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Microburst Wind Shear Models From Joint Airport Weather Studies (JAWS)

Walter Frost
Ho-Pen Chang

FWG Associates, Inc.
Tullahoma, TN 37388

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Kim L. Elmore
John McCarthy

Research Applications Program
National Center for Atmospheric Research
P.O. Box 3000
Boulder, CO 80307

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Final Report

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16. Abstract

Abstract

Multiple Doppler radar data collected during the Joint Airport Weather Studies (JAWS) Project is used to synthesize the three-dimensional wind in the region of a microburst. A six-degree-of-freedom numerical aircraft model having characteristics similar to Boeing 727 series aircraft is used to investigate jet transport aircraft response to microburst winds during simulated approaches and departures. Simple pilot control laws are used to adjust thrust, pitch, roll, and yaw so as to maintain given approach or departure parameters. Generally, when horizontal wind shear along the approach or departure path is $10 \times 10^{-3}\ s^{-1}$ or greater, the model is unable to maintain the desired approach path and suffers a significant reduction in climb performance during a go-around or departure. Although the mean wind shear along a path gives a good qualitative measure of the wind shear threat to a jet transport, different paths with similar mean shears can yield markedly different results, as do the same paths through the microburst at different times, emphasizing the fine temporal and spatial scale of microburst winds. Finally, during the approximate 30 s period required for the aircraft to traverse the region of highest horizontal shear, time variations in the microburst wind field are shown to insignificantly affect the modelled flight path because the traverse period is a short time compared to the life time of a microburst.

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TABLE OF CONTENTS

SECTION	PAGE
1.0 INTRODUCTION	1
1.1 Description of JAWS Project	1
1.2 Background	2
2.0 WIND FIELDS	7
2.1 Source of Data	7
2.2 Interpolation Technique	10
2.3 General Use of Data Sets	14
2.4 The Convective Microburst	18
2.5 Selection and Classification of Intense Wind Shear Regions	20
2.6 Flight Path Description	24
2.7 Corridor Data	29
2.8 Using a Corridor Data Table	31
2.8.1 Approach Example 1	33
2.8.2 Approach Example 2	33
2.8.3 Takeoff Example	33
2.8.4 Final Example	34
3.0 CONCLUSIONS	35
REFERENCES	37
APPENDICES	38
APPENDIX A: JAWS MULTIPLE DOPPLER DERIVED WINDS	39
APPENDIX B: SELECTION OF WIND SHEAR PATHS AND INTENSITY CLASSIFICATION	55
APPENDIX C: DATA AND DATA TAPE ATTRIBUTES	72

SECTION PAGE

APPENDIX D: FORTRAN PROGRAMS FOR READING DATA SETS 78

APPENDIX E: PLOT OF THE VECTOR WIND FIELD IN THE VERTICAL CENTER OF EACH CORRIDOR DATA SET 81

APPENDIX F: CORRIDOR DATA TABLES 103

LIST OF TABLES

TABLE		PAGE
2.1.	Parameters of Full-Volume Data Sets	12
2.2.	Selected Flight Path for August 5, June 30, and July 14 Microbursts	27
A.1.	Estimated Uncertainty in JAWS Data	51
A.2.	FDR Reconstruction Data Versus Multiple Doppler Data	53
B.1.	Recommended Flight Paths for Approach Landing Case	60
B.2.	Recommended Flight Paths for Takeoff Case	67
C.1.	Listing of Data Sets on Tape	73
E.1.	Listing of the Vector Wind Field in the Vertical Center Plane of Each Corridor Data Set	82
F.1.	JAWS Corridor Data Set #1 (along path $\overline{AB}$ in 5AU1845 measurement)	104
F.2.	JAWS Corridor Data Set #2 (along path $\overline{AB}$ in 5AU1847 measurement)	114
F.3.	JAWS Corridor Data Set #3 (along path $\overline{AB}$ in 5AU1850 measurement)	124
F.4.	JAWS Corridor Data Set #4 (along path $\overline{AB}$ in 5AU1852 measurement)	134
F.5.	JAWS Corridor Data Set #5 (along path $\overline{EF}$ in 30JN1821 measurement)	144
F.6.	JAWS Corridor Data Set #6 (along path $\overline{EF}$ in 30JN1823 measurement)	154
F.7.	JAWS Corridor Data Set #7 (along path $\overline{EF}$ in 30JN1826 measurement)	164
F.8.	JAWS Corridor Data Set #8 (along path $\overline{TU}$ in 14JL1452 measurement)	174

LIST OF FIGURES

FIGURE		PAGE
1.1.	JAWS Network Fixed Sites	4
1.2.	Schematic Illustration of the Structure of the Data Grid System: Three Wind Speed Components and Radar Reflectivity are Provided at Each Grid Point	5
2.1.	Schematic of Multi-Doppler Radar Measurement Procedures	8
2.2.	Dual Doppler Radar Analysis of a Severe Microburst, Seen Over the JAWS Network on 14 July 1982	9
2.3.	Location of Full-Volume Data Sets Analyzed in this Program	11
2.4.	Schematic Illustration of 3-D Interpolation Technique	13
2.5.	Longitudinal Wind Speed Component, W_{LONG}, at Different Vertical Levels	15
2.6.	Nomenclature for Wind Speed Spatial Derivative Interpolation Scheme	16
2.7.	Interpolated Spatial Derivative of W_{LONG} in the x-Direction	17
2.8.	Microburst Statistics	19
2.9.	Plot of Maximum Radar Reflectivity (echo intensity) as a Function of Maximum Velocity Differential	21
2.10.	Vertical Cross Section of the Evolution of the Microburst Wind Field, Based on a Summary of Examining 50 Microbursts with Doppler Radar	22
2.11.	Flight Paths Recommended for Wind Shear Simulations Overlaid on Horizontal Wind Speed Vectors, August 5, 1982, 1847 MDT	23
2.12.	Flight Paths Recommended for Wind Shear Simulations Overlaid on Horizontal Wind Speed Vectors, June 30, 1982, 1821 MDT	25
2.13.	Flight Paths Recommended for Wind Shear Simulations Overlaid on Horizontal Wind Speed Vectors, July 14, 1982, 1452 MDT	26
2.14.	Definition of Path Coordinates and Direction for Paths Tabulated in Table 2.2	28

FIGURE PAGE

2.15. Description of Corridor Data Set Coordinate System and Its Orientation Relative to the Full-Volume Data Set (the example shown is along path $\overline{AB}$; August 5, 1982, microburst and the grid resolution shown in the lower left is for this August 5 case) 30

2.16. Excerpt from Typical Corridor Data Set Table (for complete data see Table F.1, Appendix F) 32

A.1. Two Doppler Radars Sampling a Common Point in Space 43

A.2. The Resolution of V_{rA} and V_{rB} Into Orothogonal Components . 44

A.3. Two-Dimensional Schematic View (not to scale) of Doppler Radar Data Overlaid by an Orthogonal Cartesian Grid 45

A.4. A Close-Up of the Cartesian Grid Point That is Used in a Cressman Objective Analysis Scheme 45

A.5. The Concept of Continuity as It Applied to JAWS Analysis . . 47

B.1. Approach Path Definition and Orientation (relative to the full-volume of August 5, 1982, microburst) 56

B.2. Approach Along Path $\overline{CD}$ (z_o = 300 ft) 58

B.3. Approach Along Path $\overline{CD}$ (z_o = 400 ft) 59

B.4. Takeoff Path Definition and Orientation (relative to the full-volume of August 5, 1982, microburst) 62

B.5. Takeoff Along Path $\overline{AB}$ (z_o = 66 ft) 63

B.6. Takeoff Along Path $\overline{IJ}$ (z_o = -164 ft) 64

B.7. Takeoff Along Path $\overline{CD}$ as Influenced by the Location of the Microburst Center Relative to the Runway 66

B.8. Approach Through Each Individual Full-Volume Data Set for August 5, 1982, Without Considering Time Variations 69

B.9. Approach Through Time-Varying Wind Field Including 5AU1845, 5AU1847, and 5AU1850 Measurements 70

E.1. Vector Wind Field in the Center Plane of the Corridor Data Set Along Path $\overline{AB}$, 5AU1845 83

E.2. Vector Wind Field in the Center Plane of the Corridor Data Set Along Path $\overline{CD}$, 5AU1845 83

E.3. Vector Wind Field in the Center Plane of the Corridor Data Set Along Path $\overline{YZ}$, 5AU1845 84

FIGURE PAGE

E.4. Vector Wind Field in the Center Plane of the Corridor Data Set Along Path $\overline{IJ}$, 5AU1845 84

E.5. Vector Wind Field in the Center Plane of the Corridor Data Set Along Path $\overline{KL}$, 5AU1845 85

E.6. Vector Wind Field in the Center Plane of the Corridor Data Set Along Path $\overline{GH}$, 5AU1845 85

E.7. Vector Wind Field in the Center Plane of the Corridor Data Set Along Path $\overline{AB}$, 5AU1847 86

E.8. Vector Wind Field in the Center Plane of the Corridor Data Set Along Path $\overline{CD}$, 5AU1847 86

E.9. Vector Wind Field in the Center Plane of the Corridor Data Set Along Path $\overline{YZ}$, 5AU1847 87

E.10. Vector Wind Field in the Center Plane of the Corridor Data Set Along Path $\overline{IJ}$, 5AU1847 87

E.11. Vector Wind Field in the Center Plane of the Corridor Data Set Along Path $\overline{KL}$, 5AU1847 88

E.12. Vector Wind Field in the Center Plane of the Corridor Data Set Along Path $\overline{GH}$, 5AU1847 88

E.13. Vector Wind Field in the Center Plane of the Corridor Data Set Along Path $\overline{AB}$, 5AU1850 89

E.14. Vector Wind Field in the Center Plane of the Corridor Data Set Along Path $\overline{CD}$, 5AU1850 89

E.15. Vector Wind Field in the Center Plane of the Corridor Data Set Along Path $\overline{YZ}$, 5AU1850 90

E.16. Vector Wind Field in the Center Plane of the Corridor Data Set Along Path $\overline{IJ}$, 5AU1850 90

E.17. Vector Wind Field in the Center Plane of the Corridor Data Set Along Path $\overline{KL}$, 5AU1850 91

E.18. Vector Wind Field in the Center Plane of the Corridor Data Set Along Path $\overline{GH}$, 5AU1850 91

E.19. Vector Wind Field in the Center Plane of the Corridor Data Set Along Path $\overline{AB}$, 5AU1852 92

E.20. Vector Wind Field in the Center Plane of the Corridor Data Set Along Path $\overline{CD}$, 5AU1852 92

FIGURE PAGE

E.21. Vector Wind Field in the Center Plane of the Corridor Data Set Along Path $\overline{YZ}$, 5AU1852 93

E.22. Vector Wind Field in the Center Plane of the Corridor Data Set Along Path $\overline{IJ}$, 5AU1852 93

E.23. Vector Wind Field in the Center Plane of the Corridor Data Set Along Path $\overline{KL}$, 5AU1852 94

E.24. Vector Wind Field in the Center Plane of the Corridor Data Set Along Path $\overline{GH}$, 5AU1852 94

E.25. Vector Wind Field in the Center Plane of the Corridor Data Set Along Path $\overline{EF}$, 30JN1821 95

E.26. Vector Wind Field in the Center Plane of the Corridor Data Set Along Path $\overline{MN}$, 30JN1821 95

E.27. Vector Wind Field in the Center Plane of the Corridor Data Set Along Path $\overline{PQ}$, 30JN1821 96

E.28. Vector Wind Field in the Center Plane of the Corridor Data Set Along Path $\overline{RS}$, 30JN1821 96

E.29. Vector Wind Field in the Center Plane of the Corridor Data Set Along Path $\overline{EF}$, 30JN1823 97

E.30. Vector Wind Field in the Center Plane of the Corridor Data Set Along Path $\overline{MN}$, 30JN1823 97

E.31. Vector Wind Field in the Center Plane of the Corridor Data Set Along Path $\overline{PQ}$, 30JN1823 98

E.32. Vector Wind Field in the Center Plane of the Corridor Data Set Along Path $\overline{RS}$, 30JN1823 98

E.33. Vector Wind Field in the Center Plane of the Corridor Data Set Along Path $\overline{EF}$, 30JN1826 99

E.34. Vector Wind Field in the Center Plane of the Corridor Data Set Along Path $\overline{MN}$, 30JN1826 99

E.35. Vector Wind Field in the Center Plane of the Corridor Data Set Along Path $\overline{PQ}$, 30JN1826 100

E.36. Vector Wind Field in the Center Plane of the Corridor Data Set Along Path $\overline{RS}$, 30JN1826 100

FIGURE PAGE

E.37. Vector Wind Field in the Center Plane of the Corridor Data Set Along Path $\overline{TU}$, 14JL1452 101

E.38. Vector Wind Field in the Center Plane of the Corridor Data Set Along Path $\overline{VW}$, 14JL1452 101

E.39. Vector Wind Field in the Center Plane of the Corridor Data Set Along Path $\overline{OX}$, 14JL1452 102

E.40. Vector Wind Field in the Center Plane of the Corridor Data Set Along Path $\overline{LS}$, 14JL1452 102

NOMENCLATURE

$\overline{AB}, \overline{CD}, \overline{YZ}, \overline{IJ}, \overline{KL}, \overline{GH}$	Selected flight paths in August 5, 1982, microburst
C	Sensitivity factor
D	Raindrop diameter
d_i	Distance from the grid point to the ith datum
dBZ	Reflectivity factor given in decibels
DELTX	Grid interval in x-direction
DELTY	Grid interval in y-direction
DELTZ	Grid interval in z-direction
$\overline{EF}, \overline{MN}, \overline{PQ}, \overline{RS}$	Selected flight paths in June 30, 1982, microburst
G	Value of the data at the objectively analyzed grid point
g_i	The weight assigned to the ith datum
IPTSPL	Number of data points per level plane of full-volume data set
IPTSPP	Number of data points per vertical plane of corridor data set
K	Correction factor for ice or water
k	Radar index; level plane index
MX,MY,MZ	Number of data points in X, Y, and Z (or x, y, and z) directions, respectively
NFLDS	Number of data fields of full-volume and corridor data sets
N(D)	Raindrop size distribution
$\overline{P}_r$	Mean power received by radar in watts
R_k	Slant range from radar k to the pulse volume
R_r	Radius of influence

T_i, t	Time
VIP	Video Integrator and Processor
$\hat{V}_i (i = 1,2...8)$	Volumes of the eight further sub-volume elements which are diagonal to the eight respective corner or grid points of the sub-volume elements
V_{rA}, V_{rB}	Radial velocity along the radar beam
V_t	Terminal fall speed of raindrops
W	Vertical motion of raindrops
$W_i (i = 1,2...8)$	Wind speeds at eight corner or grid points of the sub-volume element in which an aircraft is located
$W_{LONG}, W_{LAT}, W_{VERT}$	Wind speed components in longitudinal, latitudinal, and vertical directions
W_P	Wind speed components at the position of an aircraft
W_X, W_Y, W_Z	Wind speed components in X, Y, and Z directions
X,Y,Z	Coordinate system for corridor data
x,y,z	Coordinate system for full-volume data
Z	Reflectivity factor
z	Height
$x_k y_k, z_k$	Cartesian distances from the pulse volume to kth radar
Z_e	Equivalent radar reflectivity

Special Symbols

$\Delta t_1, \Delta t_2, \Delta t_3$	Time interval of time-dependent microburst measurements
ΔV_r	Maximum differential velocity measured near the surface by Doppler radar
Δx	Grid interval in x-direction
Δy	Grid interval in y-direction
Δz	Grid interval in z-direction

$\left.\frac{\partial W}{\partial x}\right\|_P$	Wind gradients at point P in the x-direction
$\rho(z)$	Air density at some height z
ρ_{sfc}	Air density at ground surface
γ	Glide slope angle

1.0 INTRODUCTION

1.1 Description of JAWS Project

The Joint Airport Weather Studies (JAWS) Project, conceived in 1980, conducted a major field investigation during the summer of 1982 (15 May to 13 August) in and around Denver, Colorado. The principal objective of JAWS was to examine convectively-driven downdrafts and resulting outflows near the earth's surface. These flows are called microbursts, a term coined by Professor T. Fujita of the University of Chicago (The JAWS Project: Operations Summary 1982). When an aircraft penetrates a microburst at low levels, the combination of reduced lift and downdraft causes a rapid loss in altitude. Therefore, microbursts can be lethal for jet aircraft on takeoff or landing because of the nature of the flows.

The JAWS effort has concentrated on three aspects of microburst-induced, low-level wind shear: (1) basic scientific investigation of microburst origins, life cycles, and velocity structures; (2) various aspects of aircraft performance, including numerical models, manned flight simulators, instrumented research aircraft response, and operational air carrier performance; and (3) low-altitude wind shear detection and warning.

Data sensors utilized in JAWS included three pulsed microwave Doppler and two pulsed CO_2 lidar radars, along with 27 portable automated mesonet (PAM) surface weather stations, the FAA's low-level wind shear alert system (LLWSAS), and five instrumented research aircraft. Convective storms occurred on 75 of 91 operational days, with Doppler data being collected on at least 70 microbursts. Additional details of the field program are given in the JAWS Project, Field Operation Plan 1982.

Analyses to be performed with the JAWS data included a thorough examination of microburst climatology statistics, the capability of the LLWSAS to detect adequately and accurately the presence of low-altitude wind shear danger to aircraft; the capability of a terminal Doppler radar system development to provide improved wind shear detection and warning; and improved three- and four-dimensional microburst wind shear models for use in manned flight simulators and in design and certification of airborne wind shear alerting and flight guidance systems. This report describes an in-depth analysis of the data to produce wind shear models for the latter applications.

Three candidate wind field models were distilled from the extensive data gathered during the JAWS Project. The wind field data is presented in a format which can be readily assimilated by the aviation community. Selected wind fields are presented in tabular format and can be manually incorporated into computer simulations, if desired. Full data sets can

be obtained on magnetic tape from the Research Applications Program Office.*

This report describes the data set in detail, including source of data, interpolation techniques, general use of data, selection and classification, etc. Each wind shear data set has been carefully examined by conducting computer-simulated flights of a B-727 type aircraft through the wind fields to identify regions of varying wind shear intensities. Thus, the user can quickly select paths through a given wind field commensurate with the wind shear hazard level he or she wishes to simulate.

1.2 Background

Prior to the development of JAWS, essentially all of the convective storm wind velocity data used to develop manned-flight and computer-simulated model profiles were derived from two sources.

One principal source was the reconstruction of wind profiles derived from flight data recorders (FDR). These coarse profiles were obtained by making a number of assumptions that often used best-guess values which do not reflect accurate input data. Consequently, physically unrealistic flows were obtained, particularly in the case of vertical velocity. Moreover, with the flight data recorder reconstructions, the resulting wind field is essentially one dimensional. That is, since the data are obtained only along the flight track, the reconstruction presents only the derived flow "precisely" along the track. Thus, the two or three dimensionality of the real atmospheric wind variability is neglected or subjectively described in the model.

A second major source of convective storm wind field simulator data is the tall instrumented tower at Oklahoma City operated by the National Severe Storms Laboratory. Most of these tower data have been collected at seven levels--from the surface to approximately 1500 ft (450 m)--during thunderstorm situations. Most of the cases used in the simulator work have involved gust front phenomena. The principal limitation of these data again relates to the spatial dimensionality problem. Since the tower is fixed geographically, the passage of the weather event is measured in the two-dimensional plane of the tower location. As in the FDR situation, this again constrains the realism of the spatial variation of the data set for simulation. Another problem relates to the rather long averaging time of the initial data set collected at the tower. In most of the derived models, the averaging period typically is around one minute. Consequently, many small-scale events are filtered from the data. Finally, none of these tower wind field models included a microburst profile.

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*Requests should be in writing to: Research Applications Program, National Center for Atmospheric Research, P.O. Box 3000, Boulder, CO 80307.

Convective storm data from the above two sources were used by SRI International, Inc., to arrive at wind shear models for use in pilot recurrent training and testing of airborne wind shear detection and warning devices (Foy, 1979). However, because of the limitations of these current wind models, the JAWS Project formulated a plan to collect and make available substantially improved wind shear profiles.

The JAWS field experiment provided spatial (three-dimensional) and time-dependent (four-dimensional) velocity fields of microbursts and other convective events such as gust fronts. Velocities were measured with three Doppler radars, CP-2, CP-3, and CP-4, located relative to Stapleton International Airport as shown in Figure 1.1. Processing of the dual and triple Doppler radar returns resulted in a rectangular grid array of the three Cartesian velocity components of the wind. The origin of the (x,y,z) coordinate system to which the grid is referenced is located at CP-2. The x coordinate is measured positive toward the east, the y coordinate positive toward the north, and the z coordinate positive upward. All wind velocities are absolute; that is, relative to a fixed-earth coordinate system with no storm motion removed.

An example of the grid system on which the data are provided is given in Figure 1.2. To establish an appreciation for the magnitude of the data set, consider the typical microburst wind field data set gathered on August 5, 1982. The total volume element probed by the Doppler radar was 7.5 x 7.5 miles (12 x 12 km) in the horizontal plane and 1.2 miles (2 km) in the vertical. The three Cartesian velocity components (W_{LONG}, W_{LAT}, W_{VERT}) are computed on a grid with 492 ft (150 m) spacing in the horizontal and 820 ft (250 m) spacing in the vertical. Thus, the total number of grid points for the data set is 81 x 81 x 9 or 59,049. Since there are three velocity components at each grid point, the total number of variables to be stored is 177,147. This requires approximately 708K bytes of memory for real-time data storage for the wind field alone. Reflectivity is also provided to enable the user to compute rain rates (see Appendix A); however, this procedure increases the computer storage requirements to 945K bytes. Methods to reduce this large data storage requirement to suit current simulators include: (1) developing limited domains that contain the wind shear of interest and/or (2) deriving simplified mathematical functional forms of the data, which could more easily be utilized by training simulators. This report addresses the former approach and recommends subdomains of the data as described in Section 2.0.

Multiple Doppler radar case studies of the extensive data sets on various convective phenomena, including many "worst case" microburst wind shear events collected during JAWS, have been examined in detail with an aircraft performance computer model (see Appendix B). The computer program currently uses a six-degree-of-freedom model of a Boeing 727-type aircraft with numerical pilot-in-the-loop inputs to control thrust, elevator, aileron, and rudder. In addition, pilot and thrust spool-up lags are included. This model has been used to screen the wind shear data and identify those portions of the data domain that

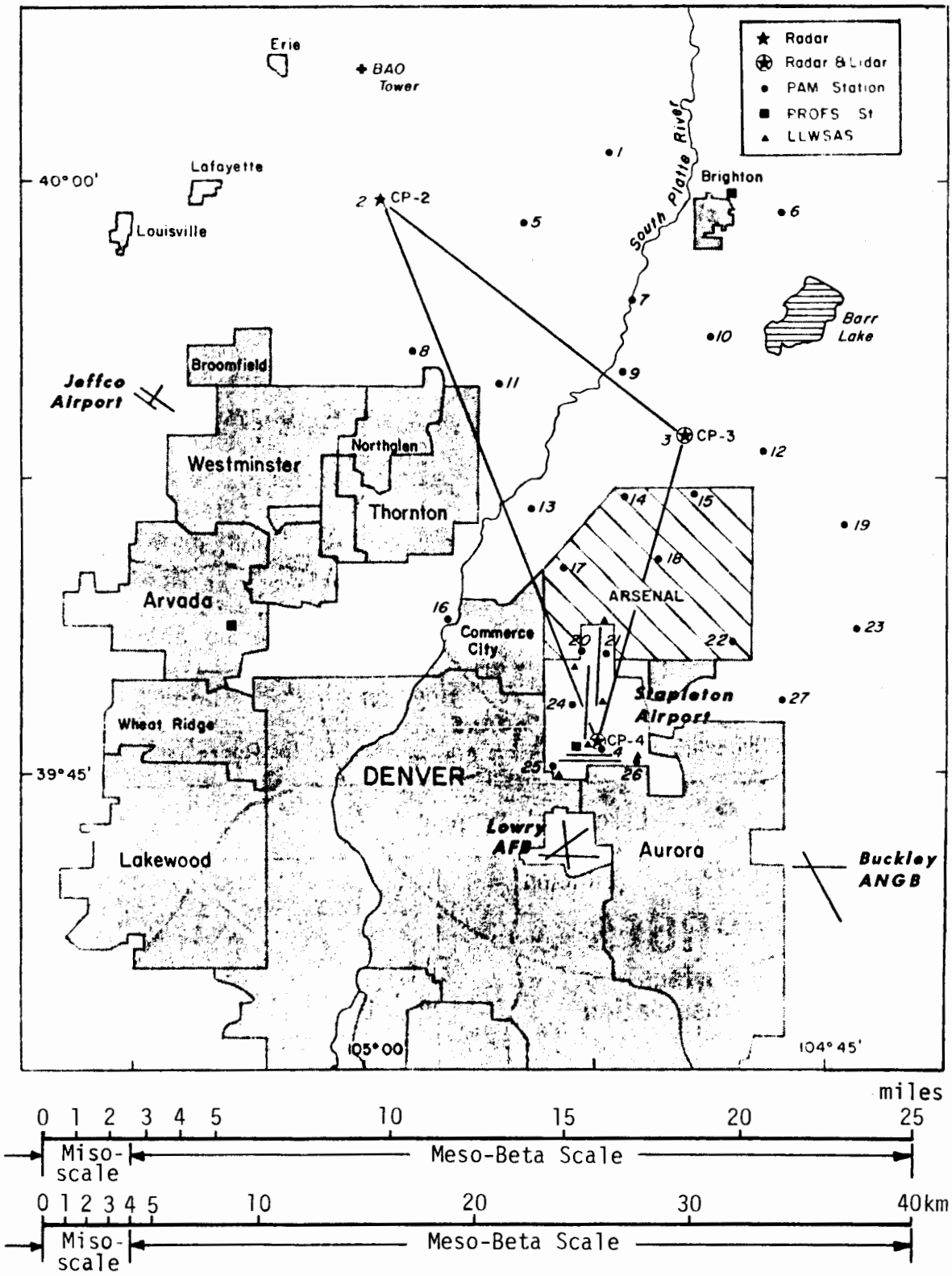

Figure 1.1. JAWS network fixed sites.

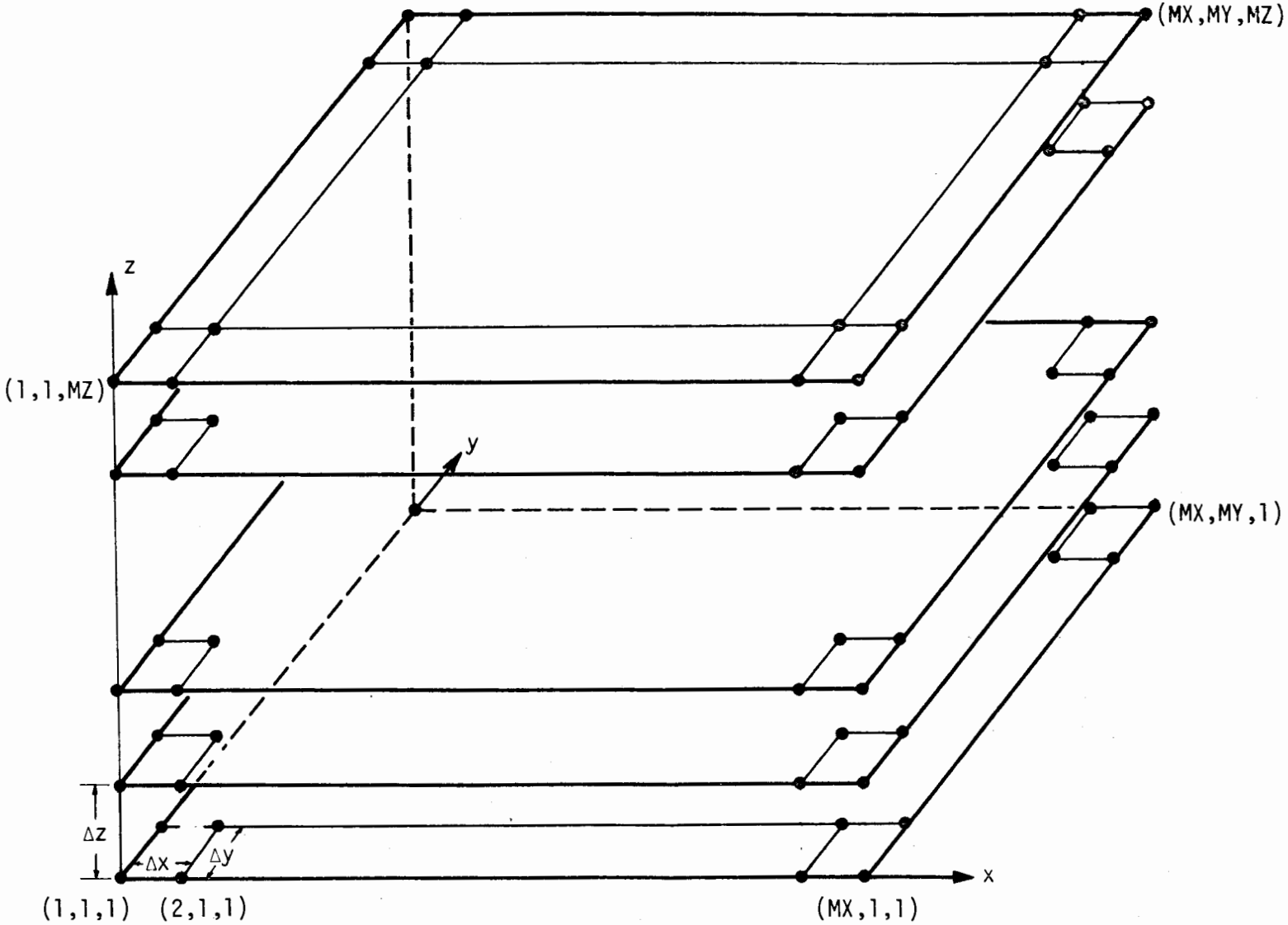

Figure 1.2. Schematic illustration of the structure of the data grid system: Three wind speed components and radar reflectivity are provided at each grid point.

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represent shears difficult for a jet transport to negotiate. The screening is not intended to be a definitive description of aircraft and/or pilot performance in wind shear but rather a technique for identifying regions of significant wind shear within the total wind field, which may be difficult for some aircraft to transit.

With these regions identified, the data sets have been sent to Dr. Roland Bowles, NASA Langley, to test the data with a Boeing 737 manned flight simulator. The validity of the numerical model was tested, and the final stratification of the data presented here has been discussed and collaborated.

An Ad Hoc Committee (with members from FAA, NASA, NCAR, and private industry) was formed to provide guidance to the wind shear model development. Two workshops for wind shear data users describing the types of data being made available through JAWS have been conducted under NCAR and NASA support (JAWS Wind Shear Simulation Workshop, September 1983, held at NCAR, Boulder, Colorado; and Wind Shear/Turbulence Inputs to Flight Simulation and Systems Certification Workshop, held at NASA Langley Research Center, Hampton, Virgina, May 1984). Representatives from the airline community, aircraft manufacturers, and simulator manufacturers and users were in attendance. Feedback from the user community has been integrated into the results of the analysis presented.

Based on the above described background and the in-depth data analysis described in Section 2.0 and the appendices, wind shear data sets were selected for user application. These should be considered as candidate standard microburst wind shear models to enhance recurrent training awareness of adverse wind shear conditions (particularly to encourage avoidance); to develop improved techniques for survival should a severe wind shear be inadvertently penetrated; and to develop better airborne instrumentation for the detection and warning of severe low-altitude wind shear.

Finally, we do not present these data to prescribe universal incorporation into simulation use. Models that are significantly simpler may be indicated for certain applications. However, for those users who desire the highest resolution microburst experimental data scenarios that are available, these data are offered.

2.0 WIND FIELDS

2.1 Source of Data

Figure 2.1 illustrates the nature of multi-Doppler radar velocity measurements. A description of the Doppler radar data reduction procedure and interpolation of wind speed to a rectangular grid array is presented in Appendix A. In general, the radar measures the wind speed directed along the radar beam and spatially averaged over a volume element referred to as a range gate. The range gate is typically a truncated cone having a length of 492 ft (150 m) and a diameter related to the spreading angle of the radar beam and the distance from the radar. When the sampling volumes or range gates from two or more scanning radars intersect or overlap, the velocity components measured toward each radar can be transformed to the two horizontal wind speed components in a rectangular coordinate system. The vertical wind speed component is determined from mass continuity.

The velocity in each range gate is typically a value averaged over several radar pulses. By scanning the radars throughout space, the wind field for a full three-dimensional spatial volume element can be measured. Wind speed components are then interpolated to a uniform rectangular grid as illustrated in Figure 1.2. Because of the size of the range gates, typical volume elements for the rectangular grid are on the order of 492 to 820 ft (150 to 250 m) in horizontal and vertical extents. The wind field data is stored on magnetic tape in an array of horizontal planes at each of approximately five to eleven levels in the vertical. Figure 2.2 shows a typical horizontal plane of wind data at approximately ground level and a vertical cross section through the data for the July 14, 1982, data set. Figure 2.2a is generated by drawing vectors representing the horizontal wind speed at each grid point in the horizontal plane at ground level. Magnitude and direction of the wind is indicated by the size and direction of the arrow. Figure 2.2b is similarly drawn for the wind projected onto a vertical plane at the cross section $\overline{AV}$, Figure 2.2a.

The Cartesian coordinate system for the grid array has its origin at the CP-2 location. The following nomenclature is used:

W_{LONG} = wind speed in knots measured as positive in the x direction to the east,

W_{LAT} = wind speed in knots measured positive in the y direction to the north, and

W_{VERT} = wind speed in knots measured positive upward.

Typically, the value of wind at any grid point is averaged over a period of a few seconds. The lowest level is scanned first, stepping upward consecutively to the top level. Each level requires an approximate 15-second scan; thus, a complete volume scan requires approximately

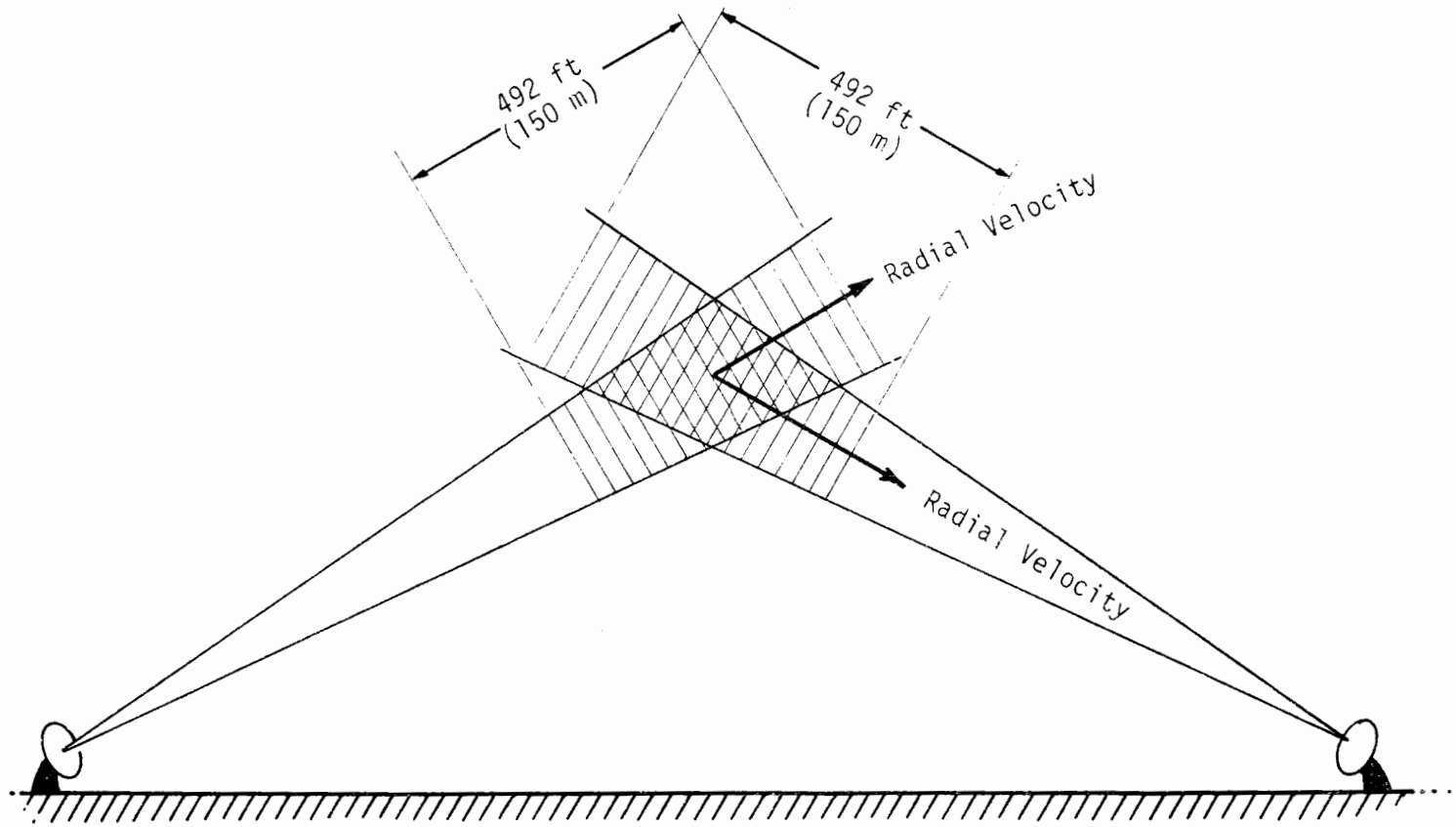


Figure 2.1. Schematic of multi-Doppler radar measurement procedures.

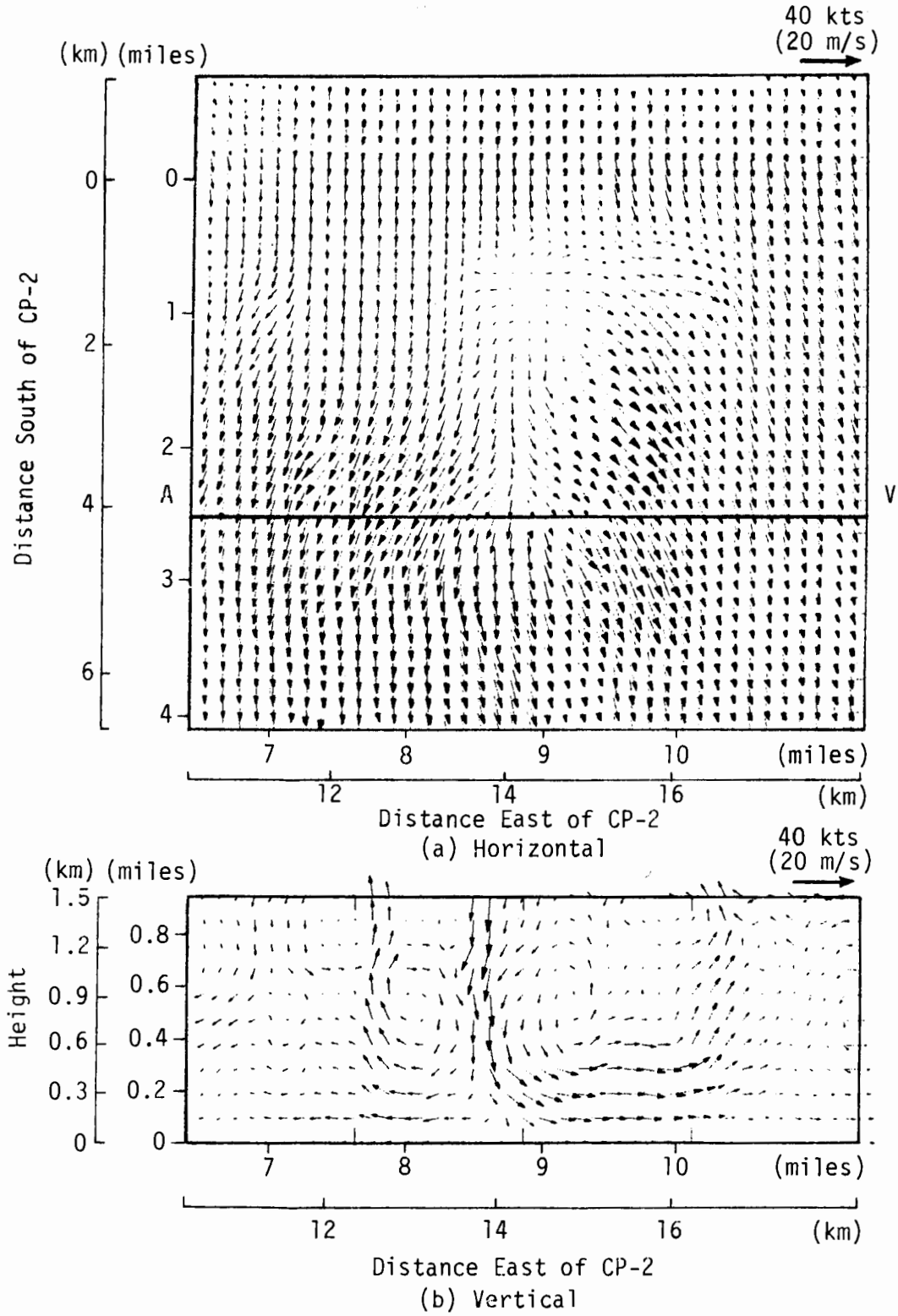


Figure 2.2. Dual Doppler radar analysis of a severe microburst, seen over the JAWS network on 14 July 1982. Shown are (a) the horizontal wind field near the earth's surface; notice the strong diverging outflow typical of a microburst, and (b) a vertical cross section through (a), which shows the downdraft, outflow, and a commonly observed, horizontal vortex circulation.

2 minutes. This results in the velocity at the first measuring station being measured 2 minutes earlier than that at the final measuring station.

By repeating the volume element scan, the spatial wind speed distribution throughout the volume at approximately 2-minute intervals is obtained. The time dependence of the wind field, to this degree of approximation, is thus resolved. That is, the spatial distribution of wind for an effective 2-minute period is provided by the first full-volume data set. The second full-volume data set represents the wind field 2 minutes later and so on over the time period of the microburst event.

A data set representing the spatially distributed wind throughout the entire scanned volume of the atmosphere is referred to as a full-volume data set. Full-volume data sets selected for analysis in this program were measured on August 5, July 14, and June 30, 1982. The horizontal size and position of each full volume relative to Stapleton International Airport is shown on Figure 2.3. The coordinates locating the southwest and northeast corners of each full volume referenced to CP-2 are shown on the figure. Four full-volume data sets were measured on August 5, 1982, representing times of 1845, 1847, 1850, and 1852 MDT. Similarly, three full-volume data sets were measured on June 30 at 1821, 1823, and 1826 MDT. Only one full-volume data set was measured for the July 14 case at time 1452 MDT. Table 2.1 lists the nomenclature used to define each full-volume data set along with other pertinent information.

2.2 Interpolation Technique

To carry out analysis of aircraft performance with the full-volume wind field data sets, the three wind components must be input to the aircraft governing equations of motion (see Frost and Bowles, 1984). Therefore, in order to utilize the spatially three-dimensional wind fields, it is necessary to interpolate three dimensionally the wind at neighboring grid points to the aircraft's position within the wind field domain. A volume-weighted interpolation scheme has been utilized by Frost et al. (1984) and is recommended to the user. The interpolation scheme is illustrated in Figure 2.4. A sub-volume element of the full volume is assumed to have velocity W1, W2, W3,...W8 at each respective corner or grid point of the element. This volume element is then divided into eight sub-subvolume elements through point P at which the aircraft is located. The sub-subvolume elements diagonal to the respective grid points are the weighting elements for the averaging process. Thus, the value of the wind speed at point P, W_p, is given by:

$$W_p = \frac{\sum_{i=1}^{8} W_i \hat{V}_i}{\sum_{i=1}^{8} \hat{V}_i} \qquad (2.1)$$

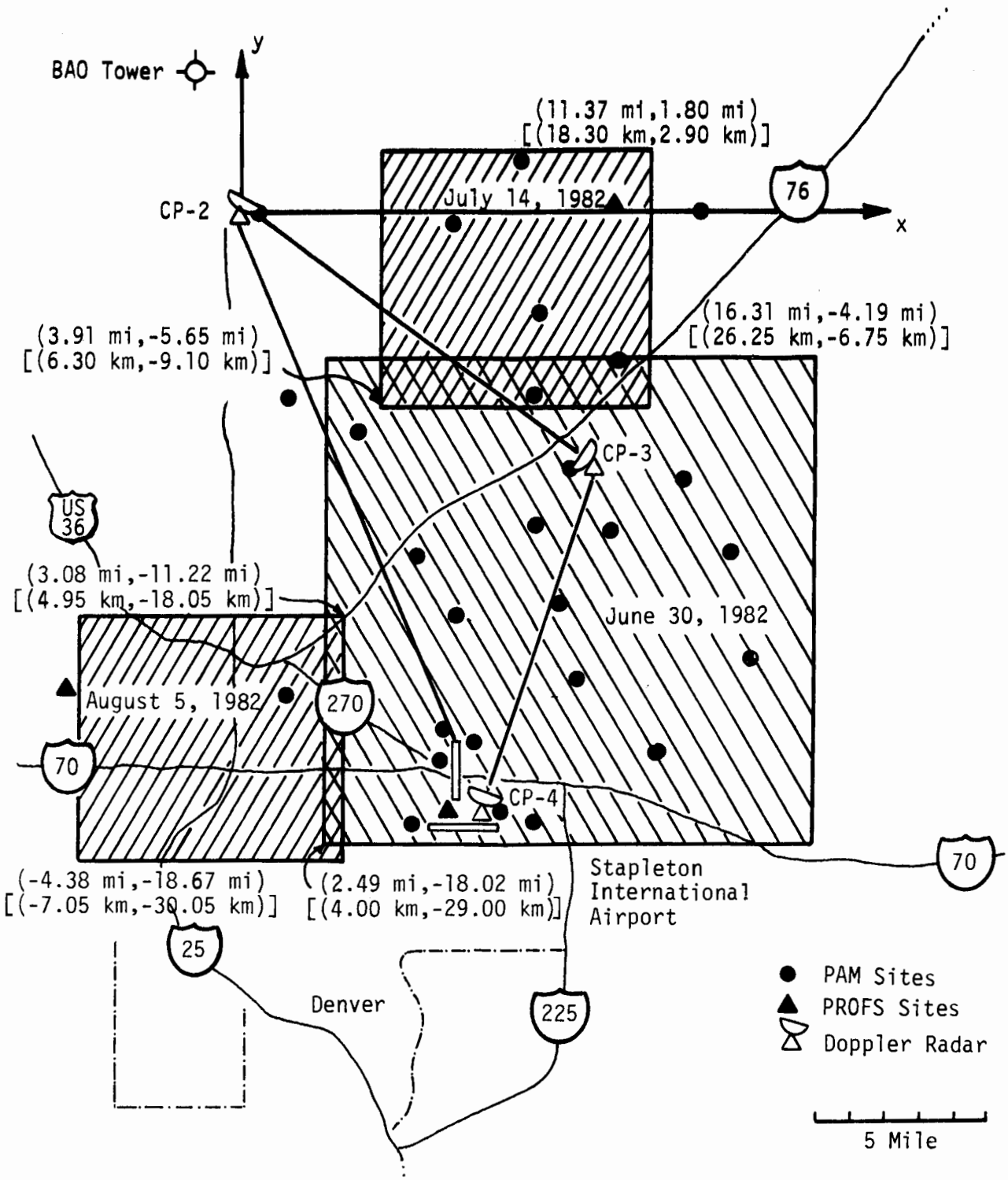


Figure 2.3. Location of full-volume data sets analyzed in this program.

TABLE 2.1. Parameters of Full-Volume Data Sets.

Date	Time (MDT)	Nomenclature	Location Relative to CP-2		Vertical Height Mile [Km]	Grid Spacing Ft [Meter]	Number of Grids
			SW Corner Mile [Km]	NE Corner Mile [Km]			
5 August 1982	1845	5AU1845	(-4.38,-18.67) [(-7.05,-30.05)]	(3.08,-11.22) [(4.95,-18.05)]	1.24 [2]	492x492x820 [150x150x250]	81x81x9
	1847	5AU1847	"	"	"	"	"
	1850	5AU1850	"	"	"	"	"
	1852	5AU1852	"	"	"	"	"
30 June 1982	1821	30JN1821	(2.49,-18.02) [(4.0,-29.00)]	(16.31,-4.19) [(26.25,-6.75)]	0.62 [1]	820x820x820 [250x250x250]	90x90x5
	1823	30JN1823	"	"	"	"	"
	1826	30JN1826	"	"	"	"	"
14 July 1982	1452	14JL1452	(3.91,-5.65) [(6.30,-9.10)]	(11.37,1.80) [(18.30,2.90)]	0.93 [1.5]	656x656x492 [200x200x150]	61x61x11

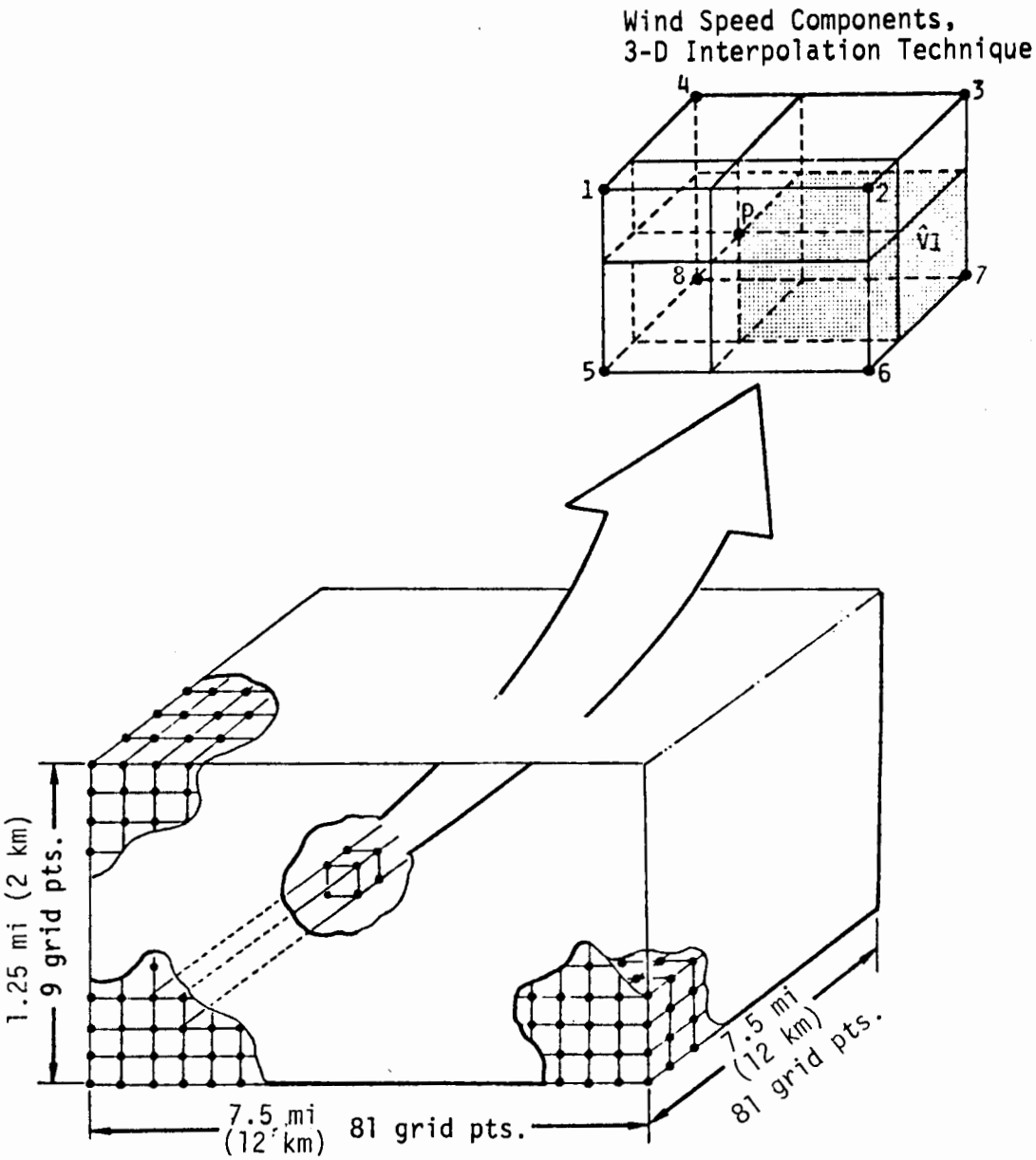


Figure 2.4. Schematic illustration of 3-D interpolation technique.

where W_i (i = 1,2...8) is the the wind speeds at the eight corners or grid points of the sub-volume element in which the aircraft is located, and $\hat{V}_i$ (i = 1,2...8) is the volume of the eight sub-subvolume elements which are diagonal to the respective corners or grid points of the sub-volume element.

To illustrate the three dimensionality of the wind and the effectiveness of the interpolation, Figure 2.5 has been prepared. This figure uses JAWS August 5, 1982, 1847 MDT microburst data. The longitudinal wind speed component W_{LONG} is plotted at ground level z = 0, at an interpolated level z = 410 ft (125 m), and at the first grid level z = 820 ft (250 m) level. The three-dimensional form of Figure 2.5 clearly illustrates the high variability of the wind and the general smoothness of the interpolated results.

In the governing equations of motion, wind shear effects for the aircraft appear not only in the form of variable wind speed components but also as spatial derivatives or wind gradients. There are nine derivatives which can be computed by a similar interpolation scheme.

The recommended form of the spatial derivative interpolation scheme is an area-weighted interpolation as illustrated in Figure 2.6. p_{x1}, p_{x2}, p_{y1}, p_{y2}, p_{z1}, and p_{z2} are the projected points of the aircraft position, p, on each of the six planes of the sub-volume element, respectively. The value of wind speed at position p_{y1}, for example, is given by:

$$W_{p_{y1}} = \frac{W1 \times A1 + W2 \times A2 + W5 \times A5 + W6 \times A6}{A1 + A2 + A5 + A6} \tag{2.2}$$

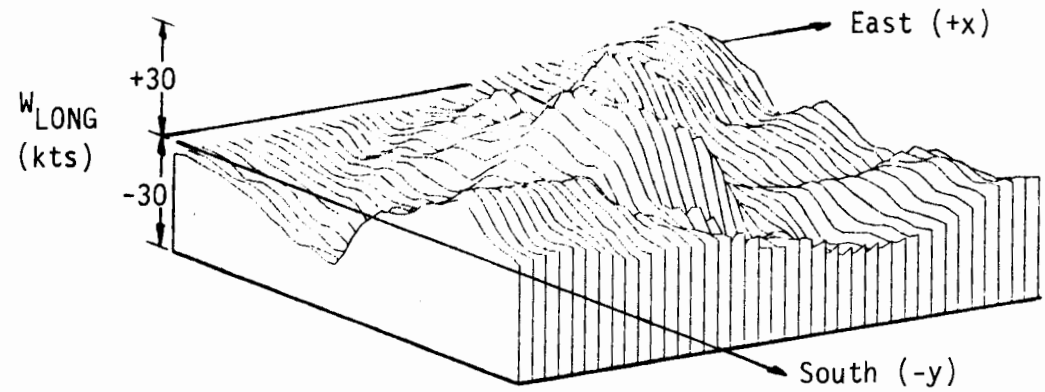
Similarly, the values of wind speed at the other projected points of the aircraft are obtained as $W_{p_{y2}}$, $W_{p_{x1}}$, $W_{p_{x2}}$, $W_{p_{z1}}$, and $W_{p_{z2}}$. The wind gradient in each direction is then obtained from:

$$\left.\frac{\partial W}{\partial x}\right|_p = \frac{W_{p_{x2}} - W_{p_{x1}}}{\Delta x}, \quad \left.\frac{\partial W}{\partial y}\right|_p = \frac{W_{p_{y2}} - W_{p_{y1}}}{\Delta y}, \text{ and } \left.\frac{\partial W}{\partial z}\right|_p = \frac{W_{p_{z2}} - W_{p_{z1}}}{\Delta z} \tag{2.3}$$

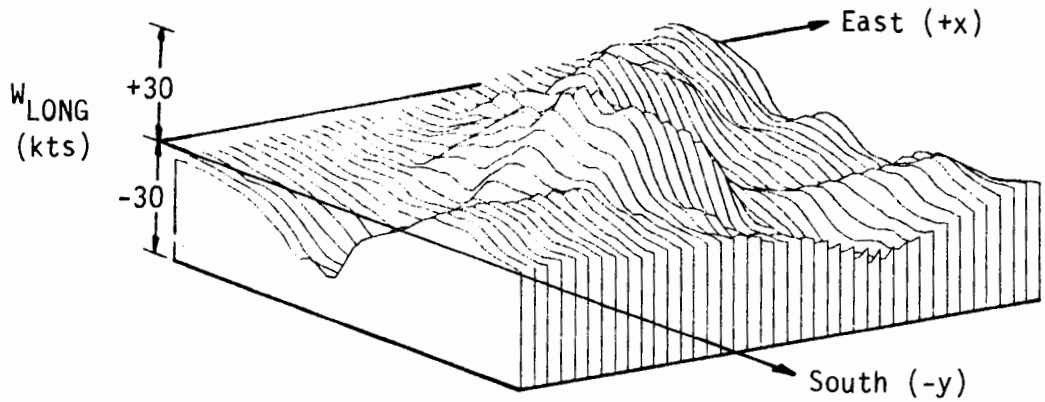
Equation 2.3 is valid for W_{LONG}, W_{LAT}, and W_{VERT}. A plot of $\partial W_{LONG}/\partial x$ interpolated to the z = 410 ft (125 m) level is shown in Figure 2.7.

2.3 General Use of Data Sets

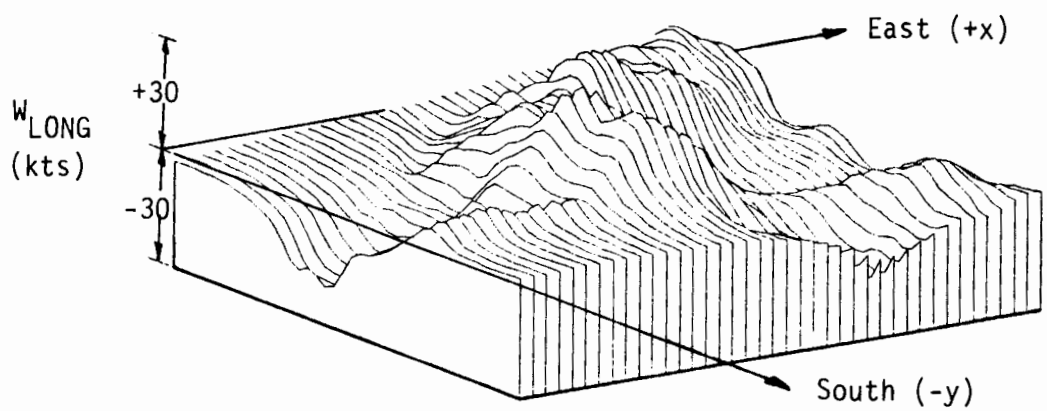
The proposed interpolation scheme coupled with a valid computer model of aircraft dynamics in variable wind fields enables one to carry out investigations of aircraft performance along approach and takeoff paths. These paths can be located anywhere within the full-volume element data set. Thus, an infinite number of flight paths through the



(a) W_{LONG} at the 820 ft (250 m) level



(b) W_{LONG} at the 410 ft (125 m) level (interpolated)



(c) W_{LONG} at ground level

Figure 2.5. Longitudinal wind speed component, W_{LONG}, at different vertical levels.

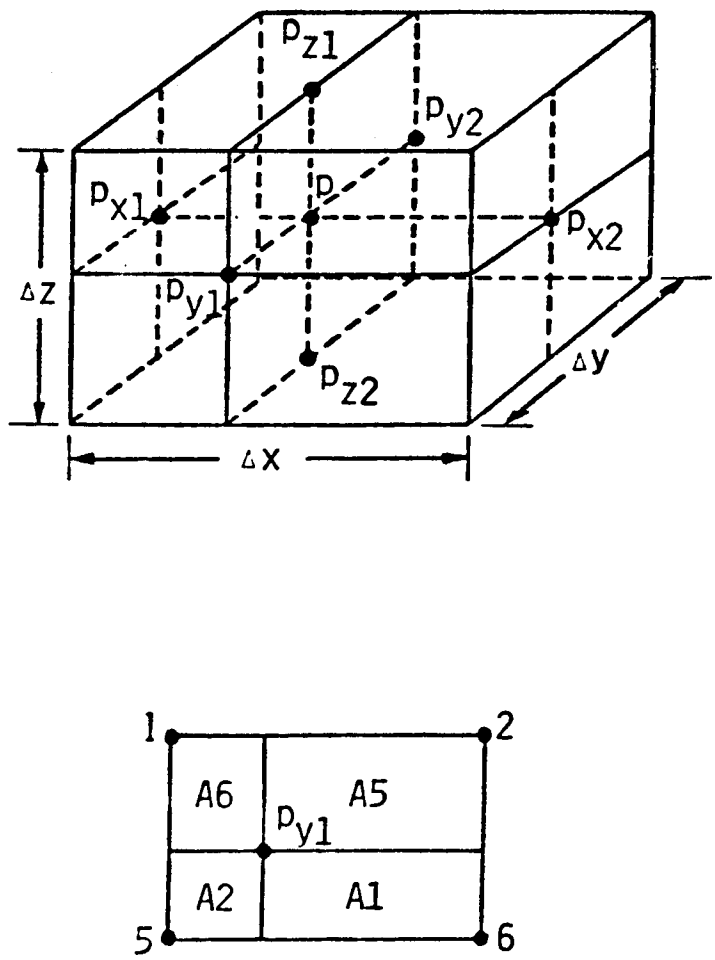


Figure 2.6. Nomenclature for wind speed spatial derivative interpolation scheme.

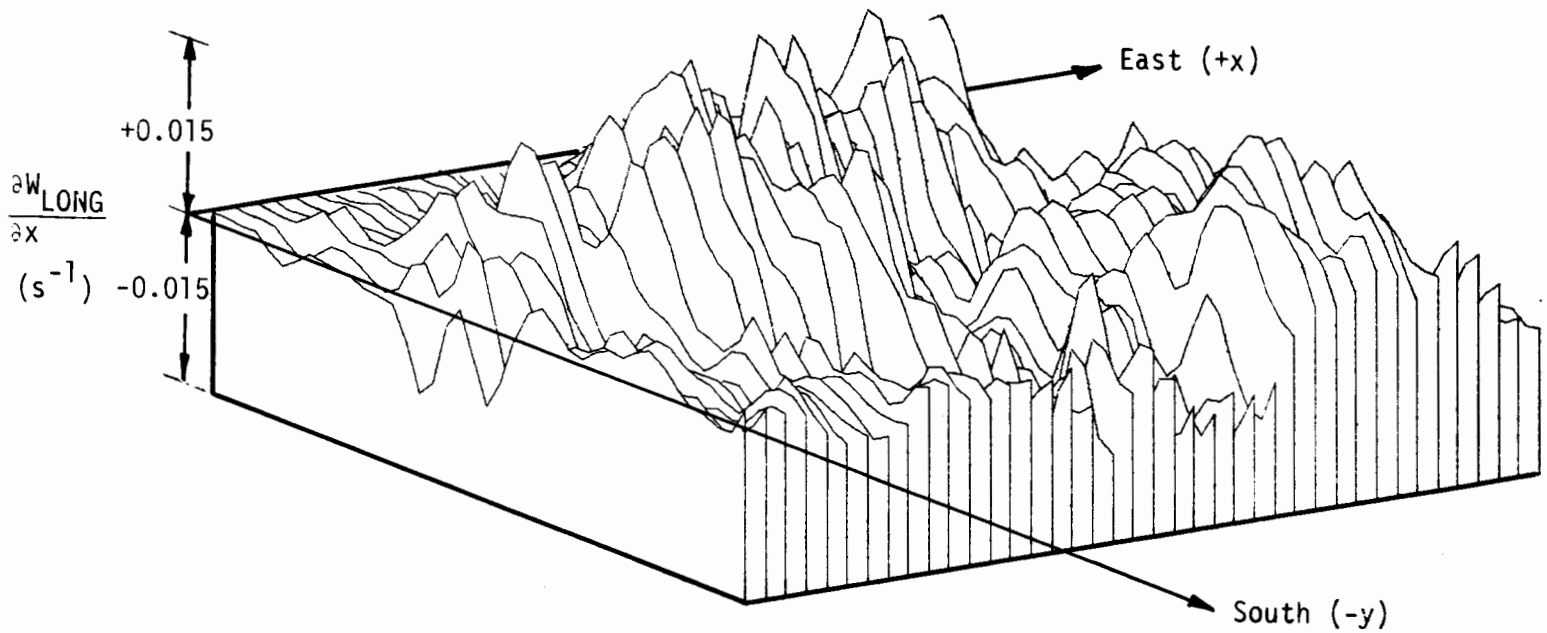


Figure 2.7. Interpolated spatial derivative of W_{LONG} in the x-direction (i.e., $\partial W_{LONG}/\partial x$) at 410 ft (125 m).

wind field are possible including full go-around and traffic control holding patterns.

In this study, aircraft simulation was initiated by trimming the airplane along an intended approach path to the runway which could be selected at any desired position within the volume element. In turn, a takeoff could be initiated from a runway position selected at any ground location. That is, the intended touchdown point for simulating approach and the runway location for simulating takeoff could be positioned anywhere relative to the storm.

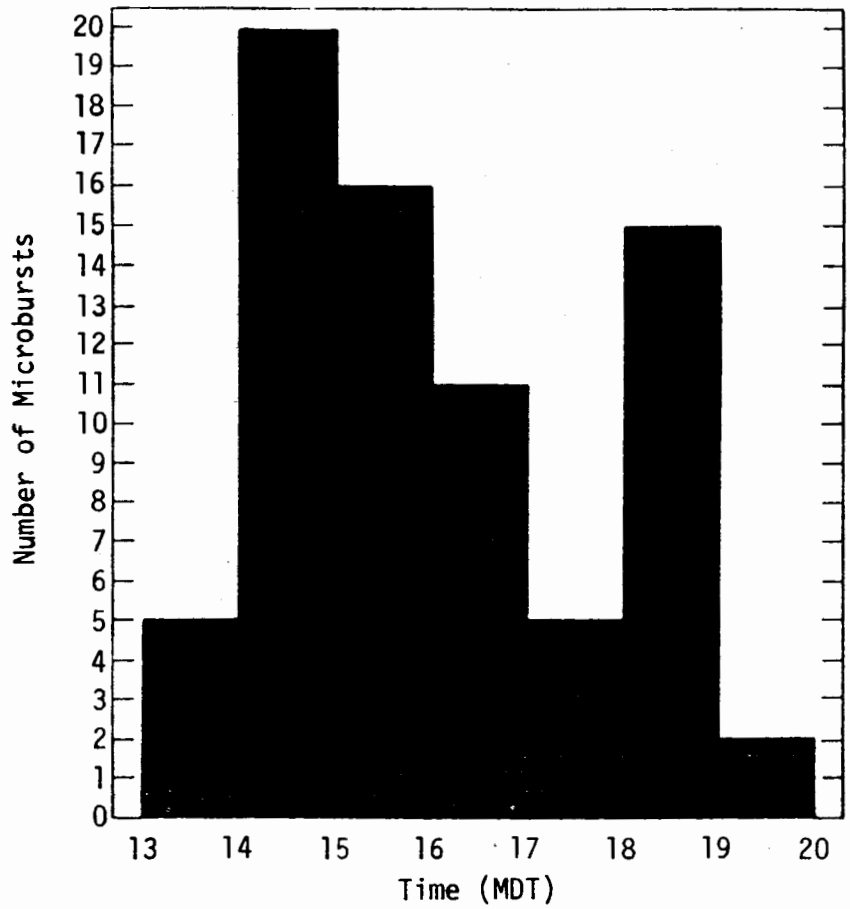
Because of the full three-dimensionality of the wind fields, different pilot or control inputs will substantially change the winds encountered and thus the nature of the flight trajectory, even though the aircraft is initially trimmed for the same path. Thus, there is an endless number of combinations of flight conditions which can be experienced during training for penetration and avoidance of hazardous microburst wind shear phenomena.

The scale of a microburst is small and thus the region of severe wind shear is generally localized in a small region of any full-volume data set. Factors which strongly influence the trajectory of an aircraft during a microburst encounter are the height above ground at which the "center" of the microburst is penetrated and the direction of flight relative to the major outflow regions. Thus, many regions of the full-volume data set are uninteresting unless go-around or large-scale maneuvers are required. For this reason the full-volume data sets were screened and a number of sub-regions throughout the flow were identified at three wind shear intensity levels. This provides the user the opportunity to immediately utilize the data set without spending considerable manpower and computer time to identify the type of wind shear pertinent to his desired simulation. Prior to describing the procedure for selecting and classifying these sub-regions, a description of the general microburst characteristics is given.

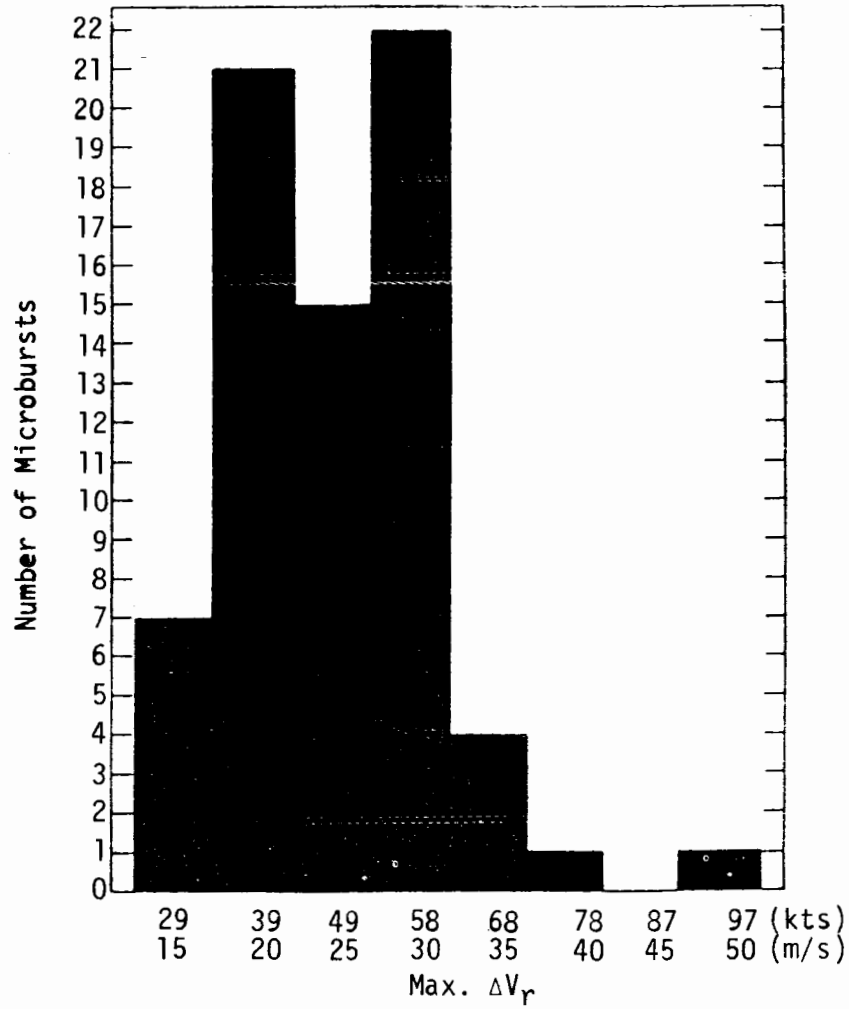
2.4 The Convective Microburst

The wind shear models documented in this report are those associated only with the convective microburst phenomenon. For our purposes, a microburst is defined as a downdraft-induced, diverging, horizontal flow near the surface whose initial horizontal dimension is less than 2.5 mi (4 km), and whose differential velocity is greater than 19.4 kts (10 m/s). A more detailed definition of the microburst can be found in Fujita (1981), while the statistics presented here can be found in McCarthy et al. (1983) and in Wilson and Roberts (1983).

The multiple Doppler radar analysis shown in Figure 2.2 of a microburst that occurred over the JAWS instrumented research network on July 14, 1982, is illustrative of the diverging flow seen at the surface and the intense downdraft seen in the microburst center. Figure 2.8a shows the frequency of microbursts at Denver as a function of time of day,



(a) Number of microbursts, identified by Doppler radar, by time of day. These microbursts are clearly related to convective phenomena with significant peaks near 1400 and 1800 hours.



(b) Number of JAWS microbursts as a function of maximum differential velocity measured near the surface by Doppler radar. The figure shows the approximate maximum headwind to tailwind shear that an aircraft would encounter when penetrating the microburst.

Figure 2.8. Microburst statistics.

as seen by Doppler radar. Notice that microburst events tend to peak during the early afternoon, and again in the early evening, and are generally associated with peaks in occurrence of convective weather.

The intensity of Doppler radar-detected microbursts at Denver can be seen in Figure 2.8b, which shows the microburst frequency as a function of wind speed maximum differential near the surface. In this illustration, the maximum headwind-to-tailwind velocity difference is shown, ranging from 20 to 100 kts (10 to 50 m/s); one microburst observed by Doppler radar had a differential of 100 kts (48 m/s)!

Conventional aviation wisdom uses radar echo intensity (radar reflectivity) as an indication of storm severity. The more intense the return is, the more likely the storm will be severe. Of course, a conventional weather radar cannot measure wind speed. Figure 2.9 shows a scatter diagram of microburst echo intensity near the ground (reflectivity) versus maximum velocity differential. The VIP scale (see explanation in Appendix A) is also given on the figure. Clearly, there is no correlation with strong microburst wind shears which occur for reflectivities ranging anywhere from near zero to above 70 dBZ. Hence it is clear that a conventional airborne or ground-based radar cannot be used to detect severe microburst wind shears.

Of 40 microbursts thoroughly examined with Doppler radar, 50 percent were found to reach their maximum intensity within 5 minutes after first detection, while 95 percent did so within 10 minutes, from the time the diverging outflow first appeared at the surface. Sometimes they dissipated within 5 to 10 minutes, with the maximum velocity differential increasing from 23 to 47 kts (12 to 24 m/s) in the first 5 to 10 minutes. Furthermore, it was found that microbursts are not circularly symmetric in their horizontal divergent outflow but are decidedly asymmetric. They are clearly small-scale events, being only 1.12 mi (1.80 km) in diameter when first detected, growing to only 1.93 mi (3.10 km) on the average in 6.4 minutes.

Figure 2.10 is a composite drawing of a microburst life cycle as observed by Doppler radar. Notice that the full sequence is seen to last 15 minutes, with the event being small-scale at the surface for only several minutes. Data such as these have made the JAWS Project unique in that for the first time, high resolution velocity data on these small-scale, short-lived, and severe wind shear events have been obtained.

2.5 Selection and Classification of Intense Wind Shear Regions

To facilitate the use of JAWS wind shear data, sub-regions of the full-volume data set were defined and classified as to wind shear intensity. Selection of interesting wind shear was initially done by inspection. Lines representing an intended approach or takeoff path were visually overlaid on a ground plane (z = 0) vector plot of horizontal winds (see Figure 2.11). The intensity of wind shear was then

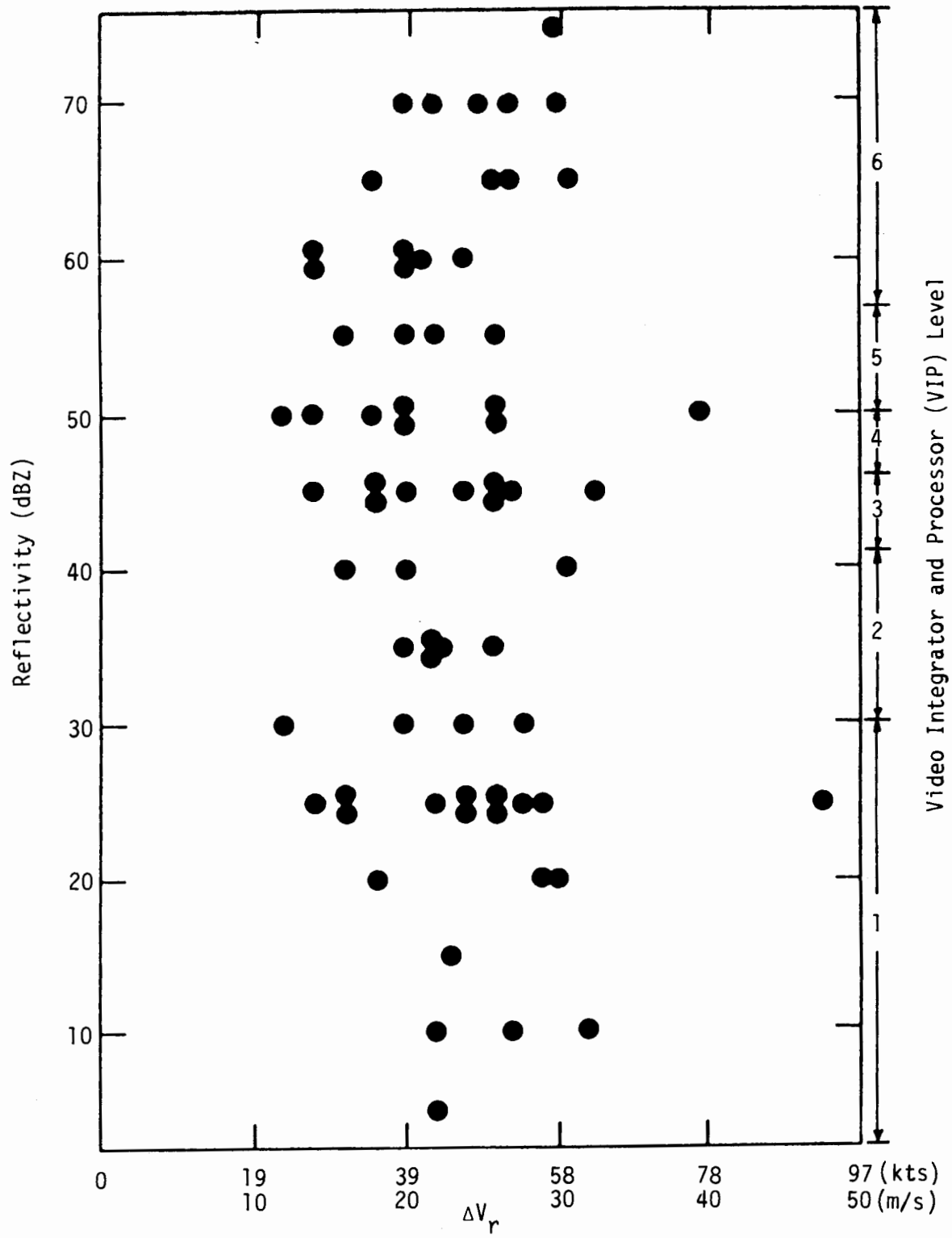


Figure 2.9. Plot of maximum radar reflectivity near the surface (echo intensity) as a function of maximum velocity differential. Serious low-altitude microburst wind shear can occur in a wide range of convective intensity, from non-thunderstorm (reflectivities generally less than 30 dBZ) to intense thunderstorms (reflectivities greater than 50 dBZ).

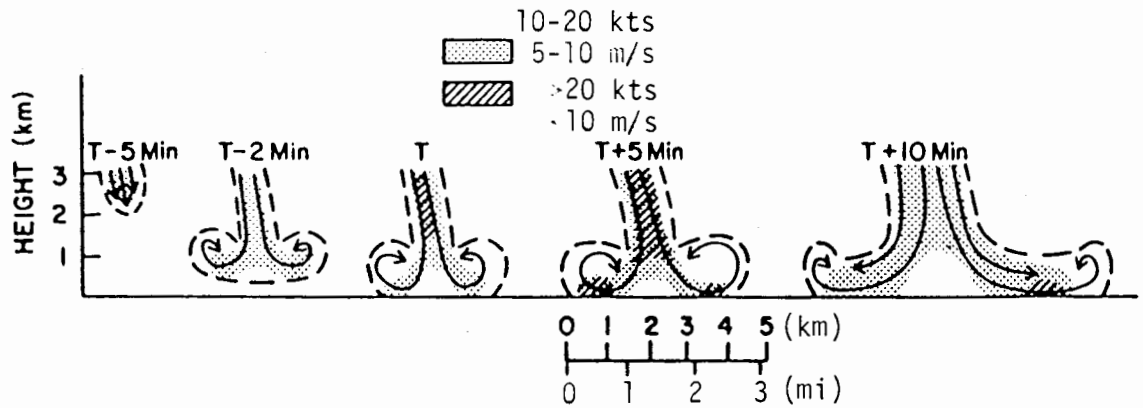


Figure 2.10. Vertical cross section of the evolution of the microburst wind field, based on a summary of examining 50 microbursts with Doppler radar. T is the time of initial divergence reaching the surface. Notice that it takes about 5 minutes after T for the microburst to reach maximum intensity. In addition, the divergence is observed above the surface several minutes before impact with the surface. Note the small scale of the phenomena, typically less than the length of a jet runway.

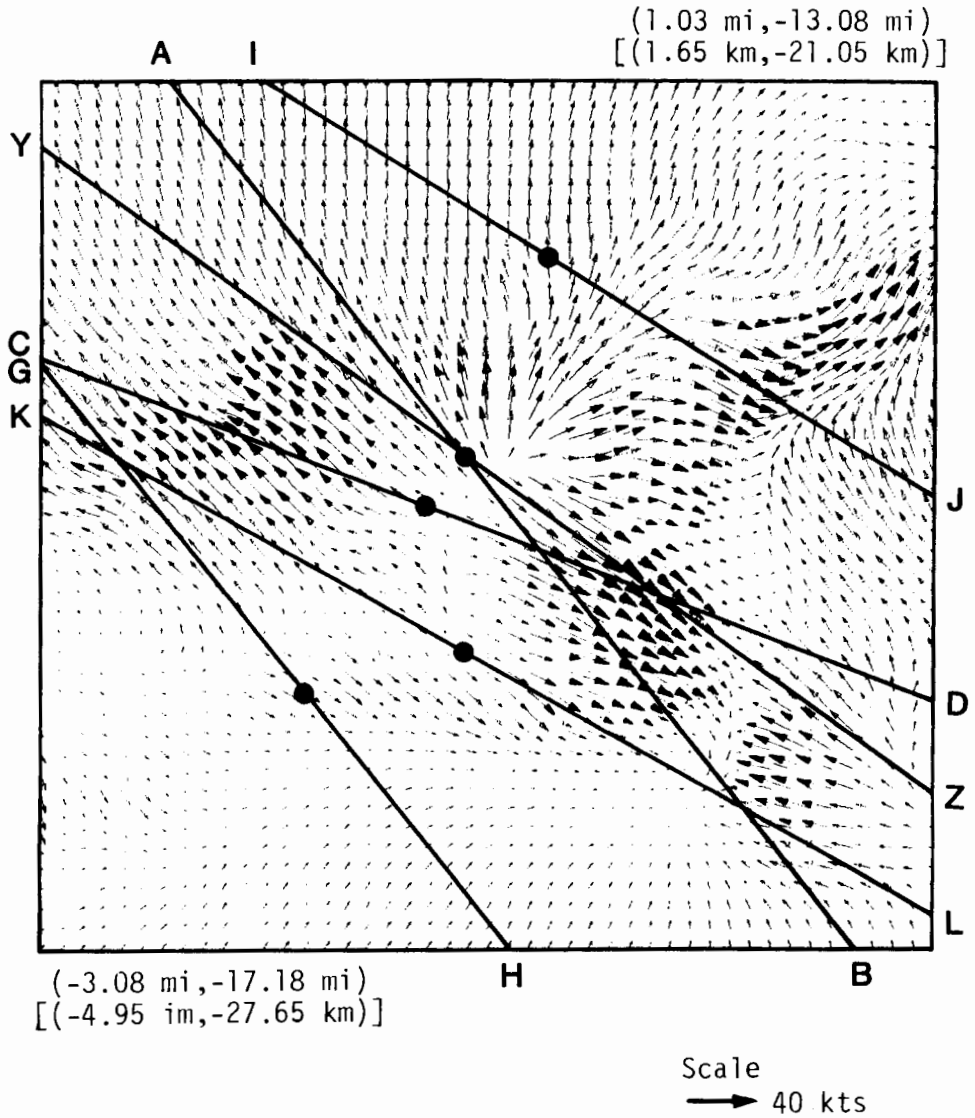


Figure 2.11. Flight paths recommended for wind shear simulations overlaid on horizontal wind speed vectors, August 5, 1982, 1847 MDT. Horizontal grid spacing is 492 ft (150 m) and vertical spacing is 820 ft (250 m). Dots represent the reference for each path definition shown in Table 2.2.

classified by conducting an approach or takeoff computer simulation with a B727-type aircraft along each path. Detailed description of the aircraft analysis and criteria of hazard level is given in Appendix B.

Following considerable analysis and many computer flight path simulations, those paths indicated in Figures 2.11 through 2.13 were selected and are recommended for user applications. Table 2.2 lists each of the flight paths recommended, provides an identification name, states the intensity classification, and describes the coordinates and direction of the flight path according to the definition given in Figure 2.14. The flight paths specified for the August 5 and June 30 data sets are the same for each time sequence of the full-volume data.

A brief description of the classifications of Class III, Class II, and Class I is:

1. Class III: poses little problem to a pilot.

2. Class II: may result in at least loss of a stabilized approach or markedly decreased takeoff performance.

3. Class I: may result in a go-around during approach (which may not be successful) and severely decreases performance during takeoff (perhaps making a successful takeoff impossible).

Shear intensity categories I, II, and III are used instead of the more conventional definition of severe, moderate, and light because these latter classifications are aircraft-type and pilot experience dependent. A more complete description of these definitions is given in Appendix B.

2.6 Flight Path Description

Consider Figure 2.11, which shows a portion of the ground level plane for the August 5, 1847 MDT measurement. Coordinate values given at the corners of the plane are relative to the origin located at CP-2. The diverging outflow of the microburst is easily discernable, with the center located approximately at (-1.12 mi,-14.85 mi) [(-1.80 km,-23.90 km)]. Paths were selected relative to the center of the microburst with the objective of finding the maximum headwind-to-tailwind change in wind speed and/or unusual crosswind variations. Paths $\overline{AB}$, $\overline{YZ}$, and $\overline{CD}$ have approximately the maximum change in head-to-tailwind speed for either direction of flight. Flight path $\overline{IJ}$ was visually selected to give a crosswind shear. Finally, flight paths $\overline{KL}$ and $\overline{GH}$ were selected to provide a measure of light but challenging wind shear.

Figure 2.12 shows a portion of the ground level plane for the June 30, 1821 MDT measurement. Paths $\overline{EF}$ and $\overline{RS}$ have complex changes in wind speed (first, a strong tailwind is encountered, then an increasing crosswind, and finally an increasing tailwind). Path $\overline{PQ}$ encounters the

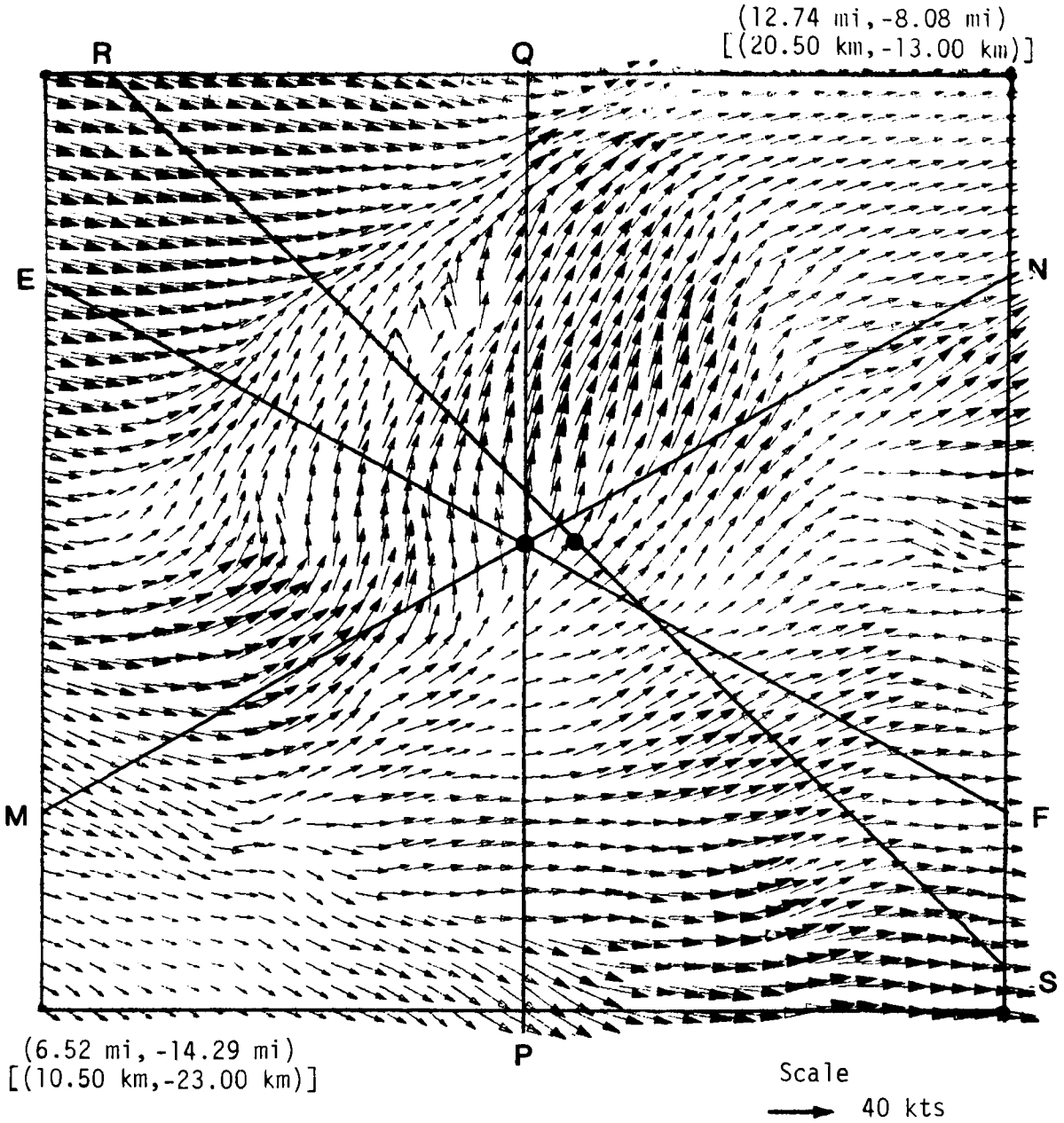


Figure 2.12. Flight paths recommended for wind shear simulations overlaid on horizontal wind speed vectors, June 30, 1982, 1821 MDT. Both horizontal and vertical grid spacing is 820 ft (250 m).

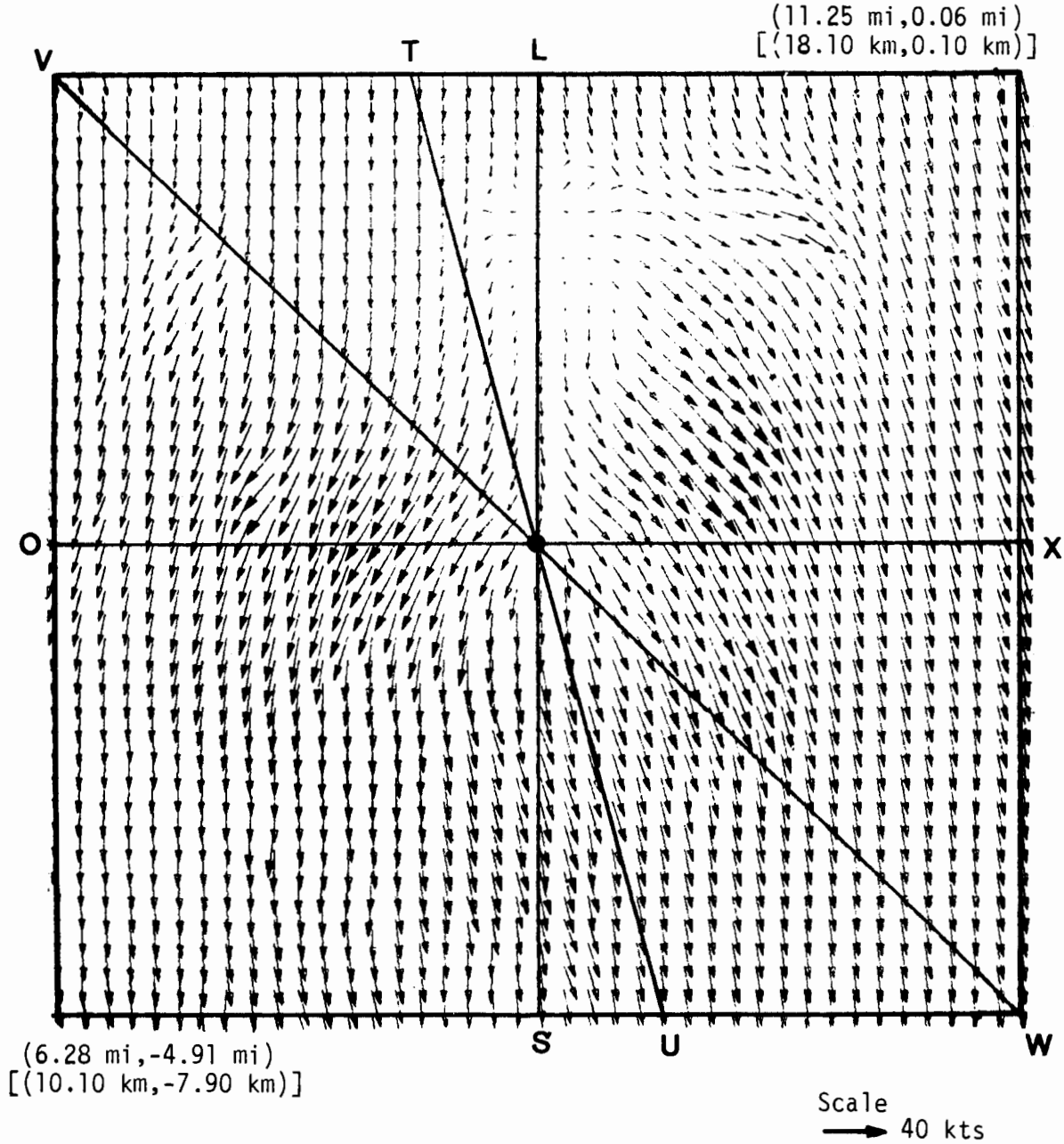


Figure 2.13. Flight paths recommended for wind shear simulations overlaid on horizontal wind speed vectors, July 14, 1982, 1452 MDT. Both horizontal and vertical grid spacing is 656 ft (200 m).

TABLE 2.2. Selected Flight Path for August 5, June 30, and July 14 Microbursts.

Flight Path	Path Definition (x_o, y_o)* Relative to the Upper Left-Hand Corner Point (0,0) of Full-Volume in Miles [Km] θ in Degrees		Coordinates (x,y) of the Corresponding Microburst Center on Each Path Relative to CP-2 in Miles [Km]	Microburst	Path Shear Intensity Classification
$\overline{AB}$	(3.26,3.64) [(5.25,5.85)]	θ = 52.7	(-1.12,-14.85) [(-1.80,-23.90)]	5 August	I
$\overline{CD}$	(3.08,3.87) [(4.95,6.23)]	θ = 19.9	(-1.31,-15.09) [(-2.10,-24.28)]	5 August	I
$\overline{YZ}$	(3.26,3.64) [(5.25,5.85)]	θ = 37.0	(-1.12,-14.85) [(-1.80,-23.90)]	5 August	I
$\overline{IJ}$	(3.64,2.70) [(5.85,4.35)]	θ = 32.3	(-0.75,-13.92) [(-1.20,-22.40)]	5 August	II
$\overline{KL}$	(3.26,4.57) [(5.25,7.35)]	θ = 30.0	(-1.12,-15.78) [(-1.80,-25.40)]	5 August	III
$\overline{GH}$	(2.52,4.75) [(4.05,7.65)]	θ = 52.7	(-1.86,-15.97) [(-3.00,-25.70)]	5 August	III
$\overline{EF}$	(7.15,6.99) [(11.5,11.25)]	θ = 30.0	(9.63,-11.18) [(15.50,-18.00)]	30 June	I
$\overline{MN}$	(7.15,6.99) [(11.5,11.25)]	θ = -30.0	(9.63,-11.18) [(15.50,-18.00)]	30 June	II
$\overline{PQ}$	(7.15,6.99) [(11.5,11.25)]	θ = -90.0	(9.63,-11.18) [(15.50,-18.00)]	30 June	I
$\overline{RS}$	(7.46,6.99) [(12.0,11.25)]	θ = 45.0	(9.94,-11.18) [(16.00,-18.00)]	30 June	I
$\overline{TU}$	(4.85,4.23) [(7.80,6.80)]	θ = 75.0	(8.76,-2.42) [(14.10,-3.90)]	14 July	II
$\overline{VW}$	(4.85,4.23) [(7.80,6.80)]	θ = 45.0	(8.76,-2.42) [(14.10,-3.90)]	14 July	III
$\overline{OX}$	(4.85,4.23) [(7.80,6.80)]	θ = 0.0	(8.76,-2.42) [(14.10,-3.90)]	14 July	II
$\overline{LS}$	(4.85,4.23) [(7.80,6.80)]	θ = 90.0	(8.76,-2.42) [(14.10,-3.90)]	14 July	II

*The coordinate system is used in the calculation of the computer simulation presented in Appendix B.

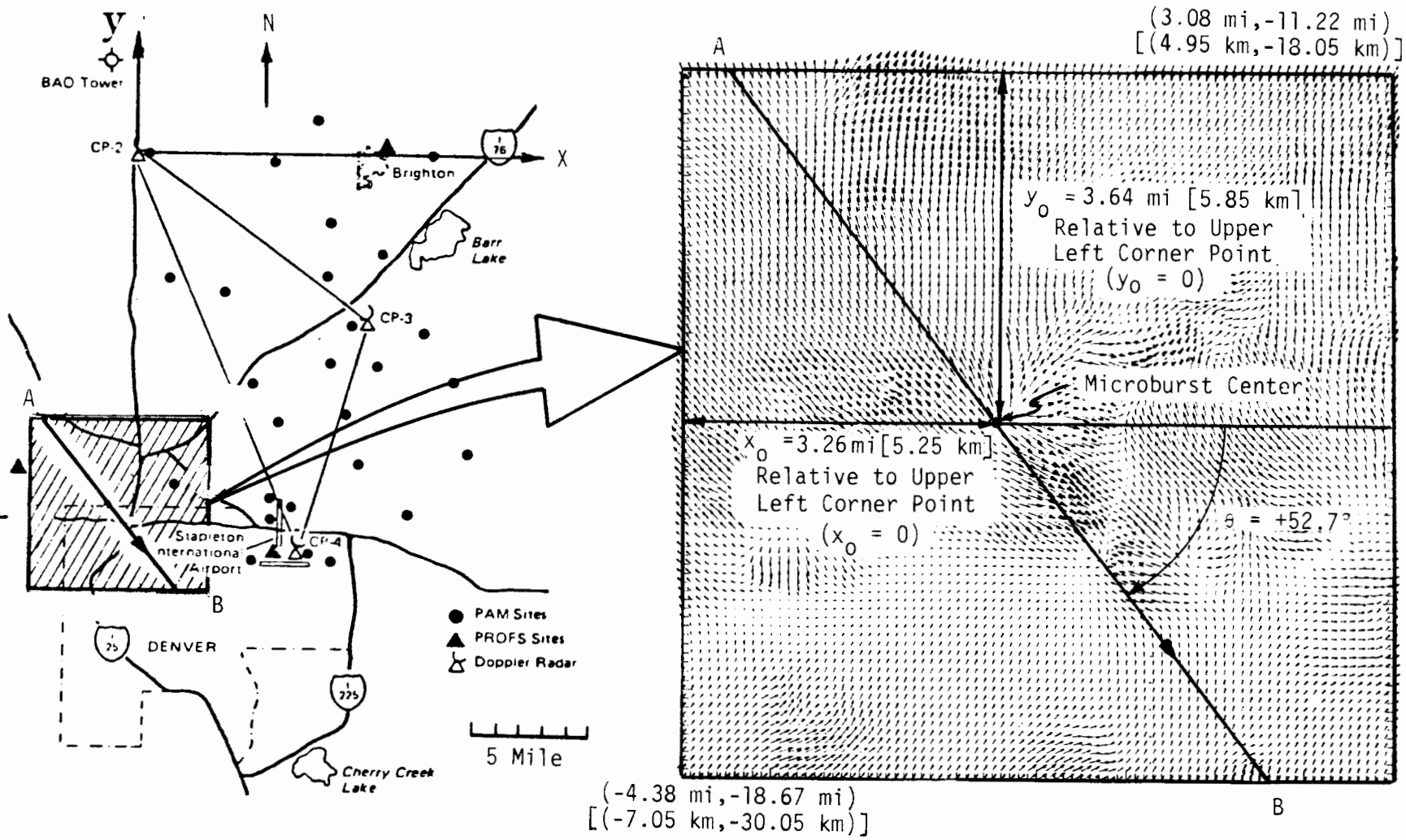


Figure 2.14. Definition of path coordinates and direction for paths tabulated in Table 2.2.

crosswind first and then enters a strong tailwind region. Path $\overline{MN}$ has a tailwind over the entire path and encounters a reversing crosswind shear approximately 1.6 mi (2.5 km) short of the path center point.

Similarly, Figure 2.13 shows a portion of the ground level plane for the July 14, 1452 MDT microburst which is relatively symmetric about the location (8.76 mi,-2.42 mi) [(14.10 km,-3.9 km)], which was selected as the center of the wind field for this case based on the 656 ft (200 m) level horizontal winds and the vertical velocity plots. Paths $\overline{TU}$, $\overline{VW}$, $\overline{OX}$, and $\overline{LS}$ represent interesting shears for this microburst.

2.7 Corridor Data

There are two ways aircraft performance simulation can be approached with the JAWS data sets: either using the full-volume data set or using only certain corridors within the data set that are centered upon the wind shear event of interest. Of the two, the first approach offers the most realism but requires the most computer storage to implement. The second approach limits the number of flight maneuvers which can be simulated but minimizes the effort required for implementation into the host computer. For this reason, corridors of data along each of the paths listed in Table 2.2 and plotted in Figures 2.11 through 2.13 have been developed. These corridors, which are defined in detail in Appendix C, consist of three vertical planes of data as illustrated in Figure 2.15. The center plane is aligned along the respective path (for example, along path $\overline{AB}$) with a parallel plane on each side separated by a distance of 500 ft.

A grid spaced at 500-ft intervals was laid out on each plane and wind speeds from the full-volume element were interpolated to these grid points using the interpolation scheme described earlier. Each corridor has five data levels; one at ground level, one at 500 feet, one at 1000 feet, one at 1500 feet, and the last at 2000 feet AGL. A new coordinate system was defined for each corridor data set. The X-axis of the coordinate system points along the direction of the path (for example, along $\overline{AB}$), and the Z-axis points vertically upward. The positive Y direction is defined with the standard right-hand convention. For the corridor data sets, capital X, Y, and Z are the nomenclature used for the new coordinate axis. In transferring to the grid system of the three planes, the wind speed components were rotated to align with the new coordinates axis. The nomenclature in the transformed coordinates is: W_X wind speed along the flight path, W_Y wind speed to the left, and W_Z wind speed vertically upward. When flying in a positive X-direction, $W_X > 0$ is a tailwind, $W_Y > 0$ is a right crosswind, and $W_Z > 0$ is an updraft.*

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*This coordinate system is meteorologically consistent, but does not follow standard aeronautical convention.

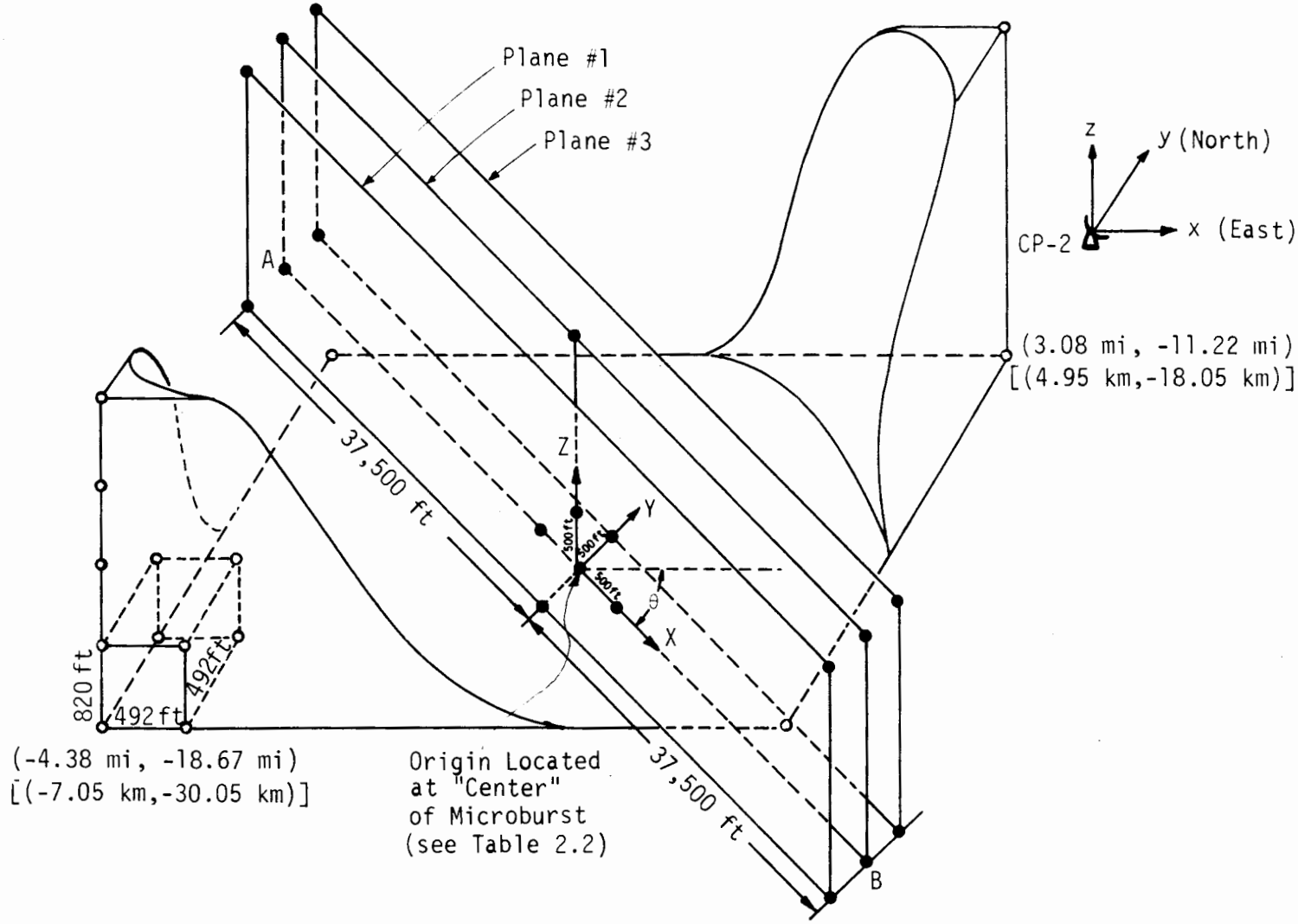

Figure 2.15. Description of corridor data set coordinate system and its orientation relative to the full-volume data set (the example shown is along path $\overline{AB}$; August 5, 1982, microburst and the grid resolution shown in the lower left is for this August 5 case).

The origin of the coordinate system was selected to correspond with the approximate center of the microburst (see values listed in Table 2.2). The X-axis extends in both the positive and negative directions from this central point. The data were interpolated from the full-volume data set to 500-ft intervals for distances of +37,500 ft and -37,500 ft in each direction. These distances extend roughly to, or somewhat past, the edge of the full-volume element. In the latter case, the data have been extrapolated outside the volume element for the user's convenience and for completeness of each corridor data set. There are a total of 40 corridor data sets (see Table C.1) for the selected flight paths shown in Figures 2.11 through 2.13. The projection of the wind vector in the central corridor plane (a vertical plane), which is coincident with the intended flight path, is plotted in Appendix E for all 40 paths.

The corridor data sets are provided both on magnetic tape (see Appendix C) and in tabular form. Tables of the data are provided in Appendix F for a selected number of paths. The tabulated data may be manually input into the user's computer system if desired. It is recommended, however, if a large number of the corridor data sets are to be installed in computer storage, the data tapes available from NCAR be utilized (described in Appendix C).

Figure 2.16 illustrates a portion of a typical corridor data table. Each page of the table has 13 columns after the header. The left-most column--labeled X--is the horizontal distance in feet from the central point of the wind shear (see Figure 2.15) to each consecutive grid point. The next four columns are collectively labeled at the top as "Plane 1." If flying in an increasing x direction, Plane 1 is the right-hand plane. Of these four columns, the first, labeled W_X, is the wind speed along the X-axis in knots. The second, labeled W_Y, is the wind speed perpendicular to the X-axis in knots and is positive to the left (right-hand coordinate system). The third, labeled W_Z, is the vertical wind in knots, and the fourth, labeled DBZ, is the radar reflectivity in dBZ's. Since each corridor is composed of three vertical data planes, there are two more sets of four columns each; one set for each additional plane of data. For all the corridors, the central data plane, "Plane 2," is always coincident with the intended flight paths. Consequently, to simulate an aircraft trajectory down the designated path (for example, along $\overline{AB}$) the aircraft would be trimmed in the center plane.

2.8 Using a Corridor Data Table

As an example of using the corridor data, consider Table F.1 in Appendix F. There are 151 grid points in each corridor data set. The corridor data are provided along the intended flight path $\overline{AB}$ (from northwest to southeast) through the August 5, 1982, 1845 MDT microburst. The distances of each grid point from the microburst center are shown on the first column of the data table. If flying from A towards B, negative

TABLE F.1. JAWS Corridor Data Set #1 (along path $\overline{AB}$ in 5AU1845 measurement).

Path Shear Intensity: Class I
Plane Separated by 500 ft
X = Horizontal Distance (ft)

WX = Wind in X Direction (kts)
WY = Wind in Y Direction (kts)
WZ = Wind in Z Direction (kts)
DBZ = Radar Reflectivity (dBZ)

Elevation: 0 ft AGL

	PLANE 1				PLANE 2				PLANE 3			
X	WX	WY	WZ	DBZ	WX	WY	WZ	DBZ	WX	WY	WZ	DBZ
-37500.	-5.83	3.69	0.00	-99.99	-5.84	3.96	0.00	-99.99	-5.35	3.92	0.00	-99.99
-37000.	-5.83	3.69	0.00	-99.99	-5.84	3.96	0.00	-99.99	-5.35	3.92	0.00	-99.99
-36500.	-5.83	3.69	0.00	-99.99	-5.84	3.96	0.00	-99.99	-5.35	3.92	0.00	-99.99
-36000.	-5.83	3.69	0.00	-99.99	-5.84	3.96	0.00	-99.99	-5.35	3.92	0.00	-99.99
-35500.	-5.83	3.69	0.00	-99.99	-5.84	3.96	0.00	-99.99	-5.35	3.92	0.00	-99.99
-35000.	-5.83	3.69	0.00	-99.99	-5.84	3.96	0.00	-99.99	-5.35	3.92	0.00	-99.99
-34500.	-5.83	3.69	0.00	-99.99	-5.84	3.96	0.00	-99.99	-5.35	3.92	0.00	-99.99
-34000.	-5.83	3.69	0.00	-99.99	-5.84	3.96	0.00	-99.99	-5.35	3.92	0.00	-99.99
-33500.	-5.83	3.69	0.00	-99.99	-5.84	3.96	0.00	-99.99	-5.35	3.92	0.00	-99.99
-33000.	-5.83	3.69	0.00	-99.99	-5.84	3.96	0.00	-99.99	-5.35	3.92	0.00	-99.99
-32500.	-5.83	3.69	0.00	-99.99	-5.84	3.96	0.00	-99.99	-5.35	3.92	0.00	-99.99
-32000.	-5.83	3.69	0.00	-99.99	-5.84	3.96	0.00	-99.99	-5.35	3.92	0.00	-99.99
-20000.	-2.22	0.19	0.00	55.26	-2.48	1.00	0.00	55.82	-2.23	1.83	0.00	54.97
-19500.	-3.50	1.85	0.00	55.18	-3.61	2.61	0.00	56.16	-1.90	2.03	0.00	55.78
-19000.	-3.11	1.89	0.00	51.59	-2.42	1.97	0.00	53.62	-1.96	2.50	0.00	53.79
-18500.	-3.16	1.85	0.00	50.44	-2.78	2.36	0.00	51.85	-2.82	3.55	0.00	52.19
-18000.	-3.88	2.30	0.00	49.55	-1.84	2.37	0.00	51.07	-2.08	3.27	0.00	50.52
-17500.	-4.24	3.24	0.00	47.39	-2.99	3.54	0.00	48.87	-3.16	3.98	0.00	50.46
-17000.	-5.38	4.32	0.00	44.94	-4.66	4.82	0.00	46.10	-5.70	5.75	0.00	47.44
-16500.	-4.25	3.01	0.00	43.55	-5.85	5.02	0.00	45.57	-6.45	6.46	0.00	46.08
-16000.	-7.04	3.82	0.00	43.44	-6.89	4.78	0.00	45.94	-7.94	6.71	0.00	45.34
-15500.	-9.49	5.44	0.00	40.62	-8.89	6.02	0.00	43.77	-9.05	6.70	0.00	42.94
-15000.	-8.84	5.47	0.00	36.51	-8.85	5.87	0.00	38.70	-10.10	6.80	0.00	40.39
-14500.	-8.18	5.05	0.00	33.90	-8.83	5.58	0.00	35.42	-10.80	6.73	0.00	37.26
-3000.	-22.00	-2.12	0.00	47.54	-17.10	-1.55	0.00	47.88	-10.79	-1.14	0.00	49.00
-2500.	-22.46	-1.21	0.00	49.93	-19.98	-1.15	0.00	49.23	-12.48	-1.22	0.00	48.37
-2000.	-20.41	-1.21	0.00	52.22	-17.50	-1.26	0.00	51.06	-14.43	-0.11	0.00	50.16
-1500.	-16.17	-1.23	0.00	51.89	-13.89	-1.42	0.00	51.00	-13.52	0.33	0.00	51.53
-1000.	-12.56	-0.84	0.00	50.89	-10.56	-1.86	0.00	50.10	-10.77	0.11	0.00	49.70
-500.	-7.74	-1.63	0.00	50.63	-6.66	-2.09	0.00	49.58	-6.67	-0.46	0.00	48.87
0.	-2.70	-2.96	0.00	51.56	-2.53	-2.23	0.00	50.66	-1.87	-1.37	0.00	48.92
500.	2.11	-4.58	0.00	51.33	1.75	-2.21	0.00	50.57	2.41	-0.13	0.00	50.02
1000.	6.48	-5.21	0.00	50.79	6.40	-2.85	0.00	50.63	6.06	-0.01	0.00	50.27
1500.	10.13	-4.46	0.00	50.84	10.71	-1.51	0.00	50.82	11.35	1.73	0.00	51.31
2000.	13.59	-0.80	0.00	49.88	16.15	1.06	0.00	49.47	19.23	3.18	0.00	49.76
2500.	17.63	2.13	0.00	49.09	22.27	4.85	0.00	48.92	26.82	5.27	0.00	48.66
3000.	17.21	7.48	0.00	47.59	22.55	8.60	0.00	47.84	26.22	9.83	0.00	47.46
14500.	-3.00	-0.03	0.00	-99.99	-3.56	-0.36	0.00	-99.99	-3.97	-0.98	0.00	-99.99
15000.	-2.72	0.23	0.00	-99.99	-3.33	-0.21	0.00	-99.99	-4.03	-0.80	0.00	25.41
15500.	-2.50	0.50	0.00	-99.99	-3.12	-0.01	0.00	-99.99	-3.79	-0.40	0.00	-99.99
16000.	-2.28	0.75	0.00	-99.99	-2.79	0.49	0.00	-99.99	-3.41	-0.41	0.00	27.23
16500.	-1.97	1.25	0.00	-99.99	-2.49	0.65	0.00	25.72	-3.04	-0.39	0.00	21.58
17000.	-1.70	1.66	0.00	23.08	-2.30	0.57	0.00	12.22	-2.53	0.42	0.00	12.17
17500.	-1.56	1.69	0.00	8.39	-2.01	1.33	0.00	7.75	-2.45	0.32	0.00	7.43
18000.	-1.45	2.15	0.00	13.55	-1.93	1.85	0.00	10.19	-2.47	0.28	0.00	7.91
18500.	-1.52	2.74	0.00	7.95	-1.93	2.00	0.00	9.79	-2.25	1.63	0.00	10.21
19000.	-1.56	2.98	0.00	6.16	-1.95	2.66	0.00	7.67	-2.22	2.52	0.00	-99.99
19500.	-1.69	3.33	0.00	6.92	-2.16	3.29	0.00	12.23	-2.14	3.04	0.00	-99.99
20000.	-2.04	3.79	0.00	11.95	-2.13	3.63	0.00	14.28	-2.72	3.49	0.00	-99.99
32000.	-16.48	8.87	0.00	-99.99	-9.42	8.62	0.00	-99.99	-5.44	7.55	0.00	-99.99
32500.	-16.48	8.87	0.00	-99.99	-9.42	8.62	0.00	-99.99	-5.44	7.55	0.00	-99.99
33000.	-16.48	8.87	0.00	-99.99	-9.42	8.62	0.00	-99.99	-5.44	7.55	0.00	-99.99
33500.	-16.48	8.87	0.00	-99.99	-9.42	8.62	0.00	-99.99	-5.44	7.55	0.00	-99.99
34000.	-16.48	8.87	0.00	-99.99	-9.42	8.62	0.00	-99.99	-5.44	7.55	0.00	-99.99
34500.	-16.48	8.87	0.00	-99.99	-9.42	8.62	0.00	-99.99	-5.44	7.55	0.00	-99.99
35000.	-16.48	8.87	0.00	-99.99	-9.42	8.62	0.00	-99.99	-5.44	7.55	0.00	-99.99
35500.	-16.48	8.87	0.00	-99.99	-9.42	8.62	0.00	-99.99	-5.44	7.55	0.00	-99.99
36000.	-16.48	8.87	0.00	-99.99	-9.42	8.62	0.00	-99.99	-5.44	7.55	0.00	-99.99
36500.	-16.48	8.87	0.00	-99.99	-9.42	8.62	0.00	-99.99	-5.44	7.55	0.00	-99.99
37000.	-16.48	8.87	0.00	-99.99	-9.42	8.62	0.00	-99.99	-5.44	7.55	0.00	-99.99
37500.	-16.48	8.87	0.00	-99.99	-9.42	8.62	0.00	-99.99	-5.44	7.55	0.00	-99.99

Figure 2.16. Excerpt from typical corridor data set table (for complete data see Table F.1, Appendix F).

distances indicate that the microburst center has not yet been reached. The user arbitrarily determines that an aircraft flies either along the direction from A to B or from B to A. However, if an aircraft flies along the direction B to A, one must change the signs of X, W_X, and W_Y in the table to be consistent with the directions of the new frame of reference.

2.8.1 Approach Example 1

Consider a simulation of an aircraft approaching along path $\overline{AB}$ with the intended touchdown point or the GPIP (glide path intercept point) at the center of the microburst. Assume the aircraft is -20,250 ft before the GPIP, at a distance of 100 ft right of the center plane (Plane 2), and at an altitude of 750 ft above the runway or ground level. The first step required in computing the wind components is to determine the grid points next to the aircraft position. The neighboring grid points for this case are between -20,500 and -20,000 ft in the X (along path) direction, between -500 and 0 ft in the Y (perpendicular to path) direction (between Planes 0 and 1), and between 1,000 and 500 ft in the Z (altitude) direction. The three wind components and wind gradient terms can be interpolated using Equations 2.1 and 2.3. The wind speed values are W_X = -6.46 kts ("-" means headwind), W_Y = 1.81 kts ("+" means right crosswind), and W_Z = -1.59 kts ("-" means downdraft).

2.8.2 Approach Example 2

Consider now an aircraft approaching from the southeast (from B to A) with an intended touchdown point (GPIP) at a distance 1000 ft past the microburst center. The intended approach path is still assumed to be in the center plane. If the aircraft were to maintain a 3° glide slope, it would fly through the microburst center at the height of 52.4 ft. Suppose, however, that the aircraft has deviated from the intended path and is 20,250 ft before the GPIP at a distance of 100 ft right of the center plane (with respect to the direction of flight) and at an altitude of 750 ft above the runway. In this case, the neighboring grid points in Table F.1 are between 19,500 and 19,000 ft in the X direction, 0 and 500 ft in the Y direction (between Planes 2 and 3), and 1000 and 500 ft in the Z direction, respectively. The wind components encountered by the aircraft at the given position are interpolated as W_X = +4.20 kts ("+" means tailwind), W_Y = -4.22 kts ("-" means left crosswind), and W_Z = 1.01 kts ("+" means updraft).

2.8.3 Takeoff Example

Consider an aircraft taking off along the intended flight path $\overline{AB}$ with brake release point (BRP) at a distance of -5000 ft before the microburst center and along the center plane. The wind speed at BRP is simply the values at X = -5000 ft, Y = 0 ft, and Z = 0 ft, i.e., W_X = -17.50 kts, W_Y = - 1.09 kts, and W_Z = 0 kts. Assume that after takeoff, the aircraft is 22,250 ft past the BRP, at a distance of 200 ft right of the center plane, and at an altitude of 250 ft above ground level. In

this case, the aircraft is between the grid points in the data table at +17,000 and +17,500 ft in the X direction, between -500 and 0 ft in the Y direction, and between 500 and 0 ft in the Z direction. Using the same interpolation method, the wind components at the aircraft's position are determined as W_X = -2.55 kts, W_Y = 1.52 kts, and W_Z = 0.23 kts.

2.8.4 Final Example

As a final example, consider an extreme case for which an aircraft is 40,000 ft before (or past) the microburst center, 750 ft right of the center plane, and 2500 ft above the runway; the data are used at -37,500 (or +37,500) ft in the X direction, at -500 ft in the Y direction, and at 2000 ft altitude.

3.0 CONCLUSIONS

The JAWS wind shear data sets provide the first four-dimensional wind field of a microburst to be made available to the aviation flight training and engineering research communities. Based on computer analysis and preliminary flight simulator studies, it is believed that the three and four dimensionality of the data provide more realism to flight simulators.

Analysis of aircraft performance in the three-dimensional wind fields clearly illustrates the hazards associated with particular regions of the wind field. Three shear intensity classifications (I, II, and III) can be used by airline training and research and development simulator communities to readily select wind shear intensities necessary for their particular applications.*

It is recommended that the entire data set be used in advanced flight simulators when carrying out wind shear studies. For older simulators having less core capabilities and other smaller, less sophisticated simulators that are unable to accommodate the large amounts of data, subvolumes have been selected and specifically formatted for these needs.

The microburst models provided do not consider wind motions that are classically called turbulence (Frost 1984). The present FAA Advisory Circular 120-41 recommends superimposing turbulence on the quasi-steady wind shear. This is considered a reasonable approach, but the proposed Dryden spectrum model with constant turbulence intensity and a turbulence length scale varying only in the vertical direction is believed to be inadequate for the microburst wind field models. Typically, one would expect the turbulence length scales to vary horizontally as well as vertically and the turbulence intensity also to vary spatially. Moreover, the Dryden spectrum is not a general representation of atmospheric motions: the von Karman spectrum agrees much better with experiments. Consideration of the scales of microburst motion relative to the scales of aircraft geometry clearly shows that the high frequency motions averaged out by the Doppler radar processing procedures are still relatively large compared to aircraft dimensions. This suggests that within a typical volume element of say 656 x 656 ft (200 x 200 m) there are turbulent motions that could influence aircraft performance. One might not anticipate these to strongly influence the trajectory of the aircraft, i.e., the success of the approach or takeoff, but quite likely they will affect the workload of the pilot. This workload may be an important parameter in training. High frequency motions may also strongly influence the design of guidance and control systems.

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*Recent studies with flight simulators have suggested that the intensity of the JAWS wind shear data be increased by multiplying all wind speed components by a constant factor (typically on the order of 1.5). This procedure provides more intense shear without violation of any of the principles of fluid dynamics.

A turbulence model to supplement the JAWS wind fields should be developed. Monte Carlo simulation techniques utilizing length scales and turbulence intensities which may be determined from further analysis of the JAWS data, particularly the second moment of the radar return signal, are required. Preliminary analyses show that turbulence intensities have their highest values in regions of strong shear. This is in agreement with expected results based on the principle of fluid mechanics. Further study to fully assess these preliminary results is required.

Further work is also required on developing mathematical models having the statistical properties which characterize microburst wind shear events. These models will then allow parametric studies of microburst wind shear flight hazards. Efforts are underway in the JAWS Project to provide these models.

The JAWS data sets presented in this report are believed to be a substantial advancement for models of wind shear that can be utilized for flight crew training and for guidance and airborne warning and detection systems development. It should be noted, however, that the models presented are strictly valid for microburst wind shear phenomena. Other forms of wind shear which could be hazardous are associated with gust fronts, terrain effects, and highly stable atmospheric boundary layers. The microburst wind shear event is believed to be the more hazardous form of wind shear for the large commercial-type airliners. This is due to strong headwind-to-tailwind shears resulting in substantial airspeed loss over very short distances, i.e., distances on the order of a runway length.

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APPENDICES

APPENDIX A

JAWS MULTIPLE DOPPLER DERIVED WINDS

A.1 Introduction

This appendix gives an elementary working knowledge of the advantages and limitations of the multiple Doppler radar analyses that have recently become available from the Joint Airport Weather Studies (JAWS) Project. The emphasis is specifically directed towards engineers and other technical specialists working in aviation-related systems rather than research institutes. What Doppler radar is and what it does is addressed and the way Doppler radars were used in the JAWS Project to gather wind shear data is described. The working definition of wind shear used here is "winds that affect aircraft flight over a span of 15 to 45 seconds," whereas turbulence is defined as "air motions that cause abrupt (several seconds or less) aircraft motions." The JAWS data currently available contain no turbulence data.

The concept of multiple Doppler analysis and the geometry of how it works are described, followed by an explanation of how data gathered in radar space are interpolated to a common Cartesian coordinate system and the limitations involved. This section includes a discussion of the analysis grid and how it is constructed. What the user actually gets (quasi-horizontal wind components) is discussed, followed by a discussion of the expected errors in the three orthogonal wind components. The paper concludes with a discussion of why JAWS data are significant.

An exhaustive treatment of Doppler radar technology and techniques is not intended but rather a very basic description of the concepts needed to understand what JAWS can and cannot provide in the area of observed wind shear data.

A.2 Doppler Radar: What Is It?

Like a Doppler radar, a standard, or incoherent, weather radar transmits a very short (about a microsecond long) pulse of electromagnetic energy and then listens for a relatively long period (roughly a millisecond) for any echoes. By carefully timing how long it takes to receive any echoes, the range to the echo can be determined very precisely. The direction of the echo from the radar is established by where the antenna is pointing when the echo is received as the antenna does not move a significant amount from the time of transmission to the time of echo reception. Some idea of the size and number of echo-producers--targets--can be determined if something is known about their physical makeup, e.g., liquid water, wet ice (as in hail), snow, or, in the case of non-weather radar, metal. For rain, the stronger the signal returned, the larger the raindrops.

Meteorologists commonly refer to the signal intensity of return from a radar in terms of the reflectivity factor, Z. This factor is independent of effects due to range from the radar, and radar type, and is a measure of many properties making up the meteorological target scatterers. Thus, useful information about the target scatterers, i.e., rainfall rate, can be determined from the reflectivity factor.

This can be seen as follows: as it is used, the reflectivity factor is

$$Z = CK \frac{\overline{P}_r}{4\pi r^2} \tag{A.1}$$

where Z is the reflectivity factor, K is a constant which corrects for whether the target scatterers are ice or water, $\overline{P}_r$ is the mean power received by the radar in watts averaged over about 10 pulses (since raindrops are constantly moving about, vibrating, coalescing, breaking up, etc.), C is a sensitivity factor tailored to each individual radar that makes the reflectivity factor a function of the meteorological target alone, and r is the range to the target scatterers. The constant C factors out such variables as antenna gain, transmitter power, radar wavelength, distance to target scatterers, etc. The formal definition of reflectivity factor is

$$Z \equiv \int_0^\infty D^6 N(D) dD \tag{A.2}$$

where D is the raindrop diameter, N(D) is the drop size distribution, and N(D)dD is the number of drops with diameters between D and D+dD. The drop size distribution is very nearly exponential, such that $N(D)dD \propto e^{-D}$ and as drops become larger they rapidly become more scarce. In reality, the exponential distribution does not hold at the small end of the distribution, and drops larger than about 6 to 8 mm in diameter spontaneously break up into smaller drops. Note that since reflectivity factor Z spans several orders of magnitude, a more convenient measurement is given in decibels, i.e., $dBZ = 10 \log_{10} Z$.

From the definition of Z, Equation A.2, it can be seen that Z varies linearly with the number of drops and as the sixth power of the drop diameter, i.e., Z is very sensitive to large drops. Because heavy rainfall has a large number of drops per unit volume (and thus more large drops), heavy rain is associated with high Z values. Empirical Z versus R relationships have been developed to estimate rainfall rates from reflectivity. A commonly used Z versus R relationship that yields good results is

$$Z = 200\ R^{1.6} \tag{A.3}$$

where R is the rainfall rate in mm hr^{-1}. Note that Z versus R relationships can become very inaccurate if hail is present or if the drop size distribution is skewed significantly towards large drops.

Finally, dBZ can be related to the National Weather Service (NWS) Video Integrator and Processor (VIP) levels as follows (Dept. of Commerce, 1980):

dBZ Relationship to VIP Levels	NWS Rainfall Classification
VIP 1 < 30 dBZ	Light
30 dBZ $\leq$ VIP 2 < 41 dBZ	Moderate
41 dBZ $\leq$ VIP 3 < 46 dBZ	Heavy
46 dBZ $\leq$ VIP 4 < 50 dBZ	Very heavy
50 dBZ $\leq$ VIP 5 < 57 dBZ	Intense
VIP 6 $\geq$ 57 dBZ	Extreme

A lot can be learned about radar scattering targets using an incoherent radar, but target motion relative to the radar cannot be obtained directly. If it is a large single-point target, like an airplane, direction and speed can be determined after a minimum of only two scans by the radar; its movement from one scan to the next can be observed. But in the case of meteorological echoes, which are caused by thousands of target scatterers far smaller than the radar can resolve individually, the scatterers' motion relative to the storm is unknown. Only the entire storm motion is known.

A Doppler, or coherent, radar does exactly what an incoherent radar does plus one other function: it measures how fast a target is moving toward or away from the radar by measuring the Doppler phase shift of the received signal. The speed radar used by police is a very simple version of the kind of radar used in the JAWS Project. The term coherent indicates that the phase of the transmitted radar signal is coherent from one pulse to the next; and so any phase shift in the returned signal can be measured and converted to engineering units of meters per second or knots. Since Doppler frequency shifts are so small at the speeds meteorological targets move and at the frequencies meteorological radars operate, phase shifts rather than frequency shifts are measured. Regardless of whether phase or freuqency shifts are measured, the Doppler concept remains valid. Because a Doppler shift <u>relative to the radar</u> is used to measure velocity, the target must have some component of motion toward or away from the radar to register a non-zero velocity. A Doppler

radar can only measure the radial component of motion toward or away from it--any tangential component cannot be observed.

Data collected by a pulsed Doppler radar are described in terms of beams and gates (gates are often interchangeably referred to as pulse volumes). A Doppler radar operating with a stationary antenna maintaining a constant azimuth and elevation angle transmits a pulse of energy which, as it travels out, traces a beam. Due to the nature of the antennae currently in use on the JAWS radars, the beam is not perfectly columnated like a laser; it spreads out, getting wider the further it gets from the radar. This spread is called the "beam-width." For the JAWS radars, the beam-width is very nearly 1 degree, and at ranges greater than about 6.2 mi (10 km) becomes the limiting factor, restricting what spatial scales the radar can resolve.

A receiver can be divided so that the waiting time for echo return is at approximately one-microsecond intervals. The pulse has time to travel out to and return from a range of 492 ft (150 m) (total distance of 984 ft (300 m)) in the first microsecond, 984 ft (300 m) in the second, 1476 ft (450 m) in the third, etc. A beam divided into discrete 492 ft (150 m) segments effectively defines a string of volumes that look like segments of a 1-degree cone, each segment 492 ft (150 m) long. These segments are what radar meteorologists refer to as "gates" and/or "pulse volumes."

Finally, the reflectivity and velocity data that a Doppler radar gathers are the ensemble average of what is in each gate. Thus, a tornado could be completely contained within a gate and the velocity data gathered by a Doppler radar would still reflect the average velocity within that gate (Doviak and Zrnić, 1984).

A.3 Multiple Doppler

Assume that there are two Doppler radars with beams oriented in a fashion similar to Figure A.1, and that the antennae are pointing locally parallel to the earth's surface. At the point where the two beams intersect, each Doppler radar is measuring the radial velocity towards it. Figure A.2 shows what radar A would measure in the gate coincident with the intersection of the two radar beams. For the sake of this example, assume further that radar B also has a gate coincident with the intersection of the two radar beams; Figure A.2 also shows what radar B measured in the gate coincident with the intersection of the two radar beams. Obviously, only simple geometry is required to resolve the two radial components measured by the two radars into two orthogonal components, as shown by the inset. Quite simply, this is how two Doppler radars are used to define the quasi-horizontal wind at the surface. But in reality, the process is much more complicated.

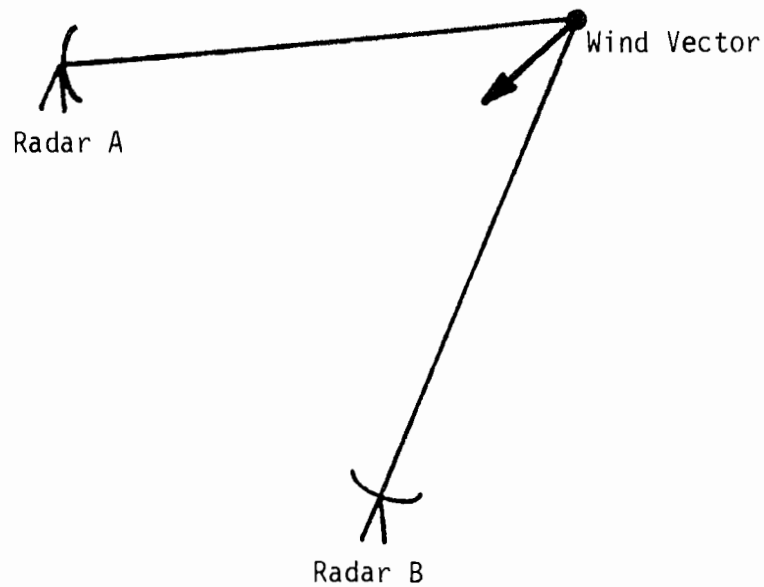

Figure A.1. Two Doppler radars sampling a common point in space.

A.4 Interpolation from Radar to Cartesian Space

A radar gathers data in a spherical coordinate system defined by azimuth, elevation, and range with the radar at the coordinate system origin. Since each radar works in its own coordinate system, a coordinate system common to both radars is required. The common coordinate system used is standard three-dimensional Cartesian space. For JAWS data, the x-direction is always pooitive towards the east, the y-direction positive towards the north, and the z-direction positive upward. As an example, a positive x wind component indicates that the wind is blowing from the west.

The process of mapping radar data onto a Cartesian coordinate system is called objective analysis. Figure A.3 shows a two-dimensional schematic view (not to scale) of radar data overlaid by a regular Cartesian grid. Each approximately square box signifies a gate of radar data and each plus-sign symbol signifies a Cartesian grid point or "node." There are many ways to perform an objective analysis, but all address the question of how best to derive a value at some grid point that is most representative of the surrounding data. A standard method called Cressman analysis (Cressman, 1959) that uses a distance-weighted mean computation is utilized in JAWS analyses.

Figure A.4 shows a close-up of nine grid points where the center grid point has been surrounded by a circle of influence whose radius equals the Cartesian grid spacing. All radar gates within this radius of influence contribute to the final value that is ultimately applied to a

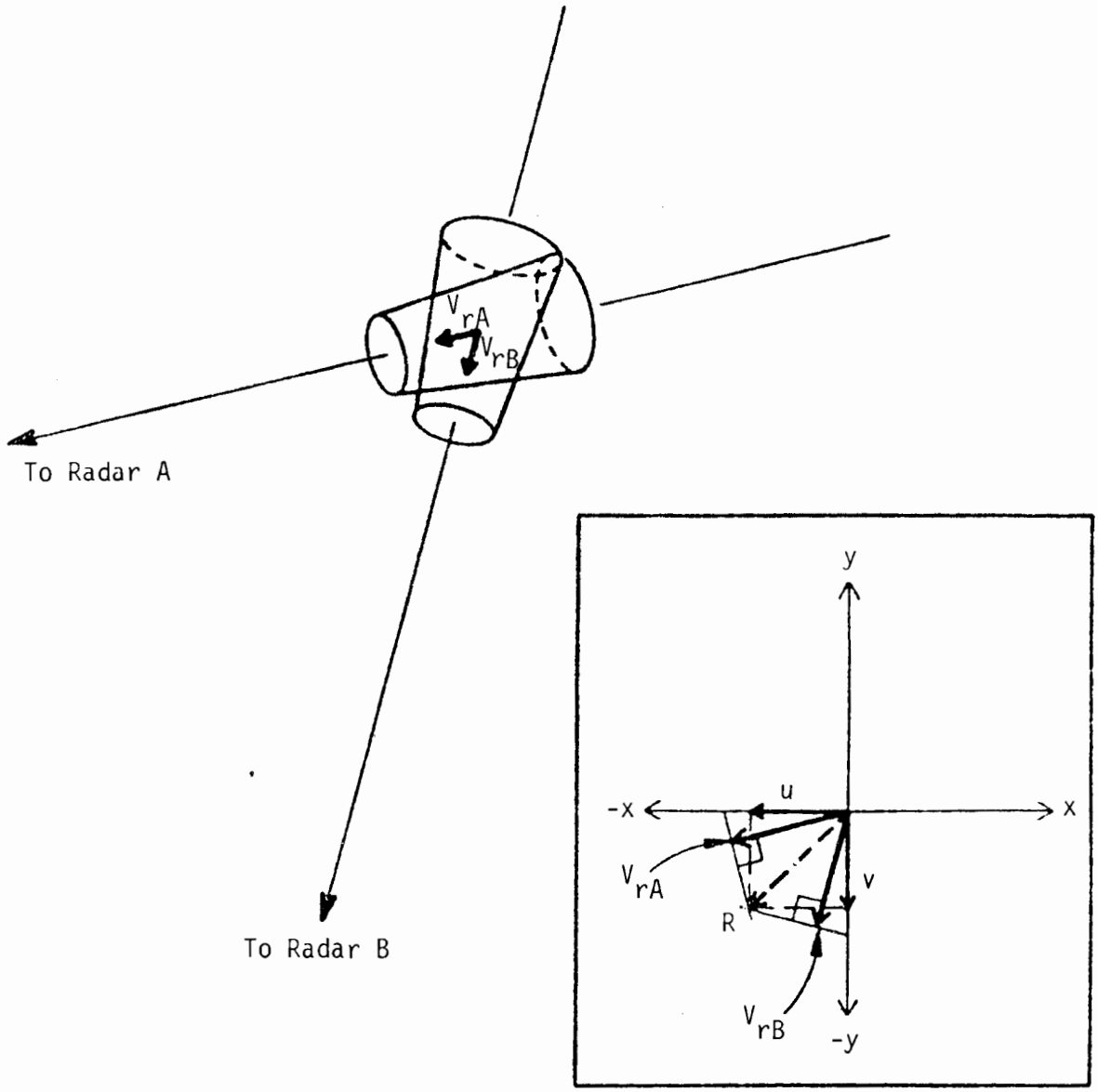

Figure A.2. The resolution of V_{rA} and V_{rB} into orothogonal components. Inset shows graphical resolution of two non-orthogonal into two orthogonal components using direction cosines.

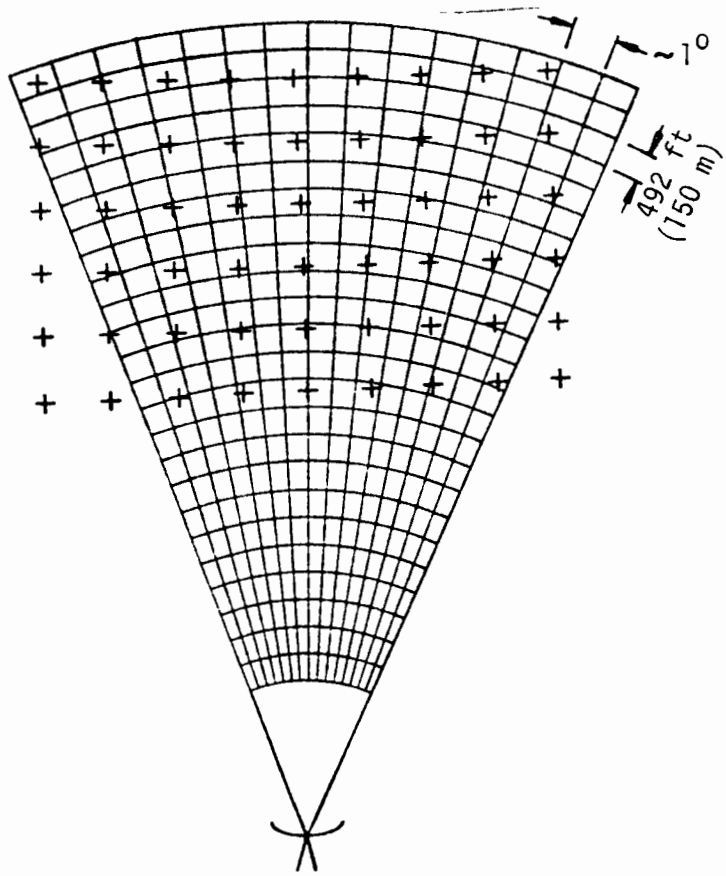

Figure A.3. Two-dimensional schematic view (not to scale) of Doppler radar data overlaid by an orthogonal Cartesian grid.

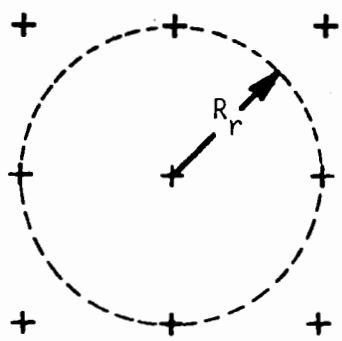

Figure A.4. A close-up of the Cartesian grid point that is used in a Cressman objective analysis scheme.

particular grid point and is representative of the data around it. Note that in using this method some gates will affect as many as four different grid points.

The weighting function to determine how much a given datum affects its associated grid point is given by

$$g_i = \begin{cases} \dfrac{R_r^2 - d_i^2}{R_r^2 + d_i^2}, & d_i \leq R_r, \\ 0, & d_i > R_r \end{cases} \tag{A.4}$$

where g_i is the weight of the ith datum, d_i is the distance from the grid point to the ith datum, and R_r is the radius of influence which, for our case, is equal to the grid spacing.

An objectively analyzed grid point value is defined as

$$G = \frac{\Sigma V_r(i) g_i}{\Sigma g_i} \tag{A.5}$$

where G is the objectively analyzed grid point value, $V_r(i)$ is the value of the ith datum, and g_i is the weight assigned to the ith datum. In reality, radar data are three-dimensional, not two-dimensional, and an influence volume, rather than an influence circle, is used. The influence volume is spheroidal or ellipsoidal in shape, since the Cartesian grids we use may not always have the same vertical and horizontal spacing.

This objective analysis is performed on the radial velocity and reflectivity data gathered by each radar. Thus, at the end of the objective analysis fields of radial velocity and reflectivity from each radar, all on a common grid, are available. Both the radial velocity and reflectivity are used in the next step: three-dimensional wind field synthesis.

A.5 Three-Dimensional Wind Field Synthesis

A synthesis is needed of the horizontal wind components W_x and W_y, as well as the vertical wind component, W_z, from only two knowns (radial velocity from each of two radars). It would seem that the system of equations is seriously under-determined, but this apparent dilemma is solved using the equation of continuity.

In its simplest terms, the equation of continuity states that whatever goes into a volume must come out of it somewhere else, thus conserving the mass within the volume. The volume may not accrue a mass excess or suffer a mass deficit. Figure A.5 shows the concept schematically.

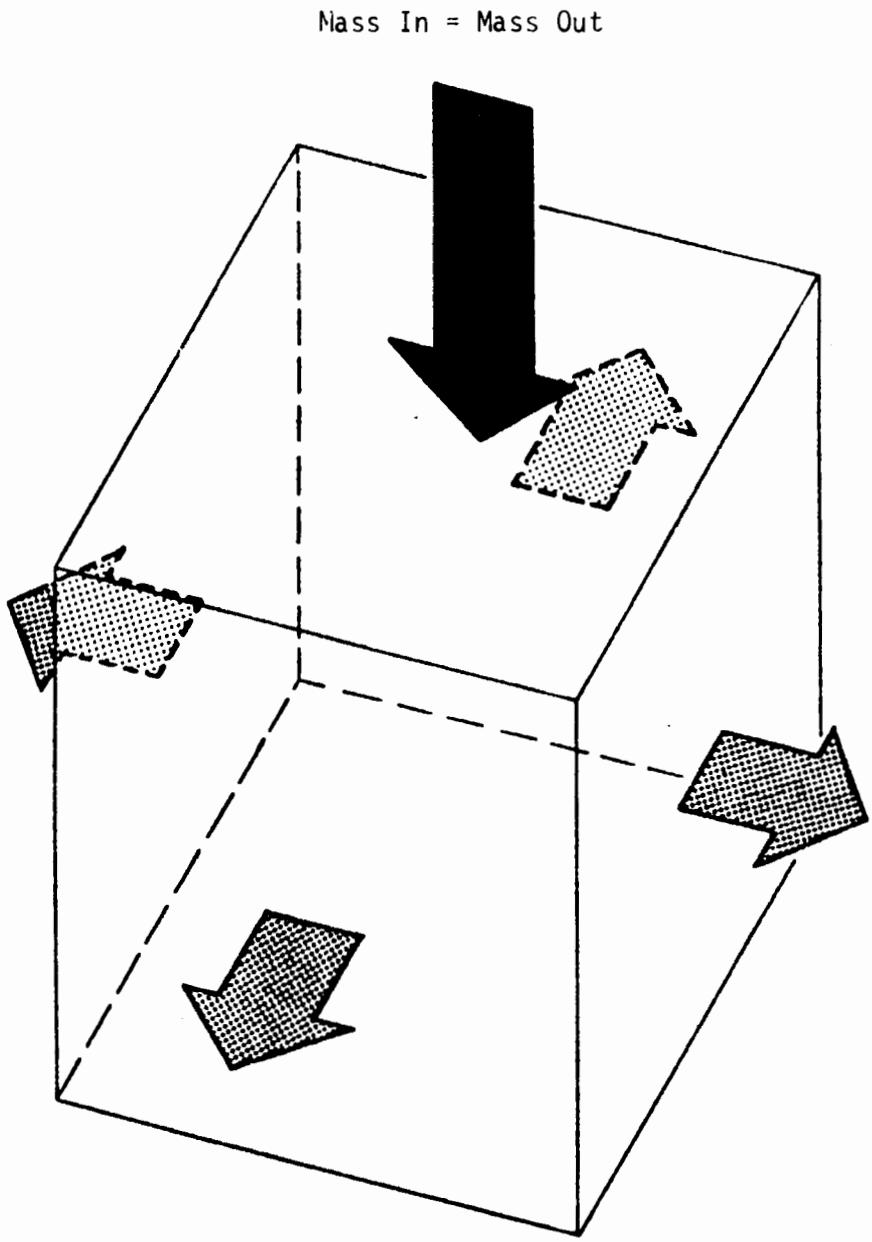

Figure A.5. The concept of continuity as it applied to JAWS analysis.

For this example, assume that the bottom of the box is a solid boundary, like the ground. Since air cannot go into or come out of the ground, whatever enters the top of the box must exit out the sides (divergence). Conversely, if air enters the sides of the box (convergence), air exits through the top.

The radial velocity measured from any radar, k, is given by

$$V_k = \frac{1}{R_k} (W_x w_k + W_y y_k + Wz_k) \tag{A.6}$$

where k is the radar index; x_k, y_k, and z_k are the Cartesian distances from the pulse volume to the kth radar; w_x, w_y, and W are the orthogonal components of motion of the raindrops measured by the radar; and R_k is the slant range from radar k to the pulse volume, defined as

$$R_k^2 = x_k^2 + y_k^2 + z_k^2 .$$

A radar actually measures the motion of raindrops, but what is desired is the air motion. Studies have shown (Bohne and Srivastava, 1975) that raindrops are remarkably good tracers of horizontal air motions, but they tend to fall at speeds that are on the order of the vertical wind speed; therefore, they make poor vertical air motion tracers. Thus, vertical fall speed somehow must be accounted for since the motion of the air, not of the raindrops, is desired.

Recall that reflectivity can be used to estimate the size of the raindrops. By knowing their size, a good estimate can be made of how fast they are falling through the air. With this estimation, a correction can be applied to the radial velocity from each radar to make a better estimate of the actual air motion, uncontaminated by the fallspeed of the raindrops.

So W in Equation A.6 can now be broken into two parts: Wz, the actual vertical air motion, and V_t, the terminal fallspeed of the raindrops. The equation describing terminal fallspeed has the following form (Rogers and Chimera, 1960):

$$V_t = -3.8 \left(\frac{\rho_{sfc}}{\rho(z)}\right)^{0.4} Z_e^{0.0174}, \tag{A.7}$$

where $\rho(z)$ is density at some height z, ρ_{sfc} is density at the surface, and Z_e is the equivalent radar reflectivity. Finally, the form of the continuity equation used for JAWS is the anelastic (or compressible) continuity equation given by

$$\frac{\partial Wx}{\partial x} + \frac{\partial Wy}{\partial y} + \frac{\partial Wz}{\partial z} = - \frac{Wz}{\rho} \frac{\partial \rho}{\partial z} . \tag{A.8}$$

We now have four equations, A.6 through A.8 (since A.6 counts as two equations), and four unknowns, Wx, Wy, Wz, and V_t.

Given the equation for V_1 and V_2 (the radial velocity from each radar), the equations for Wx and Wy become (Brandes, 1977)

$$Wx = A + B(Wz + V_t) \tag{A.9}$$

and

$$Wy = C + D(Wz + V_t) \tag{A.10}$$

where

$$A = \frac{R_1V_1y_2 - R_2V_2y_1}{x_1y_2 - x_2y_1}, \tag{A.11}$$

$$B = \frac{-z_1y_2 - z_2y_1}{x_1y_2 - x_2y_1}, \tag{A.12}$$

$$C = \frac{-R_1V_1x_2 - R_2V_2x_1}{x_1y_2 - x_2y_1}, \tag{A.13}$$

and

$$D = \frac{z_1x_2 - z_2x_1}{x_1y_2 - x_2y_1}. \tag{A.14}$$

Use Equation A.7 to eliminate V_t from Equations A.9 and A.10, and then integrate Equation A.8 to yield

$$Wz_k = Wz_{sfc}\frac{\rho_{sfc}}{\rho_k} - \frac{1}{\rho_k}\int_{z_{sfc}}^{z_k} \rho(z)\left(\frac{\partial Wx}{\partial x} + \frac{\partial Wy}{\partial y}\right)dz \tag{A.15}$$

where subscript sfc indicates a boundary (surface value), subscript k indicates the grid level for which the computation is being carried out, ρ is density, and $\rho(z)$ is the density at any height z.

In Equations A.9 and A.10, Wx, Wy, and Wz are all functions of each other and so are solved using an iterative predictor-corrector process. Starting at the bottom of the data (the surface), assume Wz = 0. Based on this assumption, solve for Wx and Wy. Then Wz at the next level up is specified using Wz at the previous level as a first guess. Since Wz is

specified at this k = 2 level, Wx and Wy are computed as at the surface. Wx's and Wy's now existing at two levels are used to compute a divergence over the depth from the surface to the second grid level. The divergence over this depth is integrated using a numerical approximation of Equation A.15 yielding a new Wz at the second level. This new Wz is used to compute a new Wx and Wy at the second level, which is, in turn, used to compute a new divergence, and so on until divergence, and so Wy converges on some constant value. Then the process repeats between the second and third levels, then the third and fourth levels, etc., until the top of the data is reached. The iterative process described above usually converges after about five to seven iterations for each level.

A.6 Errors

Comparing the numbers derived from these equations with the real world, the horizontal wind components are good to about 2 knots and the vertical wind component is good to about 6 knots, depending upon how far above the ground the measurement is made (Doviak et al., 1978). Errors result for several reasons. The radar itself can measure velocity inside a gate or pulse volume to within 0.02 knots, but not everything in a pulse volume is moving in unison. The radar calculates a number that represents only the ensemble average motion of all the raindrops in the gate. Therefore, a radial velocity estimate within each individual pulse volume is good to roughly 0.5 knots.

Radial velocities must be interpolated from radar (spherical) space to a regular, common Cartesian grid. This is the most costly step in terms of accuracy. The interpolation process along with previously mentioned effects yields gridded radial velocities gond to a little less than 2 knots.

With these errors, Wx and Wy are synthesized. Each of the radar beams are not always perpendicular; in fact, that is an extremely rare event since it occurs only on a circle whose diameter is defined by the two radars. Also, the radial velocity from each radar is not measured at the same point in space at the same time. Finally, it takes a finite amount of time (about 2 minutes) to gather all the necessary radial velocities from each radar over the region of interest. This can be likened to "moving the camera" while taking a photograph; it tends to degrade the quality of the picture. Yet, given all this, Wx and Wy are still good to just a little over 2 knots.

In computing Wz, there are additional problems. First, derivatives are computed using a three- or five-point numerical finite difference which has well-known error properties. Next, these derivative estimates are integrated vertically upward from a known boundary condition using density weighting. Because of the density weighting, any errors in Wz made at low levels will be amplified in an upward integration because an error in Wz really translates into an error in mass flux. The mass flux error actually remains constant with height, but because density decreases upward, a larger Wz is required to maintain the same erroneous mass flux.

In all cases, Wz is assumed zero at the ground, which in and of itself is a very good assumption. But, in fact, the lowest data level gathered by a Doppler radar is not at a height of zero meters; it is usually at least a few meters above the surface and can be tens of meters above the surface. Obviously, Wz is not zero a few meters above the surface, and this is a source of bias error in Wz. Orography can also play a role in degrading Wz. For example, if horizontal wind speeds at the surface are 40 knots and the terrain slopes at an angle of two degrees (a 3.5 percent grade), Wz at the surface will be 1.3 knots. This will substantially bias Wz at the higher levels.

Because Wz is a derived quantity, it is the least accurate. At the top of the data (roughly 3000 feet AGL), Wz is good to only about 6 knots. However, near the ground, where approaches and takeoffs are simulated, Wz is very nearly as good as Wx and Wy.

Table A.1 summarizes the expected errors in the JAWS data.

TABLE A.1. Estimated Uncertainty in JAWS Data.

Parameter in Error	Magnitude	Source(s)
Fundamental Radial Velocity (Pulse Volume)	∿0.5 kts	Mainly Turbulence
Gridded Radial Velocity	<2 kts	Interpolation
Wx and Wy	∿2 kts	All Data Not Simultaneous in Time and Space
Wz	∿2-6 kts (height dependent)	1) Truncation Errors 2) Improper Boundary Conditions

JAWS has independently verified these Wx, Wy, and Wz velocity estimates with airborne, vertically pointing Doppler radar and in situ instrumented aircraft measurements; thus their accuracy, at least in cases that have been possible to compare, is within the limits given above (Rodi et al., 1983).

A.7 Why JAWS Data Are Significant

A comparison of flight data recorder (FDR) reconstructions with JAWS multiple Doppler data reveals advantages unique to the FDR reconstructions: (1) FDR data come from wind shear that presumably caused the crash; and (2) FDR resolution is, in a sense, better than Doppler data since FDR's collect data with a resolution of about 1 or 0.5 Hz, which at an approach speed of 150 knots, corresponds to a spatial resolution of 246 to 492 ft (75 to 150 m) compared to 492 ft (150 m) for Doppler data.

However, on the multiple Doppler data side, advantages include: (1) actual winds are measured; (2) few assumptions are required to obtain all three wind components; and (3) multiple Doppler radar analyses are fully three-dimensional.

The only obvious disadvantages to a multiple Doppler radar analysis is the best fundamental resolution of the instrument, which is 492 ft (150 m) compared to FDR resolution which is roughly 246 ft (75 m). However, FDR disadvantages are somewhat more serious. The older FDR's, from which most accident reconstructions come and which make up the vast majority of FDR's flying today, are not very accurate. FDR's do not measure the actual winds; the winds must be derived through a complicated process involving many, often crude, assumptions. Finally, and most importantly, FDR's provide only one-dimensional data--a noodle along the aircraft's final path. The real world of flight is fully three-dimensional; for realistic simulations and control analysis, the input winds must also be three-dimensional. Multiple radar analyses provide a sufficiently better product for aviation uses than previous FDR reconstructions data. This observation alone justifies a sizable implementation and utilization effort.

Table A.2 will help in summarizing the pros and cons of FDR reconstruction versus multiple Doppler analyses.

TABLE A.2. FDR Reconstruction Data Versus Multiple Doppler Data.

Data Source	Advantages	Disadvantages
FDR	1) Data came from wind shear that presumably caused the crash. 2) In a sense, better one-dimensional (along track) resolution 246 ft (75 m)).	1) Old FDR's not very accurate. 2) Actual winds not measured--must be derived. 3) Derivation of winds requires too many, often crude, assumptions. 4) Only spatially one-dimensional, two velocity component wind field.
Doppler	1) Actual winds are measured. 2) Few assumptions are required. 3) Full spatially three-dimensional, three velocity component wind field.	1) Data only at the spatial resolution of 492 ft (150 m).

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APPENDIX B

SELECTION OF WIND SHEAR PATHS AND INTENSITY CLASSIFICATION

The classification of wind shear for the selected paths through all the data sets described in Section 2.0 were determined by conducting computer-simulated flights of a B727-type aircraft along each path. The procedure is described in this appendix using the August 5, 1982, 1847 MDT data set as an example.

Paths through the wind fields, which represent most difficult, moderately difficult, and least difficult shears, were selected first by inspection. For example, Figure 2.11 shows the representative flight paths for the August 5, 1982, 1847 MDT data set.

Figures B.1 illustrates the nomenclature used in defining the orientation of the runway to the wind field for the approach cases. To investigate the influence of the microburst position relative to the intended touchdown point on the runway, the center of the microburst is mathematically shifted along the path with respect to the end of the runway. The runway is positioned relative to the center of the microburst such that an aircraft following the glide slope or takeoff path passes through the center of the microburst at a given height designated as z_0. The intended touchdown point, TD (in Figure B.1), is the threshold of the runway corresponding to the specific flight path. The distance of the threshold from the microburst center is calculated as $z_0/\tan\gamma$, where γ is the glide slope angle. A value of $z_0 = 0$ corresponds to the threshold of the runway coinciding with the microburst center. The orientation of the runway, θ, is measured relative to the positive x direction. The (x_0,y_0) coordinates designate the position in the horizontal plane at which z_0 is measured. Values of x_0 and y_0 are measured relative to an origin located at the northwest corner of the full-volume data set.*

Flight path classification is determined by computing aircraft performance for both approach and takeoff along both directions of each path. Note that many other paths were investigated; however, those shown in Figures 2.11 through 2.13 are selected for presentation and discussion. Determination of intensity for approach and takeoff cases are explained in the following paragraphs.

B.1 Approach Paths

To test the intensity of each path through the microburst, the flight of a B727-type aircraft is computed while attempting an approach

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*For the August 5 case, the origin is at (-4.38 mi,-11.22 mi), (-7.05 km,-18.05 km), as measured from CP-2 (see Figure 2.3).

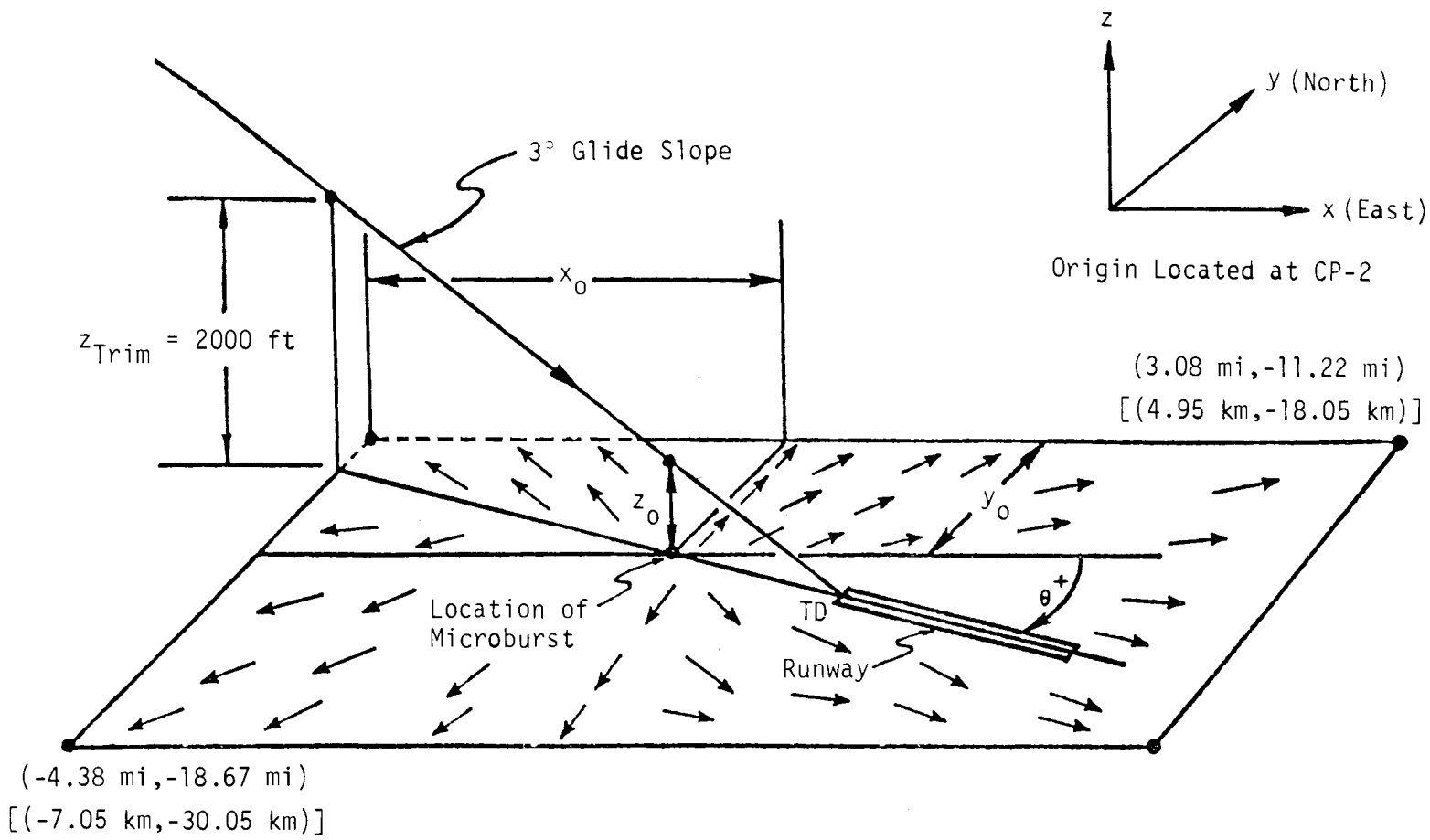


Figure B.1. Approach path definition and orientation (relative to the full-volume of August 5, 1982, microburst).

along a 3° glide slope directly along path $\overline{AB}$. The aircraft, which has a weight of 141,000 lbs, is trimmed at the 2000-ft level. In the trimmed flight, the model has airspeed of approximately 135 knots, angle of attack of about 7.5 degrees (pitch angle of about 4.5 degrees), sink rate of approximately 750 fpm, and thrust force of about 13,500 lbf. A simple control law algorithm (Turkel et al., 1981) is used to maintain the 3° glide slope. If the airplane remains exactly on the instrument landing system (ILS) beam, it passes through the center of the microburst located at the position x_0 and y_0 at a height z_0. The approach criteria call for an aircraft to attempt a go-around if it is outside a 0.7° localizer/glide slope cone centered on the ILS beam. This go-around criterion is somewhat less severe than that used in practice. It is important to recognize that the use of a simple six-degree-of-freedom, piloted simulation model in this report was not to demonstrate an accurate model of pilot or aircraft performance but rather to screen atmospheric wind shear intensities in a meaningful manner. Consequently, the reader should concentrate on the stratifications of intensity classifications rather than on aircraft model accuracy.

If at any time the aircraft is outside a 0.7° localizer/glide slope, a go-around, consisting of full thrust and a 15° pitch angle command, is initiated. If a go-around fails, the wind shear is considered intense or Class I. If a go-around is possible at full thrust and a pitch angle of 15°, the wind shear is considered moderate or Class II. Finally, the wind shear along a given path is considered light or Class III if the aircraft does not pass outside the localizer/glide slope during an approach. Shear intensity categories I, II, and III are used instead of the more conventional definitions of severe, moderate, and light because these latter classifications are aircraft-type and pilot-experience dependent.

Figure B.2 shows the computed approach of the aircraft along path $\overline{AB}$. In this case, the runway is located such that if the aircraft remains on the glide slope, it passes through the center of the microburst at roughly 300 ft above the ground. The airplane tracks the glide slope reasonably well to a level of 300 ft (i.e., at the center of the microburst) but then loses airspeed and sinks rapidly. On losing the ILS, the aircraft is commanded to full thrust and to a pitch angle of 15°; however, because of the severe descent rate and loss of airspeed (increasing tailwind) so near the ground, it is unable to recover.

Figure B.3 shows a similar situation for an approach along flight path $\overline{CD}$. For this case, the runway is located such that the approach glide slope passes the center of the microburst at a height of 400 ft. The aircraft drops below the glide slope at roughly 500 ft altitude prior to encountering the center of the microburst. The aircraft initiates a go-around procedure but encounters a rapidly increasing tailwind and sinking air mass. The airplane, however, survives the increase in tailwind and climbs out. The significant changes in airspeed and pitch angle of the aircraft are due to the complex wind shear encountered. The pitch angle of the aircraft is converging to the 15° angle commanded at

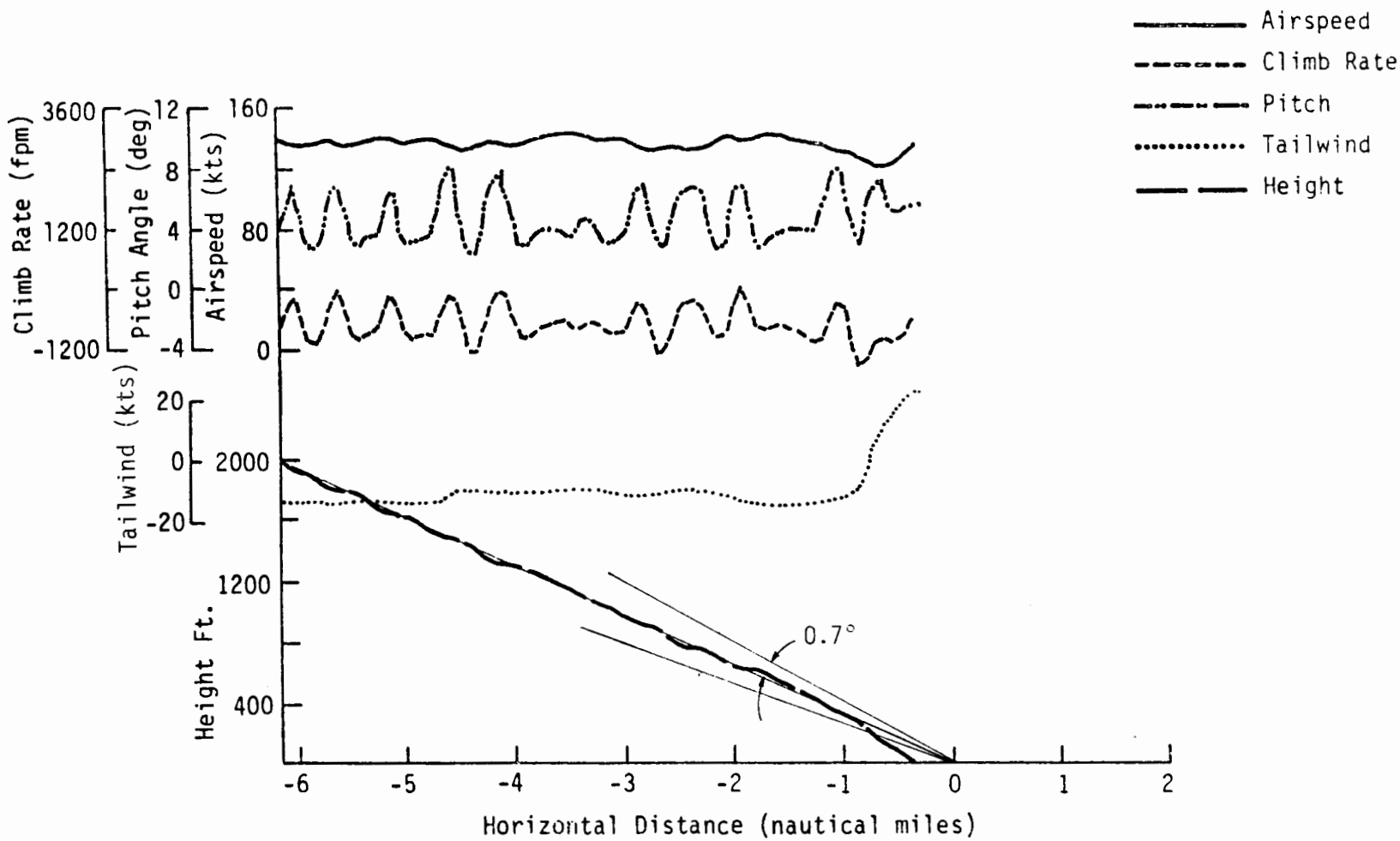


Figure B.2. Approach along path $\overline{AB}$ (z_o = 300 ft).

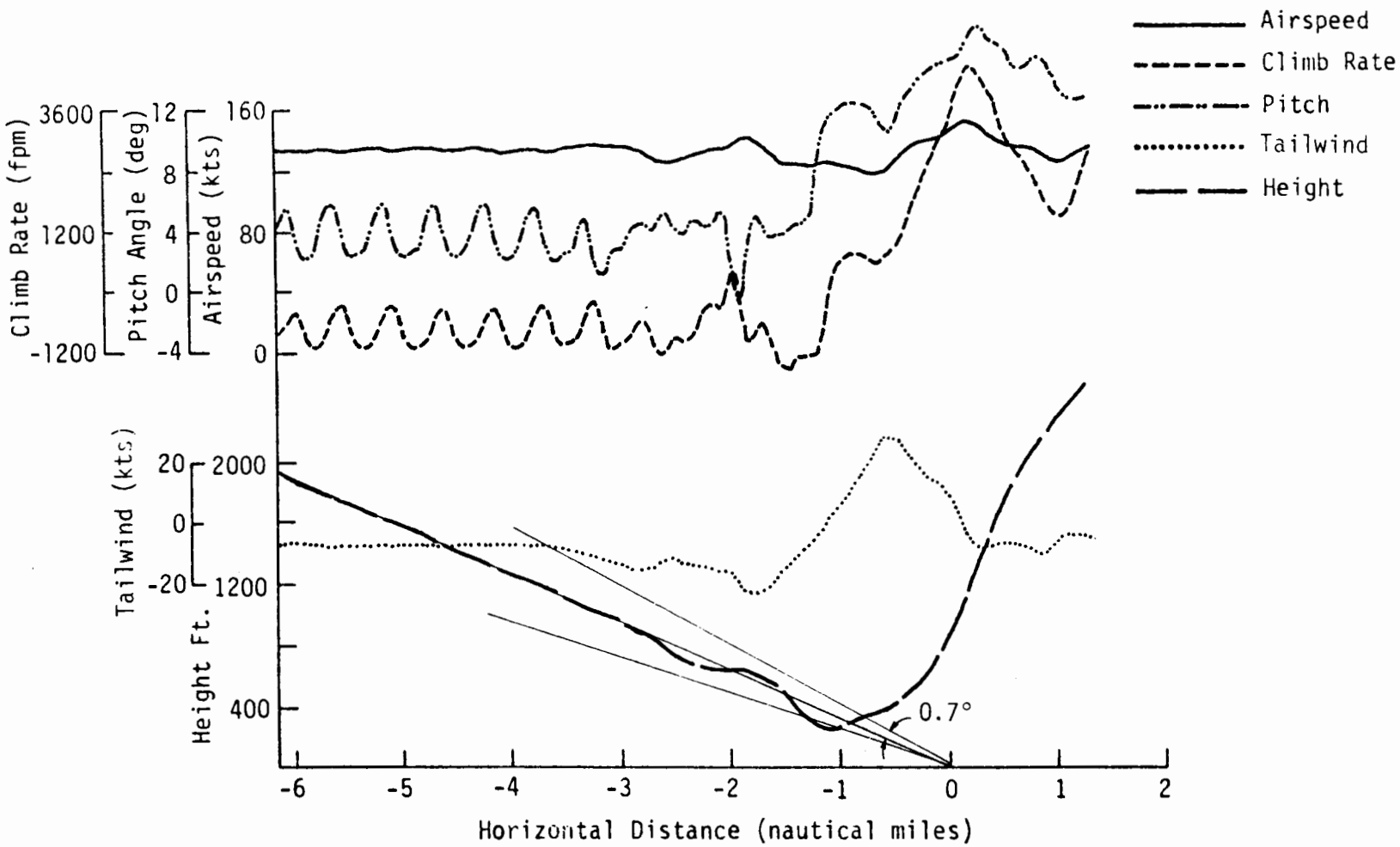


Figure B.3. Approach along path $\overline{CD}$ (z_o = 400 ft).

go-around. Many studies, such as those depicted by Figures B.2 and B.3 were carried out to classify various profiles through all the full-volume data sets as Class I, Class II, and Class III. Four paths from the 5AU1847 measurements are listed in Table B.1 as being interesting for typical training scenarios.

B.2 Takeoff Paths

A number of studies to classify takeoff wind fields were also carried out. First consider the reference case, an aircraft which has a weight of 169,000 lbs takes off in the zero wind condition. In the takeoff algorithm, the aircraft thrust is increased through the thrust control law until the aircraft accelerates to 60 kts of airspeed. The thrust is then held constant as the aircraft reaches takeoff speed. At takeoff speed a 10° pitch angle is commanded. The rate of pitch angle increase is controlled at 3° per second until 10° is established. The aircraft then climbs out along an approximately 6.4° takeoff path (pitch angle minus angle of attack relative to fuselage reference line). During climb out, the aircraft has airspeed of approximately 150 kts, pitch angle of about 10°, climb rate of approximately 1800 fpm, and thrust force of about 31,500 lbf. With zero wind conditions, a run of approximately 5000 ft is required before liftoff occurs.

TABLE B.1. Recommended Flight Paths for Approach Landing Case.

Flight Path	x_o ft x 10^3 [m]	y_o ft x 10^3 [m]	z_o ft [m]	θ (deg)	Classification
$\overline{AB}$	17.2 [5250]	19.2 [5850]	300 [90]	52.7	Class I (most difficulty)
$\overline{YZ}$	17.2 [5250]	19.2 [5850]	492 [150]	37.0	Class I (most difficulty)
$\overline{CD}$	16.2 [4950]	20.4 [6230]	400 [120]	19.9	Class II (moderate difficulty)
$\overline{GH}$	13.3 [4050]	25.1 [7650]	0 [0]	52.7	Class III (minimal difficulty)

The location of the center of the microburst is selected relative to this liftoff point, in a manner similar to that for the approach. The value of z_o for takeoff is defined as the height at which the aircraft would pass through the center of the microburst when accelerating along the runway for 5000 ft and then climbing out along an arbitrarily defined 10° reference path as shown in Figure B.4. A negative z_o indicates the aircraft is passing through the center of the microburst while still on the runway. Note on the approach the aircraft is trimmed on a 3° glide slope and controlled to maintain that path to the extent possible. For takeoff, however, the trajectory may be highly variable. This 5000 ft ground run with a 10° liftoff path is selected as a reference only for purposes of defining the position of the microburst relative to the runway. The B727-type aircraft, for example, would lift off after approximately a 5000-ft run but would climb out on an approximately 6.4° path if there was zero wind.

For every flight path investigated, the aircraft was able to take off without impacting the ground. However, there were many situations where liftoff was barely achieved and would not have succeeded if obstacles similar to those typically found around an airport were accounted for in the computer simulation. Figure B.5 is a typical example of takeoff in wind field $\overline{AB}$ (5AU1847 measurement). The dynamic responses of the aircraft flying along path $\overline{AB}$ are plotted and represented by the heavy lines; those of the aircraft flying with zero wind condition are designated by the light lines. The arrows designate the liftoff points of the respective flight paths, i.e., with and without wind. In the case being studied, the center of the microburst is located where the aircraft would pass over a point 66 ft above the ground approximately 375 ft horizontally from the departure end of the runway if the aircraft were to climb out along a 10° reference path. In the actual case, the aircraft more nearly climbs out along a 6.4° path; thus passing through the microburst at a height of 42 ft. Figure B.5 shows that the aircraft (c.g. location) lifts off and climbs to roughly 150 ft, where it begins to encounter a rapidly increasing tailwind. The aircraft in the given configuration has insufficient performance margin to maintain altitude and actually sinks to roughly 100 ft above the runway. Although the aircraft is accelerating relative to the ground, it is losing airspeed because the tailwind is increasing at a rate greater than the aircraft can inertially accelerate. Eventually the resultant tailwind decreases and the airplane encounters an increasing headwind which allows it to recover. A constant climb rate does not occur, however, until roughly a full nautical mile from the point of initial liftoff. The figure shows that the aircraft taking off in the wind field $\overline{AB}$ has a serious decrease in airspeed and a negative climb rate during the strong headwind/tailwind encountering. This wind shear is classified as Class I.

Figure B.6 is a plot of the simulated aircraft takeoff performance in the less challenging wind field along path $\overline{IJ}$ (see Figure 2.11). As indicated in the figure, the airplane encounters the effective center of the microburst near the liftoff point. The aircraft lifts off slightly earlier than the zero wind condition because of encountering the headwind on the runway. After liftoff, the aircraft climbs relatively slowly due

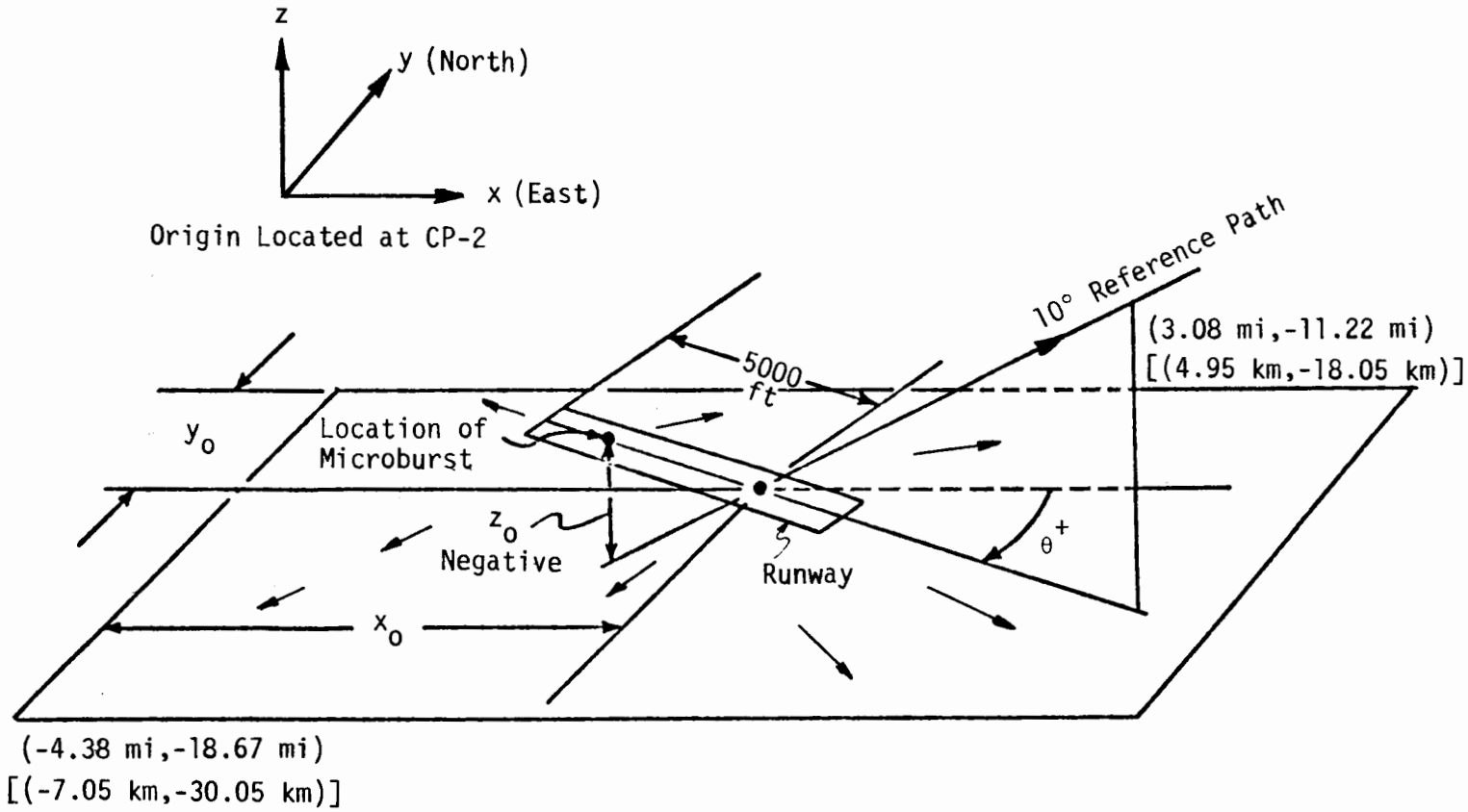


Figure B.4. Takeoff path definition and orientation (relative to the full-volume of August 5, 1982, microburst).

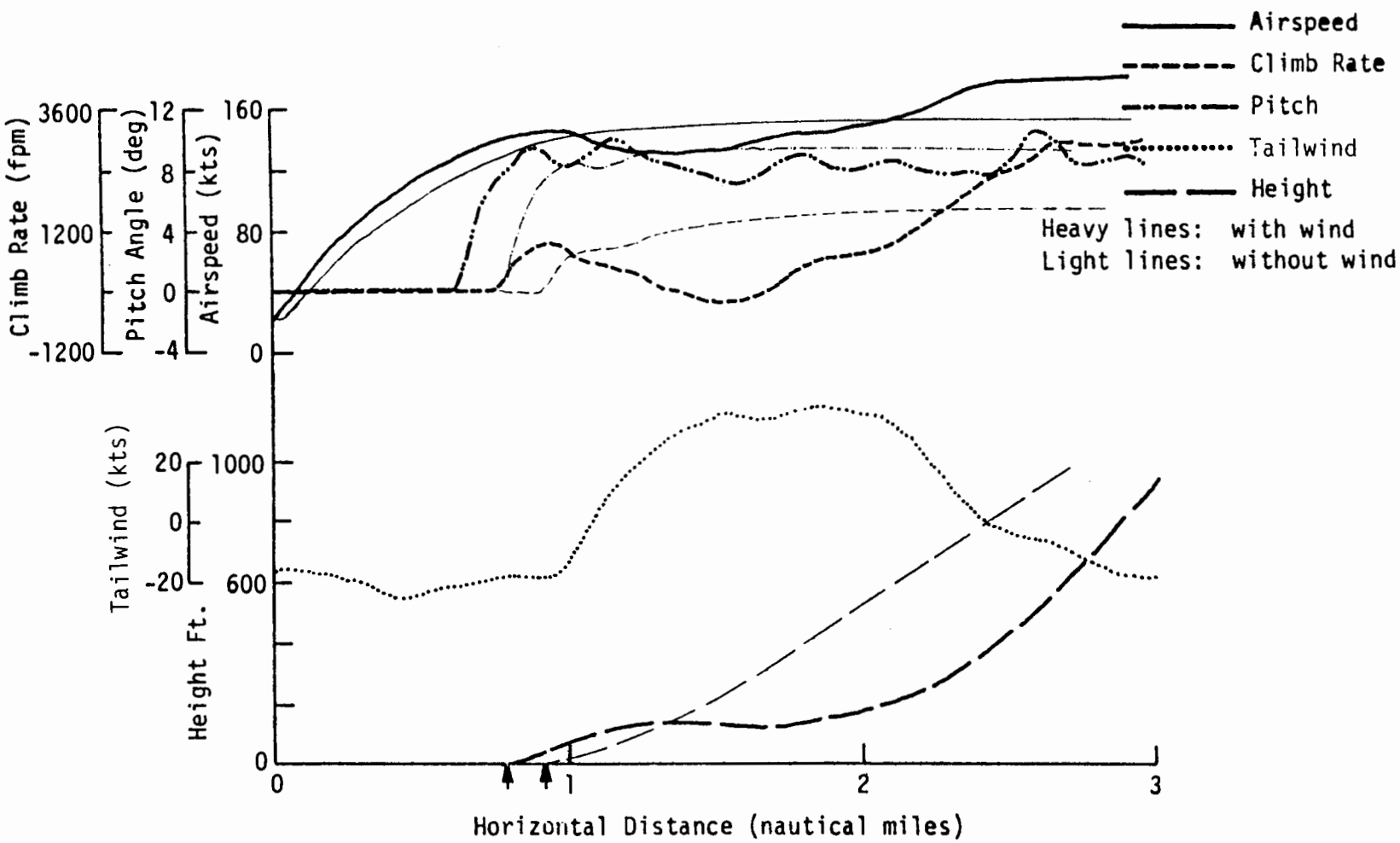


Figure B.5. Takeoff along path $\overline{AB}$ (z_0 = 66 ft). Arrows indicate liftoff points.

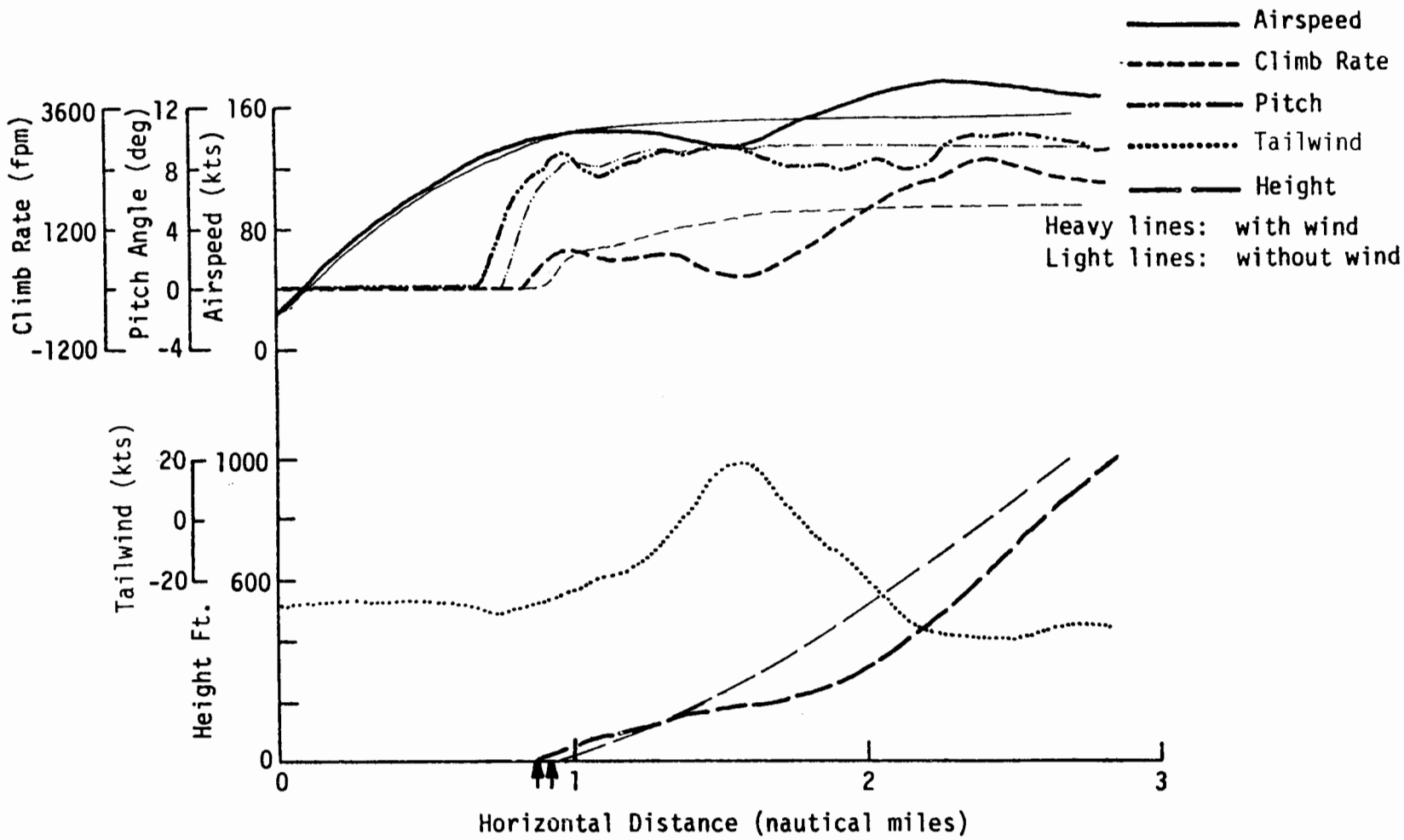


Figure B.6. Takeoff along path $\overline{IJ}$ (z_0 = -164 ft). Arrows indicate liftoff points.

to the fact that the headwind shears out and becomes an increasing tailwind. Finally, the aircraft encounters an increasing headwind and resumes a normal climb out. The aircraft performance, although not ideal, poses no real hazardous conditions and is therefore classified as Class II.

The location of the microburst relative to the runway is obviously critical to the aircraft performance. Figure B.7 clearly illustrates this effect during takeoff. Three curves are plotted for path $\overline{CD}$ (5AU1847 measurement) where the microburst is encountered at 330 ft, 164 ft, and -33 ft altitudes, respectively, if the aircraft were to climb out along a 10° reference path. Also plotted on the figure is the longitudinal wind speed (headwind -; tailwind +) encountered by the aircraft. In all cases, the aircraft initially takes off with a headwind of slightly more than 20 kts, depending on the relative position of the storm to the runway, and because of this headwind, the aircraft lifts off relatively quickly. In these three paths, a headwind loss of approximately 0.8 kts/100 ft is encountered. The arrows designate the liftoff points for the z_o = 330 ft, z_o = 164 ft, and z_o = -33 ft cases, respectively.

When the aircraft encounters the wind shear early in its takeoff roll (z_o = -33 ft, the dashed line), an extremely long distance is required before flying speed is attained. The aircraft does lift off, however, and climbs out at a slow but steady rate until it exits the microburst. In the opposite case where the aircraft encounters the center of the microburst at approximately 330 ft above the ground after liftoff, it climbs out normally up to approximately 200 ft altitude and then cannot climb regardless of the fact that takeoff thrust is maintained. The aircraft begins to sink slightly until it exits the microburst as shown by the upper curves of headwind. After exiting the microburst, the aircraft experiences an increasing headwind and resumes a normal climb out. Table B.2 lists paths (in the 5AU1847 measurement) for interesting training scenarios.

B.3 Four-Dimensional Wind Shear Models

The JAWS data sets also provide the possibility of four-dimensional wind shear models, the fourth dimension being time. Data sets separated in time by 2-minute periods are available for most of the microbursts measured during JAWS. An interpolation scheme between time fields has been developed.

The different measurements of a time-dependent microburst can be plotted on a time axis. The symbols O, A, B, and C represent different full-volume data sets. Δt_1, Δt_2, and Δt_3 are the time intervals of the serial measurements. s is the starting time for the flight of interest. T_i can be adjusted for different starting times of a specific flight. The time-dependent wind components of an aircraft at s' can be evaluated as follows.

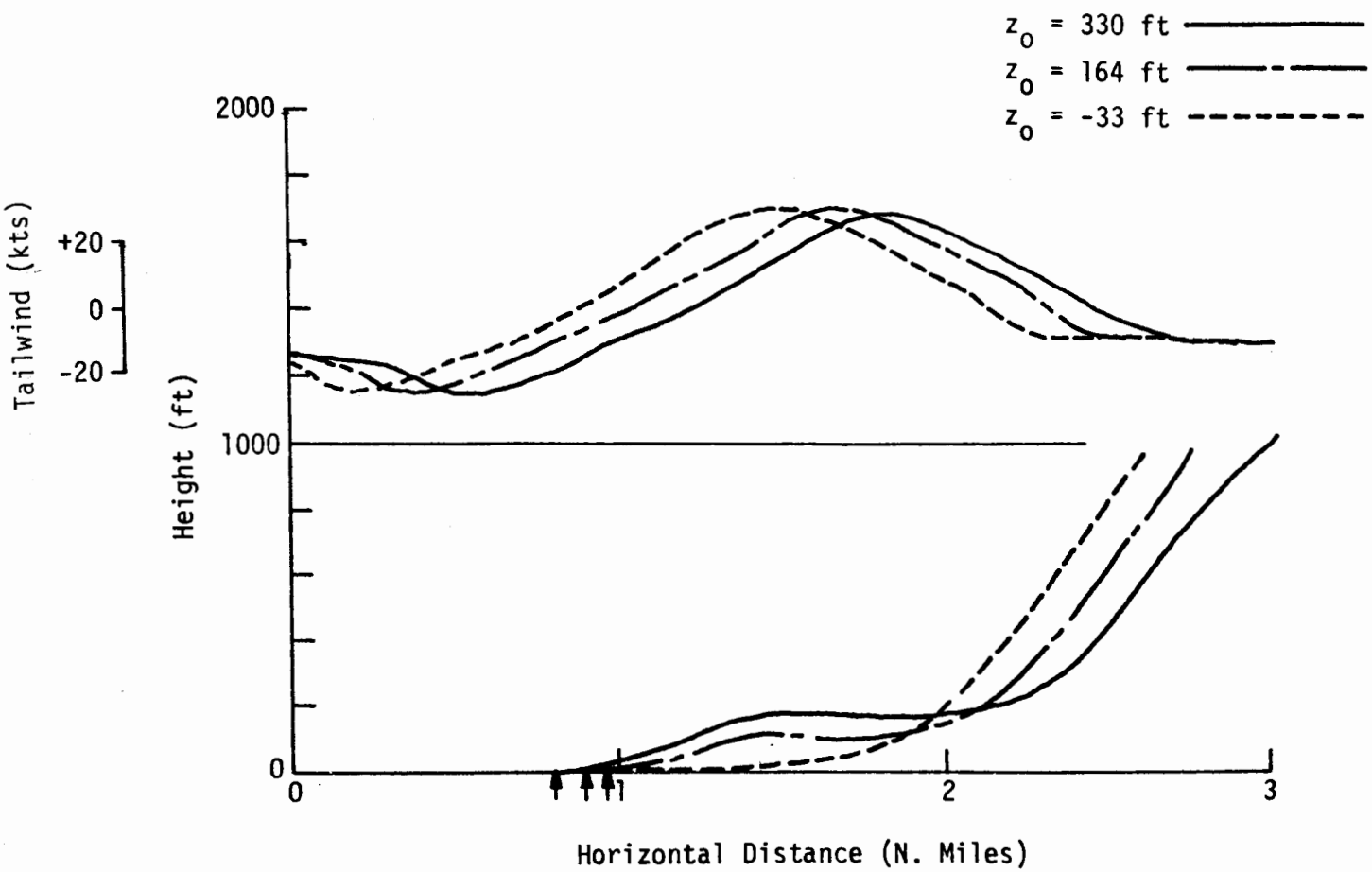
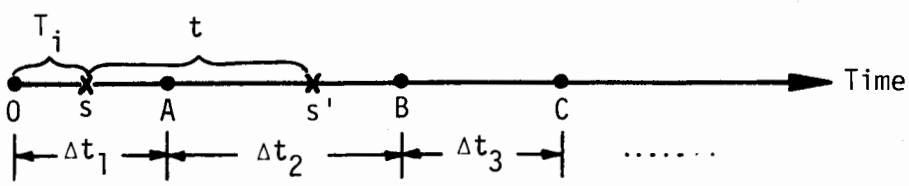


Figure B.7. Takeoff along path $\overline{CD}$ as influenced by the location of the microburst center relative to the runway. Arrows indicate liftoff points.

TABLE B.2. Recommended Flight Paths for Takeoff Case.

Flight Path	x_o ft x 10^3 [m]	y_o ft x 10^3 [m]	z_o ft [m]	θ (deg)	Classification
$\overline{AB}$	17.2 [5250]	19.2 [5850]	66 [20]	52.7	Class I (most difficulty)
$\overline{CD}$	16.2 [4950]	20.4 [6230]	-164 [-50]	19.9	Class I (most difficulty)
$\overline{IJ}$	19.2 [5850]	14.3 [4350]	-164 [-50]	32.3	Class II (moderate difficulty)
$\overline{KL}$	17.2 [5250]	24.1 [7350]	492 [150]	30.0	Class III (minimal difficulty)



Using the 3-D spatial interpolation technique recommended in Section 2.0, the wind speeds corresponding to the aircraft's current position in the full-volume data sets in the time sequence bracketing the time t, i.e., B and A, can be evaluated as W_{PB} and W_{PA}, respectively. The time-dependent wind speeds for the aircraft are then obtained by a second linear interpolation in the time domain:

$$W_P = \frac{[(T_i + t) - \Delta t_1]}{\Delta t_2} \times (W_{PB} - W_{PA}) + W_{PA} \tag{B.1}$$

Also, the time derivative terms, $\partial W_P/\partial t$, can be approximately as

$$\frac{\partial W_P}{\partial t} \simeq \frac{W_{PB} - W_{PA}}{\Delta t_2} \quad . \tag{B.2}$$

The August 5, 1982, microburst consists of four serial full-volume measurements, 5AU1845, 5AU1847, 5AU1850, and 5AU1852, which were measured at Mountain Daylight Time (MDT) 1845, 1847, 1850, and 1852, respectively. These serial measurements have been used as time-dependent wind shear data to investigate the influence of time variation on the aircraft performance. Figure B.8 shows the trajectories and longitudinal wind components of aircraft flying through each of the four individual wind fields of August 5, 1982, microburst without regard for variation with time. For the same intended flight path, a B727-type aircraft flying through the August 5, 1982, microburst measurement, taking into account time variations, is shown in Figure B.9.

The simulated flight, taking into account time variation, originated at 1845 MDT corresponding to the 5AU1845 data set which is the first of the four full-volume data set in the available time sequence. The approach trajectory of the B727-type airplane in the time-varying wind shear data set is essentially a composite of the flight trajectories for the individual full-volume data sets (compare Figures B.8 and B.9). Thus, for the specific microburst studied there is no significant influence of time variations in the wind on the aircraft performance.

B.4 Wind Fields for Simulator Application

The JAWS wind shear data set provides a unique set of wind fields for simulator application and training and for operational procedure and control system design. Prior to this date, no three-dimensional wind fields were available. Foy (1979) reports three-dimensional wind shear models for use in simulators; however, these are, at best, three-component, two-dimensional spatial wind fields. Foy's models are referred to as the SRI models. They represent winds in a given plane through the flow field. Any departure in the lateral direction from this plane does not encounter changes in the wind. In the JAWS data set, three-dimensional variations in the wind are truly represented.

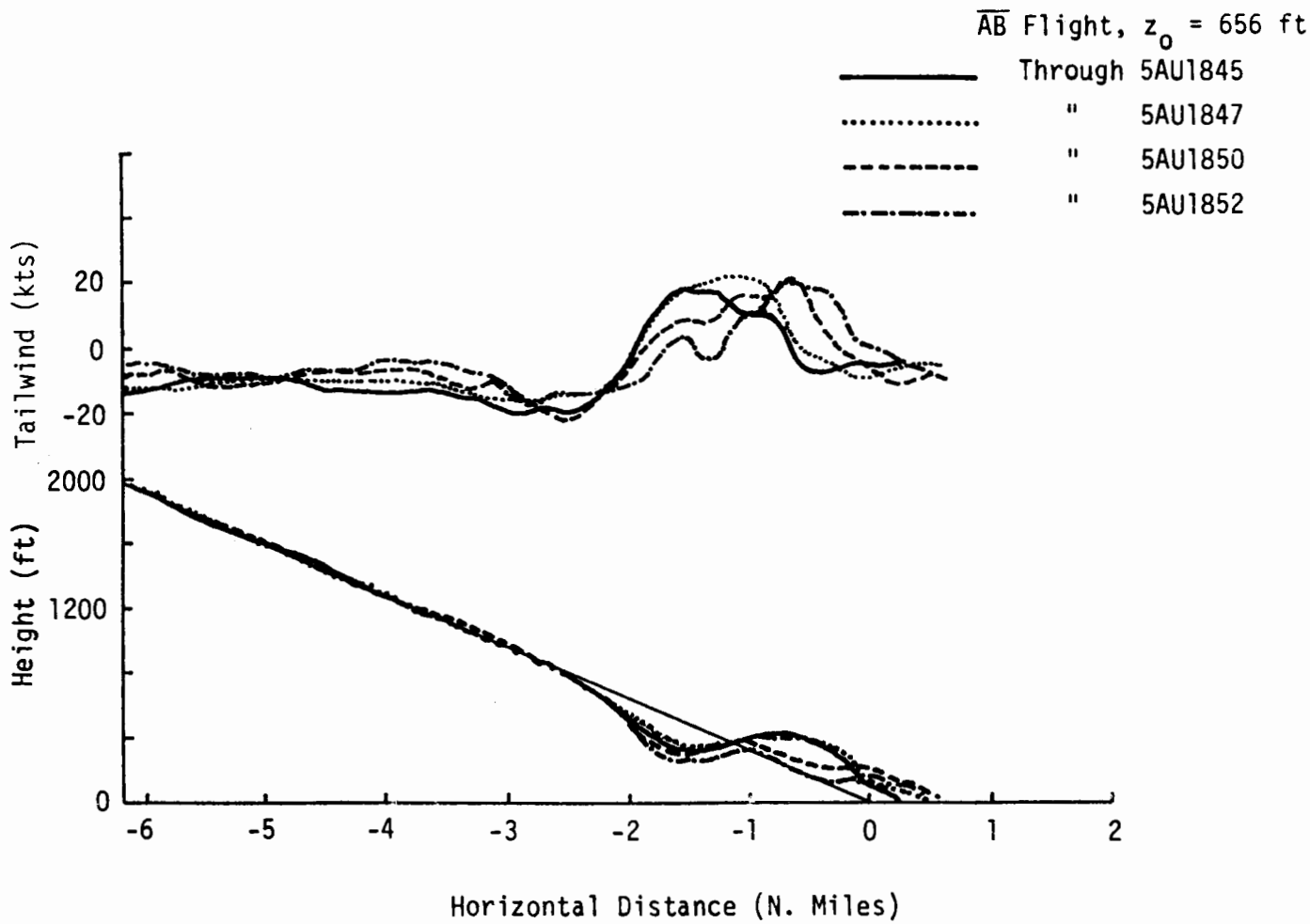


Figure B.8. Approach through each individual full-volume data set for August 5, 1982, without considering time variations.

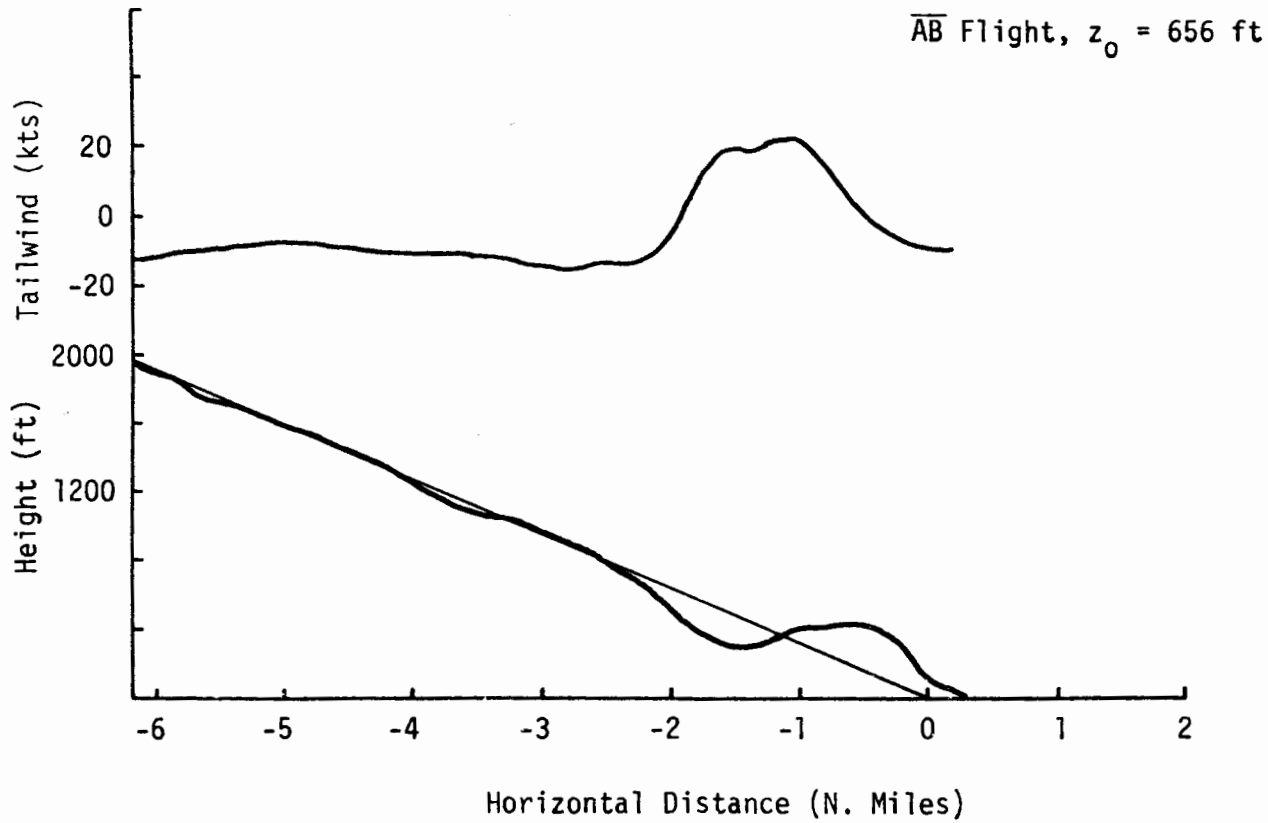


Figure B.9. Approach through time-varying wind field including the 5AU1845, 5AU1847, and 5AU1850 measurements.

REFERENCES

Turkel, B. S., P. A. Kessel, and W. Frost (1981). "Feasibility of a Procedure to Detect and Warn of Low-Level Wind Shear," NASA CR 3480.

Foy, W. H. (1979). "Airborne Aids for Coping with Low-Level Wind Shear," Report No. FAA-RD-79-117, U.S. Dept. of Transportation, FAA, Washington, D.C.

APPENDIX C

DATA AND DATA TAPE ATTRIBUTES

The JAWS data tapes available from NCAR* have the following attributes and options:

1. Nine-track 800, 1600, or 6250 BPI.

2. ASCII character data.

3. Fixed length blocked or unblocked records. Logical records are 80 byte card images. The following blocking factors are available: 1 (unblocked records), 10, 50, and 100. Blocked records should be used whenever possible as this markedly increases I/O and tape utilization efficiency. Physical record length would be 80 bytes for a blocking factor of 1, 800 bytes for a blocking factor of 10, 4000 bytes for a blocking factor of 50, and 8000 bytes for a blocking factor of 100.

When ordering a data tape, be sure to specify the density (800, 1600, or 6250 BPI) and blocking factor (1, 10, 50, or 100).

Each tape contains 48 files as listed in Table C.1. The first file contains the full-volume data set for the spatial distribution of wind from a microburst that occurred on 5 August 1982 at 1845 MDT. The following six files contain the corridor data sets for paths $\overline{AB}$, $\overline{CD}$, $\overline{YZ}$, $\overline{IJ}$, $\overline{KL}$, and $\overline{GH}$. The second seven files repeat this sequence for the same microburst but for a spatial distribution at a time 2 minutes later, 1847 MDT. (The data for 1847 were first released as the JAWS Project Preliminary Data Description.) The third set of seven files similarly contain data for the same 5 August 1982 microburst but at 1850 MDT, while the fourth set of seven files contain data for the 5 August 1982 microburst at 1852 MDT.

There then follows three sets of five files each for a microburst occurring on 30 June 1982. The first file again contains the full-volume data set with the following four files containing corridor data sets for paths $\overline{EF}$, $\overline{MN}$, $\overline{PQ}$, and $\overline{RS}$. These files are for the spatial distribution at a time of 1821 MDT. The second set of five files repeats the sequence for a time of 1823 MDT, and the third five files are for a time of 1826 MDT.

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*Research Applications Program, NCAR, P.O. Box 3000, Boulder, CO 80307. Requests should be in writing. A fee for duplication costs will be required.

TABLE C.1. Listing of Data Sets on Tape.

Order of Files on Tape	Full-Volume Data (or Corridor Data)	Microburst
1	Full-volume data	5AU1845
2	Corridor data (along path $\overline{AB}$)	"
3	Corridor data (along path $\overline{CD}$)	"
4	Corridor data (along path $\overline{YZ}$)	"
5	Corridor data (along path $\overline{IJ}$)	"
6	Corridor data (along path $\overline{KL}$)	"
7	Corridor data (along path $\overline{GH}$)	"
8-14	Same as Files 1-7	5AU1847
15-21	Same as Files 1-7	5AU1850
22-28	Same as Files 1-7	5AU1852
29	Full-volume data	30JN1821
30	Corridor data (along path $\overline{EF}$)	"
31	Corridor data (along path $\overline{MN}$)	"
32	Corridor data (along path $\overline{PQ}$)	"
33	Corridor data (along path $\overline{RS}$)	"
34-38	Same as Files 29-33	30JN1823
39-43	Same as Files 29-33	30JN1826
44	Full-volume data	14JL1452
45	Corridor data (along path $\overline{TU}$)	"
46	Corridor data (along path $\overline{VW}$)	"
47	Corridor data (along path $\overline{OX}$)	"
48	Corridor data (along path $\overline{LS}$)	"

Finally, there is one set of five files identically sequenced for a microburst that occurred on 14 July 1982 at 1452 MDT. The paths following the full-volume data set in this case are TU, VW, OX, and LS. Each file has header records containing information about the file. Unless otherwise noted, the word "record" means logical record.

C.1 Full-Volume Data Sets

For the full-volume data file, the header consists of 32 logical records consisting of the following (all capitals in the column labeled "Content" indicate literal contents of record; the symbol list in the column labeled "Program Symbols" refers to the program in Appendix D):

Record Number	Contents	Program Symbol
1	Date and time of microburst event	
2	(Intentionally left blank)	
3	FOR INFORMATION CONTACT	
4	KIM ELMORE	
5	NCAR/FOF/JAWS	
6	P.O. BOX 3000	
7	BOULDER, CO 80307	
8	TELEPHONE (303)497-8785 COMMERCIAL	
9	322-8785 FTS	
10	Number of fields	NFLDS
11	WLONG	
12	WLAT	
13	WVERT	
14	DBZ	
15	(Reserved, currently blank)	
16	(Reserved, currently blank)	
17	(Reserved, currently blank)	
18	(Reserved, currently blank)	
19	(Reserved, currently blank)	
20	(Reserved, currently blank)	
21	(Reserved, currently blank)	
22	(Reserved, currently blank)	
23	(Reserved, currently blank)	
24	Number of points per level	IPTSPL
25	Number of points in x direction	MX
26	Number of points in y direction	MY
27	Number of points in z direction	MZ
28	x grid interval	DELTX
29	y grid interval	DELTY
30	z grid interval	DELTZ
31	(Intentionally left blank)	
32	DATA OF FULL VOLUME	

Record 10 defines the number of data fields associated with each horizontal data level. Records 11 through 23 indicate which fields are on the tape and the order in which they appear. WLONG is the wind component along the x-axis (positive east), WLAT is the wind component along the y-axis (positive north), and WVERT is the wind component along the z-axis (positive up) (see Section 2.1). All wind speeds are in knots. DBZ is radar reflectivity in units of dBZ (see Appendix A, Section A.2, for an explanation of radar reflectivity and its relation to rainfall rate). Since reflectivity, unlike wind, has no intrinsic continuity in space, it will contain missing data. These missing data are denoted by a data value of -99.99.

Record 24 gives the number of data points per level of data; records 25 through 27 give the number of grid points along each axis. Records 28 through 30 give the grid intervals (in feet) along each axis. Record 32 indicates that full-volume data are to follow.

For the full-volume data set there is a subheader preceding the field of data for each level. For example, the character information "LONGITUDINAL WIND DATA (KTS)-1" indicates that the data to follow are the wind speed components in the x-direction, WLONG (in knots) for level 1 (ground level). After this subheader then comes numeric, ASCII character data in FLOATING POINT format. These numbers are recorded in the FORTRAN format 10F8.2.

Each data level contains the number of data elements specified in header Record 24. As an example, a 5 August 1982 data set would contain 6561 data elements for each level. The first data element at the first level is at an (i,j,k) position of (1,1,1) (see Figure 1.2). The second element is at (2,1,1) and so on. Once i reaches MX, the spatial position is incremented in the y direction (i.e., j = 2) and i repeats from 1 to MX. This procedure continues until j = MY (i.e., all values of WLONG for the first level k = 1 are stored). Following the wind speed components WLONG there is a record containing the character information "LATITUDINAL WIND DATA (KTS)-1" which contains the wind speed component in the y-direction for level 1. This continues for WVERT and DBZ. At that point, the level index k is incremented and the k = 2 level header "LONGITUDINAL WIND DATA (KTS)-2" will follow. The process repeats similarly through i = MX and j = MY. The number of levels in a full-volume data set is given in header record 27.

A sample program for reading the full-volume header and full-volume data sets is included in Appendix D.

C.2 Corridor Data Sets

Following the full-volume data set are corridor data sets for each path listed in Table C.1. Each corridor data set (see Section 2.7) also has a header associated with it consisting of the following:

Record Number	Contents	Program Symbol
1	Date and time of microburst event	
2	(Intentionally left blank)	
3	FOR INFORMATION CONTACT	
4	KIM ELMORE	
5	NCAR/FOF/JAWS	
6	P.O.BOX 3000	
7	BOULDER, CO 80307	
8	TELEPHONE (303)497-8785 COMMERCIAL	
9	322-8785 FTS	
10	Number of fields	NFLDS
11	WX	
12	WY	
13	WZ	
14	DBZ	
15	(Reserved, currently blank)	
16	(Reserved, currently blank)	
17	(Reserved, currently blank)	
18	(Reserved, currently blank)	
19	(Reserved, currently blank)	
20	(Reserved, currently blank)	
21	(Reserved, currently blank)	
22	(Reserved, currently blank)	
23	(Reserved, currently blank)	
24	Number of points per vertical plane	IPTSPP
25	Number of points in x direction (151)	MX
26	Number of points in y direction (3)	MY
27	Number of points in z direction (5)	MZ
28	x grid interval (500 ft)	DELTX
29	y grid interval (500 ft)	DELTY
30	z grid interval (500 ft)	DELTZ
31	(Intentionally left blank)	
32	DATA OF CORRIDOR ALONG PATH	

This header is identical to the full-volume data header with the following exceptions: The first three field names (records 11, 12, and 13) are now WX, WY, and WZ. WX is the wind component along the X-axis (positive in X-direction), YZ is the wind component along the Y-axis (positive in Y-direction), WY is the wind component along the Z-axis (positive in Z-direction). Record 24 gives the number of data elements in each vertical plane making up the corridor data set. Note also that records 25, 26, and 27 are not always 151, 3, and 5, respectively.

After the corridor data header, there is a record of character data containing "DATA POINT DISTANCE FROM MICROBURST CENTER (-BEFORE/+PAST) (FEET)." This record is followed by the grid point distances from the corresponding microburst center beginning at -37,500 ft and proceeding in increments of 500 ft to 37,500 ft. The distances are recorded in the FORTRAN format 8F10.2. Each corridor has associated with it three planes

of four data fields. There is a subheader for each field of each data plane containing character data. For example, the first subheader contains "WIND DATA IN X-DIRECTION (KTS)-1." After the subheader comes numeric ASCII character data in floating point format. Following FORTRAN convention, these numbers are formatted as 10F8.2. The subheader indicates that the data to follow is for plane 1 and contains the WX wind speed component along the path (i.e., parallel to the corridor). If flying down the corridor in an increasing X-direction, plane 1 is on the right. If flying down the corridor in a decreasing X-direction, this plane is on the left.

Each plane contains 151 x 5 = 755 data points. The first 151 points are for the first level at zero feet, the second set is for the second level at 500 ft, and so on.

Following the longitudinal data there is a record containing the character information "WIND DATA IN Y-DIRECTION (KTS)-1" which is followed by the wind components perpendicular to the corridor. Following the WY data there is a record containing "WIND DATA IN Z-DIRECTION (KTS)-1" which is followed by the vertical wind speed components along the corridor. Remember that at level 1 (z = 0 ft AGL) the vertical wind is, by definition, zero. Following the vertical wind field is the subheader "RADAR REFLECTIVITY (DBZ)-1" followed by the radar reflectivity field (see Appendix A for an explanation of radar reflectivity and its relation to rainfall rate).

After the fourth data field of the first data plane there is a record containing the character data "WIND DATA IN X-DIRECTION (KTS)-2," which is the first data field of the second or center plane (note the distance record is not repeated). The rest of the data follow the previously defined convention. A sample program to read the corridor data is contained in Appendix D.

APPENDIX D

FORTRAN PROGRAMS FOR READING DATA SETS

A listing of programs which will read the data from files described in Appendix C is given in this appendix for the convenience of the user. These programs are written in FORTRAN 77. A sample program which will read the full-volume data sets is:

```
C*********************************************************************
C*                                                                   *
C*    THE FOLLOWING IS A PROGRAM TO READ FULL VOLUME DATA SETS       *
C*                                                                   *
C*********************************************************************
C
C---- THE MAIN PROGRAM TO READ THE DATA SETS OF FULL VOLUME
C
      DIMENSION WLONG(100,100,11),WLAT(100,100,11),WVERT(100,100,11),
     $          DBZ(100,100,11)
      DIMENSION IDATE(20),INFO( 20,7 ),IFLDNM( 20,13 ),LAST(20),IBLNK(20)
      CALL HEADER (IDATE,INFO,IFLDNM,LAST,IBLNK)
      CALL FDATRD (WLONG,WLAT,WVERT,DBZ)
      STOP
      END
      SUBROUTINE HEADER(IDATE,INFO,IFLDNM,LAST,IBLNK)
C
C---- THE SUBROUTINE READS THE HEADER OF FULL VOLUME DATA SETS
C
      DIMENSION IDATE(20),INFO(20,7),IFLDNM(20,13),LAST(20),IBLNK(20)
      COMMON /MXYZ/ MX,MY,MZ
      READ(1,10) (IDATE(I),I=1,20)
      READ(1,10) (IBLNK(I),I=1,20)
      READ(1,10) ((INFO(I,J),I=1,20),J=1,7)
      READ(1,20) NFLDS
      READ(1,10) ((IFLDNM(I,J),I=1,20),J=1,13)
      READ(1,20) IPTSPL
      READ(1,20) MX
      READ(1,20) MY
      READ(1,20) MZ
      READ(1,30) DELTX
      READ(1,30) DELTY
      READ(1,30) DELTZ
      READ(1,10) (IBLNK(I),I=1,20)
      READ(1,10) (LAST(I),I=1,20)
      RETURN
C
C---- FORMAT STATEMENTS
C
10    FORMAT(20A4)
20    FORMAT(I5)
30    FORMAT(F10.0)
      END
```

```
      SUBROUTINE FDATRD(WLONG,WLAT,WVERT,DBZ)
C
C---- THIS SUBROUTINE READS FULL VOLUME DATA SETS
C
      DIMENSION WLONG(100,100,11),WLAT(100,100,11),WVERT(100,100,11),
     $          DBZ(100,100,11)
      DIMENSION ISUBHD(20)
      COMMON /MXYZ/ MX,MY,MZ
      DO 30 K=1,MZ
        READ(1,10) (ISUBHD(I),I=1,20)
        READ(1,20) ((WLONG(I,J,K),I=1,MX),J=1,MY)
        READ(1,10) (ISUBHD(I),I=1,20)
        READ(1,20) ((WLAT(I,J,K),I=1,MX),J=1,MY)
        READ(1,10) (ISUBHD(I),I=1,20)
        READ(1,20) ((WVERT(I,J,K),I=1,MX),J=1,MY)
        READ(1,10) (ISUBHD(I),I=1,20)
        READ(1,20) ((DBZ(I,J,K),I=1,MX),J=1,MY)
30    CONTINUE
      RETURN
C
C---- FORMAT STATEMENTS
C
10    FORMAT(20A4)
20    FORMAT(10F8.2)
      END
```

A sample program which will read the corridor data sets is:

```
C*********************************************************************
C*                                                                   *
C*    THE FOLLOWING IS A PROGRAM TO READ THE CORRIDOR DATA SETS      *
C*                                                                   *
C*********************************************************************
C
C---- THE MAIN PROGRAM TO READ THE CORRIDOR DATA SETS
C
      DIMENSION XX(151),WX(151,3,5),WY(151,3,5),WZ(151,3,5),
     1          DBZ(151,3,5)
      DIMENSION IDATE(20),INFO(20,7),IFLDNM(20,13),LAST(20),IBLNK(20)
      CALL HEADER (IDATE,INFO,IFLDNM,LAST,IBLNK)
      CALL CORDAT (XX,WX,WY,WZ,DBZ)
      STOP
      END
      SUBROUTINE HEADER(IDATE,INFO,IFLDNM,LAST,IBLNK)
C
C---- THE SUBROUTINE READS THE HEADER OF CORRIDOR DATA SETS
C
      DIMENSION IDATE(20),INFO(20,7),IFLDNM(20,13),LAST(20),IBLNK(20)
      COMMON /MXYZ/ MX,MY,MZ
      READ(1,10) (IDATE(I),I=1,20)
      READ(1,10) (IBLNK(I),I=1,20)
      READ(1,10) ((INFO(I,J),I=1,20),J=1,7)
      READ(1,20) NFLDS
      READ(1,10) ((IFLDNM(I,J),I=1,20),J=1,13)
      READ(1,20) IPTSPP
      READ(1,20) MX
      READ(1,20) MY
      READ(1,20) MZ
      READ(1,30) DELTX
      READ(1,30) DELTY
      READ(1,30) DELTZ
      READ(1,10) (IBLNK(I),I=1,20)
      READ(1,10) (LAST(I),I=1,20)
      RETURN
```

```
C
C---- FORMAT STATEMENTS
C
10    FORMAT(20A4)
20    FORMAT(I5)
30    FORMAT(F10.0)
      END
      SUBROUTINE CORDAT(XX,WX,WY,WZ,DBZ)
C
C---- THIS SUBROUTINE READS THE CORRIDOR DATA SETS
C
      DIMENSION XX(151),WX(151,3,5),WY(151,3,5),WZ(151,3,5),
     1          DBZ(151,3,5)
      DIMENSION ISUBHD(20)
      COMMON /MXYZ/ MX,MY,MZ
      READ(1,10) (ISUBHD(I),I=1,20)
      READ(1,50) (XX(I),I=1,MX)
      DO 30 J=1,MY
        READ(1,10) (ISUBHD(I),I=1,20)
        READ(1,20) ((WX(I,J,K),I=1,MX),K=1,MZ)
        READ(1,10) (ISUBHD(I),I=1,20)
        READ(1,20) ((WY(I,J,K),I=1,MX),K=1,MZ)
        READ(1,10) (ISUBHD(I),I=1,20)
        READ(1,20) ((WZ(I,J,K),I=1,MX),K=1,MZ)
        READ(1,10) (ISUBHD(I),I=1,20)
        READ(1,20) ((DBZ(I,J,K),I=1,MX),K=1,MZ)
30    CONTINUE
      RETURN
C
C---- FORMAT STATEMENTS
C
10    FORMAT(20A4)
20    FORMAT(10F8.2)
50    FORMAT(8F10.2)
      END
```

APPENDIX E

PLOT OF THE VECTOR WIND FIELD IN THE VERTICAL CENTER PLANE OF EACH CORRIDOR DATA SET

A plot of the vector wind field in the central plane of each corridor data set defined in Appendix C is given in this appendix. As an example of the nomenclature, consider Figure E.1. The letters in the left upper and right upper corners designate the intended flight path (i.e., $\overline{AB}$). The vector designites the projection of the total wind vector on the vertical plane. The wind component perpendicular to the vertical plane is not plotted. The horizontal distance covered in each plot is ±15,000 ft relative to the microburst center (see Figure 2.15). This region contains the most significant wind shear effect along the path. A listing of Figures E.1 through E.40 corresponding to the 40 corridor data sets is given in Table E.1.

TABLE E.1. Listing of the Vector Wind Field in the Vertical Center Plane of Each Corridor Data Set.

Figure No.	Intended Flight Path	Microburst
Figure E.1	Along path $\overline{AB}$	5AU1845
Figure E.2	Along path $\overline{CD}$	"
Figure E.3	Along path $\overline{YZ}$	"
Figure E.4	Along path $\overline{IJ}$	"
Figure E.5	Along path $\overline{KL}$	"
Figure E.6	Along path $\overline{GH}$	"
Figures E.7-E.12	Same paths as Figures E.1-E.6	5AU1847
Figures E.13-E.18	Same paths as Figures E.1-E.6	5AU1850
Figures E.19-E.24	Same paths as Figures E.1-E.6	5AU1852
Figure E.25	Along path $\overline{EF}$	30JN1821
Figure E.26	Along path $\overline{MN}$	"
Figure E.27	Along path $\overline{PQ}$	"
Figure E.28	Along path $\overline{RS}$	"
Figures E.29-E.32	Same paths as Figures E.25-E.28	30JN1823
Figures E.33-E.36	Same paths as Figures E.25-E.28	30JN1826
Figure E.37	Along path $\overline{TU}$	14JL1452
Figure E.38	Along path $\overline{VW}$	"
Figure E.39	Along path $\overline{OX}$	"
Figure E.40	Along path $\overline{LS}$	"

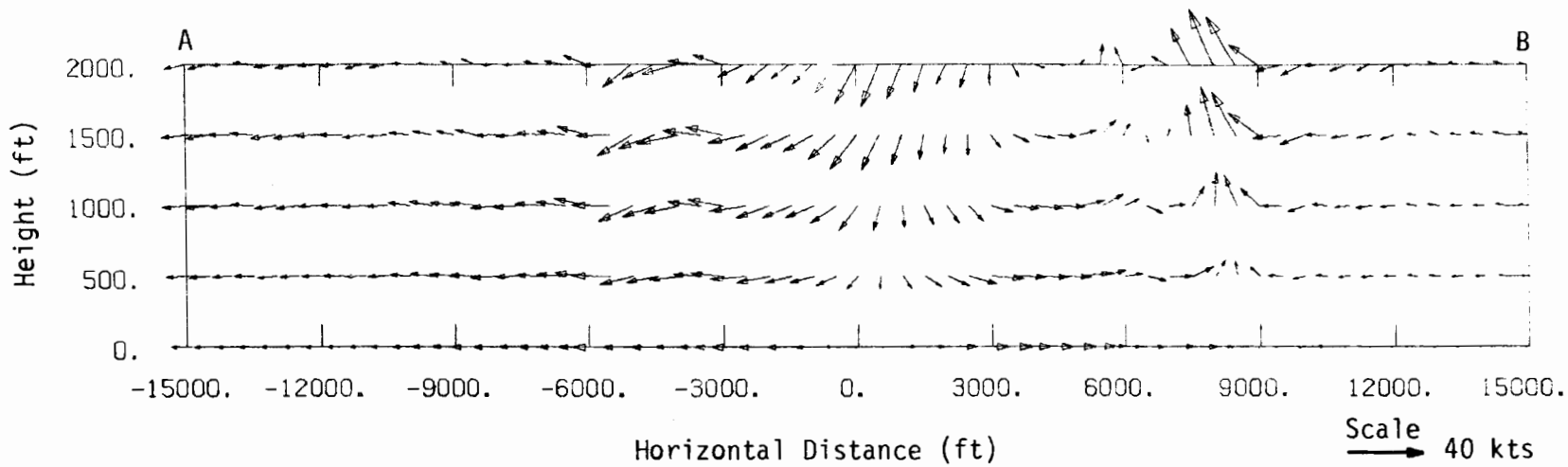

Figure E.1. Vector wind field in the center plane of the corridor data set along path $\overline{AB}$, 5AU1845.

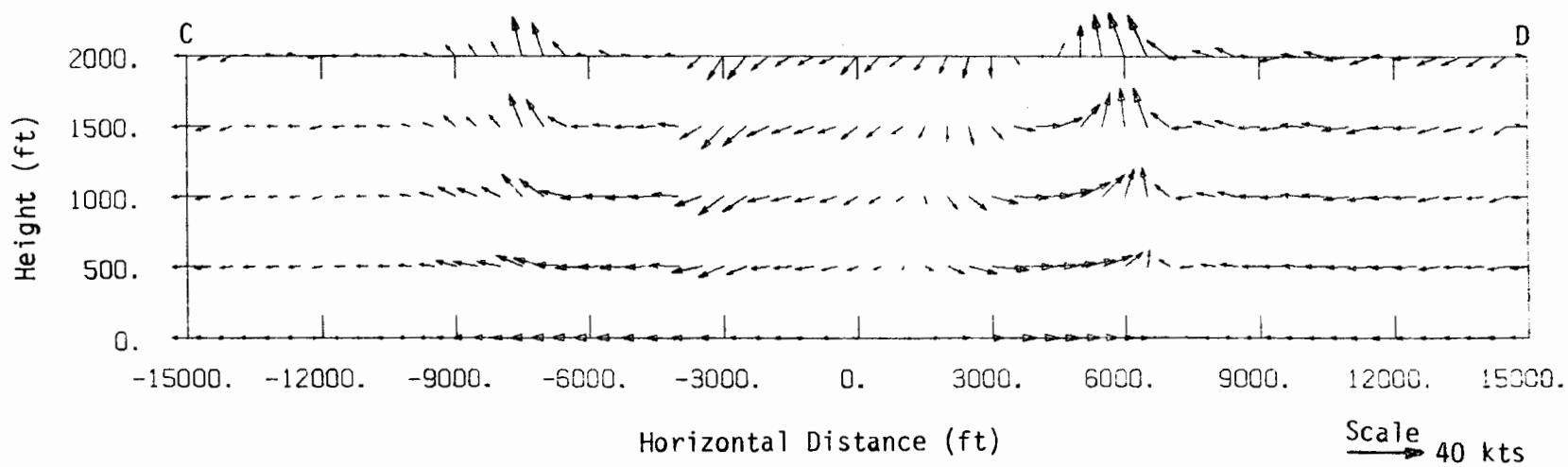

Figure E.2. Vector wind field in the center plane of the corridor data set along path $\overline{CD}$, 5AU1845.

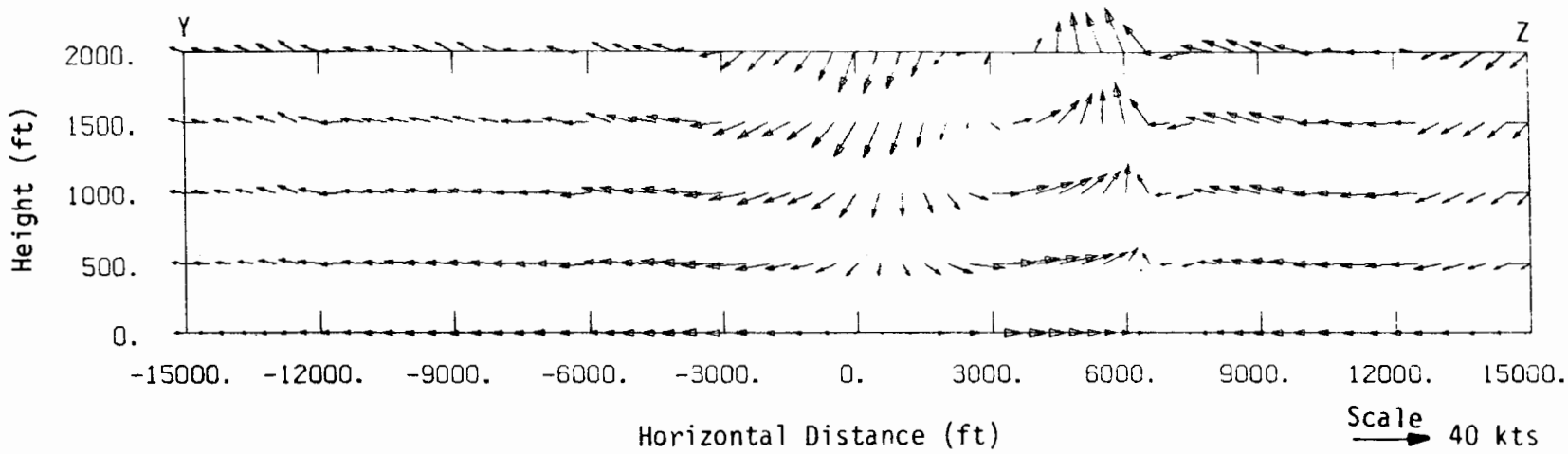

Figure E.3. Vector wind field in the center plane of the corridor data set along path $\overline{YZ}$, 5AU1845.

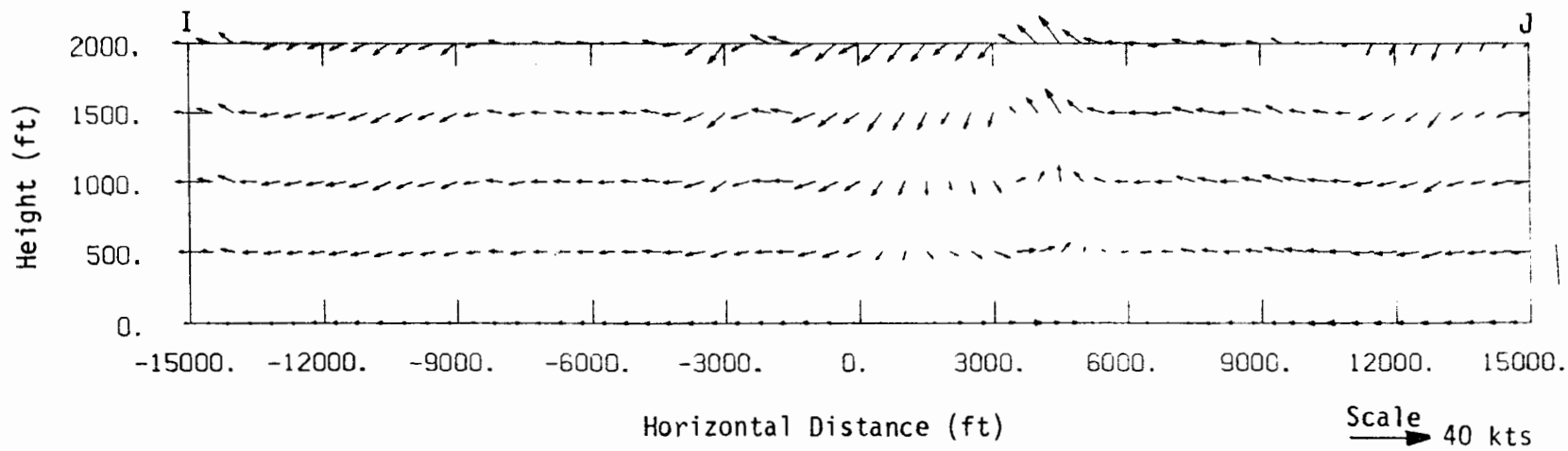

Figure E.4. Vector wind field in the center plane of the corridor data set along path $\overline{IJ}$, 5AU1845.

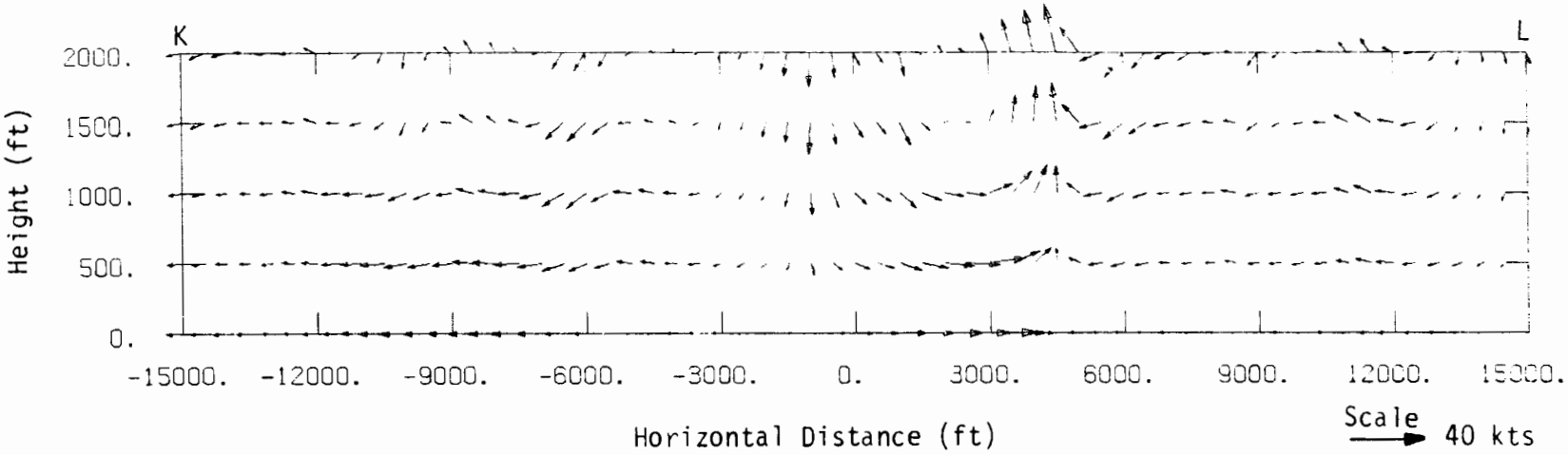

Figure E.5. Vector wind field in the center plane of the corridor data set along path $\overline{KL}$, 5AU1845.

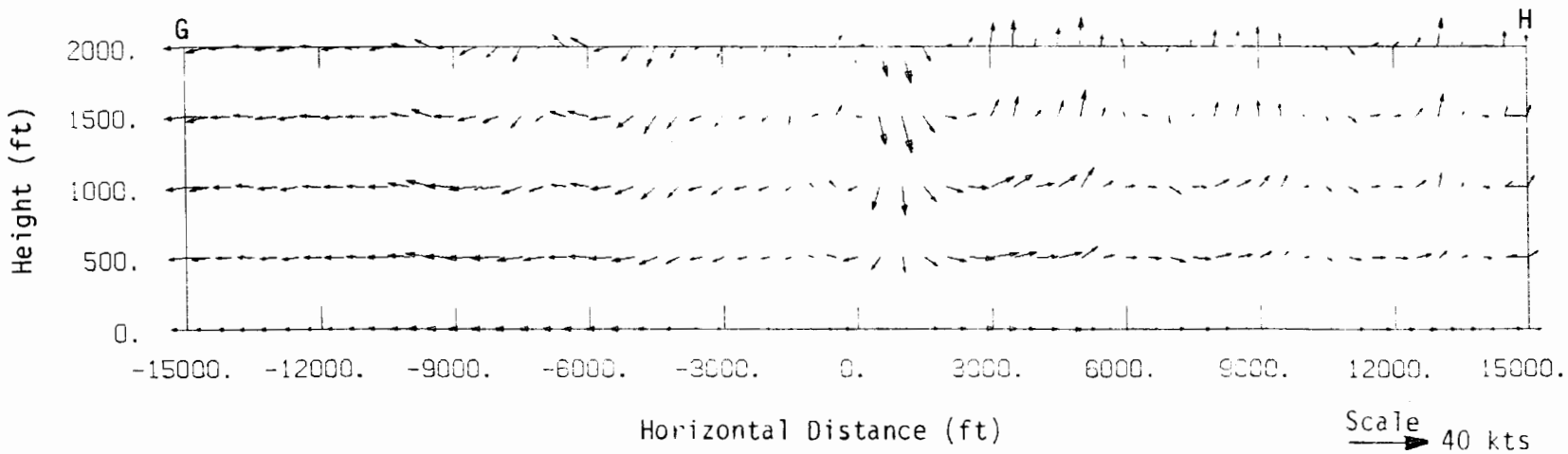

Figure E.6. Vector wind field in the center plane of the corridor data set along path $\overline{GH}$, 5AU1845.

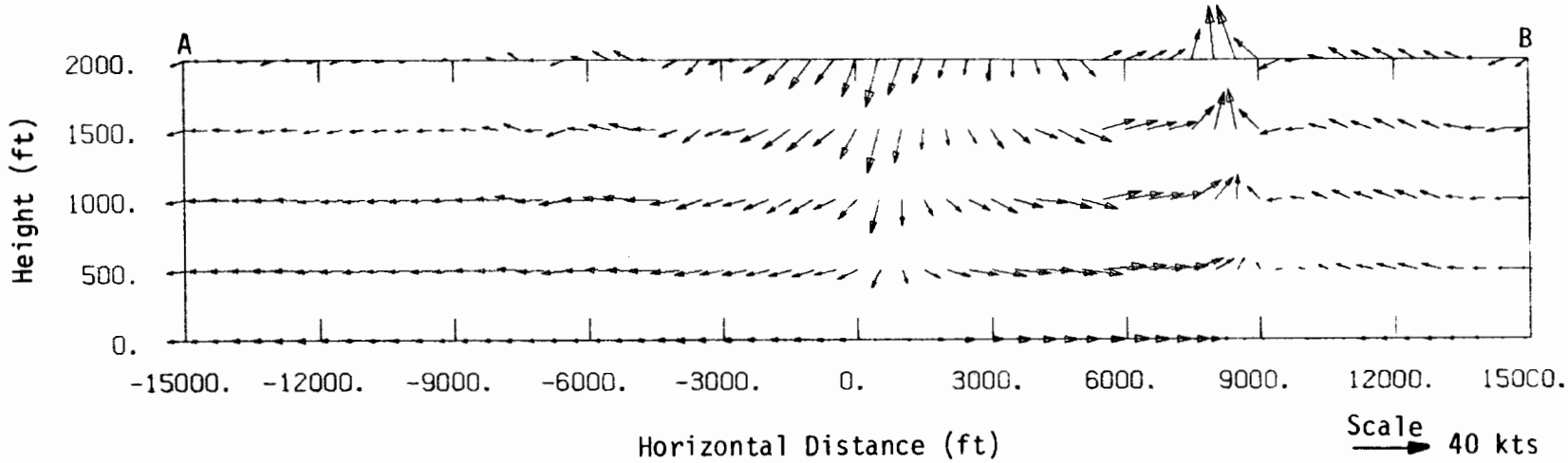

Figure E.7. Vector wind field in the center plane of the corridor data set along path $\overline{AB}$, 5AU1847.

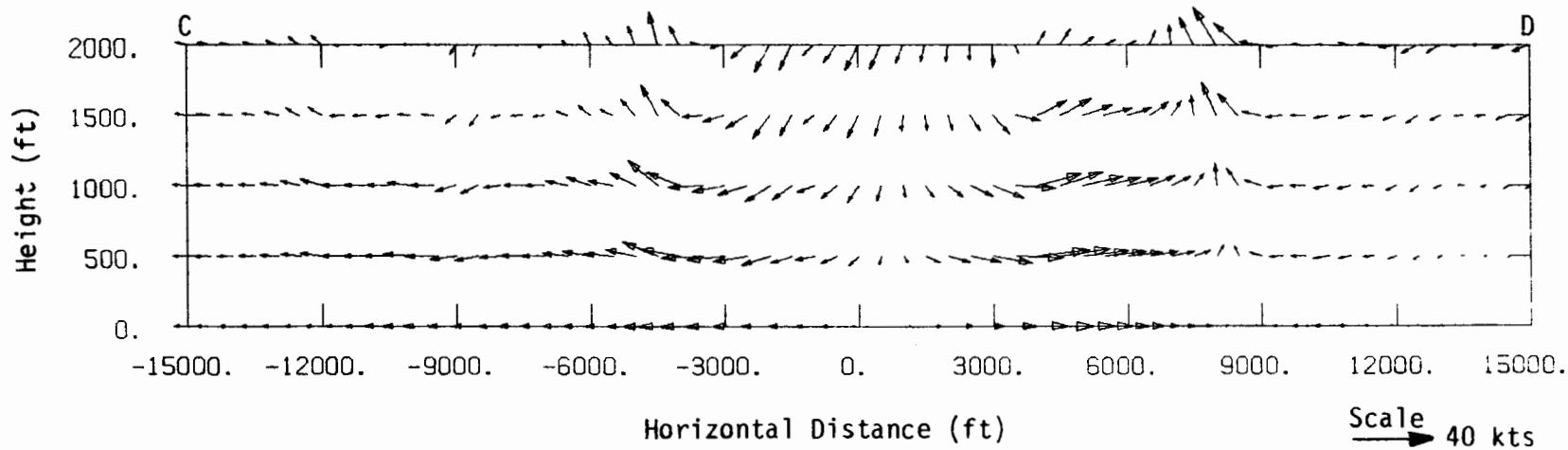

Figure E.8. Vector wind field in the center plane of the corridor data set along path $\overline{CD}$, 5AU1847.

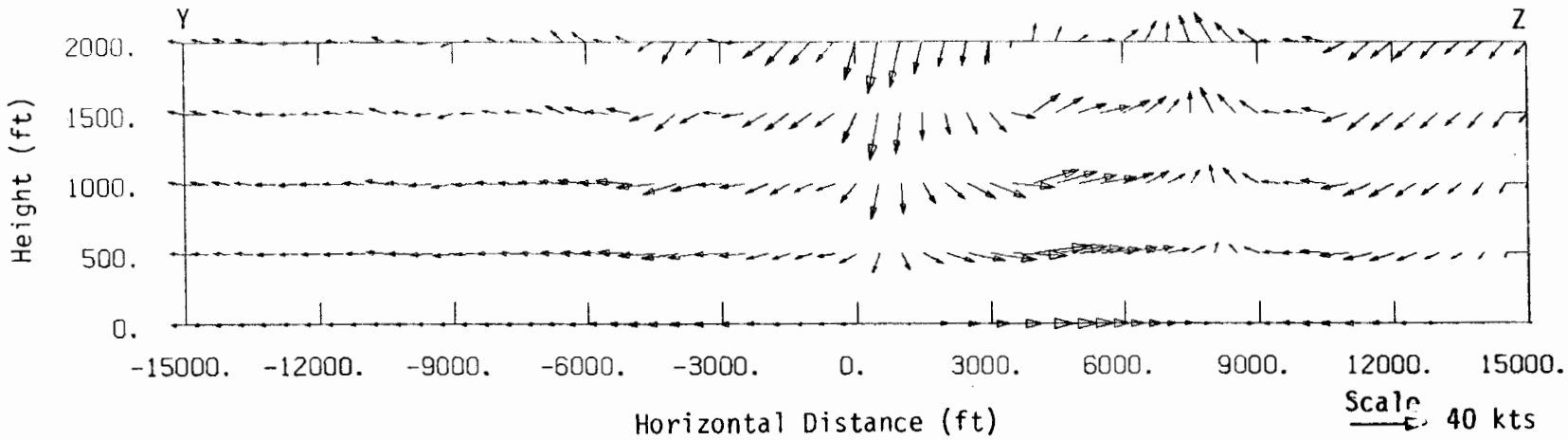

Figure E.9. Vector wind field in the center plane of the corridor data set along path $\overline{YZ}$, 5AU1847.

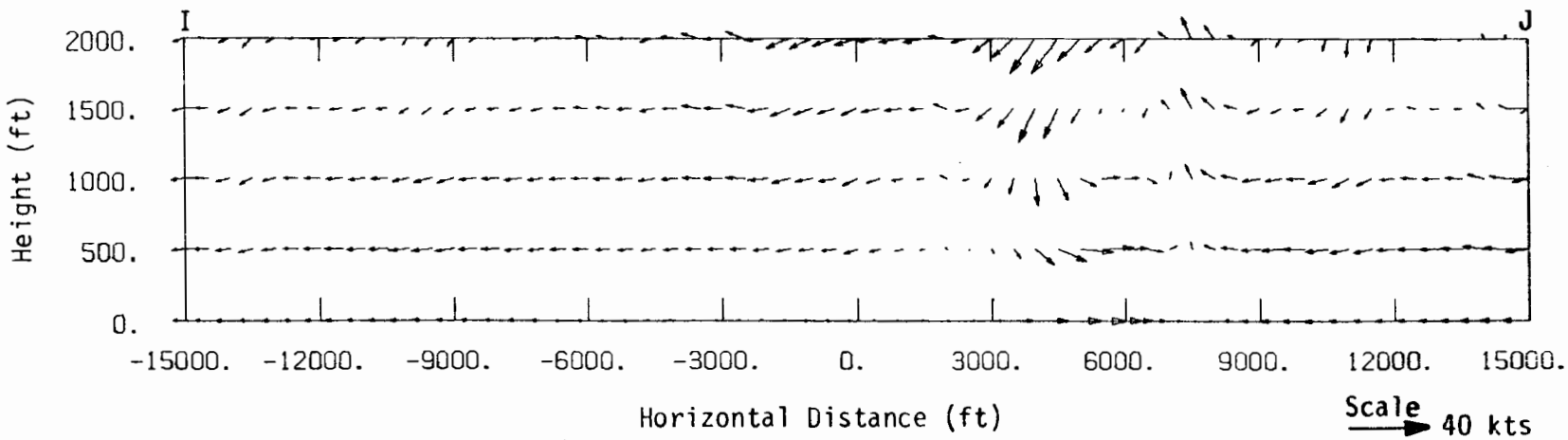

Figure E.10. Vector wind field in the center plane of the corridor data set along path $\overline{IJ}$, 5AU1847.

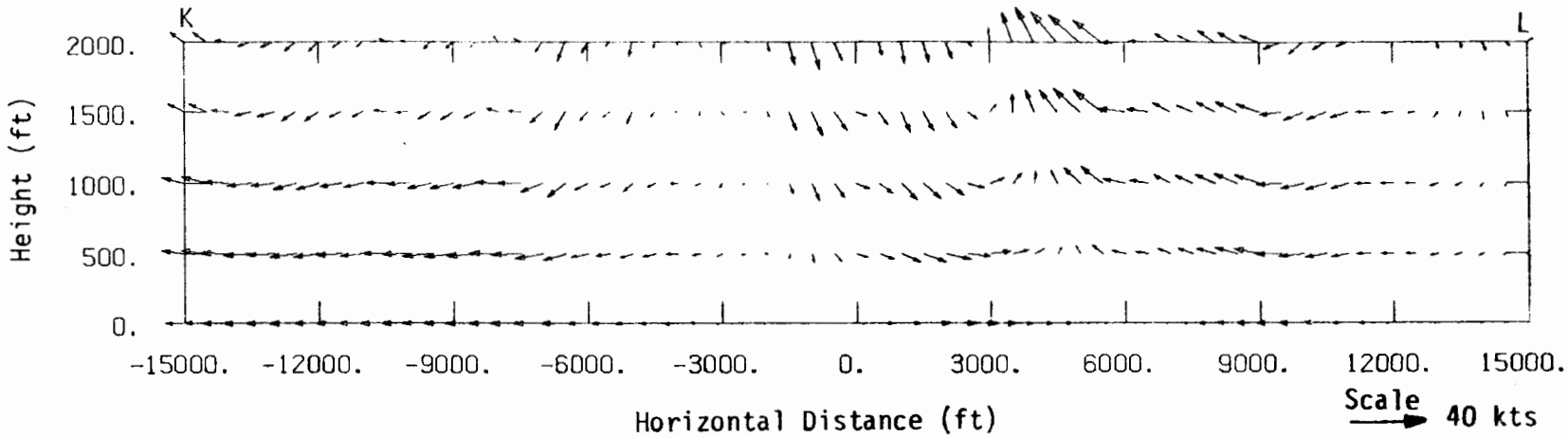

Figure E.11. Vector wind field in the center plane of the corridor data set along path $\overline{KL}$, 5AU1847.

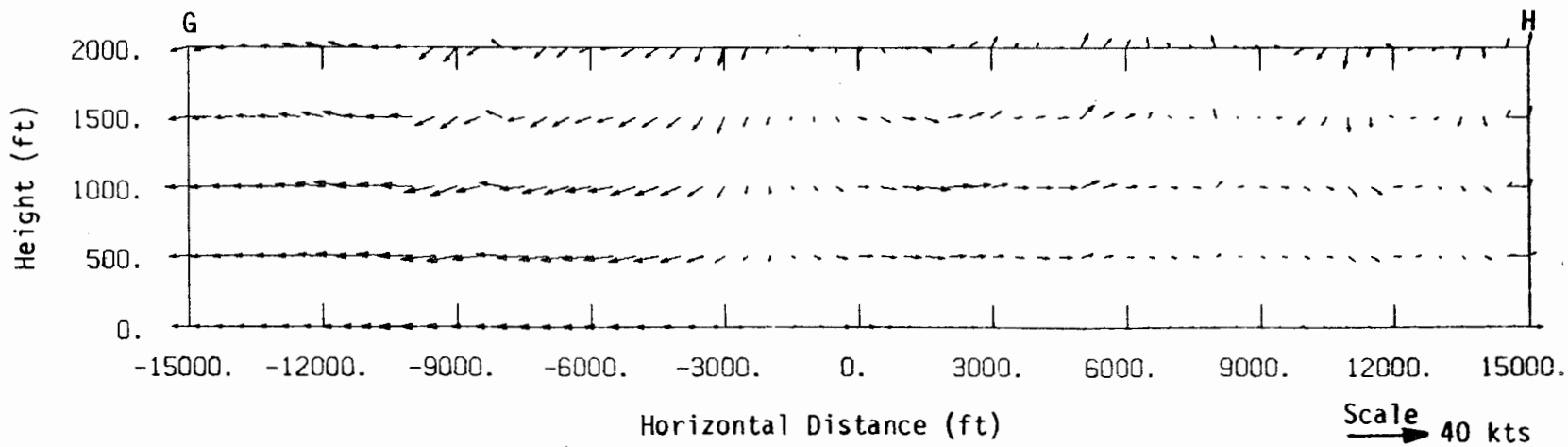

Figure E.12. Vector wind field in the center plane of the corridor data set along path $\overline{GH}$,. 5AU1847.

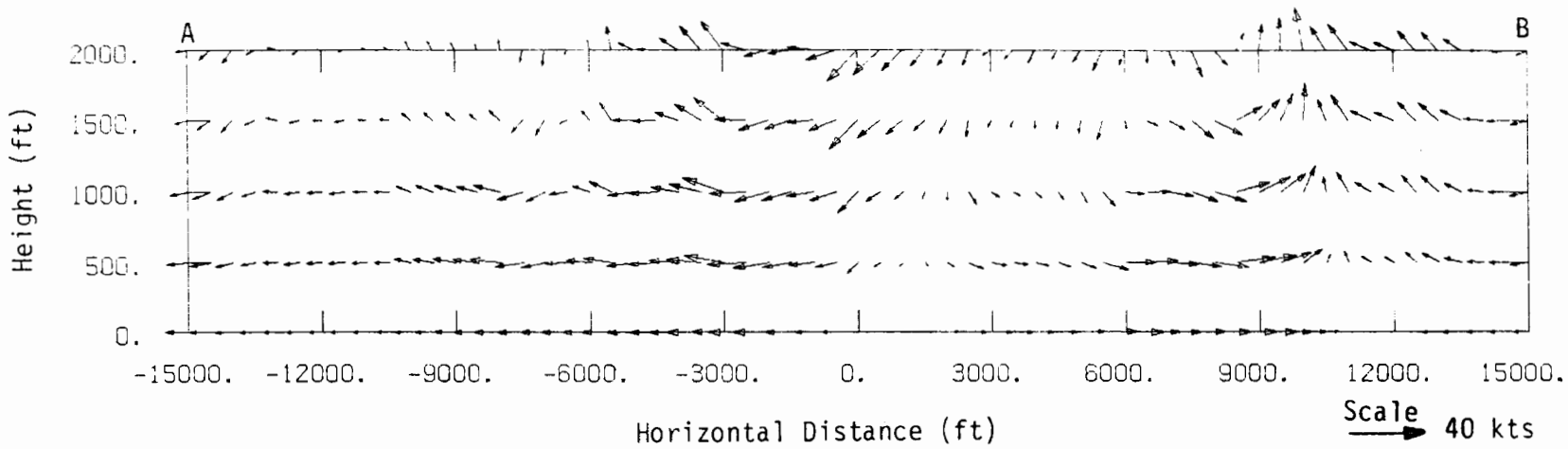

Figure E.13. Vector wind field in the center plane of the corridor data set along path $\overline{AB}$, 5AU1850.

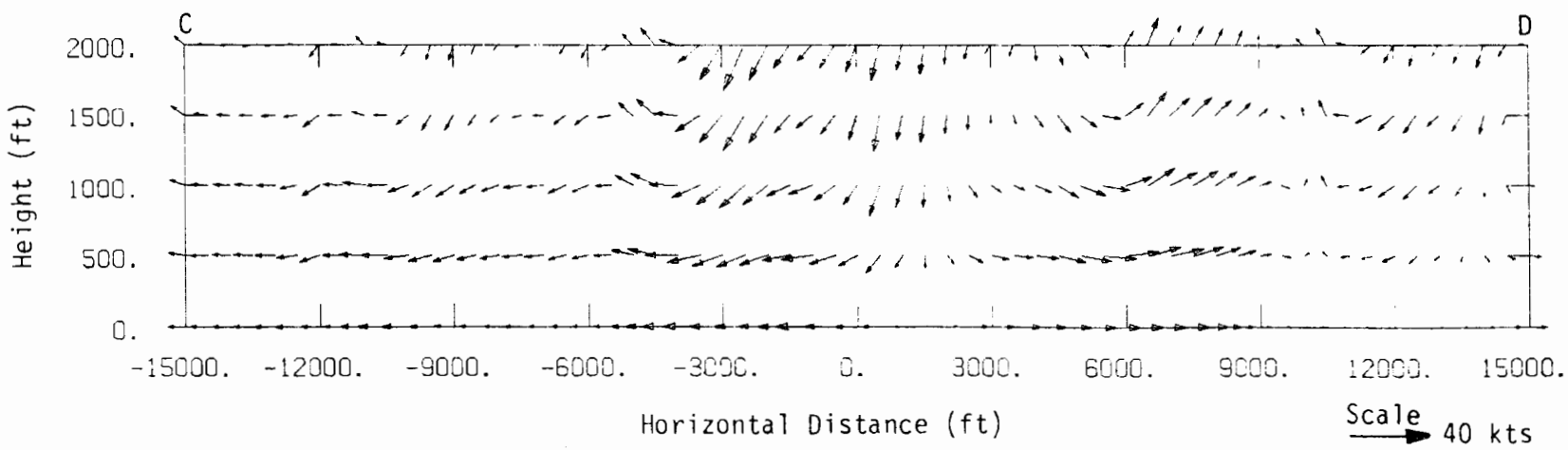

Figure E.14. Vector wind field in the center plane of the corridor data set along path $\overline{CD}$, 5AU1850.

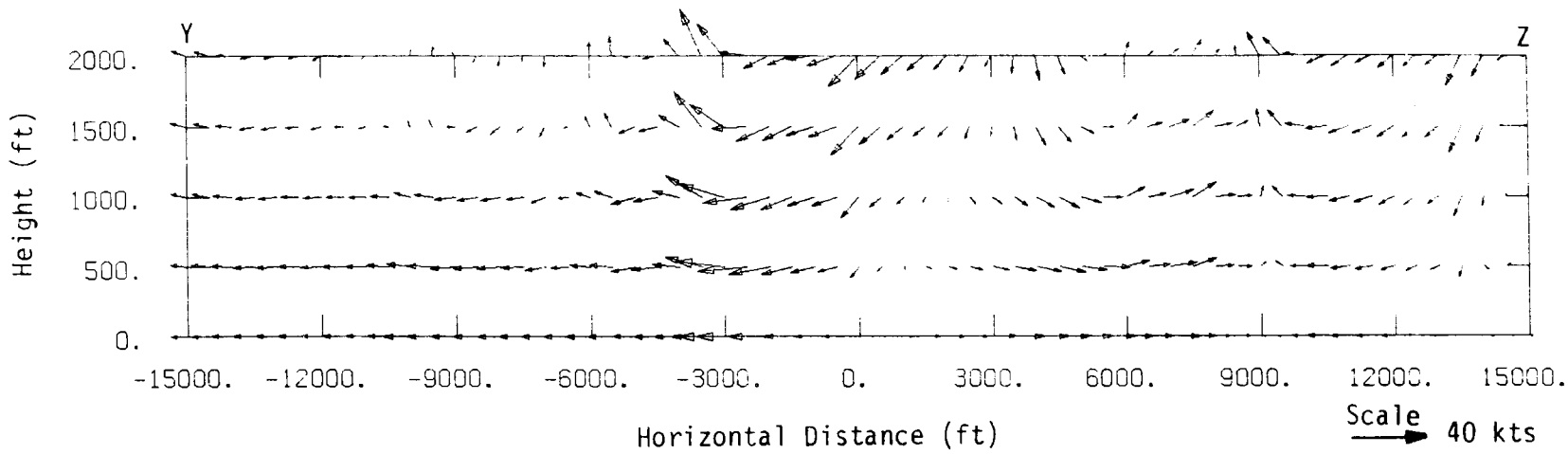

Figure E.15. Vector wind field in the center plane of the corridor data set along path $\overline{YZ}$, 5AU1850.

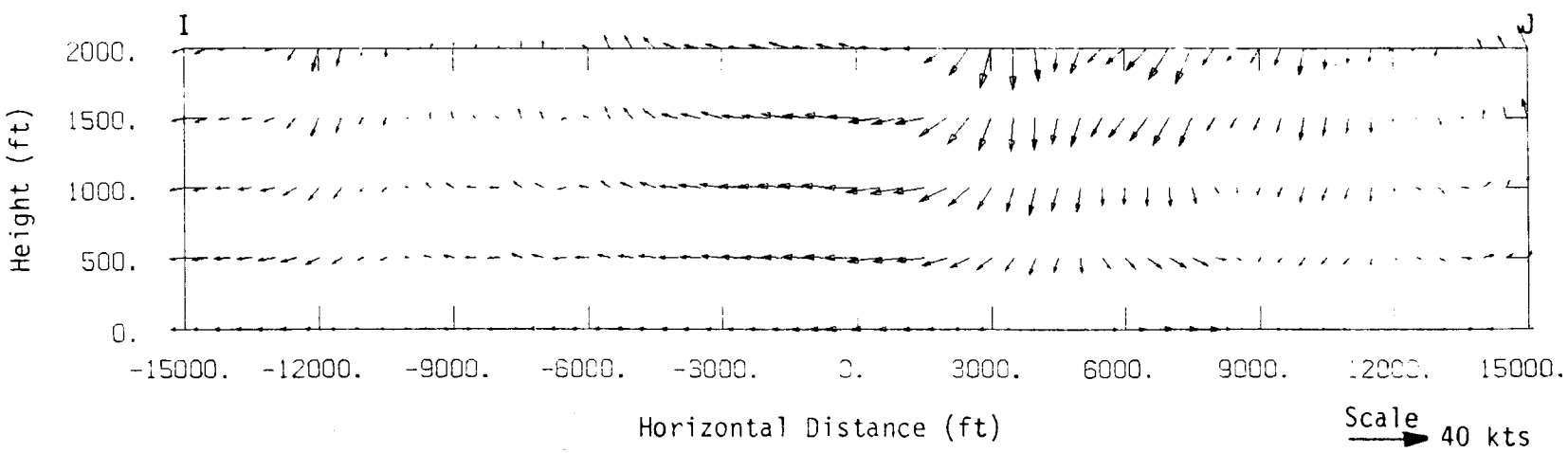

Figure E.16. Vector wind field in the center plane of the corridor data set along path $\overline{IJ}$, 5AU1850.

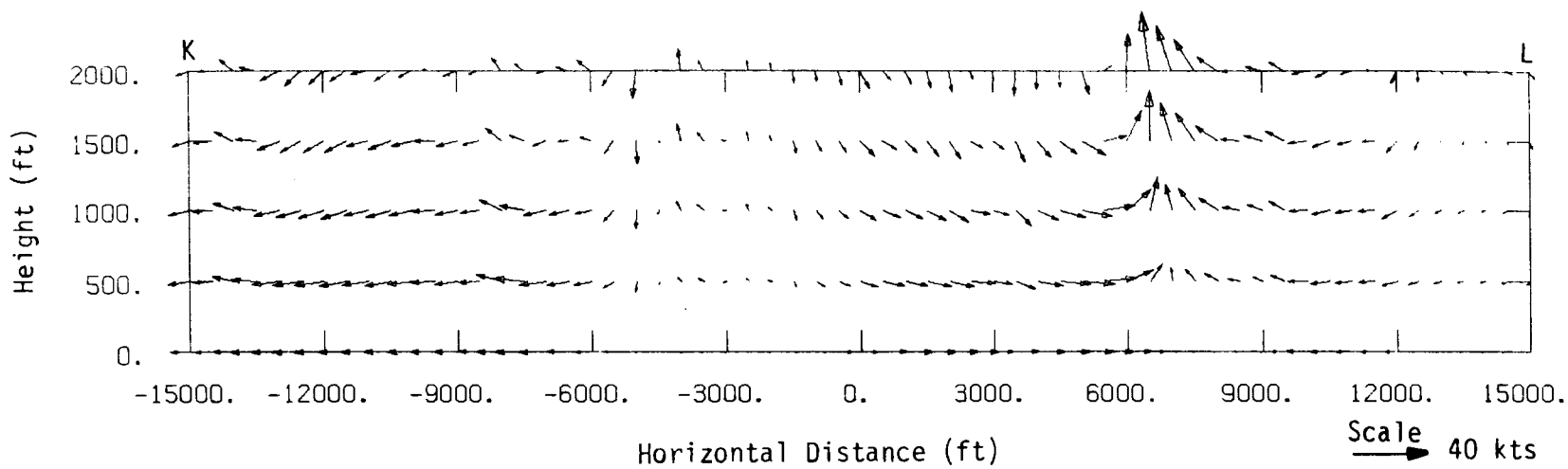

Figure E.17. Vector wind field in the center plane of the corridor data set along path $\overline{KL}$, 5AU1850.

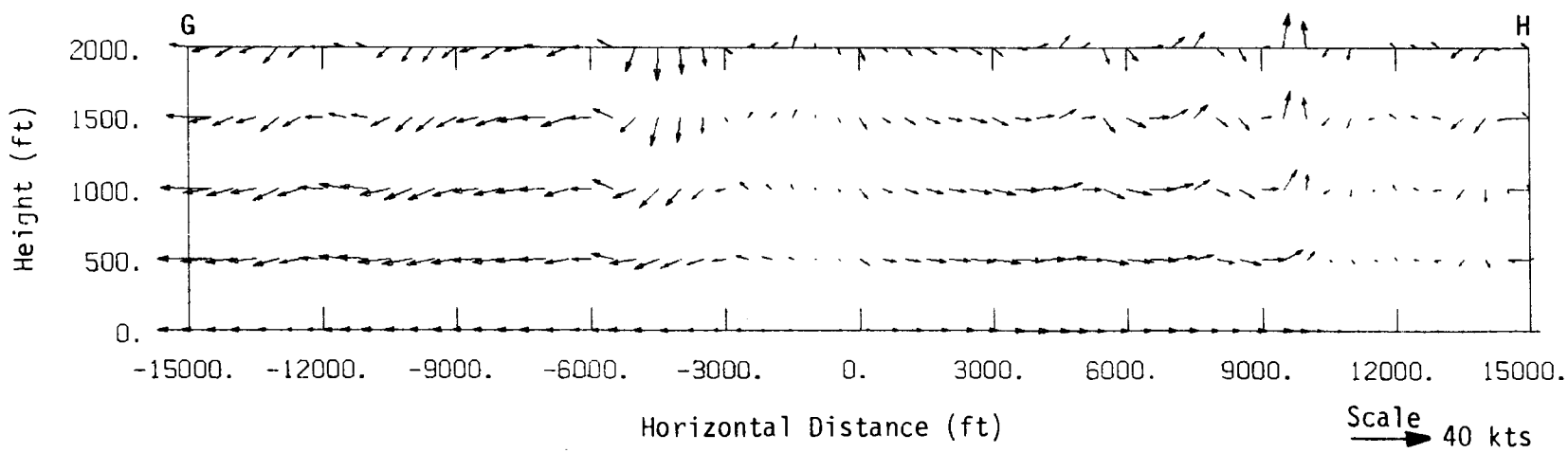

Figure E.18. Vector wind field in the center plane of the corridor data set along path $\overline{GH}$, 5AU1850.

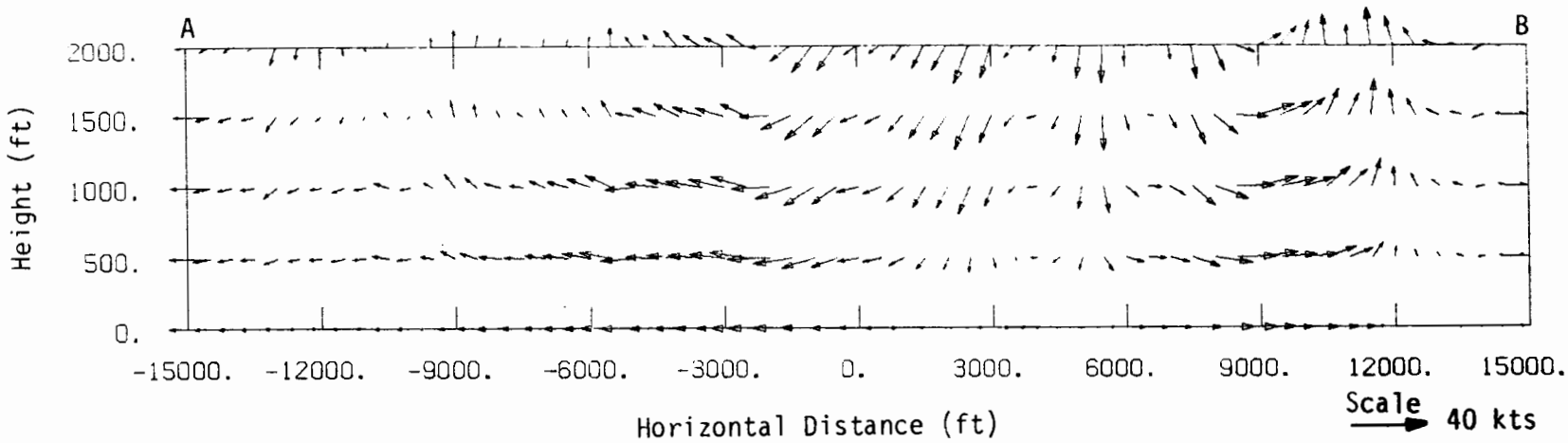

Figure E.19. Vector wind field in the center plane of the corridor data set along path $\overline{AB}$, 5AU1852.

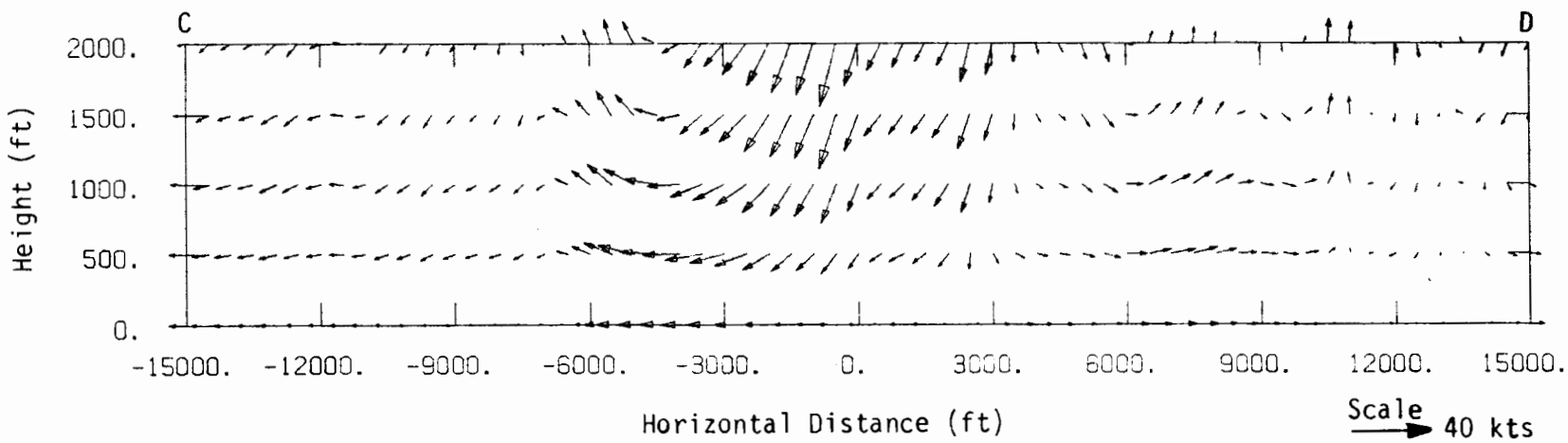

Figure E.20. Vector wind field in the center plane of the corridor data set along path $\overline{CD}$, 5AU1852.

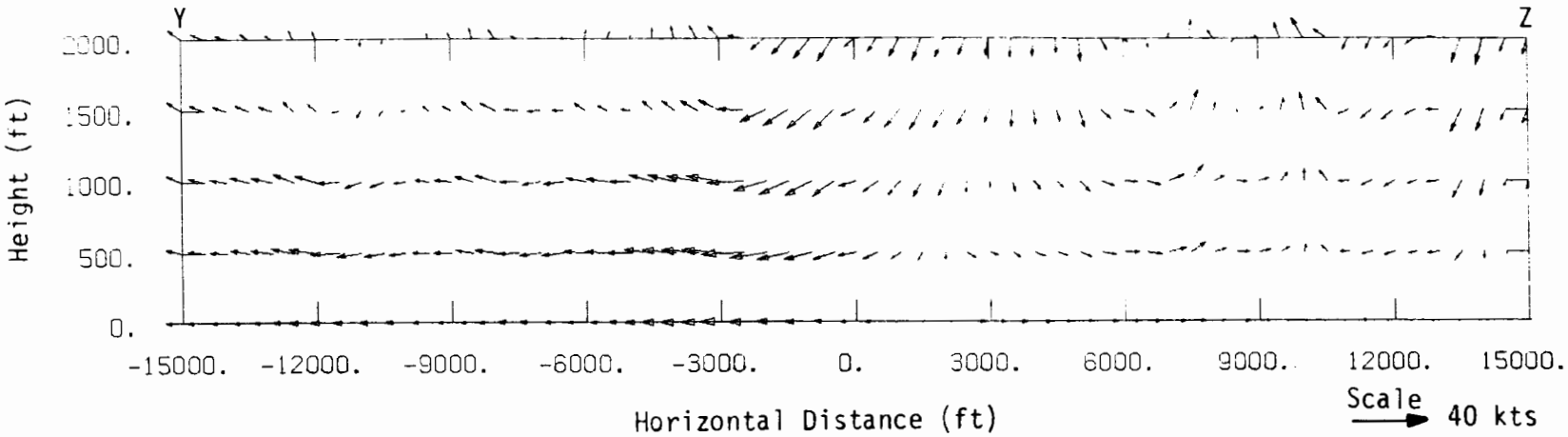

Figure E.21. Vector wind field in the center plane of the corridor data set along path $\overline{YZ}$, 5AU1852.

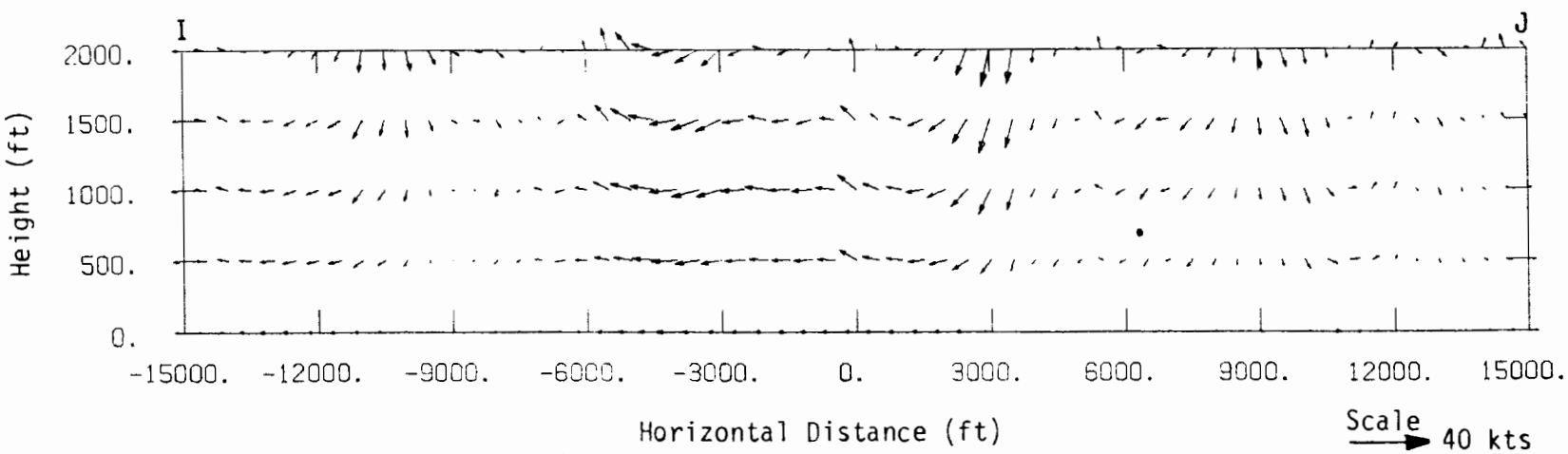

Figure E.22. Vector wind field in the center plane of the corridor data set along path $\overline{IJ}$, 5AU1852.

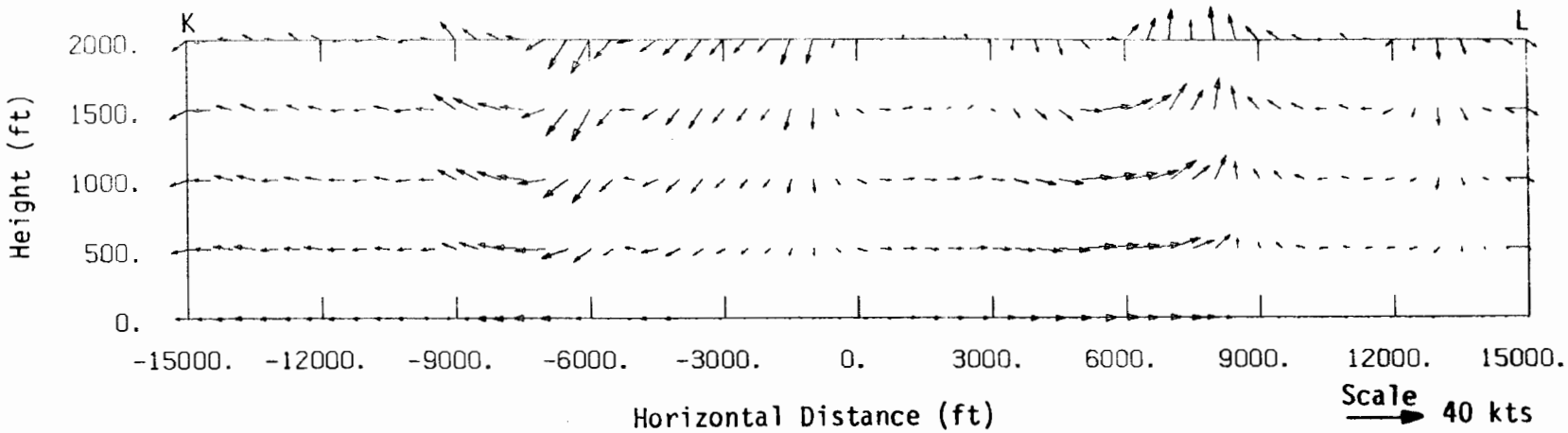

Figure E.23. Vector wind field in the center plane of the corridor data set along path $\overline{KL}$, 5AU1852.

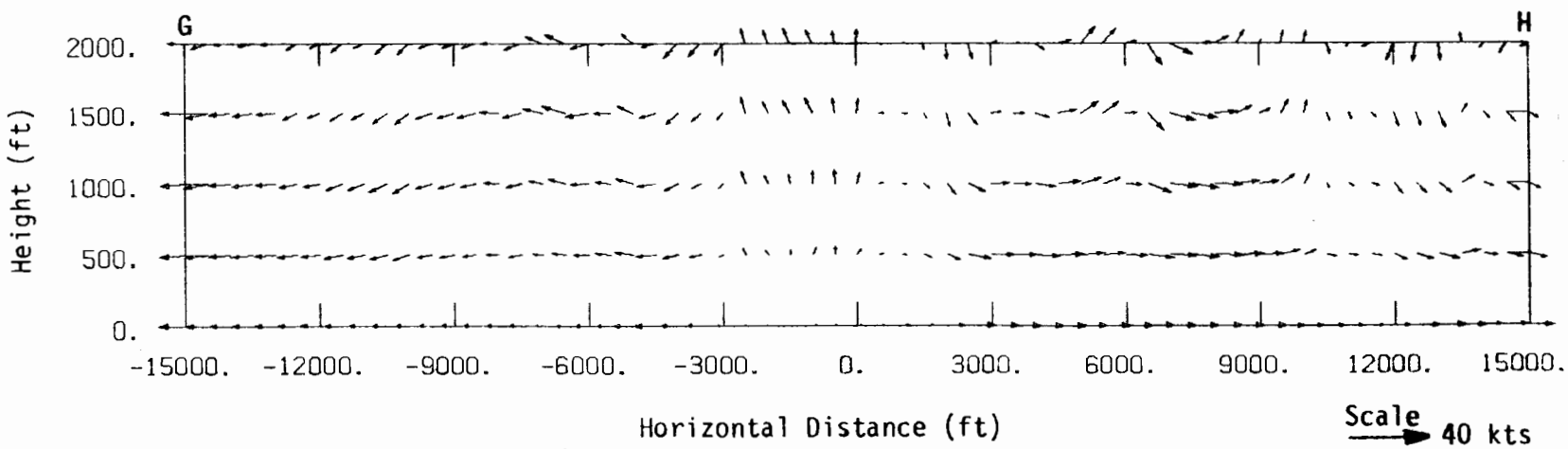

Figure E.24. Vector wind field in the center plane of the corridor data set along path $\overline{GH}$, 5AU1852.

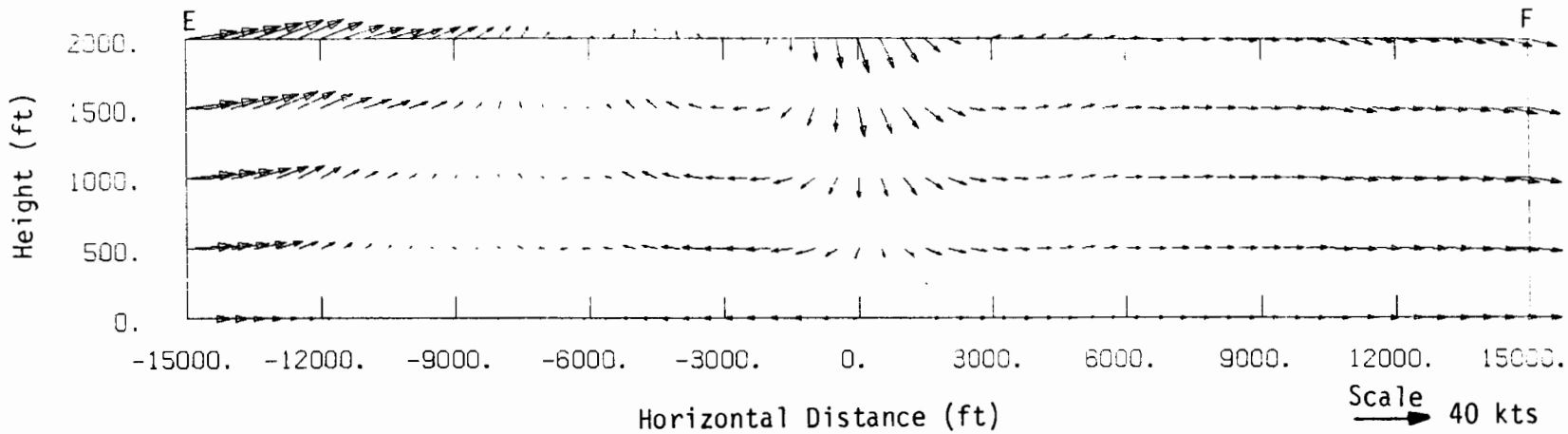

Figure E.25. Vector wind field in the center plane of the corridor data set along path $\overline{EF}$, 30JN1821.

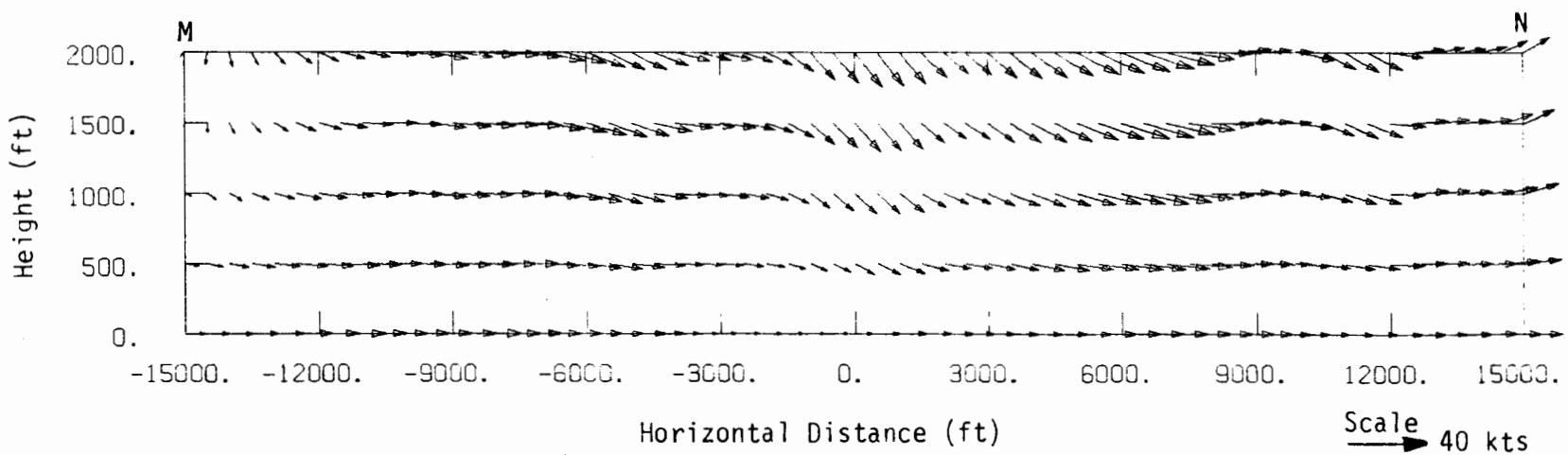

Figure E.26. Vector wind field in the center plane of the corridor data set along path $\overline{MN}$, 30JN1821.

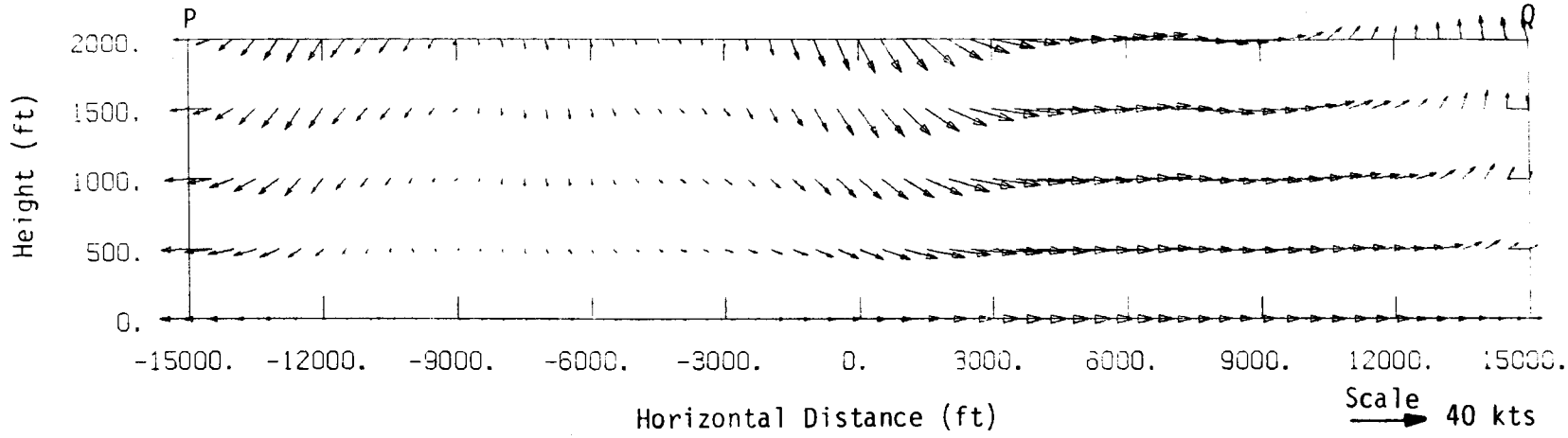

Figure E.27. Vector wind field in the center plane of the corridor data set along path $\overline{PQ}$, 30JN1821.

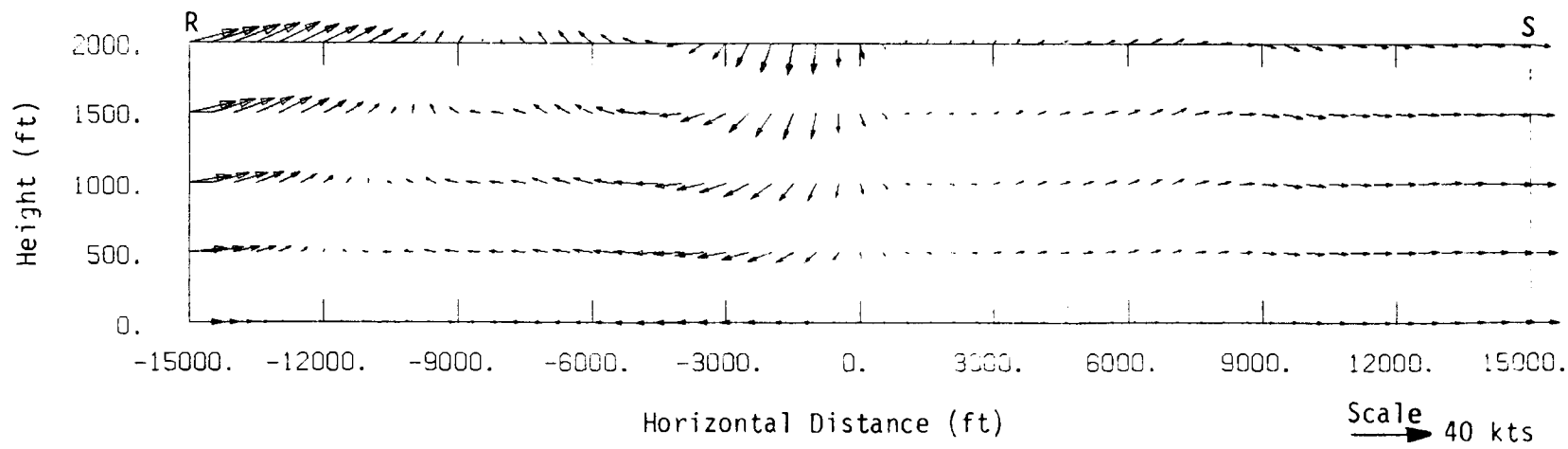

Figure E.28. Vector wind field in the center plane of the corridor data set along path $\overline{RS}$, 30JN1821.

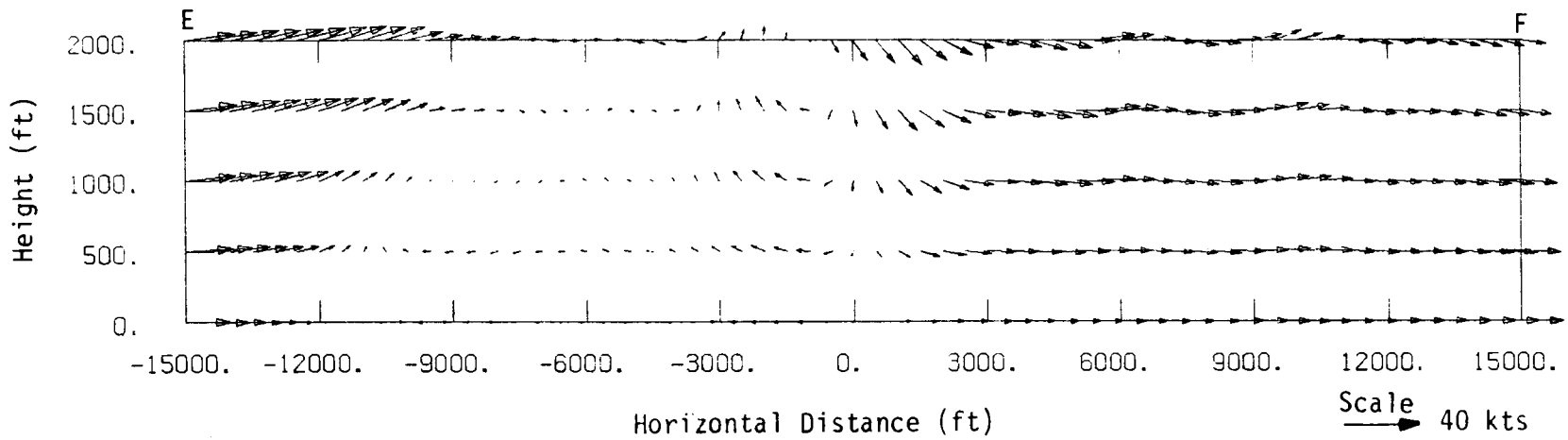

Figure E.29. Vector wind field in the center plane of the corridor data set along path $\overline{EF}$, 30JN1823.

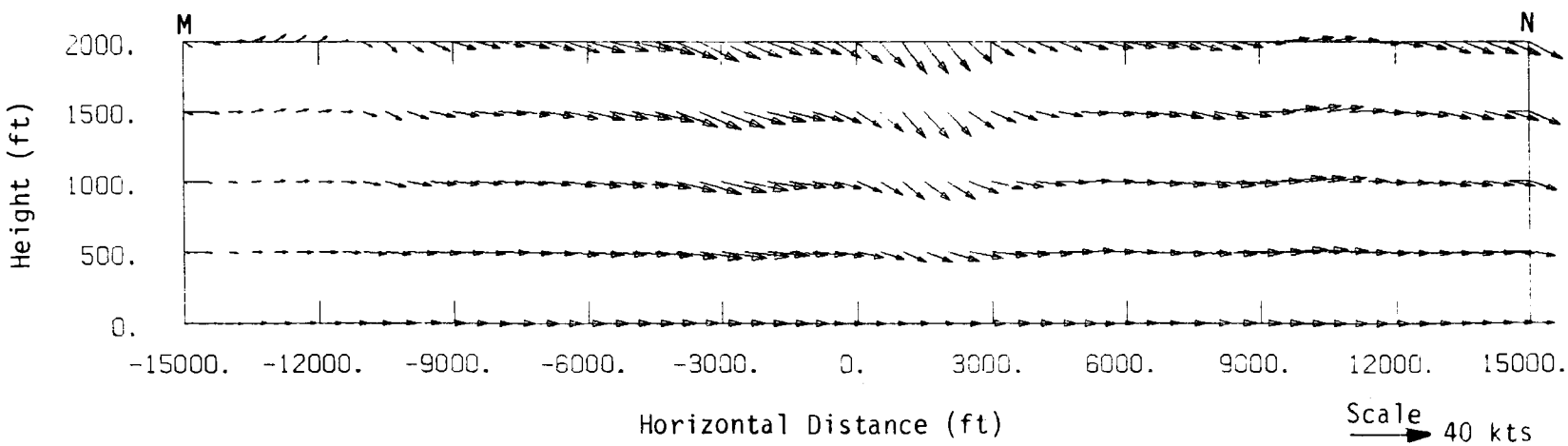

Figure E.30. Vector wind field in the center plane of the corridor data set along path $\overline{MN}$, 30JN1823.

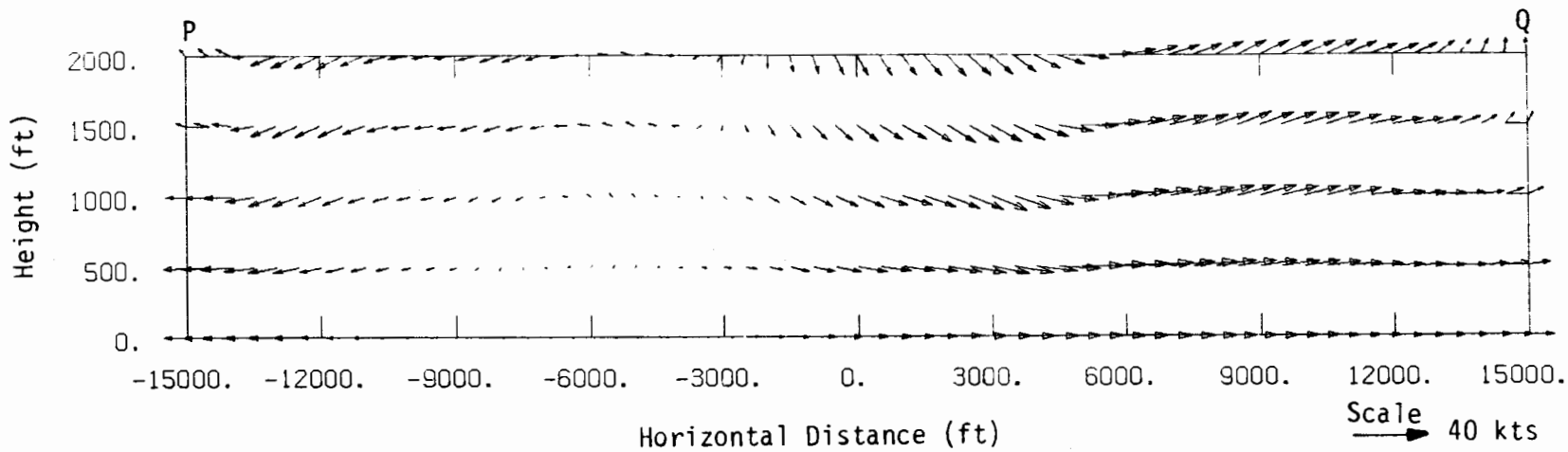

Figure E.31. Vector wind field in the center plane of the corridor data set along path $\overline{PQ}$, 30JN1823.

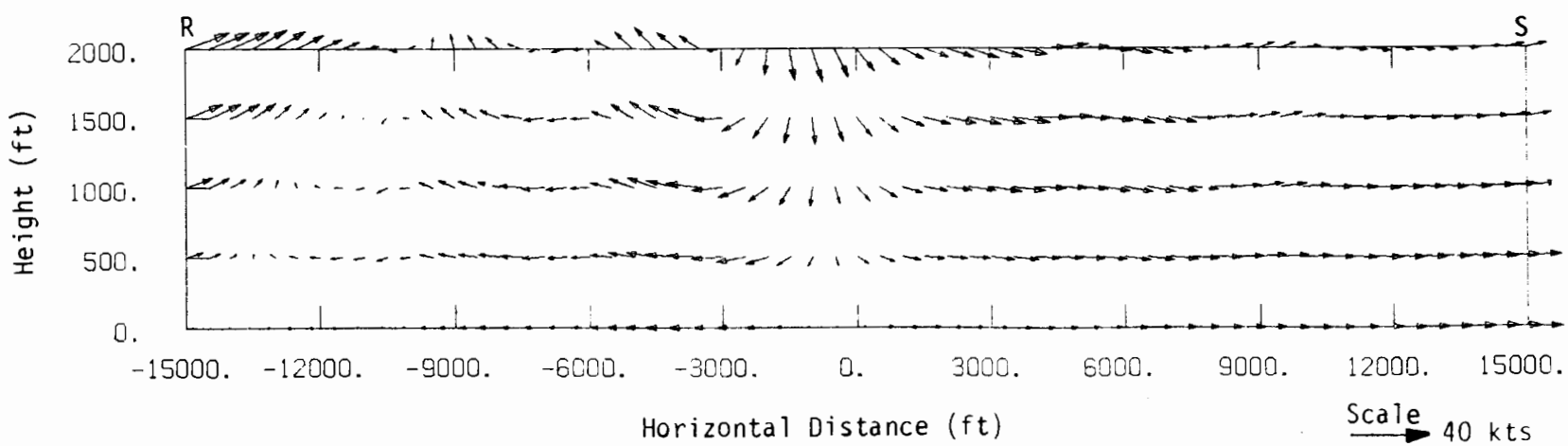

Figure E.32. Vector wind field in the center plane of the corridor data set along path $\overline{RS}$, 30JN1823.

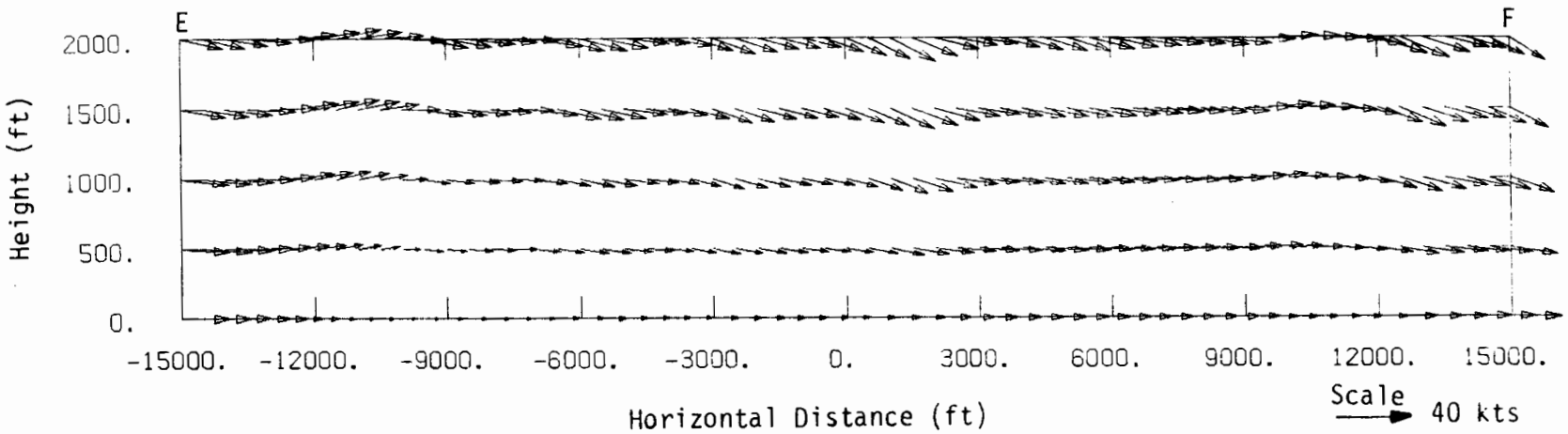

Figure E.33. Vector wind field in the center plane of the corridor data set along path $\overline{EF}$, 30JN1826.

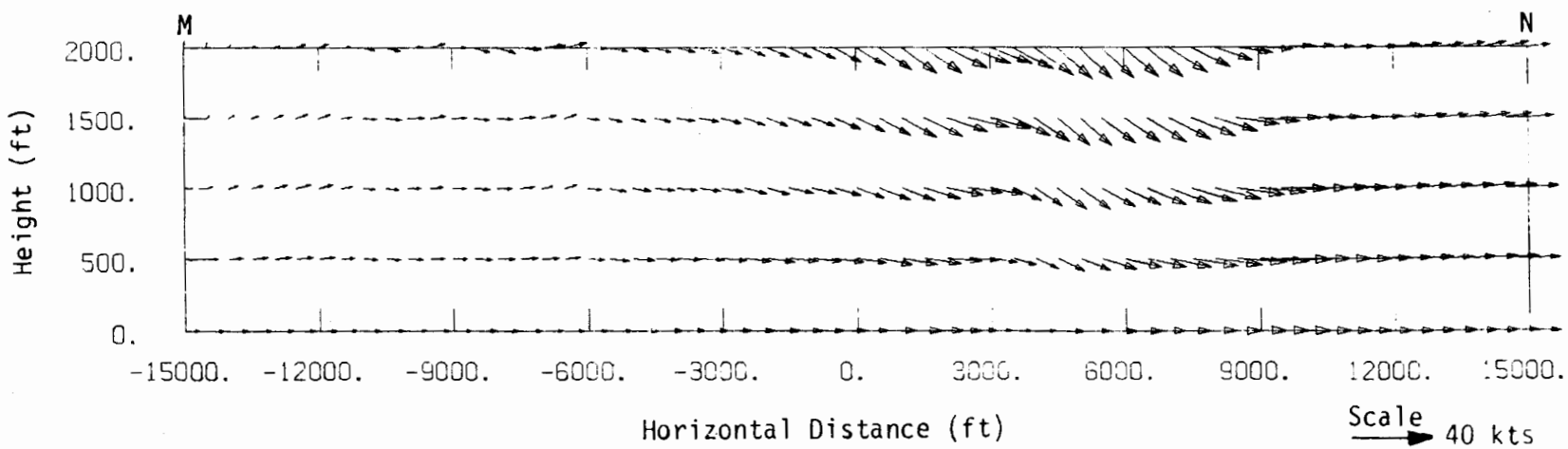

Figure E.34. Vector wind field in the center plane of the corridor data set along path $\overline{MN}$, 30JN1826.

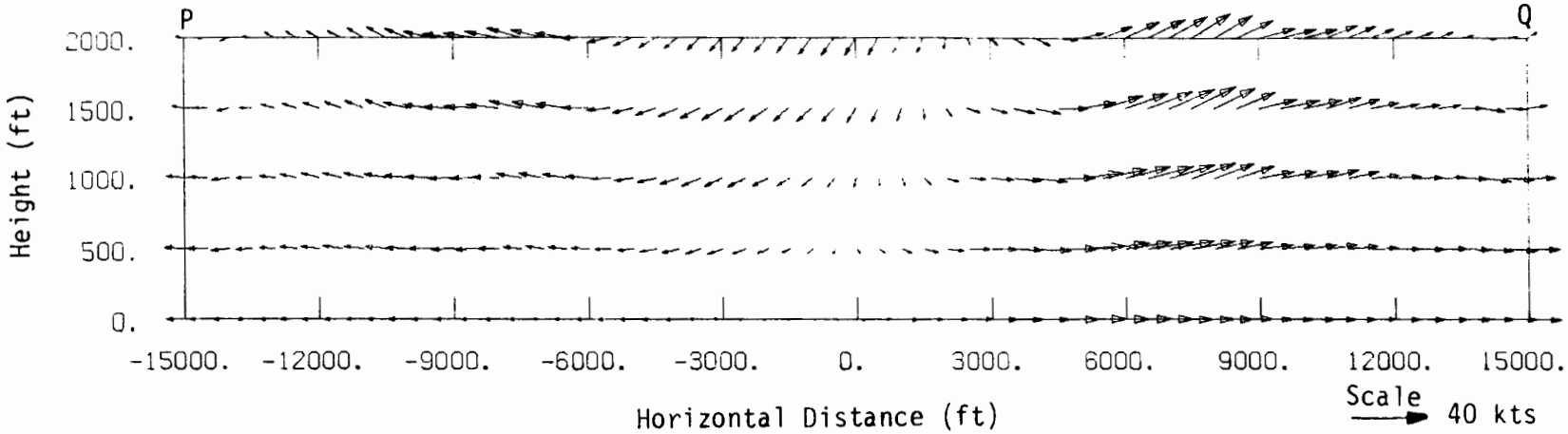

Figure E.35. Vector wind field in the center plane of the corridor data set along path $\overline{PQ}$, 30JN1826.

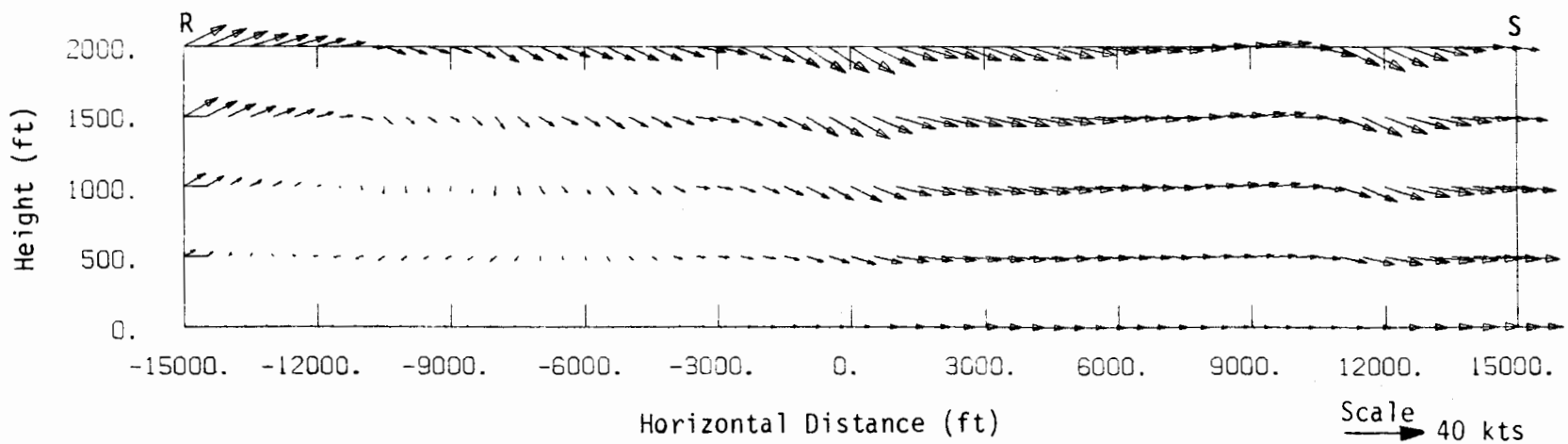

Figure E.36. Vector wind field in the center plane of the corridor data set along path $\overline{RS}$, 30JN1826.

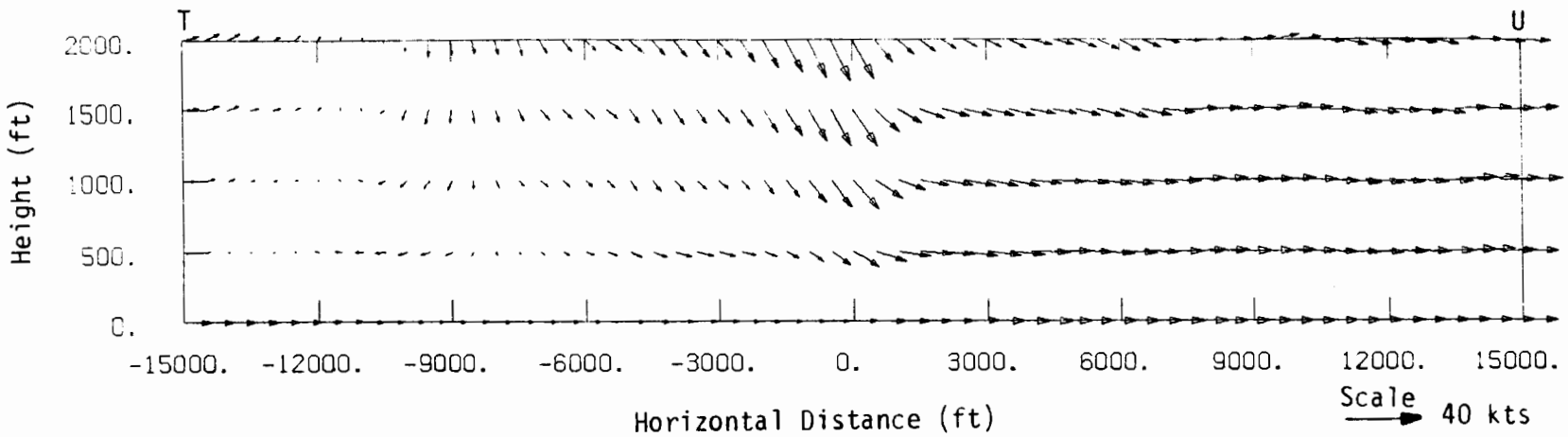

Figure E.37. Vector wind field in the center plane of the corridor data set along path $\overline{TU}$, 14JL1452.

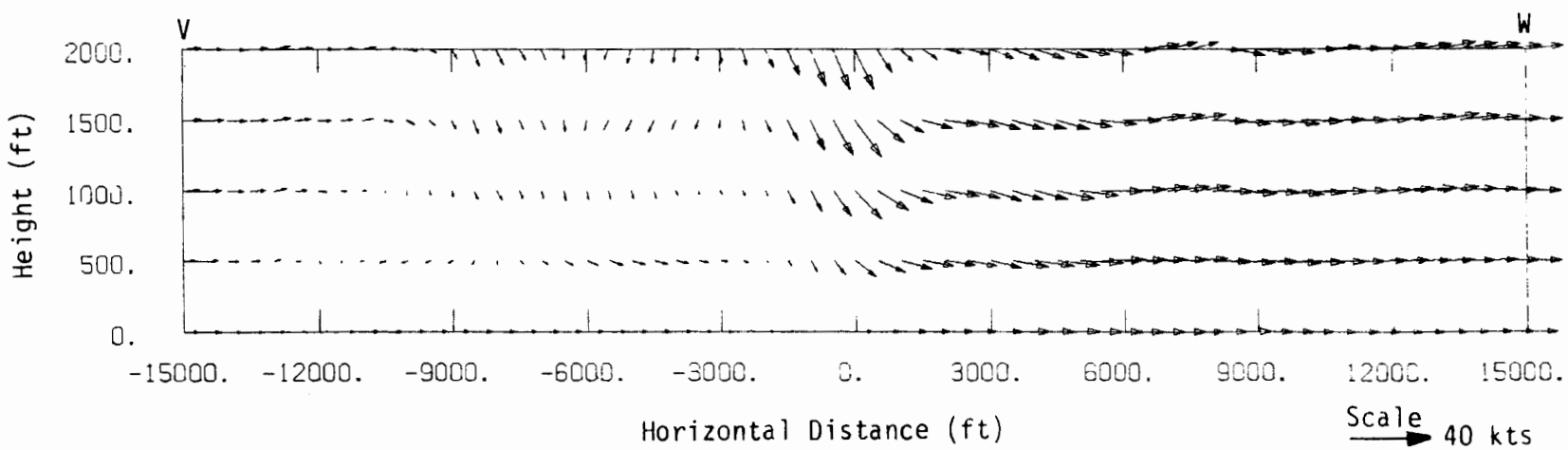

Figure E.38. Vector wind field in the center plane of the corridor data set along path $\overline{VW}$, 14JL1452.

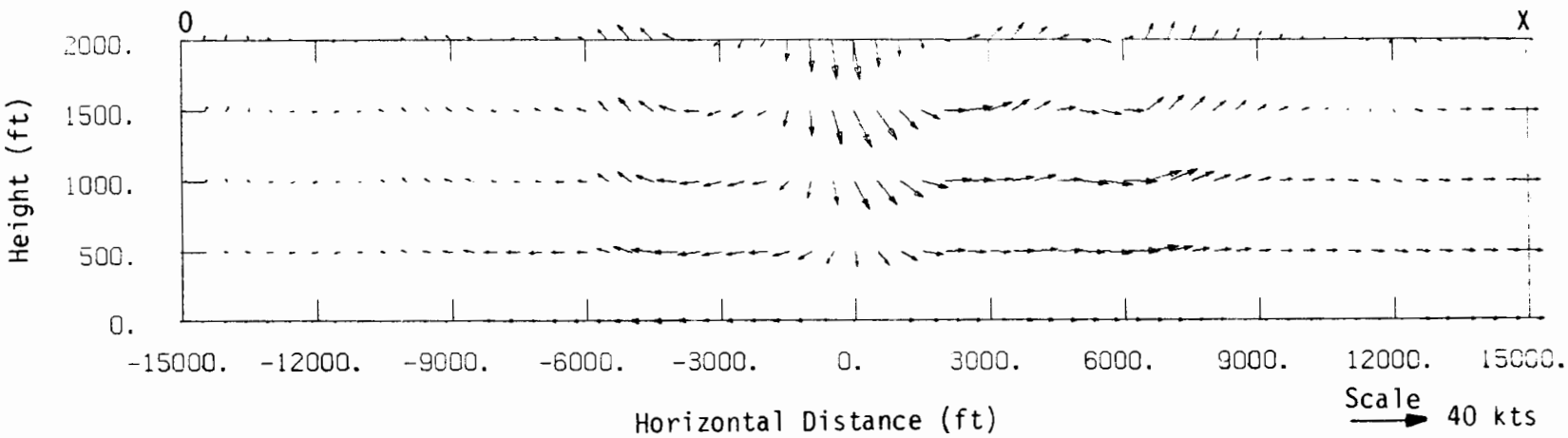

Figure E.39. Vector wind field in the center plane of the corridor data set along path $\overline{OX}$, 14JL1452.

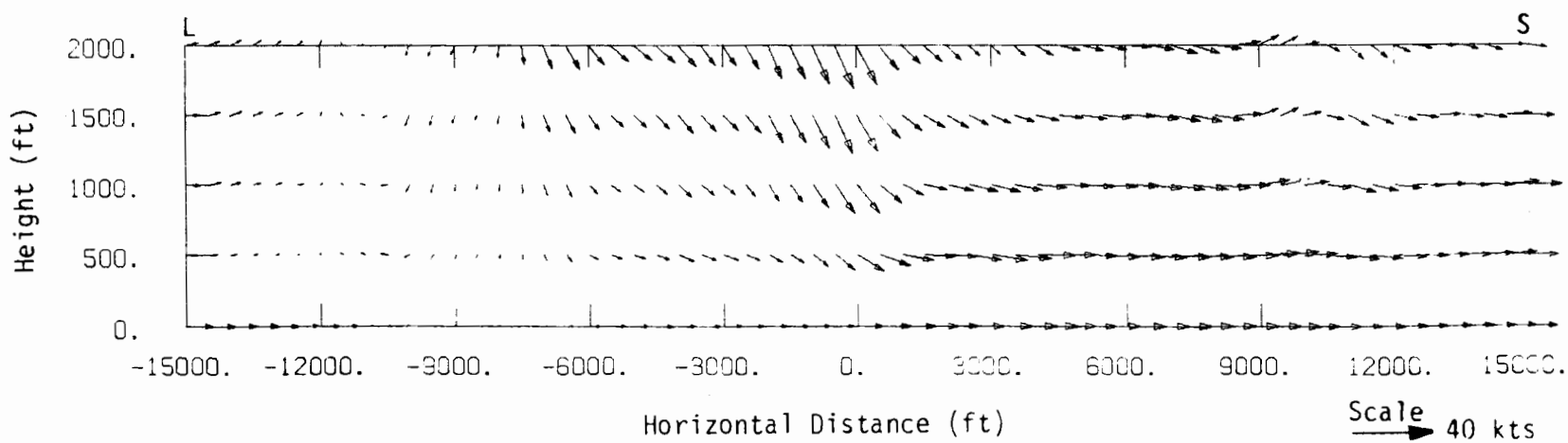

Figure E.40. Vector wind field in the center plane of the corridor data set along path $\overline{LS}$, 14JL1452.

APPENDIX F

CORRIDOR DATA TABLES

In Section 2.0, paths through regions of varying wind shear intensities for different microbursts were identified and described. Forty corridor data sets encompassing these paths were generated in the computer tape format documented in Appendix C. Eight corridor data sets for the following paths are tabulated in this appendix.

TABLE F.1. JAWS Corridor Data Set #1 (along path $\overline{AB}$ in 5AU1845 measurement).

TABLE F.2. JAWS Corridor Data Set #2 (along path $\overline{AB}$ in 5AU1847 measurement).

TABLE F.3. JAWS Corridor Data Set #3 (along path $\overline{AB}$ in 5AU1850 measurement).

TABLE F.4. JAWS Corridor Data Set #4 (along path $\overline{AB}$ in 5AU1852 measurement).

TABLE F.5. JAWS Corridor Data Set #5 (along path $\overline{EF}$ in 30JN1821 measurement).

TABLE F.6. JAWS Corridor Data Set #6 (along path $\overline{EF}$ in 30JN1823 measurement).

TABLE F.7. JAWS Corridor Data Set #7 (along path $\overline{EF}$ in 30JN1826 measurement).

TABLE F.8. JAWS Corridor Data Set #8 (along path $\overline{TU}$ in 14JL1452 measurement).

Other corridor data sets are available on magnetic tape (see Appendix C).

TABLE F.1. JAWS Corridor Data Set #1 (along path $\overline{AB}$ in 5AU1845 measurement).

Path Shear Intensity: Class I
Plane Separated by 500 ft
X = Horizontal Distance (ft)

WX = Wind in X Direction (kts)
WY = Wind in Y Direction (kts)
WZ = Wind in Z Direction (kts)
DBZ = Radar Reflectivity (dBZ)

Elevation: 0 ft AGL

	PLANE 1				PLANE 2				PLANE 3			
X	WX	WY	WZ	DBZ	WX	WY	WZ	DBZ	WX	WY	WZ	DBZ
-37500.	-5.83	3.69	0.00	-99.99	-5.84	3.96	0.00	-99.99	-5.35	3.92	0.00	-99.99
-37000.	-5.83	3.69	0.00	-99.99	-5.84	3.96	0.00	-99.99	-5.35	3.92	0.00	-99.99
-36500.	-5.83	3.69	0.00	-99.99	-5.84	3.96	0.00	-99.99	-5.35	3.92	0.00	-99.99
-36000.	-5.83	3.69	0.00	-99.99	-5.84	3.96	0.00	-99.99	-5.35	3.92	0.00	-99.99
-35500.	-5.83	3.69	0.00	-99.99	-5.84	3.96	0.00	-99.99	-5.35	3.92	0.00	-99.99
-35000.	-5.83	3.69	0.00	-99.99	-5.84	3.96	0.00	-99.99	-5.35	3.92	0.00	-99.99
-34500.	-5.83	3.69	0.00	-99.99	-5.84	3.96	0.00	-99.99	-5.35	3.92	0.00	-99.99
-34000.	-5.83	3.69	0.00	-99.99	-5.84	3.96	0.00	-99.99	-5.35	3.92	0.00	-99.99
-33500.	-5.83	3.69	0.00	-99.99	-5.84	3.96	0.00	-99.99	-5.35	3.92	0.00	-99.99
-33000.	-5.83	3.69	0.00	-99.99	-5.84	3.96	0.00	-99.99	-5.35	3.92	0.00	-99.99
-32500.	-5.83	3.69	0.00	-99.99	-5.84	3.96	0.00	-99.99	-5.35	3.92	0.00	-99.99
-32000.	-5.83	3.69	0.00	-99.99	-5.84	3.96	0.00	-99.99	-5.35	3.92	0.00	-99.99
-31500.	-5.83	3.69	0.00	-99.99	-5.84	3.96	0.00	-99.99	-5.35	3.92	0.00	-99.99
-31000.	-5.83	3.69	0.00	-99.99	-5.84	3.96	0.00	-99.99	-5.35	3.92	0.00	-99.99
-30500.	-5.83	3.69	0.00	-99.99	-5.84	3.96	0.00	-99.99	-5.35	3.92	0.00	-99.99
-30000.	-5.83	3.69	0.00	-99.99	-5.84	3.96	0.00	-99.99	-5.35	3.92	0.00	-99.99
-29500.	-5.83	3.69	0.00	-99.99	-5.84	3.96	0.00	-99.99	-5.35	3.92	0.00	-99.99
-29000.	-5.83	3.69	0.00	-99.99	-5.84	3.96	0.00	-99.99	-5.35	3.92	0.00	-99.99
-28500.	-5.83	3.69	0.00	-99.99	-5.84	3.96	0.00	-99.99	-5.35	3.92	0.00	-99.99
-28000.	-5.83	3.69	0.00	-99.99	-5.84	3.96	0.00	-99.99	-5.35	3.92	0.00	-99.99
-27500.	-5.83	3.69	0.00	-99.99	-5.84	3.96	0.00	-99.99	-5.35	3.92	0.00	-99.99
-27000.	-5.83	3.69	0.00	-99.99	-5.84	3.96	0.00	-99.99	-5.35	3.92	0.00	-99.99
-26500.	-5.83	3.69	0.00	-99.99	-5.84	3.96	0.00	-99.99	-5.35	3.92	0.00	-99.99
-26000.	-5.83	3.69	0.00	-99.99	-5.84	3.96	0.00	-99.99	-5.35	3.92	0.00	-99.99
-25500.	-5.83	3.69	0.00	-99.99	-5.84	3.96	0.00	-99.99	-5.35	3.92	0.00	-99.99
-25000.	-5.83	3.69	0.00	-99.99	-5.84	3.96	0.00	-99.99	-5.35	3.92	0.00	-99.99
-24500.	-5.83	3.69	0.00	51.02	-5.84	3.96	0.00	-99.99	-5.35	3.92	0.00	-99.99
-24000.	-5.66	3.54	0.00	49.06	-5.84	3.96	0.00	51.72	-5.35	3.92	0.00	-99.99
-23500.	-6.28	3.42	0.00	-99.99	-6.30	3.38	0.00	-99.99	-5.35	3.92	0.00	49.43
-23000.	-6.53	3.17	0.00	-99.99	-6.70	3.12	0.00	-99.99	-5.88	3.17	0.00	50.04
-22500.	-6.80	3.52	0.00	51.67	-7.55	3.43	0.00	53.30	-5.47	1.96	0.00	54.14
-22000.	-6.26	3.35	0.00	52.41	-6.56	3.39	0.00	54.50	-4.78	2.61	0.00	55.18
-21500.	-5.05	2.94	0.00	54.86	-5.29	2.89	0.00	55.79	-4.69	2.88	0.00	56.25
-21000.	-3.91	1.75	0.00	-99.99	-3.53	1.56	0.00	-99.99	-3.71	2.34	0.00	56.74
-20500.	-2.71	0.57	0.00	-99.99	-2.74	0.93	0.00	-99.99	-2.69	1.61	0.00	56.33
-20000.	-2.22	0.19	0.00	55.26	-2.48	1.00	0.00	55.82	-2.23	1.83	0.00	54.97
-19500.	-3.50	1.85	0.00	55.18	-3.61	2.61	0.00	56.16	-1.90	2.03	0.00	55.78
-19000.	-3.11	1.89	0.00	51.59	-2.42	1.97	0.00	53.62	-1.96	2.50	0.00	53.79
-18500.	-3.16	1.85	0.00	50.44	-2.78	2.36	0.00	51.85	-2.82	3.55	0.00	52.19
-18000.	-3.88	2.30	0.00	49.55	-1.84	2.37	0.00	51.07	-2.08	3.27	0.00	50.52
-17500.	-4.24	3.24	0.00	47.39	-2.99	3.54	0.00	48.87	-3.16	3.98	0.00	50.46
-17000.	-5.38	4.32	0.00	44.94	-4.66	4.82	0.00	46.10	-5.70	5.75	0.00	47.44
-16500.	-4.25	3.01	0.00	43.55	-5.05	5.02	0.00	45.57	-6.45	6.46	0.00	46.08
-16000.	-7.04	3.82	0.00	43.44	-6.89	4.78	0.00	45.94	-7.94	6.71	0.00	45.34
-15500.	-9.49	5.44	0.00	40.62	-8.89	6.02	0.00	43.77	-9.05	6.70	0.00	42.94
-15000.	-8.84	5.47	0.00	36.51	-8.85	5.87	0.00	38.70	-10.10	6.80	0.00	40.39
-14500.	-8.18	5.05	0.00	33.90	-8.83	5.58	0.00	35.42	-10.80	6.73	0.00	37.26
-14000.	-7.40	5.59	0.00	33.32	-8.54	5.60	0.00	33.25	-10.93	7.02	0.00	35.25
-13500.	-7.98	6.06	0.00	32.53	-9.18	6.15	0.00	32.92	-11.42	7.36	0.00	35.30
-13000.	-8.86	5.73	0.00	33.34	-9.10	6.15	0.00	32.88	-11.33	7.16	0.00	34.72
-12500.	-8.82	5.17	0.00	32.04	-9.39	5.75	0.00	30.77	-10.00	6.29	0.00	32.00
-12000.	-9.22	4.52	0.00	30.55	-9.66	5.08	0.00	29.55	-9.55	5.39	0.00	29.83
-11500.	-9.71	3.66	0.00	30.14	-10.18	4.54	0.00	29.65	-9.18	4.53	0.00	28.95
-11000.	-10.35	3.29	0.00	30.89	-9.77	3.61	0.00	30.43	-8.31	3.42	0.00	29.41
-10500.	-11.76	3.03	0.00	30.97	-10.01	2.89	0.00	30.61	-8.04	2.52	0.00	29.03
-10000.	-11.60	2.40	0.00	29.46	-10.28	2.36	0.00	27.25	-8.67	2.31	0.00	28.38
-9500.	-13.07	2.38	0.00	29.29	-11.89	2.49	0.00	27.03	-10.81	2.65	0.00	25.54
-9000.	-14.71	1.81	0.00	29.92	-13.45	2.16	0.00	28.23	-12.09	2.44	0.00	26.30
-8500.	-16.22	1.51	0.00	29.89	-14.78	1.49	0.00	28.28	-13.44	1.73	0.00	26.00
-8000.	-14.99	0.90	0.00	31.35	-15.49	1.19	0.00	27.80	-13.91	1.16	0.00	25.63
-7500.	-14.76	0.48	0.00	33.86	-13.20	0.65	0.00	31.23	-13.26	0.84	0.00	28.43
-7000.	-15.78	0.40	0.00	34.36	-14.39	0.49	0.00	32.37	-11.96	0.26	0.00	30.95
-6500.	-16.48	0.39	0.00	35.46	-15.89	0.35	0.00	33.54	-13.38	0.53	0.00	34.21
-6000.	-17.99	-0.13	0.00	37.84	-17.84	0.02	0.00	37.65	-15.29	0.40	0.00	37.44
-5500.	-19.11	-0.73	0.00	41.16	-21.88	-0.67	0.00	39.49	-17.89	-0.19	0.00	38.77
-5000.	-20.68	-1.76	0.00	40.46	-17.50	-1.07	0.00	40.77	-14.62	-0.75	0.00	40.37
-4500.	-17.32	-3.82	0.00	42.06	-14.13	-1.70	0.00	42.15	-10.65	-0.68	0.00	44.24
-4000.	-17.15	-4.86	0.00	44.30	-13.32	-1.93	0.00	44.44	-4.99	-1.48	0.00	46.69
-3500.	-20.24	-2.93	0.00	47.02	-12.64	-1.94	0.00	46.58	-6.15	-1.39	0.00	48.44
-3000.	-22.00	-2.12	0.00	47.54	-17.10	-1.55	0.00	47.88	-10.79	-1.14	0.00	49.00
-2500.	-22.46	-1.21	0.00	49.93	-19.98	-1.15	0.00	49.23	-12.48	-1.22	0.00	48.37

TABLE F.1. (continued).

Elevation: 0 ft AGL

-2000.	-20.41	-1.21	0.00	52.22	-17.50	-1.26	0.00	51.06	-14.43	-0.11	0.00	50.16
-1500.	-16.17	-1.23	0.00	51.89	-13.89	-1.42	0.00	51.00	-13.52	0.33	0.00	51.53
-1000.	-12.56	-0.84	0.00	50.89	-10.56	-1.86	0.00	50.10	-10.77	0.11	0.00	49.70
-500.	-7.74	-1.63	0.00	50.63	-6.66	-2.09	0.00	49.58	-6.67	-0.46	0.00	48.87
0.	-2.70	-2.96	0.00	51.56	-2.53	-2.23	0.00	50.66	-1.87	-1.37	0.00	48.92
500.	2.11	-4.58	0.00	51.33	1.75	-2.21	0.00	50.57	2.41	-0.13	0.00	50.02
1000.	6.48	-5.21	0.00	50.79	6.40	-2.85	0.00	50.63	6.06	-0.01	0.00	50.27
1500.	10.13	-4.46	0.00	50.84	10.71	-1.51	0.00	50.82	11.35	1.73	0.00	51.31
2000.	13.59	-0.80	0.00	49.88	16.15	1.06	0.00	49.47	19.23	3.18	0.00	49.76
2500.	17.63	2.13	0.00	49.09	22.27	4.85	0.00	48.92	26.82	5.27	0.00	48.66
3000.	17.21	7.48	0.00	47.59	22.55	8.60	0.00	47.84	26.22	9.83	0.00	47.46
3500.	15.86	9.96	0.00	46.10	20.38	10.28	0.00	47.29	21.75	11.74	0.00	47.50
4000.	17.08	9.33	0.00	45.09	20.61	8.99	0.00	47.37	20.85	9.62	0.00	48.17
4500.	18.01	7.49	0.00	42.99	20.80	7.63	0.00	46.16	20.90	8.70	0.00	47.32
5000.	16.89	5.52	0.00	40.86	19.46	5.36	0.00	43.39	19.27	7.70	0.00	44.72
5500.	14.95	4.11	0.00	36.12	12.57	4.75	0.00	35.92	13.98	5.99	0.00	37.56
6000.	13.05	2.36	0.00	30.98	8.33	2.85	0.00	30.40	6.38	3.91	0.00	30.64
6500.	12.57	-0.59	0.00	29.38	8.78	-1.00	0.00	26.62	4.10	-0.84	0.00	25.32
7000.	15.00	-3.12	0.00	27.43	13.13	-4.68	0.00	24.50	7.07	-4.89	0.00	24.99
7500.	11.78	-2.85	0.00	28.74	13.81	-5.33	0.00	25.40	8.73	-6.76	0.00	26.04
8000.	4.93	-2.19	0.00	28.44	10.28	-5.14	0.00	25.91	5.87	-6.84	0.00	26.95
8500.	-1.17	-2.38	0.00	26.93	2.89	-4.74	0.00	25.86	1.04	-6.70	0.00	27.20
9000.	-4.58	-2.65	0.00	26.66	-1.55	-4.49	0.00	25.27	-4.95	-7.19	0.00	27.73
9500.	-6.06	-2.79	0.00	25.41	-5.37	-3.19	0.00	27.48	-7.22	-3.96	0.00	30.55
10000.	-6.17	-2.67	0.00	26.51	-4.66	-2.10	0.00	28.74	-6.06	-2.03	0.00	31.01
10500.	-5.79	-1.92	0.00	26.38	-5.95	-2.18	0.00	24.31	-6.72	-2.40	0.00	-99.99
11000.	-5.07	-1.46	0.00	-99.99	-4.41	-0.69	0.00	-99.99	-6.33	-1.30	0.00	-99.99
11500.	-3.15	0.19	0.00	-99.99	-2.20	1.05	0.00	-99.99	-4.92	-0.47	0.00	-99.99
12000.	-1.94	1.73	0.00	-99.99	-3.28	1.51	0.00	-99.99	-5.18	0.40	0.00	-99.99
12500.	-3.49	0.48	0.00	-99.99	-4.35	1.26	0.00	-99.99	-5.48	0.53	0.00	23.81
13000.	-3.74	-0.13	0.00	-99.99	-4.70	-0.28	0.00	-99.99	-5.20	-0.28	0.00	23.99
13500.	-3.77	-0.25	0.00	-99.99	-4.34	-0.57	0.00	-99.99	-4.97	-0.95	0.00	-99.99
14000.	-3.43	-0.14	0.00	-99.99	-3.90	-0.54	0.00	-99.99	-4.40	-1.21	0.00	-99.99
14500.	-3.00	-0.03	0.00	-99.99	-3.56	-0.36	0.00	-99.99	-3.97	-0.98	0.00	-99.99
15000.	-2.72	0.23	0.00	-99.99	-3.33	-0.21	0.00	-99.99	-4.03	-0.80	0.00	25.41
15500.	-2.50	0.50	0.00	-99.99	-3.12	-0.01	0.00	-99.99	-3.79	-0.40	0.00	-99.99
16000.	-2.28	0.75	0.00	-99.99	-2.79	0.49	0.00	-99.99	-3.41	-0.41	0.00	27.23
16500.	-1.97	1.25	0.00	-99.99	-2.49	0.65	0.00	25.72	-3.04	-0.39	0.00	21.58
17000.	-1.70	1.66	0.00	23.08	-2.30	0.57	0.00	12.22	-2.53	0.42	0.00	12.17
17500.	-1.56	1.69	0.00	8.39	-2.01	1.33	0.00	7.75	-2.45	0.32	0.00	7.43
18000.	-1.45	2.15	0.00	13.55	-1.93	1.85	0.00	10.19	-2.47	0.28	0.00	7.91
18500.	-1.52	2.74	0.00	7.95	-1.93	2.00	0.00	9.79	-2.25	1.63	0.00	10.21
19000.	-1.56	2.98	0.00	6.16	-1.95	2.66	0.00	7.67	-2.22	2.52	0.00	-99.99
19500.	-1.69	3.33	0.00	6.92	-2.16	3.29	0.00	12.23	-2.14	3.04	0.00	-99.99
20000.	-2.04	3.79	0.00	11.95	-2.13	3.63	0.00	14.28	-2.72	3.49	0.00	-99.99
20500.	-2.18	4.14	0.00	12.20	-2.69	3.96	0.00	-99.99	-3.93	3.83	0.00	-99.99
21000.	-2.37	4.44	0.00	-99.99	-4.36	4.22	0.00	-99.99	-3.89	4.09	0.00	-99.99
21500.	-4.13	4.66	0.00	3.72	-4.49	4.48	0.00	-99.99	-6.13	4.10	0.00	-99.99
22000.	-4.93	4.94	0.00	3.23	-4.82	4.71	0.00	5.52	-11.59	3.82	0.00	-99.99
22500.	-4.65	5.29	0.00	5.44	-9.22	4.71	0.00	5.74	-11.50	4.29	0.00	8.53
23000.	-9.29	5.44	0.00	-99.99	-11.47	4.69	0.00	6.24	-8.53	4.35	0.00	-99.99
23500.	-15.64	6.15	0.00	5.92	-16.49	3.64	0.00	9.30	-8.14	4.25	0.00	12.75
24000.	-19.40	8.01	0.00	7.89	-16.49	7.94	0.00	10.18	-8.17	6.53	0.00	13.75
24500.	-16.48	8.87	0.00	9.81	-13.42	9.72	0.00	11.69	-1.77	8.35	0.00	15.65
25000.	-16.48	8.87	0.00	-99.99	-9.42	8.62	0.00	20.99	-7.20	8.48	0.00	25.94
25500.	-16.48	8.87	0.00	-99.99	-9.42	8.62	0.00	-99.99	-5.44	7.55	0.00	29.51
26000.	-16.48	8.87	0.00	-99.99	-9.42	8.62	0.00	-99.99	-5.44	7.55	0.00	-99.99
26500.	-16.48	8.87	0.00	-99.99	-9.42	8.62	0.00	-99.99	-5.44	7.55	0.00	-99.99
27000.	-16.48	8.87	0.00	-99.99	-9.42	8.62	0.00	-99.99	-5.44	7.55	0.00	-99.99
27500.	-16.48	8.87	0.00	-99.99	-9.42	8.62	0.00	-99.99	-5.44	7.55	0.00	-99.99
28000.	-16.48	8.87	0.00	-99.99	-9.42	8.62	0.00	-99.99	-5.44	7.55	0.00	-99.99
28500.	-16.48	8.87	0.00	-99.99	-9.42	8.62	0.00	-99.99	-5.44	7.55	0.00	-99.99
29000.	-16.48	8.87	0.00	-99.99	-9.42	8.62	0.00	-99.99	-5.44	7.55	0.00	-99.99
29500.	-16.48	8.87	0.00	-99.99	-9.42	8.62	0.00	-99.99	-5.44	7.55	0.00	-99.99
30000.	-16.48	8.87	0.00	-99.99	-9.42	8.62	0.00	-99.99	-5.44	7.55	0.00	-99.99
30500.	-16.48	8.87	0.00	-99.99	-9.42	8.62	0.00	-99.99	-5.44	7.55	0.00	-99.99
31000.	-16.48	8.87	0.00	-99.99	-9.42	8.62	0.00	-99.99	-5.44	7.55	0.00	-99.99
31500.	-16.48	8.87	0.00	-99.99	-9.42	8.62	0.00	-99.99	-5.44	7.55	0.00	-99.99
32000.	-16.48	8.87	0.00	-99.99	-9.42	8.62	0.00	-99.99	-5.44	7.55	0.00	-99.99
32500.	-16.48	8.87	0.00	-99.99	-9.42	8.62	0.00	-99.99	-5.44	7.55	0.00	-99.99
33000.	-16.48	8.87	0.00	-99.99	-9.42	8.62	0.00	-99.99	-5.44	7.55	0.00	-99.99
33500.	-16.48	8.87	0.00	-99.99	-9.42	8.62	0.00	-99.99	-5.44	7.55	0.00	-99.99
34000.	-16.48	8.87	0.00	-99.99	-9.42	8.62	0.00	-99.99	-5.44	7.55	0.00	-99.99
34500.	-16.48	8.87	0.00	-99.99	-9.42	8.62	0.00	-99.99	-5.44	7.55	0.00	-99.99
35000.	-16.48	8.87	0.00	-99.99	-9.42	8.62	0.00	-99.99	-5.44	7.55	0.00	-99.99
35500.	-16.48	8.87	0.00	-99.99	-9.42	8.62	0.00	-99.99	-5.44	7.55	0.00	-99.99
36000.	-16.48	8.87	0.00	-99.99	-9.42	8.62	0.00	-99.99	-5.44	7.55	0.00	-99.99
36500.	-16.48	8.87	0.00	-99.99	-9.42	8.62	0.00	-99.99	-5.44	7.55	0.00	-99.99
37000.	-16.48	8.87	0.00	-99.99	-9.42	8.62	0.00	-99.99	-5.44	7.55	0.00	-99.99
37500.	-16.48	8.87	0.00	-99.99	-9.42	8.62	0.00	-99.99	-5.44	7.55	0.00	-99.99

TABLE F.1. (continued).

Elevation: 500 ft AGL

		PLANE 1				PLANE 2				PLANE 3		
X	WX	WY	WZ	DBZ	WX	WY	WZ	DBZ	WX	WY	WZ	DBZ
-37500.	-9.98	1.56	-0.01	-99.99	-8.14	1.78	-0.02	-99.99	-7.48	2.30	0.37	-99.99
-37000.	-9.98	1.56	-0.01	-99.99	-8.14	1.78	-0.02	-99.99	-7.48	2.30	0.37	-99.99
-36500.	-9.98	1.56	-0.01	-99.99	-8.14	1.78	-0.02	-99.99	-7.48	2.30	0.37	-99.99
-36000.	-9.98	1.56	-0.01	-99.99	-8.14	1.78	-0.02	-99.99	-7.48	2.30	0.37	-99.99
-35500.	-9.98	1.56	-0.01	-99.99	-8.14	1.78	-0.02	-99.99	-7.48	2.30	0.37	-99.99
-35000.	-9.98	1.56	-0.01	-99.99	-8.14	1.78	-0.02	-99.99	-7.48	2.30	0.37	-99.99
-34500.	-9.98	1.56	-0.01	-99.99	-8.14	1.78	-0.02	-99.99	-7.48	2.30	0.37	-99.99
-34000.	-9.98	1.56	-0.01	-99.99	-8.14	1.78	-0.02	-99.99	-7.48	2.30	0.37	-99.99
-33500.	-9.98	1.56	-0.01	-99.99	-8.14	1.78	-0.02	-99.99	-7.48	2.30	0.37	-99.99
-33000.	-9.98	1.56	-0.01	-99.99	-8.14	1.78	-0.02	-99.99	-7.48	2.30	0.37	99.99
-32500.	-9.98	1.56	-0.01	-99.99	-8.14	1.78	-0.02	-99.99	-7.48	2.30	0.37	-99.99
-32000.	-9.98	1.56	-0.01	-99.99	-8.14	1.78	-0.02	-99.99	-7.48	2.30	0.37	-99.99
-31500.	-9.98	1.56	-0.01	-99.99	-8.14	1.78	-0.02	-99.99	-7.48	2.30	0.37	-99.99
-31000.	-9.98	1.56	-0.01	-99.99	-8.14	1.78	-0.02	-99.99	-7.48	2.30	0.37	-99.99
-30500.	-9.98	1.56	-0.01	-99.99	-8.14	1.78	-0.02	-99.99	-7.48	2.30	0.37	-99.99
-30000.	-9.98	1.56	-0.01	-99.99	-8.14	1.78	-0.02	-99.99	-7.48	2.30	0.37	-99.99
-29500.	-9.98	1.56	-0.01	-99.99	-8.14	1.78	-0.02	-99.99	-7.48	2.30	0.37	-99.99
-29000.	-9.98	1.56	-0.01	-99.99	-8.14	1.78	-0.02	-99.99	-7.48	2.30	0.37	-99.99
-28500.	-9.98	1.56	-0.01	-99.99	-8.14	1.78	-0.02	-99.99	-7.48	2.30	0.37	-99.99
-28000.	-9.98	1.56	-0.01	-99.99	-8.14	1.78	-0.02	-99.99	-7.48	2.30	0.37	-99.99
-27500.	-9.98	1.56	-0.01	-99.99	-8.14	1.78	-0.02	-99.99	-7.48	2.30	0.37	-99.99
-27000.	-9.98	1.56	-0.01	-99.99	-8.14	1.78	-0.02	-99.99	-7.48	2.30	0.37	-99.99
-26500.	-9.98	1.56	-0.01	-99.99	-8.14	1.78	-0.02	-99.99	-7.48	2.30	0.37	-99.99
-26000.	-9.98	1.56	-0.01	-99.99	-8.14	1.78	-0.02	-99.99	-7.48	2.30	0.37	-99.99
-25500.	-9.98	1.56	-0.01	-99.99	-8.14	1.78	-0.02	-99.99	-7.48	2.30	0.37	-99.99
-25000.	-9.98	1.56	-0.01	-99.99	-8.14	1.78	-0.02	-99.99	-7.48	2.30	0.37	-99.99
-24500.	-9.98	1.56	-0.01	52.41	-8.14	1.78	-0.02	-99.99	-7.48	2.30	0.37	-99.99
-24000.	-9.44	1.92	-0.43	51.13	-8.14	1.78	-0.02	52.57	-7.48	2.30	0.37	-99.99
-23500.	-8.80	1.98	-0.24	-99.99	-8.31	2.25	0.37	-99.99	-7.48	2.30	0.37	52.12
-23000.	-9.02	3.21	0.10	-99.99	-9.01	2.86	1.49	-99.99	-8.55	2.53	0.22	52.07
-22500.	-9.27	4.20	-0.67	52.01	-9.46	3.76	0.47	53.39	-7.93	2.65	-0.68	54.16
-22000.	-8.35	3.81	-1.67	52.65	-8.52	3.80	-0.49	54.67	-7.19	3.17	-0.22	55.15
-21500.	-7.32	3.45	-1.36	55.00	-7.48	3.45	-0.76	55.93	-7.06	3.37	-0.19	56.48
-21000.	-6.28	2.34	-1.84	-99.99	-6.62	2.82	-1.30	-99.99	-7.03	3.32	-1.21	57.36
-20500.	-5.08	1.12	-1.61	-99.99	-5.52	1.68	-1.70	-99.99	-5.97	2.55	-1.43	57.42
-20000.	-4.78	1.05	-0.53	55.79	-5.28	2.05	-0.55	57.08	-5.25	2.89	-0.78	57.06
-19500.	-5.59	2.28	-0.30	56.13	-5.85	3.23	-0.34	56.99	-4.51	2.90	-0.64	57.04
-19000.	-6.01	3.16	-0.77	53.12	-5.55	3.30	0.21	54.97	-4.79	3.24	0.14	55.46
-18500.	-6.33	3.37	-0.40	51.75	-5.94	3.75	0.11	52.79	-5.21	3.85	-0.66	53.51
-18000.	-6.74	3.40	-0.15	50.64	-5.37	3.61	-0.51	52.04	-5.17	4.16	0.23	52.24
-17500.	-6.98	3.74	0.52	49.13	-6.16	4.10	0.71	50.56	-6.46	4.96	0.61	51.91
-17000.	-7.87	4.65	-0.10	47.13	-7.23	5.04	0.01	48.15	-7.64	6.02	-0.62	48.74
-16500.	-7.64	4.16	0.19	45.70	-7.86	5.25	-0.49	46.85	-8.02	6.50	-0.22	46.88
-16000.	-9.59	4.95	1.98	44.54	-9.01	5.37	0.83	46.54	-9.50	6.90	0.90	45.97
-15500.	-11.12	6.17	0.78	42.21	-11.09	6.59	-0.10	44.43	-11.05	7.11	0.31	43.86
-15000.	-10.70	6.32	-0.71	39.23	-11.15	6.59	-0.61	40.48	-12.08	7.31	-0.13	41.51
-14500.	-10.13	6.15	-0.85	37.08	-10.94	6.43	-0.76	37.75	-12.50	7.30	-1.34	38.80
-14000.	-9.66	6.59	-0.30	36.02	-10.65	6.42	-0.29	35.70	-12.52	7.34	-1.02	37.20
-13500.	-9.87	6.67	0.18	34.61	-11.09	6.71	0.21	35.18	-12.82	7.36	-1.08	37.13
-13000.	-10.37	6.03	-0.44	34.96	-10.77	6.38	-0.93	35.14	-12.46	6.96	-1.42	36.82
-12500.	-10.12	5.26	-0.44	33.97	-10.74	5.86	-0.63	33.84	-11.32	6.33	-1.46	35.09
-12000.	-10.58	4.75	-0.12	32.72	-11.05	5.42	-0.09	32.67	-10.75	5.75	-0.02	33.37
-11500.	-11.51	4.42	0.18	31.44	-11.78	5.22	-0.02	31.56	-10.76	5.10	-0.27	31.05
-11000.	-12.04	3.98	0.49	31.72	-11.58	4.36	-0.33	31.32	-10.21	4.17	-0.43	30.52
-10500.	-12.95	3.45	0.36	32.10	-11.39	3.40	-0.20	31.49	-9.96	3.32	0.16	30.33
-10000.	-12.72	2.85	0.74	31.65	-11.63	2.93	0.84	29.56	-10.30	2.93	1.01	30.01
-9500.	-14.02	2.51	1.45	30.86	-13.00	2.76	1.34	29.00	-12.13	3.01	2.12	28.03
-9000.	-15.66	1.81	1.20	30.76	-14.50	2.30	0.96	29.38	-13.20	2.69	1.00	27.87
-8500.	-16.83	1.38	0.10	30.47	-15.74	1.59	0.70	29.14	-14.55	1.97	0.78	27.50
-8000.	-16.55	0.84	-0.47	31.28	-16.34	1.15	-0.88	28.70	-15.04	1.33	-0.49	27.32
-7500.	-16.55	0.43	-0.61	33.12	-14.99	0.68	-0.46	31.05	-14.74	0.86	-0.71	29.14
-7000.	-16.69	0.13	0.51	33.65	-15.71	0.34	0.61	31.96	-13.96	0.45	-0.33	31.04
-6500.	-17.35	-0.18	0.89	34.86	-16.80	0.04	1.17	33.18	-14.91	0.62	0.77	34.18
-6000.	-19.61	-1.08	1.75	38.20	-18.77	-0.38	2.22	37.46	-16.47	0.34	1.74	37.38
-5500.	-20.27	-1.50	0.56	40.67	-22.13	-1.10	0.39	39.30	-18.67	-0.40	-1.22	38.72
-5000.	-21.02	-2.03	-2.81	40.61	-18.63	-1.46	-4.55	40.57	-16.85	-0.99	-4.06	40.22
-4500.	-18.48	-3.68	-3.11	42.10	-16.40	-1.87	-3.31	42.07	-14.06	-0.82	-3.74	43.29
-4000.	-18.45	-4.72	-1.83	44.44	-16.12	-1.97	-2.02	44.43	-9.55	-1.48	-5.14	45.76
-3500.	-21.26	-2.98	0.29	47.54	-15.54	-1.93	1.41	46.53	-11.07	-0.66	0.17	47.39
-3000.	-22.08	-2.11	0.27	48.47	-18.49	-1.22	1.95	48.38	-14.38	0.08	1.04	48.61
-2500.	-21.96	-1.27	-1.16	50.69	-20.36	-0.71	-1.29	49.56	-14.99	-0.09	-0.93	48.87
-2000.	-19.48	-1.37	-3.57	52.80	-17.92	-0.62	-3.45	51.49	-16.26	0.95	-1.48	50.63
-1500.	-15.94	-1.07	-3.21	52.85	-15.11	-0.24	-3.57	51.97	-15.54	1.74	-4.59	52.49
-1000.	-13.88	0.25	-2.39	52.42	-13.60	0.56	-3.40	51.93	-13.87	2.86	-4.54	52.05

TABLE F.1. (continued).

Elevation: 500 ft AGL

-500.	-10.61	-0.64	-4.62	52.24	-11.24	0.45	-5.08	51.78	-10.82	2.30	-6.60	51.60
0.	-6.36	-2.37	-5.14	52.81	-6.50	-1.51	-7.10	52.22	-5.26	-0.12	-7.86	51.26
500.	-1.07	-4.72	-5.23	52.86	-0.47	-3.20	-6.96	52.38	0.74	-1.74	-7.38	51.63
1000.	3.43	-5.47	-4.37	52.71	4.64	-4.28	-6.85	52.42	5.66	-2.96	-6.96	52.01
1500.	7.28	-4.77	-3.12	52.51	8.87	-3.51	-5.86	51.74	10.20	-1.81	-6.31	51.90
2000.	10.22	-0.66	-3.43	50.74	12.07	0.53	-5.45	49.81	14.32	1.58	-5.46	50.07
2500.	11.62	4.67	-2.80	49.15	15.18	6.64	-4.60	48.79	18.24	6.22	-2.50	48.76
3000.	12.54	9.15	-2.13	47.38	17.46	9.87	-1.32	47.64	20.15	10.62	0.11	47.13
3500.	13.33	10.31	-1.88	45.86	17.66	10.82	-0.52	46.93	19.80	11.95	0.37	46.97
4000.	14.71	9.20	-1.49	44.78	18.26	9.32	-0.63	46.77	19.51	9.84	-0.91	47.28
4500.	15.13	7.32	-0.36	43.14	18.30	7.52	-0.21	45.79	19.28	8.35	-0.68	46.52
5000.	14.76	5.00	1.15	41.35	17.32	5.36	1.09	43.73	18.17	6.87	0.93	44.24
5500.	13.17	3.31	2.08	37.10	13.12	3.70	3.44	36.79	14.56	4.66	4.79	37.22
6000.	11.79	1.46	1.28	32.02	9.46	1.21	1.83	30.98	8.55	1.85	5.82	30.52
6500.	12.30	-1.33	0.76	30.44	10.24	-2.78	-2.52	27.59	5.58	-3.28	1.04	26.18
7000.	14.91	-3.27	3.04	29.04	12.58	-5.27	-0.06	26.31	5.74	-6.02	-0.30	26.18
7500.	11.05	-3.09	7.71	30.01	11.93	-5.37	5.53	26.73	5.02	-7.09	2.41	26.79
8000.	4.07	-2.63	10.12	29.08	6.29	-5.51	9.88	26.84	1.95	-7.13	4.99	27.98
8500.	-3.55	-2.96	6.71	28.27	-1.46	-4.99	9.08	27.27	-3.06	-6.87	7.16	28.51
9000.	-7.16	-3.14	1.16	28.47	-5.61	-4.28	5.82	27.05	-9.77	-5.89	4.79	28.72
9500.	-7.20	-3.05	-1.58	27.33	-8.22	-2.87	0.50	28.66	-10.97	-3.21	-0.15	31.03
10000.	-6.42	-2.51	-1.01	28.54	-6.48	-1.95	-1.53	29.73	-8.80	-1.77	-1.35	31.99
10500.	-6.48	-1.15	-0.49	27.83	-6.20	-1.21	0.81	24.95	-8.27	-1.02	0.62	-99.99
11000.	-6.55	-0.10	-1.72	-99.99	-6.67	0.72	-0.31	-99.99	-8.64	0.22	1.25	-99.99
11500.	-5.53	1.29	-2.57	-99.99	-6.58	2.23	-0.50	-99.99	-9.76	1.41	3.26	-99.99
12000.	-2.91	3.06	-1.13	-99.99	-6.27	2.46	-0.03	-99.99	-8.90	1.53	0.03	-99.99
12500.	-4.65	1.51	0.04	-99.99	-5.53	1.89	0.82	-99.99	-7.51	1.15	0.00	26.33
13000.	-4.94	0.91	0.03	-99.99	-6.12	0.69	0.54	-99.99	-6.96	0.39	-0.66	24.55
13500.	-4.92	0.86	0.01	-99.99	-5.66	0.48	-0.16	-99.99	-6.48	0.09	-0.39	-99.99
14000.	-4.45	0.97	0.02	-99.99	-5.06	0.51	-0.02	-99.99	-5.48	-0.06	-0.09	-99.99
14500.	-3.95	1.04	0.12	-99.99	-4.89	0.58	0.37	-99.99	-5.50	-0.03	0.81	-99.99
15000.	-3.79	1.17	0.22	-99.99	-4.60	0.63	0.26	-99.99	-5.48	0.07	0.54	25.83
15500.	-3.53	1.38	0.21	-99.99	-4.23	0.80	0.27	-99.99	-5.35	0.30	0.41	-99.99
16000.	-3.20	1.67	0.26	-99.99	-4.05	1.06	0.42	-99.99	-4.97	0.12	0.17	29.60
16500.	-2.99	2.02	0.36	-99.99	-3.67	1.30	0.40	24.16	-4.28	0.29	0.30	25.88
17000.	-2.76	2.35	0.40	18.69	-3.27	1.52	0.34	11.90	-3.78	0.81	0.91	16.37
17500.	-2.57	2.62	0.40	7.03	-3.02	2.12	0.59	7.98	-3.45	1.13	1.27	12.16
18000.	-2.56	3.08	0.51	12.06	-2.93	2.67	0.66	8.72	-3.33	1.58	1.07	11.25
18500.	-2.69	3.63	0.63	7.16	-3.09	3.01	0.64	8.43	-3.23	2.65	0.50	10.46
19000.	-3.08	3.89	0.71	5.56	-3.40	3.50	0.64	6.55	-3.45	3.40	0.58	-99.99
19500.	-3.67	4.16	0.83	5.80	-3.90	4.12	0.75	10.10	-4.03	3.73	1.05	-99.99
20000.	-4.39	4.55	1.17	9.82	-4.97	4.09	1.60	11.87	-5.47	4.00	1.44	-99.99
20500.	-5.83	4.44	2.00	9.81	-6.93	3.87	2.13	-99.99	-7.62	3.99	0.97	-99.99
21000.	-7.90	4.15	2.82	-99.99	-9.01	3.37	1.09	-99.99	-8.20	4.09	0.91	-99.99
21500.	-10.31	4.03	2.41	2.85	-10.90	3.78	1.95	-99.99	-10.02	4.12	2.45	-99.99
22000.	-12.67	4.03	1.23	3.81	-11.42	4.40	1.22	7.14	-13.05	5.31	2.39	-99.99
22500.	-11.08	4.42	-2.31	7.74	-12.63	4.81	-0.06	9.39	-13.10	5.56	-2.22	12.52
23000.	-11.63	4.90	3.13	-99.99	-12.79	4.54	2.23	9.83	-11.13	5.10	-2.03	-99.99
23500.	-16.33	6.40	5.25	10.09	-17.08	5.02	4.74	12.48	-9.79	5.16	0.75	14.90
24000.	-19.19	8.52	-0.53	11.17	-16.49	8.50	-0.83	13.49	-8.97	7.30	-1.77	17.56
24500.	-16.70	9.58	-4.05	13.75	-13.40	10.15	-3.82	16.30	-4.61	9.24	0.47	22.63
25000.	-16.70	9.58	-4.05	-99.99	-9.38	9.34	-0.99	23.59	-6.57	9.70	-0.86	28.49
25500.	-16.70	9.58	-4.05	-99.99	-9.38	9.34	-0.99	-99.99	-5.74	8.88	-0.54	32.98
26000.	-16.70	9.58	-4.05	-99.99	-9.38	9.34	-0.99	-99.99	-5.74	8.88	-0.54	-99.99
26500.	-16.70	9.58	-4.05	-99.99	-9.38	9.34	-0.99	-99.99	-5.74	8.88	-0.54	-99.99
27000.	-16.70	9.58	-4.05	-99.99	-9.38	9.34	-0.99	-99.99	-5.74	8.88	-0.54	-99.99
27500.	-16.70	9.58	-4.05	-99.99	-9.38	9.34	-0.99	-99.99	-5.74	8.88	-0.54	-99.99
28000.	-16.70	9.58	-4.05	-99.99	-9.38	9.34	-0.99	-99.99	-5.74	8.88	-0.54	-99.99
28500.	-16.70	9.58	-4.05	-99.99	-9.38	9.34	-0.99	-99.99	-5.74	8.88	-0.54	-99.99
29000.	-16.70	9.58	-4.05	-99.99	-9.38	9.34	-0.99	-99.99	-5.74	8.88	-0.54	-99.99
29500.	-16.70	9.58	-4.05	-99.99	-9.38	9.34	-0.99	-99.99	-5.74	8.88	-0.54	-99.99
30000.	-16.70	9.58	-4.05	-99.99	-9.38	9.34	-0.99	-99.99	-5.74	8.88	-0.54	-99.99
30500.	-16.70	9.58	-4.05	-99.99	-9.38	9.34	-0.99	-99.99	-5.74	8.88	-0.54	-99.99
31000.	-16.70	9.58	-4.05	-99.99	-9.38	9.34	-0.99	-99.99	-5.74	8.88	-0.54	-99.99
31500.	-16.70	9.58	-4.05	-99.99	-9.38	9.34	-0.99	-99.99	-5.74	8.88	-0.54	-99.99
32000.	-16.70	9.58	-4.05	-99.99	-9.38	9.34	-0.99	-99.99	-5.74	8.88	-0.54	-99.99
32500.	-16.70	9.58	-4.05	-99.99	-9.38	9.34	-0.99	-99.99	-5.74	8.88	-0.54	-99.99
33000.	-16.70	9.58	-4.05	-99.99	-9.38	9.34	-0.99	-99.99	-5.74	8.88	-0.54	-99.99
33500.	-16.70	9.58	-4.05	-99.99	-9.38	9.34	-0.99	-99.99	-5.74	8.88	-0.54	-99.99
34000.	-16.70	9.58	-4.05	-99.99	-9.38	9.34	-0.99	-99.99	-5.74	8.88	-0.54	-99.99
34500.	-16.70	9.58	-4.05	-99.99	-9.38	9.34	-0.99	-99.99	-5.74	8.88	-0.54	-99.99
35000.	-16.70	9.58	-4.05	-99.99	-9.38	9.34	-0.99	-99.99	-5.74	8.88	-0.54	-99.99
35500.	-16.70	9.58	-4.05	-99.99	-9.38	9.34	-0.99	-99.99	-5.74	8.88	-0.54	-99.99
36000.	-16.70	9.58	-4.05	-99.99	-9.38	9.34	-0.99	-99.99	-5.74	8.88	-0.54	-99.99
36500.	-16.70	9.58	-4.05	-99.99	-9.38	9.34	-0.99	-99.99	-5.74	8.88	-0.54	-99.99
37000.	-16.70	9.58	-4.05	-99.99	-9.38	9.34	-0.99	-99.99	-5.74	8.88	-0.54	-99.99
37500.	-16.70	9.58	-4.05	-99.99	-9.38	9.34	-0.99	-99.99	-5.74	8.88	-0.54	-99.99

TABLE F.1. (continued).

Elevation: 1000 ft AGL

		PLANE 1				PLANE 2				PLANE 3		
X	WX	WY	WZ	DBZ	WX	WY	WZ	DBZ	WX	WY	WZ	DBZ
-37500.	-13.93	-0.33	-0.03	-99.99	-10.57	-0.40	-0.16	-99.99	-9.67	0.50	0.54	-99.99
-37000.	-13.93	-0.33	-0.03	-99.99	-10.57	-0.40	-0.16	-99.99	-9.67	0.50	0.54	-99.99
-36500.	-13.93	-0.33	-0.03	-99.99	-10.57	-0.40	-0.16	-99.99	-9.67	0.50	0.54	-99.99
-36000.	-13.93	-0.33	-0.03	-99.99	-10.57	-0.40	-0.16	-99.99	-9.67	0.50	0.54	-99.99
-35500.	-13.93	-0.33	-0.03	-99.99	-10.57	-0.40	-0.16	-99.99	-9.67	0.50	0.54	-99.99
-35000.	-13.93	-0.33	-0.03	-99.99	-10.57	-0.40	-0.16	-99.99	-9.67	0.50	0.54	-99.99
-34500.	-13.93	-0.33	-0.03	-99.99	-10.57	-0.40	-0.16	-99.99	-9.67	0.50	0.54	-99.99
-34000.	-13.93	-0.33	-0.03	-99.99	-10.57	-0.40	-0.16	-99.99	-9.67	0.50	0.54	-99.99
-33500.	-13.93	-0.33	-0.03	-99.99	-10.57	-0.40	-0.16	-99.99	-9.67	0.50	0.54	-99.99
-33000.	-13.93	-0.33	-0.03	-99.99	-10.57	-0.40	-0.16	-99.99	-9.67	0.50	0.54	-99.99
-32500.	-13.93	-0.33	-0.03	-99.99	-10.57	-0.40	-0.16	-99.99	-9.67	0.50	0.54	-99.99
-32000.	-13.93	-0.33	-0.03	-99.99	-10.57	-0.40	-0.16	-99.99	-9.67	0.50	0.54	-99.99
-31500.	-13.93	-0.33	-0.03	-99.99	-10.57	-0.40	-0.16	-99.99	-9.67	0.50	0.54	-99.99
-31000.	-13.93	-0.33	-0.03	-99.99	-10.57	-0.40	-0.16	-99.99	-9.67	0.50	0.54	-99.99
-30500.	-13.93	-0.33	-0.03	-99.99	-10.57	-0.40	-0.16	-99.99	-9.67	0.50	0.54	-99.99
-30000.	-13.93	-0.33	-0.03	-99.99	-10.57	-0.40	-0.16	-99.99	-9.67	0.50	0.54	-99.99
-29500.	-13.93	-0.33	-0.03	-99.99	-10.57	-0.40	-0.16	-99.99	-9.67	0.50	0.54	-99.99
-29000.	-13.93	-0.33	-0.03	-99.99	-10.57	-0.40	-0.16	-99.99	-9.67	0.50	0.54	-99.99
-28500.	-13.93	-0.33	-0.03	-99.99	-10.57	-0.40	-0.16	-99.99	-9.67	0.50	0.54	-99.99
-28000.	-13.93	-0.33	-0.03	-99.99	-10.57	-0.40	-0.16	-99.99	-9.67	0.50	0.54	-99.99
-27500.	-13.93	-0.33	-0.03	-99.99	-10.57	-0.40	-0.16	-99.99	-9.67	0.50	0.54	-99.99
-27000.	-13.93	-0.33	-0.03	-99.99	-10.57	-0.40	-0.16	-99.99	-9.67	0.50	0.54	-99.99
-26500.	-13.93	-0.33	-0.03	-99.99	-10.57	-0.40	-0.16	-99.99	-9.67	0.50	0.54	-99.99
-26000.	-13.93	-0.33	-0.03	-99.99	-10.57	-0.40	-0.16	-99.99	-9.67	0.50	0.54	-99.99
-25500.	-13.93	-0.33	-0.03	-99.99	-10.57	-0.40	-0.16	-99.99	-9.67	0.50	0.54	-99.99
-25000.	-13.93	-0.33	-0.03	-99.99	-10.57	-0.40	-0.16	-99.99	-9.67	0.50	0.54	-99.99
-24500.	-13.93	-0.33	-0.03	53.85	-10.57	-0.40	-0.16	-99.99	-9.67	0.50	0.54	-99.99
-24000.	-12.53	-0.25	-1.42	53.04	-10.57	-0.40	-0.16	53.67	-9.67	0.50	0.54	-99.99
-23500.	-10.76	-0.23	-1.01	53.11	-10.16	0.37	0.29	53.74	-9.67	0.50	0.54	54.26
-23000.	-10.65	1.52	0.13	53.07	-10.64	1.18	2.37	53.11	-10.67	1.11	-0.22	53.54
-22500.	-10.61	2.59	-1.18	51.93	-10.50	2.02	0.49	53.03	-9.74	1.75	-2.15	53.91
-22000.	-9.66	2.47	-2.63	52.39	-9.64	2.27	-0.83	54.15	-8.71	1.78	-0.75	54.67
-21500.	-9.09	2.68	-2.38	54.29	-9.01	2.35	-0.90	55.17	-8.56	1.91	-0.10	55.99
-21000.	-8.24	1.97	-3.54	55.44	-8.82	2.41	-1.86	56.08	-9.08	2.19	-1.83	57.25
-20500.	-7.30	1.18	-3.15	55.60	-7.82	1.65	-2.98	57.22	-8.40	2.26	-2.65	57.89
-20000.	-7.08	1.47	-1.21	56.58	-7.64	2.46	-1.08	58.07	-7.77	3.20	-1.48	58.62
-19500.	-7.53	2.54	-0.82	57.18	-7.91	3.68	-0.66	57.97	-7.08	3.64	-1.10	58.08
-19000.	-8.33	3.90	-1.54	55.03	-8.09	4.30	0.34	56.29	-7.25	3.94	0.37	56.73
-18500.	-8.74	4.43	-0.88	53.42	-8.33	4.74	0.16	53.99	-7.27	4.26	-1.01	54.62
-18000.	-8.89	4.22	-0.28	51.85	-7.99	4.53	-1.03	53.13	-7.57	4.85	0.41	53.71
-17500.	-9.01	4.12	1.01	50.67	-8.35	4.44	1.11	52.25	-8.65	5.49	0.83	53.37
-17000.	-9.70	4.89	0.07	49.17	-8.94	5.08	0.02	50.49	-8.81	5.97	-1.60	50.51
-16500.	-10.11	5.15	0.59	48.07	-9.25	5.39	-0.66	48.82	-9.06	6.41	-0.51	48.35
-16000.	-11.27	5.92	3.67	46.30	-10.46	5.91	1.92	47.98	-10.53	7.04	1.82	47.20
-15500.	-12.08	6.77	1.44	44.03	-12.60	7.09	0.22	45.70	-12.34	7.55	0.72	45.19
-15000.	-12.06	7.06	-1.38	41.61	-12.83	7.28	-1.22	42.31	-13.25	7.90	-0.39	42.90
-14500.	-11.53	7.11	-1.62	39.92	-12.41	7.22	-1.47	40.08	-13.37	7.87	-2.59	40.52
-14000.	-11.35	7.50	-0.51	38.71	-12.11	7.16	-0.43	38.37	-13.53	7.81	-1.92	39.28
-13500.	-11.39	7.29	0.24	37.13	-12.48	7.25	0.49	37.88	-13.78	7.63	-2.07	39.18
-13000.	-11.61	6.46	-0.96	36.76	-12.25	6.82	-1.65	37.53	-13.41	7.17	-2.60	38.93
-12500.	-11.41	5.66	-0.91	36.02	-12.09	6.34	-1.30	36.80	-12.53	6.69	-2.76	37.94
-12000.	-11.92	5.28	-0.26	35.32	-12.34	6.04	-0.26	36.01	-11.70	6.32	0.00	36.80
-11500.	-12.99	5.29	0.29	33.84	-12.92	5.93	-0.11	34.32	-11.90	5.71	-0.40	33.92
-11000.	-13.11	4.88	0.81	33.38	-12.63	5.09	-0.81	33.24	-11.48	4.90	-0.90	32.72
-10500.	-13.47	4.21	0.63	33.53	-11.99	4.07	-0.56	33.10	-11.13	4.30	0.09	32.45
-10000.	-13.13	3.70	1.17	33.45	-12.11	3.92	1.27	31.96	-11.16	4.08	1.59	32.12
-9500.	-13.78	3.15	2.27	32.32	-12.81	3.51	2.09	31.14	-12.29	3.99	3.46	30.65
-9000.	-14.79	2.35	1.93	31.69	-13.72	2.88	1.66	30.83	-12.95	3.44	1.66	29.72
-8500.	-15.54	1.79	0.25	30.73	-14.98	2.17	1.50	30.12	-14.27	2.62	1.55	29.17
-8000.	-15.98	1.32	-0.65	30.84	-15.78	1.65	-1.29	29.46	-15.05	1.95	-0.62	28.87
-7500.	-16.32	0.83	-1.10	31.88	-15.39	1.26	-0.82	30.59	-15.42	1.54	-1.09	29.69
-7000.	-16.23	0.17	0.94	32.39	-16.00	0.62	0.99	31.15	-15.43	1.25	-0.75	30.81
-6500.	-16.96	-0.37	1.69	33.52	-16.89	0.15	1.86	32.19	-15.91	1.08	1.20	33.20
-6000.	-19.13	-1.72	3.21	37.58	-18.63	-0.46	3.81	36.26	-17.27	0.72	3.08	36.06
-5500.	-19.78	-2.13	1.20	39.68	-21.26	-1.41	0.34	38.52	-19.32	0.07	-2.29	37.61
-5000.	-20.34	-2.15	-4.83	40.31	-19.30	-1.29	-8.61	39.62	-18.89	-0.13	-7.29	38.71
-4500.	-18.99	-2.80	-5.31	41.55	-18.49	-1.05	-6.08	40.90	-17.63	0.34	-6.69	40.91
-4000.	-19.59	-2.77	-2.94	43.53	-19.06	-0.30	-3.82	42.93	-14.36	-0.22	-9.54	43.15
-3500.	-21.80	-0.96	0.02	46.50	-18.17	-0.28	2.38	45.07	-15.26	0.88	0.16	44.83
-3000.	-21.79	-0.10	0.22	47.79	-19.71	0.67	3.58	47.34	-17.31	1.93	1.71	46.86
-2500.	-21.34	0.52	-2.78	49.93	-20.52	1.19	-2.81	48.59	-16.99	1.70	-2.19	48.17
-2000.	-18.83	0.16	-6.83	52.14	-18.00	1.00	-6.47	50.70	-17.15	2.30	-2.96	50.20
-1500.	-16.35	0.51	-6.00	53.24	-16.08	1.59	-6.40	52.21	-16.67	3.18	-8.28	52.56
-1000.	-15.20	2.02	-5.50	53.63	-15.74	3.15	-6.56	53.10	-15.77	5.38	-8.45	53.35
-500.	-12.74	1.04	-9.39	53.69	-14.38	3.33	-9.82	53.55	-13.70	5.28	-12.19	53.60

TABLE F.1. (continued).

Elevation: 1000 ft AGL

0.	-9.67	-0.46	-10.39	54.06	-10.69	1.16	-13.71	53.92	-9.03	2.69	-14.90	53.41
500.	-4.90	-2.92	-10.55	54.30	-4.08	-1.93	-13.67	54.23	-2.79	-1.00	-14.56	53.35
1000.	-0.58	-4.30	-8.46	54.39	1.06	-3.99	-12.70	54.19	2.58	-3.90	-13.35	53.65
1500.	3.00	-4.30	-6.69	54.12	4.95	-4.23	-10.68	52.95	6.27	-4.09	-11.00	52.59
2000.	6.19	-1.13	-6.22	51.75	6.59	-0.26	-9.46	50.60	7.67	-0.33	-8.05	50.53
2500.	6.20	5.36	-5.13	49.51	7.79	6.71	-8.66	48.99	9.33	5.31	-4.43	48.81
3000.	8.02	9.29	-4.96	47.16	11.89	9.48	-3.53	47.34	13.50	9.15	-0.96	46.58
3500.	10.48	9.57	-4.37	45.47	14.10	10.15	-1.72	46.33	16.88	10.27	0.37	46.00
4000.	12.37	7.90	-3.15	44.42	15.20	8.73	-1.34	45.91	16.90	9.21	-1.53	45.91
4500.	11.80	6.04	-0.99	43.12	15.12	6.60	-0.53	44.92	16.24	7.52	-1.01	45.01
5000.	11.97	3.36	1.49	41.46	14.30	4.53	2.96	43.20	15.24	5.69	1.47	42.81
5500.	10.63	1.28	3.63	37.78	12.17	1.82	6.46	36.99	12.88	2.79	8.85	36.03
6000.	9.18	-0.68	2.46	33.13	8.40	-0.97	3.98	31.37	8.19	-0.46	11.28	30.08
6500.	9.97	-3.11	0.96	31.74	8.60	-4.54	-4.05	28.68	4.55	-5.38	2.54	27.07
7000.	12.25	-3.96	5.58	30.71	9.18	-5.84	0.85	27.98	2.50	-6.89	0.50	27.27
7500.	8.27	-3.63	14.76	30.96	7.36	-5.37	11.30	27.99	-0.04	-7.26	5.26	27.56
8000.	1.71	-3.36	19.84	29.66	1.03	-5.81	19.30	27.86	-2.91	-7.10	9.87	29.19
8500.	-6.46	-3.45	13.25	29.59	-6.58	-4.57	17.54	28.88	-8.20	-5.81	14.19	29.99
9000.	-10.26	-2.93	1.67	30.24	-10.42	-2.91	10.32	29.13	-14.53	-3.65	8.39	30.02
9500.	-9.48	-2.01	-4.19	29.40	-11.42	-1.45	0.22	29.84	-14.22	-1.73	-0.73	31.55
10000.	-7.68	-1.11	-2.69	30.08	-9.15	-0.47	-3.22	30.37	-11.65	-0.56	-2.79	32.46
10500.	-7.59	0.30	-1.42	28.93	-7.75	0.71	1.07	25.87	-10.17	0.79	0.81	30.59
11000.	-7.54	1.52	-3.69	27.37	-8.45	2.39	-0.79	26.56	-10.40	1.96	2.48	28.42
11500.	-6.72	2.52	-5.17	-99.99	-9.03	3.43	-1.04	26.25	-12.56	3.14	6.32	26.35
12000.	-3.61	4.22	-2.89	-99.99	-7.88	3.57	-0.70	-99.99	-11.11	2.99	-0.67	26.86
12500.	-4.85	2.93	0.07	-99.99	-5.93	3.15	1.08	-99.99	-8.42	2.62	-0.66	27.83
13000.	-5.39	2.48	0.22	-99.99	-6.36	2.48	1.10	-99.99	-7.52	2.09	-1.04	25.77
13500.	-5.49	2.60	0.17	-99.99	-6.37	2.26	-0.06	-99.99	-7.42	2.02	-0.36	-99.99
14000.	-5.15	2.88	0.12	-99.99	-6.20	2.28	0.20	-99.99	-6.66	1.75	0.29	21.52
14500.	-4.26	3.15	0.33	-99.99	-6.08	2.28	0.77	-99.99	-7.15	1.43	1.64	22.72
15000.	-4.18	3.18	0.60	-99.99	-5.35	2.30	0.64	-99.99	-6.78	1.47	1.14	26.84
15500.	-3.99	3.29	0.55	-99.99	-4.85	2.32	0.75	21.31	-6.63	1.48	0.57	30.94
16000.	-3.89	3.39	1.02	-99.99	-4.28	2.35	1.07	26.85	-5.68	1.46	-0.15	31.74
16500.	-4.25	3.62	1.20	21.81	-4.45	2.71	1.19	22.37	-4.59	1.85	0.59	29.46
17000.	-4.10	3.88	0.43	14.34	-3.94	3.02	0.61	12.46	-4.67	2.26	1.80	21.28
17500.	-3.40	4.05	1.00	6.67	-3.77	3.50	1.18	9.10	-4.47	2.82	2.50	17.48
18000.	-3.68	4.46	0.99	9.89	-3.98	4.10	1.21	8.79	-4.54	3.54	1.76	16.66
18500.	-3.46	4.64	1.17	6.04	-4.01	4.31	1.00	9.30	-4.25	4.26	0.57	13.76
19000.	-4.21	4.83	1.69	4.82	-4.58	4.60	1.17	6.58	-4.36	4.66	0.86	10.37
19500.	-5.14	4.91	1.96	4.51	-4.87	4.71	1.48	7.90	-5.13	4.57	1.63	8.31
20000.	-6.42	5.07	2.50	6.87	-6.54	4.49	3.33	9.02	-6.66	4.50	2.70	7.93
20500.	-8.24	4.08	3.93	6.85	-9.11	3.93	3.96	8.26	-8.77	4.16	1.42	4.51
21000.	-11.12	3.57	5.24	5.35	-10.53	2.84	2.03	4.34	-9.35	4.00	1.40	11.44
21500.	-13.49	3.52	5.14	2.30	-12.77	3.50	1.00	4.53	-11.11	4.35	4.96	15.58
22000.	-16.77	3.65	2.65	4.94	-15.42	4.62	2.10	8.02	-13.11	6.49	3.84	17.34
22500.	-15.49	4.29	-5.15	9.13	-14.92	5.25	-0.51	11.84	-13.50	6.74	-4.21	15.46
23000.	-14.32	5.01	5.34	10.67	-14.47	5.06	3.92	12.77	-12.71	6.32	-3.87	15.77
23500.	-17.10	7.09	8.95	13.54	-18.65	6.50	7.49	15.40	-10.91	6.68	0.75	18.12
24000.	-18.45	9.23	-1.64	15.59	-15.67	9.41	-2.27	18.19	-9.33	8.66	-3.79	22.19
24500.	-16.33	10.46	-7.75	18.86	-12.53	11.00	-7.50	21.90	-6.32	10.62	0.04	28.67
25000.	-16.33	10.46	-7.75	-99.99	-9.22	10.41	-2.05	27.20	-6.02	11.22	-1.67	31.61
25500.	-16.33	10.46	-7.75	-99.99	-9.22	10.41	-2.05	-99.99	-5.97	10.37	-0.79	36.13
26000.	-16.33	10.46	-7.75	-99.99	-9.22	10.41	-2.05	-99.99	-5.97	10.37	-0.79	-99.99
26500.	-16.33	10.46	-7.75	-99.99	-9.22	10.41	-2.05	-99.99	-5.97	10.37	-0.79	-99.99
27000.	-16.33	10.46	-7.75	-99.99	-9.22	10.41	-2.05	-99.99	-5.97	10.37	-0.79	-99.99
27500.	-16.33	10.46	-7.75	-99.99	-9.22	10.41	-2.05	-99.99	-5.97	10.37	-0.79	-99.99
28000.	-16.33	10.46	-7.75	-99.99	-9.22	10.41	-2.05	-99.99	-5.97	10.37	-0.79	-99.99
28500.	-16.33	10.46	-7.75	-99.99	-9.22	10.41	-2.05	-99.99	-5.97	10.37	-0.79	-99.99
29000.	-16.33	10.46	-7.75	-99.99	-9.22	10.41	-2.05	-99.99	-5.97	10.37	-0.79	-99.99
29500.	-16.33	10.46	-7.75	-99.99	-9.22	10.41	-2.05	-99.99	-5.97	10.37	-0.79	-99.99
30000.	-16.33	10.46	-7.75	-99.99	-9.22	10.41	-2.05	-99.99	-5.97	10.37	-0.79	-99.99
30500.	-16.33	10.46	-7.75	-99.99	-9.22	10.41	-2.05	-99.99	-5.97	10.37	-0.79	-99.99
31000.	-16.33	10.46	-7.75	-99.99	-9.22	10.41	-2.05	-99.99	-5.97	10.37	-0.79	-99.99
31500.	-16.33	10.46	-7.75	-99.99	-9.22	10.41	-2.05	-99.99	-5.97	10.37	-0.79	-99.99
32000.	-16.33	10.46	-7.75	-99.99	-9.22	10.41	-2.05	-99.99	-5.97	10.37	-0.79	-99.99
32500.	-16.33	10.46	-7.75	-99.99	-9.22	10.41	-2.05	-99.99	-5.97	10.37	-0.79	-99.99
33000.	-16.33	10.46	-7.75	-99.99	-9.22	10.41	-2.05	-99.99	-5.97	10.37	-0.79	-99.99
33500.	-16.33	10.46	-7.75	-99.99	-9.22	10.41	-2.05	-99.99	-5.97	10.37	-0.79	-99.99
34000.	-16.33	10.46	-7.75	-99.99	-9.22	10.41	-2.05	-99.99	-5.97	10.37	-0.79	-99.99
34500.	-16.33	10.46	-7.75	-99.99	-9.22	10.41	-2.05	-99.99	-5.97	10.37	-0.79	-99.99
35000.	-16.33	10.46	-7.75	-99.99	-9.22	10.41	-2.05	-99.99	-5.97	10.37	-0.79	-99.99
35500.	-16.33	10.46	-7.75	-99.99	-9.22	10.41	-2.05	-99.99	-5.97	10.37	-0.79	-99.99
36000.	-16.33	10.46	-7.75	-99.99	-9.22	10.41	-2.05	-99.99	-5.97	10.37	-0.79	-99.99
36500.	-16.33	10.46	-7.75	-99.99	-9.22	10.41	-2.05	-99.99	-5.97	10.37	-0.79	-99.99
37000.	-16.33	10.46	-7.75	-99.99	-9.22	10.41	-2.05	-99.99	-5.97	10.37	-0.79	-99.99
37500.	-16.33	10.46	-7.75	-99.99	-9.22	10.41	-2.05	-99.99	-5.97	10.37	-0.79	-99.99

TABLE F.1. (continued).

Elevation: 1500 ft AGL

	PLANE 1				PLANE 2				PLANE 3			
X	WX	WY	WZ	DBZ	WX	WY	WZ	DBZ	WX	WY	WZ	DBZ
-37500.	-17.54	-1.78	-0.06	-99.99	-13.22	-2.59	-0.53	-99.99	-11.98	-1.62	0.36	-99.99
-37000.	-17.54	-1.78	-0.06	-99.99	-13.22	-2.59	-0.53	-99.99	-11.98	-1.62	0.36	-99.99
-36500.	-17.54	-1.78	-0.06	-99.99	-13.22	-2.59	-0.53	-99.99	-11.98	-1.62	0.36	-99.99
-36000.	-17.54	-1.78	-0.06	-99.99	-13.22	-2.59	-0.53	-99.99	-11.98	-1.62	0.36	-99.99
-35500.	-17.54	-1.78	-0.06	-99.99	-13.22	-2.59	-0.53	-99.99	-11.98	-1.62	0.36	-99.99
-35000.	-17.54	-1.78	-0.06	-99.99	-13.22	-2.59	-0.53	-99.99	-11.98	-1.62	0.36	-99.99
-34500.	-17.54	-1.78	-0.06	-99.99	-13.22	-2.59	-0.53	-99.99	-11.98	-1.62	0.36	-99.99
-34000.	-17.54	-1.78	-0.06	-99.99	-13.22	-2.59	-0.53	-99.99	-11.98	-1.62	0.36	-99.99
-33500.	-17.54	-1.78	-0.06	-99.99	-13.22	-2.59	-0.53	-99.99	-11.98	-1.62	0.36	-99.99
-33000.	-17.54	-1.78	-0.06	-99.99	-13.22	-2.59	-0.53	-99.99	-11.98	-1.62	0.36	-99.99
-32500.	-17.54	-1.78	-0.06	-99.99	-13.22	-2.59	-0.53	-99.99	-11.98	-1.62	0.36	-99.99
-32000.	-17.54	-1.78	-0.06	-99.99	-13.22	-2.59	-0.53	-99.99	-11.98	-1.62	0.36	-99.99
-31500.	-17.54	-1.78	-0.06	-99.99	-13.22	-2.59	-0.53	-99.99	-11.98	-1.62	0.36	-99.99
-31000.	-17.54	-1.78	-0.06	-99.99	-13.22	-2.59	-0.53	-99.99	-11.98	-1.62	0.36	-99.99
-30500.	-17.54	-1.78	-0.06	-99.99	-13.22	-2.59	-0.53	-99.99	-11.98	-1.62	0.36	-99.99
-30000.	-17.54	-1.78	-0.06	-99.99	-13.22	-2.59	-0.53	-99.99	-11.98	-1.62	0.36	-99.99
-29500.	-17.54	-1.78	-0.06	-99.99	-13.22	-2.59	-0.53	-99.99	-11.98	-1.62	0.36	-99.99
-29000.	-17.54	-1.78	-0.06	-99.99	-13.22	-2.59	-0.53	-99.99	-11.98	-1.62	0.36	-99.99
-28500.	-17.54	-1.78	-0.06	-99.99	-13.22	-2.59	-0.53	-99.99	-11.98	-1.62	0.36	-99.99
-28000.	-17.54	-1.78	-0.06	-99.99	-13.22	-2.59	-0.53	-99.99	-11.98	-1.62	0.36	-99.99
-27500.	-17.54	-1.78	-0.06	-99.99	-13.22	-2.59	-0.53	-99.99	-11.98	-1.62	0.36	-99.99
-27000.	-17.54	-1.78	-0.06	-99.99	-13.22	-2.59	-0.53	-99.99	-11.98	-1.62	0.36	-99.99
-26500.	-17.54	-1.78	-0.06	-99.99	-13.22	-2.59	-0.53	-99.99	-11.98	-1.62	0.36	-99.99
-26000.	-17.54	-1.78	-0.06	-99.99	-13.22	-2.59	-0.53	-99.99	-11.98	-1.62	0.36	-99.99
-25500.	-17.54	-1.78	-0.06	-99.99	-13.22	-2.59	-0.53	-99.99	-11.98	-1.62	0.36	-99.99
-25000.	-17.54	-1.78	-0.06	-99.99	-13.22	-2.59	-0.53	-99.99	-11.98	-1.62	0.36	-99.99
-24500.	-17.54	-1.78	-0.06	55.39	-13.22	-2.59	-0.53	-99.99	-11.98	-1.62	0.36	-99.99
-24000.	-14.37	-3.39	-3.38	54.67	-13.22	-2.59	-0.53	55.21	-11.98	-1.62	0.36	-99.99
-23500.	-11.75	-3.77	-2.73	54.11	-11.72	-2.83	-0.60	54.86	-11.98	-1.62	0.36	55.42
-23000.	-10.77	-3.25	0.05	52.67	-11.06	-3.02	2.16	52.91	-11.79	-1.72	-1.82	54.04
-22500.	-10.10	-3.11	-1.41	51.09	-10.00	-3.42	-0.30	51.87	-10.39	-1.98	-5.03	53.17
-22000.	-9.58	-2.07	-2.33	51.26	-9.25	-2.72	-0.89	52.40	-8.64	-3.12	-1.81	53.38
-21500.	-9.96	-0.35	-2.78	52.07	-9.37	-1.69	0.06	52.83	-8.50	-3.05	0.52	54.21
-21000.	-9.48	-0.13	-5.01	53.34	-9.42	-0.97	-1.13	54.13	-8.86	-2.67	-1.40	55.83
-20500.	-9.22	0.38	-4.57	55.24	-9.27	0.21	-3.52	55.31	-9.32	-0.25	-3.47	57.26
-20000.	-8.92	1.12	-2.14	57.85	-9.24	1.76	-1.57	58.60	-9.38	2.18	-2.06	59.23
-19500.	-9.20	2.53	-1.72	58.42	-9.66	3.80	-0.96	59.23	-9.58	4.16	-1.23	58.70
-19000.	-9.61	4.03	-2.32	57.62	-9.56	4.71	0.35	57.55	-9.07	4.57	0.76	57.29
-18500.	-9.81	4.66	-1.49	55.76	-9.35	5.02	0.11	55.69	-8.74	4.88	-0.84	55.38
-18000.	-9.80	4.55	-0.38	53.28	-9.02	4.86	-1.58	54.44	-8.71	5.16	0.51	54.72
-17500.	-9.79	4.29	1.47	51.84	-8.80	4.37	0.95	53.94	-8.85	5.23	0.36	54.81
-17000.	-10.34	4.98	0.73	50.95	-9.09	4.80	0.04	53.37	-8.62	5.34	-3.24	53.14
-16500.	-10.96	5.87	1.38	50.86	-9.53	5.39	-0.26	52.02	-9.17	6.09	-0.94	50.98
-16000.	-11.38	6.62	4.81	49.25	-10.74	6.35	3.45	50.89	-10.62	7.10	2.79	49.50
-15500.	-11.86	7.17	1.90	46.25	-12.87	7.47	1.27	48.05	-12.38	8.04	1.33	47.21
-15000.	-12.55	7.61	-1.95	43.37	-13.40	7.92	-1.79	44.22	-12.98	8.60	-0.87	44.80
-14500.	-11.96	7.82	-2.25	42.17	-12.72	7.94	-2.09	42.41	-12.77	8.42	-3.68	42.59
-14000.	-12.03	8.23	-0.56	41.38	-12.40	7.77	-0.31	41.42	-13.49	8.54	-2.63	41.59
-13500.	-12.26	7.92	0.05	40.44	-12.93	7.79	0.88	41.37	-13.99	8.36	-2.92	41.64
-13000.	-12.38	7.13	-1.62	38.91	-13.39	7.65	-2.00	40.13	-14.03	8.12	-3.35	41.03
-12500.	-12.68	6.63	-1.46	38.27	-13.42	7.49	-2.05	39.56	-13.54	7.63	-3.78	40.36
-12000.	-13.25	6.31	-0.42	38.71	-13.44	7.15	-0.58	39.73	-12.20	7.25	0.09	40.04
-11500.	-13.90	6.33	0.28	38.17	-13.23	6.70	-0.33	38.57	-12.26	6.41	-0.28	38.10
-11000.	-13.06	6.12	0.85	36.54	-12.33	5.77	-1.58	36.99	-11.60	5.62	-1.45	36.84
-10500.	-12.78	5.56	0.73	35.47	-11.18	5.03	-1.21	36.02	-10.97	5.64	-0.37	36.01
-10000.	-12.31	5.27	1.03	34.54	-11.03	5.66	0.96	34.51	-10.64	6.16	1.40	35.09
-9500.	-11.43	4.72	1.97	33.58	-10.29	5.12	1.79	33.56	-10.40	6.06	3.42	33.51
-9000.	-10.69	3.82	1.80	32.79	-9.69	4.27	1.90	32.83	-10.29	5.07	1.72	32.04
-8500.	-10.87	3.15	0.49	30.46	-11.15	3.58	2.45	31.32	-11.50	4.00	2.29	31.12
-8000.	-11.64	2.75	-0.32	29.76	-12.70	3.12	-0.84	29.97	-13.07	3.38	-0.10	30.18
-7500.	-12.48	2.02	-1.38	29.72	-13.31	2.83	-0.99	29.61	-14.67	3.38	-0.86	29.94
-7000.	-13.33	0.77	1.21	30.12	-14.44	1.66	0.95	29.63	-15.95	3.15	-1.34	30.04
-6500.	-14.32	0.10	2.33	30.86	-15.48	1.00	1.66	30.09	-15.99	2.22	1.02	30.52
-6000.	-14.91	-1.80	4.16	35.18	-16.57	0.00	4.30	33.26	-17.40	1.88	3.71	32.48
-5500.	-16.34	-2.51	1.98	37.81	-18.41	-1.50	-0.51	36.70	-19.71	1.73	-3.11	34.65
-5000.	-17.82	-2.02	-5.44	39.22	-19.14	-0.11	-11.77	37.32	-20.56	2.68	-9.08	34.76
-4500.	-18.30	-0.61	-5.88	39.95	-20.26	1.55	-7.91	37.78	-21.51	3.79	-8.23	35.98
-4000.	-20.47	2.41	-2.73	40.77	-22.23	4.40	-5.24	38.78	-19.60	3.27	-12.59	37.55
-3500.	-21.49	4.72	-1.26	42.67	-20.33	4.30	2.57	41.13	-18.12	3.87	-0.18	39.59
-3000.	-20.85	5.45	-0.40	44.25	-20.58	5.35	4.64	43.58	-19.08	4.90	1.71	42.68
-2500.	-20.50	5.58	-5.19	46.47	-20.27	5.70	-4.75	45.30	-18.09	4.68	-4.03	45.34
-2000.	-18.68	4.70	-9.53	49.28	-17.50	4.38	-8.72	47.74	-16.38	4.17	-4.44	48.14
-1500.	-17.88	4.60	-8.06	52.60	-16.61	4.56	-7.94	51.17	-16.22	4.69	-10.37	51.06
-1000.	-16.51	4.99	-9.87	54.26	-16.29	6.06	-9.28	53.07	-15.51	7.49	-11.21	52.81
-500.	-13.58	3.95	-14.40	54.81	-14.95	6.85	-13.97	54.53	-14.33	8.67	-15.98	54.30

TABLE F.1. (continued).

Elevation: 1500 ft AGL

0.	-12.34	3.82	-15.82	55.30	-15.26	7.31	-19.46	55.87	-13.47	8.30	-20.50	55.23
500.	-9.89	2.35	-16.03	55.58	-10.17	3.34	-19.94	56.13	-9.66	3.92	-21.40	55.25
1000.	-6.29	-0.60	-12.06	55.65	-5.80	-0.66	-17.08	55.91	-5.28	-1.28	-18.75	55.12
1500.	-3.83	-2.42	-11.04	55.58	-2.68	-2.69	-13.65	54.65	-2.62	-4.14	-12.79	53.46
2000.	1.02	-2.69	-7.91	53.04	-1.36	-1.49	-10.91	52.15	-2.10	-2.79	-8.52	51.27
2500.	1.82	2.77	-6.60	50.41	-0.15	3.71	-11.78	49.74	-0.18	1.10	-5.34	48.77
3000.	3.79	6.73	-9.04	46.92	5.46	6.12	-7.31	46.87	5.85	3.63	-4.14	45.60
3500.	7.06	6.87	-7.95	44.84	9.07	7.31	-4.15	45.28	12.22	5.24	-0.27	44.24
4000.	10.07	4.54	-5.09	43.95	10.88	6.50	-2.19	44.56	11.99	7.05	-1.61	43.68
4500.	7.99	2.78	-2.07	42.81	10.73	4.20	-1.02	43.15	10.69	5.82	-0.72	42.22
5000.	7.97	-0.27	0.39	40.87	9.73	2.20	2.56	41.12	9.03	3.87	1.33	39.67
5500.	6.73	-2.95	4.20	37.92	8.56	-1.53	8.72	35.97	7.21	-0.05	11.62	33.30
6000.	4.16	-5.03	3.46	34.35	3.43	-4.13	6.68	31.42	3.36	-3.20	16.08	29.07
6500.	4.00	-6.74	0.16	33.46	1.43	-6.26	-3.84	29.97	-0.93	-6.90	4.87	28.00
7000.	5.03	-5.64	7.21	32.50	0.68	-6.39	3.48	29.55	-4.16	-7.29	3.26	28.14
7500.	1.83	-4.74	20.64	31.35	-1.97	-5.32	17.50	29.13	-7.51	-7.14	8.86	28.37
8000.	-3.31	-4.60	28.85	30.15	-6.48	-5.98	27.87	29.02	-9.46	-6.48	14.57	30.76
8500.	-10.29	-3.79	19.46	30.88	-13.04	-2.96	24.90	30.83	-15.18	-2.57	20.99	31.75
9000.	-14.30	-1.50	1.03	31.94	-16.57	0.56	12.49	31.73	-19.19	0.25	9.88	31.86
9500.	-13.77	1.34	-8.65	31.70	-15.24	1.92	-1.42	31.02	-16.59	1.07	-2.08	32.14
10000.	-10.74	2.50	-5.54	30.75	-13.34	3.34	-5.20	30.39	-14.70	2.33	-4.41	31.99
10500.	-9.47	2.93	-3.13	29.38	-11.65	4.35	0.33	27.32	-12.69	3.27	0.22	30.39
11000.	-7.65	3.61	-6.12	28.27	-9.36	4.52	-1.56	28.19	-11.16	3.95	3.68	29.25
11500.	-5.82	3.97	-7.81	-99.99	-8.05	4.64	-1.65	29.02	-11.72	4.61	9.04	28.65
12000.	-3.84	5.07	-5.74	-99.99	-7.02	5.00	-2.53	-99.99	-10.65	5.00	-2.68	27.73
12500.	-3.33	5.06	0.09	-99.99	-4.93	5.55	0.38	-99.99	-7.32	5.58	-2.54	27.52
13000.	-4.53	5.00	0.69	-99.99	-4.52	5.71	1.67	-99.99	-5.95	5.63	-0.95	28.17
13500.	-5.04	5.46	0.59	-99.99	-5.99	5.34	0.50	-99.99	-7.36	5.52	0.44	-99.99
14000.	-5.27	6.22	0.39	-99.99	-7.28	5.33	0.87	-99.99	-8.00	4.75	1.51	27.53
14500.	-3.45	7.11	0.70	-99.99	-7.02	5.33	1.23	-99.99	-8.98	3.83	2.50	26.83
15000.	-3.38	7.12	1.28	-99.99	-5.15	5.44	1.26	-99.99	-7.80	3.82	1.87	28.91
15500.	-3.46	7.03	1.10	-99.99	-4.57	5.11	1.60	22.24	-7.41	3.50	0.32	32.90
16000.	-4.16	6.52	2.68	-99.99	-2.68	4.90	2.11	26.45	-4.88	4.22	-1.34	33.45
16500.	-5.93	6.67	2.89	12.55	-4.52	5.50	2.69	20.15	-3.20	4.98	0.80	31.77
17000.	-5.95	6.88	-0.19	10.05	-4.11	5.51	0.75	14.61	-4.92	5.59	2.68	27.46
17500.	-3.91	6.40	1.99	8.06	-4.07	5.97	1.78	11.82	-5.50	6.05	3.65	23.85
18000.	-4.80	6.66	1.42	6.51	-5.10	6.62	1.54	11.60	-6.38	6.65	1.76	25.77
18500.	-3.54	5.87	1.54	4.31	-4.47	6.11	0.80	14.15	-5.33	6.93	-0.14	22.52
19000.	-4.64	5.84	3.11	3.84	-5.25	5.78	1.54	8.65	-4.72	6.61	0.61	18.34
19500.	-5.71	5.53	3.63	2.92	-4.46	4.86	2.15	5.59	-4.83	5.70	1.38	11.51
20000.	-7.88	5.16	4.11	2.44	-5.86	4.77	5.29	5.40	-5.08	5.28	3.63	7.33
20500.	-8.44	2.55	5.72	2.89	-7.64	4.26	5.25	8.57	-5.42	4.35	0.96	7.80
21000.	-10.26	2.50	6.97	2.38	-6.48	2.84	7.68	8.99	-4.88	3.77	1.13	13.42
21500.	-11.34	3.24	8.46	2.56	-10.65	4.24	6.69	7.25	-7.22	4.96	7.57	14.85
22000.	-14.40	4.24	4.42	7.05	-14.77	5.79	2.41	10.60	-10.71	7.09	3.65	15.27
22500.	-16.33	5.52	-8.95	8.87	-15.21	6.32	-1.69	12.16	-11.75	7.80	-5.80	16.55
23000.	-17.62	6.29	5.91	12.40	-16.80	6.76	4.67	14.53	-12.48	8.35	-5.39	18.59
23500.	-18.01	8.19	9.07	15.60	-18.29	8.18	6.71	17.84	-11.07	9.30	-0.60	22.89
24000.	-16.78	10.30	-3.01	22.07	-13.41	10.94	-4.78	25.39	-8.91	11.09	-6.24	28.26
24500.	-14.91	11.68	-10.83	26.00	-10.12	12.50	-10.92	29.27	-6.01	12.07	-1.97	33.02
25000.	-14.91	11.68	-10.83	-99.99	-8.83	12.11	-3.24	32.62	-5.65	13.25	-2.30	35.75
25500.	-14.91	11.68	-10.83	-99.99	-8.83	12.11	-3.24	-99.99	-6.04	12.17	-0.55	38.72
26000.	-14.91	11.68	-10.83	-99.99	-8.83	12.11	-3.24	-99.99	-6.04	12.17	-0.55	-99.99
26500.	-14.91	11.68	-10.83	-99.99	-8.83	12.11	-3.24	-99.99	-6.04	12.17	-0.55	-99.99
27000.	-14.91	11.68	-10.83	-99.99	-8.83	12.11	-3.24	-99.99	-6.04	12.17	-0.55	-99.99
27500.	-14.91	11.68	-10.83	-99.99	-8.83	12.11	-3.24	-99.99	-6.04	12.17	-0.55	-99.99
28000.	-14.91	11.68	-10.83	-99.99	-8.83	12.11	-3.24	-99.99	-6.04	12.17	-0.55	-99.99
28500.	-14.91	11.68	-10.83	-99.99	-8.83	12.11	-3.24	-99.99	-6.04	12.17	-0.55	-99.99
29000.	-14.91	11.68	-10.83	-99.99	-8.83	12.11	-3.24	-99.99	-6.04	12.17	-0.55	-99.99
29500.	-14.91	11.68	-10.83	-99.99	-8.83	12.11	-3.24	-99.99	-6.04	12.17	-0.55	-99.99
30000.	-14.91	11.68	-10.83	-99.99	-8.83	12.11	-3.24	-99.99	-6.04	12.17	-0.55	-99.99
30500.	-14.91	11.68	-10.83	-99.99	-8.83	12.11	-3.24	-99.99	-6.04	12.17	-0.55	-99.99
31000.	-14.91	11.68	-10.83	-99.99	-8.83	12.11	-3.24	-99.99	-6.04	12.17	-0.55	-99.99
31500.	-14.91	11.68	-10.83	-99.99	-8.83	12.11	-3.24	-99.99	-6.04	12.17	-0.55	-99.99
32000.	-14.91	11.68	-10.83	-99.99	-8.83	12.11	-3.24	-99.99	-6.04	12.17	-0.55	-99.99
32500.	-14.91	11.68	-10.83	-99.99	-8.83	12.11	-3.24	-99.99	-6.04	12.17	-0.55	-99.99
33000.	-14.91	11.68	-10.83	-99.99	-8.83	12.11	-3.24	-99.99	-6.04	12.17	-0.55	-99.99
33500.	-14.91	11.68	-10.83	-99.99	-8.83	12.11	-3.24	-99.99	-6.04	12.17	-0.55	-99.99
34000.	-14.91	11.68	-10.83	-99.99	-8.83	12.11	-3.24	-99.99	-6.04	12.17	-0.55	-99.99
34500.	-14.91	11.68	-10.83	-99.99	-8.83	12.11	-3.24	-99.99	-6.04	12.17	-0.55	-99.99
35000.	-14.91	11.68	-10.83	-99.99	-8.83	12.11	-3.24	-99.99	-6.04	12.17	-0.55	-99.99
35500.	-14.91	11.68	-10.83	-99.99	-8.83	12.11	-3.24	-99.99	-6.04	12.17	-0.55	-99.99
36000.	-14.91	11.68	-10.83	-99.99	-8.83	12.11	-3.24	-99.99	-6.04	12.17	-0.55	-99.99
36500.	-14.91	11.68	-10.83	-99.99	-8.83	12.11	-3.24	-99.99	-6.04	12.17	-0.55	-99.99
37000.	-14.91	11.68	-10.83	-99.99	-8.83	12.11	-3.24	-99.99	-6.04	12.17	-0.55	-99.99
37500.	-14.91	11.68	-10.83	-99.99	-8.83	12.11	-3.24	-99.99	-6.04	12.17	-0.55	-99.99

TABLE F.1. (continued).

Elevation: 2000 ft AGL

	PLANE 1				PLANE 2				PLANE 3			
X	WX	WY	WZ	DBZ	WX	WY	WZ	DBZ	WX	WY	WZ	DBZ
-37500.	-16.36	-4.34	-0.09	-99.99	-14.21	-3.16	-1.06	-99.99	-12.72	-2.33	-0.25	-99.99
-37000.	-16.36	-4.34	-0.09	-99.99	-14.21	-3.16	-1.06	-99.99	-12.72	-2.33	-0.25	-99.99
-36500.	-16.36	-4.34	-0.09	-99.99	-14.21	-3.16	-1.06	-99.99	-12.72	-2.33	-0.25	-99.99
-36000.	-16.36	-4.34	-0.09	-99.99	-14.21	-3.16	-1.06	-99.99	-12.72	-2.33	-0.25	-99.99
-35500.	-16.36	-4.34	-0.09	-99.99	-14.21	-3.16	-1.06	-99.99	-12.72	-2.33	-0.25	-99.99
-35000.	-16.36	-4.34	-0.09	-99.99	-14.21	-3.16	-1.06	-99.99	-12.72	-2.33	-0.25	-99.99
-34500.	-16.36	-4.34	-0.09	-99.99	-14.21	-3.16	-1.06	-99.99	-12.72	-2.33	-0.25	-99.99
-34000.	-16.36	-4.34	-0.09	-99.99	-14.21	-3.16	-1.06	-99.99	-12.72	-2.33	-0.25	-99.99
-33500.	-16.36	-4.34	-0.09	-99.99	-14.21	-3.16	-1.06	-99.99	-12.72	-2.33	-0.25	-99.99
-33000.	-16.36	-4.34	-0.09	-99.99	-14.21	-3.16	-1.06	-99.99	-12.72	-2.33	-0.25	-99.99
-32500.	-16.36	-4.34	-0.09	-99.99	-14.21	-3.16	-1.06	-99.99	-12.72	-2.33	-0.25	-99.99
-32000.	-16.36	-4.34	-0.09	-99.99	-14.21	-3.16	-1.06	-99.99	-12.72	-2.33	-0.25	-99.99
-31500.	-16.36	-4.34	-0.09	-99.99	-14.21	-3.16	-1.06	-99.99	-12.72	-2.33	-0.25	-99.99
-31000.	-16.36	-4.34	-0.09	-99.99	-14.21	-3.16	-1.06	-99.99	-12.72	-2.33	-0.25	-99.99
-30500.	-16.36	-4.34	-0.09	-99.99	-14.21	-3.16	-1.06	-99.99	-12.72	-2.33	-0.25	-99.99
-30000.	-16.36	-4.34	-0.09	-99.99	-14.21	-3.16	-1.06	-99.99	-12.72	-2.33	-0.25	-99.99
-29500.	-16.36	-4.34	-0.09	-99.99	-14.21	-3.16	-1.06	-99.99	-12.72	-2.33	-0.25	-99.99
-29000.	-16.36	-4.34	-0.09	-99.99	-14.21	-3.16	-1.06	-99.99	-12.72	-2.33	-0.25	-99.99
-28500.	-16.36	-4.34	-0.09	-99.99	-14.21	-3.16	-1.06	-99.99	-12.72	-2.33	-0.25	-99.99
-28000.	-16.36	-4.34	-0.09	-99.99	-14.21	-3.16	-1.06	-99.99	-12.72	-2.33	-0.25	-99.99
-27500.	-16.36	-4.34	-0.09	-99.99	-14.21	-3.16	-1.06	-99.99	-12.72	-2.33	-0.25	-99.99
-27000.	-16.36	-4.34	-0.09	-99.99	-14.21	-3.16	-1.06	-99.99	-12.72	-2.33	-0.25	-99.99
-26500.	-16.36	-4.34	-0.09	-99.99	-14.21	-3.16	-1.06	-99.99	-12.72	-2.33	-0.25	-99.99
-26000.	-16.36	-4.34	-0.09	-99.99	-14.21	-3.16	-1.06	-99.99	-12.72	-2.33	-0.25	-99.99
-25500.	-16.36	-4.34	-0.09	-99.99	-14.21	-3.16	-1.06	-99.99	-12.72	-2.33	-0.25	-99.99
-25000.	-16.36	-4.34	-0.09	-99.99	-14.21	-3.16	-1.06	-99.99	-12.72	-2.33	-0.25	-99.99
-24500.	-16.36	-4.34	-0.09	55.53	-14.21	-3.16	-1.06	-99.99	-12.72	-2.33	-0.25	-99.99
-24000.	-14.77	-5.01	-5.70	55.14	-14.21	-3.16	-1.06	55.68	-12.72	-2.33	-0.25	-99.99
-23500.	-13.13	-4.67	-4.81	54.43	-13.16	-3.31	-2.46	55.14	-12.72	-2.33	-0.25	55.78
-23000.	-12.41	-4.39	-0.51	52.80	-12.15	-4.13	0.97	53.32	-11.95	-3.17	-3.90	54.47
-22500.	-11.52	-5.18	-1.58	51.21	-10.88	-5.51	-1.42	51.97	-10.90	-4.39	-8.20	53.27
-22000.	-11.10	-4.47	-1.10	50.69	-10.26	-5.25	-0.26	51.68	-9.98	-5.26	-2.72	52.68
-21500.	-11.96	-2.42	-2.18	50.74	-11.22	-3.73	1.89	51.60	-10.56	-4.73	1.09	52.95
-21000.	-11.69	-2.04	-5.87	51.74	-11.37	-2.97	0.23	52.59	-10.72	-4.33	-0.91	54.22
-20500.	-11.52	-0.52	-5.70	53.50	-11.57	-0.59	-3.14	53.51	-11.07	-1.70	-3.98	55.50
-20000.	-10.99	0.67	-3.19	55.87	-11.08	0.81	-1.69	56.46	-10.71	0.39	-2.31	57.05
-19500.	-10.96	2.26	-2.55	57.16	-11.06	2.76	-0.97	57.97	-10.78	2.63	-0.93	57.62
-19000.	-10.90	3.68	-3.29	57.48	-10.82	4.18	-0.10	57.49	-10.18	3.81	0.85	57.29
-18500.	-10.56	4.21	-2.32	56.53	-10.01	4.35	-0.60	56.50	-9.28	4.13	-1.15	56.16
-18000.	-9.91	3.53	-0.72	54.68	-9.02	3.70	-2.59	55.58	-8.79	4.21	-0.01	55.57
-17500.	-9.73	3.12	1.75	53.80	-8.75	3.36	0.61	55.45	-8.55	4.18	-0.43	55.61
-17000.	-10.19	3.87	1.16	53.05	-9.05	4.07	0.23	55.09	-8.58	4.55	-4.43	54.49
-16500.	-10.82	5.39	1.53	52.56	-9.39	4.95	0.12	53.74	-9.05	5.52	-1.31	52.52
-16000.	-10.44	6.23	5.03	51.29	-10.14	6.13	4.49	52.64	-10.11	6.84	3.30	51.11
-15500.	-10.35	6.91	2.00	48.75	-11.54	7.21	1.87	50.37	-11.42	8.09	1.34	48.90
-15000.	-10.57	7.44	-2.58	46.18	-11.44	7.73	-2.76	46.77	-11.52	8.51	-2.03	46.51
-14500.	-9.97	7.59	-2.75	44.57	-10.64	7.80	-2.84	44.76	-11.13	8.40	-4.74	44.66
-14000.	-10.21	7.87	-0.58	43.43	-10.41	7.80	-0.47	43.62	-11.92	8.71	-3.39	43.73
-13500.	-10.18	7.50	-0.22	42.57	-10.58	7.61	0.85	43.24	-12.19	8.42	-3.88	43.48
-13000.	-10.35	6.69	-1.87	40.82	-11.28	7.40	-1.70	42.04	-12.28	8.07	-3.83	42.83
-12500.	-11.43	6.39	-1.60	40.01	-12.12	7.22	-2.35	41.24	-12.08	7.30	-4.24	41.87
-12000.	-12.08	6.17	-0.99	40.39	-12.27	7.01	-1.28	41.23	-11.20	7.09	0.35	41.40
-11500.	-12.12	6.07	-0.54	40.09	-11.64	6.73	-1.28	40.35	-10.97	6.40	-0.29	40.15
-11000.	-10.83	5.88	0.62	38.55	-10.43	5.66	-2.78	38.99	-10.05	5.48	-2.17	39.13
-10500.	-10.30	5.36	0.77	37.19	-9.24	5.00	-2.05	38.07	-9.09	5.35	-1.05	38.32
-10000.	-9.93	5.08	0.55	35.86	-9.03	5.67	0.30	36.45	-8.72	5.90	0.94	36.91
-9500.	-9.07	4.31	0.84	34.69	-8.19	4.88	0.46	35.09	-8.19	5.65	2.42	35.04
-9000.	-7.81	3.04	0.94	33.69	-7.10	3.66	1.08	33.86	-7.92	4.74	0.83	33.54
-8500.	-7.29	1.92	0.79	31.14	-7.70	2.52	2.67	32.50	-8.44	3.39	2.29	32.90
-8000.	-7.90	1.59	0.29	30.23	-8.78	2.07	-0.62	31.30	-9.44	2.70	-0.01	32.07
-7500.	-8.83	1.06	-0.97	29.74	-9.21	1.55	-0.86	29.94	-10.55	2.17	-0.67	30.75
-7000.	-9.93	-0.40	2.00	29.74	-10.33	-0.18	1.15	29.55	-11.96	1.19	-1.74	30.08
-6500.	-10.65	-1.69	3.26	29.90	-10.95	-1.96	1.62	29.51	-12.24	-0.64	0.86	29.89
-6000.	-10.92	-2.78	5.79	32.32	-12.73	-1.76	5.01	31.25	-13.81	-0.24	4.46	30.81
-5500.	-12.78	-2.12	3.64	34.39	-14.96	-1.57	-0.72	33.61	-16.00	0.75	-3.34	32.22
-5000.	-14.55	-1.21	-4.45	36.33	-16.10	-0.17	-13.45	34.43	-17.02	1.95	-9.60	32.32
-4500.	-15.61	0.73	-4.87	37.15	-17.52	1.73	-8.21	34.82	-18.34	2.84	-8.21	33.13
-4000.	-17.53	3.79	-1.54	38.15	-19.23	4.43	-5.88	35.96	-17.55	2.72	-13.98	34.41
-3500.	-17.03	5.16	-3.72	39.87	-17.00	4.32	2.09	38.37	-15.68	3.27	-0.45	36.55
-3000.	-15.39	5.37	-1.08	41.47	-15.86	5.02	5.43	40.72	-15.60	4.06	2.19	39.49
-2500.	-14.96	5.42	-7.40	44.03	-14.81	5.15	-7.07	42.38	-13.73	3.66	-5.89	42.09
-2000.	-12.34	3.81	-11.92	47.46	-11.36	3.06	-10.83	45.39	-11.55	3.20	-6.41	45.04
-1500.	-10.94	3.34	-8.95	51.40	-10.17	3.08	-8.32	49.44	-11.47	3.80	-12.18	48.32
-1000.	-11.16	4.34	-12.83	53.92	-11.08	5.36	-11.17	52.33	-10.94	6.90	-13.75	51.32
-500.	-9.88	4.42	-17.73	54.97	-10.94	7.19	-16.58	54.58	-10.79	9.07	-17.95	53.97

TABLE F.1. (continued).

Elevation: 2000 ft AGL

0.	-10.09	5.97	-19.18	55.36	-12.25	8.94	-22.49	56.02	-11.75	9.91	-23.17	55.65
500.	-8.96	5.14	-19.84	55.62	-9.79	5.90	-23.04	56.46	-10.46	6.69	-25.43	55.98
1000.	-7.07	1.95	-14.82	55.89	-7.69	2.27	-20.06	56.58	-8.96	2.16	-22.27	55.97
1500.	-4.66	-2.00	-14.87	55.42	-5.41	-1.23	-15.79	55.47	-5.60	-3.17	-12.76	54.68
2000.	-2.60	-3.85	-8.97	53.08	-4.89	-2.94	-11.35	53.33	-5.79	-4.44	-6.72	52.81
2500.	-2.24	-0.79	-7.04	50.74	-4.46	-0.61	-13.53	50.74	-5.14	-2.58	-5.01	50.14
3000.	-1.21	2.66	-12.25	47.66	-0.57	1.61	-10.55	47.85	-1.09	-0.82	-7.43	47.01
3500.	2.46	2.46	-11.77	45.26	3.72	2.20	-7.07	45.39	5.49	-0.17	-1.64	43.60
4000.	5.61	0.35	-6.61	43.95	5.94	1.60	-2.34	43.81	5.00	2.01	-0.91	42.41
4500.	3.37	-1.14	-2.51	42.92	4.80	-0.11	-0.91	42.13	2.89	1.32	0.37	40.25
5000.	3.05	-3.39	0.07	41.00	3.56	-1.66	2.21	39.95	0.45	0.10	1.52	37.56
5500.	0.97	-4.96	6.02	38.50	1.22	-3.60	11.70	36.23	-1.58	-1.88	13.61	33.42
6000.	-3.33	-6.16	5.28	35.85	-4.75	-4.82	9.95	33.34	-5.26	-3.23	19.83	31.32
6500.	-4.77	-7.43	-1.25	35.32	-8.06	-5.88	-3.44	32.95	-9.45	-5.00	6.31	31.89
7000.	-4.31	-6.18	6.87	34.45	-8.79	-5.37	4.73	32.75	-11.83	-5.07	5.43	31.88
7500.	-6.38	-4.80	22.95	33.29	-10.65	-3.83	20.98	32.00	-14.67	-4.14	11.48	31.67
8000.	-9.06	-3.80	33.12	32.57	-12.84	-3.43	31.66	32.18	-15.25	-3.11	16.66	33.35
8500.	-12.96	-1.89	22.03	33.06	-15.68	-0.20	27.91	33.40	-16.97	0.43	24.24	34.10
9000.	-14.45	0.63	-1.68	33.53	-16.20	2.93	11.62	33.88	-17.73	2.85	8.87	34.25
9500.	-12.52	3.37	-13.98	33.21	-13.88	4.07	-3.68	32.63	-14.54	3.15	-3.31	33.65
10000.	-9.49	4.67	-8.29	31.64	-12.35	5.42	-6.29	31.12	-13.09	4.28	-4.45	32.53
10500.	-9.08	5.09	-4.70	30.01	-11.92	6.43	-0.56	29.01	-11.98	5.26	-0.09	30.91
11000.	-7.51	5.58	-9.62	29.06	-9.66	6.46	-3.58	29.44	-10.91	6.12	3.95	30.14
11500.	-4.85	5.39	-11.43	-99.99	-7.71	6.43	-3.66	30.04	-10.52	7.09	10.19	29.98
12000.	-2.17	5.27	-7.89	-99.99	-7.01	6.64	-4.22	-99.99	-10.09	7.38	-4.42	29.06
12500.	-3.97	6.41	0.07	-99.99	-6.04	7.48	-0.80	-99.99	-7.74	8.07	-4.72	29.05
13000.	-4.81	6.70	0.20	-99.99	-5.70	7.99	1.50	30.30	-6.49	7.99	-1.01	30.13
13500.	-6.05	6.95	1.08	-99.99	-6.51	7.70	1.01	30.96	-6.86	7.71	1.27	31.34
14000.	-6.73	7.41	-0.04	-99.99	-6.99	7.73	0.73	-99.99	-6.94	7.26	2.59	30.77
14500.	-4.65	8.60	0.01	40.40	-6.35	7.67	1.39	-99.99	-7.61	6.44	3.67	30.23
15000.	-3.84	8.71	0.01	31.36	-4.81	7.80	0.89	27.72	-6.74	6.41	2.37	31.09
15500.	-1.80	7.76	0.44	24.36	-2.71	6.89	1.22	28.17	-5.30	5.69	-0.45	33.94
16000.	-3.34	7.53	5.40	22.41	-1.62	6.49	4.20	30.12	-3.21	6.23	-2.49	34.73
16500.	-5.91	8.21	4.40	18.48	-4.42	7.52	4.30	25.44	-2.56	6.98	1.75	33.84
17000.	-4.26	7.90	-2.51	17.12	-3.19	7.22	-0.15	23.02	-4.51	7.50	3.53	31.77
17500.	-2.75	7.07	3.88	17.22	-3.06	7.41	2.03	21.15	-4.87	7.89	4.67	29.56
18000.	-4.85	7.63	1.78	14.72	-4.23	8.06	1.11	20.25	-5.03	8.39	0.80	30.67
18500.	-3.55	7.17	0.93	12.54	-3.12	7.65	-0.17	20.95	-3.60	8.47	-1.71	28.28
19000.	-4.68	6.32	4.92	10.67	-4.14	6.72	2.44	16.47	-2.95	7.87	0.14	25.45
19500.	-7.44	5.33	5.69	8.24	-5.67	5.61	3.16	12.61	-4.38	7.18	1.07	20.20
22000.	-13.05	5.26	5.00	11.34	-12.64	7.06	1.68	15.29	-7.60	8.08	2.77	19.44
22500.	-14.32	6.95	-11.05	13.40	-12.01	7.97	-2.32	17.52	-7.98	9.11	-6.54	21.62
23000.	-15.41	8.18	5.22	17.24	-13.58	9.03	5.08	20.04	-9.23	10.29	-6.15	23.69
23500.	-14.16	10.10	8.08	21.27	-13.81	10.38	3.61	23.29	-8.66	11.43	-2.25	27.38
24000.	-12.41	11.65	-6.36	27.68	-9.56	12.37	-7.43	30.41	-6.68	12.69	-8.82	31.96
24500.	-11.39	12.68	-13.15	31.11	-7.47	13.58	-13.41	33.75	-4.75	13.84	-3.86	36.07
25000.	-11.39	12.68	-13.15	-99.99	-7.09	13.04	-3.96	36.47	-4.43	14.07	-2.87	39.10
25500.	-11.39	12.68	-13.15	-99.99	-7.09	13.04	-3.96	-99.99	-5.03	13.01	-0.26	41.92
26000.	-11.39	12.68	-13.15	-99.99	-7.09	13.04	-3.96	-99.99	-5.03	13.01	-0.26	-99.99
26500.	-11.39	12.68	-13.15	-99.99	-7.09	13.04	-3.96	-99.99	-5.03	13.01	-0.26	-99.99
27000.	-11.39	12.68	-13.15	-99.99	-7.09	13.04	-3.96	-99.99	-5.03	13.01	-0.26	-99.99
27500.	-11.39	12.68	-13.15	-99.99	-7.09	13.04	-3.96	-99.99	-5.03	13.01	-0.26	-99.99
28000.	-11.39	12.68	-13.15	-99.99	-7.09	13.04	-3.96	-99.99	-5.03	13.01	-0.26	-99.99
28500.	-11.39	12.68	-13.15	-99.99	-7.09	13.04	-3.96	-99.99	-5.03	13.01	-0.26	-99.99
29000.	-11.39	12.68	-13.15	-99.99	-7.09	13.04	-3.96	-99.99	-5.03	13.01	-0.26	-99.99
29500.	-11.39	12.68	-13.15	-99.99	-7.09	13.04	-3.96	-99.99	-5.03	13.01	-0.26	-99.99
30000.	-11.39	12.68	-13.15	-99.99	-7.09	13.04	-3.96	-99.99	-5.03	13.01	-0.26	-99.99
30500.	-11.39	12.68	-13.15	-99.99	-7.09	13.04	-3.96	-99.99	-5.03	13.01	-0.26	-99.99
31000.	-11.39	12.68	-13.15	-99.99	-7.09	13.04	-3.96	-99.99	-5.03	13.01	-0.26	-99.99
31500.	-11.39	12.68	-13.15	-99.99	-7.09	13.04	-3.96	-99.99	-5.03	13.01	-0.26	-99.99
32000.	-11.39	12.68	-13.15	-99.99	-7.09	13.04	-3.96	-99.99	-5.03	13.01	-0.26	-99.99
32500.	-11.39	12.68	-13.15	-99.99	-7.09	13.04	-3.96	-99.99	-5.03	13.01	-0.26	-99.99
33000.	-11.39	12.68	-13.15	-99.99	-7.09	13.04	-3.96	-99.99	-5.03	13.01	-0.26	-99.99
33500.	-11.39	12.68	-13.15	-99.99	-7.09	13.04	-3.96	-99.99	-5.03	13.01	-0.26	-99.99
34000.	-11.39	12.68	-13.15	-99.99	-7.09	13.04	-3.96	-99.99	-5.03	13.01	-0.26	-99.99
34500.	-11.39	12.68	-13.15	-99.99	-7.09	13.04	-3.96	-99.99	-5.03	13.01	-0.26	-99.99
35000.	-11.39	12.68	-13.15	-99.99	-7.09	13.04	-3.96	-99.99	-5.03	13.01	-0.26	-99.99
35500.	-11.39	12.68	-13.15	-99.99	-7.09	13.04	-3.96	-99.99	-5.03	13.01	-0.26	-99.99
36000.	-11.39	12.68	-13.15	-99.99	-7.09	13.04	-3.96	-99.99	-5.03	13.01	-0.26	-99.99
36500.	-11.39	12.68	-13.15	-99.99	-7.09	13.04	-3.96	-99.99	-5.03	13.01	-0.26	-99.99
37000.	-11.39	12.68	-13.15	-99.99	-7.09	13.04	-3.96	-99.99	-5.03	13.01	-0.26	-99.99
37500.	-11.39	12.68	-13.15	-99.99	-7.09	13.04	-3.96	-99.99	-5.03	13.01	-0.26	-99.99

TABLE F.2. JAWS Corridor Data Set #2 (along path $\overline{AB}$ in 5AU1847 measurement).

Path Shear Intensity: Class I
Plane Separated by 500 ft
X = Horizontal Distance (ft)

WX = Wind in X Direction (kts)
WY = Wind in Y Direction (kts)
WZ = Wind in Z Direction (kts)
DBZ = Radar Reflectivity (dBZ)

Elevation: 0 ft AGL

	PLANE 1				PLANE 2				PLANE 3			
X	WX	WY	WZ	DBZ	WX	WY	WZ	DBZ	WX	WY	WZ	DBZ
-37500.	-7.71	2.62	0.00	-99.99	-7.74	2.79	0.00	-99.99	-7.84	2.76	0.00	-99.99
-37000.	-7.71	2.62	0.00	-99.99	-7.74	2.79	0.00	-99.99	-7.84	2.76	0.00	-99.99
-36500.	-7.71	2.62	0.00	-99.99	-7.74	2.79	0.00	-99.99	-7.84	2.76	0.00	-99.99
-36000.	-7.71	2.62	0.00	-99.99	-7.74	2.79	0.00	-99.99	-7.84	2.76	0.00	-99.99
-35500.	-7.71	2.62	0.00	-99.99	-7.74	2.79	0.00	-99.99	-7.84	2.76	0.00	-99.99
-35000.	-7.71	2.62	0.00	-99.99	-7.74	2.79	0.00	-99.99	-7.84	2.76	0.00	-99.99
-34500.	-7.71	2.62	0.00	-99.99	-7.74	2.79	0.00	-99.99	-7.84	2.76	0.00	-99.99
-34000.	-7.71	2.62	0.00	-99.99	-7.74	2.79	0.00	-99.99	-7.84	2.76	0.00	-99.99
-33500.	-7.71	2.62	0.00	-99.99	-7.74	2.79	0.00	-99.99	-7.84	2.76	0.00	-99.99
-33000.	-7.71	2.62	0.00	-99.99	-7.74	2.79	0.00	-99.99	-7.84	2.76	0.00	-99.99
-32500.	-7.71	2.62	0.00	-99.99	-7.74	2.79	0.00	-99.99	-7.84	2.76	0.00	-99.99
-32000.	-7.71	2.62	0.00	-99.99	-7.74	2.79	0.00	-99.99	-7.84	2.76	0.00	-99.99
-31500.	-7.71	2.62	0.00	-99.99	-7.74	2.79	0.00	-99.99	-7.84	2.76	0.00	-99.99
-31000.	-7.71	2.62	0.00	-99.99	-7.74	2.79	0.00	-99.99	-7.84	2.76	0.00	-99.99
-30500.	-7.71	2.62	0.00	-99.99	-7.74	2.79	0.00	-99.99	-7.84	2.76	0.00	-99.99
-30000.	-7.71	2.62	0.00	-99.99	-7.74	2.79	0.00	-99.99	-7.84	2.76	0.00	-99.99
-29500.	-7.71	2.62	0.00	-99.99	-7.74	2.79	0.00	-99.99	-7.84	2.76	0.00	-99.99
-29000.	-7.71	2.62	0.00	-99.99	-7.74	2.79	0.00	-99.99	-7.84	2.76	0.00	-99.99
-28500.	-7.71	2.62	0.00	-99.99	-7.74	2.79	0.00	-99.99	-7.84	2.76	0.00	-99.99
-28000.	-7.71	2.62	0.00	-99.99	-7.74	2.79	0.00	-99.99	-7.84	2.76	0.00	-99.99
-27500.	-7.71	2.62	0.00	-99.99	-7.74	2.79	0.00	-99.99	-7.84	2.76	0.00	-99.99
-27000.	-7.71	2.62	0.00	-99.99	-7.74	2.79	0.00	-99.99	-7.84	2.76	0.00	-99.99
-26500.	-7.71	2.62	0.00	-99.99	-7.74	2.79	0.00	-99.99	-7.84	2.76	0.00	-99.99
-26000.	-7.71	2.62	0.00	-99.99	-7.74	2.79	0.00	-99.99	-7.84	2.76	0.00	-99.99
-25500.	-7.71	2.62	0.00	-99.99	-7.74	2.79	0.00	-99.99	-7.84	2.76	0.00	-99.99
-25000.	-7.71	2.62	0.00	-99.99	-7.74	2.79	0.00	-99.99	-7.84	2.76	0.00	-99.99
-24500.	-7.71	2.62	0.00	50.08	-7.74	2.79	0.00	-99.99	-7.84	2.76	0.00	-99.99
-24000.	-7.73	2.42	0.00	47.47	-7.74	2.79	0.00	49.10	-7.84	2.76	0.00	-99.99
-23500.	-7.71	2.18	0.00	47.90	-7.75	2.47	0.00	49.76	-7.84	2.76	0.00	54.09
-23000.	-7.66	1.93	0.00	52.81	-7.77	2.15	0.00	53.66	-7.89	2.18	0.00	54.03
-22500.	-7.59	1.67	0.00	53.16	-7.69	1.77	0.00	53.21	-7.83	1.57	0.00	52.55
-22000.	-7.44	1.30	0.00	51.77	-7.47	1.32	0.00	52.10	-7.60	1.30	0.00	51.69
-21500.	-7.24	0.80	0.00	48.06	-7.26	1.11	0.00	49.80	-7.41	1.47	0.00	50.84
-21000.	-7.36	0.95	0.00	46.24	-7.22	1.29	0.00	46.83	-7.34	1.87	0.00	50.53
-20500.	-7.43	1.42	0.00	46.23	-7.30	1.73	0.00	48.75	-7.24	2.19	0.00	50.22
-20000.	-7.08	1.65	0.00	47.66	-6.97	1.83	0.00	49.39	-7.16	2.21	0.00	49.52
-19500.	-6.92	2.00	0.00	48.26	-6.82	2.07	0.00	50.03	-7.32	2.41	0.00	51.10
-19000.	-7.53	3.01	0.00	49.46	-7.54	3.06	0.00	51.15	-7.74	3.31	0.00	52.13
-18500.	-8.30	3.92	0.00	50.42	-8.25	4.17	0.00	50.31	-8.21	4.38	0.00	50.25
-18000.	-8.73	4.00	0.00	48.93	-8.65	4.73	0.00	49.07	-8.56	5.44	0.00	48.24
-17500.	-9.06	3.91	0.00	49.36	-9.07	4.97	0.00	49.45	-8.98	6.17	0.00	48.28
-17000.	-9.42	4.16	0.00	48.45	-9.59	5.39	0.00	48.74	-9.58	6.40	0.00	47.73
-16500.	-9.95	4.87	0.00	46.89	-10.51	5.93	0.00	47.86	-10.69	6.86	0.00	47.76
-16000.	-10.91	5.48	0.00	45.96	-11.61	6.45	0.00	47.26	-11.69	7.28	0.00	47.07
-15500.	-10.69	5.71	0.00	43.91	-11.28	6.65	0.00	46.10	-11.40	7.29	0.00	45.98
-15000.	-9.64	5.70	0.00	41.59	-10.36	6.56	0.00	43.75	-11.33	7.10	0.00	44.26
-14500.	-9.39	5.35	0.00	39.06	-10.34	6.24	0.00	40.58	-11.88	6.82	0.00	40.19
-14000.	-10.00	4.95	0.00	39.49	-11.14	5.90	0.00	38.89	-12.53	6.59	0.00	39.18
-13500.	-11.26	4.88	0.00	38.84	-12.22	5.76	0.00	39.30	-13.31	6.37	0.00	39.41
-13000.	-12.27	4.62	0.00	37.70	-13.48	5.55	0.00	38.95	-13.81	5.73	0.00	38.74
-12500.	-12.95	4.42	0.00	37.51	-13.96	4.88	0.00	37.99	-14.04	4.82	0.00	37.92
-12000.	-12.75	4.51	0.00	36.50	-13.73	4.78	0.00	37.25	-13.82	4.30	0.00	37.17
-11500.	-11.90	4.79	0.00	36.03	-12.84	4.87	0.00	35.99	-13.15	4.62	0.00	36.43
-11000.	-11.22	4.82	0.00	35.03	-11.76	4.97	0.00	33.61	-12.08	4.92	0.00	33.91
-10500.	-10.72	4.78	0.00	33.93	-10.93	4.99	0.00	29.38	-11.15	5.13	0.00	31.74
-10000.	-10.33	4.70	0.00	31.60	-10.41	4.96	0.00	29.58	-10.51	5.17	0.00	29.97
-9500.	-10.02	4.61	0.00	29.90	-10.03	4.90	0.00	28.83	-10.02	5.16	0.00	27.79
-9000.	-9.80	4.50	0.00	28.61	-9.75	4.79	0.00	30.43	-9.66	5.09	0.00	30.10
-8500.	-9.64	4.38	0.00	30.63	-9.50	4.68	0.00	31.02	-9.39	4.98	0.00	30.28
-8000.	-9.58	4.22	0.00	32.01	-9.34	4.56	0.00	30.41	-9.21	4.88	0.00	28.53
-7500.	-9.59	4.03	0.00	32.47	-9.32	4.41	0.00	30.51	-9.14	4.76	0.00	28.17
-7000.	-9.75	3.80	0.00	31.52	-9.41	4.22	0.00	30.49	-9.14	4.61	0.00	29.57
-6500.	-10.04	3.53	0.00	32.84	-9.63	4.01	0.00	30.83	-3.23	4.44	0.00	30.25
-6000.	-10.43	3.24	0.00	36.58	-9.92	3.75	0.00	32.36	-9.48	4.23	0.00	31.13
-5500.	-10.97	2.91	0.00	34.55	-10.31	3.49	0.00	31.14	-9.83	4.02	0.00	30.25
-5000.	-11.70	2.54	0.00	30.78	-10.92	3.24	0.00	29.80	-10.32	3.83	0.00	29.40
-4500.	-12.78	2.15	0.00	31.53	-11.77	2.93	0.00	31.64	-10.95	3.62	0.00	-99.99
-4000.	-14.30	1.73	0.00	32.26	-13.14	2.63	0.00	-99.99	-11.58	3.45	0.00	-99.99
-3500.	-15.88	1.20	0.00	33.47	-14.92	2.32	0.00	34.61	-13.21	3.27	0.00	-99.99
-3000.	-15.70	0.65	0.00	39.75	-15.66	1.91	0.00	37.60	-14.24	2.97	0.00	-99.99
-2500.	-14.38	0.38	0.00	43.53	-13.85	1.76	0.00	37.35	-14.19	2.97	0.00	42.05
-2000.	-12.88	0.33	0.00	46.84	-13.25	2.11	0.00	45.53	-15.65	4.17	0.00	45.18
-1500.	-11.28	-0.12	0.00	50.54	-12.49	1.77	0.00	50.48	-17.53	5.37	0.00	50.09
-1000.	-9.20	-0.63	0.00	53.02	-11.89	1.57	0.00	52.58	-16.15	5.29	0.00	52.83
-500.	-9.95	-0.03	0.00	50.77	-11.79	1.75	0.00	51.59	-15.42	5.40	0.00	52.76

TABLE F.2. (continued).

Elevation: 0 ft AGL

0.	-9.45	-0.17	0.00	48.09	-11.66	1.11	0.00	48.35	-12.66	4.67	0.00	51.32
500.	-4.83	-0.32	0.00	46.76	-4.24	0.54	0.00	49.56	-4.26	3.23	0.00	51.75
1000.	2.61	0.58	0.00	48.06	4.49	1.13	0.00	51.23	7.17	2.93	0.00	54.02
1500.	8.33	2.11	0.00	49.01	11.02	2.70	0.00	51.37	13.38	3.79	0.00	53.78
2000.	12.54	4.68	0.00	47.78	15.18	4.76	0.00	49.05	17.73	5.24	0.00	51.66
2500.	15.84	7.07	0.00	45.88	18.74	7.94	0.00	45.15	22.00	7.89	0.00	47.93
3000.	17.68	8.50	0.00	44.79	21.78	10.09	0.00	45.01	27.11	9.74	0.00	45.72
3500.	18.50	8.37	0.00	44.46	22.97	9.77	0.00	44.63	30.67	10.04	0.00	44.23
4000.	18.58	7.75	0.00	43.37	22.32	9.00	0.00	43.23	27.84	9.11	0.00	42.45
4500.	19.78	7.93	0.00	42.83	22.02	8.47	0.00	42.45	25.39	8.12	0.00	41.55
5000.	21.28	9.85	0.00	42.03	24.36	9.31	0.00	42.49	25.30	8.19	0.00	41.04
5500.	22.38	12.23	0.00	39.86	25.07	11.51	0.00	40.36	24.18	9.13	0.00	39.93
6000.	21.66	13.00	0.00	37.43	23.88	12.12	0.00	37.29	23.06	9.93	0.00	37.79
6500.	21.23	11.00	0.00	34.66	23.57	10.43	0.00	33.84	22.81	9.18	0.00	35.23
7000.	18.77	7.29	0.00	30.14	21.24	7.77	0.00	31.77	22.12	7.35	0.00	33.64
7500.	13.07	5.20	0.00	26.57	15.01	5.42	0.00	28.69	17.36	5.27	0.00	32.10
8000.	8.04	3.59	0.00	24.50	7.59	3.51	0.00	29.57	11.23	3.07	0.00	31.70
8500.	4.27	1.83	0.00	26.19	4.70	1.64	0.00	30.41	6.85	1.42	0.00	31.46
9000.	1.32	-0.09	0.00	23.71	2.47	-0.32	0.00	29.42	5.12	-0.52	0.00	31.42
9500.	-1.25	-2.47	0.00	24.66	2.17	-2.48	0.00	27.92	3.69	-3.08	0.00	29.90
10000.	-1.90	-3.53	0.00	22.54	1.07	-3.96	0.00	25.20	1.69	-5.00	0.00	26.57
10500.	-2.61	-2.91	0.00	21.12	-1.86	-4.03	0.00	22.00	-3.71	-6.79	0.00	-99.99
11000.	-4.05	-2.43	0.00	-99.99	-5.66	-4.82	0.00	-99.99	-9.03	-8.38	0.00	-99.99
11500.	-5.32	-2.55	0.00	-99.99	-7.49	-5.10	0.00	-99.99	-11.46	-9.06	0.00	-99.99
12000.	-6.10	-2.56	0.00	-99.99	-8.20	-5.11	0.00	-99.99	-11.42	-8.51	0.00	32.05
12500.	-6.52	-2.49	0.00	-99.99	-8.65	-5.46	0.00	34.52	-11.37	-8.78	0.00	32.44
13000.	-6.70	-2.40	0.00	-99.99	-9.11	-6.50	0.00	36.37	-11.50	-9.63	0.00	32.43
13500.	-6.53	-1.92	0.00	-99.99	-8.35	-5.14	0.00	34.97	-10.50	-8.58	0.00	32.37
14000.	-5.70	-0.37	0.00	-99.99	-6.74	-2.34	0.00	-99.99	-7.96	-4.58	0.00	32.19
14500.	-5.01	0.81	0.00	-99.99	-5.35	-0.05	0.00	-99.99	-5.88	-1.21	0.00	31.68
15000.	-4.47	1.73	0.00	-99.99	-4.67	1.14	0.00	-99.99	-4.94	0.46	0.00	31.71
15500.	-4.16	2.43	0.00	-99.99	-4.25	2.02	0.00	28.23	-4.46	1.51	0.00	32.00
16000.	-4.00	2.95	0.00	-99.99	-4.10	2.64	0.00	26.60	-4.19	2.28	0.00	32.11
16500.	-3.95	3.30	0.00	-99.99	-4.00	3.12	0.00	22.60	-4.04	2.86	0.00	32.11
17000.	-3.93	3.73	0.00	11.28	-3.94	3.49	0.00	15.70	-3.94	3.25	0.00	25.75
17500.	-3.93	3.97	0.00	9.86	-3.92	3.76	0.00	16.22	-3.90	3.56	0.00	25.82
18000.	-3.93	4.10	0.00	9.83	-3.91	3.95	0.00	15.56	-3.90	3.80	0.00	23.19
18500.	-3.89	4.22	0.00	9.25	-3.92	4.08	0.00	11.44	-3.90	3.97	0.00	17.60
19000.	-3.86	4.33	0.00	9.08	-3.89	4.20	0.00	10.25	-3.90	4.10	0.00	12.00
19500.	-3.82	4.45	0.00	9.52	-3.84	4.32	0.00	-99.99	-3.85	4.27	0.00	13.06
20000.	-3.75	4.57	0.00	10.88	-3.75	4.48	0.00	-99.99	-3.74	4.42	0.00	-99.99
20500.	-3.65	4.74	0.00	-99.99	-3.64	4.66	0.00	-99.99	-3.60	4.59	0.00	-99.99
21000.	-3.50	4.93	0.00	-99.99	-3.47	4.83	0.00	-99.99	-3.48	4.76	0.00	-99.99
21500.	-3.20	5.16	0.00	5.87	-3.22	5.07	0.00	-99.99	-3.26	4.96	0.00	-99.99
22000.	-2.70	5.44	0.00	6.14	-2.76	5.36	0.00	7.24	-2.82	5.17	0.00	-99.99
22500.	-1.62	5.65	0.00	7.55	-1.43	5.62	0.00	9.88	-1.59	5.37	0.00	16.27
23000.	-0.11	6.10	0.00	12.12	0.20	5.83	0.00	14.97	0.16	5.34	0.00	20.26
23500.	-0.32	7.36	0.00	14.80	0.94	6.23	0.00	18.36	0.63	5.16	0.00	22.27
24000.	-2.32	8.42	0.00	17.83	-0.75	6.75	0.00	22.83	-0.23	5.54	0.00	27.02
24500.	-5.59	8.92	0.00	21.56	-3.80	7.08	0.00	28.25	-2.17	6.15	0.00	34.55
25000.	-5.59	8.92	0.00	-99.99	-5.56	7.35	0.00	31.18	-3.52	6.70	0.00	36.74
25500.	-5.59	8.92	0.00	-99.99	-5.56	7.35	0.00	-99.99	-3.57	6.82	0.00	38.82
26000.	-5.59	8.92	0.00	-99.99	-5.56	7.35	0.00	-99.99	-3.57	6.82	0.00	-99.99
26500.	-5.59	8.92	0.00	-99.99	-5.56	7.35	0.00	-99.99	-3.57	6.82	0.00	-99.99
27000.	-5.59	8.92	0.00	-99.99	-5.56	7.35	0.00	-99.99	-3.57	6.82	0.00	-99.99
27500.	-5.59	8.92	0.00	-99.99	-5.56	7.35	0.00	-99.99	-3.57	6.82	0.00	-99.99
28000.	-5.59	8.92	0.00	-99.99	-5.56	7.35	0.00	-99.99	-3.57	6.82	0.00	-99.99
28500.	-5.59	8.92	0.00	-99.99	-5.56	7.35	0.00	-99.99	-3.57	6.82	0.00	-99.99
29000.	-5.59	8.92	0.00	-99.99	-5.56	7.35	0.00	-99.99	-3.57	6.82	0.00	-99.99
29500.	-5.59	8.92	0.00	-99.99	-5.56	7.35	0.00	-99.99	-3.57	6.82	0.00	-99.99
30000.	-5.59	8.92	0.00	-99.99	-5.56	7.35	0.00	-99.99	-3.57	6.82	0.00	-99.99
30500.	-5.59	8.92	0.00	-99.99	-5.56	7.35	0.00	-99.99	-3.57	6.82	0.00	-99.99
31000.	-5.59	8.92	0.00	-99.99	-5.56	7.35	0.00	-99.99	-3.57	6.82	0.00	-99.99
31500.	-5.59	8.92	0.00	-99.99	-5.56	7.35	0.00	-99.99	-3.57	6.82	0.00	-99.99
32000.	-5.59	8.92	0.00	-99.99	-5.56	7.35	0.00	-99.99	-3.57	6.82	0.00	-99.99
32500.	-5.59	8.92	0.00	-99.99	-5.56	7.35	0.00	-99.99	-3.57	6.82	0.00	-99.99
33000.	-5.59	8.92	0.00	-99.99	-5.56	7.35	0.00	-99.99	-3.57	6.82	0.00	-99.99
33500.	-5.59	8.92	0.00	-99.99	-5.56	7.35	0.00	-99.99	-3.57	6.82	0.00	-99.99
34000.	-5.59	8.92	0.00	-99.99	-5.56	7.35	0.00	-99.99	-3.57	6.82	0.00	-99.99
34500.	-5.59	8.92	0.00	-99.99	-5.56	7.35	0.00	-99.99	-3.57	6.82	0.00	-99.99
35000.	-5.59	8.92	0.00	-99.99	-5.56	7.35	0.00	-99.99	-3.57	6.82	0.00	-99.99
35500.	-5.59	8.92	0.00	-99.99	-5.56	7.35	0.00	-99.99	-3.57	6.82	0.00	-99.99
36000.	-5.59	8.92	0.00	-99.99	-5.56	7.35	0.00	-99.99	-3.57	6.82	0.00	-99.99
36500.	-5.59	8.92	0.00	-99.99	-5.56	7.35	0.00	-99.99	-3.57	6.82	0.00	-99.99
37000.	-5.59	8.92	0.00	-99.99	-5.56	7.35	0.00	-99.99	-3.57	6.82	0.00	-99.99
37500.	-5.59	8.92	0.00	-99.99	-5.56	7.35	0.00	-99.99	-3.57	6.82	0.00	-99.99

TABLE F.2. (continued).

Elevation: 500 ft AGL

	PLANE 1				PLANE 2				PLANE 3			
X	WX	WY	WZ	DBZ	WX	WY	WZ	DBZ	WX	WY	WZ	DBZ
-37500.	-9.67	1.06	0.00	-99.99	-10.12	1.32	-0.07	-99.99	-10.97	1.60	-0.20	-99.99
-37000.	-9.67	1.06	0.00	-99.99	-10.12	1.32	-0.07	-99.99	-10.97	1.60	-0.20	-99.99
-36500.	-9.67	1.06	0.00	-99.99	-10.12	1.32	-0.07	-99.99	-10.97	1.60	-0.20	-99.99
-36000.	-9.67	1.06	0.00	-99.99	-10.12	1.32	-0.07	-99.99	-10.97	1.60	-0.20	-99.99
-35500.	-9.67	1.06	0.00	-99.99	-10.12	1.32	-0.07	-99.99	-10.97	1.60	-0.20	-99.99
-35000.	-9.67	1.06	0.00	-99.99	-10.12	1.32	-0.07	-99.99	-10.97	1.60	-0.20	-99.99
-34500.	-9.67	1.06	0.00	-99.99	-10.12	1.32	-0.07	-99.99	-10.97	1.60	-0.20	-99.99
-34000.	-9.67	1.06	0.00	-99.99	-10.12	1.32	-0.07	-99.99	-10.97	1.60	-0.20	-99.99
-33500.	-9.67	1.06	0.00	-99.99	-10.12	1.32	-0.07	-99.99	-10.97	1.60	-0.20	-99.99
-33000.	-9.67	1.06	0.00	-99.99	-10.12	1.32	-0.07	-99.99	-10.97	1.60	-0.20	-99.99
-32500.	-9.67	1.06	0.00	-99.99	-10.12	1.32	-0.07	-99.99	-10.97	1.60	-0.20	-99.99
-32000.	-9.67	1.06	0.00	-99.99	-10.12	1.32	-0.07	-99.99	-10.97	1.60	-0.20	-99.99
-31500.	-9.67	1.06	0.00	-99.99	-10.12	1.32	-0.07	-99.99	-10.97	1.60	-0.20	-99.99
-31000.	-9.67	1.06	0.00	-99.99	-10.12	1.32	-0.07	-99.99	-10.97	1.60	-0.20	-99.99
-30500.	-9.67	1.06	0.00	-99.99	-10.12	1.32	-0.07	-99.99	-10.97	1.60	-0.20	-99.99
-30000.	-9.67	1.06	0.00	-99.99	-10.12	1.32	-0.07	-99.99	-10.97	1.60	-0.20	-99.99
-29500.	-9.67	1.06	0.00	-99.99	-10.12	1.32	-0.07	-99.99	-10.97	1.60	-0.20	-99.99
-29000.	-9.67	1.06	0.00	-99.99	-10.12	1.32	-0.07	-99.99	-10.97	1.60	-0.20	-99.99
-28500.	-9.67	1.06	0.00	-99.99	-10.12	1.32	-0.07	-99.99	-10.97	1.60	-0.20	-99.99
-28000.	-9.67	1.06	0.00	-99.99	-10.12	1.32	-0.07	-99.99	-10.97	1.60	-0.20	-99.99
-27500.	-9.67	1.06	0.00	-99.99	-10.12	1.32	-0.07	-99.99	-10.97	1.60	-0.20	-99.99
-27000.	-9.67	1.06	0.00	-99.99	-10.12	1.32	-0.07	-99.99	-10.97	1.60	-0.20	-99.99
-26500.	-9.67	1.06	0.00	-99.99	-10.12	1.32	-0.07	-99.99	-10.97	1.60	-0.20	-99.99
-26000.	-9.67	1.06	0.00	-99.99	-10.12	1.32	-0.07	-99.99	-10.97	1.60	-0.20	-99.99
-25500.	-9.67	1.06	0.00	-99.99	-10.12	1.32	-0.07	-99.99	-10.97	1.60	-0.20	-99.99
-25000.	-9.67	1.06	0.00	-99.99	-10.12	1.32	-0.07	-99.99	-10.97	1.60	-0.20	-99.99
-24500.	-9.67	1.06	0.00	50.37	-10.12	1.32	-0.07	-99.99	-10.97	1.60	-0.20	-99.99
-24000.	-9.90	1.02	-0.05	49.54	-10.12	1.32	-0.07	50.56	-10.97	1.60	-0.20	-99.99
-23500.	-9.75	0.89	-0.59	50.35	-10.09	1.10	-0.50	51.64	-10.97	1.60	-0.20	53.89
-23000.	-9.00	0.57	-0.69	52.68	-9.62	0.67	-0.90	53.33	-10.39	0.95	0.88	53.67
-22500.	-8.22	0.39	-0.50	52.59	-8.65	0.40	-0.02	52.68	-9.12	0.36	-1.52	52.12
-22000.	-8.25	0.74	0.71	51.61	-8.34	0.71	0.34	51.69	-8.37	0.69	-0.29	51.16
-21500.	-8.80	1.20	-0.29	48.62	-8.42	1.25	-0.08	49.93	-8.23	1.32	-0.52	50.65
-21000.	-8.84	1.50	-0.35	46.95	-8.37	1.67	0.03	47.90	-8.12	1.87	-0.37	50.65
-20500.	-8.83	1.89	-0.24	46.87	-8.68	2.11	0.09	48.80	-8.35	2.32	-0.08	50.33
-20000.	-8.59	2.04	-0.77	47.75	-8.56	2.24	-0.62	49.36	-8.58	2.48	-0.70	50.00
-19500.	-8.29	2.36	-0.14	48.43	-8.33	2.54	0.02	50.12	-8.69	2.90	-0.04	51.51
-19000.	-8.65	3.35	0.33	49.76	-8.74	3.56	0.39	51.20	-8.97	3.86	-0.15	52.20
-18500.	-9.14	4.24	-0.09	50.78	-9.13	4.64	0.30	50.76	-9.17	4.84	-0.34	50.82
-18000.	-9.49	4.56	-0.50	49.42	-9.39	5.24	-0.48	49.96	-9.30	5.01	-0.41	49.58
-17500.	-9.77	4.66	-0.59	49.51	-9.69	5.63	-0.58	49.83	-9.53	6.58	-0.42	49.24
-17000.	-10.05	5.03	-0.65	48.72	-10.09	6.00	-0.79	49.03	-9.99	6.94	0.23	48.77
-16500.	-10.47	5.56	-0.24	47.71	-10.78	6.44	0.18	48.41	-10.83	7.22	0.35	48.69
-16000.	-11.08	5.88	-0.26	47.21	-11.43	6.64	-0.43	47.72	-11.39	7.37	-0.58	47.59
-15500.	-10.80	5.99	-1.81	45.70	-11.02	6.66	-1.83	46.37	-11.13	7.32	-1.04	46.05
-15000.	-9.92	6.02	-1.44	43.76	-10.38	6.68	-0.88	44.84	-11.22	7.26	-0.24	45.04
-14500.	-9.80	5.84	-0.49	42.31	-10.57	6.60	0.02	43.25	-11.85	7.21	0.41	42.95
-14000.	-10.49	5.60	0.05	42.00	-11.51	6.53	0.18	42.00	-12.60	7.17	0.18	42.03
-13500.	-11.51	5.54	-0.18	40.96	-12.41	6.48	0.17	41.44	-13.20	7.04	0.07	41.59
-13000.	-12.22	5.42	-0.42	39.80	-13.26	6.36	0.14	40.46	-13.42	6.56	0.15	40.49
-12500.	-12.99	5.62	-0.08	39.34	-13.71	6.07	0.24	39.59	-13.63	5.96	0.41	39.63
-12000.	-13.23	5.97	-0.63	38.73	-13.72	6.13	-0.60	39.00	-13.50	5.61	0.59	38.97
-11500.	-12.72	6.07	-0.84	38.09	-13.08	6.10	-0.54	38.06	-13.27	5.64	0.41	38.40
-11000.	-12.11	5.98	-0.68	36.84	-12.48	6.05	-0.69	36.63	-13.01	5.76	0.03	37.19
-10500.	-11.94	5.79	-0.35	35.74	-12.00	5.99	-0.29	33.96	-12.88	5.86	-0.07	36.05
-10000.	-12.03	5.52	-0.04	34.77	-12.12	5.72	-0.27	33.06	-12.53	5.81	-0.47	34.53
-9500.	-12.19	5.28	-0.18	33.23	-12.13	5.47	-0.32	32.09	-12.12	5.61	-0.42	32.13
-9000.	-12.34	5.11	0.07	31.81	-12.14	5.28	-0.19	33.12	-11.93	5.42	-0.31	33.27
-8500.	-12.83	5.01	0.23	32.57	-12.23	5.12	-0.12	33.19	-11.96	5.28	-0.14	32.88
-8000.	-12.96	4.80	-0.36	32.50	-12.45	4.90	0.12	31.97	-12.45	5.19	0.36	30.75
-7500.	-12.87	4.54	0.00	32.36	-13.58	4.90	0.99	31.00	-13.73	5.19	1.31	29.66
-7000.	-13.50	4.31	-0.05	32.06	-14.14	4.72	-0.46	30.63	-14.94	5.14	-0.54	30.06
-6500.	-13.62	3.99	-0.10	32.47	-13.89	4.42	-1.33	30.61	-13.67	4.76	-1.18	31.92
-6000.	-14.16	3.73	0.37	35.18	-13.54	4.09	-0.03	31.58	-13.09	4.40	-0.21	31.66
-5500.	-15.42	3.61	1.14	33.21	-14.14	3.89	0.39	30.38	-13.35	4.16	0.23	30.13
-5000.	-17.60	3.76	1.80	31.51	-15.11	3.82	0.76	30.38	-13.92	4.07	0.19	29.00
-4500.	-18.60	3.54	0.30	32.92	-16.12	3.80	0.08	31.55	-14.74	4.20	0.57	-99.99
-4000.	-18.06	2.88	-1.48	34.02	-15.82	3.41	-1.30	-99.99	-15.69	4.68	-0.21	-99.99
-3500.	-15.54	1.79	-1.70	36.57	-14.90	2.74	-2.47	34.89	-14.53	3.91	-1.71	-99.99
-3000.	-14.53	0.70	-1.33	40.12	-13.53	1.56	-2.31	39.49	-13.62	3.10	-1.83	-99.99
-2500.	-13.75	-0.04	-1.53	43.93	-13.01	1.07	-2.45	40.29	-13.98	3.26	-0.66	41.75
-2000.	-12.45	-0.34	-2.71	47.90	-13.19	1.46	-2.85	46.73	-15.78	4.31	-0.03	45.22
-1500.	-10.65	-0.61	-2.89	51.61	-12.63	1.45	-3.68	51.42	-17.64	5.51	-4.22	50.76
-1000.	-8.81	-0.62	-1.64	53.51	-12.35	1.88	-4.08	53.39	-16.39	5.87	-5.91	53.46
-500.	-9.62	0.44	-0.57	51.78	-12.04	2.53	-2.49	52.96	-15.22	6.21	-5.43	53.96

TABLE F.2. (continued).

Elevation: 500 ft AGL

0.	-9.05	0.66	-3.24	50.31	-11.35	2.42	-5.43	51.37	-12.04	5.64	-9.29	53.74
500.	-5.04	0.77	-6.93	49.64	-4.53	1.76	-10.27	52.31	-4.65	4.23	-13.77	54.42
1000.	1.03	1.76	-5.61	49.77	2.87	2.13	-8.23	52.29	4.96	3.49	-10.43	55.31
1500.	5.68	3.44	-3.73	50.06	8.58	3.30	-4.80	51.65	10.65	4.04	-6.13	54.26
2000.	9.54	5.37	-3.45	49.06	12.54	5.11	-3.76	49.49	15.02	5.30	-4.72	51.65
2500.	12.33	7.49	-3.10	47.58	15.85	8.12	-3.08	46.28	19.29	7.96	-3.87	47.68
3000.	14.28	8.92	-3.38	46.30	18.53	10.55	-3.86	45.66	23.78	10.14	-3.01	45.20
3500.	16.01	9.17	-3.03	45.33	20.13	10.90	-2.15	44.66	26.59	11.20	1.66	43.34
4000.	16.98	9.13	-2.05	44.28	20.19	10.86	-0.60	43.30	24.44	10.99	4.14	42.08
4500.	18.24	9.56	-2.08	43.73	20.57	10.36	-2.35	42.91	23.12	10.07	1.53	41.69
5000.	19.46	11.18	-0.74	42.85	22.80	10.71	-2.89	42.77	23.63	9.63	2.25	41.44
5500.	20.40	12.78	1.06	40.57	23.37	11.90	2.34	40.93	23.16	9.63	3.76	40.63
6000.	20.06	12.31	0.50	37.98	22.59	11.49	1.98	38.01	22.45	9.51	3.70	38.66
6500.	19.83	9.51	-0.08	35.44	22.24	9.20	1.43	35.08	22.10	8.46	1.46	35.90
7000.	17.56	4.83	3.48	33.03	20.63	5.64	2.14	33.43	21.98	6.00	0.56	34.24
7500.	12.28	0.90	5.84	30.53	16.71	1.41	5.98	31.39	20.06	2.45	3.76	33.07
8000.	6.18	-1.91	6.78	28.74	10.21	-2.50	5.50	31.27	14.72	-1.28	5.50	32.48
8500.	0.39	-4.70	6.49	28.74	3.37	-5.58	6.22	31.28	6.61	-4.76	6.75	32.14
9000.	-4.22	-6.24	5.04	26.89	-1.94	-7.30	3.34	30.42	-1.15	-6.37	3.02	31.88
9500.	-5.50	-6.32	0.27	26.45	-3.67	-6.77	-0.22	28.97	-4.28	-5.58	-0.03	30.30
10000.	-4.94	-5.41	1.40	25.04	-3.76	-5.72	0.81	26.91	-5.15	-4.52	0.62	28.15
10500.	-5.62	-5.03	2.42	23.46	-5.09	-5.13	2.36	23.55	-7.46	-4.73	4.44	-99.99
11000.	-6.82	-4.84	2.00	-99.99	-7.69	-5.26	2.83	-99.99	-10.73	-5.78	4.88	-99.99
11500.	-7.81	-4.44	1.73	-99.99	-9.01	-5.03	2.27	-99.99	-12.67	-6.32	2.79	-99.99
12000.	-8.88	-3.98	1.72	-99.99	-10.22	-4.75	2.77	-99.99	-12.84	-6.32	2.38	32.96
12500.	-9.48	-3.55	1.17	-99.99	-11.14	-4.78	2.48	34.43	-12.97	-6.51	1.70	33.64
13000.	-8.64	-2.94	0.22	-99.99	-10.74	-4.98	2.65	35.58	-12.26	-6.83	0.27	34.38
13500.	-7.09	-2.15	0.40	-99.99	-8.83	-3.93	0.51	35.63	-10.68	-5.91	-0.48	34.72
14000.	-5.78	-1.03	0.06	-99.99	-7.00	-2.24	-0.14	-99.99	-8.35	-3.62	-0.82	34.84
14500.	-5.00	-0.19	0.01	-99.99	-5.73	-0.88	-0.02	-99.99	-6.58	-1.73	-0.15	37.00
15000.	-4.48	0.48	0.09	-99.99	-5.21	-0.07	0.24	-99.99	-6.08	-0.72	0.40	34.36
15500.	-4.17	1.04	0.18	-99.99	-5.04	0.56	0.63	31.52	-6.36	-0.15	1.12	34.55
16000.	-3.97	1.52	0.34	-99.99	-5.55	1.15	0.83	31.11	-6.89	0.53	1.12	35.59
16500.	-3.93	2.04	0.06	-99.99	-5.33	1.74	-0.29	29.16	-6.95	1.28	-0.25	35.95
17000.	-3.39	2.42	-0.19	14.97	-4.32	2.15	-1.18	24.59	-4.90	1.60	-0.84	32.25
17500.	-2.90	2.73	-0.06	13.81	-3.21	2.50	-0.23	23.42	-3.56	2.16	-0.27	31.79
18000.	-2.54	3.07	-0.06	11.12	-2.73	2.90	-0.16	21.14	-2.91	2.70	-0.22	29.11
18500.	-2.22	3.38	-0.14	8.93	-2.37	3.23	-0.10	13.17	-2.52	3.08	-0.14	22.20
19000.	-1.94	3.64	-0.09	8.90	-2.05	3.51	-0.13	10.53	-2.19	3.40	-0.19	13.81
19500.	-1.61	3.85	-0.24	8.73	-1.69	3.77	-0.36	-99.99	-1.83	3.82	-0.23	12.97
20000.	-1.13	3.92	-0.30	9.07	-1.16	3.99	-0.61	-99.99	-1.21	4.07	-0.67	-99.99
20500.	-0.94	3.96	0.08	-99.99	-0.85	4.04	-0.19	-99.99	-0.73	4.20	-0.19	-99.99
21000.	-0.94	3.98	-0.42	-99.99	-1.17	4.23	0.17	-99.99	-0.89	4.36	0.30	-99.99
21500.	-0.73	4.41	-0.72	6.95	-0.98	4.61	-0.49	-99.99	-1.10	4.60	-0.17	-99.99
22000.	0.09	5.18	-1.39	9.98	0.17	5.16	-1.25	11.15	-0.55	4.84	-0.53	-99.99
22500.	0.68	5.95	0.67	12.41	0.89	5.65	0.05	15.79	0.20	5.04	0.00	21.95
23000.	-1.04	6.62	1.50	15.42	0.20	6.19	1.62	19.08	-0.08	5.34	1.34	24.62
23500.	-2.68	7.80	2.18	18.37	-1.23	6.82	2.14	22.85	-0.58	5.65	1.45	26.96
24000.	-4.06	8.95	2.81	23.71	-2.13	7.38	2.80	28.79	-0.82	6.09	1.36	32.16
24500.	-5.50	9.68	3.45	28.06	-3.64	7.75	3.09	33.59	-1.40	6.36	2.44	37.79
25000.	-5.50	9.68	3.45	-99.99	-4.44	7.87	1.08	36.54	-2.49	6.50	1.12	40.54
25500.	-5.50	9.68	3.45	-99.99	-4.44	7.87	1.08	-99.99	-2.86	6.63	0.47	43.09
26000.	-5.50	9.68	3.45	-99.99	-4.44	7.87	1.08	-99.99	-2.86	6.63	0.47	-99.99
26500.	-5.50	9.68	3.45	-99.99	-4.44	7.87	1.08	-99.99	-2.86	6.63	0.47	-99.99
27000.	-5.50	9.68	3.45	-99.99	-4.44	7.87	1.08	-99.99	-2.86	6.63	0.47	-99.99
27500.	-5.50	9.68	3.45	-99.99	-4.44	7.87	1.08	-99.99	-2.86	6.63	0.47	-99.99
28000.	-5.50	9.68	3.45	-99.99	-4.44	7.87	1.08	-99.99	-2.86	6.63	0.47	-99.99
28500.	-5.50	9.68	3.45	-99.99	-4.44	7.87	1.08	-99.99	-2.86	6.63	0.47	-99.99
29000.	-5.50	9.68	3.45	-99.99	-4.44	7.87	1.08	-99.99	-2.86	6.63	0.47	-99.99
29500.	-5.50	9.68	3.45	-99.99	-4.44	7.87	1.08	-99.99	-2.86	6.63	0.47	-99.99
30000.	-5.50	9.68	3.45	-99.99	-4.44	7.87	1.08	-99.99	-2.86	6.63	0.47	-99.99
30500.	-5.50	9.68	3.45	-99.99	-4.44	7.87	1.08	-99.99	-2.86	6.63	0.47	-99.99
31000.	-5.50	9.68	3.45	-99.99	-4.44	7.87	1.08	-99.99	-2.86	6.63	0.47	-99.99
31500.	-5.50	9.68	3.45	-99.99	-4.44	7.87	1.08	-99.99	-2.86	6.63	0.47	-99.99
32000.	-5.50	9.68	3.45	-99.99	-4.44	7.87	1.08	-99.99	-2.86	6.63	0.47	-99.99
32500.	-5.50	9.68	3.45	-99.99	-4.44	7.87	1.08	-99.99	-2.86	6.63	0.47	-99.99
33000.	-5.50	9.68	3.45	-99.99	-4.44	7.87	1.08	-99.99	-2.86	6.63	0.47	-99.99
33500.	-5.50	9.68	3.45	-99.99	-4.44	7.87	1.08	-99.99	-2.86	6.63	0.47	-99.99
34000.	-5.50	9.68	3.45	-99.99	-4.44	7.87	1.08	-99.99	-2.86	6.63	0.47	-99.99
34500.	-5.50	9.68	3.45	-99.99	-4.44	7.87	1.08	-99.99	-2.86	6.63	0.47	-99.99
35000.	-5.50	9.68	3.45	-99.99	-4.44	7.87	1.08	-99.99	-2.86	6.63	0.47	-99.99
35500.	-5.50	9.68	3.45	-99.99	-4.44	7.87	1.08	-99.99	-2.86	6.63	0.47	-99.99
36000.	-5.50	9.68	3.45	-99.99	-4.44	7.87	1.08	-99.99	-2.86	6.63	0.47	-99.99
36500.	-5.50	9.68	3.45	-99.99	-4.44	7.87	1.08	-99.99	-2.86	6.63	0.47	-99.99
37000.	-5.50	9.68	3.45	-99.99	-4.44	7.87	1.08	-99.99	-2.86	6.63	0.47	-99.99
37500.	-5.50	9.68	3.45	-99.99	-4.44	7.87	1.08	-99.99	-2.86	6.63	0.47	-99.99

TABLE F.2. (continued).

Elevation: 1000 ft AGL

	PLANE 1				PLANE 2				PLANE 3			
X	WX	WY	WZ	DBZ	WX	WY	WZ	DBZ	WX	WY	WZ	DBZ
-37500.	-12.15	-0.37	0.00	-99.99	-12.53	-0.36	-0.17	-99.99	-13.36	0.16	-0.56	-99.99
-37000.	-12.15	-0.37	0.00	-99.99	-12.53	-0.36	-0.17	-99.99	-13.36	0.16	-0.56	-99.99
-36500.	-12.15	-0.37	0.00	-99.99	-12.53	-0.36	-0.17	-99.99	-13.36	0.16	-0.56	-99.99
-36000.	-12.15	-0.37	0.00	-99.99	-12.53	-0.36	-0.17	-99.99	-13.36	0.16	-0.56	-99.99
-35500.	-12.15	-0.37	0.00	-99.99	-12.53	-0.36	-0.17	-99.99	-13.36	0.16	-0.56	-99.99
-35000.	-12.15	-0.37	0.00	-99.99	-12.53	-0.36	-0.17	-99.99	-13.36	0.16	-0.56	-99.99
-34500.	-12.15	-0.37	0.00	-99.99	-12.53	-0.36	-0.17	-99.99	-13.36	0.16	-0.56	-99.99
-34000.	-12.15	-0.37	0.00	-99.99	-12.53	-0.36	-0.17	-99.99	-13.36	0.16	-0.56	-99.99
-33500.	-12.15	-0.37	0.00	-99.99	-12.53	-0.36	-0.17	-99.99	-13.36	0.16	-0.56	-99.99
-33000.	-12.15	-0.37	0.00	-99.99	-12.53	-0.36	-0.17	-99.99	-13.36	0.16	-0.56	-99.99
-32500.	-12.15	-0.37	0.00	-99.99	-12.53	-0.36	-0.17	-99.99	-13.36	0.16	-0.56	-99.99
-32000.	-12.15	-0.37	0.00	-99.99	-12.53	-0.36	-0.17	-99.99	-13.36	0.16	-0.56	-99.99
-31500.	-12.15	-0.37	0.00	-99.99	-12.53	-0.36	-0.17	-99.99	-13.36	0.16	-0.56	-99.99
-31000.	-12.15	-0.37	0.00	-99.99	-12.53	-0.36	-0.17	-99.99	-13.36	0.16	-0.56	-99.99
-30500.	-12.15	-0.37	0.00	-99.99	-12.53	-0.36	-0.17	-99.99	-13.36	0.16	-0.56	-99.99
-30000.	-12.15	-0.37	0.00	-99.99	-12.53	-0.36	-0.17	-99.99	-13.36	0.16	-0.56	-99.99
-29500.	-12.15	-0.37	0.00	-99.99	-12.53	-0.36	-0.17	-99.99	-13.36	0.16	-0.56	-99.99
-29000.	-12.15	-0.37	0.00	-99.99	-12.53	-0.36	-0.17	-99.99	-13.36	0.16	-0.56	-99.99
-28500.	-12.15	-0.37	0.00	-99.99	-12.53	-0.36	-0.17	-99.99	-13.36	0.16	-0.56	-99.99
-28000.	-12.15	-0.37	0.00	-99.99	-12.53	-0.36	-0.17	-99.99	-13.36	0.16	-0.56	-99.99
-27500.	-12.15	-0.37	0.00	-99.99	-12.53	-0.36	-0.17	-99.99	-13.36	0.16	-0.56	-99.99
-27000.	-12.15	-0.37	0.00	-99.99	-12.53	-0.36	-0.17	-99.99	-13.36	0.16	-0.56	-99.99
-26500.	-12.15	-0.37	0.00	-99.99	-12.53	-0.36	-0.17	-99.99	-13.36	0.16	-0.56	-99.99
-26000.	-12.15	-0.37	0.00	-99.99	-12.53	-0.36	-0.17	-99.99	-13.36	0.16	-0.56	-99.99
-25500.	-12.15	-0.37	0.00	-99.99	-12.53	-0.36	-0.17	-99.99	-13.36	0.16	-0.56	-99.99
-25000.	-12.15	-0.37	0.00	-99.99	-12.53	-0.36	-0.17	-99.99	-13.36	0.16	-0.56	-99.99
-24500.	-12.15	-0.37	0.00	50.26	-12.53	-0.36	-0.17	-99.99	-13.36	0.16	-0.56	-99.99
-24000.	-12.28	-0.75	-0.15	50.73	-12.53	-0.36	-0.17	51.35	-13.36	0.16	-0.56	-99.99
-23500.	-11.99	-0.91	-1.24	51.65	-12.39	-0.66	-1.27	52.45	-13.36	0.16	-0.56	53.39
-23000.	-11.05	-1.01	-1.29	52.22	-11.72	-0.96	-1.81	52.63	-12.45	-0.41	-2.05	53.00
-22500.	-10.08	-0.84	-1.20	51.77	-10.51	-0.84	-1.75	51.78	-10.92	-0.65	-3.19	51.32
-22000.	-10.05	-0.02	1.33	51.11	-10.10	0.03	0.45	51.02	-10.01	0.14	-0.80	50.56
-21500.	-10.74	1.20	-0.51	49.17	-10.12	1.11	-0.27	50.07	-9.69	1.09	-1.23	50.58
-21000.	-10.67	1.87	-0.71	47.87	-9.90	1.84	0.04	49.06	-9.30	1.74	-0.80	51.05
-20500.	-10.51	2.26	-0.47	47.68	-10.13	2.28	0.36	49.12	-9.49	2.20	-0.02	50.62
-20000.	-10.26	2.34	-1.53	48.02	-10.09	2.45	-1.07	49.44	-9.84	2.49	-1.14	50.32
-19500.	-9.80	2.62	-0.57	48.64	-9.79	2.85	-0.07	50.19	-9.99	3.17	-0.06	51.63
-19000.	-9.79	3.60	0.29	49.92	-9.88	3.94	0.51	51.12	-10.11	4.24	-0.40	52.05
-18500.	-9.85	4.49	-0.58	50.72	-9.83	5.02	0.27	50.98	-9.97	5.17	-0.82	51.15
-18000.	-9.91	5.01	-1.18	49.54	-9.75	5.66	-0.99	50.53	-9.74	6.04	-0.93	50.62
-17500.	-10.04	5.39	-1.23	49.44	-9.82	6.15	-1.15	50.07	-9.63	6.79	-0.92	50.21
-17000.	-10.20	5.85	-1.24	49.09	-10.01	6.58	-1.38	49.47	-9.85	7.12	-0.46	49.88
-16500.	-10.45	6.20	-0.48	48.84	-10.45	6.77	0.36	49.16	-10.40	7.32	0.58	49.77
-16000.	-10.81	6.31	-0.42	48.57	-10.81	6.81	-0.79	48.60	-10.68	7.36	-1.10	48.67
-15500.	-10.58	6.35	-3.29	47.29	-10.50	6.80	-3.31	47.17	-10.55	7.39	-1.93	46.95
-15000.	-9.89	6.33	-2.69	45.63	-10.10	6.81	-1.71	46.05	-10.74	7.43	-0.60	46.07
-14500.	-9.80	6.17	-0.88	45.01	-10.31	6.77	0.04	45.59	-11.26	7.41	0.50	45.34
-14000.	-10.42	6.03	0.07	44.39	-11.14	6.83	0.27	44.76	-11.90	7.48	0.16	44.53
-13500.	-11.04	5.98	-0.57	43.15	-11.73	6.87	0.08	43.50	-12.24	7.44	-0.12	43.48
-13000.	-11.32	6.02	-1.03	41.77	-12.06	6.86	-0.12	41.88	-12.12	7.15	0.00	42.05
-12500.	-11.80	6.47	-0.17	40.99	-12.24	6.87	0.30	41.04	-12.10	6.79	0.69	41.15
-12000.	-12.16	6.90	-1.03	40.58	-12.31	6.97	-1.12	40.57	-12.03	6.54	1.28	40.51
-11500.	-11.92	6.82	-1.35	39.94	-11.87	6.77	-1.07	39.92	-11.99	6.29	0.87	40.23
-11000.	-11.51	6.62	-1.11	38.54	-11.58	6.58	-1.18	39.09	-12.16	6.23	0.28	39.83
-10500.	-11.56	6.37	-0.55	37.62	-11.31	6.49	-0.55	37.42	-12.40	6.26	-0.17	39.27
-10000.	-11.77	5.88	-0.02	37.42	-11.64	6.04	-0.51	36.21	-12.17	6.14	-0.91	38.00
-9500.	-12.13	5.34	-0.20	36.18	-11.93	5.50	-0.51	35.30	-11.94	5.73	-0.66	35.94
-9000.	-12.47	4.85	0.20	35.06	-12.19	4.97	-0.28	35.85	-12.02	5.13	-0.64	36.08
-8500.	-13.16	4.59	0.44	34.90	-12.50	4.63	-0.10	35.55	-12.25	4.77	-0.28	35.28
-8000.	-13.44	4.46	-0.71	34.10	-12.93	4.58	0.52	34.20	-13.02	4.73	0.66	33.00
-7500.	-13.33	4.25	-0.05	33.35	-14.42	4.55	2.08	32.52	-14.73	4.79	2.68	31.40
-7000.	-14.09	4.11	-0.06	32.75	-15.19	4.49	-0.75	31.23	-16.40	4.83	-0.80	30.88
-6500.	-14.25	3.99	-0.13	32.04	-14.91	4.36	-2.50	30.42	-14.99	4.53	-2.18	32.81
-6000.	-15.06	4.00	1.11	33.34	-14.53	4.18	0.20	30.65	-14.27	4.20	-0.16	31.72
-5500.	-16.76	4.21	2.49	31.59	-15.35	4.17	1.27	29.47	-14.61	3.98	0.92	29.82
-5000.	-19.40	4.56	3.80	31.33	-16.54	4.12	1.85	30.09	-15.00	3.63	0.68	28.69
-4500.	-20.12	4.20	0.45	33.07	-17.20	3.85	0.20	30.78	-15.41	3.52	1.14	27.82
-4000.	-18.36	3.28	-3.30	34.61	-15.76	3.16	-2.64	31.62	-15.86	3.95	-0.41	28.48
-3500.	-14.00	1.89	-3.59	37.71	-13.47	2.30	-4.93	34.71	-13.48	3.16	-3.58	31.11
-3000.	-12.88	0.56	-1.90	39.56	-11.59	1.04	-3.78	39.72	-12.09	2.52	-3.28	36.57
-2500.	-12.97	-0.51	-2.36	43.55	-12.61	0.54	-3.80	41.47	-13.26	3.04	-0.79	40.62
-2000.	-12.48	-0.97	-5.20	48.30	-13.69	0.97	-5.39	47.09	-15.52	4.08	-0.20	44.59
-1500.	-10.98	-1.00	-5.99	52.33	-13.49	1.37	-7.45	51.86	-17.34	5.42	-8.15	50.85
-1000.	-9.42	-0.50	-3.92	53.87	-13.12	2.35	-8.35	53.85	-16.03	6.11	-11.71	53.51
-500.	-9.84	0.97	-1.94	52.83	-12.16	3.39	-5.63	54.08	-14.12	6.65	-11.04	54.64

TABLE F.2. (continued).

Elevation: 1000 ft AGL

0.	-9.01	1.56	-6.91	52.29	-10.65	3.60	-11.07	53.84	-10.57	6.23	-17.49	55.42
500.	-5.59	1.80	-13.21	51.87	-5.17	2.82	-19.03	54.42	-5.04	4.88	-25.03	56.33
1000.	-1.09	2.71	-10.40	50.98	0.30	2.89	-15.08	53.10	1.65	3.75	-19.29	56.37
1500.	2.38	4.34	-6.63	50.84	4.81	3.61	-8.96	51.90	6.38	3.88	-11.69	54.67
2000.	5.57	5.54	-6.44	50.17	8.38	4.95	-7.01	49.87	10.35	4.75	-8.94	51.67
2500.	7.87	7.07	-5.81	49.01	11.38	7.40	-5.91	47.14	14.35	7.09	-7.57	47.56
3000.	9.84	8.31	-6.93	47.51	13.90	9.79	-7.64	46.08	18.44	9.38	-5.97	44.32
3500.	12.19	8.95	-6.54	46.05	15.98	10.74	-4.72	44.62	21.10	11.04	2.80	42.41
4000.	13.96	9.50	-4.70	44.99	17.08	11.38	-2.07	43.36	20.27	11.57	6.95	41.74
4500.	15.72	10.09	-4.79	44.39	18.35	11.12	-5.02	43.24	20.39	10.95	2.26	41.77
5000.	17.12	11.40	-1.97	43.46	20.59	11.23	-5.38	42.93	21.64	10.31	3.76	41.69
5500.	18.19	12.21	1.27	41.29	21.22	11.55	4.32	41.36	21.95	9.55	6.82	41.05
6000.	18.20	10.54	0.51	38.78	20.82	10.16	3.73	38.75	21.65	8.59	7.13	39.25
6500.	17.89	7.03	-0.22	36.66	20.14	7.37	2.81	36.44	20.97	7.14	3.12	36.45
7000.	15.45	2.13	6.55	35.73	18.86	3.37	3.67	35.09	20.92	4.31	0.55	34.88
7500.	10.46	-2.50	11.64	33.96	16.43	-1.68	10.66	33.81	20.67	0.10	5.97	34.01
8000.	3.40	-5.87	14.52	32.20	10.27	-6.50	12.25	32.93	15.60	-4.23	11.08	33.34
8500.	-4.01	-8.87	13.80	30.89	0.63	-9.86	13.64	32.24	4.97	-8.35	14.78	32.86
9000.	-9.45	-9.61	9.74	29.42	-6.43	-10.88	6.89	31.45	-6.18	-9.30	6.35	32.39
9500.	9.56	-7.79	0.05	28.17	-8.51	-8.30	-1.05	30.00	-9.71	-6.30	-1.02	30.77
10000.	-7.99	-5.31	2.43	27.31	-7.65	-5.51	0.87	28.40	-9.55	-3.27	-0.04	29.39
10500.	-8.18	-4.67	4.09	25.82	-7.77	-4.04	3.53	25.46	-9.98	-2.22	7.60	28.75
11000.	-8.78	-4.59	3.10	27.01	-9.39	-3.73	4.78	29.05	-11.97	-2.70	8.91	30.79
11500.	-9.36	-4.09	2.56	-99.99	-10.25	-3.38	3.76	33.42	-13.76	-3.13	5.04	32.55
12000.	-10.10	-3.41	2.87	-99.99	-11.39	-3.16	4.78	-99.99	-13.83	-3.57	4.08	33.71
12500.	-10.70	-2.84	2.09	-99.99	-12.08	-3.13	4.31	34.45	-13.72	-3.82	2.61	34.77
13000.	-9.56	-2.10	0.13	-99.99	-11.18	-2.91	4.18	35.39	-12.40	-3.84	0.11	36.11
13500.	-7.72	-1.35	0.61	-99.99	-9.39	-2.06	1.09	36.42	-10.80	-3.03	-0.65	36.78
14000.	-6.62	-0.62	0.03	-99.99	-8.21	-1.14	-0.25	45.10	-9.58	-1.79	-0.99	37.26
14500.	-5.87	-0.16	-0.06	-99.99	-7.25	-0.49	-0.54	49.95	-8.25	-0.99	-0.57	40.45
15000.	-5.11	0.33	-0.15	-99.99	-6.28	-0.03	-0.29	44.12	-7.45	-0.49	0.26	36.61
15500.	-4.35	0.78	-0.05	33.99	-5.51	0.41	0.49	34.66	-7.33	-0.24	1.85	36.75
16000.	-3.63	1.17	0.46	27.76	-5.74	0.77	1.40	35.03	-7.80	0.22	2.09	38.10
16500.	-3.91	1.80	0.92	25.43	-5.70	1.34	-0.05	34.51	-8.03	0.83	-0.30	38.63
17000.	-3.88	2.52	0.20	21.19	-4.82	1.90	-2.09	32.06	-5.73	1.16	-1.66	37.09
17500.	-3.10	3.06	-0.41	19.99	-3.35	2.55	-0.52	29.98	-4.00	2.07	-0.67	36.34
18000.	-1.74	3.35	-1.14	15.36	-2.26	3.24	-0.76	26.73	-2.86	3.00	-0.84	33.95
18500.	-0.64	3.57	-0.66	11.63	-1.28	3.59	-0.70	17.60	-1.89	3.46	-0.53	27.32
19000.	-0.25	3.72	-0.13	10.54	-0.68	3.70	-0.37	13.75	-1.26	3.65	-0.52	18.48
19500.	-0.30	3.90	0.06	8.86	-0.45	3.89	-0.41	12.39	-0.73	3.99	-0.70	16.70
20000.	-0.07	3.87	-0.98	9.44	0.07	4.06	-1.13	11.81	0.20	4.24	-1.63	16.34
20500.	-0.21	3.88	0.68	8.05	0.17	4.11	0.11	10.13	0.85	4.43	-0.47	13.91
21000.	-1.30	4.12	-0.21	7.66	-0.93	4.60	0.73	9.28	0.43	4.77	0.83	14.65
21500.	-1.15	4.81	-2.09	9.25	-0.70	5.17	-1.39	10.58	-0.15	5.13	-0.15	18.03
22000.	0.30	5.76	-3.16	13.59	1.14	5.73	-2.53	15.79	0.39	5.26	-1.05	23.95
22500.	0.67	6.74	2.19	16.44	1.32	6.17	0.86	20.77	0.62	5.31	0.67	26.50
23000.	-2.75	7.56	3.64	18.36	-0.86	6.92	4.11	22.58	-0.98	5.86	3.33	27.95
23500.	-4.98	8.70	4.35	22.13	-3.27	7.85	3.82	26.32	-1.88	6.62	2.76	30.38
24000.	-5.55	9.87	4.74	29.06	-3.31	8.47	4.79	33.54	-1.43	7.19	2.34	35.97
24500.	-5.36	10.79	5.96	33.90	-3.44	8.95	7.04	37.94	-0.96	7.33	4.64	40.08
25000.	-5.36	10.79	5.96	-99.99	-3.46	9.01	2.17	40.97	-1.70	7.24	2.34	43.29
25500.	-5.36	10.79	5.96	-99.99	-3.46	9.01	2.17	-99.99	-2.31	7.26	1.01	46.12
26000.	-5.36	10.79	5.96	-99.99	-3.46	9.01	2.17	-99.99	-2.31	7.26	1.01	-99.99
26500.	-5.36	10.79	5.96	-99.99	-3.46	9.01	2.17	-99.99	-2.31	7.26	1.01	-99.99
27000.	-5.36	10.79	5.96	-99.99	-3.46	9.01	2.17	-99.99	-2.31	7.26	1.01	-99.99
27500.	-5.36	10.79	5.96	-99.99	-3.46	9.01	2.17	-99.99	-2.31	7.26	1.01	-99.99
28000.	-5.36	10.79	5.96	-99.99	-3.46	9.01	2.17	-99.99	-2.31	7.26	1.01	-99.99
28500.	-5.36	10.79	5.96	-99.99	-3.46	9.01	2.17	-99.99	-2.31	7.26	1.01	-99.99
29000.	-5.36	10.79	5.96	-99.99	-3.46	9.01	2.17	-99.99	-2.31	7.26	1.01	-99.99
29500.	-5.36	10.79	5.96	-99.99	-3.46	9.01	2.17	-99.99	-2.31	7.26	1.01	-99.99
30000.	-5.36	10.79	5.96	-99.99	-3.46	9.01	2.17	-99.99	-2.31	7.26	1.01	-99.99
30500.	-5.36	10.79	5.96	-99.99	-3.46	9.01	2.17	-99.99	-2.31	7.26	1.01	-99.99
31000.	-5.36	10.79	5.96	-99.99	-3.46	9.01	2.17	-99.99	-2.31	7.26	1.01	-99.99
31500.	-5.36	10.79	5.96	-99.99	-3.46	9.01	2.17	-99.99	-2.31	7.26	1.01	-99.99
32000.	-5.36	10.79	5.96	-99.99	-3.46	9.01	2.17	-99.99	-2.31	7.26	1.01	-99.99
32500.	-5.36	10.79	5.96	-99.99	-3.46	9.01	2.17	-99.99	-2.31	7.26	1.01	-99.99
33000.	-5.36	10.79	5.96	-99.99	-3.46	9.01	2.17	-99.99	-2.31	7.26	1.01	-99.99
33500.	-5.36	10.79	5.96	-99.99	-3.46	9.01	2.17	-99.99	-2.31	7.26	1.01	-99.99
34000.	-5.36	10.79	5.96	-99.99	-3.46	9.01	2.17	-99.99	-2.31	7.26	1.01	-99.99
34500.	-5.36	10.79	5.96	-99.99	-3.46	9.01	2.17	-99.99	-2.31	7.26	1.01	-99.99
35000.	-5.36	10.79	5.96	-99.99	-3.46	9.01	2.17	-99.99	-2.31	7.26	1.01	-99.99
35500.	-5.36	10.79	5.96	-99.99	-3.46	9.01	2.17	-99.99	-2.31	7.26	1.01	-99.99
36000.	-5.36	10.79	5.96	-99.99	-3.46	9.01	2.17	-99.99	-2.31	7.26	1.01	-99.99
36500.	-5.36	10.79	5.96	-99.99	-3.46	9.01	2.17	-99.99	-2.31	7.26	1.01	-99.99
37000.	-5.36	10.79	5.96	-99.99	-3.46	9.01	2.17	-99.99	-2.31	7.26	1.01	-99.99
37500.	-5.36	10.79	5.96	-99.99	-3.46	9.01	2.17	-99.99	-2.31	7.26	1.01	-99.99

TABLE F.2. (continued).

Elevation: 1500 ft AGL

	PLANE 1				PLANE 2				PLANE 3			
X	WX	WY	WZ	DBZ	WX	WY	WZ	DBZ	WX	WY	WZ	DBZ
-37500.	-15.55	-1.57	0.00	-99.99	-15.02	-2.41	-0.33	-99.99	-14.41	-1.78	-1.20	-99.99
-37000.	-15.55	-1.57	0.00	-99.99	-15.02	-2.41	-0.33	-99.99	-14.41	-1.78	-1.20	-99.99
-36500.	-15.55	-1.57	0.00	-99.99	-15.02	-2.41	-0.33	-99.99	-14.41	-1.78	-1.20	-99.99
-36000.	-15.55	-1.57	0.00	-99.99	-15.02	-2.41	-0.33	-99.99	-14.41	-1.78	-1.20	-99.99
-35500.	-15.55	-1.57	0.00	-99.99	-15.02	-2.41	-0.33	-99.99	-14.41	-1.78	-1.20	-99.99
-35000.	-15.55	-1.57	0.00	-99.99	-15.02	-2.41	-0.33	-99.99	-14.41	-1.78	-1.20	-99.99
-34500.	-15.55	-1.57	0.00	-99.99	-15.02	-2.41	-0.33	-99.99	-14.41	-1.78	-1.20	-99.99
-34000.	-15.55	-1.57	0.00	-99.99	-15.02	-2.41	-0.33	-99.99	-14.41	-1.78	-1.20	-99.99
-33500.	-15.55	-1.57	0.00	-99.99	-15.02	-2.41	-0.33	-99.99	-14.41	-1.78	-1.20	-99.99
-33000.	-15.55	-1.57	0.00	-99.99	-15.02	-2.41	-0.33	-99.99	-14.41	-1.78	-1.20	-99.99
-32500.	-15.55	-1.57	0.00	-99.99	-15.02	-2.41	-0.33	-99.99	-14.41	-1.78	-1.20	-99.99
-32000.	-15.55	-1.57	0.00	-99.99	-15.02	-2.41	-0.33	-99.99	-14.41	-1.78	-1.20	-99.99
-31500.	-15.55	-1.57	0.00	-99.99	-15.02	-2.41	-0.33	-99.99	-14.41	-1.78	-1.20	-99.99
-31000.	-15.55	-1.57	0.00	-99.99	-15.02	-2.41	-0.33	-99.99	-14.41	-1.78	-1.20	-99.99
-30500.	-15.55	-1.57	0.00	-99.99	-15.02	-2.41	-0.33	-99.99	-14.41	-1.78	-1.20	-99.99
-30000.	-15.55	-1.57	0.00	-99.99	-15.02	-2.41	-0.33	-99.99	-14.41	-1.78	-1.20	-99.99
-29500.	-15.55	-1.57	0.00	-99.99	-15.02	-2.41	-0.33	-99.99	-14.41	-1.78	-1.20	-99.99
-29000.	-15.55	-1.57	0.00	-99.99	-15.02	-2.41	-0.33	-99.99	-14.41	-1.78	-1.20	-99.99
-28500.	-15.55	-1.57	0.00	-99.99	-15.02	-2.41	-0.33	-99.99	-14.41	-1.78	-1.20	-99.99
-28000.	-15.55	-1.57	0.00	-99.99	-15.02	-2.41	-0.33	-99.99	-14.41	-1.78	-1.20	-99.99
-27500.	-15.55	-1.57	0.00	-99.99	-15.02	-2.41	-0.33	-99.99	-14.41	-1.78	-1.20	-99.99
-27000.	-15.55	-1.57	0.00	-99.99	-15.02	-2.41	-0.33	-99.99	-14.41	-1.78	-1.20	-99.99
-26500.	-15.55	-1.57	0.00	-99.99	-15.02	-2.41	-0.33	-99.99	-14.41	-1.78	-1.20	-99.99
-26000.	-15.55	-1.57	0.00	-99.99	-15.02	-2.41	-0.33	-99.99	-14.41	-1.78	-1.20	-99.99
-25500.	-15.55	-1.57	0.00	-99.99	-15.02	-2.41	-0.33	-99.99	-14.41	-1.78	-1.20	-99.99
-25000.	-15.55	-1.57	0.00	-99.99	-15.02	-2.41	-0.33	-99.99	-14.41	-1.78	-1.20	-99.99
-24500.	-15.55	-1.57	0.00	49.46	-15.02	-2.41	-0.33	-99.99	-14.41	-1.78	-1.20	-99.99
-24000.	-15.04	-3.19	-0.34	50.34	-15.02	-2.41	-0.33	50.94	-14.41	-1.78	-1.20	-99.99
-23500.	-14.58	-3.62	-1.99	50.91	-14.63	-3.12	-2.54	51.34	-14.41	-1.78	-1.20	52.34
-23000.	-14.38	-2.99	-1.73	51.20	-14.27	-2.84	-2.76	51.28	-13.75	-2.02	-3.76	51.81
-22500.	-14.13	-1.98	-1.90	50.49	-13.99	-1.85	-2.87	50.22	-13.61	-1.30	-5.15	49.85
-22000.	-13.63	-1.12	1.79	50.05	-13.42	-0.80	0.16	49.90	-13.19	-0.18	-1.71	49.81
-21500.	-13.38	0.49	-0.61	49.75	-12.78	0.47	-0.68	50.23	-12.29	0.75	-2.31	50.71
-21000.	-13.13	1.91	-1.12	49.19	-12.11	1.63	0.05	50.41	-11.19	1.36	-1.33	51.93
-20500.	-12.68	2.45	-0.69	48.78	-11.70	2.08	0.92	49.94	-10.67	1.63	0.29	51.22
-20000.	-12.21	2.48	-2.27	48.60	-11.51	2.33	-1.25	49.72	-10.82	2.04	-1.14	50.38
-19500.	-11.57	2.72	-1.54	48.92	-11.17	2.88	-0.35	50.22	-11.15	3.04	-0.03	51.23
-19000.	-10.99	3.69	-0.42	49.84	-10.91	4.13	0.15	50.83	-11.12	4.31	-0.83	51.46
-18500.	-10.34	4.63	-1.79	49.91	-10.22	5.23	-0.34	50.80	-10.48	5.26	-1.58	51.03
-18000.	-9.76	5.40	-2.17	49.03	-9.47	5.90	-1.55	50.54	-9.64	6.01	-1.64	51.09
-17500.	-9.54	6.06	-1.95	49.02	-9.11	6.44	-1.69	50.06	-8.97	6.67	-1.56	51.18
-17000.	-9.49	6.57	-1.72	49.64	-8.94	6.73	-1.62	50.16	-8.69	6.78	-0.69	51.14
-16500.	-9.48	6.73	-0.71	50.52	-9.08	6.78	0.54	50.28	-8.95	6.95	0.59	51.10
-16000.	-9.76	6.00	-0.39	50.13	-9.38	6.91	-0.99	50.26	-9.24	7.17	-1.52	50.74
-15500.	-9.76	6.87	-4.18	48.54	-9.52	7.16	-4.19	48.92	-9.41	7.55	-2.53	49.37
-15000.	-9.31	6.66	-3.58	46.96	-9.28	6.95	-2.46	47.51	-9.61	7.64	-1.17	47.56
-14500.	-9.06	6.23	-1.09	46.72	-9.19	6.59	0.03	47.35	-9.66	7.28	0.00	47.08
-14000.	-9.33	6.04	0.04	46.58	-9.42	6.52	0.18	46.90	-9.81	7.34	-0.24	46.37
-13500.	-9.27	6.05	-1.34	45.48	-9.50	6.66	-0.49	45.41	-9.76	7.37	-0.79	44.86
-13000.	-8.87	6.26	-1.99	43.52	-9.08	6.82	-1.10	43.12	-9.18	7.29	-0.71	43.28
-12500.	-8.42	6.66	-0.29	42.30	-8.58	6.95	0.06	42.23	-8.56	7.08	0.77	42.33
-12000.	-8.34	6.80	-1.00	41.78	-8.39	6.91	-1.50	41.80	-8.50	6.82	2.17	41.56
-11500.	-8.25	6.61	-1.27	41.41	-8.08	6.48	-1.58	41.41	-8.20	6.29	1.44	41.80
-11000.	-8.28	6.35	-1.08	40.06	-7.80	6.14	-1.30	40.55	-8.11	6.04	0.93	41.35
-10500.	-8.33	6.17	-0.51	39.63	-7.49	6.09	-0.74	38.86	-7.98	6.08	-0.33	40.57
-10000.	-8.01	5.43	0.10	39.15	-7.25	5.58	-0.70	38.73	-7.56	5.93	-1.31	39.52
-9500.	-8.06	4.32	0.05	38.45	-7.62	4.55	-0.44	38.44	-7.72	5.26	-0.60	38.82
-9000.	-8.27	3.06	0.43	38.40	-8.10	3.26	-0.18	38.63	-8.25	3.72	-1.01	38.25
-8500.	-8.39	2.29	0.63	37.92	-8.38	2.46	0.17	38.23	-8.46	2.81	-0.43	37.34
-8000.	-8.76	2.47	-1.05	37.68	-8.74	2.70	1.44	37.63	-8.83	2.91	0.84	35.32
-7500.	-8.79	2.57	-0.21	36.30	-9.16	2.71	3.34	35.84	-9.33	2.92	4.16	33.58
-7000.	-9.07	2.64	0.00	33.73	-9.67	2.96	-0.76	32.64	-10.14	3.04	-0.54	32.31
-6500.	-9.62	3.17	-0.04	31.51	-10.16	3.44	-3.41	30.28	-10.76	3.33	-2.82	32.33
-6000.	-10.91	3.88	2.50	30.67	-10.81	3.81	0.89	29.46	-11.13	3.33	0.34	30.92
-5500.	-12.59	4.60	4.22	29.47	-11.90	4.26	3.01	28.30	-11.84	3.24	2.44	29.17
-5000.	-13.88	4.61	6.15	29.53	-13.07	3.94	3.51	28.22	-11.60	2.00	1.68	28.72
-4500.	-13.98	3.57	0.34	31.03	-12.47	2.43	0.40	28.79	-10.51	0.57	1.72	27.81
-4000.	-12.48	2.33	-5.73	33.12	-10.81	1.07	-4.07	30.74	-8.97	-0.30	-0.58	27.59
-3500.	-10.32	1.13	-5.84	35.35	-9.52	0.33	-7.37	33.67	-8.21	-0.07	-5.73	30.41
-3000.	-10.38	0.08	-1.12	37.33	-9.95	0.19	-3.75	36.96	-8.96	0.69	-4.04	33.93
-2500.	-11.91	-1.04	-1.93	41.76	-13.00	0.25	-3.19	39.54	-11.64	1.92	0.02	37.99
-2000.	-13.34	-1.51	-7.29	47.52	-15.19	0.79	-7.39	45.95	-14.56	3.22	-0.63	42.80
-1500.	-13.06	-1.21	-9.46	52.44	-15.63	1.73	-11.34	51.39	-16.33	4.90	-11.59	49.91
-1000.	-11.80	-0.21	-7.34	54.02	-14.49	3.11	-12.96	53.65	-14.60	5.74	-17.32	52.56
-500.	-11.04	1.59	-4.72	53.99	-12.06	4.35	-9.91	54.77	-11.41	6.44	-16.99	54.40

TABLE F.2. (continued).

Elevation: 1500 ft AGL

0.	-9.64	2.58	-11.36	53.84	-9.25	4.83	-17.10	55.32	-7.59	6.14	-23.76	55.79
500.	6.77	2.71	-18.34	52.97	-6.42	3.59	-25.12	55.37	-5.44	4.91	-31.81	56.07
1000.	-4.15	3.25	-13.69	51.31	-3.94	3.23	-19.46	53.45	-3.63	3.45	-25.37	57.03
1500.	-2.09	4.50	-8.08	51.14	-1.31	3.41	-11.97	52.10	-0.64	2.99	-16.24	54.95
2000.	-0.12	4.00	-8.59	50.99	1.48	3.07	-9.33	50.14	2.17	3.13	-12.29	51.77
2500.	1.72	5.16	-7.85	49.96	4.09	5.11	-8.30	47.49	5.41	4.58	-10.97	47.67
3000.	3.54	5.88	-10.76	48.19	6.82	6.83	-11.29	46.10	9.53	6.56	-8.81	42.80
3500.	6.01	6.90	-10.94	46.51	9.47	8.24	-8.03	44.48	13.09	8.53	3.03	41.39
4000.	8.39	8.06	-8.72	45.32	12.20	9.49	-5.09	43.39	14.73	9.82	7.39	41.48
4500.	11.44	8.65	-8.60	44.61	14.78	9.86	-8.26	43.32	16.82	9.89	1.58	41.72
5000.	13.85	9.64	-4.06	43.68	17.23	10.20	-7.13	42.86	19.08	9.64	3.98	41.66
5500.	15.59	9.64	-0.03	42.00	18.26	9.91	5.65	41.54	20.43	8.44	8.64	40.98
6000.	15.08	6.84	-0.38	40.00	18.16	7.58	5.06	39.51	20.50	6.75	10.06	39.32
6500.	14.97	2.78	-0.47	38.68	16.66	4.47	4.10	38.00	19.12	4.77	5.13	36.79
7000.	11.72	-0.98	8.90	38.10	15.03	0.85	4.09	36.73	18.23	2.04	-0.46	35.58
7500.	6.80	-4.32	17.35	36.43	12.63	-3.15	13.02	35.74	17.55	-1.40	5.40	34.88
8000.	-1.02	-7.07	23.97	34.30	5.77	-6.92	21.24	34.53	11.83	-4.71	16.79	34.38
8500.	-9.34	-8.81	22.53	32.32	-4.64	-8.91	23.21	33.39	0.83	-7.30	25.09	33.68
9000.	-14.11	-8.01	13.87	30.81	-11.07	-8.39	10.82	32.53	-9.01	-7.02	10.21	32.97
9500.	-13.30	-5.00	-1.01	29.76	-11.55	-5.23	-2.95	31.03	-10.60	-3.85	-3.73	31.38
10000.	-11.04	-1.69	2.81	29.18	-9.86	-1.79	-0.41	29.52	-9.60	-0.67	-2.95	30.00
10500.	-9.95	0.10	4.45	28.20	-9.50	0.95	2.57	28.00	-10.30	1.11	8.48	29.70
11000.	-9.32	0.42	2.59	28.17	-10.51	1.29	5.14	30.06	-12.39	1.27	11.42	31.51
11500.	-9.25	0.22	1.77	-99.99	-10.99	1.06	3.87	33.31	-14.65	0.87	6.33	33.14
12000.	-8.55	0.67	3.00	-99.99	-11.04	0.63	5.44	-99.99	-14.04	0.17	4.55	34.19
12500.	-8.83	1.03	2.54	-99.99	-10.24	0.24	4.97	34.65	-12.95	-0.40	2.11	35.75
13000.	-8.64	1.20	-0.51	-99.99	-9.49	0.13	3.73	36.28	-11.45	-0.49	-0.83	37.45
13500.	-8.46	1.29	0.48	-99.99	-10.10	0.96	1.78	37.41	-10.83	0.23	-0.29	38.30
14000.	-8.82	1.69	-0.13	-99.99	-11.07	1.74	-0.31	43.70	-12.32	1.59	-0.02	39.30
14500.	-8.30	1.69	-0.29	-99.99	-10.79	2.07	-1.95	46.63	-11.66	1.98	-1.48	40.53
15000.	-6.89	2.15	-0.97	-99.99	-8.29	2.24	-2.17	43.05	-9.20	2.26	-0.83	38.13
15500.	-4.86	2.52	-0.99	35.85	-5.40	2.60	-1.03	37.50	-6.65	2.48	1.88	38.32
16000.	-2.76	2.71	0.19	34.05	-3.67	2.38	1.50	37.89	-5.52	2.47	2.79	38.89
16500.	-3.88	3.50	3.21	32.93	-4.34	2.68	1.15	37.72	-5.83	2.40	0.04	39.22
17000.	-6.20	5.15	1.61	31.94	-5.55	3.58	-2.55	36.98	-6.36	2.87	-2.44	38.94
17500.	-5.51	6.18	-1.27	30.10	-5.01	4.93	-0.91	35.38	-5.81	4.28	-1.34	38.37
18000.	-1.98	5.96	-4.01	24.88	-3.05	6.08	-2.15	32.34	-4.46	5.79	-2.17	36.85
18500.	0.76	5.56	-1.88	19.72	-1.00	6.12	-2.22	26.80	-2.60	6.11	-1.36	33.38
19000.	1.03	5.17	-0.10	15.43	-0.15	5.46	-0.78	22.18	-1.76	5.59	-1.07	28.39
19500.	-0.58	5.08	1.31	10.65	-0.85	5.21	0.10	20.55	-1.30	5.26	-1.58	27.22
20000.	-1.79	4.90	-2.32	13.69	-1.14	5.12	-1.50	19.86	-0.38	5.33	-3.11	25.94
20500.	-3.01	5.05	2.20	11.34	-1.97	5.44	1.26	16.99	0.11	5.76	-0.92	23.16
21000.	-6.89	6.18	1.14	12.72	-4.38	6.73	1.97	15.99	-0.51	6.63	1.78	21.80
21500.	-6.71	7.29	-4.64	13.71	-3.89	7.54	-3.04	17.84	-1.36	7.25	0.21	23.49
22000.	-4.11	7.83	-5.59	16.80	-1.41	7.66	-3.87	21.69	-1.01	7.05	-1.54	27.59
22500.	-3.46	8.38	5.24	19.00	-1.61	7.56	3.00	24.09	-1.40	6.67	2.53	29.05
23000.	-5.87	9.24	6.90	20.65	-3.62	8.30	8.14	24.96	-3.04	7.31	6.47	29.46
23500.	-7.17	10.38	6.50	26.26	-5.05	9.65	4.70	28.00	-3.35	8.44	3.82	31.55
24000.	-6.63	11.48	5.11	33.44	-4.15	10.37	5.36	36.13	-2.08	9.24	2.63	37.39
24500.	-5.12	12.52	6.81	38.60	-3.18	11.08	8.88	40.53	-1.10	9.66	6.43	40.70
25000.	-5.12	12.52	6.81	-99.99	-2.77	11.27	3.26	43.72	-1.36	9.66	3.76	44.18
25500.	-5.12	12.52	6.81	-99.99	-2.77	11.27	3.26	-99.99	-2.05	9.36	1.70	46.97
26000.	-5.12	12.52	6.81	-99.99	-2.77	11.27	3.26	-99.99	-2.05	9.36	1.70	-99.99
26500.	-5.12	12.52	6.81	-99.99	-2.77	11.27	3.26	-99.99	-2.05	9.36	1.70	-99.99
27000.	-5.12	12.52	6.81	-99.99	-2.77	11.27	3.26	-99.99	-2.05	9.36	1.70	-99.99
27500.	-5.12	12.52	6.81	-99.99	-2.77	11.27	3.26	-99.99	-2.05	9.36	1.70	-99.99
28000.	-5.12	12.52	6.81	-99.99	-2.77	11.27	3.26	-99.99	-2.05	9.36	1.70	-99.99
28500.	-5.12	12.52	6.81	-99.99	-2.77	11.27	3.26	-99.99	-2.05	9.36	1.70	-99.99
29000.	-5.12	12.52	6.81	-99.99	-2.77	11.27	3.26	-99.99	-2.05	9.36	1.70	-99.99
29500.	-5.12	12.52	6.81	-99.99	-2.77	11.27	3.26	-99.99	-2.05	9.36	1.70	-99.99
30000.	-5.12	12.52	6.81	-99.99	-2.77	11.27	3.26	-99.99	-2.05	9.36	1.70	-99.99
30500.	-5.12	12.52	6.81	-99.99	-2.77	11.27	3.26	-99.99	-2.05	9.36	1.70	-99.99
31000.	-5.12	12.52	6.81	-99.99	-2.77	11.27	3.26	-99.99	-2.05	9.36	1.70	-99.99
31500.	-5.12	12.52	6.81	-99.99	-2.77	11.27	3.26	-99.99	-2.05	9.36	1.70	-99.99
32000.	-5.12	12.52	6.81	-99.99	-2.77	11.27	3.26	-99.99	-2.05	9.36	1.70	-99.99
32500.	-5.12	12.52	6.81	-99.99	-2.77	11.27	3.26	-99.99	-2.05	9.36	1.70	-99.99
33000.	-5.12	12.52	6.81	-99.99	-2.77	11.27	3.26	-99.99	-2.05	9.36	1.70	-99.99
33500.	-5.12	12.52	6.81	-99.99	-2.77	11.27	3.26	-99.99	-2.05	9.36	1.70	-99.99
34000.	-5.12	12.52	6.81	-99.99	-2.77	11.27	3.26	-99.99	-2.05	9.36	1.70	-99.99
34500.	-5.12	12.52	6.81	-99.99	-2.77	11.27	3.26	-99.99	-2.05	9.36	1.70	-99.99
35000.	-5.12	12.52	6.81	-99.99	-2.77	11.27	3.26	-99.99	-2.05	9.36	1.70	-99.99
35500.	-5.12	12.52	6.81	-99.99	-2.77	11.27	3.26	-99.99	-2.05	9.36	1.70	-99.99
36000.	-5.12	12.52	6.81	-99.99	-2.77	11.27	3.26	-99.99	-2.05	9.36	1.70	-99.99
36500.	-5.12	12.52	6.81	-99.99	-2.77	11.27	3.26	-99.99	-2.05	9.36	1.70	-99.99
37000.	-5.12	12.52	6.81	-99.99	-2.77	11.27	3.26	-99.99	-2.05	9.36	1.70	-99.99
37500.	-5.12	12.52	6.81	-99.99	-2.77	11.27	3.26	-99.99	-2.05	9.36	1.70	-99.99

TABLE F.2. (continued).

Elevation: 2000 ft AGL

	PLANE 1				PLANE 2				PLANE 3			
X	WX	WY	WZ	DBZ	WX	WY	WZ	DBZ	WX	WY	WZ	DBZ
-37500.	-14.50	-2.98	0.00	-99.99	-12.30	-4.01	-0.57	-99.99	-9.73	-3.74	-1.91	-99.99
-37000.	-14.50	-2.98	0.00	-99.99	-12.30	-4.01	-0.57	-99.99	-9.73	-3.74	-1.91	-99.99
-36500.	-14.50	-2.98	0.00	-99.99	-12.30	-4.01	-0.57	-99.99	-9.73	-3.74	-1.91	-99.99
-36000.	-14.50	-2.98	0.00	-99.99	-12.30	-4.01	-0.57	-99.99	9.73	-3.74	-1.91	-99.99
-35500.	-14.50	-2.98	0.00	-99.99	-12.30	-4.01	-0.57	-99.99	-9.73	-3.74	-1.91	-99.99
-35000.	-14.50	-2.98	0.00	-99.99	-12.30	-4.01	-0.57	-99.99	-9.73	-3.74	-1.91	-99.99
-34500.	-14.50	-2.98	0.00	-99.99	-12.30	-4.01	-0.57	-99.99	-9.73	-3.74	-1.91	-99.99
-34000.	-14.50	-2.98	0.00	-99.99	-12.30	-4.01	-0.57	-99.99	-9.73	-3.74	-1.91	-99.99
-33500.	-14.50	-2.98	0.00	-99.99	-12.30	-4.01	-0.57	-99.99	-9.73	-3.74	-1.91	-99.99
-33000.	-14.50	-2.98	0.00	-99.99	-12.30	-4.01	-0.57	-99.99	-9.73	-3.74	-1.91	-99.99
-32500.	-14.50	-2.98	0.00	-99.99	-12.30	-4.01	-0.57	-99.99	-9.73	-3.74	-1.91	-99.99
-32000.	-14.50	-2.98	0.00	-99.99	-12.30	-4.01	-0.57	-99.99	-9.73	-3.74	-1.91	-99.99
-31500.	-14.50	-2.98	0.00	-99.99	-12.30	-4.01	-0.57	-99.99	-9.73	-3.74	-1.91	-99.99
-31000.	-14.50	-2.98	0.00	-99.99	-12.30	-4.01	-0.57	-99.99	-9.73	-3.74	-1.91	-99.99
-30500.	-14.50	-2.98	0.00	-99.99	-12.30	-4.01	-0.57	-99.99	-9.73	-3.74	-1.91	-99.99
-30000.	-14.50	-2.98	0.00	-99.99	-12.30	-4.01	-0.57	-99.99	-9.73	-3.74	-1.91	-99.99
-29500.	-14.50	-2.98	0.00	-99.99	-12.30	-4.01	-0.57	-99.99	-9.73	-3.74	-1.91	-99.99
-29000.	-14.50	-2.98	0.00	-99.99	-12.30	-4.01	-0.57	-99.99	-9.73	-3.74	-1.91	-99.99
-28500.	-14.50	-2.98	0.00	-99.99	-12.30	-4.01	-0.57	-99.99	-9.73	-3.74	-1.91	-99.99
-28000.	-14.50	-2.98	0.00	-99.99	-12.30	-4.01	-0.57	-99.99	-9.73	-3.74	-1.91	-99.99
-27500.	-14.50	-2.98	0.00	-99.99	-12.30	-4.01	-0.57	-99.99	-9.73	-3.74	-1.91	-99.99
-27000.	-14.50	-2.98	0.00	-99.99	-12.30	-4.01	-0.57	-99.99	-9.73	-3.74	-1.91	-99.99
-26500.	-14.50	-2.98	0.00	-99.99	-12.30	-4.01	-0.57	-99.99	-9.73	-3.74	-1.91	-99.99
-26000.	-14.50	-2.98	0.00	-99.99	-12.30	-4.01	-0.57	-99.99	-9.73	-3.74	-1.91	-99.99
-25500.	-14.50	-2.98	0.00	-99.99	-12.30	-4.01	-0.57	-99.99	-9.73	-3.74	-1.91	-99.99
-25000.	-14.50	-2.98	0.00	-99.99	-12.30	-4.01	-0.57	-99.99	-9.73	-3.74	-1.91	-99.99
-24500.	-14.50	-2.98	0.00	47.86	-12.30	-4.01	-0.57	-99.99	-9.73	-3.74	-1.91	-99.99
-24000.	-13.91	-4.78	-0.76	49.04	-12.30	-4.01	-0.57	50.06	-9.73	-3.74	-1.91	-99.99
-23500.	-13.43	-5.59	-2.52	49.78	-11.41	-5.20	-4.36	50.62	-9.73	-3.74	-1.91	52.03
-23000.	-13.37	-5.17	-1.75	50.39	-11.56	-4.76	-2.76	50.89	-9.88	-3.66	-4.52	51.57
-22500.	-13.67	-3.96	-2.46	50.07	-12.29	-3.39	-3.30	50.17	-11.29	-2.35	-5.71	50.01
-22000.	-13.39	-3.10	0.95	49.70	-12.26	-2.29	-1.10	49.70	-11.48	-1.27	-3.18	49.42
-21500.	-12.73	-1.59	-1.15	49.67	-11.68	-1.24	-1.61	49.79	-10.81	-0.63	-3.67	50.12
-21000.	-12.27	0.03	-1.53	49.48	-11.06	-0.15	-0.32	50.45	-9.98	-0.25	-2.04	51.71
-20500.	-11.79	0.76	-0.89	49.36	-10.47	0.26	1.29	50.54	-9.60	-0.14	0.32	51.58
-20000.	-11.30	0.54	-2.69	49.31	-10.30	0.24	-1.15	50.35	-9.73	0.08	-0.87	51.00
-19500.	-10.74	0.42	-2.29	49.16	-10.09	0.45	-0.52	50.14	-10.28	0.79	-0.07	50.79
-19000.	-10.37	1.65	-0.74	48.93	-10.13	1.74	-0.05	49.65	-10.41	1.92	-1.31	50.14
-18500.	-9.94	3.22	-2.81	48.50	-9.69	3.32	-0.76	49.24	-9.94	3.16	-2.31	49.71
-18000.	-9.30	4.42	-3.21	47.90	-8.88	4.49	-2.13	49.19	-9.01	4.31	-2.49	50.14
-17500.	-8.83	5.39	-2.60	48.17	-8.29	5.42	-2.04	49.31	-8.02	5.31	-2.44	50.89
-17000.	-8.62	6.22	-2.14	49.46	-7.98	6.09	-1.45	50.28	-7.45	5.77	-0.90	51.43
-16500.	-8.44	6.50	-1.03	50.91	-7.96	6.37	0.92	50.76	-7.39	6.16	0.65	51.61
16000.	-8.57	6.69	-0.14	50.43	-7.98	6.58	-1.00	50.85	-7.33	6.47	-1.84	51.67
-15500.	-8.54	6.70	-4.71	48.74	-7.90	6.74	-4.71	49.82	-7.16	6.90	-3.08	50.80
-15000.	-7.89	6.25	-4.59	47.42	-7.37	6.45	-3.45	48.39	-7.17	7.06	-1.97	49.02
-14500.	-7.32	5.56	-1.50	47.39	-6.99	5.94	-0.38	48.40	-7.06	6.69	-0.90	48.72
-14000.	-7.45	5.16	0.03	47.12	-7.14	5.73	-0.09	47.97	-7.25	6.64	-0.99	48.07
-13500.	-7.42	5.17	-2.14	45.89	-7.30	5.77	-1.18	45.72	-7.29	6.57	-1.66	45.59
-13000.	-6.95	5.49	-2.91	43.84	-6.92	5.93	-2.53	43.47	-6.79	6.42	-1.80	43.93
-12500.	-6.56	5.91	-0.30	42.72	-6.35	6.00	-0.34	42.58	-6.15	6.17	0.46	42.61
-12000.	-6.61	6.05	-0.50	42.26	-6.25	5.83	-1.63	42.24	-6.15	5.89	2.79	41.73
-11500.	-6.61	5.73	-0.67	41.93	-6.04	5.32	-2.11	42.12	-5.93	5.34	1.21	42.25
-11000.	-6.46	5.38	-0.62	41.20	-5.65	4.90	-1.46	41.23	-5.60	4.92	0.81	41.65
-10500.	-6.07	5.00	-0.66	40.82	-5.14	4.79	-1.29	39.44	-5.11	4.83	-1.08	40.76
-10000.	-5.48	4.32	-0.12	40.04	-4.57	4.40	-1.27	39.76	-4.58	4.71	-1.90	39.83
-9500.	-5.43	3.24	0.42	39.68	-4.89	3.42	-0.09	39.78	-4.81	4.06	-0.16	39.59
-9000.	-5.68	1.79	0.41	39.48	-5.68	2.07	0.19	39.24	-6.17	2.60	-0.65	38.41
-8500.	-5.53	0.61	0.18	38.72	-6.21	0.99	0.05	38.33	-6.95	1.49	-0.58	37.28
-8000.	-5.55	0.38	-1.37	38.55	-6.12	0.64	1.47	38.18	-7.18	1.11	0.12	35.97
-7500.	-5.49	0.55	-0.37	37.21	-6.21	0.68	3.96	36.50	-7.08	0.97	4.51	34.59
-7000.	-5.89	1.15	0.16	34.23	-6.97	1.39	0.03	33.28	-7.92	1.32	0.89	33.16
-6500.	-6.38	1.94	-0.19	31.64	-7.75	2.11	-3.21	30.65	-9.32	1.79	-2.08	32.24
-6000.	-7.24	2.49	3.81	29.62	-8.40	2.35	1.72	29.35	-9.77	1.71	1.27	30.72
-5500.	-8.58	2.96	5.64	29.09	-9.17	2.50	4.98	28.19	-10.35	1.42	4.26	29.31
-5000.	-9.44	2.51	7.70	28.03	-10.09	1.89	4.92	27.61	-9.97	0.22	2.66	28.76
-4500.	-9.49	1.05	0.14	29.07	-9.31	0.21	0.35	27.74	-8.54	-1.15	1.32	27.84
-4000.	-8.52	-0.21	-7.02	30.73	-7.99	-1.07	-4.74	29.06	-6.58	-2.07	-1.11	27.10
-3500.	-7.19	-0.84	-7.10	32.46	-7.00	-1.46	-8.10	30.91	-5.84	-1.75	-6.68	28.84
-3000.	-7.36	-1.28	0.16	34.47	-7.51	-1.24	-2.84	32.95	-6.31	-0.98	-3.90	30.73
-2500.	-9.70	-1.78	-0.03	39.56	-10.62	-0.83	-0.61	36.38	-8.23	0.02	1.49	34.22
-2000.	-12.34	-1.82	-8.23	45.96	-13.14	0.01	-7.66	43.41	10.57	1.12	0.21	39.11
-1500.	-12.90	-1.33	-13.10	51.90	-13.88	1.13	-14.31	49.98	-12.16	2.66	-12.87	47.16
-1000.	-12.01	-0.22	-11.71	54.09	-12.71	2.47	-16.91	52.88	-11.23	3.56	-20.32	49.91
-500.	-10.89	1.41	-8.24	54.54	-10.35	3.61	-14.23	54.73	-8.79	4.33	-20.91	52.67

TABLE F.2. (continued).

Elevation: 2000 ft AGL

0.	-9.86	2.30	-14.99	54.39	-7.70	4.00	-21.63	55.40	-6.22	4.24	-26.59	54.83
500.	-8.36	2.15	-21.05	53.28	-7.20	2.71	-27.45	55.33	-5.99	3.52	-33.74	56.49
1000.	-7.40	2.17	-15.00	51.43	-6.98	1.91	-21.02	53.65	-6.26	2.14	-28.41	57.05
1500.	-6.06	2.94	-8.63	50.73	-5.73	1.67	-13.92	52.54	-4.92	1.36	-19.05	55.81
2000.	-3.73	3.23	-9.91	50.91	-3.64	1.84	-10.71	50.33	-3.64	1.19	-13.80	52.43
2500.	-2.51	3.23	-8.00	50.09	-2.04	2.43	-8.87	47.52	-2.61	1.93	-12.33	47.91
3000.	-2.41	3.17	-11.66	48.59	-1.41	3.15	-12.76	45.99	-1.06	2.84	-10.35	42.59
3500.	-1.55	3.20	-13.55	46.89	-0.08	3.66	-10.53	44.65	1.23	3.69	1.53	41.91
4000.	0.00	3.55	-12.15	45.33	2.26	4.38	-8.46	43.75	3.92	4.78	5.38	42.08
4500.	2.91	3.59	-13.10	44.60	5.33	4.62	-12.29	43.46	7.28	4.94	-1.42	41.91
5000.	6.08	4.09	-7.33	43.87	8.56	4.63	-10.10	43.01	11.00	4.78	1.71	41.48
5500.	8.83	3.82	-3.15	42.63	10.78	4.57	4.84	41.66	13.54	4.06	8.18	40.44
6000.	10.24	1.61	-2.43	40.87	12.07	2.84	4.37	39.98	14.66	2.93	11.65	39.02
6500.	9.37	-1.45	0.09	39.71	11.11	0.66	4.66	38.73	14.31	1.44	6.36	37.10
7000.	4.88	-3.58	12.16	39.39	8.87	-1.65	5.37	37.66	13.05	-0.26	-0.48	36.10
7500.	-0.36	-5.37	22.60	38.17	4.91	-4.17	16.45	37.04	10.77	-2.53	6.66	35.50
8000.	-7.25	-6.95	32.12	35.80	-2.08	-6.50	29.68	35.55	4.14	-4.47	23.20	34.02
8500.	-13.47	-7.18	20.50	33.72	-10.11	-6.79	30.19	34.09	-5.36	-5.13	33.03	33.01
9000.	15.63	-5.13	14.39	32.29	-13.52	-4.90	11.27	33.04	-11.41	-3.40	10.46	32.91
9500.	-13.09	-2.02	-3.61	31.17	-11.85	-1.86	-6.27	31.76	-10.66	-0.50	-7.41	31.78
10000.	-10.66	0.77	1.86	30.50	-9.76	1.01	-1.60	30.57	-9.24	1.98	-4.89	30.87
10500.	-9.52	2.51	3.41	29.75	-9.48	3.35	1.95	29.87	-9.88	3.55	9.63	31.76
11000.	-8.97	3.02	1.61	30.35	-10.26	3.76	5.67	32.37	-11.56	3.88	13.68	33.60
11500.	-9.04	3.05	0.86	32.63	-10.86	3.76	4.30	35.17	-13.55	3.69	7.82	34.82
12000.	-8.85	3.91	2.99	-99.99	-10.77	3.67	5.24	35.22	-13.09	3.26	4.25	35.10
12500.	-8.74	4.55	2.94	-99.99	-9.53	3.60	4.99	35.65	-11.74	2.89	0.87	36.07
13000.	-8.38	4.67	-0.33	-99.99	-8.12	3.49	3.89	36.70	-9.94	2.82	-2.44	37.60
13500.	-8.02	4.05	0.62	-99.99	-8.83	3.79	3.45	38.01	-8.92	3.20	0.47	38.50
14000.	-8.33	3.61	-0.50	-99.99	-9.79	3.90	-0.22	41.54	-10.27	4.03	1.64	39.63
14500.	-7.75	3.16	-1.02	47.15	-9.65	4.05	-4.12	43.31	9.77	4.14	-2.49	39.76
15000.	-6.52	4.27	-2.64	45.60	-7.23	4.40	-5.33	41.66	-7.69	4.54	-2.43	38.60
15500.	-3.39	5.02	-3.77	38.52	-3.88	5.13	-4.39	39.18	-5.38	4.91	1.30	39.00
16000.	-0.94	5.05	0.47	37.84	-2.04	4.68	1.15	39.41	-4.34	4.73	2.94	39.17
16500.	-2.66	5.57	7.16	37.20	-3.02	4.67	3.28	39.28	-4.65	4.38	0.70	39.14
17000.	-4.74	7.02	3.20	36.85	-3.90	5.49	-2.53	39.13	-5.00	4.87	-3.01	39.29
17500.	-3.22	8.22	-3.04	35.11	-2.83	7.15	-1.77	38.44	-4.02	6.62	-2.39	39.68
18000.	0.26	8.17	-0.07	31.05	-0.42	8.54	-4.24	36.73	-2.26	8.29	-4.11	39.65
18500.	2.53	7.63	-3.33	27.03	1.59	8.35	-3.93	33.02	-0.43	8.34	-2.18	37.89
19000.	1.77	7.07	0.77	23.44	1.63	7.51	-0.36	29.66	-0.07	7.53	-1.05	35.21
19500.	-0.67	6.86	3.22	19.48	0.55	7.06	1.28	27.79	-0.19	7.07	-2.41	33.47
20000.	-2.50	6.41	-2.91	19.94	-0.21	6.78	-1.03	26.62	0.50	7.00	-4.53	31.76
20500.	-4.45	6.60	4.27	18.72	-1.57	7.13	3.65	25.18	0.67	7.44	-1.30	29.94
21000.	-8.05	7.96	2.74	20.07	-4.10	8.51	3.49	24.65	0.02	8.33	2.88	29.12
21500.	-7.54	9.32	-7.83	20.53	-3.79	9.53	-4.74	25.31	-0.70	9.07	0.95	29.40
22000.	-5.23	10.07	-7.75	21.80	-1.89	9.80	-4.13	26.52	-0.49	9.03	-1.56	30.87
22500.	-4.63	10.49	7.34	22.27	-2.36	9.58	5.39	26.67	-1.44	8.69	4.83	30.79
23000.	-5.65	11.19	8.86	22.88	-3.84	10.17	11.21	26.30	-2.99	9.22	9.02	29.93
23500.	-6.06	12.12	8.02	28.03	-4.50	11.36	5.03	28.44	-3.25	10.20	4.51	31.04
24000.	-5.21	13.03	4.62	34.58	-3.21	12.05	4.95	35.61	-2.04	10.97	2.58	36.32
24500.	-3.52	14.03	6.68	39.03	-1.70	12.85	9.56	39.91	-0.31	11.63	6.80	39.23
25000.	-3.52	14.03	6.68	-99.99	-1.28	13.06	4.26	43.29	-0.29	11.77	5.19	43.19
25500.	-3.52	14.03	6.68	-99.99	-1.28	13.06	4.26	-99.99	-1.40	11.37	2.50	46.52
26000.	-3.52	14.03	6.68	-99.99	-1.28	13.06	4.26	-99.99	-1.40	11.37	2.50	-99.99
26500.	-3.52	14.03	6.68	-99.99	-1.28	13.06	4.26	-99.99	-1.40	11.37	2.50	-99.99
27000.	-3.52	14.03	6.68	-99.99	-1.28	13.06	4.26	-99.99	-1.40	11.37	2.50	-99.99
27500.	-3.52	14.03	6.68	-99.99	-1.28	13.06	4.26	-99.99	-1.40	11.37	2.50	-99.99
28000.	-3.52	14.03	6.68	-99.99	-1.28	13.06	4.26	-99.99	-1.40	11.37	2.50	-99.99
28500.	-3.52	14.03	6.68	-99.99	-1.28	13.06	4.26	-99.99	-1.40	11.37	2.50	-99.99
29000.	-3.52	14.03	6.68	-99.99	-1.28	13.06	4.26	-99.99	-1.40	11.37	2.50	-99.99
29500.	-3.52	14.03	6.68	-99.99	-1.28	13.06	4.26	-99.99	-1.40	11.37	2.50	-99.99
30000.	-3.52	14.03	6.68	-99.99	-1.28	13.06	4.26	-99.99	-1.40	11.37	2.50	-99.99
30500.	-3.52	14.03	6.68	-99.99	-1.28	13.06	4.26	-99.99	-1.40	11.37	2.50	-99.99
31000.	-3.52	14.03	6.68	-99.99	-1.28	13.06	4.26	-99.99	-1.40	11.37	2.50	-99.99
31500.	-3.52	14.03	6.68	-99.99	-1.28	13.06	4.26	-99.99	-1.40	11.37	2.50	-99.99
32000.	-3.52	14.03	6.68	-99.99	-1.28	13.06	4.26	-99.99	-1.40	11.37	2.50	-99.99
32500.	-3.52	14.03	6.68	-99.99	-1.28	13.06	4.26	-99.99	-1.40	11.37	2.50	-99.99
33000.	-3.52	14.03	6.68	-99.99	-1.28	13.06	4.26	-99.99	-1.40	11.37	2.50	-99.99
33500.	-3.52	14.03	6.68	-99.99	-1.28	13.06	4.26	-99.99	-1.40	11.37	2.50	-99.99
34000.	-3.52	14.03	6.68	-99.99	-1.28	13.06	4.26	-99.99	-1.40	11.37	2.50	-99.99
34500.	-3.52	14.03	6.68	-99.99	-1.28	13.06	4.26	-99.99	-1.40	11.37	2.50	-99.99
35000.	-3.52	14.03	6.68	-99.99	-1.28	13.06	4.26	-99.99	-1.40	11.37	2.50	-99.99
35500.	-3.52	14.03	6.68	-99.99	-1.28	13.06	4.26	-99.99	-1.40	11.37	2.50	-99.99
36000.	-3.52	14.03	6.68	-99.99	-1.28	13.06	4.26	-99.99	-1.40	11.37	2.50	-99.99
36500.	-3.52	14.03	6.68	-99.99	-1.28	13.06	4.26	-99.99	-1.40	11.37	2.50	-99.99
37000.	-3.52	14.03	6.68	-99.99	-1.28	13.06	4.26	-99.99	-1.40	11.37	2.50	-99.99
37500.	-3.52	14.03	6.68	-99.99	-1.28	13.06	4.26	-99.99	-1.40	11.37	2.50	-99.99

TABLE F.3. JAWS Corridor Data Set #3 (along path $\overline{AB}$ in 5AU1850 measurement).

Path Shear Intensity: Class I
Plane Separated by 500 ft
X = Horizontal Distance (ft)

WX = Wind in X Direction (kts)
WY = Wind in Y Direction (kts)
WZ = Wind in Z Direction (kts)
DBZ = Radar Reflectivity (dBZ)

Elevation: 0 ft AGL

	PLANE 1				PLANE 2				PLANE 3			
X	WX	WY	WZ	DBZ	WX	WY	WZ	DBZ	WX	WY	WZ	DBZ
37500.	-6.31	0.92	0.00	-99.99	-6.92	1.45	0.00	-99.99	-7.48	1.83	0.00	-99.99
-37000.	-6.31	0.92	0.00	-99.99	-6.92	1.45	0.00	-99.99	-7.48	1.83	0.00	-99.99
-36500.	-6.31	0.92	0.00	-99.99	-6.92	1.45	0.00	-99.99	-7.48	1.83	0.00	-99.99
-36000.	-6.31	0.92	0.00	-99.99	-6.92	1.45	0.00	-99.99	-7.48	1.83	0.00	-99.99
-35500.	-6.31	0.92	0.00	-99.99	-6.92	1.45	0.00	-99.99	-7.48	1.83	0.00	-99.99
-35000.	-6.31	0.92	0.00	-99.99	-6.92	1.45	0.00	-99.99	-7.48	1.83	0.00	-99.99
-34500.	-6.31	0.92	0.00	-99.99	-6.92	1.45	0.00	-99.99	-7.48	1.83	0.00	-99.99
-34000.	-6.31	0.92	0.00	-99.99	-6.92	1.45	0.00	-99.99	-7.48	1.83	0.00	-99.99
-33500.	-6.31	0.92	0.00	-99.99	-6.92	1.45	0.00	-99.99	-7.48	1.83	0.00	-99.99
-33000.	-6.31	0.92	0.00	-99.99	-6.92	1.45	0.00	-99.99	-7.48	1.83	0.00	-99.99
-32500.	-6.31	0.92	0.00	-99.99	-6.92	1.45	0.00	-99.99	-7.48	1.83	0.00	-99.99
-32000.	-6.31	0.92	0.00	-99.99	-6.92	1.45	0.00	-99.99	-7.48	1.83	0.00	-99.99
-31500.	-6.31	0.92	0.00	-99.99	-6.92	1.45	0.00	-99.99	-7.40	1.83	0.00	-99.99
-31000.	-6.31	0.92	0.00	-99.99	-6.92	1.45	0.00	-99.99	-7.40	1.83	0.00	-99.99
-30500.	-6.31	0.92	0.00	-99.99	-6.92	1.45	0.00	-99.99	-7.48	1.83	0.00	-99.99
-30000.	-6.31	0.92	0.00	-99.99	-6.92	1.45	0.00	-99.99	-7.48	1.83	0.00	-99.99
-29500.	-6.31	0.92	0.00	-99.99	-6.92	1.45	0.00	-99.99	-7.48	1.83	0.00	-99.99
-29000.	-6.31	0.92	0.00	-99.99	-6.92	1.45	0.00	-99.99	-7.48	1.83	0.00	-99.99
-28500.	-6.31	0.92	0.00	-99.99	-6.92	1.45	0.00	-99.99	-7.48	1.83	0.00	-99.99
-28000.	-6.31	0.92	0.00	-99.99	-6.92	1.45	0.00	-99.99	-7.48	1.83	0.00	-99.99
-27500.	-6.31	0.92	0.00	-99.99	-6.92	1.45	0.00	-99.99	-7.48	1.83	0.00	-99.99
-27000.	-6.31	0.92	0.00	-99.99	-6.92	1.45	0.00	-99.99	-7.48	1.83	0.00	-99.99
-26500.	-6.31	0.92	0.00	-99.99	-6.92	1.45	0.00	-99.99	-7.48	1.83	0.00	-99.99
-26000.	-6.31	0.92	0.00	-99.99	-6.92	1.45	0.00	-99.99	-7.48	1.83	0.00	-99.99
-25500.	-6.31	0.92	0.00	-99.99	-6.92	1.45	0.00	-99.99	-7.48	1.83	0.00	-99.99
-25000.	-6.31	0.92	0.00	-99.99	-6.92	1.45	0.00	-99.99	-7.48	1.83	0.00	-99.99
-24500.	-6.31	0.92	0.00	43.74	-6.92	1.45	0.00	-99.99	-7.48	1.83	0.00	-99.99
-24000.	-6.59	0.94	0.00	45.76	-6.92	1.45	0.00	48.97	-7.48	1.83	0.00	-99.99
-23500.	-6.03	0.21	0.00	46.90	-6.20	0.73	0.00	49.11	-7.48	1.83	0.00	53.73
-23000.	-4.82	-1.14	0.00	49.52	-4.30	-1.08	0.00	51.68	-6.46	0.95	0.00	53.34
-22500.	-5.07	-1.03	0.00	51.31	-6.07	-0.37	0.00	52.70	-5.08	-0.71	0.00	53.27
22000.	-4.34	-1.07	0.00	51.13	-8.31	0.69	0.00	52.32	-7.28	0.58	0.00	53.83
-21500.	-3.64	-1.24	0.00	51.00	-6.10	0.21	0.00	-99.99	-6.87	0.95	0.00	-99.99
-21000.	-6.60	0.48	0.00	-99.99	-7.71	1.38	0.00	-99.99	-7.81	1.75	0.00	-99.99
-20500.	-6.82	1.15	0.00	45.47	-8.70	2.14	0.00	-99.99	-9.32	2.55	0.00	-99.99
-20000.	-7.30	1.69	0.00	45.64	-8.62	2.36	0.00	49.48	-9.93	2.92	0.00	51.80
-19500.	-7.94	2.42	0.00	44.26	-7.03	2.84	0.00	47.07	-8.41	3.58	0.00	46.66
-19000.	-8.95	2.73	0.00	48.07	-7.12	3.25	0.00	48.23	-8.81	3.81	0.00	45.84
-18500.	-6.74	2.95	0.00	46.52	-7.87	3.34	0.00	47.80	-10.31	3.96	0.00	42.67
-18000.	-7.74	3.42	0.00	44.20	-9.92	3.62	0.00	43.66	-11.80	4.32	0.00	43.29
-17500.	-10.78	4.06	0.00	43.60	-12.38	4.35	0.00	44.07	-13.74	4.69	0.00	44.32
-17000.	-10.60	3.97	0.00	44.18	-12.25	4.37	0.00	44.75	-13.98	4.71	0.00	44.83
-16500.	-10.66	3.91	0.00	44.31	-11.66	4.35	0.00	44.40	-12.93	4.62	0.00	44.83
-16000.	-10.86	4.23	0.00	43.94	-11.78	4.62	0.00	44.37	-13.46	5.09	0.00	44.93
-15500.	-11.69	5.16	0.00	43.34	-12.73	5.89	0.00	44.35	-14.51	6.14	0.00	45.18
-15000.	-11.84	5.61	0.00	42.48	-13.03	6.52	0.00	43.78	-14.44	6.99	0.00	45.41
-14500.	-11.03	5.40	0.00	41.62	-12.21	6.55	0.00	43.03	-14.07	7.09	0.00	45.27
-14000.	-9.85	5.14	0.00	40.88	-10.93	6.78	0.00	42.36	-12.22	7.57	0.00	45.00
-13500.	-9.41	5.63	0.00	40.40	-9.43	7.00	0.00	41.34	-9.76	7.50	0.00	43.75
-13000.	-9.04	5.21	0.00	39.09	-8.42	5.79	0.00	39.60	-9.09	7.26	0.00	43.33
-12500.	-7.78	4.44	0.00	37.53	-8.41	5.11	0.00	38.62	-8.62	6.74	0.00	41.82
-12000.	-7.25	4.51	0.00	37.13	-8.28	4.93	0.00	37.52	-10.57	6.84	0.00	37.70
-11500.	-7.32	4.62	0.00	37.27	-8.83	5.11	0.00	37.22	-9.43	5.46	0.00	37.15
-11000.	-7.59	4.80	0.00	36.88	-8.29	4.99	0.00	37.22	-8.91	5.07	0.00	37.23
-10500.	-6.83	3.81	0.00	35.51	-7.09	4.75	0.00	35.72	-8.40	4.57	0.00	35.15
-10000.	-9.42	4.04	0.00	33.36	-9.87	4.56	0.00	32.46	-8.66	3.90	0.00	31.70
-9500.	-11.94	3.86	0.00	34.72	-11.41	3.75	0.00	33.18	-9.50	3.10	0.00	31.16
-9000.	-13.63	3.55	0.00	35.01	-12.74	3.22	0.00	33.49	-11.31	2.52	0.00	30.30
-8500.	-15.28	3.28	0.00	38.04	-14.21	2.92	0.00	33.44	-12.55	1.95	0.00	30.02
-8000.	-15.25	3.13	0.00	34.56	-15.55	2.72	0.00	33.09	-14.07	1.56	0.00	30.26
-7500.	-14.69	3.08	0.00	33.86	-15.04	3.00	0.00	32.47	-14.73	3.28	0.00	30.28
-7000.	-14.68	3.13	0.00	37.52	-14.69	3.91	0.00	37.73	-13.14	5.25	0.00	31.88
-6500.	-14.75	3.27	0.00	39.30	-15.51	4.54	0.00	38.73	-16.07	6.69	0.00	33.74
-6000.	-15.26	2.78	0.00	31.89	-16.10	4.78	0.00	34.07	-15.69	6.00	0.00	32.37
-5500.	-16.63	2.32	0.00	29.53	-17.93	3.93	0.00	30.17	-16.14	4.75	0.00	30.69
-5000.	-16.74	1.38	0.00	26.45	-16.69	3.31	0.00	28.09	-15.95	3.58	0.00	28.31
-4500.	-14.52	1.06	0.00	29.13	-15.84	3.22	0.00	27.97	-16.54	3.59	0.00	-99.99
-4000.	-15.10	1.02	0.00	27.76	-18.13	3.52	0.00	-99.99	-18.99	5.70	0.00	-99.99
-3500.	-21.34	1.62	0.00	24.47	-19.78	4.20	0.00	29.71	-15.09	3.85	0.00	-99.99
-3000.	-26.02	1.95	0.00	36.31	-18.85	3.53	0.00	36.12	-14.54	2.20	0.00	-99.99
-2500.	-30.37	3.26	0.00	46.84	-22.41	3.49	0.00	44.83	-10.82	3.31	0.00	35.66
-2000.	-26.17	4.63	0.00	50.23	-20.55	5.01	0.00	46.01	-17.64	4.82	0.00	37.53
-1500.	-21.00	4.71	0.00	53.21	-15.42	5.08	0.00	49.95	-13.99	4.82	0.00	43.22
-1000.	-15.64	3.56	0.00	54.86	-11.29	3.44	0.00	53.61	-9.97	2.50	0.00	52.78
-500.	-12.40	2.94	0.00	55.47	-8.61	4.12	0.00	54.90	-8.56	3.97	0.00	55.26

TABLE F.3. (continued).

Elevation: 0 ft AGL

0.	-10.33	3.95	0.00	54.65	-1.76	5.30	0.00	54.10	-6.18	6.74	0.00	55.60
500.	-5.33	5.54	0.00	52.59	-0.59	6.02	0.00	51.88	0.02	5.76	0.00	53.65
1000.	-4.39	6.42	0.00	51.48	-0.20	6.86	0.00	50.36	4.89	4.76	0.00	51.15
1500.	0.69	3.99	0.00	50.30	3.85	5.40	0.00	49.29	6.37	4.62	0.00	48.52
2000.	2.73	4.48	0.00	49.50	5.90	5.20	0.00	48.10	7.57	4.73	0.00	46.71
2500.	5.98	4.54	0.00	49.00	9.43	5.55	0.00	47.85	9.32	5.54	0.00	45.61
3000.	9.39	3.40	0.00	47.69	11.77	4.92	0.00	46.55	12.51	6.38	0.00	45.81
3500.	9.75	4.07	0.00	45.23	10.85	6.11	0.00	44.92	13.38	8.11	0.00	45.60
4000.	9.80	5.62	0.00	42.07	9.74	7.44	0.00	43.71	11.25	10.48	0.00	44.66
4500.	12.15	6.83	0.00	42.66	10.70	7.93	0.00	43.11	11.47	10.94	0.00	43.90
5000.	13.08	7.62	0.00	40.62	13.38	7.40	0.00	41.44	14.02	10.29	0.00	41.79
5500.	16.87	10.50	0.00	38.77	19.23	9.40	0.00	38.81	16.69	10.17	0.00	38.65
6000.	18.91	11.88	0.00	38.91	21.10	11.59	0.00	38.68	19.30	10.76	0.00	37.10
6500.	15.70	14.29	0.00	40.36	18.24	14.28	0.00	39.80	17.80	12.85	0.00	38.16
7000.	19.17	11.79	0.00	40.70	17.09	13.47	0.00	40.25	16.50	12.04	0.00	38.89
7500.	20.70	9.47	0.00	39.33	18.43	11.15	0.00	39.37	15.74	10.33	0.00	38.15
8000.	21.20	7.54	0.00	36.84	20.07	8.59	0.00	36.85	18.67	5.76	0.00	35.58
8500.	20.00	5.20	0.00	34.27	22.03	3.37	0.00	33.39	23.72	-0.16	0.00	32.59
9000.	17.67	1.40	0.00	31.45	20.65	-1.45	0.00	30.86	20.10	-2.91	0.00	31.22
9500.	16.61	-4.41	0.00	30.15	16.85	-4.40	0.00	31.51	15.24	-4.15	0.00	32.47
10000.	8.67	-5.27	0.00	31.76	12.36	-6.67	0.00	33.08	10.31	-5.52	0.00	33.58
10500.	5.00	-7.10	0.00	37.38	6.71	-9.46	0.00	34.99	4.14	-7.44	0.00	34.13
11000.	-0.50	-7.12	0.00	42.42	2.29	-10.54	0.00	37.20	0.53	-10.49	0.00	33.93
11500.	-5.41	-5.27	0.00	-99.99	-1.17	-9.20	0.00	42.49	-0.44	-12.93	0.00	33.47
12000.	-5.44	-3.16	0.00	-99.99	-1.92	-6.95	0.00	-99.99	1.18	-10.04	0.00	35.28
12500.	-9.11	-3.85	0.00	-99.99	-4.48	-6.62	0.00	-99.99	-1.35	-9.60	0.00	34.51
13000.	-10.08	-4.31	0.00	-99.99	-10.03	-6.62	0.00	-99.99	-7.88	-8.91	0.00	35.15
13500.	-10.44	-5.58	0.00	-99.99	-11.39	-7.10	0.00	-99.99	-10.76	-7.58	0.00	36.05
14000.	-10.04	-5.81	0.00	-99.99	-10.64	-6.07	0.00	-99.99	-12.29	-6.72	0.00	-99.99
14500.	-10.47	-6.95	0.00	-99.99	-10.08	-6.11	0.00	-99.99	-11.35	-5.85	0.00	-99.99
15000.	-8.16	-7.12	0.00	-99.99	-9.30	-6.62	0.00	-99.99	-9.75	-5.98	0.00	37.96
15500.	-7.73	-7.42	0.00	-99.99	-8.52	-6.53	0.00	38.43	-8.63	-5.98	0.00	38.17
16000.	-7.65	-7.99	0.00	-99.99	-8.01	-6.80	0.00	37.63	-8.28	-5.73	0.00	37.13
16500.	-6.82	-8.13	0.00	38.30	-6.85	-6.97	0.00	39.04	-6.65	-5.80	0.00	34.24
17000.	-6.39	-7.96	0.00	37.44	-6.19	-7.34	0.00	40.79	-7.32	-6.07	0.00	39.34
17500.	-4.12	-5.92	0.00	33.39	-6.13	-6.19	0.00	39.47	-8.37	-5.42	0.00	41.28
18000.	-2.70	-4.78	0.00	27.11	-3.82	-4.23	0.00	33.52	-6.73	-3.92	0.00	39.27
18500.	-1.17	-3.61	0.00	16.73	-2.70	-3.10	0.00	21.36	-3.27	-2.46	0.00	33.23
19000.	-1.02	-2.30	0.00	16.03	-1.61	-2.09	0.00	19.85	-2.62	-1.35	0.00	27.67
19500.	-1.61	-0.74	0.00	15.95	-1.91	-0.89	0.00	19.03	-2.02	-0.62	0.00	28.69
20000.	-0.47	0.17	0.00	14.24	-2.00	-0.05	0.00	19.68	-2.23	0.15	0.00	27.37
20500.	3.01	1.92	0.00	19.62	-0.37	0.70	0.00	27.91	-1.55	0.67	0.00	30.35
21000.	3.85	3.40	0.00	27.94	2.29	2.05	0.00	34.50	0.44	1.66	0.00	33.12
21500.	1.39	4.13	0.00	25.66	1.97	2.86	0.00	28.29	1.22	1.84	0.00	33.20
22000.	-0.24	4.49	0.00	24.52	-0.45	2.62	0.00	27.70	1.15	1.41	0.00	30.97
22500.	1.08	4.55	0.00	15.84	-0.90	2.81	0.00	21.57	-1.49	1.73	0.00	24.00
23000.	3.01	4.13	0.00	17.93	1.20	3.28	0.00	19.69	0.27	2.52	0.00	22.47
23500.	2.63	3.36	0.00	22.14	2.04	2.83	0.00	21.67	1.14	2.60	0.00	24.89
24000.	1.70	2.97	0.00	27.86	1.02	2.40	0.00	27.76	0.32	2.38	0.00	26.10
24500.	0.42	2.82	0.00	32.85	-0.83	1.84	0.00	31.59	-2.26	1.54	0.00	31.00
25000.	0.42	2.82	0.00	-99.99	-3.14	1.33	0.00	36.26	-3.96	1.19	0.00	32.91
25500.	0.42	2.82	0.00	-99.99	-3.14	1.33	0.00	-99.99	-5.59	1.24	0.00	36.25
26000.	0.42	2.82	0.00	-99.99	-3.14	1.33	0.00	-99.99	-5.59	1.24	0.00	-99.99
26500.	0.42	2.82	0.00	-99.99	-3.14	1.33	0.00	-99.99	-5.59	1.24	0.00	-99.99
27000.	0.42	2.82	0.00	-99.99	-3.14	1.33	0.00	-99.99	-5.59	1.24	0.00	-99.99
27500.	0.42	2.82	0.00	-99.99	-3.14	1.33	0.00	-99.99	-5.59	1.24	0.00	-99.99
28000.	0.42	2.82	0.00	-99.99	-3.14	1.33	0.00	-99.99	-5.59	1.24	0.00	-99.99
28500.	0.42	2.82	0.00	-99.99	-3.14	1.33	0.00	-99.99	-5.59	1.24	0.00	-99.99
29000.	0.42	2.82	0.00	-99.99	-3.14	1.33	0.00	-99.99	-5.59	1.24	0.00	-99.99
29500.	0.42	2.82	0.00	-99.99	-3.14	1.33	0.00	-99.99	-5.59	1.24	0.00	-99.99
30000.	0.42	2.82	0.00	-99.99	-3.14	1.33	0.00	-99.99	-5.59	1.24	0.00	-99.99
30500.	0.42	2.82	0.00	-99.99	-3.14	1.33	0.00	-99.99	-5.59	1.24	0.00	-99.99
31000.	0.42	2.82	0.00	-99.99	-3.14	1.33	0.00	-99.99	-5.59	1.24	0.00	-99.99
31500.	0.42	2.82	0.00	-99.99	-3.14	1.33	0.00	-99.99	-5.59	1.24	0.00	-99.99
32000.	0.42	2.82	0.00	-99.99	-3.14	1.33	0.00	-99.99	-5.59	1.24	0.00	-99.99
32500.	0.42	2.82	0.00	-99.99	-3.14	1.33	0.00	-99.99	-5.59	1.24	0.00	-99.99
33000.	0.42	2.82	0.00	-99.99	-3.14	1.33	0.00	-99.99	-5.59	1.24	0.00	-99.99
33500.	0.42	2.82	0.00	-99.99	-3.14	1.33	0.00	-99.99	-5.59	1.24	0.00	-99.99
34000.	0.42	2.82	0.00	-99.99	-3.14	1.33	0.00	-99.99	-5.59	1.24	0.00	-99.99
34500.	0.42	2.82	0.00	-99.99	-3.14	1.33	0.00	-99.99	-5.59	1.24	0.00	-99.99
35000.	0.42	2.82	0.00	-99.99	-3.14	1.33	0.00	-99.99	-5.59	1.24	0.00	-99.99
35500.	0.42	2.82	0.00	-99.99	-3.14	1.33	0.00	-99.99	-5.59	1.24	0.00	-99.99
36000.	0.42	2.82	0.00	-99.99	-3.14	1.33	0.00	-99.99	-5.59	1.24	0.00	-99.99
36500.	0.42	2.82	0.00	-99.99	-3.14	1.33	0.00	-99.99	-5.59	1.24	0.00	-99.99
37000.	0.42	2.82	0.00	-99.99	-3.14	1.33	0.00	-99.99	-5.59	1.24	0.00	-99.99
37500.	0.42	2.82	0.00	-99.99	-3.14	1.33	0.00	-99.99	-5.59	1.24	0.00	-99.99

TABLE F.3. (continued).

Elevation: 500 ft AGL

	PLANE 1				PLANE 2				PLANE 3			
X	WX	WY	WZ	DBZ	WX	WY	WZ	DBZ	WX	WY	WZ	DBZ
-37500.	-7.64	-2.01	-0.02	-99.99	-7.65	-0.67	-0.21	-99.99	-7.83	0.44	-0.46	-99.99
-37000.	-7.64	-2.01	-0.02	-99.99	-7.65	-0.67	-0.21	-99.99	-7.83	0.44	-0.46	-99.99
-36500.	-7.64	-2.01	-0.02	-99.99	-7.65	-0.67	-0.21	-99.99	-7.83	0.44	-0.46	-99.99
-36000.	-7.64	-2.01	-0.02	-99.99	-7.65	-0.67	-0.21	-99.99	-7.83	0.44	-0.46	-99.99
-35500.	-7.64	-2.01	-0.02	-99.99	-7.65	-0.67	-0.21	-99.99	-7.83	0.44	-0.46	-99.99
-35000.	-7.64	-2.01	-0.02	-99.99	-7.65	-0.67	-0.21	-99.99	-7.83	0.44	-0.46	-99.99
-34500.	-7.64	-2.01	-0.02	-99.99	-7.65	-0.67	-0.21	-99.99	-7.83	0.44	-0.46	-99.99
-34000.	-7.64	-2.01	-0.02	-99.99	-7.65	-0.67	-0.21	-99.99	-7.83	0.44	-0.46	-99.99
-33500.	-7.64	-2.01	-0.02	-99.99	-7.65	-0.67	-0.21	-99.99	-7.83	0.44	-0.46	-99.99
-33000.	-7.64	-2.01	-0.02	-99.99	-7.65	-0.67	-0.21	-99.99	-7.83	0.44	-0.46	-99.99
-32500.	-7.64	-2.01	-0.02	-99.99	-7.65	-0.67	-0.21	-99.99	-7.83	0.44	-0.46	-99.99
-32000.	-7.64	-2.01	-0.02	-99.99	-7.65	-0.67	-0.21	-99.99	-7.83	0.44	-0.46	-99.99
-31500.	-7.64	-2.01	-0.02	-99.99	-7.65	-0.67	-0.21	-99.99	-7.83	0.44	-0.46	-99.99
-31000.	-7.64	-2.01	-0.02	-99.99	-7.65	-0.67	-0.21	-99.99	-7.83	0.44	-0.46	-99.99
-30500.	-7.64	-2.01	-0.02	-99.99	-7.65	-0.67	-0.21	-99.99	-7.83	0.44	-0.46	-99.99
-30000.	-7.64	-2.01	-0.02	-99.99	-7.65	-0.67	-0.21	-99.99	-7.83	0.44	-0.46	-99.99
-29500.	-7.64	-2.01	-0.02	-99.99	-7.65	-0.67	-0.21	-99.99	-7.83	0.44	-0.46	-99.99
-29000.	-7.64	-2.01	-0.02	-99.99	-7.65	-0.67	-0.21	-99.99	-7.83	0.44	-0.46	-99.99
-28500.	-7.64	-2.01	-0.02	-99.99	-7.65	-0.67	-0.21	-99.99	-7.83	0.44	-0.46	-99.99
-28000.	-7.64	-2.01	-0.02	-99.99	-7.65	-0.67	-0.21	-99.99	-7.83	0.44	-0.46	-99.99
-27500.	-7.64	-2.01	-0.02	-99.99	-7.65	-0.67	-0.21	-99.99	-7.83	0.44	-0.46	-99.99
-27000.	-7.64	-2.01	-0.02	-99.99	-7.65	-0.67	-0.21	-99.99	-7.83	0.44	-0.46	-99.99
-26500.	-7.64	-2.01	-0.02	-99.99	-7.65	-0.67	-0.21	-99.99	-7.83	0.44	-0.46	-99.99
-26000.	-7.64	-2.01	-0.02	-99.99	-7.65	-0.67	-0.21	-99.99	-7.83	0.44	-0.46	-99.99
-25500.	-7.64	-2.01	-0.02	-99.99	-7.65	-0.67	-0.21	-99.99	-7.83	0.44	-0.46	-99.99
-25000.	-7.64	-2.01	-0.02	-99.99	-7.65	-0.67	-0.21	-99.99	-7.83	0.44	-0.46	-99.99
-24500.	-7.64	-2.01	-0.02	45.45	-7.65	-0.67	-0.21	-99.99	-7.83	0.44	-0.46	-99.99
-24000.	-7.44	-1.47	-1.04	47.72	-7.65	-0.67	-0.21	50.41	-7.83	0.44	-0.46	-99.99
-23500.	-7.05	-1.33	-0.85	49.32	-7.83	-0.48	-0.82	51.19	-7.83	0.44	-0.46	53.93
-23000.	-7.06	-1.08	-0.55	50.88	-7.86	-0.59	-0.54	52.03	-8.54	0.73	-0.80	53.36
-22500.	-7.63	-0.26	0.22	51.22	-8.94	0.35	0.59	52.30	-8.82	0.72	0.70	53.19
-22000.	-7.94	0.13	-2.05	50.43	-9.80	0.93	-1.71	52.08	-9.50	1.63	-0.53	53.72
-21500.	-6.95	-0.25	0.55	50.34	-8.89	1.28	-1.06	-99.99	-9.59	2.32	-0.24	-99.99
-21000.	-9.58	1.80	1.54	-99.99	-10.18	2.75	0.48	-99.99	-10.18	3.27	0.43	-99.99
-20500.	-10.61	3.20	-0.30	46.46	-11.62	4.30	0.41	-99.99	-11.35	4.37	0.83	-99.99
-20000.	-11.17	3.91	-0.59	46.20	-11.96	4.65	-0.84	48.58	-12.25	4.92	-0.18	49.81
-19500.	-10.80	4.06	-1.12	44.95	-10.84	4.71	-1.75	46.90	-11.15	4.96	-1.01	47.28
-19000.	-10.69	4.17	-0.86	46.43	-10.34	4.71	-0.41	47.03	-11.35	4.97	0.57	46.54
-18500.	-9.24	4.13	-1.49	45.55	-10.20	4.57	-0.74	46.31	-12.08	5.00	0.56	44.47
-18000.	-9.60	4.28	1.58	44.46	-10.92	4.41	1.47	44.06	-12.70	5.06	0.71	44.30
-17500.	-11.12	4.56	0.65	44.07	-12.31	4.70	0.67	44.31	-13.48	4.85	0.31	44.66
-17000.	-11.27	4.81	-0.61	44.00	-12.45	4.99	-0.42	44.40	-13.65	5.00	-0.90	44.68
-16500.	-10.78	4.43	-1.00	44.02	-11.81	4.97	-0.06	44.37	-12.89	5.26	-0.63	45.07
-16000.	-10.65	4.62	-0.18	44.22	-11.54	5.08	-0.15	44.70	-13.00	5.64	0.10	45.43
15500.	-10.99	5.20	-0.27	44.34	-11.82	5.92	-0.24	45.21	-13.33	6.25	-0.36	45.73
-15000.	-11.08	5.47	-0.97	43.84	-12.01	6.41	-0.99	44.91	-13.11	6.98	-0.56	46.03
-14500.	-10.46	5.31	-1.91	43.01	-11.35	6.40	-2.12	44.29	-13.31	7.51	-1.83	45.99
-14000.	-9.28	4.91	-1.66	42.17	-10.01	6.10	-2.41	43.48	-11.04	7.17	-4.04	45.78
-13500.	-9.46	5.82	-0.75	41.68	-8.68	6.26	-1.43	42.65	-8.35	6.90	-3.13	44.97
-13000.	-9.64	6.18	-1.00	40.77	-8.69	6.33	-0.08	41.92	-7.34	7.10	-0.85	44.87
-12500.	-8.95	5.97	-0.80	39.77	-9.06	6.26	-0.70	41.37	-8.00	7.16	-0.21	43.83
-12000.	-8.35	5.83	-0.21	38.91	-9.05	5.88	-0.35	39.86	-10.28	6.96	0.82	40.47
-11500.	-8.32	5.87	0.91	38.11	-9.37	5.76	-0.58	38.34	-9.43	5.83	-0.55	38.25
-11000.	-8.66	6.20	-0.85	37.49	-8.83	5.81	-0.19	38.06	-8.91	5.53	-0.05	38.15
-10500.	-7.74	5.70	-0.35	37.07	-8.75	6.81	-0.10	37.15	-9.02	5.96	0.97	37.31
-10000.	-9.38	5.37	1.69	36.40	-9.73	5.66	1.70	34.37	-9.56	5.67	1.34	34.50
-9500.	-11.65	5.16	1.45	36.42	-11.54	5.33	1.75	34.04	-10.11	4.50	1.90	32.49
-9000.	-12.84	5.27	0.57	37.12	-13.30	5.62	1.91	35.43	-12.79	5.63	1.39	33.84
-8500.	-14.79	4.84	0.22	38.38	-14.38	5.72	1.63	36.05	-12.09	5.32	1.91	33.93
-8000.	-15.73	5.80	-1.27	35.75	-17.42	7.05	1.82	33.68	-14.73	5.71	2.85	33.02
-7500.	-15.17	6.22	-3.05	34.08	-16.32	7.12	-2.40	33.15	-16.61	7.17	0.08	31.26
-7000.	-12.69	4.68	-3.08	37.57	-13.62	5.95	-2.81	37.11	-14.41	7.65	-3.51	32.33
-6500.	-12.08	4.10	-0.58	38.29	-13.35	5.28	-0.62	37.18	-12.19	5.42	-1.22	33.49
-6000.	-13.33	4.68	0.14	31.97	-13.65	4.74	1.32	33.10	-12.32	4.48	1.06	32.62
-5500.	-15.29	4.24	0.77	30.17	-16.40	4.34	2.26	29.76	-14.16	3.94	1.31	31.33
-5000.	-16.61	2.00	-2.80	27.92	-16.35	3.73	-1.78	28.40	-14.37	3.37	0.36	29.39
-4500.	-15.02	1.42	-2.31	30.28	-15.88	3.20	-0.86	29.79	-14.77	3.22	1.80	-99.99
-4000.	-15.67	1.76	0.45	30.50	-17.20	3.18	1.17	-99.99	-17.30	4.49	0.24	-99.99
-3500.	-21.02	2.85	5.65	31.69	-19.65	3.73	1.42	31.83	-14.70	2.61	1.06	-99.99
-3000.	-27.35	4.49	4.27	40.55	-22.76	4.28	3.58	40.00	-15.72	2.21	5.36	-99.99
-2500.	-28.79	4.30	-1.17	47.31	-22.43	3.60	-0.89	44.87	-19.80	3.31	-0.23	36.48
-2000.	-25.50	4.69	-3.98	50.64	-20.29	4.40	-3.25	46.30	-16.78	3.58	-2.78	40.43
-1500.	-20.94	4.10	-4.46	53.78	-16.28	4.13	-3.14	50.40	-13.97	2.89	-1.47	46.40
-1000.	-16.85	3.08	-4.42	55.63	-14.04	3.14	-1.66	53.94	-13.17	2.48	-1.04	53.33
-500.	-14.56	2.81	-4.23	55.91	-12.15	3.88	-2.98	55.29	-11.92	3.92	-2.47	55.59

TABLE F.3. (continued).

Elevation: 500 ft AGL

0.	-12.66	3.94	-4.69	55.21	-6.86	4.64	-6.71	55.31	-9.41	6.15	-4.55	56.34
500.	-7.14	5.00	-4.41	53.79	-4.22	5.15	-2.42	54.04	-4.19	4.86	-4.20	55.69
1000.	-4.48	5.35	-3.90	52.43	-2.05	5.45	-1.98	52.50	-0.13	3.97	-2.63	54.30
1500.	-0.51	3.44	-5.35	51.37	1.33	4.41	-1.99	51.15	2.00	3.74	-1.28	51.07
2000.	1.36	3.51	-5.19	50.36	3.46	4.13	-2.51	49.79	3.93	3.77	-1.49	49.79
2500.	4.17	3.67	-4.69	49.42	7.36	4.60	-3.75	48.21	6.51	4.39	-2.21	47.58
3000.	6.51	3.05	-2.47	47.68	8.49	4.06	-1.68	47.02	8.69	5.47	-1.97	46.60
3500.	6.53	3.73	-1.33	45.61	7.53	5.23	-0.91	45.61	8.66	7.42	-0.97	46.00
4000.	6.55	5.19	-0.84	43.21	6.68	6.42	-1.70	44.37	8.03	9.16	-1.93	44.96
4500.	6.24	7.54	-0.33	42.88	6.76	7.69	-2.57	43.24	8.13	10.07	-3.90	43.76
5000.	7.67	9.99	-2.56	41.16	8.46	8.83	-3.48	41.35	10.21	10.50	-5.49	41.54
5500.	11.72	12.14	-4.84	39.74	13.82	11.44	-4.39	39.40	12.65	11.56	-4.20	38.84
6000.	14.65	13.27	-1.09	39.77	16.74	13.41	0.30	39.25	15.68	12.86	-1.09	37.45
6500.	13.32	14.47	-1.03	40.60	16.22	14.83	0.89	40.00	16.26	13.92	1.73	38.42
7000.	15.98	12.10	-4.84	40.37	15.64	13.68	-0.84	40.09	15.77	12.78	2.66	38.97
7500.	17.88	9.37	-2.86	38.79	16.51	11.33	-2.38	39.09	15.56	10.69	2.16	38.30
8000.	19.51	6.53	-1.61	36.62	19.08	7.16	-2.97	36.57	20.20	4.31	-2.95	35.84
8500.	19.36	3.69	1.01	34.57	21.08	2.13	2.47	33.73	24.01	-1.45	3.36	33.26
9000.	18.29	0.12	2.07	32.55	20.19	-1.99	3.89	31.66	20.16	-3.37	7.59	32.34
9500.	18.02	-5.58	6.48	31.95	16.68	-5.22	4.92	32.60	14.22	-4.87	5.67	33.31
10000.	8.30	-7.69	10.39	34.48	10.04	-7.84	7.21	34.65	6.88	-6.42	5.98	34.57
10500.	1.20	-9.31	8.43	38.19	2.32	-10.05	3.97	36.61	0.61	-7.85	4.14	35.09
11000.	-5.80	-7.93	7.98	42.28	-2.65	-9.93	5.95	38.31	-2.82	-9.65	1.57	35.12
11500.	-9.53	-5.88	3.43	-99.99	-5.54	-8.59	3.11	42.33	-3.85	-10.77	0.14	34.30
12000.	-8.11	-4.09	2.97	-99.99	-5.41	-6.76	2.77	-99.99	-3.09	-8.74	0.84	35.55
12500.	-9.03	-4.60	3.05	-99.99	-6.16	-6.51	5.14	-99.99	-3.84	-8.67	4.16	35.29
13000.	-10.05	-4.64	1.51	-99.99	-9.45	-6.55	4.96	-99.99	-6.98	-8.56	3.51	-99.99
13500.	-9.89	-5.42	0.90	-99.99	-9.82	-6.85	2.36	-99.99	-9.29	-7.35	1.22	-99.99
14000.	-9.90	-5.01	-0.19	-99.99	-9.85	-5.47	0.71	-99.99	-11.06	-6.48	0.59	-99.99
14500.	-10.26	-4.72	-0.51	-99.99	-9.95	-5.06	0.01	-99.99	-11.62	-4.50	-0.15	-99.99
15000.	-9.36	-5.28	0.00	-99.99	-10.46	-4.74	-1.38	-99.99	-11.09	-3.72	-2.23	39.12
15500.	-9.81	-3.89	0.47	-99.99	-9.84	-4.87	-1.12	-99.99	-8.87	-4.21	-1.27	38.94
16000.	-9.51	-4.14	0.20	-99.99	-10.08	-4.42	-1.36	-99.99	-9.05	-4.06	-1.44	37.71
16500.	-8.84	-4.91	0.13	42.70	-7.93	-5.36	-1.29	41.07	-7.30	-4.52	-3.24	36.39
17000.	-10.00	-4.30	1.61	40.81	-7.71	-5.20	0.74	42.75	-7.34	-4.50	-0.38	41.00
17500.	-10.21	-2.37	-0.83	38.05	-8.75	-3.41	-0.01	41.85	-8.03	-3.45	-0.67	42.75
18000.	-5.77	-0.34	-3.26	32.27	-7.14	-0.97	-2.95	38.27	-6.59	-1.83	-2.40	42.20
18500.	-1.09	1.71	-3.12	24.93	-2.92	0.93	-2.69	30.81	-3.95	-0.49	-1.63	38.99
19000.	1.73	2.96	-0.60	23.00	0.18	1.95	0.00	28.26	-3.17	0.76	0.05	34.35
19500.	1.95	3.55	-0.32	23.38	0.91	2.38	0.38	28.19	-3.77	1.47	0.52	35.78
20000.	3.84	3.05	-0.94	23.01	1.30	2.42	-0.01	29.14	-2.61	1.79	-0.10	35.53
20500.	4.80	3.43	-0.22	26.48	1.27	2.26	0.35	33.67	-2.86	1.68	-0.30	37.22
21000.	4.27	4.40	1.51	31.35	1.34	3.05	1.28	37.50	-2.30	2.03	-0.68	38.05
21500.	3.36	5.04	2.04	28.78	1.97	3.74	2.03	33.72	-1.16	2.63	-0.39	37.19
22000.	1.52	5.13	2.51	26.13	-0.06	3.43	3.03	30.90	-0.60	2.76	2.25	34.01
22500.	1.09	4.86	0.03	18.79	-0.68	3.59	0.33	25.01	-0.74	2.92	-0.21	28.37
23000.	2.34	4.49	0.11	20.87	0.88	3.83	-1.17	23.02	1.18	3.37	-1.27	26.26
23500.	2.31	4.17	1.18	24.28	2.01	3.91	-0.09	24.67	2.32	3.78	-0.13	27.42
24000.	1.74	4.28	1.61	28.61	1.22	4.00	2.11	28.74	1.58	4.10	2.12	28.93
24500.	0.19	4.30	2.25	33.17	-1.70	3.69	3.52	32.42	-2.41	3.84	3.09	32.40
25000.	0.19	4.30	2.25	-99.99	-3.18	3.17	0.80	36.52	-4.36	3.02	1.01	34.67
25500.	0.19	4.30	2.25	-99.99	-3.18	3.17	0.80	-99.99	-3.68	2.88	0.04	37.34
26000.	0.19	4.30	2.25	-99.99	-3.18	3.17	0.80	-99.99	-3.68	2.88	0.04	-99.99
26500.	0.19	4.30	2.25	-99.99	-3.18	3.17	0.80	-99.99	-3.68	2.88	0.04	-99.99
27000.	0.19	4.30	2.25	-99.99	-3.18	3.17	0.80	-99.99	-3.68	2.88	0.04	-99.99
27500.	0.19	4.30	2.25	-99.99	-3.18	3.17	0.80	-99.99	-3.68	2.88	0.04	-99.99
28000.	0.19	4.30	2.25	-99.99	-3.18	3.17	0.80	-99.99	-3.68	2.88	0.04	-99.99
28500.	0.19	4.30	2.25	-99.99	-3.18	3.17	0.80	-99.99	-3.68	2.88	0.04	-99.99
29000.	0.19	4.30	2.25	-99.99	-3.18	3.17	0.80	-99.99	-3.68	2.88	0.04	-99.99
29500.	0.19	4.30	2.25	-99.99	-3.18	3.17	0.80	-99.99	-3.68	2.88	0.04	-99.99
30000.	0.19	4.30	2.25	-99.99	-3.18	3.17	0.80	-99.99	-3.68	2.88	0.04	-99.99
30500.	0.19	4.30	2.25	-99.99	-3.18	3.17	0.80	-99.99	-3.68	2.88	0.04	-99.99
31000.	0.19	4.30	2.25	-99.99	-3.18	3.17	0.80	-99.99	-3.68	2.88	0.04	-99.99
31500.	0.19	4.30	2.25	-99.99	-3.18	3.17	0.80	-99.99	-3.68	2.88	0.04	-99.99
32000.	0.19	4.30	2.25	-99.99	-3.18	3.17	0.80	-99.99	-3.68	2.88	0.04	-99.99
32500.	0.19	4.30	2.25	-99.99	-3.18	3.17	0.80	-99.99	-3.68	2.88	0.04	-99.99
33000.	0.19	4.30	2.25	-99.99	-3.18	3.17	0.80	-99.99	-3.68	2.88	0.04	-99.99
33500.	0.19	4.30	2.25	-99.99	-3.18	3.17	0.80	-99.99	-3.68	2.88	0.04	-99.99
34000.	0.19	4.30	2.25	-99.99	-3.18	3.17	0.80	-99.99	-3.68	2.88	0.04	-99.99
34500.	0.19	4.30	2.25	-99.99	-3.18	3.17	0.80	-99.99	-3.68	2.88	0.04	-99.99
35000.	0.19	4.30	2.25	-99.99	-3.18	3.17	0.80	-99.99	-3.68	2.88	0.04	-99.99
35500.	0.19	4.30	2.25	-99.99	-3.18	3.17	0.80	-99.99	-3.68	2.88	0.04	-99.99
36000.	0.19	4.30	2.25	-99.99	-3.18	3.17	0.80	-99.99	-3.68	2.88	0.04	-99.99
36500.	0.19	4.30	2.25	-99.99	-3.18	3.17	0.80	-99.99	-3.68	2.88	0.04	-99.99
37000.	0.19	4.30	2.25	-99.99	-3.18	3.17	0.80	-99.99	-3.68	2.88	0.04	-99.99
37500.	0.19	4.30	2.25	-99.99	-3.18	3.17	0.80	-99.99	-3.68	2.88	0.04	-99.99

TABLE F.3. (continued).

Elevation: 1000 ft AGL

	PLANE 1				PLANE 2				PLANE 3			
X	WX	WY	WZ	DBZ	WX	WY	WZ	DBZ	WX	WY	WZ	DBZ
-37500.	-9.04	-3.67	-0.03	-99.99	-8.63	-1.86	-0.40	-99.99	-8.52	-0.38	-0.71	-99.99
-37000.	-9.04	-3.67	-0.03	-99.99	-8.63	-1.86	-0.40	-99.99	-8.52	-0.38	-0.71	-99.99
-36500.	-9.04	-3.67	-0.03	-99.99	-8.63	-1.86	-0.40	-99.99	-8.52	-0.38	-0.71	-99.99
-36000.	-9.04	-3.67	-0.03	-99.99	-8.63	-1.86	-0.40	-99.99	-8.52	-0.38	-0.71	-99.99
-35500.	-9.04	-3.67	-0.03	-99.99	-8.63	-1.86	-0.40	-99.99	-8.52	-0.38	-0.71	-99.99
-35000.	-9.04	-3.67	-0.03	-99.99	-8.63	-1.86	-0.40	-99.99	-8.52	-0.38	-0.71	-99.99
-34500.	-9.04	-3.67	-0.03	-99.99	-8.63	-1.86	-0.40	-99.99	-8.52	-0.38	-0.71	-99.99
-34000.	-9.04	-3.67	-0.03	-99.99	-8.63	-1.86	-0.40	-99.99	-8.52	-0.38	-0.71	-99.99
-33500.	-9.04	-3.67	-0.03	-99.99	-8.63	-1.86	-0.40	-99.99	-8.52	-0.38	-0.71	-99.99
-33000.	-9.04	-3.67	-0.03	-99.99	-8.63	-1.86	-0.40	-99.99	-8.52	-0.38	-0.71	-99.99
-32500.	-9.04	-3.67	-0.03	-99.99	-8.63	-1.86	-0.40	-99.99	-8.52	-0.38	-0.71	-99.99
-32000.	-9.04	-3.67	-0.03	-99.99	-8.63	-1.86	-0.40	-99.99	-8.52	-0.38	-0.71	-99.99
-31500.	-9.04	-3.67	-0.03	-99.99	-8.63	-1.86	-0.40	-99.99	-8.52	-0.38	-0.71	-99.99
-31000.	-9.04	-3.67	-0.03	-99.99	-8.63	-1.86	-0.40	-99.99	-8.52	-0.38	-0.71	-99.99
-30500.	-9.04	-3.67	-0.03	-99.99	-8.63	-1.86	-0.40	-99.99	-8.52	-0.38	-0.71	-99.99
-30000.	-9.04	-3.67	-0.03	99.99	-8.63	-1.86	-0.40	-99.99	-8.52	-0.38	-0.71	-99.99
-29500.	-9.04	-3.67	-0.03	-99.99	-8.63	-1.86	-0.40	-99.99	-8.52	-0.38	-0.71	-99.99
-29000.	-9.04	-3.67	-0.03	-99.99	-8.63	-1.86	-0.40	-99.99	-8.52	-0.38	-0.71	-99.99
-28500.	-9.04	-3.67	-0.03	-99.99	-8.63	-1.86	-0.40	-99.99	-8.52	-0.38	-0.71	-99.99
-28000.	-9.04	-3.67	-0.03	-99.99	-8.63	-1.86	-0.40	-99.99	-8.52	-0.38	-0.71	-99.99
-27500.	-9.04	-3.67	-0.03	-99.99	-8.63	-1.86	-0.40	-99.99	-8.52	-0.38	-0.71	-99.99
-27000.	-9.04	-3.67	-0.03	-99.99	-8.63	-1.86	-0.40	-99.99	-8.52	-0.38	-0.71	-99.99
-26500.	-9.04	-3.67	-0.03	-99.99	-8.63	-1.86	-0.40	-99.99	-8.52	-0.38	-0.71	-99.99
-26000.	-9.04	-3.67	-0.03	-99.99	-8.63	-1.86	-0.40	-99.99	-8.52	-0.38	-0.71	-99.99
-25500.	-9.04	-3.67	-0.03	-99.99	-8.63	-1.86	-0.40	-99.99	-8.52	-0.38	-0.71	-99.99
-25000.	-9.04	-3.67	-0.03	-99.99	-8.63	-1.86	-0.40	-99.99	-8.52	-0.38	-0.71	-99.99
-24500.	-9.04	-3.67	-0.03	45.98	-8.63	-1.86	-0.40	-99.99	-8.52	-0.38	-0.71	-99.99
-24000.	-8.92	-2.79	-1.99	48.52	-8.63	-1.86	-0.40	50.88	-8.52	-0.38	-0.71	-99.99
-23500.	-8.63	-2.19	-1.47	50.57	-9.49	-1.05	-1.45	52.20	-8.52	-0.38	-0.71	53.93
-23000.	-9.33	-1.05	-0.81	51.53	-10.52	-0.39	-1.01	52.31	-10.03	0.46	-1.31	53.48
-22500.	-9.93	-0.07	0.54	51.02	-10.87	0.29	0.73	52.15	-11.02	1.25	0.52	53.37
-22000.	-10.68	0.37	-3.41	50.03	-10.57	0.25	-3.51	52.22	-10.80	1.85	-1.32	53.85
-21500.	-9.47	-0.11	1.08	50.09	-10.64	1.31	-2.15	52.12	-11.25	2.80	-0.76	53.76
-21000.	-11.48	2.10	2.89	48.21	-11.59	2.99	0.63	49.72	-11.59	3.85	0.64	51.68
-20500.	-12.79	4.12	-0.42	47.55	-13.13	5.14	0.84	49.03	-12.40	5.10	1.61	49.64
-20000.	-13.29	5.10	-1.22	47.14	-13.72	5.80	-1.54	48.23	-13.35	5.84	-0.02	48.73
-19500.	-12.36	5.07	-2.30	46.11	-13.10	5.83	-3.24	47.01	-12.77	5.71	-1.57	47.94
-19000.	-11.76	5.08	-1.73	45.78	-12.35	5.60	-0.91	46.49	-12.80	5.60	1.10	47.31
-18500.	-10.98	4.97	-2.82	45.03	-11.76	5.35	-1.50	45.59	-12.89	5.56	0.90	46.12
-18000.	-10.88	4.94	2.57	44.74	-11.45	4.95	2.25	44.63	-12.71	5.30	1.06	45.63
-17500.	-11.10	4.92	1.08	44.65	-11.69	4.82	1.09	44.94	-12.44	4.70	0.48	45.64
-17000.	-11.19	5.16	-1.21	44.21	-11.67	5.05	-0.79	44.63	-12.32	4.80	-1.63	45.02
-16500.	-10.35	4.55	-2.11	44.00	-11.00	5.00	-1.67	44.47	-11.69	5.20	-1.26	45.32
-16000.	-9.85	4.61	-0.53	44.44	-10.47	4.98	-0.43	44.94	-11.46	5.43	-0.04	45.79
-15500.	-9.77	4.92	-0.62	45.09	-10.23	5.35	-0.34	45.97	-11.26	5.61	-0.93	46.23
-15000.	-9.82	5.05	-1.74	44.94	-10.30	5.68	-1.79	45.90	-10.97	6.19	-1.22	46.77
-14500.	-9.33	4.86	-3.45	44.17	-9.76	5.61	-3.97	45.36	-11.44	7.05	-3.06	46.77
-14000.	-8.26	4.41	-2.76	43.40	-8.57	5.11	-4.62	44.60	-9.12	6.26	-7.92	46.41
-13500.	-8.77	5.56	-0.89	43.19	-7.50	5.29	-2.49	44.26	-6.70	6.02	-5.96	46.20
-13000.	-9.30	6.43	-1.50	42.62	-8.25	6.20	0.27	44.31	-5.77	6.64	-1.70	46.39
-12500.	-9.04	6.76	-1.67	41.99	-8.52	6.70	-1.24	43.88	-6.66	7.12	-0.60	45.66
-12000.	-8.15	6.65	-0.65	40.84	-8.41	6.45	-0.51	42.17	-8.44	6.90	1.49	43.05
-11500.	-8.00	6.81	1.56	39.60	-8.54	6.28	-1.02	40.08	-8.00	6.09	-0.95	40.05
-11000.	-7.86	7.09	-1.62	38.87	-7.97	6.39	-0.12	39.50	-7.68	5.85	0.36	39.55
-10500.	-7.05	6.90	-0.72	38.74	-8.53	7.94	0.01	38.85	-8.40	6.61	2.32	39.26
-10000.	-8.00	6.18	2.95	38.69	-8.38	6.23	3.07	36.64	-9.13	6.46	2.61	37.07
-9500.	-9.65	5.95	2.62	37.61	-9.93	6.15	3.30	35.32	-9.41	5.24	3.63	34.32
-9000.	-10.32	6.20	0.78	38.22	-11.45	6.65	3.42	36.92	-11.72	6.83	2.19	36.39
-8500.	-11.87	5.68	0.21	38.31	-11.88	6.88	2.93	37.62	-10.91	6.73	3.42	36.51
-8000.	-13.12	7.10	-2.43	36.45	-15.25	9.03	3.68	34.39	-12.71	7.82	5.76	34.84
-7500.	-12.77	7.70	-6.13	34.47	-14.33	9.11	-4.74	33.67	-14.86	8.85	0.70	32.08
-7000.	-9.56	5.73	-6.32	36.81	-10.96	7.08	-5.66	35.83	-12.88	8.44	-6.52	32.44
-6500.	-8.44	4.92	-1.44	36.49	-9.91	5.86	-1.32	35.14	-8.55	4.78	-2.39	32.81
-6000.	-9.57	5.90	0.46	31.85	-9.98	4.97	3.07	32.05	-9.13	3.95	2.51	32.39
-5500.	-11.91	5.44	2.43	30.40	-13.05	4.74	5.42	29.51	-11.85	3.81	3.36	31.44
-5000.	-14.78	2.91	-3.95	28.86	-14.95	4.17	-2.18	28.62	-13.05	3.53	1.68	30.08
-4500.	-14.54	2.09	-3.74	31.20	-15.31	3.01	-1.23	31.18	-14.16	3.00	3.53	27.09
-4000.	-15.06	1.95	1.45	32.34	-15.71	1.82	2.65	32.40	-15.86	1.74	0.28	27.16
-3500.	-19.17	3.08	12.79	35.86	-18.26	1.89	4.17	32.73	-14.25	0.17	2.22	27.78
-3000.	-25.62	5.65	9.48	42.06	-22.96	3.44	7.71	40.78	-16.27	0.89	9.83	33.88
-2500.	-25.81	5.22	-0.92	46.71	-21.09	3.05	-0.91	43.33	-19.27	2.28	-0.46	36.55
-2000.	-23.85	5.03	-6.62	50.34	-19.15	3.57	-5.40	45.47	-15.90	2.09	-5.13	41.21
-1500.	-20.16	3.64	-7.63	53.80	-16.19	2.64	-5.10	49.80	-13.65	1.05	-2.70	46.86
-1000.	-17.36	1.98	-7.25	56.13	-15.33	1.33	-2.43	53.35	-15.19	1.48	-2.21	52.77
-500.	-15.77	1.20	-7.49	56.39	-14.63	1.84	-5.19	55.17	-14.73	2.59	-5.16	55.47

TABLE F.3. (continued).

Elevation: 1000 ft AGL

0.	-14.30	2.21	-9.16	55.89	-11.74	2.98	-12.36	56.27	-12.59	4.34	-9.15	56.69
500.	-8.92	3.19	-9.32	54.85	-8.13	3.52	-5.60	55.67	-8.40	3.44	-8.44	57.22
1000.	-5.05	3.36	-7.65	53.34	-4.71	3.45	-4.43	54.29	-5.00	2.72	-5.51	56.82
1500.	-1.99	2.40	-9.55	52.40	-1.82	2.86	-4.06	52.99	-2.50	2.50	-2.87	54.79
2000.	-0.25	2.49	-9.47	51.27	0.29	2.78	-4.95	51.54	-0.22	2.54	-3.39	52.72
2500.	1.45	2.85	-7.89	50.00	3.99	3.48	-6.92	48.89	2.75	3.14	-4.51	49.82
3000.	2.21	2.59	-4.09	47.88	4.27	3.18	-2.96	47.65	4.22	4.50	-3.76	47.70
3500.	2.03	3.27	-2.57	46.10	3.58	4.29	-2.05	46.29	4.10	6.40	-2.67	46.43
4000.	2.28	4.50	-1.43	44.38	3.36	5.27	-3.34	44.96	4.87	7.44	-4.02	45.18
4500.	1.15	7.42	-0.11	43.30	2.95	6.94	-4.38	43.49	4.82	8.65	-6.98	43.62
5000.	2.32	10.67	-4.64	42.08	3.64	9.14	-6.10	41.70	5.84	10.10	-9.27	41.39
5500.	6.14	12.26	-9.09	41.11	6.82	12.81	-8.17	40.17	7.12	12.23	-7.46	39.16
6000.	9.02	13.20	-3.18	40.65	10.51	14.03	-0.92	39.69	10.25	13.84	-2.94	37.79
6500.	9.57	13.29	-2.98	40.46	12.44	14.05	0.25	39.62	12.94	13.83	1.97	38.24
7000.	12.04	11.25	-9.49	39.43	13.12	12.57	-2.42	39.21	13.79	12.36	3.87	38.36
7500.	14.68	8.01	-6.12	37.66	14.43	9.96	-5.54	37.99	14.91	9.68	2.54	37.52
8000.	17.33	4.47	-3.52	35.82	17.83	4.65	-5.71	35.66	20.44	2.55	-5.73	35.45
8500.	17.76	1.50	1.53	34.40	18.93	0.41	5.07	33.73	22.58	-2.58	7.57	33.67
9000.	17.43	-1.65	3.63	33.32	17.77	-2.88	7.88	32.42	17.57	-4.06	15.73	33.25
9500.	16.94	-6.43	12.74	33.47	14.02	-5.92	10.11	33.58	10.80	-5.55	11.71	33.99
10000.	6.55	-9.23	20.52	36.48	6.56	-8.49	14.30	35.87	2.73	-7.03	11.57	35.27
10500.	-2.41	-10.53	16.87	39.06	-1.49	-10.28	7.92	37.88	-2.93	-7.80	7.63	35.79
11000.	-9.70	-8.41	14.93	42.21	-6.74	-8.93	10.98	39.21	-6.23	-8.10	2.90	36.08
11500.	-12.40	-6.03	5.78	-99.99	-9.14	-7.23	5.19	41.59	-7.32	-7.91	-0.19	35.36
12000.	-10.34	-4.14	4.60	-99.99	-8.34	-5.73	4.57	-99.99	-6.95	-6.66	1.15	35.79
12500.	-10.49	-4.28	5.11	-99.99	-8.02	-5.28	8.98	-99.99	-6.73	-6.49	7.11	35.84
13000.	-10.05	-3.88	2.46	-99.99	-9.56	-5.19	8.65	-99.99	-7.57	-6.45	6.08	-99.99
13500.	-9.60	-4.07	1.45	-99.99	-9.45	-5.07	4.42	-99.99	-9.09	-5.48	2.24	-99.99
14000.	-9.67	-3.44	-0.69	-99.99	-9.85	-3.68	1.15	-99.99	-10.72	-4.60	1.06	-99.99
14500.	-9.45	-2.54	-1.07	-99.99	-10.00	-2.97	-0.08	-99.99	-11.24	-2.43	-0.31	-99.99
15000.	-10.14	-2.77	0.36	-99.99	-10.87	-2.19	-2.41	-99.99	-11.17	-1.22	-4.10	39.74
15500.	-10.92	-0.70	0.97	-99.99	-10.48	-2.32	-2.24	-99.99	-9.06	-1.64	-2.38	38.98
16000.	-10.44	-0.66	0.89	-99.99	-10.93	-1.59	-2.40	-99.99	-9.37	-1.54	-2.69	37.87
16500.	-10.16	-1.40	0.65	45.65	-8.85	-2.50	-2.44	42.67	-7.90	-1.97	-6.23	38.24
17000.	-11.60	-0.57	3.13	43.63	-8.41	-2.09	1.10	44.29	-7.07	-1.84	-1.18	42.15
17500.	-12.32	1.00	-1.84	41.87	-9.07	-0.35	-0.13	43.81	-6.94	-0.81	-1.36	43.84
18000.	-6.80	3.21	-6.50	36.87	-7.85	2.00	-5.51	42.07	-5.81	0.69	-4.21	44.48
18500.	-1.13	5.54	-6.32	31.78	-2.70	4.09	-5.41	38.25	-4.10	1.96	-2.94	43.49
19000.	2.98	6.67	-1.42	29.32	1.19	5.12	-0.07	35.39	-3.30	3.17	0.34	40.17
19500.	3.82	6.74	-0.51	30.17	2.42	5.16	0.80	35.92	-4.31	3.68	1.19	41.44
20000.	5.88	5.51	-1.50	30.95	2.92	4.60	0.36	36.95	-2.49	3.55	-0.01	41.89
20500.	5.00	5.04	0.39	32.80	1.71	3.91	1.68	38.61	-3.35	3.10	-0.12	42.52
21000.	3.93	5.53	2.66	34.31	0.62	4.25	2.02	39.96	-3.44	3.09	-1.40	41.87
21500.	4.25	6.02	3.86	31.16	1.90	4.74	3.65	37.53	-2.01	3.77	-1.08	40.36
22000.	2.45	5.96	5.28	27.69	0.31	4.48	5.72	33.48	-1.01	4.28	3.71	37.06
22500.	0.83	5.52	0.38	22.73	-0.24	4.66	0.58	28.64	0.07	4.32	-0.48	32.65
23000.	1.64	5.15	0.19	24.32	0.75	4.64	-2.11	26.86	1.57	4.41	-2.19	30.27
23500.	1.85	5.21	2.04	26.48	1.65	4.97	-0.31	27.58	2.58	4.89	-0.19	30.15
24000.	1.77	5.66	2.81	29.12	1.35	5.48	4.01	29.50	2.03	5.56	4.09	31.28
24500.	0.50	5.92	4.15	33.02	-1.59	5.59	6.78	32.78	-2.35	5.90	6.43	33.45
25000.	0.50	5.92	4.15	-99.99	-2.57	5.25	1.56	36.49	-4.32	5.01	1.93	35.95
25500.	0.50	5.92	4.15	-99.99	-2.57	5.25	1.56	-99.99	-2.67	4.68	-0.04	38.28
26000.	0.50	5.92	4.15	-99.99	-2.57	5.25	1.56	-99.99	-2.67	4.68	-0.04	-99.99
26500.	0.50	5.92	4.15	-99.99	-2.57	5.25	1.56	-99.99	-2.67	4.68	-0.04	-99.99
27000.	0.50	5.92	4.15	-99.99	-2.57	5.25	1.56	-99.99	-2.67	4.68	-0.04	-99.99
27500.	0.50	5.92	4.15	-99.99	-2.57	5.25	1.56	-99.99	-2.67	4.68	-0.04	-99.99
28000.	0.50	5.92	4.15	-99.99	-2.57	5.25	1.56	-99.99	-2.67	4.68	-0.04	-99.99
28500.	0.50	5.92	4.15	-99.99	-2.57	5.25	1.56	-99.99	-2.67	4.68	-0.04	-99.99
29000.	0.50	5.92	4.15	-99.99	-2.57	5.25	1.56	-99.99	-2.67	4.68	-0.04	-99.99
29500.	0.50	5.92	4.15	-99.99	-2.57	5.25	1.56	-99.99	-2.67	4.68	-0.04	-99.99
30000.	0.50	5.92	4.15	-99.99	-2.57	5.25	1.56	-99.99	-2.67	4.68	-0.04	-99.99
30500.	0.50	5.92	4.15	-99.99	-2.57	5.25	1.56	-99.99	-2.67	4.68	-0.04	-99.99
31000.	0.50	5.92	4.15	-99.99	-2.57	5.25	1.56	-99.99	-2.67	4.68	-0.04	-99.99
31500.	0.50	5.92	4.15	-99.99	-2.57	5.25	1.56	-99.99	-2.67	4.68	-0.04	-99.99
32000.	0.50	5.92	4.15	-99.99	-2.57	5.25	1.56	-99.99	-2.67	4.68	-0.04	-99.99
32500.	0.50	5.92	4.15	-99.99	-2.57	5.25	1.56	-99.99	-2.67	4.68	-0.04	-99.99
33000.	0.50	5.92	4.15	-99.99	-2.57	5.25	1.56	-99.99	-2.67	4.68	-0.04	-99.99
33500.	0.50	5.92	4.15	-99.99	-2.57	5.25	1.56	-99.99	-2.67	4.68	-0.04	-99.99
34000.	0.50	5.92	4.15	-99.99	-2.57	5.25	1.56	-99.99	-2.67	4.68	-0.04	-99.99
34500.	0.50	5.92	4.15	-99.99	-2.57	5.25	1.56	-99.99	-2.67	4.68	-0.04	-99.99
35000.	0.50	5.92	4.15	-99.99	-2.57	5.25	1.56	-99.99	-2.67	4.68	-0.04	-99.99
35500.	0.50	5.92	4.15	-99.99	-2.57	5.25	1.56	-99.99	-2.67	4.68	-0.04	-99.99
36000.	0.50	5.92	4.15	-99.99	-2.57	5.25	1.56	-99.99	-2.67	4.68	-0.04	-99.99
36500.	0.50	5.92	4.15	-99.99	-2.57	5.25	1.56	-99.99	-2.67	4.68	-0.04	-99.99
37000.	0.50	5.92	4.15	-99.99	-2.57	5.25	1.56	-99.99	-2.67	4.68	-0.04	-99.99
37500.	0.50	5.92	4.15	-99.99	-2.57	5.25	1.56	-99.99	-2.67	4.68	-0.04	-99.99

TABLE F.3. (continued).

Elevation: 1500 ft AGL

		PLANE 1				PLANE 2				PLANE 3		
X	WX	WY	WZ	DBZ	WX	WY	WZ	DBZ	WX	WY	WZ	DBZ
-37500.	-10.58	-3.07	-0.05	-99.99	-10.01	-1.41	-0.55	-99.99	-9.82	-0.18	-0.57	-99.99
-37000.	-10.58	-3.07	-0.05	-99.99	-10.01	-1.41	-0.55	-99.99	-9.82	-0.18	-0.57	-99.99
-36500.	-10.58	-3.07	-0.05	-99.99	-10.01	-1.41	-0.55	-99.99	-9.82	-0.18	-0.57	-99.99
-36000.	-10.58	-3.07	-0.05	-99.99	-10.01	-1.41	-0.55	-99.99	-9.82	-0.18	-0.57	-99.99
-35500.	-10.58	-3.07	-0.05	-99.99	-10.01	-1.41	-0.55	-99.99	-9.82	-0.18	-0.57	-99.99
-35000.	-10.58	-3.07	-0.05	-99.99	-10.01	-1.41	-0.55	-99.99	-9.82	-0.18	-0.57	-99.99
-34500.	-10.58	-3.07	-0.05	-99.99	-10.01	-1.41	-0.55	-99.99	-9.82	-0.18	-0.57	-99.99
-34000.	-10.58	-3.07	-0.05	-99.99	-10.01	-1.41	-0.55	-99.99	-9.82	-0.18	-0.57	-99.99
-33500.	-10.58	-3.07	-0.05	-99.99	-10.01	-1.41	-0.55	-99.99	-9.82	-0.18	-0.57	-99.99
-33000.	-10.58	-3.07	-0.05	-99.99	-10.01	-1.41	-0.55	-99.99	-9.82	-0.18	-0.57	-99.99
-32500.	-10.58	-3.07	-0.05	-99.99	-10.01	-1.41	-0.55	-99.99	-9.82	-0.18	-0.57	-99.99
-32000.	-10.58	-3.07	-0.05	-99.99	-10.01	-1.41	-0.55	-99.99	-9.82	-0.18	-0.57	-99.99
-31500.	-10.58	-3.07	-0.05	-99.99	-10.01	-1.41	-0.55	-99.99	-9.82	-0.18	-0.57	-99.99
-31000.	-10.58	-3.07	-0.05	-99.99	-10.01	-1.41	-0.55	-99.99	-9.82	-0.18	-0.57	-99.99
-30500.	-10.58	-3.07	-0.05	-99.99	-10.01	-1.41	-0.55	-99.99	-9.82	-0.18	-0.57	-99.99
-30000.	-10.58	-3.07	-0.05	-99.99	-10.01	-1.41	-0.55	-99.99	-9.82	-0.18	-0.57	-99.99
-29500.	-10.58	-3.07	-0.05	-99.99	-10.01	-1.41	-0.55	-99.99	-9.82	-0.18	-0.57	-99.99
-29000.	-10.58	-3.07	-0.05	-99.99	-10.01	-1.41	-0.55	-99.99	-9.82	-0.18	-0.57	-99.99
-28500.	-10.58	-3.07	-0.05	-99.99	-10.01	-1.41	-0.55	-99.99	-9.82	-0.18	-0.57	-99.99
-28000.	-10.58	-3.07	-0.05	-99.99	-10.01	-1.41	-0.55	-99.99	-9.82	-0.18	-0.57	-99.99
-27500.	-10.58	-3.07	-0.05	-99.99	-10.01	-1.41	-0.55	-99.99	-9.82	-0.18	-0.57	-99.99
-27000.	-10.58	-3.07	-0.05	-99.99	-10.01	-1.41	-0.55	-99.99	-9.82	-0.18	-0.57	-99.99
-26500.	-10.58	-3.07	-0.05	-99.99	-10.01	-1.41	-0.55	-99.99	-9.82	-0.18	-0.57	-99.99
-26000.	-10.58	-3.07	-0.05	-99.99	-10.01	-1.41	-0.55	-99.99	-9.82	-0.18	-0.57	-99.99
-25500.	-10.58	-3.07	-0.05	-99.99	-10.01	-1.41	-0.55	-99.99	-9.82	-0.18	-0.57	-99.99
-25000.	-10.58	-3.07	-0.05	-99.99	-10.01	-1.41	-0.55	-99.99	-9.82	-0.18	-0.57	-99.99
-24500.	-10.58	-3.07	-0.05	44.41	-10.01	-1.41	-0.55	-99.99	-9.82	-0.18	-0.57	-99.99
-24000.	-11.53	-2.16	-2.77	47.27	-10.01	-1.41	-0.55	49.62	-9.82	-0.18	-0.57	-99.99
-23500.	-11.22	-1.83	-1.67	49.74	-11.21	-0.51	-1.73	51.31	-9.82	-0.18	-0.57	53.58
-23000.	-11.65	-1.06	-0.57	50.90	-11.58	-0.72	-1.34	52.44	-10.49	0.09	-1.30	53.80
-22500.	-11.75	-0.91	1.07	50.62	-11.11	-1.16	0.09	52.46	-10.50	0.15	-1.21	54.02
-22000.	-11.89	-1.09	-3.51	50.16	-10.05	-2.04	-5.43	53.07	-10.46	0.58	-2.59	54.42
-21500.	-10.58	-1.50	1.56	50.55	-10.57	-0.47	-3.30	52.56	-11.04	1.71	-1.77	53.73
-21000.	-11.47	0.56	3.91	49.03	-11.09	1.21	0.19	50.51	-11.27	2.76	0.47	51.43
-20500.	-12.12	3.01	-0.22	48.85	-12.15	3.61	1.34	49.39	-11.70	3.87	2.31	50.23
-20000.	-12.29	4.50	-1.92	48.74	-12.65	4.93	-1.98	48.84	-12.26	4.79	0.73	49.26
-19500.	-11.61	4.93	-3.57	48.09	-12.60	5.61	-4.28	47.66	-12.39	5.32	-1.35	48.69
-19000.	-11.65	5.08	-2.65	46.87	-12.21	5.46	-1.57	47.12	-12.29	5.29	1.56	48.20
-18500.	-11.39	5.21	-3.84	45.35	-11.94	5.36	-2.31	46.22	-11.97	5.26	0.84	47.49
-18000.	-11.12	5.25	2.48	45.03	-11.12	5.05	1.81	45.49	-11.11	4.94	0.76	47.50
-17500.	-10.45	5.01	1.12	45.42	-10.12	4.54	1.07	46.27	-10.03	4.01	0.40	47.77
-17000.	-9.74	4.66	-1.80	45.10	-9.16	4.10	-1.06	45.91	-9.22	3.74	-2.05	46.24
-16500.	-8.92	3.97	-3.41	44.46	-8.47	3.95	-2.41	44.82	-8.39	3.89	-1.88	45.62
-16000.	-8.01	3.92	-1.16	44.54	-7.91	3.89	-0.92	45.02	-7.97	3.87	-0.59	45.92
-15500.	-7.62	4.06	-1.12	45.37	-7.43	3.72	-0.20	46.54	-7.60	3.61	-1.85	46.68
-15000.	-7.67	4.10	-2.18	45.59	-7.35	3.81	-2.23	46.66	-7.39	3.99	-2.07	47.70
-14500.	-7.19	3.78	-4.32	44.94	-6.86	3.67	-5.34	46.08	-7.59	5.04	-6.23	47.66
-14000.	-6.44	3.44	-2.83	44.55	-6.21	3.56	-6.48	45.70	-5.89	4.46	-11.53	46.74
-13500.	-6.76	4.48	0.06	45.10	-5.53	3.93	-2.87	46.37	-4.62	4.65	-8.27	47.42
-13000.	-7.29	5.42	-1.09	44.73	-6.53	5.15	1.37	46.84	-4.53	5.65	-2.53	47.84
-12500.	-7.20	6.22	-2.66	44.17	-5.87	5.89	-1.49	45.96	-4.05	6.27	-1.32	47.17
-12000.	-5.63	6.60	-1.50	43.05	-5.25	6.31	-0.35	44.39	-3.85	6.50	1.92	45.30
-11500.	-5.34	7.21	1.75	42.25	-5.26	6.56	-1.19	42.96	-4.02	6.15	-1.10	43.13
-11000.	-3.72	7.09	-2.25	41.61	-4.63	6.58	0.40	42.01	-4.25	5.90	1.58	41.83
-10500.	-3.48	6.85	-1.16	40.61	-4.96	7.41	0.50	41.04	-5.55	5.95	4.32	40.83
-10000.	-4.22	6.09	3.46	39.63	-4.84	5.86	3.86	39.57	-6.35	5.48	3.76	39.21
-9500.	-4.60	5.86	3.27	37.87	-5.19	5.59	4.47	37.36	-6.40	4.80	5.06	37.03
-9000.	-4.74	5.70	0.34	37.53	-5.33	5.24	4.24	37.64	-6.14	4.61	1.97	37.20
-8500.	-4.63	5.26	-0.19	37.54	-4.63	5.09	3.64	37.32	-4.79	4.64	4.24	36.73
-8000.	-5.05	5.95	-3.40	36.27	-5.86	6.83	5.62	35.30	-5.93	6.26	8.78	35.00
-7500.	-5.23	6.20	-9.29	35.18	-6.51	7.29	-6.97	33.91	-6.64	6.61	2.29	32.63
-7000.	-4.41	5.89	-9.87	34.59	-5.48	6.61	-8.59	33.37	-6.34	6.37	-8.61	31.95
-6500.	-3.09	5.61	-2.78	33.28	-4.21	6.17	-2.14	32.23	-5.33	5.26	-3.44	31.33
-6000.	-2.55	5.89	1.09	31.36	-4.14	5.69	5.61	30.87	-6.25	5.17	4.66	31.28
-5500.	-4.89	5.37	5.67	29.93	-6.48	5.13	10.21	29.55	-8.94	4.88	6.72	30.60
-5000.	-9.96	4.33	-2.18	28.85	-11.66	4.67	-0.13	28.66	-12.16	4.34	4.72	30.09
-4500.	-12.30	3.29	-3.59	31.68	-13.66	2.52	-0.72	31.82	-15.61	3.05	5.16	28.91
-4000.	-12.36	1.19	3.44	32.58	-13.22	-1.38	4.68	32.27	-14.89	-3.74	-0.03	28.82
-3500.	-14.58	1.50	22.60	34.60	-14.62	-2.40	9.27	31.44	-15.10	-4.41	3.57	28.35
-3000.	-18.42	4.36	16.40	38.72	-16.58	-0.22	12.79	36.06	-15.70	-2.83	12.72	31.55
-2500.	-20.34	5.93	1.87	44.19	-17.30	1.35	0.62	38.98	-16.05	-0.55	-0.67	35.31
-2000.	-20.43	5.86	-6.90	48.78	-16.46	2.32	-5.55	42.60	-14.95	0.15	-6.71	38.21
-1500.	-18.10	3.44	-8.52	52.81	-14.43	0.20	-4.94	47.33	-12.79	-0.60	-3.49	42.49
-1000.	-16.63	-0.21	-7.21	56.15	-14.00	-3.16	-1.61	51.13	-15.11	-1.27	-3.60	50.25
-500.	-15.29	-3.02	-9.02	56.94	-15.22	-3.40	-6.03	54.12	-16.55	-1.00	-8.25	54.53

TABLE F.3. (continued).

Elevation: 1500 ft AGL

0.	-14.70	-2.60	-13.26	56.77	-16.22	-0.48	-16.13	56.75	-15.65	0.34	-13.84	56.34
500.	-10.65	-0.88	-15.10	55.67	-12.55	0.52	-10.14	56.38	-12.64	1.12	-12.78	57.84
1000.	-6.49	-0.31	-11.13	54.18	-8.82	0.36	-7.70	55.43	-9.60	0.68	-8.84	58.20
1500.	-3.99	0.48	-11.70	53.34	-6.06	0.33	-6.24	54.78	-7.19	0.61	-5.04	56.95
2000.	-2.31	1.35	-12.13	52.26	-4.20	0.92	-7.27	53.40	-5.31	0.83	-6.00	55.39
2500.	-2.91	2.12	-8.45	50.88	-1.68	2.05	-9.05	50.12	-2.70	1.71	-6.95	52.53
3000.	-4.62	1.95	-4.19	48.43	-1.60	2.29	-3.51	48.60	-1.42	3.42	-5.21	49.33
3500.	-4.75	2.60	-3.66	46.78	-1.50	3.25	-3.64	46.95	-0.17	4.79	-5.68	46.92
4000.	-3.81	3.34	-1.57	45.60	-0.42	3.87	-4.85	45.41	1.84	5.00	-6.39	45.25
4500.	-2.46	5.83	1.10	44.39	-0.65	5.29	-4.83	43.95	1.54	6.29	-8.62	43.48
5000.	-1.49	8.33	-5.88	43.68	-0.99	7.46	-7.20	42.81	0.46	8.61	-10.02	41.42
5500.	-0.20	9.67	-12.28	43.20	-3.01	12.99	-10.86	41.29	-1.07	11.62	-9.04	39.71
6000.	0.95	10.51	-7.02	41.56	0.92	12.51	-4.86	39.91	1.60	12.79	-6.15	38.10
6500.	3.37	9.69	-6.59	39.65	5.54	10.89	-3.11	38.24	6.45	11.63	-0.44	37.30
7000.	6.74	8.32	-13.81	37.43	8.68	9.09	-5.32	37.04	9.57	9.87	2.49	36.53
7500.	10.80	4.44	-10.07	35.48	12.05	6.83	-10.12	35.41	13.41	6.25	-0.24	35.08
8000.	14.28	0.52	-5.96	34.03	16.12	0.24	-8.02	33.67	18.39	0.27	-8.22	33.90
8500.	14.44	-1.91	1.16	33.42	14.64	-2.20	7.91	33.12	18.07	-3.40	13.29	33.63
9000.	13.95	-4.33	4.29	33.48	11.87	-4.42	12.05	33.07	10.25	-5.14	24.84	33.78
9500.	11.40	-6.69	18.59	34.49	6.92	-6.39	15.77	34.35	3.11	-6.19	18.42	34.37
10000.	2.33	-9.21	30.18	37.23	0.99	-8.25	21.21	36.47	-2.70	-7.14	16.48	35.45
10500.	-5.66	-9.97	25.30	40.06	-4.24	-9.89	11.86	38.50	-6.49	-6.93	9.96	36.02
11000.	-11.10	-8.29	20.07	42.27	-9.31	-7.23	14.37	39.75	-9.78	-5.27	3.82	36.65
11500.	-13.05	-5.37	6.19	-99.99	-11.38	-4.52	5.45	39.85	-10.92	-3.82	-1.37	36.44
12000.	-11.80	-2.65	3.81	-99.99	-10.26	-3.22	4.61	-99.99	-10.11	-3.18	0.52	35.98
12500.	-11.07	-2.06	5.42	-99.99	-10.23	-2.07	10.48	-99.99	-10.33	-2.06	7.90	35.99
13000.	-10.10	-1.17	2.38	-99.99	-10.88	-1.54	10.08	-99.99	-10.79	-1.20	6.98	-99.99
13500.	-9.77	-0.64	1.39	-99.99	-11.24	-0.60	5.95	-99.99	-11.18	-0.72	2.91	-99.99
14000.	-9.25	-0.46	-1.73	-99.99	-11.27	0.23	1.09	-99.99	-11.96	0.23	1.30	-99.99
14500.	-7.58	-0.43	-1.70	-99.99	-10.38	0.98	-0.37	-99.99	-9.71	0.95	-0.51	-99.99
15000.	-10.16	0.90	1.36	-99.99	-9.97	1.57	-2.80	-99.99	-9.01	1.72	-5.29	39.41
15500.	-10.29	1.85	1.54	-99.99	-9.92	1.83	-3.33	-99.99	-9.14	2.36	-3.20	37.72
16000.	-9.74	2.15	2.45	-99.99	-9.60	2.05	-2.89	-99.99	-8.86	2.47	-3.58	37.28
16500.	-10.25	2.64	1.90	46.01	-9.52	2.59	-3.34	43.50	-8.05	2.85	-8.78	39.60
17000.	-9.62	3.30	4.50	45.49	-7.63	2.77	0.78	45.09	-6.31	2.76	-2.73	42.36
17500.	-7.32	4.07	-3.17	44.18	-5.30	3.22	-0.42	45.00	-4.53	3.02	-2.09	44.24
18000.	-4.18	5.17	-9.68	40.47	-3.95	4.45	-7.35	44.15	-3.86	3.97	-4.94	45.63
18500.	-1.40	6.73	-9.68	36.23	-1.70	5.70	-8.18	42.09	-3.34	5.27	-3.68	45.76
19000.	1.54	7.65	-2.62	34.49	0.80	6.74	-0.27	40.25	-2.69	6.15	1.05	44.44
19500.	2.67	7.97	-0.47	35.79	1.60	7.06	1.28	41.12	-2.70	6.09	2.15	44.57
20000.	3.88	7.21	-1.38	37.42	1.56	6.27	1.41	41.85	-1.49	5.51	0.41	45.03
20500.	2.38	6.86	2.45	38.17	0.01	5.72	4.75	42.06	-2.37	5.25	0.94	45.01
21000.	2.21	7.06	3.19	36.47	0.27	5.80	1.80	41.47	-1.73	5.39	-2.20	43.71
21500.	3.19	7.12	5.27	32.19	1.72	5.95	4.55	38.43	-0.17	5.56	-2.29	42.08
22000.	1.91	7.14	8.49	29.18	0.68	5.95	7.82	34.98	0.97	6.09	3.76	40.14
22500.	0.11	6.76	1.31	28.41	0.60	6.26	0.70	32.62	0.99	6.14	-0.83	36.79
23000.	0.89	6.38	0.22	28.68	0.93	5.95	-2.64	31.61	1.06	5.80	-2.49	34.71
23500.	1.14	6.63	2.34	28.77	0.73	5.98	-0.77	30.34	1.20	5.87	-0.13	33.22
24000.	1.76	7.15	3.29	29.15	1.36	6.74	5.55	29.85	1.04	6.53	5.80	32.78
24500.	1.80	7.78	5.43	32.06	0.28	7.61	9.61	32.27	-1.93	7.55	10.24	33.88
25000.	1.80	7.78	5.43	-99.99	-0.81	7.77	2.22	35.97	-3.54	7.28	2.67	36.37
25500.	1.80	7.78	5.43	-99.99	-0.81	7.77	2.22	-99.99	-3.24	6.73	-0.34	38.97
26000.	1.80	7.78	5.43	-99.99	-0.81	7.77	2.22	-99.99	-3.24	6.73	-0.34	-99.99
26500.	1.80	7.78	5.43	-99.99	-0.81	7.77	2.22	-99.99	-3.24	6.73	-0.34	-99.99
27000.	1.80	7.78	5.43	-99.99	-0.81	7.77	2.22	-99.99	-3.24	6.73	-0.34	-99.99
27500.	1.80	7.78	5.43	-99.99	-0.81	7.77	2.22	-99.99	-3.24	6.73	-0.34	-99.99
28000.	1.80	7.78	5.43	-99.99	-0.81	7.77	2.22	-99.99	-3.24	6.73	-0.34	-99.99
28500.	1.80	7.78	5.43	-99.99	-0.81	7.77	2.22	-99.99	-3.24	6.73	-0.34	-99.99
29000.	1.80	7.78	5.43	-99.99	-0.81	7.77	2.22	-99.99	-3.24	6.73	-0.34	-99.99
29500.	1.80	7.78	5.43	-99.99	-0.81	7.77	2.22	-99.99	-3.24	6.73	-0.34	-99.99
30000.	1.80	7.78	5.43	-99.99	-0.81	7.77	2.22	-99.99	-3.24	6.73	-0.34	-99.99
30500.	1.80	7.78	5.43	-99.99	-0.81	7.77	2.22	-99.99	-3.24	6.73	-0.34	-99.99
31000.	1.80	7.78	5.43	-99.99	-0.81	7.77	2.22	-99.99	-3.24	6.73	-0.34	-99.99
31500.	1.80	7.78	5.43	-99.99	-0.81	7.77	2.22	-99.99	-3.24	6.73	-0.34	-99.99
32000.	1.80	7.78	5.43	-99.99	-0.81	7.77	2.22	-99.99	-3.24	6.73	-0.34	-99.99
32500.	1.80	7.78	5.43	-99.99	-0.81	7.77	2.22	-99.99	-3.24	6.73	-0.34	-99.99
33000.	1.80	7.78	5.43	-99.99	-0.81	7.77	2.22	-99.99	-3.24	6.73	-0.34	-99.99
33500.	1.80	7.78	5.43	-99.99	-0.81	7.77	2.22	-99.99	-3.24	6.73	-0.34	-99.99
34000.	1.80	7.78	5.43	-99.99	-0.81	7.77	2.22	-99.99	-3.24	6.73	-0.34	-99.99
34500.	1.80	7.78	5.43	-99.99	-0.81	7.77	2.22	-99.99	-3.24	6.73	-0.34	-99.99
35000.	1.80	7.78	5.43	-99.99	-0.81	7.77	2.22	-99.99	-3.24	6.73	-0.34	-99.99
35500.	1.80	7.78	5.43	-99.99	-0.81	7.77	2.22	-99.99	-3.24	6.73	-0.34	-99.99
36000.	1.80	7.78	5.43	-99.99	-0.81	7.77	2.22	-99.99	-3.24	6.73	-0.34	-99.99
36500.	1.80	7.78	5.43	-99.99	-0.81	7.77	2.22	-99.99	-3.24	6.73	-0.34	-99.99
37000.	1.80	7.78	5.43	-99.99	-0.81	7.77	2.22	-99.99	-3.24	6.73	-0.34	-99.99
37500.	1.80	7.78	5.43	-99.99	-0.81	7.77	2.22	-99.99	-3.24	6.73	-0.34	-99.99

TABLE F.3. (continued).

Elevation: 2000 ft AGL

	PLANE 1				PLANE 2				PLANE 3			
X	WX	WY	WZ	DBZ	WX	WY	WZ	DBZ	WX	WY	WZ	DBZ
-37500.	-8.08	-2.93	-0.04	-99.99	-8.20	-2.48	-0.73	-99.99	-7.93	-1.56	-0.79	-99.99
-37000.	-8.08	-2.93	-0.04	-99.99	-8.20	-2.48	-0.73	-99.99	-7.93	-1.56	-0.79	-99.99
-36500.	-8.08	-2.93	-0.04	-99.99	-8.20	-2.48	-0.73	-99.99	-7.93	-1.56	-0.79	-99.99
-36000.	-8.08	-2.93	-0.04	-99.99	-8.20	-2.48	-0.73	-99.99	-7.93	-1.56	-0.79	-99.99
-35500.	-8.08	-2.93	-0.04	-99.99	-8.20	-2.48	-0.73	-99.99	-7.93	-1.56	-0.79	-99.99
-35000.	-8.08	-2.93	-0.04	-99.99	-8.20	-2.48	-0.73	-99.99	-7.93	-1.56	-0.79	-99.99
-34500.	-8.08	-2.93	-0.04	-99.99	-8.20	-2.48	-0.73	-99.99	-7.93	-1.56	-0.79	-99.99
-34000.	-8.08	-2.93	-0.04	-99.99	-8.20	-2.48	-0.73	-99.99	-7.93	-1.56	-0.79	-99.99
-33500.	-8.08	-2.93	-0.04	-99.99	-8.20	-2.48	-0.73	-99.99	-7.93	-1.56	-0.79	-99.99
-33000.	-8.08	-2.93	-0.04	-99.99	-8.20	-2.48	-0.73	-99.99	-7.93	-1.56	-0.79	-99.99
-32500.	-8.08	-2.93	-0.04	-99.99	-8.20	-2.48	-0.73	-99.99	-7.93	-1.56	-0.79	-99.99
-32000.	-8.08	-2.93	-0.04	-99.99	-8.20	-2.48	-0.73	-99.99	-7.93	-1.56	-0.79	-99.99
-31500.	-8.08	-2.93	-0.04	-99.99	-8.20	-2.48	-0.73	-99.99	-7.93	-1.56	-0.79	-99.99
-31000.	-8.08	-2.93	-0.04	-99.99	-8.20	-2.48	-0.73	-99.99	-7.93	-1.56	-0.79	-99.99
-30500.	-8.08	-2.93	-0.04	-99.99	-8.20	-2.48	-0.73	-99.99	-7.93	-1.56	-0.79	-99.99
-30000.	-8.08	-2.93	-0.04	-99.99	-8.20	-2.48	-0.73	-99.99	-7.93	-1.56	-0.79	-99.99
-29500.	-8.08	-2.93	-0.04	-99.99	-8.20	-2.48	-0.73	-99.99	-7.93	-1.56	-0.79	-99.99
-29000.	-8.08	-2.93	-0.04	-99.99	-8.20	-2.48	-0.73	-99.99	-7.93	-1.56	-0.79	-99.99
-28500.	-8.08	-2.93	-0.04	-99.99	-8.20	-2.48	-0.73	-99.99	-7.93	-1.56	-0.79	-99.99
-28000.	-8.08	-2.93	-0.04	-99.99	-8.20	-2.48	-0.73	-99.99	-7.93	-1.56	-0.79	-99.99
-27500.	-8.08	-2.93	-0.04	-99.99	-8.20	-2.48	-0.73	-99.99	-7.93	-1.56	-0.79	-99.99
-27000.	-8.08	-2.93	-0.04	-99.99	-8.20	-2.48	-0.73	-99.99	-7.93	-1.56	-0.79	-99.99
-26500.	-8.08	-2.93	-0.04	-99.99	-8.20	-2.48	-0.73	-99.99	-7.93	-1.56	-0.79	-99.99
-26000.	-8.08	-2.93	-0.04	-99.99	-8.20	-2.48	-0.73	-99.99	-7.93	-1.56	-0.79	-99.99
-25500.	-8.08	-2.93	-0.04	-99.99	-8.20	-2.48	-0.73	-99.99	-7.93	-1.56	-0.79	-99.99
-25000.	-8.08	-2.93	-0.04	-99.99	-8.20	-2.48	-0.73	-99.99	-7.93	-1.56	-0.79	-99.99
-24500.	-8.08	-2.93	-0.04	44.42	-8.20	-2.48	-0.73	-99.99	-7.93	-1.56	-0.79	-99.99
-24000.	-9.98	-3.07	-2.99	45.63	-8.20	-2.48	-0.73	47.93	-7.93	-1.56	-0.79	-99.99
-23500.	-9.62	-3.51	-1.96	47.69	-8.76	-2.44	-2.62	50.48	-7.93	-1.56	-0.79	52.74
-23000.	-10.07	-3.19	-0.07	49.52	-9.02	-2.84	-2.29	51.89	-8.28	-1.47	-2.19	53.69
-22500.	-10.05	-3.31	1.62	49.82	-8.52	-3.40	-1.30	52.16	-8.41	-1.21	-3.97	54.07
-22000.	-9.79	-3.59	-3.12	49.96	-7.62	-3.97	-7.46	53.06	-8.47	-0.87	-4.56	54.21
-21500.	-9.07	-3.02	2.00	50.42	-8.57	-2.08	-4.51	52.34	-9.23	0.38	-3.37	53.38
-21000.	-9.63	-1.07	4.41	49.44	-9.14	-0,38	-0.67	50.47	-9.67	1.58	-0.05	51.58
-20500.	-10.16	1.36	-0.12	49.47	-10.23	2.02	1.42	49.75	-10.15	2.70	2.14	50.99
-20000.	-10.40	3.34	-2.40	49.50	-10.68	3.65	-2.19	49.42	-10.54	3.53	1.24	50.13
-19500.	-9.99	4.33	-4.32	49.01	-10.72	4.68	-4.67	48.36	-10.83	4.39	-0.97	49.48
-19000.	-10.11	4.53	-2.97	47.91	-10.54	4.71	-1.92	47.77	-10.77	4.59	1.90	48.84
-18500.	-9.93	4.65	-4.32	46.48	-10.39	4.59	-2.99	47.05	-10.56	4.68	0.76	48.31
-18000.	-9.58	4.50	2.59	45.57	-9.82	4.43	1.24	46.33	-9.89	4.16	0.84	48.47
-17500.	-9.20	4.30	1.15	45.82	-8.95	3.88	0.69	46.81	-9.03	3.37	0.43	48.66
-17000.	-8.61	3.80	-2.10	45.43	-7.87	3.17	-1.60	46.35	-7.73	2.75	-2.74	46.88
-16500.	-8.10	2.89	-3.79	44.69	-6.94	2.54	-3.06	45.06	-6.30	2.33	-2.92	45.77
-16000.	-7.46	2.57	-1.04	44.23	-6.24	1.85	-1.05	44.90	-5.32	1.56	-1.24	45.87
-15500.	-7.01	2.53	-0.75	44.78	-5.72	1.21	0.92	46.23	-4.93	0.52	-1.78	46.79
-15000.	-6.98	2.79	-1.66	45.15	-6.05	1.68	-1.37	46.60	-5.27	0.65	-1.59	47.97
-14500.	-6.52	2.66	-4.46	44.88	-5.79	1.77	-5.60	46.45	-5.95	2.03	-7.40	48.41
-14000.	-5.59	2.16	-2.43	44.85	-5.15	1.71	-7.53	46.51	-4.70	2.10	-14.01	47.85
-13500.	-5.47	3.05	1.03	45.87	-4.74	2.39	-2.98	47.17	-3.69	2.74	-9.74	48.36
-13000.	-5.63	3.86	-0.90	45.76	-5.54	3.91	1.36	47.84	-2.85	3.79	-3.36	48.52
-12500.	-4.88	4.53	-4.21	44.85	-3.46	4.17	-2.61	46.36	-2.04	4.55	-2.49	47.66
-12000.	-3.23	5.01	-2.55	44.06	-2.67	4.76	-0.25	45.19	-1.88	5.45	2.13	45.75
-11500.	-3.06	6.02	1.50	43.54	-2.98	5.38	-1.27	44.24	-1.88	4.98	-1.09	44.20
-11000.	-1.68	5.73	-3.04	42.50	-2.39	5.20	0.74	43.10	-1.90	4.62	2.51	42.79
-10500.	-1.43	5.27	-1.27	41.14	-2.30	5.21	1.27	41.52	-2.74	4.42	6.00	41.39
-10000.	-1.81	4.66	4.36	39.72	-3.02	4.16	5.04	40.10	-3.62	3.60	5.35	39.66
-9500.	-2.04	4.79	3.83	37.77	-2.86	4.16	5.10	37.63	-4.65	3.15	6.02	37.51
-9000.	-1.92	4.64	0.47	36.94	-2.30	4.05	4.35	37.32	-3.55	3.32	1.26	37.00
-8500.	-0.90	4.40	-0.98	37.22	-1.02	3.91	3.22	36.80	-1.83	3.53	3.95	36.16
-8000.	-0.47	4.62	-3.77	36.30	-0.43	4.85	6.48	35.53	-1.78	4.78	10.26	34.77
-7500.	-0.49	4.68	-10.20	35.18	-1.32	5.32	-7.45	33.82	-1.63	4.72	3.42	32.85
-7000.	-0.68	4.85	-11.15	33.76	-1.32	5.06	-9.54	32.54	-1.95	4.42	-8.44	31.86
-6500.	-0.13	4.91	-3.73	32.23	-0.80	5.07	-2.62	31.46	-2.36	4.51	-2.64	30.94
-6000.	0.55	4.76	1.26	31.26	-1.00	4.93	7.09	30.62	-3.62	4.73	6.71	30.76
-5500.	-1.70	4.20	9.00	29.87	-2.92	4.41	14.41	29.69	-5.96	4.39	10.42	30.15
-5000.	-6.61	3.23	1.13	28.94	-8.37	3.62	3.66	28.76	-9.70	3.68	8.68	29.85
-4500.	-9.24	1.84	-2.52	30.45	-10.84	1.33	0.13	30.60	-13.08	2.20	6.02	29.47
-4000.	-9.65	0.05	6.05	31.11	-10.78	-2.06	6.79	30.85	-12.12	-3.78	-0.47	29.29
-3500.	-11.54	0.56	30.52	32.82	-11.60	-3.13	13.88	30.51	-12.62	-4.73	4.04	28.98
-3000.	-13.99	2.97	23.63	35.36	-12.77	-1.33	17.61	33.10	-13.23	-3.48	13.88	30.65
-2500.	-15.83	5.37	6.28	41.07	-13.66	0.53	3.99	35.51	-12.97	-1.46	-0.37	33.56
-2000.	-15.85	5.95	-5.69	46.68	-12.89	2.35	-3.82	40.45	-12.39	-0.09	-7.27	36.23
-1500.	-14.95	4.22	-7.25	51.62	-12.45	1.16	-2.34	45.45	-10.90	-0.04	-3.73	39.39
-1000.	-15.68	0.99	-4.53	55.28	-14.22	-1.31	1.22	49.43	-14.08	-0.26	-3.80	46.58
-500.	-15.80	-1.86	-10.05	56.48	-16.34	-1.71	-5.80	53.51	-15.93	-0.22	-10.43	52.00

TABLE F.3. (continued).

Elevation: 2000 ft AGL

0.	-14.92	-2.81	-17.13	-99.99	-17.30	-0.61	-18.16	-99.99	-16.33	-0.12	-17.17	-99.99
500.	-12.16	-1.64	-20.67	-99.99	-16.09	-0.12	-14.37	-99.99	-14.32	0.48	-16.94	-99.99
1000.	-7.75	-1.27	-14.87	-99.99	-11.45	-0.82	-11.77	-99.99	-12.62	-0.25	-12.68	-99.99
1500.	-4.21	0.18	-13.35	-99.99	-7.82	-0.65	-9.26	-99.99	-9.59	-0.34	-8.34	-99.99
2000.	-2.41	1.18	-12.72	-99.99	-5.02	0.16	-9.03	-99.99	-7.07	-0.11	-8.72	-99.99
2500.	-4.38	1.54	-6.40	-99.99	-3.22	1.08	-8.97	-99.99	-5.20	0.81	-8.68	-99.99
3000.	-7.27	1.14	-3.13	-99.99	-4.69	1.78	-3.04	-99.99	-4.22	2.23	-6.07	-99.99
3500.	-7.97	1.98	-5.17	-99.99	-4.99	2.71	-5.21	-99.99	-3.43	3.54	-8.22	-99.99
4000.	-6.68	2.81	-3.23	-99.99	-3.61	3.31	-6.72	-99.99	-1.08	3.50	-7.91	-99.99
4500.	-4.53	4.52	1.27	-99.99	-3.19	4.04	-4.97	-99.99	-0.98	4.19	-8.81	-99.99
5000.	-4.14	5.43	-5.78	-99.99	-3.83	4.57	-6.49	-99.99	-2.24	4.88	-8.79	-99.99
5500.	-4.22	5.65	-13.43	-99.99	-5.36	6.67	-11.60	-99.99	-4.31	6.11	-9.31	-99.99
6000.	-3.49	5.73	-9.95	-99.99	-3.23	6.58	-8.18	-99.99	-2.77	6.70	-9.63	-99.99
6500.	-1.62	4.82	-10.22	-99.99	0.26	5.52	-7.05	-99.99	1.50	6.15	-3.61	-99.99
7000.	1.17	3.13	-17.30	-99.99	2.90	4.15	-8.92	-99.99	3.86	5.28	-0.39	-99.99
7500.	3.74	-0.07	-12.60	-99.99	5.91	1.07	-14.88	-99.99	7.34	2.29	-4.39	-99.99
8000.	6.27	-3.31	-7.65	-99.99	7.79	-3.09	-8.44	-99.99	10.01	-1.78	-9.01	-99.99
8500.	5.25	-4.67	0.23	-99.99	4.71	-4.04	10.29	-99.99	7.30	-3.79	18.54	-99.99
9000.	5.55	-5.74	4.53	-99.99	2.12	-4.77	15.51	-99.99	0.64	-4.61	31.67	-99.99
9500.	2.69	-5.46	21.78	-99.99	-0.93	-5.19	19.42	-99.99	-4.20	-4.34	22.29	-99.99
10000.	-2.42	-6.86	35.27	-99.99	-4.63	-5.17	25.36	-99.99	-7.90	-3.74	18.59	-99.99
10500.	-8.09	-6.73	30.21	-99.99	-8.45	-5.13	13.99	-99.99	-10.01	-2.76	10.58	-99.99
11000.	-11.84	-4.96	22.37	-99.99	-11.07	-3.14	15.00	-99.99	-11.72	-1.20	3.43	-99.99
11500.	-13.04	-2.17	6.25	-99.99	-11.59	-0.98	4.67	-99.99	-11.29	-0.41	-3.45	-99.99
12000.	-12.72	0.67	2.52	-99.99	-10.62	0.12	4.18	-99.99	-10.34	0.10	-0.55	36.27
12500.	-10.91	1.58	4.38	-99.99	-9.93	1.17	10.70	-99.99	-9.83	1.07	7.64	36.40
13000.	-9.22	2.04	1.76	-99.99	-9.14	1.40	10.44	-99.99	-9.38	1.64	7.08	-99.99
13500.	-8.45	2.05	0.70	-99.99	-9.22	2.06	6.61	-99.99	-9.02	1.61	3.31	37.34
14000.	-7.22	1.83	-3.84	-99.99	-8.42	2.39	-0.22	41.56	-9.13	2.18	0.91	39.31
14500.	-4.82	1.53	-3.11	-99.99	-7.06	2.91	-1.31	41.58	-6.66	2.59	-1.11	39.09
15000.	-6.82	3.22	1.92	-99.99	-6.50	3.64	-2.88	-99.99	-5.88	3.35	-5.36	38.36
15500.	-6.81	4.32	1.41	-99.99	-6.43	4.49	-4.55	40.08	-6.19	4.57	-3.63	36.98
16000.	-5.72	4.64	2.81	-99.99	-5.25	4.79	-3.87	41.71	-5.40	5.24	-4.68	37.51
16500.	-5.95	5.50	2.38	46.10	-5.09	5.64	-4.43	43.62	-4.24	5.93	-10.52	40.17
17000.	-5.16	6.29	3.94	46.66	-3.17	6.92	-0.98	45.46	-2.56	5.83	-4.60	42.60
17500.	-2.81	6.62	-4.49	46.19	-1.09	6.05	-1.22	46.07	-1.07	5.82	-2.77	44.87
18000.	-1.56	7.44	-10.92	43.72	-0.25	7.02	-7.74	45.84	-0.89	6.57	-5.09	46.55
18500.	-0.39	8.59	-11.15	41.23	0.42	7.74	-9.78	45.41	-0.48	7.65	-4.18	47.32
19000.	1.43	9.18	-3.52	40.70	1.78	8.53	-0.82	44.96	-0.05	8.31	1.22	47.39
19500.	2.56	9.53	-0.26	41.79	2.59	8.98	1.26	45.87	0.78	8.39	2.05	47.81
20000.	3.27	9.03	-0.37	42.64	2.42	8.29	2.68	46.04	1.40	7.78	1.03	48.01
20500.	2.02	8.73	4.38	41.63	0.83	7.81	7.16	45.35	0.36	7.48	1.98	47.48
21000.	1.60	8.73	4.00	39.33	0.95	7.60	2.22	44.08	-0.12	7.33	-2.52	46.32
21500.	1.62	8.44	6.97	35.86	0.95	7.24	5.50	41.15	0.33	6.92	-3.23	45.00
22000.	0.81	8.37	10.84	33.98	0.46	7.24	8.67	38.77	1.50	7.50	2.88	43.36
22500.	-0.18	7.96	1.99	33.60	1.28	7.78	0.28	36.81	2.13	7.89	-1.10	40.33
23000.	0.66	7.91	0.05	32.93	1.74	7.50	-3.05	35.07	2.13	7.55	-2.29	37.65
23500.	1.22	8.35	2.98	31.14	1.50	7.45	-0.57	32.35	2.07	7.40	-0.15	35.04
24000.	1.68	8.66	3.29	29.36	2.24	8.24	6.05	30.56	2.11	7.94	6.49	33.44
24500.	2.14	9.38	5.84	30.95	2.09	9.39	11.27	31.91	0.93	9.19	13.33	34.10
25000.	2.14	9.38	5.84	30.95	0.91	9.92	3.31	35.61	-1.06	9.31	4.67	36.75
25500.	2.14	9.38	5.84	30.95	0.91	9.92	3.31	35.61	-1.93	8.96	0.03	39.53
26000.	2.14	9.38	5.84	30.95	0.91	9.92	3.31	35.61	-1.93	8.96	0.03	39.53
26500.	2.14	9.38	5.84	30.95	0.91	9.92	3.31	35.61	-1.93	8.96	0.03	39.53
27000.	2.14	9.38	5.84	30.95	0.91	9.92	3.31	35.61	-1.93	8.96	0.03	39.53
27500.	2.14	9.38	5.84	30.95	0.91	9.92	3.31	35.61	-1.93	8.96	0.03	39.53
28000.	2.14	9.38	5.84	30.95	0.91	9.92	3.31	35.61	-1.93	8.96	0.03	39.53
28500.	2.14	9.38	5.84	30.95	0.91	9.92	3.31	35.61	-1.93	8.96	0.03	39.53
29000.	2.14	9.38	5.84	30.95	0.91	9.92	3.31	35.61	-1.93	8.96	0.03	39.53
29500.	2.14	9.38	5.84	30.95	0.91	9.92	3.31	35.61	-1.93	8.96	0.03	39.53
30000.	2.14	9.38	5.84	30.95	0.91	9.92	3.31	35.61	-1.93	8.96	0.03	39.53
30500.	2.14	9.38	5.84	30.95	0.91	9.92	3.31	35.61	-1.93	8.96	0.03	39.53
31000.	2.14	9.38	5.84	30.95	0.91	9.92	3.31	35.61	-1.93	8.96	0.03	39.53
31500.	2.14	9.38	5.84	30.95	0.91	9.92	3.31	35.61	-1.93	8.96	0.03	39.53
32000.	2.14	9.38	5.84	30.95	0.91	9.92	3.31	35.61	-1.93	8.96	0.03	39.53
32500.	2.14	9.38	5.84	30.95	0.91	9.92	3.31	35.61	-1.93	8.96	0.03	39.53
33000.	2.14	9.38	5.84	30.95	0.91	9.92	3.31	35.61	-1.93	8.96	0.03	39.53
33500.	2.14	9.38	5.84	30.95	0.91	9.92	3.31	35.61	-1.93	8.96	0.03	39.53
34000.	2.14	9.38	5.84	30.95	0.91	9.92	3.31	35.61	-1.93	8.96	0.03	39.53
34500.	2.14	9.38	5.84	30.95	0.91	9.92	3.31	35.61	-1.93	8.96	0.03	39.53
35000.	2.14	9.38	5.84	30.95	0.91	9.92	3.31	35.61	-1.93	8.96	0.03	39.53
35500.	2.14	9.38	5.84	30.95	0.91	9.92	3.31	35.61	-1.93	8.96	0.03	39.53
36000.	2.14	9.38	5.84	30.95	0.91	9.92	3.31	35.61	-1.93	8.96	0.03	39.53
36500.	2.14	9.38	5.84	30.95	0.91	9.92	3.31	35.61	-1.93	8.96	0.03	39.53
37000.	2.14	9.38	5.84	30.95	0.91	9.92	3.31	35.61	-1.93	8.96	0.03	39.53
37500.	2.14	9.38	5.84	30.95	0.91	9.92	3.31	35.61	-1.93	8.96	0.03	39.53

TABLE F.4. JAWS Corridor Data Set #4 (along path $\overline{AB}$ in 5AU1852 measurement).

Path Shear Intensity: Class I
Plane Separated by 500 ft
X = Horizontal Distance (ft)

WX = Wind in X Direction (kts)
WY = Wind in Y Direction (kts)
WZ = Wind in Z Direction (kts)
DBZ = Radar Reflectivity (dBZ)

Elevation: 0 ft AGL

	PLANE 1				PLANE 2				PLANE 3			
X	WX	WY	WZ	DBZ	WX	WY	WZ	DBZ	WX	WY	WZ	DBZ
-37500.	-5.43	-0.36	0.00	-99.99	-5.60	0.01	0.00	-99.99	-5.93	1.41	0.00	-99.99
-37000.	-5.43	-0.36	0.00	-99.99	-5.60	0.01	0.00	-99.99	-5.93	1.41	0.00	-99.99
-36500.	-5.43	-0.36	0.00	-99.99	-5.60	0.01	0.00	-99.99	-5.93	1.41	0.00	-99.99
-36000.	-5.43	-0.36	0.00	-99.99	-5.60	0.01	0.00	-99.99	-5.93	1.41	0.00	-99.99
-35500.	-5.43	-0.36	0.00	-99.99	-5.60	0.01	0.00	-99.99	-5.93	1.41	0.00	-99.99
-35000.	-5.43	-0.36	0.00	-99.99	-5.60	0.01	0.00	-99.99	-5.93	1.41	0.00	-99.99
-34500.	-5.43	-0.36	0.00	-99.99	-5.60	0.01	0.00	-99.99	-5.93	1.41	0.00	-99.99
-34000.	-5.43	-0.36	0.00	-99.99	-5.60	0.01	0.00	-99.99	-5.93	1.41	0.00	-99.99
-33500.	-5.43	-0.36	0.00	-99.99	-5.60	0.01	0.00	-99.99	-5.93	1.41	0.00	-99.99
-33000.	-5.43	-0.36	0.00	-99.99	-5.60	0.01	0.00	-99.99	-5.93	1.41	0.00	-99.99
-32500.	-5.43	-0.36	0.00	-99.99	-5.60	0.01	0.00	-99.99	-5.93	1.41	0.00	-99.99
-32000.	-5.43	-0.36	0.00	-99.99	-5.60	0.01	0.00	-99.99	-5.93	1.41	0.00	-99.99
-31500.	-5.43	-0.36	0.00	-99.99	-5.60	0.01	0.00	-99.99	-5.93	1.41	0.00	-99.99
-31000.	-5.43	-0.36	0.00	-99.99	-5.60	0.01	0.00	-99.99	-5.93	1.41	0.00	-99.99
-30500.	-5.43	-0.36	0.00	-99.99	-5.60	0.01	0.00	-99.99	-5.93	1.41	0.00	-99.99
-30000.	-5.43	-0.36	0.00	-99.99	-5.60	0.01	0.00	-99.99	-5.93	1.41	0.00	-99.99
-29500.	-5.43	-0.36	0.00	-99.99	-5.60	0.01	0.00	-99.99	-5.93	1.41	0.00	-99.99
-29000.	-5.43	-0.36	0.00	-99.99	-5.60	0.01	0.00	-99.99	-5.93	1.41	0.00	-99.99
-28500.	-5.43	-0.36	0.00	-99.99	-5.60	0.01	0.00	-99.99	-5.93	1.41	0.00	-99.99
-28000.	-5.43	-0.36	0.00	-99.99	-5.60	0.01	0.00	-99.99	-5.93	1.41	0.00	-99.99
-27500.	-5.43	-0.36	0.00	-99.99	-5.60	0.01	0.00	-99.99	-5.93	1.41	0.00	-99.99
-27000.	-5.43	-0.36	0.00	-99.99	-5.60	0.01	0.00	-99.99	-5.93	1.41	0.00	-99.99
-26500.	-5.43	-0.36	0.00	-99.99	-5.60	0.01	0.00	-99.99	-5.93	1.41	0.00	-99.99
-26000.	-5.43	-0.36	0.00	-99.99	-5.60	0.01	0.00	-99.99	-5.93	1.41	0.00	-99.99
-25500.	-5.43	-0.36	0.00	-99.99	-5.60	0.01	0.00	-99.99	-5.93	1.41	0.00	-99.99
-25000.	-5.43	-0.36	0.00	-99.99	-5.60	0.01	0.00	-99.99	-5.93	1.41	0.00	-99.99
-24500.	-5.43	-0.36	0.00	48.63	-5.60	0.01	0.00	-99.99	-5.93	1.41	0.00	-99.99
-24000.	-6.25	0.29	0.00	47.76	-5.60	0.01	0.00	47.91	-5.93	1.41	0.00	-99.99
-23500.	-6.94	0.83	0.00	48.38	-6.11	0.91	0.00	48.15	-5.93	1.41	0.00	48.42
-23000.	-7.07	1.31	0.00	49.42	-7.03	2.15	0.00	49.60	-6.77	3.00	0.00	50.81
-22500.	-7.02	2.34	0.00	-99.99	-7.33	3.63	0.00	51.65	-7.56	5.35	0.00	54.84
-22000.	-6.11	3.09	0.00	-99.99	-6.68	4.61	0.00	-99.99	-7.05	6.26	0.00	55.37
-21500.	-7.22	3.50	0.00	-99.99	-7.16	4.74	0.00	51.78	-7.30	6.17	0.00	54.36
-21000.	-8.20	3.87	0.00	49.10	-7.70	4.97	0.00	51.23	-6.70	5.91	0.00	52.71
-20500.	-8.00	4.69	0.00	47.87	-7.15	4.96	0.00	51.98	-7.53	5.91	0.00	53.43
-20000.	-10.87	5.76	0.00	47.91	-10.26	5.70	0.00	50.61	-10.50	5.79	0.00	51.76
-19500.	-12.14	6.01	0.00	47.88	-11.83	5.82	0.00	49.32	-11.27	5.76	0.00	48.74
-19000.	-12.16	5.67	0.00	45.85	-12.10	6.24	0.00	47.43	-11.83	6.70	0.00	47.18
-18500.	-11.07	5.52	0.00	45.11	-13.19	7.19	0.00	45.32	-13.19	7.69	0.00	45.32
-18000.	-7.80	4.54	0.00	44.78	-10.87	6.27	0.00	45.39	-13.06	7.11	0.00	46.25
-17500.	-6.67	3.87	0.00	44.72	-8.92	5.04	0.00	45.43	-12.44	6.22	0.00	46.21
-17000.	-6.97	3.44	0.00	44.71	-8.09	4.29	0.00	45.15	-8.81	4.71	0.00	45.49
-16500.	-7.49	3.85	0.00	43.57	-6.08	3.58	0.00	44.50	-7.70	4.03	0.00	45.26
-16000.	-7.58	3.82	0.00	37.90	-6.66	3.74	0.00	42.18	-8.96	4.14	0.00	43.55
-15500.	-8.86	4.20	0.00	37.36	-9.08	4.20	0.00	38.96	-10.37	4.38	0.00	42.60
-15000.	-9.37	4.29	0.00	40.86	-10.51	4.43	0.00	41.87	-11.61	4.64	0.00	42.77
-14500.	-8.35	3.92	0.00	43.14	-9.61	3.99	0.00	43.35	-11.86	4.41	0.00	44.22
-14000.	-7.10	3.84	0.00	42.44	-8.09	4.06	0.00	42.47	-9.58	4.05	0.00	43.78
-13500.	-7.12	4.72	0.00	41.19	-8.04	5.38	0.00	41.52	-9.07	5.41	0.00	42.79
-13000.	-6.45	4.12	0.00	40.88	-7.18	5.46	0.00	40.57	-7.68	5.61	0.00	42.04
-12500.	-5.59	3.48	0.00	41.44	-5.94	4.68	0.00	41.99	-6.49	6.95	0.00	43.33
-12000.	-6.67	5.13	0.00	41.48	-6.82	6.13	0.00	41.56	-6.96	7.05	0.00	42.37
-11500.	-7.06	5.89	0.00	40.75	-7.02	6.72	0.00	39.96	-6.25	7.45	0.00	40.34
-11000.	-5.59	4.58	0.00	40.05	-6.46	5.75	0.00	39.43	-5.91	6.70	0.00	39.54
-10500.	-7.86	5.07	0.00	39.99	-8.52	5.09	0.00	39.51	-7.73	5.86	0.00	39.91
-10000.	-10.07	5.88	0.00	39.14	-8.78	4.28	0.00	39.90	-7.51	3.88	0.00	39.86
-9500.	-9.57	5.50	0.00	36.82	-8.26	4.40	0.00	36.78	-2.26	2.26	0.00	37.20
-9000.	-9.31	4.74	0.00	34.86	-10.37	5.33	0.00	34.26	-8.65	3.97	0.00	31.12
-8500.	-14.01	5.67	0.00	34.37	-12.12	5.23	0.00	33.86	-10.55	4.32	0.00	31.65
-8000.	-15.34	6.01	0.00	34.49	-13.71	5.42	0.00	33.65	-11.15	4.51	0.00	31.50
-7500.	-15.26	5.86	0.00	36.05	-13.10	5.07	0.00	34.58	-11.46	4.09	0.00	31.43
-7000.	-14.58	5.43	0.00	36.00	-13.19	4.79	0.00	34.64	-11.74	4.02	0.00	32.55
-6500.	-15.46	5.65	0.00	34.95	-13.93	4.84	0.00	32.87	-12.22	4.00	0.00	32.82
-6000.	-14.62	4.87	0.00	34.06	-15.32	5.27	0.00	31.76	-14.03	4.79	0.00	31.52
-5500.	-18.16	4.79	0.00	32.83	-18.74	5.72	0.00	31.33	-17.91	5.30	0.00	33.70
-5000.	-20.42	5.48	0.00	32.24	-19.70	6.36	0.00	35.77	-14.07	3.96	0.00	38.61
-4500.	-20.03	5.06	0.00	34.32	-15.78	5.36	0.00	37.57	-9.87	4.12	0.00	41.40
-4000.	-21.01	4.73	0.00	35.21	-14.98	5.06	0.00	38.65	-12.97	5.19	0.00	42.47
-3500.	-20.45	4.87	0.00	38.26	-15.55	4.89	0.00	39.71	-12.40	4.40	0.00	-99.99
-3000.	-22.73	6.26	0.00	44.00	-16.88	6.62	0.00	43.19	-13.10	5.62	0.00	-99.99
-2500.	-26.21	7.54	0.00	49.25	-20.73	7.17	0.00	45.54	-16.29	7.19	0.00	44.96
-2000.	-25.79	8.19	0.00	52.87	-24.34	9.61	0.00	51.21	-20.85	10.38	0.00	48.03
-1500.	-22.08	8.51	0.00	54.69	-23.00	10.83	0.00	54.01	-22.51	12.01	0.00	51.61
-1000.	-19.50	6.84	0.00	55.02	-19.42	9.68	0.00	54.54	-20.66	13.06	0.00	51.60
-500.	-15.90	6.71	0.00	55.01	-14.69	7.69	0.00	54.83	-16.98	11.92	0.00	52.66

TABLE F.4. (continued).

Elevation: 0 ft AGL

0.	-12.53	6.39	0.00	54.24	-12.03	6.79	0.00	54.71	-13.00	10.78	0.00	54.26
500.	-12.47	5.23	0.00	51.97	-9.80	5.30	0.00	53.26	-9.00	8.72	0.00	54.26
1000.	-11.74	3.05	0.00	47.96	-8.44	4.34	0.00	50.39	-4.04	6.65	0.00	52.95
1500.	-6.31	-2.30	0.00	46.02	-3.92	3.21	0.00	48.60	-2.05	6.41	0.00	50.21
2000.	-4.21	-1.58	0.00	46.74	1.27	2.82	0.00	47.00	3.42	6.17	0.00	47.79
2500.	3.06	-5.01	0.00	46.43	6.56	4.08	0.00	46.40	9.10	6.55	0.00	45.81
3000.	6.52	-4.21	0.00	46.11	9.24	2.28	0.00	45.11	8.84	6.61	0.00	44.84
3500.	4.65	-2.91	0.00	45.60	5.77	2.11	0.00	44.71	6.85	6.32	0.00	43.27
4000.	1.43	-2.40	0.00	45.23	-1.03	2.88	0.00	44.23	2.53	5.27	0.00	43.39
4500.	0.20	-1.81	0.00	44.99	-3.08	2.76	0.00	43.47	-1.12	5.39	0.00	42.61
5000.	5.16	0.30	0.00	44.23	-1.60	3.32	0.00	41.40	-2.03	5.54	0.00	41.46
5500.	11.66	2.09	0.00	42.17	5.94	3.14	0.00	40.75	1.74	6.13	0.00	40.93
6000.	13.42	4.90	0.00	40.35	10.38	5.40	0.00	39.39	8.11	6.85	0.00	40.10
6500.	12.52	7.66	0.00	38.77	10.49	8.12	0.00	37.84	8.70	9.11	0.00	37.89
7000.	14.84	7.89	0.00	38.33	11.41	8.50	0.00	36.71	8.13	8.71	0.00	36.06
7500.	19.93	6.57	0.00	38.30	15.84	7.33	0.00	35.91	8.98	7.21	0.00	34.58
8000.	24.20	6.06	0.00	37.92	20.90	6.31	0.00	35.18	11.51	5.53	0.00	33.90
8500.	23.51	5.96	0.00	36.98	21.60	5.90	0.00	34.91	15.12	5.02	0.00	33.77
9000.	20.61	5.74	0.00	36.24	19.26	5.82	0.00	33.86	13.39	5.83	0.00	32.16
9500.	17.13	5.70	0.00	36.28	16.99	3.81	0.00	33.27	12.24	2.94	0.00	32.05
10000.	19.78	1.52	0.00	33.67	18.31	-0.01	0.00	33.13	12.00	-0.60	0.00	32.71
10500.	16.43	-0.15	0.00	35.55	17.26	-1.28	0.00	33.89	10.18	-2.38	0.00	34.13
11000.	12.29	-1.68	0.00	36.99	13.75	-2.98	0.00	35.97	8.83	-3.66	0.00	34.98
11500.	8.76	-2.89	0.00	-99.99	6.56	-4.66	0.00	40.57	5.60	-6.47	0.00	35.39
12000.	7.75	-3.71	0.00	-99.99	1.30	-6.48	0.00	42.45	3.36	-8.20	0.00	37.18
12500.	2.85	-4.49	0.00	-99.99	0.33	-6.33	0.00	40.90	2.20	-7.91	0.00	36.55
13000.	0.34	-4.45	0.00	-99.99	0.78	-5.74	0.00	-99.99	-1.13	-6.19	0.00	34.64
13500.	-1.80	-4.56	0.00	-99.99	-2.07	-3.99	0.00	-99.99	-2.87	-4.06	0.00	35.39
14000.	-3.61	-5.50	0.00	-99.99	-3.13	-4.61	0.00	43.28	-3.18	-3.60	0.00	39.60
14500.	-6.27	-5.60	0.00	-99.99	-4.36	-4.67	0.00	-99.99	-3.21	-4.07	0.00	37.46
15000.	-8.16	-5.22	0.00	-99.99	-6.50	-4.45	0.00	-99.99	-4.64	-4.09	0.00	38.02
15500.	-8.51	-5.27	0.00	-99.99	-7.75	-4.89	0.00	-99.99	-5.29	-4.42	0.00	36.14
16000.	-11.37	-5.08	0.00	-99.99	-8.80	-5.33	0.00	-99.99	-5.58	-4.70	0.00	37.96
16500.	-13.77	-5.92	0.00	-99.99	-10.80	-6.03	0.00	-99.99	-6.37	-5.50	0.00	39.05
17000.	-13.03	-6.18	0.00	47.17	-9.47	-5.86	0.00	-99.99	-6.27	-5.68	0.00	41.20
17500.	-10.15	-5.47	0.00	46.66	-8.69	-5.57	0.00	45.25	-6.16	-5.68	0.00	42.95
18000.	-8.27	-5.25	0.00	44.35	-8.05	-5.34	0.00	45.84	-6.26	-5.53	0.00	44.81
18500.	-3.32	-4.23	0.00	41.93	-5.68	-5.10	0.00	46.03	-3.86	-3.00	0.00	45.62
19000.	2.56	-2.95	0.00	41.78	-2.32	-3.37	0.00	45.07	-1.81	-0.88	0.00	45.15
19500.	4.68	-1.56	0.00	40.57	-1.58	-1.52	0.00	42.89	-0.93	0.22	0.00	43.30
20000.	0.68	-0.29	0.00	35.80	-0.46	-0.19	0.00	38.80	-0.20	1.40	0.00	42.15
20500.	-1.98	0.62	0.00	32.67	0.44	0.19	0.00	36.98	0.60	2.69	0.00	42.69
21000.	0.46	2.41	0.00	33.31	0.84	2.38	0.00	36.84	0.59	2.50	0.00	43.43
21500.	2.07	3.79	0.00	34.08	1.02	2.78	0.00	37.44	1.01	2.82	0.00	44.23
22000.	2.85	4.08	0.00	38.72	1.24	3.34	0.00	41.32	1.05	3.30	0.00	46.81
22500.	1.22	3.86	0.00	38.30	0.45	3.24	0.00	43.05	0.37	2.81	0.00	46.17
23000.	0.78	3.77	0.00	39.10	0.88	3.64	0.00	-99.99	0.94	2.96	0.00	45.03
23500.	0.52	3.43	0.00	-99.99	0.81	3.12	0.00	-99.99	0.57	2.76	0.00	-99.99
24000.	0.04	2.87	0.00	22.96	-0.11	2.61	0.00	-99.99	0.14	2.54	0.00	29.07
24500.	-0.83	2.38	0.00	23.33	-0.89	2.24	0.00	22.70	-0.76	2.10	0.00	23.74
25000.	-0.83	2.38	0.00	-99.99	-1.60	2.05	0.00	24.18	-0.67	1.98	0.00	25.80
25500.	-0.83	2.38	0.00	-99.99	-1.60	2.05	0.00	-99.99	-1.61	1.66	0.00	31.28
26000.	-0.83	2.38	0.00	-99.99	-1.60	2.05	0.00	-99.99	-1.61	1.66	0.00	-99.99
26500.	-0.83	2.38	0.00	-99.99	-1.60	2.05	0.00	-99.99	-1.61	1.66	0.00	-99.99
27000.	-0.83	2.38	0.00	-99.99	-1.60	2.05	0.00	-99.99	-1.61	1.66	0.00	-99.99
27500.	-0.83	2.38	0.00	-99.99	-1.60	2.05	0.00	-99.99	-1.61	1.66	0.00	-99.99
28000.	-0.83	2.38	0.00	-99.99	-1.60	2.05	0.00	-99.99	-1.61	1.66	0.00	-99.99
28500.	-0.83	2.38	0.00	-99.99	-1.60	2.05	0.00	-99.99	-1.61	1.66	0.00	-99.99
29000.	-0.83	2.38	0.00	-99.99	-1.60	2.05	0.00	-99.99	-1.61	1.66	0.00	-99.99
29500.	-0.83	2.38	0.00	-99.99	-1.60	2.05	0.00	-99.99	-1.61	1.66	0.00	-99.99
30000.	-0.83	2.38	0.00	-99.99	-1.60	2.05	0.00	-99.99	-1.61	1.66	0.00	-99.99
30500.	-0.83	2.38	0.00	-99.99	-1.60	2.05	0.00	-99.99	-1.61	1.66	0.00	-99.99
31000.	-0.83	2.38	0.00	-99.99	-1.60	2.05	0.00	-99.99	-1.61	1.66	0.00	-99.99
31500.	-0.83	2.38	0.00	-99.99	-1.60	2.05	0.00	-99.99	-1.61	1.66	0.00	-99.99
32000.	-0.83	2.38	0.00	-99.99	-1.60	2.05	0.00	-99.99	-1.61	1.66	0.00	-99.99
32500.	-0.83	2.38	0.00	-99.99	-1.60	2.05	0.00	-99.99	-1.61	1.66	0.00	-99.99
33000.	-0.83	2.38	0.00	-99.99	-1.60	2.05	0.00	-99.99	-1.61	1.66	0.00	-99.99
33500.	-0.83	2.38	0.00	-99.99	-1.60	2.05	0.00	-99.99	-1.61	1.66	0.00	-99.99
34000.	-0.83	2.38	0.00	-99.99	-1.60	2.05	0.00	-99.99	-1.61	1.66	0.00	-99.99
34500.	-0.83	2.38	0.00	-99.99	-1.60	2.05	0.00	-99.99	-1.61	1.66	0.00	-99.99
35000.	-0.83	2.38	0.00	-99.99	-1.60	2.05	0.00	-99.99	-1.61	1.66	0.00	-99.99
35500.	-0.83	2.38	0.00	-99.99	-1.60	2.05	0.00	-99.99	-1.61	1.66	0.00	-99.99
36000.	-0.83	2.38	0.00	-99.99	-1.60	2.05	0.00	-99.99	-1.61	1.66	0.00	-99.99
36500.	-0.83	2.38	0.00	-99.99	-1.60	2.05	0.00	-99.99	-1.61	1.66	0.00	-99.99
37000.	-0.83	2.38	0.00	-99.99	-1.60	2.05	0.00	-99.99	-1.61	1.66	0.00	-99.99
37500.	-0.83	2.38	0.00	-99.99	-1.60	2.05	0.00	-99.99	-1.61	1.66	0.00	-99.99

TABLE F.4. (continued).

Elevation: 500 ft AGL

	PLANE 1				PLANE 2				PLANE 3			
X	WX	WY	WZ	DBZ	WX	WY	WZ	DBZ	WX	WY	WZ	DBZ
-37500.	-3.31	-3.49	0.03	-99.99	-5.44	-2.39	0.42	-99.99	-6.51	-0.36	0.37	-99.99
-37000.	-3.31	-3.49	0.03	-99.99	-5.44	-2.39	0.42	-99.99	-6.51	-0.36	0.37	-99.99
-36500.	-3.31	-3.49	0.03	-99.99	-5.44	-2.39	0.42	-99.99	-6.51	-0.36	0.37	-99.99
-36000.	-3.31	-3.49	0.03	-99.99	-5.44	-2.39	0.42	-99.99	-6.51	-0.36	0.37	-99.99
-35500.	-3.31	-3.49	0.03	-99.99	-5.44	-2.39	0.42	-99.99	-6.51	-0.36	0.37	-99.99
-35000.	-3.31	-3.49	0.03	-99.99	-5.44	-2.39	0.42	-99.99	-6.51	-0.36	0.37	-99.99
-34500.	-3.31	-3.49	0.03	-99.99	-5.44	-2.39	0.42	-99.99	-6.51	-0.36	0.37	-99.99
-34000.	-3.31	-3.49	0.03	-99.99	-5.44	-2.39	0.42	-99.99	-6.51	-0.36	0.37	-99.99
-33500.	-3.31	-3.49	0.03	-99.99	-5.44	-2.39	0.42	-99.99	-6.51	-0.36	0.37	-99.99
-33000.	-3.31	-3.49	0.03	-99.99	-5.44	-2.39	0.42	-99.99	-6.51	-0.36	0.37	-99.99
-32500.	-3.31	-3.49	0.03	-99.99	-5.44	-2.39	0.42	-99.99	-6.51	-0.36	0.37	-99.99
-32000.	-3.31	-3.49	0.03	-99.99	-5.44	-2.39	0.42	-99.99	-6.51	-0.36	0.37	-99.99
-31500.	-3.31	-3.49	0.03	-99.99	-5.44	-2.39	0.42	-99.99	-6.51	-0.36	0.37	-99.99
-31000.	-3.31	-3.49	0.03	-99.99	-5.44	-2.39	0.42	-99.99	-6.51	-0.36	0.37	-99.99
-30500.	-3.31	-3.49	0.03	-99.99	-5.44	-2.39	0.42	-99.99	-6.51	-0.36	0.37	-99.99
-30000.	-3.31	-3.49	0.03	-99.99	-5.44	-2.39	0.42	-99.99	-6.51	-0.36	0.37	-99.99
-29500.	-3.31	-3.49	0.03	-99.99	-5.44	-2.39	0.42	-99.99	-6.51	-0.36	0.37	-99.99
-29000.	-3.31	-3.49	0.03	-99.99	-5.44	-2.39	0.42	-99.99	-6.51	-0.36	0.37	-99.99
-28500.	-3.31	-3.49	0.03	-99.99	-5.44	-2.39	0.42	-99.99	-6.51	-0.36	0.37	-99.99
-28000.	-3.31	-3.49	0.03	-99.99	-5.44	-2.39	0.42	-99.99	-6.51	-0.36	0.37	-99.99
-27500.	-3.31	-3.49	0.03	-99.99	-5.44	-2.39	0.42	-99.99	-6.51	-0.36	0.37	-99.99
-27000.	-3.31	-3.49	0.03	-99.99	-5.44	-2.39	0.42	-99.99	-6.51	-0.36	0.37	-99.99
-26500.	-3.31	-3.49	0.03	-99.99	-5.44	-2.39	0.42	-99.99	-6.51	-0.36	0.37	-99.99
-26000.	-3.31	-3.49	0.03	-99.99	-5.44	-2.39	0.42	-99.99	-6.51	-0.36	0.37	-99.99
-25500.	-3.31	-3.49	0.03	-99.99	-5.44	-2.39	0.42	-99.99	-6.51	-0.36	0.37	-99.99
-25000.	-3.31	-3.49	0.03	-99.99	-5.44	-2.39	0.42	-99.99	-6.51	-0.36	0.37	-99.99
-24500.	-3.31	-3.49	0.03	50.60	-5.44	-2.39	0.42	-99.99	-6.51	-0.36	0.37	-99.99
-24000.	-6.08	-1.77	1.84	50.44	-5.44	-2.39	0.42	50.12	-6.51	-0.36	0.37	-99.99
-23500.	-8.37	-0.46	1.11	51.33	-6.67	-1.11	1.60	50.78	-6.51	-0.36	0.37	49.87
-23000.	-8.43	0.06	-0.39	52.03	-9.04	1.28	0.33	51.00	-8.44	2.25	-0.31	51.78
-22500.	-8.59	1.42	-2.09	-99.99	-9.53	3.46	-2.32	51.52	-9.43	5.47	-1.82	54.15
-22000.	-7.83	2.22	-1.03	-99.99	-8.67	4.77	-2.20	-99.99	-8.63	6.35	-1.93	54.59
-21500.	-9.36	4.24	-0.02	-99.99	-8.66	5.21	-1.04	51.77	-8.57	6.49	-1.48	54.15
-21000.	-9.49	4.76	-1.24	49.51	-8.61	5.58	-1.47	51.19	-8.20	6.55	-1.77	53.74
-20500.	-9.22	5.26	0.23	48.20	-8.43	5.65	0.85	51.40	-8.54	6.53	0.38	53.79
-20000.	-10.82	5.89	1.34	48.13	-10.29	6.13	1.59	50.32	-10.34	6.51	0.86	51.79
-19500.	-11.38	5.90	-0.70	48.03	-11.09	6.06	-0.05	49.54	-10.73	6.42	-1.26	49.87
-19000.	-11.12	5.48	-0.70	46.82	-11.00	6.22	-0.14	48.02	-10.78	6.87	-0.11	48.41
-18500.	-10.46	5.40	-2.78	46.49	-11.66	6.78	-1.30	46.80	-11.56	7.38	-0.13	47.05
-18000.	-8.51	4.69	-2.90	46.31	-10.54	6.23	-2.53	46.60	-11.68	6.82	-0.82	47.53
-17500.	-8.01	4.24	-1.09	45.78	-9.53	5.30	-1.98	46.32	-11.48	6.25	-1.92	47.48
-17000.	-8.08	3.86	-0.37	45.48	-8.89	4.64	-1.88	46.06	-9.27	5.02	-3.56	47.34
-16500.	-8.15	4.22	0.03	44.31	-7.35	4.05	-0.27	46.22	-8.14	4.30	-0.68	47.40
-16000.	-8.59	4.68	0.81	41.13	-8.04	4.48	1.58	44.93	-9.25	4.64	1.21	46.11
-15500.	-9.01	4.62	0.05	40.46	-9.41	4.80	0.86	42.26	-10.25	4.88	0.78	44.19
-15000.	-8.94	4.44	-0.59	42.42	-9.95	4.70	-0.13	43.18	-11.04	5.08	0.60	43.78
-14500.	-8.38	4.26	-1.03	43.96	-9.35	4.31	-1.17	44.10	-11.19	4.61	-1.80	44.00
-14000.	-7.49	4.15	-0.98	43.58	-8.20	4.27	-0.87	43.47	-9.47	4.33	-1.34	44.10
-13500.	-7.27	4.65	-1.04	42.53	-8.18	5.35	-0.43	42.65	-9.17	5.57	-1.00	43.41
-13000.	-6.76	4.32	-1.63	42.06	-7.47	5.39	-2.81	41.42	-8.05	6.08	-2.65	43.12
-12500.	-6.24	4.12	-0.30	41.98	-6.45	5.09	-1.01	42.43	-6.82	6.44	-1.92	44.26
-12000.	-7.13	5.50	0.47	42.01	-7.15	6.35	-0.34	42.41	-7.10	7.43	-1.30	44.64
-11500.	-7.47	6.08	-1.56	41.32	-7.65	7.08	-1.23	41.50	-6.78	7.85	-0.50	43.32
-11000.	-6.81	5.53	-0.52	40.78	-7.71	6.74	-0.63	40.61	-6.82	7.47	0.29	42.13
-10500.	-8.30	6.26	2.27	40.83	-9.36	6.89	1.50	40.45	-7.59	6.77	0.18	41.82
-10000.	-9.86	6.87	0.91	39.90	-7.97	5.17	-0.73	40.74	-6.61	4.80	-2.31	41.03
-9500.	-9.14	6.32	0.92	38.28	-6.96	4.91	1.28	38.59	-2.76	3.14	1.10	39.55
-9000.	-9.21	4.94	2.50	36.42	-8.32	4.71	4.14	36.07	-6.62	3.68	2.58	34.86
-8500.	-12.89	5.02	2.08	35.80	-10.22	4.40	2.95	34.79	-8.40	3.54	2.32	33.66
-8000.	-12.80	4.90	0.36	35.82	-12.33	4.44	1.13	34.55	-9.52	3.29	0.49	33.42
-7500.	-11.85	4.63	-1.02	38.29	-10.80	3.96	0.52	34.26	-11.13	3.79	1.40	32.51
-7000.	-11.46	4.78	0.41	37.20	-11.82	4.68	1.86	33.56	-12.78	4.36	2.16	32.43
-6500.	-12.57	5.86	0.92	33.79	-14.26	5.97	1.62	31.95	-14.35	5.20	2.43	31.88
-6000.	-13.10	5.36	0.04	33.57	-15.83	6.00	2.41	31.33	-16.33	5.63	3.09	31.10
-5500.	-16.42	5.33	1.78	32.32	-18.68	6.01	3.36	31.34	-19.11	5.65	2.03	32.89
-5000.	-18.97	5.52	0.25	31.60	-19.66	6.10	-1.58	34.64	-16.50	4.25	-1.42	37.37
-4500.	-20.24	5.56	0.13	33.46	-18.08	5.61	0.84	36.55	-14.93	3.96	1.84	39.77
-4000.	-21.64	5.70	-0.11	34.59	-18.20	5.89	1.85	37.79	-17.89	4.57	2.10	40.49
-3500.	-21.06	6.19	-0.70	37.38	-19.28	6.37	1.35	38.90	-18.58	4.85	0.96	-99.99
-3000.	-22.78	7.28	1.82	43.01	-19.83	7.96	2.26	42.32	-18.27	6.12	1.76	-99.99
-2500.	-25.35	8.41	0.46	48.38	-21.52	8.04	3.24	45.62	-18.81	7.25	3.80	44.02
-2000.	-24.47	8.46	-2.87	52.40	-23.55	9.22	-0.54	51.02	-21.19	9.44	2.99	47.42
-1500.	-21.06	8.45	-4.20	54.90	-22.13	9.86	-3.67	54.39	-21.89	11.28	-2.89	51.23
-1000.	-18.90	7.37	-3.15	55.89	-18.82	8.92	-5.89	55.59	-18.91	10.75	-4.71	52.18
-500.	-15.73	7.33	-3.41	56.19	-14.67	7.55	-5.30	56.12	-15.51	9.62	-5.37	53.41

TABLE F.4. (continued).

Elevation: 500 ft AGL

0.	-12.90	6.92	-2.42	55.29	-12.56	7.08	-1.84	55.85	-13.88	8.71	-5.60	54.86
500.	-11.89	5.27	-1.99	53.11	-10.48	5.43	-2.50	54.42	-10.43	7.16	-6.54	55.24
1000.	-10.69	2.31	-4.96	49.36	-9.14	4.07	-4.90	51.49	-6.16	5.37	-4.50	53.88
1500.	-6.76	-2.60	-7.98	47.25	-5.73	2.60	-6.63	49.53	-4.26	5.16	-4.53	51.41
2000.	-6.14	-1.74	-6.97	47.66	-2.95	2.29	-6.97	47.82	-0.94	5.15	-4.80	49.16
2500.	-3.78	-2.56	-8.53	46.95	-1.32	3.56	-8.43	47.17	2.43	5.59	-3.97	47.76
3000.	-0.06	-2.67	-6.92	46.60	1.43	2.24	-5.90	46.03	2.61	6.10	-2.44	47.09
3500.	0.49	-1.79	-1.50	46.22	0.54	2.13	-1.60	45.84	2.79	6.23	-1.42	45.74
4000.	-1.22	-0.37	0.63	45.72	-3.60	3.25	-0.02	45.11	0.21	5.38	0.52	45.16
4500.	-1.09	1.34	-5.46	45.60	-4.21	3.66	-2.98	44.17	-2.08	5.30	-0.64	43.72
5000.	4.36	2.60	-6.82	45.22	-1.96	4.57	-6.88	42.76	-2.20	5.71	-3.91	42.43
5500.	9.29	3.35	-4.69	43.72	4.66	4.10	-8.22	42.27	1.32	6.05	-6.78	41.98
6000.	11.70	4.70	-0.68	41.61	9.45	5.13	-3.19	40.67	7.42	6.14	-6.21	40.89
6500.	10.94	6.46	0.36	39.43	9.86	6.86	-0.25	38.62	8.77	7.60	-1.49	38.38
7000.	12.06	6.85	-4.97	38.63	10.59	7.35	-2.77	37.17	8.46	7.67	-0.69	36.57
7500.	17.33	6.34	-5.72	38.47	15.01	6.76	-5.66	36.21	10.18	6.84	-1.84	35.15
8000.	22.16	6.33	-2.54	38.23	20.41	6.36	-3.54	35.64	13.16	5.59	-3.20	34.32
8500.	22.28	6.21	1.32	37.28	21.55	5.96	0.68	35.40	17.04	4.51	-0.34	33.85
9000.	20.68	5.22	2.73	36.36	20.71	4.96	2.79	34.36	17.28	3.75	2.89	32.60
9500.	18.63	4.25	1.48	36.26	18.91	2.78	1.76	33.67	14.82	1.73	3.79	32.84
10000.	19.43	1.22	2.99	34.29	18.22	-0.31	1.78	33.56	12.20	-1.05	4.52	33.68
10500.	16.10	-0.03	6.74	35.88	15.92	-1.42	5.54	34.34	8.16	-2.75	3.94	34.80
11000.	12.24	-1.30	4.66	37.58	12.49	-2.63	4.82	36.01	6.67	-3.81	2.18	35.57
11500.	8.36	-2.42	6.64	-99.99	6.33	-3.91	8.09	39.69	4.79	-5.66	5.14	35.97
12000.	6.27	-3.19	3.52	-99.99	0.53	-5.46	5.54	41.68	2.42	-7.33	3.27	37.16
12500.	1.03	-4.57	4.10	-99.99	-1.50	-5.74	3.69	40.68	0.90	-7.30	2.39	36.88
13000.	-1.85	-4.10	2.49	-99.99	-1.47	-5.31	2.04	-99.99	-1.27	-5.95	2.72	35.39
13500.	-3.39	-4.40	1.46	-99.99	-3.42	-4.06	1.03	-99.99	-2.94	-3.96	0.75	35.97
14000.	-3.93	-5.01	0.01	-99.99	-3.57	-4.51	-0.46	43.77	-2.96	-3.57	-1.67	40.26
14500.	-4.50	-4.88	1.05	-99.99	-4.25	-4.48	0.76	-99.99	-3.09	-3.66	-0.22	38.42
15000.	-5.32	-4.42	-0.30	-99.99	-5.58	-4.11	0.72	-99.99	-4.08	-3.50	-0.26	38.10
15500.	-5.79	-4.58	0.99	-99.99	-6.51	-4.21	0.30	-99.99	-4.11	-3.76	-1.48	36.32
16000.	-9.42	-4.71	3.32	-99.99	-6.70	-4.85	1.98	-99.99	-3.79	-3.85	-1.43	38.03
16500.	-11.09	-5.28	0.89	-99.99	-8.21	-5.15	-0.26	-99.99	-4.51	-4.12	-1.26	39.95
17000.	-10.49	-5.51	-0.99	48.27	-7.33	-4.93	-1.15	-99.99	-5.37	-4.02	-1.14	41.72
17500.	-9.68	-4.66	-0.82	48.64	-7.39	-4.55	-0.44	46.40	-5.37	-4.03	-0.84	43.85
18000.	-8.80	-4.48	-1.73	46.85	-7.33	-4.29	-0.80	47.25	-5.70	-3.94	-1.67	46.28
18500.	-4.85	-3.39	-4.42	45.25	-6.30	-3.71	-4.02	48.02	-4.82	-1.92	-2.77	48.23
19000.	-0.18	-1.40	-1.79	45.28	-3.19	-1.71	-3.37	47.98	-4.13	-0.35	-2.33	48.75
19500.	0.87	0.47	4.18	44.62	-2.59	0.66	-0.87	47.36	-3.14	1.00	-0.81	48.37
20000.	-2.29	1.33	3.81	41.58	-2.30	1.52	-0.41	45.39	-1.82	2.05	-0.96	48.20
20500.	-3.92	1.39	1.06	39.79	-3.40	1.00	-0.36	44.21	-2.23	2.16	-0.07	48.37
21000.	-1.53	2.56	-1.01	41.23	-3.52	1.77	-1.97	44.57	-2.49	2.04	-1.05	48.70
21500.	1.81	3.71	-0.47	42.08	0.01	2.61	-1.89	45.74	-0.91	2.39	-2.00	49.38
22000.	2.70	3.76	2.91	43.51	1.18	2.87	0.78	46.84	0.52	2.52	-0.11	49.75
22500.	0.57	3.04	2.89	43.00	0.19	2.58	1.34	46.01	0.40	2.27	0.44	47.90
23000.	-0.71	2.81	0.09	41.47	-0.34	2.64	-0.04	-99.99	0.61	2.37	-0.35	45.75
23500.	0.21	3.00	-0.38	-99.99	1.08	2.94	-0.64	-99.99	1.35	2.68	-0.15	-99.99
24000.	0.50	3.06	0.77	25.65	0.46	3.02	0.67	-99.99	1.26	2.99	0.83	32.47
24500.	-0.13	3.06	0.55	24.79	0.08	3.07	0.23	25.02	0.84	3.21	-0.06	27.02
25000.	-0.13	3.06	0.55	-99.99	-0.12	3.06	-0.10	27.22	1.40	3.15	0.90	29.01
25500.	-0.13	3.06	0.55	-99.99	-0.12	3.06	-0.10	-99.99	-0.04	2.86	0.73	34.09
26000.	-0.13	3.06	0.55	-99.99	-0.12	3.06	-0.10	-99.99	-0.04	2.86	0.73	-99.99
26500.	-0.13	3.06	0.55	-99.99	-0.12	3.06	-0.10	-99.99	-0.04	2.86	0.73	-99.99
27000.	-0.13	3.06	0.55	-99.99	-0.12	3.06	-0.10	-99.99	-0.04	2.86	0.73	-99.99
27500.	-0.13	3.06	0.55	-99.99	-0.12	3.06	-0.10	-99.99	-0.04	2.86	0.73	-99.99
28000.	-0.13	3.06	0.55	-99.99	-0.12	3.06	-0.10	-99.99	-0.04	2.86	0.73	-99.99
28500.	-0.13	3.06	0.55	-99.99	-0.12	3.06	-0.10	-99.99	-0.04	2.86	0.73	-99.99
29000.	-0.13	3.06	0.55	-99.99	-0.12	3.06	-0.10	-99.99	-0.04	2.86	0.73	-99.99
29500.	-0.13	3.06	0.55	-99.99	-0.12	3.06	-0.10	-99.99	-0.04	2.86	0.73	-99.99
30000.	-0.13	3.06	0.55	-99.99	-0.12	3.06	-0.10	-99.99	-0.04	2.86	0.73	-99.99
30500.	-0.13	3.06	0.55	-99.99	-0.12	3.06	-0.10	-99.99	-0.04	2.86	0.73	-99.99
31000.	-0.13	3.06	0.55	-99.99	-0.12	3.06	-0.10	-99.99	-0.04	2.86	0.73	-99.99
31500.	-0.13	3.06	0.55	-99.99	-0.12	3.06	-0.10	-99.99	-0.04	2.86	0.73	-99.99
32000.	-0.13	3.06	0.55	-99.99	-0.12	3.06	-0.10	-99.99	-0.04	2.86	0.73	-99.99
32500.	-0.13	3.06	0.55	-99.99	-0.12	3.06	-0.10	-99.99	-0.04	2.86	0.73	-99.99
33000.	-0.13	3.06	0.55	-99.99	-0.12	3.06	-0.10	-99.99	-0.04	2.86	0.73	-99.99
33500.	-0.13	3.06	0.55	-99.99	-0.12	3.06	-0.10	-99.99	-0.04	2.86	0.73	-99.99
34000.	-0.13	3.06	0.55	-99.99	-0.12	3.06	-0.10	-99.99	-0.04	2.86	0.73	-99.99
34500.	-0.13	3.06	0.55	-99.99	-0.12	3.06	-0.10	-99.99	-0.04	2.86	0.73	-99.99
35000.	-0.13	3.06	0.55	-99.99	-0.12	3.06	-0.10	-99.99	-0.04	2.86	0.73	-99.99
35500.	-0.13	3.06	0.55	-99.99	-0.12	3.06	-0.10	-99.99	-0.04	2.86	0.73	-99.99
36000.	-0.13	3.06	0.55	-99.99	-0.12	3.06	-0.10	-99.99	-0.04	2.86	0.73	-99.99
36500.	-0.13	3.06	0.55	-99.99	-0.12	3.06	-0.10	-99.99	-0.04	2.86	0.73	-99.99
37000.	-0.13	3.06	0.55	-99.99	-0.12	3.06	-0.10	-99.99	-0.04	2.86	0.73	-99.99
37500.	-0.13	3.06	0.55	-99.99	-0.12	3.06	-0.10	-99.99	-0.04	2.86	0.73	-99.99

TABLE F.4. (continued).

Elevation: 1000 ft AGL

	PLANE 1				PLANE 2				PLANE 3			
X	WX	WY	WZ	DBZ	WX	WY	WZ	DBZ	WX	WY	WZ	DBZ
-37500.	-3.77	-4.68	0.06	-99.99	-5.58	-3.93	0.85	-99.99	-6.43	-2.13	0.73	-99.99
-37000.	-3.77	-4.68	0.06	-99.99	-5.58	-3.93	0.85	-99.99	-6.43	-2.13	0.73	-99.99
-36500.	-3.77	-4.68	0.06	-99.99	-5.58	-3.93	0.85	-99.99	-6.43	-2.13	0.73	-99.99
-36000.	-3.77	-4.68	0.06	-99.99	-5.58	-3.93	0.85	-99.99	-6.43	-2.13	0.73	-99.99
-35500.	-3.77	-4.68	0.06	-99.99	-5.58	-3.93	0.85	-99.99	-6.43	-2.13	0.73	-99.99
-35000.	-3.77	-4.68	0.06	-99.99	-5.58	-3.93	0.85	-99.99	-6.43	-2.13	0.73	-99.99
-34500.	-3.77	-4.68	0.06	-99.99	-5.58	-3.93	0.85	-99.99	-6.43	-2.13	0.73	-99.99
-34000.	-3.77	-4.68	0.06	-99.99	-5.58	-3.93	0.85	-99.99	-6.43	-2.13	0.73	-99.99
-33500.	-3.77	-4.68	0.06	-99.99	-5.58	-3.93	0.85	-99.99	-6.43	-2.13	0.73	-99.99
-33000.	-3.77	-4.68	0.06	-99.99	-5.58	-3.93	0.85	-99.99	-6.43	-2.13	0.73	-99.99
-32500.	-3.77	-4.68	0.06	-99.99	-5.58	-3.93	0.85	-99.99	-6.43	-2.13	0.73	-99.99
-32000.	-3.77	-4.68	0.06	-99.99	-5.58	-3.93	0.85	-99.99	-6.43	-2.13	0.73	-99.99
-31500.	-3.77	-4.68	0.06	-99.99	-5.58	-3.93	0.85	-99.99	-6.43	-2.13	0.73	-99.99
-31000.	-3.77	-4.68	0.06	-99.99	-5.58	-3.93	0.85	-99.99	-6.43	-2.13	0.73	-99.99
-30500.	-3.77	-4.68	0.06	-99.99	-5.58	-3.93	0.85	-99.99	-6.43	-2.13	0.73	-99.99
-30000.	-3.77	-4.68	0.06	-99.99	-5.58	-3.93	0.85	-99.99	-6.43	-2.13	0.73	-99.99
-29500.	-3.77	-4.68	0.06	-99.99	-5.58	-3.93	0.85	-99.99	-6.43	-2.13	0.73	-99.99
-29000.	-3.77	-4.68	0.06	-99.99	-5.58	-3.93	0.85	-99.99	-6.43	-2.13	0.73	-99.99
-28500.	-3.77	-4.68	0.06	-99.99	-5.58	-3.93	0.85	-99.99	-6.43	-2.13	0.73	-99.99
-28000.	-3.77	-4.68	0.06	-99.99	-5.58	-3.93	0.85	-99.99	-6.43	-2.13	0.73	-99.99
-27500.	-3.77	-4.68	0.06	-99.99	-5.58	-3.93	0.85	-99.99	-6.43	-2.13	0.73	-99.99
-27000.	-3.77	-4.68	0.06	-99.99	-5.58	-3.93	0.85	-99.99	-6.43	-2.13	0.73	-99.99
-26500.	-3.77	-4.68	0.06	-99.99	-5.58	-3.93	0.85	-99.99	-6.43	-2.13	0.73	-99.99
-26000.	-3.77	-4.68	0.06	-99.99	-5.58	-3.93	0.85	-99.99	-6.43	-2.13	0.73	-99.99
-25500.	-3.77	-4.68	0.06	-99.99	-5.58	-3.93	0.85	-99.99	-6.43	-2.13	0.73	-99.99
-25000.	-3.77	-4.68	0.06	-99.99	-5.58	-3.93	0.85	-99.99	-6.43	-2.13	0.73	-99.99
-24500.	-3.77	-4.68	0.06	51.76	-5.58	-3.93	0.85	-99.99	-6.43	-2.13	0.73	-99.99
-24000.	-6.93	-2.83	3.70	52.06	-5.58	-3.93	0.85	51.62	-6.43	-2.13	0.73	-99.99
-23500.	-9.24	-1.75	2.08	53.14	-6.80	-2.90	3.34	52.61	-6.43	-2.13	0.73	51.17
-23000.	-8.98	-1.53	-0.87	53.69	-9.52	-0.32	0.75	51.97	-8.73	0.70	-0.72	52.30
-22500.	-9.14	-0.13	-4.34	52.21	-10.14	2.25	-4.65	51.49	-9.99	4.59	-3.70	53.37
-22000.	-8.48	0.75	-2.29	51.32	-9.37	3.90	-4.52	51.64	-9.30	5.70	-3.85	53.84
-21500.	-10.10	3.90	-0.51	50.86	-9.28	4.99	-2.17	51.69	-9.25	6.35	-2.89	53.87
-21000.	-9.88	4.99	-2.75	50.01	-9.21	6.13	-2.74	51.28	-9.15	6.93	-3.35	54.45
-20500.	-9.68	5.45	0.05	48.76	-9.18	6.17	1.23	51.16	-9.17	6.97	0.52	54.02
-20000.	-10.38	5.77	2.12	48.56	-10.02	6.37	2.47	50.42	-10.06	7.08	1.27	52.13
-19500.	-10.39	5.52	-1.58	48.44	-10.19	6.07	-0.58	50.11	-10.15	6.93	-2.74	51.33
-19000.	-9.89	5.04	-1.50	47.97	-9.78	5.94	-0.71	48.91	-9.71	6.86	-0.68	49.84
-18500.	-9.61	5.05	-5.06	47.83	-10.05	6.17	-2.42	48.25	-9.95	6.92	-0.41	48.67
-18000.	-8.74	4.64	-5.20	47.52	-9.87	5.93	-4.49	47.67	-10.22	6.35	-1.42	48.63
-17500.	-8.70	4.39	-1.99	46.62	-9.64	5.30	-3.58	47.09	-10.37	6.00	-3.22	48.43
-17000.	-8.59	4.10	-0.79	46.20	-9.20	4.74	-3.59	46.89	-9.41	5.14	-6.46	48.77
-16500.	-8.34	4.33	0.17	45.04	-8.11	4.29	-0.60	47.55	-8.28	4.41	-1.32	49.12
-16000.	-8.86	4.96	1.38	43.55	-8.64	4.74	2.75	47.04	-8.90	4.71	2.09	48.29
-15500.	-8.70	4.65	-0.10	42.96	-8.97	4.81	1.19	44.94	-9.32	4.88	1.29	45.77
-15000.	-8.24	4.33	-1.06	43.92	-8.93	4.57	-0.21	44.61	-9.78	5.01	1.09	44.80
-14500.	-8.12	4.36	-1.73	44.86	-8.76	4.38	-1.92	45.12	-10.03	4.47	-3.17	44.21
-14000.	-7.61	4.29	-1.95	44.75	-7.96	4.07	-1.58	44.64	-9.08	4.21	-2.54	44.58
-13500.	-6.94	4.26	-1.88	43.88	-7.81	4.69	-0.95	43.80	-8.92	5.17	-2.21	44.10
-13000.	-6.63	4.19	-3.02	43.22	-7.09	4.97	-5.43	42.35	-7.95	6.05	-5.49	44.02
-12500.	-6.00	4.42	-0.86	42.73	-6.07	5.11	-2.37	43.11	-6.29	6.31	-4.33	44.98
-12000.	-6.17	5.40	0.50	42.97	-6.03	6.03	-1.04	43.78	-5.71	7.02	-2.88	46.71
-11500.	-6.07	5.80	-3.19	42.56	-6.25	6.75	-2.44	43.64	-5.45	7.51	-1.20	46.38
-11000.	-5.69	5.91	-1.20	42.19	-6.51	7.08	-1.20	42.74	-5.63	7.72	0.52	45.23
-10500.	-6.60	6.89	3.87	42.21	-7.82	7.92	2.51	42.17	-5.91	7.49	0.18	44.13
-10000.	-7.67	7.56	1.51	41.13	-5.83	6.15	-1.13	41.87	-4.70	5.86	-4.34	42.37
-9500.	-7.31	7.42	1.65	39.85	-5.11	6.20	2.60	40.40	-2.39	4.62	2.00	41.59
-9000.	-7.50	5.88	3.96	38.10	-5.70	5.38	7.47	38.10	-4.30	4.67	4.51	38.31
-8500.	-9.69	5.15	3.56	37.06	-7.01	4.62	5.43	36.10	-5.73	3.96	4.27	35.79
-8000.	-8.89	4.66	0.65	36.79	-8.85	4.22	2.30	35.59	-7.11	3.16	1.14	35.08
-7500.	-7.78	4.29	-1.78	39.43	-7.60	3.68	1.07	34.29	-9.59	3.95	2.93	33.54
-7000.	-7.28	4.44	0.57	37.69	-8.77	4.55	3.36	32.97	-11.85	4.55	4.29	32.43
-6500.	-7.88	5.72	1.70	32.92	-11.37	6.26	3.03	31.44	-14.00	5.92	4.61	31.22
-6000.	-9.08	5.71	0.40	32.91	-12.92	6.36	4.42	31.01	-15.75	6.29	5.64	30.69
-5500.	-12.02	5.80	3.98	31.74	-15.17	6.29	6.42	31.10	-17.60	6.20	4.02	31.81
-5000.	-15.01	5.74	1.44	30.93	-17.20	6.15	-1.43	32.95	-17.15	4.97	-1.56	35.03
-4500.	-17.47	6.02	0.74	32.28	-17.79	5.79	2.25	34.70	-17.89	4.04	3.93	37.05
-4000.	-18.97	6.29	0.08	33.47	-18.61	6.18	4.06	36.02	-20.20	4.04	4.78	37.66
-3500.	-18.90	6.67	-1.25	36.00	-20.16	6.88	2.88	37.38	-21.49	4.89	2.16	36.73
-3000.	-20.21	7.46	3.51	40.99	-20.14	8.18	3.86	40.82	-20.60	6.07	3.14	39.08
-2500.	-22.37	8.53	1.23	46.38	-20.15	8.08	5.72	44.40	-19.51	6.86	6.96	42.18
-2000.	-21.71	8.25	-4.85	51.08	-21.23	8.41	-0.85	49.83	-20.31	8.31	5.50	45.66
-1500.	-19.34	8.00	-7.31	54.81	-20.30	8.55	-6.52	54.22	-20.18	9.33	-5.34	49.75
-1000.	-17.70	7.28	-5.69	56.53	-17.80	7.84	-10.78	56.38	-16.79	8.26	-8.92	52.35
-500.	-15.10	7.30	-6.53	57.22	-14.23	6.98	-9.63	57.20	-13.77	7.26	-9.56	53.88

TABLE F.4. (continued).

Elevation: 1000 ft AGL

0.	-12.71	6.97	-4.01	56.40	-12.09	6.86	-3.20	56.97	-13.27	6.69	-9.57	55.24
500.	-11.03	5.40	-3.95	54.44	-10.33	5.39	-4.31	55.70	-11.37	5.71	-11.54	56.07
1000.	-9.93	2.78	-0.91	51.14	-9.19	4.16	-0.37	52.99	-8.65	4.44	-0.34	54.93
1500.	-8.32	-0.70	-14.06	40.91	-7.37	2.02	-11.57	50.89	-6.51	4.40	-0.25	52.79
2000.	-8.59	-0.46	-11.67	48.43	-6.56	2.36	-12.10	48.88	-4.77	4.35	-8.58	50.60
2500.	-8.91	-0.21	-14.98	47.27	-6.96	2.96	-16.26	47.65	-3.15	4.58	-7.44	49.34
3000.	-6.23	-0.67	-12.94	46.84	-4.49	2.25	-11.36	46.92	-2.24	5.26	-5.36	48.99
3500.	-3.14	0.19	-3.11	46.82	-3.53	2.58	-3.52	46.90	-0.32	5.83	-3.38	48.05
4000.	-3.30	1.98	0.94	46.25	-5.12	3.91	-0.50	46.00	-1.25	5.60	0.46	47.09
4500.	-2.21	3.83	-10.33	46.18	-4.57	4.62	-5.68	44.99	-2.25	5.55	-1.33	45.24
5000.	2.61	4.29	-12.68	46.00	-2.31	5.46	-12.66	43.96	-1.92	5.95	-7.09	43.72
5500.	5.81	4.13	-0.70	44.09	2.88	4.53	-15.20	43.48	0.78	5.78	-12.56	42.85
6000.	8.16	4.15	-1.37	42.71	7.11	4.39	-6.14	41.78	5.79	5.07	-12.02	41.50
6500.	7.71	4.91	0.92	40.22	7.70	5.04	-0.46	39.55	7.66	5.41	-2.87	38.99
7000.	8.23	5.48	-9.44	38.09	8.47	5.62	-5.36	37.81	7.72	5.86	-1.67	37.18
7500.	13.53	5.59	-11.26	38.48	12.68	5.60	-11.23	36.38	10.16	5.73	-4.18	35.54
8000.	18.64	5.90	-5.58	38.12	18.33	5.03	-7.27	35.78	13.56	4.89	-6.30	34.75
8500.	20.12	5.75	1.53	37.11	20.56	5.36	0.56	35.51	17.57	3.60	-1.00	33.07
9000.	20.15	4.02	4.65	36.14	21.24	3.60	4.99	34.61	19.13	1.99	6.58	33.01
9500.	19.01	2.15	3.40	35.90	19.40	1.33	4.10	33.90	15.88	0.51	8.40	33.46
10000.	18.02	0.12	6.21	34.80	16.52	-1.03	4.63	33.95	10.93	-1.54	10.34	34.51
10500.	15.01	-0.53	12.62	36.42	12.93	-1.75	10.72	34.94	4.86	-2.87	8.13	35.70
11000.	11.72	-1.22	9.02	38.40	10.18	-2.21	9.05	36.57	3.15	-3.35	3.90	36.51
11500.	7.50	-2.09	13.07	42.13	5.07	-2.92	15.22	39.46	2.30	-3.91	9.33	36.94
12000.	4.00	-2.98	7.28	46.64	-0.45	-4.16	10.58	41.19	0.00	-5.29	6.13	37.36
12500.	-0.79	-4.24	7.75	45.26	-3.22	-4.62	6.82	40.42	-1.77	-5.42	4.30	36.99
13000.	-3.08	-3.59	4.15	-99.99	-3.84	-4.27	3.24	-99.99	-2.96	-4.47	4.62	35.68
13500.	-4.27	-3.74	2.81	-99.99	-4.68	-3.51	1.66	-99.99	-4.01	-3.03	1.05	36.01
14000.	-4.48	-3.85	0.05	-99.99	-4.45	-3.61	-1.09	43.44	-3.69	-2.77	-3.31	39.65
14500.	-3.92	-3.57	1.66	-99.99	-4.55	-3.43	1.04	-99.99	-3.57	-2.62	-0.87	37.99
15000.	-4.00	-3.05	-0.51	-99.99	-4.90	-2.98	1.08	-99.99	-3.71	-2.30	-0.94	37.29
15500.	-4.88	-3.05	2.21	-99.99	-5.54	-2.69	0.69	42.77	-3.30	-2.20	-3.08	35.95
16000.	-8.26	-3.22	5.86	-99.99	-5.38	-3.12	3.34	47.20	-2.64	-2.03	-2.85	37.35
16500.	-9.02	-3.47	1.22	50.71	-6.23	-3.13	-0.78	47.26	-3.14	-1.96	-2.43	39.92
17000.	-8.19	-3.49	-2.05	48.61	-5.50	-2.81	-2.32	45.24	-4.17	-1.70	-2.34	41.59
17500.	-8.39	-2.59	-1.42	49.96	-5.83	-2.30	-0.83	46.88	-4.08	-1.51	-1.61	44.06
18000.	-8.28	-2.45	-3.20	48.89	-6.26	-2.00	-1.46	48.18	-4.54	-1.35	-2.97	46.99
18500.	-5.44	-1.53	-8.30	48.02	-5.92	-1.42	-7.57	49.56	-4.60	0.04	-5.18	49.82
19000.	-2.03	0.57	-3.68	48.16	-3.24	0.52	-6.40	50.17	-4.51	1.16	-4.55	51.14
19500.	-1.33	2.59	7.05	47.86	-2.45	3.04	-1.64	50.58	-3.38	2.62	-1.94	51.77
20000.	-3.41	3.31	6.81	46.32	-2.60	3.54	-0.46	50.24	-1.64	3.40	-1.73	52.38
20500.	-4.38	2.89	1.89	45.69	-4.66	2.63	-0.04	49.76	-2.55	2.82	0.32	52.52
21000.	-2.24	3.44	-2.50	47.32	-5.17	2.40	-4.03	50.22	-3.28	2.73	-1.95	52.52
21500.	1.90	4.13	-1.38	48.13	-0.24	3.15	-3.97	51.48	-1.48	2.85	-4.03	52.88
22000.	2.91	3.82	5.50	47.48	1.37	2.89	1.39	50.72	0.49	2.53	-0.45	51.71
22500.	0.75	2.67	5.92	46.57	0.49	2.41	2.50	48.29	0.81	2.33	0.70	49.31
23000.	-0.65	2.49	0.11	43.29	-0.36	2.32	-0.31	45.47	0.89	2.43	-0.91	46.67
23500.	0.99	3.13	-0.88	34.77	1.67	3.10	-1.41	39.46	2.03	3.04	-0.36	41.64
24000.	1.32	3.74	1.68	28.10	1.10	3.79	1.34	30.71	2.05	3.68	1.54	35.42
24500.	0.67	4.16	1.03	26.30	1.05	4.28	0.26	27.26	2.23	4.37	-0.47	29.55
25000.	0.67	4.16	1.03	-99.99	1.27	4.41	-0.22	29.97	2.95	4.54	1.81	31.47
25500.	0.67	4.16	1.03	-99.99	1.27	4.41	-0.22	-99.99	1.29	4.37	1.52	36.00
26000.	0.67	4.16	1.03	-99.99	1.27	4.41	-0.22	-99.99	1.29	4.37	1.52	-99.99
26500.	0.67	4.16	1.03	-99.99	1.27	4.41	-0.22	-99.99	1.29	4.37	1.52	-99.99
27000.	0.67	4.16	1.03	-99.99	1.27	4.41	-0.22	-99.99	1.29	4.37	1.52	-99.99
27500.	0.67	4.16	1.03	-99.99	1.27	4.41	-0.22	-99.99	1.29	4.37	1.52	-99.99
28000.	0.67	4.16	1.03	-99.99	1.27	4.41	-0.22	-99.99	1.29	4.37	1.52	-99.99
28500.	0.67	4.16	1.03	-99.99	1.27	4.41	-0.22	-99.99	1.29	4.37	1.52	-99.99
29000.	0.67	4.16	1.03	-99.99	1.27	4.41	-0.22	-99.99	1.29	4.37	1.52	-99.99
29500.	0.67	4.16	1.03	-99.99	1.27	4.41	-0.22	-99.99	1.29	4.37	1.52	-99.99
30000.	0.67	4.16	1.03	-99.99	1.27	4.41	-0.22	-99.99	1.29	4.37	1.52	-99.99
30500.	0.67	4.16	1.03	-99.99	1.27	4.41	-0.22	-99.99	1.29	4.37	1.52	-99.99
31000.	0.67	4.16	1.03	-99.99	1.27	4.41	-0.22	-99.99	1.29	4.37	1.52	-99.99
31500.	0.67	4.16	1.03	-99.99	1.27	4.41	-0.22	-99.99	1.29	4.37	1.52	-99.99
32000.	0.67	4.16	1.03	-99.99	1.27	4.41	-0.22	-99.99	1.29	4.37	1.52	-99.99
32500.	0.67	4.16	1.03	-99.99	1.27	4.41	-0.22	-99.99	1.29	4.37	1.52	-99.99
33000.	0.67	4.16	1.03	-99.99	1.27	4.41	-0.22	-99.99	1.29	4.37	1.52	-99.99
33500.	0.67	4.16	1.03	-99.99	1.27	4.41	-0.22	-99.99	1.29	4.37	1.52	-99.99
34000.	0.67	4.16	1.03	-99.99	1.27	4.41	-0.22	-99.99	1.29	4.37	1.52	-99.99
34500.	0.67	4.16	1.03	-99.99	1.27	4.41	-0.22	-99.99	1.29	4.37	1.52	-99.99
35000.	0.67	4.16	1.03	-99.99	1.27	4.41	-0.22	-99.99	1.29	4.37	1.52	-99.99
35500.	0.67	4.16	1.03	-99.99	1.27	4.41	-0.22	-99.99	1.29	4.37	1.52	-99.99
36000.	0.67	4.16	1.03	-99.99	1.27	4.41	-0.22	-99.99	1.29	4.37	1.52	-99.99
36500.	0.67	4.16	1.03	-99.99	1.27	4.41	-0.22	-99.99	1.29	4.37	1.52	-99.99
37000.	0.67	4.16	1.03	-99.99	1.27	4.41	-0.22	-99.99	1.29	4.37	1.52	-99.99
37500.	0.67	4.16	1.03	-99.99	1.27	4.41	-0.22	-99.99	1.29	4.37	1.52	-99.99

TABLE F.4. (continued).

Elevation: 1500 ft AGL

	PLANE 1				PLANE 2				PLANE 3			
X	WX	WY	WZ	DBZ	WX	WY	WZ	DBZ	WX	WY	WZ	DBZ
-37500.	-8.80	-2.40	0.09	-99.99	-6.25	-3.94	1.31	-99.99	-5.15	-3.88	1.06	-99.99
-37000.	-8.80	-2.40	0.09	-99.99	-6.25	-3.94	1.31	-99.99	-5.15	-3.88	1.06	-99.99
-36500.	-8.80	-2.40	0.09	-99.99	-6.25	-3.94	1.31	-99.99	-5.15	-3.88	1.06	-99.99
-36000.	-8.80	-2.40	0.09	-99.99	-6.25	-3.94	1.31	-99.99	-5.15	-3.88	1.06	-99.99
-35500.	-8.80	-2.40	0.09	-99.99	-6.25	-3.94	1.31	-99.99	-5.15	-3.88	1.06	-99.99
-35000.	-8.80	-2.40	0.09	-99.99	-6.25	-3.94	1.31	-99.99	-5.15	-3.88	1.06	-99.99
-34500.	-8.80	-2.40	0.09	-99.99	-6.25	-3.94	1.31	-99.99	-5.15	-3.88	1.06	-99.99
-34000.	-8.80	-2.40	0.09	-99.99	-6.25	-3.94	1.31	-99.99	-5.15	-3.88	1.06	-99.99
-33500.	-8.80	-2.40	0.09	-99.99	-6.25	-3.94	1.31	-99.99	-5.15	-3.88	1.06	-99.99
-33000.	-8.80	-2.40	0.09	-99.99	-6.25	-3.94	1.31	-99.99	-5.15	-3.88	1.06	-99.99
-32500.	-8.80	-2.40	0.09	-99.99	-6.25	-3.94	1.31	-99.99	-5.15	-3.88	1.06	-99.99
-32000.	-8.80	-2.40	0.09	-99.99	-6.25	-3.94	1.31	-99.99	-5.15	-3.88	1.06	-99.99
-31500.	-8.80	-2.40	0.09	-99.99	-6.25	-3.94	1.31	-99.99	-5.15	-3.88	1.06	-99.99
-31000.	-8.80	-2.40	0.09	-99.99	-6.25	-3.94	1.31	-99.99	-5.15	-3.88	1.06	-99.99
-30500.	-8.80	-2.40	0.09	-99.99	-6.25	-3.94	1.31	-99.99	-5.15	-3.88	1.06	-99.99
-30000.	-8.80	-2.40	0.09	-99.99	-6.25	-3.94	1.31	-99.99	-5.15	-3.88	1.06	-99.99
-29500.	-8.80	-2.40	0.09	-99.99	-6.25	-3.94	1.31	-99.99	-5.15	-3.88	1.06	-99.99
-29000.	-8.80	-2.40	0.09	-99.99	-6.25	-3.94	1.31	-99.99	-5.15	-3.88	1.06	-99.99
-28500.	-8.80	-2.40	0.09	-99.99	-6.25	-3.94	1.31	-99.99	-5.15	-3.88	1.06	-99.99
-28000.	-8.80	-2.40	0.09	-99.99	-6.25	-3.94	1.31	-99.99	-5.15	-3.88	1.06	-99.99
-27500.	-8.80	-2.40	0.09	-99.99	-6.25	-3.94	1.31	-99.99	-5.15	-3.88	1.06	-99.99
-27000.	-8.80	-2.40	0.09	-99.99	-6.25	-3.94	1.31	-99.99	-5.15	-3.88	1.06	-99.99
-26500.	-8.80	-2.40	0.09	-99.99	-6.25	-3.94	1.31	-99.99	-5.15	-3.88	1.06	-99.99
-26000.	-8.80	-2.40	0.09	-99.99	-6.25	-3.94	1.31	-99.99	-5.15	-3.88	1.06	-99.99
-25500.	-8.80	-2.40	0.09	-99.99	-6.25	-3.94	1.31	-99.99	-5.15	-3.88	1.06	-99.99
-25000.	-8.80	-2.40	0.09	-99.99	-6.25	-3.94	1.31	-99.99	-5.15	-3.88	1.06	-99.99
-24500.	-8.80	-2.40	0.09	51.47	-6.25	-3.94	1.31	-99.99	-5.15	-3.88	1.06	-99.99
-24000.	-9.60	-2.12	5.59	61.78	-6.25	-3.94	1.31	51.86	-5.15	-3.88	1.06	-99.99
-23500.	-9.15	-3.05	2.81	52.95	-6.19	-4.30	5.33	53.02	-5.15	-3.88	1.06	52.18
-23000.	-8.12	-3.73	-1.51	53.64	-7.30	-3.21	1.36	52.30	-6.57	-2.14	-1.32	52.03
-22500.	-7.90	-2.78	-6.86	52.59	-7.93	-0.85	-7.01	51.66	-8.24	1.95	-5.70	52.41
-22000.	-7.21	-1.81	-3.93	52.16	-7.75	1.20	-7.03	51.48	-8.35	3.72	-5.72	53.15
-21500.	-8.32	1.61	-1.84	51.47	-8.34	3.55	-3.49	51.49	-8.84	5.39	-4.18	53.46
-21000.	-8.82	4.02	-4.74	50.64	-9.26	6.59	-3.68	51.60	-9.13	6.86	-4.60	54.56
-20500.	-8.90	4.96	-0.87	49.72	-8.97	6.37	0.77	51.54	-9.13	7.07	0.24	54.04
-20000.	-9.23	5.18	1.88	49.38	-9.23	6.27	2.05	51.18	-9.59	7.35	0.87	53.02
-19500.	-8.98	4.69	-2.75	49.28	-9.03	5.65	-1.95	51.33	-9.51	7.18	-4.59	53.38
-19000.	-8.35	4.16	-2.47	49.45	-8.34	5.20	-2.03	50.35	-8.61	6.53	-2.05	51.60
-18500.	-8.32	4.29	-6.44	49.07	-8.29	5.18	-3.23	49.63	-8.37	6.22	-0.94	50.07
-18000.	-8.10	4.20	-6.41	48.19	-8.58	5.18	-5.42	48.50	-8.59	5.55	-1.63	49.39
-17500.	-8.22	4.17	-2.57	47.04	-8.89	4.83	-4.50	47.67	-8.97	5.23	-3.45	48.83
-17000.	-8.01	3.99	-1.33	46.84	-8.64	4.43	-4.99	47.59	-9.00	4.89	-8.20	49.43
-16500.	-7.69	3.96	0.53	45.75	-7.96	4.11	-1.06	48.20	-7.88	4.20	-1.89	50.08
-16000.	-7.83	4.22	1.53	44.53	-7.86	4.13	3.19	47.99	-7.42	4.02	2.38	49.78
-15500.	-7.55	3.98	-0.59	44.35	-7.18	3.79	0.59	46.51	-6.98	3.99	1.30	47.31
-15000.	-7.08	3.74	-1.32	45.32	-7.08	3.75	-0.20	46.22	-7.27	4.02	1.39	45.83
-14500.	-7.36	4.04	-1.82	45.93	-7.61	3.98	-1.92	46.65	-7.98	3.73	-3.77	45.19
-14000.	-7.24	4.12	-2.92	45.98	-7.11	3.13	-2.02	46.10	-8.19	3.38	-3.51	45.32
-13500.	-5.75	3.32	-2.36	45.26	-6.52	2.90	-1.63	45.01	-8.05	3.79	-3.81	44.90
-13000.	-5.73	3.47	-3.98	44.35	-5.56	3.92	-7.70	43.40	-7.02	5.13	-8.65	44.60
-12500.	-4.14	4.12	-1.90	43.88	-4.10	4.43	-4.32	44.20	-4.22	5.09	-7.63	45.33
-12000.	-2.67	4.47	-0.24	44.71	-2.30	4.74	-2.36	46.07	-1.60	5.19	-4.96	48.42
-11500.	-1.44	4.68	-4.95	44.99	-1.23	5.20	-3.59	46.86	-0.83	5.87	-2.22	49.61
-11000.	-0.43	5.26	-2.19	44.83	-0.94	6.27	-1.66	46.55	-0.67	7.07	0.65	49.24
-10500.	-1.09	6.52	4.27	44.54	-2.04	7.67	2.66	45.28	-1.48	7.87	-0.13	47.14
-10000.	-1.99	7.70	1.54	43.16	-1.33	7.27	-0.94	43.55	-1.01	7.19	-5.87	43.99
-9500.	-2.97	9.01	2.06	41.59	-2.25	8.85	4.01	42.18	-0.47	7.18	2.51	43.05
-9000.	-2.90	8.13	3.58	39.99	-2.07	8.37	9.37	40.49	-1.45	7.93	5.29	41.25
-8500.	-2.80	6.68	3.94	38.03	-1.48	6.72	7.07	38.09	-2.14	6.52	5.58	38.14
-8000.	-2.54	5.97	0.80	37.16	-1.62	5.39	3.54	36.91	-3.34	4.98	2.08	36.29
-7500.	-2.55	5.53	-2.08	38.59	-2.79	4.87	1.67	34.93	-5.92	4.95	4.68	34.49
-7000.	-1.23	4.66	0.27	36.93	-2.74	4.40	4.24	33.27	-7.42	4.48	6.37	32.63
-6500.	0.01	4.98	2.25	32.57	-2.75	5.04	4.06	31.64	-9.26	5.77	6.33	31.04
-6000.	-0.59	5.80	1.29	31.95	-3.94	6.06	5.71	30.86	-10.06	6.66	7.21	30.30
-5500.	-2.86	6.18	6.90	31.04	-5.51	6.53	8.94	30.44	-11.27	7.12	5.95	30.26
-5000.	-6.56	6.29	4.32	30.20	-10.45	6.79	1.80	30.25	-14.65	6.43	0.55	30.73
-4500.	-9.37	6.42	2.19	30.54	-12.90	5.86	4.68	31.39	-17.09	4.51	6.45	32.36
-4000.	-10.43	6.20	0.78	31.46	-14.03	5.52	6.91	32.61	-17.89	3.65	8.49	33.31
-3500.	-11.82	5.68	-1.55	33.72	-15.96	5.68	4.74	34.57	-18.56	4.18	3.78	34.05
-3000.	-12.95	6.12	4.95	37.12	-15.75	6.41	4.28	38.20	-17.86	5.02	3.84	36.65
-2500.	-15.63	7.29	2.54	42.35	-14.90	6.64	6.84	40.89	-16.96	5.66	8.98	38.72
-2000.	-16.41	7.21	-5.23	48.23	-16.15	6.85	-0.76	46.87	-17.27	6.84	7.16	41.88
-1500.	-16.37	6.89	-8.47	54.17	-16.76	6.63	-7.90	53.06	-16.55	6.65	-7.00	46.33
-1000.	-15.46	6.12	-7.15	56.79	-16.05	6.20	-13.87	56.67	-14.03	5.43	-12.27	51.79
-500.	-13.65	6.12	-9.14	57.98	-13.04	5.65	-12.24	57.91	-11.52	4.77	-11.63	53.86

TABLE F.4. (continued).

Elevation: 1500 ft AGL

0.	-11.53	6.14	-7.19	57.63	-9.84	5.74	-3.74	58.06	-11.42	4.76	-10.63	55.21
500.	-9.70	6.01	-5.84	56.13	-8.70	5.05	-4.90	57.17	-11.58	4.46	-13.83	56.66
1000.	-9.67	5.41	-11.09	53.60	-8.07	4.87	-9.32	55.17	-11.81	4.12	-11.01	56.22
1500.	-11.85	5.12	-16.78	51.32	-8.67	4.51	-13.47	53.01	-8.83	4.52	-10.50	54.50
2000.	-11.99	3.38	-12.33	48.94	-9.09	3.49	-13.95	50.38	-7.67	3.94	-10.55	52.16
2500.	-11.02	1.97	-17.70	47.24	-8.62	2.22	-19.23	47.63	-6.76	3.46	-10.00	50.28
3000.	-7.89	2.12	-17.35	47.08	-7.03	2.35	-16.06	47.73	-4.66	3.84	-9.16	50.23
3500.	-5.84	3.72	-4.93	47.37	-5.54	3.81	-6.04	47.84	-1.73	4.88	-6.31	50.06
4000.	-4.37	4.93	0.68	46.84	-4.74	5.07	-1.80	46.95	-1.17	6.02	-0.62	49.30
4500.	-3.04	5.15	-14.13	46.69	-3.56	5.66	-7.87	46.03	-1.00	6.39	-2.11	47.48
5000.	-0.84	4.92	-16.81	46.40	-2.64	5.68	-16.48	44.90	-0.84	6.32	-8.97	45.55
5500.	0.33	4.03	-11.50	45.38	0.19	4.03	-19.97	44.12	0.02	5.17	-16.56	43.40
6000.	1.38	3.00	-2.04	43.50	2.26	2.81	-8.66	42.57	2.48	3.37	-17.12	41.79
6500.	1.53	2.73	1.85	41.20	3.12	2.24	-0.62	40.74	4.46	2.04	-4.08	39.81
7000.	2.53	3.54	-13.01	39.07	4.03	2.87	-7.63	38.74	5.07	2.69	-3.20	37.98
7500.	7.63	3.89	-16.46	38.18	7.69	3.70	-16.64	36.30	7.97	3.28	-7.40	35.60
8000.	12.51	4.53	-9.50	37.26	13.43	4.28	-11.34	35.34	11.72	2.83	-9.23	35.20
8500.	16.30	4.06	-0.22	36.10	17.89	3.58	-0.98	34.90	15.60	2.00	-2.26	33.80
9000.	18.58	1.61	5.13	35.30	20.15	1.30	6.13	34.39	17.38	0.78	7.91	33.39
9500.	17.40	-1.09	6.09	34.92	17.34	-0.86	7.48	33.86	14.21	-0.74	14.49	33.79
10000.	14.74	-2.39	9.83	35.13	11.97	-2.49	9.38	34.26	7.03	-2.13	18.47	35.09
10500.	12.56	-2.11	16.99	37.31	7.01	-2.40	15.26	35.78	-0.72	-2.56	12.75	37.00
11000.	10.36	-1.68	12.83	39.62	6.01	-1.66	12.21	38.05	-2.78	-1.84	4.79	38.10
11500.	5.82	-1.98	19.14	42.50	1.98	-1.51	20.63	40.38	-2.83	-0.50	11.83	38.61
12000.	0.29	-3.32	11.46	45.20	-1.80	-2.38	14.72	41.19	-5.04	-1.17	8.28	37.91
12500.	-2.58	-3.17	10.57	45.11	-4.75	-2.58	8.95	40.11	-6.90	-1.29	5.37	36.70
13000.	-2.58	-2.80	4.37	-99.99	-6.38	-2.13	2.94	-99.99	-7.41	-0.79	5.08	35.16
13500.	-3.93	-2.21	3.94	-99.99	-5.76	-1.86	1.62	-99.99	-6.86	-0.59	0.54	35.08
14000.	-5.45	-1.54	0.15	-99.99	-6.12	-1.30	-2.01	41.67	-6.12	-0.59	-4.89	36.77
14500.	-5.44	-1.20	1.50	-99.99	-5.58	-0.85	0.48	-99.99	-5.11	-0.48	-2.27	35.07
15000.	-5.38	-0.66	-0.57	-99.99	-4.67	-0.43	0.79	-99.99	-3.68	0.01	-2.36	34.91
15500.	-7.22	0.00	3.83	-99.99	-5.05	0.33	1.25	38.95	-3.15	0.93	-4.90	34.61
16000.	-8.52	0.25	7.01	-99.99	-5.43	0.85	3.62	40.94	-2.65	1.53	-4.25	35.34
16500.	-8.03	0.45	0.59	46.73	-5.36	0.94	-1.79	43.02	-2.66	1.60	-3.42	38.23
17000.	-6.32	0.95	-3.25	47.61	-4.21	1.42	-3.53	43.77	-2.40	1.78	-3.66	40.31
17500.	-5.65	1.74	-1.61	50.11	-3.81	2.13	-1.14	46.14	-1.93	2.54	-2.24	43.02
18000.	-5.86	1.82	-4.17	50.10	-4.54	2.51	-1.89	48.23	-2.33	3.00	-3.61	46.33
18500.	-4.33	2.15	-11.22	49.81	-3.77	2.48	-10.31	50.31	-2.29	3.56	-6.97	49.61
19000.	-2.29	3.30	-5.74	49.94	-1.82	3.77	-8.83	51.06	-1.44	4.38	-6.57	51.38
19500.	-0.68	4.85	7.61	49.63	-0.25	5.77	-2.25	51.57	-0.10	5.72	-3.63	52.19
20000.	-1.26	5.95	8.37	49.21	-0.13	6.12	0.15	52.00	1.72	6.01	-2.19	53.22
20500.	-2.22	5.68	2.32	49.40	-1.32	5.69	1.47	52.31	1.57	5.62	1.53	53.96
21000.	-0.65	5.63	-4.84	50.19	-2.00	5.24	-6.25	52.13	0.01	5.47	-2.57	53.74
21500.	2.62	5.45	-3.08	50.72	0.89	4.97	-6.38	52.64	0.34	4.89	-6.13	53.41
22000.	3.77	4.58	7.50	50.01	2.01	3.82	1.67	51.69	1.33	3.92	-1.22	51.94
22500.	2.44	3.10	9.23	48.14	1.80	3.12	3.33	49.38	1.89	3.49	0.61	50.11
23000.	2.16	3.33	0.04	44.15	1.79	3.20	-1.01	46.48	2.25	3.66	-1.87	47.97
23500.	3.68	4.24	-1.58	36.99	2.82	3.83	-2.40	40.76	2.51	4.19	-0.66	43.89
24000.	2.78	5.28	2.83	30.59	1.90	5.20	2.02	32.92	2.25	4.79	2.02	37.57
24500.	1.68	6.01	1.38	27.89	1.99	6.17	-0.06	29.37	3.21	5.59	-1.51	30.76
25000.	1.68	6.01	1.38	-99.99	2.51	6.39	-0.35	32.22	3.57	6.35	2.76	32.61
25500.	1.68	6.01	1.38	-99.99	2.51	6.39	-0.35	-99.99	2.21	6.42	2.40	36.33
26000.	1.68	6.01	1.38	-99.99	2.51	6.39	-0.35	-99.99	2.21	6.42	2.40	-99.99
26500.	1.68	6.01	1.38	-99.99	2.51	6.39	-0.35	-99.99	2.21	6.42	2.40	-99.99
27000.	1.68	6.01	1.38	-99.99	2.51	6.39	-0.35	-99.99	2.21	6.42	2.40	-99.99
27500.	1.68	6.01	1.38	-99.99	2.51	6.39	-0.35	-99.99	2.21	6.42	2.40	-99.99
28000.	1.68	6.01	1.38	-99.99	2.51	6.39	-0.35	-99.99	2.21	6.42	2.40	-99.99
28500.	1.68	6.01	1.38	-99.99	2.51	6.39	-0.35	-99.99	2.21	6.42	2.40	-99.99
29000.	1.68	6.01	1.38	-99.99	2.51	6.39	-0.35	-99.99	2.21	6.42	2.40	-99.99
29500.	1.68	6.01	1.38	-99.99	2.51	6.39	-0.35	-99.99	2.21	6.42	2.40	-99.99
30000.	1.68	6.01	1.38	-99.99	2.51	6.39	-0.35	-99.99	2.21	6.42	2.40	-99.99
30500.	1.68	6.01	1.38	-99.99	2.51	6.39	-0.35	-99.99	2.21	6.42	2.40	-99.99
31000.	1.68	6.01	1.38	-99.99	2.51	6.39	-0.35	-99.99	2.21	6.42	2.40	-99.99
31500.	1.68	6.01	1.38	-99.99	2.51	6.39	-0.35	-99.99	2.21	6.42	2.40	-99.99
32000.	1.68	6.01	1.38	-99.99	2.51	6.39	-0.35	-99.99	2.21	6.42	2.40	-99.99
32500.	1.68	6.01	1.38	-99.99	2.51	6.39	-0.35	-99.99	2.21	6.42	2.40	-99.99
33000.	1.68	6.01	1.38	-99.99	2.51	6.39	-0.35	-99.99	2.21	6.42	2.40	-99.99
33500.	1.68	6.01	1.38	-99.99	2.51	6.39	-0.35	-99.99	2.21	6.42	2.40	-99.99
34000.	1.68	6.01	1.38	-99.99	2.51	6.39	-0.35	-99.99	2.21	6.42	2.40	-99.99
34500.	1.68	6.01	1.38	-99.99	2.51	6.39	-0.35	-99.99	2.21	6.42	2.40	-99.99
35000.	1.68	6.01	1.38	-99.99	2.51	6.39	-0.35	-99.99	2.21	6.42	2.40	-99.99
35500.	1.68	6.01	1.38	-99.99	2.51	6.39	-0.35	-99.99	2.21	6.42	2.40	-99.99
36000.	1.68	6.01	1.38	-99.99	2.51	6.39	-0.35	-99.99	2.21	6.42	2.40	-99.99
36500.	1.68	6.01	1.38	-99.99	2.51	6.39	-0.35	-99.99	2.21	6.42	2.40	-99.99
37000.	1.68	6.01	1.38	-99.99	2.51	6.39	-0.35	-99.99	2.21	6.42	2.40	-99.99
37500.	1.68	6.01	1.38	-99.99	2.51	6.39	-0.35	-99.99	2.21	6.42	2.40	-99.99

TABLE F.4. (continued).

Elevation: 2000 ft AGL

	PLANE 1				PLANE 2				PLANE 3			
X	WX	WY	WZ	DBZ	WX	WY	WZ	DBZ	WX	WY	WZ	DBZ
-37500.	-9.83	-0.18	0.10	-99.99	-5.21	-3.92	1.50	-99.99	-3.30	-5.06	1.12	-99.99
-37000.	-9.83	-0.18	0.10	-99.99	-5.21	-3.92	1.50	-99.99	-3.30	-5.06	1.12	-99.99
-36500.	-9.83	-0.18	0.10	-99.99	-5.21	-3.92	1.50	-99.99	-3.30	-5.06	1.12	-99.99
-36000.	-9.83	-0.18	0.10	-99.99	-5.21	-3.92	1.50	-99.99	-3.30	-5.06	1.12	-99.99
-35500.	-9.83	-0.18	0.10	-99.99	-5.21	-3.92	1.50	-99.99	-3.30	-5.06	1.12	-99.99
-35000.	-9.83	-0.18	0.10	-99.99	-5.21	-3.92	1.50	-99.99	-3.30	-5.06	1.12	-99.99
-34500.	-9.83	-0.18	0.10	-99.99	-5.21	-3.92	1.50	-99.99	-3.30	-5.06	1.12	-99.99
-34000.	-9.83	-0.18	0.10	-99.99	-5.21	-3.92	1.50	-99.99	-3.30	-5.06	1.12	-99.99
-33500.	-9.83	-0.18	0.10	-99.99	-5.21	-3.92	1.50	-99.99	-3.30	-5.06	1.12	-99.99
-33000.	-9.83	-0.18	0.10	-99.99	-5.21	-3.92	1.50	-99.99	-3.30	-5.06	1.12	-99.99
-32500.	-9.83	-0.18	0.10	-99.99	-5.21	-3.92	1.50	-99.99	-3.30	-5.06	1.12	-99.99
-32000.	-9.83	-0.18	0.10	-99.99	-5.21	-3.92	1.50	-99.99	-3.30	-5.06	1.12	-99.99
-31500.	-9.83	-0.18	0.10	-99.99	-5.21	-3.92	1.50	-99.99	-3.30	-5.06	1.12	-99.99
-31000.	-9.83	-0.18	0.10	-99.99	-5.21	-3.92	1.50	-99.99	-3.30	-5.06	1.12	-99.99
-30500.	-9.83	-0.18	0.10	-99.99	-5.21	-3.92	1.50	-99.99	-3.30	-5.06	1.12	-99.99
-30000.	-9.83	-0.18	0.10	-99.99	-5.21	-3.92	1.50	-99.99	-3.30	-5.06	1.12	-99.99
-29500.	-9.83	-0.18	0.10	-99.99	-5.21	-3.92	1.50	-99.99	-3.30	-5.06	1.12	-99.99
-29000.	-9.83	-0.18	0.10	-99.99	-5.21	-3.92	1.50	-99.99	-3.30	-5.06	1.12	-99.99
-28500.	-9.83	-0.18	0.10	-99.99	-5.21	-3.92	1.50	-99.99	-3.30	-5.06	1.12	-99.99
-28000.	-9.83	-0.18	0.10	-99.99	-5.21	-3.92	1.50	-99.99	-3.30	-5.06	1.12	-99.99
-27500.	-9.83	-0.18	0.10	-99.99	-5.21	-3.92	1.50	-99.99	-3.30	-5.06	1.12	-99.99
-27000.	-9.83	-0.18	0.10	-99.99	-5.21	-3.92	1.50	-99.99	-3.30	-5.06	1.12	-99.99
-26500.	-9.83	-0.18	0.10	-99.99	-5.21	-3.92	1.50	-99.99	-3.30	-5.06	1.12	-99.99
-26000.	-9.83	-0.18	0.10	-99.99	-5.21	-3.92	1.50	-99.99	-3.30	-5.06	1.12	-99.99
-25500.	-9.83	-0.18	0.10	-99.99	-5.21	-3.92	1.50	-99.99	-3.30	-5.06	1.12	-99.99
-25000.	-9.83	-0.18	0.10	-99.99	-5.21	-3.92	1.50	-99.99	-3.30	-5.06	1.12	-99.99
-24500.	-9.83	-0.18	0.10	51.52	-5.21	-3.92	1.50	-99.99	-3.30	-5.06	1.12	-99.99
-24000.	-9.34	-1.63	5.96	51.78	-5.21	-3.92	1.50	52.12	-3.30	-5.06	1.12	-99.99
-23500.	-7.06	-3.99	2.22	52.65	-4.84	-5.01	6.68	53.21	-3.30	-5.06	1.12	52.73
-23000.	-5.76	-5.40	-2.49	53.50	-4.82	-5.07	1.31	52.81	-4.12	-4.30	-2.07	52.01
-22500.	-5.27	-5.28	-8.79	53.06	-5.05	-3.80	-8.90	52.29	-5.64	-1.24	-7.16	51.97
-22000.	-4.94	-4.41	-5.12	52.88	-5.11	-2.25	-9.34	51.93	-6.21	0.50	-7.91	52.92
-21500.	-5.74	-1.74	-2.65	52.06	-5.82	-0.16	-4.40	52.00	-6.71	1.83	-5.28	53.53
-21000.	-6.85	1.39	-6.10	51.27	-7.42	3.69	-3.94	52.34	-7.58	4.02	-5.13	54.69
-20500.	-7.18	3.08	-2.22	50.66	-7.65	4.67	0.00	52.30	-8.21	5.33	0.24	54.29
-20000.	-7.43	3.57	1.10	50.27	-7.83	4.94	1.11	51.97	-8.56	6.08	0.35	53.60
-19500.	-7.48	3.46	-3.96	50.01	-7.82	4.68	-3.61	52.06	-8.45	6.15	-6.52	54.36
-19000.	-7.10	3.06	-3.45	50.09	-7.18	4.18	-3.74	61.31	-7.51	5.67	-4.03	52.73
-18500.	-7.30	3.36	-7.45	49.55	-7.16	4.29	-4.08	50.00	-7.15	5.73	-2.03	50.80
-18000.	-7.33	3.47	-7.30	48.23	-7.86	4.79	-6.26	48.52	-7.20	5.37	-1.93	49.81
-17500.	-7.41	3.51	-3.03	47.06	-7.88	4.05	-5.26	47.88	-7.36	4.57	-3.74	49.30
-17000.	-7.41	3.34	-1.28	47.10	-7.78	3.34	-5.44	47.93	-7.26	3.15	-9.00	49.72
-16500.	-7.57	3.58	0.70	46.30	-7.58	3.26	-1.13	48.24	-6.72	3.08	-2.36	50.24
-16000.	-7.07	3.40	1.19	45.57	-7.22	3.53	2.77	48.05	-5.88	3.23	1.60	50.14
-15500.	-6.42	2.96	-1.36	45.30	-6.20	3.10	-0.46	47.12	-4.51	3.01	1.01	48.19
-15000.	-5.68	2.54	-1.63	45.87	-5.42	2.51	-0.69	46.76	-4.71	2.85	1.25	46.61
-14500.	-5.47	2.45	-1.89	46.25	-5.00	2.11	-2.50	47.00	-3.84	2.08	-5.50	45.72
-14000.	-4.90	2.02	-3.13	46.38	-3.55	0.68	-2.56	46.48	-2.78	0.87	-4.99	45.52
-13500.	-3.65	0.58	-2.37	45.73	-3.09	-0.21	-2.03	45.46	-2.66	0.58	-5.18	45.12
-13000.	-3.01	-0.19	-4.74	44.85	-2.66	0.70	-10.13	44.14	-2.48	2.13	-11.08	44.76
-12500.	-1.64	0.85	-3.39	44.09	-1.31	1.73	-6.85	44.70	-0.86	2.77	-10.54	45.46
-12000.	-0.37	2.08	-1.21	44.76	0.02	2.64	-4.18	46.47	0.62	3.45	-6.65	48.58
-11500.	0.64	2.80	-6.20	45.47	0.74	3.38	-4.94	47.39	1.34	4.11	-3.42	50.40
-11000.	1.37	3.99	-3.21	45.69	1.04	4.65	-2.36	47.84	1.36	5.50	0.32	50.94
-10500.	1.39	5.17	3.98	45.56	0.77	5.92	2.24	47.03	0.92	6.43	-0.76	49.82
-10000.	1.00	6.30	1.35	44.30	1.21	6.30	-0.15	45.32	1.29	6.34	-6.65	46.95
-9500.	-0.13	8.10	1.91	42.64	0.02	8.33	5.29	43.42	1.07	7.19	3.28	44.67
-9000.	-0.07	8.05	1.90	41.11	0.28	8.29	10.05	41.51	0.74	7.63	5.98	42.20
-8500.	0.61	6.88	3.75	39.05	1.15	6.84	7.77	39.17	0.46	6.37	6.46	39.10
-8000.	0.53	6.27	1.34	37.59	1.19	5.69	5.22	37.68	-0.44	5.05	3.45	36.99
-7500.	0.41	5.76	-2.25	37.29	-0.10	5.01	2.52	35.24	-2.65	4.78	6.18	35.01
-7000.	1.06	4.51	-0.67	35.72	0.34	4.11	4.26	33.50	-3.94	4.03	7.61	33.08
-6500.	3.48	4.32	2.11	32.57	1.20	4.16	4.08	32.08	-5.39	5.33	6.64	31.49
-6000.	3.58	5.11	1.84	31.83	0.56	5.52	5.79	31.16	-5.77	6.52	7.22	30.61
-5500.	2.22	5.70	9.27	31.02	-0.21	6.26	10.78	30.48	-6.24	7.15	7.67	30.11
-5000.	-0.40	5.79	7.02	30.11	-4.56	6.43	5.76	29.58	-9.87	6.42	3.65	29.46
-4500.	-2.68	5.60	3.76	29.55	-7.11	5.21	6.74	29.59	-12.78	4.46	8.27	29.94
-4000.	-3.54	4.91	2.34	29.63	-7.85	4.25	9.17	29.98	-13.04	3.09	10.01	30.36
-3500.	-5.65	4.02	-0.07	30.93	-9.57	4.02	6.53	31.41	-12.56	3.15	4.79	30.99
-3000.	-7.39	4.53	6.39	33.41	-10.14	4.62	4.82	34.47	-12.18	3.72	4.73	33.08
-2500.	-9.01	4.66	3.22	39.28	-9.99	5.16	7.09	37.48	-11.41	3.79	11.17	34.94
-2000.	-9.44	3.85	-5.51	46.24	-10.52	4.55	-0.98	43.62	-11.95	4.63	8.97	38.07
-1500.	-9.81	3.41	-8.71	53.11	-11.22	4.21	-8.81	50.32	-11.68	4.84	-7.59	42.11
-1000.	-10.18	3.62	-7.24	56.41	-11.41	4.09	-15.49	54.71	-11.17	4.15	-13.98	48.72
-500.	-9.66	4.26	-10.69	57.86	-10.03	3.99	-14.46	57.62	-9.91	3.92	-13.64	52.72

TABLE F.4. (continued).

Elevation: 2000 ft AGL

0.	-8.40	4.74	-8.77	58.00	-7.23	4.28	-5.37	58.30	-8.93	4.29	-12.09	55.19
500.	-7.22	5.24	-6.18	57.01	-5.86	4.29	-5.10	57.69	-8.81	4.27	-15.39	56.69
1000.	-7.91	6.06	-10.69	54.97	-5.82	5.23	-8.69	56.12	-9.16	5.28	-12.92	56.51
1500.	-10.36	6.95	-16.16	52.52	-6.92	5.94	-13.61	54.06	-7.18	6.11	-11.95	55.49
2000.	-10.39	5.38	-11.82	49.98	-8.00	5.24	-14.32	51.52	-6.77	5.55	-11.59	53.31
2500.	-9.59	3.75	-18.77	47.88	-8.19	3.47	-22.23	48.44	-5.94	4.16	-12.22	51.10
3000.	-7.24	3.33	-19.66	47.20	-5.99	2.53	-19.02	48.12	-3.59	3.16	-12.06	50.81
3500.	-5.58	4.53	-5.93	47.38	-4.74	3.90	-7.49	48.06	-1.77	4.00	-7.86	50.75
4000.	-4.36	5.25	0.25	46.93	-3.80	5.05	-3.06	47.32	-1.03	5.67	-2.02	50.44
4500.	-3.59	4.80	-16.66	46.54	-2.66	5.35	-9.68	46.54	-0.44	6.18	-3.27	48.76
5000.	-2.25	4.09	-19.36	46.08	-2.17	4.66	-18.94	45.05	-0.17	5.58	-10.50	46.54
5500.	-1.83	3.00	-12.47	45.18	-0.64	2.64	-21.95	44.14	-0.33	3.66	-18.61	43.77
6000.	-1.62	1.65	-1.97	43.75	-0.12	1.01	-9.68	42.96	0.14	1.21	-20.04	42.05
6500.	-0.98	0.65	2.33	41.86	0.67	-0.33	-0.60	41.42	1.15	-0.64	-4.62	40.50
7000.	0.35	0.40	-14.88	39.11	0.98	-0.26	-8.84	39.15	1.44	-0.46	-4.34	38.68
7500.	3.13	0.78	-19.06	38.11	3.01	0.14	-19.96	36.36	3.31	-0.16	-9.91	36.07
8000.	5.78	1.29	-12.28	37.04	6.25	0.88	-14.72	35.33	5.76	0.06	-11.54	35.31
8500.	9.50	0.71	-3.43	36.25	10.58	0.54	-4.13	35.15	8.33	0.02	-4.15	34.28
9000.	12.39	-1.19	4.64	35.86	13.26	-0.82	6.30	35.16	9.75	0.26	8.80	34.45
9500.	10.23	-2.96	9.61	36.26	9.62	-1.74	11.00	35.45	6.58	-0.22	19.54	35.34
10000.	6.11	-3.45	12.88	37.26	3.44	-2.46	14.14	36.45	-0.35	-0.78	25.45	36.88
10500.	4.30	-2.29	18.82	39.19	-1.43	-1.43	17.44	38.02	-7.06	-0.53	15.77	38.64
11000.	3.67	-0.90	13.86	40.83	-0.85	0.13	12.11	39.73	-8.16	0.59	3.67	39.83
11500.	1.53	-0.85	22.39	42.59	-1.84	0.54	22.27	41.27	-6.27	2.10	11.45	40.27
12000.	-2.65	-1.79	14.97	43.90	-3.88	0.09	16.86	41.41	-6.98	1.52	8.74	39.06
12500.	-5.65	-0.78	12.47	43.40	-6.48	0.12	10.07	39.87	-8.16	1.28	5.55	37.27
13000.	-5.44	-0.26	3.42	42.47	-8.09	0.56	2.14	37.71	-8.23	1.39	4.44	35.36
13500.	-5.72	0.36	3.83	42.41	-6.33	0.31	0.41	38.12	-6.87	0.98	-1.06	34.49
14000.	-5.55	0.74	-0.27	-99.99	-5.30	0.52	-3.05	38.79	-4.75	0.26	-5.93	35.33
14500.	-4.70	1.01	0.15	-99.99	-3.96	1.03	-0.73	-99.99	-3.92	0.61	-3.44	33.62
15000.	-3.18	1.41	-0.99	-99.99	-2.10	1.53	-0.26	37.17	-1.83	1.28	-3.57	33.41
15500.	-4.35	2.07	5.44	-99.99	-1.52	2.25	1.94	36.60	-1.23	2.23	-5.17	33.63
16000.	-5.08	2.55	7.30	-99.99	-2.44	2.88	3.70	38.19	-1.14	2.85	-4.42	34.21
16500.	-4.09	2.90	-0.82	44.54	-2.14	3.04	-2.98	40.49	-1.00	3.17	-3.97	35.74
17000.	-1.84	3.44	-5.01	46.35	-0.79	3.76	-4.99	42.18	-0.10	3.83	-5.12	38.53
17500.	-1.36	4.46	-1.63	49.20	-0.20	4.89	-1.27	44.79	0.83	5.12	-2.65	41.32
18000.	-2.74	4.68	-4.29	49.96	-1.39	5.47	-1.35	47.45	0.35	5.80	-3.65	44.86
18500.	-2.81	4.83	-12.91	50.16	-1.79	5.40	-12.10	49.74	-0.23	6.43	-8.01	48.27
19000.	-1.89	5.74	-7.75	50.74	-0.64	6.62	-11.10	50.82	0.32	7.46	-8.68	50.38
19500.	-0.67	7.29	5.99	51.16	1.03	8.53	-3.96	51.92	2.12	8.49	-6.29	51.64
20000.	0.51	8.65	8.82	51.58	1.75	8.71	0.17	53.09	4.05	8.48	-2.91	53.29
20500.	0.19	8.47	2.35	52.02	1.07	8.49	2.46	54.06	4.06	8.20	2.62	54.68
21000.	1.62	8.05	-7.70	52.43	0.95	8.07	-7.53	54.01	2.83	8.12	-2.39	54.77
21500.	4.26	7.51	-5.03	52.37	2.67	7.30	-7.93	53.55	2.67	7.31	-6.86	53.85
22000.	5.31	6.32	9.43	51.26	3.05	5.54	2.46	52.10	2.12	5.85	-1.22	51.59
22500.	3.47	4.33	12.67	48.86	2.19	4.42	4.12	49.86	1.70	5.04	0.33	50.33
23000.	2.33	4.54	0.63,	45.08	1.80	4.41	-1.59	47.32	1.74	5.06	-3.10	48.89
23500.	3.12	5.49	-1.17	38.83	2.08	4.83	-2.19	42.64	2.16	5.41	-1.03	45.59
24000.	1.40	6.89	4.74	32.92	0.82	6.60	3.18	35.48	2.10	6.08	2.16	39.92
24500.	0.35	8.05	1.64	30.21	0.85	7.99	-0.47	32.20	3.53	7.05	-2.23	34.15
25000.	0.35	8.05	1.64	-99.99	1.66	8.29	-0.07	33.65	2.61	7.90	4.68	34.41
25500.	0.35	8.05	1.64	-99.99	1.66	8.29	-0.07	-99.99	0.88	8.01	3.55	35.95
26000.	0.35	8.05	1.64	-99.99	1.66	8.29	-0.07	-99.99	0.88	8.01	3.55	-99.99
26500.	0.35	8.05	1.64	-99.99	1.66	8.29	-0.07	-99.99	0.88	8.01	3.55	-99.99
27000.	0.35	8.05	1.64	-99.99	1.66	8.29	-0.07	-99.99	0.88	8.01	3.55	-99.99
27500.	0.35	8.05	1.64	-99.99	1.66	8.29	-0.07	-99.99	0.88	8.01	3.55	-99.99
28000.	0.35	8.05	1.64	-99.99	1.66	8.29	-0.07	-99.99	0.88	8.01	3.55	-99.99
28500.	0.35	8.05	1.64	-99.99	1.66	8.29	-0.07	-99.99	0.88	8.01	3.55	-99.99
29000.	0.35	8.05	1.64	-99.99	1.66	8.29	-0.07	-99.99	0.88	8.01	3.55	-99.99
29500.	0.35	8.05	1.64	-99.99	1.66	8.29	-0.07	-99.99	0.88	8.01	3.55	-99.99
30000.	0.35	8.05	1.64	-99.99	1.66	8.29	-0.07	-99.99	0.88	8.01	3.55	-99.99
30500.	0.35	8.05	1.64	-99.99	1.66	8.29	-0.07	-99.99	0.88	8.01	3.55	-99.99
31000.	0.35	8.05	1.64	-99.99	1.66	8.29	-0.07	-99.99	0.88	8.01	3.55	-99.99
31500.	0.35	8.05	1.64	-99.99	1.66	8.29	-0.07	-99.99	0.88	8.01	3.55	-99.99
32000.	0.35	8.05	1.64	-99.99	1.66	8.29	-0.07	-99.99	0.88	8.01	3.55	-99.99
32500.	0.35	8.05	1.64	-99.99	1.66	8.29	-0.07	-99.99	0.88	8.01	3.55	-99.99
33000.	0.35	8.05	1.64	-99.99	1.66	8.29	-0.07	-99.99	0.88	8.01	3.55	-99.99
33500.	0.35	8.05	1.64	-99.99	1.66	8.29	-0.07	-99.99	0.88	8.01	3.55	-99.99
34000.	0.35	8.05	1.64	-99.99	1.66	8.29	-0.07	-99.99	0.88	8.01	3.55	-99.99
34500.	0.35	8.05	1.64	-99.99	1.66	8.29	-0.07	-99.99	0.88	8.01	3.55	-99.99
35000.	0.35	8.05	1.64	-99.99	1.66	8.29	-0.07	-99.99	0.88	8.01	3.55	-99.99
35500.	0.35	8.05	1.64	-99.99	1.66	8.29	-0.07	-99.99	0.88	8.01	3.55	-99.99
36000.	0.35	8.05	1.64	-99.99	1.66	8.29	-0.07	-99.99	0.88	8.01	3.55	-99.99
36500.	0.35	8.05	1.64	-99.99	1.66	8.29	-0.07	-99.99	0.88	8.01	3.55	-99.99
37000.	0.35	8.05	1.64	-99.99	1.66	8.29	-0.07	-99.99	0.88	8.01	3.55	-99.99
37500.	0.35	8.05	1.64	-99.99	1.66	8.29	-0.07	-99.99	0.88	8.01	3.55	-99.99

TABLE F.5. JAWS Corridor Data Set #5 (along path $\overline{EF}$ in 30JN1821 measurement).

Path Shear Intensity: Class I
Plane Separated by 500 ft
X = Horizontal Distance (ft)

WX = Wind in X Direction (kts)
WY = Wind in Y Direction (kts)
WZ = Wind in Z Direction (kts)
DBZ = Radar Reflectivity (dBZ)

Elevation: 0 ft AGL

		PLANE 1				PLANE 2				PLANE 3		
X	WX	WY	WZ	DBZ	WX	WY	WZ	DBZ	WX	WY	WZ	DBZ
-37500.	25.36	5.52	0.00	-99.99	26.31	5.50	0.00	-99.99	25.26	5.49	0.00	-99.99
-37000.	25.40	5.35	0.00	-99.99	25.35	5.34	0.00	-99.99	25.33	5.42	0.00	-99.99
-36500.	25.45	5.27	0.00	-99.99	25.44	5.37	0.00	-99.99	25.42	5.49	0.00	-99.99
-36000.	25.56	5.33	0.00	-99.99	25.55	5.43	0.00	-99.99	25.47	5.42	0.00	-99.99
-35500.	25.61	5.31	0.00	-99.99	25.55	5.27	0.00	-99.99	25.48	5.24	0.00	-99.99
-35000.	25.61	5.13	0.00	-99.99	25.55	5.13	0.00	-99.99	25.58	5.26	0.00	-99.99
-34500.	25.68	5.09	0.00	-99.99	25.71	5.22	0.00	-99.99	25.73	5.35	0.00	-99.99
-34000.	25.84	5.17	0.00	-99.99	25.84	5.24	0.00	-99.99	25.78	5.15	0.00	-99.99
-33500.	25.89	5.04	0.00	-99.99	25.83	4.96	0.00	-99.99	25.79	4.86	0.00	-99.99
-33000.	25.83	4.79	0.00	-99.99	25.88	4.78	0.00	-99.99	25.97	4.85	0.00	-99.99
-32500.	25.97	4.73	0.00	-99.99	26.09	4.80	0.00	-99.99	26.18	4.87	0.00	-99.99
-32000.	26.19	4.74	0.00	-99.99	26.19	4.83	0.00	-99.99	26.24	4.90	0.00	-99.99
-31500.	26.02	4.77	0.00	-99.99	26.03	4.87	0.00	-99.99	26.20	4.98	0.00	-99.99
-31000.	25.65	4.79	0.00	-99.99	25.91	5.21	0.00	-99.99	26.36	5.60	0.00	-99.99
-30500.	25.20	5.20	0.00	-99.99	25.67	5.73	0.00	-99.99	26.43	6.11	0.00	37.27
-30000.	24.77	5.42	0.00	39.35	25.45	5.55	0.00	38.61	26.46	5.72	0.00	37.88
-29500.	25.09	4.88	0.00	39.78	25.41	4.93	0.00	39.31	26.35	5.12	0.00	38.71
-29000.	25.42	4.52	0.00	39.95	25.83	4.52	0.00	39.76	26.28	4.41	0.00	39.61
-28500.	26.28	4.70	0.00	39.77	26.47	4.48	0.00	40.01	26.66	4.42	0.00	40.20
-28000.	26.96	5.01	0.00	39.36	27.05	5.26	0.00	40.34	27.38	5.46	0.00	40.56
-27500.	27.10	5.29	0.00	39.85	27.35	5.76	0.00	40.62	27.52	6.04	0.00	40.66
-27000.	27.13	5.38	0.00	40.22	27.23	5.75	0.00	40.23	27.22	6.06	0.00	40.38
-26500.	27.40	5.69	0.00	39.60	27.28	5.84	0.00	39.68	27.41	6.05	0.00	40.25
-26000.	27.75	5.93	0.00	39.31	27.89	6.11	0.00	39.84	27.94	6.21	0.00	40.38
-25500.	28.23	6.12	0.00	39.37	28.44	6.31	0.00	40.19	28.59	6.36	0.00	41.54
-25000.	28.89	6.32	0.00	41.48	29.02	6.31	0.00	42.20	29.15	6.34	0.00	43.37
-24500.	29.70	6.52	0.00	44.24	29.70	6.42	0.00	44.69	29.71	6.50	0.00	45.73
-24000.	30.43	6.85	0.00	46.57	30.40	6.77	0.00	47.35	30.37	6.71	0.00	48.48
-23500.	30.98	7.29	0.00	48.78	30.94	7.28	0.00	49.18	30.79	7.28	0.00	49.88
-23000.	31.18	7.97	0.00	50.36	31.21	8.07	0.00	50.47	31.08	8.03	0.00	51.04
-22500.	31.29	8.60	0.00	51.23	31.11	8.64	0.00	51.46	30.88	8.71	0.00	51.51
-22000.	30.99	8.70	0.00	51.92	30.74	8.89	0.00	52.02	30.50	9.09	0.00	52.26
-21500.	30.80	8.59	0.00	52.74	30.60	8.93	0.00	52.60	30.32	9.01	0.00	52.94
-21000.	31.02	8.64	0.00	53.32	30.80	8.91	0.00	53.20	30.48	9.00	0.00	53.51
-20500.	31.24	8.90	0.00	53.76	31.12	9.12	0.00	53.85	31.09	9.18	0.00	54.20
-20000.	31.38	9.27	0.00	54.52	31.39	9.52	0.00	54.33	31.42	9.46	0.00	54.77
-19500.	31.34	9.62	0.00	55.28	31.42	9.77	0.00	54.93	31.52	9.71	0.00	55.20
-19000.	31.06	9.70	0.00	55.98	31.22	9.86	0.00	55.72	31.59	10.10	0.00	55.50
-18500.	30.80	9.96	0.00	56.23	31.01	10.16	0.00	56.04	31.54	10.50	0.00	55.75
-18000.	30.50	10.42	0.00	56.16	30.63	10.49	0.00	56.19	31.23	10.86	0.00	55.36
-17500.	30.05	10.85	0.00	55.79	30.29	10.98	0.00	55.22	30.78	11.26	0.00	54.44
-17000.	29.38	11.23	0.00	54.96	29.74	11.37	0.00	54.45	30.08	11.77	0.00	53.16
-16500.	28.36	11.88	0.00	54.06	28.86	12.01	0.00	53.61	29.24	12.37	0.00	52.10
-16000.	26.99	12.67	0.00	53.26	27.63	12.83	0.00	52.60	28.08	13.07	0.00	51.07
-15500.	25.07	13.27	0.00	52.21	25.94	13.66	0.00	51.25	26.80	14.07	0.00	49.91
-15000.	22.17	13.27	0.00	50.84	23.97	14.25	0.00	50.00	24.78	14.52	0.00	48.31
-14500.	18.71	13.42	0.00	49.14	21.05	14.42	0.00	48.26	22.50	14.86	0.00	46.75
-14000.	14.95	14.09	0.00	47.36	17.60	14.80	0.00	46.60	19.78	14.96	0.00	45.76
-13500.	13.03	15.94	0.00	45.91	14.67	15.72	0.00	45.29	16.57	15.48	0.00	44.51
-13000.	11.06	17.70	0.00	44.55	11.70	16.86	0.00	44.18	12.39	16.25	0.00	43.59
-12500.	8.15	18.50	0.00	43.47	8.69	17.74	0.00	43.11	8.84	17.08	0.00	42.50
-12000.	5.82	19.07	0.00	42.53	5.42	18.31	0.00	41.40	4.99	17.58	0.00	40.48
-11500.	3.67	19.50	0.00	40.71	2.44	18.78	0.00	39.29	2.03	18.04	0.00	38.27
-11000.	1.90	19.75	0.00	38.74	0.98	19.02	0.00	36.75	0.23	18.40	0.00	35.33
-10500.	0.85	19.54	0.00	36.05	-0.11	19.03	0.00	34.04	-0.97	18.20	0.00	32.77
-10000.	0.00	18.87	0.00	34.00	-1.05	18.18	0.00	32.99	-1.70	17.28	0.00	32.06
-9500.	-1.32	17.52	0.00	32.96	-2.20	16.92	0.00	32.13	-1.90	16.54	0.00	31.05
-9000.	-2.26	16.60	0.00	31.84	-1.89	16.60	0.00	31.25	-1.29	16.20	0.00	30.56
-8500.	-2.63	16.60	0.00	30.88	-1.76	16.68	0.00	30.39	-1.17	16.17	0.00	29.40
-8000.	-3.49	16.84	0.00	29.70	-2.12	17.00	0.00	28.95	-1.29	16.49	0.00	27.99
-7500.	-4.48	17.15	0.00	28.52	-3.00	17.18	0.00	27.66	-1.95	16.61	0.00	26.55
-7000.	-5.02	17.32	0.00	27.81	-3.81	17.25	0.00	26.75	-2.82	16.61	0.00	25.44
-6500.	-5.32	17.41	0.00	27.21	-4.22	17.86	0.00	26.48	-3.27	17.99	0.00	26.38
-6000.	-5.56	18.22	0.00	27.42	-4.54	18.95	0.00	27.12	-3.64	19.48	0.00	27.11
-5500.	-5.92	19.56	0.00	28.16	-5.17	19.90	0.00	27.73	-4.66	20.45	0.00	26.87
-5000.	-7.69	20.38	0.00	29.43	-6.85	20.42	0.00	28.87	-6.07	21.03	0.00	27.58
-4500.	-9.60	20.80	0.00	30.84	-8.61	20.43	0.00	30.10	-7.39	20.62	0.00	28.76
-4000.	-11.21	19.45	0.00	31.86	-10.23	19.33	0.00	31.14	-8.86	19.89	0.00	30.36
-3500.	-12.63	17.38	0.00	32.71	-11.48	17.82	0.00	32.89	-9.81	18.55	0.00	32.25
-3000.	-12.80	16.43	0.00	35.11	-12.00	16.55	0.00	35.26	-10.80	17.24	0.00	34.81
-2500.	-12.82	15.84	0.00	37.76	-12.43	16.11	0.00	37.68	-11.86	16.47	0.00	37.60
-2000.	-12.68	15.66	0.00	39.76	-13.08	15.86	0.00	40.12	-12.46	16.19	0.00	40.25
-1500.	-12.42	15.23	0.00	42.26	-13.02	15.30	0.00	43.18	-12.72	15.77	0.00	43.48
-1000.	-11.14	14.22	0.00	45.57	-11.91	14.44	0.00	46.38	-11.67	15.62	0.00	46.57
-500.	-8.24	13.30	0.00	48.25	-8.56	14.15	0.00	48.80	-8.59	15.69	0.00	49.09

TABLE F.5. (continued).

Elevation: 0 ft AGL

0.	-3.08	12.93	0.00	50.14	-4.66	13.43	0.00	50.99	-4.67	15.99	0.00	50.10
500.	0.37	12.90	0.00	51.34	0.21	14.58	0.00	50.79	0.05	16.02	0.00	50.04
1000.	4.11	13.21	0.00	51.43	4.43	15.25	0.00	50.62	3.69	18.09	0.00	48.62
1500.	6.36	13.90	0.00	50.59	7.33	16.70	0.00	49.01	6.39	19.51	0.00	46.08
2000.	7.08	14.96	0.00	48.93	8.07	17.75	0.00	46.05	7.38	19.70	0.00	43.83
2500.	8.27	15.40	0.00	44.88	8.28	17.82	0.00	42.22	7.75	20.15	0.00	40.18
3000.	8.48	15.79	0.00	38.12	8.17	17.29	0.00	36.72	7.31	18.17	0.00	34.84
3500.	8.49	14.66	0.00	31.79	8.21	15.43	0.00	30.37	7.29	16.13	0.00	28.79
4000.	8.35	13.24	0.00	26.71	7.87	13.61	0.00	27.00	7.03	13.69	0.00	28.53
4500.	7.84	12.53	0.00	26.24	7.30	11.65	0.00	26.70	6.47	11.57	0.00	28.66
5000.	7.13	12.26	0.00	26.22	6.84	10.38	0.00	27.36	5.61	10.08	0.00	30.92
5500.	7.05	11.89	0.00	26.79	6.54	10.19	0.00	28.61	5.61	9.17	0.00	32.48
6000.	7.30	11.30	0.00	26.88	7.16	10.06	0.00	30.11	6.73	9.03	0.00	35.43
6500.	7.73	11.04	0.00	27.84	8.23	9.97	0.00	30.83	7.71	9.20	0.00	36.39
7000.	7.69	10.55	0.00	27.69	8.36	10.09	0.00	30.70	8.56	9.64	0.00	35.11
7500.	7.48	10.96	0.00	27.19	8.09	10.20	0.00	30.02	9.10	10.32	0.00	33.62
8000.	7.42	12.26	0.00	27.32	8.22	11.32	0.00	29.03	9.15	11.45	0.00	32.70
8500.	7.74	14.22	0.00	27.35	8.62	13.17	0.00	28.67	9.62	12.57	0.00	32.17
9000.	8.05	15.63	0.00	27.21	9.13	14.20	0.00	29.02	10.23	13.14	0.00	31.75
9500.	9.13	16.37	0.00	28.17	9.64	15.25	0.00	28.79	10.77	13.95	0.00	32.76
10000.	10.09	16.94	0.00	29.42	10.21	16.05	0.00	29.99	11.21	14.79	0.00	33.04
10500.	11.38	18.01	0.00	30.15	11.42	17.16	0.00	31.39	11.90	16.97	0.00	33.96
11000.	13.12	19.29	0.00	31.36	12.91	19.22	0.00	32.15	13.20	19.31	0.00	34.58
11500.	14.63	20.43	0.00	32.94	13.99	20.17	0.00	32.35	13.95	19.23	0.00	34.06
12000.	15.36	19.59	0.00	33.93	14.64	18.69	0.00	33.47	14.35	18.11	0.00	34.62
12500.	15.33	17.41	0.00	34.50	15.39	17.09	0.00	33.70	15.54	16.75	0.00	33.48
13000.	15.33	14.71	0.00	34.20	16.42	15.33	0.00	32.60	16.70	15.21	0.00	32.74
13500.	15.18	11.87	0.00	33.70	16.50	13.15	0.00	31.70	17.16	13.88	0.00	31.00
14000.	15.32	10.09	0.00	32.71	16.42	11.30	0.00	30.75	17.27	12.58	0.00	29.33
14500.	15.91	9.03	0.00	32.36	16.70	10.71	0.00	30.68	17.36	12.26	0.00	29.91
15000.	16.88	9.78	0.00	33.64	17.63	11.36	0.00	31.72	17.93	12.34	0.00	30.53
15500.	17.89	10.37	0.00	34.65	18.38	11.35	0.00	32.65	18.89	12.23	0.00	30.97
16000.	18.31	9.82	0.00	35.12	18.90	11.01	0.00	33.22	19.34	11.66	0.00	31.47
16500.	18.57	9.12	0.00	35.66	19.01	10.39	0.00	33.46	19.24	10.73	0.00	31.70
17000.	18.76	8.98	0.00	36.35	19.14	9.94	0.00	34.01	19.17	10.43	0.00	31.59
17500.	19.43	9.98	0.00	36.47	19.25	10.36	0.00	33.66	19.14	10.60	0.00	31.25
18000.	20.27	11.16	0.00	35.41	19.63	11.40	0.00	32.64	19.07	10.46	0.00	30.38
18500.	20.67	10.70	0.00	34.02	19.54	9.95	0.00	31.00	18.76	9.51	0.00	28.75
19000.	20.48	8.21	0.00	31.82	19.30	7.98	0.00	29.04	18.25	9.02	0.00	27.51
19500.	19.79	5.59	0.00	29.33	17.87	5.79	0.00	26.34	17.29	7.54	0.00	25.70
20000.	18.92	3.64	0.00	26.65	16.99	4.30	0.00	23.89	17.29	7.72	0.00	24.18
20500.	19.09	4.27	0.00	24.78	17.97	6.35	0.00	23.34	17.44	9.03	0.00	23.06
21000.	19.15	6.82	0.00	22.24	19.17	7.38	0.00	22.61	19.83	8.52	0.00	23.54
21500.	20.41	7.55	0.00	21.87	21.43	7.47	0.00	23.43	22.31	8.18	0.00	24.37
22000.	21.84	7.30	0.00	22.33	23.01	7.00	0.00	23.45	24.17	6.46	0.00	24.06
22500.	22.13	6.66	0.00	21.80	24.16	5.70	0.00	22.88	25.55	5.25	0.00	23.44
23000.	22.15	5.94	0.00	21.29	24.65	5.05	0.00	21.85	25.59	5.09	0.00	21.59
23500.	22.01	6.01	0.00	19.92	24.28	5.20	0.00	20.31	25.60	5.15	0.00	19.91
24000.	22.34	6.04	0.00	18.64	23.76	6.27	0.00	18.49	24.92	6.69	0.00	17.62
24500.	21.92	6.97	0.00	17.42	23.37	7.66	0.00	16.97	24.16	7.57	0.00	15.60
25000.	21.34	7.25	0.00	16.77	23.09	7.51	0.00	15.88	23.80	7.27	0.00	14.15
25500.	21.53	6.48	0.00	16.26	23.20	6.76	0.00	15.18	23.57	7.28	0.00	-99.99
26000.	20.53	6.04	0.00	-99.99	22.11	6.44	0.00	-99.99	22.15	6.76	0.00	-99.99
26500.	19.53	6.18	0.00	-99.99	20.77	6.54	0.00	-99.99	20.90	7.14	0.00	-99.99
27000.	19.38	6.64	0.00	-99.99	19.88	7.45	0.00	-99.99	19.90	8.08	0.00	-99.99
27500.	19.30	7.75	0.00	-99.99	19.45	8.42	0.00	-99.99	19.58	8.15	0.00	-99.99
28000.	19.33	8.13	0.00	-99.99	19.39	7.92	0.00	-99.99	19.52	7.67	0.00	-99.99
28500.	19.26	7.53	0.00	-99.99	19.31	7.60	0.00	-99.99	19.26	8.19	0.00	-99.99
29000.	19.16	7.84	0.00	-99.99	19.14	8.50	0.00	-99.99	19.04	9.07	0.00	-99.99
29500.	19.12	8.85	0.00	-99.99	19.07	9.09	0.00	-99.99	19.04	8.88	0.00	-99.99
30000.	19.11	8.88	0.00	-99.99	19.07	8.70	0.00	-99.99	19.05	8.51	0.00	-99.99
30500.	19.10	8.49	0.00	-99.99	19.01	8.66	0.00	-99.99	18.90	9.01	0.00	-99.99
31000.	18.97	8.84	0.00	-99.99	18.86	9.18	0.00	-99.99	18.76	9.47	0.00	-99.99
31500.	18.82	9.36	0.00	-99.99	18.81	9.28	0.00	-99.99	18.81	9.14	0.00	-99.99
32000.	18.85	9.10	0.00	-99.99	18.85	8.95	0.00	-99.99	18.83	8.95	0.00	-99.99
32500.	18.90	8.79	0.00	-99.99	18.85	9.14	0.00	-99.99	18.80	9.50	0.00	-99.99
33000.	18.89	9.35	0.00	-99.99	18.83	9.70	0.00	-99.99	18.81	9.82	0.00	-99.99
33500.	18.90	9.81	0.00	-99.99	18.89	9.69	0.00	-99.99	18.89	9.57	0.00	-99.99
34000.	18.98	9.56	0.00	-99.99	18.98	9.43	0.00	-99.99	18.81	9.60	0.00	-99.99
34500.	18.96	9.48	0.00	-99.99	18.73	9.79	0.00	-99.99	18.48	10.11	0.00	-99.99
35000.	18.67	9.98	0.00	-99.99	18.42	10.29	0.00	-99.99	18.39	10.22	0.00	-99.99
35500.	18.52	10.21	0.00	-99.99	18.52	10.06	0.00	-99.99	18.52	9.92	0.00	-99.99
36000.	18.66	9.92	0.00	-99.99	18.66	9.78	0.00	-99.99	18.43	10.06	0.00	-99.99
36500.	18.63	9.95	0.00	-99.99	18.42	10.22	0.00	-99.99	18.20	10.50	0.00	-99.99
37000.	18.41	10.36	0.00	-99.99	18.24	10.55	0.00	-99.99	18.26	10.44	0.00	-99.99
37500.	18.40	10.41	0.00	-99.99	18.43	10.27	0.00	-99.99	18.45	10.17	0.00	-99.99

TABLE F.5. (continued).

Elevation: 500 ft AGL

		PLANE 1				PLANE 2				PLANE 3		
X	WX	WY	WZ	DBZ	WX	WY	WZ	DBZ	WX	WY	WZ	DBZ
-37500.	25.79	4.92	-0.11	-99.99	25.73	4.93	-0.11	-99.99	25.66	4.93	-0.10	-99.99
-37000.	25.79	4.79	-0.10	-99.99	25.73	4.80	-0.10	-99.99	25.72	4.87	-0.10	-99.99
-36500.	25.81	4.72	-0.09	-99.99	25.82	4.81	-0.09	-99.99	25.82	4.91	-0.09	-99.99
-36000.	25.94	4.75	-0.09	-99.99	25.98	4.84	-0.09	-99.99	25.87	4.85	-0.11	-99.99
-35500.	26.00	4.71	-0.08	-99.99	25.93	4.71	-0.11	-99.99	25.86	4.71	-0.13	-99.99
-35000.	25.96	4.58	-0.11	-99.99	25.91	4.59	-0.12	-99.99	25.96	4.70	-0.10	-99.99
-34500.	26.02	4.53	-0.10	-99.99	26.07	4.64	-0.08	-99.99	26.11	4.76	-0.06	-99.99
-34000.	26.19	4.56	-0.05	-99.99	26.19	4.61	-0.04	-99.99	26.08	4.53	-0.05	-99.99
-33500.	26.17	4.42	-0.03	-99.99	26.07	4.34	-0.03	-99.99	25.99	4.23	-0.04	-99.99
-33000.	26.02	4.18	-0.01	-99.99	26.05	4.16	-0.03	-99.99	26.17	4.21	-0.07	-99.99
-32500.	26.13	4.12	-0.02	-99.99	26.27	4.17	-0.05	-99.99	26.40	4.23	-0.10	-99.99
-32000.	26.36	4.12	0.00	-99.99	26.34	4.09	-0.01	-99.99	26.34	3.99	-0.06	-99.99
-31500.	26.15	3.99	0.14	-99.99	26.10	3.89	0.16	-99.99	26.20	3.80	0.05	-99.99
-31000.	25.79	3.89	0.33	-99.99	25.90	3.85	0.22	-99.99	26.23	3.86	-0.01	-99.99
-30500.	25.52	4.07	0.21	-99.99	25.73	3.99	0.08	-99.99	26.10	3.87	-0.05	37.73
-30000.	25.43	4.31	-0.10	39.81	25.81	4.04	-0.01	38.89	26.45	3.85	-0.06	38.12
-29500.	25.99	4.23	-0.25	39.96	26.13	3.92	-0.05	39.14	26.72	3.74	-0.16	38.62
-29000.	26.45	4.14	-0.32	40.06	26.61	3.70	-0.24	39.69	26.97	3.45	-0.39	39.39
-28500.	26.81	3.60	-0.21	40.49	26.98	3.31	-0.24	40.30	27.33	3.40	-0.60	40.48
-28000.	27.00	3.21	-0.00	40.90	27.12	3.16	-0.22	41.80	27.62	3.52	-0.69	42.13
-27500.	27.10	2.91	-0.11	42.31	27.17	2.92	-0.26	43.25	27.59	3.48	-0.59	43.50
-27000.	27.20	2.76	-0.22	43.53	27.32	3.06	-0.40	44.06	27.39	3.40	-0.68	44.57
-26500.	27.65	3.12	-0.43	44.57	27.61	3.24	-0.76	44.94	27.78	3.63	-0.83	45.31
-26000.	28.06	3.35	-0.43	45.30	28.14	3.49	-0.70	45.68	28.31	3.06	-0.85	46.06
-25500.	28.41	3.46	-0.44	45.89	28.57	3.67	-0.65	46.42	28.74	3.92	-0.73	47.13
-25000.	28.83	3.64	-0.52	47.33	28.96	3.75	-0.62	47.67	29.12	3.98	-0.66	48.36
-24500.	29.34	3.94	-0.58	48.74	29.41	3.87	-0.66	49.06	29.63	4.14	-0.69	49.64
-24000.	29.90	4.14	-0.59	49.92	29.96	4.18	-0.66	50.44	30.00	4.28	-0.74	51.08
-23500.	30.43	4.51	-0.52	51.18	30.49	4.67	-0.60	51.50	30.44	4.86	-0.68	51.96
-23000.	30.74	5.00	-0.47	52.20	30.93	5.47	-0.44	52.39	30.88	5.63	-0.54	52.77
-22500.	31.01	5.59	-0.53	52.93	31.06	6.06	-0.40	53.13	31.02	6.50	-0.33	53.23
-22000.	31.01	5.96	-0.59	53.56	31.01	6.52	-0.42	53.67	31.00	7.11	-0.23	53.82
-21500.	31.14	6.33	-0.72	54.31	31.05	6.83	-0.57	54.25	30.94	7.31	-0.46	54.54
-21000.	31.44	6.73	-0.79	54.86	31.30	7.15	-0.74	54.83	31.15	7.56	-0.67	55.07
-20500.	31.73	7.20	-0.69	55.28	31.64	7.54	-0.64	55.25	31.69	7.93	-0.69	55.41
-20000.	31.68	7.29	-0.49	55.69	31.83	7.86	-0.37	55.47	31.95	8.23	-0.51	55.67
-19500.	31.52	7.42	-0.27	55.12	31.71	7.95	-0.26	55.74	31.92	8.35	-0.38	55.82
-19000.	31.20	7.48	-0.15	56.41	31.43	7.97	-0.21	56.11	31.82	8.57	-0.34	55.82
-18500.	30.95	7.82	-0.06	56.31	31.21	8.31	-0.18	56.03	31.70	8.97	-0.33	55.71
-18000.	30.68	8.28	0.07	55.87	30.90	8.68	-0.17	55.77	31.42	9.30	-0.23	55.08
-17500.	30.25	8.64	0.31	55.23	30.53	9.06	0.03	54.71	31.01	9.60	-0.13	54.03
-17000.	29.67	9.02	0.45	54.30	30.01	9.39	0.22	53.82	30.41	10.09	0.12	52.83
-16500.	28.92	9.69	0.67	53.33	29.28	10.00	0.45	52.93	29.72	10.69	0.43	51.80
-16000.	27.95	10.45	0.95	52.44	28.36	10.76	0.72	51.94	28.67	11.22	0.73	50.94
-15500.	26.51	11.07	1.26	51.48	27.04	11.51	1.10	50.86	27.52	11.90	1.03	50.03
-15000.	24.24	11.30	1.62	50.33	25.54	12.13	1.45	49.93	26.03	12.39	1.40	48.99
-14500.	21.53	11.55	2.05	49.28	23.29	12.43	1.98	48.97	24.32	12.83	1.89	48.12
-14000.	18.55	12.07	2.36	48.38	20.45	12.68	2.49	48.01	22.19	13.02	2.70	47.45
-13500.	15.85	12.79	2.78	47.27	17.56	12.99	3.09	47.18	19.31	13.20	3.35	46.60
-13000.	12.88	13.56	3.13	46.12	14.25	13.36	3.55	46.23	15.35	13.39	3.88	45.57
-12500.	9.55	13.89	3.10	44.94	10.74	13.69	3.64	44.95	11.57	13.62	4.13	44.46
-12000.	7.05	14.31	2.99	43.86	7.42	14.19	3.15	43.25	7.74	14.07	3.53	42.53
-11500.	4.89	15.03	2.40	41.88	4.61	14.92	2.40	41.31	4.75	14.80	2.75	40.38
-11000.	2.83	15.63	1.72	39.79	2.73	15.77	1.89	38.57	2.55	15.82	2.05	37.54
-10500.	1.67	16.51	1.26	36.95	1.25	16.67	1.41	35.63	0.85	16.54	1.57	34.80
-10000.	0.87	17.08	0.92	34.70	0.05	16.90	1.03	33.76	-0.27	16.68	1.15	33.14
-9500.	-0.33	17.04	0.66	33.35	-1.08	16.92	0.77	32.28	-0.95	16.69	0.81	31.65
-9000.	-1.29	17.16	0.41	32.26	-1.19	17.21	0.50	31.45	-1.03	16.79	0.57	30.68
-8500.	-1.79	17.56	0.20	31.49	-1.31	17.90	0.28	30.59	-1.17	17.24	0.91	29.76
-8000.	-2.64	18.17	0.24	30.63	-1.73	18.63	0.86	29.49	-1.38	18.03	1.56	28.65
-7500.	-3.60	18.93	0.29	29.73	-2.57	19.12	1.00	28.58	-1.81	18.53	1.43	27.46
-7000.	-4.25	18.88	0.03	29.22	-3.28	19.00	0.33	27.95	-2.49	18.54	0.86	26.64
-6500.	-4.82	18.39	-0.18	28.77	-3.65	19.26	-0.23	27.61	-2.59	19.60	0.20	26.77
-6000.	-5.28	18.87	0.07	28.68	-3.92	20.07	-0.02	27.68	-2.61	20.87	-0.16	26.81
-5500.	-5.84	20.14	0.67	28.83	-4.75	20.81	0.56	27.91	-3.64	21.68	0.38	26.70
-5000.	-7.61	20.95	1.39	29.67	-6.69	21.16	1.50	28.72	-5.32	22.05	1.22	27.22
-4500.	-9.56	21.41	2.04	30.85	-8.52	21.05	1.70	29.62	-7.17	21.24	1.16	28.01
-4000.	-11.06	20.18	1.65	31.76	-10.13	19.89	1.21	30.49	-8.91	20.18	0.76	29.26
-3500.	-12.20	18.59	1.10	32.60	-11.30	18.63	0.75	32.62	-9.82	19.18	0.43	32.10
-3000.	-12.44	17.78	0.58	35.68	-11.78	17.69	0.24	35.63	-10.69	18.23	0.07	35.36
-2500.	-12.69	16.98	0.11	39.02	-12.21	17.17	-0.02	38.82	-11.54	17.66	-0.04	38.88
-2000.	-12.48	16.43	-0.28	41.55	-12.84	16.56	-0.25	41.86	-11.95	17.21	-0.58	41.95
-1500.	-11.91	15.61	-1.11	44.34	-12.28	15.85	-1.53	44.87	-11.71	16.60	-1.95	44.95
-1000.	-9.95	14.71	-2.83	47.75	-10.48	15.08	-3.22	48.08	-10.33	16.07	-3.60	48.06
-500.	-6.64	13.87	-4.30	50.64	-6.95	14.51	-4.76	50.83	-7.18	15.61	-5.32	50.98

TABLE F.5. (continued).

Elevation: 500 ft AGL

0.	-2.12	13.32	-6.00	52.58	-2.84	13.71	-6.03	53.17	-3.34	15.43	-5.92	52.06
500.	2.22	13.04	-5.04	53.41	1.68	14.07	-5.71	52.52	1.04	15.52	-5.99	51.69
1000.	5.97	12.96	-4.61	52.40	5.81	14.29	-5.24	51.50	4.41	16.18	-4.89	49.01
1500.	8.01	13.57	-3.64	49.93	8.46	15.63	-3.78	47.86	6.93	17.39	-3.19	45.38
2000.	9.22	14.81	-2.71	46.53	9.67	16.85	-2.52	44.25	7.77	18.19	-1.66	42.07
2500.	9.25	15.62	-2.00	42.66	8.79	17.47	-1.35	40.42	7.86	19.30	-0.17	38.66
3000.	8.89	16.07	-1.30	37.58	8.33	17.35	-0.82	36.38	7.24	17.85	-0.05	35.92
3500.	8.56	15.03	-0.57	32.98	8.05	15.69	-0.46	32.32	6.93	16.17	0.05	32.35
4000.	8.28	13.77	0.39	28.67	7.70	14.15	0.24	29.73	6.82	14.26	0.14	32.18
4500.	8.10	13.37	1.04	28.29	7.48	12.75	0.81	28.88	6.56	12.68	0.54	31.86
5000.	7.91	13.49	1.59	28.03	7.44	11.94	0.94	28.80	6.21	11.63	0.43	32.94
5500.	8.08	13.38	1.27	28.04	7.47	11.96	0.63	29.82	6.50	11.03	0.08	33.90
6000.	8.42	12.98	0.89	27.38	8.15	11.86	0.27	30.79	7.53	10.86	-0.42	36.13
6500.	8.92	12.62	0.90	28.60	9.26	11.67	0.00	31.41	8.53	10.99	-0.65	36.95
7000.	9.04	12.23	1.13	28.82	9.55	11.91	0.19	31.69	9.55	11.61	-0.52	36.01
7500.	8.97	12.67	1.07	29.18	9.48	12.20	0.26	31.74	10.28	12.46	-0.39	34.84
8000.	9.03	13.72	1.00	30.17	9.61	13.11	0.18	31.59	10.24	13.49	-0.47	34.76
8500.	9.38	15.21	0.71	31.13	9.81	14.48	0.04	32.07	10.50	14.22	-0.41	34.79
9000.	9.83	16.29	0.41	31.94	10.40	15.30	0.14	32.99	10.98	14.44	-0.12	34.70
9500.	10.90	16.95	0.21	33.07	11.04	16.04	0.21	33.48	11.62	15.03	-0.13	35.61
10000.	11.90	17.45	-0.41	34.09	11.79	16.74	-0.11	34.02	12.24	15.73	-0.29	36.20
10500.	13.22	18.14	-1.22	34.55	12.99	17.53	-0.76	34.79	13.00	17.38	-0.46	35.94
11000.	14.60	18.81	-1.23	35.36	14.22	18.84	-0.80	35.25	14.16	19.00	-0.69	36.08
11500.	15.67	19.52	-0.66	36.48	15.08	19.45	-0.50	35.41	14.75	19.14	-0.54	36.47
12000.	16.17	19.25	-0.40	37.26	15.48	18.87	-0.43	36.23	15.05	18.72	-0.45	36.38
12500.	16.10	18.12	-0.21	37.74	16.04	18.03	-0.43	36.46	16.02	17.89	-0.71	35.43
13000.	16.10	16.15	-0.38	37.58	16.87	16.73	-0.60	35.80	16.96	16.76	-0.86	34.96
13500.	16.02	13.89	-0.79	37.31	16.98	14.81	-0.81	35.27	17.40	15.14	-0.56	33.89
14000.	16.23	12.33	-1.27	36.83	17.01	13.05	-1.20	34.75	17.58	13.69	-0.77	32.95
14500.	16.83	11.42	-1.68	36.81	17.41	12.57	-1.60	34.58	17.84	13.45	-1.08	33.18
15000.	17.53	11.95	-1.70	37.16	18.12	13.17	-1.70	34.81	18.38	13.67	-1.18	33.23
15500.	18.12	12.20	-1.84	37.19	18.55	12.96	-1.41	34.88	19.05	13.69	-0.77	33.01
16000.	18.29	11.31	-1.34	36.84	18.70	12.32	-1.14	34.53	19.26	13.01	-0.45	32.79
16500.	18.47	10.46	-1.13	36.61	18.78	11.60	-0.98	34.06	19.16	12.03	-0.34	32.37
17000.	18.83	10.42	-1.05	36.77	19.10	11.24	-0.78	34.10	19.17	11.63	-0.23	31.89
17500.	19.57	11.42	-0.66	36.61	19.37	11.54	-0.29	33.76	19.32	11.66	0.17	31.60
18000.	20.42	12.51	0.13	35.45	19.80	12.31	0.38	32.65	19.31	11.35	0.39	30.87
18500.	20.90	12.15	0.62	33.86	19.83	10.93	0.60	31.18	19.05	10.22	0.49	29.44
19000.	20.95	9.70	0.98	31.52	19.82	9.13	0.77	29.23	18.70	9.64	-0.32	28.37
19500.	20.64	7.57	0.48	29.15	19.04	7.71	-0.48	26.98	18.20	8.67	-1.55	26.85
20000.	20.19	6.19	-0.09	26.61	18.57	6.78	-1.45	24.83	18.40	9.22	-2.27	25.52
20500.	20.17	6.89	-0.50	24.90	19.08	8.56	-2.01	24.29	18.56	10.53	-3.45	24.50
21000.	19.85	9.01	-1.00	23.11	19.75	9.49	-2.14	23.67	20.45	10.06	-2.49	24.71
21500.	20.69	9.37	-0.65	22.89	21.43	9.26	-1.62	24.31	22.31	9.60	-1.79	25.29
22000.	21.59	8.90	-0.11	23.23	22.74	8.42	-0.82	24.36	24.01	7.69	-1.01	24.97
22500.	22.10	7.70	0.48	22.95	23.92	6.80	0.11	24.01	25.35	6.13	-0.17	24.49
23000.	22.28	6.50	0.95	22.65	24.36	5.85	0.48	23.21	25.28	5.66	0.26	22.75
23500.	22.15	6.27	0.71	21.46	24.04	5.63	0.32	21.83	25.18	5.47	0.37	21.29
24000.	22.36	6.28	0.25	20.47	23.66	6.37	0.20	20.19	24.56	6.62	0.59	19.18
24500.	22.21	7.33	0.21	19.54	23.52	7.56	-0.20	18.92	24.08	7.40	0.59	17.54
25000.	22.01	7.82	0.56	19.11	23.45	7.76	0.26	18.20	24.01	7.44	0.73	16.66
25500.	22.27	7.51	0.96	18.88	23.66	7.45	0.85	17.80	23.82	7.60	0.86	-99.99
26000.	21.53	7.48	0.82	-99.99	22.58	7.24	1.12	-99.99	22.41	7.23	1.25	-99.99
26500.	20.49	7.50	0.27	-99.99	21.27	7.32	0.92	-99.99	21.20	7.65	1.05	-99.99
27000.	20.11	7.70	-0.31	-99.99	20.34	8.15	0.32	-99.99	20.21	8.55	0.53	-99.99
27500.	19.81	8.53	-0.19	-99.99	19.79	8.95	0.12	-99.99	19.90	8.65	0.22	-99.99
28000.	19.73	8.78	-0.13	-99.99	19.79	8.54	0.03	-99.99	19.89	8.28	0.08	-99.99
28500.	19.71	8.28	-0.09	-99.99	19.74	8.28	0.00	-99.99	19.65	8.75	0.02	-99.99
29000.	19.61	8.53	-0.09	-99.99	19.54	9.05	-0.07	-99.99	19.41	9.50	-0.04	-99.99
29500.	19.51	9.35	-0.16	-99.99	19.43	9.53	-0.10	-99.99	19.40	9.33	-0.03	-99.99
30000.	19.49	9.35	-0.11	-99.99	19.44	9.18	-0.02	-99.99	19.41	9.00	0.03	-99.99
30500.	19.48	8.99	0.03	-99.99	19.38	9.13	0.03	-99.99	19.25	9.44	0.01	-99.99
31000.	19.33	9.29	0.03	-99.99	19.21	9.60	0.00	-99.99	19.10	9.86	-0.03	-99.99
31500.	19.17	9.75	-0.03	-99.99	19.15	9.68	-0.04	-99.99	19.16	9.54	-0.06	-99.99
32000.	19.20	9.50	-0.06	-99.99	19.20	9.36	-0.08	-99.99	19.19	9.36	-0.10	-99.99
32500.	19.25	9.20	-0.08	-99.99	19.19	9.51	-0.11	-99.99	19.13	9.82	-0.13	-99.99
33000.	19.21	9.68	-0.13	-99.99	19.14	9.99	-0.14	-99.99	19.11	10.10	-0.12	-99.99
33500.	19.20	10.08	-0.15	-99.99	19.19	9.97	-0.08	-99.99	19.19	9.86	-0.02	-99.99
34000.	19.29	9.84	-0.04	-99.99	19.28	9.73	0.03	-99.99	19.12	9.89	0.04	-99.99
34500.	19.28	9.76	0.04	-99.99	19.04	10.06	0.03	-99.99	18.79	10.36	0.02	-99.99
35000.	18.98	10.23	0.02	-99.99	18.74	10.53	0.00	-99.99	18.70	10.47	0.00	-99.99
35500.	18.84	10.45	0.00	-99.99	18.84	10.32	-0.01	-99.99	18.85	10.20	-0.01	-99.99
36000.	18.97	10.18	0.00	-99.99	18.97	10.05	-0.01	-99.99	18.76	10.33	-0.03	-99.99
36500.	18.95	10.21	-0.02	-99.99	18.74	10.47	-0.04	-99.99	18.52	10.74	-0.06	-99.99
37000.	18.74	10.61	-0.04	-99.99	18.58	10.79	-0.06	-99.99	18.59	10.68	-0.06	-99.99
37500.	18.74	10.64	-0.03	-99.99	18.77	10.52	-0.03	-99.99	18.78	10.41	-0.04	-99.99

TABLE F.5. (continued).

Elevation: 1000 ft AGL

	PLANE 1				PLANE 2				PLANE 3			
X	WX	WY	WZ	DBZ	WX	WY	WZ	DBZ	WX	WY	WZ	DBZ
-37500.	26.03	4.28	-0.21	-99.99	25.95	4.30	-0.21	-99.99	25.87	4.31	-0.20	-99.99
-37000.	25.98	4.18	-0.19	-99.99	25.91	4.20	-0.18	-99.99	25.92	4.26	-0.19	-99.99
-36500.	25.99	4.12	-0.18	-99.99	26.02	4.19	-0.19	-99.99	26.04	4.27	-0.19	-99.99
-36000.	26.13	4.12	-0.17	-99.99	26.15	4.19	-0.19	-99.99	26.09	4.22	-0.22	-99.99
-35500.	26.19	4.08	-0.17	-99.99	26.12	4.09	-0.21	-99.99	26.05	4.11	-0.25	-99.99
-35000.	26.12	3.98	-0.21	-99.99	26.08	4.01	-0.23	-99.99	26.14	4.10	-0.19	-99.99
-34500.	26.16	3.93	-0.18	-99.99	26.25	4.01	-0.14	-99.99	26.30	4.11	-0.10	-99.99
-34000.	26.34	3.93	-0.09	-99.99	26.35	3.96	-0.07	-99.99	26.22	3.88	-0.07	-99.99
-33500.	26.28	3.80	-0.04	-99.99	26.16	3.72	-0.04	-99.99	26.06	3.61	-0.05	-99.99
-33000.	26.06	3.60	-0.01	-99.99	26.10	3.57	-0.03	-99.99	26.23	3.60	-0.10	-99.99
-32500.	26.16	3.56	-0.01	-99.99	26.32	3.58	-0.06	-99.99	26.46	3.62	-0.15	-99.99
-32000.	26.38	3.55	0.02	-99.99	26.36	3.42	0.05	-99.99	26.35	3.18	-0.02	-99.99
-31500.	26.18	3.31	0.34	-99.99	26.09	3.07	0.44	-99.99	26.17	2.80	0.22	-99.99
-31000.	25.85	3.13	0.73	-99.99	25.90	2.72	0.55	-99.99	26.22	2.40	0.07	-99.99
-30500.	25.82	3.05	0.45	-99.99	25.90	2.51	0.22	-99.99	26.16	2.02	-0.04	38.15
-30000.	26.06	3.19	-0.17	40.26	26.20	2.68	0.03	39.23	26.56	2.27	-0.12	38.41
-29500.	26.75	3.45	-0.43	40.30	26.73	2.92	-0.05	39.21	27.04	2.50	-0.30	38.76
-29000.	27.24	3.55	-0.44	40.50	27.18	2.84	-0.34	40.03	27.42	2.49	-0.64	39.66
-28500.	27.18	2.58	-0.20	41.60	27.29	2.24	-0.24	41.13	27.69	2.36	-1.03	41.28
-28000.	27.13	1.74	0.01	42.90	27.12	1.45	-0.29	43.51	27.68	1.83	-1.30	43.90
-27500.	27.11	1.08	-0.15	44.86	27.02	0.72	-0.51	45.80	27.60	1.36	-1.24	46.12
-27000.	27.30	0.78	-0.38	46.62	27.43	0.92	-0.97	47.36	27.60	1.17	-1.51	48.01
-26500.	27.85	1.12	-0.82	48.62	27.89	1.14	-1.51	49.06	28.17	1.54	-1.72	49.24
-26000.	28.29	1.32	-0.80	49.92	28.39	1.37	-1.35	50.09	28.71	1.80	-1.67	50.29
-25500.	28.56	1.36	-0.80	50.73	28.75	1.51	-1.22	50.98	28.97	1.82	-1.40	51.22
-25000.	28.84	1.52	-0.93	51.59	28.98	1.66	-1.14	51.65	29.18	1.94	-1.21	51.97
-24500.	29.14	1.72	-1.06	52.04	29.24	1.80	-1.20	52.26	29.42	2.08	-1.26	52.53
-24000.	29.53	1.98	-1.12	52.46	29.60	2.05	-1.23	52.82	29.66	2.16	-1.35	53.14
-23500.	29.98	2.32	-1.03	53.07	30.06	2.51	-1.16	53.36	30.04	2.68	-1.31	53.67
-23000.	30.34	2.79	-0.96	53.68	30.57	3.24	-0.92	53.97	30.52	3.40	-1.12	54.22
-22500.	30.67	3.20	-1.12	54.28	30.84	3.79	-0.86	54.51	30.90	4.29	-0.74	54.66
-22000.	30.84	3.66	-1.21	54.84	31.00	4.31	-0.86	54.99	31.13	4.96	-0.52	55.11
-21500.	31.14	4.22	-1.42	55.52	31.11	4.70	-1.11	55.53	31.13	5.27	-0.93	55.76
-21000.	31.41	4.68	-1.53	56.01	31.32	5.09	-1.41	56.03	31.30	5.58	-1.30	56.19
-20500.	31.68	5.13	-1.32	56.38	31.62	5.47	-1.24	56.26	31.72	5.94	-1.39	56.27
-20000.	31.58	5.09	-0.95	56.49	31.75	5.69	-0.75	56.26	31.95	6.21	-1.07	56.28
-19500.	31.42	5.14	-0.53	56.61	31.64	5.71	-0.55	56.21	31.93	6.29	-0.82	56.10
-19000.	31.13	5.21	-0.28	56.50	31.39	5.73	-0.42	56.17	31.79	6.40	-0.73	55.87
-18500.	30.90	5.52	-0.10	56.08	31.19	6.03	-0.38	55.72	31.64	6.75	-0.71	55.42
-18000.	30.65	5.84	0.11	55.34	30.93	6.30	-0.39	55.08	31.41	7.03	-0.53	54.55
-17500.	30.28	6.09	0.56	54.47	30.61	6.64	-0.04	53.97	31.08	7.28	-0.37	53.38
-17000.	29.86	6.49	0.75	53.50	30.19	6.96	0.29	52.99	30.61	7.79	0.10	52.22
-16500.	29.39	7.22	1.16	52.51	29.64	7.59	0.74	52.06	30.09	8.44	0.71	51.22
-16000.	28.78	8.01	1.68	51.56	29.00	8.38	1.26	51.11	29.19	8.92	1.31	50.51
-15500.	27.81	8.69	2.28	50.67	28.05	9.10	2.00	50.28	28.22	9.45	1.90	49.82
-15000.	26.23	9.15	2.95	49.67	27.01	9.76	2.69	49.57	27.19	9.92	2.58	49.19
-14500.	24.32	9.47	3.78	49.07	25.44	10.11	3.69	49.15	26.02	10.38	3.51	48.78
-14000.	22.20	9.87	4.42	48.75	23.34	10.25	4.67	48.65	24.56	10.54	4.96	48.30
-13500.	19.44	9.76	5.32	47.95	20.91	10.12	5.83	48.17	22.30	10.46	6.17	47.72
-13000.	16.24	9.72	6.10	46.97	17.90	9.98	6.75	47.37	19.11	10.39	7.20	46.69
-12500.	12.90	9.67	6.02	45.78	14.45	9.90	6.90	46.02	15.73	10.28	7.73	45.63
-12000.	10.36	9.90	5.77	44.63	11.29	10.27	5.98	44.40	12.21	10.67	6.68	43.86
-11500.	8.29	10.78	4.62	42.63	8.73	11.07	4.52	42.63	9.35	11.49	5.24	41.88
-11000.	6.09	11.56	3.28	40.55	6.64	12.30	3.59	40.00	6.93	12.83	3.99	39.37
-10500.	4.91	13.18	2.43	37.88	4.93	13.76	2.69	37.18	4.86	14.18	3.18	36.78
-10000.	4.02	14.64	1.90	35.73	3.36	14.87	2.15	34.92	3.26	15.21	2.56	34.65
-9500.	2.57	15.65	1.57	34.30	1.94	15.91	1.89	33.15	1.80	15.86	2.11	32.82
-9000.	1.20	16.61	1.09	33.25	0.89	16.74	1.47	32.28	0.46	16.36	1.89	31.47
-8500.	0.11	17.45	0.66	32.50	-0.02	17.98	1.06	31.35	-0.41	17.15	2.38	30.55
-8000.	-1.05	18.37	0.59	31.69	-0.86	18.96	2.01	30.29	-1.13	18.21	3.41	29.46
-7500.	-2.17	19.51	0.67	30.75	-1.86	19.66	2.16	29.42	-1.52	18.84	2.94	28.35
-7000.	-2.95	19.42	0.19	30.27	-2.41	19.39	0.74	28.90	-1.97	18.75	1.64	27.65
-6500.	-3.77	18.65	-0.19	29.90	-2.70	19.47	-0.36	28.49	-1.66	19.68	0.32	27.29
-6000.	-4.44	18.96	0.28	29.57	-2.88	20.18	0.01	28.22	-1.26	20.92	-0.36	26.93
-5500.	-5.23	20.04	1.36	29.28	-3.84	20.85	1.12	28.14	-2.16	21.86	0.79	26.87
-5000.	-6.92	20.88	2.72	29.75	-5.84	21.25	2.95	28.59	-3.93	22.27	2.46	27.17
-4500.	-8.85	21.52	3.98	30.69	-7.62	21.26	3.30	29.24	-6.02	21.52	2.24	27.70
-4000.	-10.18	20.70	3.23	31.51	-9.12	20.36	2.34	29.99	-7.79	20.51	1.40	28.64
-3500.	-10.98	19.82	2.20	32.39	-10.14	19.54	1.44	32.27	-8.62	20.02	0.77	31.96
-3000.	-11.15	19.32	1.21	35.93	-10.46	19.05	0.40	35.64	-9.32	19.51	0.01	35.54
-2500.	-11.48	18.50	0.36	39.75	-10.73	18.56	-0.16	39.37	-9.84	19.17	-0.34	39.46
-2000.	-11.05	17.56	-0.63	42.59	-11.15	17.63	-0.80	42.80	-10.01	18.54	-1.43	42.81
-1500.	-10.15	16.31	-2.41	45.53	-10.21	16.62	-3.31	45.80	-9.46	17.59	-4.04	45.68
-1000.	-7.70	15.32	-5.79	49.06	-7.94	15.74	-6.57	49.07	-7.92	16.58	-7.16	48.85
-500.	-4.10	14.50	-8.60	52.15	-4.44	14.96	-9.34	52.03	-4.91	15.68	-10.29	52.04

TABLE F.5. (continued).

Elevation: 1000 ft AGL

0.	0.41	13.85	-9.76	54.06	-0.29	14.15	-11.54	54.44	-1.37	15.05	-11.30	53.09
500.	4.62	13.17	-9.67	54.49	3.60	13.60	-10.75	53.30	2.40	14.33	-11.24	52.39
1000.	8.04	12.59	-8.58	52.59	7.28	13.16	-9.62	51.43	5.20	14.12	-9.04	48.54
1500.	9.69	12.98	-6.55	48.54	9.36	14.14	-6.70	45.99	7.25	14.85	-5.75	43.21
2000.	10.52	14.35	-4.71	43.60	10.12	15.41	-4.21	41.11	7.00	16.07	-2.75	39.76
2500.	10.22	15.61	-3.34	39.83	9.05	16.67	-2.06	37.97	7.56	17.76	0.16	36.57
3000.	9.34	16.28	-2.04	36.22	8.31	17.11	-1.13	35.22	6.89	17.02	0.23	36.20
3500.	8.69	15.41	-0.79	33.32	7.77	15.77	-0.57	33.34	6.39	16.84	0.29	34.93
4000.	8.14	14.35	0.87	29.91	7.30	14.56	0.55	31.63	6.44	14.56	0.29	34.70
4500.	8.18	14.19	1.87	29.06	7.45	13.71	1.43	30.43	6.44	13.52	0.86	34.17
5000.	8.42	14.58	2.73	29.50	7.78	13.32	1.61	29.93	6.64	12.98	0.69	34.40
5500.	8.88	14.68	2.19	29.41	8.18	13.52	1.08	30.94	7.24	12.70	0.09	34.87
6000.	9.30	14.40	1.57	28.60	8.91	13.48	0.42	31.75	8.17	12.59	-0.82	36.54
6500.	9.81	13.93	1.51	30.06	9.96	13.26	-0.14	32.45	9.11	12.71	-1.28	37.41
7000.	10.03	13.56	1.86	30.68	10.39	13.51	0.16	33.11	10.20	13.37	-1.12	36.94
7500.	10.14	13.96	1.74	31.65	10.51	13.85	0.27	33.76	11.07	14.27	-0.92	36.12
8000.	10.34	14.68	1.59	33.14	10.50	14.49	0.14	34.26	11.01	15.08	-1.04	36.66
8500.	10.72	15.64	1.04	34.64	10.73	15.36	-0.13	35.29	11.13	15.44	-0.92	37.11
9000.	11.25	16.35	0.49	36.02	11.37	15.84	0.03	36.44	11.49	15.38	-0.42	37.22
9500.	12.22	16.85	0.11	37.14	12.06	16.35	0.16	37.36	12.16	15.73	-0.44	37.09
10000.	13.18	17.21	-1.03	37.96	12.88	16.88	-0.42	37.46	12.88	16.25	-0.73	38.11
10500.	14.42	17.56	-2.48	38.39	13.98	17.34	-1.59	37.86	13.62	17.34	-1.03	37.76
11000.	15.41	17.74	-2.45	39.04	14.92	17.93	-1.65	38.22	14.54	18.23	-1.45	37.72
11500.	16.09	18.00	-1.36	39.86	15.57	18.21	-1.06	38.46	15.05	18.46	-1.17	38.16
12000.	16.42	18.29	-0.86	40.35	15.78	18.34	-0.92	38.88	15.27	18.53	-0.99	38.16
12500.	16.37	18.10	-0.53	40.57	16.18	18.20	-0.90	38.91	16.01	18.23	-1.40	37.41
13000.	16.38	16.96	-0.81	40.42	16.83	17.49	-1.18	38.38	16.74	17.64	-1.62	36.99
13500.	16.39	15.49	-1.51	40.19	16.99	16.06	-1.52	38.04	17.19	16.07	-1.04	36.31
14000.	16.70	14.38	-2.37	39.90	17.16	14.65	-2.20	37.73	17.48	14.72	-1.40	35.78
14500.	17.32	13.83	-3.08	39.90	17.63	14.42	-2.89	37.32	17.93	14.67	-2.00	35.62
15000.	17.84	14.20	-3.07	39.42	18.26	14.97	-3.01	36.81	18.48	15.04	-2.14	35.11
15500.	18.11	14.20	-3.27	38.58	18.46	14.63	-2.49	36.18	18.92	15.15	-1.36	34.36
16000.	18.11	13.06	-2.43	37.53	18.33	13.77	-2.07	35.06	18.95	14.42	-0.83	33.59
16500.	18.22	12.16	-2.11	36.60	18.39	13.03	-1.87	34.04	18.87	13.48	-0.72	32.72
17000.	18.67	12.17	-1.94	36.19	18.82	12.77	-1.51	33.60	18.92	13.08	-0.55	31.93
17500.	19.38	13.03	-1.17	35.67	19.15	12.95	-0.52	33.19	19.14	13.05	0.24	31.63
18000.	20.11	13.90	0.35	34.50	19.51	13.38	0.81	32.00	19.12	12.62	0.74	30.98
18500.	20.60	13.60	1.25	32.87	19.64	12.19	1.14	30.02	18.90	11.43	0.91	29.78
19000.	20.86	11.55	1.79	30.66	19.86	10.67	1.38	29.05	18.80	10.72	-0.64	28.90
19500.	20.95	9.89	0.81	28.62	19.77	9.83	-0.85	27.32	18.83	10.10	-2.86	27.73
20000.	20.94	9.18	-0.31	26.52	19.76	9.41	-2.61	25.62	19.24	10.84	-4.13	26.55
20500.	20.84	9.85	-1.01	25.13	19.91	10.85	-3.60	25.11	15.44	12.05	-6.19	25.59
21000.	20.34	11.13	-1.80	24.07	20.16	11.50	-3.73	24.63	20.80	11.50	-4.43	25.50
21500.	20.71	11.01	-1.17	24.02	21.19	10.88	-2.75	25.11	22.02	10.82	-3.10	25.93
22000.	21.02	10.36	-0.19	24.25	22.09	9.67	-1.33	25.15	23.41	8.70	-1.63	25.57
22500.	21.66	8.67	0.92	24.09	23.15	7.75	0.34	24.93	24.54	6.80	-0.11	25.19
23000.	21.98	7.11	1.83	23.98	23.53	6.53	1.06	24.35	24.37	6.03	0.72	23.70
23500.	21.94	6.68	1.41	23.17	23.35	6.04	0.80	23.33	24.20	5.61	0.94	22.60
24000.	22.16	6.73	0.60	22.60	23.15	6.50	0.54	22.11	23.66	6.41	1.25	20.97
24500.	22.29	7.80	0.53	21.94	23.27	7.46	-0.24	21.21	23.48	7.04	1.18	19.74
25000.	22.49	8.47	1.26	21.64	23.47	7.79	0.67	20.61	23.75	7.15	1.45	19.09
25500.	22.85	8.41	2.14	21.36	23.82	7.74	1.91	20.19	23.70	7.36	1.78	-99.99
26000.	22.39	8.52	1.96	-99.99	22.83	7.75	2.43	-99.99	22.42	7.38	2.53	-99.99
26500.	21.30	8.42	0.92	-99.99	21.59	7.82	2.05	-99.99	21.27	7.93	2.15	-99.99
27000.	20.65	8.43	-0.20	-99.99	20.58	8.60	0.85	-99.99	20.26	8.84	1.12	-99.99
27500.	20.06	9.05	-0.15	-99.99	19.86	9.27	0.33	-99.99	19.94	8.95	0.49	-99.99
28000.	19.84	9.17	-0.15	-99.99	19.90	8.92	0.11	-99.99	19.98	8.63	0.19	-99.99
28500.	19.87	8.73	-0.14	-99.99	19.89	8.69	0.01	-99.99	19.73	9.07	0.06	-99.99
29000.	19.75	8.94	-0.15	-99.99	19.61	9.36	-0.11	-99.99	19.43	9.74	-0.06	-99.99
29500.	19.56	9.63	-0.28	-99.99	19.46	9.76	-0.17	-99.99	19.43	9.58	-0.04	-99.99
30000.	19.53	9.61	-0.19	-99.99	19.48	9.43	-0.03	-99.99	19.46	9.26	0.06	-99.99
30500.	19.53	9.25	0.07	-99.99	19.42	9.39	0.07	-99.99	19.27	9.67	0.02	-99.99
31000.	19.37	9.53	0.06	-99.99	19.22	9.81	0.00	-99.99	19.09	10.04	-0.05	-99.99
31500.	19.16	9.94	-0.05	-99.99	19.15	9.87	-0.08	-99.99	19.16	9.74	-0.11	-99.99
32000.	19.21	9.69	-0.11	-99.99	19.22	9.56	-0.14	-99.99	19.20	9.55	-0.19	-99.99
32500.	19.26	9.40	-0.16	-99.99	19.18	9.69	-0.20	-99.99	19.10	9.97	-0.25	-99.99
33000.	19.18	9.84	-0.24	-99.99	19.09	10.12	-0.27	-99.99	19.05	10.21	-0.23	-99.99
33500.	19.13	10.19	-0.29	-99.99	19.13	10.09	-0.15	-99.99	19.14	9.99	-0.02	-99.99
34000.	19.23	9.96	-0.07	-99.99	19.23	9.86	0.05	-99.99	19.07	10.02	0.08	-99.99
34500.	19.23	9.89	0.08	-99.99	19.00	10.17	0.05	-99.99	18.74	10.46	0.03	-99.99
35000.	18.93	10.34	0.03	-99.99	18.69	10.63	0.00	-99.99	18.66	10.57	-0.01	-99.99
35500.	18.79	10.55	-0.01	-99.99	18.80	10.43	-0.02	-99.99	18.81	10.32	-0.02	-99.99
36000.	18.92	10.30	-0.01	-99.99	18.92	10.18	-0.03	-99.99	18.72	10.46	-0.06	-99.99
36500.	18.90	10.33	-0.04	-99.99	18.70	10.58	-0.08	-99.99	18.48	10.85	-0.12	-99.99
37000.	18.70	10.72	-0.09	-99.99	18.54	10.89	-0.12	-99.99	18.55	10.78	-0.12	-99.99
37500.	18.70	10.75	-0.07	-99.99	18.73	10.63	-0.06	-99.99	18.74	10.52	-0.07	-99.99

TABLE F.5. (continued).

Elevation: 1500 ft AGL

	PLANE 1				PLANE 2				PLANE 3			
X	WX	WY	WZ	DBZ	WX	WY	WZ	DBZ	WX	WY	WZ	DBZ
-37500.	25.91	3.58	-0.31	-99.99	25.83	3.59	-0.30	-99.99	25.75	3.58	-0.29	-99.99
-37000.	25.84	3.48	-0.27	-99.99	25.76	3.48	-0.26	-99.99	25.78	3.52	-0.27	-99.99
-36500.	25.83	3.42	-0.25	-99.99	25.88	3.47	-0.27	-99.99	25.93	3.53	-0.29	-99.99
-36000.	25.97	3.42	-0.25	-99.99	26.03	3.47	-0.28	-99.99	25.96	3.49	-0.33	-99.99
-35500.	26.03	3.38	-0.26	-99.99	25.96	3.40	-0.31	-99.99	25.90	3.41	-0.37	-99.99
-35000.	25.95	3.31	-0.30	-99.99	25.91	3.33	-0.33	-99.99	25.98	3.39	-0.27	-99.99
-34500.	25.98	3.28	-0.25	-99.99	26.07	3.33	-0.17	-99.99	26.13	3.40	-0.11	-99.99
-34000.	26.14	3.28	-0.10	-99.99	26.16	3.29	-0.05	-99.99	26.06	3.21	-0.06	-99.99
-33500.	26.08	3.19	-0.02	-99.99	25.98	3.11	-0.02	-99.99	25.90	3.00	-0.03	-99.99
-33000.	25.87	3.08	0.01	-99.99	25.91	3.03	0.01	-99.99	26.05	3.02	-0.07	-99.99
-32500.	25.94	3.07	0.03	-99.99	26.10	3.06	0.00	-99.99	26.24	3.06	-0.09	-99.99
-32000.	26.14	3.07	0.09	-99.99	26.16	2.89	0.21	-99.99	26.19	2.56	0.18	-99.99
-31500.	26.00	2.82	0.64	-99.99	25.96	2.50	0.92	-99.99	26.09	2.11	0.63	-99.99
-31000.	25.79	2.62	1.25	-99.99	25.95	2.00	1.09	-99.99	26.42	1.44	0.30	-99.99
-30500.	26.06	2.24	0.78	-99.99	26.24	1.49	0.50	-99.99	26.55	0.87	0.05	38.50
-30000.	26.62	2.09	-0.19	40.73	26.64	1.60	0.15	39.65	26.87	1.21	-0.20	38.77
-29500.	27.23	2.43	-0.48	40.96	27.11	1.96	0.05	39.73	27.27	1.51	-0.41	39.32
-29000.	27.62	2.58	-0.22	41.53	27.37	1.90	-0.16	41.11	27.46	1.50	-0.66	40.80
-28500.	27.29	1.70	0.23	43.41	27.24	1.34	0.20	42.93	27.52	1.29	-1.15	43.01
-28000.	27.08	0.88	0.40	45.37	26.98	0.45	-0.09	45.67	27.44	0.58	-1.80	46.03
-27500.	27.15	0.20	-0.06	47.56	26.91	-0.36	-0.74	48.19	27.55	-0.02	-1.99	48.36
-27000.	27.45	-0.09	-0.43	49.31	27.57	-0.22	-1.49	49.69	27.91	-0.28	-2.60	50.12
-26500.	27.95	0.14	-1.13	51.03	28.08	-0.05	-2.24	51.15	28.61	0.04	-2.71	51.17
-26000.	28.38	0.26	-1.09	52.11	28.64	0.14	-1.91	51.95	29.20	0.29	-2.42	51.97
-25500.	28.66	0.24	-1.01	52.59	29.01	0.23	-1.66	52.56	29.34	0.33	-1.93	52.62
-25000.	28.98	0.38	-1.16	53.03	29.13	0.39	-1.47	52.98	29.43	0.47	-1.56	53.11
-24500.	29.24	0.57	-1.35	53.20	29.26	0.56	-1.54	53.38	29.43	0.58	-1.62	53.61
-24000.	29.44	0.83	-1.50	53.54	29.38	0.75	-1.61	53.91	29.37	0.62	-1.70	54.21
-23500.	29.70	1.19	-1.52	54.07	29.63	1.15	-1.66	54.42	29.53	0.95	-1.83	54.71
-23000.	30.00	1.55	-1.52	54.52	30.04	1.69	-1.48	54.92	29.90	1.47	-1.76	55.18
-22500.	30.22	1.93	-1.81	54.99	30.31	2.05	-1.43	55.34	30.33	2.09	-1.26	55.57
-22000.	30.36	2.17	-1.86	55.48	30.49	2.36	-1.36	55.73	30.62	2.50	-0.94	55.93
-21500.	30.53	2.37	-2.08	56.06	30.50	2.51	-1.60	56.13	30.54	2.62	-1.42	56.30
-21000.	30.56	2.37	-2.17	56.45	30.48	2.48	-1.94	56.49	30.53	2.64	-1.87	56.56
-20500.	30.66	2.42	-1.82	56.76	30.64	2.63	-1.76	56.57	30.71	2.64	-2.11	56.52
-20000.	30.76	2.51	-1.39	56.64	30.77	2.60	-1.14	56.41	30.98	2.80	-1.73	56.37
-19500.	30.83	2.73	-0.78	56.48	30.91	2.72	-0.85	56.07	31.27	3.00	-1.35	56.00
-19000.	30.70	2.85	-0.35	55.96	30.91	2.87	-0.63	55.64	31.30	3.10	-1.20	55.42
-18500.	30.49	2.93	-0.09	55.29	30.75	2.98	-0.59	54.86	31.19	3.28	-1.18	54.69
-18000.	30.27	2.86	0.13	54.38	30.52	2.91	-0.68	53.91	31.05	3.50	-0.97	53.50
-17500.	30.01	2.91	0.69	53.37	30.40	3.31	-0.27	52.80	30.89	3.80	-0.83	52.28
-17000.	29.89	3.39	0.82	52.44	30.22	3.70	0.10	51.80	30.60	4.39	-0.19	51.12
-16500.	29.73	4.25	1.31	51.53	29.88	4.49	0.76	50.86	30.26	5.17	0.69	50.17
-16000.	29.41	5.17	2.04	50.57	29.51	5.41	1.48	49.99	29.58	5.83	1.60	49.56
-15500.	28.87	5.98	2.89	49.73	28.90	6.25	2.55	49.34	28.87	6.52	2.47	49.04
-15000.	28.08	6.66	3.77	48.78	28.29	6.92	3.52	48.71	28.20	6.84	3.36	48.51
-14500.	27.07	7.03	4.94	48.23	27.44	7.22	4.94	48.37	27.52	7.17	4.65	48.16
-14000.	25.90	7.35	6.98	47.97	26.34	7.27	6.29	47.95	26.86	7.10	6.44	47.66
-13500.	24.40	6.96	7.42	47.38	25.12	6.98	7.95	47.55	25.75	6.90	8.05	47.15
-13000.	22.35	6.44	8.78	46.54	23.51	6.80	9.33	46.88	24.29	7.13	9.52	46.28
-12500.	19.76	6.14	8.60	45.50	21.12	6.56	9.50	45.72	22.44	7.17	10.38	45.41
-12000.	17.39	6.14	8.16	44.43	18.52	6.71	8.22	44.30	19.74	7.47	9.15	43.91
-11500.	15.57	6.91	6.53	42.62	16.33	7.26	6.14	42.73	17.27	8.03	7.25	42.30
-11000.	13.52	7.58	4.53	40.82	14.37	8.43	4.98	40.73	14.99	9.10	5.72	40.57
-10500.	12.43	9.32	3.43	38.90	12.76	9.89	3.74	38.66	12.76	10.56	4.86	38.69
-10000.	11.19	11.06	3.00	37.35	10.62	11.48	3.42	36.75	10.55	12.16	4.42	36.89
-9500.	8.90	12.62	2.90	36.22	8.35	13.11	3.63	35.28	7.76	13.27	4.28	35.02
-9000.	6.39	14.08	2.26	35.26	5.40	14.37	3.27	34.27	4.13	14.11	4.54	33.42
-8500.	3.90	15.44	1.56	34.25	2.77	16.05	2.72	33.13	1.73	15.02	4.85	32.12
-8000.	1.82	16.58	1.14	33.01	0.84	16.94	3.66	31.55	-0.25	15.98	5.79	30.54
-7500.	0.26	17.94	1.18	31.44	-0.65	17.70	3.62	30.14	-0.95	16.27	4.60	29.20
-7000.	-0.71	18.15	0.61	30.70	-0.93	17.37	1.29	29.42	-1.13	15.92	2.28	28.32
-6500.	-1.76	17.61	0.12	30.25	-1.06	17.59	-0.31	28.93	-0.28	17.05	0.33	28.06
-6000.	-2.60	18.04	0.75	29.82	-1.08	18.48	0.12	28.70	0.62	18.57	-0.66	27.81
-5500.	-3.65	18.76	2.07	29.33	-2.03	19.35	1.67	28.46	0.15	20.15	1.26	27.63
-5000.	-5.14	19.69	3.94	29.54	-3.78	20.18	4.29	28.51	-1.38	21.06	3.72	27.65
-4500.	-6.96	20.75	5.73	30.25	-5.25	20.71	4.73	29.04	-3.22	21.18	3.19	28.18
-4000.	-8.01	20.83	4.67	30.99	-6.48	20.66	3.34	29.77	-4.59	20.91	1.82	28.89
-3500.	-8.37	21.11	3.30	31.99	-7.25	20.65	2.03	31.78	-5.25	21.23	0.92	31.85
-3000.	-8.22	21.20	1.90	35.61	-7.21	20.84	0.43	35.03	-5.69	21.33	-0.30	35.07
-2500.	-8.34	20.67	0.83	39.54	-7.02	20.54	-0.51	38.86	-5.68	21.24	-1.08	38.81
-2000.	-7.42	19.33	-1.14	42.29	-6.86	19.37	-1.86	42.30	-5.53	20.42	-2.76	42.19
-1500.	-6.21	17.54	-4.01	45.14	-5.76	17.80	-5.50	45.36	-5.01	18.86	-6.35	45.09
-1000.	-3.57	16.17	-8.96	48.86	-3.41	16.45	-10.16	48.78	-3.62	17.21	-10.64	48.36
-500.	0.10	15.25	-12.91	52.10	-0.32	15.57	-13.62	51.75	-1.11	16.02	-14.62	51.60

TABLE F.5. (continued).

Elevation: 1500 ft AGL

0.	4.34	14.62	-14.10	53.86	3.53	14.87	-16.11	54.10	1.73	14.99	-15.71	52.51
500.	8.01	13.45	-13.60	53.80	6.28	13.20	-14.58	52.39	4.43	13.30	-15.16	51.42
1000.	10.50	11.99	-11.40	51.02	8.91	11.75	-12.47	49.69	6.13	11.78	-11.87	46.54
1500.	11.45	11.93	-8.18	45.86	9.85	11.88	-8.08	42.82	7.15	11.52	-7.19	39.83
2000.	11.75	13.30	-5.43	39.71	9.96	13.01	-4.43	37.01	7.19	12.90	-2.84	36.44
2500.	11.16	15.16	-3.52	35.91	8.87	15.09	-1.65	34.37	6.54	14.99	1.39	33.45
3000.	9.87	16.34	-1.79	33.40	7.95	16.36	-0.50	32.57	6.05	15.27	1.11	35.05
3500.	8.91	15.79	-0.37	32.15	7.30	15.53	-0.07	32.69	5.55	14.87	0.87	35.76
4000.	7.90	14.98	1.53	29.90	6.83	14.74	1.01	32.03	5.79	14.35	0.48	35.52
4500.	7.97	14.99	2.35	30.56	7.01	14.40	1.71	30.98	5.98	13.90	0.79	34.92
5000.	8.48	15.42	3.05	30.37	7.65	14.41	1.80	30.50	6.80	13.95	0.61	34.84
5500.	9.26	15.62	2.49	30.99	8.52	14.70	1.19	31.93	7.72	14.04	-0.04	35.01
6000.	9.77	15.32	1.87	31.13	9.26	14.78	0.36	33.19	8.49	14.14	-1.16	36.43
6500.	10.17	14.75	1.60	32.76	10.08	14.67	-0.53	34.30	9.27	14.27	-1.86	37.70
7000.	10.40	14.28	1.88	33.85	10.58	14.71	-0.28	35.31	10.28	14.77	-1.84	37.89
7500.	10.73	14.47	1.71	34.98	10.92	14.88	-0.17	36.32	11.19	15.49	-1.69	37.55
8000.	11.13	14.76	1.43	36.29	10.98	15.15	-0.30	37.11	11.21	15.89	-1.77	38.25
8500.	11.52	15.10	0.69	37.67	11.21	15.45	-0.68	38.20	11.30	15.92	-1.62	38.91
9000.	12.04	15.36	-0.02	38.95	11.79	15.56	-0.52	38.96	11.54	15.69	-1.05	39.01
9500.	12.75	15.52	-0.54	39.73	12.41	15.79	-0.37	39.75	12.15	15.78	-1.09	39.16
10000.	13.50	15.62	-2.01	40.43	13.11	16.05	-1.08	39.85	12.82	16.06	-1.43	39.21
10500.	14.48	15.70	-3.81	41.26	13.95	16.14	-2.56	40.35	13.40	16.50	-1.81	39.27
11000.	15.05	15.59	-3.66	42.16	14.56	16.10	-2.57	40.94	14.01	16.65	-2.33	39.55
11500.	15.42	15.72	-2.12	42.97	14.99	16.06	-1.71	41.47	14.45	16.72	-1.93	39.99
12000.	15.68	16.22	-1.42	43.00	15.13	16.55	-1.54	41.31	14.65	16.92	-1.68	39.98
12500.	15.72	16.76	-1.01	42.67	15.44	17.00	-1.45	40.81	15.13	17.17	-2.04	39.43
13000.	15.79	16.67	-1.33	42.28	15.88	17.12	-1.69	39.87	15.64	17.33	-2.19	38.67
13500.	15.90	16.37	-2.14	41.75	16.14	16.60	-2.04	39.38	16.16	16.40	-1.41	37.89
14000.	16.37	16.10	-3.16	41.11	16.53	16.02	-2.82	38.92	16.65	15.61	-1.76	37.22
14500.	17.08	16.27	-4.01	40.58	17.13	16.24	-3.63	38.01	17.33	15.98	-2.65	36.54
15000.	17.55	16.57	-3.86	39.45	17.77	16.77	-3.64	36.86	17.96	16.49	-2.72	35.54
15500.	17.66	16.48	-3.96	37.89	17.89	16.41	-3.02	35.80	18.29	16.59	-1.62	34.48
16000.	17.62	15.31	-3.08	36.35	17.67	15.48	-2.64	34.20	18.26	15.95	-1.07	33.48
16500.	17.73	14.50	-2.79	34.90	17.69	14.84	-2.59	32.89	18.20	15.23	-1.17	32.50
17000.	18.12	14.48	-2.52	33.82	18.11	14.70	-2.17	32.01	18.22	14.99	-1.05	31.50
17500.	18.60	14.96	-1.41	32.83	18.31	14.77	-0.66	31.42	18.35	15.02	0.13	31.10
18000.	18.99	15.36	0.73	31.79	18.39	14.77	1.34	30.17	18.16	14.56	1.00	30.42
18500.	19.35	15.03	1.89	30.42	18.62	13.96	1.58	29.48	17.96	13.53	1.21	29.49
19000.	19.78	13.68	2.30	28.79	19.02	12.93	1.68	28.23	18.26	12.62	-0.96	28.86
19500.	20.30	12.79	0.87	27.47	19.74	12.31	-1.04	27.14	18.93	12.04	-3.78	28.10
20000.	20.77	12.95	-0.74	26.33	20.27	12.30	-3.26	26.12	19.59	12.66	-5.26	27.04
20500.	20.78	13.43	-1.56	25.56	20.24	13.29	-4.45	25.72	19.91	13.60	-7.65	26.05
21000.	20.45	13.12	-2.27	25.20	20.26	13.30	-4.35	25.45	20.68	12.75	-5.40	25.91
21500.	20.30	12.35	-1.46	25.31	20.52	12.20	-3.00	25.74	21.18	11.68	-3.56	26.07
22000.	19.85	11.56	-0.24	25.49	20.81	10.61	-1.29	25.73	22.02	9.32	-1.58	25.62
22500.	20.48	9.53	1.30	25.23	21.47	8.43	0.78	25.46	22.65	7.09	0.36	25.26
23000.	20.89	7.78	2.57	25.24	21.73	7.01	1.81	25.11	22.38	6.05	1.53	24.31
23500.	21.13	7.37	2.12	25.16	21.89	6.42	1.57	24.80	22.23	5.45	1.87	23.79
24000.	21.54	7.57	1.13	25.27	21.93	6.70	1.13	24.43	21.79	5.93	2.01	23.17
24500.	22.00	8.49	1.05	24.85	22.31	7.36	0.01	24.11	21.95	6.32	1.74	22.43
25000.	22.60	9.23	2.21	24.52	22.86	7.45	1.37	23.16	22.65	6.05	2.14	21.36
25500.	23.15	9.08	3.70	23.57	23.45	7.31	3.33	22.15	22.92	6.12	2.81	-99.99
26000.	22.99	8.84	3.65	-99.99	22.70	7.75	4.11	-99.99	21.97	6.97	3.86	-99.99
26500.	21.86	8.61	2.26	-99.99	21.59	7.80	3.58	-99.99	20.94	7.82	3.34	-99.99
27000.	20.87	8.55	0.68	-99.99	20.42	8.61	1.72	-99.99	19.84	8.81	1.81	-99.99
27500.	19.88	9.07	0.31	-99.99	19.44	9.24	0.71	-99.99	19.49	8.91	0.82	-99.99
28000.	19.46	9.11	0.01	-99.99	19.52	8.85	0.30	-99.99	19.57	8.55	0.33	-99.99
28500.	19.53	8.65	-0.10	-99.99	19.51	8.59	0.06	-99.99	19.27	8.96	0.12	-99.99
29000.	19.33	8.83	-0.17	-99.99	19.12	9.24	-0.09	-99.99	18.85	9.61	-0.03	-99.99
29500.	19.01	9.50	-0.33	-99.99	18.88	9.62	-0.16	-99.99	18.86	9.44	-0.01	-99.99
30000.	18.96	9.47	-0.21	-99.99	18.93	9.29	0.00	-99.99	18.93	9.12	0.11	-99.99
30500.	19.00	9.10	0.13	-99.99	18.87	9.23	0.12	-99.99	18.68	9.51	0.04	-99.99
31000.	18.80	9.37	0.11	-99.99	18.62	9.66	0.02	-99.99	18.46	9.89	-0.06	-99.99
31500.	18.56	9.79	-0.05	-99.99	18.54	9.71	-0.09	-99.99	18.56	9.57	-0.15	-99.99
32000.	18.60	9.53	-0.14	-99.99	18.62	9.39	-0.19	-99.99	18.61	9.38	-0.25	-99.99
32500.	18.66	9.23	-0.21	-99.99	18.55	9.52	-0.28	-99.99	18.44	9.81	-0.33	-99.99
33000.	18.52	9.67	-0.32	-99.99	18.40	9.96	-0.37	-99.99	18.35	10.05	-0.31	-99.99
33500.	18.41	10.05	-0.39	-99.99	18.43	9.93	-0.21	-99.99	18.46	9.83	-0.02	-99.99
34000.	18.52	9.81	-0.10	-99.99	18.54	9.70	0.08	-99.99	18.39	9.86	0.13	-99.99
34500.	18.53	9.73	0.11	-99.99	18.31	10.02	0.07	-99.99	18.06	10.30	0.05	-99.99
35000.	18.24	10.18	0.02	-99.99	18.00	10.47	-0.01	-99.99	17.98	10.41	-0.02	-99.99
35500.	18.10	10.40	-0.03	-99.99	18.12	10.29	-0.03	-99.99	18.13	10.19	-0.04	-99.99
36000.	18.24	10.16	-0.03	-99.99	18.26	10.06	-0.04	-99.99	18.03	10.33	-0.10	-99.99
36500.	18.22	10.21	-0.06	-99.99	18.01	10.45	-0.13	-99.99	17.78	10.72	-0.19	-99.99
37000.	17.99	10.59	-0.14	-99.99	17.83	10.76	-0.19	-99.99	17.85	10.65	-0.18	-99.99
37500.	17.98	10.61	-0.11	-99.99	18.01	10.49	-0.08	-99.99	18.04	10.38	-0.09	-99.99

TABLE F.5. (continued).

Elevation: 2000 ft AGL

	PLANE 1				PLANE 2				PLANE 3			
X	WX	WY	WZ	DBZ	WX	WY	WZ	DBZ	WX	WY	WZ	DBZ
-37500.	25.31	3.16	-0.38	-99.99	25.21	3.16	-0.36	-99.99	25.12	3.15	-0.34	-99.99
-37000.	25.20	3.07	-0.32	-99.99	25.11	3.07	-0.30	-99.99	25.13	3.08	-0.31	-99.99
-36500.	25.17	3.02	-0.29	-99.99	25.23	3.04	-0.31	-99.99	25.29	3.07	-0.34	-99.99
-36000.	25.32	3.00	-0.29	-99.99	25.39	3.02	-0.33	-99.99	25.30	3.02	-0.38	-99.99
-35500.	25.36	2.97	-0.29	-99.99	25.27	2.96	-0.36	-99.99	25.19	2.95	-0.42	-99.99
-35000.	25.23	2.93	-0.33	-99.99	25.17	2.92	-0.37	-99.99	25.25	2.93	-0.29	-99.99
-34500.	25.25	2.91	-0.27	-99.99	25.34	2.90	-0.18	-99.99	25.41	2.91	-0.08	-99.99
-34000.	25.41	2.88	-0.09	-99.99	25.44	2.87	-0.02	-99.99	25.32	2.78	-0.01	-99.99
-33500.	25.36	2.86	0.03	-99.99	25.25	2.79	0.06	-99.99	25.15	2.66	0.06	-99.99
-33000.	25.15	2.87	0.09	-99.99	25.16	2.79	0.11	-99.99	25.27	2.70	0.04	-99.99
-32500.	25.21	2.90	0.12	-99.99	25.33	2.82	0.11	-99.99	25.44	2.74	0.02	-99.99
-32000.	25.39	2.91	0.20	-99.99	25.35	2.79	0.41	-99.99	25.30	2.55	0.46	-99.99
-31500.	25.18	2.94	0.90	-99.99	25.06	2.77	1.33	-99.99	25.11	2.45	1.08	-99.99
-31000.	24.89	3.04	1.61	-99.99	24.95	2.75	1.53	-99.99	25.29	2.34	0.64	-99.99
-30500.	25.03	3.01	0.91	-99.99	25.12	2.67	0.68	-99.99	25.31	2.31	0.27	41.12
-30000.	25.38	3.01	-0.34	43.79	25.33	2.79	0.21	43.02	25.48	2.51	-0.05	42.35
-29500.	25.72	3.14	-0.57	44.69	25.56	3.02	0.13	43.99	25.69	2.61	-0.25	43.56
-29000.	25.94	3.14	-0.13	45.69	25.70	2.83	0.07	45.37	25.72	2.47	-0.33	45.10
-28500.	25.82	2.70	0.47	47.24	25.62	2.47	0.62	46.90	25.70	2.11	-0.84	46.83
-28000.	25.90	2.28	0.63	48.78	25.60	1.81	0.16	48.68	25.78	1.39	-1.79	48.75
-27500.	26.24	1.93	0.06	50.25	25.82	1.28	-0.69	50.32	26.10	0.83	-2.21	50.20
-27000.	26.65	1.78	-0.28	51.41	26.51	1.12	-1.54	51.29	26.65	0.43	-3.02	51.22
-26500.	26.98	1.58	-1.00	52.38	26.95	0.99	-2.25	52.20	27.25	0.44	-2.97	51.98
-26000.	27.23	1.35	-0.95	52.98	27.29	0.85	-1.84	52.68	27.65	0.41	-2.48	52.54
-25500.	27.37	1.08	-0.93	53.12	27.50	0.66	-1.61	52.98	27.64	0.39	-1.82	52.98
-25000.	27.62	1.04	-1.10	53.31	27.55	0.81	-1.37	53.34	27.65	0.49	-1.36	53.35
-24500.	27.86	1.20	-1.35	53.52	27.61	0.97	-1.41	53.78	27.58	0.56	-1.40	53.98
-24000.	27.92	1.49	-1.53	53.98	27.61	1.14	-1.41	54.40	27.41	0.63	-1.31	54.72
-23500.	27.98	1.90	-1.57	54.61	27.70	1.48	-1.52	54.97	27.49	0.76	-1.65	55.23
-23000.	28.17	2.12	-1.62	54.99	27.96	1.81	-1.40	55.41	27.75	1.05	-1.74	55.65
-22500.	28.28	2.44	-1.92	55.35	28.23	1.97	-1.40	55.73	28.24	1.46	-1.28	55.96
-22000.	28.42	2.36	-1.93	55.78	28.45	2.00	-1.34	56.07	28.61	1.63	-0.94	56.26
-21500.	28.49	2.09	-2.17	56.30	28.54	1.89	-1.58	56.34	28.69	1.57	-1.49	56.38
-21000.	28.55	1.83	-2.35	56.57	28.59	1.64	-2.01	56.56	28.77	1.43	-2.01	56.46
-20500.	28.62	1.68	-2.02	56.82	28.74	1.54	-1.89	56.49	28.96	1.31	-2.36	56.25
-20000.	28.87	1.86	-1.45	56.46	28.89	1.61	-1.15	56.17	29.23	1.33	-1.97	55.91
-19500.	29.02	2.12	-0.57	56.03	29.09	1.55	-0.71	55.53	29.54	1.29	-1.47	55.30
-19000.	28.80	1.94	0.18	55.19	29.07	1.41	-0.27	54.75	29.66	1.07	-1.24	54.45
-18500.	28.56	1.59	0.53	54.39	28.99	1.09	-0.36	53.71	29.66	0.84	-1.34	53.47
-18000.	28.46	0.94	0.45	53.36	28.88	0.52	-0.77	52.47	29.70	0.78	-1.26	52.13
-17500.	28.35	0.57	0.86	52.21	29.08	0.71	-0.46	51.31	29.86	0.91	-1.26	50.63
-17000.	28.57	0.84	0.79	51.13	29.19	0.92	-0.18	50.16	29.82	1.31	-0.51	49.40
-16500.	28.68	1.40	1.29	50.16	29.02	1.48	0.70	49.20	29.65	1.88	0.65	48.43
-16000.	28.56	2.06	2.20	49.09	28.89	2.15	1.61	48.31	29.21	2.39	1.79	47.82
-15500.	28.40	2.73	3.16	48.16	28.61	2.82	2.81	47.62	28.79	2.90	2.79	47.24
-15000.	28.31	3.48	4.10	47.24	28.41	3.47	3.89	46.90	28.55	3.40	3.75	46.63
-14500.	28.12	4.11	5.47	46.60	28.27	4.06	5.55	46.41	28.40	3.96	5.23	46.12
-14000.	27.83	4.65	6.75	46.17	28.04	4.39	7.12	45.95	28.32	4.04	7.20	45.57
-13500.	27.46	4.61	8.55	45.93	27.73	4.34	9.04	45.58	28.06	4.05	8.99	45.11
-13000.	26.69	4.41	10.41	45.39	27.22	4.41	10.69	45.14	27.62	4.42	10.64	44.55
-12500.	25.46	4.36	10.32	44.60	26.20	4.45	11.00	44.37	26.96	4.71	11.74	43.98
-12000.	24.18	4.46	9.90	43.64	24.80	4.74	9.66	43.29	25.55	5.25	10.62	42.95
-11500.	23.03	5.12	7.96	42.22	23.45	5.24	7.27	41.98	24.04	5.78	8.61	41.76
-11000.	21.69	5.68	5.52	40.80	22.14	6.16	6.07	40.65	22.47	6.56	7.08	40.60
-10500.	20.87	6.97	4.49	39.50	21.02	7.28	4.78	39.26	20.76	7.74	6.45	39.31
-10000.	19.60	8.28	4.51	38.44	18.97	8.69	5.15	37.73	18.71	9.19	6.69	37.87
-9500.	17.15	9.73	4.94	37.48	16.55	10.17	6.24	36.53	15.69	10.32	7.33	36.24
-9000.	14.36	11.25	4.36	36.48	13.04	11.54	6.18	35.47	11.42	11.27	8.42	34.78
-8500.	11.30	12.85	3.68	35.23	9.82	13.36	5.76	34.10	8.51	12.18	8.55	33.32
-8000.	8.44	13.93	2.99	33.69	6.84	14.02	6.64	32.20	5.67	12.97	9.32	31.42
-7500.	5.88	14.95	2.91	31.76	4.42	14.50	6.27	30.57	4.03	12.89	7.18	30.09
-7000.	4.16	15.11	2.07	30.99	3.64	14.06	2.86	30.12	3.25	12.28	3.55	29.51
-6500.	2.73	14.95	1.26	30.60	3.04	14.30	0.73	29.84	3.96	13.27	0.92	29.58
-6000.	1.70	15.64	1.73	30.21	2.95	15.28	0.86	29.77	4.66	14.66	-0.44	29.59
-5500.	0.38	16.21	2.96	29.82	2.03	16.55	2.44	29.54	4.33	16.90	1.94	29.39
-5000.	-0.97	17.46	4.79	29.87	0.70	18.31	5.29	29.46	3.18	18.74	4.67	29.30
-4500.	-2.65	19.15	6.59	30.24	-0.44	19.69	5.48	30.00	1.81	20.34	3.64	29.95
-4000.	-3.36	20.38	5.25	31.63	-1.30	20.81	3.71	31.24	1.05	21.32	1.72	30.81
-3500.	-3.47	21.72	3.54	33.56	-1.82	21.49	2.15	33.47	0.48	21.99	0.69	33.61
-3000.	-3.27	21.74	1.86	36.72	-1.66	21.70	0.17	36.42	0.15	22.20	-0.79	36.39
-2500.	-3.36	21.14	0.73	39.96	-1.44	21.01	-1.14	39.27	0.24	21.71	-1.99	39.02
-2000.	-2.21	18.96	-2.12	41.95	-1.06	19.30	-3.08	41.64	0.27	20.39	-4.17	41.42
-1500.	-0.96	16.60	-5.89	44.39	-0.37	17.12	-7.57	44.48	0.23	18.31	-8.45	43.96
-1000.	1.14	14.74	-12.01	48.07	1.35	15.19	-13.30	47.92	0.83	16.45	-13.59	47.31
-500.	4.11	13.76	-16.69	51.10	3.32	14.60	-17.22	50.63	2.15	15.63	-18.20	50.50

TABLE F.5. (continued).

Elevation: 2000 ft AGL

0.	7.16	13.61	-17.63	52.14	5.96	14.30	-19.76	52.57	3.89	15.10	-19.21	50.98
500.	9.59	12.78	-16.39	50.97	7.42	13.05	-17.26	49.86	5.36	13.93	-17.98	49.26
1000.	10.65	11.27	-12.81	46.68	8.64	11.60	-13.89	45.97	5.95	11.90	-13.62	43.60
1500.	10.49	10.90	-8.46	40.88	8.31	10.76	-8.05	38.83	5.85	10.64	-7.59	36.32
2000.	10.02	12.26	-4.95	35.52	7.64	11.48	-3.43	33.63	5.37	11.22	-2.13	34.30
2500.	9.32	14.65	-2.57	33.13	6.77	13.84	-0.25	32.69	4.45	12.68	3.15	33.14
3000.	8.40	16.85	-0.50	32.13	6.03	15.76	1.11	31.95	4.39	13.73	2.50	35.02
3500.	7.84	17.05	0.90	32.04	5.82	15.68	1.33	32.62	4.25	14.10	2.00	35.98
4000.	6.96	16.65	2.84	31.10	5.69	15.42	2.09	32.82	4.70	14.23	1.18	35.93
4500.	7.10	16.27	3.02	31.88	6.05	15.40	2.20	32.36	5.13	14.22	0.95	35.81
5000.	7.66	15.99	3.09	31.54	6.71	15.33	1.91	32.05	6.07	14.42	0.51	35.77
5500.	8.41	15.58	2.41	32.11	7.60	14.94	1.13	33.21	6.93	14.37	-0.29	35.82
6000.	8.87	14.92	1.88	32.53	8.28	14.66	0.08	34.24	7.63	14.32	-1.62	36.58
6500.	9.20	14.27	1.40	34.12	8.90	14.36	-1.14	35.38	8.30	14.26	-2.59	37.65
7000.	9.39	13.75	1.51	35.33	9.41	14.30	-0.97	36.41	9.14	14.56	-2.76	38.09
7500.	9.81	14.00	1.28	36.50	9.84	14.44	-0.89	37.47	9.94	15.02	-2.67	38.11
8000.	10.31	14.45	0.92	37.85	10.06	14.68	-0.96	38.47	10.16	15.33	-2.66	38.87
8500.	10.80	14.73	0.13	39.30	10.40	14.95	-1.32	39.75	10.29	15.43	-2.40	39.73
9000.	11.29	14.87	-0.69	40.63	10.81	15.10	-1.18	40.43	10.39	15.35	-1.71	40.11
9500.	11.65	14.74	-1.36	41.36	11.20	15.22	-1.09	41.21	10.79	15.45	-1.80	40.16
10000.	12.09	14.55	-3.07	42.07	11.61	15.27	-1.91	41.41	11.21	15.58	-2.22	40.20
10500.	12.64	14.44	-5.06	43.06	12.10	15.13	-3.56	41.99	11.60	15.69	-2.74	40.45
11000.	12.94	14.31	-4.77	43.99	12.50	14.91	-3.52	42.57	12.01	15.56	-3.37	40.84
11500.	13.23	14.42	-2.85	44.70	12.78	14.76	-2.41	43.10	12.36	15.53	-2.83	41.11
12000.	13.39	14.85	-1.93	44.50	12.87	15.18	-2.16	42.62	12.49	15.61	-2.45	40.94
12500.	13.33	15.38	-1.38	43.91	13.04	15.65	-1.94	41.85	12.80	15.89	-2.71	40.32
13000.	13.38	15.70	-1.80	43.25	13.32	16.03	-2.14	40.62	13.15	16.26	-2.80	39.32
13500.	13.49	15.93	-2.80	42.42	13.67	16.03	-2.59	39.81	13.75	15.89	-1.94	38.26
14000.	14.09	16.03	-3.99	41.23	14.24	15.93	-3.50	38.89	14.44	15.63	-2.31	37.17
14500.	15.00	16.31	-4.99	39.99	14.97	16.24	-4.37	37.58	15.24	16.07	-3.43	36.26
15000.	15.69	16.43	-4.57	38.51	15.77	16.56	-4.19	36.10	15.97	16.43	-3.40	35.04
15500.	15.99	16.26	-4.28	36.61	16.03	16.17	-3.38	34.85	16.32	16.32	-1.99	33.90
16000.	15.94	15.33	-3.36	34.92	15.88	15.33	-2.91	33.11	16.40	15.74	-1.40	32.89
16500.	16.02	14.70	-3.03	33.35	15.86	14.75	-2.98	31.85	16.40	15.14	-1.70	32.04
17000.	16.23	14.56	-2.67	32.18	16.13	14.56	-2.57	30.96	16.31	14.92	-1.61	31.07
17500.	16.46	14.63	-1.33	31.03	16.20	14.51	-0.75	30.34	16.29	14.90	-0.18	30.62
18000.	16.59	14.59	1.03	30.05	16.07	14.21	1.57	29.12	16.06	14.52	0.93	29.93
18500.	16.82	14.21	2.15	28.99	16.36	13.77	1.47	28.72	15.91	13.82	0.95	29.15
19000.	17.35	13.45	2.20	28.06	16.85	13.18	1.25	27.98	16.45	13.23	-1.77	28.52
19500.	18.00	13.21	0.53	27.34	17.78	13.00	-1.50	27.38	17.34	13.00	-4.74	28.01
20000.	18.52	13.75	-1.31	26.84	18.41	13.30	-3.75	26.83	18.04	13.44	-5.97	27.13
20500.	18.58	14.14	-2.12	26.57	18.37	13.93	-4.88	26.54	18.30	14.11	-8.13	26.29
21000.	18.54	13.53	-2.73	26.59	18.34	13.69	-4.49	26.55	18.62	13.00	-5.52	26.21
21500.	18.46	12.55	-1.69	26.66	18.42	12.40	-2.72	26.72	18.79	11.73	-3.22	26.36
22000.	18.11	11.78	-0.15	26.72	18.62	10.79	-0.81	26.58	19.34	9.39	-0.98	26.13
22500.	18.69	9.96	1.66	26.32	19.16	8.78	1.44	26.27	19.83	7.24	1.13	25.82
23000.	19.22	8.43	3.07	26.22	19.54	7.59	2.62	25.90	19.84	6.45	2.39	25.08
23500.	19.87	8.11	2.50	26.12	20.11	7.10	2.25	25.59	20.04	6.01	2.71	24.56
24000.	20.63	8.20	1.40	26.00	20.53	7.26	1.64	25.16	20.03	6.34	2.64	23.86
24500.	21.24	8.63	1.45	25.38	21.13	7.62	0.44	24.66	20.46	6.52	2.16	22.92
25000.	21.95	8.96	3.04	24.75	21.78	7.29	2.08	23.27	21.25	5.97	2.55	21.37
25500.	22.50	8.52	5.15	23.27	22.40	6.82	4.62	21.75	21.68	5.77	3.53	-99.99
26000.	22.42	8.15	5.32	-99.99	21.88	7.32	5.63	-99.99	21.03	6.73	4.83	-99.99
26500.	21.45	8.08	3.64	-99.99	20.99	7.50	4.97	-99.99	20.20	7.65	4.28	-99.99
27000.	20.46	8.19	1.73	-99.99	19.85	8.37	2.59	-99.99	19.17	8.68	2.43	-99.99
27500.	19.36	8.81	0.87	-99.99	18.82	9.07	1.11	-99.99	18.85	8.77	1.16	-99.99
28000.	18.88	8.90	0.25	-99.99	18.93	8.67	0.53	-99.99	18.97	8.39	0.49	-99.99
28500.	18.97	8.44	-0.02	-99.99	18.92	8.41	0.14	-99.99	18.59	8.81	0.23	-99.99
29000.	18.71	8.65	-0.14	-99.99	18.41	9.09	-0.03	-99.99	18.07	9.48	0.06	-99.99
29500.	18.24	9.35	-0.32	-99.99	18.08	9.49	-0.11	-99.99	18.09	9.30	0.05	-99.99
30000.	18.17	9.30	-0.20	-99.99	18.18	9.12	0.04	-99.99	18.18	8.95	0.15	-99.99
30500.	18.25	8.91	0.19	-99.99	18.11	9.06	0.17	-99.99	17.90	9.36	0.06	-99.99
31000.	18.02	9.19	0.15	-99.99	17.82	9.50	0.04	-99.99	17.63	9.75	-0.05	-99.99
31500.	17.73	9.63	-0.04	-99.99	17.72	9.57	-0.10	-99.99	17.74	9.44	-0.17	-99.99
32000.	17.77	9.39	-0.15	-99.99	17.80	9.26	-0.21	-99.99	17.79	9.26	-0.28	-99.99
32500.	17.84	9.10	-0.24	-99.99	17.70	9.41	-0.32	-99.99	17.56	9.71	-0.39	-99.99
33000.	17.64	9.57	-0.38	-99.99	17.50	9.87	-0.45	-99.99	17.44	9.97	-0.37	-99.99
33500.	17.48	9.97	-0.48	-99.99	17.52	9.85	-0.24	-99.99	17.56	9.73	0.00	-99.99
34000.	17.60	9.73	-0.12	-99.99	17.65	9.61	0.10	-99.99	17.51	9.76	0.17	-99.99
34500.	17.63	9.65	0.13	-99.99	17.41	9.94	0.08	-99.99	17.18	10.22	0.05	-99.99
35000.	17.34	10.11	0.01	-99.99	17.11	10.40	-0.03	-99.99	17.10	10.33	-0.03	-99.99
35500.	17.21	10.33	-0.06	-99.99	17.24	10.22	-0.06	-99.99	17.26	10.10	-0.06	-99.99
36000.	17.36	10.09	-0.05	-99.99	17.39	9.99	-0.06	-99.99	17.17	10.25	-0.13	-99.99
36500.	17.34	10.13	-0.09	-99.99	17.13	10.39	-0.18	-99.99	16.90	10.66	-0.25	-99.99
37000.	17.10	10.62	-0.19	-99.99	16.94	10.70	-0.26	-99.99	16.96	10.59	-0.24	-99.99
37500.	17.09	10.56	-0.15	-99.99	17.13	10.43	-0.12	-99.99	17.15	10.32	-0.12	-99.99

TABLE F.6. JAWS Corridor Data Set #6 (along path $\overline{EF}$ in 30JN1823 measurement).

Path Shear Intensity: Class I
Plane Separated by 500 ft
X = Horizontal Distance (ft)

WX = Wind in X Direction (kts)
WY = Wind in Y Direction (kts)
WZ = Wind in Z Direction (kts)
DBZ = Radar Reflectivity (dBZ)

Elevation: 0 ft AGL

	PLANE 1				PLANE 2				PLANE 3			
X	WX	WY	WZ	DBZ	WX	WY	WZ	DBZ	WX	WY	WZ	DBZ
-37500.	17.48	8.44	0.00	-99.99	17.65	8.27	0.00	-99.99	17.80	8.12	0.00	-99.99
-37000.	17.80	8.09	0.00	-99.99	17.97	7.93	0.00	-99.99	17.94	8.00	0.00	-99.99
-36500.	18.01	7.89	0.00	-99.99	17.94	8.02	0.00	-99.99	17.86	8.15	0.00	-99.99
-36000.	17.93	8.06	0.00	-99.99	17.88	8.18	0.00	-99.99	17.96	8.14	0.00	-99.99
-35500.	17.97	8.10	0.00	-99.99	18.07	8.04	0.00	-99.99	18.17	7.99	0.00	-99.99
-35000.	18.18	7.95	0.00	-99.99	18.26	7.92	0.00	-99.99	18.21	8.05	0.00	-99.99
-34500.	18.27	7.94	0.00	-99.99	18.22	8.07	0.00	-99.99	18.17	8.21	0.00	-99.99
-34000.	18.22	8.11	0.00	-99.99	18.23	8.16	0.00	-99.99	18.34	8.11	0.00	-99.99
-33500.	18.34	8.05	0.00	-99.99	18.47	7.99	0.00	-99.99	18.59	7.93	0.00	-99.99
-33000.	18.57	7.86	0.00	-99.99	18.62	7.90	0.00	-99.99	18.57	8.03	0.00	-99.99
-32500.	18.60	7.92	0.00	-99.99	18.56	8.05	0.00	-99.99	18.51	8.17	0.00	-99.99
-32000.	18.54	8.07	0.00	-99.99	18.62	8.06	0.00	-99.99	18.75	7.99	0.00	-99.99
-31500.	18.72	7.94	0.00	-99.99	18.87	7.87	0.00	-99.99	18.96	7.83	0.00	-99.99
-31000.	18.97	7.74	0.00	-99.99	18.96	7.84	0.00	-99.99	18.93	7.96	0.00	-99.99
-30500.	18.93	7.84	0.00	-99.99	18.91	7.97	0.00	-99.99	19.00	8.02	0.00	-99.99
-30000.	18.88	7.95	0.00	-99.99	19.23	7.86	0.00	-99.99	19.57	7.77	0.00	-99.99
-29500.	19.46	7.70	0.00	-99.99	19.81	7.62	0.00	-99.99	19.97	7.62	0.00	-99.99
-29000.	19.96	7.49	0.00	-99.99	19.97	7.60	0.00	-99.99	19.99	7.70	0.00	-99.99
-28500.	19.95	7.59	0.00	-99.99	19.97	7.70	0.00	-99.99	20.34	7.66	0.00	-99.99
-28000.	20.16	7.59	0.00	-99.99	20.68	7.52	0.00	-99.99	21.20	7.44	0.00	-99.99
-27500.	21.02	7.35	0.00	-99.99	21.54	7.27	0.00	-99.99	21.65	7.35	0.00	-99.99
-27000.	21.58	7.22	0.00	-99.99	21.64	7.32	0.00	-99.99	21.70	7.43	0.00	-99.99
-26500.	21.61	7.28	0.00	-99.99	21.72	7.38	0.00	-99.99	22.41	7.27	0.00	-99.99
-26000.	22.15	7.17	0.00	-99.99	22.86	7.07	0.00	-99.99	23.54	6.97	0.00	99.99
-25500.	23.30	6.86	0.00	-99.99	23.86	6.82	0.00	-99.99	24.02	6.92	0.00	-99.99
-25000.	23.91	6.75	0.00	-99.99	24.08	6.86	0.00	-99.99	24.23	6.96	0.00	-99.99
-24500.	24.11	6.79	0.00	-99.99	24.58	6.87	0.00	-99.99	25.40	6.88	0.00	-99.99
-24000.	25.15	6.72	0.00	-99.99	25.99	6.75	0.00	-99.99	26.79	6.76	0.00	-99.99
-23500.	26.65	6.56	0.00	-99.99	27.08	6.85	0.00	-99.99	27.29	7.26	0.00	-99.99
-23000.	27.38	6.87	0.00	-99.99	27.51	7.32	0.00	-99.99	27.74	7.76	0.00	54.14
-22500.	27.95	7.37	0.00	-99.99	28.15	7.73	0.00	54.52	28.49	8.19	0.00	54.04
-22000.	28.54	7.34	0.00	55.35	28.84	7.88	0.00	54.69	29.19	8.58	0.00	54.12
-21500.	29.07	7.15	0.00	55.59	29.14	7.83	0.00	54.96	29.24	8.41	0.00	54.47
-21000.	29.35	7.31	0.00	55.96	29.34	7.92	0.00	55.36	29.30	8.40	0.00	54.80
-20500.	29.71	7.59	0.00	56.25	29.56	8.16	0.00	55.68	29.38	8.68	0.00	55.05
-20000.	30.19	8.03	0.00	56.78	29.77	8.49	0.00	56.03	29.52	8.94	0.00	55.26
-19500.	30.72	8.50	0.00	57.19	29.90	8.72	0.00	56.21	29.53	9.07	0.00	55.30
-19000.	30.88	9.14	0.00	57.43	30.09	9.20	0.00	56.41	29.28	9.11	0.00	55.32
-18500.	30.61	9.75	0.00	57.68	29.89	9.74	0.00	56.67	28.96	9.45	0.00	55.40
-18000.	29.97	10.12	0.00	57.88	29.57	10.33	0.00	57.07	28.82	9.84	0.00	55.57
-17500.	29.41	10.39	0.00	57.72	29.20	10.41	0.00	56.64	28.78	10.17	0.00	55.53
-17000.	28.81	10.38	0.00	56.99	28.83	10.56	0.00	56.01	28.78	10.56	0.00	54.88
-16500.	28.01	10.48	0.00	56.18	28.39	11.05	0.00	54.97	28.47	10.95	0.00	53.84
-16000.	27.26	10.94	0.00	55.49	27.61	11.49	0.00	54.22	27.92	11.69	0.00	53.17
-15500.	26.10	11.69	0.00	55.13	26.47	12.16	0.00	54.05	27.18	12.39	0.00	52.84
-15000.	24.67	12.90	0.00	54.74	24.72	13.17	0.00	53.86	25.00	13.55	0.00	52.49
-14500.	22.43	14.34	0.00	54.19	22.25	14.58	0.00	53.40	22.54	14.87	0.00	52.18
-14000.	19.56	15.66	0.00	53.61	19.34	15.74	0.00	52.59	19.29	16.07	0.00	51.21
-13500.	16.36	15.85	0.00	52.63	15.82	16.26	0.00	51.66	15.84	16.82	0.00	50.15
-13000.	12.64	15.78	0.00	51.75	12.04	16.26	0.00	50.88	11.65	16.72	0.00	49.32
-12500.	8.66	15.57	0.00	50.97	8.19	16.05	0.00	50.00	7.72	16.50	0.00	48.64
-12000.	4.98	15.35	0.00	50.17	4.27	15.79	0.00	49.19	3.68	16.14	0.00	47.75
-11500.	2.33	15.27	0.00	49.36	0.69	15.59	0.00	48.59	-0.09	15.56	0.00	47.22
-11000.	-0.01	15.16	0.00	48.74	-2.02	14.74	0.00	48.18	-3.62	14.34	0.00	47.35
-10500.	-2.58	13.80	0.00	48.30	-4.62	13.59	0.00	47.85	-5.96	13.20	0.00	47.10
-10000.	-4.81	12.09	0.00	47.43	-6.06	12.20	0.00	47.12	-6.83	11.91	0.00	46.22
-9500.	-6.11	10.27	0.00	46.06	-7.46	10.42	0.00	46.01	-7.12	11.08	0.00	44.91
-9000.	-6.66	9.30	0.00	44.21	-6.94	10.13	0.00	43.56	-6.85	10.82	0.00	42.73
-8500.	-5.77	10.14	0.00	42.07	-6.54	10.24	0.00	41.25	-5.85	11.47	0.00	40.84
-8000.	-5.01	11.16	0.00	40.55	-5.75	11.36	0.00	39.84	-5.02	12.45	0.00	39.33
-7500.	-4.41	12.63	0.00	39.29	-4.90	12.95	0.00	38.57	-4.71	13.66	0.00	37.93
-7000.	-3.29	15.44	0.00	37.94	-4.25	15.46	0.00	37.32	-4.09	15.73	0.00	36.67
-6500.	-2.32	18.75	0.00	36.44	-4.06	17.97	0.00	36.08	-4.30	17.60	0.00	35.66
-6000.	-2.37	20.50	0.00	35.25	-4.14	19.46	0.00	34.98	-4.97	19.08	0.00	34.62
-5500.	-2.70	21.56	0.00	34.49	-4.62	20.00	0.00	34.16	-6.03	18.75	0.00	34.01
-5000.	-2.49	22.40	0.00	34.08	-5.04	19.84	0.00	33.70	-6.52	18.51	0.00	33.53
-4500.	-2.38	23.03	0.00	33.69	-4.72	20.64	0.00	33.58	-6.41	18.62	0.00	33.51
-4000.	-2.41	23.90	0.00	34.15	-4.44	21.69	0.00	33.84	-6.18	19.38	0.00	33.62
-3500.	-2.89	24.40	0.00	35.09	-5.11	21.89	0.00	34.35	-6.86	19.11	0.00	34.21
-3000.	-3.58	23.92	0.00	35.79	-6.24	21.41	0.00	35.06	-8.11	18.73	0.00	35.09
-2500.	-3.80	23.54	0.00	36.24	-7.00	20.62	0.00	36.22	-9.83	17.69	0.00	36.66
-2000.	-4.16	22.39	0.00	37.58	-7.96	19.75	0.00	37.24	-10.67	16.92	0.00	38.08
-1500.	-4.53	21.11	0.00	38.48	-8.34	18.96	0.00	38.70	-11.06	16.50	0.00	39.62
-1000.	-3.83	19.88	0.00	39.76	-7.82	17.79	0.00	40.26	-10.51	16.13	0.00	40.68
-500.	-1.83	18.63	0.00	40.98	-4.95	17.69	0.00	41.19	-7.99	16.07	0.00	41.38

TABLE F.6. (continued).

Elevation: 0 ft AGL

0.	1.16	17.92	0.00	42.26	-1.60	17.97	0.00	42.35	-3.56	16.47	0.00	42.63
500.	4.03	16.92	0.00	43.56	2.52	17.21	0.00	43.92	1.31	16.94	0.00	44.22
1000.	7.04	15.63	0.00	44.99	6.12	16.24	0.00	45.39	5.90	16.94	0.00	45.62
1500.	9.58	14.60	0.00	45.75	9.40	15.67	0.00	46.00	9.70	16.22	0.00	46.52
2000.	12.04	14.19	0.00	46.37	11.94	14.98	0.00	46.25	11.96	15.59	0.00	45.55
2500.	13.61	14.00	0.00	46.36	13.36	14.40	0.00	45.45	13.26	14.79	0.00	44.17
3000.	14.70	13.74	0.00	46.25	13.83	14.06	0.00	44.62	12.96	14.41	0.00	42.47
3500.	15.06	13.22	0.00	45.58	12.71	13.33	0.00	43.22	11.68	13.76	0.00	40.83
4000.	16.18	12.87	0.00	45.15	13.04	13.12	0.00	42.30	10.58	13.47	0.00	39.48
4500.	15.81	12.45	0.00	44.40	13.68	13.47	0.00	41.27	10.53	13.62	0.00	38.60
5000.	15.80	12.28	0.00	43.82	14.02	13.87	0.00	41.04	11.76	14.20	0.00	39.23
5500.	15.72	12.60	0.00	44.78	13.73	13.97	0.00	41.98	11.67	14.74	0.00	40.14
6000.	15.41	13.20	0.00	45.60	13.66	14.41	0.00	44.41	11.11	15.10	0.00	43.60
6500.	15.36	13.98	0.00	47.55	13.83	15.16	0.00	46.99	11.62	15.74	0.00	46.05
7000.	16.18	15.03	0.00	48.77	14.73	15.89	0.00	47.79	13.14	16.47	0.00	46.88
7500.	17.29	15.93	0.00	48.31	15.97	16.75	0.00	47.76	14.42	16.95	0.00	46.77
8000.	18.37	16.50	0.00	46.50	17.40	17.08	0.00	45.93	15.79	17.05	0.00	44.87
8500.	19.52	16.57	0.00	43.30	18.72	17.20	0.00	43.14	17.00	17.05	0.00	41.60
9000.	20.34	16.23	0.00	39.60	19.20	16.36	0.00	38.82	18.12	16.81	0.00	37.37
9500.	19.97	15.17	0.00	35.57	19.40	15.44	0.00	35.33	17.42	15.50	0.00	36.33
10000.	19.20	14.16	0.00	33.89	18.01	14.39	0.00	35.58	16.05	14.43	0.00	36.83
10500.	18.55	13.68	0.00	35.38	17.08	13.80	0.00	36.57	15.42	14.26	0.00	37.90
11000.	18.43	13.79	0.00	37.85	17.29	14.40	0.00	38.77	15.34	14.79	0.00	39.88
11500.	18.98	14.52	0.00	40.33	18.00	15.31	0.00	40.84	16.86	15.51	0.00	41.71
12000.	19.47	14.94	0.00	42.29	18.53	15.66	0.00	42.66	17.93	16.24	0.00	43.34
12500.	19.39	15.00	0.00	43.85	18.90	15.53	0.00	44.43	18.98	16.06	0.00	45.26
13000.	19.57	14.27	0.00	45.43	19.50	14.67	0.00	46.05	19.75	15.33	0.00	47.03
13500.	19.72	13.42	0.00	47.24	20.28	13.81	0.00	47.48	20.96	14.42	0.00	48.06
14000.	20.77	12.68	0.00	48.40	21.50	13.05	0.00	48.71	22.23	13.59	0.00	48.79
14500.	21.91	11.98	0.00	48.97	22.40	12.56	0.00	48.75	22.83	13.52	0.00	48.25
15000.	22.43	11.29	0.00	47.66	23.14	12.03	0.00	47.68	23.43	13.15	0.00	47.02
15500.	22.55	10.38	0.00	46.18	22.97	11.57	0.00	45.48	23.49	12.67	0.00	44.39
16000.	21.93	10.41	0.00	44.71	22.34	11.35	0.00	43.22	22.97	12.42	0.00	41.49
16500.	21.40	10.67	0.00	43.79	21.60	11.68	0.00	40.96	22.14	12.63	0.00	38.57
17000.	21.03	11.38	0.00	42.76	21.17	12.34	0.00	39.64	21.51	13.02	0.00	36.41
17500.	20.74	11.70	0.00	41.69	21.01	12.38	0.00	38.52	21.28	13.12	0.00	34.82
18000.	20.41	11.03	0.00	40.18	20.83	12.14	0.00	37.58	21.06	12.43	0.00	33.99
18500.	19.95	9.71	0.00	38.50	20.39	10.41	0.00	35.67	20.78	11.00	0.00	32.77
19000.	19.38	7.64	0.00	36.70	19.81	8.61	0.00	33.82	20.20	9.68	0.00	31.71
19500.	19.02	6.15	0.00	35.43	19.01	7.47	0.00	32.21	19.37	8.40	0.00	30.45
20000.	18.92	5.85	0.00	34.47	18.49	6.91	0.00	30.92	18.12	8.20	0.00	29.09
20500.	19.06	6.20	0.00	32.86	18.21	7.30	0.00	29.78	16.94	8.41	0.00	27.84
21000.	19.78	6.72	0.00	30.35	18.66	7.38	0.00	27.79	17.63	7.85	0.00	25.85
21500.	20.65	6.74	0.00	28.44	19.74	6.91	0.00	26.23	18.93	7.26	0.00	24.14
22000.	21.23	6.99	0.00	26.15	20.59	7.38	0.00	24.72	19.98	7.60	0.00	23.63
22500.	22.10	8.67	0.00	25.21	21.51	8.93	0.00	23.47	20.80	8.72	0.00	22.64
23000.	23.08	10.33	0.00	22.79	22.82	10.74	0.00	22.77	22.37	10.71	0.00	22.66
23500.	24.37	11.58	0.00	22.70	24.22	12.01	0.00	22.65	24.10	12.20	0.00	22.41
24000.	25.07	12.15	0.00	22.86	25.13	12.46	0.00	22.40	25.33	12.62	0.00	21.82
24500.	24.39	10.96	0.00	22.63	25.40	12.19	0.00	21.98	25.71	12.56	0.00	21.24
25000.	23.28	9.90	0.00	22.63	24.47	11.49	0.00	21.00	25.35	12.33	0.00	19.94
25500.	21.69	10.11	0.00	21.60	22.99	11.18	0.00	19.98	24.20	12.16	0.00	17.71
26000.	20.33	11.24	0.00	19.60	21.52	10.99	0.00	17.53	22.27	12.01	0.00	15.36
26500.	19.50	11.56	0.00	16.25	20.64	11.06	0.00	14.30	21.33	11.76	0.00	13.00
27000.	18.55	11.38	0.00	13.01	19.64	11.11	0.00	11.38	20.82	11.57	0.00	10.20
27500.	18.17	9.92	0.00	8.84	18.47	10.46	0.00	8.27	20.15	10.74	0.00	8.32
28000.	18.23	8.37	0.00	4.96	17.84	9.26	0.00	6.35	19.35	9.56	0.00	6.83
28500.	18.32	7.38	0.00	2.29	18.01	7.97	0.00	-99.99	18.38	8.11	0.00	5.60
29000.	19.01	6.04	0.00	-99.99	18.38	6.16	0.00	-99.99	17.91	6.55	0.00	-99.99
29500.	19.96	4.61	0.00	-99.99	18.62	4.25	0.00	-99.99	18.23	4.51	0.00	-99.99
30000.	20.41	3.87	0.00	-99.99	18.59	3.27	0.00	-99.99	17.64	2.72	0.00	-99.99
30500.	20.71	3.50	0.00	-99.99	18.90	2.97	0.00	-99.99	17.41	1.27	0.00	-99.99
31000.	19.75	3.77	0.00	-99.99	18.60	3.76	0.00	-99.99	17.60	1.64	0.00	-99.99
31500.	18.49	4.90	0.00	-99.99	17.66	4.95	0.00	-99.99	17.04	4.44	0.00	-99.99
32000.	17.23	6.08	0.00	-99.99	16.57	6.11	0.00	-99.99	16.22	6.17	0.00	-99.99
32500.	15.79	7.17	0.00	-99.99	15.77	7.23	0.00	-99.99	15.69	7.45	0.00	-99.99
33000.	15.35	7.96	0.00	-99.99	15.31	8.12	0.00	-99.99	15.18	8.28	0.00	-99.99
33500.	14.94	8.58	0.00	-99.99	14.79	8.55	0.00	-99.99	14.62	8.51	0.00	-99.99
34000.	14.42	8.88	0.00	-99.99	14.25	8.83	0.00	-99.99	14.19	8.87	0.00	-99.99
34500.	14.03	9.19	0.00	-99.99	14.00	9.22	0.00	-99.99	14.00	9.31	0.00	-99.99
35000.	13.89	9.55	0.00	-99.99	13.85	9.59	0.00	-99.99	13.82	9.51	0.00	-99.99
35500.	13.76	9.76	0.00	-99.99	13.72	9.63	0.00	-99.99	13.67	9.52	0.00	-99.99
36000.	13.62	9.74	0.00	-99.99	13.58	9.63	0.00	-99.99	13.58	9.59	0.00	-99.99
36500.	13.52	9.77	0.00	-99.99	13.51	9.72	0.00	-99.99	13.51	9.69	0.00	-99.99
37000.	13.45	9.83	0.00	-99.99	13.43	9.79	0.00	-99.99	13.38	9.72	0.00	-99.99
37500.	13.36	9.83	0.00	-99.99	13.30	9.75	0.00	-99.99	13.24	9.70	0.00	-99.99

TABLE F.6. (continued).

Elevation: 500 ft AGL

	PLANE 1				PLANE 2				PLANE 3			
X	WX	WY	WZ	DBZ	WX	WY	WZ	DBZ	WX	WY	WZ	DBZ
-37500.	17.75	8.12	-0.09	-99.99	17.89	7.96	-0.09	-99.99	18.03	7.81	-0.09	-99.99
-37000.	18.03	7.79	-0.09	-99.99	18.17	7.64	-0.08	-99.99	18.15	7.69	-0.09	-99.99
-36500.	18.21	7.60	-0.09	-99.99	18.16	7.71	-0.10	-99.99	18.09	7.82	-0.11	-99.99
-36000.	18.15	7.73	-0.09	-99.99	18.11	7.84	-0.11	-99.99	18.18	7.81	-0.12	-99.99
-35500.	18.19	7.75	-0.10	-99.99	18.29	7.72	-0.11	-99.99	18.38	7.70	-0.12	-99.99
-35000.	18.39	7.63	-0.11	-99.99	18.47	7.62	-0.12	-99.99	18.42	7.73	-0.12	-99.99
-34500.	18.47	7.62	-0.12	-99.99	18.44	7.72	-0.12	-99.99	18.39	7.84	-0.12	-99.99
-34000.	18.43	7.74	-0.12	-99.99	18.45	7.79	-0.12	-99.99	18.55	7.76	-0.13	-99.99
-33500.	18.55	7.70	-0.12	-99.99	18.66	7.66	-0.12	-99.99	18.78	7.63	-0.13	-99.99
-33000.	18.76	7.56	-0.12	-99.99	18.80	7.60	-0.12	-99.99	18.77	7.70	-0.12	-99.99
-32500.	18.79	7.60	-0.11	-99.99	18.76	7.70	-0.11	-99.99	18.73	7.81	-0.11	-99.99
-32000.	18.75	7.70	-0.11	-99.99	18.83	7.71	-0.11	-99.99	18.94	7.66	-0.11	-99.99
-31500.	18.92	7.60	-0.10	-99.99	19.04	7.56	-0.10	-99.99	19.13	7.54	-0.11	-99.99
-31000.	19.14	7.45	-0.10	-99.99	19.14	7.54	-0.15	-99.99	19.10	7.64	-0.21	-99.99
-30500.	19.11	7.53	-0.18	-99.99	19.09	7.63	-0.24	-99.99	19.18	7.68	-0.28	-99.99
-30000.	19.08	7.60	-0.26	-99.99	19.40	7.54	-0.26	-99.99	19.70	7.48	-0.26	-99.99
-29500.	19.60	7.38	-0.26	-99.99	19.92	7.32	-0.26	-99.99	20.07	7.34	-0.29	-99.99
-29000.	20.05	7.19	-0.27	-99.99	20.07	7.29	-0.33	-99.99	20.09	7.38	-0.39	-99.99
-28500.	20.05	7.24	-0.37	-99.99	20.07	7.33	-0.43	-99.99	20.43	7.32	-0.45	-99.99
-28000.	20.25	7.22	-0.44	-99.99	20.75	7.16	-0.44	-99.99	21.25	7.10	-0.44	-99.99
-27500.	21.06	6.99	-0.43	-99.99	21.56	6.93	-0.43	-99.99	21.67	7.00	-0.47	-99.99
-27000.	21.58	6.84	-0.45	-99.99	21.65	6.94	-0.50	-99.99	21.70	7.02	-0.54	-99.99
-26500.	21.61	6.87	-0.53	-99.99	21.72	6.95	-0.57	-99.99	22.39	6.84	-0.58	-99.99
-26000.	22.13	6.73	-0.58	-99.99	22.81	6.63	-0.59	-99.99	23.48	6.52	-0.61	-99.99
-25500.	23.22	6.42	-0.61	-99.99	23.77	6.36	-0.63	-99.99	23.94	6.41	-0.67	-99.99
-25000.	23.80	6.27	-0.68	-99.99	23.97	6.34	-0.71	-99.99	24.13	6.39	-0.74	-99.99
-24500.	23.98	6.24	-0.81	-99.99	24.47	6.24	-0.81	-99.99	25.32	6.10	-0.86	-99.99
-24000.	25.05	6.09	-1.02	-99.99	25.92	5.97	-0.99	-99.99	26.74	5.79	-0.94	-99.99
-23500.	26.59	5.89	-1.33	-99.99	27.12	5.92	-1.09	-99.99	27.32	5.76	-0.73	-99.99
-23000.	27.54	6.06	-1.27	-99.99	27.89	6.32	-0.88	-99.99	28.00	6.01	-0.56	55.80
-22500.	28.35	6.38	-1.09	-99.99	28.61	6.50	-0.78	56.50	28.79	6.46	-0.59	56.04
-22000.	28.89	6.04	-0.93	57.45	29.20	6.35	-0.71	56.85	29.48	6.73	-0.53	56.26
-21500.	29.25	5.37	-0.73	57.74	29.43	5.95	-0.62	57.22	29.57	6.33	-0.40	56.59
-21000.	29.28	4.96	-0.76	58.11	29.39	5.45	-0.62	57.63	29.53	5.97	-0.39	56.94
-20500.	29.44	4.84	-0.86	58.45	29.47	5.57	-0.69	57.84	29.46	6.15	-0.52	57.12
-20000.	29.79	5.43	-0.91	58.72	29.63	6.08	-0.76	58.05	29.57	6.56	-0.54	57.17
-19500.	30.20	5.93	-0.83	58.89	29.77	6.38	-0.60	58.06	29.66	6.87	-0.38	57.08
-19000.	30.27	6.20	-0.41	58.93	29.90	6.60	-0.24	58.04	29.49	7.00	-0.14	57.04
-18500.	30.04	6.63	-0.05	59.07	29.68	7.03	0.05	58.21	29.16	7.27	0.17	57.12
-18000.	29.61	7.30	0.02	59.21	29.40	7.66	0.23	58.54	28.96	7.58	0.25	57.22
-17500.	29.29	7.93	0.01	59.08	29.18	8.04	0.18	58.17	28.87	7.94	0.26	57.15
-17000.	29.08	8.38	-0.04	58.53	29.06	8.54	0.13	57.71	28.93	8.38	0.23	56.64
-16500.	28.73	8.73	0.02	57.85	28.94	9.03	0.26	57.00	28.86	8.81	0.24	55.89
-16000.	28.34	9.15	0.25	57.19	28.54	9.40	0.48	56.31	28.63	9.40	0.46	55.26
-15500.	27.50	9.59	0.73	56.71	27.69	9.76	0.95	55.84	28.18	9.84	0.82	54.75
-15000.	26.36	10.28	1.31	56.24	26.36	10.34	1.60	55.52	26.64	10.75	1.36	54.37
-14500.	24.53	11.23	1.83	55.66	24.42	11.32	1.98	55.04	24.78	11.69	1.83	54.04
-14000.	22.08	12.02	2.62	55.00	22.06	12.15	2.41	54.28	22.33	12.72	2.21	53.33
-13500.	19.19	11.98	2.72	54.11	19.13	12.49	2.61	53.46	19.57	13.37	2.52	52.44
-13000.	15.67	11.66	3.03	53.29	15.78	12.59	2.81	52.65	15.92	13.63	2.99	51.51
-12500.	11.97	11.72	2.89	52.50	12.21	12.76	2.85	51.76	12.27	13.84	3.23	50.63
-12000.	8.60	11.75	2.25	51.70	8.26	12.87	2.89	50.82	7.89	13.94	3.55	49.42
-11500.	5.80	12.15	2.03	50.83	4.60	13.07	2.93	50.07	3.85	13.79	3.42	48.65
-11000.	3.26	12.62	1.70	50.19	1.50	13.01	2.46	49.46	-0.09	13.21	2.83	48.44
-10500.	0.72	12.62	1.50	49.59	-1.33	13.02	2.08	48.95	-2.88	13.03	2.03	48.05
-10000.	-1.32	12.37	1.21	48.73	-2.85	12.96	1.05	48.26	-3.98	13.04	0.67	47.28
-9500.	-2.70	11.77	0.50	47.60	-4.26	12.48	0.15	47.30	-4.38	12.84	-0.29	46.14
-9000.	-3.66	11.46	0.10	46.08	-4.21	12.17	-0.32	45.32	-4.20	12.58	-0.92	44.43
-8500.	-3.79	11.95	-0.20	44.09	-4.54	12.21	-0.59	43.37	-3.73	12.78	-1.15	42.59
-8000.	-3.79	12.48	-0.46	42.35	-4.32	12.58	-0.75	41.59	-3.48	13.13	-1.25	40.81
-7500.	-3.79	13.00	-0.51	40.76	-4.03	13.24	-0.84	40.00	-3.47	13.91	-1.18	39.47
-7000.	-2.96	14.78	-0.22	39.47	-3.65	14.80	-0.54	38.91	-3.07	15.21	-1.01	38.38
-6500.	-2.18	17.20	0.33	38.17	-3.62	16.61	0.00	37.83	-3.34	17.19	-0.17	37.51
-6000.	-2.15	19.07	0.92	37.09	-3.47	18.62	0.70	36.87	-3.89	18.96	0.62	36.62
-5500.	-2.21	20.50	1.36	36.21	-3.79	19.78	1.08	36.01	-5.01	19.27	1.26	35.86
-5000.	-1.79	21.64	1.18	35.52	-4.13	20.38	0.71	35.34	-5.48	19.80	1.26	35.18
-4500.	-1.38	22.49	0.97	34.84	-3.63	21.54	0.75	34.95	-5.33	20.73	1.04	35.00
-4000.	-1.23	23.39	1.28	35.07	-3.14	22.78	1.25	34.95	-4.92	22.17	1.25	34.93
-3500.	-1.70	23.81	1.15	35.90	-3.63	23.30	2.01	35.38	-5.51	22.40	2.16	35.46
-3000.	-2.58	24.03	1.55	36.89	-4.83	23.38	2.72	36.30	-6.79	22.33	2.98	36.43
-2500.	-2.99	24.54	1.84	37.72	-5.98	23.01	2.81	37.77	-8.85	21.40	3.31	38.25
-2000.	-3.66	23.91	1.94	39.31	-7.23	22.45	3.09	39.09	-10.06	20.46	3.03	39.84
-1500.	-4.25	22.90	1.67	40.46	-7.87	21.19	2.26	40.56	-10.75	19.16	2.04	41.30
-1000.	-3.87	21.32	-0.09	41.75	-7.71	19.58	0.58	42.08	-10.29	17.69	0.52	42.30
-500.	-2.10	19.51	-1.46	43.01	-5.05	18.22	-1.46	43.05	-7.87	16.18	-1.61	42.98

TABLE F.6. (continued).

Elevation: 500 ft AGL

0.	0.94	17.80	-2.41	44.48	-1.93	17.20	-3.01	44.29	-3.49	15.59	-3.36	44.46
500.	4.15	16.43	-3.13	45.99	2.55	16.00	-3.66	46.00	1.45	15.24	-4.37	46.22
1000.	7.67	14.96	-3.67	47.31	6.54	14.82	-4.19	47.43	6.21	15.07	-4.21	47.43
1500.	10.90	13.85	-3.38	47.91	10.37	14.37	-3.57	47.80	10.45	14.68	-3.72	48.05
2000.	13.94	13.47	-2.55	48.20	13.36	13.85	-2.65	47.60	12.93	14.18	-2.68	46.50
2500.	15.72	13.19	-1.49	47.54	15.00	13.40	-1.34	46.11	14.55	13.52	-1.26	44.43
3000.	16.60	12.90	-0.81	46.62	15.91	13.05	-0.41	44.58	15.22	13.29	-1.09	42.34
3500.	17.32	12.62	-1.13	45.60	15.85	12.68	-0.55	42.81	15.16	12.94	-0.96	40.26
4000.	18.66	12.50	-1.71	45.10	16.78	12.93	-1.02	41.98	15.43	13.47	-0.66	38.96
4500.	18.91	13.06	-1.52	44.94	17.98	13.97	-1.14	41.55	16.17	14.29	-0.76	38.46
5000.	19.42	13.80	-1.36	45.21	18.31	14.90	-0.52	42.20	16.53	15.06	0.26	39.97
5500.	19.19	14.43	-0.83	46.88	17.76	15.41	0.25	43.98	15.85	15.83	1.08	41.85
6000.	18.81	14.99	-0.66	48.03	16.93	15.70	0.01	46.62	14.15	16.02	0.52	45.44
6500.	17.96	15.07	-1.13	49.59	16.13	15.94	-0.53	49.16	13.61	16.11	-0.21	47.96
7000.	18.15	15.40	-1.49	50.65	16.40	16.06	-1.04	49.97	14.34	16.23	-0.90	49.11
7500.	18.85	16.09	-1.63	50.48	17.20	16.55	-1.35	50.13	15.32	16.44	-1.17	49.05
8000.	19.45	16.77	-1.40	49.01	18.45	17.02	-1.17	48.27	16.63	16.79	-1.10	46.97
8500.	20.24	17.14	-0.74	45.56	19.43	17.39	-0.66	45.41	17.68	17.07	-0.69	43.70
9000.	20.75	17.22	0.10	41.47	19.53	16.94	0.15	40.62	18.29	16.82	0.14	39.15
9500.	20.20	16.41	0.73	37.18	19.49	16.26	0.96	36.65	17.70	15.99	0.70	38.22
10000.	19.63	15.27	0.78	35.77	18.44	15.02	0.82	37.62	16.68	14.84	0.81	39.29
10500.	19.15	14.10	0.23	37.51	17.75	14.00	0.26	39.05	16.26	14.31	0.00	40.63
11000.	19.09	13.75	-0.37	40.15	18.04	14.09	-0.67	41.15	16.33	14.29	-1.08	42.45
11500.	19.51	13.77	-0.89	42.86	18.68	14.33	-1.15	43.26	17.49	14.55	-1.26	44.32
12000.	19.80	13.82	-0.80	44.99	18.98	14.46	-0.87	45.36	18.32	14.91	-1.07	46.13
12500.	19.58	13.88	-0.49	46.62	19.23	14.43	-0.74	47.12	19.10	14.95	-1.12	47.74
13000.	19.54	13.54	-0.70	48.07	19.59	14.12	-1.02	48.59	19.62	14.68	-1.35	49.25
13500.	19.47	13.03	-0.88	49.54	20.09	13.57	-1.22	49.64	20.64	14.13	-1.52	49.83
14000.	20.19	12.30	-1.07	50.19	20.94	12.84	-1.36	50.29	21.67	13.50	-1.58	50.13
14500.	21.01	11.56	-1.26	50.49	21.47	12.26	-1.33	49.93	21.90	13.14	-1.40	49.10
15000.	21.29	11.03	-0.93	49.18	21.87	11.76	-1.10	48.76	22.18	12.67	-1.13	47.66
15500.	21.31	10.47	-0.49	47.79	21.67	11.43	-0.62	46.69	22.17	12.21	-0.57	45.07
16000.	20.74	10.53	-0.30	46.49	21.08	11.35	-0.25	44.76	21.71	12.05	-0.22	42.51
16500.	20.24	10.74	-0.34	45.65	20.51	11.59	-0.24	42.96	21.06	12.22	-0.23	40.18
17000.	20.04	11.16	-0.55	44.94	20.25	11.95	-0.41	41.90	20.62	12.51	-0.33	38.52
17500.	19.89	11.41	-0.60	44.00	20.27	11.98	-0.53	40.77	20.54	12.61	-0.48	37.16
18000.	19.74	11.02	-0.52	42.38	20.35	11.85	-0.50	39.57	20.57	12.21	-0.47	35.94
18500.	19.50	10.10	-0.56	40.64	20.13	10.74	-0.44	37.48	20.58	11.41	-0.34	34.28
19000.	19.24	8.52	-0.70	38.69	19.80	9.41	-0.48	35.47	20.20	10.38	-0.18	32.98
19500.	19.00	7.30	-0.89	37.63	19.10	8.42	-0.35	34.15	19.49	9.28	-0.09	31.82
20000.	18.94	6.93	-1.14	36.65	18.63	7.94	-0.51	33.13	18.33	9.22	-0.38	30.88
20500.	19.14	7.20	-1.67	35.03	18.39	8.36	-1.23	32.01	17.21	9.52	-0.88	29.97
21000.	19.88	7.64	-1.72	32.50	18.89	8.54	-1.70	30.00	18.12	9.19	-1.60	27.99
21500.	20.66	7.73	-1.32	30.12	19.87	8.29	-1.39	27.92	19.18	8.84	-1.67	25.93
22000.	21.09	8.12	-0.96	27.53	20.59	8.65	-1.09	26.34	20.11	8.89	-1.13	25.62
22500.	21.88	9.40	-1.17	26.97	21.39	9.77	-1.23	25.56	20.89	9.60	-1.00	25.01
23000.	22.78	10.67	-1.68	25.19	22.57	11.06	-1.48	25.01	22.29	10.90	-1.36	24.91
23500.	24.01	11.33	-1.68	24.78	23.90	11.75	-1.51	24.68	23.77	11.87	-1.43	24.55
24000.	24.74	11.44	-1.29	24.43	24.84	11.84	-1.22	24.12	25.03	11.92	-1.12	23.74
24500.	24.41	10.53	-0.41	23.99	25.30	11.65	-0.61	23.46	25.54	11.79	-0.52	22.91
25000.	23.70	9.98	0.25	23.73	24.64	11.31	0.20	22.34	25.34	11.91	0.36	21.45
25500.	22.38	10.58	0.68	22.53	23.46	11.54	0.80	21.15	24.44	12.34	0.84	19.40
26000.	21.19	11.38	0.71	20.39	22.29	11.61	0.47	18.85	22.86	12.58	0.56	17.33
26500.	20.43	11.24	0.66	17.07	21.56	11.45	0.05	15.72	21.99	12.47	-0.01	14.97
27000.	19.48	10.88	0.75	13.67	20.43	11.41	0.11	12.63	21.37	12.32	-0.22	12.08
27500.	18.86	10.12	-0.01	9.84	19.19	10.98	-0.10	9.28	20.61	11.56	0.05	9.84
28000.	18.70	9.03	-0.61	6.31	18.19	10.16	-0.09	7.25	19.55	10.66	0.26	8.04
28500.	19.33	8.26	-1.61	2.53	18.55	9.14	-0.65	-99.99	18.70	9.16	0.31	6.78
29000.	20.24	7.48	-1.32	-99.99	19.52	7.72	-0.43	-99.99	18.80	7.51	0.30	-99.99
29500.	20.85	6.69	-0.29	-99.99	20.04	6.63	0.29	-99.99	19.27	6.02	0.61	-99.99
30000.	20.60	5.85	0.32	-99.99	19.37	5.35	0.96	-99.99	18.68	4.56	1.36	-99.99
30500.	20.06	5.24	0.73	-99.99	18.80	4.91	1.29	-99.99	17.87	3.98	1.44	-99.99
31000.	18.72	5.52	1.08	-99.99	17.75	5.56	1.65	-99.99	17.20	4.37	1.48	-99.99
31500.	17.12	6.40	1.26	-99.99	16.69	6.34	1.50	-99.99	16.52	5.93	1.03	-99.99
32000.	16.25	7.09	0.89	-99.99	15.97	6.99	0.85	-99.99	15.78	6.97	0.61	-99.99
32500.	15.37	7.70	0.67	-99.99	15.28	7.81	0.58	-99.99	15.14	8.03	0.44	-99.99
33000.	14.83	8.43	0.49	-99.99	14.71	8.62	0.40	-99.99	14.59	8.73	0.32	-99.99
33500.	14.36	9.02	0.36	-99.99	14.29	8.95	0.33	-99.99	14.20	8.89	0.31	-99.99
34000.	14.02	9.20	0.30	-99.99	13.93	9.12	0.28	-99.99	13.90	9.14	0.25	-99.99
34500.	13.76	9.40	0.23	-99.99	13.75	9.42	0.20	-99.99	13.74	9.48	0.17	-99.99
35000.	13.66	9.69	0.18	-99.99	13.63	9.72	0.14	-99.99	13.60	9.65	0.13	-99.99
35500.	13.55	9.86	0.15	-99.99	13.50	9.75	0.15	-99.99	13.46	9.65	0.15	-99.99
36000.	13.42	9.85	0.16	-99.99	13.37	9.74	0.16	-99.99	13.36	9.70	0.15	-99.99
36500.	13.34	9.87	0.16	-99.99	13.32	9.81	0.15	-99.99	13.31	9.78	0.13	-99.99
37000.	13.28	9.91	0.16	-99.99	13.26	9.86	0.14	-99.99	13.21	9.80	0.14	-99.99
37500.	13.18	9.91	0.16	-99.99	13.14	9.83	0.16	-99.99	13.08	9.78	0.15	-99.99

TABLE F.6. (continued).

Elevation: 1000 ft AGL

	PLANE 1				PLANE 2				PLANE 3			
X	WX	WY	WZ	DBZ	WX	WY	WZ	DBZ	WX	WY	WZ	DBZ
-37500.	18.00	7.81	-0.18	-99.99	18.10	7.65	-0.17	-99.99	18.20	7.51	-0.17	-99.99
-37000.	18.22	7.50	-0.16	-99.99	18.33	7.36	-0.16	-99.99	18.31	7.39	-0.18	-99.99
-36500.	18.37	7.31	-0.16	-99.99	18.33	7.40	-0.18	-99.99	18.27	7.50	-0.22	-99.99
-36000.	18.33	7.41	-0.19	-99.99	18.29	7.51	-0.21	-99.99	18.36	7.49	-0.23	-99.99
-35500.	18.37	7.43	-0.21	-99.99	18.46	7.41	-0.22	-99.99	18.54	7.40	-0.24	-99.99
-35000.	18.56	7.32	-0.23	-99.99	18.63	7.32	-0.24	-99.99	18.59	7.42	-0.24	-99.99
-34500.	18.63	7.30	-0.24	-99.99	18.61	7.40	-0.24	-99.99	18.57	7.49	-0.25	-99.99
-34000.	18.61	7.40	-0.24	-99.99	18.62	7.45	-0.24	-99.99	18.71	7.43	-0.25	-99.99
-33500.	18.71	7.37	-0.23	-99.99	18.81	7.35	-0.24	-99.99	18.90	7.32	-0.25	-99.99
-33000.	18.89	7.26	-0.23	-99.99	18.93	7.30	-0.23	-99.99	18.91	7.39	-0.24	-99.99
-32500.	18.93	7.29	-0.23	-99.99	18.91	7.38	-0.22	-99.99	18.89	7.47	-0.22	-99.99
-32000.	18.91	7.37	-0.22	-99.99	18.98	7.37	-0.21	-99.99	19.07	7.36	-0.22	-99.99
-31500.	19.06	7.28	-0.20	-99.99	19.16	7.26	-0.20	-99.99	19.24	7.24	-0.22	-99.99
-31000.	19.25	7.16	-0.19	-99.99	19.25	7.24	-0.28	-99.99	19.23	7.32	-0.41	-99.99
-30500.	19.24	7.22	-0.36	-99.99	19.23	7.31	-0.47	-99.99	19.30	7.35	-0.55	-99.99
-30000.	19.23	7.27	-0.51	-99.99	19.50	7.22	-0.52	-99.99	19.76	7.18	-0.51	-99.99
-29500.	19.67	7.07	-0.51	-99.99	19.95	7.02	-0.51	-99.99	20.08	7.05	-0.56	-99.99
-29000.	20.06	6.90	-0.53	-99.99	20.09	6.98	-0.65	-99.99	20.11	7.05	-0.77	-99.99
-28500.	20.08	6.92	-0.73	-99.99	20.11	6.99	-0.86	-99.99	20.44	6.98	-0.88	-99.99
-28000.	20.27	6.87	-0.87	-99.99	20.74	6.81	-0.86	-99.99	21.20	6.75	-0.86	-99.99
-27500.	21.01	6.64	-0.84	-99.99	21.48	6.58	-0.83	-99.99	21.59	6.64	-0.91	-99.99
-27000.	21.50	6.49	-0.88	-99.99	21.56	6.56	-0.97	-99.99	21.63	6.63	-1.06	-99.99
-26500.	21.53	6.48	-1.04	-99.99	21.64	6.55	-1.13	-99.99	22.28	6.43	-1.15	-99.99
-26000.	22.02	6.34	-1.15	-99.99	22.68	6.23	-1.17	-99.99	23.33	6.11	-1.19	-99.99
-25500.	23.06	6.05	-1.19	-99.99	23.59	5.96	-1.22	-99.99	23.75	5.97	-1.30	-99.99
-25000.	23.60	5.87	-1.34	-99.99	23.77	5.89	-1.40	-99.99	23.93	5.90	-1.45	-99.99
-24500.	23.77	5.79	-1.60	-99.99	24.26	5.73	-1.60	-99.99	25.13	5.46	-1.66	-99.99
-24000.	24.85	5.57	-2.02	-99.99	25.74	5.35	-1.94	-99.99	26.58	5.01	-1.82	-99.99
-23500.	26.40	5.32	-2.64	-99.99	27.02	5.15	-2.11	-99.99	27.29	4.58	-1.34	-99.99
-23000.	27.47	5.32	-2.45	-99.99	28.01	5.37	-1.64	-99.99	28.15	4.58	-0.92	57.39
-22500.	28.41	5.40	-2.04	-99.99	28.74	5.34	-1.40	58.27	28.83	4.99	-1.00	57.87
-22000.	28.87	4.90	-1.75	59.25	29.21	5.02	-1.28	58.74	29.43	5.17	-0.90	58.19
-21500.	29.15	4.00	-1.39	59.59	29.40	4.42	-1.13	59.15	29.56	4.64	-0.72	58.46
-21000.	29.12	3.30	-1.46	59.95	29.30	3.62	-1.13	59.53	29.50	4.06	-0.70	58.78
-20500.	29.24	2.96	-1.64	60.34	29.31	3.61	-1.24	59.69	29.32	4.04	-0.87	58.91
-20000.	29.42	3.47	-1.67	60.41	29.40	4.10	-1.31	59.82	29.37	4.38	-0.90	58.87
-19500.	29.66	3.81	-1.46	60.38	29.44	4.22	-1.03	59.70	29.41	4.59	-0.67	58.69
-19000.	29.56	3.61	-0.67	60.27	29.40	4.04	-0.40	59.51	29.24	4.60	-0.26	58.62
-18500.	29.33	3.73	-0.04	60.27	29.14	4.24	0.11	59.59	28.92	4.70	0.27	58.66
-18000.	29.05	4.41	0.02	60.31	28.85	4.69	0.39	59.82	28.69	4.88	0.42	58.66
-17500.	28.92	5.16	-0.04	60.14	28.81	5.24	0.29	59.42	28.58	5.20	0.46	58.53
-17000.	28.99	5.85	-0.14	59.67	28.88	5.92	0.20	59.02	28.70	5.65	0.39	58.09
-16500.	28.99	6.37	-0.01	59.05	29.03	6.43	0.44	58.49	28.86	6.13	0.41	57.58
-16000.	28.94	6.78	0.45	58.40	28.97	6.79	0.86	57.83	28.92	6.64	0.76	56.88
-15500.	28.49	7.06	1.34	57.83	28.53	6.99	1.69	57.16	28.78	6.92	1.37	56.22
-15000.	27.80	7.43	2.38	57.30	27.75	7.33	2.87	56.72	27.99	7.68	2.31	55.81
-14500.	26.59	8.07	3.34	56.71	26.54	8.03	3.55	56.22	26.90	8.37	3.15	55.44
-14000.	24.86	8.54	4.84	56.01	24.93	8.68	4.32	55.51	25.34	9.33	3.82	54.90
-13500.	22.61	8.48	4.98	55.18	22.81	9.01	4.67	54.76	23.43	9.99	4.39	54.14
-13000.	19.80	8.21	5.51	54.39	20.25	9.34	5.05	53.94	20.69	10.65	5.38	53.16
-12500.	16.76	8.56	5.28	53.61	17.38	9.88	5.18	53.07	17.76	11.30	5.92	52.18
-12000.	14.00	8.79	4.11	52.88	13.84	10.28	5.32	52.07	13.69	11.78	6.68	50.81
-11500.	11.35	9.40	3.77	52.02	10.44	10.73	5.43	51.21	9.85	11.95	6.52	49.84
-11000.	8.75	10.10	3.19	51.39	7.30	11.13	4.70	50.46	5.89	11.84	5.54	49.28
-10500.	6.29	11.00	2.93	50.69	4.41	11.86	4.13	49.82	2.75	12.27	4.20	48.73
-10000.	4.28	11.81	2.46	49.85	2.44	12.67	2.25	49.15	0.99	13.07	1.71	48.02
-9500.	2.56	12.21	1.19	48.88	0.67	13.18	0.62	48.28	0.04	13.37	-0.13	47.00
-9000.	1.08	12.46	0.53	47.61	0.12	13.02	-0.20	46.66	-0.21	13.27	-1.34	45.62
-8500.	-0.09	12.67	0.03	45.74	-0.94	13.09	-0.60	45.03	-0.35	13.19	-1.73	43.88
-8000.	-0.97	12.82	-0.50	43.88	-1.44	12.91	-0.96	43.04	-0.74	13.06	-1.95	42.00
-7500.	-1.64	12.71	-0.69	42.10	-1.82	12.90	-1.28	41.27	-1.15	13.51	-2.08	40.76
-7000.	-1.27	13.60	-0.27	40.87	-1.77	13.64	-1.01	40.36	-1.07	14.15	-2.13	39.87
-6500.	-0.91	15.12	0.66	39.78	-1.96	14.79	-0.17	39.47	-1.42	16.17	-0.65	39.18
-6000.	-0.94	16.89	1.62	38.84	-1.74	17.03	0.97	38.67	-1.83	18.06	0.69	38.50
-5500.	-0.81	18.51	2.15	37.97	-1.96	18.61	1.54	37.85	-2.97	18.96	1.90	37.67
-5000.	-0.16	20.01	1.62	37.12	-2.11	19.90	0.75	37.09	-3.39	20.22	1.87	36.90
-4500.	0.60	21.18	1.00	36.29	-1.51	21.52	0.71	36.51	-3.36	21.92	1.42	36.61
-4000.	0.83	22.25	1.58	36.29	-0.99	23.08	1.63	36.28	-2.99	24.00	1.79	36.39
-3500.	0.32	22.65	1.45	36.91	-1.48	24.00	3.17	36.59	-3.69	24.74	3.73	36.83
-3000.	-1.00	23.42	2.42	38.00	-2.93	24.57	4.72	37.56	-5.12	24.99	5.47	37.77
-2500.	-1.85	24.58	3.13	39.02	-4.58	24.45	5.11	39.13	-7.45	24.18	6.29	39.63
-2000.	-2.88	24.29	3.46	40.73	-6.20	24.05	5.79	40.61	-9.05	22.96	5.83	41.25
-1500.	-3.69	23.44	2.98	42.03	-7.03	22.22	4.13	42.03	-9.95	20.69	3.85	42.60
-1000.	-3.40	21.45	-0.39	43.35	-7.03	20.10	0.88	43.52	-9.35	18.28	0.73	43.62
-500.	-1.57	19.34	-3.07	44.70	-4.23	17.91	-3.08	44.65	-6.62	15.81	-3.51	44.47

TABLE F.6. (continued).

Elevation: 1000 ft AGL

0.	1.71	17.23	-4.92	46.36	-1.04	16.06	-6.04	46.05	-2.21	14.56	-6.81	46.14
500.	5.19	15.66	-6.24	47.99	3.65	14.68	-7.26	47.79	2.72	13.69	-8.65	47.97
1000.	9.04	14.00	-7.22	49.16	7.82	13.37	-8.21	49.10	7.27	13.25	-8.25	48.88
1500.	12.66	12.79	-6.59	49.54	11.66	12.82	-6.96	49.05	11.41	12.85	-7.24	49.12
2000.	15.91	12.11	-4.88	49.44	14.83	12.11	-5.15	48.41	13.84	12.22	-5.26	46.98
2500.	17.75	11.52	-2.81	48.26	16.51	11.48	-2.70	46.37	15.56	11.45	-2.69	44.24
3000.	18.51	11.10	-1.53	46.86	17.75	10.97	-1.02	44.47	16.95	11.15	-2.46	41.99
3500.	19.61	11.04	-2.21	45.85	18.61	10.81	-1.49	42.81	17.90	10.88	-2.42	39.94
4000.	21.29	11.21	-3.36	45.51	20.09	11.63	-2.32	42.26	19.25	12.26	-1.77	39.06
4500.	22.15	12.96	-2.87	45.82	21.78	13.57	-2.33	42.35	20.63	13.97	-1.71	38.97
5000.	23.18	14.85	-2.40	46.73	22.15	15.31	-0.85	43.60	20.38	15.39	0.70	41.01
5500.	22.72	16.03	-1.16	48.78	21.36	16.55	0.94	45.83	19.31	16.68	2.62	43.48
6000.	22.10	16.71	-0.74	50.06	19.93	16.92	0.59	48.52	16.84	16.81	1.69	47.14
6500.	20.58	16.33	-1.70	51.31	18.42	16.88	-0.50	50.90	15.54	16.66	0.19	49.60
7000.	20.11	16.14	-2.47	52.17	18.10	16.62	-1.62	51.65	15.64	16.42	-1.41	50.84
7500.	20.34	16.70	-2.84	52.14	18.43	16.89	-2.36	51.88	16.31	16.55	-2.08	50.69
8000.	20.35	17.43	-2.40	50.82	19.43	17.49	-1.97	49.89	17.46	17.15	-1.95	48.37
8500.	20.68	18.02	-0.99	47.24	20.02	18.02	-0.84	46.92	18.19	17.46	-1.05	45.06
9000.	20.77	18.27	0.66	42.97	19.62	17.56	0.68	42.00	18.27	17.09	0.57	40.54
9500.	19.95	17.38	1.72	38.60	19.26	16.83	2.18	37.79	17.69	16.22	1.55	39.75
10000.	19.48	16.06	1.72	37.53	18.47	15.40	1.79	39.35	16.96	14.95	1.62	41.27
10500.	19.15	14.57	0.66	39.64	17.96	14.10	0.66	41.27	16.70	14.17	0.08	42.88
11000.	19.10	13.84	-0.48	42.42	18.25	13.81	-1.08	43.42	16.84	13.79	-1.94	44.82
11500.	19.33	13.39	-1.47	45.22	18.75	13.63	-1.99	45.57	17.59	13.75	-2.30	46.71
12000.	19.41	13.17	-1.33	47.40	18.81	13.55	-1.50	47.74	18.17	13.80	-1.94	48.57
12500.	19.09	13.13	-0.80	49.00	18.83	13.60	-1.32	49.42	18.64	14.07	-2.05	49.82
13000.	18.86	13.09	-1.26	50.26	18.96	13.79	-1.91	50.70	18.85	14.25	-2.54	51.05
13500.	18.59	12.88	-1.72	51.43	19.20	13.59	-2.35	51.35	19.61	14.15	-2.86	51.11
14000.	19.02	12.29	-2.09	51.59	19.71	13.02	-2.61	51.42	20.34	13.84	-2.96	50.91
14500.	19.54	11.68	-2.44	51.59	19.94	12.45	-2.50	50.60	20.28	13.26	-2.53	49.30
15000.	19.57	11.35	-1.77	50.27	20.02	12.03	-1.99	49.26	20.27	12.73	-1.98	47.61
15500.	19.47	11.11	-0.93	49.04	19.74	11.82	-1.10	47.40	20.13	12.32	-0.95	45.20
16000.	18.94	11.17	-0.58	47.91	19.19	11.84	-0.42	45.84	19.74	12.21	-0.34	43.07
16500.	18.51	11.30	-0.66	47.13	18.81	11.95	-0.45	44.40	19.32	12.29	-0.43	41.28
17000.	18.46	11.47	-1.07	46.48	18.73	12.04	-0.80	43.42	19.10	12.43	-0.66	39.95
17500.	18.47	11.64	-1.15	45.46	18.92	12.03	-1.05	42.18	19.18	12.46	-0.97	38.70
18000.	18.53	11.44	-1.03	43.68	19.21	11.96	-1.04	40.65	19.39	12.29	-0.95	37.13
18500.	18.53	10.89	-1.09	41.89	19.19	11.38	-0.89	38.52	19.60	11.95	-0.69	35.21
19000.	18.58	9.86	-1.34	39.77	19.12	10.55	-0.93	36.40	19.38	11.30	-0.34	33.73
19500.	18.53	9.02	-1.68	38.80	18.52	9.80	-0.63	35.27	18.78	10.48	-0.10	32.56
20000.	18.58	8.68	-2.14	37.79	18.16	9.44	-0.93	34.45	17.82	10.41	-0.67	32.07
20500.	18.87	8.91	-3.12	36.21	18.06	9.83	-2.29	33.42	16.89	10.69	-1.65	31.51
21000.	19.53	9.30	-3.25	33.67	18.57	10.08	-3.18	31.57	17.79	10.61	-2.99	29.89
21500.	20.17	9.25	-2.60	31.09	19.40	9.94	-2.70	29.38	18.74	10.49	-3.20	27.91
22000.	20.52	9.17	-1.99	28.50	20.05	9.84	-2.24	27.84	19.64	10.13	-2.31	27.68
22500.	21.24	9.66	-2.42	28.14	20.80	10.16	-2.55	27.29	20.42	10.15	-2.13	27.25
23000.	22.09	10.17	-3.43	26.87	21.89	10.72	-3.07	26.68	21.76	10.69	-2.84	26.81
23500.	23.26	10.12	-3.53	26.06	23.16	10.74	-3.21	26.04	23.11	11.08	-3.01	26.18
24000.	23.99	9.56	-2.87	25.13	24.14	10.35	-2.70	25.12	24.31	10.77	-2.43	25.10
24500.	23.94	8.73	-1.14	24.39	24.76	9.80	-1.54	24.16	24.92	10.36	-1.29	23.98
25000.	23.58	8.52	0.18	23.74	24.35	9.83	0.09	22.83	24.90	10.52	0.42	22.37
25500.	22.58	9.41	1.02	22.30	23.49	10.44	1.28	21.40	24.27	11.21	1.40	20.38
26000.	21.64	10.01	1.10	20.09	22.61	10.69	0.59	19.17	23.07	11.70	0.80	18.41
26500.	20.87	9.44	1.15	16.94	21.99	10.35	-0.18	16.21	22.29	11.81	-0.31	16.02
27000.	19.83	8.90	1.50	13.65	20.72	10.33	0.03	13.03	21.57	11.86	-0.78	13.04
27500.	18.89	9.13	-0.03	9.86	19.36	10.22	-0.30	9.52	20.76	11.31	-0.20	10.60
28000.	18.58	8.74	-1.38	6.66	18.36	9.85	-0.43	7.56	19.69	10.76	0.17	8.69
28500.	19.72	8.06	-3.50	2.85	18.96	9.14	-1.63	4.72	19.11	9.17	0.33	7.53
29000.	20.83	7.62	-2.66	-0.45	20.24	7.94	-0.87	1.61	19.64	7.36	0.60	5.79
29500.	21.20	7.44	-0.33	-2.25	20.77	7.46	0.90	-2.13	19.94	6.38	1.40	2.33
30000.	20.38	6.78	0.95	-2.89	19.56	6.30	2.25	-2.51	19.12	5.39	3.00	-0.49
30500.	19.16	6.20	1.84	-3.26	18.33	5.95	2.87	-2.81	17.84	5.54	3.26	-1.93
31000.	17.59	6.54	2.35	-3.23	16.80	6.56	3.30	-3.14	16.59	6.01	3.18	-2.15
31500.	15.84	7.22	2.51	-3.23	15.68	7.07	2.86	-3.20	15.84	6.74	2.09	-2.63
32000.	15.26	7.58	1.75	-3.16	15.23	7.40	1.63	-3.07	15.18	7.32	1.18	-99.99
32500.	14.77	7.89	1.24	-99.99	14.67	8.03	1.09	-99.99	14.51	8.25	0.86	-99.99
33000.	14.23	8.60	0.92	-99.99	14.08	8.79	0.76	-99.99	13.98	8.88	0.63	-99.99
33500.	13.77	9.17	0.68	-99.99	13.74	9.08	0.62	-99.99	13.71	9.01	0.59	-99.99
34000.	13.56	9.28	0.56	-99.99	13.51	9.19	0.53	-99.99	13.51	9.20	0.48	-99.99
34500.	13.39	9.42	0.44	-99.99	13.39	9.42	0.39	-99.99	13.40	9.47	0.32	-99.99
35000.	13.33	9.65	0.33	-99.99	13.32	9.67	0.27	-99.99	13.28	9.60	0.26	-99.99
35500.	13.25	9.80	0.29	-99.99	13.20	9.70	0.29	-99.99	13.15	9.62	0.29	-99.99
36000.	13.14	9.80	0.31	-99.99	13.08	9.70	0.33	-99.99	13.08	9.66	0.29	-99.99
36500.	13.07	9.81	0.32	-99.99	13.05	9.75	0.29	-99.99	13.04	9.71	0.25	-99.99
37000.	13.03	9.83	0.31	-99.99	13.01	9.78	0.28	-99.99	12.96	9.73	0.27	-99.99
37500.	12.93	9.84	0.33	-99.99	12.89	9.77	0.33	-99.99	12.84	9.72	0.32	-99.99

TABLE F.6. (continued).

Elevation: 1500 ft AGL

	PLANE 1				PLANE 2				PLANE 3			
X	WX	WY	WZ	DBZ	WX	WY	WZ	DBZ	WX	WY	WZ	DBZ
-37500.	18.22	7.51	-0.26	-99.99	18.26	7.36	-0.24	-99.99	18.29	7.22	-0.23	-99.99
-37000.	18.36	7.22	-0.22	-99.99	18.40	7.07	-0.21	-99.99	18.37	7.10	-0.25	-99.99
-36500.	18.45	7.03	-0.22	-99.99	18.41	7.12	-0.26	-99.99	18.37	7.21	-0.33	-99.99
-36000.	18.43	7.13	-0.28	-99.99	18.40	7.22	-0.32	-99.99	18.45	7.20	-0.35	-99.99
-35500.	18.48	7.15	-0.33	-99.99	18.55	7.12	-0.34	-99.99	18.61	7.10	-0.35	-99.99
-35000.	18.63	7.04	-0.34	-99.99	18.69	7.03	-0.36	-99.99	18.67	7.12	-0.36	-99.99
-34500.	18.71	7.03	-0.35	-99.99	18.70	7.11	-0.36	-99.99	18.67	7.20	-0.37	-99.99
-34000.	18.72	7.11	-0.35	-99.99	18.72	7.16	-0.36	-99.99	18.70	7.13	-0.37	-99.99
-33500.	18.80	7.07	-0.35	-99.99	18.85	7.04	-0.35	-99.99	18.91	7.01	-0.37	-99.99
-33000.	18.92	6.96	-0.35	-99.99	18.95	6.99	-0.34	-99.99	18.94	7.08	-0.36	-99.99
-32500.	18.97	7.00	-0.35	-99.99	18.97	7.07	-0.34	-99.99	18.96	7.17	-0.34	-99.99
-32000.	18.99	7.07	-0.34	-99.99	19.04	7.08	-0.33	-99.99	19.11	7.05	-0.33	-99.99
-31500.	19.11	6.98	-0.30	-99.99	19.18	6.95	-0.28	-99.99	19.25	6.94	-0.33	-99.99
-31000.	19.25	6.86	-0.27	-99.99	19.25	6.94	-0.40	-99.99	19.25	7.03	-0.59	-99.99
-30500.	19.27	6.92	-0.51	-99.99	19.26	7.01	-0.68	-99.99	19.31	7.06	-0.80	-99.99
-30000.	19.28	6.98	-0.75	-99.99	19.48	6.92	-0.75	-99.99	19.68	6.86	-0.74	-99.99
-29500.	19.63	6.78	-0.72	-99.99	19.84	6.71	-0.72	-99.99	19.95	6.72	-0.80	-99.99
-29000.	19.94	6.61	-0.74	-99.99	19.97	6.67	-0.94	-99.99	20.00	6.74	-1.13	-99.99
-28500.	19.98	6.62	-1.04	-99.99	20.01	6.69	-1.24	-99.99	20.30	6.64	-1.30	-99.99
-28000.	20.17	6.58	-1.25	-99.99	20.57	6.49	-1.24	-99.99	20.98	6.40	-1.24	-99.99
-27500.	20.82	6.33	-1.20	-99.99	21.23	6.24	-1.19	-99.99	21.34	6.27	-1.32	-99.99
-27000.	21.25	6.16	-1.27	-99.99	21.33	6.21	-1.42	-99.99	21.40	6.26	-1.56	-99.99
-26500.	21.30	6.14	-1.53	-99.99	21.42	6.19	-1.66	-99.99	22.02	6.07	-1.68	-99.99
-26000.	21.78	6.02	-1.70	-99.99	22.39	5.91	-1.70	-99.99	22.99	5.77	-1.72	-99.99
-25500.	22.75	5.79	-1.73	-99.99	23.24	5.68	-1.77	-99.99	23.39	5.63	-1.87	-99.99
-25000.	23.25	5.62	-1.95	-99.99	23.41	5.60	-2.04	-99.99	23.56	5.55	-2.09	-99.99
-24500.	23.41	5.52	-2.35	-99.99	23.89	5.41	-2.35	-99.99	24.75	5.07	-2.37	-99.99
-24000.	24.46	5.25	-2.98	-99.99	25.35	4.97	-2.82	-99.99	26.20	4.57	-2.56	-99.99
-23500.	25.94	4.95	-3.90	-99.99	26.66	4.64	-3.02	-99.99	27.14	4.00	-1.70	-99.99
-23000.	26.99	4.69	-3.46	-99.99	27.71	4.50	-2.17	-99.99	28.10	3.71	-0.94	58.86
-22500.	27.86	4.45	-2.71	-99.99	28.31	4.31	-1.72	59.64	28.44	4.00	-1.10	59.39
-22000.	28.22	4.03	-2.34	60.52	28.59	4.04	-1.59	60.16	28.79	4.15	-0.99	59.75
-21500.	28.54	3.35	-1.92	60.89	28.81	3.54	-1.44	60.50	28.94	3.64	-0.90	59.88
-21000.	28.78	2.86	-2.04	61.24	28.94	2.94	-1.47	60.79	28.99	3.05	-0.86	60.08
-20500.	29.16	2.62	-2.28	61.68	28.99	2.76	-1.55	60.98	28.79	2.68	-0.93	60.19
-20000.	29.09	2.65	-2.18	61.62	28.98	2.89	-1.50	61.14	28.70	2.58	-0.94	60.20
-19500.	29.07	2.50	-1.74	61.51	28.72	2.39	-1.18	60.98	28.46	2.16	-0.78	60.03
-19000.	28.68	1.65	-0.70	61.31	28.34	1.54	-0.39	60.71	28.16	1.70	-0.36	59.93
-18500.	28.34	1.21	0.11	61.13	28.03	1.28	0.18	60.66	27.89	1.46	0.25	59.86
-18000.	28.12	1.41	0.01	61.00	27.64	1.18	0.43	60.77	27.68	1.39	0.44	59.74
-17500.	28.09	1.82	-0.18	60.69	27.80	1.67	0.29	60.18	27.62	1.56	0.53	59.47
-17000.	28.25	2.39	-0.33	60.08	27.98	2.24	0.15	59.64	27.81	1.93	0.42	58.96
-16500.	28.47	2.91	-0.13	59.39	28.28	2.80	0.48	59.01	28.14	2.47	0.43	58.31
-16000.	28.67	3.40	0.56	58.73	28.52	3.26	1.06	58.31	28.46	3.03	0.77	57.62
-15500.	28.75	3.78	1.72	58.12	28.67	3.58	2.06	57.62	28.70	3.36	1.41	56.93
-15000.	28.78	4.20	3.05	57.58	28.70	4.01	3.55	57.09	28.83	4.14	2.52	56.45
-14500.	28.59	4.81	4.31	57.02	28.57	4.69	4.36	56.57	28.80	4.84	3.53	56.00
-14000.	28.09	5.34	6.36	56.34	28.09	5.42	5.36	55.91	28.30	5.86	4.39	55.50
-13500.	27.08	5.66	6.41	55.48	27.17	6.04	5.73	55.17	27.53	6.72	5.10	54.80
-13000.	25.87	5.95	7.03	54.68	26.03	6.83	6.28	54.36	26.33	7.85	6.70	53.88
-12500.	24.17	6.62	6.79	53.98	24.58	7.74	6.58	53.60	24.94	8.98	7.66	52.95
-12000.	22.57	6.97	5.27	53.43	22.25	8.28	6.94	52.65	22.33	9.69	9.05	51.66
-11500.	20.58	7.31	4.96	52.71	19.75	8.68	7.19	51.76	19.48	9.98	9.06	50.60
-11000.	18.23	7.60	4.32	52.14	17.16	9.00	6.58	50.98	16.23	10.05	8.04	49.68
-10500.	15.90	8.57	4.21	51.44	14.51	9.65	6.13	50.30	12.94	10.45	6.63	48.91
-10000.	13.61	9.78	3.76	50.64	11.45	10.50	3.70	49.60	9.71	11.16	3.43	48.19
-9500.	11.10	10.73	2.23	49.68	8.69	11.46	1.62	48.71	7.45	11.69	0.84	47.20
-9000.	8.91	11.38	1.54	48.50	7.29	11.76	0.69	47.27	6.16	12.05	-0.86	45.90
-8500.	6.68	11.48	1.02	46.71	5.48	12.03	0.46	45.86	5.27	11.98	-1.33	44.36
-8000.	4.72	11.42	0.22	44.89	4.06	11.67	-0.21	43.96	4.12	11.67	-1.67	42.64
-7500.	3.25	11.24	-0.31	43.20	2.79	11.45	-1.02	42.26	3.10	11.95	-2.49	41.64
-7000.	2.82	11.52	0.00	42.07	2.36	11.61	-1.36	41.55	2.67	12.16	-3.44	40.96
-6500.	2.37	12.10	1.01	41.16	1.88	12.15	-0.64	40.88	2.23	14.07	-1.69	40.57
-6000.	2.01	13.38	1.91	40.45	1.89	14.11	0.48	40.31	1.97	15.77	-0.23	40.15
-5500.	2.20	14.84	1.92	39.76	1.66	15.73	0.90	39.67	0.88	17.21	1.46	39.42
-5000.	3.13	16.85	0.73	39.01	1.90	17.63	-0.38	39.02	0.57	19.08	1.32	38.74
-4500.	4.30	18.48	-0.63	38.29	2.45	19.87	-0.70	38.43	0.19	21.47	0.63	38.44
-4000.	4.48	19.97	0.16	38.04	2.64	22.00	0.47	38.01	0.16	24.13	1.04	38.15
-3500.	3.81	20.50	0.24	38.29	1.90	23.42	2.84	38.10	-1.06	25.37	4.21	38.43
-3000.	1.62	21.52	2.10	39.15	-0.20	24.37	5.44	38.84	-2.83	26.00	7.08	39.12
-2500.	-0.15	22.89	3.46	39.97	-2.55	24.21	6.49	40.18	-5.31	25.29	8.65	40.65
-2000.	-1.59	22.66	4.23	41.59	-4.67	23.65	7.79	41.55	-7.31	23.57	8.23	42.05
-1500.	-2.63	21.73	3.68	42.89	-5.53	21.08	5.33	42.84	-8.29	20.20	5.25	43.23
-1000.	-2.04	19.27	-1.07	44.29	-5.31	18.36	0.70	44.29	-7.11	17.13	0.42	44.38
-500.	0.36	17.28	-4.93	45.80	-1.77	16.12	-4.98	45.82	-3.36	14.57	-5.92	45.74

TABLE F.6. (continued).

Elevation: 1500 ft AGL

0.	4.19	15.53	-7.58	47.62	2.01	14.30	-9.11	47.81	1.21	13.27	-10.41	47.57
500.	7.86	14.04	-9.32	49.23	6.66	13.13	-10.73	49.05	6.01	12.37	-12.75	49.28
1000.	11.74	12.52	-10.55	50.20	10.64	11.84	-11.91	50.10	9.64	11.51	-11.99	49.72
1500.	15.18	11.01	-9.53	50.22	13.69	10.64	-10.03	49.45	12.71	10.50	-10.42	49.36
2000.	18.00	9.61	-6.82	49.60	16.41	9.30	-7.37	48.29	14.62	9.30	-7.67	46.62
2500.	19.63	8.33	-3.85	48.17	17.81	8.07	-4.08	45.92	16.06	7.94	-4.40	43.21
3000.	20.43	7.57	-2.11	46.88	19.17	6.99	-2.01	44.22	17.73	7.19	-4.33	41.24
3500.	21.98	7.69	-3.19	46.49	20.72	6.88	-3.12	43.55	19.31	6.61	-4.78	40.09
4000.	24.18	8.26	-4.88	46.74	22.66	8.35	-4.12	43.59	21.21	8.89	-3.68	40.29
4500.	25.65	11.64	-3.90	47.30	24.69	11.54	-3.58	44.09	22.99	11.87	-3.01	40.66
5000.	27.19	15.03	-2.86	48.47	25.20	14.59	-0.80	45.45	22.60	14.74	1.48	42.59
5500.	26.37	17.21	-0.58	50.34	24.17	17.14	2.43	47.39	21.47	17.11	4.99	44.97
6000.	25.19	18.31	0.24	51.49	22.45	18.01	2.17	49.86	18.90	17.53	4.01	48.56
6500.	23.25	17.89	-1.26	52.45	20.70	18.10	0.53	51.87	17.35	17.53	1.60	50.75
7000.	22.04	17.52	-2.55	53.04	19.87	17.85	-1.41	52.42	17.10	17.36	-1.22	51.67
7500.	21.69	18.14	-3.32	52.88	19.66	18.18	-2.78	52.52	17.46	17.79	-2.52	51.18
8000.	20.94	18.92	-2.67	51.61	20.31	18.88	-2.09	50.24	18.29	18.58	-2.34	48.55
8500.	20.64	19.48	-0.39	47.93	20.39	19.41	-0.17	47.08	18.54	18.51	-0.84	45.27
9000.	20.13	19.42	2.05	43.83	19.25	18.28	1.90	42.62	17.92	17.27	1.55	41.21
9500.	18.83	17.88	3.16	39.68	18.43	16.96	3.88	38.60	17.18	15.99	2.65	40.64
10000.	18.27	16.30	2.91	39.05	17.79	15.36	3.03	40.55	16.61	14.52	2.44	42.38
10500.	18.07	14.92	1.44	41.77	17.35	14.04	1.32	43.05	16.43	13.68	0.34	44.43
11000.	17.93	14.16	-0.13	44.66	17.46	13.72	-1.03	45.52	16.49	13.29	-2.39	46.81
11500.	17.90	13.67	-1.49	47.30	17.71	13.42	-2.27	47.68	16.77	13.22	-2.91	48.72
12000.	17.76	13.34	-1.37	49.27	17.52	13.18	-1.70	49.58	17.06	13.05	-2.45	50.37
12500.	17.38	13.03	-0.79	50.69	17.27	13.26	-1.60	51.01	17.13	13.60	-2.65	51.19
13000.	17.01	13.14	-1.58	51.68	17.08	13.86	-2.59	52.05	16.94	14.21	-3.45	52.12
13500.	16.60	13.17	-2.48	52.59	17.05	14.05	-3.29	52.25	17.28	14.73	-3.86	51.52
14000.	16.82	12.95	-3.03	52.27	17.32	13.90	-3.66	51.73	17.64	14.94	-3.98	50.69
14500.	17.07	12.76	-3.48	51.94	17.34	13.49	-3.40	50.38	17.40	14.24	-3.19	48.35
15000.	16.82	12.69	-2.42	50.59	17.15	13.25	-2.52	48.74	17.19	13.76	-2.31	46.36
15500.	16.55	12.74	-1.27	49.68	16.72	13.16	-1.33	47.24	16.84	13.44	-0.99	44.34
16000.	16.07	12.73	-0.80	48.69	16.20	13.18	-0.46	46.13	16.50	13.32	-0.29	42.80
16500.	15.75	12.74	-0.94	47.94	16.06	13.10	-0.62	44.87	16.39	13.20	-0.58	41.46
17000.	15.84	12.72	-1.53	46.88	16.12	12.99	-1.16	43.61	16.45	13.11	-0.99	40.17
17500.	16.02	12.77	-1.64	45.40	16.46	12.87	-1.57	42.07	16.73	12.99	-1.47	38.81
18000.	16.35	12.62	-1.51	43.40	16.93	12.74	-1.65	40.10	17.00	12.92	-1.45	36.98
18500.	16.63	12.39	-1.58	41.52	17.07	12.60	-1.36	38.21	17.25	12.87	-1.06	35.10
19000.	17.00	12.02	-1.86	39.24	17.23	12.30	-1.31	36.07	17.08	12.64	-0.45	33.54
19500.	17.23	11.73	-2.31	38.15	16.74	11.94	-0.80	34.93	16.59	12.25	0.02	32.19
20000.	17.54	11.63	-2.90	37.09	16.61	11.78	-1.18	34.23	16.00	12.03	-0.78	32.20
20500.	17.97	11.86	-4.20	35.63	16.81	12.01	-3.03	33.41	15.52	11.98	-2.20	31.99
21000.	18.36	12.29	-4.45	33.08	17.29	12.29	-4.26	32.01	16.33	12.19	-4.04	31.37
21500.	18.00	11.68	-3.80	30.79	17.86	12.09	-3.88	30.43	17.05	12.26	-4.50	30.19
22000.	19.17	10.06	-3.16	28.76	18.52	10.89	-3.48	29.11	18.10	11.31	-3.57	29.87
22500.	19.87	9.06	-3.82	28.27	19.38	9.73	-4.04	28.40	19.09	10.08	-3.51	29.29
23000.	20.69	8.17	-5.31	27.28	20.44	9.18	-4.87	27.35	20.41	9.78	-4.52	28.12
23500.	21.82	7.18	-5.67	25.91	21.70	8.40	-5.23	26.21	21.69	9.48	-4.83	26.89
24000.	22.47	5.58	-4.96	24.26	22.69	7.30	-4.63	24.82	22.82	8.82	-4.10	25.45
24500.	22.59	4.46	-2.42	23.07	23.44	6.09	-3.04	23.46	23.54	7.79	-2.53	23.99
25000.	22.53	4.30	-0.46	21.79	23.25	6.01	-0.59	21.83	23.69	7.41	-0.02	22.20
25500.	21.92	5.34	0.74	20.01	22.72	6.75	1.18	20.03	23.38	7.78	1.45	20.10
26000.	21.34	5.92	0.91	17.82	22.13	7.04	0.11	17.70	22.60	8.26	0.46	17.90
26500.	20.45	5.00	1.34	15.13	21.54	6.59	-0.90	15.06	21.91	8.71	-1.15	15.43
27000.	19.12	4.29	2.29	12.01	20.12	6.83	-0.37	11.90	21.15	9.27	-1.92	12.35
27500.	17.73	6.00	-0.06	8.14	18.58	7.16	-0.69	8.38	20.36	9.17	-0.95	9.99
28000.	17.40	6.75	-2.46	5.25	18.19	7.39	-1.22	6.81	19.73	9.11	-0.52	8.35
28500.	19.01	5.92	-5.88	3.33	19.15	7.05	-3.23	5.04	19.67	7.35	-0.13	7.48
29000.	20.29	5.46	-4.04	0.24	20.19	5.77	-1.30	1.93	20.38	5.25	0.91	6.08
29500.	20.55	5.84	0.06	-2.34	20.30	5.53	2.06	-2.36	19.94	4.68	2.52	2.09
30000.	19.43	5.87	2.13	-3.02	18.72	5.26	4.11	-2.66	18.50	4.42	5.15	-0.86
30500.	17.81	5.76	3.61	-3.32	17.20	5.41	4.97	-2.89	16.93	5.05	5.77	-2.03
31000.	16.28	6.23	3.98	-3.27	15.64	6.13	4.94	-3.17	15.59	5.71	5.27	-2.19
31500.	14.71	6.82	3.74	-3.25	14.62	6.65	3.99	-3.21	14.87	6.34	3.22	-2.65
32000.	14.23	7.16	2.55	-3.17	14.26	6.97	2.29	-3.07	14.27	6.90	1.70	-99.99
32500.	13.86	7.47	1.66	-99.99	13.81	7.61	1.50	-99.99	13.74	7.84	1.24	-99.99
33000.	13.48	8.20	1.23	-99.99	13.38	8.40	1.06	-99.99	13.32	8.50	0.90	-99.99
33500.	13.18	8.80	0.92	-99.99	13.13	8.73	0.86	-99.99	13.10	8.67	0.82	-99.99
34000.	12.98	8.94	0.77	-99.99	12.93	8.88	0.73	-99.99	12.95	8.87	0.65	-99.99
34500.	12.84	9.10	0.60	-99.99	12.85	9.08	0.54	-99.99	12.88	9.11	0.44	-99.99
35000.	12.83	9.30	0.47	-99.99	12.83	9.29	0.37	-99.99	12.80	9.24	0.36	-99.99
35500.	12.79	9.43	0.41	-99.99	12.75	9.36	0.42	-99.99	12.70	9.29	0.42	-99.99
36000.	12.70	9.46	0.47	-99.99	12.65	9.40	0.49	-99.99	12.65	9.33	0.42	-99.99
36500.	12.65	9.48	0.48	-99.99	12.64	9.42	0.43	-99.99	12.64	9.36	0.36	-99.99
37000.	12.62	9.50	0.46	-99.99	12.61	9.44	0.41	-99.99	12.57	9.39	0.41	-99.99
37500.	12.53	9.52	0.50	-99.99	12.49	9.46	0.53	-99.99	12.45	9.41	0.52	-99.99

TABLE F.6. (continued).

Elevation: 2000 ft AGL

	PLANE 1				PLANE 2				PLANE 3			
X	WX	WY	WZ	DBZ	WX	WY	WZ	DBZ	WX	WY	WZ	DBZ
-37500.	17.82	7.44	-0.31	-99.99	17.85	7.31	-0.29	-99.99	17.88	7.20	-0.27	-99.99
-37000.	17.94	7.17	-0.27	-99.99	17.97	7.06	-0.25	-99.99	17.95	7.08	-0.31	-99.99
-36500.	18.02	7.01	-0.26	-99.99	17.99	7.09	-0.33	-99.99	17.95	7.16	-0.43	-99.99
-36000.	18.01	7.10	-0.36	-99.99	17.99	7.17	-0.42	-99.99	18.04	7.15	-0.46	-99.99
-35500.	18.06	7.11	-0.44	-99.99	18.13	7.09	-0.45	-99.99	18.18	7.07	-0.46	-99.99
-35000.	18.20	7.02	-0.45	-99.99	18.26	7.01	-0.47	-99.99	18.24	7.09	-0.47	-99.99
-34500.	18.27	7.00	-0.46	-99.99	18.26	7.07	-0.46	-99.99	18.24	7.15	-0.47	-99.99
-34000.	18.28	7.06	-0.46	-99.99	18.29	7.10	-0.46	-99.99	18.34	7.09	-0.47	-99.99
-33500.	18.36	7.03	-0.45	-99.99	18.41	7.01	-0.45	-99.99	18.46	6.99	-0.47	-99.99
-33000.	18.48	6.94	-0.43	-99.99	18.50	6.95	-0.44	-99.99	18.49	7.03	-0.46	-99.99
-32500.	18.52	6.95	-0.44	-99.99	18.52	7.02	-0.44	-99.99	18.51	7.09	-0.45	-99.99
-32000.	18.54	7.00	-0.45	-99.99	18.58	7.01	-0.43	-99.99	18.65	6.99	-0.43	-99.99
-31500.	18.64	6.92	-0.40	-99.99	18.71	6.90	-0.38	-99.99	18.77	6.90	-0.43	-99.99
-31000.	18.77	6.82	-0.36	-99.99	18.78	6.88	-0.52	-99.99	18.77	6.95	-0.75	-99.99
-30500.	18.78	6.86	-0.65	-99.99	18.78	6.93	-0.86	-99.99	18.83	6.97	-1.00	-99.99
-30000.	18.81	6.91	-0.95	-99.99	18.98	6.86	-0.94	-99.99	19.16	6.81	-0.92	-99.99
-29500.	19.12	6.76	-0.91	-99.99	19.30	6.71	-0.89	-99.99	19.39	6.70	-1.00	-99.99
-29000.	19.38	6.63	-0.92	-99.99	19.41	6.66	-1.17	-99.99	19.43	6.70	-1.43	-99.99
-28500.	19.42	6.63	-1.31	-99.99	19.45	6.66	-1.57	-99.99	19.70	6.61	-1.65	-99.99
-28000.	19.59	6.58	-1.58	-99.99	19.94	6.49	-1.57	-99.99	20.30	6.40	-1.56	-99.99
-27500.	20.16	6.36	-1.51	-99.99	20.52	6.28	-1.49	-99.99	20.62	6.28	-1.69	-99.99
-27000.	20.55	6.21	-1.61	-99.99	20.62	6.23	-1.83	-99.99	20.68	6.25	-2.05	-99.99
-26500.	20.60	6.17	-2.01	-99.99	20.71	6.19	-2.19	-99.99	21.28	6.10	-2.19	-99.99
-26000.	21.06	6.08	-2.24	-99.99	21.64	6.00	-2.21	-99.99	22.22	5.90	-2.21	-99.99
-25500.	22.00	5.93	-2.24	-99.99	22.46	5.85	-2.27	-99.99	22.58	5.78	-2.40	-99.99
-25000.	22.47	5.80	-2.52	-99.99	22.60	5.76	-2.65	-99.99	22.72	5.68	-2.73	-99.99
-24500.	22.60	5.70	-3.08	-99.99	23.06	5.63	-3.10	-99.99	23.89	5.41	-3.11	-99.99
-24000.	23.62	5.56	-3.92	-99.99	24.49	5.41	-3.74	-99.99	25.31	5.16	-3.42	-99.99
-23500.	25.05	5.43	-5.07	-99.99	25.70	5.25	-3.95	-99.99	26.10	4.89	-2.17	-99.99
-23000.	25.92	5.28	-4.34	-99.99	26.50	5.16	-2.74	-99.99	26.85	4.74	-1.04	59.77
-22500.	26.59	5.13	-3.13	-99.99	26.98	5.10	-2.04	60.42	27.12	5.03	-1.24	60.25
-22000.	26.95	4.91	-2.77	61.21	27.25	4.98	-1.94	60.86	27.44	5.22	-1.14	60.56
-21500.	27.30	4.52	-2.38	61.49	27.49	4.57	-1.75	61.07	27.55	4.67	-0.88	60.60
-21000.	27.62	4.23	-2.41	61.77	27.72	4.18	-1.65	61.27	27.63	4.08	-0.68	60.68
-20500.	28.03	4.03	-2.65	62.13	27.76	3.84	-1.47	61.44	27.41	3.45	-0.42	60.69
-20000.	27.89	3.66	-2.23	61.99	27.70	3.62	-1.07	61.58	27.22	2.98	-0.29	60.70
-19500.	27.76	3.11	-1.50	61.80	27.31	2.81	-0.71	61.37	26.84	2.21	-0.25	60.54
-19000.	27.23	2.01	-0.31	61.46	26.79	1.67	0.15	60.98	26.47	1.59	0.06	60.34
-18500.	26.82	1.25	0.50	61.06	26.39	1.23	0.54	60.70	26.13	1.21	0.46	60.07
-18000.	26.68	1.15	0.07	60.72	25.96	0.95	0.56	60.53	25.97	1.03	0.49	59.77
-17500.	26.76	1.27	-0.34	60.29	26.22	1.14	0.25	59.90	25.97	1.03	0.46	59.38
-17000.	26.86	1.53	-0.51	59.59	26.40	1.41	0.05	59.27	26.26	1.17	0.29	58.85
-16500.	27.09	1.83	-0.30	58.87	26.73	1.71	0.46	58.62	26.70	1.45	0.33	58.20
-16000.	27.33	2.17	0.50	58.26	27.05	1.96	1.09	57.94	27.07	1.67	0.65	57.51
-15500.	27.61	2.36	1.78	57.59	27.47	2.05	2.11	57.25	27.39	1.71	1.23	56.85
-15000.	27.92	2.45	3.24	56.91	27.82	2.21	3.73	56.61	27.87	2.06	2.33	56.28
-14500.	28.09	2.65	4.64	56.33	28.05	2.43	4.62	56.05	28.20	2.33	3.42	55.73
-14000.	28.09	2.85	6.98	55.75	28.13	2.84	5.63	55.51	28.32	3.04	4.25	55.30
-13500.	28.02	3.27	6.74	55.08	28.06	3.40	5.79	54.98	28.35	3.75	4.82	54.79
-13000.	27.95	3.86	7.24	54.45	28.07	4.32	6.28	54.32	28.46	5.07	6.65	53.96
-12500.	27.73	4.76	7.07	53.85	28.07	5.46	6.67	53.63	28.45	6.35	7.80	53.14
-12000.	27.47	5.27	5.51	53.44	27.27	6.04	7.37	52.78	27.55	7.13	9.80	52.00
-11500.	26.53	5.31	5.48	52.74	26.05	6.17	7.91	51.92	26.15	7.38	10.17	50.92
-11000.	25.21	5.25	5.17	52.11	24.55	6.29	7.65	51.01	24.15	7.33	9.39	49.77
-10500.	23.64	5.82	5.37	51.33	22.81	6.59	7.55	50.19	21.88	7.55	8.25	48.72
-10000.	22.10	6.93	5.10	50.53	20.50	7.45	5.04	49.33	19.37	8.38	5.01	47.75
-9500.	20.18	8.18	3.49	49.60	18.44	8.67	2.81	48.40	17.23	9.11	2.15	46.76
-9000.	18.31	9.17	2.85	48.53	16.84	9.53	1.99	47.09	15.54	9.91	0.29	45.52
-8500.	16.25	9.67	2.44	46.88	15.07	10.28	1.98	45.80	14.16	10.10	-0.12	44.31
-8000.	14.03	9.85	1.60	45.32	13.11	10.15	1.35	44.28	12.48	9.98	-0.36	42.99
-7500.	11.87	10.01	0.87	43.94	11.15	10.15	0.24	42.92	11.00	10.27	-1.79	42.27
-7000.	10.55	10.15	0.93	42.99	10.06	10.22	-0.85	42.44	9.90	10.37	-3.73	41.83
-6500.	9.33	10.43	1.82	42.26	9.06	10.58	-0.50	41.94	8.85	11.97	-2.24	41.61
-6000.	8.55	11.20	2.27	41.72	8.57	11.85	0.07	41.53	8.30	13.25	-1.21	41.33
-5500.	8.44	11.91	1.39	41.27	8.02	13.06	-0.06	41.07	6.91	14.96	0.55	40.81
-5000.	8.81	13.38	-0.59	40.76	8.02	14.79	-1.96	40.59	6.22	16.81	0.10	40.32
-4500.	9.40	14.48	-2.77	40.23	7.84	16.64	-2.63	40.19	5.24	19.07	-0.81	40.11
-4000.	9.07	15.73	-1.85	40.07	7.24	18.43	-1.28	39.89	4.64	21.33	-0.35	39.92
-3500.	8.37	16.29	-1.60	40.25	6.15	19.67	1.58	40.04	3.07	22.50	3.56	40.25
-3000.	6.25	17.09	0.82	40.95	4.09	20.52	4.83	40.73	1.37	23.21	7.14	40.90
-2500.	4.52	17.95	2.62	41.50	2.16	20.52	6.30	41.77	-0.34	23.06	9.22	42.11
-2000.	3.49	17.82	3.59	42.95	0.41	20.10	7.86	42.89	-1.68	21.45	8.72	43.35
-1500.	2.93	16.97	2.87	44.07	0.17	17.43	4.59	44.24	-1.98	17.80	4.77	44.66
-1000.	4.04	14.76	-2.78	45.67	1.07	14.86	-1.01	45.82	-0.37	14.59	-1.43	46.23
-500.	6.32	13.51	-7.21	47.37	4.49	13.02	-7.52	47.73	3.41	12.25	-8.97	48.23

TABLE F.6. (continued).

Elevation: 2000 ft AGL

0.	9.48	12.56	-10.11	49.22	7.74	11.78	-12.13	49.56	6.99	11.30	-13.67	49.96
500.	12.26	11.65	-11.88	50.57	11.15	11.15	-13.53	50.64	10.43	10.85	-15.75	51.21
1000.	15.06	10.46	-13.08	51.02	13.96	10.16	-14.57	51.08	12.60	10.00	-14.50	50.09
1500.	17.36	8.87	-11.54	50.49	15.66	8.56	-12.05	49.31	14.22	8.59	-12.35	49.40
2000.	19.07	7.08	-7.88	49.36	17.18	6.85	-8.61	47.61	14.90	7.02	-9.06	46.09
2500.	19.89	5.56	-4.24	48.75	17.57	5.39	-4.75	46.25	15.15	5.33	-5.28	42.59
3000.	20.41	4.61	-2.26	48.87	18.09	4.05	-2.52	46.37	15.78	4.19	-5.53	42.92
3500.	21.66	4.28	-3.79	49.63	18.97	3.34	-4.36	47.56	16.45	3.13	-6.62	44.11
4000.	23.68	4.40	-5.90	50.58	20.55	4.47	-5.58	48.17	17.66	4.80	-5.52	45.34
4500.	24.94	7.96	-4.39	50.61	22.10	7.59	-4.62	48.44	19.08	7.63	-4.48	45.77
5000.	26.25	11.64	-2.46	50.95	22.48	11.31	-0.83	49.03	19.11	11.77	1.54	46.41
5500.	25.13	14.59	0.68	51.77	21.53	14.81	3.57	49.77	18.40	15.27	6.20	47.71
6000.	23.52	16.67	1.75	52.38	20.32	16.55	3.33	51.16	17.07	16.76	5.15	50.08
6500.	22.28	17.45	-0.32	53.02	19.26	17.46	0.97	52.40	16.40	17.60	2.23	51.29
7000.	20.95	17.95	-2.05	53.48	18.91	18.31	-1.29	52.52	16.72	18.25	-1.27	51.46
7500.	20.38	19.07	-3.19	53.22	18.70	19.41	-2.98	52.39	17.08	19.31	-2.62	50.45
8000.	19.11	19.78	-2.47	51.90	18.82	20.10	-1.80	49.97	17.31	20.03	-1.98	47.74
8500.	18.22	19.75	0.60	48.51	18.37	20.29	0.98	46.77	16.94	19.42	0.13	44.81
9000.	17.10	18.93	3.58	45.00	16.71	18.24	3.45	43.26	15.81	17.37	3.14	41.56
9500.	15.51	16.89	4.52	41.46	15.44	16.33	5.70	40.04	14.73	15.77	4.07	41.70
10000.	14.73	15.42	3.65	41.17	14.72	15.17	4.12	42.49	14.00	14.57	3.27	44.01
10500.	14.83	14.78	1.49	44.20	14.47	14.39	1.59	45.29	13.92	14.15	0.51	46.39
11000.	15.09	14.46	-0.43	46.90	14.94	14.35	-1.21	47.76	14.29	14.06	-2.85	48.90
11500.	15.34	14.29	-1.83	49.16	15.60	14.30	-2.53	49.73	14.81	14.10	-3.50	50.44
12000.	15.42	14.10	-1.62	50.72	15.60	14.06	-1.94	51.07	15.30	14.00	-2.93	51.66
12500.	15.32	13.81	-0.93	51.87	15.38	14.16	-1.88	52.01	15.36	14.59	-3.09	51.85
13000.	15.08	13.98	-1.92	52.43	15.20	14.77	-3.17	52.48	15.14	15.21	-4.11	52.16
13500.	14.74	14.14	-3.11	52.93	15.06	14.96	-4.00	52.15	15.13	15.59	-4.50	50.94
14000.	14.76	13.96	-3.66	52.23	15.09	14.79	-4.33	51.16	15.18	15.66	-4.57	49.50
14500.	14.71	13.90	-4.00	51.65	14.84	14.39	-3.78	49.52	14.65	14.91	-3.28	46.93
15000.	14.10	13.93	-2.56	50.31	14.28	14.22	-2.44	47.72	14.15	14.44	-2.04	44.86
15500.	13.60	14.07	-1.22	49.63	13.71	14.15	-1.13	46.52	13.68	14.08	-0.64	43.17
16000.	13.30	14.07	-0.84	48.60	13.27	14.16	-0.29	45.68	13.40	13.88	-0.02	41.98
16500.	13.21	14.06	-1.14	47.74	13.32	14.01	-0.60	44.44	13.52	13.66	-0.53	40.85
17000.	13.52	13.93	-1.90	46.14	13.60	13.81	-1.34	42.79	13.74	13.51	-1.07	39.47
17500.	13.90	13.76	-2.02	44.18	14.12	13.50	-1.87	40.99	14.20	13.29	-1.70	37.88
18000.	14.40	13.37	-1.78	42.03	14.75	13.11	-1.96	38.86	14.45	13.04	-1.59	36.10
18500.	14.74	13.09	-1.70	40.07	14.77	12.93	-1.40	37.15	14.56	12.82	-0.57	34.46
19000.	15.03	12.92	-1.87	37.76	14.83	12.73	-1.14	35.11	14.23	12.58	-0.06	33.15
19500.	15.27	12.79	-2.43	36.27	14.26	12.52	-0.52	33.77	13.64	12.37	0.58	31.75
20000.	15.60	12.67	-3.13	35.00	14.19	12.34	-1.05	32.84	13.30	12.00	-0.57	31.93
20500.	16.12	12.62	-4.59	33.57	14.63	12.21	-3.25	32.20	13.19	11.67	-2.45	31.86
21000.	16.39	12.48	-4.92	31.14	15.21	12.14	-4.73	30.97	14.16	11.68	-4.72	31.69
21500.	16.83	11.45	-4.56	29.16	15.86	11.59	-4.75	29.84	14.98	11.47	-5.57	30.94
22000.	17.27	9.57	-4.26	27.25	16.56	10.17	-4.76	28.58	16.08	10.61	-4.92	30.33
22500.	17.90	7.85	-5.42	26.43	17.41	8.71	-5.91	27.46	17.08	9.29	-5.27	29.43
23000.	18.73	5.79	-7.53	25.45	18.38	7.63	-7.31	25.89	18.28	8.51	-6.68	27.57
23500.	19.74	4.09	-8.07	23.63	19.52	6.10	-7.86	24.40	19.48	7.73	-7.33	25.76
24000.	20.14	2.41	-7.17	21.46	20.41	4.53	-6.97	22.51	20.59	6.72	-6.35	23.81
24500.	19.94	1.86	-3.65	19.79	21.00	3.12	-4.82	20.60	21.19	5.36	-4.14	21.89
25000.	19.52	2.06	-0.85	17.91	20.50	3.23	-1.37	18.71	21.13	4.69	-0.72	19.85
25500.	18.72	3.02	0.68	16.06	19.68	4.02	1.06	16.74	20.67	4.63	1.28	17.59
26000.	18.08	3.26	0.89	14.12	18.95	4.08	-0.22	14.21	19.87	4.81	0.01	15.17
26500.	16.99	2.04	1.94	11.43	18.18	3.35	-1.21	11.52	19.10	4.96	-2.01	12.55
27000.	15.42	1.03	3.61	8.25	16.76	3.10	-0.55	8.50	18.25	5.01	-3.25	9.40
27500.	13.87	2.52	0.29	4.72	15.15	3.11	-0.99	5.14	17.47	5.28	-2.17	7.34
28000.	13.59	3.75	-3.39	2.33	15.06	4.00	-2.36	4.16	17.07	5.94	-2.05	6.22
28500.	15.42	3.90	-7.91	1.10	16.17	4.66	-5.17	3.02	16.94	5.49	-1.20	5.33
29000.	16.73	4.02	-5.05	-1.18	16.87	4.25	-1.81	0.37	17.30	4.91	0.99	3.98
29500.	17.00	4.55	0.79	-3.15	16.83	3.89	3.03	-3.24	16.73	3.74	3.65	0.11
30000.	16.09	4.84	3.61	-3.80	15.52	4.07	5.85	-3.65	15.42	3.26	7.25	-2.57
30500.	14.74	4.95	5.34	-4.24	14.34	4.60	6.83	-4.06	14.23	4.39	7.91	-3.51
31000.	13.69	5.69	5.36	-4.69	13.29	5.68	6.21	-4.70	13.32	5.45	6.91	-3.98
31500.	12.65	6.53	4.62	-5.18	12.60	6.40	4.74	-5.13	12.81	6.19	4.00	-4.72
32000.	12.33	6.92	3.05	-5.30	12.36	6.78	2.66	-5.24	12.41	6.78	1.97	-99.99
32500.	12.08	7.23	1.85	-5.31	12.13	7.41	1.68	-99.99	12.16	7.64	1.41	-99.99
33000.	11.96	7.98	1.36	-5.88	11.97	8.19	1.17	-6.56	11.97	8.30	1.02	-99.99
33500.	11.88	8.63	1.00	-99.99	11.84	8.56	0.96	-99.99	11.82	8.52	0.94	-99.99
34000.	11.74	8.80	0.87	-99.99	11.70	8.76	0.85	-99.99	11.73	8.73	0.77	-99.99
34500.	11.66	8.96	0.72	-99.99	11.68	8.93	0.63	-99.99	11.74	8.92	0.52	-99.99
35000.	11.71	9.12	0.55	-99.99	11.73	9.10	0.43	-99.99	11.70	9.05	0.43	-99.99
35500.	11.71	9.25	0.49	-99.99	11.67	9.19	0.51	-99.99	11.63	9.14	0.51	-99.99
36000.	11.65	9.32	0.57	-99.99	11.60	9.27	0.61	-99.99	11.61	9.19	0.51	-99.99
36500.	11.62	9.35	0.60	-99.99	11.62	9.27	0.53	-99.99	11.63	9.19	0.43	-99.99
37000.	11.61	9.35	0.58	-99.99	11.61	9.28	0.52	-99.99	11.58	9.24	0.53	-99.99
37500.	11.55	9.37	0.66	-99.99	11.51	9.33	0.71	-99.99	11.49	9.30	0.72	-99.99

TABLE F.7. JAWS Corridor Data Set #7 (along path EF in 30JN1826 measurement).

Path Shear Intensity: Class I
Plane Separated by 500 ft
X = Horizontal Distance (ft)

WX = Wind in X Direction (kts)
WY = Wind in Y Direction (kts)
WZ = Wind in Z Direction (kts)
DBZ = Radar Reflectivity (dBZ)

Elevation: 0 ft AGL

	PLANE 1				PLANE 2				PLANE 3			
X	WX	WY	WZ	DBZ	WX	WY	WZ	DBZ	WX	WY	WZ	DBZ
-37500.	21.55	4.99	0.00	-99.99	21.50	4.81	0.00	-99.99	21.43	4.62	0.00	-99.99
-37000.	21.38	4.67	0.00	-99.99	21.33	4.39	0.00	-99.99	21.39	4.48	0.00	-99.99
-36500.	21.28	4.33	0.00	-99.99	21.38	4.62	0.00	-99.99	21.49	4.69	0.00	-99.99
-36000.	21.35	4.54	0.00	-99.99	21.47	4.74	0.00	-99.99	21.50	4.70	0.00	-99.99
-35500.	21.37	4.59	0.00	-99.99	21.42	4.57	0.00	-99.99	21.45	4.54	0.00	-99.99
-35000.	21.33	4.42	0.00	-99.99	21.39	4.43	0.00	-99.99	21.50	4.61	0.00	-99.99
-34500.	21.34	4.43	0.00	-99.99	21.47	4.63	0.00	-99.99	21.50	4.82	0.00	-99.99
-34000.	21.41	4.64	0.00	-99.99	21.61	4.76	0.00	-99.99	21.66	4.73	0.00	-99.99
-33500.	21.40	4.61	0.00	-99.99	21.45	4.68	0.00	-99.99	21.60	4.57	0.00	-99.99
-33000.	21.35	4.43	0.00	-99.99	21.44	4.61	0.00	-99.99	21.56	4.72	0.00	-99.99
-32500.	21.38	4.52	0.00	-99.99	21.51	4.72	0.00	-99.99	21.64	4.92	0.00	-99.99
-32000.	21.45	4.72	0.00	-99.99	21.53	4.76	0.00	-99.99	21.59	4.73	0.00	-99.99
-31500.	21.42	4.60	0.00	-99.99	21.49	4.57	0.00	-99.99	21.55	4.57	0.00	-99.99
-31000.	21.37	4.40	0.00	-99.99	21.49	4.57	0.00	-99.99	21.62	4.76	0.00	-99.99
-30500.	21.42	4.56	0.00	-99.99	21.55	4.75	0.00	-99.99	21.64	4.85	0.00	-99.99
-30000.	21.47	4.73	0.00	-99.99	21.47	4.63	0.00	-99.99	21.47	4.56	0.00	-99.99
-29500.	21.28	4.38	0.00	-99.99	21.29	4.31	0.00	-99.99	21.39	4.40	0.00	-99.99
-29000.	21.13	4.07	0.00	-99.99	21.34	4.33	0.00	-99.99	21.54	4.58	0.00	-99.99
-28500.	21.28	4.26	0.00	-99.99	21.48	4.51	0.00	-99.99	21.76	4.55	0.00	-99.99
-28000.	21.45	4.30	0.00	-99.99	21.75	4.24	0.00	-99.99	22.06	4.20	0.00	-99.99
-27500.	21.72	3.87	0.00	-99.99	22.03	3.84	0.00	-99.99	22.30	4.13	0.00	-99.99
-27000.	21.94	3.65	0.00	-99.99	22.22	4.01	0.00	-99.99	22.48	4.35	0.00	-99.99
-26500.	22.11	3.90	0.00	-99.99	22.40	4.22	0.00	-99.99	22.65	4.07	0.00	-99.99
-26000.	22.27	3.67	0.00	-99.99	22.57	3.51	0.00	-99.99	22.83	3.41	0.00	-99.99
-25500.	22.42	2.81	0.00	-99.99	22.74	2.87	0.00	-99.99	23.12	3.42	0.00	-99.99
-25000.	22.65	2.56	0.00	-99.99	23.06	3.16	0.00	-99.99	23.44	3.70	0.00	-99.99
-24500.	22.95	2.87	0.00	-99.99	23.39	3.06	0.00	-99.99	23.79	2.79	0.00	-99.99
-24000.	23.24	1.83	0.00	-99.99	23.71	1.54	0.00	-99.99	24.18	1.47	0.00	-99.99
-23500.	23.43	-0.14	0.00	-99.99	24.12	0.31	0.00	-99.99	24.91	1.34	0.00	-99.99
-23000.	23.81	-1.16	0.00	-99.99	24.75	-0.13	0.00	-99.99	25.54	1.06	0.00	54.42
-22500.	24.13	-2.11	0.00	-99.99	25.09	-0.30	0.00	53.96	25.84	1.39	0.00	54.80
-22000.	24.38	-1.66	0.00	53.10	25.34	0.25	0.00	54.22	26.17	1.99	0.00	55.26
-21500.	24.50	-1.04	0.00	53.53	25.42	0.72	0.00	54.51	25.98	2.20	0.00	55.47
-21000.	24.62	-0.40	0.00	54.03	25.42	1.17	0.00	54.87	25.98	2.72	0.00	55.72
-20500.	25.03	0.26	0.00	54.75	25.76	1.91	0.00	55.47	26.30	3.66	0.00	56.12
-20000.	25.74	0.82	0.00	55.70	26.35	2.63	0.00	56.18	26.74	4.37	0.00	56.46
-19500.	26.31	1.06	0.00	56.30	26.77	2.89	0.00	56.35	27.14	4.74	0.00	56.36
-19000.	26.50	0.92	0.00	56.41	27.01	2.84	0.00	56.43	27.34	4.90	0.00	56.20
-18500.	26.43	1.04	0.00	56.29	26.76	3.00	0.00	56.26	27.11	5.03	0.00	55.91
-18000.	25.97	1.45	0.00	55.90	26.38	3.34	0.00	56.14	26.74	5.47	0.00	55.79
-17500.	25.65	1.78	0.00	55.63	26.06	3.85	0.00	55.80	26.31	6.05	0.00	55.65
-17000.	25.77	2.19	0.00	55.80	26.05	4.21	0.00	55.71	26.36	6.64	0.00	55.44
-16500.	26.07	3.01	0.00	55.87	26.49	4.76	0.00	55.54	26.79	7.18	0.00	55.24
-16000.	26.36	4.11	0.00	55.72	26.80	5.79	0.00	55.33	27.05	7.91	0.00	54.85
-15500.	26.56	5.53	0.00	55.38	26.89	7.28	0.00	54.82	27.30	9.01	0.00	54.32
-15000.	26.73	7.19	0.00	55.09	26.81	8.75	0.00	54.28	26.74	10.46	0.00	53.80
-14500.	26.38	8.49	0.00	54.69	26.46	10.04	0.00	53.74	26.34	11.80	0.00	53.18
-14000.	25.74	9.48	0.00	54.20	25.35	10.91	0.00	53.33	24.44	12.27	0.00	52.49
-13500.	24.06	10.01	0.00	54.21	23.59	11.38	0.00	53.03	22.32	12.64	0.00	52.07
-13000.	22.29	10.29	0.00	54.34	20.76	11.46	0.00	52.81	17.99	12.03	0.00	51.71
-12500.	19.08	10.65	0.00	54.28	17.05	11.53	0.00	52.77	14.30	11.76	0.00	51.39
-12000.	16.20	11.10	0.00	54.23	13.74	11.44	0.00	52.58	10.99	11.26	0.00	51.12
-11500.	13.24	11.01	0.00	54.10	10.50	11.20	0.00	52.23	8.09	10.77	0.00	50.75
-11000.	11.01	11.50	0.00	53.99	8.56	10.70	0.00	51.82	6.26	9.92	0.00	50.02
-10500.	9.71	11.24	0.00	53.27	6.96	10.29	0.00	51.23	4.99	9.44	0.00	49.29
-10000.	9.28	11.56	0.00	52.70	6.98	11.08	0.00	50.61	4.92	10.16	0.00	48.78
-9500.	10.24	12.92	0.00	52.58	7.88	12.33	0.00	50.19	5.71	11.94	0.00	48.32
-9000.	11.34	14.84	0.00	53.06	9.19	15.00	0.00	50.77	7.19	14.87	0.00	48.00
-8500.	13.25	16.85	0.00	54.05	10.39	17.78	0.00	51.87	7.52	16.20	0.00	48.97
-8000.	14.19	17.63	0.00	55.17	10.34	17.91	0.00	53.25	7.28	16.70	0.00	50.43
-7500.	13.61	17.36	0.00	56.23	10.38	17.48	0.00	54.26	8.40	17.03	0.00	51.65
-7000.	13.69	16.20	0.00	56.38	11.28	16.67	0.00	55.04	9.93	16.59	0.00	52.45
-6500.	13.45	15.20	0.00	56.72	12.00	16.45	0.00	55.76	11.70	17.88	0.00	52.55
-6000.	13.55	15.57	0.00	56.70	13.41	17.63	0.00	55.16	13.79	19.66	0.00	52.71
-5500.	13.77	15.99	0.00	56.43	13.65	18.28	0.00	54.49	13.97	20.59	0.00	51.47
-5000.	13.73	16.18	0.00	55.73	13.13	18.61	0.00	53.57	13.48	20.86	0.00	50.24
-4500.	13.01	16.27	0.00	55.56	12.77	17.78	0.00	53.27	12.73	19.13	0.00	50.09
-4000.	12.50	14.20	0.00	56.36	12.11	15.53	0.00	53.97	12.39	17.62	0.00	50.66
-3500.	12.37	12.17	0.00	56.86	12.42	14.15	0.00	55.40	13.25	17.18	0.00	52.13
-3000.	13.62	11.82	0.00	57.05	13.82	13.76	0.00	56.25	14.18	17.28	0.00	53.53
-2500.	14.21	11.38	0.00	57.09	14.51	15.29	0.00	55.98	14.86	19.71	0.00	54.34
-2000.	15.27	13.40	0.00	56.37	14.85	17.24	0.00	55.77	14.62	20.65	0.00	53.88
-1500.	15.82	14.33	0.00	55.96	14.17	16.84	0.00	55.39	13.22	19.31	0.00	53.24
-1000.	15.21	13.67	0.00	55.55	13.64	16.15	0.00	54.79	12.87	17.96	0.00	53.42
-500.	14.79	12.69	0.00	55.13	13.59	14.37	0.00	54.61	13.24	16.17	0.00	53.59

TABLE F.7. (continued).

Elevation: 0 ft AGL

0.	14.41	10.95	0.00	54.87	13.01	12.42	0.00	54.61	13.42	15.36	0.00	53.68
500.	14.77	9.75	0.00	54.87	14.63	12.34	0.00	54.63	14.37	15.34	0.00	54.03
1000.	16.77	9.00	0.00	54.92	16.35	11.66	0.00	54.62	15.42	14.69	0.00	53.90
1500.	18.99	8.61	0.00	54.64	18.39	10.87	0.00	54.02	16.95	13.75	0.00	53.29
2000.	20.94	8.76	0.00	54.25	20.40	10.58	0.00	53.37	18.79	12.39	0.00	52.22
2500.	21.91	8.56	0.00	53.63	21.18	9.98	0.00	52.40	20.62	11.37	0.00	50.91
3000.	21.75	8.24	0.00	52.88	21.86	9.38	0.00	51.69	21.51	10.65	0.00	50.57
3500.	21.54	7.59	0.00	52.41	22.35	8.64	0.00	51.02	22.36	9.90	0.00	49.97
4000.	21.29	6.71	0.00	52.29	22.56	8.28	0.00	51.03	23.73	9.71	0.00	50.29
4500.	21.77	7.29	0.00	52.36	23.19	8.72	0.00	51.37	24.49	9.91	0.00	50.79
5000.	22.03	7.75	0.00	52.61	23.37	9.16	0.00	51.78	24.63	9.99	0.00	51.96
5500.	21.52	7.86	0.00	52.93	22.86	9.23	0.00	52.34	24.42	10.43	0.00	52.47
6000.	21.28	8.25	0.00	52.79	22.28	9.58	0.00	52.56	24.23	11.15	0.00	52.86
6500.	20.48	9.05	0.00	52.28	21.21	10.05	0.00	52.28	23.71	11.69	0.00	52.67
7000.	19.26	9.85	0.00	51.40	20.92	11.13	0.00	51.47	23.38	12.55	0.00	51.79
7500.	18.76	11.15	0.00	50.16	20.46	12.30	0.00	50.28	22.96	13.18	0.00	50.55
8000.	18.65	12.27	0.00	49.43	20.25	12.13	0.00	48.65	22.78	12.95	0.00	48.78
8500.	18.80	12.04	0.00	49.32	20.43	11.81	0.00	47.83	22.21	12.32	0.00	47.73
9000.	18.09	11.43	0.00	49.75	19.30	11.22	0.00	48.50	20.91	11.41	0.00	47.48
9500.	16.41	10.00	0.00	49.99	17.74	10.24	0.00	49.09	19.36	10.41	0.00	48.15
10000.	14.91	8.18	0.00	50.45	16.14	8.35	0.00	50.05	17.69	8.84	0.00	49.12
10500.	13.70	5.87	0.00	50.82	14.98	6.28	0.00	50.45	16.65	7.05	0.00	49.75
11000.	13.29	4.36	0.00	49.77	14.56	4.82	0.00	49.91	16.20	5.42	0.00	49.60
11500.	13.71	3.41	0.00	47.83	14.48	4.23	0.00	48.29	16.31	6.28	0.00	47.00
12000.	16.20	4.34	0.00	43.55	16.89	5.94	0.00	43.27	17.24	7.66	0.00	43.06
12500.	20.46	6.09	0.00	38.33	19.96	7.99	0.00	38.93	19.13	9.97	0.00	39.45
13000.	23.56	8.18	0.00	36.92	22.52	10.53	0.00	36.85	21.62	12.51	0.00	36.83
13500.	26.27	10.09	0.00	37.09	24.08	12.60	0.00	36.40	21.98	14.89	0.00	36.09
14000.	26.95	12.01	0.00	37.31	24.59	14.51	0.00	36.56	22.14	16.63	0.00	35.74
14500.	27.64	13.74	0.00	37.78	25.94	16.18	0.00	37.96	23.60	17.90	0.00	37.05
15000.	30.01	15.21	0.00	40.75	28.16	17.61	0.00	40.82	25.90	18.37	0.00	39.36
15500.	32.69	16.77	0.00	43.78	30.64	17.19	0.00	42.42	28.95	16.83	0.00	41.14
16000.	33.62	15.76	0.00	43.44	32.81	16.50	0.00	43.30	30.52	14.89	0.00	42.24
16500.	34.22	14.16	0.00	43.15	32.60	13.62	0.00	43.36	30.15	11.55	0.00	42.83
17000.	33.70	10.19	0.00	42.63	31.73	9.53	0.00	42.69	29.56	8.56	0.00	42.39
17500.	33.09	6.87	0.00	41.91	31.02	5.95	0.00	41.28	29.06	5.32	0.00	41.12
18000.	31.63	3.91	0.00	40.48	29.93	2.53	0.00	39.37	27.97	4.06	0.00	37.52
18500.	29.23	2.77	0.00	37.71	27.41	3.52	0.00	34.87	26.22	4.48	0.00	32.61
19000.	24.97	4.09	0.00	32.54	23.79	4.93	0.00	30.15	23.50	5.80	0.00	27.99
19500.	21.18	5.67	0.00	28.79	20.41	7.00	0.00	27.10	20.05	7.89	0.00	24.36
20000.	16.54	8.76	0.00	26.54	16.61	9.04	0.00	24.76	16.82	9.13	0.00	22.77
20500.	11.75	11.05	0.00	24.85	12.09	10.40	0.00	22.94	12.77	9.63	0.00	20.61
21000.	10.09	12.15	0.00	23.96	9.25	11.15	0.00	21.50	10.58	9.98	0.00	20.21
21500.	12.24	11.96	0.00	23.43	12.13	9.78	0.00	19.67	11.69	9.03	0.00	18.63
22000.	13.79	12.13	0.00	23.52	13.17	9.97	0.00	19.94	14.16	7.38	0.00	17.88
22500.	11.59	12.98	0.00	24.41	9.56	12.24	0.00	20.92	12.90	8.18	0.00	18.41
23000.	10.68	13.14	0.00	24.93	5.37	14.91	0.00	21.36	9.69	10.61	0.00	19.11
23500.	11.08	13.21	0.00	24.62	6.44	14.54	0.00	21.55	6.52	13.16	0.00	19.85
24000.	10.82	13.42	0.00	24.29	8.92	13.80	0.00	22.84	8.89	13.06	0.00	21.90
24500.	12.22	12.47	0.00	27.05	11.16	13.10	0.00	25.15	11.93	11.87	0.00	24.59
25000.	12.46	11.91	0.00	29.13	13.44	11.14	0.00	28.23	14.12	10.33	0.00	28.01
25500.	16.48	8.46	0.00	31.55	16.76	8.15	0.00	30.97	15.84	8.62	0.00	30.13
26000.	19.69	6.00	0.00	33.25	18.14	6.48	0.00	31.72	17.07	6.90	0.00	30.74
26500.	20.72	5.34	0.00	34.14	18.99	5.60	0.00	32.30	17.72	6.23	0.00	30.33
27000.	21.68	5.01	0.00	34.48	19.80	5.52	0.00	31.63	18.09	6.03	0.00	28.99
27500.	22.40	5.24	0.00	33.82	20.52	5.48	0.00	30.68	18.57	5.96	0.00	26.85
28000.	22.85	5.43	0.00	32.01	20.89	5.34	0.00	27.07	18.98	5.82	0.00	23.54
28500.	22.65	5.96	0.00	28.71	20.82	5.41	0.00	23.81	18.84	4.62	0.00	19.34
29000.	21.47	6.24	0.00	25.85	19.76	4.66	0.00	20.99	18.67	2.74	0.00	16.12
29500.	19.83	7.46	0.00	22.57	18.05	4.67	0.00	18.30	16.63	4.60	0.00	14.54
30000.	18.58	8.87	0.00	18.73	16.70	6.03	0.00	14.88	14.74	5.32	0.00	11.85
30500.	17.52	8.83	0.00	14.22	16.56	7.28	0.00	12.44	15.52	5.95	0.00	11.22
31000.	18.15	8.62	0.00	12.94	18.04	8.44	0.00	12.43	16.89	7.36	0.00	11.07
31500.	19.53	9.03	0.00	12.33	19.23	7.83	0.00	11.68	18.45	6.28	0.00	10.13
32000.	20.52	6.85	0.00	11.83	20.16	5.68	0.00	10.75	19.52	5.26	0.00	8.83
32500.	21.02	4.97	0.00	11.90	20.14	3.46	0.00	8.87	19.23	4.00	0.00	6.21
33000.	19.80	3.48	0.00	9.27	19.03	1.36	0.00	6.01	18.64	2.52	0.00	-99.99
33500.	18.89	2.14	0.00	-99.99	18.80	2.17	0.00	-99.99	18.59	3.05	0.00	-99.99
34000.	19.66	3.17	0.00	-99.99	19.13	3.46	0.00	-99.99	18.66	4.48	0.00	-99.99
34500.	19.72	4.43	0.00	-99.99	18.99	5.11	0.00	-99.99	18.48	6.17	0.00	-99.99
35000.	19.18	6.23	0.00	-99.99	18.58	7.03	0.00	-99.99	18.34	6.97	0.00	-99.99
35500.	18.68	7.21	0.00	-99.99	18.52	6.95	0.00	-99.99	18.33	6.71	0.00	-99.99
36000.	18.64	7.00	0.00	-99.99	18.49	6.70	0.00	-99.99	18.15	6.99	0.00	-99.99
36500.	18.47	7.16	0.00	-99.99	18.17	7.34	0.00	-99.99	17.84	7.61	0.00	-99.99
37000.	18.16	7.72	0.00	-99.99	17.90	7.86	0.00	-99.99	17.80	7.78	0.00	-99.99
37500.	18.05	7.98	0.00	-99.99	17.97	7.89	0.00	-99.99	17.87	7.80	0.00	-99.99

TABLE F.7. (continued).

Elevation: 500 ft AGL

	PLANE 1				PLANE 2				PLANE 3			
X	WX	WY	WZ	DBZ	WX	WY	WZ	DBZ	WX	WY	WZ	DBZ
-37500.	22.03	4.52	0.06	-99.99	21.95	4.30	0.04	-99.99	21.87	4.24	0.04	-99.99
-37000.	21.83	4.17	0.06	-99.99	21.75	4.02	0.05	-99.99	21.82	4.12	0.01	-99.99
-36500.	21.70	3.96	0.04	-99.99	21.81	4.13	-0.02	-99.99	21.92	4.30	-0.00	-99.99
-36000.	21.78	4.13	-0.06	-99.99	21.90	4.30	-0.11	-99.99	21.93	4.30	-0.11	-99.99
-35500.	21.81	4.17	-0.11	-99.99	21.85	4.16	-0.11	-99.99	21.88	4.16	-0.11	-99.99
-35000.	21.75	4.02	-0.10	-99.99	21.81	4.05	-0.10	-99.99	21.92	4.22	-0.10	-99.99
-34500.	21.77	4.04	-0.10	-99.99	21.89	4.21	-0.09	-99.99	22.01	4.39	-0.09	-99.99
-34000.	21.84	4.21	-0.09	-99.99	21.94	4.32	-0.09	-99.99	21.98	4.32	-0.09	-99.99
-33500.	21.84	4.18	-0.09	-99.99	21.88	4.17	-0.09	-99.99	21.93	4.17	-0.10	-99.99
-33000.	21.77	4.02	-0.09	-99.99	21.87	4.11	-0.10	-99.99	21.99	4.30	-0.10	-99.99
-32500.	21.80	4.10	-0.09	-99.99	21.94	4.29	-0.09	-99.99	22.07	4.47	-0.09	-99.99
-32000.	21.87	4.27	-0.09	-99.99	21.96	4.32	-0.10	-99.99	22.02	4.32	-0.10	-99.99
-31500.	21.84	4.17	-0.09	-99.99	21.91	4.16	-0.10	-99.99	21.98	4.18	-0.10	-99.99
-31000.	21.79	4.00	-0.10	-99.99	21.92	4.16	-0.07	-99.99	22.05	4.34	-0.04	-99.99
-30500.	21.84	4.13	-0.04	-99.99	21.98	4.32	-0.01	-99.99	22.07	4.42	0.00	-99.99
-30000.	21.88	4.28	0.03	-99.99	21.89	4.23	0.00	-99.99	21.89	4.21	-0.03	-99.99
-29500.	21.69	4.01	0.00	-99.99	21.72	3.98	-0.03	-99.99	21.81	4.00	-0.09	-99.99
-29000.	21.55	3.78	-0.05	-99.99	21.75	4.00	-0.14	-99.99	21.94	4.22	-0.24	-99.99
-28500.	21.68	3.91	-0.20	-99.99	21.88	4.14	-0.30	-99.99	22.14	4.18	-0.34	-99.99
-28000.	21.83	3.93	-0.31	-99.99	22.13	3.89	-0.35	-99.99	22.43	3.86	-0.37	-99.99
-27500.	22.07	3.54	-0.35	-99.99	22.38	3.53	-0.38	-99.99	22.65	3.79	-0.33	-99.99
-27000.	22.27	3.34	-0.34	-99.99	22.54	3.66	-0.28	-99.99	22.81	3.96	-0.22	-99.99
-26500.	22.41	3.53	-0.21	-99.99	22.69	3.83	-0.17	-99.99	22.92	3.72	-0.26	-99.99
-26000.	22.51	3.32	-0.21	-99.99	22.76	3.22	-0.31	-99.99	22.99	3.16	-0.40	-99.99
-25500.	22.53	2.59	-0.37	-99.99	22.83	2.66	-0.43	-99.99	23.23	3.14	-0.38	-99.99
-25000.	22.68	2.37	-0.38	-99.99	23.10	2.90	-0.34	-99.99	23.51	3.36	-0.30	-99.99
-24500.	22.97	2.63	-0.24	-99.99	23.35	2.76	-0.29	-99.99	23.65	2.45	-0.38	-99.99
-24000.	23.08	1.64	-0.17	-99.99	23.41	1.30	-0.31	-99.99	23.77	1.14	-0.48	-99.99
-23500.	23.02	-0.14	-0.09	-99.99	23.60	-0.04	-0.50	-99.99	24.26	0.38	-0.91	-99.99
-23000.	23.34	-1.28	-0.65	-99.99	24.09	-0.89	-1.21	-99.99	24.74	-0.39	-1.49	54.66
-22500.	23.79	-2.26	-1.49	-99.99	24.55	-1.11	-1.56	54.66	25.16	0.01	-1.36	55.29
-22000.	24.34	-1.67	-1.65	54.71	25.12	-0.39	-1.55	55.43	25.66	0.66	-1.20	56.03
-21500.	24.77	-0.96	-1.79	55.71	25.53	0.26	-1.56	56.11	25.80	1.05	-1.11	56.58
-21000.	24.99	-0.56	-1.79	56.28	25.73	0.69	-1.47	56.65	26.03	1.62	-1.13	57.03
-20500.	25.41	-0.10	-1.97	56.86	25.98	1.14	-1.63	57.12	26.30	2.31	-1.40	57.31
-20000.	25.95	0.27	-1.88	57.35	26.47	1.65	-1.76	57.60	26.57	2.70	-1.56	57.52
-19500.	26.36	0.39	-1.73	57.67	26.68	1.71	-1.55	57.70	26.76	2.81	-1.45	57.46
-19000.	26.37	0.22	-1.36	57.77	26.68	1.52	-1.19	57.74	26.76	2.75	-1.20	57.35
-18500.	26.21	0.29	-1.00	57.74	26.31	1.53	-1.00	57.58	26.38	2.63	-1.02	57.07
-18000.	25.71	0.64	-0.88	57.54	25.85	1.80	-0.79	57.52	26.07	3.00	-1.10	56.93
-17500.	25.33	0.96	-1.06	57.46	25.57	2.17	-1.29	57.30	25.78	3.50	-1.54	56.84
-17000.	25.22	1.15	-1.50	57.59	25.43	2.44	-1.72	57.33	25.87	4.16	-2.00	56.77
-16500.	25.47	1.80	-1.83	57.61	25.80	3.10	-1.97	57.32	26.23	4.87	-2.29	56.74
-16000.	25.96	2.88	-1.96	57.55	26.25	4.09	-2.10	57.18	26.63	5.73	-2.14	56.49
-15500.	26.42	3.97	-1.85	57.31	26.69	5.30	-1.92	56.76	27.06	6.72	-2.03	56.12
-15000.	26.75	4.93	-1.58	57.06	26.95	6.38	-1.65	56.33	27.01	7.92	-1.41	55.55
-14500.	26.76	5.81	-1.23	56.68	26.99	7.32	-1.33	55.76	27.05	8.96	-1.04	54.94
-14000.	26.55	6.53	-0.88	56.30	26.47	8.13	-0.62	55.32	25.98	9.72	0.15	54.30
-13500.	25.60	7.26	-0.22	56.01	25.51	8.92	0.34	54.94	24.73	10.41	1.28	53.83
-13000.	24.54	7.72	0.18	55.83	23.60	9.34	1.16	54.59	21.60	10.32	2.15	53.39
-12500.	22.23	8.11	0.85	55.58	20.87	9.54	1.98	54.30	18.76	10.38	2.92	52.96
-12000.	20.03	8.45	1.23	55.41	17.98	9.36	2.27	53.90	15.51	9.84	2.78	52.44
-11500.	17.14	8.08	1.39	55.12	14.89	8.92	2.64	53.41	12.56	9.18	2.67	51.82
-11000.	14.98	8.19	1.51	54.87	12.59	8.24	2.03	52.75	10.24	8.20	2.08	50.81
-10500.	13.28	7.79	0.98	54.17	10.59	7.66	1.37	52.02	8.49	7.58	1.35	49.80
-10000.	12.57	7.97	0.25	53.73	10.06	7.97	0.30	51.44	7.92	7.83	0.30	49.19
-9500.	13.29	8.97	-1.14	53.72	10.51	8.76	-1.07	51.16	8.13	8.76	-0.33	48.98
-9000.	14.44	10.44	-1.94	54.22	11.83	10.61	-1.00	51.82	9.08	10.53	-0.11	49.09
-8500.	16.23	11.99	-1.68	55.14	13.34	12.60	-0.79	52.85	10.00	11.57	0.05	50.09
-8000.	17.09	12.69	-1.19	56.27	13.66	12.78	-0.43	54.17	10.50	12.04	0.28	51.46
-7500.	16.45	12.59	-0.37	57.44	13.63	12.62	-0.07	55.29	11.82	12.52	-0.67	52.73
-7000.	16.27	11.83	-0.77	57.74	14.22	12.33	-1.22	56.28	13.01	12.50	-1.99	53.73
-6500.	15.99	11.07	-1.51	58.13	14.70	12.33	-2.10	57.18	14.24	13.68	-2.34	54.33
-6000.	16.19	11.25	-1.82	58.22	15.98	13.18	-2.38	56.90	16.00	15.13	-2.74	54.90
-5500.	16.44	11.37	-2.04	57.92	16.14	13.56	-2.21	56.47	16.03	15.81	-1.77	54.36
-5000.	16.04	11.39	-1.46	57.15	15.57	13.68	-1.39	55.64	15.39	15.92	-0.85	53.44
-4500.	15.22	11.45	-1.04	56.79	14.82	13.22	-1.16	55.15	14.28	14.79	-1.15	52.95
-4000.	14.46	10.65	-1.38	57.23	13.85	12.22	-1.49	55.42	13.56	13.88	-1.66	52.96
-3500.	14.09	10.09	-1.83	57.70	13.99	11.60	-2.37	56.44	14.20	13.53	-2.93	54.02
-3000.	15.20	9.70	-2.65	58.18	15.16	11.28	-3.42	57.30	14.97	13.56	-3.62	55.20
-2500.	15.96	9.15	-3.06	58.58	15.76	11.74	-3.15	57.43	15.54	14.74	-2.83	56.05
-2000.	16.79	9.52	-2.80	58.14	16.09	12.23	-2.75	57.49	15.34	14.97	-2.12	55.92
-1500.	17.17	9.63	-2.67	57.93	15.49	11.99	-2.30	57.29	14.17	14.30	-1.55	55.56
-1000.	16.66	9.55	-2.14	57.71	14.97	11.86	-1.74	56.93	13.78	13.63	-1.69	55.79
-500.	16.45	9.20	-1.73	57.52	15.02	11.01	-2.11	57.10	14.05	12.68	-2.29	56.17

TABLE F.7. (continued).

Elevation: 500 ft AGL

0.	16.36	8.38	-2.11	57.63	14.85	10.15	-2.57	57.49	14.51	12.36	-2.80	56.55
500.	16.96	7.79	-2.88	57.92	16.45	9.87	-3.53	57.73	15.70	12.22	-3.74	57.14
1000.	18.98	7.36	-3.83	58.18	18.25	9.36	-4.44	57.96	17.08	11.68	-4.34	57.30
1500.	20.95	7.08	-3.56	58.04	20.29	8.67	-3.99	57.52	18.80	11.05	-4.06	56.89
2000.	22.43	6.93	-2.46	57.69	21.94	8.29	-3.04	56.95	20.33	10.04	-3.36	56.00
2500.	22.98	6.71	-1.47	57.03	22.31	7.93	-2.03	56.00	21.74	9.15	-2.53	54.86
3000.	22.61	6.52	-0.79	56.23	22.68	7.55	-1.38	55.16	22.31	8.73	-2.19	54.28
3500.	22.52	6.21	-0.89	55.72	23.14	7.14	-1.59	54.38	22.97	8.27	-2.21	53.48
4000.	22.61	5.80	-1.29	55.49	23.48	6.98	-1.70	54.36	24.27	8.09	-1.90	53.80
4500.	23.09	6.07	-1.33	55.49	24.15	7.23	-1.58	54.64	25.07	8.22	-1.69	54.24
5000.	23.53	6.21	-1.46	55.55	24.55	7.52	-1.41	54.70	25.56	8.40	-1.39	54.61
5500.	23.39	6.25	-1.16	55.51	24.45	7.57	-1.08	54.80	25.72	8.82	-1.14	54.55
6000.	23.33	6.64	-0.71	55.15	24.19	8.13	-0.93	54.69	25.80	9.59	-1.15	54.33
6500.	22.67	7.93	-0.41	54.60	23.46	9.25	-0.81	54.42	25.46	10.53	-1.02	54.05
7000.	21.57	8.98	-0.16	53.79	22.99	10.38	-0.59	53.64	25.01	11.68	-0.77	53.42
7500.	20.86	10.07	-0.36	52.94	22.29	11.41	-0.63	52.72	24.58	12.48	-0.63	52.47
8000.	20.59	11.00	-0.39	52.54	22.10	11.35	-0.57	51.72	24.52	12.37	-0.59	51.29
8500.	20.66	10.89	0.28	52.62	22.23	11.16	-0.18	51.33	24.18	11.88	-0.30	50.59
9000.	20.00	10.50	1.07	53.12	21.46	10.65	0.61	51.77	23.39	11.07	0.34	50.19
9500.	18.73	9.65	1.17	53.43	20.19	9.91	1.17	52.54	22.12	10.43	0.60	50.85
10000.	17.67	8.48	0.92	53.83	18.98	8.69	0.68	53.29	20.73	9.44	0.31	51.80
10500.	16.76	6.97	0.54	54.13	18.15	7.38	0.14	53.44	19.77	8.14	-0.20	52.28
11000.	16.39	6.01	-0.28	52.88	17.76	6.55	-0.59	52.70	19.33	7.06	-0.91	51.93
11500.	16.58	5.46	-2.01	50.70	17.63	6.33	-1.65	50.98	19.13	7.87	-1.90	49.36
12000.	18.45	5.89	-3.89	46.53	19.32	7.33	-3.51	46.12	19.65	8.92	-3.31	45.61
12500.	21.98	6.59	-5.24	41.36	21.67	8.41	-4.52	41.95	20.81	10.43	-3.72	42.00
13000.	24.30	7.70	-4.41	39.64	23.64	9.81	-3.80	40.01	22.60	11.92	-3.40	39.47
13500.	26.13	8.84	-3.21	39.80	24.44	11.50	-3.00	39.77	22.53	14.12	-2.70	39.60
14000.	26.09	10.99	-3.35	40.50	24.12	13.73	-2.98	40.43	22.06	16.20	-2.29	40.15
14500.	26.21	13.05	-3.93	41.21	24.85	15.49	-3.65	41.60	23.02	17.66	-3.19	41.31
15000.	28.14	14.00	-4.33	42.61	26.60	16.66	-4.37	43.09	24.92	18.05	-3.43	42.62
15500.	30.35	14.67	-4.19	43.97	28.93	15.87	-2.97	43.58	27.86	16.28	-1.55	43.22
16000.	31.62	13.89	-1.99	43.22	31.09	14.90	-0.96	43.61	29.53	14.34	0.18	43.45
16500.	32.59	12.76	-0.36	42.58	31.42	12.59	0.26	43.30	29.65	11.56	1.18	43.48
17000.	32.74	9.99	0.70	42.23	31.32	9.69	1.37	42.73	29.50	8.98	1.22	42.54
17500.	32.70	7.68	1.55	41.75	31.02	6.72	1.24	41.26	29.24	6.11	0.58	40.82
18000.	31.84	5.21	2.34	40.43	30.53	3.81	1.46	39.65	28.29	5.08	0.70	37.28
18500.	29.93	4.18	3.12	37.77	28.05	4.70	2.09	35.12	26.54	5.50	1.30	32.55
19000.	26.12	5.11	2.77	33.00	24.77	5.79	2.24	30.65	24.08	6.53	1.85	28.29
19500.	22.38	6.42	2.99	29.44	21.60	7.51	3.22	27.63	20.94	8.21	2.44	24.79
20000.	17.84	9.33	3.53	27.79	17.77	9.55	4.08	25.63	17.63	9.65	3.59	23.61
20500.	13.05	12.10	2.90	27.33	13.08	11.71	3.65	25.04	13.34	11.03	5.06	22.29
21000.	10.65	13.76	1.00	27.87	9.56	13.46	2.08	25.00	10.73	12.02	2.68	22.96
21500.	11.31	13.88	-0.28	28.65	9.93	13.31	0.21	24.92	9.82	12.35	0.38	23.01
22000.	12.44	13.74	-0.15	29.65	10.64	13.16	0.43	25.89	9.99	12.11	1.65	23.41
22500.	12.08	13.44	-0.23	29.74	9.49	13.77	1.47	26.54	9.37	12.43	3.11	24.29
23000.	12.11	12.92	-0.83	29.58	8.16	14.52	0.90	26.80	8.50	13.24	2.15	24.92
23500.	12.57	12.59	-2.23	29.86	9.06	13.89	-0.75	27.38	7.85	13.89	0.17	25.82
24000.	12.63	12.33	-2.80	30.19	10.92	12.97	-2.11	28.94	10.03	13.17	-3.13	28.05
24500.	14.21	11.00	-2.58	32.51	13.01	11.78	-1.74	31.16	12.66	11.67	-3.30	30.34
25000.	15.06	9.95	-2.97	34.17	15.08	9.88	-1.90	33.11	15.08	9.74	-2.07	32.43
25500.	17.81	7.30	-2.85	35.68	17.54	7.43	-2.19	34.75	16.65	8.22	-1.64	33.54
26000.	19.97	5.57	-1.93	36.77	18.60	6.18	-1.90	35.01	17.65	6.94	-1.43	33.75
26500.	20.91	5.07	-1.31	37.29	19.35	5.56	-1.29	35.16	18.25	6.34	-1.23	32.97
27000.	21.82	4.75	-1.05	37.61	20.14	5.46	-1.18	34.55	18.68	6.07	-1.25	31.41
27500.	22.44	5.15	-0.82	37.07	20.77	5.50	-1.08	34.07	19.12	6.07	-1.04	29.81
28000.	22.86	5.50	-0.24	35.85	21.22	5.51	-0.36	32.28	19.56	6.05	-0.49	28.08
28500.	22.69	6.36	0.80	33.55	21.23	6.01	0.51	29.95	19.64	5.77	-0.53	25.74
29000.	21.85	7.08	1.80	30.64	20.50	6.31	1.60	27.07	19.47	5.45	-0.35	23.11
29500.	20.62	8.32	2.59	26.96	19.39	6.92	3.00	24.48	18.20	7.02	0.60	21.64
30000.	19.61	9.70	1.85	23.54	18.31	8.37	1.32	21.50	16.92	8.15	0.22	19.53
30500.	18.78	10.18	0.77	20.28	18.10	9.34	0.46	19.19	17.37	8.57	0.21	18.21
31000.	19.16	10.04	-0.19	19.19	18.97	9.79	0.03	18.53	18.20	9.15	0.00	17.23
31500.	20.16	10.13	-0.57	18.33	19.83	9.07	-0.19	17.23	19.30	8.03	-0.01	15.55
32000.	21.04	7.96	0.53	16.42	20.69	7.03	0.59	15.11	20.09	6.83	-0.10	13.35
32500.	21.47	5.92	2.41	15.12	20.70	4.68	0.92	11.66	19.80	5.07	-0.17	8.87
33000.	20.54	3.89	1.77	11.35	19.79	2.33	0.36	7.58	19.28	3.36	-0.52	-99.99
33500.	19.93	1.86	0.91	-99.99	19.53	2.54	-0.28	-99.99	19.15	3.57	-1.19	-99.99
34000.	20.07	3.06	0.09	-99.99	19.55	3.56	-1.06	-99.99	19.10	4.70	-1.34	-99.99
34500.	19.88	4.37	-0.25	-99.99	19.35	5.25	-0.65	-99.99	18.92	6.41	-0.52	-99.99
35000.	19.43	6.38	0.05	-99.99	18.97	7.32	-0.11	-99.99	18.78	7.22	-0.11	-99.99
35500.	19.04	7.53	0.07	-99.99	18.90	7.19	0.05	-99.99	18.75	6.90	0.04	-99.99
36000.	18.99	7.20	0.19	-99.99	18.87	6.85	0.18	-99.99	18.64	7.19	0.05	-99.99
36500.	18.89	7.34	0.20	-99.99	18.69	7.57	0.06	-99.99	18.47	7.89	-0.05	-99.99
37000.	18.74	8.01	0.05	-99.99	18.56	8.18	-0.05	-99.99	18.48	8.06	-0.05	-99.99
37500.	18.70	8.29	0.00	-99.99	18.62	8.15	-0.01	-99.99	18.54	8.03	0.00	-99.99

TABLE F.7. (continued).

Elevation: 1000 ft AGL

	PLANE 1				PLANE 2				PLANE 3			
X	WX	WY	WZ	DBZ	WX	WY	WZ	DBZ	WX	WY	WZ	DBZ
-37500.	22.22	4.02	0.10	-99.99	22.12	3.92	0.09	-99.99	22.02	3.83	0.08	-99.99
-37000.	21.98	3.74	0.12	-99.99	21.88	3.65	0.11	-99.99	21.94	3.74	0.02	-99.99
-36500.	21.83	3.59	0.08	-99.99	21.94	3.73	-0.04	-99.99	22.05	3.88	-0.16	-99.99
-36000.	21.92	3.72	-0.11	-99.99	22.04	3.86	-0.21	-99.99	22.06	3.88	-0.22	-99.99
-35500.	21.95	3.75	-0.23	-99.99	21.98	3.76	-0.22	-99.99	22.00	3.77	-0.21	-99.99
-35000.	21.89	3.63	-0.20	-99.99	21.93	3.66	-0.20	-99.99	22.06	3.82	-0.20	-99.99
-34500.	21.90	3.64	-0.19	-99.99	22.02	3.79	-0.18	-99.99	22.15	3.95	-0.18	-99.99
-34000.	21.99	3.77	-0.17	-99.99	22.08	3.87	-0.17	-99.99	22.12	3.89	-0.19	-99.99
-33500.	21.98	3.75	-0.17	-99.99	22.03	3.76	-0.19	-99.99	22.07	3.77	-0.21	-99.99
-33000.	21.90	3.62	-0.18	-99.99	22.01	3.71	-0.19	-99.99	22.14	3.87	-0.19	-99.99
-32500.	21.94	3.68	-0.19	-99.99	22.09	3.85	-0.19	-99.99	22.23	4.01	-0.18	-99.99
-32000.	22.02	3.82	-0.18	-99.99	22.11	3.88	-0.19	-99.99	22.17	3.89	-0.20	-99.99
-31500.	21.98	3.74	-0.19	-99.99	22.04	3.75	-0.19	-99.99	22.11	3.78	-0.20	-99.99
-31000.	21.92	3.60	-0.20	-99.99	22.05	3.75	-0.14	-99.99	22.20	3.90	-0.09	-99.99
-30500.	21.98	3.71	-0.09	-99.99	22.12	3.87	-0.03	-99.99	22.23	3.98	-0.01	-99.99
-30000.	22.03	3.83	0.04	-99.99	22.03	3.84	-0.01	-99.99	22.03	3.87	-0.06	-99.99
-29500.	21.83	3.66	-0.01	-99.99	21.84	3.68	-0.06	-99.99	21.94	3.80	-0.18	-99.99
-29000.	21.66	3.52	-0.10	-99.99	21.87	3.70	-0.28	-99.99	22.07	3.88	-0.47	-99.99
-28500.	21.79	3.61	-0.39	-99.99	22.00	3.80	-0.58	-99.99	22.24	3.85	-0.67	-99.99
-28000.	21.93	3.61	-0.61	-99.99	22.21	3.59	-0.67	-99.99	22.49	3.59	-0.72	-99.99
-27500.	22.12	3.29	-0.68	-99.99	22.41	3.29	-0.73	-99.99	22.68	3.51	-0.64	-99.99
-27000.	22.28	3.12	-0.65	-99.99	22.56	3.39	-0.53	-99.99	22.83	3.64	-0.42	-99.99
-26500.	22.41	3.25	-0.41	-99.99	22.69	3.51	-0.33	-99.99	22.88	3.47	-0.50	-99.99
-26000.	22.45	3.09	-0.40	-99.99	22.65	3.06	-0.60	-99.99	22.87	3.07	-0.77	-99.99
-25500.	22.34	2.54	-0.69	-99.99	22.62	2.64	-0.81	-99.99	23.05	3.04	-0.72	-99.99
-25000.	22.42	2.37	-0.70	-99.99	22.87	2.81	-0.63	-99.99	23.30	3.20	-0.54	-99.99
-24500.	22.69	2.57	-0.43	-99.99	23.03	2.69	-0.50	-99.99	23.25	2.45	-0.66	-99.99
-24000.	22.61	1.76	-0.25	-99.99	22.83	1.48	-0.49	-99.99	23.11	1.35	-0.00	-99.99
-23500.	22.26	0.31	-0.04	-99.99	22.78	0.28	-0.83	-99.99	23.44	0.38	-1.67	-99.99
-23000.	22.46	-0.70	-1.16	-99.99	23.11	-0.68	-2.22	-99.99	23.77	-0.53	-2.80	55.07
-22500.	22.88	-1.49	-2.88	-99.99	23.61	-0.79	-2.97	55.38	24.24	-0.04	-2.59	55.84
-22000.	23.65	-0.75	-3.26	56.02	24.39	0.11	-3.04	56.45	24.85	0.68	-2.32	56.72
-21500.	24.32	0.02	-3.56	57.30	25.04	0.86	-3.04	57.34	25.21	1.16	-2.12	57.46
-21000.	24.68	0.27	-3.51	57.87	25.42	1.22	-2.80	57.95	25.63	1.71	-2.09	58.00
-20500.	25.16	0.49	-3.81	58.33	25.68	1.38	-3.05	58.29	25.89	2.09	-2.52	58.18
-20000.	25.57	0.59	-3.55	58.51	26.14	1.62	-3.23	58.59	26.08	2.13	-2.76	58.30
-19500.	25.85	0.52	-3.21	58.64	26.20	1.42	-2.76	58.66	26.15	1.93	-2.49	58.29
-19000.	25.72	0.24	-2.48	58.75	26.02	1.04	-2.03	58.69	26.04	1.61	-1.97	58.24
-18500.	25.51	0.18	-1.79	58.79	25.59	0.87	-1.68	58.56	25.58	1.26	-1.66	58.00
-18000.	25.04	0.37	-1.54	58.73	25.15	0.98	-1.27	58.56	25.32	1.44	-1.86	57.86
-17500.	24.66	0.59	-1.85	58.79	24.90	1.14	-2.24	58.44	25.16	1.75	-2.69	57.80
-17000.	24.43	0.56	-2.70	58.90	24.69	1.25	-3.06	58.55	25.27	2.30	-3.59	57.82
-16500.	24.64	0.97	-3.41	58.89	24.96	1.84	-3.59	58.67	25.54	2.92	-4.20	57.89
-16000.	25.26	1.87	-3.74	58.90	25.49	2.61	-3.93	58.58	25.99	3.69	-4.00	57.78
-15500.	25.86	2.55	-3.58	58.74	26.14	3.41	-3.66	58.22	26.53	4.41	-3.89	57.52
-15000.	26.29	2.85	-3.11	58.49	26.64	4.03	-3.22	57.87	26.88	5.24	-2.86	56.93
-14500.	26.62	3.28	-2.55	58.12	27.03	4.56	-2.75	57.29	27.28	5.89	-2.28	56.33
-14000.	26.87	3.69	-1.99	57.81	27.07	5.21	-1.54	56.81	26.99	6.80	-0.17	55.73
-13500.	26.61	4.47	-0.87	57.32	26.87	6.18	0.14	56.36	26.57	7.70	1.84	55.19
-13000.	26.29	5.07	-0.22	56.95	25.91	6.85	1.67	55.90	24.73	8.07	3.55	54.66
-12500.	24.99	5.53	1.09	56.58	24.29	7.22	3.27	55.46	22.90	8.44	5.09	54.15
-12000.	23.65	5.80	1.86	56.37	22.14	7.10	3.89	54.94	20.16	8.04	4.98	53.46
-11500.	21.27	5.34	2.27	56.01	19.64	6.66	4.68	54.39	17.61	7.44	4.86	52.72
-11000.	19.50	5.24	2.56	55.75	17.43	6.00	3.59	53.66	15.29	6.61	3.79	51.61
-10500.	17.75	4.81	1.55	55.24	15.41	5.43	2.37	53.03	13.45	6.06	2.42	50.55
-10000.	16.99	4.89	0.15	55.02	14.64	5.42	0.34	52.66	12.61	6.01	0.43	50.05
-9500.	17.59	5.58	-2.44	55.11	14.83	6.87	-2.25	52.55	12.47	6.25	-0.81	50.11
-9000.	18.73	6.60	-3.86	55.61	16.02	6.90	-2.09	53.19	12.98	7.00	-0.50	50.51
-8500.	20.09	7.63	-3.17	56.37	17.52	8.09	-1.62	54.11	14.11	7.65	-0.24	51.50
-8000.	20.65	8.16	-2.13	57.41	17.93	8.24	-0.93	55.37	14.94	7.98	0.18	52.81
-7500.	20.01	8.18	-0.62	58.61	17.76	8.28	-0.25	56.51	16.24	8.53	-1.51	54.13
-7000.	19.69	7.91	-1.46	58.98	18.23	8.47	-2.42	57.57	17.18	8.89	-3.95	55.25
-6500.	19.50	7.61	-2.94	59.37	18.66	8.77	-4.08	58.53	18.02	10.01	-4.57	56.12
-6000.	19.76	7.82	-3.48	59.49	19.64	9.48	-4.53	58.44	19.42	11.21	-5.24	56.89
-5500.	19.95	7.86	-3.80	59.16	19.72	9.79	-4.13	58.18	19.29	11.78	-3.39	56.85
-5000.	19.22	7.78	-2.76	58.40	18.99	9.83	-2.55	57.47	18.50	11.87	-1.62	56.20
-4500.	18.30	7.76	-2.07	57.92	17.94	9.67	-2.15	56.88	17.18	11.32	-2.10	55.52
-4000.	17.41	7.93	-2.76	58.07	16.82	9.64	-2.82	56.84	16.25	10.98	-3.02	55.17
-3500.	16.93	8.43	-3.76	58.45	16.79	9.64	-4.41	57.45	16.66	10.76	-5.33	55.82
-3000.	17.84	8.04	-5.21	59.09	17.66	9.40	-6.27	58.22	17.19	10.74	-6.57	56.71
-2500.	18.67	7.43	-5.86	59.72	18.12	9.00	-5.81	58.61	17.53	10.87	-5.15	57.47
-2000.	19.17	6.52	-5.23	59.50	18.36	8.31	-5.01	58.87	17.28	10.45	-3.91	57.61
-1500.	19.29	5.92	-4.93	59.49	17.75	8.05	-4.27	58.87	16.22	10.13	-2.97	57.53
-1000.	18.78	6.10	-4.17	59.48	17.15	8.16	-3.42	58.76	15.79	9.90	-3.35	57.84
-500.	18.68	6.15	-3.62	59.49	17.29	8.04	-4.28	59.16	16.00	9.61	-4.64	58.34

TABLE F.7. (continued).

Elevation: 1000 ft AGL

0.	10.90	6.11	-4.39	59.81	17.49	8.06	-5.22	59.80	16.77	9.73	-5.74	58.88
500.	19.73	6.12	-5.79	60.24	19.12	7.01	-6.93	60.12	18.24	9.64	-7.49	59.50
1000.	21.65	6.13	-7.31	60.58	20.93	7.63	-8.46	60.44	19.82	9.33	-8.50	59.87
1500.	23.16	5.94	-6.60	60.51	22.69	7.05	-7.42	60.09	21.46	8.99	-7.86	59.57
2000.	24.00	5.44	-4.37	60.17	23.76	6.49	-5.51	59.57	22.40	8.19	-6.37	58.81
2500.	23.96	4.99	-2.51	59.48	23.54	6.10	-3.68	58.66	23.15	7.24	-4.72	57.83
3000.	23.26	4.72	-1.46	58.69	23.44	5.73	-2.57	57.75	23.23	6.97	-4.19	57.08
3500.	23.20	4.62	-1.83	58.17	23.73	5.56	-3.14	56.92	23.55	6.71	-4.36	56.16
4000.	23.55	4.58	-2.70	57.88	24.17	5.55	-3.48	56.86	24.73	6.53	-3.90	56.41
4500.	24.12	4.63	-2.84	57.82	24.94	5.65	-3.34	57.09	25.62	6.59	-3.59	56.76
5000.	24.76	4.56	-3.07	57.74	25.61	5.86	-3.05	56.86	26.44	6.90	-3.07	56.49
5500.	25.04	4.67	-2.52	57.38	25.96	6.00	-2.48	56.56	27.01	7.33	-2.61	55.96
6000.	25.25	5.14	-1.69	56.82	26.06	6.74	-2.11	56.13	27.37	8.17	-2.48	55.24
6500.	24.87	6.66	-1.06	56.19	25.77	8.19	-1.76	55.78	27.26	9.33	-2.12	54.83
7000.	24.06	7.83	-0.57	55.47	25.26	9.33	-1.32	55.07	26.80	10.59	-1.60	54.36
7500.	23.28	8.76	-0.95	55.03	24.47	10.25	-1.39	54.47	26.45	11.53	-1.36	53.67
8000.	22.92	9.54	-0.98	54.91	24.33	10.39	-1.39	54.03	26.48	11.61	-1.39	53.04
8500.	22.93	9.61	0.25	55.10	24.42	10.41	-0.73	53.97	26.39	11.36	-0.93	52.80
9000.	22.43	9.45	1.75	55.63	24.07	10.04	0.82	54.30	26.19	10.79	0.25	52.53
9500.	21.64	9.13	1.97	55.79	23.23	9.54	1.91	55.10	25.24	10 45	0.84	53.08
10000.	20.96	8.59	1.58	55.88	22.36	8.91	1.07	55.45	24.15	9.91	0.40	53.77
10500.	20.29	7.81	0.92	55.84	21.76	8.32	0.13	55.14	23.27	9.18	-0.65	53.82
11000.	19.95	7.41	-0.61	54.22	21.37	8.07	-1.17	54.00	22.78	8.69	-1.76	53.01
11500.	20.00	7.27	-3.87	51.71	21.20	8.15	-3.07	52.04	22.30	9.37	-3.48	50.33
12000.	21.29	7.40	-7.38	47.72	22.19	8.62	-6.53	47.34	22.43	10.04	-6.04	46.65
12500.	23.99	7.30	-9.81	42.97	23.74	9.00	-8.38	43.58	22.84	10.79	-6.87	43.39
13000.	25.37	7.71	-8.07	41.52	24.93	9.51	-6.94	42.18	23.81	11.44	-6.25	41.38
13500.	26.16	8.19	-5.64	41.97	24.82	10.81	-5.34	42.36	23.08	13.45	-4.85	42.37
14000.	25.23	10.28	-6.02	42.90	23.55	13.05	-5.40	43.35	21.86	15.69	-4.06	43.60
14500.	24.61	12.38	-7.26	43.50	23.48	14.71	-6.87	44.05	22.14	17.13	-5.98	44.30
15000.	25.88	13.04	-8.11	43.36	24.53	15.65	-8.42	44.14	23.40	17.39	-6.68	44.47
15500.	27.40	13.21	-7.89	43.12	26.48	14.67	-5.84	43.48	25.96	15.45	-3.34	43.77
16000.	28.64	12.53	-3.84	41.93	28.38	13.48	-2.13	42.64	27.58	13.63	-0.14	43.03
16500.	29.70	11.68	-0.89	40.89	29.15	11.69	0.10	41.87	28.17	11.49	1.72	42.41
17000.	30.44	9.86	1.03	40.48	29.73	9.77	2.13	41.20	28.45	9.43	1.88	40.90
17500.	30.93	8.42	2.65	40.04	29.83	7.66	2.14	39.55	28.46	7.22	0.93	38.65
18000.	30.62	6.84	4.36	38.85	29.91	5.59	2.86	38.15	27.66	6.55	1.42	35.36
18500.	29.19	6.28	5.99	36.64	27.49	6.43	4.17	34.10	25.90	6.96	2.74	31.21
19000.	25.92	6.93	5.56	32.91	24.61	7.31	4.63	30.46	23.62	7.75	3.83	27.90
19500.	22.36	7.96	6.01	30.24	21.64	8.69	6.50	28.15	20.75	9.05	4.97	25.27
20000.	18.22	10.36	6.84	29.44	18.01	10.49	8.03	26.91	17.60	10.50	7.11	24.85
20500.	14.00	13.03	5.50	29.95	13.77	12.83	7.06	27.41	13.59	12.26	9.79	24.60
21000.	11.55	14.67	1.89	31.34	10.38	14.87	4.05	28.36	11.20	13.43	5.41	26.00
21500.	11.41	14.81	-0.71	32.99	9.49	15.26	0.47	29.61	9.47	14.31	1.11	27.24
22000.	12.23	14.47	-0.86	34.51	10.03	14.84	0.53	31.02	8.54	14.74	2.98	28.44
22500.	12.95	13.57	-0.97	34.25	10.48	14.38	2.16	31.50	8.47	14.69	5.23	29.51
23000.	13.50	12.77	-1.85	33.79	10.95	13.95	1.07	31.77	9.04	14.48	3.32	30.18
23500.	13.93	12.23	-4.19	34.50	11.60	13.26	-1.73	32.63	9.86	13.98	-0.22	31.25
24000.	14.21	11.72	-5.15	35.32	12.84	12.37	-4.07	34.27	11.60	13.03	-5.93	33.46
24500.	15.66	10.44	-4.87	37.26	14.50	11.13	-3.49	36.32	13.59	11.61	-6.20	35.31
25000.	16.77	9.33	-5.54	38.64	16.22	9.59	-3.71	37.44	15.81	9.80	-3.97	36.34
25500.	18.52	7.54	-5.28	39.47	17.93	7.86	-4.12	38.29	17.12	8.63	-3.11	36.65
26000.	19.94	6.45	-3.64	40.01	18.75	7.00	-3.57	38.22	17.92	7.76	-2.69	36.48
26500.	20.79	6.12	-2.56	40.16	19.43	6.59	-2.51	38.11	18.46	7.27	-2.28	35.52
27000.	21.59	5.89	-2.12	40.29	20.14	6.52	-2.28	37.32	18.87	7.06	-2.30	33.96
27500.	22.19	6.18	-1.68	39.63	20.73	6.58	-2.09	36.97	19.28	7.07	-1.95	32.65
28000.	22.55	6.48	-0.60	38.66	21.19	6.61	-0.78	36.18	19.72	7.07	-0.97	31.78
28500.	22.37	7.35	1.31	37.00	21.21	7.22	0.82	34.37	19.93	7.37	-1.00	30.53
29000.	21.81	8.14	3.13	34.02	20.77	8.03	2.71	31.40	19.79	7.97	-0.67	28.19
29500.	20.96	9.15	4.61	30.14	20.20	8.80	5.13	28.82	19.20	8.96	1.03	26.64
30000.	20.23	10.17	3.38	27.07	19.50	9.89	2.31	26.16	18.58	9.95	0.41	24.85
30500.	19.68	10.72	1.45	24.63	19.30	10.36	0.82	23.91	18.90	10.05	0.32	23.04
31000.	19.90	10.45	-0.30	23.56	19.73	10.08	-0.04	22.73	19.32	9.85	-0.09	21.45
31500.	20.59	10.02	-1.00	22.35	20.33	9.26	-0.44	21.00	20.04	8.82	-0.07	19.29
32000.	21.33	8.04	0.98	19.50	21.07	7.52	0.99	18.12	20.58	7.64	-0.28	16.54
32500.	21.68	6.00	4.33	17.31	21.02	5.24	1.57	13.54	20.15	5.61	-0.35	10.68
33000.	21.00	3.72	3.17	12.59	20.29	2.86	0.51	8.50	19.63	3.84	-1.04	-99.99
33500.	20.64	1.41	1.66	-99.99	19.94	2.68	-0.64	-99.99	19.37	3.89	-2.34	-99.99
34000.	20.21	2.78	0.12	-99.99	19.64	3.55	-2.08	-99.99	19.18	4.79	-2.60	-99.99
34500.	19.70	4.18	-0.56	-99.99	19.35	5.23	-1.29	-99.99	18.98	6.44	-1.03	-99.99
35000.	19.33	6.28	0.02	-99.99	18.99	7.33	-0.27	-99.99	18.82	7.25	-0.25	-99.99
35500.	19.04	7.57	0.07	-99.99	18.91	7.22	0.05	-99.99	18.76	6.95	0.04	-99.99
36000.	18.97	7.23	0.34	-99.99	18.85	6.88	0.32	-99.99	18.71	7.26	0.06	-99.99
36500.	18.91	7.38	0.36	-99.99	18.80	7.66	0.09	-99.99	18.66	8.01	-0.15	-99.99
37000.	18.89	8.12	0.07	-99.99	18.77	8.32	-0.13	-99.99	18.69	8.18	-0.12	-99.99
37500.	18.90	8.42	-0.03	-99.99	18.82	8.27	-0.01	-99.99	18.74	8.13	0.02	-99.99

TABLE F.7. (continued).

Elevation: 1500 ft AGL

	PLANE 1				PLANE 2				PLANE 3			
X	WX	WY	WZ	DBZ	WX	WY	WZ	DBZ	WX	WY	WZ	DBZ
-37500.	21.90	3.45	0.15	-99.99	21.76	3.42	0.14	-99.99	21.62	3.38	0.13	-99.99
-37000.	21.61	3.29	0.19	-99.99	21.47	3.25	0.18	-99.99	21.53	3.33	0.03	-99.99
-36500.	21.42	3.21	0.12	-99.99	21.54	3.32	-0.05	-99.99	21.66	3.43	-0.24	-99.99
-36000.	21.54	3.29	-0.17	-99.99	21.67	3.42	-0.33	-99.99	21.67	3.44	-0.34	-99.99
-35500.	21.59	3.31	-0.34	-99.99	21.60	3.34	-0.33	-99.99	21.60	3.37	-0.33	-99.99
-35000.	21.50	3.23	-0.30	-99.99	21.53	3.27	-0.30	-99.99	21.66	3.40	-0.31	-99.99
-34500.	21.52	3.24	-0.28	-99.99	21.66	3.36	-0.27	-99.99	21.79	3.48	-0.28	-99.99
-34000.	21.63	3.33	-0.25	-99.99	21.74	3.41	-0.26	-99.99	21.76	3.44	-0.29	-99.99
-33500.	21.62	3.32	-0.25	-99.99	21.65	3.34	-0.27	-99.99	21.68	3.37	-0.31	-99.99
-33000.	21.52	3.24	-0.26	-99.99	21.62	3.31	-0.28	-99.99	21.76	3.43	-0.29	-99.99
-32500.	21.57	3.28	-0.27	-99.99	21.73	3.40	-0.28	-99.99	21.87	3.52	-0.28	-99.99
-32000.	21.67	3.36	-0.27	-99.99	21.75	3.41	-0.28	-99.99	21.80	3.44	-0.29	-99.99
-31500.	21.62	3.31	-0.28	-99.99	21.67	3.33	-0.29	-99.99	21.73	3.37	-0.29	-99.99
-31000.	21.53	3.22	-0.30	-99.99	21.68	3.33	-0.22	-99.99	21.84	3.44	-0.14	-99.99
-30500.	21.62	3.29	-0.14	-99.99	21.79	3.40	-0.05	-99.99	21.89	3.51	-0.02	-99.99
-30000.	21.71	3.37	0.04	-99.99	21.68	3.45	-0.03	-99.99	21.66	3.54	-0.09	-99.99
-29500.	21.45	3.35	-0.03	-99.99	21.44	3.46	-0.10	-99.99	21.54	3.56	-0.26	-99.99
-29000.	21.24	3.32	-0.15	-99.99	21.47	3.47	-0.42	-99.99	21.69	3.60	-0.68	-99.99
-28500.	21.38	3.38	-0.56	-99.99	21.61	3.52	-0.83	-99.99	21.85	3.57	-0.96	-99.99
-28000.	21.51	3.38	-0.87	-99.99	21.75	3.40	-0.97	-99.99	22.00	3.41	-1.02	-99.99
-27500.	21.61	3.18	-0.96	-99.99	21.87	3.21	-1.04	-99.99	22.15	3.36	-0.91	-99.99
-27000.	21.72	3.05	-0.91	-99.99	22.02	3.25	-0.75	-99.99	22.32	3.43	-0.60	-99.99
-26500.	21.86	3.13	-0.56	-99.99	22.16	3.32	-0.46	-99.99	22.32	3.39	-0.70	-99.99
-26000.	21.85	3.06	-0.53	-99.99	22.02	3.13	-0.82	-99.99	22.21	3.25	-1.08	-99.99
-25500.	21.60	2.77	-0.94	-99.99	21.88	2.93	-1.12	-99.99	22.36	3.26	-0.99	-99.99
-25000.	21.62	2.68	-0.94	-99.99	22.12	3.04	-0.82	-99.99	22.59	3.35	-0.70	-99.99
-24500.	21.88	2.82	-0.51	-99.99	22.23	3.01	-0.58	-99.99	22.39	3.03	-0.79	-99.99
-24000.	21.59	2.40	-0.15	-99.99	21.75	2.40	-0.45	-99.99	22.01	2.52	-0.87	-99.99
-23500.	20.88	1.58	0.26	-99.99	21.44	1.77	-0.85	-99.99	22.32	2.08	-2.16	-99.99
-23000.	20.83	1.12	-1.45	-99.99	21.56	1.30	-2.88	-99.99	22.52	1.65	-3.83	55.82
-22500.	20.98	0.92	-4.10	-99.99	21.95	1.56	-4.12	56.14	22.91	2.28	-3.59	56.50
-22000.	21.78	1.80	-4.79	56.79	22.77	2.60	-4.40	57.12	23.50	3.12	-3.32	57.29
-21500.	22.62	2.61	-5.31	57.87	23.48	3.35	-4.39	57.91	23.92	3.54	-2.95	57.92
-21000.	23.15	2.72	-5.11	58.31	24.01	3.58	-3.90	58.39	24.42	3.91	-2.75	58.37
-20500.	23.77	2.78	-5.41	58.68	24.42	3.42	-4.11	58.62	24.76	3.89	-3.15	58.50
-20000.	24.14	2.48	-4.84	58.78	25.00	3.27	-4.19	58.81	25.04	3.51	-3.34	58.58
-19500.	24.33	2.10	-4.24	58.89	25.05	2.73	-3.36	58.92	25.11	2.92	-2.81	58.64
-19000.	24.13	1.56	-3.15	59.04	24.76	2.07	-2.24	59.02	25.04	2.30	-1.98	58.68
-18500.	23.96	1.22	-2.19	59.11	24.39	1.61	-1.80	58.96	24.67	1.72	-1.62	58.54
-18000.	23.63	1.08	-1.80	59.11	24.11	1.41	-1.21	59.02	24.46	1.49	-2.00	58.41
-17500.	23.36	1.01	-2.16	59.21	23.90	1.26	-2.57	58.93	24.37	1.44	-3.18	58.36
-17000.	23.19	0.78	-3.38	59.33	23.72	1.12	-3.71	59.07	24.46	1.51	-4.48	58.37
-16500.	23.41	0.84	-4.57	59.35	23.88	1.27	-4.56	59.23	24.60	1.63	-5.47	58.46
-16000.	24.01	1.28	-5.22	59.41	24.35	1.55	-5.26	59.18	24.99	1.91	-5.40	58.40
-15500.	24.58	1.39	-5.12	59.26	24.97	1.70	-5.10	58.83	25.48	2.09	-5.45	58.22
-15000.	24.97	1.08	-4.54	58.97	25.51	1.72	-4.63	58.49	26.04	2.32	-4.36	57.63
-14500.	25.58	1.01	-4.04	58.59	26.17	1.70	-4.35	57.95	26.67	2.41	-3.89	57.08
-14000.	26.29	1.03	-3.53	58.28	26.74	2.05	-3.01	57.44	27.04	3.23	-1.33	56.46
-13500.	26.66	1.65	-2.27	57.78	27.21	2.93	-1.00	56.92	27.40	4.10	1.15	55.86
-13000.	27.15	2.26	-1.65	57.42	27.27	3.70	1.04	56.40	27.01	4.87	3.62	55.22
-12500.	27.03	2.86	0.21	57.09	26.97	4.30	3.31	55.96	26.46	5.53	5.93	54.64
-12000.	26.88	3.18	1.44	56.95	26.14	4.50	4.37	55.48	25.04	5.58	6.15	53.96
-11500.	25.81	2.96	2.24	56.69	25.04	4.44	5.66	54.99	23.72	5.46	6.20	53.32
-11000.	24.99	2.92	2.77	56.63	23.70	4.17	4.31	54.55	22.24	5.26	4.84	52.44
-10500.	23.83	2.66	1.41	56.64	22.39	3.89	2.69	54.43	21.00	5.14	2.99	51.73
-10000.	23.42	2.71	-0.55	56.76	21.88	3.89	-0.11	54.58	20.34	5.09	0.26	51.74
-9500.	24.13	3.18	-4.00	56.95	22.18	4.19	-3.61	54.72	20.22	4.96	-1.56	52.09
-9000.	25.15	3.74	-5.73	57.40	22.95	4.41	-3.36	55.14	20.45	4.91	-1.38	52.52
-8500.	25.53	4.15	-4.32	57.85	23.92	4.78	-2.51	55.89	21.14	4.99	-1.13	53.44
-8000.	25.42	4.37	-2.61	58.63	23.86	4.74	-1.55	57.07	21.55	4.98	-0.61	54.74
-7500.	24.84	4.43	-0.65	59.67	23.48	4.84	-0.63	58.04	22.44	5.49	-2.66	56.14
-7000.	24.61	4.81	-2.01	60.00	24.15	5.47	-3.57	58.97	23.28	6.14	-5.87	57.20
-6500.	24.77	5.33	-4.23	60.30	24.84	6.19	-5.87	59.75	24.00	7.27	-6.59	57.93
-6000.	25.00	5.98	-4.86	60.35	25.22	7.11	-6.28	59.64	25.01	8.39	-7.31	58.53
-5500.	24.96	6.33	-5.07	59.98	25.06	7.68	-5.55	59.41	24.68	9.08	-4.75	58.61
-5000.	23.96	6.27	-3.76	59.33	24.16	7.88	-3.30	58.88	23.74	9.40	-2.27	58.15
-4500.	22.93	6.11	-3.06	58.91	22.99	7.92	-2.85	58.36	22.52	9.42	-2.72	57.59
-4000.	22.12	6.67	-4.14	58.86	21.97	8.39	-3.85	58.18	21.64	9.54	-3.81	57.23
-3500.	21.76	7.54	-5.87	59.06	21.80	8.74	-5.85	58.41	21.78	9.55	-6.80	57.47
-3000.	22.37	7.21	-7.63	59.58	22.24	8.62	-8.11	58.89	21.92	9.52	-8.30	57.92
-2500.	23.10	6.65	-8.20	60.20	22.46	7.70	-7.58	59.30	21.84	8.93	-6.54	58.39
-2000.	23.07	5.06	-7.02	60.16	22.47	6.31	-6.43	59.66	21.37	7.97	-5.10	58.64
-1500.	22.77	3.96	-6.44	60.32	21.68	5.72	-5.63	59.90	20.23	7.46	-4.14	58.84
-1000.	22.08	3.84	-6.03	60.57	20.86	5.54	-5.01	60.06	19.74	7.23	-4.95	59.29
-500.	21.95	3.87	-5.79	60.70	21.05	5.75	-6.56	60.49	19.98	7.29	-7.09	59.80

TABLE F.7. (continued).

Elevation: 1500 ft AGL

0.	22.40	4.37	-6.97	60.93	21.56	6.28	-7.99	61.10	21.08	7.75	-8.96	60.26
500.	23.54	4.97	-8.74	61.22	23.32	6.49	-10.12	61.23	22.93	8.03	-11.26	60.80
1000.	25.12	5.63	-10.16	61.44	24.99	6.91	-11.72	61.40	24.48	8.10	-12.32	60.97
1500.	25.81	5.51	-8.70	61.31	25.99	6.45	-9.87	60.97	25.54	8.06	-11.18	60.58
2000.	25.70	4.53	-5.30	60.93	26.08	5.58	-6.95	60.44	25.42	7.19	-8.75	59.87
2500.	24.80	3.52	-2.82	60.27	24.95	4.67	-4.66	59.64	25.05	5.91	-6.30	59.07
3000.	23.56	2.78	-1.91	59.55	24.08	3.93	-3.43	58.75	24.34	5.51	-5.83	58.26
3500.	23.35	2.68	-2.86	59.10	23.96	3.85	-4.59	57.98	24.05	5.26	-6.37	57.35
4000.	23.80	2.79	-4.33	58.83	24.45	3.91	-5.40	57.89	25.07	5.06	-6.06	57.41
4500.	24.61	2.82	-4.67	58.73	25.42	3.91	-5.39	58.05	26.11	5.10	-5.87	57.61
5000.	25.51	2.72	-4.94	58.61	26.46	4.15	-5.13	57.65	27.22	5.53	-5.25	57.02
5500.	26.29	3.15	-4.27	58.00	27.32	4.60	-4.44	57.04	28.28	6.09	-4.67	56.19
6000.	26.95	3.82	-3.19	57.24	27.87	5.46	-3.74	56.34	28.93	7.02	-4.13	55.15
6500.	27.10	5.12	-2.14	56.49	28.22	6.69	-2.95	55.75	29.16	8.07	-3.36	54.54
7000.	26.84	6.20	-1.43	55.88	27.88	7.74	-2.29	55.17	28.88	9.13	-2.56	54.08
7500.	26.29	7.04	-1.91	55.88	27.30	8.63	-2.39	54.99	28.74	10.11	-2.27	53.60
8000.	25.94	7.73	-1.93	55.95	27.25	9.11	-2.65	55.00	28.83	10.54	-2.59	53.45
8500.	25.93	8.08	-0.32	56.13	27.29	9.48	-1.94	55.08	29.06	10.70	-2.13	53.82
9000.	25.79	8.20	1.74	56.60	27.49	9.35	0.28	55.51	29.52	10.63	-0.60	54.21
9500.	25.59	8.33	2.13	56.26	27.32	9.10	1.86	56.09	29.02	10.45	0.44	54.46
10000.	25.23	8.35	1.76	55.60	26.72	8.91	0.93	55.70	28.25	10.19	0.10	54.47
10500.	24.66	8.22	0.98	54.69	26.18	8.95	-0.16	54.53	27.42	10.12	-1.17	53.60
11000.	24.31	8.35	-1.03	52.39	25.72	9.25	-1.71	52.62	26.77	10.33	-2.51	51.87
11500.	24.41	8.67	-5.49	49.43	25.53	9.49	-4.10	50.22	26.11	10.69	-4.51	48.81
12000.	25.17	8.84	-10.18	45.68	25.82	9.74	-8.67	45.65	25.84	10.91	-7.73	44.96
12500.	26.08	8.70	-13.17	42.05	26.47	9.85	-11.06	42.72	25.48	10.95	-9.02	42.74
13000.	27.02	8.62	-10.40	41.90	26.52	9.96	-8.90	42.58	25.40	11.16	-8.11	41.98
13500.	26.46	8.63	-6.68	43.18	25.23	10.84	-6.52	43.57	23.62	12.96	-6.02	43.80
14000.	24.35	10.15	-7.50	43.91	22.82	12.54	-6.80	44.59	21.44	15.00	-4.89	45.35
14500.	22.71	11.74	-9.52	43.78	21.61	13.74	-9.33	44.41	20.73	16.07	-8.06	45.03
15000.	22.93	12.51	-10.89	42.14	21.58	14.54	-11.90	43.01	20.93	16.11	-9.63	43.82
15500.	23.35	12.91	-10.69	40.42	22.73	13.67	-8.53	41.13	22.60	14.12	-5.55	41.60
16000.	23.91	12.07	-5.46	38.74	23.89	12.38	-3.67	39.41	23.89	12.65	-1.35	39.71
16500.	24.57	11.19	-1.72	37.18	24.93	11.02	-0.82	38.02	24.93	11.27	1.09	38.29
17000.	25.78	9.87	0.69	36.30	26.04	9.70	1.78	36.87	25.66	9.94	1.51	36.06
17500.	26.70	9.05	2.93	35.54	26.54	8.89	2.43	34.81	26.00	8.91	0.07	33.14
18000.	26.86	9.09	5.79	34.54	27.12	8.26	4.15	33.50	25.31	8.83	2.17	30.46
18500.	25.87	9.62	8.44	33.36	24.81	9.18	6.25	30.80	23.54	9.25	4.44	27.58
19000.	23.31	10.22	8.40	31.86	22.41	10.03	7.29	29.03	21.31	9.04	6.05	26.28
19500.	20.20	10.88	9.11	31.33	19.63	11.05	9.88	28.66	18.65	10.85	7.64	25.87
20000.	16.97	12.23	9.76	31.79	16.59	12.17	11.72	28.91	16.08	11.92	10.51	26.83
20500.	14.32	13.74	7.56	32.80	13.90	13.58	10.03	30.24	13.27	13.18	13.94	28.03
21000.	13.05	14.33	2.56	34.01	12.11	14.67	5.84	31.49	12.22	13.72	8.23	29.53
21500.	13.32	13.97	-1.39	35.76	12.18	14.39	0.84	33.31	11.80	13.85	2.46	31.23
22000.	14.05	13.64	-2.58	37.10	12.83	13.81	0.06	34.69	11.93	13.63	3.77	32.60
22500.	14.51	13.13	-2.59	37.28	13.35	13.38	1.47	35.27	12.25	13.39	5.58	33.58
23000.	14.82	12.71	-3.21	37.24	13.73	13.06	-0.07	35.91	12.66	13.23	2.74	34.49
23500.	15.07	12.34	-5.68	38.09	14.01	12.66	-3.15	36.84	13.11	12.93	-1.62	35.71
24000.	15.37	11.97	-6.70	39.09	14.60	12.19	-5.74	38.26	13.92	12.44	-8.12	37.58
24500.	16.15	11.49	-6.66	40.79	15.35	11.63	-5.26	39.95	14.87	11.79	-8.38	38.88
25000.	16.91	11.09	-7.37	42.08	16.44	11.03	-5.32	40.76	16.10	11.02	-5.58	39.36
25500.	18.13	10.30	-6.95	42.67	17.61	10.32	-5.58	41.38	16.98	10.48	-4.26	39.24
26000.	19.36	9.66	-4.96	42.77	18.32	9.82	-4.85	41.31	17.62	9.98	-3.63	38.72
26500.	20.08	9.53	-3.70	42.53	19.02	9.52	-3.59	41.22	18.10	9.65	-3.03	37.92
27000.	20.69	9.54	-3.20	42.17	19.56	9.59	-3.24	39.82	18.38	9.72	-2.99	36.73
27500.	21.42	9.22	-2.60	40.95	20.17	9.54	-2.99	38.97	18.76	9.67	-2.62	35.24
28000.	21.66	9.10	-1.16	39.62	20.52	9.39	-1.32	37.75	19.17	9.50	-1.44	33.97
28500.	21.42	9.37	1.32	37.93	20.45	9.51	0.77	35.74	19.29	9.74	-1.35	32.44
29000.	21.02	9.62	3.65	34.88	20.20	9.88	2.95	32.65	19.22	10.16	-0.93	29.87
29500.	20.49	9.93	5.61	31.15	20.08	10.04	5.73	29.86	19.19	10.03	1.16	27.91
30000.	20.16	9.97	4.36	28.29	19.91	9.95	2.73	27.30	19.32	9.93	0.52	25.94
30500.	19.92	9.85	1.99	25.95	19.90	9.53	0.99	25.03	19.83	9.48	0.27	24.03
31000.	20.14	9.04	-0.28	24.57	20.20	8.47	-0.28	23.51	20.10	8.61	-0.37	22.21
31500.	20.68	7.78	-1.19	22.86	20.66	7.56	-0.81	21.61	20.61	7.90	-0.20	20.05
32000.	21.19	6.31	1.27	19.92	21.19	6.48	1.06	18.73	20.94	7.12	-0.58	17.34
32500.	21.47	4.53	5.37	17.65	20.95	4.65	1.74	13.82	20.10	5.18	-0.54	10.98
33000.	20.97	2.52	3.93	12.33	20.31	2.63	0.30	8.25	19.46	3.70	-1.54	-99.99
33500.	20.75	0.67	2.14	-99.99	19.80	2.44	-1.12	-99.99	19.01	3.87	-3.41	-99.99
34000.	19.84	2.19	0.05	-99.99	19.11	3.35	-3.01	-99.99	18.61	4.67	-3.69	-99.99
34500.	18.94	3.74	-0.97	-99.99	18.72	4.90	-1.92	-99.99	18.37	6.10	-1.52	-99.99
35000.	18.61	5.75	-0.16	-99.99	18.36	6.84	-0.49	-99.99	18.18	6.88	-0.43	-99.99
35500.	18.39	7.10	-0.05	-99.99	18.23	6.88	-0.04	-99.99	18.07	6.73	-0.03	-99.99
36000.	18.28	6.95	0.40	-99.99	18.14	6.72	0.39	-99.99	18.04	7.11	0.00	-99.99
36500.	18.24	7.19	0.46	-99.99	18.15	7.49	0.04	-99.99	18.05	7.85	-0.32	-99.99
37000.	18.28	7.93	0.01	-99.99	18.19	8.15	-0.28	-99.99	18.08	8.04	-0.22	-99.99
37500.	18.30	8.24	-0.09	-99.99	18.20	8.12	0.00	-99.99	18.10	8.01	0.08	-99.99

TABLE F.7. (continued).

Elevation: 2000 ft AGL

		PLANE 1				PLANE 2				PLANE 3		
X	WX	WY	WZ	DBZ	WX	WY	WZ	DBZ	WX	WY	WZ	DBZ
-37500.	21.16	3.17	0.20	-99.99	21.01	3.19	0.19	-99.99	20.85	3.20	0.18	-99.99
-37000.	20.83	3.12	0.26	-99.99	20.68	3.13	0.25	-99.99	20.74	3.19	0.05	-99.99
-36500.	20.63	3.09	0.17	-99.99	20.77	3.17	-0.07	-99.99	20.89	3.24	-0.32	-99.99
-36000.	20.77	3.13	-0.23	-99.99	20.91	3.22	-0.45	-99.99	20.91	3.25	-0.46	-99.99
-35500.	20.82	3.13	-0.45	-99.99	20.82	3.18	-0.44	-99.99	20.83	3.22	-0.44	-99.99
-35000.	20.72	3.10	-0.40	-99.99	20.75	3.14	-0.39	-99.99	20.89	3.23	-0.41	-99.99
-34500.	20.75	3.10	-0.37	-99.99	20.89	3.19	-0.37	-99.99	21.03	3.27	-0.38	-99.99
-34000.	20.88	3.15	-0.33	-99.99	20.98	3.22	-0.35	-99.99	21.00	3.25	-0.38	-99.99
-33500.	20.87	3.15	-0.33	-99.99	20.89	3.18	-0.36	-99.99	20.92	3.22	-0.40	-99.99
-33000.	20.77	3.11	-0.34	-99.99	20.86	3.17	-0.36	-99.99	21.01	3.25	-0.38	-99.99
-32500.	20.83	3.13	-0.35	-99.99	20.99	3.21	-0.36	-99.99	21.14	3.30	-0.37	-99.99
-32000.	20.95	3.17	-0.34	-99.99	21.02	3.22	-0.36	-99.99	21.05	3.26	-0.38	-99.99
-31500.	20.88	3.14	-0.36	-99.99	20.92	3.18	-0.37	-99.99	20.98	3.22	-0.37	-99.99
-31000.	20.78	3.09	-0.38	-99.99	20.94	3.18	-0.29	-99.99	21.10	3.25	-0.20	-99.99
-30500.	20.88	3.12	-0.20	-99.99	21.05	3.21	-0.10	-99.99	21.16	3.31	-0.06	-99.99
-30000.	20.98	3.17	0.01	-99.99	20.95	3.31	-0.07	-99.99	20.93	3.46	-0.14	-99.99
-29500.	20.72	3.28	-0.06	-99.99	20.71	3.45	-0.16	-99.99	20.81	3.56	-0.35	-99.99
-29000.	20.50	3.37	-0.21	-99.99	20.74	3.48	-0.54	-99.99	20.97	3.56	-0.87	-99.99
-28500.	20.65	3.38	-0.72	-99.99	20.89	3.49	-1.05	-99.99	21.11	3.55	-1.20	-99.99
-28000.	20.77	3.38	-1.09	-99.99	20.98	3.43	-1.20	-99.99	21.20	3.48	-1.26	-99.99
-27500.	20.80	3.27	-1.19	-99.99	21.02	3.34	-1.28	-99.99	21.32	3.44	-1.14	-99.99
-27000.	20.86	3.20	-1.12	-99.99	21.18	3.34	-0.94	-99.99	21.50	3.46	-0.78	-99.99
-26500.	21.01	3.22	-0.69	-99.99	21.33	3.37	-0.58	-99.99	21.47	3.56	-0.90	-99.99
-26000.	20.95	3.25	-0.64	-99.99	21.11	3.45	-1.02	-99.99	21.30	3.67	-1.33	-99.99
-25500.	20.61	3.23	-1.15	-99.99	20.89	3.46	-1.37	-99.99	21.41	3.70	-1.21	-99.99
-25000.	20.56	3.21	-1.12	-99.99	21.13	3.49	-0.96	-99.99	21.64	3.71	-0.84	-99.99
-24500.	20.83	3.28	-0.52	-99.99	21.15	3.56	-0.61	-99.99	21.21	3.90	-0.90	-99.99
-24000.	20.24	3.27	0.05	-99.99	20.28	3.61	-0.33	-99.99	20.49	4.05	-0.91	-99.99
-23500.	19.05	3.10	0.66	-99.99	19.53	3.66	-0.80	-99.99	20.37	4.33	-2.57	-99.99
-23000.	18.57	3.35	-1.73	-99.99	19.21	3.92	-3.50	-99.99	20.15	4.59	-4.78	56.42
-22500.	18.36	3.92	-5.43	-99.99	19.47	4.50	-5.30	56.69	20.69	5.06	-4.51	56.99
-22000.	19.26	4.71	-6.41	57.11	20.45	5.36	-5.72	57.48	21.42	5.69	-4.26	57.63
-21500.	20.32	5.43	-7.07	57.92	21.24	5.81	-5.57	58.11	21.89	5.74	-3.59	58.07
-21000.	20.85	5.33	-6.50	58.23	21.78	5.76	-4.67	58.43	22.39	5.76	-3.11	58.41
-20500.	21.36	5.23	-6.46	58.56	22.10	5.42	-4.72	58.55	22.65	5.49	-3.43	58.48
-20000.	21.38	4.58	-5.66	58.60	22.46	5.02	-4.64	58.64	22.85	4.96	-3.55	58.52
-19500.	21.34	3.93	-4.80	58.73	22.45	4.27	-3.60	58.77	22.93	4.23	-2.86	58.62
-19000.	21.13	3.10	-3.56	58.92	22.16	3.37	-2.31	58.93	22.95	3.47	-1.86	58.73
-18500.	20.96	2.38	-2.59	59.10	22.01	2.69	-1.88	59.01	22.82	2.74	-1.52	58.76
-18000.	20.88	1.93	-2.22	59.23	22.00	2.22	-1.30	59.18	22.75	2.26	-2.07	58.76
-17500.	20.92	1.63	-2.65	59.39	21.97	1.87	-2.93	59.18	22.81	1.98	-3.49	58.79
-17000.	21.10	1.29	-4.17	59.45	22.08	1.59	-4.30	59.29	23.03	1.82	-5.08	58.85
-16500.	21.50	1.07	-5.66	59.47	22.34	1.48	-5.36	59.48	23.26	1.68	-6.35	58.97
-16000.	22.03	1.08	-6.40	59.51	22.78	1.38	-6.24	59.47	23.64	1.70	-6.40	58.95
-15500.	22.43	0.81	-6.28	59.36	23.22	1.16	-6.17	59.17	24.09	1.62	-6.61	58.83
-15000.	22.59	0.27	-5.65	59.09	23.59	0.81	-5.70	58.85	24.46	1.39	-5.53	58.23
-14500.	23.06	-0.03	-5.30	58.74	24.12	0.50	-5.66	58.36	24.96	1.08	-5.21	57.71
-14000.	23.73	-0.23	-4.99	58.49	24.67	0.51	-4.41	57.92	25.37	1.30	-2.50	57.19
-13500.	24.37	0.04	-3.85	58.11	25.30	0.96	-2.32	57.48	25.88	1.71	0.13	56.69
-13000.	25.22	0.38	-3.46	57.89	25.83	1.38	-0.10	57.09	26.15	2.13	2.93	56.15
-12500.	25.80	0.72	-1.35	57.69	26.24	1.69	2.47	56.79	26.38	2.53	5.64	55.73
-12000.	26.42	0.87	0.18	57.66	26.41	1.88	3.77	56.47	26.20	2.72	6.05	55.26
-11500.	26.38	0.74	1.27	57.53	26.39	1.95	5.37	56.13	25.98	2.85	6.23	54.79
-11000.	26.41	0.74	2.03	57.58	26.01	1.98	3.89	55.91	25.47	3.11	4.70	54.14
-10500.	26.01	0.76	0.40	57.86	25.58	2.05	1.98	56.06	25.05	3.38	2.57	53.74
-10000.	26.02	0.91	-1.93	58.19	25.57	2.26	-1.27	56.48	24.90	3.59	-0.57	54.05
-9500.	26.72	1.29	-5.75	58.48	26.02	2.58	-5.24	56.81	25.03	3.49	-2.69	54.50
-9000.	27.51	1.56	-7.45	58.89	26.49	2.42	-4.69	57.10	25.27	3.17	-2.46	54.94
-8500.	27.53	1.58	-5.25	59.12	27.08	2.34	-3.36	57.71	25.63	3.00	-2.13	55.66
-8000.	27.29	1.62	-2.97	59.59	26.95	2.28	-2.31	58.61	25.83	2.90	-1.63	56.73
-7500.	26.85	1.76	-0.77	60.27	26.60	2.45	-1.26	59.24	26.48	3.36	-4.02	57.92
-7000.	26.47	2.54	-2.34	60.36	27.00	3.17	-4.59	59.86	27.04	4.06	-7.67	58.72
-6500.	26.37	3.63	-4.86	60.49	27.38	4.01	-7.09	60.41	27.43	5.05	-8.16	59.27
-6000.	26.29	4.79	-5.30	60.51	27.34	5.28	-7.14	60.30	27.99	6.05	-8.57	59.76
-5500.	25.88	5.70	-5.32	60.16	26.93	6.31	-6.00	60.11	27.52	6.94	-5.43	59.85
-5000.	24.85	5.96	-4.13	59.61	26.02	6.92	-3.37	59.73	26.56	7.71	-2.50	59.51
-4500.	23.97	5.92	-3.83	59.22	25.03	7.21	-3.25	59.28	25.56	8.26	-3.09	59.07
-4000.	23.60	6.43	-5.44	59.12	24.40	7.72	-4.82	59.08	24.94	8.68	-4.54	58.81
-3500.	23.69	7.09	-7.73	59.21	24.39	8.03	-7.08	59.22	25.13	8.75	-7.87	58.94
-3000.	23.99	6.93	-9.35	59.58	24.66	7.96	-9.26	59.56	25.16	8.62	-9.28	59.24
-2500.	24.22	6.64	-9.54	60.07	24.53	7.21	-8.42	59.91	24.81	7.78	-6.96	59.60
-2000.	23.95	5.54	-7.86	60.25	24.22	6.17	-6.86	60.34	24.12	6.93	-5.35	59.88
-1500.	23.50	4.73	-7.05	60.64	23.53	5.65	-6.21	60.66	23.05	6.48	-4.70	60.15
-1000.	22.89	4.41	-7.06	60.90	22.85	5.30	-5.98	60.86	22.79	6.38	-6.08	60.51
-500.	22.56	4.25	-7.28	60.88	22.88	5.58	-8.26	61.03	23.02	6.63	-9.03	60.77

TABLE F.7. (continued).

Elevation: 2000 ft AGL

0.	22.81	4.84	-9.00	60.73	23.10	6.09	-10.36	61.27	23.82	7.15	-11.57	60.95
500.	23.61	5.83	-11.14	60.65	24.59	6.93	-12.53	61.11	25.41	7.82	-14.10	61.18
1000.	24.70	7.15	-12.11	60.58	25.84	8.00	-13.84	60.98	26.73	8.29	-14.72	61.09
1500.	24.89	6.99	-9.77	60.48	26.32	7.51	-10.94	60.53	27.33	8.22	-12.77	60.62
2000.	24.24	5.46	-5.23	60.26	25.89	6.17	-7.03	60.13	26.58	6.90	-9.54	59.96
2500.	23.00	3.73	-2.41	59.74	24.35	4.38	-4.65	59.48	25.57	4.97	-6.56	59.31
3000.	21.90	2.40	-1.96	59.22	23.20	3.10	-3.73	58.67	24.47	4.39	-6.67	58.39
3500.	21.86	2.14	-3.81	58.80	23.06	2.95	-5.87	57.86	23.94	4.06	-8.07	57.40
4000.	22.55	2.10	-6.17	58.49	23.65	3.07	-7.42	57.64	24.66	4.22	-8.26	57.10
4500.	23.55	2.13	-6.77	58.54	24.65	3.14	-7.73	57.61	25.62	4.44	-8.43	57.02
5000.	24.62	2.08	-7.08	58.65	25.74	3.38	-7.61	57.15	26.57	4.96	-7.75	56.28
5500.	25.64	2.36	-6.35	57.98	26.80	3.81	-6.90	56.61	27.64	5.49	-7.19	55.45
6000.	26.56	2.75	-5.11	57.12	27.47	4.43	-5.82	56.01	28.20	6.20	-6.11	54.63
6500.	27.06	3.98	-3.70	56.40	28.07	5.40	-4.65	55.50	28.50	6.92	-4.88	54.16
7000.	27.44	5.00	-2.86	55.89	28.11	6.36	-3.76	55.09	28.46	7.63	-3.87	53.89
7500.	27.55	5.92	-3.37	56.04	28.15	7.27	-3.82	55.10	28.75	8.52	-3.59	53.60
8000.	27.72	6.83	-3.37	56.07	28.64	8.11	-4.33	55.24	29.32	9.27	-4.15	53.58
8500.	28.14	7.57	-1.68	56.09	29.09	8.92	-3.71	55.30	30.07	9.89	-3.72	54.11
9000.	28.67	8.10	0.64	56.26	29.84	9.24	-1.04	55.53	31.07	10.41	-1.99	54.73
9500.	29.05	8.59	1.37	55.45	30.47	9.49	0.93	55.72	31.34	10.46	-0.37	54.53
10000.	29.07	8.93	1.39	54.17	30.44	9.60	0.35	54.71	31.35	10.45	-0.24	53.91
10500.	28.81	9.08	0.84	52.56	30.11	9.85	-0.47	52.88	30.84	10.74	-1.42	52.36
11000.	28.32	9.50	-1.40	49.81	29.47	10.35	-1.97	50.43	30.13	11.21	-2.66	50.00
11500.	28.13	10.14	-6.67	46.72	29.03	10.83	-4.56	47.88	29.20	11.58	-4.75	46.96
12000.	28.33	10.44	-12.03	43.74	28.74	11.08	-9.77	44.14	28.56	11.86	-8.33	43.60
12500.	29.12	10.34	-15.10	41.64	28.69	11.17	-12.31	42.32	27.89	11.84	-9.94	42.48
13000.	28.46	10.10	-11.32	42.26	27.96	11.17	-9.30	42.98	27.15	11.91	-8.60	42.65
13500.	27.24	9.94	-6.43	43.75	26.07	11.72	-6.22	44.15	24.71	13.36	-5.73	44.53
14000.	24.52	10.85	-7.68	44.09	23.18	12.85	-6.80	44.84	22.04	14.93	-4.25	45.80
14500.	22.22	11.66	-10.26	43.44	21.04	13.58	-10.28	44.06	20.19	15.53	-8.56	44.85
15000.	21.30	12.34	-11.88	41.15	19.86	14.13	-13.60	41.95	19.24	15.34	-11.01	42.83
15500.	20.53	12.97	-11.57	38.81	19.94	13.30	-9.71	39.40	19.77	13.41	-6.75	39.63
16000.	20.18	12.00	-5.82	36.80	20.17	12.03	-4.19	37.14	20.28	12.04	-2.07	36.99
16500.	20.13	10.90	-1.07	34.99	20.68	10.63	-1.33	35.35	20.94	10.75	0.34	35.00
17000.	20.83	9.38	0.48	33.94	21.29	9.10	1.17	33.97	21.37	9.63	0.79	32.67
17500.	21.25	8.41	3.01	33.21	21.51	8.68	2.50	32.15	21.52	9.06	0.59	30.06
18000.	21.04	8.96	6.78	32.62	21.71	8.51	5.26	31.19	20.67	9.20	2.82	28.25
18500.	20.10	9.95	10.20	32.32	19.77	9.57	8.04	29.75	19.04	9.69	6.06	26.59
19000.	18.35	10.85	10.62	32.18	17.98	10.66	9.62	29.29	17.11	10.41	8.04	26.54
19500.	16.17	11.56	11.37	32.70	15.86	11.70	12.58	29.94	14.99	11.52	9.82	27.32
20000.	14.03	12.59	11.50	33.65	13.73	12.61	14.32	30.86	13.19	12.45	12.87	28.89
20500.	12.63	13.71	8.34	34.85	12.20	13.64	11.63	32.48	11.40	13.36	16.35	30.59
21000.	12.27	14.21	2.41	35.89	11.52	14.48	6.37	33.84	11.25	13.85	9.52	32.16
21500.	12.86	13.99	-2.21	37.40	12.11	14.33	0.54	35.64	11.57	14.02	2.73	33.90
22000.	13.70	13.74	-3.81	38.59	12.85	13.87	-0.53	36.93	12.08	13.72	3.85	35.29
22500.	14.18	13.40	-3.62	39.25	13.46	13.45	0.97	37.80	12.59	13.39	5.64	36.34
23000.	14.47	13.13	-4.00	39.79	13.93	13.28	-0.67	38.76	13.15	13.26	2.43	37.42
23500.	14.68	13.01	-6.51	40.65	14.10	13.18	-3.85	39.67	13.53	13.21	-2.22	38.64
24000.	14.93	12.83	-7.60	41.52	14.40	12.94	-6.51	40.78	13.93	12.99	-8.96	40.06
24500.	15.30	12.61	-7.70	42.73	14.68	12.65	-6.05	42.04	14.30	12.55	-9.17	40.92
25000.	15.83	12.43	-8.43	43.71	15.25	12.20	-6.06	42.52	14.78	11.93	-6.10	41.13
25500.	16.56	11.92	-8.01	43.87	15.91	11.70	-6.31	42.80	15.17	11.43	-4.59	40.77
26000.	17.55	11.41	-5.86	43.32	16.45	11.24	-5.53	42.25	15.56	10.95	-3.89	39.71
26500.	18.25	11.30	-4.52	42.38	17.17	10.91	-4.16	41.58	15.99	10.76	-3.24	38.62
27000.	18.81	11.49	-4.04	41.38	17.64	11.25	-3.83	39.69	16.30	11.10	-3.31	37.27
27500.	19.28	11.33	-3.30	39.53	18.29	11.49	-3.57	38.30	16.77	11.39	-2.95	35.57
28000.	19.22	11.36	-1.60	37.75	18.57	11.67	-1.67	36.69	17.22	11.60	-1.61	33.98
28500.	18.95	11.62	1.24	35.90	18.37	11.79	0.74	34.47	17.54	11.74	-1.34	32.15
29000.	18.56	11.65	3.90	33.07	18.26	11.80	3.19	31.28	17.65	11.86	-0.75	29.46
29500.	18.19	11.61	6.17	29.77	18.35	11.41	6.22	28.27	17.83	10.56	1.65	27.02
30000.	18.07	10.85	5.21	26.86	18.42	10.13	3.41	25.81	18.30	9.19	1.15	24.83
30500.	18.07	9.92	3.02	23.88	18.47	8.67	1.73	22.86	18.88	7.78	0.63	21.89
31000.	18.56	7.64	0.37	21.67	18.78	6.17	0.04	20.11	19.03	5.77	-0.26	19.03
31500.	19.16	4.79	-0.65	19.12	19.02	4.35	-0.76	18.54	18.77	4.63	-0.20	18.56
32000.	19.34	3.33	1.75	16.22	19.10	3.29	1.05	16.54	18.62	3.78	-0.98	17.38
32500.	19.31	1.76	5.80	13.80	18.89	2.38	1.53	11.63	18.15	3.22	-1.09	9.92
33000.	18.73	1.14	4.06	10.02	18.37	1.76	-0.31	7.23	17.77	2.98	-2.40	-99.99
33500.	18.30	0.65	1.99	-99.99	17.89	2.35	-1.88	-99.99	17.52	3.85	-4.52	-99.99
34000.	17.53	2.27	-0.45	-99.99	17.38	3.63	-4.05	-99.99	17.22	4.82	-4.72	-99.99
34500.	17.00	3.90	-1.84	-99.99	17.20	4.90	-2.65	-99.99	17.11	5.86	-2.05	-99.99
35000.	17.09	5.54	-0.73	-99.99	17.16	6.44	-0.86	-99.99	17.01	6.60	-0.70	-99.99
35500.	17.21	6.78	-0.37	-99.99	17.04	6.74	-0.26	-99.99	16.87	6.78	-0.20	-99.99
36000.	17.07	6.91	0.33	-99.99	16.90	6.86	0.37	-99.99	16.86	7.21	-0.14	-99.99
36500.	17.04	7.25	0.48	-99.99	17.00	7.53	-0.08	-99.99	16.95	7.84	-0.52	-99.99
37000.	17.16	7.91	-0.11	-99.99	17.10	8.11	-0.48	-99.99	17.00	8.03	-0.33	-99.99
37500.	17.22	8.19	-0.19	-99.99	17.12	8.10	-0.03	-99.99	17.02	8.02	0.13	-99.99

TABLE F.8. JAWS Corridor Data Set #8 (along path $\overline{TU}$ in 14JL1452 measurement).

Path Shear Intensity: Class II
Plane Separated by 500 ft
X = Horizontal Distance (ft)

WX = Wind in X Direction (kts)
WY = Wind in Y Direction (kts)
WZ = Wind in Z Direction (kts)
DBZ = Radar Reflectivity (dBZ)

Elevation: 0 ft AGL

	PLANE 1				PLANE 2				PLANE 3			
X	WX	WY	WZ	DBZ	WX	WY	WZ	DBZ	WX	WY	WZ	DBZ
-37500.	15.90	-3.43	0.00	-99.99	16.40	-3.40	0.00	-99.99	16.19	-3.32	0.00	-99.99
-37000.	15.90	-3.43	0.00	-99.99	16.40	-3.40	0.00	-99.99	16.19	-3.32	0.00	-99.99
-36500.	15.90	-3.43	0.00	-99.99	16.40	-3.40	0.00	-99.99	16.19	-3.32	0.00	-99.99
-36000.	15.90	-3.43	0.00	-99.99	16.40	-3.40	0.00	-99.99	16.19	-3.32	0.00	-99.99
-35500.	15.90	-3.43	0.00	-99.99	16.40	-3.40	0.00	-99.99	16.19	-3.32	0.00	-99.99
-35000.	15.90	-3.43	0.00	-99.99	16.40	-3.40	0.00	-99.99	16.19	-3.32	0.00	-99.99
-34500.	15.90	-3.43	0.00	-99.99	16.40	-3.40	0.00	-99.99	16.19	-3.32	0.00	-99.99
-34000.	15.90	-3.43	0.00	-99.99	16.40	-3.40	0.00	-99.99	16.19	-3.32	0.00	-99.99
-33500.	15.90	-3.43	0.00	-99.99	16.40	-3.40	0.00	-99.99	16.19	-3.32	0.00	-99.99
-33000.	15.90	-3.43	0.00	-99.99	16.40	-3.40	0.00	-99.99	16.19	-3.32	0.00	-99.99
-32500.	15.90	-3.43	0.00	-99.99	16.40	-3.40	0.00	-99.99	16.19	-3.32	0.00	-99.99
-32000.	15.90	-3.43	0.00	-99.99	16.40	-3.40	0.00	-99.99	16.19	-3.32	0.00	-99.99
-31500.	15.90	-3.43	0.00	-99.99	16.40	-3.40	0.00	-99.99	16.19	-3.32	0.00	-99.99
-31000.	15.90	-3.43	0.00	-99.99	16.40	-3.40	0.00	-99.99	16.19	-3.32	0.00	-99.99
-30500.	15.90	-3.43	0.00	-99.99	16.40	-3.40	0.00	-99.99	16.19	-3.32	0.00	-99.99
-30000.	15.90	-3.43	0.00	-99.99	16.40	-3.40	0.00	-99.99	16.19	-3.32	0.00	-99.99
-29500.	15.90	-3.43	0.00	-99.99	16.40	-3.40	0.00	-99.99	16.19	-3.32	0.00	-99.99
-29000.	15.90	-3.43	0.00	-99.99	16.40	-3.40	0.00	-99.99	16.19	-3.32	0.00	-99.99
-28500.	15.90	-3.43	0.00	-99.99	16.40	-3.40	0.00	-99.99	16.19	-3.32	0.00	-99.99
-28000.	15.90	-3.43	0.00	-99.99	16.40	-3.40	0.00	-99.99	16.19	-3.32	0.00	-99.99
-27500.	15.90	-3.43	0.00	-99.99	16.40	-3.40	0.00	-99.99	16.19	-3.32	0.00	-99.99
-27000.	15.90	-3.43	0.00	-99.99	16.40	-3.40	0.00	-99.99	16.19	-3.32	0.00	-99.99
-26500.	15.90	-3.43	0.00	-99.99	16.40	-3.40	0.00	-99.99	16.19	-3.32	0.00	-99.99
-26000.	15.90	-3.43	0.00	-99.99	16.40	-3.40	0.00	-99.99	16.19	-3.32	0.00	-99.99
-25500.	15.90	-3.43	0.00	-99.99	16.40	-3.40	0.00	-99.99	16.19	-3.32	0.06	-99.99
-25000.	15.90	-3.43	0.00	-99.99	16.40	-3.40	0.00	-99.99	16.19	-3.32	0.00	-99.99
-24500.	15.90	-3.43	0.00	-99.99	16.40	-3.40	0.00	-99.99	16.19	-3.32	0.00	-99.99
-24000.	15.90	-3.43	0.00	-99.99	16.40	-3.40	0.00	-99.99	16.19	-3.32	0.00	-99.99
-23500.	15.90	-3.43	0.00	-99.99	16.40	-3.40	0.00	-99.99	16.19	-3.32	0.00	-99.99
-23000.	15.90	-3.43	0.00	-99.99	16.40	-3.40	0.00	-99.99	16.19	-3.32	0.00	-99.99
-22500.	15.94	-3.37	0.00	-99.99	16.36	-3.37	0.00	-99.99	16.19	-3.32	0.00	-99.99
-22000.	15.99	-3.31	0.00	-99.99	16.24	-3.30	0.00	-99.99	16.11	-3.24	0.00	-99.99
-21500.	16.06	-3.28	0.00	27.87	16.10	-3.23	0.00	29.32	16.12	-3.17	0.00	29.77
-21000.	16.13	-3.26	0.00	28.48	15.95	-3.14	0.00	29.86	16.15	-3.12	0.00	31.02
-20500.	16.03	-3.18	0.00	31.92	15.84	-3.07	0.00	34.01	16.22	-3.10	0.00	34.53
-20000.	15.93	-3.12	0.00	33.34	15.84	-3.02	0.00	35.36	16.30	-3.09	0.00	37.14
-19500.	15.81	-3.06	0.00	35.16	15.91	-3.01	0.00	36.31	16.34	-3.07	0.00	38.61
-19000.	15.68	-2.99	0.00	36.21	15.97	-3.01	0.00	36.88	16.24	-3.05	0.00	37.61
-18500.	15.53	-2.92	0.00	34.45	16.02	-3.00	0.00	34.81	16.11	-3.03	0.00	36.42
-18000.	15.54	-2.91	0.00	33.17	16.06	-3.00	0.00	33.77	15.97	-3.01	0.00	35.95
-17500.	15.57	-2.91	0.00	31.63	16.01	-2.99	0.00	32.52	15.82	-2.98	0.00	35.26
-17000.	15.61	-2.93	0.00	28.88	15.87	-2.98	0.00	30.07	15.68	-2.96	0.00	35.09
-16500.	15.65	-2.94	0.00	26.42	15.70	-2.97	0.00	27.52	15.60	-2.93	0.00	30.24
-16000.	15.71	-2.96	0.00	24.99	15.53	-2.96	0.00	24.47	15.51	-2.89	0.00	25.34
-15500.	15.59	-2.97	0.00	24.04	15.34	-2.94	0.00	22.34	15.43	-2.84	0.00	23.21
-15000.	15.38	-2.98	0.00	24.25	15.16	-2.92	0.00	24.52	15.31	-2.81	0.00	25.44
-14500.	15.12	-2.97	0.00	23.43	14.98	-2.90	0.00	24.28	15.12	-2.80	0.00	26.19
-14000.	14.79	-2.97	0.00	24.79	14.76	-2.88	0.00	24.12	14.76	-2.82	0.00	25.78
-13500.	14.44	-2.96	0.00	23.60	14.51	-2.88	0.00	22.88	14.32	-2.83	0.00	23.83
-13000.	14.16	-2.96	0.00	19.92	14.25	-2.87	0.00	21.08	13.81	-2.85	0.00	23.77
-12500.	13.88	-2.98	0.00	20.99	13.87	-2.88	0.00	24.55	13.18	-2.87	0.00	26.24
-12000.	13.53	-2.99	0.00	25.43	13.21	-2.91	0.00	28.51	12.38	-2.91	0.00	29.98
-11500.	13.11	-3.01	0.00	33.27	12.40	-2.94	0.00	31.58	11.69	-2.86	0.00	32.25
-11000.	12.65	-3.01	0.00	34.94	11.45	-2.97	0.00	34.95	10.79	-2.82	0.00	34.31
-10500.	11.86	-3.08	0.00	36.38	10.33	-3.02	0.00	37.24	9.58	-2.79	0.00	35.74
-10000.	10.94	-3.17	0.00	37.34	9.22	-3.10	0.00	38.37	7.90	-2.82	0.00	36.39
-9500.	10.11	-3.31	0.00	37.25	8.08	-3.22	0.00	37.65	6.10	-3.00	0.00	36.54
-9000.	9.46	-3.48	0.00	35.91	7.51	-3.33	0.00	36.66	4.80	-3.27	0.00	36.31
-8500.	9.07	-3.71	0.00	36.00	7.37	-3.45	0.00	36.51	4.71	-3.45	0.00	35.88
-8000.	9.00	-3.94	0.00	36.64	7.51	-3.58	0.00	36.67	5.12	-3.52	0.00	35.63
-7500.	9.12	-4.17	0.00	37.07	7.56	-3.79	0.00	37.62	5.54	-3.46	0.00	35.40
-7000.	9.26	-4.46	0.00	36.44	7.77	-3.98	0.00	37.09	6.15	-3.34	0.00	35.58
-6500.	9.33	-4.89	0.00	36.24	7.95	-4.24	0.00	36.43	6.62	-3.51	0.00	36.22
-6000.	9.10	-5.39	0.00	35.47	7.62	-4.77	0.00	35.29	7.06	-3.78	0.00	35.48
-5500.	8.46	-5.93	0.00	34.00	5.61	-5.98	0.00	34.34	5.89	-4.16	0.00	34.69
-5000.	8.96	-6.14	0.00	33.53	7.16	-6.29	0.00	33.56	7.02	-4.62	0.00	33.70
-4500.	10.92	-6.52	0.00	33.39	9.48	-5.96	0.00	33.39	8.65	-5.15	0.00	33.17
-4000.	12.46	-7.02	0.00	33.41	10.48	-5.18	0.00	33.93	8.28	-3.26	0.00	34.20
-3500.	13.14	-7.85	0.00	33.29	11.57	-5.96	0.00	33.80	10.08	-3.78	0.00	34.22
-3000.	12.64	-8.40	0.00	34.50	11.02	-5.70	0.00	34.12	10.45	-3.23	0.00	34.25
-2500.	11.94	-8.67	0.00	34.46	9.62	-4.94	0.00	34.16	9.75	-1.70	0.00	34.03
-2000.	10.26	-8.43	0.00	34.98	8.76	-4.50	0.00	34.13	10.09	-1.29	0.00	33.16
-1500.	7.79	-7.97	0.00	37.23	7.92	-4.53	0.00	36.55	9.59	-0.98	0.00	35.22
-1000.	8.08	-9.84	0.00	39.33	8.23	-5.44	0.00	38.90	9.56	-0.74	0.00	36.83
-500.	10.26	-10.69	0.00	40.92	9.71	-5.86	0.00	40.74	10.43	-0.26	0.00	37.69

TABLE F.8. (continued).

Elevation: 0 ft AGL

0.	13.27	-10.00	0.00	41.56	12.98	-5.19	0.00	41.70	13.47	-0.30	0.00	37.60
500.	16.02	-9.32	0.00	41.55	16.14	-6.11	0.00	41.51	16.21	-1.35	0.00	38.29
1000.	16.93	-7.08	0.00	38.96	17.46	-5.22	0.00	39.80	17.40	-2.09	0.00	38.77
1500.	17.44	-5.04	0.00	38.42	17.27	-3.81	0.00	38.51	16.81	-1.72	0.00	37.88
2000.	17.08	-3.80	0.00	39.07	16.92	-2.73	0.00	39.72	16.98	-0.80	0.00	38.36
2500.	19.05	-3.86	0.00	36.91	18.89	-1.40	0.00	38.09	18.05	0.16	0.00	37.62
3000.	21.92	-2.00	0.00	37.37	20.70	-0.53	0.00	37.46	19.65	0.47	0.00	37.17
3500.	23.19	-0.88	0.00	37.55	22.40	-0.40	0.00	37.55	22.39	-0.33	0.00	37.11
4000.	23.38	-0.39	0.00	37.11	22.92	0.80	0.00	36.82	22.64	1.32	0.00	36.15
4500.	21.41	0.58	0.00	37.20	21.21	0.85	0.00	37.10	21.90	1.39	0.00	35.51
5000.	20.78	0.25	0.00	37.35	20.41	0.44	0.00	36.96	21.33	1.07	0.00	35.06
5500.	21.07	0.20	0.00	37.41	21.10	0.67	0.00	36.04	21.29	1.28	0.00	36.45
6000.	21.73	0.63	0.00	37.32	21.56	0.80	0.00	34.80	21.35	1.14	0.00	34.04
6500.	22.61	0.96	0.00	35.81	21.94	0.71	0.00	34.55	21.33	0.76	0.00	33.16
7000.	23.23	0.69	0.00	35.01	22.55	0.61	0.00	34.50	21.21	-0.06	0.00	32.49
7500.	23.48	-0.04	0.00	33.50	23.61	0.80	0.00	32.58	22.03	0.00	0.00	26.32
8000.	22.52	-1.91	0.00	29.76	22.29	-1.03	0.00	28.43	21.82	-0.54	0.00	24.02
8500.	21.76	-2.22	0.00	25.55	21.56	-1.43	0.00	24.09	21.47	-0.78	0.00	23.27
9000.	21.13	-1.63	0.00	24.13	21.06	-1.26	0.00	21.85	20.98	-1.04	0.00	22.05
9500.	20.27	-1.29	0.00	24.49	20.62	-1.02	0.00	21.51	20.59	-1.23	0.00	20.52
10000.	20.02	-1.53	0.00	21.14	20.36	-0.93	0.00	20.65	20.28	-1.44	0.00	20.46
10500.	19.92	-1.42	0.00	21.72	20.09	-0.94	0.00	21.67	20.01	-1.70	0.00	21.65
11000.	19.77	-1.21	0.00	22.58	19.84	-1.13	0.00	23.42	19.79	-1.87	0.00	23.98
11500.	19.61	-1.01	0.00	23.64	19.61	-1.42	0.00	25.57	19.65	-1.81	0.00	25.49
12000.	19.56	-0.81	0.00	25.48	19.45	-1.68	0.00	27.14	19.55	-1.72	0.00	26.05
12500.	19.41	-1.10	0.00	24.09	19.30	-1.91	0.00	27.85	19.47	-1.61	0.00	27.11
13000.	19.28	-1.33	0.00	23.71	19.21	-1.87	0.00	27.77	19.42	-1.50	0.00	27.58
13500.	19.14	-1.45	0.00	24.33	19.17	-1.68	0.00	26.20	19.37	-1.45	0.00	26.16
14000.	18.97	-1.48	0.00	27.65	19.11	-1.50	0.00	27.09	19.27	-1.50	0.00	26.11
14500.	18.79	-1.43	0.00	28.78	19.08	-1.33	0.00	27.66	19.17	-1.52	0.00	27.78
15000.	18.75	-1.24	0.00	28.62	19.08	-1.18	0.00	27.75	19.09	-1.56	0.00	29.35
15500.	18.75	-1.07	0.00	28.62	19.03	-1.13	0.00	28.92	18.99	-1.61	0.00	30.40
16000.	18.02	-0.96	0.00	28.29	18.98	-1.17	0.00	29.36	18.95	-1.67	0.00	30.90
16500.	18.90	-0.91	0.00	27.39	18.96	-1.30	0.00	29.32	19.01	-1.64	0.00	31.27
17000.	18.97	-0.93	0.00	26.40	18.98	-1.52	0.00	29.08	19.09	-1.66	0.00	31.81
17500.	18.99	-1.20	0.00	27.28	19.02	-1.81	0.00	31.08	19.14	-1.72	0.00	32.48
18000.	18.99	-1.20	0.00	-99.99	19.02	-1.81	0.00	-99.99	19.14	-1.72	0.00	-99.99
18500.	18.99	-1.20	0.00	-99.99	19.02	-1.81	0.00	-99.99	19.14	-1.72	0.00	-99.99
19000.	18.99	-1.20	0.00	-99.99	19.02	-1.81	0.00	-99.99	19.14	-1.72	0.00	-99.99
19500.	18.99	-1.20	0.00	-99.99	19.02	-1.81	0.00	-99.99	19.14	-1.72	0.00	-99.99
20000.	18.99	-1.20	0.00	-99.99	19.02	-1.81	0.00	-99.99	19.14	-1.72	0.00	-99.99
20500.	18.99	-1.20	0.00	-99.99	19.02	-1.81	0.00	-99.99	19.14	-1.72	0.00	-99.99
21000.	18.99	-1.20	0.00	-99.99	19.02	-1.81	0.00	-99.99	19.14	-1.72	0.00	-99.99
21500.	18.99	-1.20	0.00	-99.99	19.02	-1.81	0.00	-99.99	19.14	-1.72	0.00	-99.99
22000.	18.99	-1.20	0.00	-99.99	19.02	-1.81	0.00	-99.99	19.14	-1.72	0.00	-99.99
22500.	18.99	-1.20	0.00	-99.99	19.02	-1.81	0.00	-99.99	19.14	-1.72	0.00	-99.99
23000.	18.99	-1.20	0.00	-99.99	19.02	-1.81	0.00	-99.99	19.14	-1.72	0.00	-99.99
23500.	18.99	-1.20	0.00	-99.99	19.02	-1.81	0.00	-99.99	19.14	-1.72	0.00	-99.99
24000.	18.99	-1.20	0.00	-99.99	19.02	-1.81	0.00	-99.99	19.14	-1.72	0.00	-99.99
24500.	18.99	-1.20	0.00	-99.99	19.02	-1.81	0.00	-99.99	19.14	-1.72	0.00	-99.99
25000.	18.99	-1.20	0.00	-99.99	19.02	-1.81	0.00	-99.99	19.14	-1.72	0.00	-99.99
25500.	18.99	-1.20	0.00	-99.99	19.02	-1.81	0.00	-99.99	19.14	-1.72	0.00	-99.99
26000.	18.99	-1.20	0.00	-99.99	19.02	-1.81	0.00	-99.99	19.14	-1.72	0.00	-99.99
26500.	18.99	-1.20	0.00	-99.99	19.02	-1.81	0.00	-99.99	19.14	-1.72	0.00	-99.99
27000.	18.99	-1.20	0.00	-99.99	19.02	-1.81	0.00	-99.99	19.14	-1.72	0.00	-99.99
27500.	18.99	-1.20	0.00	-99.99	19.02	-1.81	0.00	-99.99	19.14	-1.72	0.00	-99.99
28000.	18.99	-1.20	0.00	-99.99	19.02	-1.81	0.00	-99.99	19.14	-1.72	0.00	-99.99
28500.	18.99	-1.20	0.00	-99.99	19.02	-1.81	0.00	-99.99	19.14	-1.72	0.00	-99.99
29000.	18.99	-1.20	0.00	-99.99	19.02	-1.81	0.00	-99.99	19.14	-1.72	0.00	-99.99
29500.	18.99	-1.20	0.00	-99.99	19.02	-1.81	0.00	-99.99	19.14	-1.72	0.00	-99.99
30000.	18.99	-1.20	0.00	-99.99	19.02	-1.81	0.00	-99.99	19.14	-1.72	0.00	-99.99
30500.	18.99	-1.20	0.00	-99.99	19.02	-1.81	0.00	-99.99	19.14	-1.72	0.00	-99.99
31000.	18.99	-1.20	0.00	-99.99	19.02	-1.81	0.00	-99.99	19.14	-1.72	0.00	-99.99
31500.	18.99	-1.20	0.00	-99.99	19.02	-1.81	0.00	-99.99	19.14	-1.72	0.00	-99.99
32000.	18.99	-1.20	0.00	-99.99	19.02	-1.81	0.00	-99.99	19.14	-1.72	0.00	-99.99
32500.	18.99	-1.20	0.00	-99.99	19.02	-1.81	0.00	-99.99	19.14	-1.72	0.00	-99.99
33000.	18.99	-1.20	0.00	-99.99	19.02	-1.81	0.00	-99.99	19.14	-1.72	0.00	-99.99
33500.	18.99	-1.20	0.00	-99.99	19.02	-1.81	0.00	-99.99	19.14	-1.72	0.00	-99.99
34000.	18.99	-1.20	0.00	-99.99	19.02	-1.81	0.00	-99.99	19.14	-1.72	0.00	-99.99
34500.	18.99	-1.20	0.00	-99.99	19.02	-1.81	0.00	-99.99	19.14	-1.72	0.00	-99.99
35000.	18.99	-1.20	0.00	-99.99	19.02	-1.81	0.00	-99.99	19.14	-1.72	0.00	-99.99
35500.	18.99	-1.20	0.00	-99.99	19.02	-1.81	0.00	-99.99	19.14	-1.72	0.00	-99.99
36000.	18.99	-1.20	0.00	-99.99	19.02	-1.81	0.00	-99.99	19.14	-1.72	0.00	-99.99
36500.	18.99	-1.20	0.00	-99.99	19.02	-1.81	0.00	-99.99	19.14	-1.72	0.00	-99.99
37000.	18.99	-1.20	0.00	-99.99	19.02	-1.81	0.00	-99.99	19.14	-1.72	0.00	-99.99
37500.	18.99	-1.20	0.00	-99.99	19.02	-1.81	0.00	-99.99	19.14	-1.72	0.00	-99.99

TABLE F.8. (continued).

Elevation: 500 ft AGL

	PLANE 1				PLANE 2				PLANE 3			
X	WX	WY	WZ	DBZ	WX	WY	WZ	DBZ	WX	WY	WZ	DBZ
-37500.	12.49	-2.79	-0.06	-99.99	12.59	-2.88	-0.04	-99.99	13.40	-3.21	-0.09	-99.99
-37000.	12.49	-2.79	-0.06	-99.99	12.59	-2.88	-0.04	-99.99	13.40	-3.21	-0.09	-99.99
-36500.	12.49	-2.79	-0.06	-99.99	12.59	-2.88	-0.04	-99.99	13.40	-3.21	-0.09	-99.99
-36000.	12.49	-2.79	-0.06	-99.99	12.59	-2.88	-0.04	-99.99	13.40	-3.21	-0.09	-99.99
-35500.	12.49	-2.79	-0.06	-99.99	12.59	-2.88	-0.04	-99.99	13.40	-3.21	-0.09	-99.99
-35000.	12.49	-2.79	-0.06	-99.99	12.59	-2.88	-0.04	-99.99	13.40	-3.21	-0.09	-99.99
-34500.	12.49	-2.79	-0.06	-99.99	12.59	-2.88	-0.04	-99.99	13.40	-3.21	-0.09	-99.99
-34000.	12.49	-2.79	-0.06	-99.99	12.59	-2.88	-0.04	-99.99	13.40	-3.21	-0.09	-99.99
-33500.	12.49	-2.79	-0.06	-99.99	12.59	-2.88	-0.04	-99.99	13.40	-3.21	-0.09	-99.99
-33000.	12.49	-2.79	-0.06	-99.99	12.59	-2.88	-0.04	-99.99	13.40	-3.21	-0.09	-99.99
-32500.	12.49	-2.79	-0.06	-99.99	12.59	-2.88	-0.04	-99.99	13.40	-3.21	-0.09	-99.99
-32000.	12.49	-2.79	-0.06	-99.99	12.59	-2.88	-0.04	-99.99	13.40	-3.21	-0.09	-99.99
-31500.	12.49	-2.79	-0.06	-99.99	12.59	-2.88	-0.04	-99.99	13.40	-3.21	-0.09	-99.99
-31000.	12.49	-2.79	-0.06	-99.99	12.59	-2.88	-0.04	-99.99	13.40	-3.21	-0.09	-99.99
-30500.	12.49	-2.79	-0.06	-99.99	12.59	-2.88	-0.04	-99.99	13.40	-3.21	-0.09	-99.99
-30000.	12.49	-2.79	-0.06	-99.99	12.59	-2.88	-0.04	-99.99	13.40	-3.21	-0.09	-99.99
-29500.	12.49	-2.79	-0.06	-99.99	12.59	-2.88	-0.04	-99.99	13.40	-3.21	-0.09	-99.99
-29000.	12.49	-2.79	-0.06	-99.99	12.59	-2.88	-0.04	-99.99	13.40	-3.21	-0.09	-99.99
-28500.	12.49	-2.79	-0.06	-99.99	12.59	-2.88	-0.04	-99.99	13.40	-3.21	-0.09	-99.99
-28000.	12.49	-2.79	-0.06	-99.99	12.59	-2.88	-0.04	-99.99	13.40	-3.21	-0.09	-99.99
-27500.	12.49	-2.79	-0.06	-99.99	12.59	-2.88	-0.04	-99.99	13.40	-3.21	-0.09	-99.99
-27000.	12.49	-2.79	-0.06	-99.99	12.59	-2.88	-0.04	-99.99	13.40	-3.21	-0.09	-99.99
-26500.	12.49	-2.79	-0.06	-99.99	12.59	-2.88	-0.04	-99.99	13.40	-3.21	-0.09	-99.99
-26000.	12.49	-2.79	-0.06	-99.99	12.59	-2.88	-0.04	-99.99	13.40	-3.21	-0.09	-99.99
-25500.	12.49	-2.79	-0.06	-99.99	12.59	-2.88	-0.04	-99.99	13.40	-3.21	-0.09	-99.99
-25000.	12.49	-2.79	-0.06	-99.99	12.59	-2.88	-0.04	-99.99	13.40	-3.21	-0.09	-99.99
-24500.	12.49	-2.79	-0.06	-99.99	12.59	-2.88	-0.04	-99.99	13.40	-3.21	-0.09	-99.99
-24000.	12.49	-2.79	-0.06	-99.99	12.59	-2.88	-0.04	-99.99	13.40	-3.21	-0.09	-99.99
-23500.	12.49	-2.79	-0.06	-99.99	12.59	-2.88	-0.04	-99.99	13.40	-3.21	-0.09	-99.99
-23000.	12.49	-2.79	-0.06	-99.99	12.59	-2.88	-0.04	-99.99	13.40	-3.21	-0.09	-99.99
-22500.	12.95	-2.92	-0.18	27.02	13.28	-3.05	-0.21	-99.99	13.40	-3.21	-0.09	-99.99
-22000.	13.67	-2.95	-0.10	28.32	13.74	-3.13	-0.04	29.55	13.60	-3.33	0.03	30.54
-21500.	13.88	-3.03	0.12	29.66	13.72	-3.24	0.08	30.40	13.26	-3.32	0.10	31.07
-21000.	13.71	-3.19	0.39	31.36	13.70	-3.50	-0.05	32.26	13.78	-3.63	-0.26	33.01
-20500.	13.63	-3.39	0.57	33.54	14.07	-3.70	0.39	35.02	14.03	-3.74	0.39	35.69
-20000.	12.40	-3.13	0.75	35.75	12.39	-3.53	1.06	36.82	12.68	-3.64	1.05	37.74
-19500.	10.90	-3.14	0.98	37.51	10.13	-3.31	1.17	37.86	10.06	-3.40	1.16	38.81
-19000.	9.21	-3.11	0.78	37.92	8.42	-3.20	0.50	38.18	8.72	-3.21	0.49	38.76
-18500.	8.31	-2.90	0.41	36.81	8.07	-3.01	0.40	37.15	8.19	-3.05	0.48	30.20
-18000.	7.33	-2.52	0.65	34.76	7.07	-2.69	0.70	35.53	7.30	-2.82	0.63	37.70
-17500.	5.98	-2.15	0.79	31.96	5.56	-2.28	0.97	33.53	5.74	-2.44	0.80	37.46
-17000.	4.43	-1.77	0.73	28.74	3.99	-1.83	0.81	30.27	4.45	-1.90	0.68	33.03
-16500.	3.14	-1.33	0.52	25.81	2.94	-1.26	0.60	26.94	2.99	-1.24	0.60	28.84
-16000.	2.21	-0.99	0.27	24.69	2.09	-0.95	0.39	24.94	1.86	-0.95	0.26	26.01
-15500.	2.04	-1.13	-0.02	24.38	1.59	-1.13	0.10	24.14	2.49	-1.63	-0.01	25.22
-15000.	2.41	-1.84	-0.23	24.55	1.98	-1.98	-0.26	24.44	1.82	-1.84	0.42	25.92
-14500.	2.99	-2.94	0.46	24.48	1.94	-2.75	0.39	24.85	0.55	-1.96	0.64	26.71
-14000.	1.26	-3.00	0.83	23.99	0.54	-2.74	0.51	24.87	-0.45	-2.16	0.41	27.01
-13500.	-0.28	-2.60	0.62	23.03	-0.77	-2.45	0.21	24.18	-1.29	-2.09	0.16	25.62
-13000.	-0.27	-2.40	0.08	22.23	-0.26	-2.71	0.21	24.01	-1.23	-2.66	0.18	25.71
-12500.	-0.93	-4.47	0.50	23.44	-0.83	-4.33	0.37	25.64	-1.49	-3.70	0.14	27.67
-12000.	-1.95	-6.77	0.45	27.28	-1.87	-5.96	0.37	28.80	-2.01	-4.91	0.21	31.20
-11500.	-2.97	-8.58	0.43	31.65	-3.25	-7.64	0.42	32.19	-3.44	-6.51	0.46	32.89
-11000.	-3.91	-10.27	0.79	35.81	-4.69	-9.25	0.31	34.83	-4.80	-7.55	0.12	34.30
-10500.	-5.33	-11.99	0.25	36.63	-5.54	-9.98	-0.45	36.11	-5.39	-7.77	-0.30	35.48
-10000.	-5.95	-12.50	-0.33	36.88	-5.54	-10.14	-1.20	36.84	-4.84	-7.34	-0.63	36.52
-9500.	-5.87	-12.41	-1.00	36.81	-5.00	-10.21	-1.44	37.02	-4.14	-6.70	-0.93	37.19
-9000.	-5.00	-11.06	-1.83	36.52	-3.54	-8.70	-1.81	36.87	-2.54	-6.49	-1.39	36.89
-8500.	-2.72	-8.95	-1.98	36.16	-1.55	-7.33	-1.70	36.53	-0.77	-6.26	-1.42	36.27
-8000.	-0.97	-7.69	-1.79	35.79	0.27	-6.24	-1.33	36.15	1.00	-5.63	-0.86	35.05
-7500.	0.30	-7.06	-1.58	35.49	0.89	-5.65	-1.09	36.32	1.80	-4.98	-0.70	34.89
-7000.	1.67	-6.50	-1.66	35.33	1.57	-5.16	-1.41	35.93	2.24	-4.37	-0.97	35.33
-6500.	3.06	-6.14	-1.74	35.27	2.82	-4.70	-1.57	35.79	2.72	-3.56	-1.40	36.04
-6000.	4.56	-6.10	-1.49	35.04	4.30	-4.22	-1.52	35.57	4.61	-2.21	-1.44	35.96
-5500.	5.85	-6.13	-1.10	34.73	4.49	-4.69	-1.80	35.29	4.97	-2.56	-2.24	35.79
-5000.	7.22	-5.80	-2.62	34.82	5.95	-4.60	-2.93	34.85	5.91	-2.75	-2.56	35.09
-4500.	9.03	-6.46	-2.83	34.29	7.83	-4.80	-3.09	34.41	6.71	-2.83	-2.21	34.09
-4000.	10.27	-7.21	-2.47	34.03	8.94	-4.90	-2.90	34.20	7.08	-2.12	-2.88	34.06
-3500.	10.31	-7.30	-1.70	33.85	9.35	-4.47	-2.51	33.71	8.46	-1.74	-2.95	33.91
-3000.	8.68	-7.10	-2.42	33.47	8.56	-3.85	-2.27	33.61	8.50	-1.06	-2.66	34.06
-2500.	7.78	-7.31	-2.15	34.10	7.55	-3.44	-2.10	34.19	7.54	-0.06	-2.64	34.24
-2000.	6.79	-7.14	-2.09	35.52	6.74	-3.32	-3.01	35.17	7.45	0.69	-3.73	34.62
-1500.	5.73	-6.25	-2.80	37.58	6.44	-2.83	-3.96	37.06	7.52	1.12	-4.24	36.17
-1000.	7.50	-7.39	-5.11	39.81	7.70	-3.53	-5.90	39.33	8.50	1.04	-5.69	37.55
-500.	10.18	-7.98	-6.34	41.70	10.23	-3.96	-8.02	41.44	10.92	1.10	-8.03	38.75

TABLE F.8. (continued).

Elevation: 500 ft AGL

0.	13.35	-7.00	-6.26	42.70	14.12	-2.82	-9.04	42.81	14.77	1.94	-8.02	39.47
500.	15.88	-5.14	-3.81	42.46	16.82	-2.02	-6.01	42.20	17.49	2.20	-6.20	39.70
1000.	16.32	-3.33	-2.06	40.74	17.73	-1.25	-3.16	40.94	18.52	1.84	-3.77	39.88
1500.	16.66	-2.19	-1.06	40.31	17.58	-0.82	-1.29	40.18	17.98	1.04	-1.67	39.71
2000.	16.79	-1.36	-1.26	40.71	17.09	-0.54	-1.77	40.59	17.56	1.14	-1.98	39.77
2500.	18.00	-0.84	-3.03	39.61	17.82	0.17	-2.72	40.65	17.51	1.45	-2.44	39.87
3000.	19.28	-0.33	-2.64	39.57	18.57	0.53	-2.54	40.26	17.69	1.39	-2.88	39.98
3500.	20.58	-0.05	-1.51	39.33	19.78	0.42	-1.93	39.73	19.48	0.84	-3.16	39.63
4000.	21.94	0.23	-0.55	38.96	21.41	1.04	-0.58	39.48	21.37	1.60	-0.96	39.31
4500.	20.88	0.34	0.81	39.42	20.85	1.29	0.08	39.38	21.67	1.79	0.09	38.78
5000.	20.25	-0.10	0.37	39.20	20.26	0.89	-0.48	39.22	20.78	1.81	-0.10	38.04
5500.	20.10	-0.53	-0.38	39.48	20.10	-0.11	-1.22	38.97	20.60	1.02	-0.83	37.54
6000.	20.36	-0.96	-0.53	40.14	20.23	-0.66	-1.01	38.00	20.59	1.03	-0.93	35.34
6500.	21.71	0.50	-0.34	37.89	20.80	0.24	-0.57	35.94	20.56	0.80	-0.49	33.78
7000.	22.74	1.53	-0.17	35.81	21.61	0.75	-0.07	34.02	20.51	0.06	-0.23	32.22
7500.	23.38	1.35	0.16	33.01	23.12	0.92	0.49	31.88	21.25	-0.52	0.33	29.19
8000.	23.20	-0.21	0.83	29.17	22.51	-0.20	0.39	28.31	21.18	-1.26	0.33	26.64
8500.	23.47	0.80	0.14	29.41	22.62	0.58	0.15	27.64	21.37	-0.77	0.26	25.62
9000.	23.04	1.18	0.26	28.13	22.52	1.32	0.27	27.00	21.80	1.05	0.47	25.50
9500.	21.79	0.05	0.61	25.44	21.83	1.01	0.66	25.32	21.32	0.70	0.29	24.50
10000.	20.72	-1.37	0.16	25.36	21.11	-0.21	0.08	27.21	21.33	0.37	-0.38	25.37
10500.	19.81	-2.27	0.44	25.62	20.35	-1.47	-0.45	27.12	21.71	0.45	-0.99	26.71
11000.	19.71	-2.33	0.09	25.88	20.18	-1.90	-0.76	26.97	21.68	0.06	-1.06	28.24
11500.	20.77	-0.98	-0.39	26.81	20.95	-1.00	-0.94	28.62	21.88	0.52	-1.12	29.12
12000.	22.45	0.83	0.29	27.97	21.73	-0.45	-0.51	28.85	22.43	1.15	-0.98	28.92
12500.	22.62	0.26	0.14	27.70	22.35	-0.22	-0.36	29.24	22.86	1.27	-0.55	29.18
13000.	22.55	0.00	-0.05	28.31	23.01	0.42	0.01	30.47	22.66	0.43	0.71	30.51
13500.	22.39	0.20	0.13	29.76	22.58	0.38	0.84	31.10	21.46	-0.51	1.71	30.66
14000.	21.72	-0.40	1.32	31.64	20.90	-1.45	1.04	32.08	19.96	-1.97	0.82	31.48
14500.	20.62	-1.84	0.99	32.82	19.67	-2.47	0.35	33.34	19.52	-1.61	-0.28	32.94
15000.	19.69	-2.08	0.26	33.37	19.67	-1.16	0.17	34.77	18.81	-1.40	0.25	33.88
15500.	19.09	-1.34	0.41	33.32	19.01	-0.98	0.28	33.91	18.46	-1.28	0.18	34.30
16000.	18.68	-0.98	0.18	31.79	18.55	-0.89	0.23	33.22	18.26	-0.95	0.01	34.43
16500.	18.55	-0.74	0.09	31.45	18.25	-0.74	0.11	32.75	17.80	-0.51	0.00	33.53
17000.	18.73	-0.49	-0.02	31.67	18.15	-0.44	-0.11	32.25	17.62	0.01	-0.22	32.82
17500.	19.35	-0.02	0.00	31.37	18.59	0.15	-0.03	32.11	17.85	0.51	-0.13	33.31
18000.	19.35	-0.02	0.00	-99.99	18.59	0.15	-0.03	-99.99	17.85	0.51	-0.13	-99.99
18500.	19.35	-0.02	0.00	-99.99	18.59	0.15	-0.03	-99.99	17.85	0.51	-0.13	-99.99
19000.	19.35	-0.02	0.00	-99.99	18.59	0.15	-0.03	-99.99	17.85	0.51	-0.13	-99.99
19500.	19.35	-0.02	0.00	-99.99	18.59	0.15	-0.03	-99.99	17.85	0.51	-0.13	-99.99
20000.	19.35	-0.02	0.00	-99.99	18.59	0.15	-0.03	-99.99	17.85	0.51	-0.13	-99.99
20500.	19.35	-0.02	0.00	-99.99	18.59	0.15	-0.03	-99.99	17.85	0.51	-0.13	-99.99
21000.	19.35	-0.02	0.00	-99.99	18.59	0.15	-0.03	-99.99	17.85	0.51	-0.13	-99.99
21500.	19.35	-0.02	0.00	-99.99	18.59	0.15	-0.03	-99.99	17.85	0.51	-0.13	-99.99
22000.	19.35	-0.02	0.00	-99.99	18.59	0.15	-0.03	-99.99	17.85	0.51	-0.13	-99.99
22500.	19.35	-0.02	0.00	-99.99	18.59	0.15	-0.03	-99.99	17.85	0.51	-0.13	-99.99
23000.	19.35	-0.02	0.00	-99.99	18.59	0.15	-0.03	-99.99	17.85	0.51	-0.13	-99.99
23500.	19.35	-0.02	0.00	-99.99	18.59	0.15	-0.03	-99.99	17.85	0.51	-0.13	-99.99
24000.	19.35	-0.02	0.00	-99.99	18.59	0.15	-0.03	-99.99	17.85	0.51	-0.13	-99.99
24500.	19.35	-0.02	0.00	-99.99	18.59	0.15	-0.03	-99.99	17.85	0.51	-0.13	-99.99
25000.	19.35	-0.02	0.00	-99.99	18.59	0.15	-0.03	-99.99	17.85	0.51	-0.13	-99.99
25500.	19.35	-0.02	0.00	-99.99	18.59	0.15	-0.03	-99.99	17.85	0.51	-0.13	-99.99
26000.	19.35	-0.02	0.00	-99.99	18.59	0.15	-0.03	-99.99	17.85	0.51	-0.13	-99.99
26500.	19.35	-0.02	0.00	-99.99	18.59	0.15	-0.03	-99.99	17.85	0.51	-0.13	-99.99
27000.	19.35	-0.02	0.00	-99.99	18.59	0.15	-0.03	-99.99	17.85	0.51	-0.13	-99.99
27500.	19.35	-0.02	0.00	-99.99	18.59	0.15	-0.03	-99.99	17.85	0.51	-0.13	-99.99
28000.	19.35	-0.02	0.00	-99.99	18.59	0.15	-0.03	-99.99	17.85	0.51	-0.13	-99.99
28500.	19.35	-0.02	0.00	-99.99	18.59	0.15	-0.03	-99.99	17.85	0.51	-0.13	-99.99
29000.	19.35	-0.02	0.00	-99.99	18.59	0.15	-0.03	-99.99	17.85	0.51	-0.13	-99.99
29500.	19.35	-0.02	0.00	-99.99	18.59	0.15	-0.03	-99.99	17.85	0.51	-0.13	-99.99
30000.	19.35	-0.02	0.00	-99.99	18.59	0.15	-0.03	-99.99	17.85	0.51	-0.13	-99.99
30500.	19.35	-0.02	0.00	-99.99	18.59	0.15	-0.03	-99.99	17.85	0.51	-0.13	-99.99
31000.	19.35	-0.02	0.00	-99.99	18.59	0.15	-0.03	-99.99	17.85	0.51	-0.13	-99.99
31500.	19.35	-0.02	0.00	-99.99	18.59	0.15	-0.03	-99.99	17.85	0.51	-0.13	-99.99
32000.	19.35	-0.02	0.00	-99.99	18.59	0.15	-0.03	-99.99	17.85	0.51	-0.13	-99.99
32500.	19.35	-0.02	0.00	-99.99	18.59	0.15	-0.03	-99.99	17.85	0.51	-0.13	-99.99
33000.	19.35	-0.02	0.00	-99.99	18.59	0.15	-0.03	-99.99	17.85	0.51	-0.13	-99.99
33500.	19.35	-0.02	0.00	-99.99	18.59	0.15	-0.03	-99.99	17.85	0.51	-0.13	-99.99
34000.	19.35	-0.02	0.00	-99.99	18.59	0.15	-0.03	-99.99	17.85	0.51	-0.13	-99.99
34500.	19.35	-0.02	0.00	-99.99	18.59	0.15	-0.03	-99.99	17.85	0.51	-0.13	-99.99
35000.	19.35	-0.02	0.00	-99.99	18.59	0.15	-0.03	-99.99	17.85	0.51	-0.13	-99.99
35500.	19.35	-0.02	0.00	-99.99	18.59	0.15	-0.03	-99.99	17.85	0.51	-0.13	-99.99
36000.	19.35	-0.02	0.00	-99.99	18.59	0.15	-0.03	-99.99	17.85	0.51	-0.13	-99.99
36500.	19.35	-0.02	0.00	-99.99	18.59	0.15	-0.03	-99.99	17.85	0.51	-0.13	-99.99
37000.	19.35	-0.02	0.00	-99.99	18.59	0.15	-0.03	-99.99	17.85	0.51	-0.13	-99.99
37500.	19.35	-0.02	0.00	-99.99	18.59	0.15	-0.03	-99.99	17.85	0.51	-0.13	-99.99

TABLE F.8. (continued).

Elevation: 1000 ft AGL

	PLANE 1				PLANE 2				PLANE 3			
X	WX	WY	WZ	DBZ	WX	WY	WZ	DBZ	WX	WY	WZ	DBZ
-37500.	13.73	-1.29	-0.24	-99.99	13.83	-1.29	-0.11	-99.99	14.24	-0.91	-0.40	-99.99
-37000.	13.73	-1.29	-0.24	-99.99	13.83	-1.29	-0.11	-99.99	14.24	-0.91	-0.40	-99.99
-36500.	13.73	-1.29	-0.24	-99.99	13.83	-1.29	-0.11	-99.99	14.24	-0.91	-0.40	-99.99
-36000.	13.73	-1.29	-0.24	-99.99	13.83	-1.29	-0.11	-99.99	14.24	-0.91	-0.40	-99.99
-35500.	13.73	-1.29	-0.24	-99.99	13.83	-1.29	-0.11	-99.99	14.24	-0.91	-0.40	-99.99
-35000.	13.73	-1.29	-0.24	-99.99	13.83	-1.29	-0.11	-99.99	14.24	-0.91	-0.40	-99.99
-34500.	13.73	-1.29	-0.24	-99.99	13.83	-1.29	-0.11	-99.99	14.24	-0.91	-0.40	-99.99
-34000.	13.73	-1.29	-0.24	-99.99	13.83	-1.29	-0.11	-99.99	14.24	-0.91	-0.40	-99.99
-33500.	13.73	-1.29	-0.24	-99.99	13.83	-1.29	-0.11	-99.99	14.24	-0.91	-0.40	-99.99
-33000.	13.73	-1.29	-0.24	-99.99	13.83	-1.29	-0.11	-99.99	14.24	-0.91	-0.40	-99.99
-32500.	13.73	-1.29	-0.24	-99.99	13.83	-1.29	-0.11	-99.99	14.24	-0.91	-0.40	-99.99
-32000.	13.73	-1.29	-0.24	-99.99	13.83	-1.29	-0.11	-99.99	14.24	-0.91	-0.40	-99.99
-31500.	13.73	-1.29	-0.24	-99.99	13.83	-1.29	-0.11	-99.99	14.24	-0.91	-0.40	-99.99
-31000.	13.73	-1.29	-0.24	-99.99	13.83	-1.29	-0.11	-99.99	14.24	-0.91	-0.40	-99.99
-30500.	13.73	-1.29	-0.24	-99.99	13.83	-1.29	-0.11	-99.99	14.24	-0.91	-0.40	-99.99
-30000.	13.73	-1.29	-0.24	-99.99	13.83	-1.29	-0.11	-99.99	14.24	-0.91	-0.40	-99.99
-29500.	13.73	-1.29	-0.24	-99.99	13.83	-1.29	-0.11	-99.99	14.24	-0.91	-0.40	-99.99
-29000.	13.73	-1.29	-0.24	-99.99	13.83	-1.29	-0.11	-99.99	14.24	-0.91	-0.40	-99.99
-28500.	13.73	-1.29	-0.24	-99.99	13.83	-1.29	-0.11	-99.99	14.24	-0.91	-0.40	-99.99
-28000.	13.73	-1.29	-0.24	-99.99	13.83	-1.29	-0.11	-99.99	14.24	-0.91	-0.40	-99.99
-27500.	13.73	-1.29	-0.24	-99.99	13.83	-1.29	-0.11	-99.99	14.24	-0.91	-0.40	-99.99
-27000.	13.73	-1.29	-0.24	-99.99	13.83	-1.29	-0.11	-99.99	14.24	-0.91	-0.40	-99.99
-26500.	13.73	-1.29	-0.24	-99.99	13.83	-1.29	-0.11	-99.99	14.24	-0.91	-0.40	-99.99
-26000.	13.73	-1.29	-0.24	-99.99	13.83	-1.29	-0.11	-99.99	14.24	-0.91	-0.40	-99.99
-25500.	13.73	-1.29	-0.24	-99.99	13.83	-1.29	-0.11	-99.99	14.24	-0.91	-0.40	-99.99
-25000.	13.73	-1.29	-0.24	-99.99	13.83	-1.29	-0.11	-99.99	14.24	-0.91	-0.40	-99.99
-24500.	13.73	-1.29	-0.24	-99.99	13.83	-1.29	-0.11	-99.99	14.24	-0.91	-0.40	-99.99
24000.	13.73	-1.29	-0.24	-99.99	13.83	-1.29	-0.11	-99.99	14.24	-0.91	-0.40	-99.99
-23500.	13.73	-1.29	-0.24	-99.99	13.83	-1.29	-0.11	-99.99	14.24	-0.91	-0.40	-99.99
-23000.	13.73	-1.29	-0.24	-99.99	13.83	-1.29	-0.11	-99.99	14.24	-0.91	-0.40	-99.99
-22500.	14.19	-1.10	-0.67	28.51	14.15	-1.01	-0.67	-99.99	14.24	-0.91	-0.40	-99.99
-22000.	14.79	-0.91	-0.13	29.14	14.48	-1.02	-0.12	29.81	14.72	-1.00	-0.10	30.24
-21500.	14.36	-1.11	0.49	31.05	14.59	-1.35	0.32	31.84	14.77	-1.59	0.35	32.30
-21000.	13.97	-1.48	1.09	33.06	14.45	-1.76	0.20	34.76	14.53	-1.92	-0.21	35.27
-20500.	13.69	-1.89	1.48	34.66	14.13	-2.33	1.24	36.36	13.74	-2.47	1.11	36.52
-20000.	13.69	-2.06	1.86	37.85	13.61	-2.58	2.62	37.76	13.13	-2.95	2.43	37.43
-19500.	13.37	-2.43	2.50	39.23	13.09	-2.82	2.85	38.65	13.03	-3.33	2.70	38.37
-19000.	12.68	-2.77	2.22	39.29	12.26	-2.98	1.56	39.16	12.06	-3.18	1.48	39.12
-18500.	11.42	-2.92	1.47	38.40	11.35	-3.01	1.29	38.13	11.23	-3.05	1.50	38.75
-18000.	10.47	-2.61	1.91	35.19	10.28	-2.82	2.02	36.28	9.85	-2.81	2.04	38.14
17500.	9.52	-2.46	2.05	31.79	8.95	-2.63	2.58	34.19	8.23	-2.57	2.24	37.33
-17000.	8.84	-2.44	1.65	28.60	7.84	-2.65	1.81	30.83	7.35	-2.63	1.67	33.05
16500.	9.25	-2.29	1.00	26.14	7.92	-2.21	1.22	27.53	6.68	-2.11	1.41	29.32
-16000.	9.07	-2.03	0.61	25.62	7.57	-1.83	0.87	25.76	6.19	-1.65	0.58	26.76
-15500.	8.37	-1.92	0.30	25.63	7.08	-1.70	0.40	25.31	6.11	-1.71	0.03	26.18
-15000.	7.35	-1.99	0.08	26.17	6.55	-1.84	-0.06	26.08	5.04	-1.77	1.41	27.46
-14500.	5.82	-1.91	1.34	26.65	4.76	-1.75	1.32	26.64	3.11	-1.55	2.05	28.03
-14000.	5.15	-2.09	1.97	25.35	3.22	-1.67	1.38	26.33	1.82	-1.41	1.40	27.92
-13500.	4.29	-2.31	1.54	23.93	2.16	-1.68	0.41	25.62	0.89	-1.41	0.53	27.28
-13000.	2.98	-2.49	0.52	23.17	1.57	-2.02	0.27	25.60	0.48	-1.69	0.34	27.17
-12500.	1.70	-3.22	1.14	24.74	0.88	-2.81	0.71	27.42	-0.14	-2.29	0.20	28.46
-12000.	0.67	-4.71	0.84	28.20	-0.12	-3.96	0.76	29.96	-0.99	-3.35	0.43	31.04
-11500.	-0.44	-6.22	0.76	32.20	-1.43	-5.38	0.81	32.66	-2.24	-4.85	0.96	33.01
-11000.	-1.63	-7.67	1.61	36.19	-2.42	-6.67	0.50	34.87	-3.28	-6.14	-0.04	34.45
10500.	-3.63	-9.23	0.45	37.33	-3.40	-7.83	-1.48	36.13	-3.95	-7.04	-1.57	35.71
-10000.	-4.65	-10.47	-1.26	37.61	-3.81	-8.72	-3.78	37.01	-3.71	-7.30	-3.32	36.95
-9500.	-4.57	-10.52	-3.22	37.54	-3.42	-9.13	-4.98	37.62	-2.30	-7.04	-4.33	37.97
-9000.	-3.14	-8.63	-4.95	37.25	-1.97	-7.93	-5.21	37.25	-1.06	-6.81	-4.39	37.31
-8500.	-1.04	-7.80	-5.26	36.06	-0.20	-6.92	-4.72	36.66	0.40	-6.32	-3.67	36.62
-8000.	0.68	-7.44	-4.82	35.30	1.59	-5.97	-3.89	36.33	2.26	-5.35	-2.33	36.13
-7500.	2.01	-7.11	-4.20	35.07	2.94	-5.33	-3.25	36.10	3.12	-4.45	-1.87	35.70
-7000.	3.04	-6.79	-3.83	34.99	3.59	-5.24	-3.42	35.53	3.81	-3.67	-2.32	35.32
-6500.	3.05	-6.05	-3.97	34.28	3.60	-4.56	-3.66	34.97	4.00	-2.79	-3.35	35.32
-6000.	3.22	-5.37	-3.96	33.95	3.26	-3.63	-3.72	34.83	3.75	-1.94	-3.68	35.70
-5500.	3.70	-4.61	-3.69	34.38	3.17	-3.05	-3.93	35.01	3.65	-1.97	-4.45	35.65
-5000.	4.49	-4.64	-5.69	35.12	3.84	-2.93	-5.70	34.77	3.91	-1.97	-4.79	35.48
-4500.	4.69	-5.03	-5.46	34.92	4.66	-3.25	-6.03	34.64	4.39	-1.72	-4.47	35.23
-4000.	4.81	-5.54	-4.83	34.63	5.39	-3.37	-5.89	34.44	5.77	-1.21	-6.14	34.63
-3500.	4.54	-5.38	-3.99	34.23	5.40	-2.26	-5.13	34.12	6.57	0.02	-5.82	34.46
-3000.	4.06	-4.80	-4.94	34.44	4.83	-1.61	-4.82	34.03	6.44	1.05	-5.26	34.50
-2500.	4.11	-4.51	-4.72	34.53	4.43	-1.48	-5.09	34.12	5.60	2.11	-5.73	34.70
-2000.	4.68	-4.32	-5.24	35.23	5.03	-1.31	-7.39	34.80	6.42	3.05	-8.94	34.95
-1500.	6.00	-3.69	-7.04	36.88	6.69	-0.13	-9.26	36.58	7.79	4.16	-9.90	36.43
-1000.	8.20	-3.12	-10.57	39.73	8.88	0.51	-12.28	39.03	9.52	4.73	-12.07	38.04
-500.	10.35	-2.06	-12.52	41.47	11.35	1.53	-15.35	41.07	11.97	5.36	-15.89	39.24

TABLE F.8. (continued).

Elevation: 1000 ft AGL

0.	12.23	0.23	-12.30	42.12	14.05	4.36	-16.18	42.22	14.54	6.90	-14.39	39.67
500.	13.28	3.78	-7.94	41.88	14.77	6.74	-10.31	42.15	15.60	7.96	-10.21	40.36
1000.	14.03	5.96	-5.09	41.48	15.15	7.88	-5.68	41.97	15.94	8.45	-5.87	41.09
1500.	15.56	7.55	-3.59	41.20	15.84	8.34	-2.86	41.56	16.25	8.84	-2.80	41.11
2000.	17.62	8.37	-3.49	40.60	17.00	8.25	-2.84	40.51	17.06	7.89	-2.82	40.48
2500.	18.25	7.04	-4.08	40.21	17.35	6.80	-3.40	40.73	17.39	6.56	-3.24	40.32
3000.	17.30	5.15	-3.55	40.55	17.19	5.42	-3.47	40.76	17.09	5.67	-4.06	40.18
3500.	16.81	3.79	-2.63	41.01	16.68	4.58	-3.38	40.89	16.52	5.83	-5.50	40.38
4000.	16.75	2.96	-1.85	41.63	16.41	3.78	-1.87	41.44	16.72	4.60	-2.54	40.32
4500.	17.67	1.02	-0.11	41.01	17.59	2.36	-1.21	41.12	17.63	3.22	-0.80	39.53
5000.	18.59	0.07	-0.26	40.24	18.63	1.34	-1.84	40.68	18.33	2.31	-0.47	37.95
5500.	18.86	-0.18	-0.84	39.24	18.87	0.72	-2.46	39.11	18.52	1.99	-2.08	36.34
6000.	18.71	-0.04	-1.01	37.26	18.93	0.75	-2.30	36.03	19.10	2.20	-2.42	34.27
6500.	19.79	2.13	-1.07	35.50	19.76	2.27	-1.61	34.01	20.09	2.46	-1.47	32.40
7000.	20.64	3.55	-0.63	33.50	20.92	3.18	-0.58	32.18	21.20	2.86	-0.59	30.31
7500.	21.53	3.93	-0.01	31.60	22.28	3.09	0.81	30.53	22.12	2.87	0.78	28.91
8000.	22.01	4.11	0.91	30.54	22.28	3.76	0.82	30.03	22.28	3.18	1.01	28.12
8500.	22.74	4.07	-0.14	30.62	22.76	4.08	0.37	29.89	22.48	3.36	0.91	27.70
9000.	22.75	3.76	0.25	29.78	23.01	3.92	0.52	29.51	22.72	3.57	1.20	27.79
9500.	22.15	3.01	1.04	28.04	22.70	3.16	1.25	28.90	22.33	3.12	0.62	28.17
10000.	21.51	2.59	0.51	26.60	22.30	3.03	0.12	28.85	22.24	3.16	-1.07	28.76
10500.	20.53	1.66	0.98	27.70	21.58	2.42	-1.18	29.18	22.43	3.33	-2.62	29.84
11000.	19.89	1.87	0.03	28.63	21.17	2.32	-1.98	30.04	22.46	3.40	-2.80	31.28
11500.	19.87	3.17	-1.06	29.83	21.41	3.60	-2.18	31.35	22.55	4.19	-2.66	31.59
12000.	20.06	3.62	0.40	31.85	20.70	3.67	-1.33	31.77	22.05	4.47	-2.41	31.67
12500.	21.15	3.42	-0.33	31.47	20.93	3.82	-1.51	32.47	21.82	4.41	-1.71	32.54
13000.	22.11	3.41	-0.78	32.17	22.35	4.14	-1.13	34.13	22.73	4.64	0.93	33.82
13500.	22.75	3.00	0.21	33.44	23.25	2.79	1.43	34.33	22.98	2.79	3.07	33.80
14000.	22.33	2.15	2.28	34.37	23.03	2.40	1.90	34.67	23.00	2.45	1.50	33.96
14500.	22.24	1.97	1.82	34.64	22.60	2.08	0.90	35.10	22.38	2.37	-0.22	34.96
15000.	21.38	0.95	0.77	34.39	21.89	1.02	1.16	35.83	20.81	0.43	0.69	35.87
15500.	20.17	-0.74	0.99	34.34	20.76	-0.20	0.55	36.03	20.45	0.26	-0.07	35.81
16000.	19.86	-1.02	0.15	34.33	20.24	-0.32	0.02	35.14	20.49	0.71	-0.70	34.96
16500.	19.96	-0.48	-0.22	33.38	20.16	0.09	-0.34	33.98	20.29	0.95	-0.60	34.11
17000.	20.28	0.27	-0.44	32.86	20.56	0.92	-0.62	33.61	20.34	1.33	-0.57	33.84
17500.	20.52	0.76	-0.02	33.94	20.44	1.09	-0.16	34.44	19.98	1.34	-0.22	34.14
18000.	20.52	0.76	-0.02	-99.99	20.44	1.09	-0.16	-99.99	19.98	1.34	-0.22	-99.99
18500.	20.52	0.76	-0.02	-99.99	20.44	1.09	-0.16	-99.99	19.98	1.34	-0.22	-99.99
19000.	20.52	0.76	-0.02	-99.99	20.44	1.09	-0.16	-99.99	19.98	1.34	-0.22	-99.99
19500.	20.52	0.76	-0.02	-99.99	20.44	1.09	-0.16	-99.99	19.98	1.34	-0.22	-99.99
20000.	20.52	0.76	-0.02	-99.99	20.44	1.09	-0.16	-99.99	19.98	1.34	-0.22	-99.99
20500.	20.52	0.76	-0.02	-99.99	20.44	1.09	-0.16	-99.99	19.98	1.34	-0.22	-99.99
21000.	20.52	0.76	-0.02	-99.99	20.44	1.09	-0.16	-99.99	19.98	1.34	-0.22	-99.99
21500.	20.52	0.76	-0.02	-99.99	20.44	1.09	-0.16	-99.99	19.98	1.34	-0.22	-99.99
22000.	20.52	0.76	-0.02	-99.99	20.44	1.09	-0.16	-99.99	19.98	1.34	-0.22	-99.99
22500.	20.52	0.76	-0.02	-99.99	20.44	1.09	-0.16	-99.99	19.98	1.34	-0.22	-99.99
23000.	20.52	0.76	-0.02	-99.99	20.44	1.09	-0.16	-99.99	19.98	1.34	-0.22	-99.99
23500.	20.52	0.76	-0.02	-99.99	20.44	1.09	-0.16	-99.99	19.98	1.34	-0.22	-99.99
24000.	20.52	0.76	-0.02	-99.99	20.44	1.09	-0.16	-99.99	19.98	1.34	-0.22	-99.99
24500.	20.52	0.76	-0.02	-99.99	20.44	1.09	-0.16	-99.99	19.98	1.34	-0.22	-99.99
25000.	20.52	0.76	-0.02	-99.99	20.44	1.09	-0.16	-99.99	19.98	1.34	-0.22	-99.99
25500.	20.52	0.76	-0.02	-99.99	20.44	1.09	-0.16	-99.99	19.98	1.34	-0.22	-99.99
26000.	20.52	0.76	-0.02	-99.99	20.44	1.09	-0.16	-99.99	19.98	1.34	-0.22	-99.99
26500.	20.52	0.76	-0.02	-99.99	20.44	1.09	-0.16	-99.99	19.98	1.34	-0.22	-99.99
27000.	20.52	0.76	-0.02	-99.99	20.44	1.09	-0.16	-99.99	19.98	1.34	-0.22	-99.99
27500.	20.52	0.76	-0.02	-99.99	20.44	1.09	-0.16	-99.99	19.98	1.34	-0.22	-99.99
28000.	20.52	0.76	-0.02	-99.99	20.44	1.09	-0.16	-99.99	19.98	1.34	-0.22	-99.99
28500.	20.52	0.76	-0.02	-99.99	20.44	1.09	-0.16	-99.99	19.98	1.34	-0.22	-99.99
29000.	20.52	0.76	-0.02	-99.99	20.44	1.09	-0.16	-99.99	19.98	1.34	-0.22	-99.99
29500.	20.52	0.76	-0.02	-99.99	20.44	1.09	-0.16	-99.99	19.98	1.34	-0.22	-99.99
30000.	20.52	0.76	-0.02	-99.99	20.44	1.09	-0.16	-99.99	19.98	1.34	-0.22	-99.99
30500.	20.52	0.76	-0.02	-99.99	20.44	1.09	-0.16	-99.99	19.98	1.34	-0.22	-99.99
31000.	20.52	0.76	-0.02	-99.99	20.44	1.09	-0.16	-99.99	19.98	1.34	-0.22	-99.99
31500.	20.52	0.76	-0.02	-99.99	20.44	1.09	-0.16	-99.99	19.98	1.34	-0.22	-99.99
32000.	20.52	0.76	-0.02	-99.99	20.44	1.09	-0.16	-99.99	19.98	1.34	-0.22	-99.99
32500.	20.52	0.76	-0.02	-99.99	20.44	1.09	-0.16	-99.99	19.98	1.34	-0.22	-99.99
33000.	20.52	0.76	-0.02	-99.99	20.44	1.09	-0.16	-99.99	19.98	1.34	-0.22	-99.99
33500.	20.52	0.76	-0.02	-99.99	20.44	1.09	-0.16	-99.99	19.98	1.34	-0.22	-99.99
34000.	20.52	0.76	-0.02	-99.99	20.44	1.09	-0.16	-99.99	19.98	1.34	-0.22	-99.99
34500.	20.52	0.76	-0.02	-99.99	20.44	1.09	-0.16	-99.99	19.98	1.34	-0.22	-99.99
35000.	20.52	0.76	-0.02	-99.99	20.44	1.09	-0.16	-99.99	19.98	1.34	-0.22	-99.99
35500.	20.52	0.76	-0.02	-99.99	20.44	1.09	-0.16	-99.99	19.98	1.34	-0.22	-99.99
36000.	20.52	0.76	-0.02	-99.99	20.44	1.09	-0.16	-99.99	19.98	1.34	-0.22	-99.99
36500.	20.52	0.76	-0.02	-99.99	20.44	1.09	-0.16	-99.99	19.98	1.34	-0.22	-99.99
37000.	20.52	0.76	-0.02	-99.99	20.44	1.09	-0.16	-99.99	19.98	1.34	-0.22	-99.99
37500.	20.52	0.76	-0.02	-99.99	20.44	1.09	-0.16	-99.99	19.98	1.34	-0.22	-99.99

TABLE F.8. (continued).

Elevation: 1500 ft AGL

	PLANE 1				PLANE 2				PLANE 3			
X	WX	WY	WZ	DBZ	WX	WY	WZ	DBZ	WX	WY	WZ	DBZ
-37500.	13.56	-0.54	-0.43	-99.99	13.67	-0.53	-0.17	-99.99	14.19	-0.09	-0.89	-99.99
-37000.	13.56	-0.54	-0.43	-99.99	13.67	-0.53	-0.17	-99.99	14.19	-0.09	-0.89	-99.99
-36500.	13.56	-0.54	-0.43	-99.99	13.67	-0.53	-0.17	-99.99	14.19	-0.09	-0.89	-99.99
-36000.	13.56	-0.54	-0.43	-99.99	13.67	-0.53	-0.17	-99.99	14.19	-0.09	-0.89	-99.99
-35500.	13.56	-0.54	-0.43	-99.99	13.67	-0.53	-0.17	-99.99	14.19	-0.09	-0.89	-99.99
-35000.	13.56	-0.54	-0.43	-99.99	13.67	-0.53	-0.17	-99.99	14.19	-0.09	-0.89	-99.99
-34500.	13.56	-0.54	-0.43	-99.99	13.67	-0.53	-0.17	-99.99	14.19	-0.09	-0.89	-99.99
-34000.	13.56	-0.54	-0.43	-99.99	13.67	-0.53	-0.17	-99.99	14.19	-0.09	-0.89	-99.99
-33500.	13.56	-0.54	-0.43	-99.99	13.67	-0.53	-0.17	-99.99	14.19	-0.09	-0.89	-99.99
-33000.	13.56	-0.54	-0.43	-99.99	13.67	-0.53	-0.17	-99.99	14.19	-0.09	-0.89	-99.99
-32500.	13.56	-0.54	-0.43	-99.99	13.67	-0.53	-0.17	-99.99	14.19	-0.09	-0.89	-99.99
-32000.	13.56	-0.54	-0.43	-99.99	13.67	-0.53	-0.17	-99.99	14.19	-0.09	-0.89	-99.99
-31500.	13.56	-0.54	-0.43	-99.99	13.67	-0.53	-0.17	-99.99	14.19	-0.09	-0.89	-99.99
-31000.	13.56	-0.54	-0.43	-99.99	13.67	-0.53	-0.17	-99.99	14.19	-0.09	-0.89	-99.99
-30500.	13.56	-0.54	-0.43	-99.99	13.67	-0.53	-0.17	-99.99	14.19	-0.09	-0.89	-99.99
-30000.	13.56	-0.54	-0.43	-99.99	13.67	-0.53	-0.17	-99.99	14.19	-0.09	-0.89	-99.99
-29500.	13.56	-0.54	-0.43	-99.99	13.67	-0.53	-0.17	-99.99	14.19	-0.09	-0.89	-99.99
-29000.	13.56	-0.54	-0.43	-99.99	13.67	-0.53	-0.17	-99.99	14.19	-0.09	-0.89	-99.99
-28500.	13.56	-0.54	-0.43	-99.99	13.67	-0.53	-0.17	-99.99	14.19	-0.09	-0.89	-99.99
-28000.	13.56	-0.54	-0.43	-99.99	13.67	-0.53	-0.17	-99.99	14.19	-0.09	-0.89	-99.99
-27500.	13.56	-0.54	-0.43	-99.99	13.67	-0.53	-0.17	-99.99	14.19	-0.09	-0.89	-99.99
-27000.	13.56	-0.54	-0.43	-99.99	13.67	-0.53	-0.17	-99.99	14.19	-0.09	-0.89	-99.99
-26500.	13.56	-0.54	-0.43	-99.99	13.67	-0.53	-0.17	-99.99	14.19	-0.09	-0.89	-99.99
-26000.	13.56	-0.54	-0.43	-99.99	13.67	-0.53	-0.17	-99.99	14.19	-0.09	-0.89	-99.99
-25500.	13.56	-0.54	-0.43	-99.99	13.67	-0.53	-0.17	-99.99	14.19	-0.09	-0.89	-99.99
-25000.	13.56	-0.54	-0.43	-99.99	13.67	-0.53	-0.17	-99.99	14.19	-0.09	-0.89	-99.99
-24500.	13.56	-0.54	-0.43	-99.99	13.67	-0.53	-0.17	-99.99	14.19	-0.09	-0.89	-99.99
-24000.	13.56	-0.54	-0.43	-99.99	13.67	-0.53	-0.17	-99.99	14.19	-0.09	-0.89	-99.99
-23500.	13.56	-0.54	-0.43	-99.99	13.67	-0.53	-0.17	-99.99	14.19	-0.09	-0.89	-99.99
-23000.	13.56	-0.54	-0.43	29.42	13.67	-0.53	-0.17	28.56	14.19	-0.09	-0.89	-99.99
-22500.	13.96	-0.22	-1.15	28.98	14.02	-0.17	-1.09	29.74	14.19	-0.09	-0.89	29.22
-22000.	14.31	0.21	0.00	29.88	14.27	0.15	-0.18	31.09	14.56	0.18	-0.40	31.40
-21500.	14.05	0.18	0.79	32.25	14.27	0.23	0.57	33.48	14.42	0.12	0.71	34.30
-21000.	13.87	0.06	1.34	34.25	14.14	0.18	0.48	36.52	14.34	0.05	0.25	37.08
-20500.	13.89	-0.11	1.71	37.12	14.31	-0.28	1.67	38.67	14.04	-0.40	1.67	38.85
-20000.	14.24	-0.64	2.22	39.88	14.35	-0.82	3.31	39.29	13.60	-0.92	3.09	39.73
-19500.	14.20	-1.04	3.29	39.86	13.95	-1.25	3.70	39.38	13.24	-1.47	3.46	39.68
-19000.	13.78	-1.40	3.29	38.99	13.20	-1.54	2.38	39.31	12.77	-1.69	2.09	39.66
-18500.	13.40	-1.91	2.56	37.54	13.16	-1.91	2.02	38.87	13.00	-1.89	2.35	39.87
-18000.	12.41	-1.77	3.08	33.95	12.45	-1.95	3.13	36.54	12.65	-1.99	3.27	38.98
-17500.	11.50	-1.79	3.05	30.94	11.33	-1.96	3.92	33.42	11.26	-1.99	3.69	37.04
-17000.	10.83	-1.93	2.09	28.56	10.26	-2.10	2.25	30.06	10.25	-2.12	2.23	32.44
-16500.	11.13	-1.99	0.92	27.08	10.70	-2.11	1.30	27.74	10.15	-2.14	1.75	29.18
-16000.	11.25	-2.06	0.88	26.46	10.50	-2.16	1.19	26.56	9.93	-2.17	0.89	27.59
-15500.	10.65	-2.20	1.21	26.92	9.70	-2.28	1.11	26.60	8.48	-2.18	0.47	27.27
-15000.	9.61	-2.38	1.44	28.02	9.22	-2.54	1.05	27.82	8.27	-2.44	2.28	29.05
-14500.	7.91	-2.31	2.63	27.94	7.53	-2.46	2.66	28.29	7.24	-2.50	3.41	29.96
-14000.	6.88	-2.23	3.01	26.54	6.10	-2.32	2.57	27.84	5.77	-2.37	2.92	29.81
-13500.	6.05	-2.09	2.53	25.24	4.81	-2.18	1.02	26.75	3.83	-2.01	1.61	29.18
-13000.	5.11	-1.96	1.74	24.50	4.12	-2.41	0.80	26.59	2.67	-2.03	1.03	28.68
-12500.	3.53	-2.53	1.95	25.27	2.89	-2.72	1.50	27.69	1.37	-2.32	0.75	28.89
-12000.	2.44	-3.70	1.25	28.32	1.46	-3.33	1.59	29.92	0.16	-3.04	1.21	30.51
-11500.	1.35	-5.12	1.02	32.07	0.24	-4.32	1.47	33.19	-0.89	-4.12	1.98	33.66
-11000.	0.34	-6.90	2.16	35.13	-0.70	-5.62	1.13	34.74	-1.98	-5.46	0.56	34.89
-10500.	-1.80	-8.35	1.18	36.06	-1.89	-6.70	-1.57	35.71	-2.65	-6.56	-2.02	35.89
-10000.	-2.99	-9.01	-1.66	36.60	-2.48	-7.33	-5.35	36.36	-2.48	-6.95	-5.34	36.75
-9500.	-2.94	-8.44	-4.97	36.76	-2.09	-7.34	-7.89	36.64	-1.14	-6.63	-6.97	37.17
-9000.	-1.39	-6.62	-6.77	36.92	-0.56	-6.65	-7.44	36.93	0.22	-6.24	-6.61	37.09
-8500.	-0.10	-6.70	-7.34	35.86	0.62	-6.36	-6.95	36.27	1.34	-5.78	-5.46	36.67
-8000.	1.25	-7.19	-7.31	34.88	1.79	-6.21	-6.58	35.55	2.03	-4.87	-4.08	36.28
-7500.	2.88	-7.51	-6.88	34.43	3.43	-6.17	-6.52	35.26	3.36	-4.18	-4.11	36.40
-7000.	4.72	-7.27	-5.62	34.11	4.84	-6.00	-5.79	34.59	4.69	-3.72	-4.57	36.10
-6500.	4.99	-6.18	-5.14	33.41	5.32	-5.13	-5.35	34.23	5.46	-3.25	-5.56	35.35
-6000.	5.01	-4.79	-5.25	33.15	5.23	-3.78	-5.00	34.08	5.20	-2.34	-5.66	34.79
-5500.	5.04	-3.07	-5.59	33.51	5.70	-1.72	-5.19	33.96	5.96	-1.35	-6.04	34.88
-5000.	4.68	-2.46	-7.38	34.98	5.56	-1.28	-6.98	34.15	6.08	-1.33	-6.27	35.31
-4500.	3.80	-3.20	-6.97	35.48	5.39	-1.90	-7.70	34.71	5.99	-1.64	-6.31	35.56
-4000.	3.53	-3.73	-6.81	35.75	5.73	-2.47	-8.17	34.96	7.28	-1.47	-8.95	34.74
-3500.	3.67	-3.59	-6.89	35.57	6.04	-1.45	-7.62	34.86	7.98	0.38	-8.47	34.76
-3000.	4.52	-3.66	-8.16	35.18	6.20	-0.68	-7.88	34.59	8.57	2.12	-8.17	34.98
-2500.	5.46	-3.00	-8.35	35.46	6.57	-0.06	-9.17	34.66	9.29	3.86	-9.43	35.22
-2000.	6.66	-2.38	-9.52	36.10	7.87	0.87	-12.70	35.38	10.06	5.78	-14.69	35.20
-1500.	7.94	-1.67	-11.98	37.06	8.98	2.13	-14.81	36.39	10.77	6.44	-15.37	35.91
-1000.	8.85	-1.01	-15.88	39.08	10.04	2.90	-18.04	38.08	11.17	6.35	-17.07	37.31
-500.	10.83	0.31	-18.10	41.33	11.46	4.03	-21.15	40.07	11.29	6.62	-21.03	38.77

TABLE F.8. (continued).

Elevation: 1500 ft AGL

0.	12.64	2.56	-17.60	42.65	13.44	6.34	-21.05	41.80	11.91	8.03	-17.29	39.14
500.	13.15	5.10	-12.03	41.68	13.38	7.79	-12.57	41.14	11.27	7.90	-11.00	39.12
1000.	14.17	7.12	-9.41	41.49	13.46	9.56	-7.73	41.21	11.55	8.84	-6.26	39.67
1500.	15.08	9.60	-7.86	40.71	14.32	12.32	-5.29	41.12	13.57	13.20	-3.88	40.72
2000.	15.53	11.52	-6.74	39.06	15.37	13.78	-4.09	39.14	15.18	13.13	-3.09	38.93
2500.	14.49	10.53	-4.80	38.29	15.45	11.60	-3.46	37.79	16.05	11.18	-3.13	37.60
3000.	14.36	9.03	-3.86	39.23	15.45	9.30	-3.54	38.14	16.22	9.44	-3.95	37.27
3500.	14.54	7.39	-3.20	40.57	15.00	8.20	-3.82	39.73	15.41	9.70	-5.76	38.66
4000.	14.64	6.02	-2.55	41.91	13.82	6.70	-2.56	40.78	13.49	8.11	-3.39	38.64
4500.	14.17	5.33	-1.42	41.05	13.36	5.87	-2.67	40.20	12.73	6.70	-2.01	37.66
5000.	15.15	3.94	-1.50	40.46	13.88	4.37	-3.60	39.40	13.06	4.94	-1.48	36.06
5500.	16.01	2.66	-2.01	38.86	14.93	2.89	-4.13	37.54	13.89	4.72	-4.06	34.50
6000.	16.28	3.09	-2.70	35.68	15.86	5.08	-4.49	33.99	15.68	6.75	-4.44	31.64
6500.	17.48	5.07	-2.99	33.43	17.09	6.73	-3.45	31.43	17.29	7.47	-2.62	29.07
7000.	18.20	6.39	-1.94	32.32	17.89	7.19	-1.70	29.91	18.56	6.87	-0.63	27.46
7500.	18.61	6.73	-0.61	31.79	18.41	6.36	0.32	29.89	19.14	6.55	1.36	27.18
8000.	19.09	6.82	0.53	32.24	18.84	6.27	0.75	31.21	19.29	6.47	1.79	28.05
8500.	19.60	7.13	-0.40	31.68	19.71	6.63	0.39	31.41	19.77	6.17	1.65	28.97
9000.	19.58	6.79	0.29	30.06	20.36	6.65	0.66	30.93	20.46	6.06	2.10	29.61
9500.	19.22	6.07	1.26	28.00	20.48	6.10	1.87	30.06	20.28	5.48	1.41	29.91
10000.	18.69	5.88	0.36	28.11	19.72	5.84	0.72	30.60	20.05	5.28	-0.83	30.68
10500.	17.92	4.04	0.86	29.58	19.04	4.86	-1.29	31.31	20.30	5.12	-2.99	31.80
11000.	17.62	3.26	-0.31	31.29	18.85	3.99	-2.64	32.38	20.45	4.54	-3.29	32.87
11500.	17.55	3.37	-1.40	33.10	18.91	3.95	-2.61	33.68	20.07	4.61	-3.07	33.52
12000.	17.01	4.04	0.19	34.38	18.68	4.30	-1.56	34.03	19.75	4.88	-2.85	33.97
12500.	17.01	4.06	-1.19	34.32	18.37	4.73	-2.29	34.55	19.36	5.23	-2.39	34.51
13000.	17.13	4.33	-1.97	34.35	18.08	5.34	-2.59	35.37	19.09	5.94	0.34	35.09
13500.	17.65	4.52	-0.47	34.28	18.56	5.06	0.78	34.91	19.14	5.17	2.55	34.74
14000.	18.62	3.59	1.02	34.76	19.35	4.33	1.15	34.74	19.57	4.48	1.12	34.46
14500.	19.29	2.16	1.20	34.90	20.00	3.16	0.56	34.66	20.15	3.63	-0.12	34.44
15000.	19.12	0.74	0.97	34.63	20.68	1.68	1.33	34.93	20.39	2.63	0.41	35.28
15500.	18.84	0.29	1.25	34.39	20.78	1.35	0.18	34.98	20.53	2.37	-0.87	35.51
16000.	18.67	0.16	-0.36	33.51	20.04	1.09	-0.71	34.71	20.40	2.16	-1.75	35.54
16500.	19.23	0.51	-0.92	32.79	19.77	1.03	-1.18	34.36	19.96	1.86	-1.58	35.37
17000.	19.90	0.88	-1.02	32.30	20.27	1.11	-1.22	34.08	20.22	1.60	-1.08	34.62
17500.	20.05	0.81	-0.05	32.96	20.30	0.73	-0.29	33.76	20.42	1.35	-0.38	34.27
18000.	20.05	0.81	-0.05	-99.99	20.30	0.73	-0.29	-99.99	20.42	1.35	-0.38	-99.99
18500.	20.05	0.81	-0.05	-99.99	20.30	0.73	-0.29	-99.99	20.42	1.35	-0.38	-99.99
19000.	20.05	0.81	-0.05	-99.99	20.30	0.73	-0.29	-99.99	20.42	1.35	-0.38	-99.99
19500.	20.05	0.81	-0.05	-99.99	20.30	0.73	-0.29	-99.99	20.42	1.35	-0.38	-99.99
20000.	20.05	0.81	-0.05	-99.99	20.30	0.73	-0.29	-99.99	20.42	1.35	-0.38	-99.99
20500.	20.05	0.81	-0.05	-99.99	20.30	0.73	-0.29	-99.99	20.42	1.35	-0.38	-99.99
21000.	20.05	0.81	-0.05	-99.99	20.30	0.73	-0.29	-99.99	20.42	1.35	-0.38	-99.99
21500.	20.05	0.81	-0.05	-99.99	20.30	0.73	-0.29	-99.99	20.42	1.35	-0.38	-99.99
22000.	20.05	0.81	-0.05	-99.99	20.30	0.73	-0.29	-99.99	20.42	1.35	-0.38	-99.99
22500.	20.05	0.81	-0.05	-99.99	20.30	0.73	-0.29	-99.99	20.42	1.35	-0.38	-99.99
23000.	20.05	0.81	-0.05	-99.99	20.30	0.73	-0.29	-99.99	20.42	1.35	-0.38	-99.99
23500.	20.05	0.81	-0.05	-99.99	20.30	0.73	-0.29	-99.99	20.42	1.35	-0.38	-99.99
24000.	20.05	0.81	-0.05	-99.99	20.30	0.73	-0.29	-99.99	20.42	1.35	-0.38	-99.99
24500.	20.05	0.81	-0.05	-99.99	20.30	0.73	-0.29	-99.99	20.42	1.35	-0.38	-99.99
25000.	20.05	0.81	-0.05	-99.99	20.30	0.73	-0.29	-99.99	20.42	1.35	-0.38	-99.99
25500.	20.05	0.81	-0.05	-99.99	20.30	0.73	-0.29	-99.99	20.42	1.35	-0.38	-99.99
26000.	20.05	0.81	-0.05	-99.99	20.30	0.73	-0.29	-99.99	20.42	1.35	-0.38	-99.99
26500.	20.05	0.81	-0.05	-99.99	20.30	0.73	-0.29	-99.99	20.42	1.35	-0.38	-99.99
27000.	20.05	0.81	-0.05	-99.99	20.30	0.73	-0.29	-99.99	20.42	1.35	-0.38	-99.99
27500.	20.05	0.81	-0.05	-99.99	20.30	0.73	-0.29	-99.99	20.42	1.35	-0.38	-99.99
28000.	20.05	0.81	0.05	-99.99	20.30	0.73	-0.29	-99.99	20.42	1.35	-0.38	-99.99
28500.	20.05	0.81	-0.05	-99.99	20.30	0.73	-0.29	-99.99	20.42	1.35	-0.38	-99.99
29000.	20.05	0.81	-0.05	-99.99	20.30	0.73	-0.29	-99.99	20.42	1.35	-0.38	-99.99
29500.	20.05	0.81	-0.05	-99.99	20.30	0.73	-0.29	-99.99	20.42	1.35	-0.38	-99.99
30000.	20.05	0.81	-0.05	-99.99	20.30	0.73	-0.29	-99.99	20.42	1.35	-0.38	-99.99
30500.	20.05	0.81	-0.05	-99.99	20.30	0.73	-0.29	-99.99	20.42	1.35	-0.38	-99.99
31000.	20.05	0.81	-0.05	-99.99	20.30	0.73	-0.29	-99.99	20.42	1.35	-0.38	-99.99
31500.	20.05	0.81	-0.05	-99.99	20.30	0.73	-0.29	-99.99	20.42	1.35	-0.38	-99.99
32000.	20.05	0.81	-0.05	-99.99	20.30	0.73	-0.29	-99.99	20.42	1.35	-0.38	-99.99
32500.	20.05	0.81	-0.05	-99.99	20.30	0.73	-0.29	-99.99	20.42	1.35	-0.38	-99.99
33000.	20.05	0.81	-0.05	-99.99	20.30	0.73	-0.29	-99.99	20.42	1.35	-0.38	-99.99
33500.	20.05	0.81	-0.05	-99.99	20.30	0.73	-0.29	-99.99	20.42	1.35	-0.38	-99.99
34000.	20.05	0.81	-0.05	-99.99	20.30	0.73	-0.29	-99.99	20.42	1.35	-0.38	-99.99
34500.	20.05	0.81	-0.05	-99.99	20.30	0.73	-0.29	-99.99	20.42	1.35	-0.38	-99.99
35000.	20.05	0.81	-0.05	-99.99	20.30	0.73	-0.29	-99.99	20.42	1.35	-0.38	-99.99
35500.	20.05	0.81	-0.05	-99.99	20.30	0.73	-0.29	-99.99	20.42	1.35	-0.38	-99.99
36000.	20.05	0.81	-0.05	-99.99	20.30	0.73	-0.29	-99.99	20.42	1.35	-0.38	-99.99
36500.	20.05	0.81	-0.05	-99.99	20.30	0.73	-0.29	-99.99	20.42	1.35	-0.38	-99.99
37000.	20.05	0.81	-0.05	-99.99	20.30	0.73	-0.29	-99.99	20.42	1.35	-0.38	-99.99
37500.	20.05	0.81	-0.05	-99.99	20.30	0.73	-0.29	-99.99	20.42	1.35	-0.38	-99.99

TABLE F.8. (continued).

Elevation: 2000 ft AGL

	PLANE 1				PLANE 2				PLANE 3			
X	WX	WY	WZ	DBZ	WX	WY	WZ	DBZ	WX	WY	WZ	DBZ
-37500.	12.91	-0.66	-0.59	-99.99	13.01	-0.64	-0.23	-99.99	13.36	-0.06	-1.36	-99.99
-37000.	12.91	-0.66	-0.59	-99.99	13.01	-0.64	-0.23	-99.99	13.36	-0.06	-1.36	-99.99
-36500.	12.91	-0.66	-0.59	-99.99	13.01	-0.64	-0.23	-99.99	13.36	-0.06	-1.36	-99.99
-36000.	12.91	-0.66	-0.59	-99.99	13.01	-0.64	-0.23	-99.99	13.36	-0.06	-1.36	-99.99
-35500.	12.91	-0.66	-0.59	-99.99	13.01	-0.64	-0.23	-99.99	13.36	-0.06	-1.36	-99.99
-35000.	12.91	-0.66	-0.59	-99.99	13.01	-0.64	-0.23	-99.99	13.36	-0.06	-1.36	-99.99
-34500.	12.91	-0.66	-0.59	-99.99	13.01	-0.64	-0.23	-99.99	13.36	-0.06	-1.36	-99.99
-34000.	12.91	-0.66	-0.59	-99.99	13.01	-0.64	-0.23	-99.99	13.36	-0.06	-1.36	-99.99
-33500.	12.91	-0.66	-0.59	-99.99	13.01	-0.64	-0.23	-99.99	13.36	-0.06	-1.36	-99.99
-33000.	12.91	-0.66	-0.59	-99.99	13.01	-0.64	-0.23	-99.99	13.36	-0.06	-1.36	-99.99
-32500.	12.91	-0.66	-0.59	-99.99	13.01	-0.64	-0.23	-99.99	13.36	-0.06	-1.36	-99.99
-32000.	12.91	-0.66	-0.59	-99.99	13.01	-0.64	-0.23	-99.99	13.36	-0.06	-1.36	-99.99
-31500.	12.91	-0.66	-0.59	-99.99	13.01	-0.64	-0.23	-99.99	13.36	-0.06	-1.36	-99.99
-31000.	12.91	-0.66	-0.59	-99.99	13.01	-0.64	-0.23	-99.99	13.36	-0.06	-1.36	-99.99
-30500.	12.91	-0.66	-0.59	-99.99	13.01	-0.64	-0.23	-99.99	13.36	-0.06	-1.36	-99.99
-30000.	12.91	-0.66	-0.59	-99.99	13.01	-0.64	-0.23	-99.99	13.36	-0.06	-1.36	-99.99
-29500.	12.91	-0.66	-0.59	-99.99	13.01	-0.64	-0.23	-99.99	13.36	-0.06	-1.36	-99.99
-29000.	12.91	-0.66	-0.59	-99.99	13.01	-0.64	-0.23	-99.99	13.36	-0.06	-1.36	-99.99
-28500.	12.91	-0.66	-0.59	-99.99	13.01	-0.64	-0.23	-99.99	13.36	-0.06	-1.36	-99.99
-28000.	12.91	-0.66	-0.59	-99.99	13.01	-0.64	-0.23	-99.99	13.36	-0.06	-1.36	-99.99
-27500.	12.91	-0.66	-0.59	-99.99	13.01	-0.64	-0.23	-99.99	13.36	-0.06	-1.36	-99.99
-27000.	12.91	-0.66	-0.59	-99.99	13.01	-0.64	-0.23	-99.99	13.36	-0.06	-1.36	-99.99
-26500.	12.91	-0.66	-0.59	-99.99	13.01	-0.64	-0.23	-99.99	13.36	-0.06	-1.36	-99.99
-26000.	12.91	-0.66	-0.59	-99.99	13.01	-0.64	-0.23	-99.99	13.36	-0.06	-1.36	-99.99
-25500.	12.91	-0.66	-0.59	-99.99	13.01	-0.64	-0.23	-99.99	13.36	-0.06	-1.36	-99.99
-25000.	12.91	-0.66	-0.59	-99.99	13.01	-0.64	-0.23	-99.99	13.36	-0.06	-1.36	-99.99
-24500.	12.91	-0.66	-0.59	-99.99	13.01	-0.64	-0.23	-99.99	13.36	-0.06	-1.36	-99.99
-24000.	12.91	-0.66	-0.59	-99.99	13.01	-0.64	-0.23	-99.99	13.36	-0.06	-1.36	-99.99
-23500.	12.91	-0.66	-0.59	-99.99	13.01	-0.64	-0.23	-99.99	13.36	-0.06	-1.36	-99.99
-23000.	12.91	-0.66	-0.59	30.17	13.01	-0.64	-0.23	28.77	13.36	-0.06	-1.36	-99.99
-22500.	13.16	-0.48	-1.55	32.88	13.19	-0.37	-1.48	33.56	13.36	-0.06	-1.36	30.95
-22000.	13.44	-0.44	0.12	35.25	13.30	-0.37	-0.29	35.59	13.47	-0.01	-0.72	33.88
-21500.	13.18	-0.39	0.96	36.86	13.24	-0.36	0.72	37.22	13.31	-0.32	0.89	36.94
-21000.	12.95	-0.30	1.29	38.03	13.09	-0.19	0.59	38.82	13.35	-0.41	0.50	38.71
-20500.	12.85	-0.26	1.52	39.88	13.06	-0.20	1.74	39.61	13.19	-0.38	2.04	39.66
-20000.	13.04	-0.45	2.01	39.70	12.96	-0.32	3.55	39.52	12.94	-0.32	3.55	40.15
-19500.	13.14	-0.71	3.40	38.88	12.89	-0.51	4.00	39.03	12.80	-0.41	3.81	39.79
-19000.	13.13	-0.95	3.67	37.46	12.90	-0.86	2.51	37.87	12.68	-0.81	1.99	38.62
-18500.	13.11	-1.20	3.06	35.62	13.36	-1.17	2.22	37.35	13.19	-1.12	2.35	38.54
-18000.	12.64	-1.12	3.87	33.53	13.10	-1.20	3.85	35.40	13.32	-1.26	3.81	37.56
-17500.	12.18	-1.09	3.87	30.64	12.38	-1.16	5.01	32.14	12.62	-1.14	4.91	35.80
-17000.	11.74	-1.15	2.58	27.87	11.78	-1.21	2.69	28.23	12.09	-1.17	2.74	31.59
-16500.	11.45	-1.34	1.18	27.76	11.42	-1.37	1.62	28.00	11.58	-1.33	2.20	29.59
-16000.	10.85	-1.39	1.31	26.62	10.83	-1.46	1.73	27.55	10.95	-1.50	1.51	29.07
-15500.	10.45	-1.53	2.12	27.15	10.14	-1.66	1.99	27.69	10.08	-1.65	1.36	29.15
-15000.	9.98	-1.86	2.81	28.92	9.41	-2.08	2.18	29.91	8.94	-2.05	3.08	30.65
-14500.	8.73	-2.20	4.16	29.52	8.37	-2.42	4.01	30.91	7.93	-2.31	4.43	31.57
-14000.	7.76	-2.15	4.44	29.03	7.18	-2.38	3.98	30.57	7.02	-2.33	4.29	32.12
-13500.	6.52	-1.91	3.96	27.18	5.68	-2.15	2.24	29.26	5.26	-1.99	3.17	31.69
-13000.	5.05	-1.80	3.24	25.00	4.56	-2.14	1.98	28.13	3.43	-1.91	2.41	30.51
-12500.	3.75	-2.57	2.96	26.40	3.28	-2.52	2.79	28.89	1.57	-2.29	1.82	30.35
-12000.	2.91	-3.60	1.77	29.01	1.94	-3.21	2.47	30.86	0.26	-3.07	1.93	31.81
-11500.	2.26	-4.64	1.19	31.89	1.12	-4.06	1.70	33.67	0.25	-3.69	2.45	34.32
-11000.	1.99	-5.68	2.55	32.98	1.06	-4.60	1.49	33.93	0.33	-4.11	0.81	34.76
-10500.	-0.35	-6.78	2.07	34.10	0.21	-5.18	-1.66	34.97	0.26	-4.66	-2.45	35.51
-10000.	-1.71	-7.40	-1.93	34.97	-0.28	-5.73	-6.67	35.78	0.52	-5.20	-6.85	36.69
-9500.	-1.78	-7.43	-6.50	35.35	-0.04	-6.29	-10.32	35.67	1.63	-5.47	-8.95	36.63
-9000.	-0.50	-6.86	-8.09	35.83	0.90	-6.50	-9.06	36.32	2.18	-5.92	-8.10	37.01
-8500.	0.31	-7.46	-8.68	35.00	1.48	-6.77	-8.48	35.95	2.30	-6.10	-6.69	36.95
-8000.	1.26	-7.27	-9.12	34.23	1.87	-6.69	-8.67	35.25	2.28	-5.58	-5.88	36.57
-7500.	2.48	-6.35	-9.20	33.94	2.55	-6.26	-9.45	34.84	2.88	-4.92	-6.67	35.48
-7000.	4.34	-5.06	-7.61	33.86	4.09	-4.65	-8.26	33.97	4.04	-3.75	-7.30	34.74
-6500.	5.23	-3.88	-6.26	33.54	5.50	-3.26	-7.32	33.61	5.62	-2.48	-8.17	34.43
-6000.	5.82	-2.31	-6.31	33.00	6.91	-1.76	-6.60	33.29	7.18	-1.16	-8.13	33.57
-5500.	6.18	-0.41	-7.05	32.63	8.35	0.67	-6.33	32.89	8.78	0.70	-7.70	33.70
-5000.	5.56	-1.00	-8.31	33.69	8.35	0.22	-7.66	33.15	9.61	1.04	-7.56	34.11
-4500.	4.79	-2.46	-8.01	34.51	7.89	-0.91	-8.79	33.67	10.04	0.64	-7.84	34.14
-4000.	4.84	-3.24	-8.68	35.57	7.57	-1.90	-10.05	33.94	9.85	-0.04	-11.04	33.19
-3500.	5.76	-3.03	-9.60	36.81	7.55	-1.73	-9.64	35.16	8.78	0.12	-10.63	34.31
-3000.	7.27	-3.16	-11.04	36.02	7.69	-1.67	-10.54	35.07	8.04	0.50	-10.97	35.02
-2500.	7.60	-2.55	-11.67	36.29	7.89	-1.04	-12.68	34.96	8.16	1.17	-12.93	35.38
-2000.	8.01	-1.48	-13.29	36.99	8.57	0.35	-16.67	35.43	8.54	1.98	-18.45	35.23
-1500.	8.71	-0.21	-16.06	38.68	9.24	1.81	-18.83	37.54	9.43	3.25	-18.76	36.48
-1000.	9.57	0.28	-19.97	39.86	10.22	1.86	-21.81	38.77	9.96	3.05	-19.43	37.81
-500.	10.63	0.10	-22.13	41.62	11.27	1.05	-24.28	40.01	9.55	0.62	-22.36	38.85

TABLE F.8 (continued).

Elevation: 2000 ft AGL

0.	11.39	-0.33	-21.02	42.60	12.03	0.29	-22.94	41.23	9.39	-0.57	-17.25	39.72
500.	11.55	-0.35	-14.61	41.25	10.40	0.06	-13.28	40.31	8.45	0.10	-10.47	39.67
1000.	12.07	0.50	-12.21	40.56	9.94	1.39	-9.06	39.54	7.81	2.39	-6.60	38.73
1500.	11.51	1.91	-10.30	39.10	9.61	3.63	-7.47	38.03	8.00	5.60	-5.26	37.07
2000.	9.82	3.03	-8.03	36.86	8.75	5.84	-5.74	35.51	8.32	7.84	-4.25	34.98
2500.	7.69	5.72	-5.32	34.83	8.01	6.93	-4.71	34.77	9.16	8.95	-4.16	34.04
3000.	7.98	7.45	-5.27	36.47	8.81	7.98	-4.85	35.80	10.55	9.41	-4.89	34.09
3500.	9.97	8.53	-5.08	38.05	10.39	9.07	-5.17	37.16	11.73	9.91	-6.28	34.87
4000.	13.02	9.32	-4.04	38.47	12.40	10.05	-3.40	36.86	12.07	10.57	-3.70	34.41
4500.	13.67	9.19	-2.13	38.10	12.39	9.93	-3.46	36.86	11.47	10.66	-2.44	34.38
5000.	13.58	8.23	-2.14	37.07	12.22	8.93	-4.78	36.17	10.63	10.08	-2.23	34.01
5500.	13.52	7.12	-3.12	35.60	12.32	7.82	-5.96	34.11	10.66	9.83	-6.46	32.29
6000.	13.31	6.81	-4.76	33.93	12.38	8.80	-6.74	32.22	11.83	10.65	-6.18	30.46
6500.	12.42	6.91	-5.05	31.39	11.22	8.48	-4.66	29.94	12.17	8.85	-2.62	28.80
7000.	11.64	6.31	-3.11	30.70	9.73	6.42	-1.98	28.77	11.52	5.26	0.89	27.71
7500.	11.39	4.33	-1.27	31.19	9.14	3.22	-0.47	29.20	11.57	3.66	2.13	27.73
8000.	12.25	3.11	-0.58	32.08	10.76	3.19	0.10	30.71	11.63	3.04	2.44	28.53
8500.	13.83	6.39	-0.06	31.33	12.46	4.56	0.65	30.94	12.01	2.88	2.41	29.25
9000.	14.31	8.17	1.15	30.69	13.43	6.05	1.34	30.92	13.12	3.87	3.17	29.73
9500.	14.03	8.97	2.01	29.99	14.21	7.17	2.89	31.27	14.85	5.43	2.45	30.92
10000.	13.22	7.24	0.30	31.28	13.91	6.91	1.45	32.51	15.77	6.18	-0.36	32.04
10500.	12.93	5.17	0.11	32.70	14.06	6.05	-1.53	33.39	16.54	6.05	-3.09	33.25
11000.	13.38	4.15	-1.49	33.69	14.54	4.99	-3.60	34.19	16.86	5.08	-3.53	34.96
11500.	14.10	4.25	-2.40	34.13	15.22	5.02	-3.39	34.14	16.70	5.32	-3.43	34.40
12000.	14.11	5.40	0.00	34.70	15.61	5.00	-1.75	34.57	16.80	5.18	-3.17	34.58
12500.	14.07	4.70	-1.47	34.85	15.70	4.80	-2.47	35.16	16.84	5.31	-2.76	35.10
13000.	13.68	4.71	-2.59	34.72	15.31	5.17	-3.06	35.77	16.38	6.10	0.34	35.97
13500.	12.99	5.03	-1.34	34.32	14.37	5.37	0.35	35.49	15.59	5.81	2.30	35.91
14000.	13.10	4.03	-1.11	34.06	14.47	5.15	-0.11	34.96	15.43	5.57	0.59	35.39
14500.	14.24	2.53	-0.56	33.90	15.30	4.24	-1.07	34.16	15.84	4.73	-0.80	34.66
15000.	15.13	1.07	-0.03	32.90	16.51	2.41	-0.86	33.00	16.92	4.01	-1.24	34.45
15500.	15.53	0.55	0.55	31.73	17.65	2.36	-1.43	33.53	17.66	3.40	-1.92	34.78
16000.	15.77	0.66	-1.15	31.53	17.55	1.54	-1.66	33.15	17.72	2.43	-2.47	34.64
16500.	16.38	0.65	-1.61	31.29	17.30	1.06	-1.94	32.76	17.43	1.86	-2.59	34.05
17000.	16.89	0.74	-1.50	31.12	17.56	1.29	-1.80	32.51	17.74	1.69	-1.95	33.49
17500.	17.39	0.75	-0.08	30.68	17.56	0.39	-0.44	31.05	18.07	1.31	-0.80	32.61
18000.	17.39	0.75	-0.08	-99.99	17.56	0.39	-0.44	-99.99	18.07	1.31	-0.80	-99.99
18500.	17.39	0.75	-0.08	-99.99	17.56	0.39	-0.44	-99.99	18.07	1.31	-0.80	-99.99
19000.	17.39	0.75	-0.08	-99.99	17.56	0.39	-0.44	-99.99	18.07	1.31	-0.80	-99.99
19500.	17.39	0.75	-0.08	-99.99	17.56	0.39	-0.44	-99.99	18.07	1.31	-0.80	-99.99
20000.	17.39	0.75	-0.08	-99.99	17.56	0.39	-0.44	-99.99	18.07	1.31	-0.80	-99.99
20500.	17.39	0.75	-0.08	-99.99	17.56	0.39	-0.44	-99.99	18.07	1.31	-0.80	-99.99
21000.	17.39	0.75	-0.08	-99.99	17.56	0.39	-0.44	-99.99	18.07	1.31	-0.80	-99.99
21500.	17.39	0.75	-0.08	-99.99	17.56	0.39	-0.44	-99.99	18.07	1.31	-0.80	-99.99
22000.	17.39	0.75	-0.08	-99.99	17.56	0.39	-0.44	-99.99	18.07	1.31	-0.80	-99.99
22500.	17.39	0.75	-0.08	-99.99	17.56	0.39	-0.44	-99.99	18.07	1.31	-0.80	-99.99
23000.	17.39	0.75	-0.08	-99.99	17.56	0.39	-0.44	-99.99	18.07	1.31	-0.80	-99.99
23500.	17.39	0.75	-0.08	-99.99	17.56	0.39	-0.44	-99.99	18.07	1.31	-0.80	-99.99
24000.	17.39	0.75	-0.08	-99.99	17.56	0.39	-0.44	-99.99	18.07	1.31	-0.80	-99.99
24500.	17.39	0.75	-0.08	-99.99	17.56	0.39	-0.44	-99.99	18.07	1.31	-0.80	-99.99
25000.	17.39	0.75	-0.08	-99.99	17.56	0.39	-0.44	-99.99	18.07	1.31	-0.80	-99.99
25500.	17.39	0.75	-0.08	-99.99	17.56	0.39	-0.44	-99.99	18.07	1.31	-0.80	-99.99
26000.	17.39	0.75	-0.08	-99.99	17.56	0.39	-0.44	-99.99	18.07	1.31	-0.80	-99.99
26500.	17.39	0.75	-0.08	-99.99	17.56	0.39	-0.44	-99.99	18.07	1.31	-0.80	-99.99
27000.	17.39	0.75	-0.08	-99.99	17.56	0.39	-0.44	-99.99	18.07	1.31	-0.80	-99.99
27500.	17.39	0.75	-0.08	-99.99	17.56	0.39	-0.44	-99.99	18.07	1.31	-0.80	-99.99
28000.	17.39	0.75	-0.08	-99.99	17.56	0.39	-0.44	-99.99	18.07	1.31	-0.80	-99.99
28500.	17.39	0.75	-0.08	-99.99	17.56	0.39	-0.44	-99.99	18.07	1.31	-0.80	-99.99
29000.	17.39	0.75	-0.08	-99.99	17.56	0.39	-0.44	-99.99	18.07	1.31	-0.80	-99.99
29500.	17.39	0.75	-0.08	-99.99	17.56	0.39	-0.44	-99.99	18.07	1.31	-0.80	-99.99
30000.	17.39	0.75	-0.08	-99.99	17.56	0.39	-0.44	-99.99	18.07	1.31	-0.80	-99.99
30500.	17.39	0.75	-0.08	-99.99	17.56	0.39	-0.44	-99.99	18.07	1.31	-0.80	-99.99
31000.	17.39	0.75	-0.08	-99.99	17.56	0.39	-0.44	-99.99	18.07	1.31	-0.80	-99.99
31500.	17.39	0.75	-0.08	-99.99	17.56	0.39	-0.44	-99.99	18.07	1.31	-0.80	-99.99
32000.	17.39	0.75	-0.08	-99.99	17.56	0.39	-0.44	-99.99	18.07	1.31	-0.80	-99.99
32500.	17.39	0.75	-0.08	-99.99	17.56	0.39	-0.44	-99.99	18.07	1.31	-0.80	-99.99
33000.	17.39	0.75	-0.08	-99.99	17.56	0.39	-0.44	-99.99	18.07	1.31	-0.80	-99.99
33500.	17.39	0.75	-0.08	-99.99	17.56	0.39	-0.44	-99.99	18.07	1.31	-0.80	-99.99
34000.	17.39	0.75	-0.08	-99.99	17.56	0.39	-0.44	-99.99	18.07	1.31	-0.80	-99.99
34500.	17.39	0.75	-0.08	-99.99	17.56	0.39	-0.44	-99.99	18.07	1.31	-0.80	-99.99
35000.	17.39	0.75	-0.08	-99.99	17.56	0.39	-0.44	-99.99	18.07	1.31	-0.80	-99.99
35500.	17.39	0.75	-0.08	-99.99	17.56	0.39	-0.44	-99.99	18.07	1.31	-0.80	-99.99
36000.	17.39	0.75	-0.08	-99.99	17.56	0.39	-0.44	-99.99	18.07	1.31	-0.80	-99.99
36500.	17.39	0.75	-0.08	-99.99	17.56	0.39	-0.44	-99.99	18.07	1.31	-0.80	-99.99
37000.	17.39	0.75	-0.08	-99.99	17.56	0.39	-0.44	-99.99	18.07	1.31	-0.80	-99.99
37500.	17.39	0.75	-0.08	-99.99	17.56	0.39	-0.44	-99.99	18.07	1.31	-0.80	-99.99