

OBSTRUCTION DATA SHEET

ODS 860
MANSFIELD LAHM MUNICIPAL AIRPORT
MANSFIELD, OHIO

DIGITIZED FROM

OC 860
SURVEYED SEPTEMBER 1988
8TH EDITION



PREPARED AND DISTRIBUTED BY
THE NATIONAL OCEAN SERVICE
U.S. DEPARTMENT OF COMMERCE
FOR THE FEDERAL AVIATION ADMINISTRATION

OBSTRUCTION DATA SHEET

The Obstruction Data Sheet (ODS) provides digital obstruction and runway data for use in aircraft arrival and departure planning. This information has been obtained using field survey and photogrammetric methods by the Photogrammetry Branch of the National Ocean Service in accordance with Federal Aviation Regulations Part 77 (FAR-77), "Objects Affecting Navigable Airspace" and FAA Nr. 405, "Specifications - Airport Obstruction Chart and Related Products."

The ODS is a derivative of the Airport Obstruction Chart (OC). The source OC is indicated on the ODS cover. All objects, both obstructing and nonobstructing, that carry an elevation on the OC are listed in the ODS. The ODS (and OC) depict a representation of objects that existed at the time of the OC field survey.

ODS information is arranged as follows:

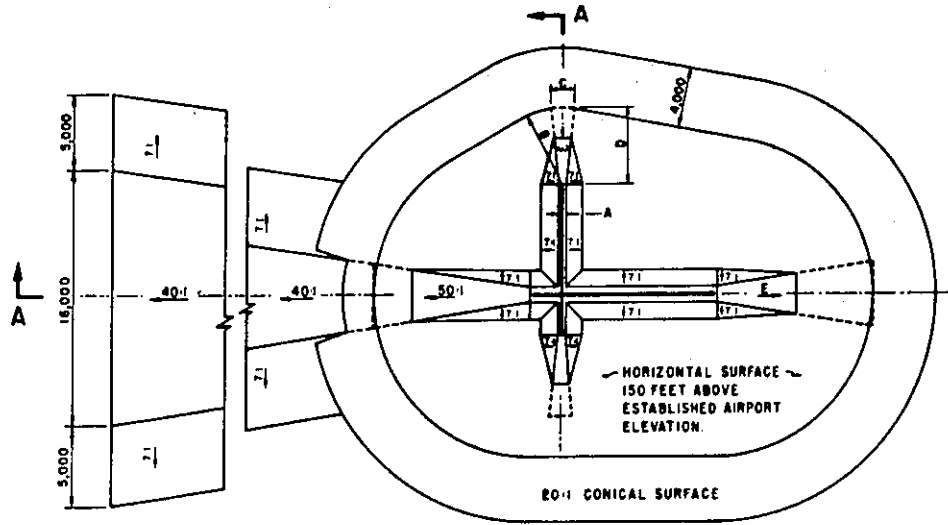
1. Objects located in FAR-77 approach (including supplemental approaches if present) or primary areas are listed with the associated runway (reference runway). For example, all objects in the Runway 9R approach or primary are listed with Runway 9R. Distances to these objects are computed from both the physical end and threshold of Runway 9R. Objects in the Runway 27L approach or primary are listed with Runway 27L. (Objects in the common 9R/27L primary area are listed with both runways.)
2. All objects not included in "1" above are listed with the Airport Reference Point (ARP).
3. Runway configuration and runway lengths, widths, and elevations are presented on the ODS last page.

The FAR-77 imaginary approach surfaces for which the obstruction surveys were performed are coded in the ODS as follows (see footnote 2 on page 3):

A(V) Utility runway - visual approach only
 A(NP) Utility runway - nonprecision instrument approach
 B(V) Nonutility runway - visual approach only
 C Nonutility runway - nonprecision instrument approach with
 visibility minimums greater than 3/4 mile
 D Nonutility runway - nonprecision instrument approach with
 visibility minimums as low as 3/4 mile
 PIR Precision instrument runway
 SUPLC ... Supplemental C underlying a B(V)

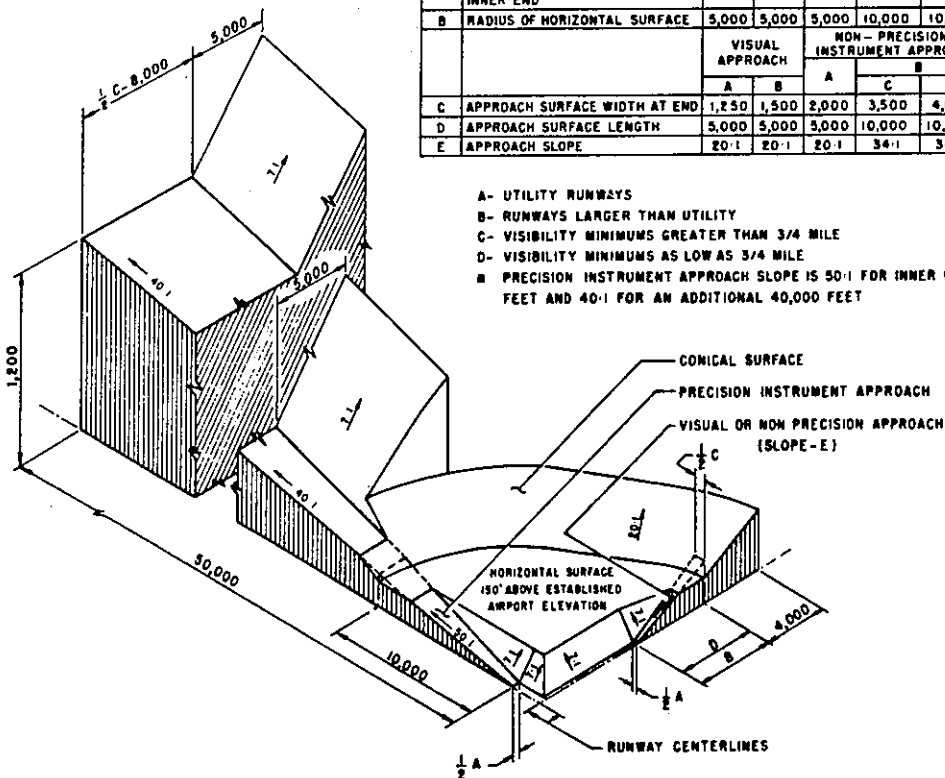
FAR-77 imaginary surface dimensions are defined on page 2 of this report.

Primary surface width is determined by the widest approach at the two approach/primary interfaces for that runway.



DIM	ITEM	DIMENSIONAL STANDARDS (FEET)					
		VISUAL RUNWAY		NON-PRECISION INSTRUMENT RUNWAY			PRECISION INSTRUMENT RUNWAY
		A	B	A	C	D	
A	WIDTH OF PRIMARY SURFACE AND APPROACH SURFACE WIDTH AT INNER END	250	500	500	500	1,000	1,000
B	RADIUS OF HORIZONTAL SURFACE	5,000	5,000	5,000	10,000	10,000	10,000
C	APPROACH SURFACE WIDTH AT END	VISUAL APPROACH		NON-PRECISION INSTRUMENT APPROACH			PRECISION INSTRUMENT APPROACH
		A	B	A	C	D	
C	APPROACH SURFACE WIDTH AT END	1,250	1,500	2,000	3,500	4,000	16,000
D	APPROACH SURFACE LENGTH	5,000	5,000	5,000	10,000	10,000	*
E	APPROACH SLOPE	20:1	20:1	20:1	34:1	34:1	*

- A- UTILITY RUNWAYS
- B- RUNWAYS LARGER THAN UTILITY
- C- VISIBILITY MINIMUMS GREATER THAN 3/4 MILE
- D- VISIBILITY MINIMUMS AS LOW AS 3/4 MILE
- E- PRECISION INSTRUMENT APPROACH SLOPE IS 50:1 FOR INNER 10,000 FEET AND 40:1 FOR AN ADDITIONAL 40,000 FEET



ISOMETRIC VIEW OF SECTION A-A

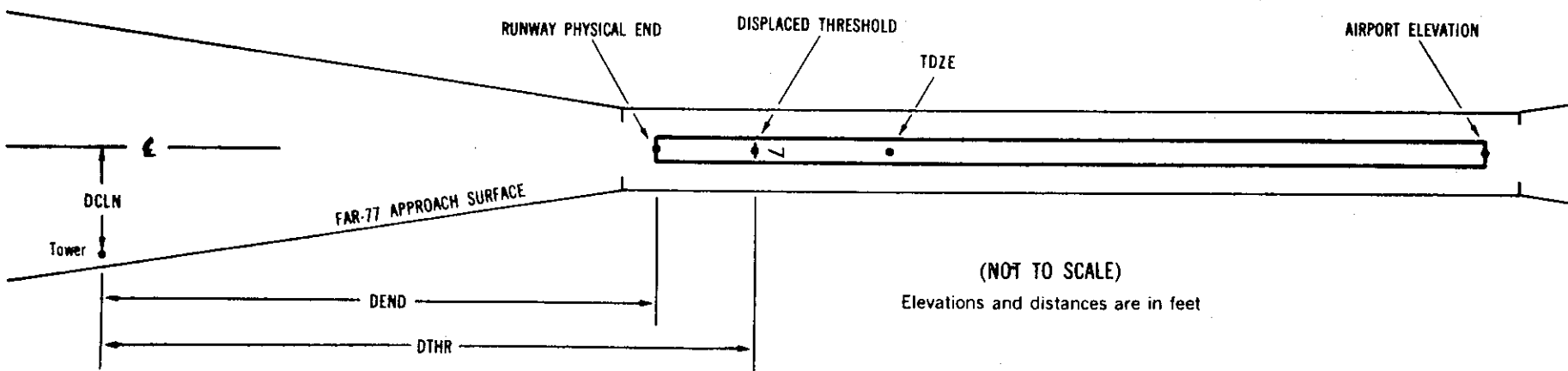
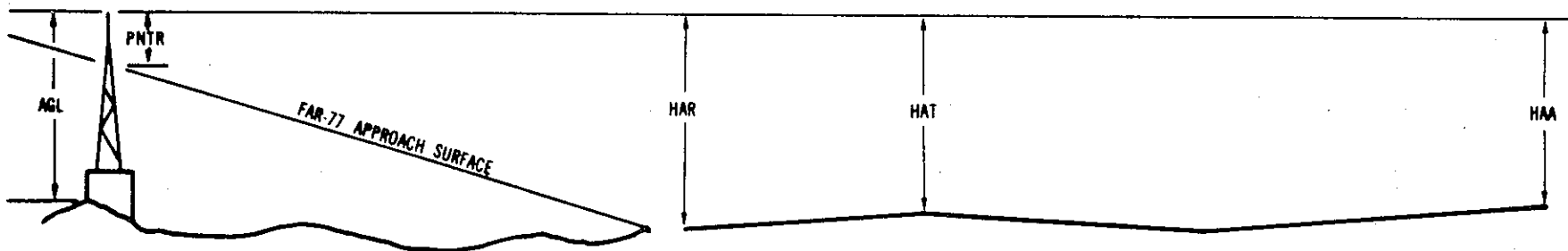
FAR-77 CIVIL AIRPORT
IMAGINARY SURFACES

ANNOTATION OF ODS DATA FORMAT

OC XXXX

AIRPORT ELEVATION XXXX

X ¹	X ²	XXXX/XXXX ³	XXXXXX.XXX ⁴	XXXXXX.XXX ⁴	XXXXXX ⁵	XXXX/XXXX ⁶	XXXXXX.XXX ⁷	XXXXXX.XXX ⁷				
OBJECT	LAT	LONG	A ⁸	ELEV ⁹	AGL ¹⁰	HAR ¹¹	HAT ¹¹	HAA ¹¹	DEND ¹²	DTHR ¹²	DCLN ¹²	PNTR ¹³
XXXXXXXXXXXX	XXXXXX.XXX	XXXXXXXX.XXX	XX	XXXX	XXXX	XXX	XXX	XXX	XXXXX	XXXXX	XXXX	XXXX
XXXXXXXXXXXX	XXXXXX.XXX	XXXXXXXX.XXX	XX	XXXX	XXXX	XXX	XXX	XXX	XXXXX	XXXXX	XXXX	XXXX



EXPLANATION OF FOOTNOTES

- ¹ Data block identifier. If a runway number is entered (reference runway), this data block will contain data pertinent to the reference runway and to objects in the FAR-77 approach and primary area of the reference runway. If ARP is entered, this data block will contain the ARP position and data relative to all objects not in an FAR-77 approach or primary area.
- ² For the reference runway, the lowest FAR-77 approach surface for which an obstruction survey was performed. (More than one surface may be surveyed.)
- ³ Reference runway approach physical end elevation/touchdown zone elevation
- ⁴ Latitude and longitude of reference runway approach physical end
- ⁵ Reference runway geodetic azimuth reckoned clockwise from south.
- ⁶ Reference runway displaced threshold elevation/touchdown zone elevation
- ⁷ Latitude and longitude of reference runway displaced threshold
- ⁸ Accuracy Code:
- | | Horizontal | Vertical |
|---|------------|----------|
| 1 | = 20 | A = 2 |
| 2 | = 40 | B = 5 |
| | | C = 20 |
- ⁹ Mean Sea Level (MSL) elevation at top of object. This value includes 15 feet added to noninterstate roads, 17 feet added to interstate roads, and 23 feet added to railroad tracks.
- ¹⁰ Height above ground level (AGL). AGLs are provided only for those objects appearing on the OC that are equal to, or greater than, 200 feet AGL. AGL accuracy is ± 10 feet.
- ¹¹ HAA - Height above airport
 HAR - Height above reference runway approach physical end
 HAT - Height above reference runway touchdown zone elevation
- ¹² DEND - Distance along reference runway centerline from point perpendicular to object to reference runway approach physical end
 DTHR - Distance along reference runway centerline from point perpendicular to object to reference runway threshold
 DCLN - Distance left (L) or right (R) of reference runway centerline as observed facing forward in a landing aircraft.
- A negative value for DEND or DTHR indicates object is in primary area on roll-out side of zero distance point.
- ¹³ PNTR - Penetration of indicated FAR-77 approach or primary surface (see footnote 2).

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AIRPORT ELEVATION 1297

5 C 1287/1297 404841.362N 0823129.688W 2265553

OBJECT	LAT	LONG	A	ELEV	AGL	HAR	HAT	HAA	DEND	DTHR	DCLN	PNTR
MARKER	404921.36	0823035.69	1A	1287		0	-10	-10	-5798		123L	4
MARKER	404914.69	0823045.24	1A	1294		7	-3	-3	-4800		130L	4
MARKER	404907.98	0823054.69	1A	1299		12	2	2	-3805		131L	4
MARKER	404847.65	0823123.22	1A	1298		11	1	1	-798		126L	3

23 C 1276/1295 404927.205N 0823025.125W 0465635

OBJECT	LAT	LONG	A	ELEV	AGL	HAR	HAT	HAA	DEND	DTHR	DCLN	PNTR
MARKER	404847.65	0823123.22	1A	1298		22	3	1	-5997		126R	3
MARKER	404907.98	0823054.69	1A	1299		23	4	2	-2989		131R	4
MARKER	404914.69	0823045.24	1A	1294		18	-1	-3	-1995		130R	4
MARKER	404921.36	0823035.69	1A	1287		11	-8	-10	-997		123R	4
ROAD (N)	404934.64	0823014.51	1A	1260	-16	-35	-37		1110		7L	-43
TREE	404934.35	0823010.11	1A	1313		37	18	16	1337		260L	4
TREE	404935.65	0823009.23	1A	1318		42	23	21	1476		209L	4
TREE	404940.70	0823013.93	1A	1318		42	23	21	1562		410R	2

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AIRPORT ELEVATION 1297

14 C 1245/1276 404958.919N 0823142.376W 3165605

OBJECT	LAT	LONG	A	ELEV	AGL	HAR	HAT	HAA	DEND	DTHR	DCLN	PNTR
GROUND	404850.86	0823027.12	1A	1292		47	16	-5	-8983		475R	2
OL ON GLIDE SLOPE	404903.04	0823025.63	1A	1344		99	68	47	-8160		450L	53
MARKER	404902.00	0823030.12	1A	1296		51	20	-1	-8002		126L	4
MARKER	404914.69	0823045.24	1A	1294		49	18	-3	-6270		153L	3
GROUND	404929.67	0823059.60	1A	1293		48	17	-4	-4408		381L	8
GROUND	404926.54	0823111.01	1A	1286		41	10	-11	-4040		476R	3
MARKER	404930.94	0823105.63	1A	1288		43	12	-9	-3998		131L	5
MARKER	404952.61	0823132.30	1A	1259		14	-17	-38	-996		130L	4
TREE	404956.60	0823130.78	1A	1261		16	-15	-36	-780		491L	8
GROUND	404957.75	0823150.11	1A	1249		4	-27	-48	320		515R	0
OL ON LOCALIZER	405006.28	0823151.44	1A	1262		17	-14	-35	1020		0R	-7
ROAD (N)	405002.93	0823158.51	1A	1272		27	-4	-25	1143		629R	-1

32 PIR 1290/1293 404853.947N 0823022.459W 1365657

OBJECT	LAT	LONG	A	ELEV	AGL	HAR	HAT	HAA	DEND	DTHR	DCLN	PNTR
TREE	404956.60	0823130.78	1A	1261		-29	-32	-36	-8219		491R	8
MARKER	404952.61	0823132.30	1A	1259		-31	-34	-38	-8004		130R	4
MARKER	404930.94	0823105.63	1A	1288		-2	-5	-9	-5001		131R	5
GROUND	404926.54	0823111.01	1A	1286		-4	-7	-11	-4959		476L	3
GROUND	404929.67	0823059.60	1A	1293		3	0	-4	-4591		381R	8
MARKER	404914.69	0823045.24	1A	1294		4	1	-3	-2729		153R	3
MARKER	404902.00	0823030.12	1A	1296		6	3	-1	-998		126R	4
OL ON GLIDE SLOPE	404903.04	0823025.63	1A	1344		54	51	47	-839		450R	53
GROUND	404850.86	0823027.12	1A	1292		2	-1	-5	-16		475L	2
BUILDING	404839.67	0823012.70	1A	1300		10	7	3	1568		438L	-17
TREE	404831.06	0822939.64	1A	1355		65	62	58	3940		825R	-10

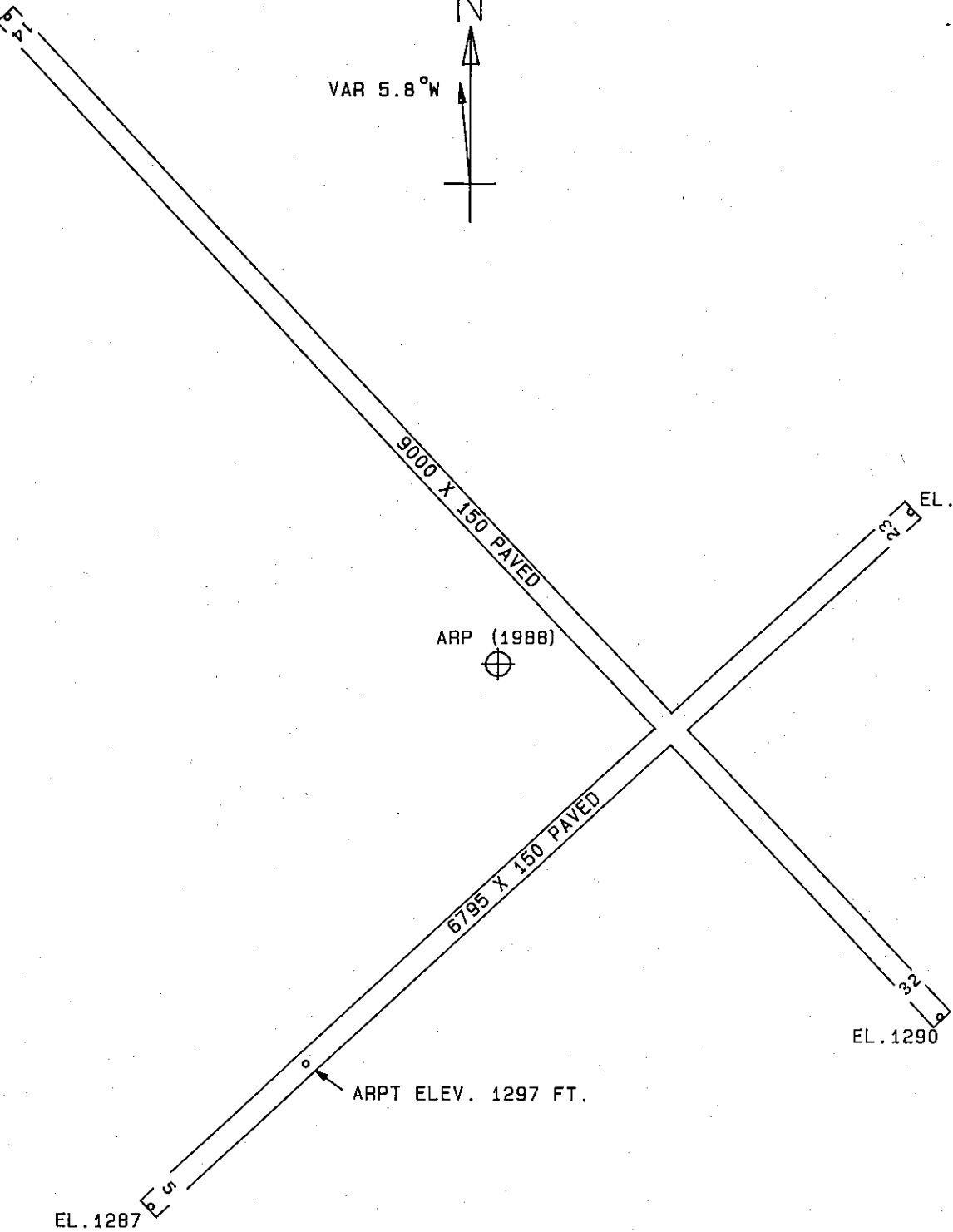
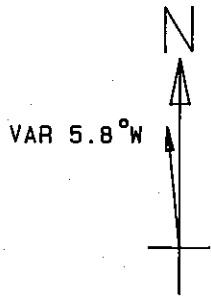
OC0860

AIRPORT ELEVATION 1297

ARP 404916.906N 0823100.260W

OBJECT	LAT	LONG	A	ELEV	AGL	HAA	MAG BEARING	DISTANCE
OL ANEMOMETER	404913.03	0823057.87	1A	1314		17	160 40	433
ROD ON OL ASR	404906.75	0823119.47	1A	1396		99	240 58	1799
TREE	404935.98	0823057.92	1A	1334		37	11 7	1938
ANTENNA ON OL CONTROL TR	404855.86	0823051.69	1A	1409		112	168 37	2230
ROD ON OL RTR TOWER	404941.23	0823054.30	1A	1370		73	16 21	2504
ROD ON OL AIRPORT BEACON	404852.25	0823046.46	1A	1354		57	162 45	2711
SIREN ON OL HANGAR	404843.67	0823107.94	1A	1363		66	195 45	3415
TREE	404939.20	0823135.27	1A	1331		34	315 47	3512
TREE	404941.09	0823015.60	1A	1330		33	60 19	4217
TREE	404956.52	0823128.06	1A	1278		-19	337 44	4544
TREE	404950.34	0823148.39	1A	1309		12	318 15	5014
POLE	404836.90	0823015.45	1A	1323		26	145 24	5317
TREE	405002.88	0823135.13	1A	1290		-7	335 51	5369
TREE	405002.24	0823137.09	1A	1259		-38	334 7	5391
TREE	404954.84	0823150.83	1A	1282		-15	320 26	5464
TREE	405022.10	0823155.42	1A	1310		13	333 5	7843
ANTENNA ON OL RADIO TOWER	404751.19	0823035.09	1A	1450	209	153	173 13	8888

EL. 1245



TOUCHDOWN ZONE RUNWAY ELEVATION	
5	1297
23	1295
14	1276
32	1293

MANSFIELD LAHM MUNICIPAL AIRPORT
 MANSFIELD. OHIO
 (NOT TO SCALE)