

# OBSTRUCTION DATA SHEET

**ODS 647  
PELLSTON REGIONAL AIRPORT OF EMMET COUNTY  
PELLSTON, MICHIGAN**

**DIGITIZED FROM**

**OC 647  
SURVEYED AUGUST 1990  
8TH EDITION**



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THE NATIONAL OCEAN SERVICE  
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See SPECIAL NOTICES in "Dates of Latest Editions, Airport Obstruction Charts - Obstruction Data Sheets," for possible corrections. National Oceanic and Atmospheric Administration (NOAA) publications are available through NOAA Distribution Branch (N/CG33), National Ocean Service, Riverdale, MD 20737. Telephone: 301-436-6990

## 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:

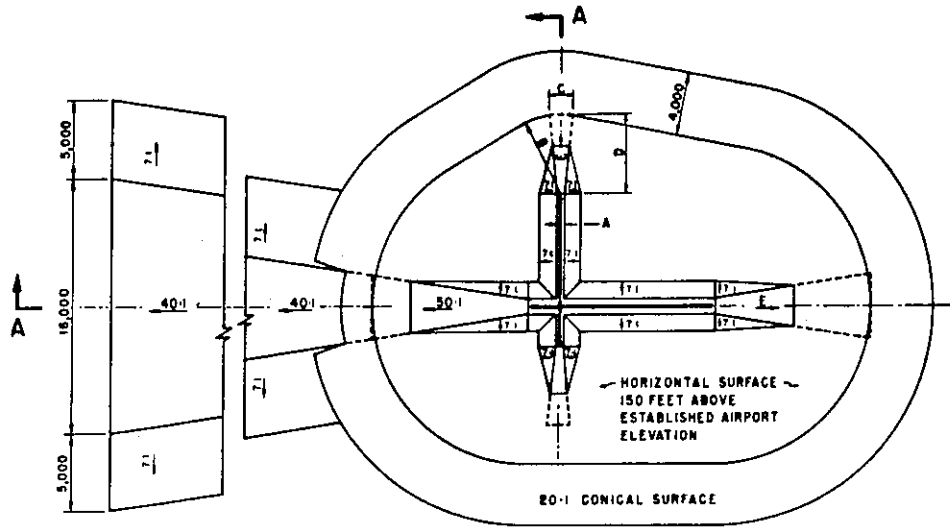
1. Objects located in FAR-77 approach (including supplemental approaches if present) or primary areas are listed with the associated runway (reference runway). For example, all objects in the Runway 9R approach or primary are listed with Runway 9R. Distances to these objects are computed from both the 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)

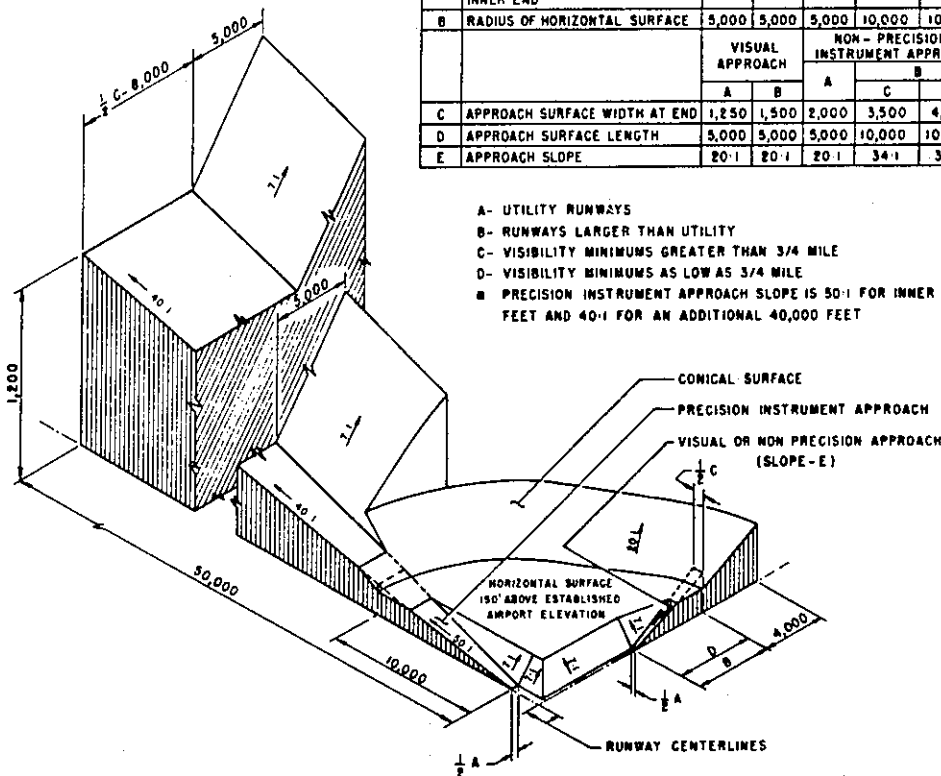
FAR-77 imaginary surface dimensions are defined on page 2 of this report.

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
		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
- \* 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

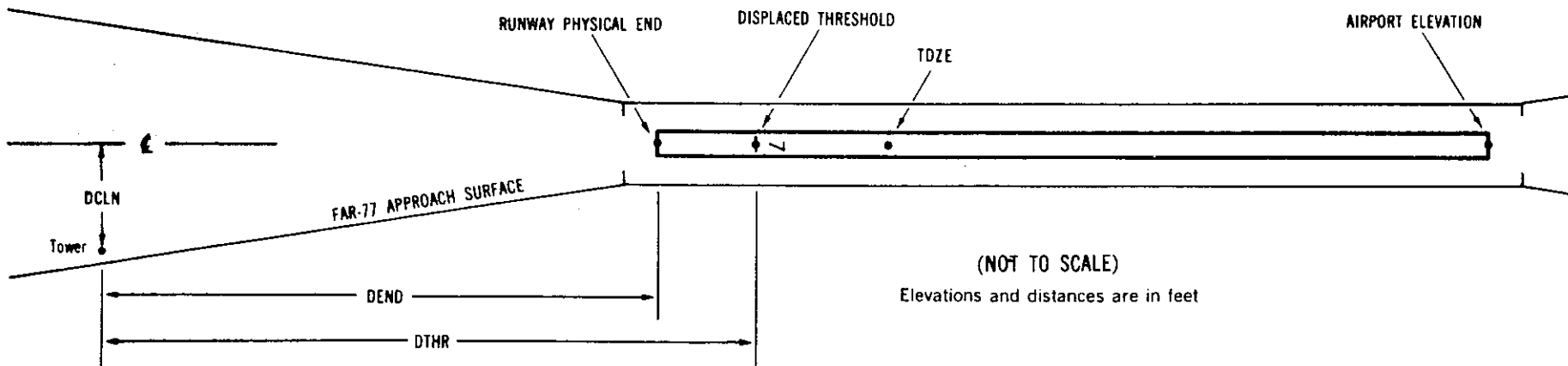
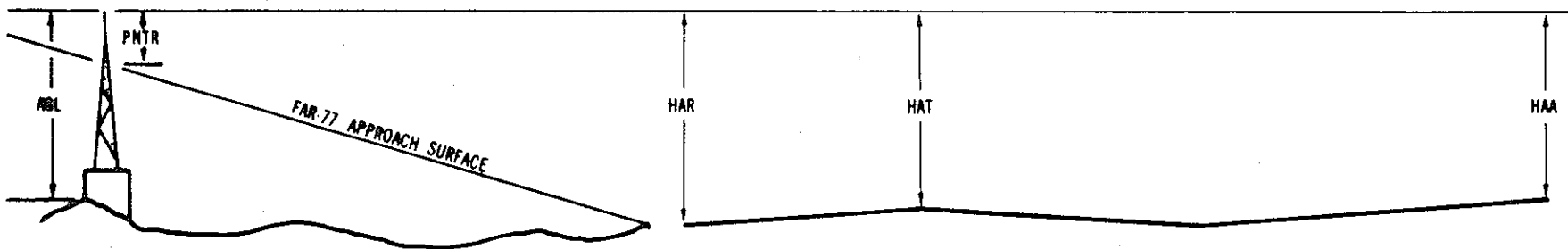
AIRPORT ELEVATION XXXX

x<sup>1</sup> x<sup>2</sup> XXXX/XXXX<sup>3</sup> XXXXXX.XXX<sup>4</sup> XXXXXXXX.XXX<sup>4</sup> XXXXXXXX<sup>5</sup> XXXX/XXXX<sup>6</sup> XXXXXX.XXX<sup>7</sup> XXXXXXXX.XXX<sup>7</sup>

OBJECT LAT LONG A<sup>8</sup> ELEV<sup>9</sup> AGL<sup>10</sup> HAR<sup>11</sup> HAT<sup>11</sup> HAA<sup>11</sup> DEND<sup>12</sup> DTHR<sup>12</sup> DCLN<sup>12</sup> PNTR<sup>13</sup>

XXXXXXXXXXXX	XXXXXX.XXX	XXXXXXXXX.XXX	XX	XXXX	XXXX	XXX	XXX	XXX	XXXXX	XXXXX	XXXXX	XXXX	XXXX
XXXXXXXXXXXX	XXXXXX.XXX	XXXXXXXXX.XXX	XX	XXXX	XXXX	XXX	XXX	XXX	XXXXX	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  $\pm 10$  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).

OC0647

AIRPORT ELEVATION 720

5 C 710/715 453402.579N 08448 9.767W 2244142

OBJECT	LAT	LONG	A	ELEV	AGL	HAR	HAT	HAA	DEND	DTHR	DCLN	PNTR
TREE	453354.02	0844818.68	1A	739		29	24	19	1062		159R	4
TREE	453353.85	0844826.84	1A	754		44	39	34	1483		242L	6
TREE	453351.70	0844824.05	1A	748		38	33	28	1498		52R	-1
TREE	453349.20	0844820.53	1A	755		45	40	35	1502		409R	7
TREE	453350.19	0844822.76	1A	757		47	42	37	1542		225R	8
TREE	453341.14	0844832.09	1A	774		64	59	54	2661		398R	-8
TREE	453341.18	0844840.88	1A	777		67	62	57	3098		50L	-18

23 C 720/720 453440.434N 0844716.430W 0444220

OBJECT	LAT	LONG	A	ELEV	AGL	HAR	HAT	HAA	DEND	DTHR	DCLN	PNTR
ROAD (N)	453447.32	0844712.97	1A	738		18	18	18	669		316R	4
TREE	453446.62	0844659.59	1A	759		39	39	39	1288		410L	7
TREE	453450.57	0844652.09	1A	777		57	57	57	1948		508L	6
TREE	453455.34	0844649.72	1A	785		65	65	65	2409		288L	1
TREE	453501.08	0844653.85	1A	795		75	75	75	2616		330R	4
TREE	453459.28	0844650.11	1A	796		76	76	76	2673		12R	3

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AIRPORT ELEVATION 720

14 SUPLC 718/718 453432.722N 0844824.628W 3144051

OBJECT	LAT	LONG	A	ELEV	AGL	HAR	HAT	HAA	DEND	DTHR	DCLN	PNTR
OL ON GLIDE SLOPE	453351.57	0844733.40	1A	737		19	19	17	-5522		400R	29
OL ON POST	453406.31	0844756.69	1A	717		-1	-1	-3	-3294		505R	5
BUSH	453435.64	0844822.64	1A	722		4	4	2	107		309L	4
ANTENNA ON BUILDING	453441.62	0844833.74	1A	735		17	17	15	1095		185L	-9
ROAD (N)	453446.49	0844844.55	1A	732		14	14	12	1989		5R	-39
GROUND	453452.51	0844838.82	1A	775		57	57	55	2127		715L	1
TREE	453502.82	0844914.03	1A	847		129	129	127	4642		303R	-2
TREE	453508.75	0844910.20	1A	848		130	130	128	4871		316L	-7
TREE	453527.65	0844946.79	1B	919		201	201	199	8067		152R	-30
GROUND	453523.16	0844956.35	1B	912		194	194	192	8231		954R	-42
TREE	453523.06	0845008.82	1B	968		250	250	248	8855		1584R	-5
TREE	453535.61	0844955.61	1B	951		233	233	231	9080		19R	-28

32 PIR 707/711 453347.512N 0844719.553W 1344137

OBJECT	LAT	LONG	A	ELEV	AGL	HAR	HAT	HAA	DEND	DTHR	DCLN	PNTR
BUSH	453435.64	0844822.64	1A	722		15	11	2	-6619		309R	4
OL ON POST	453406.31	0844756.69	1A	717		10	6	-3	-3218		505L	5
OL ON GLIDE SLOPE	453351.57	0844733.40	1A	737		30	26	17	-989		400L	29
APPROACH LIGHT	453337.77	0844705.63	1A	731		24	20	11	1398		5L	1
POLE	453338.83	0844701.91	1A	733		26	22	13	1511		258R	-1
TREE	453329.42	0844707.94	1A	739		32	28	19	1877		722L	-2
TREE	453339.42	0844652.48	1A	753		46	42	33	1946		772R	11
TREE	453327.09	0844704.38	1A	753		46	42	33	2222		711L	6
TREE	453325.77	0844704.18	1A	762		55	51	42	2326		796L	12
TREE	453322.42	0844700.74	1A	763		56	52	43	2739		865L	5
TREE	453319.25	0844651.47	1A	765		58	54	45	3434		630L	-7
TREE	453326.76	0844640.16	1A	768		61	57	48	3471		477R	-4
TREE	453322.46	0844644.70	1A	768		61	57	48	3548		60L	-6
TREE	453318.16	0844633.03	1A	787		80	76	67	4444		215R	-5



OC0647

AIRPORT ELEVATION 720

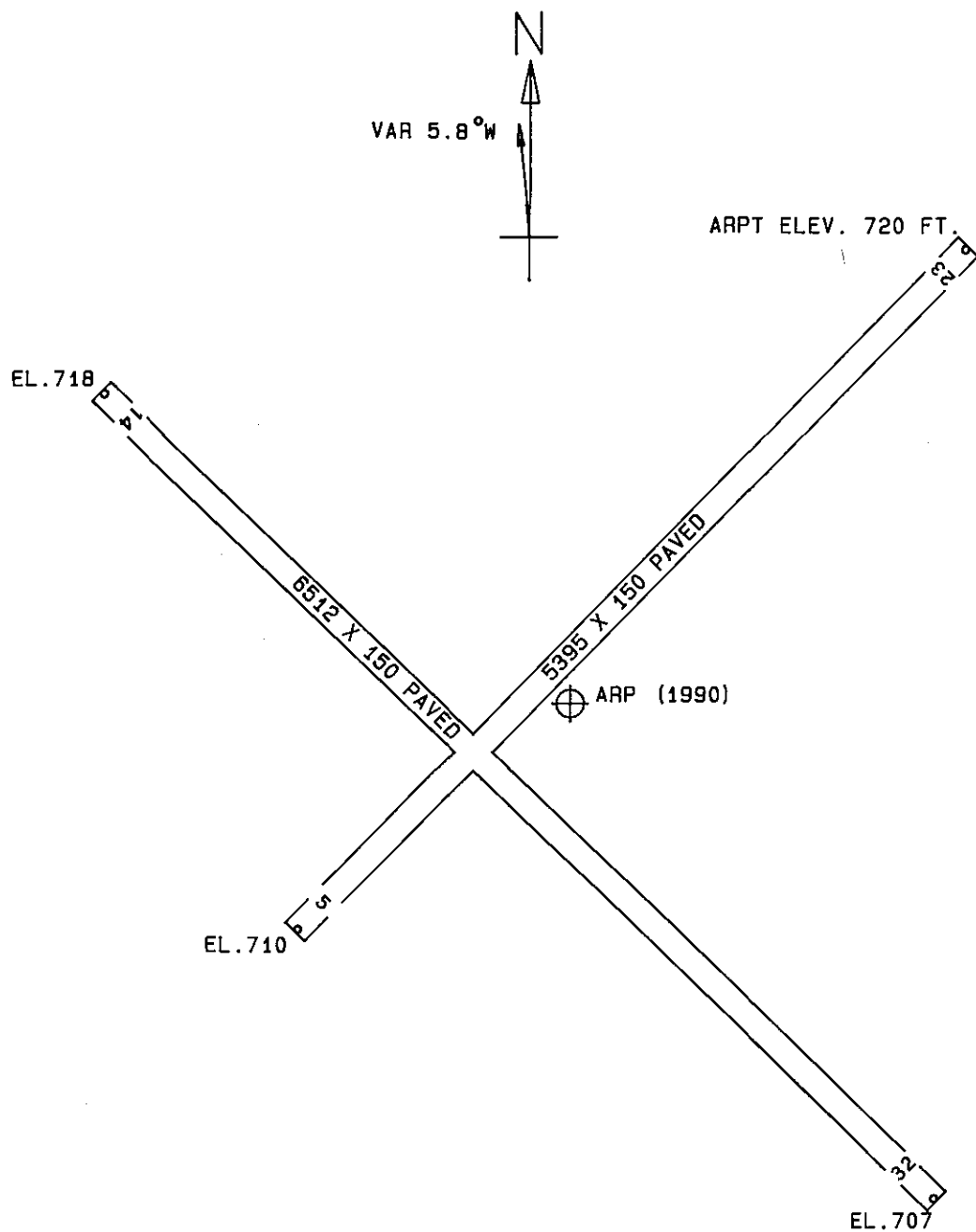
ARP 453415.278N 0844748.015W

OBJECT	LAT	LONG	A	ELEV	AGL	HAA	MAG BEARING	DISTANCE
OL ON LIGHTED WINDSOCK	453409.73	0844723.94	1A	740		20	113 58	1803
BUSH	453406.94	0844811.94	1A	732		12	249 25	1900
SATELLITE TARGET	453434.15	0844732.88	1A	725		5	35 12	2194
AIRPORT BEACON	453411.07	0844705.67	1A	766		46	103 51	3043
BUSH	453441.89	0844721.35	1A	740		20	40 56	3296
TREE	453359.01	0844829.11	1A	771		51	246 24	3356
TREE	453355.33	0844830.06	1A	759		39	241 46	3610
TREE	453347.69	0844820.28	1A	755		35	225 12	3617
POLE	453350.70	0844707.11	1A	748		28	136 20	3830
TREE	453455.09	0844810.29	1B	889		169	344 21	4332
POLE	453344.29	0844701.51	1A	728		8	139 17	4561
TREE	453455.11	0844819.56	1B	914		194	336 43	4616
TREE	453344.27	0844658.61	1A	753		33	137 35	4714
TREE	453446.19	0844656.34	1A	777		57	55 22	4828
TREE	453456.39	0844710.52	1A	808		88	38 27	4945
TREE	453500.57	0844703.38	1A	790		70	40 29	5579
TREE	453505.42	0844830.50	1B	912		192	335 3	5910
TREE	453331.03	0844634.78	1A	769		49	136 30	6873
TREE	453525.33	0844813.06	1B	892		172	351 43	7316
TREE	453512.79	0844853.94	1B	872		152	326 58	7478
TREE	453524.94	0844828.39	1B	910		190	343 39	7618
TREE	453520.74	0844903.59	1B	869		149	326 47	8536
TREE	453525.67	0844857.79	1B	889		169	330 58	8687
TREE	453508.39	0844947.99	1B	936		216	308 2	10088
TREE	453511.94	0844951.02	1B	933		213	309 4	10464
TREE	453234.37	0844913.34	1B	882		162	216 31	11888
TREE	453234.08	0844917.53	1B	885		165	217 40	12068
TREE	453614.35	0844806.48	1B	871		151	359 35	12132
TREE	453314.41	0845014.96	1B	895		175	245 17	12138
TREE	453306.71	0845008.64	1B	896		176	241 3	12180
TREE	453617.43	0844804.25	2C	877		157	0 28	12426
TREE	453303.84	0845020.00	2C	930		210	242 2	13011
TREE	453252.18	0845014.74	2C	978		258	236 56	13411

AIRPORT ELEVATION 720

ARP 453415.278N 0844748.015W

OBJECT	LAT	LONG	A	ELEV	AGL	HAA	MAG BEARING	DISTANCE
TREE	453535.92	0845021.91	2C	992		272	312 33	13658
TREE	453544.16	0845012.83	2C	996		276	316 58	13680
TREE	453232.87	0844956.60	2C	972		252	227 14	13832
TREE	453224.98	0844955.52	2C	1002		282	224 54	14393
TREE	453600.11	0845006.14	2C	995		275	323 2	14466
TREE	453232.45	0845013.22	2C	1047		327	230 35	14671
TREE	453308.32	0845056.75	2C	1068		348	249 1	15045
TREE	453614.61	0845007.66	2C	1016		296	326 24	15644
TREE	453246.42	0845051.56	2C	1075		355	241 15	15861
TREE	453222.57	0845029.76	2C	1112		392	231 3	16211



TOUCHDOWN ZONE RUNWAY ELEVATION	
5	715
23	720
14	718
32	711

PELLSTON REGIONAL AIRPORT OF EMMET COUNTY  
 PELLSTON, MICHIGAN  
 (NOT TO SCALE)