

# OBSTRUCTION DATA SHEET

**ODS 5326  
MANASSAS MUNICIPAL AIRPORT / HARRY P. DAVIS FIELD  
MANASSAS, VIRGINIA**

**DIGITIZED FROM**

**OC 5326  
SURVEYED OCTOBER 1990  
2ND EDITION**



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

## **ATTENTION**

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:

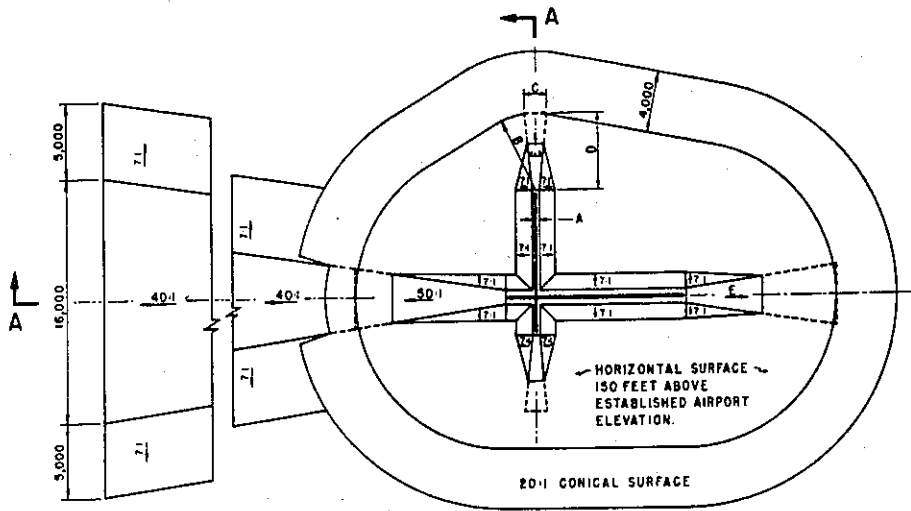
1. Objects located in FAR-77 approach (including supplemental approaches if present) or primary areas are listed with the associated runway (reference runway). For example, all objects in the Runway 9R approach or primary are listed with Runway 9R. Distances to these objects are computed from both the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

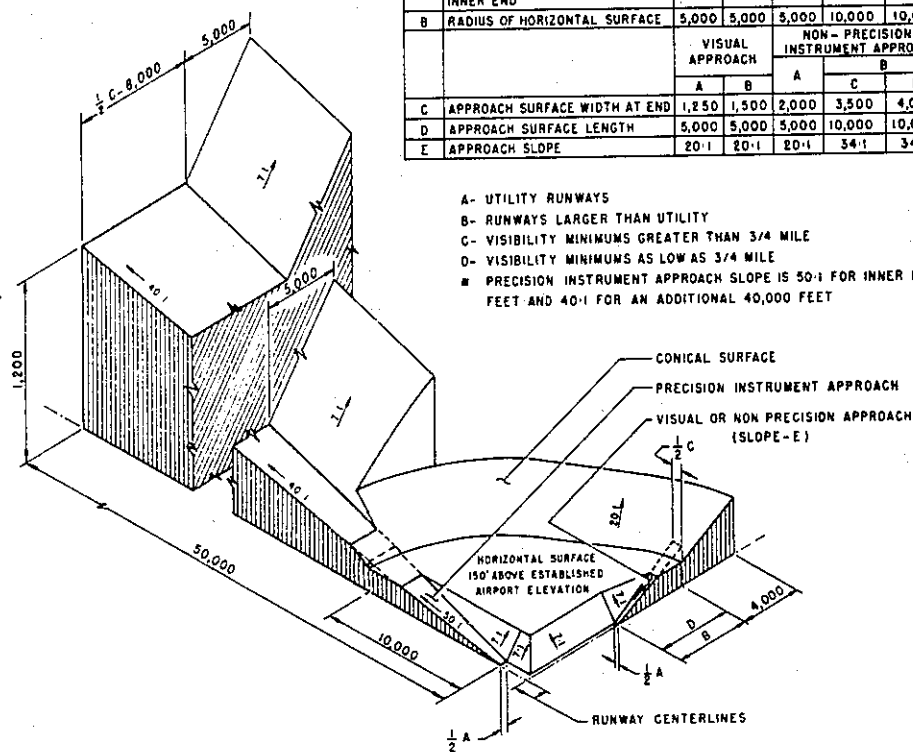
FAR-77 imaginary surface dimensions are defined on page 2 of this report.

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	B		
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	B		
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

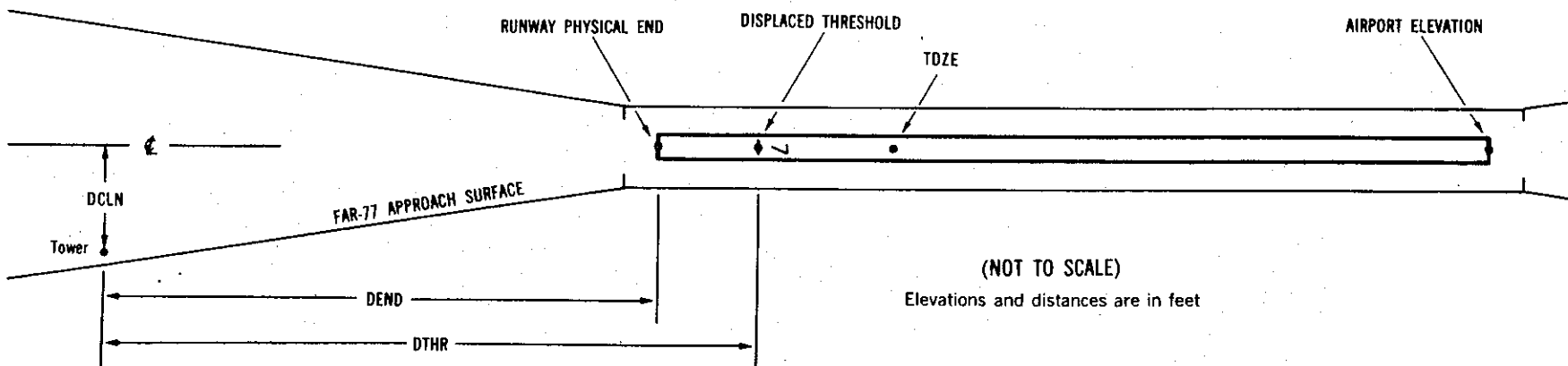
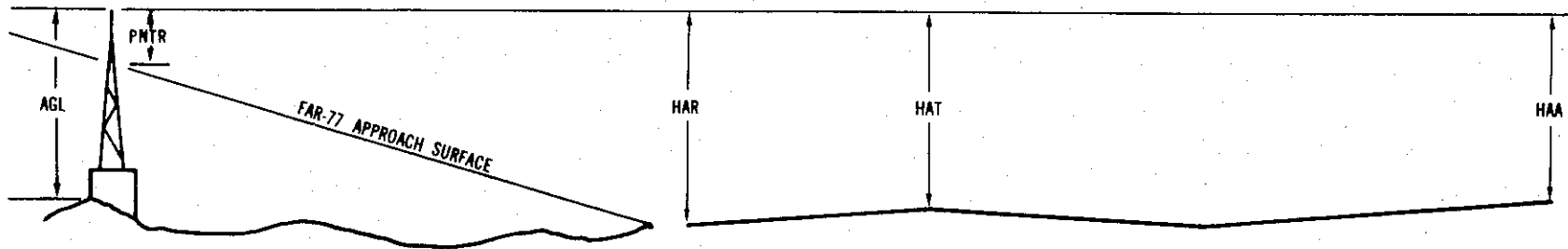
OC XXXX

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	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

\*\*\*\*\*



(NOT TO SCALE)  
Elevations and distances are in feet

## EXPLANATION OF FOOTNOTES

- <sup>1</sup> 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.
- <sup>2</sup> For the reference runway, the lowest FAR-77 approach surface for which an obstruction survey was performed. (More than one surface may be surveyed.)
- <sup>3</sup> Reference runway approach physical end elevation/touchdown zone elevation
- <sup>4</sup> Latitude and longitude of reference runway approach physical end
- <sup>5</sup> Reference runway geodetic azimuth reckoned clockwise from south
- <sup>6</sup> Reference runway displaced threshold elevation/touchdown zone elevation
- <sup>7</sup> Latitude and longitude of reference runway displaced threshold
- <sup>8</sup> Accuracy Code:
- |   | Horizontal | Vertical |
|---|------------|----------|
| 1 | = 20       | A = 2    |
| 2 | = 40       | B = 5    |
|   |            | C = 20   |
- <sup>9</sup> 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.
- <sup>10</sup> 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.
- <sup>11</sup> HAA - Height above airport  
 HAR - Height above reference runway approach physical end  
 HAT - Height above reference runway touchdown zone elevation
- <sup>12</sup> 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.
- <sup>13</sup> PNTR - Penetration of indicated FAR-77 approach or primary surface (see footnote 2).

OC5326

AIRPORT ELEVATION 193

16L PIR 193/193 384339.306N 07731 8.626W 3303720

OBJECT	LAT	LONG	A	ELEV	AGL	HAR	HAT	HAA	DEND	DTHR	DCLN	PNTR
TREE	384300.08	0773047.04	1A	188		-5	-5	-5	-4298		456R	11
ANTENNA ON BUILDING	384306.02	0773051.13	1A	185		-8	-8	-8	-3614		443R	8
OL ON WINDSOCK	384323.75	0773103.08	1A	201		8	8	8	-1587		389R	22
OL ON GLIDE SLOPE	384326.52	0773104.16	1A	216		23	23	23	-1301		326R	36
TREE	384350.56	0773126.01	1A	223		30	30	30	1668		642R	1
TREE	384354.14	0773119.95	1A	222		29	29	29	1747		46R	-2
TREE	384356.21	0773116.40	1A	226		33	33	33	1792		302L	1
TREE	384358.85	0773111.89	1A	235		42	42	42	1850		744L	9
VENT ON BUILDING	384358.15	0773117.67	1A	229		36	36	36	2013		311L	-1
VENT ON BUILDING	384354.45	0773129.49	1A	233		40	40	40	2146		690R	1
TREE	384401.75	0773131.76	1A	258		65	65	65	2878		484R	11
POLE	384401.66	0773137.93	1A	257		64	64	64	3110		914R	6
TREE	384405.90	0773129.09	1A	256		63	63	63	3140		93R	4
OL MOBILE CRANE	384410.22	0773134.37	1A	355*		162	162	162	3726		243R	91
TREE	384456.11	0773215.65	1A	372		179	179	179	9376		815R	-5

\* Probable maximum obstructing elevation in mobile crane area.

34R SUPLC 177/177 384250.204N 0773033.347W 1503742

OBJECT	LAT	LONG	A	ELEV	AGL	HAR	HAT	HAA	DEND	DTHR	DCLN	PNTR
OL ON GLIDE SLOPE	384326.52	0773104.16	1A	216		39	39	23	-4400		326L	36
OL ON WINDSOCK	384323.75	0773103.08	1A	201		24	24	8	-4113		389L	22
ANTENNA ON BUILDING	384306.02	0773051.13	1A	185		8	8	-8	-2086		443L	8
TREE	384300.08	0773047.04	1A	188		11	11	-5	-1403		456L	11
TREE	384236.81	0773014.30	1A	247		70	70	54	1921		652R	19
TREE	384233.69	0773014.26	1A	259		82	82	66	2198		499R	23
TREE	384231.07	0773017.29	1A	272		95	95	79	2311		160R	33
TREE	384231.52	0773009.32	1A	268		91	91	75	2581		732R	21
TREE	384227.43	0773018.15	1A	264		87	87	71	2599		80L	16
TREE	384225.60	0773019.97	1A	265		88	88	72	2689		297L	15
TREE	384218.95	0773020.73	1A	251		74	74	58	3246		679L	-16

OC5326

AIRPORT ELEVATION 193

16R A(NP) 186/186 384335.678N 0773116.870W 3303741

OBJECT	LAT	LONG	A	ELEV	AGL	HAR	HAT	HAA	DEND	DTHR	DCLN	PNTR
TREE	384347.66	0773130.91	1A	233		47	47	40	1602		375R	-23
TREE	384350.56	0773126.01	1A	223		37	37	30	1667		107L	-36
TREE	384350.36	0773131.05	1A	252		66	66	59	1846		251R	-16
VENT ON BUILDING	384354.45	0773129.49	1A	233		47	47	40	2145		59L	-50
TREE	384401.75	0773131.76	1A	258		72	72	65	2877		265L	-62
POLE	384401.66	0773137.93	1A	257		71	71	64	3109		165R	-74
TREE	384405.90	0773129.09	1A	256		70	70	63	3140		656L	-77
OL MOBILE CRANE	384410.22	0773134.37	1A	355*		169	169	162	3726		506L	-7

\* Probable maximum obstructing elevation in mobile crane area.

34L A(V) 176/181 384303.780N 0773053.956W 1503755

OBJECT	LAT	LONG	A	ELEV	AGL	HAR	HAT	HAA	DEND	DTHR	DCLN	PNTR
TREE	384300.08	0773047.04	1A	188		12	7	-5	596		294R	-8
TREE	384255.34	0773052.27	1A	199		23	18	6	810		302L	-7
TREE	384225.60	0773019.97	1A	265		89	84	72	4687		453R	-135

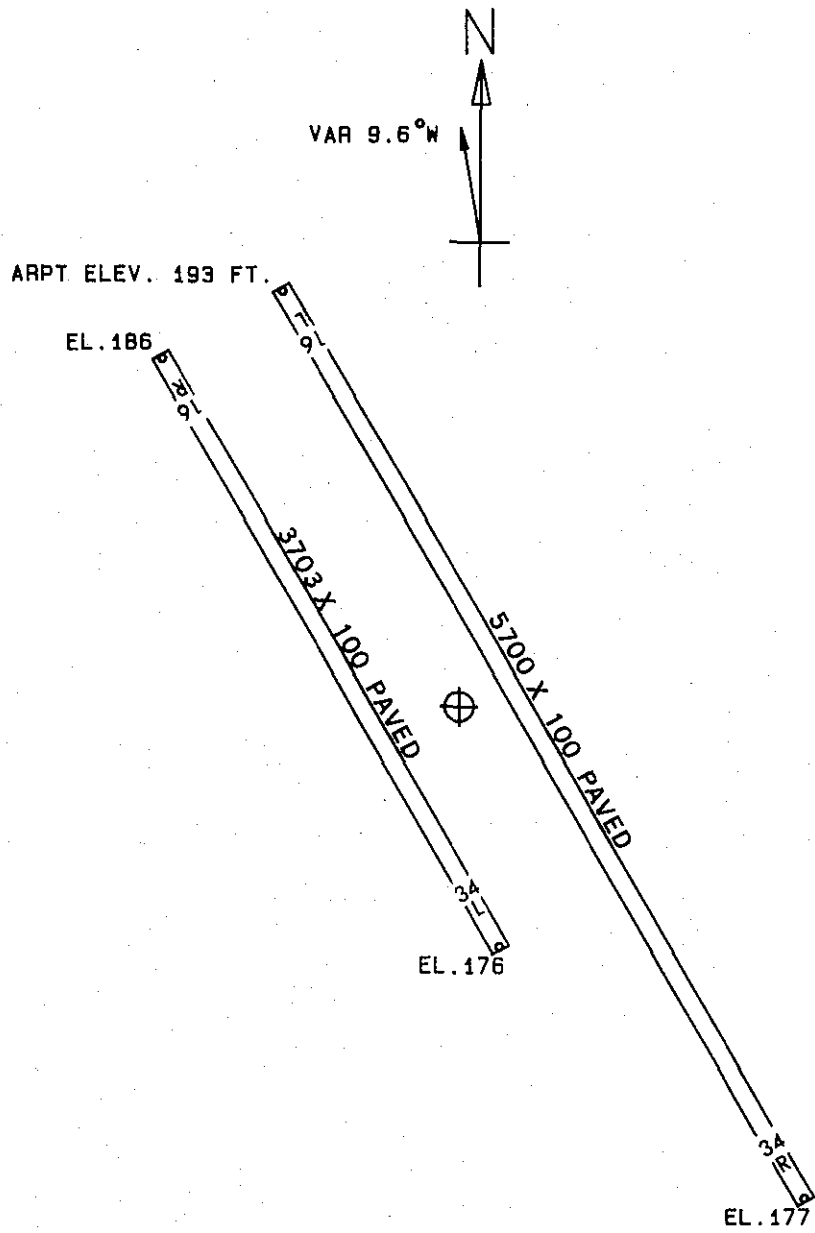


OC5326

AIRPORT ELEVATION 193

ARP 384316.714N 0773056.667W

OBJECT	LAT	LONG	A	ELEV	AGL	HAA	MAG BEARING	DISTANCE
HANGAR	384317.25	0773110.85	1A	212		19	282 20	1126
ROD ON OL AIRPORT BEACON	384317.05	0773114.34	1A	237		44	280 59	1401
ANEMOMETER ON HANGAR	384328.29	0773120.22	1A	216		23	311 42	2204
TREE	384303.17	0773034.40	1A	190		-3	137 26	2235
OL ANTENNA	384330.41	0773122.99	1A	242		49	313 11	2504
TREE	384359.34	0773111.03	1A	248		55	354 49	4460
TREE	384349.02	0773135.06	1A	250		57	326 39	4466
TREE	384405.46	0773107.73	1A	310		117	359 31	5009
TREE	384240.43	0773008.63	1A	303		110	143 33	5289
TREE	384238.21	0773011.36	1A	277		84	146 55	5298
TREE	384409.65	0773114.49	1A	280		87	354 50	5539
TREE	384312.08	0772934.07	1B	342		149	103 41	6563
TREE	384226.38	0773001.89	1A	292		99	149 9	6692
TREE	384303.80	0772933.37	1B	338		145	110 47	6730
TREE	384308.94	0772929.68	1B	353		160	106 6	6939
TREE	384247.82	0772931.89	1B	360		167	123 6	7328
TREE	384401.89	0772938.86	1B	332		139	63 3	7676
TREE	384322.24	0772916.07	1B	353		160	95 35	7993
TREE	384256.09	0772916.86	1B	357		164	114 22	8181
TREE	384252.37	0772915.19	1B	372		179	116 37	8412
TREE	384412.37	0773234.29	1B	368		175	315 39	9569
TREE	384408.78	0773237.73	1B	384		191	312 57	9586
TREE	384424.30	0772925.13	1B	353		160	56 17	9968
TREE	384306.83	0773307.96	1B	355		162	274 7	10454
ROD ON OL RADIO T(C of 5)	384500.06	0773049.20	1B	390		197	12 50	10472
TREE	384320.20	0772843.21	1B	362		169	97 41	10583
TREE	384426.13	0772913.36	2C	365		172	58 58	10786
TREE	384357.49	0773307.63	1B	391		198	301 17	11169
TREE	384448.16	0773225.16	1B	381		188	332 27	11609
TREE	384350.98	0773319.99	2C	419		226	296 35	11876
TREE	384122.60	0773002.78	1B	359		166	169 17	12310



TOUCHDOWN ZONE RUNWAY ELEVATION	
16L	193
34R	177
16R	186
34L	181

MANASSAS MUNICIPAL AIRPORT / HARRY P. DAVIS FIELD  
 MANASSAS, VIRGINIA  
 (NOT TO SCALE)