

OBSTRUCTION DATA SHEET

**ODS 5298
PARK RAPIDS MUNICIPAL AIRPORT
PARK RAPIDS, MINNESOTA**

DIGITIZED FROM

**OC 5298
SURVEYED AUGUST 1991
1ST 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:

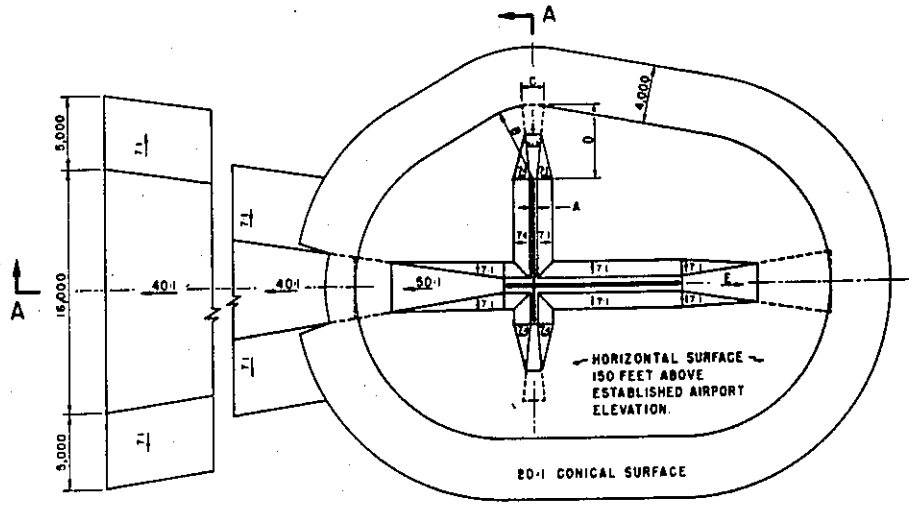
1. Objects located in FAR-77 approach (including supplemental approaches if present) or primary areas are listed with the associated runway (reference runway). For example, all objects in the Runway 9R approach or primary are listed with Runway 9R. Distances to these objects are computed from both the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

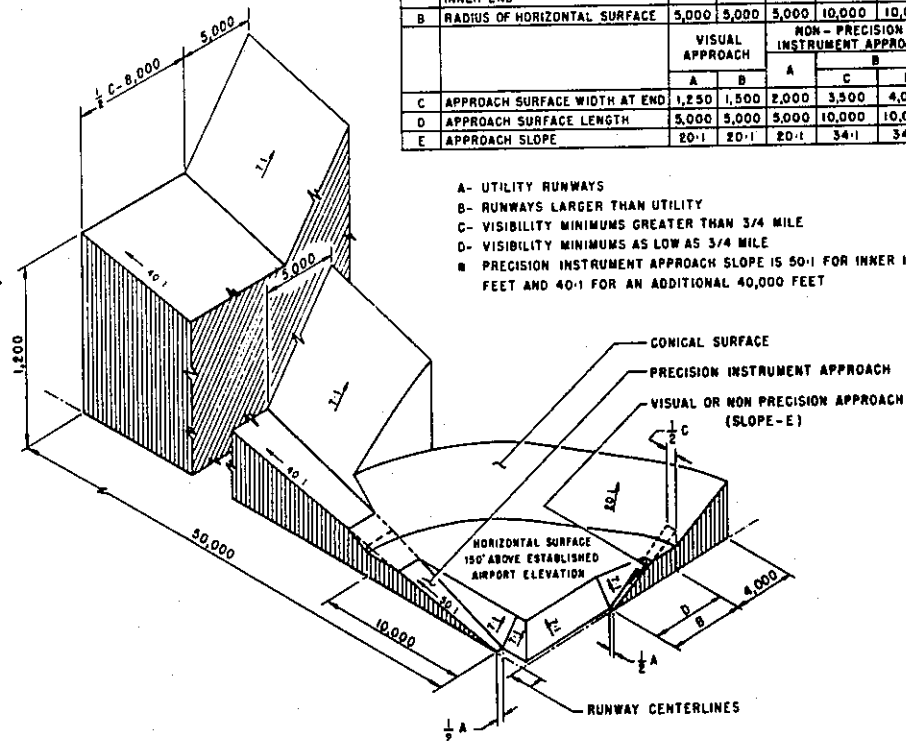
FAR-77 imaginary surface dimensions are defined on page 2 of this report.

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	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	
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

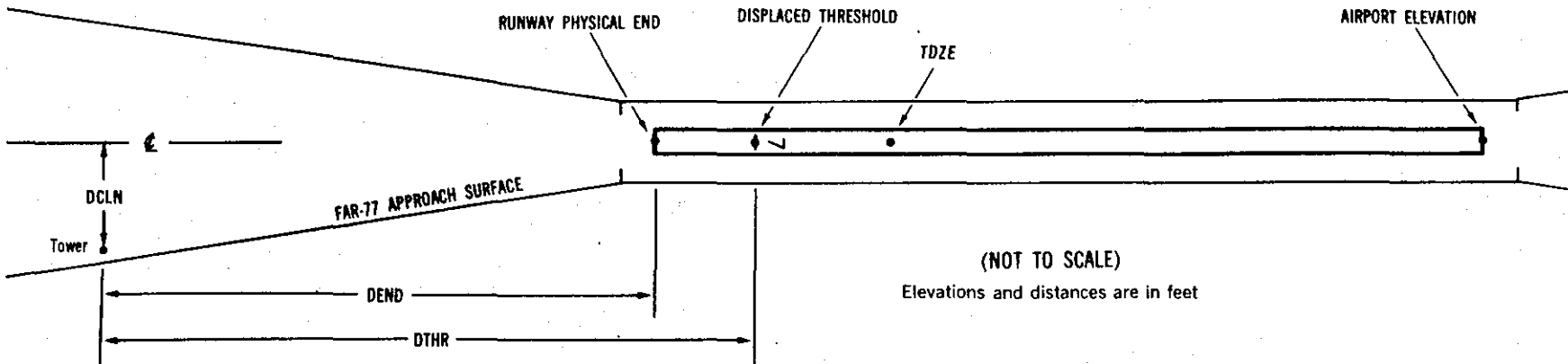
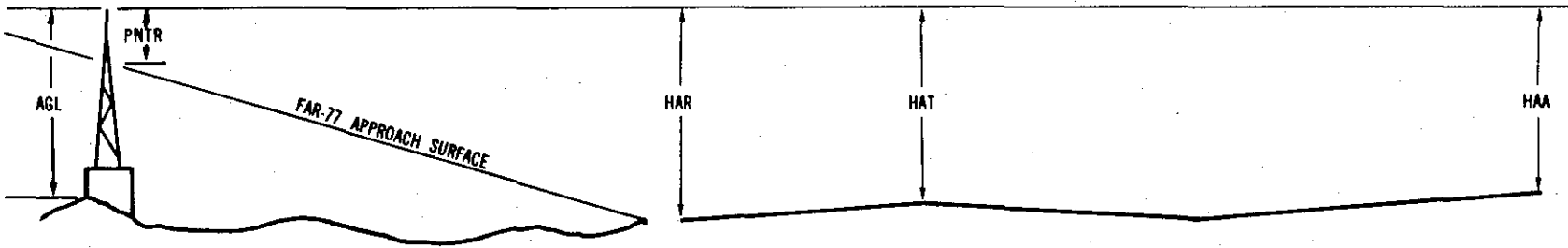
FAR-77 CIVIL AIRPORT
IMAGINARY SURFACES

ANNOTATION OF ODS DATA FORMAT

OC XXXX

AIRPORT ELEVATION XXXX

X ¹	X ²	XXXX/XXXX ³	XXXXXX.XXX ⁴	XXXXXX.XXX ⁴	XXXXXXX 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



(NOT TO SCALE)
Elevations and distances are in feet

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).

OC5298

AIRPORT ELEVATION 1443

13 C 1443/1443 465424.341N 0950450.935W 3150331

OBJECT	LAT	LONG	A	ELEV	AGL	HAR	HAT	HAA	DEND	DTHR	DCLN	PNTR
GROUND	465348.00	0950354.79	1A	1443		0	0	0	-5361		159L	1
GROUND	465356.12	0950404.52	1A	1442		-1	-1	-1	-4300		262L	3
OL DME	465353.25	0950414.56	1A	1474		31	31	31	-4014		436R	35
GROUND	465357.38	0950415.93	1A	1442		-1	-1	-1	-3651		208R	3
GROUND	465407.50	0950436.30	1A	1443		0	0	0	-1926		485R	2
GROUND	465415.69	0950447.45	1A	1445		2	2	2	-791		448R	4
GROUND	465423.41	0950439.57	1A	1444		1	1	1	-624		492L	2
GROUND	465422.03	0950454.15	1A	1446		3	3	3	-8		324R	3
GROUND	465423.69	0950456.05	1A	1446		3	3	3	204		298R	3
GROUND	465425.84	0950453.09	1A	1444		1	1	1	213		1L	1
TREE	465430.49	0950449.25	1A	1467		24	24	24	359		523L	19
TREE	465431.60	0950452.24	1A	1466		23	23	23	584		455L	12
TREE	465425.85	0950505.03	1A	1467		24	24	24	799		585R	6
TREE	465427.91	0950502.09	1A	1474		31	31	31	803		293R	13
TREE	465433.51	0950454.92	1A	1472		29	29	29	853		461L	10
TREE	465429.54	0950503.30	1A	1479		36	36	36	979		236R	13
TREE	465435.38	0950457.77	1A	1474		31	31	31	1127		454L	4
TREE	465430.79	0950505.71	1A	1479		36	36	36	1187		264R	7
TREE	465434.91	0950500.29	1A	1476		33	33	33	1217		297L	3
TREE	465432.22	0950504.64	1A	1474		31	31	31	1237		110R	1

OC5298

AIRPORT ELEVATION 1443

31 PIR 1442/1443 465345.927N 0950355.016W 1350412

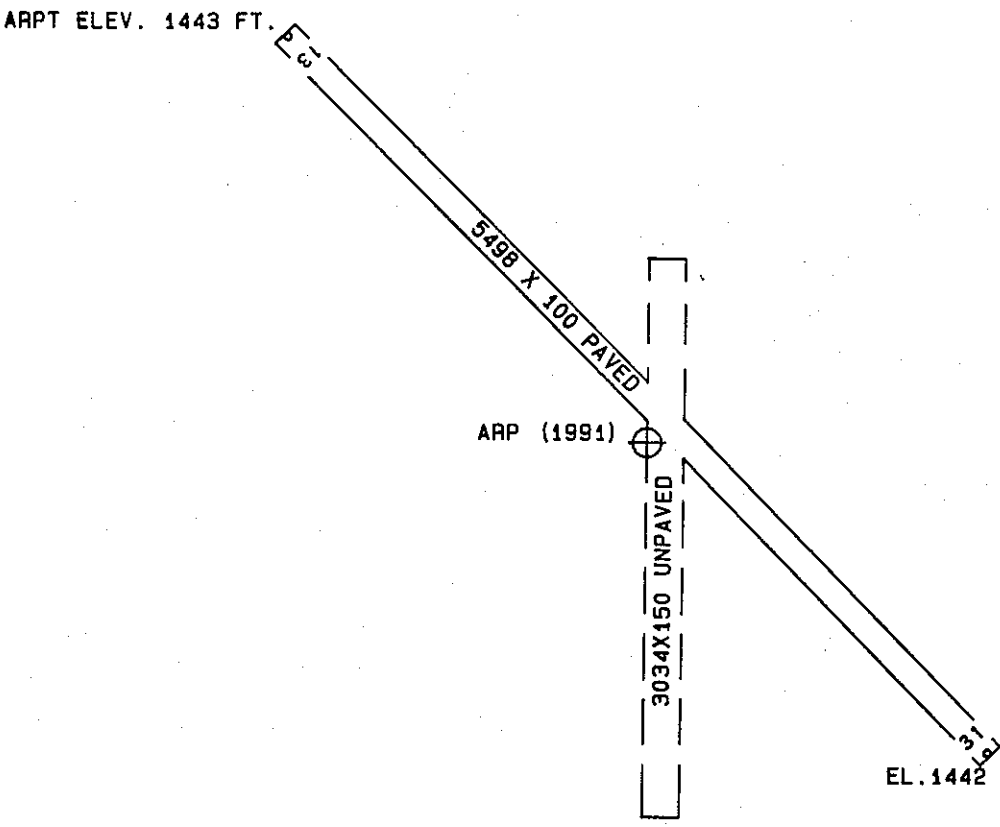
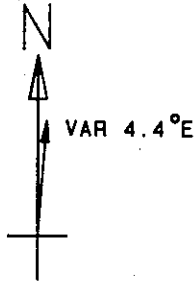
OBJECT	LAT	LONG	A	ELEV	AGL	HAR	HAT	HAA	DEND	DTHR	DCLN	PNTR
GROUND	465425.84	0950453.09	1A	1444		2	1	1	-5711		1R	1
GROUND	465423.69	0950456.05	1A	1446		4	3	3	-5702		298L	3
GROUND	465422.03	0950454.15	1A	1446		4	3	3	-5490		324L	3
GROUND	465423.41	0950439.57	1A	1444		2	1	1	-4874		492R	2
GROUND	465415.69	0950447.45	1A	1445		3	2	2	-4707		448L	4
GROUND	465407.50	0950436.30	1A	1443		1	0	0	-3572		485L	2
GROUND	465357.38	0950415.93	1A	1442		0	-1	-1	-1847		208L	3
OL DME	465353.25	0950414.56	1A	1474		32	31	31	-1484		436L	35
GROUND	465356.12	0950404.52	1A	1442		0	-1	-1	-1197		262R	3
GROUND	465348.00	0950354.79	1A	1443		1	0	0	-137		159R	1
TREE	465338.28	0950355.22	1A	1450		8	7	7	538		557L	1
ANTENNA ON BUILDING	465342.25	0950341.50	1A	1455		13	12	12	927		402R	-2
ROAD (N)	465343.63	0950339.38	1A	1456		14	13	13	931		605R	-1
ROAD (N)	465333.40	0950349.89	1A	1454		12	11	11	1150		644L	-7
TREE	465340.56	0950333.30	1A	1457		15	14	14	1450		684R	-10
TREE	465338.00	0950333.29	1A	1456		14	13	13	1635		501R	-15
TREE	465337.55	0950327.50	1A	1461		19	18	18	1950		754R	-16

OC5298

AIRPORT ELEVATION 1443

ARP 465402.376N 0950422.177W

OBJECT	LAT	LONG	A	ELEV	AGL	HAA	MAG BEARING	DISTANCE
OL ON WINDSOCK	465358.64	0950400.79	1A	1464		21	99 55	1533
FLOODLIGHT	465359.19	0950357.72	1A	1482		39	96 22	1729
ROD ON OL AIRPORT BEACON	465355.75	0950349.99	1A	1501		58	102 18	2334
FLOODLIGHT	465353.62	0950349.57	1A	1483		40	106 59	2432
TREE	465426.65	0950443.70	1A	1462		19	324 19	2878
TREE	465336.55	0950354.53	1A	1455		12	139 19	3245
POLE	465344.74	0950338.81	1A	1467		24	116 16	3502
TREE	465332.90	0950355.61	1A	1485		42	143 53	3510
TREE	465431.78	0950450.39	1A	1468		25	322 16	3565
POLE	465342.70	0950329.03	1A	1477		34	113 58	4195
TREE	465338.28	0950326.24	1A	1471		28	117 44	4588
ANTENNA ON OL MCWV TOWER	465434.66	0950321.87	1B	1565		122	47 36	5314
STACK	465302.31	0950331.81	1B	1535		92	145 42	7019
ANTENNA ON WATER TANK	465516.99	0950349.96	1B	1599		156	12 5	7883
ANTENNA ON TOWER	465514.46	0950339.20	1B	1594		151	17 49	7889
OL ON WATER TANK	465525.96	0950350.12	1B	1593		150	10 19	8756
OL ON RADIO MAST (N of 3)	465420.73	0950105.96	2A	1671	251	228	77 49	13751



TOUCHDOWN ZONE	
RUNWAY ELEVATION	
13	1443
31	1443

PARK RAPIDS MUNICIPAL AIRPORT
 PARK RAPIDS, MINNESOTA
 (NOT TO SCALE)