

OBSTRUCTION DATA SHEET

**ODS 5666
OCEANSIDE MUNICIPAL AIRPORT
OCEANSIDE, CALIFORNIA**

DIGITIZED FROM

**OC 5666
SURVEYED FEBRUARY 1992
4TH EDITION**

**HORIZONTAL DATUM NAD83
VERTICAL DATUM NGVD29**



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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 No. 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 the OC depict a representation of objects that existed at the time of the OC field survey.

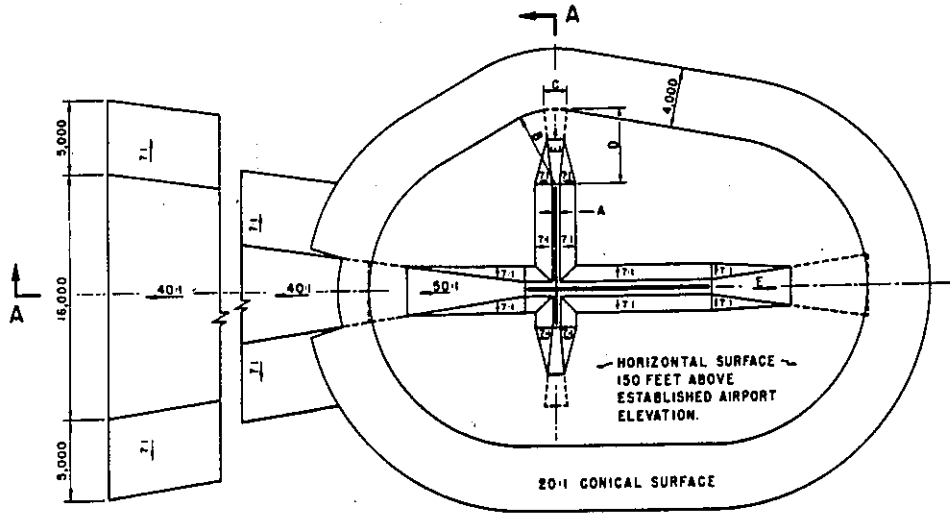
ODS information is arranged as follows:

1. Objects located in an FAR-77 approach or primary and listed with the associated runway (reference runway).
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:

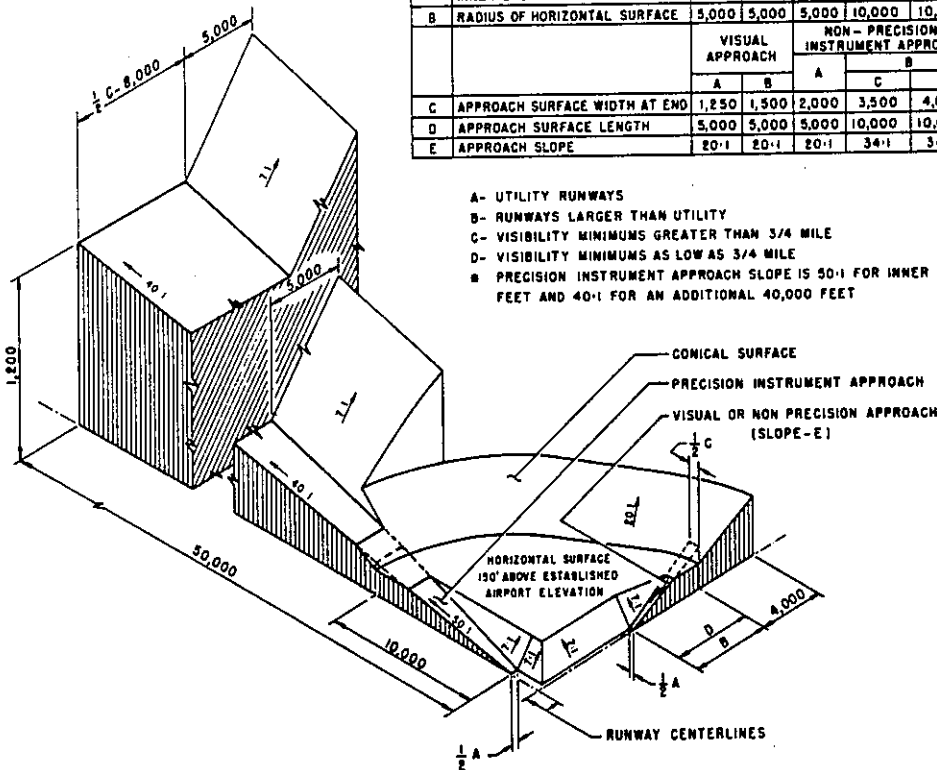
A(V) Utility runway - visual approach only
A(NP) Utility runway - nonprecision instrument approach
B(V) Nonutility runway - visual approach only
C Nonutility runway - nonprecision instrument
approach with visibility minimums greater than
3/4 mile
D Nonutility runway- nonprecision instrument approach
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.



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
- ∅- 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

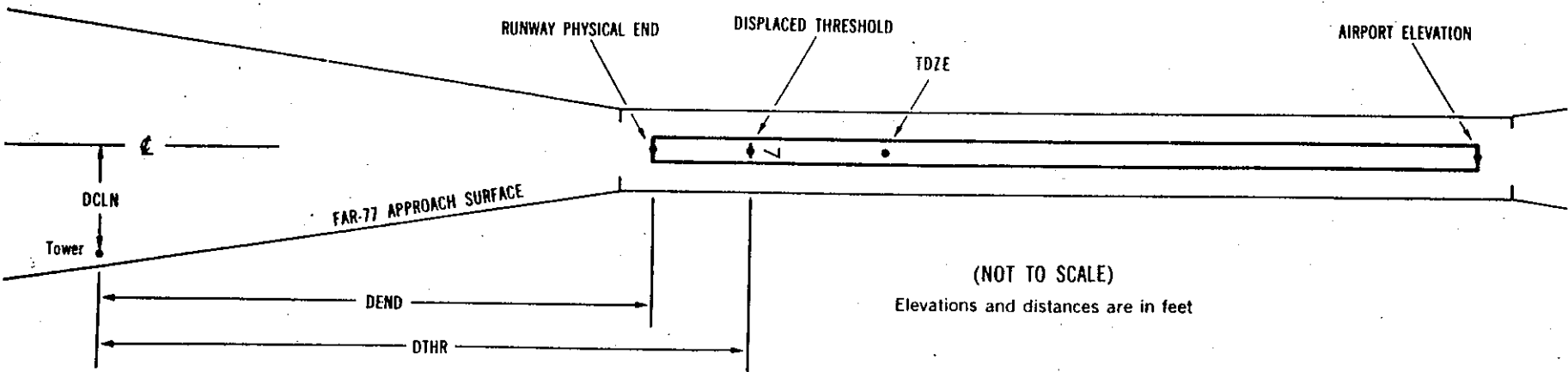
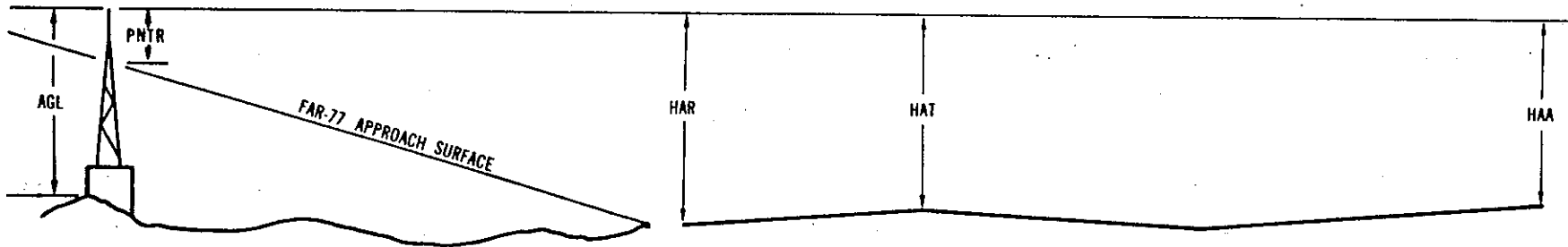
FAR-77 CIVIL AIRPORT
IMAGINARY SURFACES

ANNOTATION OF ODS DATA FORMAT

OC XXXX

AIRPORT ELEVATION XXXX

	x ¹	x ²	XXXX/XXXX ³	XXXXXX.XXX ⁴	XXXXXXXX.XXX ⁴	XXXXXXXX ⁵	XXXX/XXXX ⁶	XXXXXX.XXX ⁷	XXXXXXXX.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 areas 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 Elevation at approach end of reference runway/touchdown zone elevation
- 4 Latitude and longitude at approach end of reference runway
- 5 Geodetic azimuth of reference runway reckoned from north
- 6 Elevation at reference runway displaced threshold/touchdown zone elevation
- 7 Latitude and longitude at reference runway displace threshold
- 8 Accuracy codes: Horizontal Vertical
 1 = 20 A = 2
 2 = 40 B = 5
 C = 20
- 9 Elevation above mean sea level (MSL) 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). AGL's are provided only for manmade objects appearing on the OC and equal to or greater than 200 feet AGL. AGL accuracy is 10 feet.
- 11 HAA - Height above airport
 HAR - Height above approach end of reference runway
 HAT - Height above reference runway touchdown zone elevation
- 12 DEND - Distance along reference runway centerline from point nearest to object (perpendicular) to approach end of runway
 DTHR - Distance along reference runway centerline from point nearest to object (perpendicular) to displace 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 that object is in primary on roll-out side of zero distance point.
- 13 PTNR - Penetration of indicated FAR-77 approach or primary surface (See footnote 2).

AIRPORT ELEVATION 28

6 AV	24/	331301.773	-1172125.192	2595716.	25/	28	331302.375	-1172121.153					
OBJECT		LAT	LONG	A	ELEV	AGL	HAR	HAT	HAA	DEND	DTHR	DCLN	PNTR
GROUND		331306.23	-1172047.17	1A	30		6	2	2	-3259	-2911	120R	2
SIGN		331307.69	-1172053.66	1A	36		12	8	8	-2742	-2393	122L	9
ROAD (N)		331302.67	-1172125.33	1A	38		14	10	10	-4	344	91L	14
ROAD (N)		331301.66	-1172126.20	1A	39		15	11	11	86	435	3L	15
TREE		331301.87	-1172127.31	1A	41		17	13	13	176	524	41L	17
TREE		331301.84	-1172130.18	1A	55		31	27	27	416	765	81L	20
TREE		331258.85	-1172135.39	1A	64		40	36	36	905	1253	140R	5
DL POLE		331259.20	-1172143.45	1A	89		65	61	61	1573	1921	15L	-4
POLE		331257.74	-1172216.73	1A	194		170	166	166	4382	4731	363L	-39

24 AV	28/	28	331307.055	-1172049.711	795736.									
OBJECT			LAT	LONG	A	ELEV	AGL	HAR	HAT	HAA	DEND	DTHR	DCLN	PNTR
TREE			331301.87	-1172127.31	1A	41		13	13	13	-3237		41R	17
ROAD (N)			331301.66	-1172126.20	1A	39		11	11	11	-3147		3R	15
ROAD (N)			331302.67	-1172125.33	1A	38		10	10	10	-3057		91R	14
SIGN			331307.69	-1172053.66	1A	36		8	8	8	-319		122R	9
GROUND			331306.23	-1172047.17	1A	30		2	2	2	198		120L	2
GROUND			331308.45	-1172047.54	1A	30		2	2	2	206		107R	2
ROAD (N)			331309.91	-1172031.01	1A	52		24	24	24	1614		8R	-47
TRANSMISSION POLE			331315.11	-1172018.27	1A	98		70	70	70	2772		336R	-59
DL POLE			331312.79	-1172017.72	1A	113		85	85	85	2777		97R	-44
DL ON TRANSMISSION POLE			331309.32	-1172016.30	1A	98		70	70	70	2835		269L	-62
TREE			331312.19	-1171950.09	1A	277		249	249	249	5078		372L	5

AIRPORT ELEVATION 28

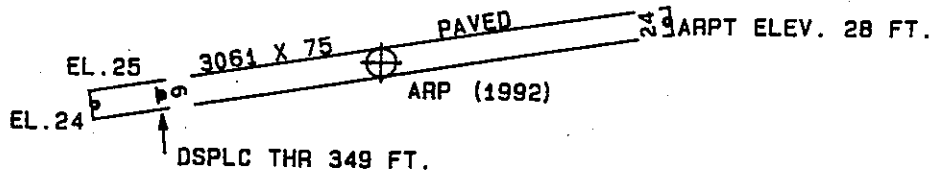
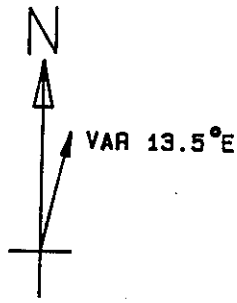
ARP 331304.414 -1172107.452

OBJECT	LAT	LONG	A	ELEV	AGL	HAA	MAG BEARING	DISTANCE
OL ON LIGHTED WINDSOCK	331305.69	-1172109.71	1A	48		20	29024	231
OL ON ANTENNA	331301.78	-1172108.25	1A	75		47	18050	275
AIRPORT BEACON	331300.38	-1172107.24	1A	70		42	16356	408
HANGAR	331303.02	-1172102.41	1A	40		12	9440	451
OL ON FLOODLIGHT	331306.08	-1172112.91	1A	60		32	27623	493
TREE	331301.05	-1172114.31	1A	70		42	22612	674
TREE	331304.24	-1172117.74	1A	48		20	25522	875
ANTENNA ON BUILDING	331305.13	-1172118.90	1A	80		52	26046	975
BUSH	331307.50	-1172055.22	1A	47		19	5948	1085
WINDSOCK	331304.73	-1172052.23	1A	41		13	7504	1293
TREE	331303.43	-1172122.88	1A	58		30	25208	1315
FENCE	331305.54	-1172050.55	1A	32		4	7159	1440
BUSH	331308.76	-1172050.82	1A	42		14	5914	1480
TREE	331310.26	-1172050.64	1A	72		44	5401	1545
TREE	331258.09	-1172125.71	1A	72		44	23406	1678
BUSH	331305.37	-1172047.32	1A	44		16	7315	1713
TREE	331303.35	-1172128.28	1A	44		16	25301	1773
LIGHT STANDARD	331236.62	-1172054.37	1B	213		185	14455	3021
LIGHT ON DOME	331242.19	-1172133.85	1A	275		247	21127	3175
TREE	331302.24	-1172145.51	1A	115		87	25237	3240
CHIMNEY ON HOUSE	331233.46	-1172121.33	1B	205		177	18708	3344
OL ANTENNA MAST	331235.08	-1172048.97	1B	348		320	13835	3355
CROSS ON HILL	331306.24	-1172146.97	1A	251		223	25938	3362
POLE	331245.39	-1172141.48	1B	260		232	22252	3472
TREE	331313.77	-1172147.15	1B	312		284	27209	3503
TREE	331234.61	-1172129.45	1B	334		306	19818	3545
BUILDING	331237.54	-1172040.59	1B	243		215	12627	3548
POLE	331322.10	-1172145.59	1B	288		260	28522	3700
TREE	331318.28	-1172147.81	1B	321		293	27843	3704
TREE	331231.77	-1172046.63	1B	362		334	13817	3744
ANTENNA	331230.02	-1172050.69	1B	359		331	14413	3757
FENCE POST	331336.74	-1172130.98	1B	304		276	31502	3830
POLE	331225.78	-1172116.35	1B	265		237	17727	3977
OL MOVIE SCREEN	331315.72	-1172021.66	1A	97		69	6007	4055
OL ON TRANSMISSION TOWER	331324.45	-1172023.88	1B	143		115	4749	4219

AIRPORT ELEVATION 28

ARP 331304.414 -1172107.452

OBJECT	LAT	LONG	A	ELEV	AGL	HAA	MAG BEARING	DISTANCE
POLE	331238.87	-1172026.86	1B	298		270	11318	4308
TREE	331220.10	-1172108.58	1B	276		248	16743	4480
LIGHTNING ROD ON OL MCWVT	331226.55	-1172136.50	1B	308		280	19918	4554
TREE	331233.82	-1172023.97	1B	356		328	11626	4818
POLE	331340.57	-1172148.90	1B	302		274	30234	5075
ANTENNA ON OL MAST	331332.64	-1172157.03	1B	399		371	29036	5087
POLE	331352.34	-1172137.34	2C	375		347	31850	5469
BUSH	331359.34	-1172100.59	2C	269		241	35229	5582
TRANSMISSION TOWER	331244.63	-1172005.30	1B	353		325	9714	5646
TREE	331240.97	-1172209.61	2C	223		195	23220	5788
POLE	331339.56	-1172201.34	1B	336		308	29418	5794
POLE	331251.53	-1171957.95	1B	267		239	8855	6046
BUILDING	331308.59	-1171953.47	1B	221		193	7239	6299
LIGHT STANDARD	331300.62	-1171952.62	1B	277		249	7957	6369
POLE	331346.58	-1172206.27	2C	346		318	29657	6567
TREE	331303.97	-1171948.60	2C	294		266	7652	6699
POLE	331409.66	-1172124.11	2C	314		286	33423	6745
OL RADIO TOWER	331210.54	-1172017.06	2C	235		207	12819	6927
TREE	331303.01	-1171945.78	2C	303		275	7739	6940
TREE	331320.14	-1171947.84	2C	231		203	6316	6948
TRANSMISSION TOWER	331414.60	-1172045.56	2C	311		283	111	7333
POLE	331355.17	-1172211.32	2C	336		308	29954	7467
TREE	331304.42	-1171929.96	2C	359		331	7629	8282
BUSH	331325.96	-1171930.32	2C	279		251	6142	8534
TRANSMISSION TOWER	331427.52	-1172049.23	2C	420		392	35656	8541
ANTENNA ON OL RADIO TOWER	331143.85	-1172032.56	2C	389		361	14629	8666
OL ROD ON WATER TANK	331407.14	-1172217.96	1A	444		416	30307	8722



TOUCHDOWN ZONE	
RUNWAY ELEVATION	
6	28
24	28

OCEANSIDE MUNICIPAL AIRPORT
 OCEANSIDE, CALIFORNIA
 (NOT TO SCALE)