

OBSTRUCTION DATA SHEET

ODS 6860
LOS ALAMOS AIRPORT
LOS ALAMOS, NEW MEXICO

DIGITIZED FROM

OC 6860
SURVEYED MAY 1987
1ST 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:

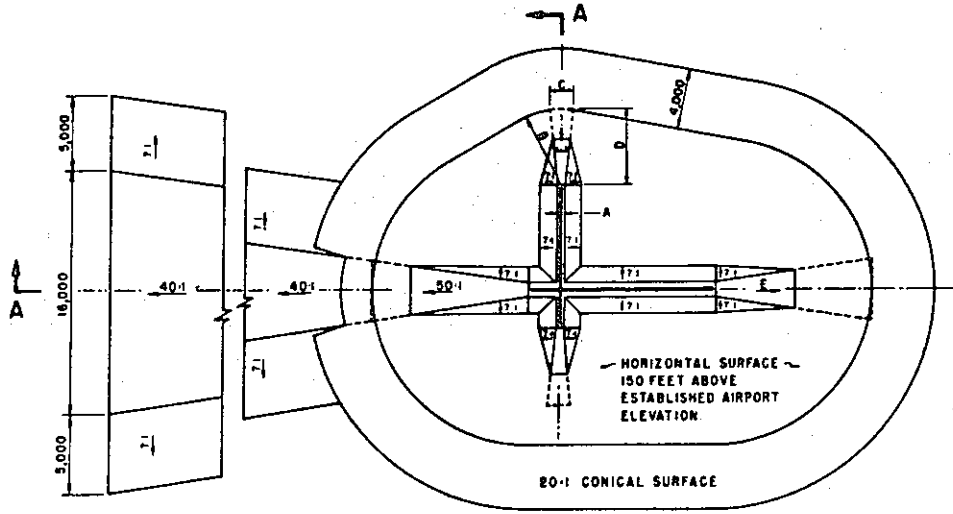
1. Objects located in FAR-77 approach (including supplemental approaches if present) or primary areas are listed with the associated runway (reference runway). For example, all objects in the Runway 9R approach or primary are listed with Runway 9R. Distances to these objects are computed from both the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

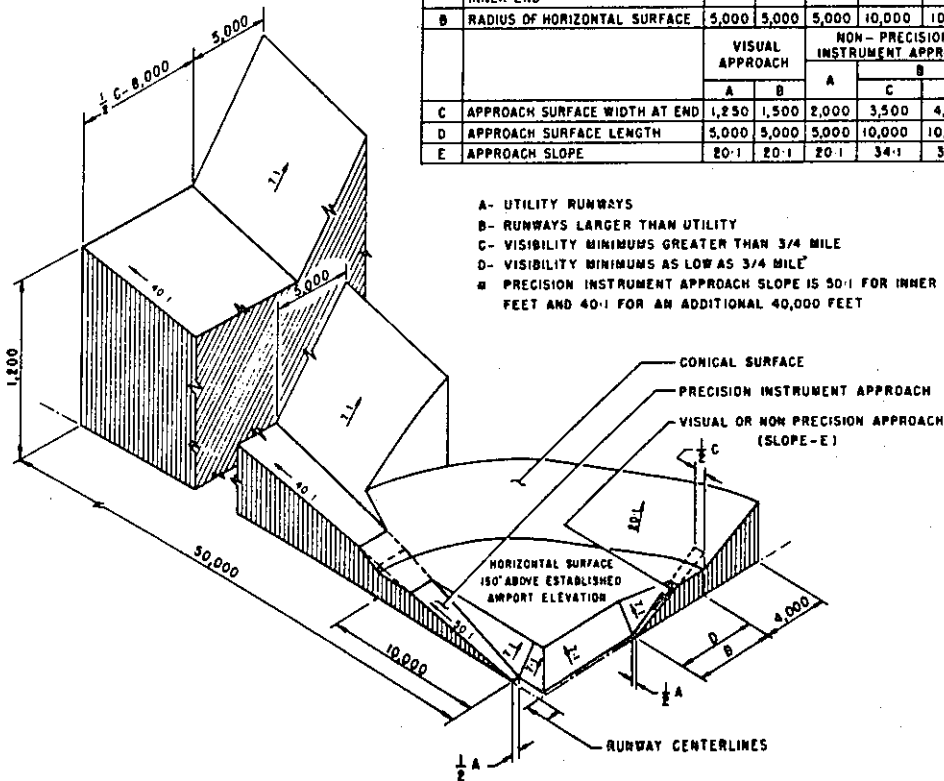
FAR-77 imaginary surface dimensions are defined on page 2 of this report.

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	
D	APPROACH SURFACE LENGTH	1,250	1,500	2,000	3,500	4,000	16,000
E	APPROACH SURFACE SLOPE	5,000	5,000	5,000	10,000	10,000	#
		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

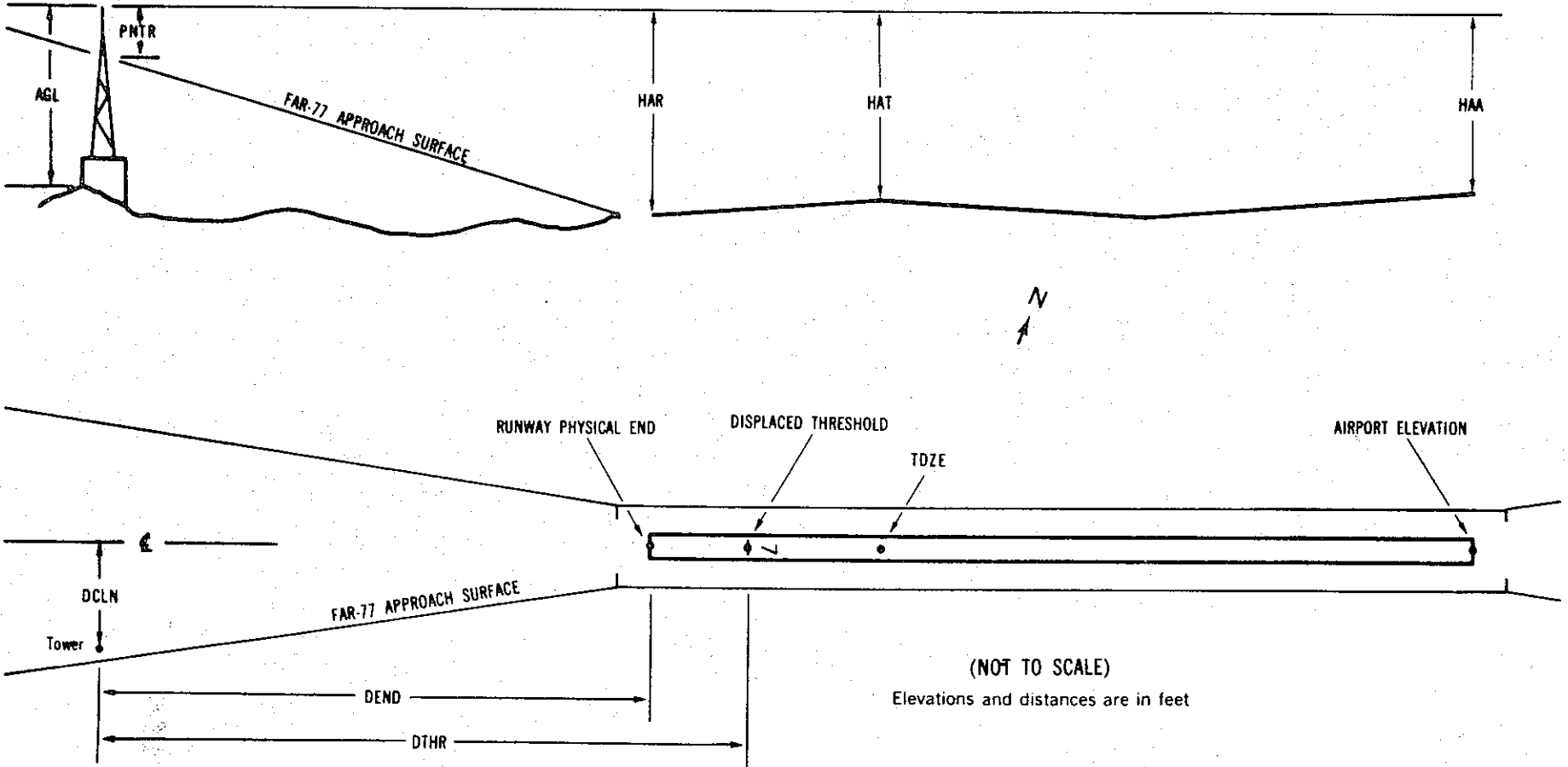
FAR-77 CIVIL AIRPORT
IMAGINARY SURFACES

ANNOTATION OF ODS DATA FORMAT

OC XXXX

AIRPORT ELEVATION XXXX

x ¹	x ²	XXXX/XXXX ³	XXXXXX.XXX ⁴	XXXXXXX.XXX ⁴	XXXXXXX ⁵	XXXX/XXXX ⁶	XXXXXX.XXX ⁷	XXXXXXX.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).

DC6860

AIRPORT ELEVATION 7171

9 A(V) 7171/7171 355253.110N 1061640.718W 2822324

OBJECT	LAT	LONG	A	ELEV	AGL	HAR	HAT	HAA	DEND	DTHR	DCLN	PNTR
TREE	355239.07	1061532.91	1A	7086		-85		-85	-5755		188R	-2
TREE	355239.52	1061535.14	1A	7101		-70		-70	-5566		183R	13
ROD ON OL ANEMOMETER	355243.98	1061540.33	1A	7110		-61		-61	-5052		165L	15
TREE	355240.99	1061541.60	1A	7115		-56		-56	-5015		153R	19
OL ON LTD WINDSOCK	355244.10	1061542.25	1A	7120		-51		-51	-4895		143L	22
TREE	355241.59	1061545.08	1A	7123		-48		-48	-4723		155R	23
TREE	355246.12	1061547.97	1A	7109		-62		-62	-4391		242L	4
TREE	355241.73	1061549.55	1A	7128		-43		-43	-4360		220R	22
TREE	355244.10	1061555.62	1A	7125		-46		-46	-3820		93R	11
TREE	355243.03	1061556.96	1A	7131		-40		-40	-3736		223R	16
TREE	355244.03	1061602.70	1A	7142		-29		-29	-3253		226R	20
FENCE	355245.29	1061606.40	1A	7134		-37		-37	-2928		166R	7
ROAD (N)	355246.07	1061613.66	1A	7150		-21		-21	-2328		217R	14
BUSH	355248.24	1061624.42	1A	7160		-11		-11	-1415		193R	10
OL ON WINDSOCK	355253.41	1061628.75	1A	7176		5		5	-955		241L	19
HANGAR	355253.49	1061632.10	1A	7173		2		2	-685		190L	12
GATE	355249.65	1061633.38	1A	7165		-6		-6	-665		212R	4
TREE	355254.19	1061633.95	1A	7192		21		21	-520		227L	29
TREE	355254.96	1061638.27	1A	7202		31		31	-157		226L	33
FENCE	355250.91	1061641.24	1A	7176		5		5	-6		227R	5
SHED	355251.59	1061641.41	1A	7178		7		7	23		162R	7
TOWER	355254.82	1061640.77	1A	7181		10		10	41		168L	10
TREE	355252.50	1061642.75	1A	7203		32		32	150		96R	32
POLE	355252.64	1061643.65	1A	7203		32		32	225		98R	31
TREE	355252.99	1061644.78	1A	7217		46		46	324		83R	40
TREE	355256.27	1061648.60	1A	7245		74		74	702		173L	49
TREE	355252.86	1061649.70	1A	7249		78		78	717		183R	52
TREE	355255.59	1061656.50	1A	7254		83		83	1323		34R	27
TREE	355257.03	1061658.69	1A	7264		93		93	1529		70L	27
TREE	355254.60	1061701.05	1A	7245		74		74	1667		212R	1
TREE	355257.52	1061702.75	1A	7261		90		90	1866		47L	7
TREE	355258.53	1061724.82	1A	7339		168		168	3663		243R	-5
TREE	355257.76	1061736.25	1B	7330		159		159	4565		521R	-59

DC6860

AIRPORT ELEVATION 7171

27 A(NF) 7088/7132 355241.332N 1061534.874W 1022403

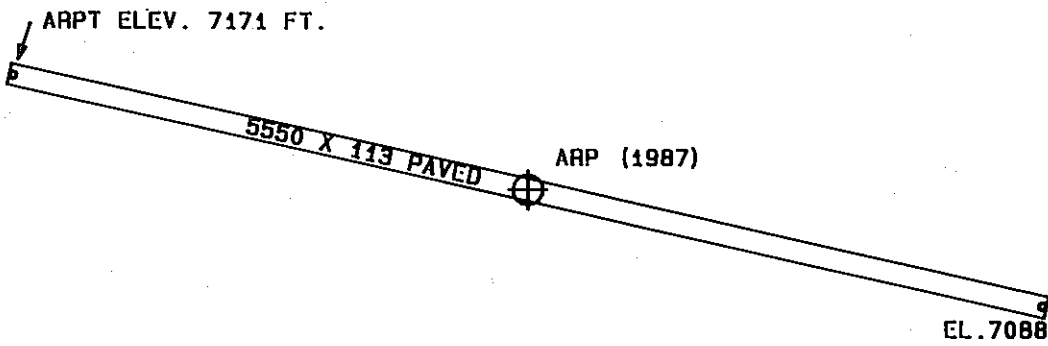
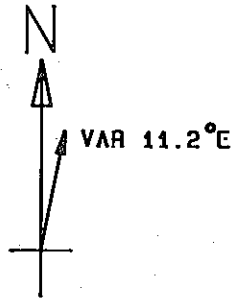
OBJECT	LAT	LONG	A	ELEV	AGL	HAR	HAT	HAA	DEND	DTHR	DCLN	PNTR
TREE	355252.50	1061642.75	1A	7203		115		32	-5698		96L	32
TOWER	355254.82	1061640.77	1A	7181		93		10	-5589		168R	10
SHED	355251.59	1061641.41	1A	7178		90		7	-5571		162L	7
FENCE	355250.91	1061641.24	1A	7176		88		5	-5543		227L	5
TREE	355254.96	1061638.27	1A	7202		114		31	-5391		226R	33
TREE	355254.19	1061633.95	1A	7192		104		21	-5028		227R	29
GATE	355249.65	1061633.38	1A	7165		77		-6	-4883		212L	4
HANGAR	355253.49	1061632.10	1A	7173		85		2	-4863		190R	12
OL ON WINDSOCK	355253.41	1061628.75	1A	7176		88		5	-4593		241R	19
BUSH	355248.24	1061624.42	1A	7160		72		-11	-4133		193L	10
ROAD (N)	355246.07	1061613.66	1A	7150		62		-21	-3220		217L	14
FENCE	355245.29	1061606.40	1A	7134		46		-37	-2620		166L	7
TREE	355244.03	1061602.70	1A	7142		54		-29	-2295		226L	20
TREE	355243.03	1061556.96	1A	7131		43		-40	-1812		223L	16
TREE	355244.10	1061555.62	1A	7125		37		-46	-1728		93L	11
TREE	355241.73	1061549.55	1A	7128		40		-43	-1188		220L	22
TREE	355246.12	1061547.97	1A	7109		21		-62	-1157		242R	4
TREE	355241.59	1061545.08	1A	7123		35		-48	-825		155L	23
OL ON LTD WINDSOCK	355244.10	1061542.25	1A	7120		32		-51	-653		143R	22
TREE	355240.99	1061541.60	1A	7115		27		-56	-533		153L	19
ROD ON OL ANEMOMETER	355243.98	1061540.33	1A	7110		22		-61	-496		165R	15
TREE	355239.52	1061535.14	1A	7101		13		-70	18		183L	13
TREE	355239.07	1061532.91	1A	7086		-2		-85	207		188L	-2

DC6860

AIRPORT ELEVATION 7171

ARF 355247.222N 1061607.795W

OBJECT	LAT	LONG	A	ELEV	AGL	HAA	MAG BEARING	DISTANCE
ANTENNA (NDB)	355252.16	1061611.39	1A	7162		-9	318 10	580
LIGHT STANDARD	355254.97	1061625.56	1A	7178		7	287 0	1659
TREE	355247.64	1061628.64	1A	7193		22	260 12	1716
ANT ON OL APT BCN	355254.65	1061629.33	1A	7208		37	281 47	1925
OL ON WATER TANK	355233.98	1061629.44	1B	7319		148	221 52	2229
TREE	355249.03	1061635.84	1A	7189		18	263 20	2315
TREE	355239.51	1061541.17	1A	7113		-58	98 23	2326
TREE	355256.16	1061640.00	1A	7190		19	277 38	2801
ANTENNA	355250.42	1061643.86	1A	7202		31	265 1	2985
OL ON WATER TANK	355240.71	1061645.51	1A	7323		152	246 49	3173
POLE	355251.12	1061647.14	1A	7212		41	265 44	3262
LIGHT STANDARD	355335.90	1061709.43	1B	7382		211	302 57	7068
OL ON RADIO TOWER	355344.13	1061721.47	2C	7469		298	302 19	8359
ANT ON OL WATER TANK	355412.60	1061646.99	2C	7462		291	328 19	9216
ANT ON BUILDING	355246.54	1061802.87	2C	7424		253	258 23	9471



TOUCHDOWN ZONE	
RUNWAY ELEVATION	
9	7171
27	7132

LOS ALAMOS AIRPORT
LOS ALAMOS, NEW MEXICO
(NOT TO SCALE)