

OBSTRUCTION DATA SHEET

ODS 6851
FRONT RANGE AIRPORT
DENVER, COLORADO

DIGITIZED FROM

OC 6851
SURVEYED JUNE 1993
2ND EDITION

HORIZONTAL DATUM NAD 83
VERTICAL DATUM NGVD 29



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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.

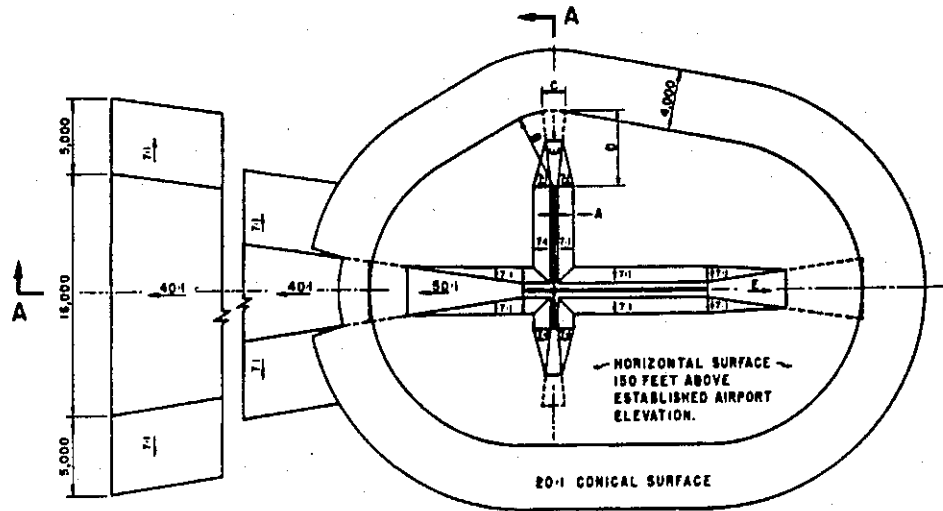
ODS information is arranged as follows:

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.

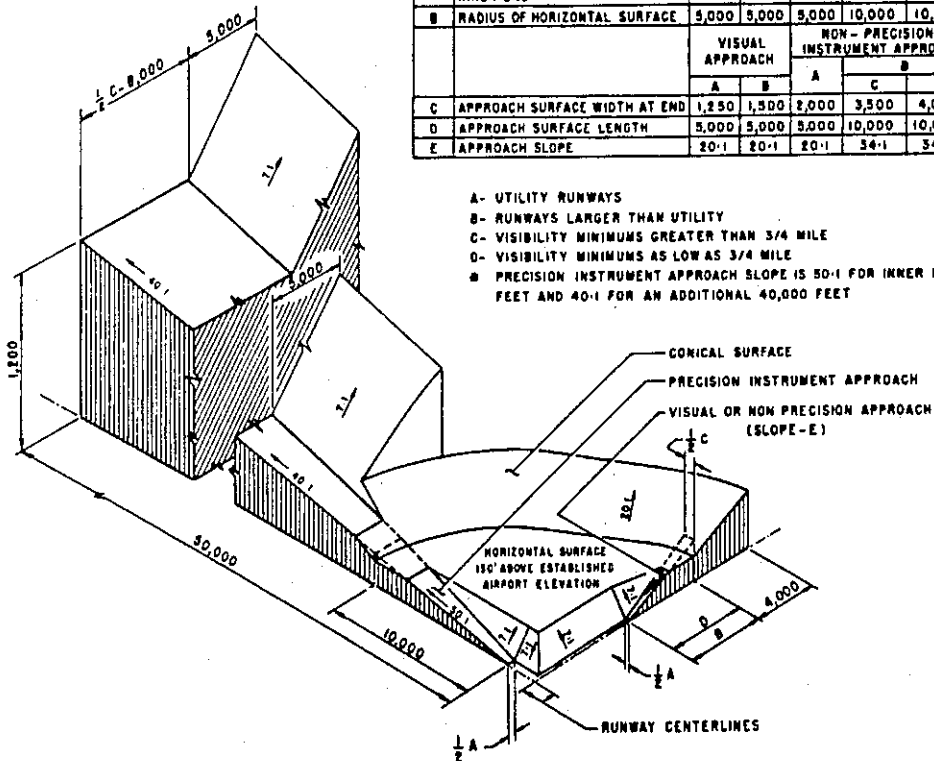
The FAR-77 imaginary approach surfaces for which the obstruction surveys were performed are coded in the ODS as follows:

- 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	
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

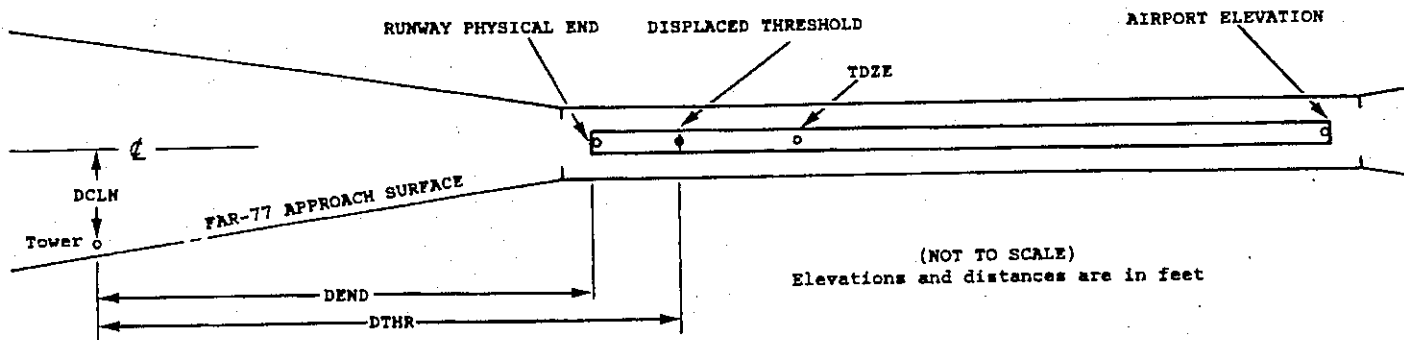
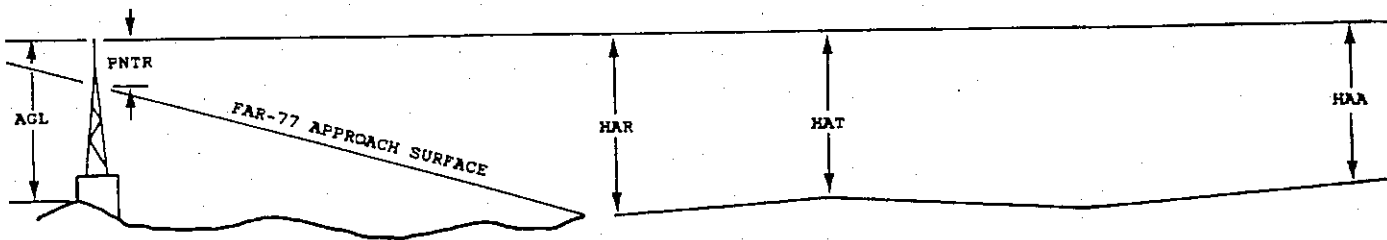
FAR-77 CIVIL AIRPORT
IMAGINARY SURFACES

ANNOTATION OF ODS DATA FORMAT

OC XXXX

AIRPORT ELEVATION XXXX

1 X	2 X	3 XXXX/XXXX	4 XXXXXX.XXX	4 XXXXXX.XXX	5 XXXXXX	6 XXXX/XXXX	7 XXXXXX.XXX	7 XXXXXX.XXX	8 A	9 ELEV	10 AGL	11 HAR	11 HAT	11 HAA	12 DEND	12 DTHR	12 DCLN	13 PNTR
XXXXXXXXXXXX			XXXXXX.XXX	XXXXXX.XXX	XX	XXXX	XXXX	XXX	XXX	XXX	XXX	XXX	XXX	XXXXX	XXXXX	XXXX	XXXX	
XXXXXXXXXXXX			XXXXXX.XXX	XXXXXX.XXX	XX	XXXX	XXXX	XXX	XXX	XXX	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 displaced threshold

8 Accuracy codes: Horizontal(Ft.) Vertical(Ft.)
 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 displaced 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 PNTR - Penetration of indicated FAR-77 approach or primary surface (See footnote 2).

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AIRPORT ELEVATION 5511

17 PIR 5473/5487 394708.145 -1043127.243 1795915.

OBJECT	LAT	LONG	A	EL	AGL	HAR	HAT	HAA	DEND	DTHR	DCLN	PNTR
OL LTD WSK	394601.15	-1043130.49	1A	5513		40	26	2	-6779		255R	7
BLDG AT DME (UNDER CONST)	394718.15	-1043131.94	1A	5473		0	-14	-38	1012		366R	-16

35 PIR 5511/5511 394549.098 -1043127.221 3595916.

OBJECT	LAT	LONG	A	EL	AGL	HAR	HAT	HAA	DEND	DTHR	DCLN	PNTR
OL LTD WSK	394601.15	-1043130.49	1A	5513		2	2	2	-1219		255L	7
BLDG	394539.01	-1043122.16	1A	5534		23	23	23	1021		395R	6
GROUND	394528.35	-1043127.21	1A	5535		24	24	24	2100		1R	-14
POLE	394522.23	-1043120.53	1A	5575		64	64	64	2719		522R	13
POLE	394513.34	-1043120.60	1A	5603		92	92	92	3618		516R	23
POLE	394511.01	-1043140.58	1A	5583		72	72	72	3854		1044L	-2
POLE	394510.94	-1043136.80	1A	5591		80	80	80	3861		749L	6
POLE	394510.74	-1043120.65	1A	5604		93	93	93	3881		512R	19
POLE	394510.67	-1043114.50	1A	5596		85	85	85	3889		992R	11
POLE	394504.85	-1043136.71	1A	5609		98	98	98	4477		742L	12
POLE	394502.89	-1043136.69	1A	5612		101	101	101	4676		741L	11
POLE	394458.93	-1043136.65	1A	5612		101	101	101	5076		738L	3
POLE	394452.98	-1043136.57	1A	5616		105	105	105	5678		732L	-5

18 AV 5446/5450 394743.612 -1043405.944 1795259.

OBJECT	LAT	LONG	A	EL	AGL	HAR	HAT	HAA	DEND	DTHR	DCLN	PNTR
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*** NO OBSTRUCTIONS ***

36 AV 5455/5455 394704.087 -1043405.840 3595259.

OBJECT	LAT	LONG	A	EL	AGL	HAR	HAT	HAA	DEND	DTHR	DCLN	PNTR
GROUND	394644.38	-1043405.84	1A	5481		26	26	-30	1994		4L	-64

006851

AIRPORT ELEVATION 5511

8 SUPLC 5450/5466 394738.418 -1043354.870 910859.

OBJECT	LAT	LONG	A	EL	AGL	HAR	HAT	HAA	DEND	DTHR	DCLN	PNTR
WSK	394734.90	-1043215.37	1A	5493		43	27	-18	-7772		199R	8
ROD ON OL GS	394740.97	-1043225.12	1A	5525		75	59	14	-6999		400L	43
ANT ON OL AMOM	394741.09	-1043225.72	1A	5515		65	49	4	-6952		411L	33
LTD WSK	394741.44	-1043254.58	1A	5493		43	27	-18	-4699		400L	19
GROUND	394742.49	-1043320.12	1A	5476		26	10	-35	-2703		466L	12
GROUND	394741.92	-1043335.34	1A	5468		18	2	-43	-1517		385L	10
WSK	394736.38	-1043352.07	1A	5459		9	-7	-52	-223		202R	8
OL LOC	394738.93	-1043428.11	1A	5434		-16	-32	-77	2595		OR	-86
OL DME	394736.37	-1043428.22	1A	5438		-12	-28	-73	2599		260R	-82

26 PIR 5485/5485 394736.819 -1043212.426 2711005.

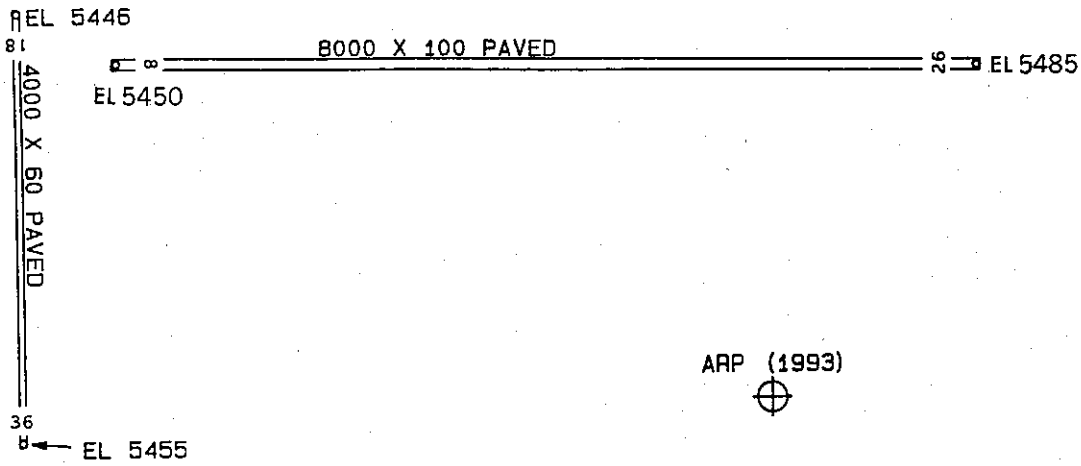
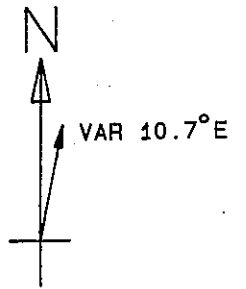
OBJECT	LAT	LONG	A	EL	AGL	HAR	HAT	HAA	DEND	DTHR	DCLN	PNTR
WSK	394736.38	-1043352.07	1A	5459		-26	-26	-52	-7775		202L	8
GROUND	394741.92	-1043335.34	1A	5468		-17	-17	-43	-6481		385R	10
GROUND	394742.49	-1043320.12	1A	5476		-9	-9	-35	-5295		466R	12
LTD WSK	394741.44	-1043254.58	1A	5493		8	8	-18	-3299		400R	19
ANT ON OL AMOM	394741.09	-1043225.72	1A	5515		30	30	4	-1046		411R	33
ROD ON OL GS	394740.97	-1043225.12	1A	5525		40	40	14	-999		400R	43
WSK	394734.90	-1043215.37	1A	5493		8	8	-18	-226		199L	8

OC6851

AIRPORT ELEVATION 5511

ARP 394707.267 -1043237.530

OBJECT	LAT	LONG	A	EL	AGL	HAA	MAG BEARING	DISTANCE
ANT ON DOME	394711.83	-1043244.92	1A	5636		125	29757	739
ANT ON APBN	394723.45	-1043259.65	1A	5538		27	30246	2380
LIGHT	394729.56	-1043248.62	1A	5519		8	32818	2416
AMOM ON BLDG	394727.58	-1043257.05	1A	5520		9	31245	2559
LIGHT	394729.69	-1043256.69	1A	5516		5	31554	2718
GROUND	394743.76	-1043312.49	1A	5489		-22	31250	4592
POLE	394655.90	-1043136.97	1A	5514		3	9258	4865
GROUND	394655.68	-1043133.93	1A	5482		-29	9235	5102
GROUND	394637.04	-1043135.02	1A	5503		-8	11122	5759
WSK	394702.28	-1043404.07	1A	5463		-48	25502	6775
WSK	394745.90	-1043404.20	1A	5447		-64	28919	7814
ROD ON ELEVATOR	394527.03	-1043026.27	1A	5649		138	12359	14419



ARP (1993)



EL 5473



8001 X 100 PAVED

35

ARPT EL 5511

TOUCHDOWN ZONE
RUNWAY ELEVATION

17	5487
35	5511
18	5450
36	5455
8	5466
26	5485

FRONT RANGE AIRPORT
DENVER, COLORADO
(NOT TO SCALE)
(ELEVATIONS AND DISTANCES IN FEET)