

# OBSTRUCTION DATA SHEET

**ODS 1195  
MERLE K. (MUDHOLE) SMITH AIRPORT  
CORDOVA, ALASKA**

**DIGITIZED FROM**

**OC 1195  
SURVEYED JUNE 1991  
3RD EDITION**



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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 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:

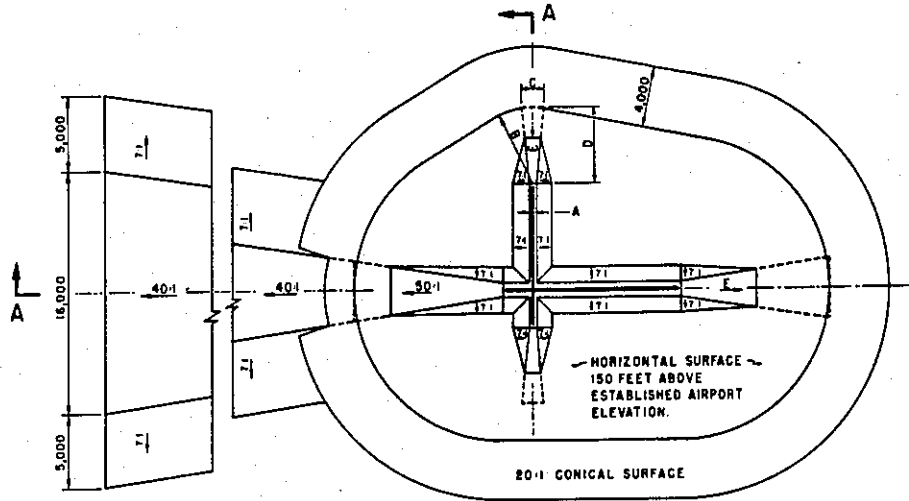
1. Objects located in FAR-77 approach (including supplemental approaches if present) or primary areas are listed with the associated runway (reference runway). For example, all objects in the Runway 9R approach or primary are listed with Runway 9R. Distances to these objects are computed from both the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

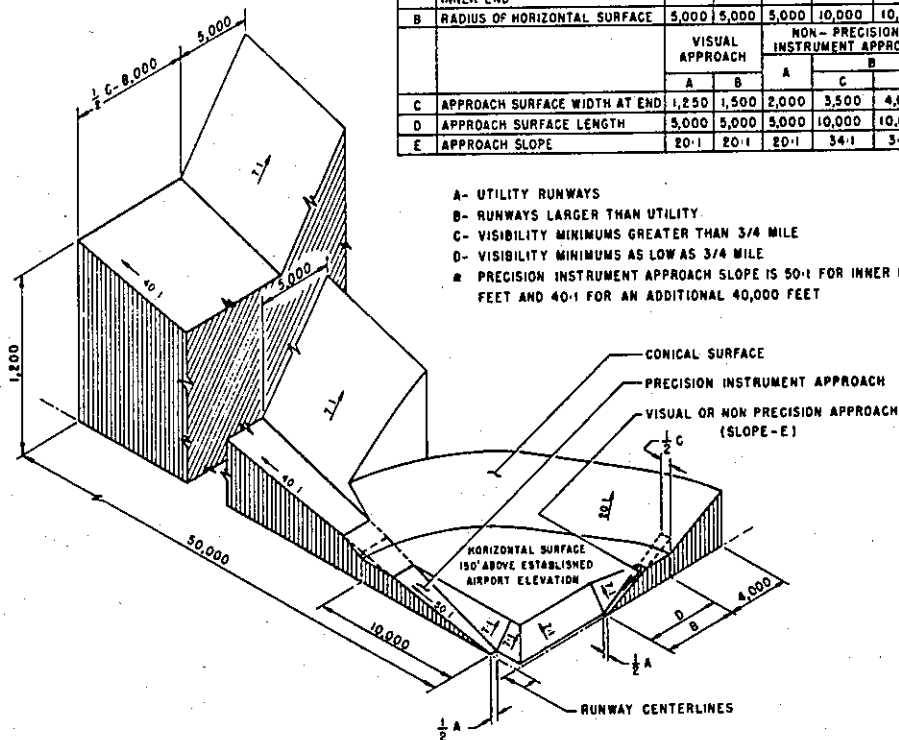
FAR-77 imaginary surface dimensions are defined on page 2 of this report.

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
- E- 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

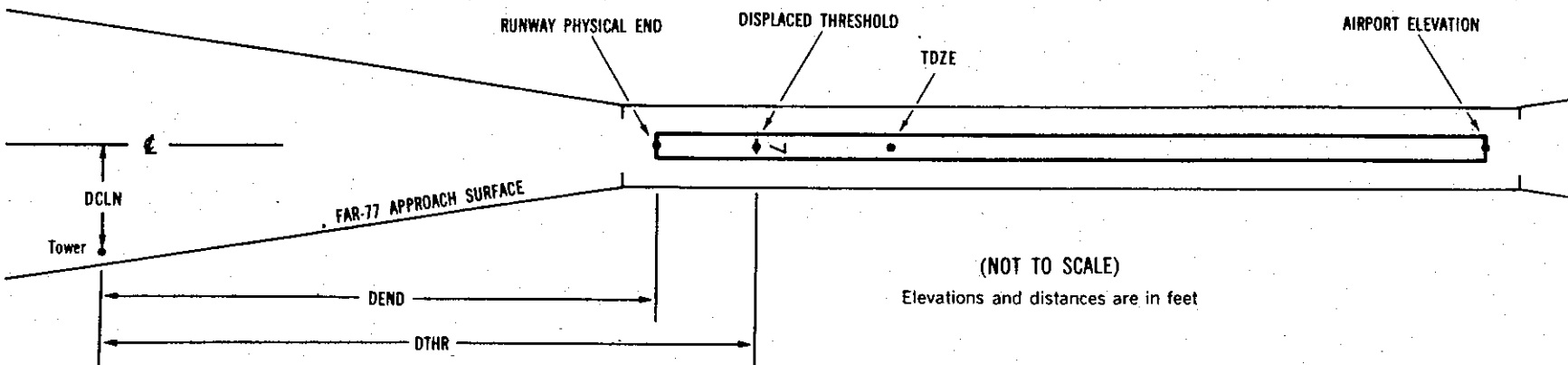
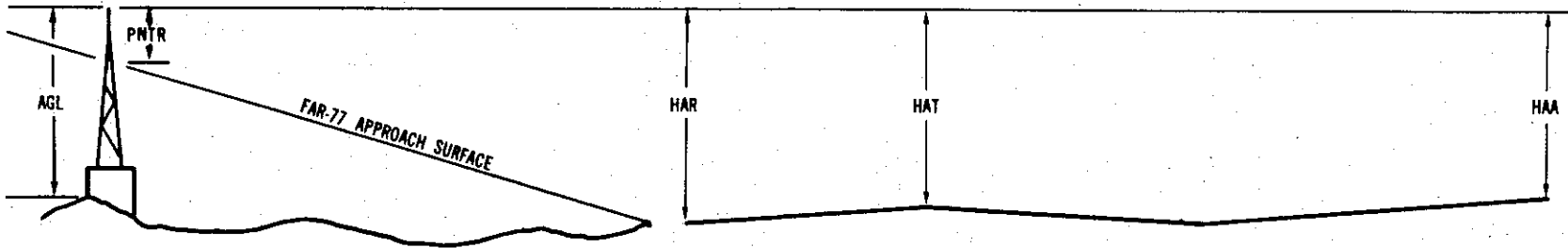
OC XXXX

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	XXXXXXXXX.XXX	XX	XXXX	XXXX	XXX	XXX	XXX	XXXXX	XXXXX	XXXX	XXXX
XXXXXXXXXXXX	XXXXXX.XXX	XXXXXXXXX.XXX	XX	XXXX	XXXX	XXX	XXX	XXX	XXXXX	XXXXX	XXXX	XXXX

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## 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).

OC1195

AIRPORT ELEVATION 42

9 SUPLC 31/39 602950.254N 1452941.364W 2941243

OBJECT	LAT	LONG	A	ELEV	AGL	HAR	HAT	HAA	DEND	DTHR	DCLN	PNTR
BUSH	602920.11	1452720.39	1A	39		8	0	-3	-7696		107L	7
BUSH	602918.00	1452723.37	1A	41		10	2	-1	-7648		150R	9
BUSH	602924.71	1452726.87	1A	42		11	3	0	-7208		400L	10
OL MONITOR POLE	602920.77	1452741.50	1A	54		23	15	12	-6704		266R	23
OL ON GLIDE SLOPE	602921.74	1452745.09	1A	66		35	27	24	-6500		250R	35
TREE	602921.13	1452750.44	1A	109		78	70	67	-6281		416R	77
TREE	602924.01	1452803.49	1A	103		72	64	61	-5565		419R	68
ROD ON OL APBN & WINDSOCK	602933.38	1452800.56	1A	93		62	54	51	-5308		509L	56
TREE	602927.88	1452823.48	1A	98		67	59	56	-4490		472R	57
BUSH	602932.03	1452832.34	1A	52		21	13	10	-3912		269R	11
TREE	602931.99	1452842.82	1A	107		76	68	65	-3435		488R	67
TREE	602936.16	1452856.64	1A	104		73	65	62	-2630		386R	66
TREE	602939.10	1452910.07	1A	69		38	30	27	-1894		390R	33
TREE	602945.91	1452907.49	1A	47		16	8	5	-1729		294L	11
TREE	602942.44	1452927.30	1A	54		23	15	12	-968		434R	20
TREE	602950.84	1452920.29	1A	55		24	16	13	-938		487L	22
TREE	602944.96	1452939.52	1A	58		27	19	16	-305		452R	26
TREE	602953.77	1452932.67	1A	50		19	11	8	-251		504L	18
TREE	602946.66	1452946.15	1A	48		17	9	6	69		431R	17
BUSH	602953.29	1452942.15	1A	38		7	-1	-4	163		265L	7
BUSH	602954.14	1452944.78	1A	37		6	-2	-5	318		290L	3
OL ON LOCALIZER	602952.68	1452952.27	1A	41		10	2	-1	599		0L	-2
OL ON DME	602955.34	1452951.61	1A	53		22	14	11	680		260L	8
TREE	602956.32	1452956.11	1A	51		20	12	9	926		259L	-1
TREE	602959.11	1453001.02	1A	58		27	19	16	1266		416L	-4
TREE	602953.18	1453006.64	1A	53		22	14	11	1277		248R	-10

OC1195

AIRPORT ELEVATION 42

27 PIR 32/42 602919.946N 1452724.849W 1141441

OBJECT	LAT	LONG	A	ELEV	AGL	HAR	HAT	HAA	DEND	DTHR	DCLN	PNTR
BUSH	602953.29	1452942.15	1A	38		6	-4	-4	-7662		265R	7
TREE	602946.66	1452946.15	1A	48		16	6	6	-7569		431L	17
TREE	602953.77	1452932.67	1A	50		18	8	8	-7249		504R	18
TREE	602944.96	1452939.52	1A	58		26	16	16	-7195		452L	26
TREE	602950.84	1452920.29	1A	55		23	13	13	-6561		487R	22
TREE	602942.44	1452927.30	1A	54		22	12	12	-6532		434L	20
TREE	602945.91	1452907.49	1A	47		15	5	5	-5771		294R	11
TREE	602939.10	1452910.07	1A	69		37	27	27	-5605		390L	33
TREE	602936.16	1452856.64	1A	104		72	62	62	-4869		386L	66
TREE	602931.99	1452842.82	1A	107		75	65	65	-4064		488L	67
BUSH	602932.03	1452832.34	1A	52		20	10	10	-3587		269L	11
TREE	602927.88	1452823.48	1A	98		66	56	56	-3009		472L	57
ROD ON OL APBN & WINDSOCK	602933.38	1452800.56	1A	93		61	51	51	-2192		509R	56
TREE	602924.01	1452803.49	1A	103		71	61	61	-1935		419L	68
TREE	602921.13	1452750.44	1A	109		77	67	67	-1219		416L	77
OL ON GLIDE SLOPE	602921.74	1452745.09	1A	66		34	24	24	-1000		250L	35
OL MONITOR POLE	602920.77	1452741.50	1A	54		22	12	12	-795		266L	23
BUSH	602924.71	1452726.87	1A	42		10	0	0	-291		400R	10
BUSH	602918.00	1452723.37	1A	41		9	-1	-1	148		150L	9
BUSH	602920.11	1452720.39	1A	39		7	-3	-3	197		107R	7
OL ANEMOMETER	602922.25	1452713.09	1A	65		33	23	23	441		455R	28
TREE	602915.04	1452716.92	1A	46		14	4	4	567		291L	7
TREE	602920.87	1452710.34	1A	58		26	16	16	624		384R	18
TREE	602900.55	1452639.12	1A	119		87	77	77	2898		855L	33
TREE	602914.18	1452623.97	1A	106		74	64	64	3022		719R	18
TREE	602906.01	1452613.71	1A	130		98	88	88	3831		174R	25
TREE	602901.78	1452615.24	1A	121		89	79	79	3938		249L	14
TREE	602909.19	1452600.52	1A	126		94	84	84	4301		740R	12



OC1195

AIRPORT ELEVATION 42

34 A(V) 29/ 602913.003N 1452829.178W 1803155

OBJECT	LAT	LONG	A	ELEV	AGL	HAR	HAT	HAA	DEND	DTHR	DCLN	PNTR
WINDSOCK	602927.84	1452827.06	1A	53		24		11	-1508		92R	16
TREE	602925.57	1452826.64	1A	76		47		34	-1277		115R	40
TREE	602924.80	1452830.73	1A	74		45		32	-1197		89L	38
TREE	602920.31	1452826.94	1A	80		51		38	-743		105R	47
TREE	602914.51	1452827.33	1A	74		45		32	-154		91R	44
TREE	602912.72	1452827.09	1A	64		35		22	28		105R	35
TREE	602910.18	1452827.23	1A	59		30		17	286		100R	26
TREE	602905.85	1452832.95	1A	74		45		32	728		182L	19
TREE	602903.47	1452832.75	1A	85		56		43	969		170L	18
TREE	602859.00	1452834.37	1A	98		69		56	1424		247L	8

16 A(V) 39/ 602930.560N 1452828.848W 0003155

OBJECT	LAT	LONG	A	ELEV	AGL	HAR	HAT	HAA	DEND	DTHR	DCLN	PNTR
TREE	602912.72	1452827.09	1A	64		25		22	-1811		105L	35
TREE	602914.51	1452827.33	1A	74		35		32	-1629		91L	44
TREE	602920.31	1452826.94	1A	80		41		38	-1040		105L	47
TREE	602924.80	1452830.73	1A	74		35		32	-586		89R	38
TREE	602925.57	1452826.64	1A	76		37		34	-506		115L	40
WINDSOCK	602927.84	1452827.06	1A	53		14		11	-275		92L	16
TREE	602942.80	1452830.55	1A	125		86		83	1242		97R	34
TREE	602944.80	1452824.95	1A	148		109		106	1448		182L	47
TREE	602950.75	1452834.10	1A	145		106		103	2047		282R	14
TREE	602951.86	1452824.58	1A	167		128		125	2165		193L	30

OC1195

AIRPORT ELEVATION 42

ARP 602932.546N 1452832.313W

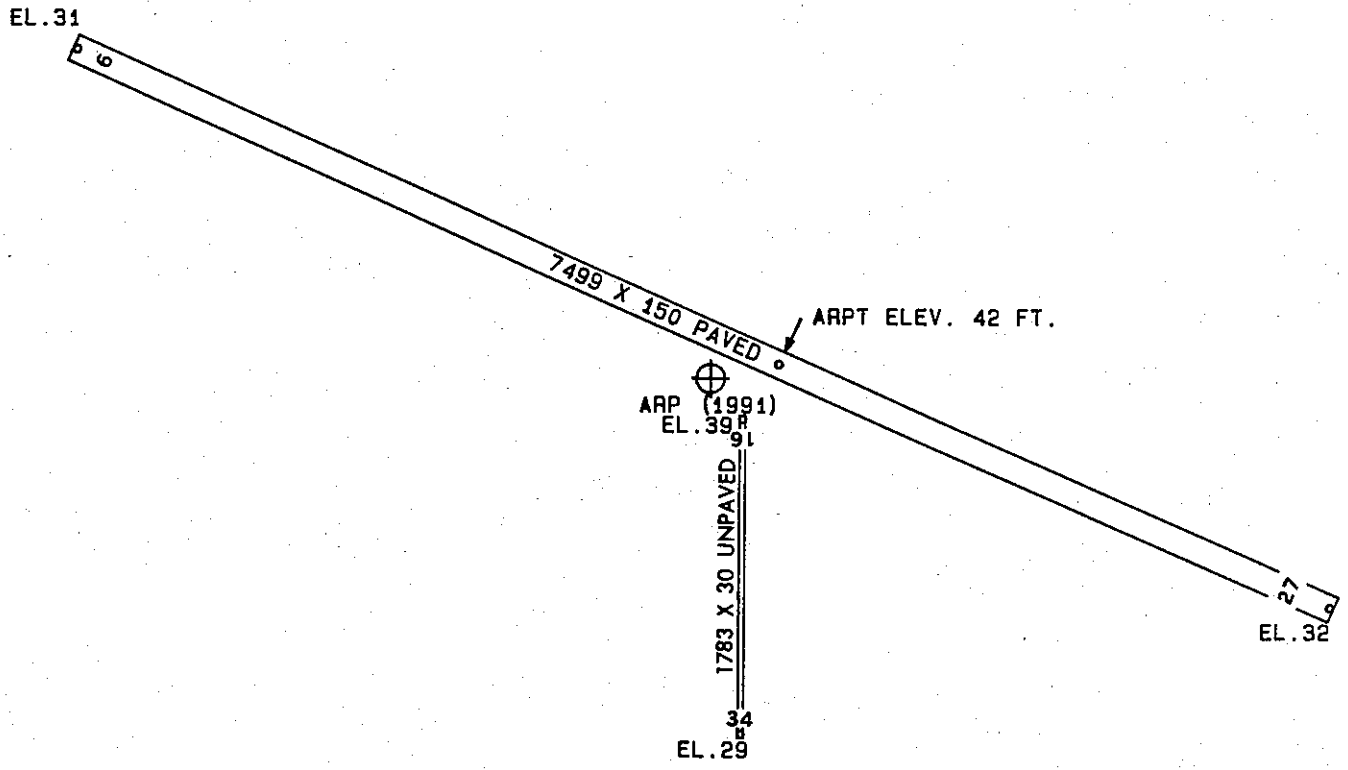
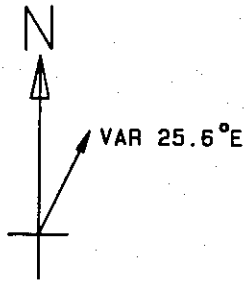
OBJECT	LAT	LONG	A	ELEV	AGL	HAA	MAG BEARING	DISTANCE
TREE	602928.09	1452832.21	1A	100		58	153 44	452
TREE	602929.30	1452843.36	1A	138		96	213 39	644
TREE	602926.07	1452836.48	1A	143		101	172 1	690
TREE	602922.62	1452835.13	1A	136		94	162 22	1018
TREE	602943.39	1452823.11	1A	150		108	357 7	1193
TREE	602944.64	1452840.80	1A	135		93	315 19	1300
ANT ON OL TOWER(SE 1 of 4)	602939.57	1452805.99	1A	125		83	35 59	1499
TREE	602940.99	1452807.36	1A	138		96	29 57	1516
TREE	602946.04	1452818.30	1A	162		120	1 32	1540
TREE	602921.55	1452808.33	1A	129		87	107 19	1640
TREE	602913.22	1452834.27	1A	131		89	157 15	1965
TREE	602910.75	1452834.39	1A	134		92	157 6	2216
TREE	602934.12	1452748.08	1A	115		73	60 16	2222
TREE	602910.11	1452832.38	1A	86		44	154 29	2278
TREE	602955.98	1452820.23	1A	166		124	348 40	2456
TREE	602932.26	1452733.91	1A	148		106	64 57	2926
TREE	602915.67	1452743.54	1A	133		91	99 26	2985
TREE	602902.16	1452834.80	1A	104		62	156 43	3088
TREE	602953.47	1452917.78	1A	123		81	287 25	3115
TREE	602942.58	1452937.59	1A	116		74	261 43	3425
TREE	602914.27	1452733.65	1A	134		92	96 39	3476
TREE	602924.77	1452713.22	1A	75		33	75 40	4040
WINDSOCK	602955.83	1452938.52	1A	53		11	279 54	4073
TREE	602947.17	1452954.97	1A	46		4	264 9	4399
TREE	603000.11	1452940.82	1A	88		46	283 37	4428
TREE	602929.18	1452701.13	1A	132		90	68 40	4581
TREE	602906.07	1452708.79	1A	92		50	97 6	4974
TREE	603004.66	1453008.57	1A	76		34	278 29	5821
TREE	602901.46	1452645.50	1A	117		75	94 55	6213
TREE	602857.70	1452647.11	1A	137		95	98 15	6348
TREE	603009.50	1452634.03	1B	259		217	32 2	7013
TREE	603021.71	1452648.54	1B	261		219	20 32	7207
TREE	603005.32	1452606.46	1B	249		207	39 53	8028

OC1195 File Continued from Previous Page

AIRPORT ELEVATION 42

ARP 602932.546N 1452832.313W

OBJECT	LAT	LONG	A	ELEV	AGL	HAA	MAG BEARING	DISTANCE
TREE	603013.96	1452611.01	1B	212		170	33 40	8233
TREE	603033.08	1452602.42	1B	220		178	25 4	9703
TREE	603112.63	1452729.57	2C	246		204	351 34	10638
TREE	603030.50	1452533.64	1B	204		162	31 3	10711
TREE	603038.85	1452517.94	2C	319		277	29 43	11836
TREE	603034.29	1452501.32	2C	222		180	33 42	12287



TOUCHDOWN ZONE RUNWAY ELEVATION	
9	39
27	42

MERLE K. (MUDHOLE) SMITH AIRPORT  
 CORDOVA, ALASKA  
 (NOT TO SCALE)