

# OBSTRUCTION DATA SHEET

**ODS 324  
PIERRE MUNICIPAL AIRPORT  
PIERRE, SOUTH DAKOTA**

**DIGITIZED FROM**

**OC 324  
SURVEYED OCTOBER 1991  
8TH EDITION**



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THE NATIONAL OCEAN SERVICE  
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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:

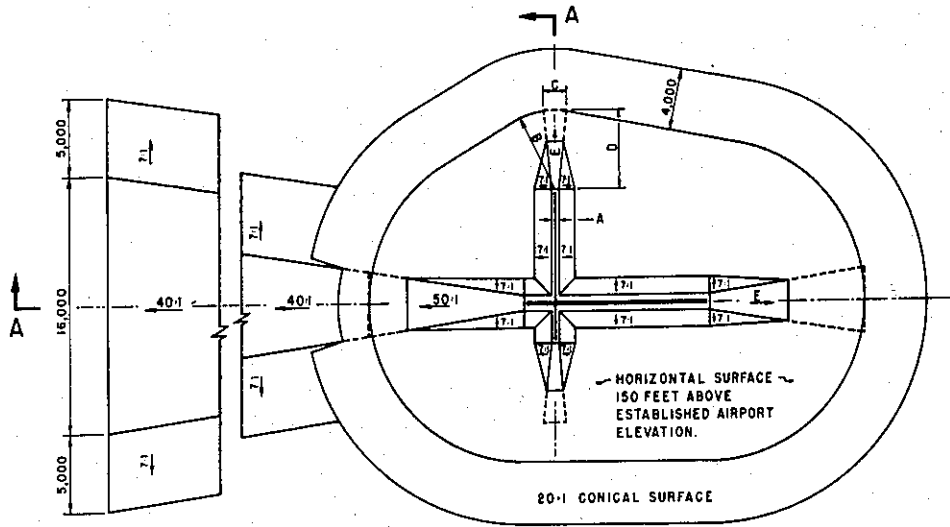
1. Objects located in FAR-77 approach (including supplemental approaches if present) or primary areas are listed with the associated runway (reference runway). For example, all objects in the Runway 9R approach or primary are listed with Runway 9R. Distances to these objects are computed from both the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

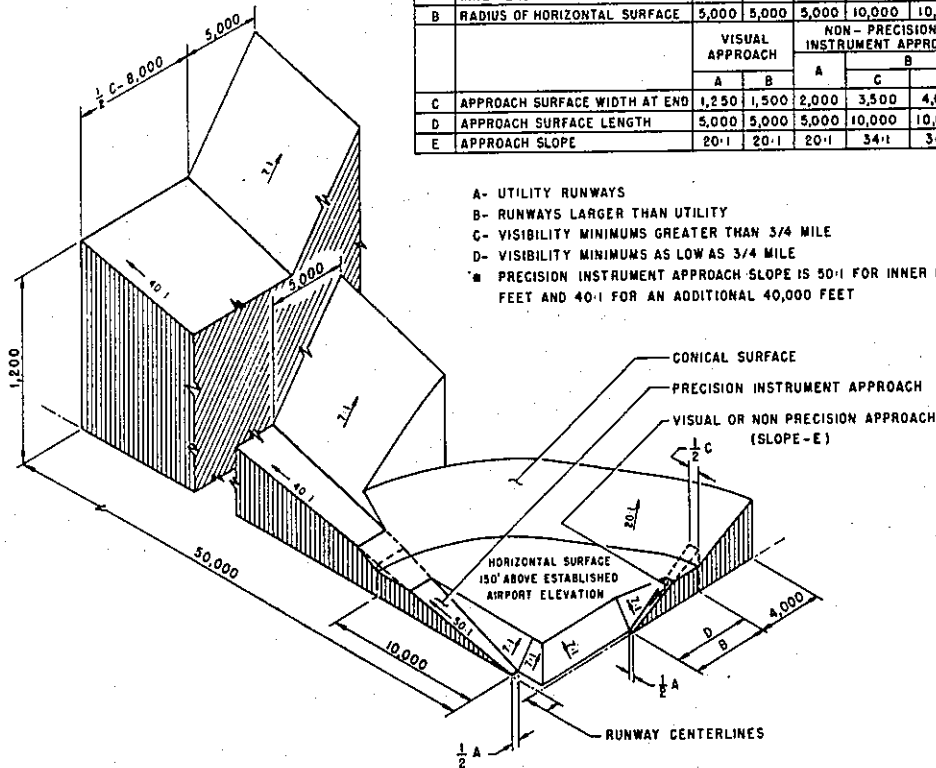
A(V) ..... Utility runway - visual approach only  
 A(NP) .... Utility runway - nonprecision instrument approach  
 B(V) ..... Nonutility runway - visual approach only  
 C ..... Nonutility runway - nonprecision instrument approach with  
 visibility minimums greater than 3/4 mile  
 D ..... Nonutility 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
C	APPROACH SURFACE WIDTH AT END	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
- \* 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

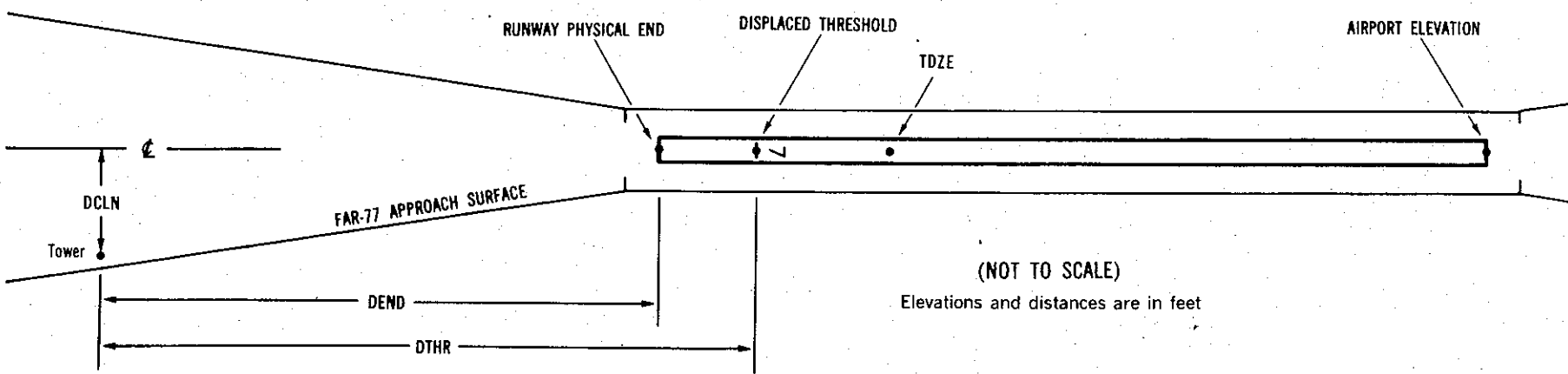
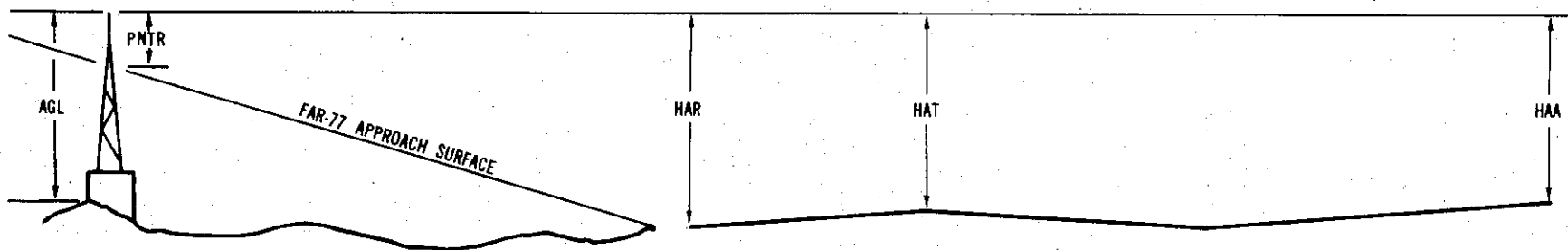
AIRPORT ELEVATION XXXX

x<sup>1</sup> x<sup>2</sup> XXXX/XXXX<sup>3</sup> XXXXXX.XXX<sup>4</sup> XXXXXX.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 XXXXXX.XXX XX XXXX XXXX XXX XXX XXX XXX XXXXXX XXXXXX XXXX XXXX  
 XXXXXXXXXXXX XXXXXX.XXX XXXXXX.XXX XX XXXX XXXX XXX XXX XXX XXX XXXXXX XXXXXX XXXX XXXX

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## 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  $\pm 10$  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).

OC0324

AIRPORT ELEVATION 1742

7 C 1742/1742 442308.662N 1001756.128W 2570853

OBJECT	LAT	LONG	A	ELEV	AGL	HAR	HAT	HAA	DEND	DTHR	DCLN	PNTR
SIGN	442314.63	1001709.92	1A	1728		-14	-14	-14	-3406		157R	2
GROUND	442308.00	1001758.06	1A	1743		1	1	1	152		34R	1
GROUND	442303.83	1001825.66	1A	1784		42	42	42	2200		0R	-17
OL ON UNDERGROUND W TANK	442307.00	1001840.20	1A	1827		85	85	85	3158		548L	-2

25 C 1700/1723 442323.778N 1001623.669W 0770958

OBJECT	LAT	LONG	A	ELEV	AGL	HAR	HAT	HAA	DEND	DTHR	DCLN	PNTR
GROUND	442308.00	1001758.06	1A	1743		43	20	1	-7038		34L	1
SIGN	442314.63	1001709.92	1A	1728		28	5	-14	-3481		157L	2

13 SUPLC 1724/1724 442305.589N 1001736.195W 3203838

OBJECT	LAT	LONG	A	ELEV	AGL	HAR	HAT	HAA	DEND	DTHR	DCLN	PNTR
ANTENNA ON OL GLIDE SLOPE	442223.56	1001641.02	1A	1746		22	22	4	-5832		400L	31
SIGN	442254.03	1001720.60	1A	1727		3	3	-15	-1623		134L	3
GROUND	442308.73	1001730.73	1A	1726		2	2	-16	-6		509L	2
GROUND	442307.11	1001737.85	1A	1725		1	1	-17	195		4L	1
GROUND	442309.02	1001736.47	1A	1727		3	3	-15	281		205L	1
OL ON LOCALIZER	442320.85	1001753.65	1A	1754		30	30	12	1999		0L	-23
ANTENNA ON BUILDING	442319.91	1001756.03	1A	1761		37	37	19	2035		194R	-17
OL ON DME ANTENNA	442320.01	1001756.18	1A	1768		44	44	26	2049		196R	-10
TREE	442348.20	1001806.42	1A	1816		92	92	74	4728		1040L	-41

OC0324

AIRPORT ELEVATION 1742

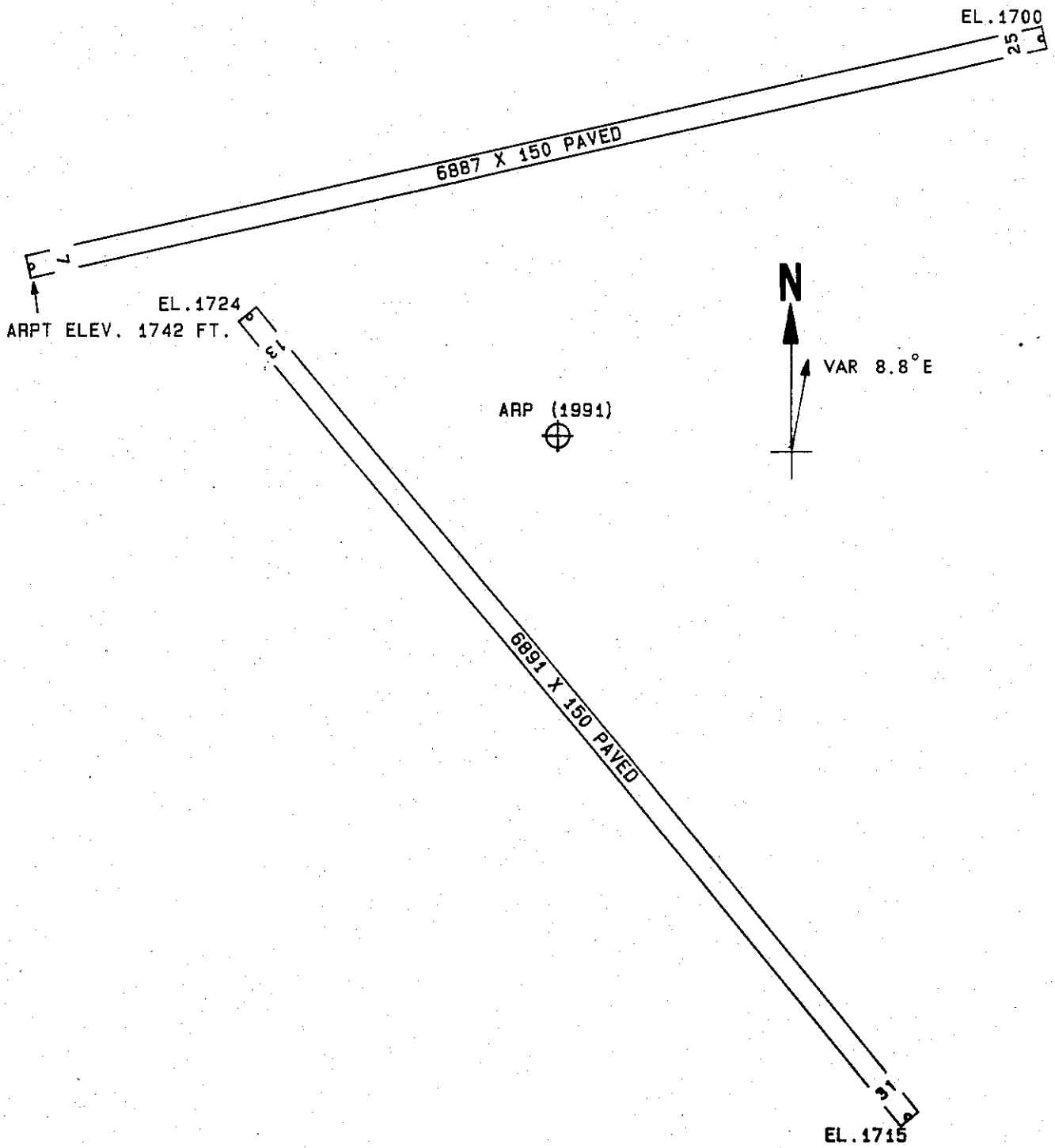
31 PIR 1715/1718 442212.971N 1001636.040W 1403920

OBJECT	LAT	LONG	A	ELEV	AGL	HAR	HAT	HAA	DEND	DTHR	DCLN	PNTR
GROUND	442307.11	1001737.85	1A	1725		10	7	-17	-7086		4R	1
GROUND	442308.73	1001730.73	1A	1726		11	8	-16	-6885		509R	2
SIGN	442254.03	1001720.60	1A	1727		12	9	-15	-5268		134R	3
ANTENNA ON OL GLIDE SLOPE	442223.56	1001641.02	1A	1746		31	28	4	-1059		400R	31
BUILDING	442207.93	1001623.02	1A	1716		1	-2	-26	994		408R	-15

ARP 442257.746N 1001708.006W

OBJECT	LAT	LONG	A	ELEV	AGL	HAA	MAG	BEARING	DISTANCE
OL ON WINDSOCK	442257.69	1001703.80	1A	1739		-3	82	19	306
ANEMOMETER	442306.61	1001724.94	1A	1750		8	297	19	1522
OL ON AIRPORT BEACON	442243.51	1001727.08	1A	1769		27	215	4	1999
OL ANTENNA	442251.66	1001736.38	1A	1759		17	244	33	2151
POLE ON HANGAR	442236.62	1001716.47	1A	1749		7	187	14	2226
ANTENNA ON RTR T(SW of 4)	442503.62	1001744.99	2C	1953		211	339	19	13026





TOUCHDOWN ZONE RUNWAY ELEVATION	
7	1742
25	1723
13	1724
31	1718

PIERRE MUNICIPAL AIRPORT  
 PIERRE, SOUTH DAKOTA  
 (NOT TO SCALE)