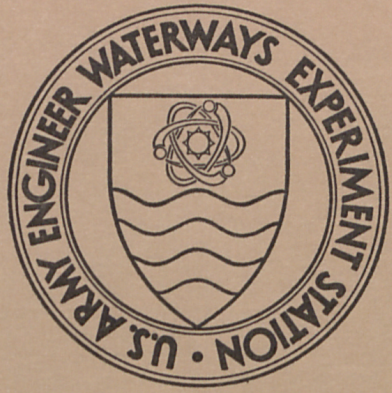


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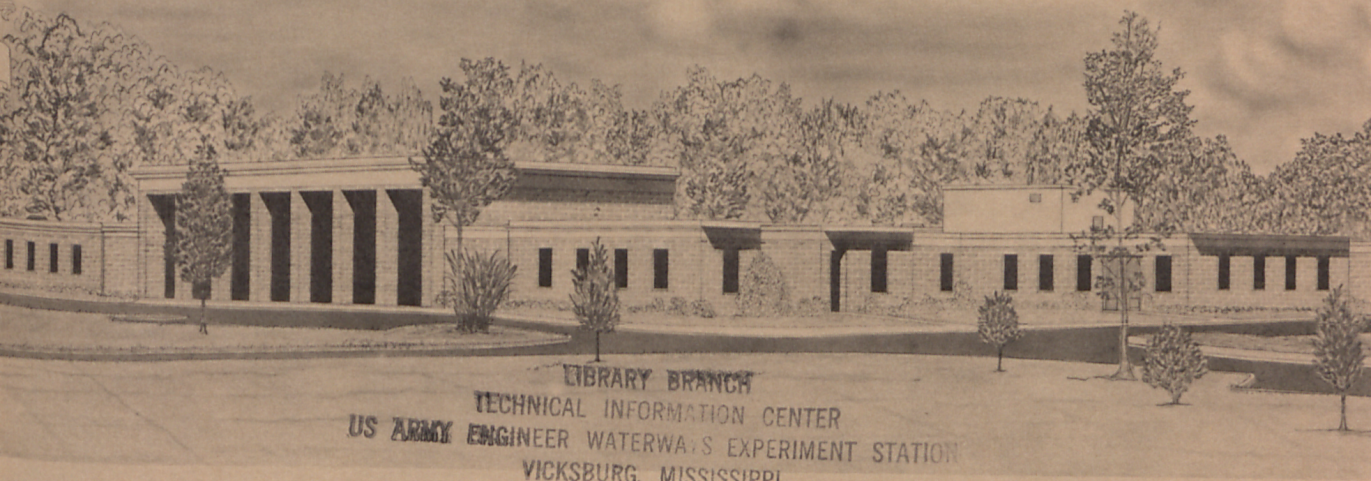


MISCELLANEOUS PAPER S-73-43

# CONDITION SURVEY, DYESS AIR FORCE BASE, TEXAS

by

R. D. Jackson



June 1973

Sponsored by **Office, Chief of Engineers, U. S. Army**

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## Foreword

The study reported herein was conducted under the general supervision of the Engineering Design Criteria Branch, Soils and Pavements Laboratory, of the U. S. Army Engineer Waterways Experiment Station (WES), Vicksburg, Mississippi. Personnel involved in the condition survey were Messrs. R. D. Jackson, K. A. O'Connor, and S. R. Rowland, Jr. This report was prepared by Mr. Jackson under the general supervision of Messrs. J. P. Sale, R. G. Ahlvin, R. L. Hutchinson, and P. J. Vedros of the Soils and Pavements Laboratory. Appendix A was obtained from the Air Force.

COL Ernest D. Peixotto, CE, was Director of the WES during the conduct of the study and preparation of the report. Mr. F. R. Brown was Technical Director.

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## Conversion Factors, British to Metric Units of Measurement

British units of measurement used in this report can be converted to metric units as follows:

<u>Multiply</u>	<u>By</u>	<u>To Obtain</u>
inches	2.54	centimeters
feet	0.3048	meters
miles (U. S. statute)	1.609344	kilometers
square inches	6.4516	square centimeters
pounds (mass)	0.45359237	kilograms
pounds (force) per square inch	0.6894757	newtons per square centimeter
Fahrenheit degrees	*	Celsius or Kelvin degrees

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\* To obtain Celsius (C) temperature readings from Fahrenheit (F) readings, use the following formula:  $C = (5/9)(F - 32)$ . To obtain Kelvin (K) readings, use:  $K = (5/9)(F - 32) + 273.15$ .

CONDITION SURVEY, DYESS AIR FORCE BASE, TEXAS

Authority

1. Authority for conducting condition surveys at selected airfields is contained in amendment to FY 1972 RDTE Funding Authorization (MFS-MC-5, 16 February 1972), subject: "Air Force Airfield Pavement Research Program," from the Office, Chief of Engineers (OCE), U. S. Army, Directorate of Military Construction, dated 18 February 1972.

Purpose and Scope

2. The purpose of this report is to present the results of a condition survey performed at Dyess Air Force Base (DAFB), Texas, during 11-14 December 1972. The following two major areas of interest were considered in this condition survey:

- a. The structural condition of the primary airfield pavements.
- b. The condition of pavement repairs and the types of maintenance materials that have been used at this airfield.

3. This report is limited to a presentation of visual observations of the pavement conditions, discussion of these observations, and pertinent remarks with regard to the performance of the pavements. No physical tests of the pavements, foundations, or patching materials were performed during this survey.

Pertinent Background Data

Location and topography

4. DAFB is situated in north central Texas, approximately 6 miles\* west of Abilene and 2 miles west of the original site of Tye Air Force

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\* A table of factors for converting British units of measurement to metric units is presented on page vii.

Base. The airfield is located in the physiographic section of the Osage Plains and lies 10-12 miles north of prominent hills that form the Callaban Divide. A vicinity map is shown in plates 1 and 2.

#### Geology and soils

5. The airfield is located on a relatively flat alluvial plain formed by a combination of outwash from the hills to the south and west and deposits of stream-transported sediments derived from the soft Permian strata in the region. The hills to the south are capped with limestone of the Fredericksburg group of the Lower Cretaceous period. The native subgrade soils are calcareous sandy clays (which are classified as CL material according to the Unified Soil Classification System\*), with some gravelly sandy clay (CL) and fat clay (CH).

#### Drainage

6. The surface drainage of a major portion of the paved areas is collected in a system of ditches and catch basins located between the runway and taxiways and discharged through storm sewers and ditches. In areas where pavement grades or topographic conditions are such that surface runoff flows away from the catch basins, the drainage is handled by a peripheral system of open ditches that encircles the field and drains to the southeast. The water table is located approximately 20 ft below ground surface.

#### Climatic conditions

7. The climate of the area is generally mild and is typical of central Texas. The average monthly temperature has ranged from a low of approximately 33 F in January to a high of 96 F in August, with extreme temperatures having ranged from a low of 3 F to a high of 111 F. Temperature and precipitation data for 1971 are shown in table 1. The amounts of departure from normal for the 1971 temperatures and precipitation were determined using a period of record of 85 years. Total annual precipitation averages approximately 23.3 in.

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\* U. S. Department of Defense, "Unified Soil Classification System for Roads, Airfields, Embankments, and Foundations," Military Standard MIL-STD-619B, June 1968, U. S. Government Printing Office, Washington, D. C.

## General description of airfield

8. In December 1972, the airfield facilities consisted of a N-S (16-34) runway, a parallel taxiway, a parking apron, three warm-up aprons, five connecting taxiways, a washrack, and seven maintenance hangar aprons and connecting taxiways. The runway was 300 ft wide and 13,500 ft long; the parking apron was 1,025 ft wide and 9,725 ft long; and the taxiways were 75 ft wide. A layout of the airfield is shown in plate 1. A pavement plan indicating the type pavement on each facility is shown in plate 2.

## Previous reports

9. Previous reports concerning the airfield facilities at DAFB are listed below. Pertinent data were extracted from them for use in this condition survey report.

### a. Condition survey reports:

- (1) Ohio River Division Laboratories, CE, "Condition Survey Report, Dyess Air Force Base, Texas," July 1958, Mariemont, Ohio.
- (2) \_\_\_\_\_, "Condition Survey Report, Dyess Air Force Base, Texas," September 1965, Cincinnati, Ohio.

### b. Pavement evaluation reports:

- (1) U. S. Army Engineer Waterways Experiment Station, CE, "Airfield Pavement Evaluation Report, Abilene Air Force Base, Abilene, Texas," February 1957, Vicksburg, Mississippi.
- (2) \_\_\_\_\_, "Airfield Pavement Evaluation Report, Dyess Air Force Base, Abilene, Texas," April 1958, Vicksburg, Mississippi.
- (3) U. S. Army Engineer District, Albuquerque, CE, "Pavement Evaluation Report, Dyess Air Force Base, Texas," January 1965, Albuquerque, New Mexico.

## History of Airfield Pavements

### Design and construction history

10. The original construction of the airfield was started in 1953 and completed in 1955. The rigid pavements constructed during this period were 15 and 16 in. thick and were designed in accordance with the



provisions of Chapters 2 and 3, Part XII, Engineering Manual for Military Construction, dated July 1951, to support a landing gear load of 100,000 lb on twin wheels spaced 37.5 in. center to center, with each wheel having a tire contact area of 267 sq in. Extensions to these pavement facilities were constructed during the 2-year period 1956-57. The rigid pavements constructed during this period were 15 to 19 in. thick and were designed (in accordance with the provisions of Interim Design Criteria for Airfield Pavement Subjected to Channelized Traffic, inclosure to OCE letter to all Divisions, subject: "Revisions to Design Criteria for Airfield Pavements," dated 15 June 1955) to support a landing gear load of 100,000 lb on the same gear configuration as that for the pavements constructed during 1953-55. Rigid pavements constructed during 1963-64 were 15 to 27 in. thick and were designed to support a single gear load of 265,000 lb on twin-twin wheels spaced 37-62-37 in., with each wheel having a tire contact area of 267 sq in. The inlay placed in taxiway 2 in 1966 was 19 in. of portland cement concrete (PCC) and was constructed in accordance with the design criteria used for the 1963-64 construction. Details of the construction history of the airfield pavements (extracted from reports referenced in paragraph 9) are presented in table 2. Pavement thicknesses, descriptions, and other details are presented in table 3.

#### Traffic history

11. Operations by KC-97 and B-47 aircraft at DAFB began in February 1956 and continued until December 1959 and March 1963, respectively. Available traffic records indicate that the following amounts of traffic were applied by B-47 aircraft during the cited periods: February 1956-April 1958, 235 cycles\* per month; April 1958-June 1961, 424 cycles per month; and June 1961-March 1963, 179 cycles per month. Gross operating loads of the B-47 aircraft were 178,000 lb during February 1956-December 1958 and 186,000 lb during December 1958-March 1963. Traffic records indicate that an average of 78 cycles per month of KC-97 aircraft traffic were applied at 155,000-lb gross loads.

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\* A cycle of operation is one takeoff and one landing.

Runway construction was in progress between January 1963 and March 1964, and only the south half of the runway was in use. During this period, 235 cycles per month of C-130 aircraft traffic and 390 cycles per month of other light aircraft traffic were being applied. The B-52 aircraft arrived at DAFB on 23 December 1963. Traffic records for 1964 indicate that an average of 67 cycles per month of B-52 aircraft traffic were applied at reduced gross takeoff weights of 250,000 lb. Additional aircraft traffic prior to the runway reconstruction (January 1963) consisted of 130 cycles per month of C-130 aircraft traffic and 640 cycles per month of other light aircraft traffic. Traffic records for the years 1965-71 indicate that approximately 65 to 75 cycles per month of B-52 aircraft traffic, 75 to 85 cycles per month of KC-135 traffic, 183 cycles per month of C-130 traffic, and 468 cycles of other aircraft traffic were applied. Normal operating loads were approximately 413,000 lb for B-52's, 240,000 lb for KC-135's, 106,000 lb for C-130's, and 75,000-87,000 lb for other aircraft. The 1972 traffic records indicate that the following amounts of traffic per type of aircraft were applied: 331 cycles, B-52's; 7 cycles, C-5A's; 142 cycles, C-141's; 617 cycles, KC-135's, C-135's, and C-133's; and 17,336 cycles, other aircraft, C-130's being the predominate aircraft in this group. Normal operating loads were approximately 413,000 lb for B-52's; 712,000 lb for C-5A's; 310,000 lb for C-141's; 270,000 lb for KC-135's, C-135's, and C-133's; and 150,000 lb for other aircraft. Takeoffs and landings were about equally distributed between the runway ends. Alert exercises were conducted by B-52 and KC-135 aircraft that consisted of taxiing from the north end of the parking apron to the north end of the runway by taxiways 7 and 1, taxiing down the length of the runway, and returning to the parking apron by taxiways 5 and 7.

### Conditions of Pavement Surfaces

#### Pavement inspection procedure

12. The following procedure was used in conducting the inspection of the rigid pavements. Representative features were selected for

detailed inspection. The features were then inspected slab\* by slab, and the defects were recorded. The locations of the individual pavement features, the inspection starting points, and the directions in which the pavements were inspected (shown by arrows) are indicated in plate 1. The results of the rigid pavement survey for those features that were inspected in detail are presented in table 4. This table shows a quantitative breakdown of the various types of defects and a condition rating for each feature inspected in detail. The procedures used for determining the condition rating of a pavement are given in Appendix III, Department of the Army Technical Manual TM 5-827-3, "Rigid Airfield Pavement Evaluation," dated September 1965.

#### Runway

13. The PCC pavement features of the runway were in good to excellent condition based on the percentages of slabs containing no major defects. The predominate major defects on the runway were longitudinal cracks. The asphaltic concrete (AC) outside edges of the runway interior were in fair to good condition (see photos 1-5).

#### Taxiways

14. The primary taxiways, 1, 5, and 7 (features T1A, T2A, T3B, T7A, T8A, T10B, and T11B), were in conditions ranging from good to excellent based on the percentages of the slabs containing major defects. The taxi lane on taxiway 7 had been moved and a 26-in. inlay constructed at the present location of the taxi lane. Using only the 75 ft at the present location for the condition rating of this feature would have resulted in a rating of very good to excellent; however, using the 150-ft width resulted in a condition rating of good. Taxiway 2, which is 16- and 18-in. PCC, was in very good condition. Taxiways 3 and 4, which are AC, were in only fair condition (see photos 6 and 7).

#### Aprons

15. The 16-in. PCC of the parking apron (features A1B and A2B) was in very good structural condition. The predominate major defect noted was longitudinal cracking. Approximately 4.5 percent of the slabs

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\* A slab is the smallest unit, containing no joints, of a given pavement feature.

contained this defect. Warm-up apron A was in excellent condition, since no major defects and only one minor defect were noted. Warm-up apron C and its extension were in good structural condition. The maintenance hangar aprons surveyed were in conditions ranging from fair to very good based on the percentages of slabs containing major defects.

### Maintenance

16. Maintenance of the airfield pavements at DAFB has generally consisted of spall patching, joint sealing, seal coating, and replacing some PCC slabs. The annual pavement maintenance plan for the airfield is presented as Appendix A. Listed below are contract maintenance costs since 1959:

<u>Fiscal Year</u>	<u>Amount</u>	<u>Fiscal Year</u>	<u>Amount</u>
1959	\$225,000	1967	\$135,000
1962	60,000	1968	10,000
1963	25,000	1969	10,000
1964	250,000	1971	153,000
1965	75,000	1972	325,000
1966	78,000		

### Evaluation

17. A summary of the pavement evaluation is presented in table 5. Previously published pavement evaluations were updated to eliminate aircraft that are no longer in the Air Force inventory and to include aircraft that have been added to the inventory since the last pavement evaluation. The evaluation is based on the pavement thickness, flexural strength (PCC), base and subbase thickness and strength, strength of the subgrade (CBR or k value), and the structural condition of the pavement.

### Conclusions

18. The following statements summarize the findings of the inspection at DAFB:

- a. The runway pavements were in good to excellent condition. The 16-in. PCC at the north end (feature R4B) was in only good condition. The other features were in either very good or excellent condition.
- b. Considerable damage to the pavement of taxiway 7 (16-in. PCC) as a result of channelized traffic of B-52 aircraft necessitated the moving of the taxi lane and replacing the 16-in. pavement in one paving lane with 26-in. PCC pavement.
- c. Joint seal materials were in good condition in some areas and in poor condition in other areas.
- d. PCC and AC patching materials had been used to repair spalled PCC slabs, and both materials were performing adequately.

Table 1

Temperature and Precipitation Data

<u>Month</u>	<u>1971 Average Temperature, F</u>	<u>Departure from Normal, F</u>	<u>1971 Precipi- tation, in.</u>	<u>Departure from Normal, in.</u>
January	46.4	1.8	0.01	-0.87
February	48.7	0.3	0.57	-0.52
March	55.1	0.1	0.04	-1.00
April	64.5	0.2	2.44	0.17
May	72.4	0.7	2.17	-2.16
June	80.4	0.1	1.78	-0.89
July	84.4	1.2	1.85	-0.43
August	76.9	-6.1	6.92	5.45
September	73.3	-2.6	5.33	3.26
October	66.0	-0.2	2.43	-0.42
November	55.0	2.0	0.76	-0.35
December	48.9	2.8	1.81	0.55
Annual	64.3	0.0	26.11	2.79

Note: Highest temperature in 1971 was 103 F on July 5; lowest temperature in 1971 was 3 F on February 8.

Table 2

Airfield Construction History

Pavement Facility	Pavement		Construction	
	Thickness, in.	Type	Year(s)	Agency
N-S runway				
Sta 190+00 to 200+00	16	PCC	1954	CE
Sta 200+00 to 292+00	4	AC	1953-55	CE
Sta 292+00 to 302+00	16	PCC	1954	CE
Sta 167+00 to 172+00	16 and 19	PCC	1956-57	CE
Sta 172+00 to 177+25	16	PCC	1957	CE
Sta 177+25 to 190+00	15	PCC	1957	CE
Taxiway 3	4	AC	1955	CE
Taxiway 4	4	AC	1955	CE
Taxiway 2				
Sta 2+70 to 10+00, center 25 ft replaced	4	AC	1955	CE
Sta 0+00 to 2+70	16	PCC	1956-57	CE
Sta 2+70 to 10+00	18	PCC*	1966	AF
Taxiway 5	4	AC	1955	CE
Taxiway 1				
Sta 158+8.76 to 171+15	19	PCC	1956-57	CE
Sta 171+15 to 193+90	16-19	PCC	1956-57	CE
Parking apron and taxiway 7				
Sta 193+90 to 260+00	16	PCC	1954-55	CE
Sta 260+00 to 292+00	16	PCC	1954-55	CE
Sta 292+00 to 298+15	16	PCC	1954-55	CE
Warm-up apron A	16	PCC	1955	CE
Warm-up apron B	16	PCC	1955	CE
Warm-up apron C	18	PCC	1956	CE
Blast pads	2	AC	1956-57	CE
N-S runway				
Sta 167+00 to 177+00, west side	15	PCC**	1963-64	CE
Sta 172+00 to 177+00, east side	15	PCC**	1963-64	CE

(Continued)

Note: CE denotes Corps of Engineers; AF denotes Air Force.

\* Inlay.

\*\* New construction.

Table 2 (Continued)

Pavement Facility	Pavement		Construction	
	Thickness, in.	Type	Year(s)	Agency
N-S runway (Continued)				
Sta 177+00 to 292+00, each side	4	AC**	1963-64	CE
Sta 175+00 to 177+00, center 50 ft	26-22-26	PCC*	1963-64	CE
Sta 177+00 to 200+00, center 50 ft	26-18-26	PCC*	1963-64	CE
Sta 200+00 to 292+00, center 75 ft	18	PCC*	1963-64	CE
Sta 200+90 to 292+00, each side between widening and inlay	3/4-4	AC	1963-64	CE
Sta 292+00 to 298+25, east side, 50-ft widening	15	PCC**	1963-64	CE
Sta 292+00 to 302+00, west side, 50-ft widening	15	PCC**	1963-64	CE
Taxiway 1				
Sta 165+66.26 to 193+90, center 25 ft	27	PCC*	1963-64	CE
Taxiway 5				
Sta 298+15 to 310+71.24	23	PCC†	1963-64	CE
Taxiway 7				
Sta 193+90 to 298+15, 25-ft-wide section	26	PCC*	1963-64	CE
Warm-up apron A	23	PCC†	1963-64	CE
Warm-up apron C addition	18	PCC**	1963-64	CE
N-S runway				
Sta 167+75 to 172+00	23	PCC**	1963-64	CE
Sta 298+25 to 302+00	23	PCC**	1963-64	CE
Addition to washrack	15	PCC**	1963-64	CE

- \* Inlay.  
 \*\* New construction.  
 † Reconstruction.



Table 3  
SUMMARY OF PHYSICAL PROPERTY DATA

FACILITY Dress AFB, Texas December 1972			OVERLAY PAVEMENT			PAVEMENT			BASE			SUBGRADE		GENERAL CONDITION OF AREA CONSIDERED
FACILITY NUMBER AND IDENTIFICATION	LENGTH FT	WIDTH FT	THICK. IN.	DESCRIPTION	FLEX. STR PSI	THICK. IN.	DESCRIPTION	FLEX. STR PSI	THICK. IN.	CLASSIFICATION	CBR OR K	CLASSIFICATION	CBR OR K	
R1A N-S runway Sta 167+00 to 167+75 Sta 167+75 to 169+25 Sta 169+25 to 172+00	75 150 275	50 150 100				19	Portland cement concrete	800	6	Clayey-sandy gravel (GC) and clayey grav- elly sand (SC)		Fat clay (CH) with sandy clay (CL)	125	Very good
R2A N-S runway Sta 167+75 to 172+00 Sta 298+25 to 302+00	425 375	varies 50				23	Portland cement concrete	780	6 6	Sandy gravel (GM-GM) and (GM-GC) cement treated Crushed limestone (GM-GP)		Lean clay (CL) and sandy clay (CL) with some fat clay (CH) top 6" lime treated	100	Very good
R3D N-S runway Sta 167+00 to 177+00 Sta 172+00 to 177+00	1,000 500	50 50				15	Portland cement concrete	800	6	Clayey-sandy gravel (GC) and clayey grav- elly sand (SC)		Fat clay (CH) with sandy clay (CL)	125	Very good
R1B N-S runway Sta 167+00 to 172+00 Sta 169+25 to 172+00 Sta 172+00 to 177+00	500 275 500	50 50 varies				16	Portland cement concrete	800	6	Clayey-sandy gravel (GC) and clayey grav- elly sand (SC)		Fat clay (CH) with sandy clay (CL)	125	Very good
R5B N-S runway inlay Sta 175+00 to 177+00	200	50				26- 22- 26	Portland cement concrete	780				Lean clay (CL) and sandy clay (CL) some fat clay (CH) top 8" lime treated	100	Good
R6C N-S runway inlay Sta 177+00 to 200+00	2,300	50				26- 18- 25	Portland cement concrete	780				Lean clay (CL) and sandy clay (CL) some fat clay (CH) top 8" lime treated	100	Very good
R7D N-S runway interior Sta 177+00 to 190+00 75-ft width, each side of inlay	1,300	75				15	Portland cement concrete	800	6	Clayey-sandy gravel (GC) and clayey grav- elly sand (SC)		Fat clay (CH) with sandy clay (CL)	125	Very good
R8D N-S runway Sta 190+00 to 200+00 75-ft width, each side of inlay	1,000	75				16	Portland cement concrete	740	6	Clayey-sandy gravel (GC) and clayey grav- elly sand (SC)		Fat clay (CH) with sandy clay (CL)	125	Very good
R9C N-S runway inlay Sta 200+00 to 260+00	6,000	75				18	Portland cement concrete	780	27	Clayey-gravel (GC) and clayey-sandy gravel (GM-GC) top 6" cement treated		Lean sandy clay (CL) with some fat clay (CH)	100	Excellent
R10D N-S runway outside edges Sta 177+00 to 260+00	8,300	varies				4	Asphaltic concrete		6 10 25	Crushed limestone Subbase 1 Subbase 2	80 45 20	Fat clay (CH) with sandy clay (CL)	4	Fair
R11C N-S runway inlay Sta 260+00 to 292+00	3,200	75				18	Portland cement concrete	780	18	Clayey-gravel (GC) and clayey-sandy gravel (GM-GC) top 6" cement treated		Lean and sandy clay (CL)	100	Excellent
R12D N-S runway outside edges Sta 260+00 to 292+00	3,200	112.5				4	Asphaltic concrete		6 10 16	Crushed limestone Subbase 1 Subbase 2	80 45 20	Lean clay (CL) with clayey sands (SC)	6	Fair
R13D N-S runway Sta 292+00 to 302+00 Sta 292+00 to 298+25	1,000 625	50 50				15	Portland cement concrete	800	6	Clayey-sandy gravel (GC) and clayey grav- elly sand (SC)		Fat clay (CH) with sandy clay (CL)	125	Very good

Table 3 (Continued)  
SUMMARY OF PHYSICAL PROPERTY DATA

FACILITY				OVERLAY PAVEMENT			PAVEMENT			BASE			SUBGRADE		GENERAL CONDITION OF AREA CONSIDERED
FACILITY NUMBER AND IDENTIFICATION		LENGTH FT	WIDTH FT	THICK. IN.	DESCRIPTION	FLEX. STR PSI	THICK. IN.	DESCRIPTION	FLEX. STR PSI	THICK. IN.	CLASSIFICATION	CBR OR K	CLASSIFICATION	CBR OR K	
R14B R15A	N-S runway; 2nd 500 ft, S end and 1st 500 ft, S end	500 500	200 200				16	Portland cement concrete	740				Lean clay (CL) with clayey sand (SC)	100	Very good
T1A	Taxiway 1 Sta 158+23.76 to 165+66.26 Sta 165+66.26 to 171+15	737.5 548.74	75 50				19	Portland cement concrete	800	6	Clayey-sandy gravel (GC) and clayey grav- elly sand (SC)		Fat clay (CH) with sandy clay (CL)	125	Very good
T2A	Taxiway 1 inlay Sta 165+66.26 to 193+90	2,823.74	25				27	Portland cement concrete	780				Lean & sandy clay (CL) with some fat clay (CH) top 8" lime treated	100	Very good
T3B	Taxiway 1 outside lanes Sta 171+15 to 193+90	3,275	25				16- 19	Portland cement concrete	800	6	Clayey-sandy gravel (GC) and clayey grav- elly sand (SC)		Fat clay (CH) with sandy clay (CL)	125	Very good
T4C	Taxiway 2	270	75				16	Portland cement concrete	740	6	Clayey-sandy gravel (GC) and clayey grav- elly sand (SC)		Fat clay (CH) with sandy clay (CL)	125	Very good
T5C	Taxiway 2, center section	730	25				18	Portland cement concrete	650	6	Select material		Fat clay (CH) with sandy clay (CL)	125	Very good
T6C	Taxiway 2, remaining sections Taxiway 3	730 1,000	50 75				4	Asphaltic concrete		6 10 30	Crushed limestone Subbase 1 Subbase 2	80 45 20	Fat clay (CH) with sandy clays (CL)	4	Fair
T7A	Taxiway 7 inlay Sta 193+90 to 298+15	10,425	Varies				26	Portland cement concrete	780				Lean and sandy clay (CL) top 5" lime treated	100	Good
T8A	Taxiway 5 Sta 298+15 to 310+71.24	1,256.24	75				23	Portland cement concrete	780	17	Clayey gravel (GC) and clayey-sandy gravel (GM-GC) top 6" cement treated		Lean and sandy clay (CL)	100	Excellent
T9C	Taxiway 4 Taxiway 6	1,000 525	75 50				4	Asphaltic concrete		6 10 20	Crushed limestone Subbase 1 Subbase 2	80 45 20	Lean clay (CL) with clayey sands (SC)	4	Fair
A1B T10B	Parking apron A Taxiway 7, 75-ft-wide west edge and 50-ft wide east edge	6,610	1,025				16	Portland cement concrete	740	6	Clayey-sandy gravel (GC) and clayey grav- elly sand (SC)		Fat clay (CH) with sandy clays (CL)	125	Very good  Good
A2B T11B	Parking apron B Taxiway 7, 75-ft-wide west edge and 50-ft wide east edge	3,115	1,025				16	Portland cement concrete	740				Lean clay (CL) with clayey sands (SC)	100	Very good  Good
A3B	Warm-up apron A	Varies	Varies				23	Portland cement concrete	780	6 6	Sandy gravel (GW-GM) cement treated Crushed limestone		Lean and sandy clay (CL) top 6" lime treated	100	Excellent
A4B	Warm-up apron B	Varies	Varies				16	Portland cement concrete	740	6	Clayey-sandy gravel (GC) and clayey grav- elly sand (SC)		Fat clay (CH) with sandy clays (CL)	125	Fair
A5B	Warm-up apron C	Varies	Varies				18	Portland cement concrete	800	6	Sandy gravel (GW-GM) and (GM-GC) cement treated		Lean and sandy clay (CL) with some fat clay (CH) top 6" lime treated	125	Good

Table 3 (Continued)  
SUMMARY OF PHYSICAL PROPERTY DATA

FACILITY				OVERLAY PAVEMENT			PAVEMENT			BASE			SUBGRADE		GENERAL CONDITION OF AREA CONSIDERED
Dyess AFB, Texas				THICK. IN.	DESCRIPTION	FLEX. STR PSI	THICK. IN.	DESCRIPTION	FLEX. STR PSI	THICK. IN.	CLASSIFICATION	CBR OR K	CLASSIFICATION	CBR OR K	
FACILITY NUMBER AND IDENTIFICATION	LENGTH FT	WIDTH FT													
A6B	Warm-up apron C addition	Varies	Varies				18	Portland cement concrete	780	6	Sandy gravel (GW-GM) and (GM-GC) cement treated		Lean and sandy clay (CL) with some fat clay (CH) top 6" lime treated	100	Good
A7C	Calibration hardstand (275-ft diameter)						16	Portland cement concrete	700	6	Clayey-sandy gravel (GC) and clayey gravelly sand (SC)		Fat clay (CH) with sandy clay (CL)	125	
A8B	Washrack	275	150				15	Portland cement concrete	700	6	Clayey-sandy gravel (GC) and clayey gravelly sand (SC)		Fat clay (CH) with sandy clay (CL)	125	Poor to failed
A9B	Washrack addition	70	50				15	Portland cement concrete	780	6 6	Sandy gravel (GW-GM) and (GM-GC) cement treated Crushed limestone		Lean and sandy clay (CL) with some fat clay (CH) top 6" lime treated	100	
ALCB	Maintenance hangar aprons (1-5) and access taxiways	Varies	Varies				15	Portland cement concrete	700	6	Clayey-sandy gravel (GC) and clayey gravelly sand (SC)		Fat clay (CH) with sandy clay (CL)	125	Good
AllB	Maintenance hangar apron (6 and 7) and access taxiways	Varies	Varies				15	Portland cement concrete	700				Lean clay (CL) with clayey sand (S2)	100	Very good
R16X	Elast pad, north end	150	300				2	Asphaltic concrete		6 14	Crushed limestone Select material		Fat clay (CH) with sandy clays (CL)	125	Fair
R17X	Overrun, north end	850	300					Double bituminous surface treatment		6 10	Stabilized aggregate Subbase		Lime stabilized subgrade		Fair
R18X	Elast pad, south end	150	300				2	Asphaltic concrete		6 8	Crushed limestone Select material		Lean clay (CL) with clayey sands (SC)	100	Fair
R19X	Overrun, south end	850	300					Double bituminous surface treatment		6 4	Stabilized aggregate Subbase		Lime stabilized Subgrade		Fair

Table 4

DATE: December 1972		SUMMARY OF DATA - RIGID PAVEMENT CONDITION SURVEY																		AIRFIELD: Dyess AFB, Texas			
FEATURE		SLAB SIZE FT	APPROX NO. OF SLABS	PAVE. THICK. IN.	NO. OF SLABS CONTAINING INDICATED DEFECTS															% OF SLABS NO DEFECTS	% OF SLABS NO MAJOR DEFECTS	CONDITION	
NO.	DESIGNATION				I	-	\	Δ	*	K	W	S	J	J	J	⊕	M	P	O				C
R1A R2A R3D R4B	N-S runway; 1st 500 ft, north end	25 by 25	240	23 19 16 15	9	1				3				1				1			93.7	95.8	Very good
R3D R4B R5B	N-S runway; 2nd 500 ft, north end	25 by 25	224	22 16 15	14	1	1			3		1		1							85.4	86.6	Good
R6C R7D R8D	N-S runway in- terior, sta 177+00 to 200+00	25 by 25	736	18 15 16	26	6	4	2		25		4	4	2		8		1	10		88.8	94.8	Very good
R9C R11C	N-S runway in- terior	25 by 25	1104	18	2	3	2			7		5	4	1		1		1			98.0	99.3	Excel- lent
R13D R14B	N-S runway; 2nd 500 ft, south end	25 by 25	240	15 16	5	7	6			13			2	1		2					86.6	92.9	Very good
R13D R15A R2A	N-S runway; 1st 500 ft, south end	25 by 25	240	15 16 23	6	5		2		11					1						93.7	95.8	Very good
T1A T2A T3B	Taxiway 1	25 by 25	496	19 27 16-19	22		13	1		12			2					2			89.7	92.7	Very good
T4C T5C	Taxiway 2	25 by 25	80	16 18	3	1	1	2		5		1									86.2	93.7	Very good
T7A T10B T11B	Taxiway 7	25 by 25	2406	26 16	201	28	54	13		137		2	7	4		1		13	32		78.3	84.1	Good
REMARKS:																							
LEGEND:																							
I	LONGITUDINAL CRACK	W	SHRINKAGE CRACK	M	MAP CRACKING																		
-	TRANSVERSE CRACK	S	SCALING	P	PUMPING JOINT																		
\	DIAGONAL CRACK	J	SPALL ON TRANSVERSE JOINT	O	POP-OUT																		
Δ	CORNER BREAK	J	SPALL ON LONGITUDINAL JOINT	C	UNCONTROLLED CONTRACTION CRACK																		
*	SHATTERED SLAB	J	CORNER SPALL	D	"D" CRACKING																		
K	KEYED JOINT FAILURE	⊕	SETTLEMENT																				

Table 4 (Continued)

DATE: December 1972		SUMMARY OF DATA - RIGID PAVEMENT CONDITION SURVEY																AIRFIELD: Dyess AFB, Texas						
FEATURE		SLAB SIZE FT	APPROX NO. OF SLABS	PAVE. THICK. IN.	NO. OF SLABS CONTAINING INDICATED DEFECTS															% OF SLABS NO DEFECTS	% OF SLABS NO MAJOR DEFECTS	CONDITION		
NO.	DESIGNATION				I	-	\	Δ	*	K	~	S	J	↓	J	⊕	M	P	O				C	D
T8A	Taxiway 5	25 by 25	213	23													1			99.5	100	Excel- lent		
A1B	Parking apron A	25 by 25	6336	16	218	63	62	12	7		113		17	15	24			28	109		90.5	94.5	Very good	
A2B	Parking apron B	25 by 25	6468	16	341	75	79	14	2		239		11	8	32		5		13	23		88.8	92.5	Very good
A3B	Warm-up apron A	25 by 25	230	23													1			99.5	100	Excel- lent		
A4B	Warm-up apron B	25 by 25	126	16	14	6	8	2			3							2	2		72.2	76.1	Fair	
A5B A6B	Warm-up apron C and extension	25 by 25	214	18	15	5	9	1			10							2			81.7	85.9	Good	
A8B	Washrack	25 by 25	66	15	23	6	4		1		8										53.0	53.0	Poor to failed	
A10B	Maintenance han- gar apron 2	25 by 25	215	15	30	9	8				8			1	1					1		78.1	80.9	Good
A10B	Maintenance han- gar apron 3	25 by 25	97	15	15	4	2		1		20		1	3	3							65.9	77.3	Fair
A10B	Maintenance han- gar apron 4	25 by 25	297	15	23	10	5	5	5		1			2	7					7		83.1	86.1	Good
REMARKS:																								
LEGEND:																								
		LONGITUDINAL CRACK			~		SHRINKAGE CRACK			M		MAP CRACKING												
-		TRANSVERSE CRACK			S		SCALING			P		PUMPING JOINT												
\		DIAGONAL CRACK			J		SPALL ON TRANSVERSE JOINT			O		POP-OUT												
Δ		CORNER BREAK			↓		SPALL ON LONGITUDINAL JOINT			C		UNCONTROLLED CONTRACTION CRACK												
*		SHATTERED SLAB			J		CORNER SPALL			D		"D" CRACKING												
K		KEYED JOINT FAILURE			⊕		SETTLEMENT																	

Table 4 (Continued)

DATE: <u>December 1972</u>		SUMMARY OF DATA - RIGID PAVEMENT CONDITION SURVEY																AIRFIELD: <u>Dyess AFB, Texas</u>					
FEATURE		SLAB SIZE FT	APPROX NO. OF SLABS	PAVE. THICK. IN.	NO. OF SLABS CONTAINING INDICATED DEFECTS																% OF SLABS NO DEFECTS	% OF SLABS NO MAJOR DEFECTS	CONDITION
NO.	DESIGNATION				I	-	\	Δ	*	K	~	S	J	↓	J	⊕	M	P	O	C			
A10B	Maintenance hangar apron 5	25 by 25	392	15	24	10	2			4		1	4	7					3	87.7	91.0	Very good	
A11B	Maintenance hangar apron 6	25 by 25	347	15	11	1	5			2		3	2	5				4	2	89.9	94.5	Very good	
REMARKS:																							

LEGEND:

I	LONGITUDINAL CRACK	~	SHRINKAGE CRACK	M	MAP CRACKING
-	TRANSVERSE CRACK	S	SCALING	P	PUMPING JOINT
\	DIAGONAL CRACK	J	SPALL ON TRANSVERSE JOINT	O	POP-OUT
Δ	CORNER BREAK	↓	SPALL ON LONGITUDINAL JOINT	C	UNCONTROLLED CONTRACTION CRACK
*	SHATTERED SLAB	J	CORNER SPALL	D	"D" CRACKING
K	KEYED JOINT FAILURE	⊕	SETTLEMENT		

Table 5  
SUMMARY OF PAVEMENT EVALUATION

NAME OF AIRFIELD: Dyess AFB		LOAD-CARRYING CAPACITY IN LB OF GROSS PLANE LOAD FOR INDICATED LANDING GEAR TYPES AND CONFIGURATIONS											REMARKS
DATE OF EVALUATION MONTH: Dec , YR: 1972		TRICYCLE ARRANGEMENT										BICYCLE	
FEATURE		PAVEMENT OPERATIONAL USE	SINGLE 100-PSI TIRE PRESSURE	SINGLE 100-SQ-IN. CONTACT AREA	SINGLE 241-SQ-IN. CONTACT AREA	TW 28-IN. C-C 226-SQ-IN. CONTACT AREA EACH TIRE	SINGLE TANDEM 60-IN. SPACING 400-SQ-IN. CONTACT AREA	TW 37-IN. C-C 267-SQ-IN. CONTACT AREA EACH TIRE	TW 44-IN. C-C 630-SQ-IN. CONTACT AREA EACH TIRE	TWIN TANDEM 33 IN. x 48 IN. 208-SQ-IN. CONTACT AREA EACH TIRE	C-SA GEAR CONFIGURATION	TWIN TWIN SPCG 37-62-37 267-SQ-IN. CONTACT AREA EACH TIRE	
NO.	DESIGNATION		1	2	3	4	5	6	7	8	9	10	
R1A T1A	N-S runway, sta 167+00 to 172+00 Taxiway 1, sta 158+28.76 to 165+66.26 and sta 165+66.26 to 171+15	Capacity	155,000+	85,000+	155,000+	220,000+	200,000+	290,000+	330,000+	380,000+	800,000+	420,000	
R2A T8A	N-S runway; sta 167+75 to 172+00 and sta 298+25 to 302+00 Taxiway 5, sta 298+15 to 310+71.24	Capacity	155,000+	85,000+	155,000+	220,000+	200,000+	330,000+	330,000+	380,000+	300,000+	510,000	
R4B	N-S runway interior; 2nd 500 ft, N end	Capacity	155,000+	85,000+	155,000+	220,000+	200,000+	265,000	330,000	380,000+	800,000+	350,000	
R5B	N-S runway in- lay, sta 175+00 to 177+00	Capacity	155,000+	85,000+	155,000+	220,000+	200,000+	330,000+	330,000+	380,000+	800,000+	510,000	
R6C R9C R11C	Runway inlays, sta 177+00 to 292+00	Capacity	155,000+	85,000+	155,000+	220,000+	200,000+	330,000+	330,000+	380,000+	800,000+	520,000	
R14B A2B T11B	N-S runway, 2nd 500 ft, S end Parking apron B Outside edges of taxiway 7	Capacity	155,000	85,000+	155,000+	210,000	200,000+	235,000	290,000	380,000+	800,000+	310,000	
R15A	N-S runway; 1st 500 ft, S end	Capacity	155,000	85,000+	155,000+	210,000	200,000+	195,000	250,000	330,000	800,000+	290,000	
T2A	Taxiway 1 inlay, sta 165+66.26 to 193+90	Capacity	155,000+	85,000+	155,000+	220,000+	200,000+	330,000+	330,000+	380,000+	800,000+	600,000+	

Note: + sign denotes allowable gross loading greater than maximum gross weight of any existing aircraft having indicated gear configuration.

Table 5 (Continued)  
SUMMARY OF PAVEMENT EVALUATION

NAME OF AIRFIELD: Dyess AFB		LOAD-CARRYING CAPACITY IN LB OF GROSS PLANE LOAD FOR INDICATED LANDING GEAR TYPES AND CONFIGURATIONS											REMARKS
DATE OF EVALUATION MONTH: Dec YR: 1972		TRICYCLE ARRANGEMENT										BICYCLE	
NO.	DESIGNATION	PAVEMENT OPERATIONAL USE	SINGLE 100-PSI TIRE PRESSURE	SINGLE 100-SQ-IN. CONTACT AREA	SINGLE 241-SQ-IN. CONTACT AREA	TW 28-IN. C-C 226-SQ-IN. CONTACT AREA EACH TIRE	SINGLE TANDEM 60-IN. SPACING 400-SQ-IN. CONTACT AREA	TW 37-IN. C-C 267-SQ-IN. CONTACT AREA EACH TIRE	TW 44-IN. C-C 630-SQ-IN. CONTACT AREA EACH TIRE	TWIN TANDEM 33 IN. x 48 IN. 208-SQ-IN. CONTACT AREA EACH TIRE	C-5A GEAR CONFIGURATION	TWIN TWIN SPCG 37-62-37 267-SQ-IN. CONTACT AREA EACH TIRE	
			1	2	3	4	5	6	7	8.	9	10	
T4C	Taxiway 2 (PCC portion)	Capacity	155,000+	85,000+	155,000+	220,000+	200,000+	330,000	330,000+	380,000+	800,000+	430,000	
T5C	Taxiway 2 (PCC)	Capacity	155,000+	85,000+	155,000+	220,000+	200,000+	330,000+	330,000+	380,000+	800,000+	440,000	
T6C	Taxiway 2 (AC portion) and taxiway 3	Capacity	155,000+	85,000+	155,000+	180,000	200,000+	290,000	300,000	320,000	800,000+	310,000	
T7A	Taxiway 7 inlay	Capacity	155,000+	85,000+	155,000+	220,000+	200,000+	330,000+	330,000+	380,000+	800,000+	590,000	
T9C	Taxiways 4 and 6	Capacity	155,000+	85,000+	155,000+	180,000	200,000+	300,000	310,000	360,000	800,000+	340,000	
A1B T10B A4B	Parking apron A Outside edges of taxiway 7 Warm-up apron B	Capacity	155,000	85,000+	155,000+	220,000	200,000+	245,000	310,000	380,000+	800,000+	320,000	
A3B	Warm-up apron A	Capacity	155,000+	85,000+	155,000+	220,000+	200,000+	330,000+	330,000+	380,000+	800,000+	540,000	
A5B	Warm-up apron C	Capacity	155,000+	85,000+	155,000+	220,000+	200,000+	310,000	330,000+	380,000+	800,000+	410,000	
A6B	Warm-up apron C addition	Capacity	155,000+	85,000+	155,000+	220,000+	200,000+	300,000	330,000+	380,000+	800,000+	390,000	
A7C	Calibration hardstand	Capacity	150,000	85,000+	155,000+	205,000	200,000+	230,000	290,000	380,000+	800,000+	310,000	
A8B A10B	Washrack Maintenance hangar aprons 1-5 and access taxiways	Capacity	135,000	85,000+	155,000+	185,000	200,000+	200,000	260,000	360,000	800,000+	280,000	
A9B	Washrack addition	Capacity	145,000	85,000+	155,000+	200,000	200,000+	225,000	280,000	380,000	800,000+	300,000	
AllB	Maintenance hangar aprons 6 and 7 and access taxiways	Capacity	130,000	85,000+	155,000+	180,000	200,000+	200,000	250,000	340,000	800,000+	265,000	





Photo 1. AC portion of runway near north end, east side



Photo 2. AC portion of runway, 5000 ft from north end,  
west side



Photo 3. AC portion of runway, 5000 ft from north end,  
east side

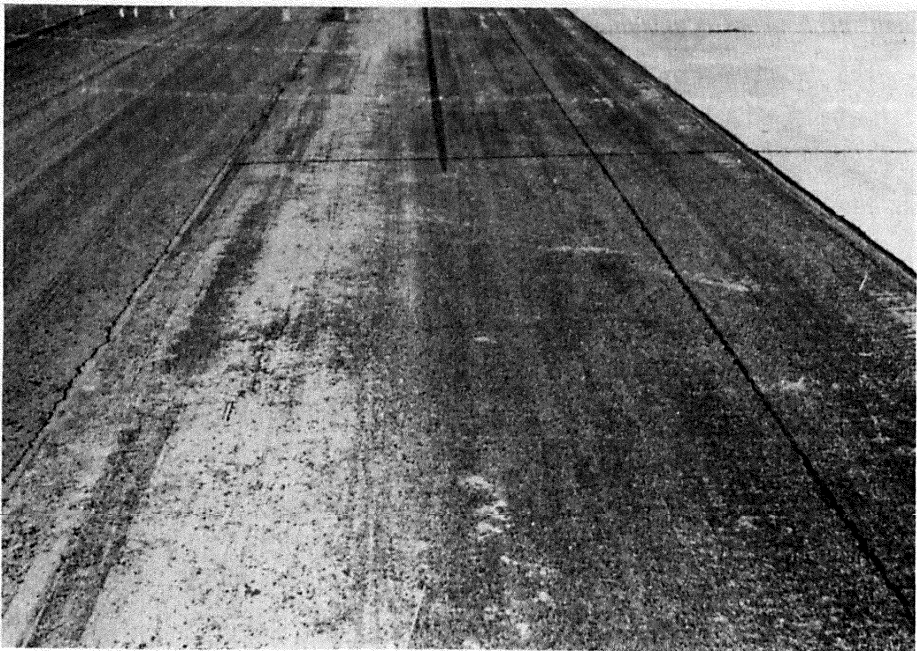


Photo 4. AC portion of runway, 6000 ft from south end,  
east side

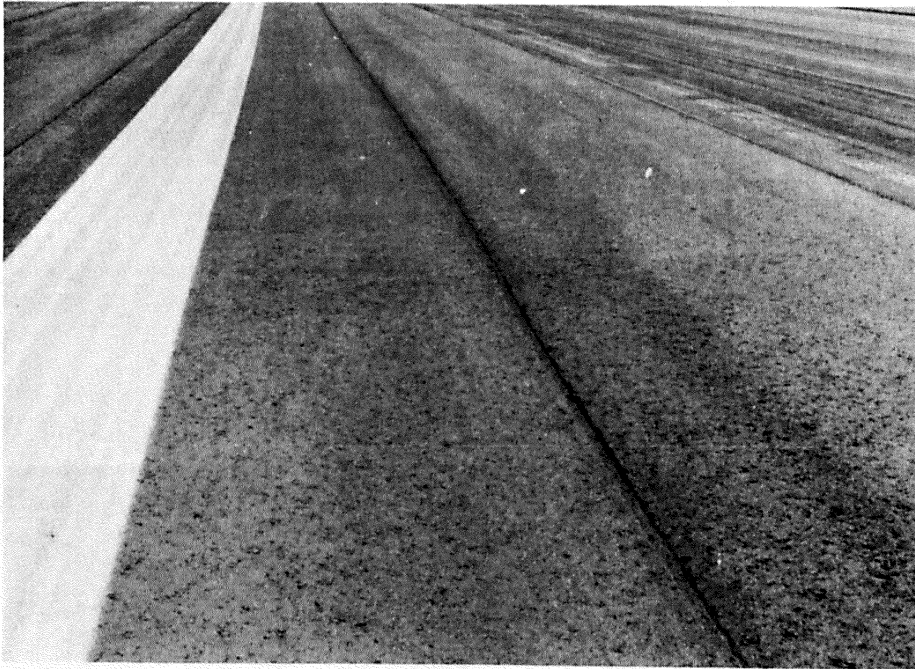


Photo 5. AC portion of runway, 4000 ft from south end,  
west side

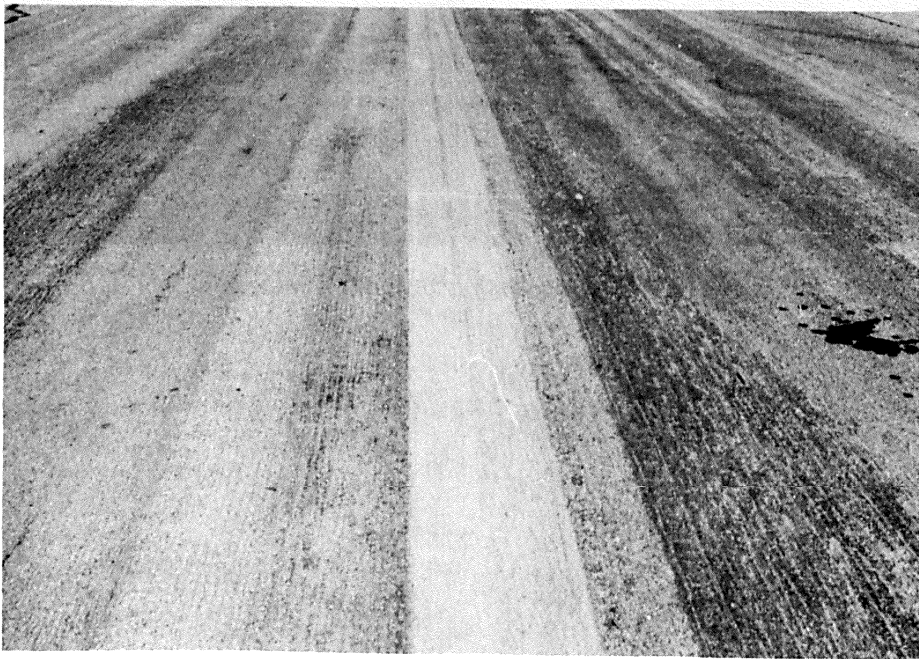
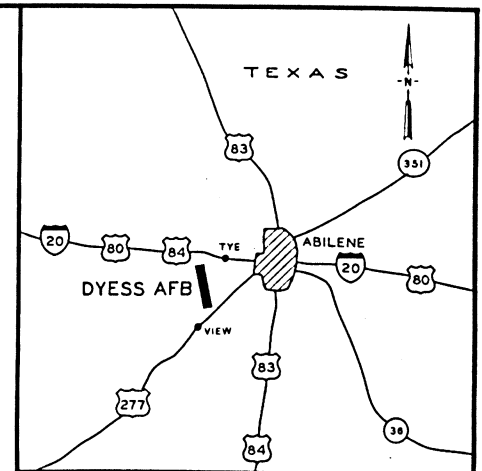
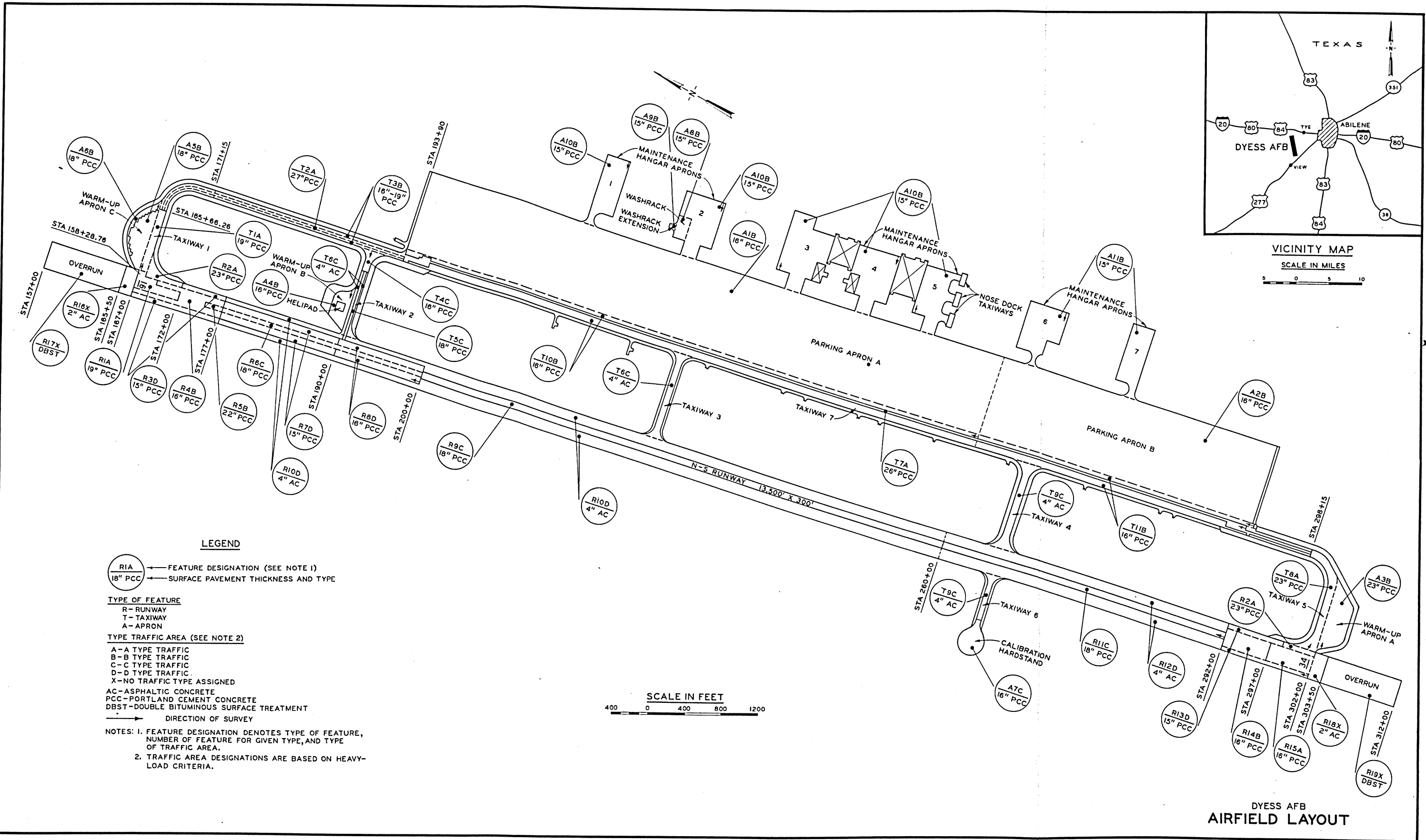


Photo 6. General view of taxiway 3



Photo 7. General view of taxiway 4



**LEGEND**

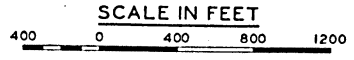
RIA 18" PCC ← FEATURE DESIGNATION (SEE NOTE 1)  
 ← SURFACE PAVEMENT THICKNESS AND TYPE

**TYPE OF FEATURE**  
 R - RUNWAY  
 T - TAXIWAY  
 A - APRON

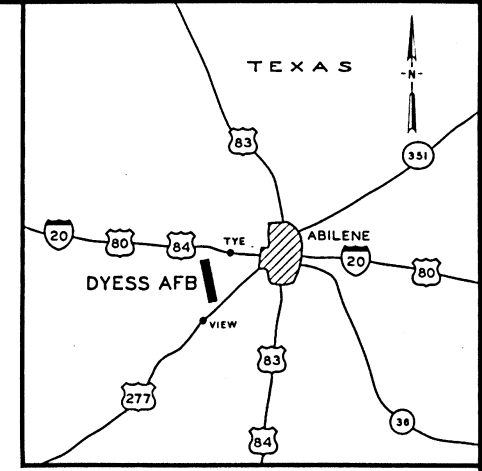
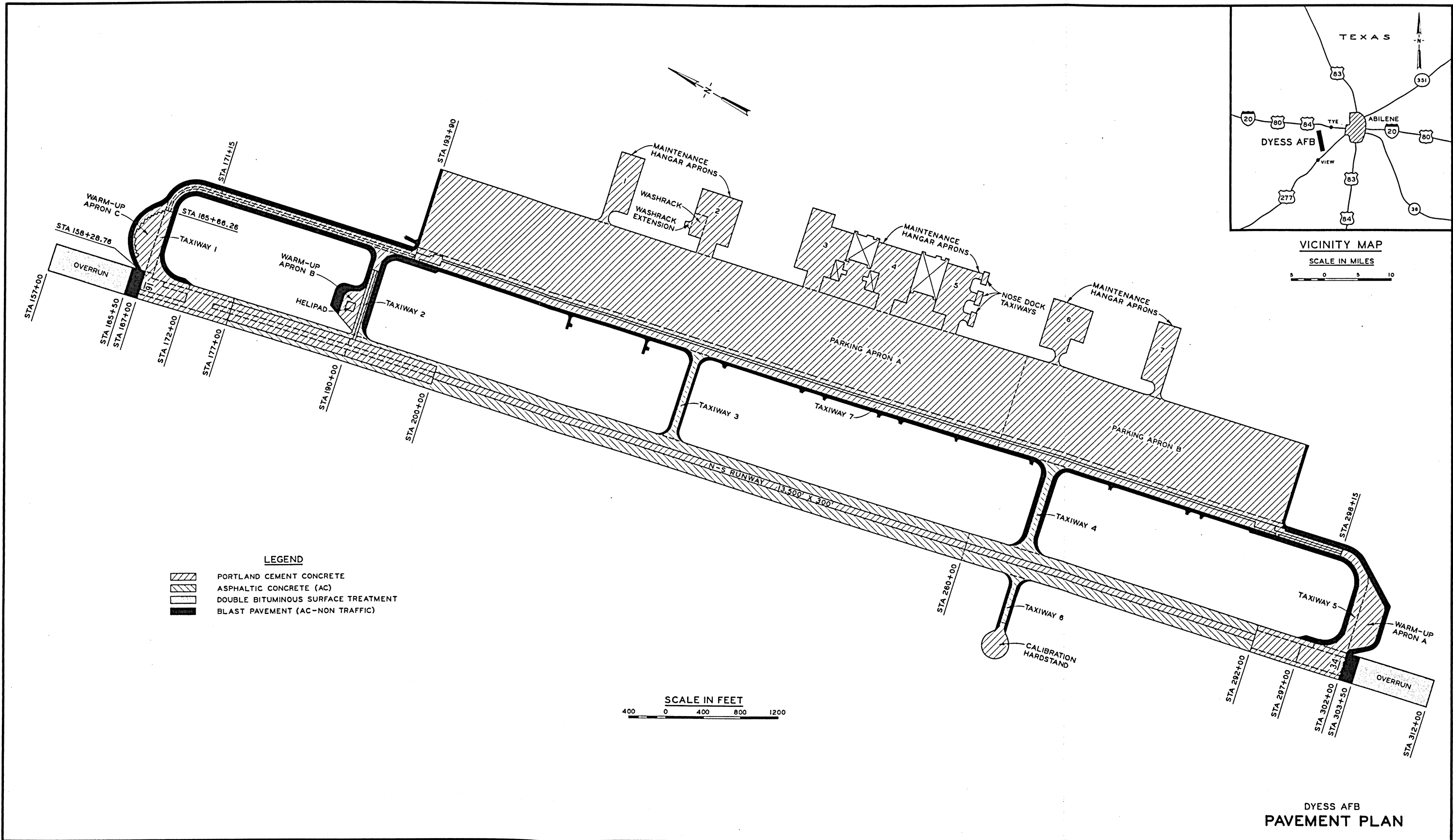
**TYPE TRAFFIC AREA (SEE NOTE 2)**  
 A - A TYPE TRAFFIC  
 B - B TYPE TRAFFIC  
 C - C TYPE TRAFFIC  
 D - D TYPE TRAFFIC  
 X - NO TRAFFIC TYPE ASSIGNED

AC - ASPHALTIC CONCRETE  
 PCC - PORTLAND CEMENT CONCRETE  
 DBST - DOUBLE BITUMINOUS SURFACE TREATMENT  
 → DIRECTION OF SURVEY

**NOTES:** 1. FEATURE DESIGNATION DENOTES TYPE OF FEATURE, NUMBER OF FEATURE FOR GIVEN TYPE, AND TYPE OF TRAFFIC AREA.  
 2. TRAFFIC AREA DESIGNATIONS ARE BASED ON HEAVY-LOAD CRITERIA.



DYESS AFB  
AIRFIELD LAYOUT



VICINITY MAP  
SCALE IN MILES

DYESS AFB  
PAVEMENT PLAN

APPENDIX A: DAFN ANNUAL PAVEMENT MAINTENANCE PLAN

Fac No.	Description	Pavement Type	Year Const.	Exist. Condition	Inspection Requirements	Maint Priority	Present or Proposed Maint & Repair	
							Maint & Repair History	Maint & Repair
540	Runway, Prim/Inst: (13,500' X 300') Sta. 167+00 to 177+00 (Center 200) - First 500' - 19" thick on 6" select base; Second 500' - 18" thick on 6" select base.	Rigid Heavy	1956	Satis.	Daily P&G Monthly P&G Bi-monthly E&C	I-A	Project DYS 761-5, Patch & Joint Seal, 1965. Minor reprs by in-house, FY 66 through FY 72. Rubber removal by in-house, FY 72 & 72. Project DYS 43-9"A", Random Crack Seal, 1970.	Mtn & repr by in-house, FY 73 through FY 78. Replace center slabs (800' X 50') with rigid, heavy keel, FY 74. Project DYS 08-2, Seal Joints by contract, FY 74.
540	Sta. 167+00 to 177+00 (50' wdn ea side) - 15" thick on 6" cem. stab. base on 6" lime stab. subgrade.	Rigid Heavy	1964	Satis.	Daily P&G Monthly P&G Bi-monthly E&C	I-A	Minor reprs by in-house, FY 70 through FY 72. Project DYS 46-7, Joint Seal & Minor Reprs, 1967*	Minor reprs by in-house FY 73 through FY 78. Project DYS 08-2, Joint Seal, FY 74.
	Sta. 177+00 to 190+00 (75' width ea side of 50' wide keel) - 15" on 6" select base.	Rigid Heavy	1956	Satis.	Daily P&G Monthly P&G Bi-monthly E&C	I-A	Minor reprs by in-house, FY 66 through FY 72. Project DYS 46-7, Joint Seal & Minor Repairs, 1967. Project DYS 43-9"A", Random Cracks Seal, 1970.	Minor reprs by in-house through FY 78. Project DYS 08-2, Joint Seal, FY 74. Stabilize Culvert Backfill, FY 73.
540	Sta. 177+00 to 200+00 (50' wide center line keel) 18" on 8" lime stab. subgrade.	Rigid Heavy	1964	Satis.	Daily P&G Monthly P&G Bi-monthly E&C	I-A	Project DYS 46-7, Joint Seal & Minor Reprs, 1967. Minor reprs by in-house FY 71 & 72. Project DYS 43-9"A", Random Crack Seal, 1970. Project DYS 259-3, 50' Widen Keel, 1964.**	Mtn & reprs by in-house, FY 73 through FY 78. Project DYS 08-2, Joint Seal, FY 74.
540	Sta. 190+00 to 200+00 (75' width ea side of 50' wide keel) - 16" on 6" select.	Rigid Heavy	1954	Satis.	Daily P&G Monthly P&G Bi-monthly E&C	I-A	Project DYS 46-7, Joint Seal 1967. Minor reprs by in-house, FY 71 & 72. Project DYS 43-9"A", Random Crack Seal, 1970.	Mtn & reprs by in-house through FY 78. Project DYS 08-2, Joint Seal by contract, FY 74. Project DYS 79-2, Level Depression, FY 72.
540	Sta. 200+00 to 292+00 (Center 75') - 18" on 6" cem. stab. base on 27" sub-base north of Sta. 260+00 and 23" sub-base south of Sta. 260+00	Rigid Keel Heavy	1964	Satis.	Daily P&G Monthly P&G Bi-monthly E&C	I-A	Project DYS 46-7, Joint Seal, 1967. DYS 43-9"A", Random Crack Seal, 1970. Minor reprs by in-house, FY 71 & 72.*	Mtn & reprs by in-house, FY 73 through 78.
540	Sta. 292+00 to 302+00 (Center 200') - 16" thick on 6" compacted subgrade.	Rigid Heavy	1954	Satis.	Daily P&G Monthly P&G Bi-monthly E&C	I-A	Minor reprs by in-house, FY 71 & 72. Project DYS 46-7, Joint Seal & Minor Repairs, 1967.	Minor reprs by in-house through FY 78. Project DYS 08-2, Joint Seal, FY 74.
540	Sta. 292+00 to 302+00 (50' Wdn ea side) - 15" thick on 6" cem. stab. base on 6" lime stab. subgrade.	Rigid Heavy	1964	Satis.	Daily P&G Monthly P&G Bi-monthly E&C	I-A	Project DYS 46-7, Joint Seal & Minor Repairs, 1967. Minor reprs by in-house, FY 71 & 72. Wdn by MCP, 1964.	Minor reprs by in-house FY 73 through FY 78. Project DYS 08-2, Joint & Seal, 1974.
539	Runway Prim/Inst. 177+00 to 292+00 (50' Wdn ea side) (177+00 to 260+00 - 55") (260+00 to 292+00 - 46")	Flex Heavy Type "D"	1964	Satis.	Daily P&G Monthly P&G Bi-monthly E&C	I-A	Project DYS 46-7, Slurry Seal, 1967. Project DYS 43-9"A", Crack Seal, 1970. Wdn by MCP, 1964.	Project DYS 17-1, Seal Coat, FY 73.
539	Sta. 200+00 to 223+00 (41' wide strip ea side Keel - 51").	Flex Heavy Type "D"	1954	Unsatis.	Daily P&G Monthly P&G Monthly E&C	I-A	Seal coat by contract, FY 66. Crack Seal by contract, 1970. Minor reprs by in-house, FY 71 & 72.	Stabilize Base & Resurface by contract, FY 74. Repairs by in-house, FY 73 through FY 78. Project DYS 17-1, Seal Coat, FY 73.
539	Sta. 223+00 to 292+00 (41' strip ea side keel 42").	Flex Heavy Type "D"	1954	Satis.	Daily P&G Monthly P&G Monthly E&C	I-A	Seal Coat by contract, FY 66. Crack Seal by contract, 1970. Minor reprs by in-house through FY 72. Project DYS 72-2, Cement Stab. Base & Resurface, FY 72.	Minor repairs by in-house, FY 73 through FY 78.
531	T/W No. 1 - 19'	Rigid Heavy	1956	Satis.	Daily P&G Bi-monthly P&G Quarterly E&C	I-B	Project DYS 47-7, Seal Joints & Patch, 1967. Minor reprs by in-house, FY 69 through FY 71. Project DYS 258-3, Keel, 1964.†	Minor reprs and crack seal by in-house, FY 73 through FY 78. Project DYS 09-2, Joint Seal by contract, FY 74. Complete replacement of center slab (25' wide) with rigid, heavy keel to support B-52 Aircraft, FY 77.
532	T/W No. 2 - 18" keel, 56" flex.	Flex with Rigid Keel††	1954	Satis.	Weekly P&G Quarterly P&G Quarterly E&C	I-C	Project DYS 723-5, Rigid Keel, 1965. Project DYS 47-7, Seal Coat, 1967	Project DYS 18-1, Seal Coat, FY 74.

(Continued)

\* Work covered by FY 63 MCP project to widen runway to 300' and replace 75' width of flexible pavement with rigid, heavy, keel was completed in 1964.

\*\* Work covered by Project DYS 259-3, to replace rigid pavement with new rigid, heavy, between stations 175+00 and 200+00 was completed in 1964.

† Work covered by C&M Project DYS 258-3 to replace part center slabs (25' wide) with new rigid, heavy keel was completed in 1964.

†† Project DYS 723-5 to replace 25' width of flex pavement with rigid keel was completed by contract in 1966.

APPENDIX A (Continued)

Fac No.	Description	Pavement Type	Year Const.	Exist. Condition	Inspection Requirements	Maint Priority	Maint & Repair History	Present or Proposed Maint & Repair
533	T/W No. 3 - 56"	Flex Medium	1954	Satis.	Weekly P&G Monthly P&G Monthly E&C	I-D	Project DYS 227-4, Repr & Mtn, 1965. Minor reprs by in-house. Project DYS 47-7, Seal Coat, 1967. Project DYS 43-9"B", Patch 1971. Project DYS 43-9"A", Crack Seal, 1971.	Project DYS 18-1, Seal Coat, FY 74. 25' wide Rigid Keel to support B-52 Aircraft, FY 77. Reprs by in-house or contract, FY 73 through FY 76.
534	T/W No. 4 - 46"	Flex Medium	1954	Satis.	Weekly P&G Quarterly P&G Quarterly E&C	I-D	Same as T/W #3.	Same as T/W #3.
535	T/W No. 5 - 23"	Rigid Heavy*	1964	Satis.	Daily P&G Bi-monthly P&G Quarterly E&C	I-B	Project DYS 47-7, Joint Seal, 1967.*	Minor repairs by in-house FY 73 through FY 78. Project DYS 09-2, Joint Seal by contract, FY 74.
536	T/W No. 6 - 46"	Flex Medium	1955	Unsatis.	Weekly P&G Quarterly P&G Quarterly E&C	I-D	Project DYS 47-7, Seal Cracks & Seal Coat, 1967. Project DYS 43-9"A", Crack Seal, 1971.	Project DYS 18-1, Seal Coat, FY 74. 25' wide Rigid Keel to support B-52 Aircraft, FY 77. Reprs by in-house, FY 73 through FY 78.
530 & 537	T/W No. 7 - 26"	Rigid Heavy	1954	Unsatis. **	Daily P&G Bi-monthly P&G Bi-monthly E&C	I-B	Project DYS 40-6, Joint Seal & Patch, 1967. Patch and crack seal by in-house 1968 to present.*	Repairs by in-house in FY 73 through FY 77. Project DYS 29-2, Sub-drain by contract, FY 73. Project DYS 09-2, Joint Seal by contract, FY 74. DYS 26-3, Repl 22 Conc Slabs, FY 74. DYS 14-4, Patch, FY 75.
515 (North) 526 (South)	Runway Overruns - (1000' X 300' ea end) 22" - North 16" - South	Flex Heavy	1956	Satis.	Daily P&G Quarterly P&G Quarterly E&C	I-C	Wdn by MCP, 1964. § Project DYS 47-8, Seal Coat, 1969. Project DYS 43-9"A", Crack Seal by contract, 1971.	Seal Coat by contract, FY 74. Mtn by in-house through FY 78.
527	South Pad Warm-up Holding (SPDWH) - 23"	Rigid Heavy	1963	Satis.	Daily P&G Quarterly P&G Quarterly E&C	I-B	Project DYS 47-7, §§ Joint Seal, 1967.	Mtn by in-house through FY 78.
516	North Pad Warm-up Holding (NPDWH) - 18"	Rigid Heavy	1956	Satis.	Daily P&G Monthly P&G Quarterly E&C	I-B	Project DYS 260-3, Joint Seal & Minor Repair, 1965. Project DYS 54-8, Joint Seal & Patch, 1969. Repairs by in-house, FY 71 & 72.	Mtn and repairs by in-house through FY 78. Joint Seal by contract, FY 74. Project DYS 29-2, Sub-drains by contract, FY 73.
509	Center Pad Warm-up Holding (CPDWH) - 16"	Rigid Heavy	1954	Satis.	Weekly P&G Quarterly P&G Quarterly E&C	I-D	Project DYS 47-7, Joint Seal, 1967.	Mtn & repair by in-house through FY 78.
512	Hardstand, Calib. (HACAL) - 16"	Rigid Heavy	1955	Satis.	Weekly P&G Quarterly P&G Quarterly E&C	I-D	Project DYS 723-5, Joint Seal, 1965.	Mtn & repair by in-house through FY 78. Joint Seal by contract, FY 74.
505	Apron, Oper (APROP) - 16"	Rigid Heavy	1954-55	Satis.	Daily P&G Bi-monthly P&G Quarterly E&C	I-B	Project DYS 135-2, 137-2, 538-5, 539-5, Joint Seal, 1965. Project DYS 98-1, Joint Seal by contract, FY 72.	Mtn & reprs by in-house through FY 78. Project DYS 74-2, Joint Seal by contract, FY 73. Project DYS 29-2, Sub-drains by contract, FY 73. Slabs (25) by contract, FY 75 (Project DYS 17-5).
500 501 541 542 543 502 519	Aprons, Hangar Acc. (Incl. Access T/W's) - 15"	Rigid Heavy	1955	Satis.	Weekly P&G Quarterly P&G Quarterly E&C	I-C	Project DYS 723-5, Joint Seal & Repairs, 1965.	Mtn & reprs by in-house, FY 73 through FY 78. Project DYS 19-1, Seal Joints, FY 74.
528	Shoulder Stabil. North of Sta. 260+00 - 17" South of Sta. 260+00 - 13"	Flex	1955 & 1956	Satis.	Monthly P&G Quarterly E&C	I-E	Wdn by MCP, 1964. # Project DYS 42-7, Seal Coat, 1967. Project DYS 43-9"A", Crack Seal by contract, 1971. Project DYS 43-9"B", Patch by contract, 1971.	Project DYS 20-1, Seal Coat, FY 75. Spot-Seal Coat and Patch by in-house, FY 73 through FY 78.

\* Work covered by FY 63 MCP project to widen runway to 300' and replace 75' width of flexible pavement with rigid, heavy, keel was completed in 1964.

# All flex pavement was replaced in 1964 with rigid, heavy under FY 63 MCP.

\*\* To prevent tire damage by shattered slabs, this T/W was moved 50' east (to present location). The center 25' slab width was replaced in 1964 with rigid, heavy keel to support B-52 operations.

§ Overruns have been widened from 200' to 300' by FY 63 MCP.

§§ This pad has been enlarged by FY 63 MCP to accommodate two B-52 aircraft.

# Shoulder stabil. (Except on T/W 3 and T/W 6 have been widened from 25' to 50' by FY 63 MCP.)