ホンデュラス共和国

テグシガルパ新空港建設計画

フィージビリティ調査報告書

付属資料

昭和54年8月

国際協力事業団

ホンデュラス国・テグシガルパ新空港建設計画 フィージビリティ調査報告書(付属資料) 国際協力事

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(別冊)

付　属　資　料

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SCOPE OF WORK

SCOPE OF WORK

THE FEASIBILITY STUDY

FOR

THE NEW INTERNATIONAL AIRPORT CONSTRUCTION PROJECT

IN

TEGUCIGALPA, HONDURAS

I. INTRODUCTION

In response to the request of the Government of the Republic of Honduras, the Government of Japan has decided to conduct a feasibility study for the New International Airport in Tegucigalpa in accordance with laws and regulations in force in Japan, and the Japan International Cooperation Agency(JICA), the official agency responsible for the implementation of technical cooperation programs of the Government of Japan, will carry out the study.

The present document sets forth the scope of work in regard to the above mentioned study which is to be carried out in close cooperation with the Government of the Republic of Honduras and authorities concerned.

II. OBJECTIVE

The objective is to study technical and economic feasibility of the New International Airport construction project in Tegucigalpa so as to contribute to optimum planning.

III. OUTLINE OF THE STUDY

This feasibility study will be divided into two stages as shown below.

First Stage: New airport site selection

Second stage: New airport basic planning

The second stage study will be started after the New airport site is selected by the Government of Honduras.

First stage study consists of the following:

1) Narrow down of choice of airport potential sites
2) Aviation demand forecasts
3) Facility requirements & planning criteria
4) Tentative airport layout planning
5) Aeronautical & engineering analysis
6) Economic analysis
7) Evaluation & conclusion as to sites

Second stage study consists of the following:

1) Airport layout plan
2) Air Navigation planning
3) Schedule & cost estimates
4) Financial analysis

IV. REPORTS

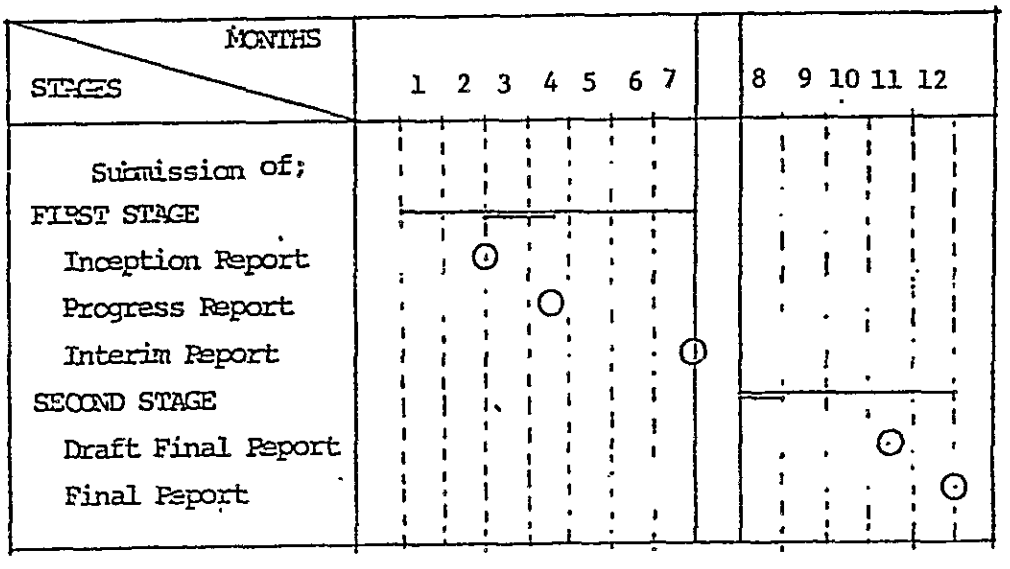
JICA will prepare and submit the following reports in course of the study. All documents are written in English and with Metric System.

1) Inception Report
2) Progress Report
3) Interim Report
4) Draft Final Report
5) Final Report

V. UNDERTAKING OF THE GOVERNMENT OF THE REPUBLIC OF HONDURAS

1) to provide the study team with data and information necessary for the study, including soil boring information and topographical maps as required scale.
2) to exempt the taxes and duties on the materials and personal effects which the study team will bring into the Republic of Honduras.
3) to assign the counterpart officials for the study team.
4) to provide suitable office spaces for the team.
5) to collaborate in collecting the necessary data and reference material, and also in ensuring that such documents are smoothly carried out of the country.
6) to make necessary arrangements for visiting the authorities and facilities concerned.
7) to provide the necessary means or equipments for the study team, for their business such as vehicles, airplane (use for evaluation flight), etc.

VI. TIME SCHEDULE



Notes: ○ indicates the submission of Report.
——— indicates Home work in Japan.
═══ indicates Field work in Honduras.

APPENDIX 1B

SUPERVISORY COMMITTEE AND CONSULTANTS

作業監理委員会

委員長	平井磨磋夫	運輸省航空局飛行場部建設課長（現計画課長）
委　員	男竹　昭	運輸省大臣官房国際課
	坂田　隆史	運輸省大臣官房地域計画課
	駒田　幸彦	運輸省航空局飛行場部計画課（現東京航空局飛行場部長）
	伊藤　忠光	運輸省航空局技術部運航課
	阿部　洋一	運輸省航空局飛行場部建設課
	島田壮八郎	運輸省航空局飛行場部建設課（現第３港湾建設局関西空港調査室）

調査団（株式会社　日本空港コンサルタンツ）

総　括	吉岡　明		
計　画	前田　稔	斉藤　邦雄	
経済・財務	蛎崎　広義	山岡　春夫	
	太田　正樹	引頭　雄一	
運　航	本行　泰彦	中岡　章	
建　築	新名　義昭	飯田　英明	
土　木	岸田　州生	古川　浩三	
	山川　精一	吉田　昇	
	田中　久司		
地　質	村上　雅博		
無　線	佐藤　藤雄	今村　一夫	
照　明	酒井　俊一	三田　博	
設　備	藤井　正一	金谷　国弘	
アドバイザー	平出　啓見	福岡　博次	

APPENDIX 2A

ECONOMIC AND TRANSPORT DATA

Table 2A-1 PAST DEVELOPMENT OF GROSS DOMESTIC PRODUCT, POPULATION AND PER CAPITA GDP IN THE REPUBLIC OF HONDURAS

Year	Gross Domestic Product*1 (Milliones of Lempiras in 1966 Prices)	Population*2 (thousand)	Par capita GDP (Lempiras in 1966 Prices)
1960	797	1,943	410
1961	819	2,020	405
1962	861	2,096	411
1963	889	2,169	410
1964	942	2,238	421
1965	1,039	2,304	451
1966	1,100	2,384	461
1967	1,151	2,466	467
1968	1,235	2,552	484
1969	1,239	2,638	470
1970	1,278	2,639	484
1971	1,351	2,717	497
1972	1,406	2,801	502
1973	1,469	2,892	508
1974	1,478	2,990	494
1975	1,486	3,093	480
1976	1,584	3,203	495
1977	1,709	3,318	515

* 1 Source: BANCO CENTRAL DE HONDURAS

* 2 Source: DIRECCION GENERAL DE ESTADISTICA Y CENSOS

Table 2A-2

POPULATION OF HONDURAS BY DEPARTMENT

Department	1961 Census						1974 Census					
	Total	%	Urban*	%	Rural	%	Total	%	Urban*	%	Rural	%
TOTAL	1,884,765	100.0	437,818	23.2	1,446,947	76.8	2,656,948	100.0	909,848	34.2	1,747,100	65.8
Francisco Morazán	284,428	15.1	140,375	49.4	144,053	50.6	453,597	17.1	297,844	65.7	155,753	34.3
Atlántida	92,914	4.9	39,645	42.7	53,269	57.3	148,285	5.6	63,371	42.7	84,914	57.3
Colón	41,904	2.2	4,499	10.7	37,405	89.3	77,750	2.9	15,142	19.5	62,608	80.5
Comayagüa	96,442	5.1	14,466	15.0	81,976	85.0	136,619	5.1	42,958	31.4	93,661	68.6
Copán	126,183	6.7	12,241	9.7	113,942	90.3	151,859	5.7	39,507	26.0	112,352	74.0
Cortés	200,099	10.6	106,992	53.5	93,107	46.5	369,616	13.9	207,138	56.0	162,478	44.0
Choluteca	149,175	7.9	17,933	12.0	131,242	88.0	193,336	7.3	37,426	19.4	155,910	80.6
El Faraíso	106,823	5.7	13,770	12.9	93,053	87.1	140,793	5.3	26,052	18.5	114,741	81.5
Gracias a Dios	10,905	0.6	0	0.0	10,905	100.0	20,738	0.8	0	0.0	20,738	100.0
Intibucá	73,138	3.9	6,027	8.2	67,111	91.8	81,815	3.1	8,309	10.2	73,506	89.8
Islas de la Bahía	8,961	0.5	2,844	31.7	6,117	68.3	13,194	0.5	6,185	46.9	7,009	53.1
La Paz	60,600	3.2	6,533	10.8	54,067	89.2	66,046	2.5	11,190	16.9	54,856	83.1
Lempira	111,546	5.9	1,854	1.7	109,692	98.3	127,782	4.8	6,255	4.9	121,527	95.1
Ocotopeque	52,540	2.8	5,702	10.9	46,838	89.1	51,038	1.9	7,749	15.2	43,289	84.8
Olancho	110,744	5.9	14,048	12.7	96,696	87.3	151,436	5.7	29,387	19.4	122,049	80.6
Santa Bárbara	146,909	7.8	17,101	11.6	129,808	88.4	186,106	7.0	35,349	19.0	150,757	81.0
Valle	80,907	4.3	8,119	10.0	72,788	90.0	91,901	3.5	21,069	22.9	70,832	77.1
Yoro	130,547	6.9	25,669	19.7	104,878	80.3	195,037	7.3	54,917	28.2	140,120	71.8

* Refers to localities with 1,000 or more inhabitants.

Source: POBLACION Y VIVIENDA POR DEPARTAMENTO Y MUNICIPIO, 1976

Table 2A-3 POPULATION OF PRINCIPAL CITIES IN HONDURAS

(In Census year)

City	1961	1974	Average Annual Growth Rate (%)
Tegucigalpa	134,075	273,894	5.6
San Pedro Sula	58,632	150,991	7.5
La Ceiba	24,863	38,788	3.5
Choluteca	11,483	26,152	6.5
Puerto Cortés	17,048	25,817	3.2
Tela	13,619	19,055	2.6
Comayagua	8,473	15,941	5.0
Siguatepeque	5,993	12,456	5.8
Santa Rosa de Copán	7,946	12,413	3.5
Danlí	6,325	10,825	4.2

Source: DIRECCION GENERAL DE ESTADISTICA Y CENSOS

Table 2A-4 GROSS DOMESTIC PRODUCT OF HONDURAS BY INDUSTRIAL ORIGIN

(In millions of current lempiras)

Item	1973	1974	1975	1976 P	1977 P
Agriculture, Forestry, Fishing and Hunting	563	578	562	687	852
Mining	44	64	53	50	58
Manufacturing	244	280	314	375	457
Construction	73	96	108	118	142
Electricity, Gas and Water	27	27	36	39	46
Transport and Telecommunications	114	124	138	159	194
Trade	197	216	242	280	341
Banking, Insurance & Real Estate	53	64	68	74	90
Ownership of Dwellings	118	127	137	148	161
Public Administration and Defense	58	62	68	79	95
Services	153	157	166	176	212
GDP at Factor Cost	1,644	1,795	1,892	2,185	2,648
Net Indirect Taxes	169	200	220	253	292
GDP at Market Prices	1,813	1,995	2,112	2,438	2,940
Annual Growth Rate (%)	-	10.0	5.9	15.4	20.6
(As percentage of GDP at factor cost)					
Agriculture, Forestry, Fishing and Hunting	34.2	32.2	29.7	31.4	32.2
Mining	2.7	3.6	2.8	2.3	2.2
Manufacturing	14.8	15.6	16.6	17.2	17.3
Construction	4.4	5.3	5.7	5.4	5.4
Electricity, Gas and Water	1.6	1.5	1.9	1.8	1.7
Transport and Telecommunications	6.9	6.9	7.3	7.3	7.3
Trade	12.0	12.0	12.8	12.8	12.9
Banking, Insurance and Real Estate	3.2	3.6	3.6	3.4	3.4
Ownership of Dwellings	7.2	7.1	7.2	6.8	6.1
Public Administration and Defense	3.5	3.5	3.6	3.7	3.4
Services	9.5	8.7	8.8	7.9	8.1
GDP at Factor Cost	100.0	100.0	100.0	100.0	100.0

P: Preliminary Estimate

Source: BANCO CENTRAL DE HONDURAS

Table 2A-5 GROSS DOMESTIC PRODUCT OF HONDURAS BY INDUSTRIAL ORIGIN

(In millions of 1966 lempiras)

Item	1973	1974	1975	1976 P	1977 P
Agriculture, Forestry, Fishing and Hunting	468	427	401	440	476
Mining	34	45	33	28	30
Manufacturing	192	190	195	218	243
Construction	58	72	76	80	83
Electricity, Gas and Water	15	16	17	18	20
Transport and Telecommunications	83	84	84	90	97
Trade	166	174	176	188	200
Banking, Insurance and Real Estate	34	38	39	43	47
Ownership of Dwellings	96	100	105	111	116
Public Administration and Defense	43	42	45	50	55
Services	143	142	158	160	177
GDP at Factor Cost	1,332	1,330	1,329	1,426	1,544
Net Indirect Taxes	137	148	157	158	165
GDP at Market Prices	1,469	1,478	1,486	1,584	1,709
Annual growth rate (%)	-	0.6	0.5	6.6	7.9
(As percentage of GDP at factor cost)					
Agriculture, Forestry, Fishing and Hunting	35.1	32.1	30.2	30.9	30.8
Mining	2.6	3.4	2.5	2.0	1.9
Manufacturing	14.4	14.3	14.7	15.3	15.7
Construction	4.4	5.4	5.7	5.6	5.4
Electricity, Gas and Water	1.1	1.2	1.3	1.2	1.3
Transport and Telecommunications	6.2	6.3	6.3	6.3	6.3
Trade	12.5	13.1	13.2	13.2	13.0
Banking, Insurance and Real Estate	2.6	2.9	2.9	3.0	3.0
Ownership of Dwellings	7.2	7.5	7.9	7.8	7.5
Public Administration and Defense	3.2	3.1	3.4	3.5	3.6
Services	10.7	10.7	11.9	11.2	11.5
GDP at Factor Cost	100.0	100.0	100.0	100.0	100.0

P: Preliminary Estimate

Source: BANCO CENTRAL DE HONDURAS

Table 2A-6 VALUE OF PRINCIPAL EXPORTS OF HONDURAS

(In thousands of current lempiras)

Item	1972	1973	1974	1975	1976
Bananas	181,312	187,983	159,415	122,932	213,366
Coffee	54,505	95,636	88,009	113,845	200,631
Lumber	54,218	78,176	81,481	77,602	76,053
Beef	31,921	43,566	33,415	36,472	51,168
Silver	10,399	13,886	26,209	22,063	27,090
Lead	8,182	8,269	12,914	8,000	12,719
Zinc	7,540	14,624	20,982	32,160	23,836
Shrimps & Lobsters	4,680	4,460	8,138	20,580	24,506
Cotton	1,342	2,922	6,273	9,007	8,730
Sugar	4,098	24	9,044	13,836	4,415
Soap	307	2,481	5,314	7,941	13,229
Tobacco	4,394	5,720	8,503	11,138	11,794
Wooden Products	1,944	2,811	3,844	3,029	7,245
Others	44,246	56,924	112,104	107,920	108,880
Total	409,088	517,482	575,645	586,525	783,662
Annual growth rate(%)	-	26.5	11.2	1.9	33.6
	(As percentage of Exports)				
Bananas	44.3	36.3	27.7	21.0	27.2
Coffee	13.3	18.5	15.3	19.4	25.6
Lumber	13.3	15.1	14.2	13.2	9.7
Beef	7.8	8.4	5.8	6.2	6.5
Silver	2.5	2.7	4.6	3.8	3.5
Lead	2.0	1.6	2.2	1.4	1.6
Zink	1.8	2.8	3.6	5.5	3.0
Shrimps & Lobsters	1.1	0.9	1.4	3.5	3.1
Cotton	0.3	0.6	1.1	1.5	1.1
Sugar	1.0	0.0	1.6	2.4	0.6
Soap	0.1	0.5	0.9	1.4	1.7
Tobacco	1.1	1.1	1.5	1.9	1.5
Wooden Products	0.5	0.5	0.7	0.5	0.9
Others	10.9	10.9	19.4	18.3	14.0
Total	100.0	100.0	100.0	100.0	100.0

Source: BANCO CENTRAL DE HONDURAS

Table 2A-7 VALUE OF PRINCIPAL IMPORTS OF HONDURAS

(In thousand of current lempiras)

	1972	1973	1974	1975	1976
Food	34,749	44,483	62,338	90,371	74,424
Beverage and Tobacco	1,457	1,916	2,890	2,790	4,493
Raw Materials	6,588	5,374	11,235	12,460	17,129
Fuel and Lubric	38,351	52,139	126,862	136,996	96,417
Oil & Grease of Vegetables and Animals	3,634	4,301	9,331	8,880	11,199
Chemical Products	62,007	79,422	112,350	116,505	148,017
Intermediate Goods	111,639	150,879	209,180	172,805	236,097
Machinery & Material of Transport	100,789	151,475	204,637	213,510	261,725
Other Manufacturing Goods	25,060	32,629	38,183	43,250	54,172
Others	1,312	1,868	6,293	2,451	2,491
Total	385,586	524,486	783,299	800,018	906,164
Annual growth rate (%)	-	36.0	49.3	2.1	13.3
	(As percentage of Imports)				
Food	9.0	8.5	8.0	11.3	8.2
Beverage and Tobacco	0.4	0.4	0.4	0.3	0.5
Raw Materials	1.7	1.0	1.4	1.6	1.9
Fuel and Lubric	9.9	9.9	16.2	17.1	10.6
Oil & Grease of Vegetables and Animals	0.9	0.8	1.2	1.1	1.2
Chemical Products	16.1	15.1	14.3	14.6	16.3
Intermediate Goods	29.0	28.8	26.7	21.6	26.1
Machinery & Material of Transport	26.1	28.9	26.1	26.7	28.9
Other Manufacturing Goods	6.5	6.2	4.9	5.4	6.0
Others	0.4	0.4	0.8	0.3	0.3
Total	100.0	100.0	100.0	100.0	100.0

Source: BANCO CENTRAL DE HONDURAS

Table 2A-8 PAST DEVELOPMENT OF LENGTH OF ROADS IN HONDURAS

(1960 - 1976) (km)

Year	Total	Paved Road	All-Weather Road	Road only for Dry Season
1960	3,229	110	2,184	935
1961	3,385	345	2,097	943
1962	3,406	380	2,106	920
1963	3,437	380	2,125	932
1964	3,595	382	1,805	1,408
1965	3,639	407	1,852	1,380
1966	4,048	407	1,982	1,713
1967	4,349	416	1,978	1,955
1968	4,570	472	2,120	1,978
1969	4,728	622	2,102	2,004
1970	4,940	745	2,162	2,033
1971	5,589	1,168	2,988	1,433
1972	5,746	1,228	3,028	1,490
1973	5,943	1,228	3,225	1,490
1974	6,136	1,240	3,406	1,490
1975	6,595	1,327	3,670	1,598
1976	7,249	1,408	4,121	1,720

Source: ANUARIO ESTADISTICO 1975 & SECOPT

Table 2A-9 PAST DEVELOPMENT OF NUMBER OF REGISTERED CARS IN HONDURAS

(1960 - 1976)

Year	Total	Automobile	Bus	Truck	Others
1960	10,989	5,505	1,269	3,914	301
1961	11,338	5,680	1,334	4,001	323
1962	11,606	5,850	1,407	4,025	324
1963	14,329	7,476	1,661	4,881	311
1964	16,002	8,759	1,217	5,909	117
1965	18,797	10,273	1,526	6,682	316
1966	21,609	11,786	1,784	7,871	168
1967	22,570	12,042	1,704	8,784	40
1968	24,748	11,045	1,982	11,617	104
1969	27,527	12,254	2,198	12,950	125
1970	28,706	12,630	2,296	13,492	288
1971	30,733	13,765	2,066	14,874	28
1972	34,139	16,701	2,399	15,039	-
1973	33,982	15,713	2,690	15,567	12
1974	37,661	16,077	4,323	17,194	67
1975	43,838	18,152	5,103	20,583	-
1976	47,337	...	...	...	...
Average Annual Growth Rate (%)					
1960 - 1970	10.1	8.7	6.1	13.2	-0.4
1970 - 1975	8.9	7.5	17.3	8.8	-

Source: ANUARIO ESTADISTICO 1975

(...) : NOT AVAILABLE

Table 2A-10 PAST DEVELOPMENT OF INTERNATIONAL PASSENGERS TRAFFIC AT INTERNATIONAL AIRPORTS IN CENTRAL AMERICA

(1960 - 1975) (persons)

	Guatemala *1	El Salvador *1	San Pedro Sula *2	Tegucigalpa *2	Managua *1	San Jose *1	Total
1960	111,265	82,800	13,814	49,583	45,298	89,793	392,553
1961	120,232	91,500	13,668	45,342	49,017	93,609	413,368
1962	110,777	85,000	14,206	45,130	52,977	94,840	402,930
1963	122,714	94,500	26,510	39,116	61,588	101,858	446,286
1964	134,744	90,000	19,493	43,434	68,212	101,072	456,955
1965	156,197	98,509	25,514	48,650	78,025	122,008	528,903
1966	180,372	128,215	38,516	46,744	92,841	139,568	626,256
1967	199,851	127,939	36,808	46,622	95,166	155,476	661,862
1968	208,723	144,590	49,547	65,922	101,468	166,400	736,650
1969	244,362	139,824	56,708	70,804	113,497	197,024	822,219
1970	246,250	148,930	61,775	70,654	140,566	225,168	893,343
1971	260,422	156,516	54,910	75,957	148,922	252,130	948,857
1972	292,374	162,782	52,743	80,440	161,738	278,050	1,028,127
1973	347,462	186,160	62,201	85,308	150,718	336,054	1,167,903
1974	380,952	211,052	65,945	91,777	178,496	382,564	1,310,786
1975	406,490	224,968	66,313	95,885	177,806	409,428	1,380,890
Average Annual Growth Rate (%)							
1960 - 1970	8.3	6.1	16.2	3.6	12.0	9.6	8.6
1970 - 1975	10.5	8.6	1.4	6.3	4.8	12.7	9.1

Source: *1 ESTUDIO CENTROAMERICANO DE TRANSPORTE
*2 DIRECCION GENERAL DE AERONAUTICA CIVIL, REPUBLICA DE HONDURAS

Table 2A-11 PAST DEVELOPMENT OF DOMESTIC PASSENGERS TRAFFIC AT INTERNATIONAL AIRPORTS IN CENTRAL AMERICA

(1965 - 1975) (persons)

	Guatemala*1	San Pedro Sula*2	Tegucigalpa*2	Managua*1	San Jose*1	Total
1965	42,350	55,591	63,171	31,882	94,154	287,148
1966	44,900	70,561	77,935	32,733	97,887	324,016
1967	47,812	75,262	86,432	34,006	103,850	347,362
1968	42,535	87,515	101,789	19,234	122,000	373,073
1969	36,432	110,585	112,255	18,954	130,893	409,119
1970	29,464	138,591	133,126	25,991	150,651	477,823
1971	24,043	94,952	93,739	30,252	185,259	428,245
1972	34,808	56,126	64,532	22,477	196,950	374,893
1973	47,754	40,973	57,436	20,324	202,332	368,819
1974	66,670	42,769	56,486	24,309	212,507	402,741
1975	79,500	35,591	42,899	27,963	242,817	428,770
Average Annual Growth Rate (%)						
1965 - 1970	-7.0	20.0	16.1	-4.0	9.9	10.7
1970 - 1975	22.0	-23.8	-20.3	1.5	10.0	-2.1

Source: *1 ESTUDIO CENTROAMERICANO DE TRANSPORTE
*2 DIRECCION GENERAL DE AERONAUTICA CIVIL, REPUBLICA DE HONDURAS

Table 2A-12 PAST DEVELOPMENT OF INTERNATIONAL CARGO TRAFFIC AT INTERNATIONAL AIRPORTS IN CENTRAL AMERICA

(1965 - 1975) (tons)

	Guatemala*1	El Salvador*1	San Pedro Sula*2	Tegucigalpa*2	Managua*1	San Jose*1	Total
1965	7,991	4,154	1,514	1,433	5,748	3,430	24,270
1966	7,927	5,004	2,251	1,811	6,008	3,821	26,822
1967	8,975	4,605	1,798	2,439	5,881	9,081	32,779
1968	10,166	4,667	2,496	2,678	11,086	6,086	37,179
1969	13,128	6,502	4,093	3,400	7,264	6,466	40,853
1970	9,788	9,656	3,333	3,874	10,159	8,818	45,628
1971	9,995	7,020	3,609	3,059	10,508	9,569	43,760
1972	17,192	7,995	3,342	2,764	11,078	10,511	52,882
1973	13,065	7,083	3,193	2,753	14,094	11,157	51,345
1974	14,455	11,232	3,326	3,409	16,565	13,690	62,677
1975	15,407	11,098	3,523	3,182	16,552	15,300	65,062
Average Annual Growth Rate (%)							
1965 - 1970	4.1	18.4	17.0	22.0	12.1	20.8	13.5
1970 - 1975	9.5	2.8	1.1	-3.9	10.3	11.7	7.4

Source: *1 ESTUDIO CENTROAMERICANO DE TRANSPORTE

*2 DIRECCION GENERAL DE AERONAUTICA CIVIL, REPUBLICA DE HONDURAS

Table 2A-13 PAST DEVELOPMENT OF DOMESTIC CARGO TRAFFIC AT INTERNATIONAL AIRPORTS IN CENTRAL AMERICA

(1965 - 1975) (tons)

	Guatemala*1	San Pedro Sula*2	Tegucigalpa*2	Managua*1	San Jose*1	Total
1965	3,647	1,832	2,404	3,327	6,400	17,610
1966	4,477	2,897	3,107	3,547	6,430	20,458
1967	4,533	2,922	4,338	3,336	6,040	21,169
1968	4,611	2,770	4,202	3,560	6,680	21,823
1969	3,955	3,887	4,829	3,483	8,100	24,254
1970	3,840	4,288	4,304	4,708	10,880	28,020
1971	2,453	3,340	3,581	3,267	8,200	20,841
1972	1,567	1,926	2,216	2,264	4,460	12,433
1973	855	1,275	1,873	2,292	5,430	11,725
1974	830	900	1,491	2,880	4,960	11,061
1975	...	550	859	...	...	...
Average Annual Growth Rate (%)						
1965-74	-15.2	-7.6	-5.2	-1.6	-2.8	-5.0

Source: *1 ESTUDIO CENTROAMERICANO DE TRANSPORTE

*2 DIRECCION GENERAL DE AERONAUTICA CIVIL, REPUBLICA DE HONDURAS

(....) Not Available

Table 2A-14 PAST DEVELOPMENT OF INTERNATIONAL EMBARKING & DISEMBARKING PASSENGER TRAFFIC IN THE REPUBLIC OF HONDURAS

(1960 - 1977) (persons)

Air-port / Year	Tegucigalpa	San Pedro Sula	La Ceiba	Total
1960	49,583	13,814	-	63,397
1961	45,342	13,668	-	59,010
1962	45,130	14,206	-	59,336
1963	39,116	26,510	30	65,656
1964	43,434	19,493	68	62,995
1965	48,650	25,514	1,235	75,399
1966	46,744	38,516	1,717	86,977
1967	46,622	36,808	1,590	85,020
1968	65,922	49,547	1,784	117,253
1969	70,804	56,708	1,848	129,360
1970	70,654	61,775	2,119	134,548
1971	75,957	54,910	2,765	133,632
1972	80,440	52,743	6,066	139,249
1973	85,308	62,201	9,062	156,571
1974	91,777	65,945	8,224	165,946
1975	95,885	66,313	7,886	170,084
1976	98,032	74,396	7,857	180,285
1977	112,473	77,580	12,897	202,950
Average Annual Growth Rate (%)				
			('65- '70)	
1960 - 1970	3.6	16.2	11.4	7.8
1970 - 1977	6.9	3.3	29.4	6.0

Source: DIRECCION GENERAL DE AERONAUTICA CIVIL

Table 2A-15 PAST DEVELOPMENT OF DOMESTIC EMBARKING & DISEMBARKING PASSENGER TRAFFIC IN THE REPUBLIC OF HONDURAS

(1960 - 1977) (persons)

Year \ Airport	Tegucigalpa	San Pedro Sula	La Ceiba	Others	Total
1960	41,857	36,942	23,629	29,679	132,107
1961	41,077	35,717	21,577	27,648	126,019
1962	39,155	30,706	18,845	29,701	118,407
1963	47,045	40,063	29,593	34,036	150,737
1964	54,284	45,478	31,479	40,275	171,516
1965	63,171	55,591	44,421	45,601	208,784
1966	77,935	70,561	49,668	48,223	246,387
1967	86,432	75,262	48,612	48,565	258,871
1968	101,789	87,515	55,531	44,320	289,155
1969	112,255	110,585	83,962	75,122	381,924
1970	133,126	138,591	123,452	111,976	507,145
1971	93,739	94,952	94,576	98,264	381,531
1972	64,532	56,126	74,065	93,547	288,270
1973	57,436	40,973	73,483	106,362	278,254
1974	56,486	42,769	70,921	97,467	267,643
1975	42,899	35,591	54,011	69,483	201,984
1976	44,753	38,064	75,126	90,645	248,588
1977	53,275	38,979	87,806	102,468	282,528
Average Annual Growth Rate (%)					
1960 - 1970	12.2	14.1	18.0	14.2	15.2
1970 - 1977	-12.3	-16.6	-4.8	-1.3	-8.0

Source: DIRECCION GENERAL DE AERONAUTICA CIVIL

Table 2A-16 PAST DEVELOPMENT OF INTERNATIONAL LOADED & UNLOADED CARGO IN THE REPUBLIC OF HONDURAS

(1960 - 1977) (tons)

Airport / Year	Tegucigalpa	San Pedro Sula	La Ceiba	Total
1960	1,545	651	-	2,196
1961	1,396	972	-	2,368
1962	1,587	1,127	-	2,714
1963	1,477	2,281	-	3,758
1964	1,589	1,345	-	2,934
1965	1,433	1,514	25	2,972
1966	1,811	2,251	26	4,088
1967	2,439	1,798	22	4,259
1968	2,678	2,496	54	5,228
1969	3,400	4,093	54	7,547
1970	3,874	3,333	56	7,263
1971	3,059	3,609	103	6,771
1972	2,764	3,342	188	6,294
1973	2,753	3,193	192	6,138
1974	3,409	3,326	263	6,998
1975	3,182	3,523	148	6,853
1976	4,665	4,384	289	9,338
1977	5,112	5,261	397	10,770
Average Annual Growth Rate (%)				
			('65-'70)	
1960 - 1970	9.6	17.7	17.5	12.7
1970 - 1977	4.0	6.7	32.3	5.8

Source: DIRECCION GENERAL DE AERONAUTICA CIVIL

Table 2A-17 PAST DEVELOPMENT OF DOMESTIC LOADED & UNLOADED CARGO IN THE REPUBLIC OF HONDURAS

(1960 - 1977) (tons)

Year \ Airport	Tegucigalpa	San Pedro Sula	La Ceiba	Others	Total
1960	2,307	1,706	2,274	1,199	7,486
1961	2,267	1,756	1,925	1,226	7,174
1962	2,157	1,581	2,179	952	6,869
1963	2,288	2,137	2,382	915	7,722
1964	2,641	2,110	2,446	1,242	8,439
1965	2,404	1,832	2,478	1,225	7,939
1966	3,107	2,897	2,997	1,203	10,204
1967	4,338	2,922	2,785	840	10,885
1968	4,202	2,770	2,589	2,931	12,492
1969	4,829	3,887	3,588	9,763	22,067
1970	4,304	4,228	3,639	3,154	15,325
1971	3,581	3,340	3,762	2,835	13,518
1972	2,216	1,926	2,065	5,804	12,011
1973	1,873	1,275	1,719	3,128	7,995
1974	1,491	900	1,446	3,592	7,429
1975	859	550	870	1,411	3,690
1976	759	426	837	1,214	3,236
1977	578	338	868	1,440	3,224
Average Annual Growth Rate (%)					
1960 - 1970	6.4	9.5	4.8	10.2	7.4
1970 - 1977	-25.0	-30.3	-18.5	-10.6	-20.0

Source: DIRECCION GENERAL DE AERONAUTICA CIVIL

Table 2A-18 INTERNATIONAL EMBARKING, DISEMBARKING & TRANSIT PASSENGERS BY ROUTE AT TONCONTIN AIRPORT

(1970 - 1977) (persons)

Route		1970	1971	1972	1973	1974	1975	1976	1977
Toncontín - Miami	Embarking & Disembarking	11,405	11,492	14,605	16,245	17,698	18,626	19,705	23,069
	Transit	-	-	-	-	-	-	-	-
	Total	11,405	11,492	14,605	16,245	17,698	18,626	19,705	23,069
Toncontín - Mexico	Embarking & Disembarking	6,774	6,944	7,404	7,493	7,344	7,817	7,611	8,943
	Transit	6,057	6,000	5,900	5,412	5,343	5,506	5,340	4,770
	Total	12,831	12,944	13,304	12,905	12,687	13,323	12,951	13,713
Toncontín - Panama	Embarking & Disembarking	2,478	4,199	5,074	5,823	7,195	8,033	9,561	10,793
	Transit	690	1,254	1,732	2,005	3,281	3,310	3,546	3,922
	Total	3,168	5,453	6,806	7,828	10,476	11,343	13,107	14,715
Toncontín - San Andres	Embarking & Disembarking	1,721	2,110	2,076	2,553	2,597	3,015	4,023	4,260
	Transit	1,885	2,264	2,261	2,720	3,954	5,531	4,565	4,472
	Total	3,606	4,374	4,337	5,273	6,551	8,546	8,588	8,732
Toncontín - San Jose	Embarking & Disembarking	10,436	10,087	9,482	10,457	11,327	10,671	10,242	11,693
	Transit	7,201	9,942	9,649	9,907	13,104	12,866	12,967	14,258
	Total	17,637	20,029	19,131	20,364	24,431	23,537	23,209	25,951
Toncontín - Managua	Embarking & Disembarking	9,017	10,359	10,281	7,199	8,806	9,619	9,759	10,342
	Transit	3,629	3,113	2,783	1,966	5,038	6,001	6,845	8,287
	Total	12,646	13,472	13,064	9,165	13,844	15,620	16,604	18,629
Toncontín - Guatemala	Embarking & Disembarking	21,652	22,650	22,871	25,258	25,029	24,386	22,684	26,072
	Transit	7,987	8,014	6,548	7,823	12,738	9,044	6,653	5,576
	Total	29,639	30,664	29,419	32,081	37,767	33,430	29,337	31,648
Toncontín - Belize	Embarking & Disembarking	1,193	1,207	1,599	1,660	1,928	1,961	1,760	1,188
	Transit	2,089	1,913	1,947	1,656	1,821	2,125	1,962	1,356
	Total	3,282	3,120	3,546	3,316	3,749	4,086	3,722	2,544
Toncontín - New Orleans	Embarking & Disembarking	5,972	6,903	7,000	7,859	9,019	11,724	12,627	15,895
	Transit	2,393	3,127	3,768	3,115	5,053	8,704	10,525	12,467
	Total	8,365	10,030	10,768	10,974	14,072	20,428	23,152	28,362
Non-Scheduled	Embarking & Disembarking	6	6	48	761	834	33	60	218
Total	Embarking & Disembarking	70,654	75,957	80,440	85,308	91,777	95,885	98,032	112,473
	Transit	31,931	35,627	34,588	34,604	50,332	53,087	52,403	55,108
	Total	102,585	111,584	115,028	119,912	142,109	148,972	150,435	167,581

Source: DIRECCION GENERAL DE AERONAUTICA CIVIL

Table 2A-19 DOMESTIC EMBARKING, DISEMBARKING & TRANSIT PASSENGERS BY ROUTE AT TONCONTIN AIRPORT

(persons)

Route		1970	1971	1972	1973	1974	1975	1976	1977
Toncontín - San Pedro Sula	Embarking & Disembarking	78,751	49,349	25,698	22,260	20,914	20,353	21,922	23,720
	Transfer*	10,902	10,999	9,750	11,618	13,782	15,019	15,320	16,435
	Total	89,653	60,348	35,448	33,878	34,696	35,372	37,242	40,155
" - La Ceiba	Embarking & Disembarking	23,860	17,305	15,233	12,548	13,353	10,035	11,377	16,126
	Transfer *	113	198	304	1,132	674	786	803	1,241
	Total	23,973	17,503	15,537	13,680	14,027	10,821	12,180	17,367
" - Tela	Embarking & Disembarking	2,383	1,880	761	34	145	54	4	-
" - Utila	"	85	400	503	578	314	216	342	603
" - Roatan	"	1,709	786	1,427	1,846	2,103	1,428	1,754	2,635
" - Guanaja	"	1,009	811	911	1,185	836	792	682	824
" - Tocoa	"	292	361	947	1,083	988	861	953	1,221
" - Trujillo	"	1,524	1,241	1,575	1,618	1,347	928	899	1,013
" - Coyoles	"	628	2,517	2,584	2,591	1,812	377	1,552	3,390
" - Victoria	"	998	886	902	1,069	988	397	197	-
" - Sulaco	"	1,000	800	570	877	725	223	-	-
" - Yoro	"	1,047	1,040	698	642	903	150	-	-
" - Juticalpa	"	2,461	2,170	2,423	2,685	2,596	1,557	1,053	-
" - Catacamas	"	1,276	1,354	1,134	1,087	1,053	662	453	-
" - San Esteban	"	220	249	233	249	357	156	113	-
" - Limas	"	-	-	103	80	68	17	-	-
" - La Union	"	40	44	36	39	34	36	74	20
" - Olanchito	"	1,809	1,055	748	624	1,157	1,141	667	422
" - Gualaco	"	66	93	47	84	50	8	-	-
" - Ahuas	"	307	383	320	347	457	376	189	53
" - Brus Laguna	"	575	643	662	946	912	706	549	679
" - PTO. Lempira	"	1,275	1,273	1,170	1,237	1,411	1,268	1,388	1,582
" - Isletas	"	278	137	53	50	-	-	-	-
" - Occidente	"	6,484	3,317	1,068	148	20	-	-	176
Non-Scheduled	"	5,049	5,645	4,726	3,529	3,943	1,158	585	811
Total	Embarking & Disembarking	113,126	93,739	64,532	57,436	56,486	42,899	44,753	53,275
	Transfer*	11,015	11,197	10,054	12,750	14,456	15,805	16,123	17,676
	Total	144,141	104,936	74,586	70,186	70,942	58,704	60,876	70,951

* Transfer Passengers to/from International Route

Source: DIRECCION GENERAL DE AERONAUTICA CIVIL

Table 2A-20 INTERNATIONAL LOADED & UNLOADED CARGO BY ORIGIN/DESTINATION AT TONCONTIN AIRPORT

(1970 - 1976) (tons)

Origin/Destination	1970	1971	1972	1973	1974	1975	1976
Toncontín/Miami	2,132.5	1,646.4	1,520.9	1,572.0	1,717.0	1,599.6	2,115.0
" /Mexico	161.0	258.0	216.7	193.8	245.9	223.5	240.2
" /Panama	428.5	358.5	340.8	190.9	510.2	570.9	881.5
" /San Andres	44.0	30.7	17.4	6.9	2.5	12.3	64.1
" /San José	189.4	145.8	152.8	175.8	173.6	113.1	217.2
" /Managua	69.9	44.3	56.2	28.9	51.4	48.5	55.9
" /Guatemala	628.2	451.2	368.5	374.9	497.6	388.6	720.9
" /Belize	7.6	11.7	12.9	29.4	9.4	19.6	7.2
" /New Orleans	212.3	112.7	78.1	180.3	201.6	205.7	363.4
Total	3,873.4	3,059.3	2,764.3	2,752.9	3,409.2	3,181.8	4,665.4

Source: DIRECCION GENERAL DE AERONAUTICA CIVIL

Table 2A-21 INTERNATIONAL LOADED CARGO BY ORIGIN-DESTINATION AT TONCONTIN AIRPORT

(1970 - 1976) (tons)

Origin - Destination	1970	1971	1972	1973	1974	1975	1976
Toncontín - Miami	569.7	366.7	288.6	379.3	429.4	312.0	366.0
" - Mexico	11.1	7.1	16.5	16.1	12.6	7.7	9.1
" - Panama	52.8	52.4	39.9	23.0	46.4	19.6	40.4
" - San Andres	24.2	10.5	10.3	3.5	2.5	1.0	63.8
" - San José	41.6	28.3	26.2	21.4	44.6	30.6	45.0
" - Managua	38.9	20.3	13.7	21.5	31.1	33.5	29.5
" - Guatemala	160.4	37.4	31.2	35.7	31.8	30.5	40.1
" - Belize	5.0	7.6	11.1	28.2	7.1	16.6	3.0
" - New Orleans	12.6	8.8	9.6	10.2	13.0	21.9	12.1
Total	916.3	539.1	447.1	538.9	618.5	473.4	609.0

Source: DIRECCION GENERAL DE AERONAUTICA CIVIL

Table 2A-22 INTERNATIONAL UNLOADED CARGO BY ORIGIN-DESTINATION AT TONCONTIN AIRPORT

(1970 - 1976) (tons)

Origin - Destination	1970	1971	1972	1973	1974	1975	1976
Miami - Toncontín	1,562.8	1,279.7	1,232.3	1,192.7	1,287.6	1,287.6	1,749.0
Mexico - "	149.9	250.9	200.2	177.7	233.3	215.8	231.1
Panama - "	375.7	306.1	300.9	167.9	463.8	551.3	841.1
San Andres - "	19.8	20.2	7.1	3.4	-	11.3	0.3
San Jose - "	147.8	117.5	126.6	154.4	129.0	82.5	172.2
Managua - "	31.0	24.0	42.5	7.4	20.3	15.0	26.4
Guatemala - "	467.8	413.8	337.3	339.2	465.8	358.1	680.8
Belize - "	2.6	4.1	1.8	1.2	2.3	3.0	4.2
New Orleans - "	199.7	103.9	68.5	170.1	188.6	183.8	351.3
Total	2,957.1	2,520.2	2,317.2	2,214.0	2,790.7	2,708.4	4,056.4

Source: DIRECCION GENERAL DE AERONAUTICA CIVIL

Table 2A-23 DOMESTIC LOADED & UNLOADED CARGO BY ORIGIN/DESTINATION AT TONCONTIN AIRPORT

(1970 - 1976) (tons)

Origin/Destination	1970	1971	1972	1973	1974	1975	1976
Toncontín/San Pedro Sula	2,033.4	1,362.7	776.1	523.8	294.4	146.8	174.9
" /La Ceiba	1,035.4	972.4	426.7	304.0	303.1	176.5	155.2
" /Tela	60.4	68.5	41.8	3.8	13.9	4.8	2.3
" /Utila	0.9	2.7	2.4	5.6	4.0	3.4	11.1
" /Roatan	11.6	16.0	27.9	23.5	29.6	21.1	39.0
" /Guanaja	26.6	23.0	32.9	55.2	63.2	37.5	39.2
" /Tocoa	15.6	19.1	31.8	57.5	37.1	20.9	17.6
" /Trujillo	54.1	70.1	86.7	82.1	72.3	37.3	26.5
" /Coyoles	5.0	37.4	30.9	39.1	32.2	20.0	61.1
" /Victoria	114.3	107.9	100.4	85.4	67.9	41.6	17.4
" /Sulaco	39.1	24.1	11.4	24.0	10.0	3.4	-
" /Yoro	44.5	38.6	31.5	35.6	33.9	8.7	-
" /Juticalpa	130.8	129.0	104.9	91.0	64.1	44.8	27.9
" /Catacamas	63.7	75.0	63.6	75.0	54.6	35.2	19.7
" /San Esteban	72.1	78.9	49.1	39.8	46.3	19.0	10.1
" /Limas	1.9	8.0	4.1	6.5	3.3	0.4	-
" /La Union	6.2	5.4	3.3	1.9	1.2	1.2	2.6
" /Olanchito	125.3	123.1	121.2	164.3	146.9	101.8	73.5
" /Gualaco	28.2	33.7	31.2	24.3	12.4	0.3	-
" /Ahuas	71.0	59.3	52.7	76.9	51.0	42.3	19.5
" /Brus Laguna	45.9	35.1	33.4	37.2	43.6	17.4	7.3
" /PTO. Lempira	84.4	107.5	66.7	87.5	94.4	66.6	45.8
" /Isletas	1.6	1.4	0.3	6.0	7.0	8.6	8.5
" /Occidente	233.2	181.1	85.2	22.9	4.8	-	-
Total	4,305.2	3,580.0	2,216.2	1,872.9	1,491.2	859.6	759.2

Source: DIRECCION GENERAL DE AERONAUTICA CIVIL

Table 2A-24 DOMESTIC LOADED CARGO BY ORIGIN/DESTINATION AT TONCONTIN AIRPORT

(1970 - 1976) (tons)

Origin - Destination	1970	1971	1972	1973	1974	1975	1976
Toncontín - San Pedro Sula	1,020.3	698.1	439.7	238.7	162.2	76.3	112.3
" - La Ceiba	641.6	532.4	267.1	182.3	151.3	101.5	125.1
" - Tela	33.5	45.4	27.8	3.1	9.4	2.4	1.9
" - Utila	0.0	1.8	1.0	2.0	1.6	0.8	6.2
" - Roatán	7.8	11.2	15.3	13.2	15.6	13.1	26.3
" - Guanaja	13.8	10.1	16.2	20.2	29.0	19.0	28.3
" - Tocoa	8.8	14.3	25.9	44.6	19.3	8.8	7.1
" - Trujillo	36.0	51.2	67.7	61.1	48.1	22.3	17.1
" - Coyoles	2.1	12.7	16.0	21.1	12.7	7.4	23.6
" - Victoria	85.6	67.7	64.8	61.4	41.2	28.9	13.8
" - Sulaco	34.1	16.6	8.9	19.8	8.8	3.2	-
" - Yoro	32.0	29.3	23.2	25.3	26.6	6.8	-
" - Juticalpa	62.5	64.1	68.7	65.1	52.4	39.3	25.4
" - Catacamas	34.3	23.2	22.5	43.6	26.9	17.1	14.2
" - San Esteban	34.3	30.8	23.8	27.4	15.1	9.7	8.7
" - Limas	0.8	3.3	3.2	4.4	2.2	0.2	-
" - La Union	6.1	3.8	2.5	1.6	1.0	1.1	2.2
" - Olanchito	98.3	92.8	91.9	103.0	67.0	53.7	35.1
" - Gualaco	18,8	16.2	15.5	13.4	11.2	0.2	-
" - Ahuas	52.0	47.8	40.9	61.1	43.4	24.9	13.1
" - Brus Laguna	36.9	27.0	27.8	27.9	29.0	13.1	6.2
" - PTO. Lempira	61.4	72.2	59.9	53.0	68.1	42.1	40.3
" - Isletas	-	-	-	4.1	7.0	8.6	8.5
" - Occidente	173.6	135.8	74.1	20.2	4.5	-	-
Total	2,494.6	2,007.8	1,404.4	1,117.6	853.6	500.5	515.4

Source: DIRECCION GENERAL DE AERONAUTICA CIVIL

Table 2A-25 DOMESTIC UNLOADED CARGO BY ORIGIN-DESTINATION AT TONCONTIN AIRPORT

(1970 - 1976) (tons)

Origin - Destination	1970	1971	1972	1973	1974	1975	1976
San Pedro Sula - Toncontín	1,013.1	664.6	336.4	285.1	132.2	70.5	62.6
La Ceiba - "	393.8	440.0	159.6	121.7	151.8	75.0	30.1
Tela - "	26.9	23.1	14.0	0.7	4.5	2.4	0.4
Utila - "	0.9	0.9	1.4	3.6	2.4	2.6	4.9
Roatan - "	3.8	4.8	12.6	10.3	14.0	8.0	12.7
Guanaja - "	12.8	12.9	16.7	35.0	34.2	18.5	10.9
Tocoa - "	6.8	4.8	5.9	12.9	17.8	12.1	10.5
Trujillo - "	18.1	18.9	19.0	21.0	24.2	15.0	9.4
Coyoles - "	2.9	24.7	14.9	18.0	19.5	12.6	37.5
Victoria - "	28.7	40.2	35.6	24.0	26.7	12.7	3.6
Sulaco - "	5.0	7.5	2.5	4.2	1.2	0.2	-
Yoro - "	12.5	9.3	8.3	10.3	7.3	1.9	-
Juticalpa - "	68.3	64.9	36.2	25.9	11.7	5.5	2.5
Catacamas - "	29.4	51.8	41.1	31.4	27.7	18.1	5.5
San Esteban - "	37.8	48.1	25.3	12.4	31.2	9.3	1.4
Limas - "	1.1	4.7	0.9	2.1	1.1	0.2	-
La Union - "	0.1	1.6	0.8	0.3	0.2	0.1	0.4
Olanchito - "	27.0	30.3	29.3	61.3	79.9	48.1	38.4
Gualaco - "	9.4	17.5	15.7	10.9	1.2	0.1	-
Ahuas - "	19.0	11.5	11.8	15.8	7.6	17.4	6.4
Brus Laguna - "	9.0	8.1	5.6	9.3	14.6	4.3	1.1
PTO. Lempira - "	23.0	35.3	6.8	34.5	26.3	24.5	5.5
Isletas - "	1.6	1.4	0.3	1.9	-	-	-
Occidente - "	59.6	45.3	11.1	2.7	0.3	-	-
Total	1,810.6	1,572.2	811.8	755.3	637.6	359.1	243.8

Source: DIRECCION GENERAL DE AERONAUTICA CIVIL

Table 2A-26 INTERNATIONAL TRANSIT PASSENGER TRAFFIC BY ORIGIN/DESTINATION AT TONCONTIN AIRPORT

(1977) (persons)

O \ D	MGA	SJO	PTY	ADZ	GUA	MEX	MSY	MIA	SAP	LCE	BZE	TOTAL
MGA				108	167		2,600		1,280	160	34	4,349
SJO					728		4,331		2,350	224	32	7,665
PTY					121		87		1,642	112	52	2,014
ADZ	148				1,537		115		558	142	36	2,536
GUA	131	476	237	1,240			4		757	65		2,910
MEX									2,113		395	2,508
MSY	2,078	3,186	52	14								5,330
MIA												
SAP	1,398	2,604	1,345	511	90	1,787						7,735
LCE	143	242	69	63	21							538
BZE	40	85	205	-	2	475						807
TOTAL	3,938	6,593	1,908	1,936	2,666	2,262	7,137		8,700	703	549	36,392

Source: DIRECCION GENERAL DE AERONAUTICA CIVIL

Table 2A-27 PRESENT AIRLINES' OPERATIONS BY ROUTE TO/FROM TONCONTIN AIRPORT

	Route	Aircraft Type	Number of weekly Operations by Route	Number of weekly Aircraft Movements at Toncontin Airport
1.	SJO⇄MGA⇄TGU⇄SAP⇄BZE⇄MSY	B 737	10	20
2.	SJO⇄MGA⇄TGU⇄LCE⇄SAP⇄MSY	B 737	4	8
3.	TGU⇄MGA⇄SJO	L-188	6	6
4.	GUA⇄TGU⇄PTY	L-188	4	8
5.	GUA⇄TGU⇄ADZ⇄PTY	L-188	10	20
6.	MIA→BZE→TGU→MEX	B 737	3	6
7.	MEX→TGU→SAP→BZE→MIA	B 737	3	6
8.	MIA⇄SAP⇄LCE⇄TGU	B 737	4	4
9.	MIA⇄BZE⇄SAP⇄LCE⇄TGU	B 737	2	2
10.	MIA→SAP→TGU→LCE→SAP→MIA	L-188	1	2
11.	MIA⇄BZE⇄TGU	B 737	2	2
12.	TGU⇄LCE⇄SAP	CV-580	8	8
13.	TGU⇄LCE⇄SAP⇄TGU	CV-580	2	4
14.	LCE⇄OAN⇄TGU	DC-3	2	2
15.	TGU⇄AHU⇄BRL⇄PLP⇄TGU	DC-3	2	2
16.	LCE⇄COY⇄TGU	DC-3	8	8
	Total		71	108
		B 737	28	48
		L-188	21	36
		CV-588	10	12
		DC-3	12	12

Source: Flight Schedules of TAN, SAHSA, AHNSA & LANSA as of February 1978

Table 2A-28 PRESENT AIRCRAFT MOVEMENTS BY TIME PERIOD AT TONCONTIN AIRPORT

Time Period	Sunday			Monday			Tuesday			Wednesday			Thursday			Friday			Saturday			Total		
	Arr.	Dep.	Total	Arr.	Dep.	Total	Arr.	Dep.	Total	Arr.	Dep.	Total	Arr.	Dep.	Total	Arr.	Dep.	Total	Arr.	Dep.	Total	Arr.	Dep.	Total
7:00 - 7:59	1	1	2	1	2	3	1	2	3	1	2	3	1	3	4	1	1	2	1	1	2	7	12	19
8:00 - 8:59	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	1	-	1	1
9:00 - 9:59	2	1	3	2	-	2	3	-	3	2	-	2	2	-	2	-	-	-	2	-	2	13	1	14
10:00 - 10:59	-	1	1	2	3	5	2	2	4	1	3	4	2	2	4	2	1	3	1	2	3	10	14	24
11:00 - 11:59	-	-	-	-	1	1	-	1	1	-	-	-	-	1	1	-	2	2	-	1	1	-	6	6
12:00 - 12:59	-	-	-	-	-	-	-	-	-	-	-	-	1	-	1	-	-	-	-	-	-	1	-	1
13:00 - 13:59	-	-	-	-	1	1	-	1	1	-	1	1	-	-	-	-	-	-	-	-	-	-	3	3
14:00 - 14:59	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
15:00 - 15:59	-	-	-	4	2	6	-	-	-	4	2	6	-	-	-	-	-	-	1	1	2	9	5	14
16:00 - 16:59	2	2	4	1	1	2	2	2	4	1	1	2	2	2	4	3	2	5	2	2	4	13	12	25
17:00 - 17:59	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	1	1	-	1
Total	5	5	10	10	10	20	8	8	16	9	9	18	8	8	16	6	6	12	8	8	16	54	54	108

Source: FLIGHT SCHEDULES OF TAN, SAHSH, AHNSA & LANSA AS OF FEBRUARY, 1978

Table 2A-29 MONTHLY EMBARKING & DISEMBARKING INTERNATIONAL PASSENGERS AT TONCONTIN AIRPORT

(1975 - 1977) (persons)

	Jan.	Feb.	Mar.	Apr.	May.	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	Total
1975													
Embarking	4,086	3,695	3,632	3,532	3,474	4,228	4,369	4,308	3,799	3,659	4,015	4,894	47,691
Disembarking	4,654	3,646	3,881	3,440	3,632	4,179	4,386	4,880	4,049	3,566	3,694	4,187	48,194
Total	8,740	7,341	7,513	6,972	7,106	8,407	8,755	9,188	7,848	7,225	7,709	9,081	95,885
Monthly Coefficient*	1.094	0.919	0.940	0.873	0.889	1.052	1.096	1.150	0.982	0.904	0.965	1.137	12.000
1976													
Embarking	3,845	3,903	3,288	3,729	3,621	3,877	4,834	4,904	3,767	3,764	3,819	5,662	49,013
Disembarking	4,211	3,669	3,300	3,705	3,910	4,417	4,947	4,904	4,043	3,604	4,060	4,246	49,016
Total	8,056	7,572	6,588	7,434	7,531	8,294	9,781	9,808	7,810	7,368	7,879	9,908	98,029
Monthly Coefficient*	0.986	0.927	0.806	0.910	0.922	1.015	1.197	1.201	0.956	0.902	0.964	1.213	12.000
1977													
Embarking	4,447	4,128	4,256	4,186	3,680	4,751	5,475	5,191	4,104	4,241	4,749	6,271	55,479
Disembarking	4,752	4,278	4,790	4,298	3,955	4,757	5,781	5,679	4,600	4,226	4,917	5,737	57,770
Total	9,199	8,406	9,046	8,484	7,635	9,508	11,256	10,870	8,704	8,467	9,666	12,008	113,249
Monthly Coefficient*	0.975	0.891	0.959	0.899	0.809	1.008	1.193	1.152	0.922	0.897	1.024	1.272	12.000
Averaged Monthly Coefficient	1.018	0.912	0.902	0.894	0.873	1.025	1.162	1.168	0.953	0.901	0.984	1.207	12.000

* Average Number of Monthly Passengers = 1.000

Source: DIRECCION GENERAL DE AERONAUTICA CIVIL

Table 2A-30 MONTHLY EMBARKING & DISEMBARKING DOMESTIC PASSENGERS AT TONCONTIN AIRPORT

(1975 - 1977) (persons)

	Jan.	Feb.	Mar.	Apr.	May.	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	Total
1975													
Embarking	2,619	2,210	2,040	2,140	1,857	1,569	1,813	1,955	1,861	1,998	1,816	1,887	23,765
Disembarking	2,308	2,089	2,196	2,107	1,813	2,046	2,046	1,940	1,864	1,906	1,994	2,193	24,502
Total	4,927	4,299	4,236	4,247	3,670	3,615	3,859	3,895	3,725	3,904	3,810	4,080	48,267
Monthly Coefficient*	1.225	1.069	1.053	1.056	0.912	0.899	0.959	0.968	0.926	0.971	0.947	1.014	12.000
1976													
Embarking	1,628	1,769	1,880	1,840	2,127	1,977	1,921	2,007	1,845	1,698	1,962	2,114	22,768
Disembarking	1,659	1,938	1,919	1,834	2,288	2,069	2,127	2,033	1,852	1,740	1,905	2,462	23,826
Total	3,287	3,707	3,799	3,674	4,415	4,046	4,048	4,040	3,697	3,438	3,867	4,576	46,594
Monthly Coefficient*	0.847	0.955	0.978	0.946	1.137	1.042	1.042	1.040	0.952	0.885	0.996	1.178	12.000
1977													
Embarking	2,237	2,221	2,366	2,310	2,313	2,314	2,339	2,498	2,360	2,438	2,638	2,623	28,657
Disembarking	1,789	2,082	2,183	1,832	2,043	2,101	2,154	2,399	2,123	2,201	2,391	2,698	25,996
Total	4,026	4,303	4,549	4,142	4,356	4,415	4,493	4,897	4,483	4,639	5,029	5,321	54,653
Monthly Coefficient*	0.884	0.945	0.999	0.910	0.957	0.969	0.987	1.075	0.984	1.019	1.104	1.168	12.000
Averaged Monthly Coefficient	1.985	0.990	1.010	0.971	1.002	0.970	0.996	1.028	0.954	0.958	1.016	1.120	12.000

* Average Number of Monthly Passengers = 1.000

Source: DIRECCION GENERAL DE AERONAUTICA CIVIL

Table 2A-31 PAST DEVELOPMENT OF NUMBER OF SMALL AIRCRAFT REGISTERED AT TONCONTIN AIRPORT

Year	Number
1966	41
1967	48
1968	53
1969	54
1970	56
1971	64
1972	68
1973	71
1974	76
1975	85
1976	102

Source: DIRECCION GENERAL DE AERONAUTICA CIVIL

Table 2A-32 NUMBER OF EMPLOYEES AT TONCONTIN AIRPORT

(As of March 15, 1978)

Name of the Office	Number
General Direction of Civil Aviation	221
COCESNA	65
TAN-SAHSA	42
AEROSERVICIOS	16
LANSA	2
Post Office	7
Public Health Office	2
Police	23
Immigration Office	11
Customs	48
Quarantine Office	4
Turism Office	4
Cargo Agent	11
Airport Radio Service	3
Gift Shop	7
Restaurant	6
Total	472

Source: DIRECCION GENERAL DE AERONAUTICA CIVIL

APPENDIX 2B

ANNUAL RECORDS OF TRANSPORT

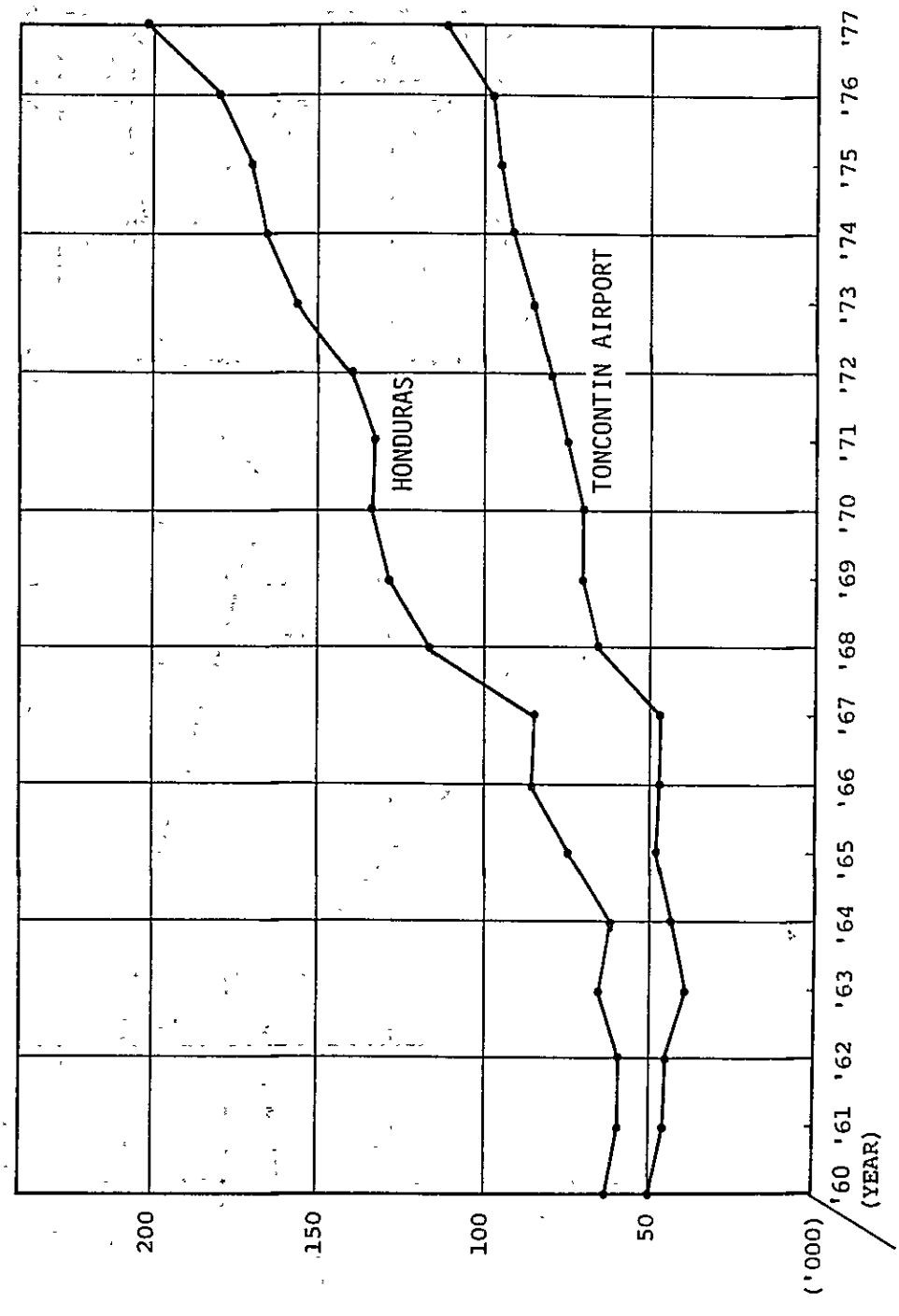


Fig. 2B-1 PAST DEVELOPMENT OF INTERNATIONAL EMBARKING & DISEMBARKING PASSENGER TRAFFIC IN THE REPUBLIC OF HONDURAS

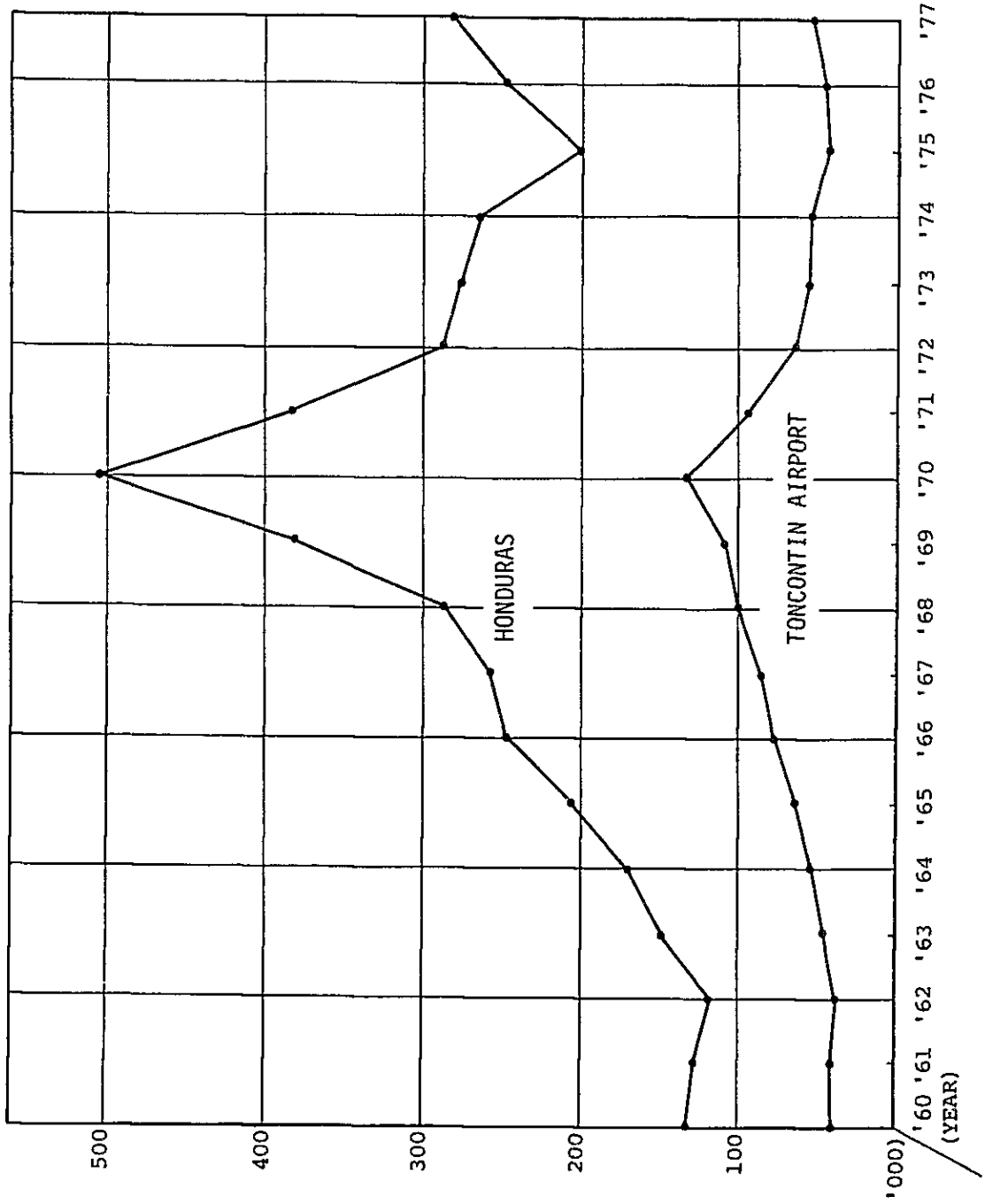


Fig. 2B-2 PAST DEVELOPMENT OF DOMESTIC EMBARKING & DISEMBARKING PASSENGER TRAFFIC IN THE REPUBLIC OF HONDURAS

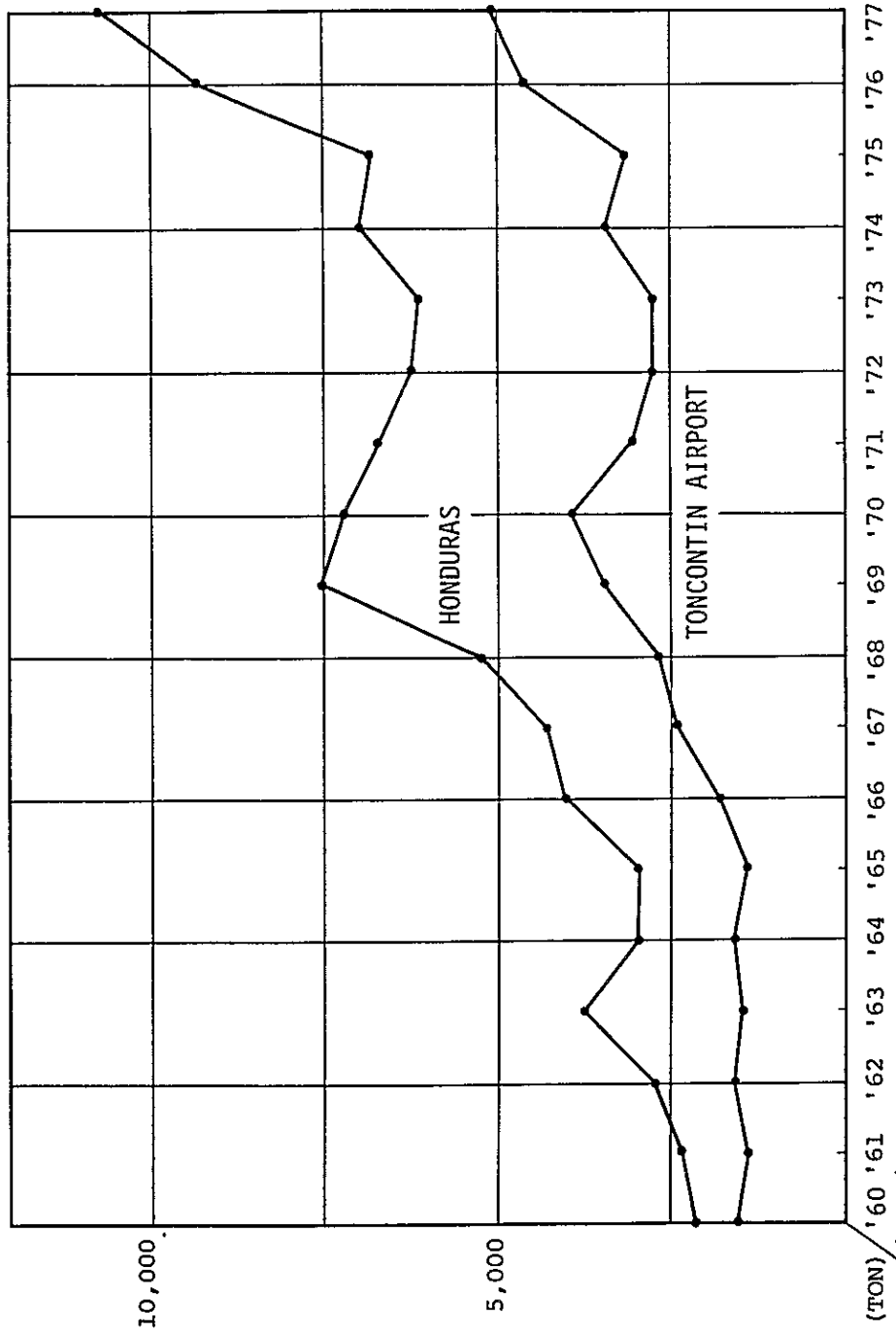


Fig. 2B-3 PAST DEVELOPMENT OF INTERNATIONAL LOADED & UNLOADED CARGO TRAFFIC IN THE REPUBLIC OF HONDURAS

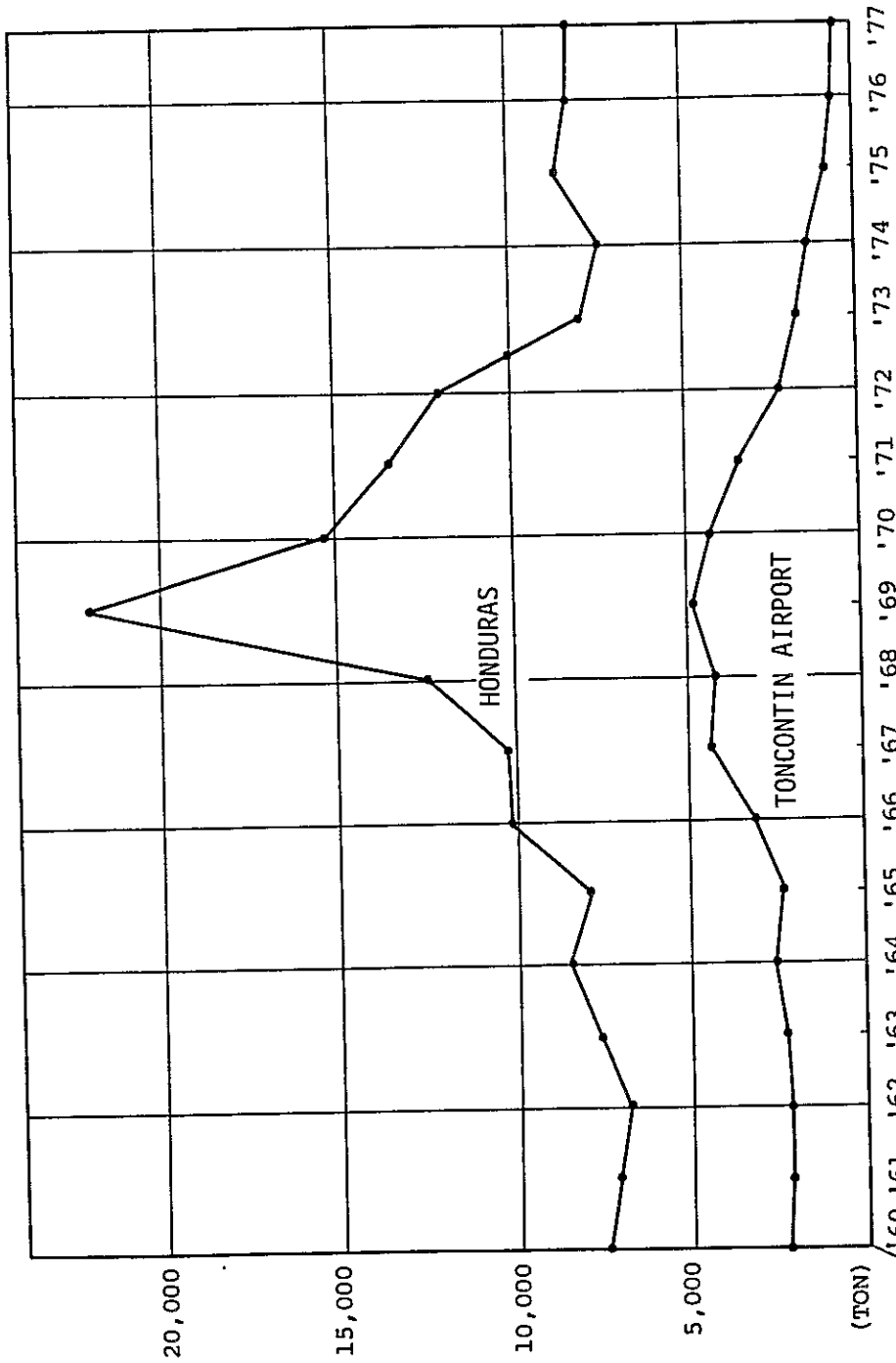


Fig. 2B-4 PAST DEVELOPMENT OF DOMESTIC LOADED & UNLOADED CARGO TRAFFIC IN THE REPUBLIC OF HONDURAS

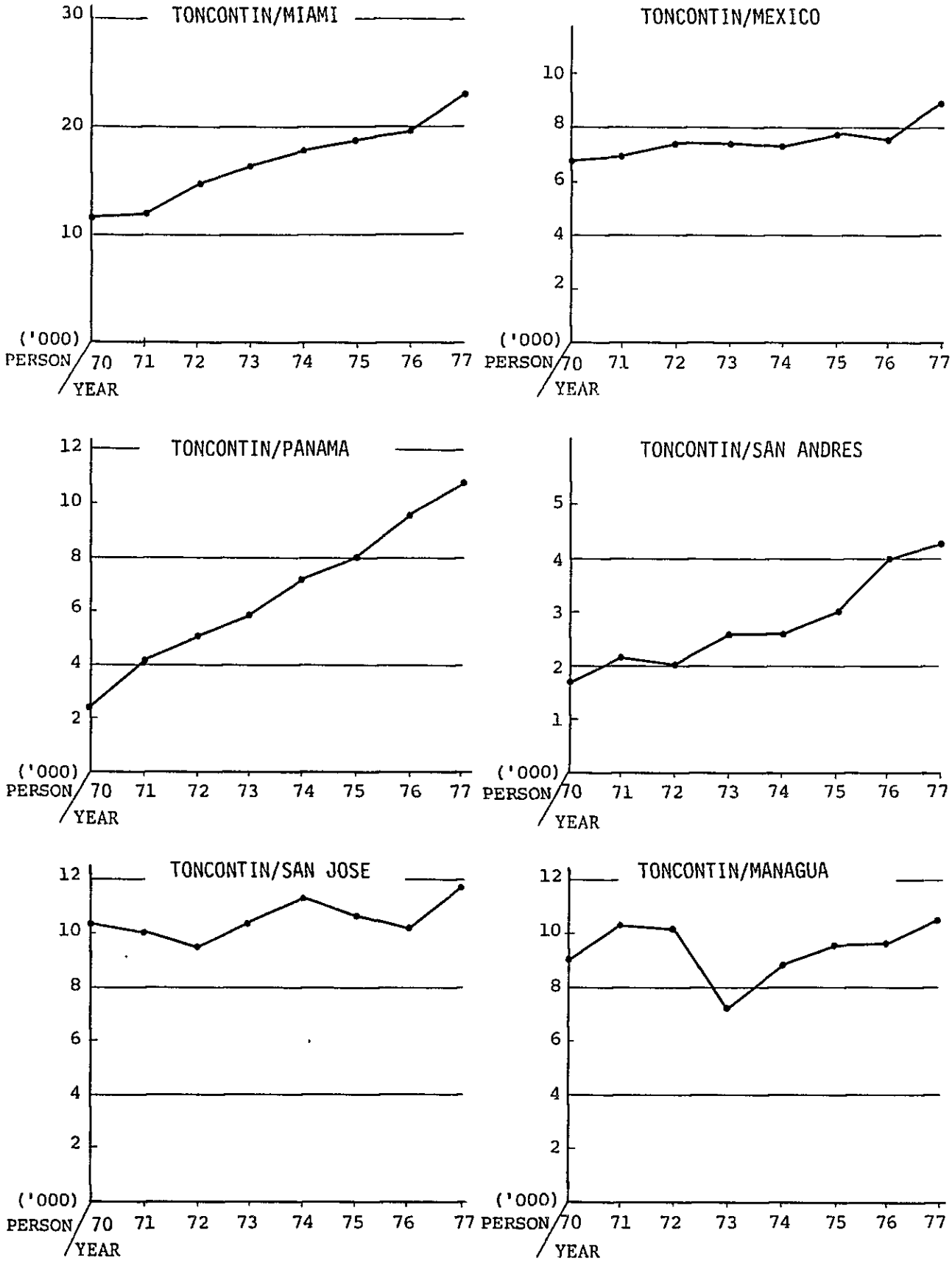


Fig 2B-5 (1) INTERNATIONAL EMBARKING & DISEMBARKING PASSENGERS BY ORIGIN/DESTINATION AT TONCONTIN AIRPORT [1970 - 1977]

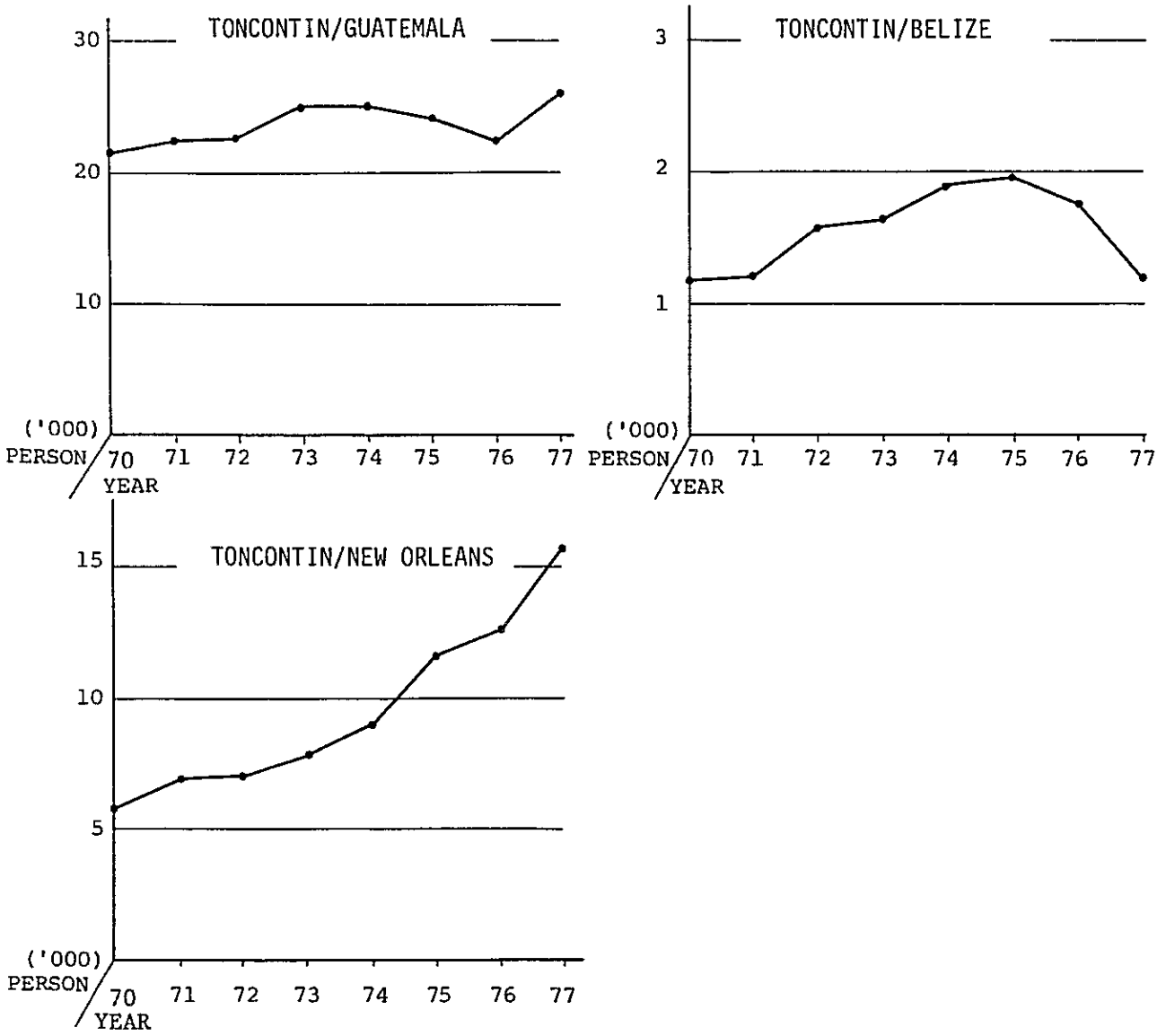


Fig. 2B-5 (2) INTERNATIONAL EMBARKING & DISEMBARKING PASSENGERS BY ORIGIN/DESTINATION AT TONCONTIN AIRPORT [1970 - 1977]

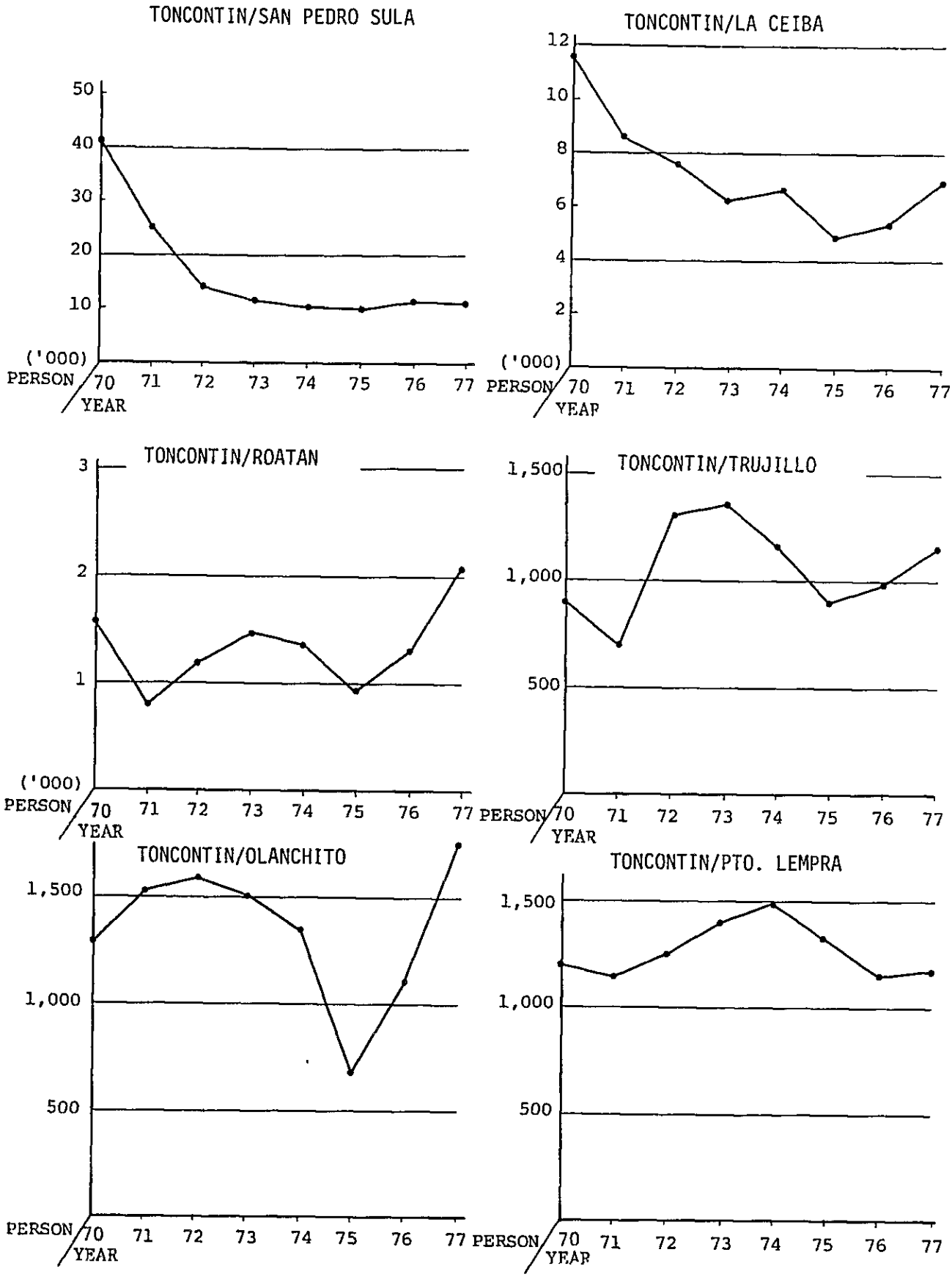


Fig. 2B-6 DOMESTIC EMBARKING & DISEMBARKING PASSENGERS BY ORIGIN/DESTINATION AT TONCONTIN AIRPORT [1970 - 1977]

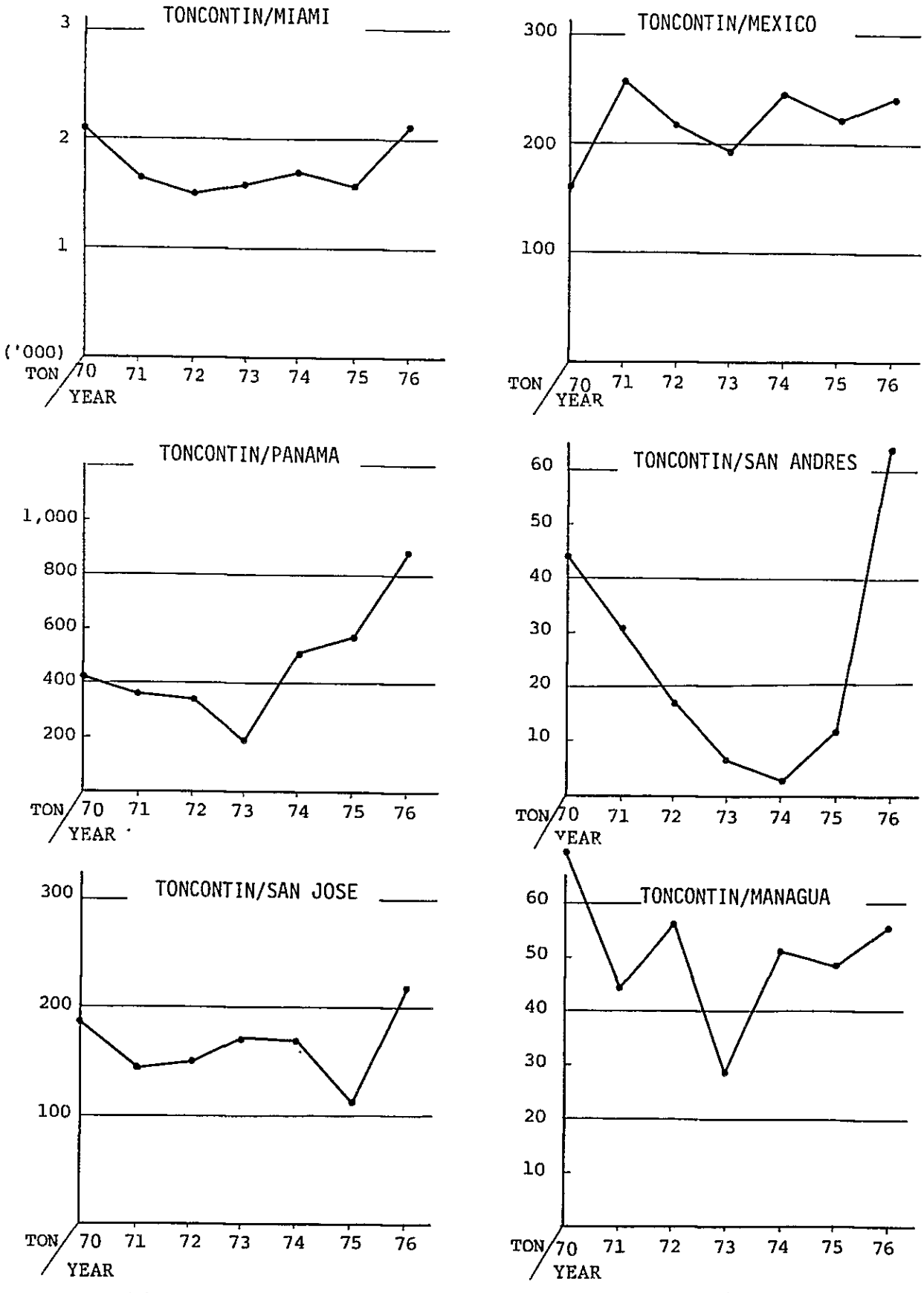
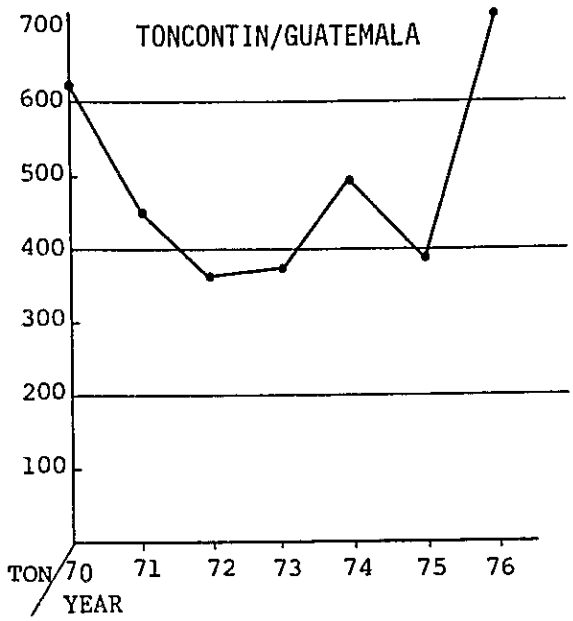
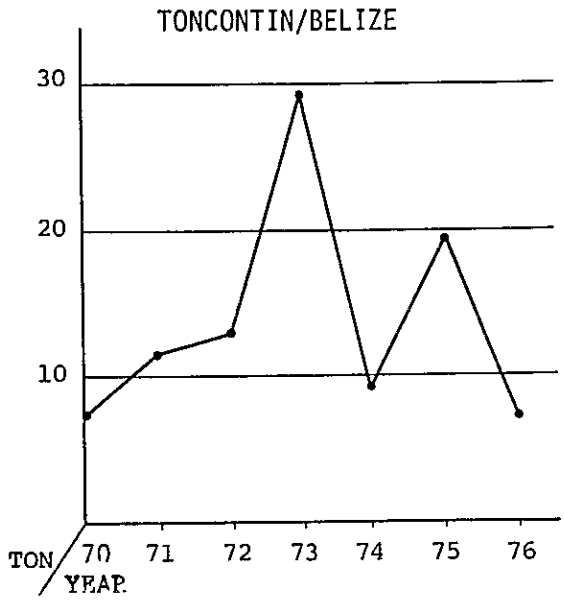


Fig. 2B-7 (1) INTERNATIONAL LOADED & UNLOADED CARGO BY ORIGIN/DESTINATION AT TONCONTIN AIRPORT [1970 - 1976]





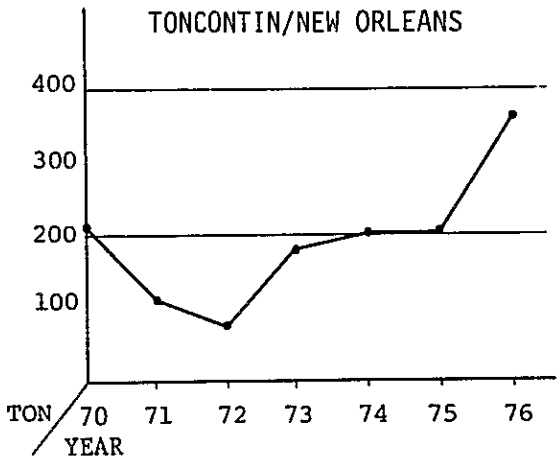


Fig. 2B-7 (2) INTERNATIONAL LOADED & UNLOADED CARGO BY ORIGIN/DESTINATION AT TONCONTIN AIRPORT [1970 - 1976]

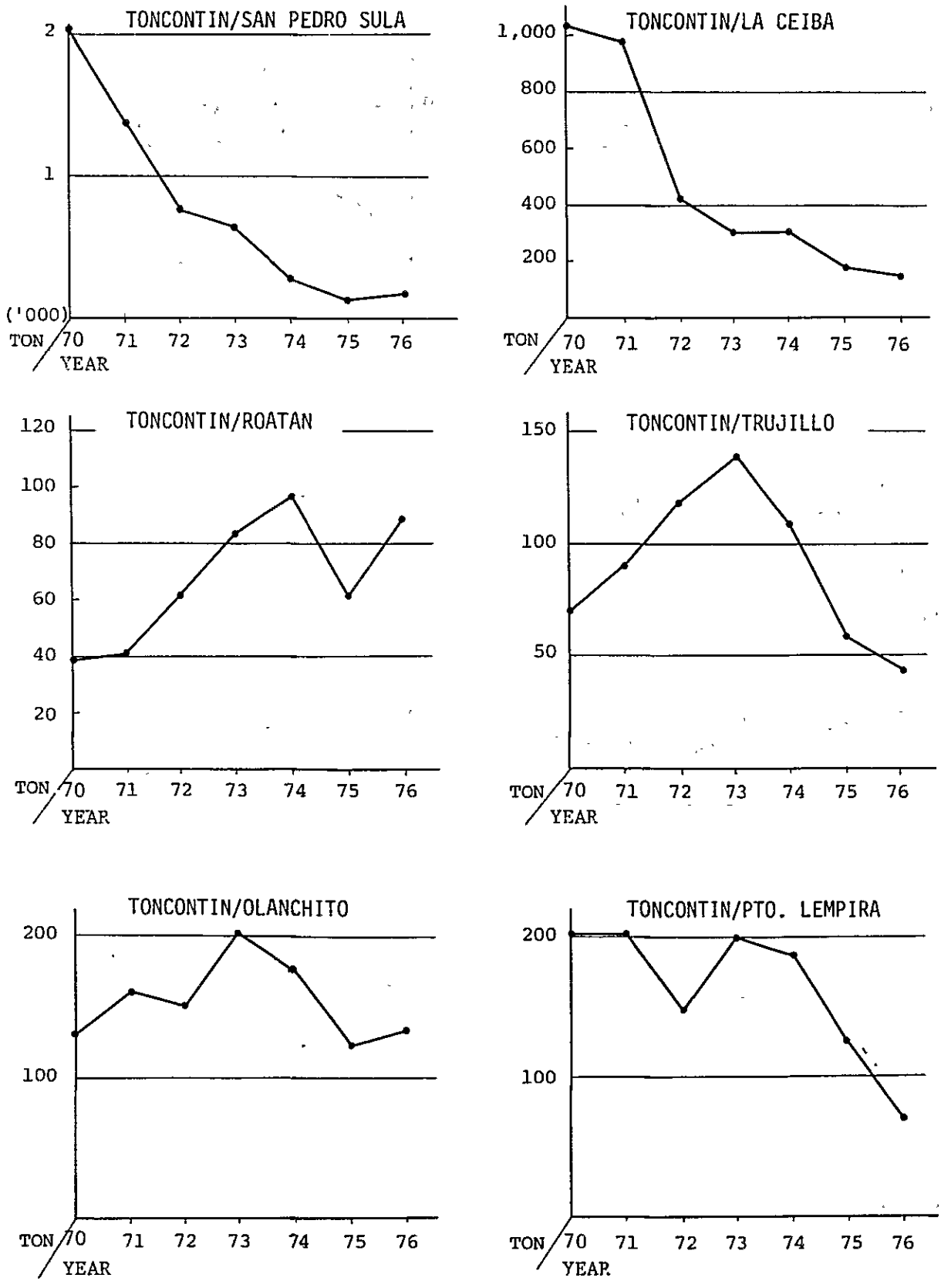


Fig. 2B-8 DOMESTIC LOADED & UNLOADED CARGO BY ORIGIN/DESTINATION AT TONCONTIN AIRPORT [1970 - 1976]

APPENDIX 3A

LISTS OF PROJECTION FORMULA

1. Forecast of International Embarking & Disembarking Passengers in the Republic of Honduras

[Formula 1] $\text{Log } Y_t = -1.1656 + 1.1340 \text{ Log } X_t + 0.4094 \text{ Log } Y_{t-1}$

where: Y_t = International Embarking & Disembarking Passengers in Honduras at year t

X_t = Gross Domestic Product in Honduras at year t

(R = 0.989, DWR = 2.272, n = 18)

2. Forecast of International Embarking & Disembarking Passengers at Toncontin Airport

[Formula 2] $\text{Log } Y_t = -0.9902 + 1.1393 \text{ Log } X_t + 0.3673 \text{ Log } Y_{t-1}$

where: Y_t = International Embarking & Disembarking Passengers at Toncontin Airport at year t

X_t = Gross Domestic Product in Honduras at year t

(R = 0.971, DWR = 1.818, n = 18)

3. Forecast of International Embarking & Disembarking Passengers bt Route at Toncontin Airport

3.1 TGU - MIA Route

[Formula 3] $Y_t = -9,548 + 0.2945 X_t$

where: Y_t = International Embarking & Disembarking Passengers by TGU - MIA Route at year t

X_t = Total International Embarking & Disembarking Passengers at Toncontin Airport at year t

(R = 0.985)

3.2 TGU - MEX Route

[Formula 4] $Y_t = 3{,}513 + 0.0436\ X_t$

where: Y_t = International Embarking & Disembarking Passengers by TGU - MEX Route at year t

X_t = Total International Embarking & Disembarking Passengers at Toncontin Airport at year t

(R = 0.917)

3.3 TGU - PTY Route

[Formula 5] $Y_t = 11{,}356 + 0.2027\ X_t$

where: Y_t = International Embarking & Disembarking Passengers by TGU - PTY Route at year t

X_t = Total International Embarking & Disembarking Passengers at Toncontin Airport at year t

(R = 0.980)

3.4 TGU - ADZ Route

[Formula 6] $Y_t = -2{,}900 + 0.0641\ X_t$

where: Y_t = International Embarking & Disembarking Passengers by TGU - ADZ Route at year t

X_t = Total International Embarking & Disembarking Passengers at Toncontin Airport at year t

(R = 0.931)

3.5 TGU - SJO Route

[Formula 7] $Y_t = 7{,}453 + 0.0349\ X_t$

where: Y_t = International Embarking & Disembarking Passengers by TGU - SJO Route at year t

X_t = Total International Embarking & Disembarking Passengers at Toncontin Airport at year t

(R = 0.607)

3.6 TGU - MGA Route

[Formula 8] $Y_t = 8{,}012 + 0.0159\ X_t$

where: Y_t = International Embarking & Disembarking Passengers by TGU - MGA Route at year t

X_t = Total International Embarking & Disembarking Passengers at Toncontin Airport at year t

(R = 0.446)

3.7 TGU - GUA Route

[Formula 9] $Y_t = 16{,}357 + 0.0841\ X_t$

where: Y_t = International Embarking & Disembarking Passengers by TGU - GUA Route at year t

X_t = Total International Embarking & Disembarking Passengers at Toncontin Airport at year t

(R = 0.670)

3.8 TGU - BZE Route

[Formula 10] $Y_t = 1{,}042 + 0.0059\ X_t$

where: Y_t = International Embarking & Disembarking Passengers by TGU - BZE Route at year t

X_t = Total International Embarking & Disembarking Passengers at Toncontin Airport at year t

(R = 0.413)

3.9 TGU - MSY Route

[Formula 11] $Y_t = -12{,}463 + 0.2487\ X_t$

where: Y_t = International Embarking & Disembarking Passengers by TGU - MSY Route at year t

X_t = Total International Embarking & Disembarking Passengers at Toncontin Airport at year t

(R = 0.967)

4. Forecast of International Embarking & Disembarking Passengers Generated by New Route

[Formula 12] $$T_{ij} = 0.5368 \frac{P_i P_j}{D_{ij}^{1.7558}}$$

where: T_{ij} = Number of Passengers between cities i and j

P_i = Number of Population in city i

P_j = Number of Population in city j

D_{ij} = Travel Time between cities i and j (Including trip time from downtown to airport)

5. Forecast of International Transit Passengers at Toncontin Airport

[Formula 13] $$Y_t = -17{,}002 + 0.8365\ X_t$$

where: Y_t = International Transit Passengers at Toncontin Airport at year t

X_t = International Embarking & Disembarking Passengers at Toncontin Airport at year t

(R = 0.916)

6. Forecast of Domestic Embarking & Disembarking Passengers in the Republic of Honduras

[Formula 14] $Y_t = -850,029 + 1,447\ X_t + 77,687\ Z_t + 0.7765\ Y_{t-1}$

where: Y_t = Domestic Embarking & Disembarking Passengers in Honduras at year t

X_t = Per capita GDP in Honduras at year t

$Z_t = TR_t/TA_t$

where: TR_t = Travel Time by road between Tegucigalpa and San Pedro Sula at year t

TA_t = Travel Time by air between Tegucigalpa and San Pedro Sula at year t

(R = 0.917, DWR = 2.001, n = 18)

7. Forecast of Domestic Embarking & Disembarking Passengers at Toncontin Airport

[Formula 15] $Y_t = -207,281 + 325\ X_t + 23,172\ Z_t + 0.7769\ Y_{t-1}$

where: Y_t = Domestic Embarking & Disembarking Passengers at Toncontin Airport

X_t = Per capita GDP in Honduras at year t

$Z_t = TR_t/TA_t$

where: TR_t = Travel Time by road between Tegucigalpa and San Pedro Sula at year t

TA_t = Travel Time by air between Tegucigalpa and San Pedro Sula at year t

(R = 0.961, DWR = 2.198, n = 18)

8. Forecast of Domestic Embarking & Disembarking Passengers by Route at Toncontin Airport

8.1 TGU - SAP Route

[Formula 16] $Y_t = 12{,}740 + 0.1927\ X_t$

where: Y_t = Domestic Embarking & Disembarking Passengers by TGU - SAP Route at year t

X_t = Total Domestic Embarking & Disembarking Passengers at Toncontin Airport at year t

(R = 0.863)

8.2 TGU - LCE Route

[Formula 17] $Y_t = -3{,}099 + 0.3206\ X_t$

where: Y_t = Domestic Embarking & Disembarking Passengers by TGU - LCE Route at year t

Xt = Total Domestic Embarking & Disembarking Passengers at Toncontin Airport at year t

(R = 0.795)

8.3 TGU - ROA Route

[Formula 18] $Y_t = -933 + 0.0824\ X_t$

where: Yt = Domestic Embarking & Disembarking Passengers by TGU - ROA Route at year t

X_t = Total Domestic Embarking & Disembarking Passengers at Toncontin Airport at year t

(R = 0.767)

8.4 TGU - TJI Route

[Formula 19] $Y_t = 6.9 + 0.0414\ X_t$

where: Y_t = Domestic Embarking & Disembarking Passengers by TGU - TJI Route at year t

X_t = Total Domestic Embarking & Disembarking Passengers at Toncontin Airport at year t

(R = 0.999)

8.5 TGU - OAN Route

[Formula 20] $Y_t = -3,535 + 0.1249\ X_t$

where: Y_t = Domestic Embarking & Disembarking Passengers by TGU - OAN Route at year t

X_t = Total Domestic Embarking & Disembarking Passengers at Toncontin Airport at year t

(R = 0.831)

8.6 TGU - PLP Route

[Formula 21] $Y_t = 880 + 0.0365\ X_t$

where: Y_t = Domestic Embarking & Disembarking Passengers by TGU -PLP Route at year t

X_t = Total Domestic Embarking & Disembarking Passengers at Toncontin Airport at year t

(R = 0.728)

9. Forecast of Domestic Embarking & Disembarking Passengers by Route

[Formula 22] $$T_{ij} = 0.465 \frac{P_i P_j}{D_{ij}^{0.5452}}$$

where: T_{ij} = Number of Passengers between cities i and j

P_i = Number of Population in city i

P_j = Number of Population in city j

D_{ij} = Travel Time between cities i and j

10. Forecast of International Loaded & Unloaded Air Cargo in the Republic of Honduras

[Formula 23] $\text{Log } Y_t = -2.6929 + 1.0679 \text{ Log } X_t + 0.4332 \text{ Log } Y_{t-1}$

where: Y_t = International Loaded & Unloaded Air Cargo in Honduras at year t

X_t = Gross Domestic Product in Honduras at year t

(R = 0.941, DWR = 1.820, n = 18)

11. Forecast of International Loaded & Unloaded Air Cargo at Toncontin Airport

[Formula 24] $\text{Log } Y_t = -2.5672 + 0.8970 \text{ Log } X_t + 0.5198 \text{ Log } Y_{t-1}$

where: Y_t = International Loaded & Unloaded Air Cargo at Toncontin Airport at year t

X_t = Gross Domestic Product in Honduras at year t

(R = 0.932, DWR = 1.806, n = 18)

12. Forecast of International Loaded & Unloaded Air Cargo Generated by New Route

[Formula 25] $$T_{ij} = 32.265 \frac{G_i G_j}{D_{ij}^{2.1075}}$$

where: T_{ij} = International Air Cargo Tonnage between cities i and j

G_i = (Number of Population in city i) x (Per capita GDP in city i)

G_j = (Number of Population in city j) x (Per capita GDP in city j)

D_{ij} = Travel Time between cities i and j

13. Forecast of Domestic Loaded & Unloaded Air Cargo in the Republic of Honduras

[Formula 26] $Y_t = -3,517 + 0.2197\ X_t + 1,583\ Z_t + 0.8049\ Y_{t-1}$

where: Y_t = Domestic Loaded & Unloaded Air Cargo in Honduras at year t

X_t = Gross Domestic Product in Honduras at year t

$Z_t = TR_t/TA_t$

where: TR_t = Travel Time by road between Tegucigalpa and San Pedro Sula at year t

TA_t = Travel Time by air between Tegucigalpa and San Pedro Sula at year t

(R = 0.726, DWR = 2.616, n = 18)

14. Forecast of Domestic Loaded & Unloaded Air Cargo at Toncontin Airport

[Formula 27] $\text{Log } Y_t = -1.8335 + 1.0594 \text{ Log } X_t$

where: Y_t = Domestic Loaded & Unloaded Air Cargo at Toncontin Airport at year t

X_t = Domestic Loaded & Unloaded Air Cargo in Honduras at year t

(R = 0.935)

15. Forecast of Number of Small Aircraft Registered at Toncontin Airport

[Formula 28] $Y = -82 + 0.11\ X$

where: Y = Number of small aircraft registered at Toncontin Airport

X = Gross Domestic Product (in 1966 constant prices)

(R = 0.959)

APPENDIX 4A

STAGE LENGTH-PAYLOAD RELATIONSHIP

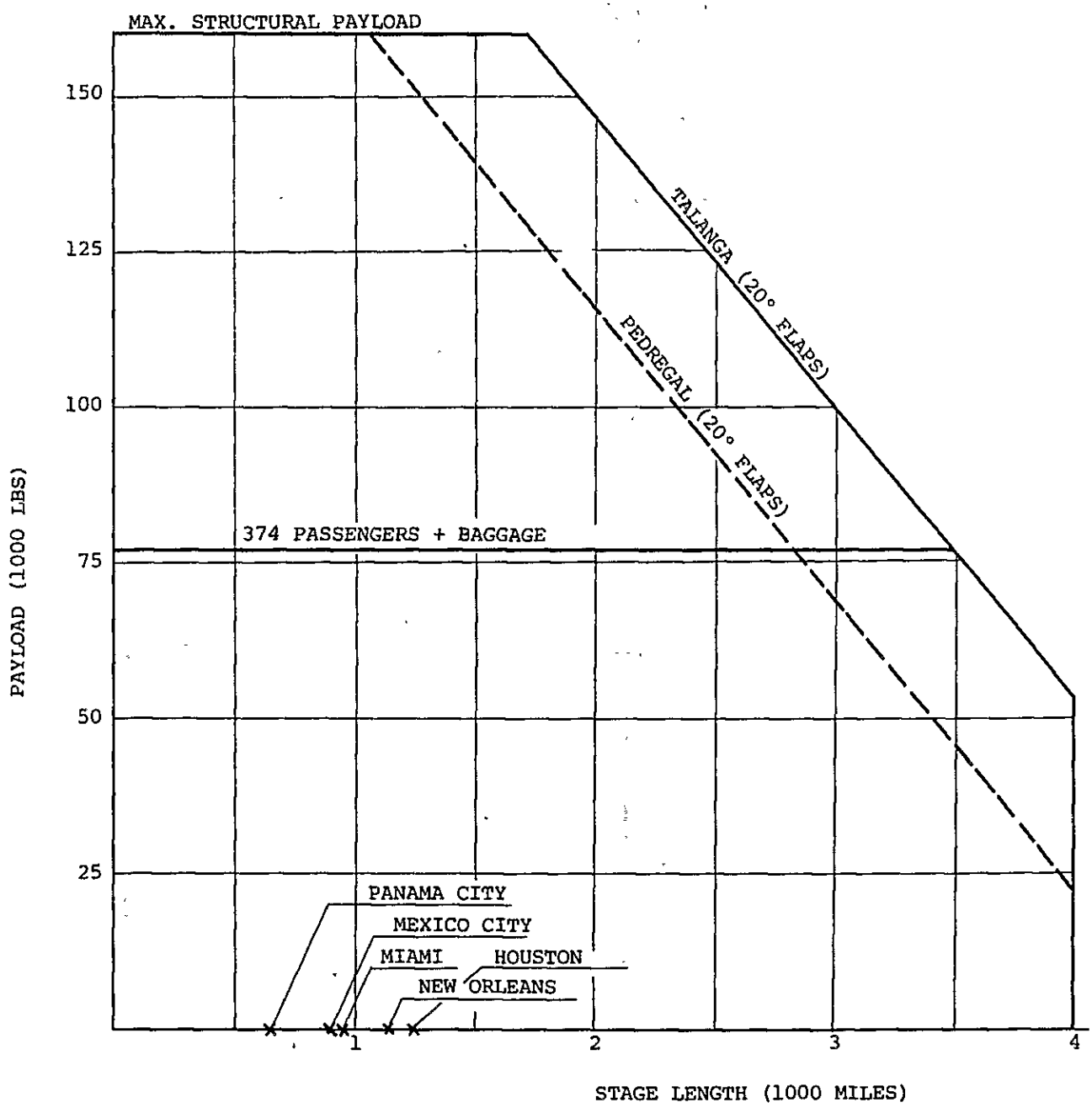


Fig. 4A-1 STAGE LENGTH - PAYLOAD RELATIONSHIP (B-747)

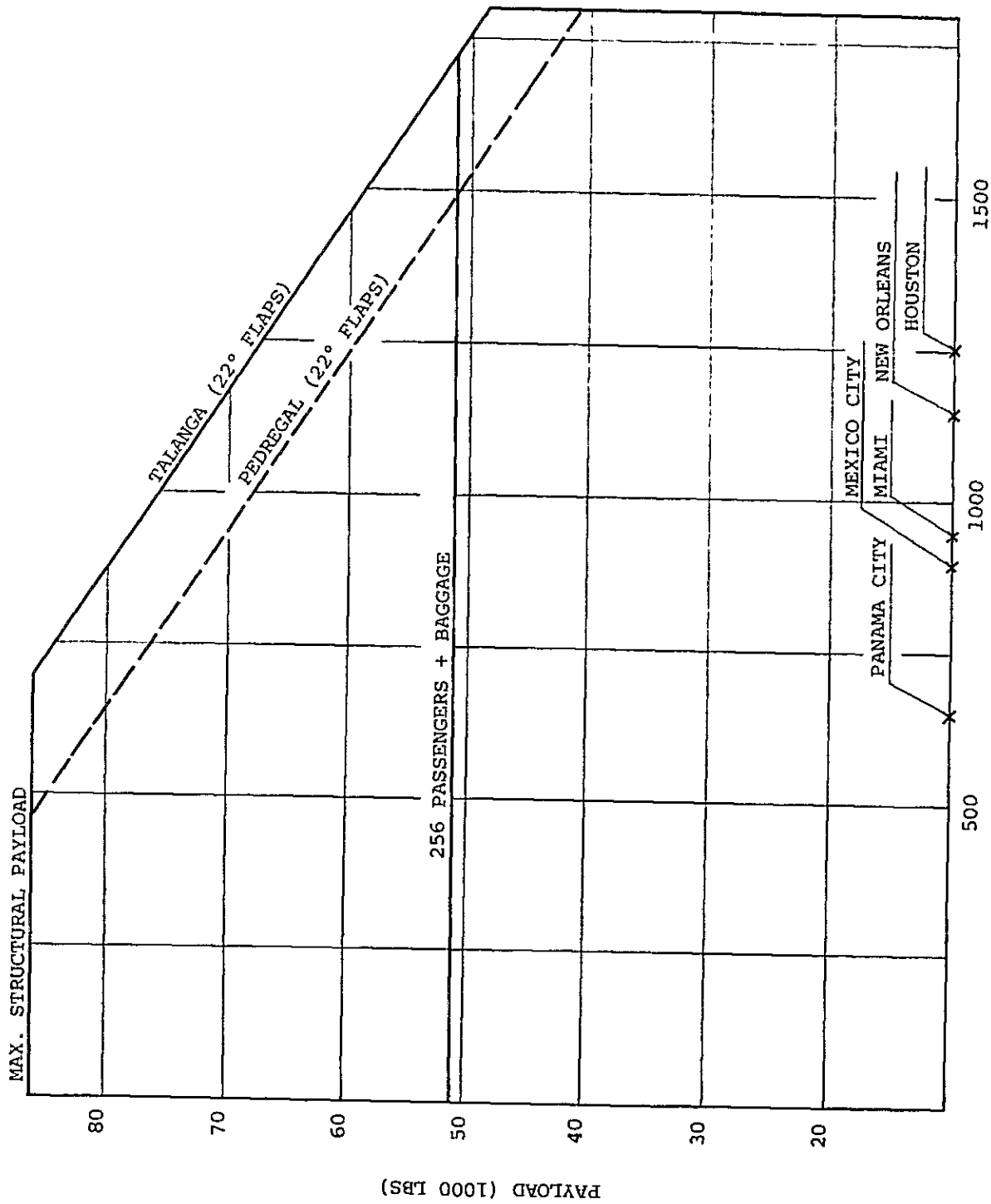


Fig. 4A-2 STAGE LENGTH - PAYLOAD RELATIONSHIP (L-1011)

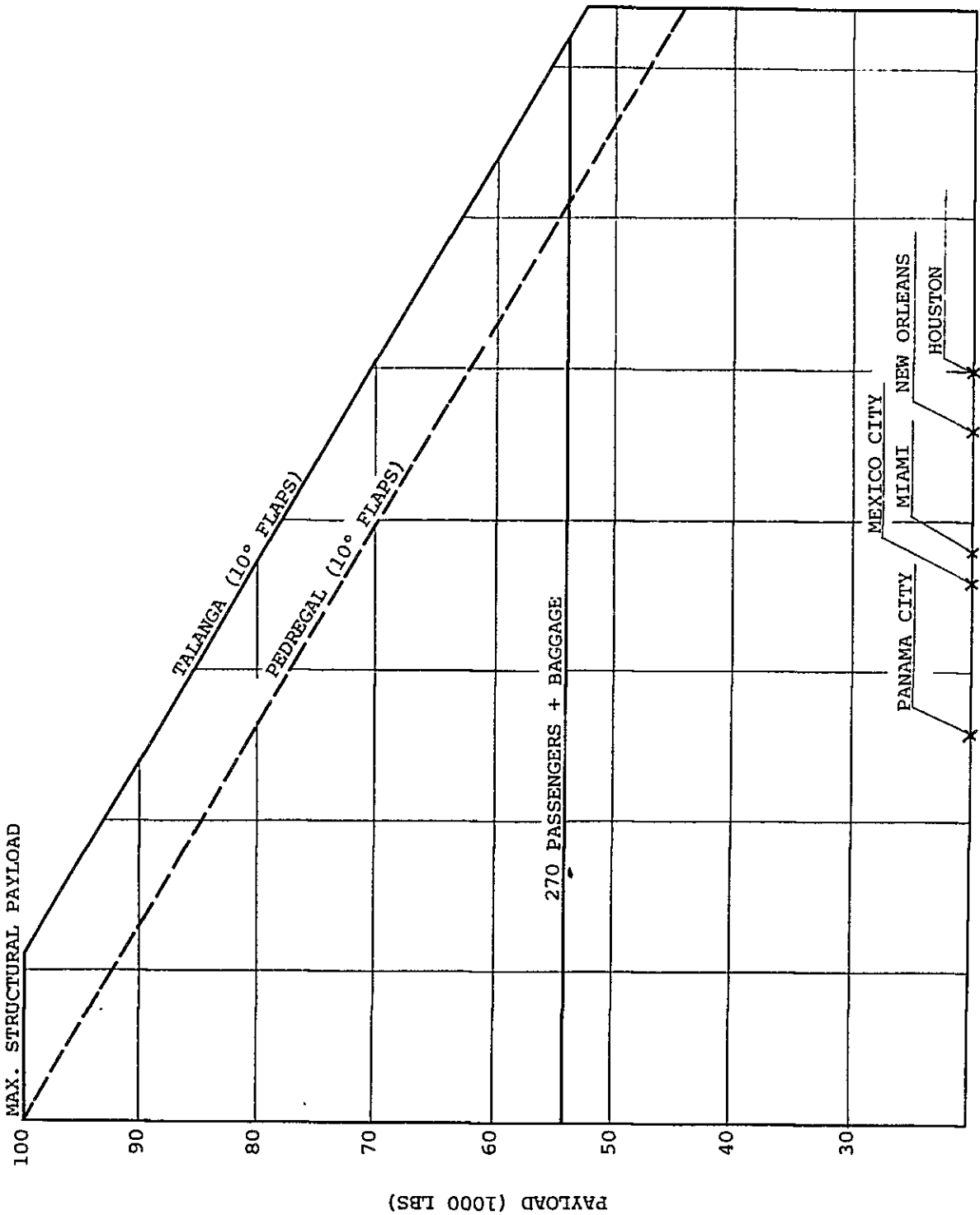


Fig. 4A-3 STAGE LENGTH - PAYLOAD RELATIONSHIP (DC-10)

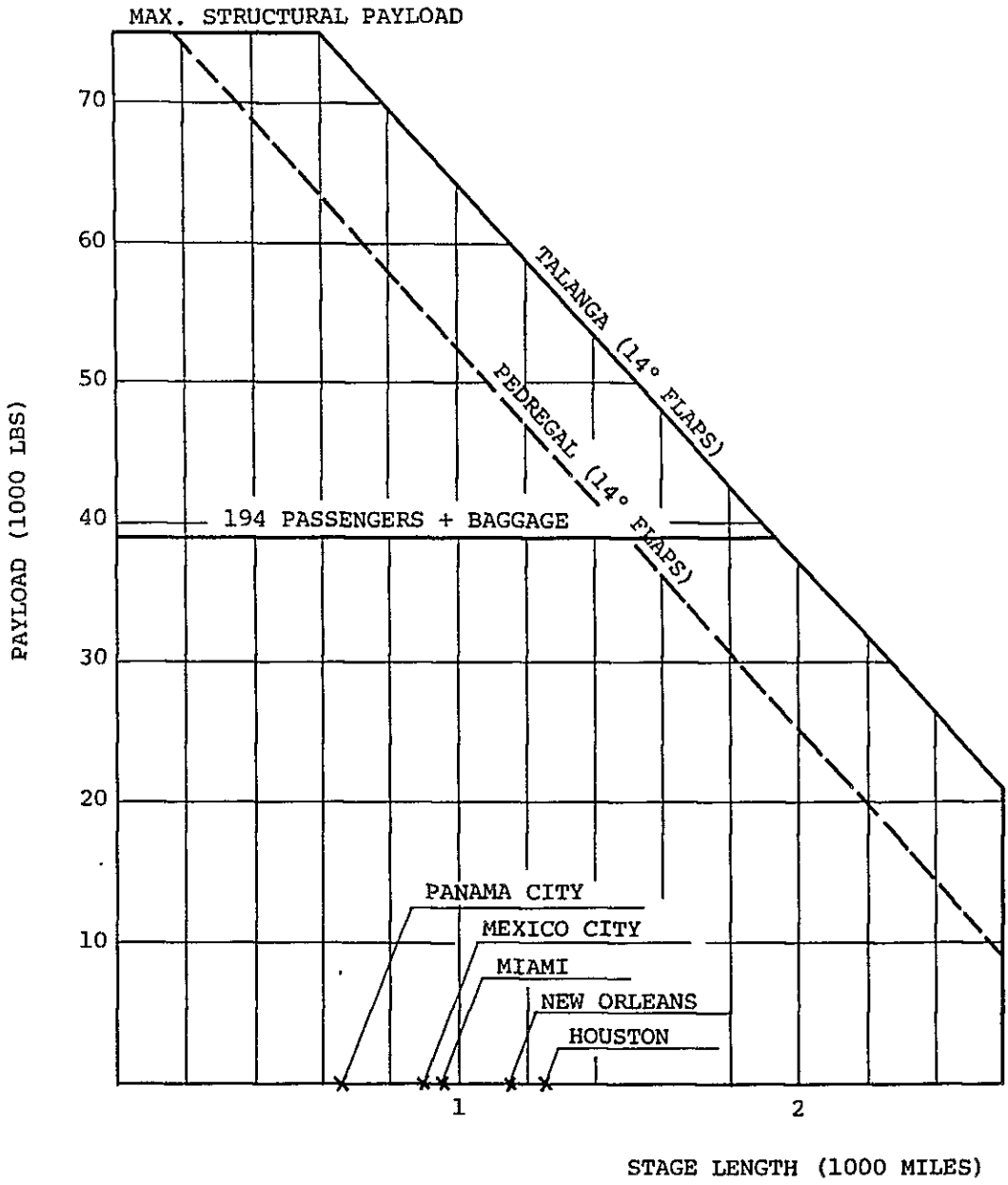


Fig. 4A-4 STAGE LENGTH - PAYLOAD RELATIONSHIP (B-707)

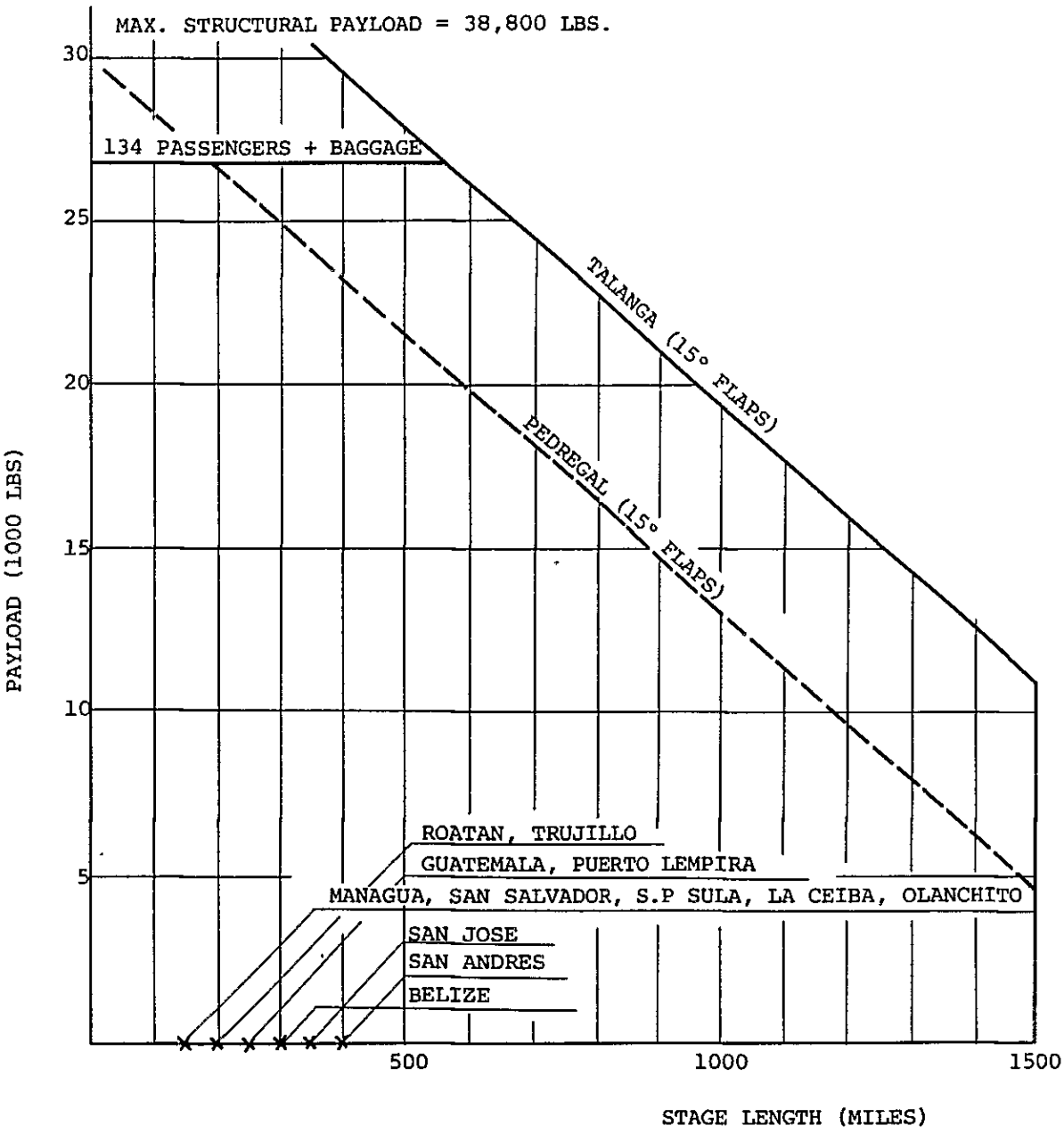


Fig. 4A-5 STAGE LENGTH - PAYLOAD RELATIONSHIP (B-727)

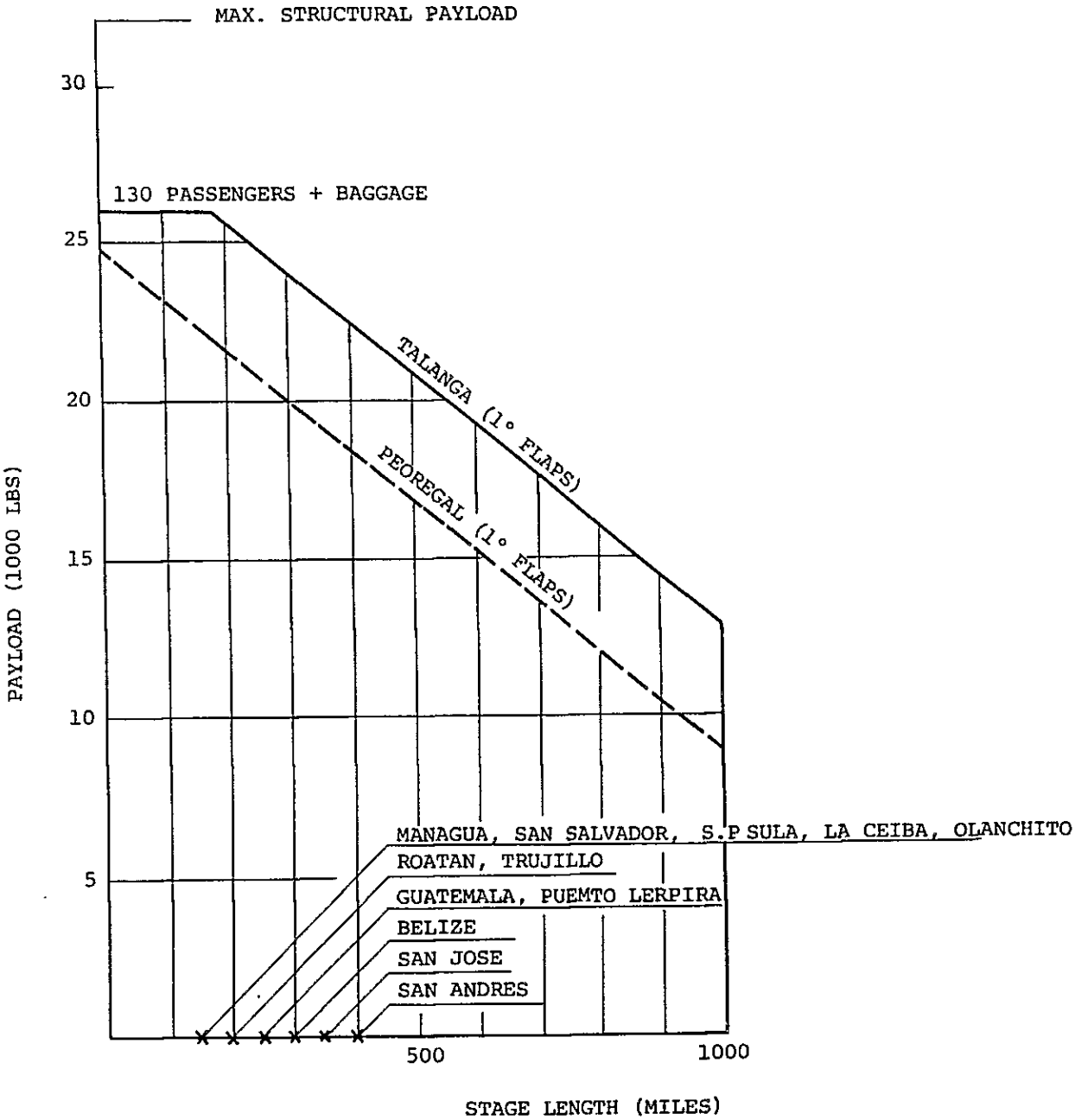


Fig. 4A-6 STAGE LENGTH - PAYLOAD RELATIONSHIP (B-737)

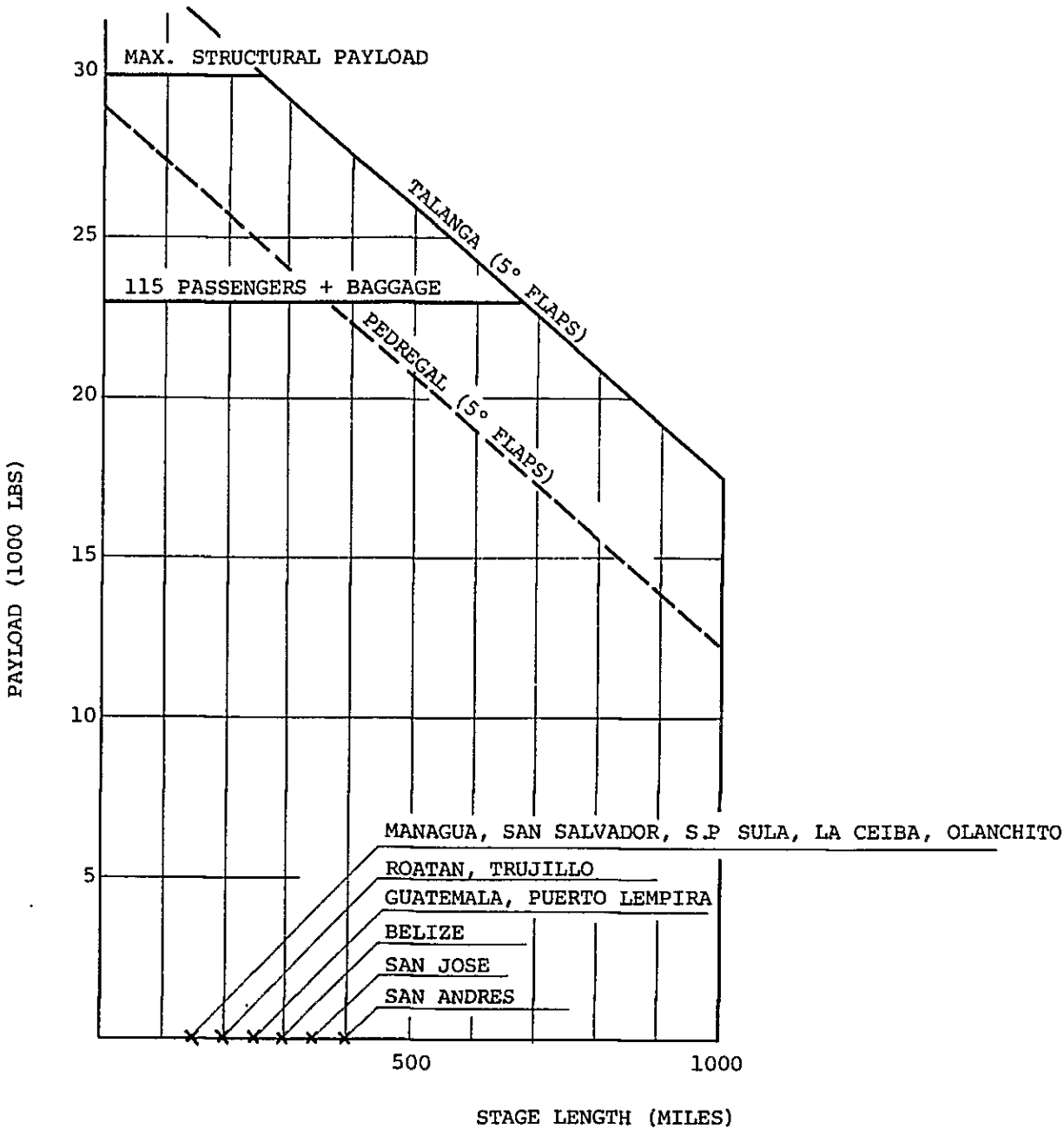


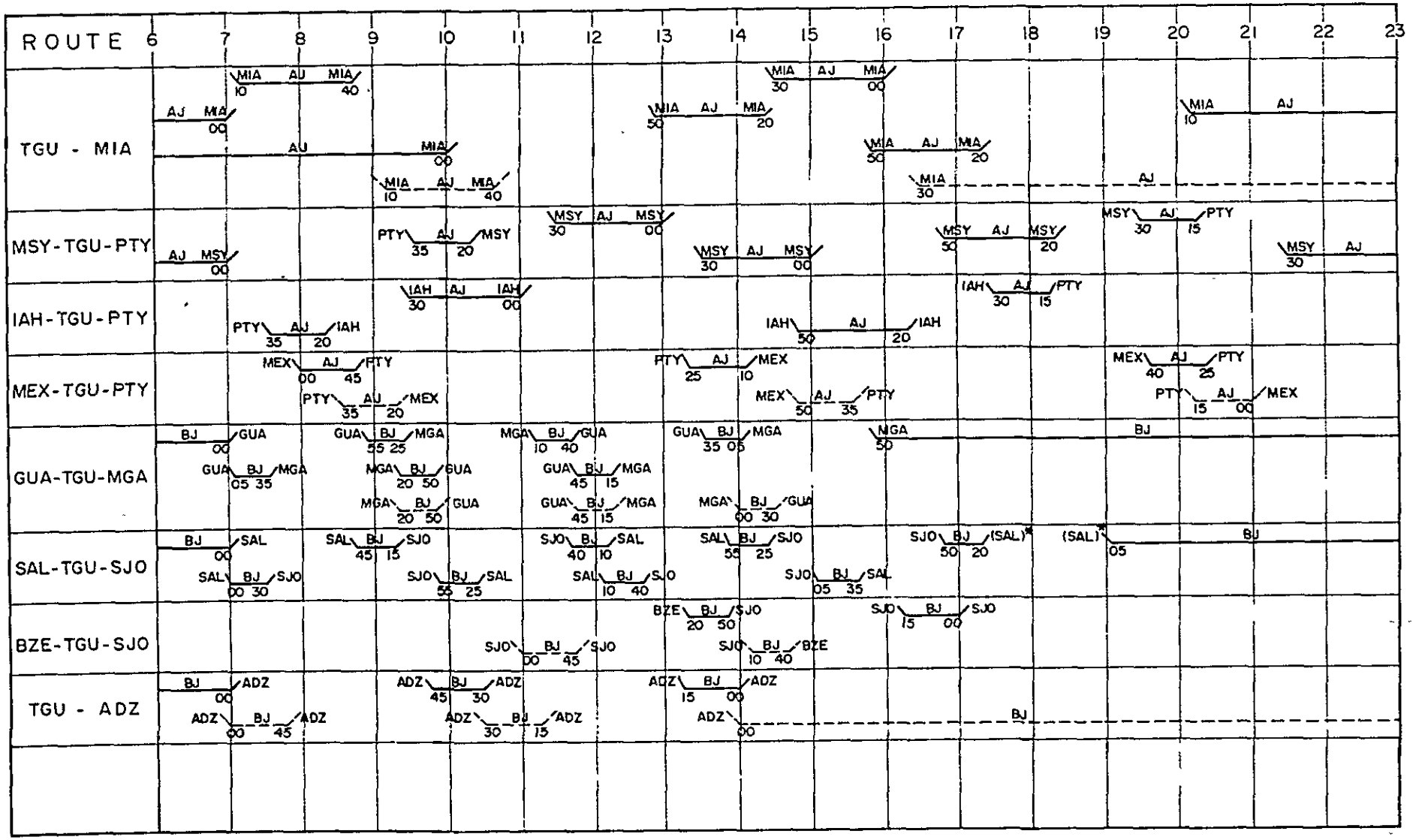
Fig. 4A-7 STAGE LENGTH - PAYLOAD RELATIONSHIP (DC-9)

APPENDIX 4B

POSSIBLE FLIGHT SCHEDULE

Table 4B-1 POSSIBLE FLIGHT SCHEDULE (INTERNATIONAL SERVICE)

YEAR 2005



Notes: 1. Aircraft Categories AJ -- 200 Seater Jet
BJ -- 120 Seater Jet
CN -- 40 Seater Non-Jet

2. Arriving Flight
Departing Flight
Alternate (every other day) schedule to one directly thereabove

3. Schedules with asterisk occur only at Pedregal Site

Appendix 4B-1

Table 4B-2 POSSIBLE FLIGHT SCHEDULE (DOMESTIC SERVICE)

YEAR 2005

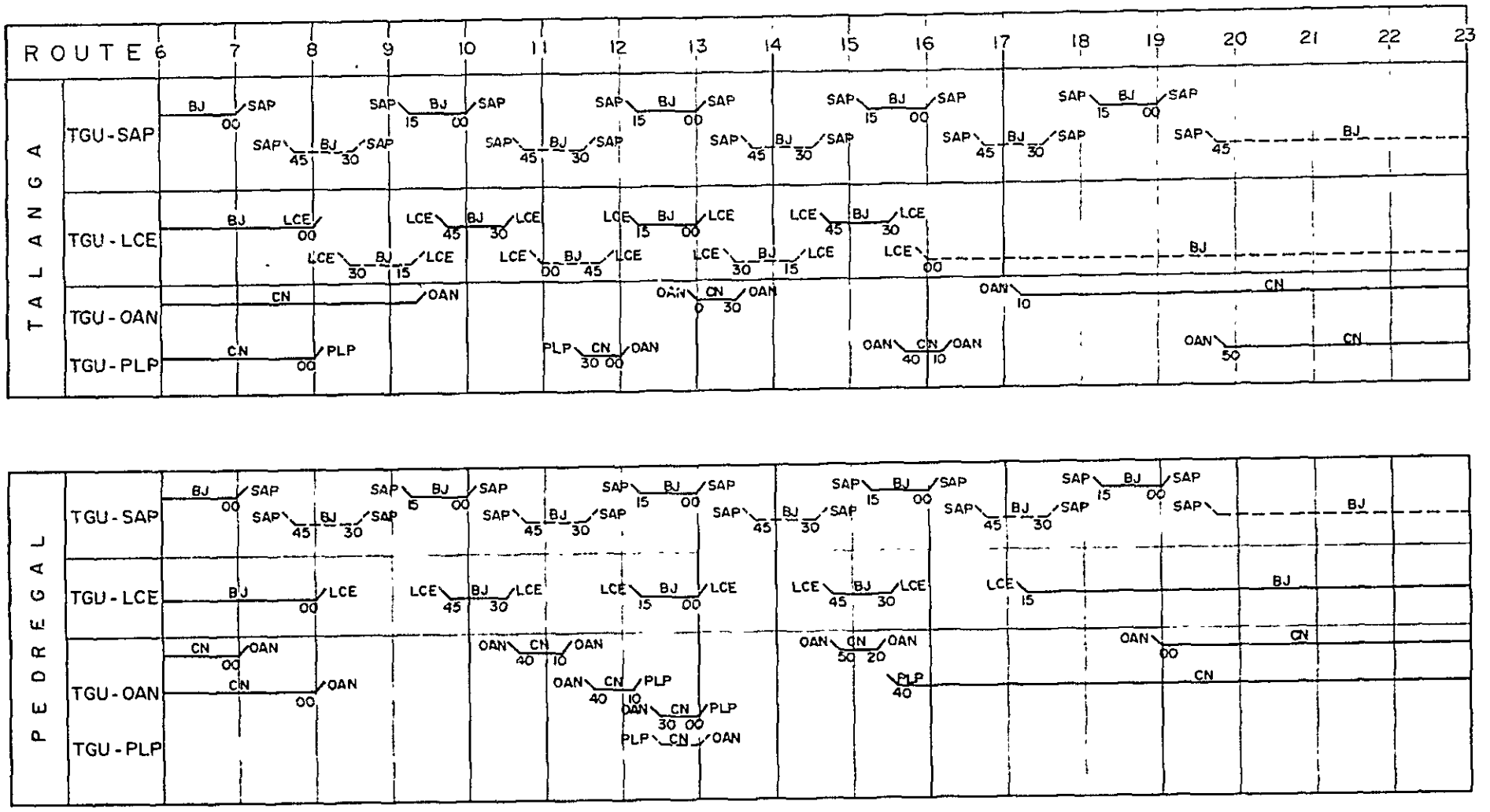
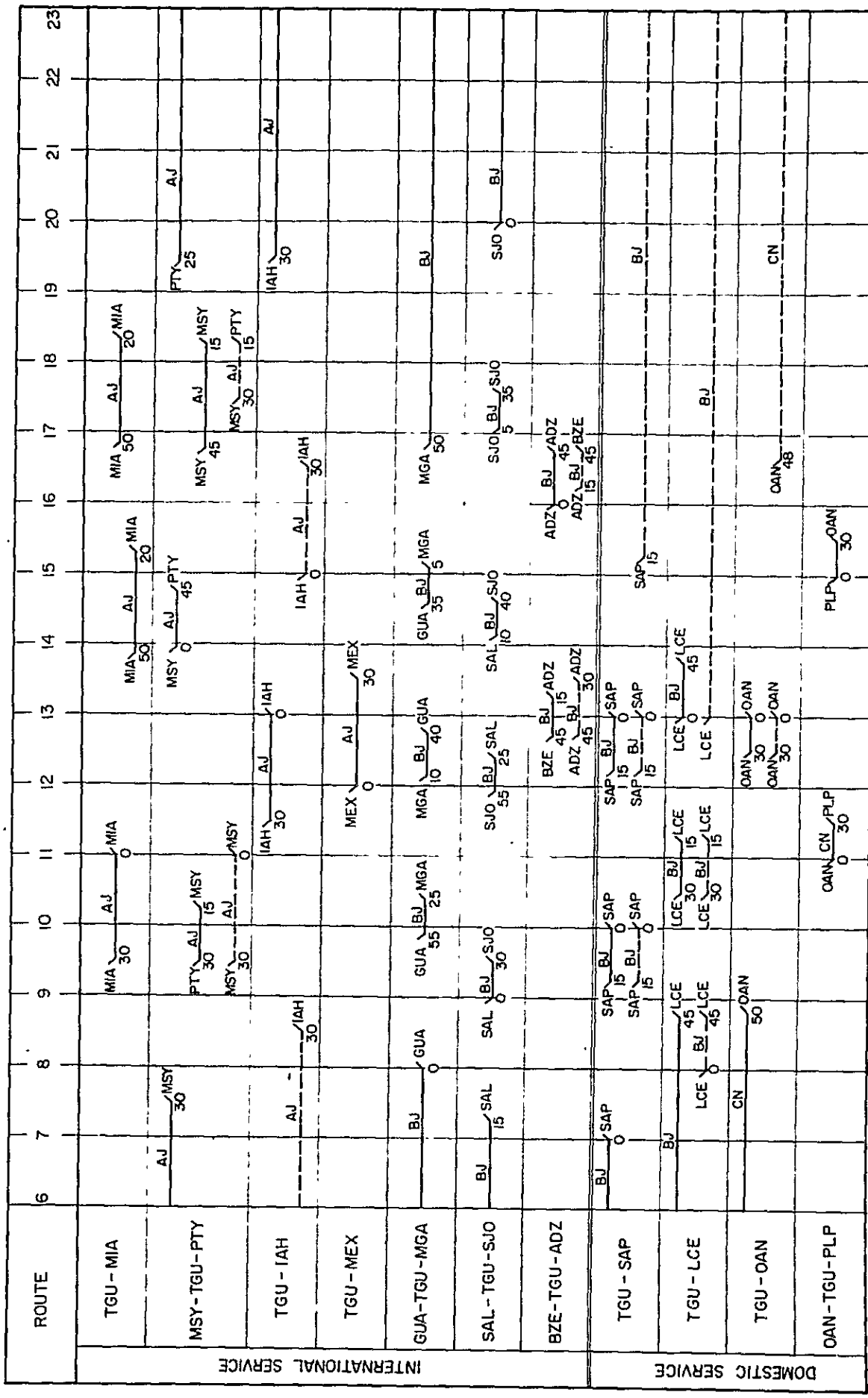


Fig. 4B-1 POSSIBILE FLIGHT SCHDULE (1995)



APPENDIX 4C

HOURLY DISTRIBUTION OF PASSENGERS

Table 4C-1

HOURLY DISTRIBUTION OF PASSENGERS AT PEDREGAL

TIME	CASE 1			CASE 2			CASE 3			CASE 4		
	ARR	DEP	THRU	ARR	DEP	THRU	ARR	DEP	THRU	ARR	DEP	THRU
500- 530	0	0	0	0	0	0	0	0	0	0	0	0
530- 600	0	0	0	0	0	0	0	0	0	0	0	0
600- 630	0	313	143	0	269	124	0	313	143	0	269	124
630- 700	0	369	143	0	369	124	0	369	143	0	369	124
700- 730	176	125	104	220	178	123	176	125	104	220	178	123
730- 800	257	300	92	257	353	111	257	300	92	257	353	111
800- 830	226	329	67	226	329	67	226	329	67	226	329	67
830- 900	88	313	111	88	313	111	88	313	111	88	313	111
900- 930	115	281	136	115	281	136	115	281	136	115	281	136
930-1000	294	313	194	241	269	175	294	313	194	241	269	175
1000-1030	198	241	130	145	241	121	198	241	130	145	241	121
1030-1100	0	122	51	53	175	70	0	151	51	53	204	70
1100-1130	27	115	32	27	169	51	56	144	75	56	197	94
1130-1200	193	144	140	193	144	140	193	173	183	193	173	183
1200-1230	117	175	148	117	175	148	117	175	148	117	175	148
1230-1300	35	142	76	35	142	76	35	113	76	35	113	76
1300-1330	143	195	51	143	195	51	110	166	7	110	166	7
1330-1400	456	248	210	403	195	191	429	246	166	376	193	147
1400-1430	229	391	166	171	391	166	258	418	210	205	418	210
1430-1500	157	207	109	157	269	119	186	234	144	186	287	163
1500-1530	98	289	155	98	289	155	98	289	155	98	289	155
1530-1600	144	221	200	144	221	200	144	192	209	144	192	209
1600-1630	144	186	171	144	186	171	115	157	128	115	157	128
1630-1700	169	117	190	169	117	190	140	88	156	140	88	156
1700-1730	113	288	111	113	288	111	113	288	111	113	288	111
1730-1800	69	200	107	69	209	107	69	209	107	69	200	107
1800-1830	0	209	64	0	209	64	0	209	64	0	209	64
1830-1900	0	0	0	0	0	0	0	0	0	0	0	0
1900-1930	0	232	0	0	232	0	0	232	0	0	232	0
1930-2000	194	232	27	194	232	27	194	232	27	194	232	27
2000-2030	198	232	59	198	232	59	198	272	59	198	232	59
2030-2100	88	0	32	88	0	32	88	0	32	88	0	32
2100-2130	0	0	32	0	0	32	0	0	32	0	0	32
2130-2200	84	0	36	84	0	36	84	0	36	84	0	36
2200-2230	0	0	36	0	0	36	0	0	36	0	0	36
2230-2300	0	0	0	0	0	0	0	0	0	0	0	0

Table 4C-2

HOURLY DISTRIBUTION OF PASSENGERS AT PEDREGAL

TIME	CASE 5			CASE 6			CASE 7			CASE 8		
	ARR	DEP	THRU	ARR	DEP	THRU	ARR	DEP	THRU	ARR	DEP	THRU
500- 530	0	0	0	0	0	0	0	0	0	0	0	0
530- 600	0	0	0	0	0	0	0	0	0	0	0	0
600- 630	0	313	143	0	269	124	0	313	143	0	269	124
630- 700	0	342	143	0	342	124	0	342	143	0	342	124
700- 730	123	98	72	176	151	91	123	98	72	176	151	91
730- 800	204	273	60	204	326	79	204	273	60	204	326	79
800- 830	226	329	67	226	329	67	226	329	67	226	329	67
830- 900	88	313	111	88	313	111	88	313	111	88	313	111
900- 930	115	281	136	115	281	136	115	281	136	115	281	136
930-1000	204	313	194	241	260	175	204	313	194	241	269	175
1000-1030	198	241	130	145	241	121	198	241	130	145	241	121
1030-1100	0	122	51	53	175	70	0	151	51	53	204	79
1100-1130	27	115	32	27	168	51	56	144	75	56	197	94
1130-1200	193	144	140	193	144	140	193	173	183	193	173	183
1200-1230	117	175	148	117	175	148	117	175	148	117	175	148
1230-1300	35	142	76	35	142	76	35	113	76	35	113	76
1300-1330	143	195	51	143	195	51	116	166	7	116	166	7
1330-1400	456	301	219	403	248	191	429	299	159	376	246	147
1400-1430	256	444	198	293	444	198	285	471	242	232	471	242
1430-1500	157	207	100	157	269	119	186	234	144	186	287	163
1500-1530	98	280	155	98	280	155	98	280	155	98	280	155
1530-1600	144	221	200	144	221	200	144	192	200	144	192	200
1600-1630	144	186	171	144	186	171	115	157	128	115	157	128
1630-1700	169	117	199	169	117	199	149	88	156	149	88	156
1700-1730	113	288	111	113	288	111	113	288	111	113	288	111
1730-1800	69	299	107	69	299	107	69	299	107	69	299	107
1800-1830	0	200	64	0	200	64	0	200	64	0	200	64
1830-1900	0	0	0	0	0	0	0	0	0	0	0	0
1900-1930	0	232	0	0	232	0	0	232	0	0	232	0
1930-2000	194	232	27	194	232	27	194	232	27	194	232	27
2000-2030	198	232	59	198	232	59	198	232	59	198	232	59
2030-2100	88	0	32	88	0	32	88	0	32	88	0	32
2100-2130	0	0	32	0	0	32	0	0	32	0	0	32
2130-2200	84	0	36	84	0	36	84	0	36	84	0	36
2200-2230	0	0	36	0	0	36	0	0	36	0	0	36
2230-2300	0	0	0	0	0	0	0	0	0	0	0	0

Table 4C-3

HOURLY DISTRIBUTION OF PASSENGERS AT PEDREGAL

TIME	CASE 9			CASE 10			CASE 11			CASE 12		
	ARR	DEP	THRU	ARR	DEP	THRU	ARR	DEP	THRU	ARR	DEP	THRU
500- 530	0	0	0	0	0	0	0	0	0	0	0	0
530- 600	0	0	0	0	0	0	0	0	0	0	0	0
600- 630	0	313	143	0	260	124	0	313	143	0	260	124
630- 700	0	360	143	0	360	124	0	360	143	0	360	124
700- 730	176	125	104	220	178	123	176	125	104	220	178	123
730- 800	257	184	92	257	237	111	257	184	92	257	237	111
800- 830	116	323	60	116	323	60	116	323	60	116	323	60
830- 900	204	307	111	204	307	111	204	307	111	204	307	111
900- 930	231	301	143	231	301	143	231	301	143	231	301	143
930-1000	294	313	104	241	260	175	294	313	104	241	260	175
1000-1030	198	241	130	145	241	121	198	241	130	145	241	121
1030-1100	0	122	51	53	175	70	0	151	51	53	204	70
1100-1130	27	115	32	27	168	51	56	144	75	56	197	94
1130-1200	193	144	140	193	144	140	193	173	193	193	173	193
1200-1230	117	175	148	117	175	148	117	175	148	117	175	148
1230-1300	35	142	76	35	142	76	35	113	76	35	113	76
1300-1330	27	85	44	27	85	44	0	56	0	0	56	0
1330-1400	340	138	203	287	85	184	313	136	159	260	83	140
1400-1430	229	281	150	176	281	150	258	308	203	205	308	203
1430-1500	267	323	107	267	376	126	220	350	151	220	403	170
1500-1530	208	306	162	208	306	162	208	306	162	208	306	162
1530-1600	144	337	207	144	337	207	144	308	207	144	308	207
1600-1630	144	186	171	144	186	171	115	157	128	115	157	128
1630-1700	160	117	199	160	117	199	140	88	156	140	88	156
1700-1730	113	288	111	113	288	111	113	288	111	113	288	111
1730-1800	60	200	107	60	200	107	60	200	107	60	200	107
1800-1830	0	200	64	0	200	64	0	200	64	0	200	64
1830-1900	0	0	0	0	0	0	0	0	0	0	0	0
1900-1930	0	116	0	0	116	0	0	116	0	0	116	0
1930-2000	84	116	20	84	116	20	84	116	20	84	116	20
2000-2030	204	226	59	204	226	59	204	226	59	204	226	59
2030-2100	204	110	30	204	110	30	204	110	30	204	110	30
2100-2130	0	0	32	0	0	32	0	0	32	0	0	32
2130-2200	84	0	36	84	0	36	84	0	36	84	0	36
2200-2230	0	0	36	0	0	36	0	0	36	0	0	36
2230-2300	0	0	0	0	0	0	0	0	0	0	0	0

Table 4C-4 HOURLY DISTRIBUTION OF PASSENGERS AT PEDREGAL

TIME	CASE 13			CASE 14			CASE 15			CASE 16		
	ARR	DEP	THRU	ARR	DEP	THRU	ARR	DEP	THRU	ARR	DEP	THRU
500- 530	0	0	0	0	0	0	0	0	0	0	0	0
530- 600	0	0	0	0	0	0	0	0	0	0	0	0
600- 630	0	313	143	0	260	124	0	313	143	0	260	124
630- 700	0	342	143	0	342	124	0	342	143	0	342	124
700- 730	123	98	72	176	151	97	123	98	72	176	151	97
730- 800	204	157	89	204	210	79	204	157	89	204	210	79
800- 830	116	323	60	116	323	60	116	323	60	116	323	60
830- 900	204	307	111	204	307	111	204	307	111	204	307	111
900- 930	231	391	143	231	391	143	231	391	143	231	391	143
930-1000	204	313	194	241	260	175	204	313	194	241	260	175
1000-1030	198	241	139	145	241	121	198	241	139	145	241	121
1030-1100	0	122	51	53	175	70	0	151	51	53	204	70
1100-1130	27	115	32	27	168	51	56	144	75	56	197	94
1130-1200	193	144	140	193	144	140	193	173	183	193	173	183
1200-1230	117	175	148	117	175	148	117	175	148	117	175	148
1230-1300	35	142	76	35	142	76	35	113	76	35	113	76
1300-1330	27	85	44	27	85	44	0	58	0	0	56	0
1330-1400	340	191	203	287	138	184	313	189	159	260	136	140
1400-1430	256	334	191	203	334	191	285	361	235	232	361	235
1430-1500	267	323	107	267	376	126	296	350	151	296	403	170
1500-1530	208	396	162	208	396	162	208	396	162	208	396	162
1530-1600	144	337	207	144	337	207	144	308	207	144	308	207
1600-1630	144	186	171	144	186	171	115	157	128	115	157	128
1630-1700	169	117	199	169	117	199	149	88	156	149	88	156
1700-1730	113	288	111	113	288	111	113	288	111	113	288	111
1730-1800	69	200	107	69	200	107	69	200	107	69	200	107
1800-1830	0	200	64	0	200	64	0	200	64	0	200	64
1830-1900	0	0	0	0	0	0	0	0	0	0	0	0
1900-1930	0	116	0	0	116	0	0	116	0	0	116	0
1930-2000	84	116	20	84	116	20	84	116	20	84	116	20
2000-2030	204	226	59	204	226	59	204	226	59	204	226	59
2030-2100	204	119	39	204	119	39	204	119	39	204	119	39
2100-2130	0	0	32	0	0	32	0	0	32	0	0	32
2130-2200	84	0	36	84	0	36	84	0	36	84	0	36
2200-2230	0	0	36	0	0	36	0	0	36	0	0	36
2230-2300	0	0	0	0	0	0	0	0	0	0	0	0

Table 4C-5

HOURLY DISTRIBUTION OF PASSENGERS AT PEDREGAL

TIME	CASE 17			CASE 18			CASE 19			CASE 20		
	ARR	DEP	THRU	ARR	DEP	THRU	ARR	DEP	THRU	ARR	DEP	THRU
500- 530	0	0	0	0	0	0	0	0	0	0	0	0
530- 600	0	0	0	0	0	0	0	0	0	0	0	0
600- 630	0	313	143	0	260	124	0	313	143	0	260	124
630- 700	0	360	143	0	360	124	0	360	143	0	360	124
700- 730	176	125	104	220	178	123	176	125	104	220	178	123
730- 800	257	300	92	257	353	111	257	300	92	257	353	111
800- 830	226	320	67	226	320	67	226	320	67	226	320	67
830- 900	88	313	111	88	313	111	88	313	111	88	313	111
900- 930	203	193	136	203	193	136	203	193	136	203	193	136
930-1000	382	313	194	320	260	175	382	313	194	320	260	175
1000-1030	198	320	162	145	320	153	198	320	162	145	320	153
1030-1100	0	122	83	53	175	102	0	151	93	53	204	102
1100-1130	27	115	32	27	168	51	56	144	75	56	197	94
1130-1200	193	144	140	193	144	140	193	173	183	193	173	183
1200-1230	117	175	148	117	175	148	117	175	148	117	175	148
1230-1300	35	142	76	35	142	76	35	113	76	35	113	76
1300-1330	143	195	51	143	195	51	116	166	7	116	166	7
1330-1400	456	248	210	403	195	101	420	240	160	376	193	147
1400-1430	229	391	166	176	391	166	258	418	210	205	418	210
1430-1500	157	207	100	157	260	110	186	234	144	186	287	163
1500-1530	98	280	155	98	280	155	98	280	155	98	280	155
1530-1600	56	221	168	56	221	168	56	192	168	56	192	168
1600-1630	56	98	139	56	98	139	27	69	96	27	69	96
1630-1700	257	20	199	257	20	199	228	0	156	228	0	156
1700-1730	201	200	111	201	200	111	201	200	111	201	200	111
1730-1800	69	200	107	69	200	107	69	200	107	69	200	107
1800-1830	0	200	64	0	200	64	0	200	64	0	200	64
1830-1900	0	0	0	0	0	0	0	0	0	0	0	0
1900-1930	0	232	0	0	232	0	0	232	0	0	232	0
1930-2000	194	232	27	194	232	27	194	232	27	194	232	27
2000-2030	198	232	59	198	232	59	198	232	59	198	232	59
2030-2100	88	0	32	88	0	32	88	0	32	88	0	32
2100-2130	0	0	32	0	0	32	0	0	32	0	0	32
2130-2200	84	0	36	84	0	36	84	0	36	84	0	36
2200-2230	0	0	36	0	0	36	0	0	36	0	0	36
2230-2300	0	0	0	0	0	0	0	0	0	0	0	0

Table 4C-6 HOURLY DISTRIBUTION OF PASSENGERS AT PEDREGAL

TIME	CASE 21			CASE 22			CASE 23			CASE 24		
	ARR	DEP	THRU	ARR	DEP	THRU	ARR	DEP	THRU	ARR	DEP	THRU
500- 530	0	0	0	0	0	0	0	0	0	0	0	0
530- 600	0	0	0	0	0	0	0	0	0	0	0	0
600- 630	0	313	143	0	260	124	0	313	143	0	260	124
630- 700	0	342	143	0	342	124	0	342	143	0	342	124
700- 730	123	98	72	176	151	91	123	98	72	176	151	91
730- 800	204	273	69	204	326	79	204	273	69	204	326	79
800- 830	226	329	67	226	329	67	226	329	67	226	329	67
830- 900	88	313	111	88	313	111	88	313	111	88	313	111
900- 930	293	193	136	203	193	136	203	193	136	203	193	136
930-1000	382	313	194	329	269	175	382	313	194	329	269	175
1000-1030	198	329	162	145	329	153	198	329	162	145	329	153
1030-1100	0	122	83	53	175	102	0	151	83	53	204	102
1100-1130	27	115	32	27	168	51	56	144	75	56	197	94
1130-1200	193	144	140	193	144	140	193	173	183	193	173	183
1200-1230	117	175	148	117	175	148	117	175	148	117	175	148
1230-1300	35	142	76	35	142	76	35	113	76	35	113	76
1300-1330	143	195	51	143	195	51	116	166	7	116	166	7
1330-1400	456	301	210	403	248	191	429	299	166	376	246	147
1400-1430	256	444	198	203	444	198	295	471	242	232	471	242
1430-1500	157	207	100	157	269	119	186	234	144	186	287	163
1500-1530	98	280	155	98	280	155	98	280	155	98	280	155
1530-1600	56	221	168	56	221	168	56	192	168	56	192	168
1600-1630	56	98	139	56	98	139	27	69	96	27	69	96
1630-1700	257	29	199	257	29	199	228	0	156	228	0	156
1700-1730	201	200	111	201	200	111	201	200	111	201	200	111
1730-1800	69	200	107	69	200	107	69	200	107	69	200	107
1800-1830	0	200	64	0	200	64	0	200	64	0	200	64
1830-1900	0	0	0	0	0	0	0	0	0	0	0	0
1900-1930	0	232	0	0	232	0	0	232	0	0	232	0
1930-2000	194	232	27	194	232	27	194	232	27	194	232	27
2000-2030	198	232	59	198	232	59	198	232	59	198	232	59
2030-2100	88	0	32	88	0	32	88	0	32	88	0	32
2100-2130	0	0	32	0	0	32	0	0	32	0	0	32
2130-2200	84	0	36	84	0	36	84	0	36	84	0	36
2200-2230	0	0	36	0	0	36	0	0	36	0	0	36
2230-2300	0	0	0	0	0	0	0	0	0	0	0	0

Table 4C-7

HOURLY DISTRIBUTION OF PASSENGERS AT PEDREGAL

TIME	CASE 25			CASE 26			CASE 27			CASE 28		
	ARR	DEP	THRU	ARR	DEP	THRU	ARR	DEP	THRU	ARR	DEP	THRU
500- 530	0	0	0	0	0	0	0	0	0	0	0	0
530- 600	0	0	0	0	0	0	0	0	0	0	0	0
600- 630	0	313	143	0	260	124	0	313	143	0	260	124
630- 700	0	360	143	0	360	124	0	360	143	0	360	124
700- 730	176	125	104	229	178	123	176	125	104	229	178	123
730- 800	257	184	92	257	237	111	257	184	92	257	237	111
800- 830	116	323	60	116	323	60	116	323	60	116	323	60
830- 900	204	307	111	204	307	111	204	307	111	204	307	111
900- 930	310	303	143	310	303	143	310	303	143	310	303	143
930-1000	382	313	194	329	260	175	382	313	194	329	260	175
1000-1030	198	329	162	145	329	153	198	329	162	145	329	153
1030-1100	0	122	83	53	175	102	0	151	83	53	204	102
1100-1130	27	115	32	27	168	51	56	144	75	56	197	94
1130-1200	193	144	140	193	144	140	193	173	183	193	173	183
1200-1230	117	175	148	117	175	148	117	175	148	117	175	148
1230-1300	35	142	76	35	142	76	35	113	76	35	113	76
1300-1330	27	85	44	27	85	44	0	58	0	0	56	0
1330-1400	340	138	203	287	85	184	313	138	159	260	83	140
1400-1430	229	281	150	176	281	150	258	308	203	205	308	203
1430-1500	267	323	107	267	376	126	206	350	151	206	403	170
1500-1530	208	396	162	208	396	162	208	396	162	208	396	162
1530-1600	56	337	175	56	337	175	56	308	175	56	308	175
1600-1630	56	98	139	56	98	139	27	59	96	27	59	96
1630-1700	257	29	109	257	29	109	228	0	156	228	0	156
1700-1730	201	209	111	201	209	111	201	209	111	201	209	111
1730-1800	69	209	107	69	209	107	69	209	107	69	209	107
1800-1830	0	209	64	0	209	64	0	209	64	0	209	64
1830-1900	0	0	0	0	0	0	0	0	0	0	0	0
1900-1930	0	116	0	0	116	0	0	116	0	0	116	0
1930-2000	84	116	29	84	116	29	84	116	29	84	116	29
2000-2030	204	226	59	204	226	59	204	226	59	204	226	59
2030-2100	204	119	39	204	119	39	204	119	39	204	119	39
2100-2130	0	0	32	0	0	32	0	0	32	0	0	32
2130-2200	84	0	36	84	0	36	84	0	36	84	0	36
2200-2230	0	0	36	0	0	36	0	0	36	0	0	36
2230-2300	0	0	0	0	0	0	0	0	0	0	0	0

Table 4C-8

HOURLY DISTRIBUTION OF PASSENGERS AT PEDREGAL

TIME	CASE 29			CASE 30			CASE 31			CASE 32		
	ARR	DEP	THRU	ARR	DEP	THRU	ARR	DEP	THRU	ARR	DEP	THRU
500- 530	0	0	0	0	0	0	0	0	0	0	0	0
530- 600	0	0	0	0	0	0	0	0	0	0	0	0
600- 630	0	313	143	0	269	124	0	313	143	0	269	124
630- 700	0	342	143	0	342	124	0	342	143	0	342	124
700- 730	123	98	72	176	151	91	123	98	72	176	151	91
730- 800	204	157	69	204	210	79	204	157	69	204	210	79
800- 830	116	323	60	116	323	60	116	323	60	116	323	60
830- 900	204	307	111	204	307	111	204	307	111	204	307	111
900- 930	319	303	143	319	303	143	319	303	143	319	303	143
930-1000	382	313	194	329	269	175	382	313	194	329	269	175
1000-1030	198	329	162	145	329	153	198	329	162	145	329	153
1030-1100	0	122	83	53	175	102	0	151	83	53	204	102
1100-1130	27	115	32	27	168	51	56	144	75	56	197	94
1130-1200	193	144	140	193	144	140	193	173	183	193	173	183
1200-1230	117	175	148	117	175	148	117	175	148	117	175	148
1230-1300	35	142	76	35	142	76	35	113	76	35	113	76
1300-1330	27	85	44	27	85	44	0	56	0	0	56	0
1330-1400	340	191	203	287	138	184	313	189	159	260	136	140
1400-1430	256	334	191	203	334	191	285	361	235	232	361	235
1430-1500	267	323	107	267	376	126	296	359	151	296	403	170
1500-1530	208	396	162	208	396	162	208	396	162	208	396	162
1530-1600	56	337	175	56	337	175	56	308	175	56	308	175
1600-1630	56	98	139	56	98	139	27	69	96	27	69	96
1630-1700	257	29	199	257	29	199	228	0	156	228	0	156
1700-1730	201	209	111	201	209	111	201	209	111	201	209	111
1730-1800	69	209	107	69	209	107	69	209	107	69	209	107
1800-1830	0	209	64	0	209	64	0	209	64	0	209	64
1830-1900	0	0	0	0	0	0	0	0	0	0	0	0
1900-1930	0	116	0	0	116	0	0	116	0	0	116	0
1930-2000	84	116	20	84	116	20	84	116	20	84	116	20
2000-2030	204	226	59	204	226	59	204	226	59	204	226	59
2030-2100	204	119	39	204	119	39	204	119	39	204	119	39
2100-2130	0	0	32	0	0	32	0	0	32	0	0	32
2130-2200	84	0	36	84	0	36	84	0	36	84	0	36
2200-2230	0	0	36	0	0	36	0	0	36	0	0	36
2230-2300	0	0	0	0	0	0	0	0	0	0	0	0

Table 4C-9

HOURLY DISTRIBUTION OF PASSENGERS AT TALANGA

TIME	CASE 1			CASE 2			CASE 3			CASE 4		
	ARR	DEP	THRU	ARR	DEP	THRU	ARR	DEP	THRU	ARR	DEP	THRU
500- 530	0	0	0	0	0	0	0	0	0	0	0	0
530- 600	0	0	0	0	0	0	0	0	0	0	0	0
600- 630	0	318	138	0	265	119	0	318	138	0	265	119
630- 700	0	347	138	0	347	119	0	347	138	0	347	119
700- 730	128	101	70	181	154	89	128	101	70	181	154	89
730- 800	204	160	58	204	213	77	204	160	58	204	213	77
800- 830	116	326	58	116	326	58	116	326	58	116	326	58
830- 900	209	307	109	209	307	109	209	307	109	209	307	109
900- 930	324	314	141	324	314	141	324	314	141	324	314	141
930-1000	385	318	189	332	265	179	385	318	189	332	265	179
1000-1030	198	337	157	145	337	148	198	337	157	145	337	148
1030-1100	0	125	80	53	178	99	0	154	89	53	207	99
1100-1130	27	120	32	27	173	51	56	149	75	56	202	94
1130-1200	193	120	138	193	120	138	193	149	181	193	149	181
1200-1230	122	180	144	122	180	144	122	180	144	122	180	144
1230-1300	40	142	74	40	142	74	40	113	74	40	113	74
1300-1330	27	85	44	27	85	44	0	56	0	0	56	0
1330-1400	345	191	201	202	138	182	318	189	157	265	136	138
1400-1430	261	334	189	208	334	189	299	361	233	237	361	233
1430-1500	270	328	155	270	381	174	299	355	199	299	408	218
1500-1530	211	404	157	211	404	157	211	404	157	211	404	157
1530-1600	56	345	170	56	345	170	56	316	170	56	316	170
1600-1630	56	141	136	56	141	136	27	112	93	27	112	93
1630-1700	230	69	149	230	69	149	201	49	106	201	40	106
1700-1730	201	240	106	201	240	106	201	240	106	201	240	106
1730-1800	72	200	62	72	200	62	72	200	62	72	200	62
1800-1830	0	200	62	0	200	62	0	200	62	0	200	62
1830-1900	0	0	0	0	0	0	0	0	0	0	0	0
1900-1930	140	116	32	140	116	32	149	116	32	140	116	32
1930-2000	124	116	52	124	116	52	124	116	52	124	116	52
2000-2030	204	226	91	204	226	91	204	226	91	204	226	91
2030-2100	204	110	39	204	110	39	204	110	39	204	110	39
2100-2130	0	0	32	0	0	32	0	0	32	0	0	32
2130-2200	84	0	36	84	0	36	84	0	36	84	0	36
2200-2230	0	0	36	0	0	36	0	0	36	0	0	36
2230-2300	0	0	0	0	0	0	0	0	0	0	0	0

Table 4C-10

HOURLY DISTRIBUTION OF PASSENGERS AT TALANGA

TIME	CASE 5			CASE 6			CASE 7			CASE 8		
	ARR	DEP	THRU	ARR	DEP	THRU	ARR	DEP	THRU	ARR	DEP	THRU
500- 530	0	0	0	0	0	0	0	0	0	0	0	0
530- 600	0	0	0	0	0	0	0	0	0	0	0	0
600- 630	0	318	138	0	265	119	0	318	138	0	265	119
630- 700	0	374	138	0	374	119	0	374	138	0	374	119
700- 730	181	128	192	234	181	121	181	128	192	234	181	121
730- 800	257	197	90	257	240	109	257	197	90	257	240	109
800- 830	116	326	58	116	326	58	116	326	58	116	326	58
830- 900	299	307	109	299	307	109	299	307	109	299	307	109
900- 930	324	314	141	324	314	141	324	314	141	324	314	141
930-1000	385	318	189	332	265	179	385	318	189	332	265	179
1000-1030	198	337	157	145	337	148	198	337	157	145	337	149
1030-1100	0	125	80	53	178	99	0	154	80	53	207	99
1100-1130	27	120	32	27	173	51	56	149	75	56	202	94
1130-1200	193	120	138	193	120	138	193	149	182	193	149	181
1200-1230	122	180	144	122	180	144	122	180	144	122	180	144
1230-1300	40	142	74	40	142	74	40	113	74	40	113	74
1300-1330	27	85	44	27	85	44	0	56	0	0	56	0
1330-1400	345	138	201	202	85	182	318	136	157	265	83	138
1400-1430	234	281	157	181	281	157	263	308	201	219	308	201
1430-1500	270	328	155	270	381	174	299	355	199	299	408	219
1500-1530	211	404	157	211	404	157	211	404	157	211	404	157
1530-1600	56	345	170	56	345	170	56	316	179	56	316	170
1600-1630	56	141	136	56	141	136	27	112	93	27	112	93
1630-1700	239	69	149	239	69	149	201	40	106	201	40	106
1700-1730	201	240	106	201	240	106	201	240	106	201	240	106
1730-1800	72	200	62	72	200	62	72	200	62	72	200	62
1800-1830	0	200	62	0	200	62	0	200	62	0	200	62
1830-1900	0	0	0	0	0	0	0	0	0	0	0	0
1900-1930	140	116	32	140	116	32	140	116	32	140	116	32
1930-2000	124	116	52	124	116	52	124	116	52	124	116	52
2000-2030	204	226	91	204	226	91	204	226	91	204	226	91
2030-2100	204	110	39	204	110	39	204	110	39	204	110	39
2100-2130	0	0	32	0	0	32	0	0	32	0	0	32
2130-2200	84	0	36	84	0	36	84	0	36	84	0	36
2200-2230	0	0	36	0	0	36	0	0	36	0	0	36
2230-2300	0	0	0	0	0	0	0	0	0	0	0	0

Table 4C-11 HOURLY DISTRIBUTION OF PASSENGERS AT TALANGA

TIME	CASE 9			CASE 10			CASE 11			CASE 12		
	ARR	DEP	THRU	ARR	DEP	THRU	ARR	DEP	THRU	ARR	DEP	THRU
500- 530	0	0	0	0	0	0	0	0	0	0	0	0
530- 600	0	0	0	0	0	0	0	0	0	0	0	0
600- 630	0	318	138	0	265	119	0	318	138	0	265	119
630- 700	0	347	138	0	347	119	0	347	138	0	347	119
700- 730	128	101	70	181	154	89	128	101	70	181	154	89
730- 800	204	276	58	204	320	77	204	276	58	204	320	77
800- 830	226	332	65	226	332	65	226	332	65	226	332	65
830- 900	93	313	109	93	313	109	93	313	109	93	313	109
900- 930	208	204	134	208	204	134	208	204	134	208	204	134
930-1000	385	318	189	332	265	170	385	318	189	332	265	170
1000-1030	198	337	157	145	337	148	198	337	157	145	337	148
1030-1100	0	125	80	53	178	99	0	154	80	53	207	99
1100-1130	27	120	32	27	173	51	56	140	75	56	202	94
1130-1200	193	120	138	193	120	138	193	140	191	193	140	181
1200-1230	122	180	144	122	180	144	122	180	144	122	180	144
1230-1300	40	142	74	40	142	74	40	113	74	40	113	74
1300-1330	143	195	51	143	195	51	116	156	7	116	166	7
1330-1400	461	301	208	408	248	189	434	299	164	381	246	145
1400-1430	261	444	196	208	444	196	299	471	240	237	471	240
1430-1500	169	212	148	169	265	167	189	239	192	189	292	211
1500-1530	101	288	150	101	288	150	101	288	150	101	288	150
1530-1600	56	229	163	56	229	163	56	209	163	56	209	163
1600-1630	56	141	136	56	141	136	27	112	93	27	112	93
1630-1700	230	69	149	230	69	149	201	49	106	201	49	106
1700-1730	201	240	106	201	249	106	201	249	106	201	240	106
1730-1800	72	209	62	72	209	62	72	209	62	72	209	62
1800-1830	0	209	62	0	209	62	0	209	62	0	209	62
1830-1900	0	0	0	0	0	0	0	0	0	0	0	0
1900-1930	140	232	32	140	232	32	140	232	32	140	232	32
1930-2000	234	232	59	234	232	59	234	232	59	234	232	59
2000-2030	198	232	91	198	232	91	198	232	91	198	232	91
2030-2100	88	0	32	88	0	32	88	0	32	88	0	32
2100-2130	0	0	32	0	0	32	0	0	32	0	0	32
2130-2200	84	0	36	84	0	36	84	0	36	84	0	36
2200-2230	0	0	36	0	0	36	0	0	36	0	0	36
2230-2300	0	0	0	0	0	0	0	0	0	0	0	0

Table 4C-12

HOURLY DISTRIBUTION OF PASSENGERS AT TALANGA

TIME	CASE 13			CASE 14			CASE 15			CASE 16		
	ARR	DEP	THRU	ARR	DEP	THRU	ARR	DEP	THRU	ARR	DEP	THRU
500- 530	0	0	0	0	0	0	0	0	0	0	0	0
530- 600	0	0	0	0	0	0	0	0	0	0	0	0
600- 630	0	318	138	0	265	119	0	318	138	0	265	119
630- 700	0	374	138	0	374	119	0	374	138	0	374	119
700- 730	181	128	192	234	181	121	181	128	192	234	181	121
730- 800	257	303	90	257	356	109	257	303	90	257	356	109
800- 830	226	332	65	226	332	65	226	332	65	226	332	65
830- 900	93	313	109	93	313	109	93	313	109	93	313	109
900- 930	208	204	134	208	204	134	208	204	134	208	204	134
930-1000	385	318	189	332	265	170	385	318	189	332	265	170
1000-1030	198	337	157	145	337	148	198	337	157	145	337	148
1030-1100	0	125	80	53	178	99	0	154	80	53	207	99
1100-1130	27	120	32	27	173	51	56	149	75	56	202	94
1130-1200	193	120	138	193	120	138	193	149	181	193	149	181
1200-1230	122	189	144	122	189	144	122	189	144	122	189	144
1230-1300	40	142	74	40	142	74	40	113	74	40	113	74
1300-1330	143	195	51	143	195	51	116	166	7	116	166	7
1330-1400	461	248	208	408	195	189	434	245	164	381	193	145
1400-1430	234	391	164	181	391	164	263	418	208	210	418	208
1430-1500	160	212	148	160	265	167	189	239	192	189	292	211
1500-1530	101	288	150	101	288	150	101	288	150	101	288	150
1530-1600	56	229	163	56	229	163	56	200	163	56	200	163
1600-1630	56	141	136	56	141	136	27	112	93	27	112	93
1630-1700	230	69	149	230	69	149	201	40	106	201	40	106
1700-1730	201	240	106	201	240	106	201	249	106	201	249	106
1730-1800	72	200	62	72	200	62	72	200	62	72	200	62
1800-1830	0	200	62	0	200	62	0	200	62	0	200	62
1830-1900	0	0	0	0	0	0	0	0	0	0	0	0
1900-1930	140	232	32	140	232	32	140	232	32	140	232	32
1930-2000	234	232	59	234	232	59	234	232	59	234	232	59
2000-2030	198	232	91	198	232	91	198	232	91	198	232	91
2030-2100	88	0	32	88	0	32	88	0	32	88	0	32
2100-2130	0	0	32	0	0	32	0	0	32	0	0	32
2130-2200	84	0	36	84	0	36	84	0	36	84	0	36
2200-2230	0	0	36	0	0	36	0	0	36	0	0	36
2230-2300	0	0	0	0	0	0	0	0	0	0	0	0

Table 4C-13

HOURLY DISTRIBUTION OF PASSENGERS AT TALANGA

TIME	CASE 17			CASE 18			CASE 19			CASE 20		
	ARR	DEP	THRU	ARR	DEP	THRU	ARR	DEP	THRU	ARR	DEP	THRU
500- 530	0	0	0	0	0	0	0	0	0	0	0	0
530- 600	0	0	0	0	0	0	0	0	0	0	0	0
600- 630	0	318	138	0	265	119	0	318	138	0	265	119
630- 700	0	347	138	0	347	119	0	347	138	0	347	119
700- 730	128	101	70	181	154	89	128	101	70	181	154	89
730- 800	204	160	58	204	213	77	204	160	58	204	213	77
800- 830	116	326	58	116	326	58	116	326	58	116	326	58
830- 900	200	307	100	200	307	100	200	307	100	200	307	100
900- 930	236	402	141	236	402	141	236	402	141	236	402	141
930-1000	207	318	180	244	265	170	207	318	180	244	265	170
1000-1030	198	240	125	145	240	116	198	240	125	145	240	116
1030-1100	0	125	48	53	178	67	0	154	48	53	207	67
1100-1130	27	120	32	27	173	51	56	140	75	56	202	94
1130-1200	193	120	138	193	120	138	193	140	181	193	140	181
1200-1230	122	180	144	122	180	144	122	180	144	122	180	144
1230-1300	40	142	74	40	142	74	40	113	74	40	113	74
1300-1330	27	85	44	27	85	44	0	56	0	0	56	0
1330-1400	345	191	201	202	138	182	318	189	157	265	136	138
1400-1430	261	334	189	208	334	189	209	361	233	237	361	233
1430-1500	270	328	155	270	381	174	209	355	199	209	408	218
1500-1530	211	404	157	211	404	157	211	404	157	211	404	157
1530-1600	144	345	202	144	345	202	144	316	202	144	316	202
1600-1630	144	229	168	144	229	168	115	209	125	115	209	125
1630-1700	142	157	140	142	157	140	113	128	106	113	128	106
1700-1730	113	328	106	113	328	106	113	328	106	113	328	106
1730-1800	72	200	62	72	200	62	72	200	62	72	200	62
1800-1830	0	200	62	0	200	62	0	200	62	0	200	62
1830-1900	0	0	0	0	0	0	0	0	0	0	0	0
1900-1930	140	116	32	140	116	32	140	116	32	140	116	32
1930-2000	124	116	52	124	116	52	124	116	52	124	116	52
2000-2030	204	226	91	204	226	91	204	226	91	204	226	91
2030-2100	204	110	39	204	110	39	204	110	39	204	110	39
2100-2130	0	0	32	0	0	32	0	0	32	0	0	32
2130-2200	84	0	36	84	0	36	84	0	36	84	0	36
2200-2230	0	0	36	0	0	36	0	0	36	0	0	36
2230-2300	0	0	0	0	0	0	0	0	0	0	0	0

Table 4C-14

HOURLY DISTRIBUTION OF PASSENGERS AT TALANGA

TIME	CASE 21			CASE 22			CASE 23			CASE 24		
	ARR	DEP	THRU	ARR	DEP	THRU	ARR	DEP	THRU	ARR	DEP	THRU
500- 530	0	0	0	0	0	0	0	0	0	0	0	0
530- 600	0	0	0	0	0	0	0	0	0	0	0	0
600- 630	0	318	138	0	265	110	0	318	138	0	265	110
630- 700	0	374	138	0	374	110	0	374	138	0	374	110
700- 730	181	128	102	234	181	101	181	128	102	234	181	101
730- 800	257	187	90	257	240	109	257	187	90	257	240	109
800- 830	116	326	58	116	326	58	116	326	58	116	326	58
830- 900	209	307	109	209	307	109	209	307	109	209	307	109
900- 930	236	402	141	236	402	141	236	402	141	236	402	141
930-1000	207	318	180	244	265	170	207	318	180	244	265	170
1000-1030	198	240	125	145	240	116	198	240	125	145	240	116
1030-1100	0	125	48	53	178	67	0	154	48	53	207	67
1100-1130	27	120	32	27	173	51	56	149	75	56	202	94
1130-1200	193	120	138	193	120	138	193	149	181	193	149	181
1200-1230	122	180	144	122	180	144	122	180	144	122	180	144
1230-1300	40	142	74	40	142	74	40	113	74	40	113	74
1300-1330	27	85	44	27	85	44	0	56	0	0	56	0
1330-1400	345	138	201	202	85	182	318	136	157	265	83	138
1400-1430	234	281	157	181	281	157	263	308	201	210	308	201
1430-1500	270	328	155	270	381	174	200	355	199	200	408	218
1500-1530	211	404	157	211	404	157	211	404	157	211	404	157
1530-1600	144	345	202	144	345	202	144	315	202	144	316	202
1600-1630	144	220	168	144	220	168	115	200	125	115	200	125
1630-1700	142	157	140	142	157	140	113	128	106	113	128	106
1700-1730	113	328	106	113	328	106	113	328	106	113	328	106
1730-1800	72	200	62	72	200	62	72	200	62	72	200	62
1800-1830	0	200	62	0	200	62	0	200	62	0	200	62
1830-1900	0	0	0	0	0	0	0	0	0	0	0	0
1900-1930	140	116	32	140	116	32	140	116	32	140	116	32
1930-2000	124	116	52	124	116	52	124	116	52	124	116	52
2000-2030	204	226	91	204	226	91	204	226	91	204	226	91
2030-2100	204	110	39	204	110	39	204	110	39	204	110	39
2100-2130	0	0	32	0	0	32	0	0	32	0	0	32
2130-2200	84	0	36	84	0	36	84	0	36	84	0	36
2200-2230	0	0	36	0	0	36	0	0	36	0	0	36
2230-2300	0	0	0	0	0	0	0	0	0	0	0	0

Table 4C-15

HOURLY DISTRIBUTION OF PASSENGERS AT TALANGA

TIME	CASE 25			CASE 26			CASE 27			CASE 28		
	ARR	DEP	THRU	ARR	DEP	THRU	ARR	DEP	THRU	ARR	DEP	THRU
500- 530	0	0	0	0	0	0	0	0	0	0	0	0
530- 600	0	0	0	0	0	0	0	0	0	0	0	0
600- 630	0	318	138	0	265	119	0	318	138	0	265	119
630- 700	0	347	138	0	347	119	0	347	138	0	347	119
700- 730	128	101	70	181	154	89	128	101	70	181	154	89
730- 800	204	276	58	204	329	77	204	276	58	204	329	77
800- 830	226	332	65	226	332	65	226	332	65	226	332	65
830- 900	93	313	109	93	313	109	93	313	109	93	313	109
900- 930	120	292	134	120	292	134	120	292	134	120	292	134
930-1000	297	318	189	244	265	170	297	318	189	244	265	170
1000-1030	198	240	125	145	240	110	198	240	125	145	240	110
1030-1100	0	125	48	53	178	67	0	154	48	53	207	67
1100-1130	27	120	32	27	173	51	56	149	75	56	202	94
1130-1200	193	129	138	193	120	138	193	149	181	193	149	181
1200-1230	122	180	144	122	180	144	122	180	144	122	180	144
1230-1300	40	142	74	40	142	74	40	113	74	40	113	74
1300-1330	143	195	51	143	195	51	116	166	7	116	166	7
1330-1400	461	301	208	408	248	189	434	299	164	381	246	145
1400-1430	261	444	196	208	444	196	299	471	240	237	471	240
1430-1500	169	212	148	169	265	167	189	239	192	189	292	211
1500-1530	101	288	159	101	288	159	101	288	150	101	288	150
1530-1600	144	229	195	144	229	195	144	209	195	144	209	195
1600-1630	144	229	168	144	229	168	115	200	125	115	200	125
1630-1709	142	157	149	142	157	149	113	128	106	113	128	106
1700-1730	113	328	106	113	328	106	113	328	106	113	328	106
1730-1800	72	200	62	72	209	62	72	200	62	72	209	62
1800-1830	0	209	62	0	200	62	0	200	62	0	209	62
1830-1900	0	0	0	0	0	0	0	0	0	0	0	0
1900-1930	140	232	32	140	232	32	140	232	32	140	232	32
1930-2000	234	232	59	234	232	59	234	232	59	234	232	59
2000-2030	198	232	91	198	232	91	198	232	91	198	232	91
2030-2100	88	0	32	88	0	32	88	0	32	88	0	32
2100-2130	0	0	32	0	0	32	0	0	32	0	0	32
2130-2200	84	0	36	84	0	36	84	0	36	84	0	36
2200-2230	0	0	36	0	0	36	0	0	36	0	0	36
2230-2300	0	0	0	0	0	0	0	0	0	0	0	0

Table 4C-16

HOURLY DISTRIBUTION OF PASSENGERS AT TALANGA

TIME	CASE 29 ARR	CASE 29 DEP	CASE 29 THRU	CASE 30 ARR	CASE 30 DEP	CASE 30 THRU	CASE 31 ARR	CASE 31 DEP	CASE 31 THRU	CASE 32 ARR	CASE 32 DEP	CASE 32 THRU
500- 530	0	0	0	0	0	0	0	0	0	0	0	0
530- 600	0	0	0	0	0	0	0	0	0	0	0	0
600- 630	0	318	138	0	265	110	0	318	138	0	265	110
630- 700	0	374	138	0	374	110	0	374	138	0	374	110
700- 730	181	128	102	234	181	121	181	128	102	234	181	121
730- 800	257	303	90	257	356	109	257	303	90	257	356	109
800- 830	226	332	65	226	332	65	226	332	65	226	332	65
830- 900	93	313	109	93	313	109	93	313	109	93	313	109
900- 930	120	202	134	120	202	134	120	202	134	120	202	134
930-1000	207	318	180	244	265	170	297	318	189	244	265	170
1000-1030	198	240	125	145	240	116	198	240	125	145	240	116
1030-1100	0	125	48	53	178	67	0	154	48	53	207	67
1100-1130	27	129	32	27	173	51	56	140	75	56	202	94
1130-1200	193	129	138	193	120	138	193	149	181	193	149	181
1200-1230	122	189	144	122	189	144	122	189	144	122	180	144
1230-1300	40	142	74	40	142	74	40	113	74	40	113	74
1300-1330	143	195	51	143	195	51	116	166	7	116	166	7
1330-1400	461	248	208	408	195	189	434	246	164	381	193	145
1400-1430	234	391	164	181	391	164	263	418	208	210	418	208
1430-1500	160	212	148	160	265	167	189	230	192	189	292	211
1500-1530	101	288	150	101	288	150	101	288	150	101	288	150
1530-1600	144	229	195	144	229	195	144	290	195	144	290	195
1600-1630	144	229	168	144	229	168	115	200	125	115	200	125
1630-1700	142	157	149	142	157	149	113	128	106	113	128	106
1700-1730	113	328	106	113	328	106	113	328	106	113	328	106
1730-1800	72	200	62	72	200	62	72	290	62	72	200	62
1800-1830	0	200	62	0	200	62	0	200	62	0	200	62
1830-1900	0	0	0	0	0	0	0	0	0	0	0	0
1900-1930	140	232	32	140	232	32	140	232	32	140	232	32
1930-2000	234	232	59	234	232	59	234	232	59	234	232	59
2000-2030	198	232	91	198	232	91	198	232	91	198	232	91
2030-2100	88	0	32	88	0	32	88	0	32	88	0	32
2100-2130	0	0	32	0	0	32	0	0	32	0	0	32
2130-2200	84	0	36	84	0	36	84	0	36	84	0	36
2200-2230	0	0	36	0	0	36	0	0	36	0	0	36
2230-2300	0	0	0	0	0	0	0	0	0	0	0	0

APPENDIX 5A

ILS OPERATIONAL REQUIREMENT

Appendix 5A ILS OPERATIONAL REQUIREMENTS

Operational requirements of ICAO by category of Instrument Landing System (ILS) are as follows:

Table 5A-1 ICAO ILS OPERATIONAL REQUIREMENTS BY CATEGORY

Category	Decision Height meter (ft.)	Runway Visual Range meter (ft.)
I	60 (200)	800 (2600)
II	30 (100)	400 (1200)
III	- -	Below 200 (700)

The frequency of occurrence of below Cat-I operational minima at each meteorological observation point based on data obtained 24 times a day for a 12-month period are as follows:

Table 5A-2 PERCENTAGE OF OCCURRENCE OF WEATHER CONDITIONS BELOW CAT-I OPERATIONAL MINIMA

	Toncontin	Pedregal	Hule	Talanga
Average for 12-month period	0.7%	4.4%	11.5%	
Jan	0	12.1	5.0	
Feb	0	0.5	5.0	
Mar	0	1.6	3.5	0
Apr	0	1.9	14.6	0.15
May	0.7	0.9	6.1	0
Jun	3.1	4.3	14.7	0.15
Jul	0.7	7.7	13.2	
Aug	1.3	1.8	13.3	
Sep	0	0.5	16.7	
Oct	2.2	3.2	19.5	
Nov	0	11.3	13.4	
Dec	0	13.6	8.0	

Provision of ILS at airports regularly handling international jet flights is generally required by international airlines. ILS is often an economic necessity where its absence could result in excessive delays and diversions of traffic. As Tegucigalpa area is surrounded by mountains and is elevated high, it has low cloud height and poor visibility as shown in Table 3A-2 above.

Notwithstanding the fact that according to the ICAO recommendation as stipulated in the "Requirements of ILS at New Tegucigalpa International Airport, ANP 1977", ILS Category I operation with Category II ILS equipment and appropriate airfield lighting system are recommended, in this site selection study Category I equipment is selected for economic reasons, especially of cost-effectiveness considerations based on (1) expected number of flight movements and (2) costs of equipment, operation and maintenance.

APPENDIX 5B

AERONAUTICAL METEOROLOGICAL ANALYSIS

Appendix 5B AERONAUTICAL METEOROLOGICAL ANALYSIS

1. Observation Data Obtained

1) Source

Dirección General de Aeronautica Civil, Servicio Meteorologico Nacional

2) Observation Points, Period, Time and Interruption

i) Toncontin (Existing Airport Site) - Elev. 1000m

January to December, 1976 (12 months)
Hourly observation (24 times a day)
No interruption of observation

ii) El Pedregal - Elev. 1500m

January to December, 1976 (12 months)
Hourly observation (24 times a day)
Interruption 23%

iii) Cerro de Hule - Elev. 1500m

a) January, 1962 (1 month)
Hourly observation (12 times a day)
No interruption of observation

b) February, 1962 to January, 1963 (12 months)
Hourly observation (24 times a day)
Interruption %

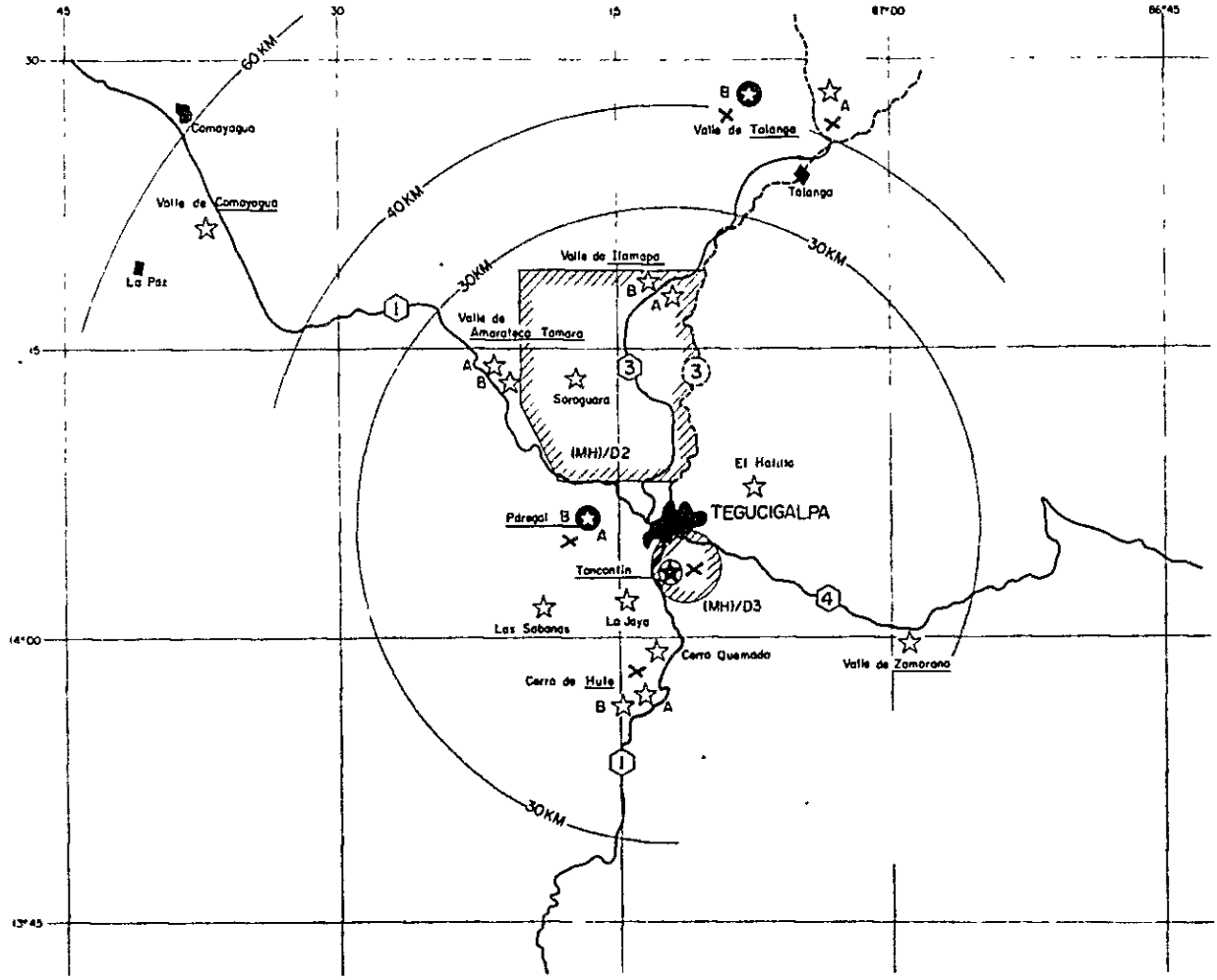
c) April to December, 1970 (9 months)
Hourly observation (12 times a day)
Interruption 24%

iv) Talanga - La Ermita - Elev. 760m

March, 1978 to present
Hourly observation (24 times a day)
No interruption of observation

v) Talanga - El Espino - Elev. 760m

April, 1978 to present
Anemocinemograph recording (24 hours a day)
No interruption of observation



x Weather observation point

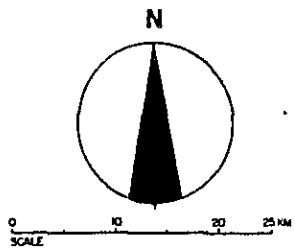


Fig. 5B-2 LOCATION OF WEATHER OBSERVATION POINTS

2. Results of Analysis

1) Toncontin

i) Prevailing wind direction : N to NNE

ii) Frequency of occurence of calm wind:

39% of the total number of observations

25% of the number of daytime observations only

iii) Annual frequency of occurence of weather conditions below weather minimum (ceiling/visibility):

	Below 200ft - 800m	Below 1200ft - 2800m (Operating minima for the existing runway)
Out of the total number of o servations	0.7%	17%
Out of the number of daytime observations only	0.8%	21%

iv) Wind coverage

	Maximum cross-wind component :	
	10kts	15kts
RWY 01/19	95.2%	99.8%
RWY 06/24	89.5%	99.3%
RWY 13/31	85.3%	98.7%

2) El Pedregal

i) Prevailing wind direction : N to NNE

ii) Frequency of occurence of calm wind:

52% Whole year

44% Dry season

58% Wet season

iii) Frequency of occurence of weather conditions below weather minimum (ceiling/visibility, 24 hours):

	Below 200ft - 800m	Below 200ft - 1200m
Whole year	4%	7%
Dry season	4%	6%
Wet season	4%	7%

iv) Wind coverage

Not less than 99% for any direction under the maximum cross-wind component of 15kts.

3) Cerro de Hule

i) Prevailing wind direction : N

ii) Frequency of occurence of calm wind:

32% Whole year

27% Dry season

35% Wet season

iii) Frequency of occurence of weather conditions below weather minimum (ceiling/visibility, 24 hours):

	Below 200ft - 800m	Below 200ft - 1200m
Whole year	12%	12%
Dry season	7%	7%
Wet season	15%	15%

iv) Wind coverage:

	Max. cross-wind component	
	10kts	15kts
RWY 04/22		
Whole year	74.8%	93.1%
Dry season	73.1%	92.0%
Wet season	75.9%	94.4%
RWY 18/36		
Whole year	97.3%	99.7%
Dry season	97.0%	99.7%
Wet season	97.5%	99.6%

v) Other findings:

During January, 1962, wind of over 30kts was observed, with frequency of occurence of 57%.

4) Valle de Talanga

i) Prevailing wind direction : E

ii) Frequency of occurence of calm wind:

More than 50%

iii) Frequency of occurence of weather conditions below weather minimum (Ceiling 200ft, Visibility 800m)

No more than 1%

Table 5B-1 SUMMARY (1)

Observation Point	Year	D.S	W.S.	Dry Season (D.S.)						Wet Season (W.S.)					
				Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov

a) Prevailing Wind Direction

Toncontin 12 hrs	N,NNE	N,NNE	N	NNE	NNE	NNE	NW	N,NE	NW	N,NW	NW	NW	NW	N	NNE
24 hrs	N,NNE	N	NNE	NNE	NNE	NNE	NW	N	NW	N	N	NW	NW	N	NNE
Pedregal	N	N	N,NNE	NE	N	N	N	N	N	E	NNE	NNE	NNE	N	N
Hule 1962*1	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N
1970	N	N	N												
Talanga															
La Ermita							E	E	E	E					
El Espino								E	E	E					

*1 March to December only

b) Frequency of Occurence of Calm Wind (%)

Toncontin 12 hrs	25.4	24.6	26.3	18.4	15.1	14.1	29.0	32.3	38.2	51.8	15.6	21.1	26.2	26.8	16.7
24 hrs	39.0	34.4	43.7	30.9	23.3	24.0	40.1	40.6	47.0	63.1	34.7	41.7	46.3	44.8	31.5
Pedregal	51.9	44.4	58.3	32.5	22.4	28.2	43.5	51.3	68.8	83.6	38.6	51.4	64.1	60.1	48.4
Hule 1962*1	31.6	27.4	35.2	11.5	13.6	24.6	46.3	31.5	25.9	58.8	7.1	36.7	52.4	43.1	13.8
1970	17.1	11.9	20.3												
Talanga															
La Ermita							66.1	56.6	59.7	62.2					
El Espino								54.9	45.1	52.5					

*1 March to December only

Table 5B-1 SUMMARY (2)

Observation Point	Year	D.S.	W.S.	Dry Season (D.S.)						Wet Season (W.S.)					
				Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov

C) Frequency of Occurence of Wind Velocity More Than 20 kts (%)

Toncontin															
12 hrs	0.36	0.50	0.21	0.25	1.49	1.06	0.25	0	0	0	0	0.25	0.26	0	0.77
24 hrs	0.33	0.52	0.14	0.40	0.81	0.57	1.07	0.14	0.13	0.14	0	0.13	0.14	0	0.42
Pedregal	0.09	0.19	0	0	0.40	1.00	0	0	0	0	0	0	0	0	0
Hule 1962*2	6.85	8.36	5.56	*1 17.69	75.53 11.53	12.63	6.33	7.50	0.94	0.42	5.91	3.36	0.28	0.95	22.79
1970*2	13.58	20.53	9.09												
Talanga															
La Ermita															
El Espino															

*1 12 hrs. 1962 only

*2 March to December, 1970

Table 5B-1 SUMMARY (3)

Observation Point	Year	D.S.	W.S.	Dry Season (D.S.) Dec	Jan	Feb	Mar	Apr	May	Wet Season (W.S.) Jun	Jul	Aug	Sep	Oct	Nov
d) Frequency of Occurence of Ceiling/Visibility Minimum (%)															
Toncontin (12hrs)															
200ft - 800m	0.76	0.08	1.47	0	0	0	0	0	0	3.85	0	1.24	0	3.72	0
1200ft - 2800m*1	20.55	12.99	24.30	34.99	17.87	9.28	1.99	5.90	7.69	36.15	22.58	15.14	13.85	29.53	26.92
(24hrs)															
200ft - 800m	0.74	0.11	1.25	0	0	0	0	0	0.67	3.14	0.68	1.34	0	2.15	0
1200ft - 2800m	17.06	12.48	21.65	33.91	18.01	7.89	1.47	4.43	8.74	34.67	19.35	9.66	11.20	31.95	23.19
Pedregal															
200ft - 800m	4.38	4.34	4.34	13.61	12.10	0.50	1.59	1.87	0.94	4.28	7.69	1.82	0.46	3.23	11.29
200ft - 1200m	6.70	6.32	7.10	24.17	14.48	0.75	2.07	2.43	1.75	8.22	9.74	3.33	1.98	7.22	15.21
Hule (1962)					12.20*2										
200ft - 800m	11.46	7.14	15.11	8.97	5.03	5.02	3,50	14.58	6.05	14.71	13.17	13.31	16.67	19.50	13.36
200ft - 1200m	11.71	7.28	15.46	8.97	5.36	5.02	3.50	14.72	6.32	15.13	13.31	13.31	16.81	19.86	14.35
(1970)*3															
200ft - 800m	13.63	9.67	16.01												
200ft - 1200m	14.54	10.55	16.50												
Talanga - La Ermita															
200ft - 800m							0	0.15	0	0.15					
200ft - 1200m							0	0.58	1.11	0.15					

*1 Existing Runway Operation Minimum
*2 12hrs, 1962 only
*3 March to December only

Table 5B-1 SUMMARY (4)

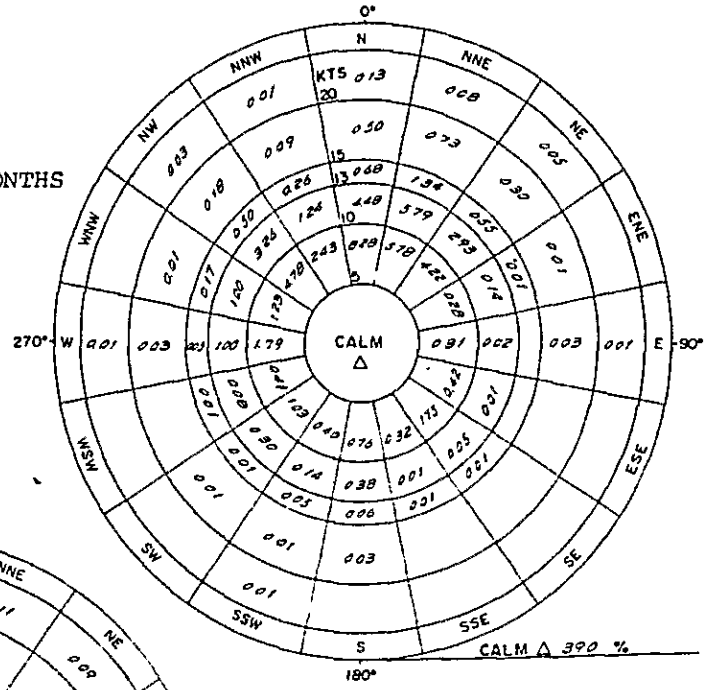
e) Wind Coverage (%)

Observation Point		RWY	Cross Wind Components of 10kts Year	10kts Dry Season	10kts Wet Season	15kts Year	15kts Dry Season	15kts Wet Season
Toncontin	12hrs	01/19	91.6 x	91.2 x	92.2 x	99.7	99.6	99.8
		06/24	84.6 x	82.8 x	85.4 x	98.9	98.6	99.3
		13/31	79.8 x	75.5 x	83.6 x	98.0	97.3	99.2
	24hrs	01/19	95.2	94.6	95.4	99.8	99.8	99.9
		06/24	89.5 x	88.7 x	90.7 x	99.3	99.0	99.5
		13/31	85.3 x	82.0x	89.0 x	98.7	97.9	99.8
Pedregal	24hrs	01/19	99.6	100.0	99.7	99.99	99.4	99.97
Hule (1962)	24hrs	04/22	74.8 x	73.1 x	75.9 x	93.1 x	92.0 x	94.4 x
		18/36	97.3	97.0	97.5	99.7	99.7	99.6
Talanga *1 La Ermita	24hrs	17/35		90.1 x	87.1 x		98.2	94.5 x
		10/28		96.7	97.9		99.5	99.5
El Espino*2		17/35		88.9 x	86.3 x		99.7	99.4
		10/28		98.2	99.5		99.9	100.0

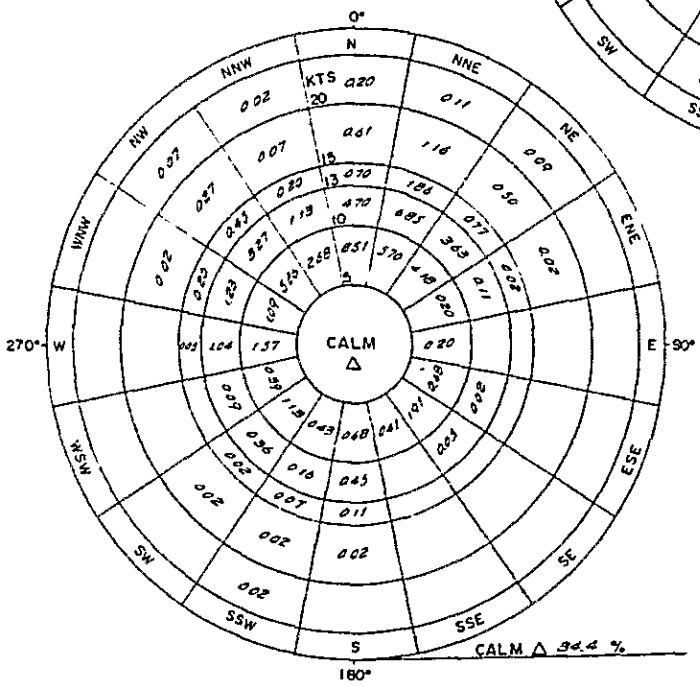
Notes to Observation Period: *1 March to June, 1978 *2 April to June, 1978

Mark x indicates wind coverage less than 95%

12 MONTHS



DRY SEASON,
(DEC - MAY)



WET SEASON,
(JUN - NOV)

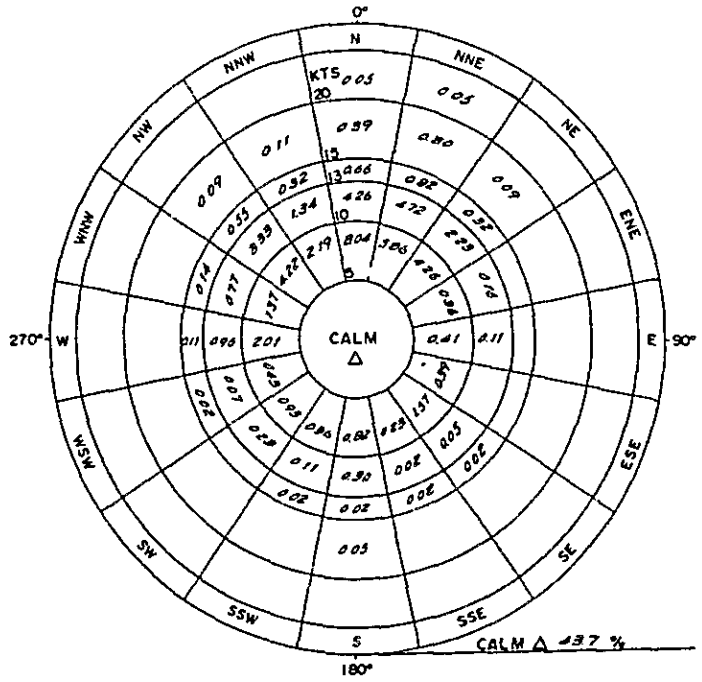


Fig. 5B-2 (a) TONCONTIN WIND ROSE, 1976

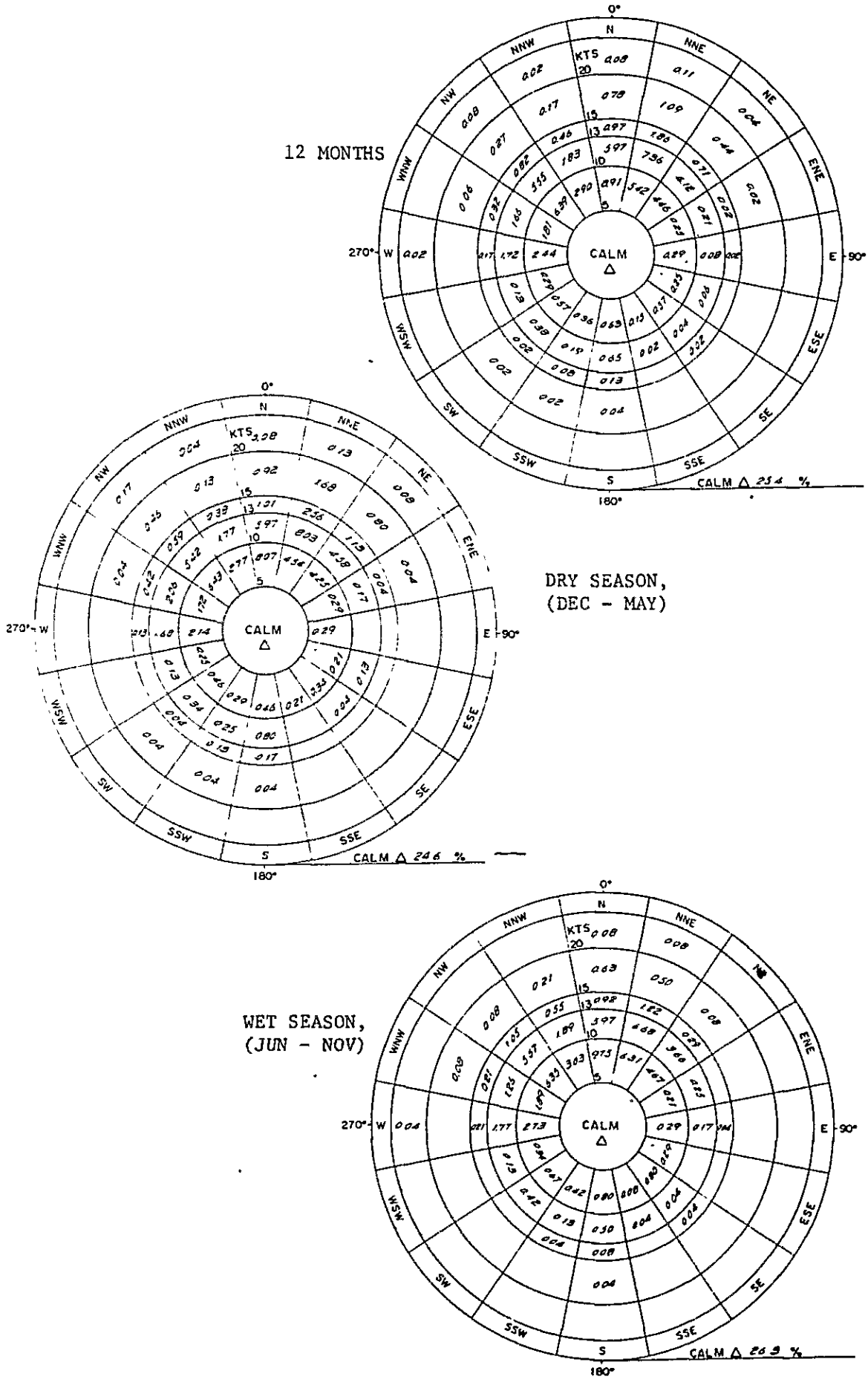


Fig. 5B-2 (b) TONCONTIN-DAYTIME WIND ROSE, 1976

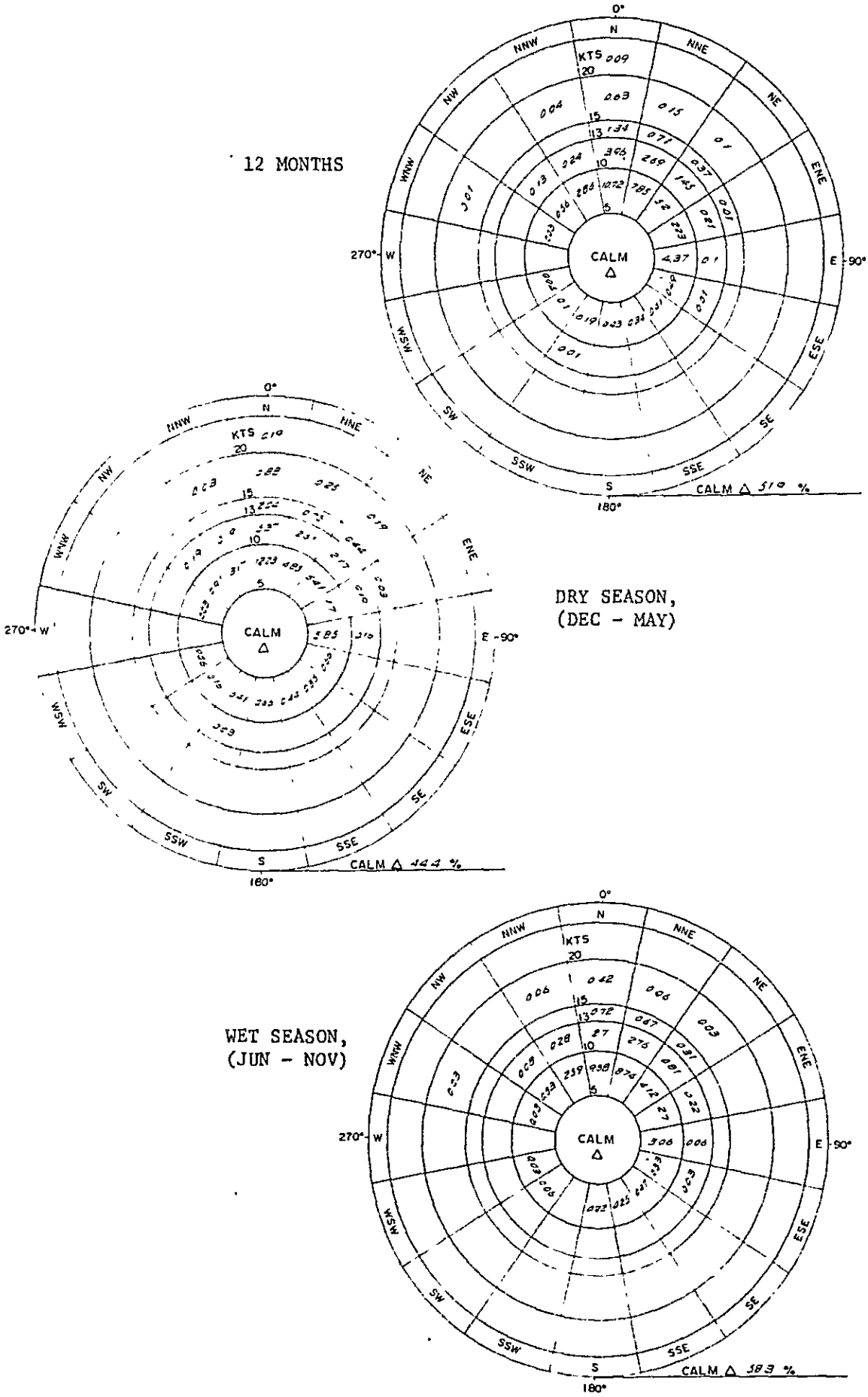


Fig. 5B-3 PEDREGAL WIND ROSE, 1976

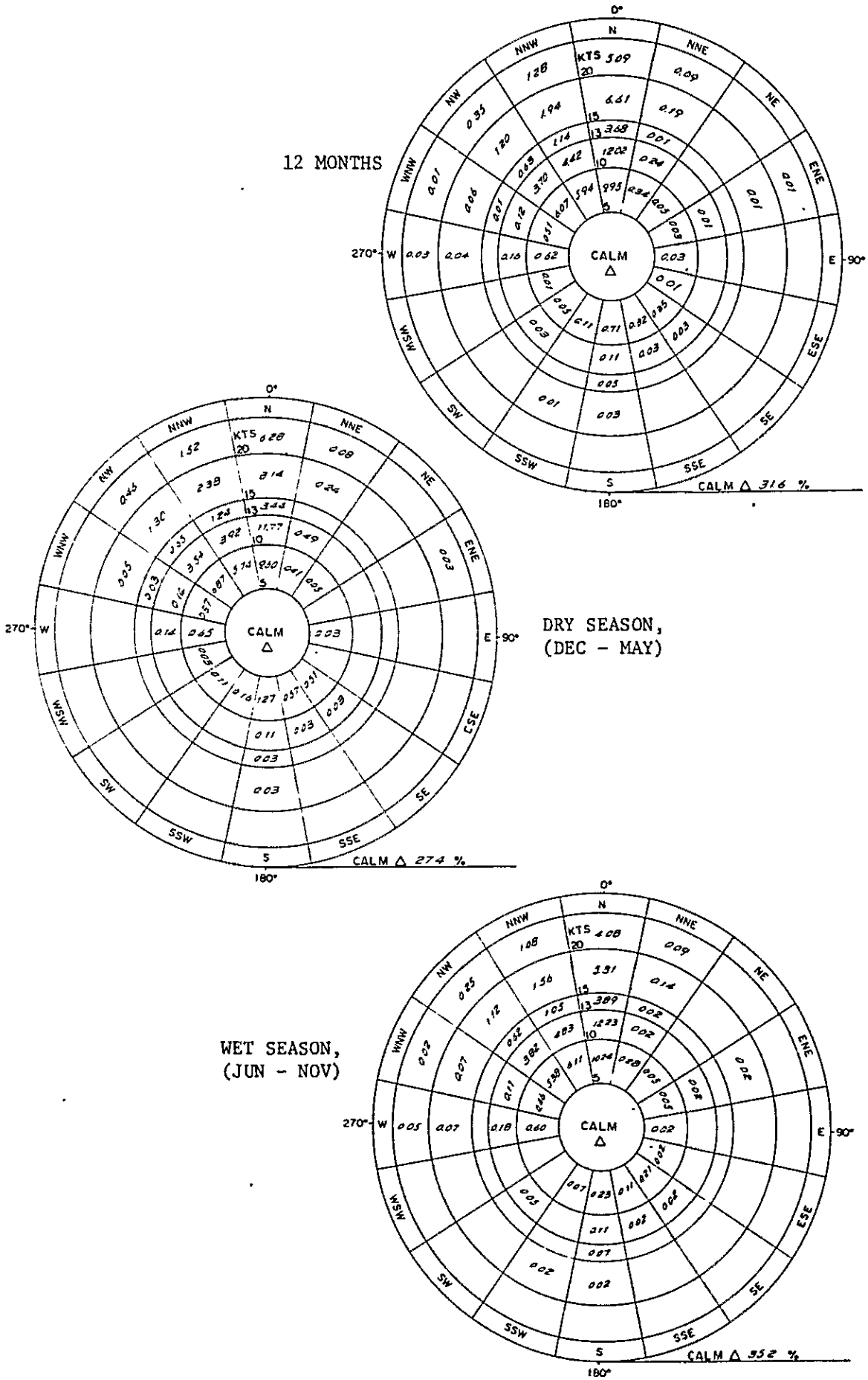


Fig. 5B-4 HULE WIND ROSE, 1962 - 1963

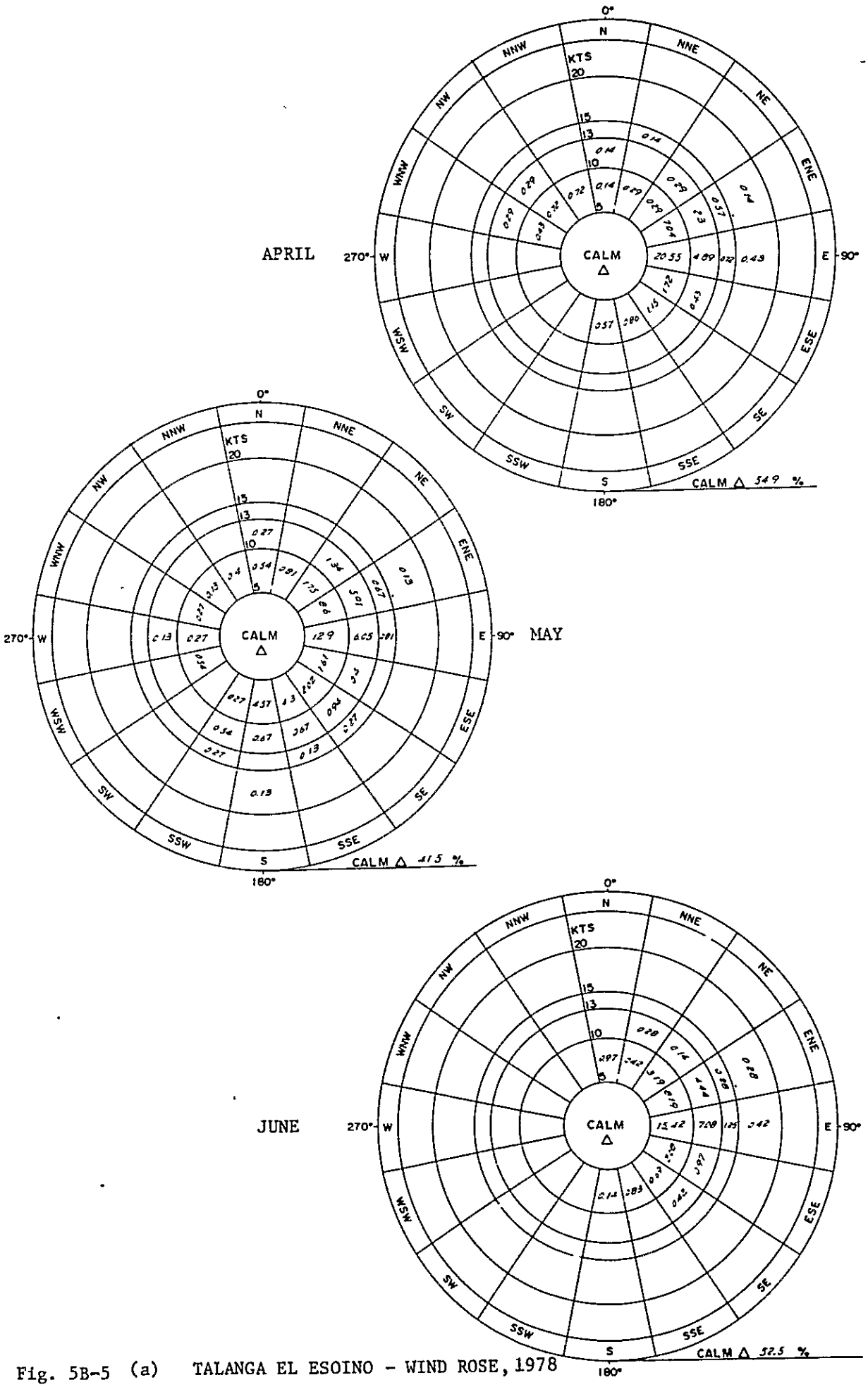
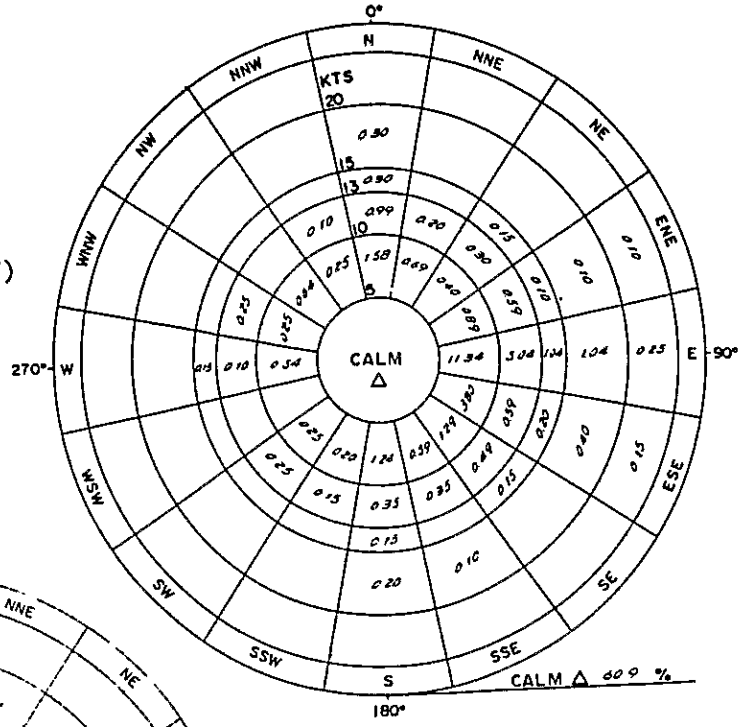
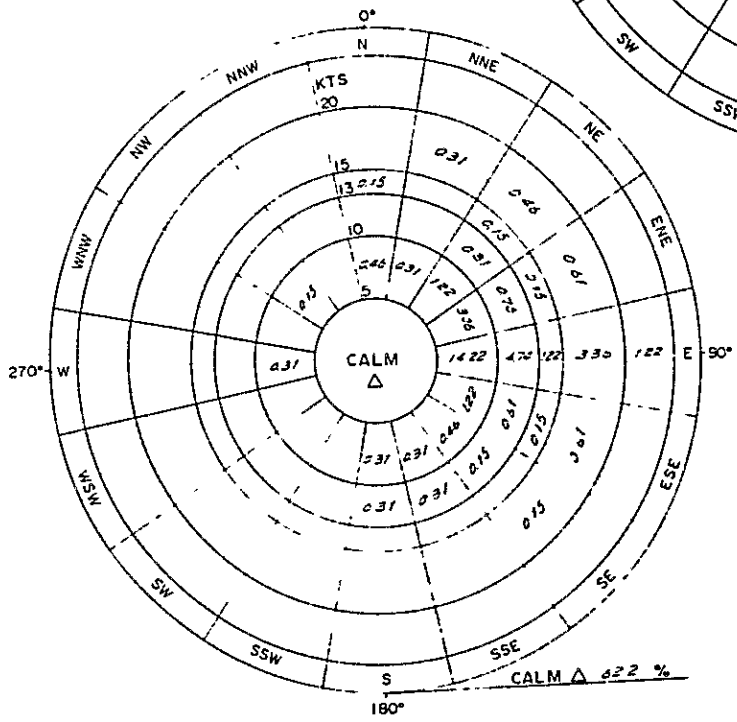


Fig. 5B-5 (a) TALANGA EL ESOINO - WIND ROSE, 1978

DRY SEASON
(MAR. APR. MAY ONLY)





WET SEASON
(JUNE ONLY)

Fig. 5B-6 (6) TALANGA LA ERMITA - WIND ROSE, 1978

STATION. TONCONTIN 12 MONTHS YEAR. 1976

CEILING (meter) \ VISIBILITY (meter)		100 or less	100	200	300	400	500	600	700	800	900	1,000	1,100	1,200	1,300	1,400	1,500	1,600 2,000	2,100 3,000	3,100 5,000	6,000 or more	TOTAL	%
Cloud layer 5/8 or more	Unknown																						
	50 or less											1								2	5	8	009
	50 ~ 100											6						3	3	7	32	51	038
	100 ~ 200									2		2						11	16	35	214	280	318
	200 ~ 300						1					5						7	19	30	835	897	1020
	300 ~ 600											3						2	3	13	403	424	482
	600 ~1,000						2	1		1		4	1				1	10	17	36	3315	3388	3852
	1,000 ~1,500																	1	3	9	781	794	905
	1,500 ~2,000																						
	2,000 ~2,500																						
	2,500 or more																	1			27	28	032
Cloud layer 4/8 or less							2											2	3	19	2905	2925	3326
TOTAL							5	1		3		21	1				1	37	64	145	8317	8795	
%							006	001		003		024	001				001	042	073	165	9684		

STATION TONCONTIN DRY SEASON, (DEC - MAY) YEAR 1976

CEILING (meter) \ VISIBILITY (meter)		100 or less	100	200	300	400	500	600	700	800	900	1,000	1,100	1,200	1,300	1,400	1,500	1,600 2,000	2,100 3,000	3,100 5,000	6,000 or more	TOTAL	%
Cloud layer 5/8 or more	Unknown																						
	50 or less																						
	50 ~ 100																			2	3	5	011
	100 ~ 200																	2	3	13	47	65	147
	200 ~ 300						1					4						1	5	5	338	354	803
	300 ~ 600											1						2	2	3	188	196	445
	600 ~1,000						1	1		1		2						4	9	19	1325	1362	3091
	1,000 ~1,500																		1	5	397	403	914
	1,500 ~2,000																						
	2,000 ~2,500																						
	2,500 or more																	1			6	7	016
Cloud layer 4/8 or less							2											1	3	11	1998	2015	4572
TOTAL							4	1		1		7						11	23	58	4302	4407	
%							009	002		002		016						025	052	132	9762		

STATION TONCONTIN WET SEASON, (JUN - NOV) YEAR 1976

CEILING (meter) \ VISIBILITY (meter)		100 or less	100	200	300	400	500	600	700	800	900	1,000	1,100	1,200	1,300	1,400	1,500	1,600 2,000	2,100 3,000	3,100 5,000	6,000 or more	TOTAL	%
Cloud layer 5/8 or more	Unknown																						
	50 or less											1								2	5	8	018
	50 ~ 100											6						3	3	5	29	46	105
	100 ~ 200									2		2						9	13	22	167	215	490
	200 ~ 300											1						6	14	25	497	543	1237
	300 ~ 600											2							1	10	215	228	520
	600 ~1,000						1					2	1				1	6	8	17	1990	2026	4611
	1,000 ~1,500																						
	1,500 ~2,000																						
	2,000 ~2,500																						
	2,500 or more																	1	2	4	984	991	891
Cloud layer 4/8 or less																					21	21	048
TOTAL																		1		2	907	910	2074
%							1			2		14	1				1	26	41	87	4215	4388	
							002			003		032	002				002	059	093	198	9604		

Table 5B-2 (a) TONCONTIN-CEILING/VISIBILITY 1976

STATION: TONCONTIN-DAYTIME — 12 MONTHS — YEAR: 1976

CEILING (meter) \ VISIBILITY (meter)		100 or less	100	200	300	400	500	600	700	800	900	1,000	1,100	1,200	1,300	1,400	1,500	1,600 2,000	2,100 3,000	3,100 5,000	6,000 or more	TOTAL	%
Cloud layer 5/8 or more	Unknown																						
	50 or less																						
	50 ~ 100											6						3	1	4	21	35	0.74
	100 ~ 200									1		2						7	8	17	110	145	3.05
	200 ~ 300											5						4	17	23	486	535	11.24
	300 ~ 600											1						1	3	6	238	249	5.23
	600 ~1,000						1					4					1	7	14	18	1834	1879	39.49
	1,000 ~1,500																		3	8	599	610	12.82
	1,500 ~2,000																						
	2,000 ~2,500																						
	2,500 or more																				5	5	0.11
Cloud layer 4/8 or less							1											1	3	7	1288	1300	27.32
TOTAL							2			1		18					1	23	49	83	4581	4758	
%							0.04			0.02		0.38					0.02	0.48	1.03	1.74	96.28		

STATION: TONCONTIN-DAYTIME — DRY SEASON, (DEC - MAY) — YEAR: 1976

CEILING (meter) \ VISIBILITY (meter)		100 or less	100	200	300	400	500	600	700	800	900	1,000	1,100	1,200	1,300	1,400	1,500	1,600 2,000	2,100 3,000	3,100 5,000	6,000 or more	TOTAL	%
Cloud layer 5/8 or more	Unknown																						
	50 or less																						
	50 ~ 100																						
	100 ~ 200																	1	1	3	27	32	1.35
	200 ~ 300											4						1	6	3	178	194	8.15
	300 ~ 600											1						1	2	1	115	120	5.04
	600 ~1,000						1					2						3	9	13	731	759	31.90
	1,000 ~1,500																		1	4	284	289	12.15
	1,500 ~2,000																						
	2,000 ~2,500																						
	2,500 or more																				5	5	0.21
Cloud layer 4/8 or less							1											1	3	6	949	980	41.19
TOTAL							2					7						7	22	32	2309	2379	
%							0.08					0.29						0.29	0.92	1.35	97.06		

STATION: TONCONTIN-DAYTIME — WET SEASON, (JUN - NOV) — YEAR: 1976

CEILING (meter) \ VISIBILITY (meter)		100 or less	100	200	300	400	500	600	700	800	900	1,000	1,100	1,200	1,300	1,400	1,500	1,600 2,000	2,100 3,000	3,100 5,000	6,000 or more	TOTAL	%
Cloud layer 5/8 or more	Unknown																						
	50 or less																						
	50 ~ 100											6						3	1	4	21	35	1.47
	100 ~ 200									1		2						6	7	14	83	113	4.75
	200 ~ 300											1						3	11	18	308	341	14.33
	300 ~ 600																		1	5	123	129	5.42
	600 ~1,000											2					1	4	5	5	1103	1120	47.08
	1,000 ~1,500																		2	4	315	321	13.49
	1,500 ~2,000																						
	2,000 ~2,500																						
	2,500 or more																						
Cloud layer 4/8 or less																				1	319	320	13.45
TOTAL										1		11					1	16	27	51	2272	2379	
%										0.04		0.46					0.04	0.67	1.13	2.14	95.50		

Table 5B-2 (a) TONCONTIN-DAYTIME CEILING/VISIBILITY 1976

STATION : PEDREGAL — 12 MONTHS — YEAR. 1976

CEILING (feet) \ VISIBILTY (meter x100)	1 or less	1	2	4	6	8	10	12	14	16	20	24	28	32	36	40	48	64	80	90	112	160	240 or more	TOTAL	%
Cloud layer 5/8 or more — 50 or less	52	4	2	13			1				3					2								77	114
100	9		1	1			2																	13	019
200	5	1	1	1	1		4				5		5			2	6		1	1			10	43	063
300		2		2			4				3		1				5			1			1	19	028
400	3		1	9			3									1								17	025
500	1	1		6	1		4									1							1	15	022
600	2			4			5						1			2	1						2	17	025
700																							1	1	001
800	2			1			1																1	6	009
900																									
1,000	17		3	7		1	18				15		7			2	19	4	6	1	4		23	127	187
1,100																									
1,200	10	1	2	7		2	32			1	38		23			22	43	4	50	1	1	1	133	371	548
1,300 ~ 1,500	3	1	1	3			7				17		31			9	31	12	21	3	9	12	201	361	533
1,600 ~ 2,000	13	8	3	2		2	34				10		13			17	37	4	34	14	38	89	502	820	121
2,100 ~ 3,000																	5		10	1	1	23	377	417	615
3,100 ~ 5,000							1																6	7	01
5,100 ~ 10,000	5		3	10	3	1	33				45		15			27	58	11	64	13	8	3	345	644	951
10,000 or more				4			1				5		6			7	17	2	23	2	2	22	515	606	894
Cloud layer 4/8 or less	42	1		11			9				32		23			53	75	6	106	18	45	134	1459	3214	4744
TOTAL	167	19	17	81	5	6	159	0	1	1	173	0	125	0	0	145	297	43	313	55	108	284	4777	6775	
%	246	028	025	12	007	009	235	0	001	001	255	0	185	0	0	214	438	063	465	081	159	419	7051		100

STATION PEDREGAL — DRY SEASON, (DEC - MAY) — YEAR 1976

CEILING (feet) \ VISIBILTY (meter x100)	1 or less	1	2	4	6	8	10	12	14	16	20	24	28	32	36	40	48	64	80	90	112	160	240 or more	TOTAL	%
Cloud layer 5/8 or more — 50 or less	33	4	2	10			1				3					2								55	173
100																									
200		1		1	1		2												1					6	019
300		2		2			1				3		1										1	10	031
400	3		1	8			2									1								15	047
500	1	1		6	1		4									1							1	15	047
600	2			4			5						1			2	1						2	17	053
700																							1	1	003
800				1			1		1															3	009
900																									
1,000	1		1	3		1	3				3		1				3						6	22	069
1,100																									
1,200				4		1	9			1	6		7			4	5	1	5				55	98	308
1,300 ~ 1,500	1	1	1				1				7		10			5	12	1	9				83	131	412
1,600 ~ 2,000	7	8	3	1		2	25				10		6			3	16	1	15	11	25	37	270	440	1383
2,100 ~ 3,000																	2		6		1	11	249	269	845
3,100 ~ 5,000							1																6	7	022
5,100 ~ 10,000				2			3				5		3			1	15		8				132	169	531
10,000 or more				2			1				2		3			1	5		6	1		3	205	229	72
Cloud layer 4/8 or less	10			3			1				9		2			6	27		26	2	11	47	1551	1695	5327
TOTAL	58	17	8	47	2	4	60	0	1	1	48	0	34	0	0	26	86	3	76	14	37	98	2562	3182	
%	182	053	025	148	006	013	189	0	003	003	151	0	107	0	0	082	27	009	239	044	116	308	8052		100

STATION PEDREGAL — WET SEASON, (JUN - NOV) — YEAR 1976

CEILING (feet) \ VISIBILTY (meter x100)	1 or less	1	2	4	6	8	10	12	14	16	20	24	28	32	36	40	48	64	80	90	112	160	240 or more	TOTAL	%
Cloud layer 5/8 or more — 50 or less	19			3																				22	061
100	9		1	1			2																	13	036
200	5		1				2				5		5			2	6			1			10	37	103
300							3										5			1				9	025
400				1			1																	2	006
500																									
600																									
700																									
800	2																						1	3	008
900																									
1,000	16		2	4			15				12		6			2	16	4	6	1	4		17	105	292
1,100																									
1,200	10	1	2	3		1	23				32		16			18	38	3	45	1	1	1	78	273	76
1,300 ~ 1,500	2			3			6				10		21			4	19	11	12	3	9	12	118	230	64
1,600 ~ 2,000	6			1			9						7			14	21	3	19	3	13	52	232	380	1058
2,100 ~ 3,000																	3		4	1		12	128	148	412
3,100 ~ 5,000																									
5,100 ~ 10,000	5		3	8	1	1	30				40		12			26	43	11	56	13	8	3	213	475	1322
10,000 or more				2							3		3			6	12	2	17	1	2	19	310	377	1049
Cloud layer 4/8 or less	32	1		8			8				23		21			47	48	6	80	16	34	87	1108	1519	4228
TOTAL	106	2	9	34	3	2	99	0	0	0	125	0	91	0	0	119	211	40	239	41	71	186	2215	3593	
%	295	006	025	095	008	006	276	0	0	0	348	0	253	0	0	331	587	111	665	114	198	518	6165		100

Table 5B-3 PEDREGAL-CEILING/VISIBILITY 1976

STATION HULE — 12 MONTHS — YEAR: 1962, 1963

CEILING (meter) \ VISIBILITY (meter)		100 or less	100	200	300	400	500	600	700	800	900	1,000	1,100	1,200	1,300	1,400	1,500	1,600 2,000	2,100 3,000	3,100 5,000	6,000 or more	TOTAL	%
Cloud layer 5/8 or more	Unknown	4				1												1			7	13	02
	50 or less	238		1		79				12								69	3	39	160	621	77
	50 ~ 100	9		2		1	1			3				1				2	1	12	19	51	06
	100 ~ 200	34		2		48				4						2		41	1	74	346	552	69
	200 ~ 300	35		1	1	23				1				3			1	18		37	229	349	43
	300 ~ 600	4				9												3		10	166	192	24
	600 ~1,000	33				20				3		1						27		64	2177	2315	287
	1,000 ~1,500	6				6												2		12	928	954	118
	1,500 ~2,000																				1	1	—
	2,000 ~2,500	1																			21	22	03
	2,500 or more	8				2				1								5		3	69	88	11
Cloud layer 4/8 or less		4				2				4	2	3	1				1	8		31	2849	2905	360
TOTAL		394		6	1	191	1			28	2	4	1	4		2	2	176	5	272	6972	8063	
%		49		01	—	24	—			04	—	01	—	01		—	—	22	01	34	865		

STATION HULE — DRY SEASON, (DEC - MAY) — YEAR 1962, 1963

CEILING (meter) \ VISIBILITY (meter)		100 or less	100	200	300	400	500	600	700	800	900	1,000	1,100	1,200	1,300	1,400	1,500	1,600 2,000	2,100 3,000	3,100 5,000	6,000 or more	TOTAL	%
Cloud layer 5/8 or more	Unknown					1												1			4	6	02
	50 or less	30		1		48				1								16		5	35	165	45
	50 ~ 100	5								2				1				2	1	3	12	26	07
	100 ~ 200	13		2		12				2								10	1	16	123	179	48
	200 ~ 300	2		1		8								3				1		2	60	77	21
	300 ~ 600					7												1		4	87	99	27
	600 ~1,000	1				6												6		25	632	670	181
	1,000 ~1,500	2				2												1		1	354	360	97
	1,500 ~2,000																					0	
	2,000 ~2,500																					0	
	2,500 or more	6								1								3			37	47	13
Cloud layer 4/8 or less		3				2				2								1		4	2055	2067	559
TOTAL		91		4		86				8				4				42	2	60	3399	3696	
%		25		01		23				02				01				11	01	16	920		

STATION HULE — WET SEASON, (JUN - NOV) — YEAR: 1962

CEILING (meter) \ VISIBILITY (meter)		100 or less	100	200	300	400	500	600	700	800	900	1,000	1,100	1,200	1,300	1,400	1,500	1,600 2,000	2,100 3,000	3,100 5,000	6,000 or more	TOTAL	%
Cloud layer 5/8 or more	Unknown	4																			3	7	02
	50 or less	199				31				11								53	3	34	125	456	104
	50 ~ 100	4		2		1	1			1										9	7	25	06
	100 ~ 200	21				36				2						2		31		38	223	373	85
	200 ~ 300	33			1	15				1							1	17		35	169	272	62
	300 ~ 600	4				2												2		6	79	93	21
	600 ~1,000	32				14				3		1						21		29	1545	1645	377
	1,000 ~1,500	4				4												1		11	374	394	136
	1,500 ~2,000																				1	1	—
	2,000 ~2,500	1																			21	22	05
	2,500 or more	2				2												2		3	32	41	09
Cloud layer 4/8 or less		1								2	2	3	1				1	7		27	794	838	192
TOTAL		305		2	1	105	1			20	2	4	1			2	2	134	3	212	3373	4367	
%		70		—	—	24	—			05	—	01	—			—	—	31	01	49	818		

Table 5B-4 HULE-CEILING/VISIBILITY 1962 - 1963

STATION LA ERMITA — MARCH — YEAR 1978

CEILING (feet) \ VISIBILTY (meter x100)	1 or less	1	2	4	6	8	10	12	14	16	20	24	28	32	36	40	48	64	80	90	112	160	240 or more	TOTAL	%
Cloud layer 5/8 or more: 50 or less																								0	
100																								0	
200																								0	
300																								0	
400																								0	
500																								0	
600																								0	
700																								0	
800																								0	
900																								0	
1,000																								0	
1,100																								0	
1,200																								0	
1,300 ~ 1,500																								0	
1,600 ~ 2,000																	1						11	12	17
2,100 ~ 3,000																	1		1				98	100	141
3,100 ~ 5,000																							168	168	236
5,100 ~ 10,000																1	1			1			17	20	28
10,000 or more																	2		2				47	51	72
Cloud layer 4/8 or less													1				1						358	360	506
TOTAL													1			1	6		3	1			699	711	
%													01			01	08		04	01			98.3		

STATION LA ERMITA — APRIL — YEAR 1978

CEILING (feet) \ VISIBILTY (meter x100)	1 or less	1	2	4	6	8	10	12	14	16	20	24	28	32	36	40	48	64	80	90	112	160	240 or more	TOTAL	%
Cloud layer 5/8 or more: 50 or less																									
100																									
200																									
300																									
400																									
500																									
600																									
700																									
800																									
900																									
1,000																									
1,100																									
1,200																									
1,300 ~ 1,500																									
1,600 ~ 2,000																							4	4	06
2,100 ~ 3,000													2			3	3	1	21	4			66	100	146
3,100 ~ 5,000											4		6			9	13		13	3			93	141	206
5,100 ~ 10,000																	3		1	1			3	8	12
10,000 or more	1												1			16	16		21	6			63	124	181
Cloud layer 4/8 or less							3				3		15			14	23	3	9	11			227	308	450
TOTAL	1						3				7		24			42	58	4	65	25			456	685	
%	02						04				10		35			61	85	06	95	37			666		

STATION LA ERMITA — MAY — YEAR 1978

CEILING (feet) \ VISIBILTY (meter x100)	1 or less	1	2	4	6	8	10	12	14	16	20	24	28	32	36	40	48	64	80	90	112	160	240 or more	TOTAL	%
Cloud layer 5/8 or more: 50 or less																									
100																									
200																									
300																									
400																									
500																									
600																									
700																									
800																									
900																									
1,000																									
1,100																									
1,200																									
1,300 ~ 1,500																									
1,600 ~ 2,000											2						2		1				1	6	10
2,100 ~ 3,000							3						1			2	5		15	2			93	121	193
3,100 ~ 5,000						1					1		1			1	5		8	8			108	133	212
5,100 ~ 10,000							3									1	6		2	3			23	38	61
10,000 or more																	1		7	2			95	105	167
Cloud layer 4/8 or less											4		4			3	25	1	34	14			140	225	358
TOTAL						1	6				7		6			7	44	1	67	29			460	628	
%						02	10				11		10			11	70	02	107	46			733		

Table 5B-5 (a) TALANGA LA ERMITA-CEILING/VISIBILITY 1978

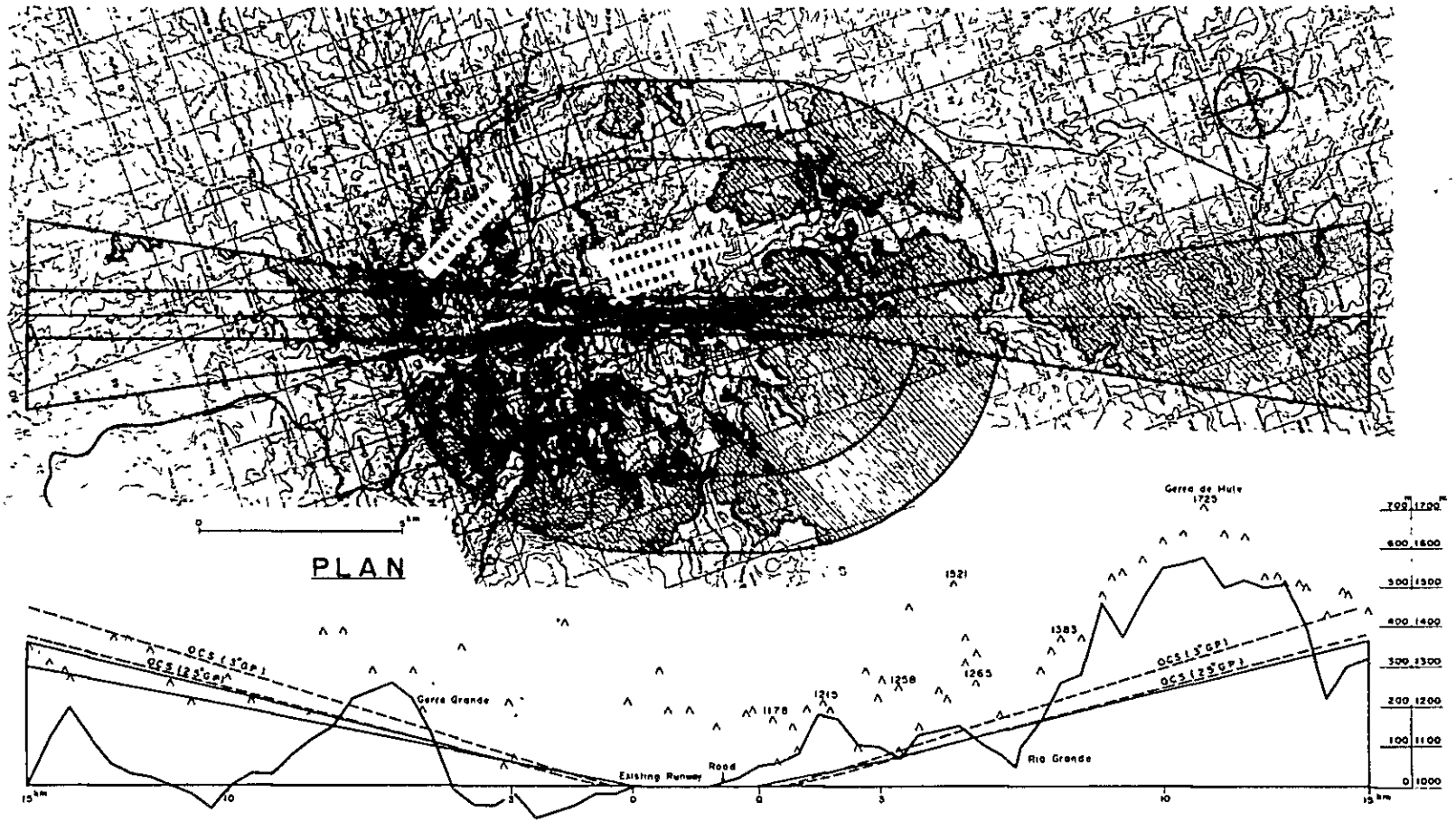
STATION . LA ERMITA JUNE YEAR: 1978

CEILING (feet) \ VISIBILTY (meter x100)		1 or less	1	2	4	6	8	10	12	14	16	20	24	28	32	36	40	48	64	80	90	112	160	240 or more	TOTAL	%
Cloud layer 5/8 or more	50 or less																									
	100																									
	200																									
	300																									
	400																									
	500																									
	600																									
	700																									
	800																									
	900																									
	1,000																									
	1,100																									
	1,200																									
	1,300 ~ 1,500																									
	1,600 ~ 2,000			1																2				14	17	760
	2,100 ~ 3,000											1					1	5	1	7	10			219	244	3731
	3,100 ~ 5,000																			1				35	36	550
	5,100 ~ 10,000																	2		4				46	52	795
	10,000 or more																	1		1	1			115	118	1804
Cloud layer 4/8 or less																	1	1		1	2			182	187	2859
TOTAL				1								1					2	9	1	14	13			611	654	
%				015								015					031	138	015	245	199			9345		

Table 5B-5(b) TALANGA - LA ERMITA-CEILING/VISIBILITY 1978

APPENDIX 5C

DRAWINGS OF SITES SCREENING



PROFILE OF OBSTRUCTION LIMITATION AREA (RWY 01/19)

NOTES
RUNWAY DATA
1) INSTRUMENT RUNWAY
2) ICAO OBSTRUCTION RESTRICTION
3) LENGTH 3000 m +
4) ELEVATION 1000 m (ASSUMED)
5) ORIENTATION N19°30 E (TENTATIVE)

– TOPOGRAPHICALLY OBSTRUCTED AREA

Fig. 5C-1 (a) EXISTING TONCONTIN AIRPORT:
RWY (01/19) EXTENSION & OBSTACLES

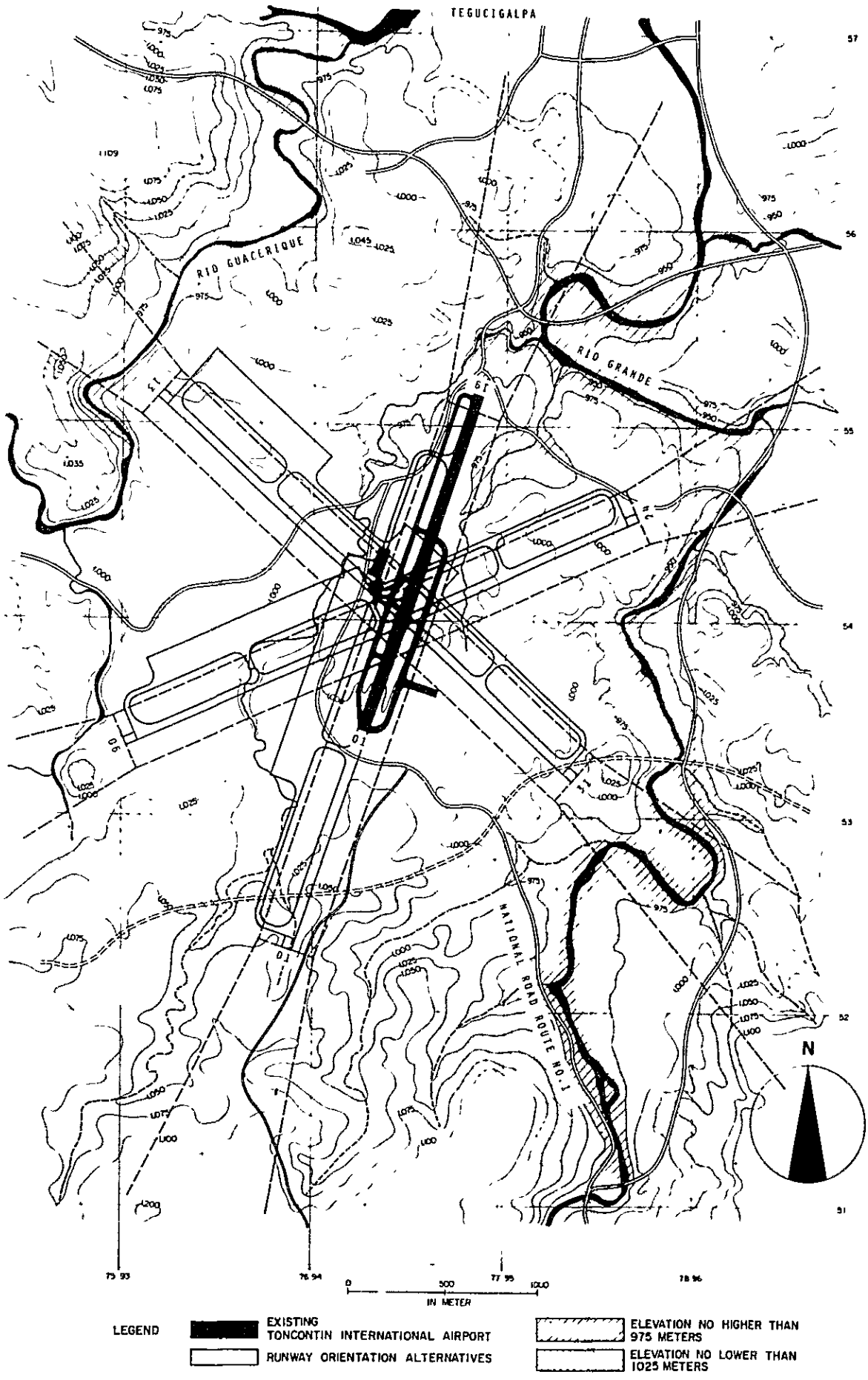


Fig. 5C-1 (b) TOPOGRAPHICALLY FEASIBLE ORIENTATION ALTERNATIVES OF RUNWAY EXTENSION NEEDED IN IMPROVEMENT OF EXISTING TONCONTIN AIRPORT

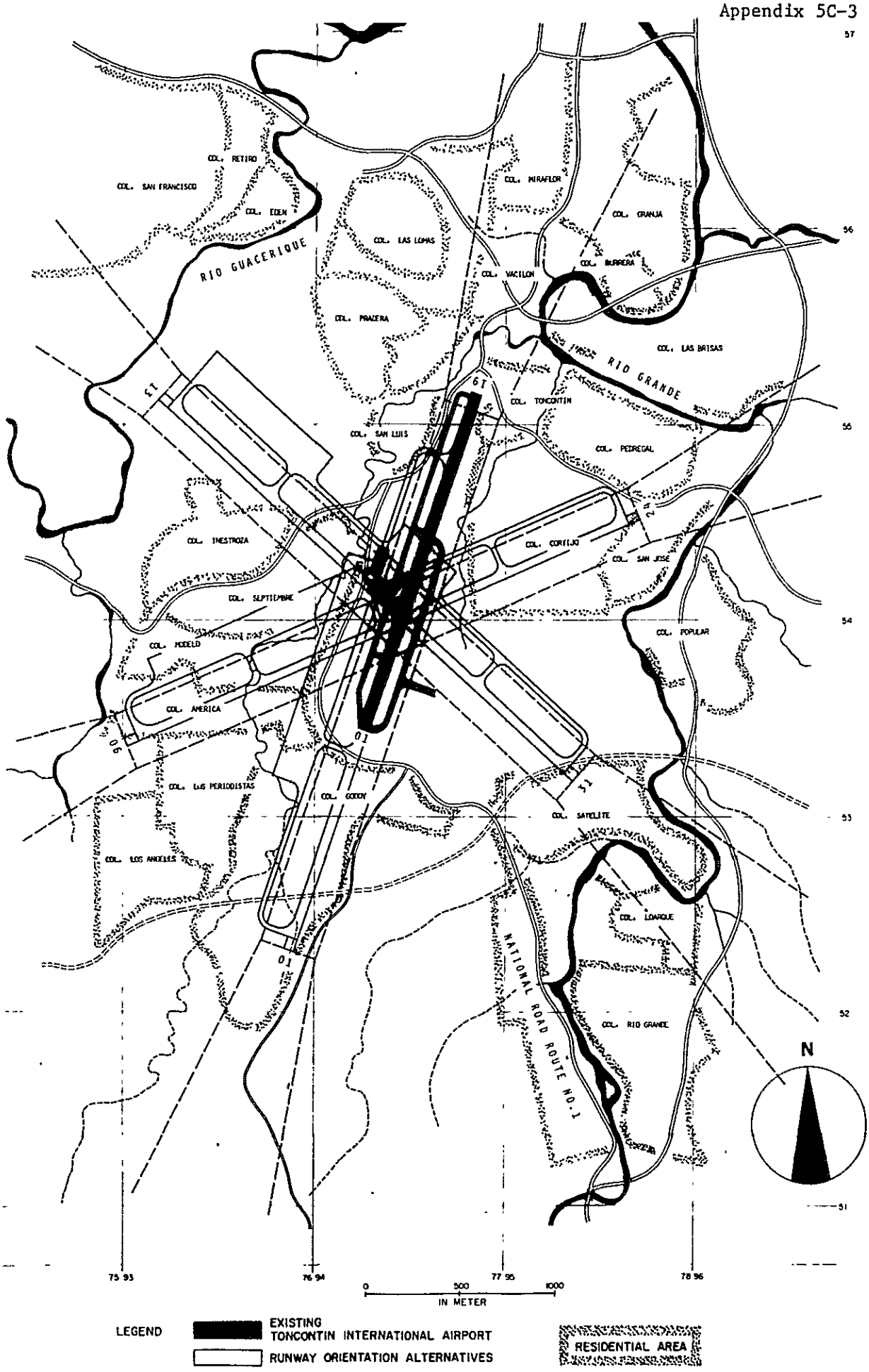
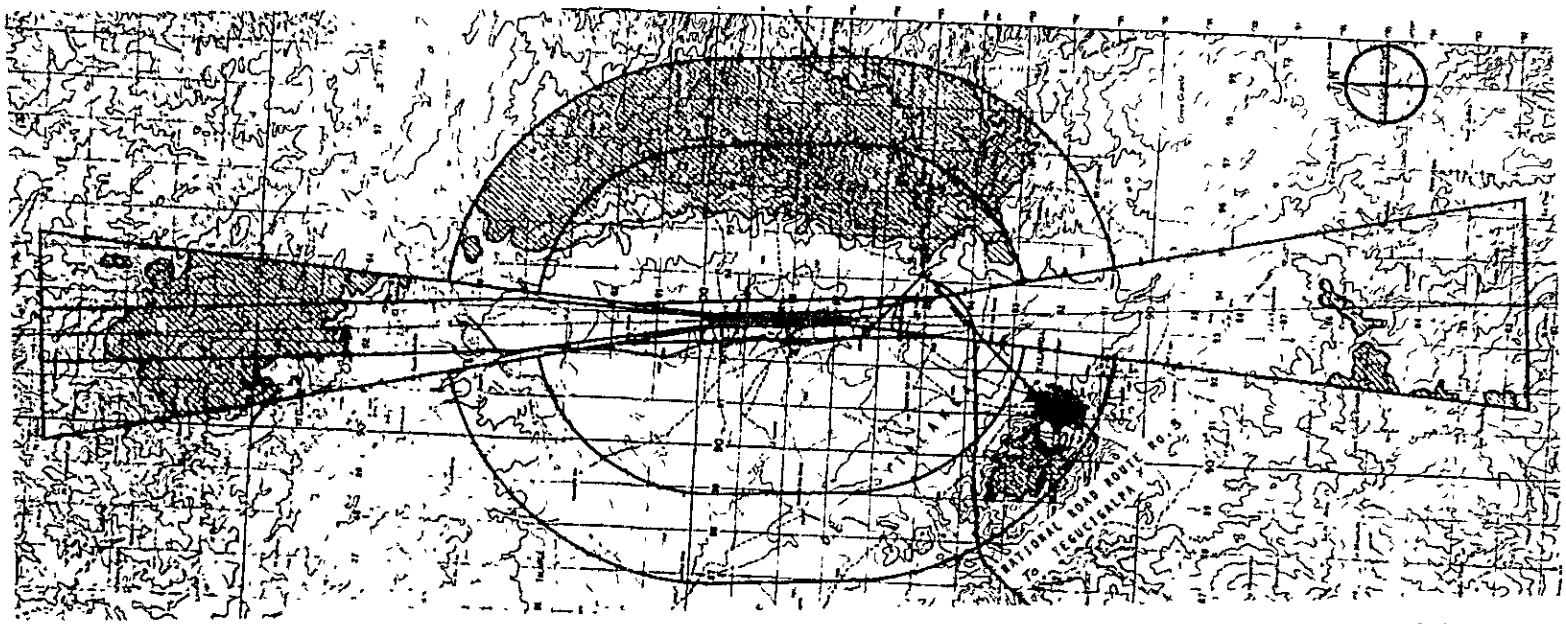


Fig. 5C-1 (c) INCOMPATIBILITY WITH SURROUNDING LAND USE OF TOPOGRAPHICALLY FEASIBLE EXPANSION POSSIBILITIES OF EXISTING TONCONTIN AIRPORT

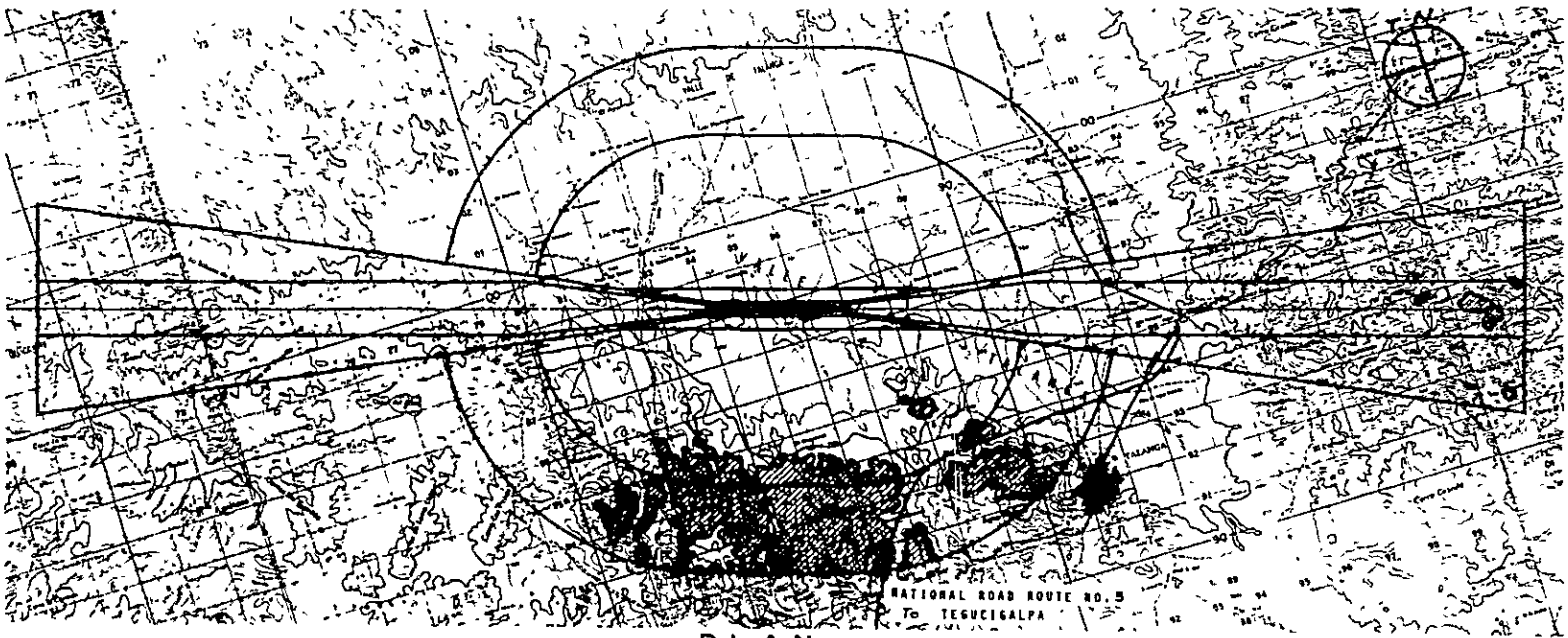


PROFILE OF OBSTRUCTION LIMITATION AREA

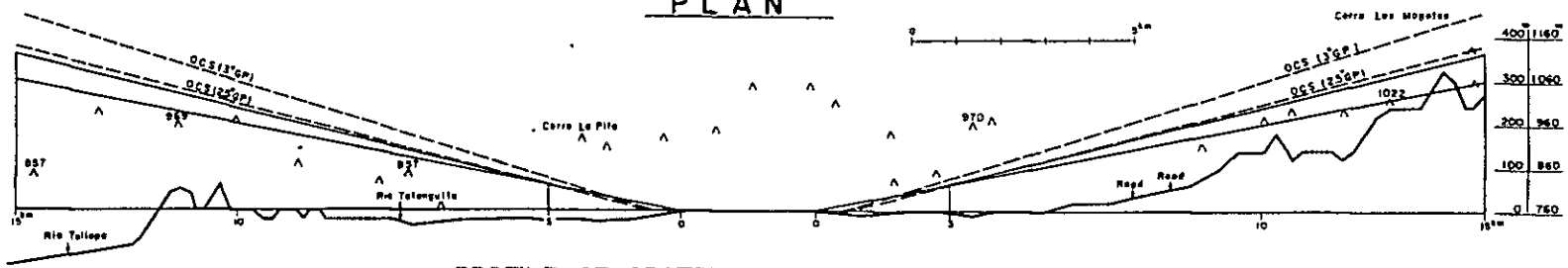
NOTES
RUNWAY DATA
1) INSTRUMENT RUNWAY
2) ICAO OBSTRUCTION RESTRICTION
3) LENGTH 3000m
4) ELEVATION 750m (ASSUMED)
5) ORIENTATION N3°40' W (TENTATIVE)

- TOPOGRAPHICALLY OBSTRUCTED AREA

Fig. 5C-2 (a) VALLE DE TALANGA – A : RWY LOCATION & OBSTACLES



PLAN



PROFILE OF OBSTRUCTION LIMITATION AREA

NOTES
RUNWAY DATA
1) INSTRUMENT RUNWAY
2) HEAD OBSTRUCTION RESTRICTION
3) LENGTH 3000m
4) ELEVATION 760m (ASSUMED)
5) ORIENTATION N73°W (TENTATIVE)

— TOPOGRAPHICALLY OBSTRUCTED AREA

Fig. 5C-2 (b) VALLES DE TALANGA - B : RWY LOCATION & OBSTACLES

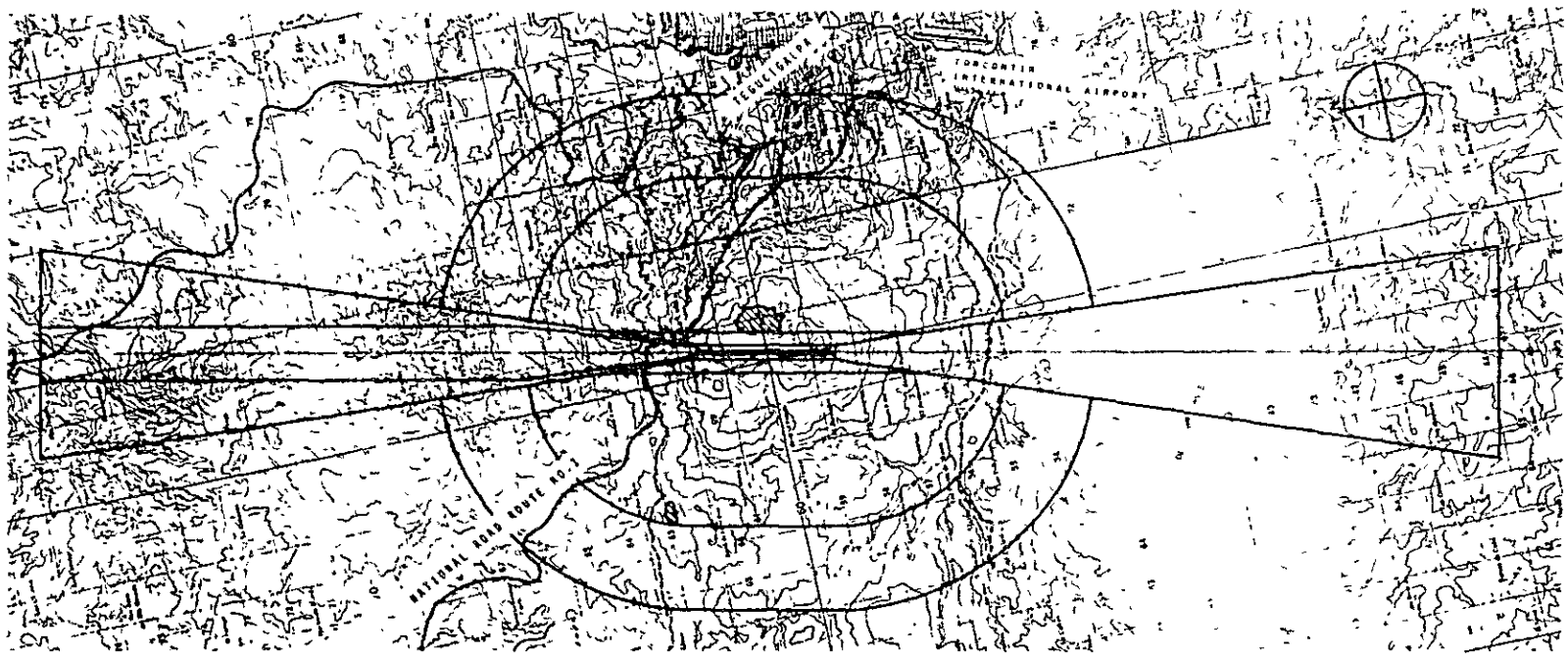
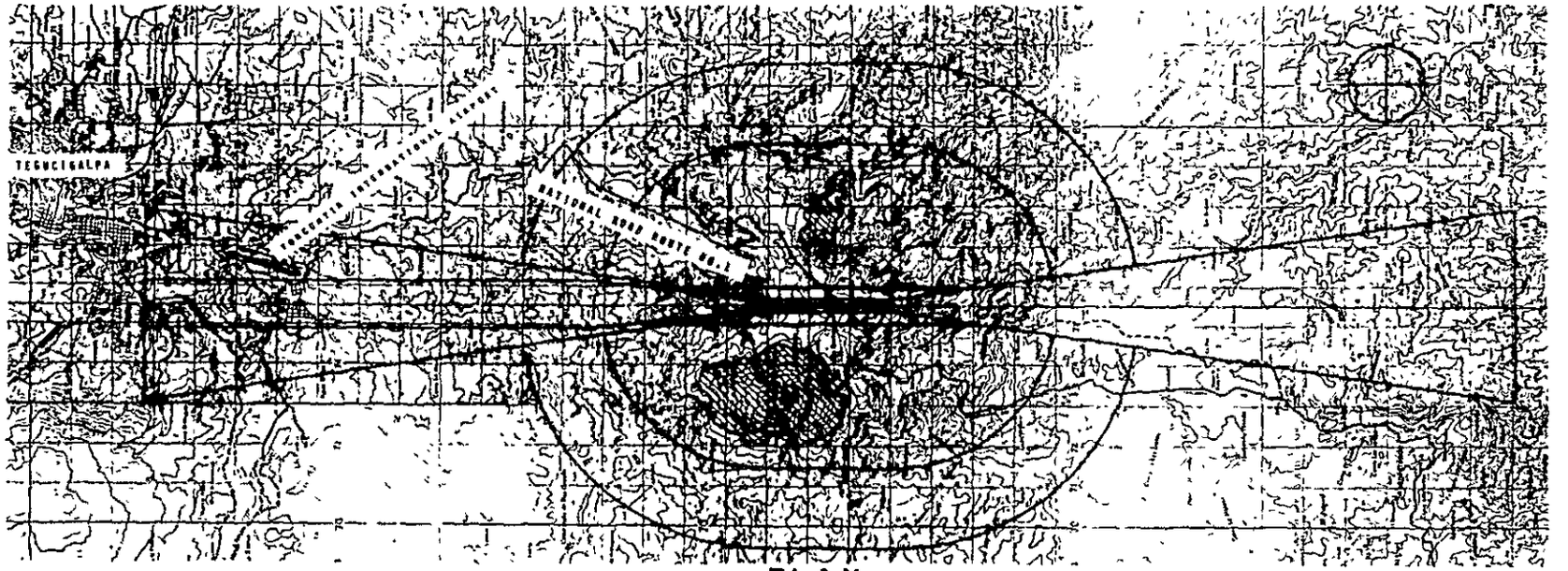
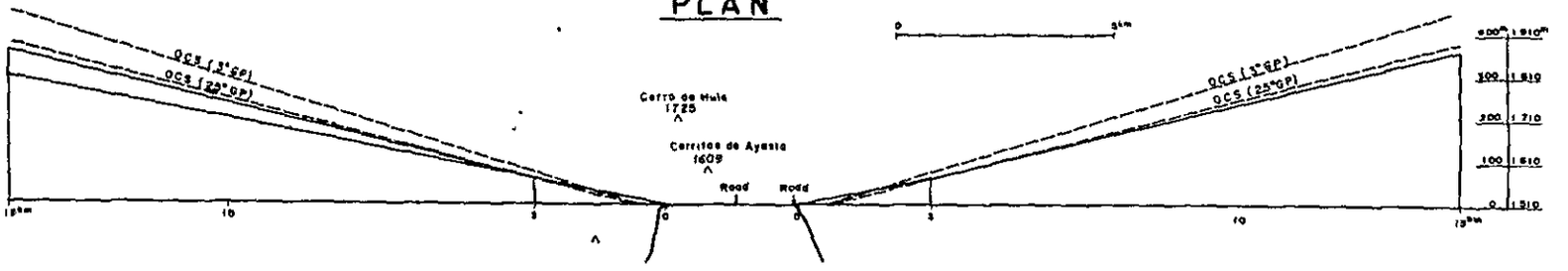


Fig. 5C-3 LAGUNA EL PEDREGAL - B : RWY LOCATION & OBSTACLES



PLAN

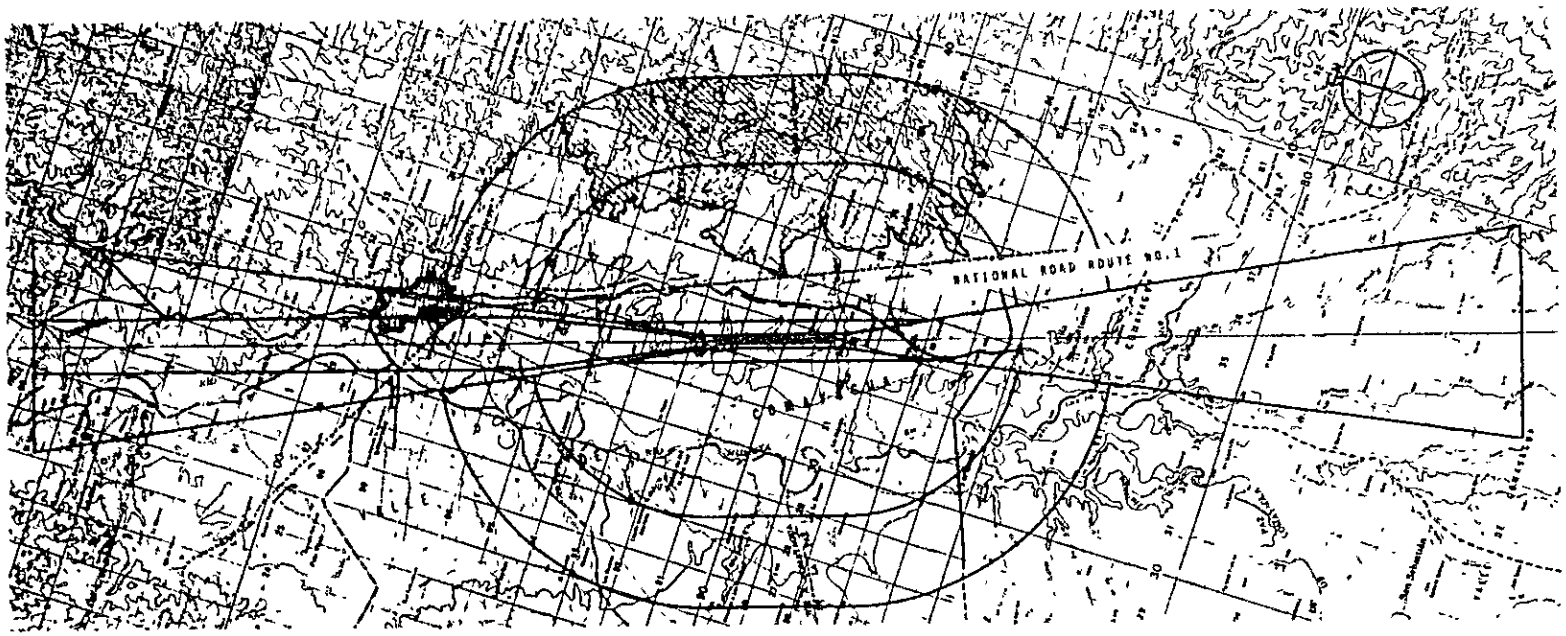


PROFILE OF OBSTRUCTION LIMITATION AREA

NOTES
RUNWAY DATA
1) INSTRUMENT, RUNWAY
2) ICAO OBSTRUCTION RESTRICTION
3) LENGTH 3 000m
4) ELEVATION 1 810m (ASSUMED)
5) ORIENTATION 100°E (TENTATIVE)

— TOPOGRAPHICALLY OBSTRUCTED AREA

Fig. 5C-4 CERRO DE HULE - B : RWY LOCATION & OBSTACLES



PROFILE OF OBSTRUCTION LIMITATION AREA

NOTES
RUNWAY DATA
1) INSTRUMENT RUNWAY
2) ICAO OBSTRUCTION RESTRICTION
3) LENGTH 3000m
4) ELEVATION 880m (ASSUMED)
5) ORIENTATION N17°W (TENTATIVE)

TOPOGRAPHICALLY OBSTRUCTED AREA

Fig. 5C-5 COMAYAGUA : RWY LOCATION & OBSTACLES

APPENDIX 5D

GRID MAP

,

VALLE DE TALANGA

VALLE DE ICAMARA

VALLE DE AMARATECA

SOROCAIMA

LAGUNA EL PEDREGAL

TONGONTIRE

LA GOYA

LAS SABANAS

EL HATILLO

CERRO QUEMADO

CERRO DE HULE

VALLE DE ZAMORO

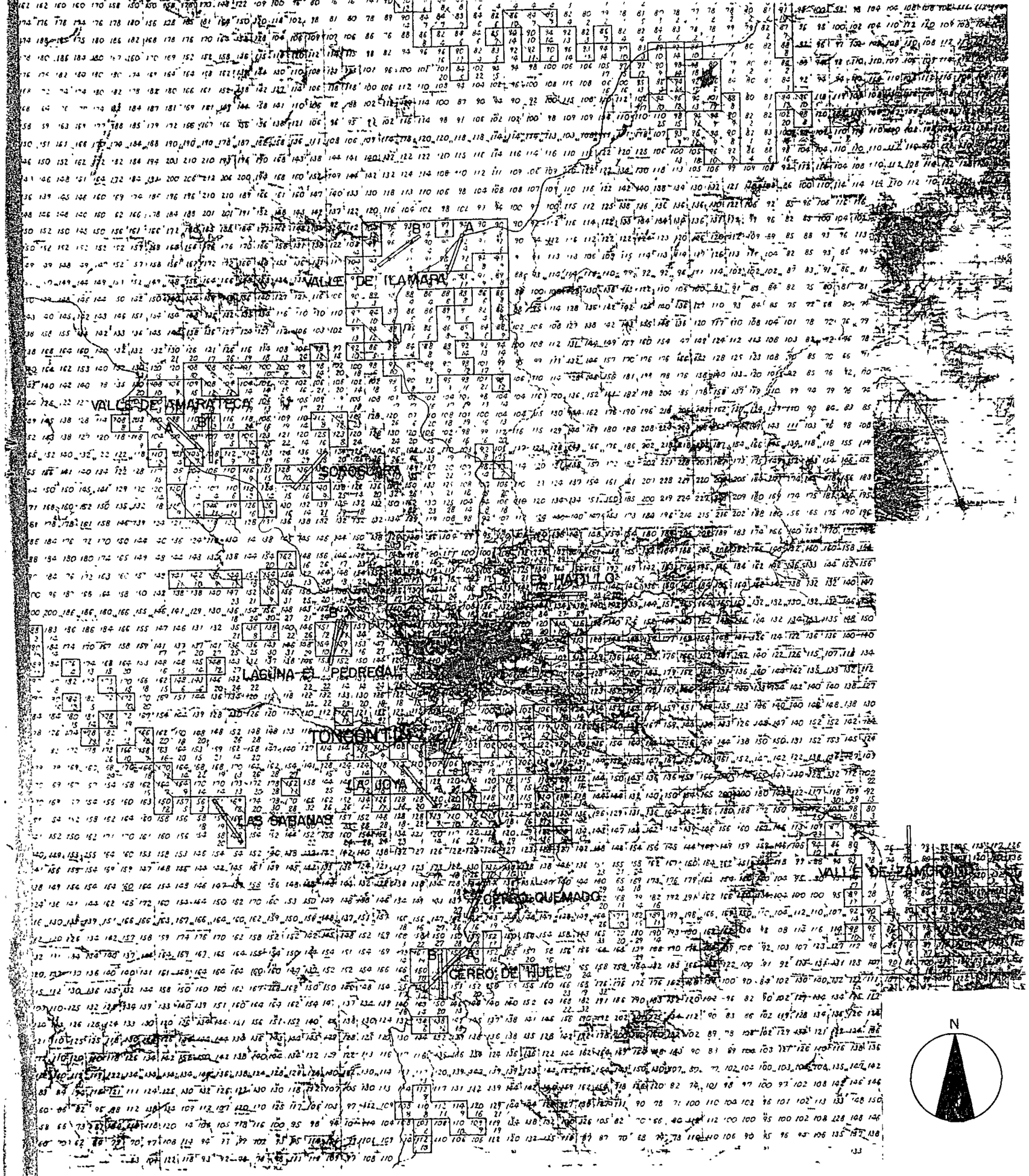
A

B

N

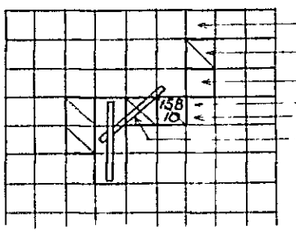
LEGEND :

GRID 1,000 m x 1,000m



LEGEND :

GRID · 1,000 m x 1,000m



- MAX ELEVATION RANGE IN GRID — 120m AND OVER
- MAX ELEVATION RANGE IN GRID — 60m – 120m
- MAX. ELEVATION RANGE IN GRID — 0m – 60m
- HEIGHEST ELEVATION IN GRID — 158 (x10) = 1580m
- MAX. ELEVATION RANGE IN GRID — 10 (x10) = 100m
- POTENTIAL SITE (RUNWAY LOCATION)

NOTE : COMAYAGUA-SITE IS NOT SHOWN

SCALE · 1 . 200,000

AIRPORT POTENTIAL SITES / EARTHWORK PRACTICABILITY GRID MAP

NEW TEGUCIGALPA AIRPORT DEVELOPMENT – HONDURAS, C.A.

Appendix 5 D