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**GASP Cloud- and Particle-Encounter
Statistics, and Their Application
to LFC Aircraft Studies**

Volume II: Appendixes

ON REFERENCE

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Volume II: Appendixes

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SUMMARY

Summary statistics, tabulations, and variability studies are presented for the entire cloud observation archive - nearly 88 000 samples - from the NASA Global Atmospheric Sampling Program (GASP), which was conducted from 1975 to 1979 aboard four commercial airliners in regular service. Summary statistics, tabulations, and variability studies are also presented for GASP particle-concentration data - nearly 56 000 samples - gathered concurrently with the cloud observations. Clouds were encountered in about 15 percent of the data samples, but the probability of cloud encounter is shown to vary significantly with altitude, latitude, and distance from the tropopause, and less significantly with season. Several meteorological circulation features, such as the Intertropical Convergence Zone, are apparent in the latitudinal distribution of cloud cover. The cloud-encounter statistics are shown to be consistent with the classical mid-latitude cyclone model, with more clouds encountered in the upper troposphere in highs than in lows. Observations of clouds spaced more closely than 90 minutes of flight time are shown to be statistically dependent.

The number density of particles with a diameter greater than 3 μm also varies with time and location. It depends primarily on the horizontal extent of cloudiness, that is, the portion of each sampling interval that is spent within clouds. Thus, the variability of time in clouds and the variability of particle number density are closely related.

The summary statistics for cloud and particle encounter are utilized to estimate the frequency of cloud encounter on long-range commercial transport routes and to assess the probability and extent of laminar flow (LF) loss due to cloud or particle encounter by aircraft utilizing laminar flow control (LFC). The observations of route-averaged time in clouds are found to fit an empirical model based on a gamma probability density function; this model can be used to estimate the probability of extended cloud encounter along a route. The analysis in this report shows that the probability of LF loss in clear air is negligible and that the probability of extended cloud encounter, and associated significant loss of LF, is too low, of itself, to make LFC impractical.

For user convenience, this report is presented in two volumes. Volume I contains the narrative, analysis, and conclusions. Volume II is composed of five appendixes, as follows: A - GASP Cloud and Particle Instrumentation; B - Individual Flight Summaries; C - Independence of Cloud Observation Periods; D - Cloud-Encounter Statistics as Functions of Latitude, Longitude, Northern Hemisphere Season, and Altitude; and E - Cloud-Encounter Statistics as Functions of Latitude, Longitude, Northern Hemisphere Season, and Distance From the National Meteorological Center (NMC) Tropopause.

APPENDIX A

GASP CLOUD AND PARTICLE INSTRUMENTATION

GASP cloud and particle data were obtained with a particle counter (Royco Instruments, Inc., model number 245), which used a forward light-scattering technique to measure the number of airborne particles larger than 0.3 μm in diameter. The operation was similar to that of the unit described in reference 33 (Vol. I). As the air sample containing particles passed through the sensor, it was illuminated by a light beam, and light scattered by the particles in a forward direction was detected by a photomultiplier tube. The sensor thus operated at night as well as in day. Under normal operating conditions, each particle caused a pulse in the photomultiplier output. The particle concentration was determined by counting the number of output pulses during the counting period and then dividing that number by the corresponding sample volume flow during the same period, corrected to altitude-ambient conditions. Particle-counter volumetric flow rate was approximately 30 liters per minute and the counting period was normally 1 minute.

The particle count accumulated during the sampling period was separated (within the instrument) into five particle-diameter ranges - 0.3 to 0.45 μm , 0.45 to 0.65 μm , 0.65 to 1.4 μm , 1.4 to 3.0 μm , and $>3.0 \mu\text{m}$ - based on the amplitude of the pulse. Each instrument was calibrated by the manufacturer for particle-size detection. An aerosol generator and latex particles were used at NASA Lewis Research Center to check each instrument.

The GASP particle counters had two discrete output signals to indicate proper flight operation. One of these indicated that the light source had remained on during the full counting period, and the second verified that the automatic-gain adjustment was completed prior to each counting cycle. The sample flow rate through the sensing unit was measured with a choked venturi.

During laboratory evaluation of a flight-test prototype of this instrument, it was found that the sample volume was not receiving uniform illumination. This resulted in a substantial ambiguity in the number and sizes of particles counted. (See ref. 34, Vol. I.) A detailed mapping of the sample-volume light field was not made for any of the instruments flown on GASP airliners, nor has any attempt been made to correct or normalize the data. The particle number density data reported herein are subject to variations between instruments due to differences in sample-volume illumination. These differences may be on the order of +300 percent to -70 percent ($\pm 1/2$ cycle) in particle count. (See refs. 28 to 33, Vol. I.)

APPENDIX B

INDIVIDUAL FLIGHT SUMMARIES

DEP - airport of departure

ARR - airport of arrival

IM/ID/IY - date of departure (month/day/year)

Note: * following date means departure and arrival airports are reversed for the flight.

CODE: XYZ

<u>X = Aircraft code</u>	<u>Y = Particle counter code</u>	<u>Z = Moisture sensor code</u>
A = PANAM (N533PA)	A = #3	A = Aluminum oxide
B = PANAM (N655PA)	B = #4	B = Chilled mirror
C = UAL (N4711U)	C = #6	
D = QANTAS (VH-EBE)	D = #7	

AVFL - average flight altitude, kft

EXHI - highest flight altitude, kft

EXLO - lowest flight altitude, kft

ALAT - average latitude (positive for degrees N, negative for degrees S)

EXTN - northernmost data point (degrees latitude)

EXTS - southernmost data point (degrees latitude)

FLT TOT - includes all data on flight

IN CLR - in clear air, only observation periods with time in cloud equal to zero

NOT CLR - only observation periods with time in cloud greater than zero

NUMBER OF OBS - CLD - cloud-encounter data not missing
PD5 - cloud-encounter data not missing and particle density data present
OZ - cloud-encounter data not missing and ozone data present
H2O - cloud-encounter data not missing and water vapor data present
H2S - relative humidity equals 100 percent

APPENDIX B

AVERAGES FOR THE FLIGHT - %TIC - average percentage of time in cloud per data sample
PATCHES - average number of cloud patches per data sample
PD5 - average particle concentration or number density, if available (particles/m³)
OZ - average ozone mixing ratio (parts per billion by volume)
RH - average relative humidity, percent
H2O - average water vapor mixing ratio (parts per million by volume)

TROP N - when available, number of observation periods in the troposphere
STRAT N - when available, number of observation periods in the stratosphere

DEP-ARR IM/ID/IY	CODE	AVFL ALAT	EXHI EXTN	EXLO EXTS	NUMBER OF OBS					AVERAGES FOR THE FLIGHT			OZ	RH	H2O	TRCP N	STRAT N		
					CLD	PD5	OZ	H2O	H2S	%TIC	PATCHES	PD5							
AKL-AKL																			
5/24/78	ABB	324 -28	331 -23	268 -36	FLT IN NOT	TOT CLR CLR	12 12 0	12 12 0	6 6 0	4 4 0	0 0 0	0.0 0.0 0.0	0.0 0.0 0.0	.125E+02 .125E+02 0.	41 41 0	33 33 0	59 59 0	12 12 0	0 0 0
AKL-CPT																			
10/29/77	* ABB	384 -64	430 -36	307 -88	FLT IN NOT	TOT CLR CLR	60 59 1	0 0 0	10 9 1	0 0 0	0 0 0	.4 0.0 23.5	.0 0.0 1.0	0. 0. 0.	425 465 64	0 0 0	0 0 0	9 8 1	51 51 0
AKL-HNL																			
11/13/78	* BBB	336 -9	351 18	247 -36	FLT IN NOT	TOT CLR CLR	90 61 29	90 61 29	58 40 18	50 38 12	5 0 5	18.7 0.0 53.0	.9 0.0 2.9	.443E+05 .406E+03 .137E+06	37 36 39	54 43 38	138 109 229	90 61 29	0 0 0
AKL-LAX																			
5/21/78	* ABB	373 0	390 33	275 -35	FLT IN NOT	TOT CLR CLR	140 140 0	140 140 0	93 93 0	70 70 0	27 27 0	0.0 0.0 0.0	0.0 0.0 0.0	.428E+01 .428E+01 0.	45 45 0	70 70 0	60 60 0	140 140 0	0 0 0
5/22/78	ABB	391 0	412 32	293 -36	FLT IN NOT	TOT CLR CLR	129 129 0	129 129 0	33 83 0	74 74 0	38 38 0	0.0 0.0 0.0	0.0 0.0 0.0	.329E+02 .329E+02 0.	81 81 0	81 81 0	50 50 0	123 123 0	6 6 0
5/23/78	* ABB	374 1	391 33	273 -35	FLT IN NOT	TOT CLR CLR	139 138 1	139 138 1	93 93 0	60 60 0	12 12 0	.0 0.0 .4	.0 0.0 1.0	.573E+02 .575E+02 .215E+02	53 53 0	67 67 0	65 65 0	134 133 4	5 5 0
5/24/78	ABB	386 7	411 32	370 -18	FLT IN NOT	TOT CLR CLR	94 94 0	94 94 0	60 60 0	48 48 0	3 3 0	0.0 0.0 0.0	0.0 0.0 0.0	.631E+01 .631E+01 0.	60 80 0	48 48 0	34 34 0	85 85 0	9 9 0
AKL-SFO																			
1/ 1/77	* AAA	386 1	410 37	270 -35	FLT IN NOT	TOT CLR CLR	140 122 18	0 0 0	91 80 11	115 100 15	36 24 12	5.4 0.0 42.0	.4 0.0 3.3	0. 0. 0.	64 70 24	71 67 99	40 39 44	133 115 18	7 7 0
2/ 4/77	AAA	377 1	410 36	278 -35	FLT IN NOT	TOT CLR CLR	125 101 24	125 101 24	0 0 0	104 84 20	7 0 7	11.4 0.0 59.3	.6 0.0 3.0	.104E+06 .675E+02 .540E+06	0 0 0	44 34 87	55 38 125	115 91 24	10 10 0
3/31/77	* AAA	383 -3	390 36	263 -9	FLT IN NOT	TOT CLR CLR	18 10 8	18 10 8	0 0 0	14 7 7	13 6 7	13.7 0.0 30.7	2.2 0.0 4.9	.106E+06 .166E+03 .238E+06	0 0 0	100 99 100	53 52 54	0 0 0	0 0 0

DEP-ARR	IM/ID/IY	CODE	AVFL ALAT	EXHI EXTN	EXLO EXTS		NUMBER OF OBS					AVERAGES FOR		THE FLIGHT		TROP		STRAT	
							CLD	PD5	OZ	H2O, H2S	%TIC	PATCHES	PD5	OZ	RH	H2O	N	N	
AKL-SFO (CONT.)																			
5/	5/77	* AAA	376 1	392 37	239 -35	FLT TOT: IN CLR: NOT CLR:	141 115 26	141 115 26	91 77 14	0 0 0	6.1 0.0 32.9	.5 0.0 2.8	.189E+05 .124E+03 .101E+06	73 86 34	0 0 0	0 0 0	126 100 26	15 15 0	
5/	6/77	AAA	381 5	410 37	257 -35	FLT TOT: IN CLR: NOT CLR:	128 102 26	128 102 26	85 68 17	0 0 0	5.7 0.0 27.9	.5 0.0 2.7	.143E+05 .275E+03 .692E+05	127 151 34	0 0 0	0 0 0	110 85 25	18 17 1	
5/19/77	*	AAA	365 -2	391 36	234 -36	FLT TOT: IN CLR: NOT CLR:	58 45 13	58 45 13	31 24 7	0 0 0	8.8 0.0 39.3	.6 0.0 2.5	.827E+05 .365E+03 .368E+06	43 50 36	0 0 0	0 0 0	59 45 13	0 0 0	
5/20/77		AAA	368 -2	410 32	318 -35	FLT TOT: IN CLR: NOT CLR:	52 38 14	52 38 14	33 23 10	0 0 0	11.1 0.0 41.4	.9 0.0 3.4	.256E+05 .108E+03 .947E+05	48 50 43	0 0 0	0 0 0	50 36 14	2 0 0	
5/21/77	*	AAA	376 -2	391 35	337 -35	FLT TOT: IN CLR: NOT CLR:	66 56 10	66 56 10	46 38 8	0 0 0	3.4 0.0 22.5	.6 0.0 3.8	.649E+05 .584E+02 .428E+06	52 54 45	0 0 0	0 0 0	66 56 10	0 0 0	
6/30/77	*	ACA	370 1	392 37	240 -35	FLT TOT: IN CLR: NOT CLR:	136 103 33	0 0 0	0 0 0	0 0 0	12.4 0.0 51.0	0.0 0.0 0.0	0. 0. 0.	0 0 0	0 0 0	0 0 0	136 103 33	0 0 0	
7/ 1/77		ACA	388 3	420 37	293 -35	FLT TOT: IN CLR: NOT CLR:	122 106 16	0 0 0	0 0 0	0 0 0	5.6 0.0 42.5	0.0 0.0 0.0	0. 0. 0.	0 0 0	0 0 0	0 0 0	122 106 16	0 0 0	
7/ 2/77	*	ACA	367 0	390 36	270 -36	FLT TOT: IN CLR: NOT CLR:	136 103 33	0 0 0	0 0 0	0 0 0	8.4 0.0 34.5	0.0 0.0 0.0	0. 0. 0.	0 0 0	0 0 0	0 0 0	136 103 33	0 0 0	
9/29/77	*	ABA	381 2	410 37	322 -35	FLT TOT: IN CLR: NOT CLR:	132 114 18	0 0 0	80 71 9	0 0 0	3.5 0.0 25.6	.4 0.0 3.3	0. 0. 0.	47 49 26	0 0 0	0 0 0	122 104 18	10 10 0	
9/30/77		ABA	393 2	413 37	268 -35	FLT TOT: IN CLR: NOT CLR:	116 104 12	0 0 0	74 68 6	0 0 0	2.7 0.0 26.6	.2 0.0 1.8	0. 0. 0.	59 60 41	0 0 0	0 0 0	105 94 11	11 10 1	
10/ 1/77	*	ABA	373 -1	390 36	232 -36	FLT TOT: IN CLR: NOT CLR:	117 108 9	0 0 0	77 72 5	0 0 0	.7 0.0 8.6	.3 0.0 3.4	0. 0. 0.	59 61 32	0 0 0	0 0 0	108 99 9	9 9 0	
10/30/77		ABB	393 0	410 34	315 -35	FLT TOT: IN CLR: NOT CLR:	46 35 11	0 0 0	2 2 0	0 0 0	7.7 0.0 32.4	.7 0.0 2.7	0. 0. 0.	112 112 0	0 0 0	0 0 0	46 35 11	0 0 0	
12/16/76	*	AAA	386 4	410 37	277 -33	FLT TOT: IN CLR: NOT CLR:	121 84 37	0 0 0	77 51 26	0 0 0	11.5 0.0 37.6	.6 0.0 1.9	0. 0. 0.	50 64 24	0 0 0	0 0 0	121 84 37	0 0 0	

DEP-ARR	IM/ID/IY	CODE	AVFL ALAT	EXHI EXTN	EXLO EXTS	NUMBER OF OBS					AVERAGES FOR THE FLIGHT			ØZ	RH	H2O	TROP N	STRAT N		
						CLD	PD5	ØZ	H2O	H2S	%TIC	PATCHES	PD5							
AKL-SFO (CONT.)																				
	12/17/76	AAA	385 2	430 37	269 -35	FLT	TØT:	126	0	81	0	0	3.4	.3	0.	57	0	0	112	14
						IN	CLR:	110	0	71	0	0	0.0	0.0	0.	61	0	0	96	14
						NOT	CLR:	16	0	10	0	0	27.2	2.6	0.	25	0	0	16	0
	12/18/76	* AAA	366 1	390 37	282 -35	FLT	TØT:	136	0	89	0	0	6.1	.5	0.	58	0	0	136	0
						IN	CLR:	110	0	71	0	0	0.0	0.0	0.	64	0	0	110	0
						NOT	CLR:	26	0	18	0	0	32.0	2.4	0.	34	0	0	26	0
	12/23/76	* AAA	377 1	430 37	250 -34	FLT	TØT:	134	0	22	0	0	7.8	.6	0.	91	0	0	121	13
						IN	CLR:	112	0	21	0	0	0.0	0.0	0.	94	0	0	99	13
						NOT	CLR:	22	0	1	0	0	47.3	3.4	0.	18	0	0	22	0
	12/24/76	AAA	387 6	410 37	330 -34	FLT	TØT:	116	0	74	0	0	8.8	.8	0.	45	0	0	116	0
						IN	CLR:	81	0	53	0	0	0.0	0.0	0.	49	0	0	81	0
						NOT	CLR:	35	0	21	0	0	29.3	2.6	0.	35	0	0	35	0
	12/25/76	* AAA	391 0	450 37	235 -35	FLT	TØT:	141	0	93	0	0	7.7	.7	0.	63	0	0	141	0
						IN	CLR:	100	0	65	0	0	0.0	0.0	0.	66	0	0	100	0
						NOT	CLR:	41	0	28	0	0	26.3	2.4	0.	57	0	0	41	0
	12/30/76	* AAA	379 1	414 37	259 -35	FLT	TØT:	145	0	97	115	3	12.1	.7	0.	63	54	35	140	5
						IN	CLR:	102	0	68	79	1	0.0	0.0	0.	73	48	32	97	5
						NOT	CLR:	43	0	29	36	2	40.7	2.4	0.	39	68	41	43	0
	12/31/76	AAA	385 2	412 37	197 -35	FLT	TØT:	131	0	14	19	0	8.3	.4	0.	80	72	71	121	10
						IN	CLR:	106	0	13	18	0	0.0	0.0	0.	80	71	71	96	10
						NOT	CLR:	25	0	1	1	0	43.2	2.1	0.	82	96	78	25	0
AKL-SYD																				
	1/ 1/77	AAA	416 -36	437 -34	276 -37	FLT	TØT:	17	0	5	0	0	0.0	0.0	0.	176	0	0	17	0
						IN	CLR:	17	0	5	0	0	0.0	0.0	0.	176	0	0	17	0
						NOT	CLR:	0	0	0	0	0	0.0	0.0	0.	0	0	0	0	0
	2/ 3/77	AAA	386 -36	390 -34	326 -37	FLT	TØT:	27	27	0	22	5	.2	.1	.123E+01	0	90	28	27	0
						IN	CLR:	26	26	0	21	4	0.0	0.0	.128E+01	0	90	28	26	0
						NOT	CLR:	1	1	0	1	1	6.3	3.0	0.	0	100	26	1	0
	2/ 4/77	* AAA	396 -36	410 -34	213 -37	FLT	TØT:	25	25	0	20	8	1.3	.2	.254E+04	0	90	85	17	8
						IN	CLR:	22	22	0	18	8	0.0	0.0	0.	0	91	22	14	8
						NOT	CLR:	3	3	0	2	0	10.6	2.0	.211E+05	0	88	649	3	0
	2/ 6/77	* DDA	323 -36	330 -34	248 -37	FLT	TØT:	23	23	16	0	0	3.4	.7	.139E+05	65	0	0	23	0
						IN	CLR:	18	18	14	0	0	0.0	0.0	.161E+02	69	0	0	18	0
						NOT	CLR:	5	5	2	0	0	15.6	3.0	.637E+05	43	0	0	5	0
	2/ 6/77	DDA	308 -36	310 -34	272 -37	FLT	TØT:	24	24	16	0	0	11.8	1.1	.151E+06	60	0	0	24	0
						IN	CLR:	18	18	10	0	0	0.0	0.0	.565E+02	65	0	0	18	0
						NOT	CLR:	6	6	6	0	0	47.1	4.5	.602E+06	52	0	0	6	0

APPENDIX B

DEP-ARR	IM/ID/IY	CODE	AVFL ALAT	EXHI EXTN	EXLO EXTS		NUMBER OF OBS					AVERAGES FOR THE FLIGHT			TROP			STRAT	
							CLD	PD5	OZ	H2O	H2S	%TIC	PATCHES	PD5	OZ	RH	H2O	N	N
AKL-SYD (CONT.)																			
5/ 5/77	AAA	382 -36	391 -34	243 -37	FLT IN NOT	TOT: CLR: CLR:	31 30 1	31 30 1	19 19 0	0 0 0	0 0 0	1.7 0.0 51.4	.1 0.0 4.0	0. 0. 0.	89 89 0	0 0 0	0 0 0	18 17 1	13 13 0
5/ 6/77	* AAA	400 -36	410 -34	281 -37	FLT IN NOT	TOT: CLR: CLR:	21 20 1	21 20 1	13 13 0	0 0 0	0 0 0	.0 0.0 .8	.0 0.0 1.0	.315E+01 0. .662E+02	98 38 0	0 0 0	0 0 0	2 1 1	19 19 0
5/19/77	AAA	411 -36	430 -34	389 -37	FLT IN NOT	TOT: CLR: CLR:	11 7 4	11 7 4	7 4 3	0 0 0	0 0 0	7.6 0.0 20.8	2.0 0.0 5.5	.183E+05 .290E+02 .502E+05	115 165 49	0 0 0	0 0 0	10 6 4	1 1 0
5/20/77	* AAA	380 -36	410 -34	201 -37	FLT IN NOT	TOT: CLR: CLR:	13 12 1	13 12 1	8 7 1	0 0 0	0 0 0	.5 0.0 6.3	.2 0.0 2.0	.492E+01 .533E+01 0.	119 133 21	0 0 0	0 0 0	13 12 1	0 0 0
5/21/77	AAA	382 -36	391 -34	281 -37	FLT IN NOT	TOT: CLR: CLR:	14 14 0	14 14 0	4 4 0	0 0 0	0 0 0	0.0 0.0 0.0	0.0 0.0 0.0	0. 0. 0.	85 85 0	0 0 0	0 0 0	11 11 0	3 3 0
5/21/78	ABB	423 -36	430 -34	305 -37	FLT IN NOT	TOT: CLR: CLR:	27 27 0	27 27 0	17 17 0	9 9 0	0 0 0	0.0 0.0 0.0	0.0 0.0 0.0	.534E+01 .534E+01 0.	183 183 0	41 41 0	36 36 0	1 1 0	26 26 0
5/22/78	* ABB	405 -36	411 -34	321 -37	FLT IN NOT	TOT: CLR: CLR:	22 22 0	22 22 0	12 12 0	5 5 0	0 0 0	0.0 0.0 0.0	0.0 0.0 0.0	.663E+01 .663E+01 0.	207 207 0	30 30 0	26 26 0	2 2 0	20 20 0
5/24/78	* ABB	405 -36	410 -34	332 -37	FLT IN NOT	TOT: CLR: CLR:	20 20 0	20 20 0	11 11 0	4 4 0	0 0 0	0.0 0.0 0.0	0.0 0.0 0.0	.543E+01 .543E+01 0.	257 257 0	9 9 0	7 7 0	1 1 0	19 19 0
6/30/77	ACA	422 -36	430 -34	364 -37	FLT IN NOT	TOT: CLR: CLR:	29 29 0	0 0 0	0 0 0	0 0 0	0 0 0	0.0 0.0 0.0	0.0 0.0 0.0	0. 0. 0.	0 0 0	0 0 0	0 0 0	1 1 0	28 28 0
7/ 1/77	* ACA	361 -36	370 -34	244 -37	FLT IN NOT	TOT: CLR: CLR:	21 21 0	0 0 0	0 0 0	0 0 0	0 0 0	0.0 0.0 0.0	0.0 0.0 0.0	0. 0. 0.	0 0 0	0 0 0	0 0 0	5 5 0	16 16 0
7/ 2/77	ACA	423 -36	430 -34	324 -37	FLT IN NOT	TOT: CLR: CLR:	26 25 1	0 0 0	0 0 0	0 0 0	0 0 0	.0 0.0 .4	0.0 0.0 0.0	0. 0. 0.	0 0 0	0 0 0	0 0 0	1 1 0	25 24 1
9/29/77	ABA	369 -36	391 -34	245 -37	FLT IN NOT	TOT: CLR: CLR:	21 20 1	0 0 0	13 12 1	0 0 0	0 0 0	.0 0.0 .4	.0 0.0 1.0	0. 0. 0.	202 194 293	0 0 0	0 0 0	4 4 0	17 16 1
9/30/77	* ABA	404 -36	412 -34	319 -37	FLT IN NOT	TOT: CLR: CLR:	22 21 1	0 0 0	14 14 0	0 0 0	0 0 0	.2 0.0 3.5	.4 0.0 8.0	0. 0. 0.	152 152 0	0 0 0	0 0 0	1 1 0	21 20 1

DEP-ARR IM/ID/IY	CODE	AVFL ALAT	EXHI EXTN	EXLO EXTS			NUMBER OF OBS				AVERAGES FOR THE FLIGHT			ØZ	RH	H2Ø	TROP N	STRAT N	
							CLD	PD5	ØZ	H2Ø, H2S	%TIC	PATCHES	PD5						
10/ 1/77	ABA	404 -36	411 -34	327 -37	FLT TØT:	27	0	17	0	0	1.6	.3	0.	327	0	0	2	25	
					IN CLR:	25	0	16	0	0	0.0	0.0	0.						324
					NØT CLR:	2	0	1	0	0	22.2	3.5	0.						379
11/24/76 *	DDA	326 -36	330 -34	265 -37	FLT TØT:	21	0	0	0	0	5.3	.8	0.	0	0	0	21	0	
					IN CLR:	18	0	0	0	0	0.0	0.0	0.						0
					NØT CLR:	3	0	0	0	0	37.1	5.7	0.						0
11/25/76	DDA	372 -36	390 -34	307 -37	FLT TØT:	28	0	0	0	0	0.0	0.0	0.	0	0	0	24	4	
					IN CLR:	28	0	0	0	0	0.0	0.0	0.						0
					NØT CLR:	0	0	0	0	0	0.0	0.0	0.						0
11/13/78	BBB	322 -36	330 -34	217 -37	FLT TØT:	26	26	16	9	0	0.0	0.0	.415E+02	150	61	58	26	0	
					IN CLR:	26	26	16	9	0	0.0	0.0	.415E+02						150
					NØT CLR:	0	0	0	0	0	0.0	0.0	0.						0
12/ 7/76	DDA	343 -36	350 -34	244 -37	FLT TØT:	26	0	0	0	0	5.9	.7	0.	0	0	0	26	0	
					IN CLR:	22	0	0	0	0	0.0	0.0	0.						0
					NØT CLR:	4	0	0	0	0	38.5	4.3	0.						0
12/ 7/76 *	DDA	326 -36	330 -34	263 -37	FLT TØT:	21	0	0	0	0	6.6	1.0	0.	0	0	0	21	0	
					IN CLR:	17	0	0	0	0	0.0	0.0	0.						0
					NØT CLR:	4	0	0	0	0	34.9	5.0	0.						0
12/ 8/76 *	DDA	325 -36	330 -34	235 -37	FLT TØT:	21	0	0	0	0	8.3	1.0	0.	0	0	0	21	0	
					IN CLR:	12	0	0	0	0	0.0	0.0	0.						0
					NØT CLR:	9	0	0	0	0	19.3	2.4	0.						0
12/ 8/76	DDA	338 -36	350 -34	236 -37	FLT TØT:	25	0	0	0	0	23.4	2.4	0.	0	0	0	25	0	
					IN CLR:	9	0	0	0	0	0.0	0.0	0.						0
					NØT CLR:	16	0	0	0	0	36.6	3.8	0.						0
12/15/76	DDA	342 -36	351 -33	230 -37	FLT TØT:	27	0	0	0	0	23.9	1.1	0.	0	0	0	0	0	
					IN CLR:	17	0	0	0	0	0.0	0.0	0.						0
					NØT CLR:	10	0	0	0	0	64.5	2.9	0.						0
12/15/76 *	DDA	326 -36	330 -34	266 -37	FLT TØT:	21	0	0	0	0	.9	.1	0.	0	0	0	0	0	
					IN CLR:	20	0	0	0	0	0.0	0.0	0.						0
					NØT CLR:	1	0	0	0	0	18.4	3.0	0.						0
12/16/76	AAA	423 -36	430 -34	340 -37	FLT TØT:	27	0	15	0	0	.5	.1	0.	149	0	0	25	2	
					IN CLR:	25	0	14	0	0	0.0	0.0	0.						153
					NØT CLR:	2	0	1	0	0	6.1	1.5	0.						89
12/17/76 *	AAA	402 -36	409 -34	321 -37	FLT TØT:	21	0	14	0	0	2.1	.0	0.	167	0	0	15	6	
					IN CLR:	20	0	13	0	0	0.0	0.0	0.						174
					NØT CLR:	1	0	1	0	0	43.5	1.0	0.						80
12/18/76	AAA	393 -36	410 -34	232 -37	FLT TØT:	29	0	19	0	0	0.0	0.0	0.	267	0	0	4	25	
					IN CLR:	29	0	19	0	0	0.0	0.0	0.						267
					NØT CLR:	0	0	0	0	0	0.0	0.0	0.						0

APPENDIX B

DEP-ARR IM/ID/IY	CODE	AVFL ALAT	EXHI EXTN	EXLO EXTS	NUMBER OF OBS					AVERAGES FOR THE FLIGHT			OZ	RH	H2O	TROP N	STRAT N		
					CLD	PD5	OZ	H20	H2S	%TIC	PATCHES	PD5							
AKL-SYD (CONT.)																			
12/23/76	AAA	419 -36	432 -34	312 -37	FLT	TOT:	23	0	0	0	0	2.4	.1	0.	0	0	0	13	10
					IN	CLR:	21	0	0	0	0	0.0	0.0	0.	0	0	0	11	10
					NOT	CLR:	2	0	0	0	0	27.1	1.5	0.	0	0	0	2	0
12/24/76	* AAA	399 -36	410 -35	284 -37	FLT	TOT:	12	0	6	0	0	4.9	.3	0.	179	0	0	8	4
					IN	CLR:	10	0	6	0	0	0.0	0.0	0.	179	0	0	6	4
					NOT	CLR:	2	0	0	0	0	29.6	2.0	0.	0	0	0	2	0
12/25/76	AAA	421 -36	430 -34	281 -37	FLT	TOT:	28	0	16	22	1	0.0	0.0	0.	121	63	42	28	0
					IN	CLR:	28	0	16	22	1	0.0	0.0	0.	121	63	42	28	0
					NOT	CLR:	0	0	0	0	0	0.0	0.0	0.	0	0	0	0	0
12/27/76	DDA	309 -36	310 -34	274 -37	FLT	TOT:	27	0	0	0	0	19.6	1.4	0.	0	0	0	27	0
					IN	CLR:	16	0	0	0	0	0.0	0.0	0.	0	0	0	16	0
					NOT	CLR:	11	0	0	0	0	48.0	3.5	0.	0	0	0	11	0
12/27/76	* DDA	324 -36	330 -34	248 -37	FLT	TOT:	23	0	0	0	0	14.4	1.0	0.	0	0	0	23	0
					IN	CLR:	16	0	0	0	0	0.0	0.0	0.	0	0	0	16	0
					NOT	CLR:	7	0	0	0	0	47.3	3.1	0.	0	0	0	7	0
12/30/76	AAA	417 -36	430 -34	201 -37	FLT	TOT:	20	0	15	21	1	0.0	0.0	0.	314	47	18	18	10
					IN	CLR:	20	0	15	21	1	0.0	0.0	0.	314	47	18	18	10
					NOT	CLR:	0	0	0	0	0	0.0	0.0	0.	0	0	0	0	0
12/31/76	* AAA	362 -36	371 -34	207 -37	FLT	TOT:	24	0	16	20	4	0.0	0.0	0.	175	65	35	24	0
					IN	CLR:	24	0	16	20	4	0.0	0.0	0.	175	65	35	24	0
					NOT	CLR:	0	0	0	0	0	0.0	0.0	0.	0	0	0	0	0
AMS-ATH																			
1/20/77	DDA	306 46	331 52	199 39	FLT	TOT:	26	26	16	0	0	12.7	.7	.237E+05	73	0	0	26	0
					IN	CLR:	17	17	9	0	0	0.0	0.0	.108E+03	87	0	0	17	0
					NOT	CLR:	9	9	7	0	0	36.7	2.0	.683E+05	55	0	0	9	0
AMS-BAH																			
12/21/76	DDA	325 40	330 52	199 27	FLT	TOT:	57	0	0	0	0	4.8	.4	0.	0	0	0	0	0
					IN	CLR:	50	0	0	0	0	0.0	0.0	0.	0	0	0	0	0
					NOT	CLR:	7	0	0	0	0	38.8	3.0	0.	0	0	0	0	0
ATH-BAH																			
1/21/77	DDA	288 32	290 36	227 27	FLT	TOT:	34	34	22	0	0	0.0	0.0	.748E+02	69	0	0	34	0
					IN	CLR:	34	34	22	0	0	0.0	0.0	.748E+02	69	0	0	34	0
					NOT	CLR:	0	0	0	0	0	0.0	0.0	0.	0	0	0	0	0

DEP-ARR	IM/ID/IY	CODE	AVFL ALAT	EXHI EXTN	EXLØ EXTS	NUMBER OF OBS					AVERAGES FOR THE FLIGHT			TRCP			STRAT			
						CLD	PD5	ØZ	H2Ø	H2S	%TIC	PATCHES	PD5	ØZ	RH	H2Ø	N	N		
ATH-BEG																				
	8/19/76	* DDA	319 41	330 43	264 39	FLT	TØT:	8	0	4	0	0	8.8	.9	0.	130	0	0	8	0
						IN	CLR:	7	0	4	0	0	0.0	0.0	0.	130	0	0	7	0
						NØT	CLR:	1	0	0	0	0	70.2	7.0	0.	0	0	0	1	0
	8/19/76	DDA	299 42	310 44	271 40	FLT	TØT:	6	0	2	0	0	.1	.2	0.	94	0	0	6	0
						IN	CLR:	5	0	1	0	0	0.0	0.0	0.	105	0	0	5	0
						NØT	CLR:	1	0	1	0	0	.4	1.0	0.	83	0	0	1	0
ATH-BGR																				
	11/ 9/78	BBB	320 47	370 50	286 39	FLT	TØT:	96	96	49	52	4	8.4	.4	.123E+05	48	48	46	96	0
						IN	CLR:	76	76	36	43	2	0.0	0.0	.684E+02	53	42	40	76	0
						NØT	CLR:	20	20	13	9	2	40.2	2.0	.610E+05	34	78	77	20	0
ATH-BKK																				
	8/22/76	* DDA	334 25	350 37	223 14	FLT	TØT:	102	0	65	0	0	8.9	.6	0.	47	0	0	102	0
						IN	CLR:	82	0	54	0	0	0.0	0.0	0.	52	0	0	82	0
						NØT	CLR:	20	0	11	0	0	45.1	3.3	0.	27	0	0	20	0
	8/23/76	DDA	327 24	370 36	247 14	FLT	TØT:	104	0	70	0	0	13.5	1.3	0.	43	0	0	104	0
						IN	CLR:	68	0	46	0	0	0.0	0.0	0.	50	0	0	68	0
						NØT	CLR:	36	0	24	0	0	39.1	3.8	0.	30	0	0	36	0
	8/29/76	* DDA	326 24	351 37	231 14	FLT	TØT:	106	0	63	0	0	18.0	1.5	0.	33	0	0	106	0
						IN	CLR:	66	0	36	0	0	0.0	0.0	0.	42	0	0	66	0
						NØT	CLR:	40	0	27	0	0	47.8	4.1	0.	21	0	0	40	0
	8/30/76	DDA	329 24	371 36	241 14	FLT	TØT:	103	0	68	0	0	26.7	1.7	0.	39	0	0	103	0
						IN	CLR:	57	0	36	0	0	0.0	0.0	0.	51	0	0	57	0
						NØT	CLR:	46	0	32	0	0	59.7	3.8	0.	25	0	0	46	0
ATH-DAM																				
	8/19/76	* DDA	336 35	350 37	243 34	FLT	TØT:	17	0	10	0	0	0.0	0.0	0.	69	0	0	17	0
						IN	CLR:	17	0	10	0	0	0.0	0.0	0.	69	0	0	17	0
						NØT	CLR:	0	0	0	0	0	0.0	0.0	0.	0	0	0	0	0
	12/ 5/76	* DDA	334 35	350 37	199 34	FLT	TØT:	19	0	0	0	0	43.3	3.2	0.	0	0	0	19	0
						IN	CLR:	3	0	0	0	0	0.0	0.0	0.	0	0	0	3	0
						NØT	CLR:	16	0	0	0	0	51.4	3.8	0.	0	0	0	16	0
ATH-DEL																				
	8/19/76	DDA	306 32	331 36	243 28	FLT	TØT:	59	0	36	0	0	0.0	0.0	0.	62	0	0	59	0
						IN	CLR:	59	0	36	0	0	0.0	0.0	0.	62	0	0	59	0
						NØT	CLR:	0	0	0	0	0	0.0	0.0	0.	0	0	0	0	0

APPENDIX B

DEP-ARR	IM/ID/IY	CODE	AVFL ALAT	EXHI EXTN	EXLO EXTS	NUMBER OF OBS					AVERAGES FOR THE FLIGHT			OZ	RH	H2O	TROP N	STRAT N		
						CLD	PD5	OZ	H2O	H2S	%TIC	PATCHES	PD5							
ATH-FCO																				
	2/22/77	DDA	340 39	350 42	265 38	FLT	TOT:	14	14	8	0	0	66.0	2.5	.166E+06	57	0	0	0	0
						IN	CLR:	2	2	1	0	0	0.0	0.0	.323E+02	75	0	0	0	0
						NOT	CLR:	12	12	7	0	0	77.0	2.9	.193E+06	55	0	0	0	0
	8/10/76	DDA	297 39	310 41	195 38	FLT	TOT:	11	0	7	0	0	0.0	0.0	0.	90	0	0	11	0
						IN	CLR:	11	0	7	0	0	0.0	0.0	0.	90	0	0	11	0
						NOT	CLR:	0	0	0	0	0	0.0	0.0	0.	0	0	0	0	0
	8/10/76 *	DDA	313 40	330 41	213 38	FLT	TOT:	10	0	7	0	0	0.0	0.0	0.	90	0	0	10	0
						IN	CLR:	10	0	7	0	0	0.0	0.0	0.	90	0	0	10	0
						NOT	CLR:	0	0	0	0	0	0.0	0.0	0.	0	0	0	0	0
	8/15/76	DDA	330 39	351 41	221 38	FLT	TOT:	12	0	7	0	0	0.0	0.0	0.	89	0	0	12	0
						IN	CLR:	12	0	7	0	0	0.0	0.0	0.	89	0	0	12	0
						NOT	CLR:	0	0	0	0	0	0.0	0.0	0.	0	0	0	0	0
	8/15/76 *	DDA	313 40	330 41	232 38	FLT	TOT:	10	0	6	0	0	9.4	.7	0.	52	0	0	10	0
						IN	CLR:	6	0	4	0	0	0.0	0.0	0.	56	0	0	6	0
						NOT	CLR:	4	0	2	0	0	23.4	1.8	0.	45	0	0	4	0
	12/ 5/76 *	DDA	316 40	330 41	215 38	FLT	TOT:	12	0	0	0	0	11.7	.7	0.	0	0	0	9	3
						IN	CLR:	10	0	0	0	0	0.0	0.0	0.	0	0	0	7	3
						NOT	CLR:	2	0	0	0	0	70.4	4.0	0.	0	0	0	2	0
	12/ 5/76	DDA	301 39	310 42	207 38	FLT	TOT:	14	0	0	0	0	24.2	1.9	0.	0	0	0	14	0
						IN	CLR:	8	0	0	0	0	0.0	0.0	0.	0	0	0	8	0
						NOT	CLR:	6	0	0	0	0	56.5	4.5	0.	0	0	0	6	0
ATH-JFK																				
	11/ 9/78 *	BBB	322 47	371 52	209 39	FLT	TOT:	94	94	60	48	5	13.8	.7	.406E+05	59	53	56	94	0
						IN	CLR:	68	68	43	39	2	0.0	0.0	.991E+02	66	45	34	68	0
						NOT	CLR:	26	26	17	9	3	49.8	2.4	.147E+06	41	86	151	26	0
ATH-LHR																				
	8/23/76	DDA	373 46	391 52	333 40	FLT	TOT:	29	0	18	0	0	0.0	0.0	0.	210	0	0	23	6
						IN	CLR:	29	0	18	0	0	0.0	0.0	0.	210	0	0	23	6
						NOT	CLR:	0	0	0	0	0	0.0	0.0	0.	0	0	0	0	0
	8/23/76 *	DDA	363 46	370 51	325 39	FLT	TOT:	28	0	19	0	0	0.0	0.0	0.	146	0	0	17	11
						IN	CLR:	28	0	19	0	0	0.0	0.0	0.	146	0	0	17	11
						NOT	CLR:	0	0	0	0	0	0.0	0.0	0.	0	0	0	0	0
	8/30/76	DDA	280 46	280 52	277 40	FLT	TOT:	27	0	16	0	0	12.5	1.9	0.	72	0	0	27	0
						IN	CLR:	19	0	11	0	0	0.0	0.0	0.	74	0	0	19	0
						NOT	CLR:	8	0	5	0	0	42.4	6.4	0.	68	0	0	8	0

DEP-ARR IM/ID/IY	CODE	AVFL ALAT	EXHI EXTN	EXLO EXTS			NUMBER OF OBS				AVERAGES FOR THE FLIGHT			OZ	RH	H2O	TROP N	STRAT N	
							CLD	PD5	OZ	H2O, H2S	%TIC	PATCHES	PD5						
ATH-LHR (CONT.)																			
8/30/76	* DDA	364 46	371 51	274 39	FLT	TOT:	28	0	17	0	0	0.0	0.0	0.	135	0	0	22	6
					IN	CLR:	28	0	17	0	0	0.0	0.0	0.	135	0	0	22	6
					NOT	CLR:	0	0	0	0	0	0.0	0.0	0.	0	0	0	0	0
ATH-THR																			
2/22/77	DDA	326 35	330 36	265 34	FLT	TOT:	33	33	21	0	0	4.8	.4	.253E+05	99	0	0	0	0
					IN	CLR:	26	26	18	0	0	0.0	0.0	.771E+02	109	0	0	0	0
					NOT	CLR:	7	7	3	0	0	22.6	2.0	.119E+06	35	0	0	0	0
2/22/77	* DDA	347 35	349 37	294 34	FLT	TOT:	35	35	21	0	0	2.8	.0	.810E+04	148	0	0	0	0
					IN	CLR:	33	33	20	0	0	0.0	0.0	.203E+02	152	0	0	0	0
					NOT	CLR:	2	2	1	0	0	48.4	.5	.142E+06	64	0	0	0	0
8/10/76	* DDA	342 35	370 37	205 34	FLT	TOT:	33	0	21	0	0	0.0	0.0	0.	55	0	0	33	0
					IN	CLR:	33	0	21	0	0	0.0	0.0	0.	55	0	0	33	0
					NOT	CLR:	0	0	0	0	0	0.0	0.0	0.	0	0	0	0	0
8/11/76	DDA	327 35	330 36	262 34	FLT	TOT:	30	0	19	0	0	0.0	0.0	0.	52	0	0	30	0
					IN	CLR:	30	0	19	0	0	0.0	0.0	0.	52	0	0	30	0
					NOT	CLR:	0	0	0	0	0	0.0	0.0	0.	0	0	0	0	0
8/15/76	DDA	319 35	331 37	208 33	FLT	TOT:	31	0	19	0	0	0.0	0.0	0.	58	0	0	31	0
					IN	CLR:	31	0	19	0	0	0.0	0.0	0.	58	0	0	31	0
					NOT	CLR:	0	0	0	0	0	0.0	0.0	0.	0	0	0	0	0
8/15/76	* DDA	346 35	351 37	263 33	FLT	TOT:	29	0	17	0	0	0.0	0.0	0.	48	0	0	29	0
					IN	CLR:	29	0	17	0	0	0.0	0.0	0.	48	0	0	29	0
					NOT	CLR:	0	0	0	0	0	0.0	0.0	0.	0	0	0	0	0
12/ 5/76	DDA	322 35	330 37	275 34	FLT	TOT:	28	0	0	0	0	36.8	2.1	0.	0	0	0	28	0
					IN	CLR:	10	0	0	0	0	0.0	0.0	0.	0	0	0	10	0
					NOT	CLR:	18	0	0	0	0	57.3	3.3	0.	0	0	0	18	0
BAH-BEG																			
12/21/76	DDA	301 37	350 44	199 28	FLT	TOT:	44	0	0	0	0	4.9	1.0	0.	0	0	0	0	0
					IN	CLR:	33	0	0	0	0	0.0	0.0	0.	0	0	0	0	0
					NOT	CLR:	11	0	0	0	0	19.4	3.8	0.	0	0	0	0	0
BAH-BKK																			
1/30/77	* DDA	308 19	310 24	249 14	FLT	TOT:	58	58	20	0	0	4.2	.8	.302E+05	38	0	0	58	0
					IN	CLR:	50	50	14	0	0	0.0	0.0	.754E+01	32	0	0	50	0
					NOT	CLR:	8	8	6	0	0	30.1	5.9	.219E+06	53	0	0	8	0
2/ 1/77	DDA	327 19	331 25	261 14	FLT	TOT:	62	62	40	0	0	0.0	0.0	.772E+01	42	0	0	62	0
					IN	CLR:	62	62	40	0	0	0.0	0.0	.772E+01	42	0	0	62	0
					NOT	CLR:	0	0	0	0	0	0.0	0.0	0.	0	0	0	0	0

APPENDIX B

DEP-ARR	IM/ID/IY	CODE	AVFL ALAT	EXHI EXTN	EXLO EXTS	NUMBER OF OBS					AVERAGES FOR THE FLIGHT			QZ	RH	H2O	TROP N	STRAT N		
						CLD	PD5	QZ	H2O	H2S	%TIC	PATCHES	PD5							
BAH-BKK (CONT.)																				
2/13/77	*	DDA	304 20	310 26	193 14	FLT IN NOT	TOT CLR CLR:	66 64 2	66 64 2	41 40 1	0 0 0	0 0 0	1.0 0.0 33.9	.3 0.0 8.5	.140E+04 .436E+02 .449E+05	50 50 16	0 0 0	0 0 0	66 64 2	0 0 0
2/15/77		DDA	348 19	370 26	247 14	FLT IN NOT	TOT CLR CLR:	63 63 0	63 63 0	41 41 0	0 0 0	0 0 0	0.0 0.0 0.0	0.0 0.0 0.0	.148E+02 .148E+02 0.	47 47 0	0 0 0	0 0 0	63 63 0	0 0 0
11/21/76	*	DDA	326 20	350 26	237 14	FLT IN NOT	TOT CLR CLR:	64 59 5	0 0 0	0 0 0	0 0 0	0 0 0	3.3 0.0 42.0	.3 0.0 3.4	0. 0. 0.	0 0 0	0 0 0	0 0 0	64 59 5	0 0 0
11/28/76	*	DDA	307 20	310 26	211 14	FLT IN NOT	TOT CLR CLR:	68 61 7	0 0 0	0 0 0	0 0 0	0 0 0	5.5 0.0 53.7	.4 0.0 3.6	0. 0. 0.	0 0 0	0 0 0	0 0 0	68 61 7	0 0 0
11/30/76		DDA	301 19	330 25	240 14	FLT IN NOT	TOT CLR CLR:	62 54 8	0 0 0	0 0 0	0 0 0	0 0 0	6.9 0.0 53.4	.5 0.0 3.9	0. 0. 0.	0 0 0	0 0 0	0 0 0	62 54 8	0 0 0
12/30/76		DDA	331 19	370 25	264 14	FLT IN NOT	TOT CLR CLR:	56 44 12	0 0 0	0 0 0	0 0 0	0 0 0	17.6 0.0 82.1	.5 0.0 2.5	0. 0. 0.	0 0 0	0 0 0	0 0 0	56 44 12	0 0 0
BAH-FRA																				
1/20/77		DDA	337 38	351 49	277 27	FLT IN NOT	TOT CLR CLR:	63 54 9	63 54 9	41 35 6	0 0 0	0 0 0	7.0 0.0 49.3	.6 0.0 4.3	.781E+05 .636E+02 .546E+06	162 178 70	0 0 0	0 0 0	21 13 8	42 41 1
1/31/77	*	DDA	289 35	292 45	239 27	FLT IN NOT	TOT CLR CLR:	42 34 8	42 34 8	24 19 5	0 0 0	0 0 0	9.7 0.0 51.0	.6 0.0 3.0	.351E+05 .324E+02 .184E+06	52 52 52	0 0 0	0 0 0	42 34 8	0 0 0
1/31/77		DDA	328 38	350 50	233 27	FLT IN NOT	TOT CLR CLR:	66 60 6	66 60 6	37 34 3	0 0 0	0 0 0	2.1 0.0 22.6	.4 0.0 4.5	.786E+04 .313E+02 .862E+05	154 164 40	0 0 0	0 0 0	60 54 6	6 6 0
2/14/77		DDA	316 41	350 49	226 30	FLT IN NOT	TOT CLR CLR:	43 30 13	43 30 13	14 10 4	0 0 0	0 0 0	7.0 0.0 23.1	1.1 0.0 3.5	.108E+06 .115E+03 .355E+06	245 314 73	0 0 0	0 0 0	33 20 13	10 10 0
2/14/77	*	DDA	347 38	370 49	200 27	FLT IN NOT	TOT CLR CLR:	59 53 6	59 53 6	30 27 3	0 0 0	0 0 0	4.4 0.0 42.9	.2 0.0 1.7	.111E+05 .445E+02 .105E+06	119 125 59	0 0 0	0 0 0	42 36 6	17 17 0
11/22/76		DDA	307 38	310 49	214 27	FLT IN NOT	TOT CLR CLR:	59 41 18	0 0 0	0 0 0	0 0 0	0 0 0	9.8 0.0 32.1	1.3 0.0 4.3	0. 0. 0.	0 0 0	0 0 0	0 0 0	59 41 18	0 0 0

DEP-ARR	IM/ID/IY	CODE	AVFL ALAT	EXHI EXTN	EXLØ EXTS			NUMBER OF OBS					AVERAGES FOR		THE FLIGHT			TROP	STRAT	
						CLD	PD5	OZ	H20	H2S	%TIC	PATCHES	PD5	OZ	RH	H20	N	N		
BAH-FRA (CONT.)																				
11/29/76		DDA	325 37	350 49	254 27	FLT	TØT:	61	0	0	0	0	2.3	.3	0.	0	0	0	61	0
						IN	CLR:	53	0	0	0	0	0.0	0.0	0.	0	0	0	53	0
						NØT	CLR:	8	0	0	0	0	17.6	2.6	0.	0	0	0	8	0
11/29/76	*	DDA	327 38	330 49	262 27	FLT	TØT:	46	0	0	0	0	2.1	.1	0.	0	0	0	46	0
						IN	CLR:	43	0	0	0	0	0.0	0.0	0.	0	0	0	43	0
						NØT	CLR:	3	0	0	0	0	32.9	1.7	0.	0	0	0	3	0
12/29/76	*	DDA	314 38	330 49	251 27	FLT	TØT:	53	0	0	0	0	5.5	.2	0.	0	0	0	53	0
						IN	CLR:	46	0	0	0	0	0.0	0.0	0.	0	0	0	46	0
						NØT	CLR:	7	0	0	0	0	41.3	1.6	0.	0	0	0	7	0
BAH-JFK																				
1/25/77	*	AAA	389 40	411 46	283 27	FLT	TØT:	120	120	37	100	7	14.6	.4	.574E+05	302	41	14	30	90
						IN	CLR:	98	98	34	82	0	0.0	0.0	.993E+02	324	31	14	8	90
						NØT	CLR:	22	22	3	18	7	79.8	2.1	.313E+06	61	85	14	22	0
1/26/77		AAA	359 46	429 57	200 27	FLT	TØT:	157	157	0	128	11	13.8	.7	.959E+05	0	44	33	62	95
						IN	CLR:	120	120	0	97	4	0.0	0.0	.140E+04	0	35	27	28	92
						NØT	CLR:	37	37	0	31	7	58.6	3.0	.402E+06	0	71	50	34	3
3/23/77		AAA	386 47	410 58	200 29	FLT	TØT:	134	134	92	113	1	.6	.1	.191E+03	420	21	12	0	0
						IN	CLR:	130	130	90	110	0	0.0	0.0	.165E+03	427	18	10	0	0
						NØT	CLR:	4	4	2	3	1	21.2	3.0	.102E+04	101	100	69	0	0
5/23/77	*	AAA	384 41	410 48	214 27	FLT	TØT:	76	76	49	0	0	.1	.0	.991E+03	295	0	0	30	46
						IN	CLR:	73	73	49	0	0	0.0	0.0	.352E+02	295	0	0	27	46
						NØT	CLR:	3	3	0	0	0	2.6	1.0	.243E+05	0	0	0	3	0
5/25/77		AAA	377 44	410 54	194 28	FLT	TØT:	81	81	50	0	0	2.0	.2	.195E+05	348	0	0	34	47
						IN	CLR:	77	77	47	0	0	0.0	0.0	.461E+02	358	0	0	31	46
						NØT	CLR:	4	4	3	0	0	39.5	3.3	.394E+06	193	0	0	3	1
7/11/77	*	ACA	394 42	411 46	278 28	FLT	TØT:	100	100	67	0	0	6.7	0.0	.124E+05	200	0	0	9	0
						IN	CLR:	84	84	57	0	0	0.0	0.0	.554E+02	219	0	0	0	0
						NØT	CLR:	16	16	10	0	0	41.7	0.0	.772E+05	96	0	0	9	0
7/12/77		ACA	382 46	430 55	203 27	FLT	TØT:	138	138	90	0	0	1.5	0.0	.231E+04	257	0	0	85	53
						IN	CLR:	134	134	87	0	0	0.0	0.0	.140E+03	259	0	0	83	51
						NØT	CLR:	4	4	3	0	0	53.4	0.0	.750E+05	207	0	0	2	2
8/23/77	*	ABA	397 43	411 50	286 28	FLT	TØT:	119	119	81	0	0	.6	.2	.351E+04	155	0	0	75	44
						IN	CLR:	115	115	79	0	0	0.0	0.0	.302E+02	156	0	0	72	43
						NØT	CLR:	4	4	2	0	0	17.6	6.8	.104E+06	117	0	0	3	1
8/24/77		ABA	386 46	430 57	246 27	FLT	TØT:	145	145	95	0	0	0.0	0.0	.341E+02	220	0	0	50	95
						IN	CLR:	145	145	95	0	0	0.0	0.0	.341E+02	220	0	0	50	95
						NØT	CLR:	0	0	0	0	0	0.0	0.0	0.	0	0	0	0	0

APPENDIX B

DEP-ARR IM/ID/IY	CODE	AVFL ALAT	EXHI EXTN	EXLO EXTS	NUMBER OF OBS						AVERAGES FOR THE FLIGHT			OZ	RH	H2O	TROP N	STRAT N
					CLD	PD5	OZ	H2O	H2S	%TIC	PATCHES	PD5						
BAH-KUL																		
1/19/77 * DDA	338 12	350 25	222 3	FLT TOT:	79	79	49	0	0	0.0	0.0	.142E+02	58	0	0	79	0	
				IN CLR:	79	79	49	0	0	0.0	0.0	.142E+02	58	0	0	79	0	
				NOT CLR:	0	0	0	0	0	0.0	0.0	0.	0	0	0	0	0	
12/20/76 * DDA	313 16	350 26	237 4	FLT TOT:	77	0	0	0	0	10.5	.7	0.	0	0	0	0	0	
				IN CLR:	60	0	0	0	0	0.0	0.0	0.	0	0	0	0	0	
				NOT CLR:	17	0	0	0	0	47.6	3.2	0.	0	0	0	0	0	
12/22/76 DDA	325 15	330 25	253 4	FLT TOT:	69	0	0	0	0	17.8	1.3	0.	0	0	0	0	0	
				IN CLR:	45	0	0	0	0	0.0	0.0	0.	0	0	0	0	0	
				NOT CLR:	24	0	0	0	0	51.2	3.6	0.	0	0	0	0	0	
BAH-SIN																		
1/21/77 DDA	317 14	331 25	287 2	FLT TOT:	70	70	47	0	0	1.7	.3	.964E+02	57	0	0	70	0	
				IN CLR:	64	64	44	0	0	0.0	0.0	.212E+02	59	0	0	64	0	
				NOT CLR:	6	6	3	0	0	19.5	3.3	.899E+03	32	0	0	6	0	
BEG-LHR																		
12/21/76 DDA	280 49	280 52	273 45	FLT TOT:	20	0	0	0	0	18.6	1.6	0.	0	0	0	0	0	
				IN CLR:	14	0	0	0	0	0.0	0.0	0.	0	0	0	0	0	
				NOT CLR:	6	0	0	0	0	62.0	5.3	0.	0	0	0	0	0	
BEG-ORY																		
8/19/76 DDA	324 47	351 48	205 45	FLT TOT:	16	0	10	0	0	12.1	.8	0.	150	0	0	16	0	
				IN CLR:	11	0	7	0	0	0.0	0.0	0.	173	0	0	11	0	
				NOT CLR:	5	0	3	0	0	38.7	2.4	0.	95	0	0	5	0	
8/19/76 * DDA	328 47	331 48	289 45	FLT TOT:	15	0	9	0	0	0.0	0.0	0.	81	0	0	15	0	
				IN CLR:	15	0	9	0	0	0.0	0.0	0.	81	0	0	15	0	
				NOT CLR:	0	0	0	0	0	0.0	0.0	0.	0	0	0	0	0	
BGR-LAX																		
11/10/78 BBB	343 39	350 44	210 34	FLT TOT:	58	58	36	32	1	9.7	1.3	.212E+05	37	49	53	58	0	
				IN CLR:	44	44	29	24	0	0.0	0.0	0.	38	41	35	44	0	
				NOT CLR:	14	14	7	8	1	40.1	5.5	.877E+05	32	74	109	14	0	
12/14/78 BBB	343 42	349 46	290 35	FLT TOT:	54	54	35	28	0	0.0	0.0	.109E+02	189	37	24	28	26	
				IN CLR:	54	54	35	28	0	0.0	0.0	.109E+02	189	37	24	28	26	
				NOT CLR:	0	0	0	0	0	0.0	0.0	0.	0	0	0	0	0	

DEP-ARR	IM/1D/1Y	CODE	AVFL ALAT	EXHI EXTN	EXLØ EXTS	NUMBER OF OBS					AVERAGES FOR THE FLIGHT			ØZ	RH	H2Ø	TROP N	STRAT N		
						CLD	PD5	ØZ	H2Ø	H2S	%TIC	PATCHES	PD5	ØZ	RH	H2Ø	TROP N	STRAT N		
BGR-LPA																				
12/13/78	*	BBB	292 38	310 45	219 29	FLT IN NOT	TØT: CLR: CLR:	70 50 20	70 50 20	41 26 15	33 27 6	7 2 5	16.6 0.0 58.0	1.0 0.0 3.7	.879E+05 .245E+02 .307E+06	41 43 39	56 48 93	125 108 203	70 50 20	0 0 0
BKK-BØM																				
5/24/79	*	BDB	363 17	371 20	290 14	FLT IN NOT	TØT: CLR: CLR:	36 26 10	36 26 10	22 15 7	20 15 5	2 0 2	7.9 0.0 28.4	1.1 0.0 4.0	.117E+06 .113E+04 .419E+06	65 68 58	47 40 67	96 82 138	36 26 10	0 0 0
BKK-DAM																				
8/18/76		DDA	311 27	351 34	209 16	FLT IN NOT	TØT: CLR: CLR:	82 64 18	0 0 0	55 41 14	0 0 0	0 0 0	4.6 0.0 21.2	.5 0.0 2.5	0. 0. 0.	38 42 28	0 0 0	0 0 0	82 64 18	0 0 0
12/ 4/76		DDA	313 28	350 34	236 16	FLT IN NOT	TØT: CLR: CLR:	94 94 0	0 0 0	0 0 0	0 0 0	0 0 0	0.0 0.0 0.0	0.0 0.0 0.0	0. 0. 0.	0 0 0	0 0 0	0 0 0	94 94 0	0 0 0
BKK-DEL																				
1/23/76		BBA	337 22	351 28	212 15	FLT IN NOT	TØT: CLR: CLR:	22 18 4	0 0 0	22 18 4	0 0 0	0 0 0	7.6 0.0 41.7	.6 0.0 3.5	0. 0. 0.	36 36 35	0 0 0	0 0 0	22 18 4	0 0 0
3/19/76		BBA	336 22	351 28	209 15	FLT IN NOT	TØT: CLR: CLR:	24 20 4	0 0 0	24 20 4	0 0 0	0 0 0	4.3 0.0 26.0	.5 0.0 2.6	0. 0. 0.	58 59 50	0 0 0	0 0 0	24 20 4	0 0 0
3/24/76	*	BBA	360 21	371 28	219 15	FLT IN NOT	TØT: CLR: CLR:	21 20 1	0 0 0	21 20 1	0 0 0	0 0 0	.3 0.0 5.9	.6 0.0 12.0	0. 0. 0.	73 72 97	0 0 0	0 0 0	21 20 1	0 0 0
4/20/76	*	BBA	376 21	411 28	209 14	FLT IN NOT	TØT: CLR: CLR:	23 23 0	0 0 0	23 23 0	0 0 0	0 0 0	0.0 0.0 0.0	0.0 0.0 0.0	0. 0. 0.	98 98 0	0 0 0	0 0 0	23 23 0	0 0 0
8/20/76	*	DDA	321 22	331 28	251 15	FLT IN NOT	TØT: CLR: CLR:	35 17 18	0 0 0	23 7 16	0 0 0	0 0 0	14.4 0.0 27.9	1.7 0.0 3.3	0. 0. 0.	34 31 35	0 0 0	0 0 0	35 17 18	0 0 0
9/ 6/76		BBA	342 22	353 28	246 15	FLT IN NOT	TØT: CLR: CLR:	33 33 0	0 0 0	19 19 0	0 0 0	0 0 0	0.0 0.0 0.0	0.0 0.0 0.0	0. 0. 0.	40 40 0	0 0 0	0 0 0	33 33 0	0 0 0
10/12/77	*	BCB	362 21	371 28	217 14	FLT IN NOT	TØT: CLR: CLR:	31 27 4	31 27 4	0 0 0	0 0 0	0 0 0	1.5 0.0 11.8	0.0 0.0 0.0	.326E+04 .209E+02 .251E+05	0 0 0	0 0 0	0 0 0	31 27 4	0 0 0

APPENDIX B

DEP-ARR	IM/ID/IY	CODE	AVFL ALAT	EXHI EXTN	EXLO EXTS	NUMBER OF OBS					AVERAGES FOR THE FLIGHT			TROP			STRAT			
						CLD	PD5	OZ	H2O, H2S	%TIC	PATCHES	PD5	OZ	RH	H2O	N	N			
BKK-DEL (CONT.)																				
12/	8/78	* BBB	358 21	370 28	258 15	FLT IN NOT	TOT CLR: CLR:	32 27 5	32 27 5	13 10 3	13 10 3	3 0 3	4.5 0.0 29.1	.5 0.0 3.4	.145E+05 .314E+02 .927E+05	61 50 64	58 46 100	55 41 102	32 27 5	0 0 0
BKK-DRW																				
8/18/76		* DDA	333 -1	350 12	249 -11	FLT IN NOT	TOT CLR: CLR:	56 43 13	0 0 0	36 28 8	0 0 0	0 0 0	11.9 0.0 51.4	.7 0.0 2.9	0. 0. 0.	21 21 18	0 0 0	0 0 0	56 43 13	0 0 0
8/20/76		DDA	334 -3	370 10	205 -12	FLT IN NOT	TOT CLR: CLR:	53 39 14	0 0 0	35 25 10	0 0 0	0 0 0	7.7 0.0 29.0	.8 0.0 3.2	0. 0. 0.	20 19 21	0 0 0	0 0 0	53 39 14	0 0 0
BKK-HKG																				
1/23/76		* BBA	376 13	390 22	218 8	FLT IN NOT	TOT CLR: CLR:	24 24 0	0 0 0	24 24 0	0 0 0	0 0 0	0.0 0.0 0.0	0.0 0.0 0.0	0. 0. 0.	10 10 0	0 0 0	0 0 0	24 24 0	0 0 0
3/19/76		* BBA	336 13	352 21	204 8	FLT IN NOT	TOT CLR: CLR:	22 20 2	0 0 0	22 20 2	0 0 0	0 0 0	.6 0.0 7.1	.2 2.0 2.0	0. 0. 0.	40 40 33	0 0 0	0 0 0	22 20 2	0 0 0
3/24/76		BBA	327 13	331 21	251 8	FLT IN NOT	TOT CLR: CLR:	19 17 2	0 0 0	19 17 2	0 0 0	0 0 0	.3 0.0 2.5	.5 0.0 5.0	0. 0. 0.	49 50 48	0 0 0	0 0 0	19 17 2	0 0 0
4/20/76		BBA	334 10	371 13	210 8	FLT IN NOT	TOT CLR: CLR:	6 6 0	0 0 0	6 6 0	0 0 0	0 0 0	0.0 0.0 0.0	0.0 0.0 0.0	0. 0. 0.	41 41 0	0 0 0	0 0 0	6 6 0	0 0 0
5/25/79		BDB	359 17	371 21	280 15	FLT IN NOT	TOT CLR: CLR:	20 19 1	20 19 1	12 12 0	9 9 0	2 2 0	.1 0.0 1.6	.1 0.0 2.0	.532E+04 .276E+04 .541E+05	70 70 0	45 45 0	151 151 0	20 19 1	0 0 0
9/ 6/76		* BBA	382 12	390 21	271 8	FLT IN NOT	TOT CLR: CLR:	33 33 0	0 0 0	22 22 0	0 0 0	0 0 0	0.0 0.0 0.0	0.0 0.0 0.0	0. 0. 0.	33 33 0	0 0 0	0 0 0	33 33 0	0 0 0
10/ 8/77		* BCB	310 12	310 20	310 8	FLT IN NOT	TOT CLR: CLR:	27 22 5	27 22 5	0 0 0	0 0 0	0 0 0	5.4 0.0 29.2	0.0 0.0 0.0	.110E+05 .555E+01 .595E+05	0 0 0	0 0 0	0 0 0	27 22 5	0 0 0
10/12/77		BCB	361 13	371 21	193 8	FLT IN NOT	TOT CLR: CLR:	32 14 18	32 14 18	0 0 0	0 0 0	0 0 0	21.5 0.0 38.1	0.0 0.0 0.0	.882E+05 .229E+02 .157E+06	0 0 0	0 0 0	0 0 0	32 14 18	0 0 0

DEP-ARR 1M/1D/1Y	CODE	AVFL ALAT	EXHI EXTN	EXLC EXTS	NUMBER OF OBS							AVERAGES FOR THE FLIGHT			TRCP N	STRAT N		
					CLD	PD5	OZ	H20	H2S	%TIC	PATCHES	PD5	OZ	RH			H2O	
BKK-HKG (CONT.)																		
11/ 3/78	BBB	347 17	370 22	198 14	FLT TOT:	21	21	13	11	3	17.1	1.0	.531E+05	37	64	240	21	0
					IN CLR:	14	14	8	5	0	0.0	0.0	.931E+01	37	55	220	14	0
					NOT CLR:	7	7	5	6	3	51.3	2.9	.159E+06	37	72	257	7	0
12/ 8/78	BBB	322 17	330 21	259 15	FLT TOT:	18	18	12	8	0	0.0	0.0	.209E+02	58	31	124	18	0
					IN CLR:	18	18	12	8	0	0.0	0.0	.209E+02	58	31	124	18	0
					NOT CLR:	0	0	0	0	0	0.0	0.0	0.	0	0	0	0	0
BKK-KHI																		
10/ 8/77	BCB	324 20	351 25	282 14	FLT TOT:	40	40	0	0	0	2.7	0.0	.223E+05	0	0	0	40	0
					IN CLR:	35	35	0	0	0	0.0	0.0	.181E+03	0	0	0	35	0
					NOT CLR:	5	5	0	0	0	21.6	0.0	.177E+06	0	0	0	5	0
BKK-MEL																		
8/ 9/76 *	DDA	322 -12	352 12	191 -37	FLT TOT:	81	0	54	0	0	0.0	0.0	0.	27	0	0	81	0
					IN CLR:	81	0	54	0	0	0.0	0.0	0.	27	0	0	81	0
					NOT CLR:	0	0	0	0	0	0.0	0.0	0.	0	0	0	0	0
8/11/76	DDA	315 -15	330 10	235 -37	FLT TOT:	90	0	58	0	0	1.0	.2	0.	29	0	0	90	0
					IN CLR:	83	0	54	0	0	0.0	0.0	0.	28	0	0	83	0
					NOT CLR:	7	0	4	0	0	12.5	2.9	0.	35	0	0	7	0
8/14/76 *	DDA	318 -15	351 12	244 -37	FLT TOT:	91	0	59	0	0	11.8	1.0	0.	28	0	0	91	0
					IN CLR:	67	0	42	0	0	0.0	0.0	0.	26	0	0	67	0
					NOT CLR:	24	0	17	0	0	44.6	3.8	0.	33	0	0	24	0
8/16/76	DDA	337 -15	370 11	239 -37	FLT TOT:	83	0	42	0	0	9.0	.8	0.	42	0	0	77	6
					IN CLR:	64	0	32	0	0	0.0	0.0	0.	49	0	0	58	6
					NOT CLR:	19	0	10	0	0	39.1	3.6	0.	20	0	0	19	0
8/24/76	DDA	324 -15	370 11	238 -38	FLT TOT:	87	0	58	0	0	7.4	.7	0.	120	0	0	68	19
					IN CLR:	70	0	48	0	0	0.0	0.0	0.	140	0	0	51	19
					NOT CLR:	17	0	10	0	0	37.9	3.5	0.	21	0	0	17	0
8/31/76	DDA	343 -15	371 11	215 -37	FLT TOT:	89	0	56	0	0	2.3	.4	0.	80	0	0	78	11
					IN CLR:	79	0	49	0	0	0.0	0.0	0.	85	0	0	68	11
					NOT CLR:	10	0	7	0	0	20.7	3.2	0.	44	0	0	10	0
BKK-SIN																		
1/30/77 *	DDA	341 8	350 12	267 3	FLT TOT:	15	15	3	0	0	11.9	.9	.369E+05	47	0	0	15	0
					IN CLR:	11	11	3	0	0	0.0	0.0	.520E+02	47	0	0	11	0
					NOT CLR:	4	4	0	0	0	44.5	3.3	.138E+06	0	0	0	4	0
2/13/77 *	DDA	337 8	350 13	262 3	FLT TOT:	14	14	7	0	0	.2	.1	.139E+02	20	0	0	14	0
					IN CLR:	13	13	6	0	0	0.0	0.0	.125E+02	22	0	0	13	0
					NOT CLR:	1	1	1	0	0	2.4	1.0	.326E+02	13	0	0	1	0

DEP-ARR IM/ID/IY	CODE	AVFL ALAT	EXHI EXTN	EXLO EXTS	NUMBER OF OBS					AVERAGES FOR THE FLIGHT			ØZ	RH	H2Ø	TROP N	STRAT N		
					CLD	PD5	ØZ	H2Ø	H2S	%TIC	PATCHES	PD5							
BKK-SIN (CONT.)																			
2/15/77	DDA	351 7	370 12	229 2	FLT	TØT:	16	16	10	0	0	7.1	.8	.103E+05	18	0	0	16	0
					IN	CLR:	11	11	6	0	0	0.0	0.0	.543E+02	14	0	0	11	0
					NØT	CLR:	5	5	4	0	0	22.6	2.6	.328E+05	25	0	0	5	0
2/21/77 *	DDA	343 8	350 12	267 3	FLT	TØT:	15	15	9	0	0	2.5	.2	.280E+03	26	0	0	0	0
					IN	CLR:	13	13	8	0	0	0.0	0.0	.352E+02	27	0	0	0	0
					NØT	CLR:	2	2	1	0	0	18.6	1.5	.187E+04	22	0	0	0	0
2/23/77	DDA	283 7	290 12	202 2	FLT	TØT:	15	15	9	0	0	0.0	0.0	.615E+01	24	0	0	0	0
					IN	CLR:	15	15	9	0	0	0.0	0.0	.615E+01	24	0	0	0	0
					NØT	CLR:	0	0	0	0	0	0.0	0.0	0.	0	0	0	0	0
11/21/76 *	DDA	338 8	350 13	261 3	FLT	TØT:	15	0	0	0	0	19.3	2.6	0.	0	0	0	15	0
					IN	CLR:	7	0	0	0	0	0.0	0.0	0.	0	0	0	7	0
					NØT	CLR:	8	0	0	0	0	36.1	4.9	0.	0	0	0	8	0
11/28/76 *	DDA	337 8	351 13	246 3	FLT	TØT:	15	0	0	0	0	35.3	2.7	0.	0	0	0	15	0
					IN	CLR:	7	0	0	0	0	0.0	0.0	0.	0	0	0	7	0
					NØT	CLR:	8	0	0	0	0	66.3	5.1	0.	0	0	0	8	0
11/30/76	DDA	289 7	290 11	279 3	FLT	TØT:	14	0	0	0	0	0.0	0.0	0.	0	0	0	14	0
					IN	CLR:	14	0	0	0	0	0.0	0.0	0.	0	0	0	14	0
					NØT	CLR:	0	0	0	0	0	0.0	0.0	0.	0	0	0	0	0
12/ 4/76 *	DDA	337 8	350 13	234 3	FLT	TØT:	15	0	0	0	0	19.3	3.8	0.	0	0	0	15	0
					IN	CLR:	5	0	0	0	0	0.0	0.0	0.	0	0	0	5	0
					NØT	CLR:	10	0	0	0	0	29.0	5.7	0.	0	0	0	10	0
12/ 6/76	DDA	351 7	370 12	249 3	FLT	TØT:	14	0	0	0	0	6.6	1.1	0.	0	0	0	14	0
					IN	CLR:	5	0	0	0	0	0.0	0.0	0.	0	0	0	5	0
					NØT	CLR:	9	0	0	0	0	10.2	1.8	0.	0	0	0	9	0
12/30/76	DDA	358 7	370 12	267 3	FLT	TØT:	15	0	0	0	0	0.0	0.0	0.	0	0	0	15	0
					IN	CLR:	15	0	0	0	0	0.0	0.0	0.	0	0	0	15	0
					NØT	CLR:	0	0	0	0	0	0.0	0.0	0.	0	0	0	0	0
BKK-SYD																			
8/22/76 *	DDA	346 -14	390 12	267 -33	FLT	TØT:	99	0	66	0	0	11.5	1.0	0.	34	0	0	99	0
					IN	CLR:	73	0	49	0	0	0.0	0.0	0.	38	0	0	73	0
					NØT	CLR:	26	0	17	0	0	43.9	3.8	0.	22	0	0	26	0
8/29/76 *	DDA	322 -14	351 12	193 -33	FLT	TØT:	99	0	57	0	0	0.0	0.0	0.	29	0	0	99	0
					IN	CLR:	99	0	57	0	0	0.0	0.0	0.	29	0	0	99	0
					NØT	CLR:	0	0	0	0	0	0.0	0.0	0.	0	0	0	0	0

DEP-ARR	IM/1D/1Y	CODE	AVFL ALAT	EXHI EXTN	EXLØ EXTS	NUMBER OF OBS					AVERAGES FOR THE FLIGHT			TROP			STRAT		
						CLD	PD5	OZ	H2Ø, H2S	%TIC	PATCHES	PD5	OZ	RH	H2Ø	N	N		
BKK-THR																			
	2/21/77	DDA	328 26	349 35	252 15	FLT IN NOT	TØT: CLR: CLR:	73 45 28	73 45 28	39 21 18	0 0 0	0 0 0	14.3 0.0 37.4	2.0 0.0 5.3	.101E+06 .117E+03 .262E+06	51 64 59	0 0 0	0 0 0	0 0 0
	2/23/77	* DDA	339 25	370 34	260 15	FLT IN NOT	TØT: CLR: CLR:	56 37 19	56 37 19	33 22 11	0 0 0	0 0 0	20.7 0.0 61.1	1.0 0.0 3.1	.643E+05 .623E+03 .188E+06	48 45 53	0 0 0	0 0 0	0 0 0
	8/ 9/76	DDA	313 26	351 33	236 16	FLT IN NOT	TØT: CLR: CLR:	62 49 13	0 0 0	39 32 7	0 0 0	0 0 0	4.9 0.0 23.3	.7 0.0 3.2	0. 0. 0.	37 39 25	0 0 0	0 0 0	62 49 13
	8/11/76	* DDA	322 25	330 34	243 15	FLT IN NOT	TØT: CLR: CLR:	63 37 26	0 0 0	41 23 18	0 0 0	0 0 0	18.1 0.0 43.7	1.6 0.0 3.8	0. 0. 0.	39 45 30	0 0 0	0 0 0	63 37 26
	8/14/76	DDA	311 26	350 35	245 15	FLT IN NOT	TØT: CLR: CLR:	66 66 0	0 0 0	40 40 0	0 0 0	0 0 0	0.0 0.0 0.0	0.0 0.0 0.0	0. 0. 0.	22 22 0	0 0 0	0 0 0	66 66 0
	8/16/76	* DDA	311 26	330 34	238 14	FLT IN NOT	TØT: CLR: CLR:	67 49 18	0 0 0	43 30 13	0 0 0	0 0 0	12.8 0.0 47.8	.6 0.0 2.2	0. 0. 0.	43 48 32	0 0 0	0 0 0	67 49 18
	11/ 2/78	* BBB	350 25	370 34	252 14	FLT IN NOT	TØT: CLR: CLR:	64 64 0	64 64 0	41 41 0	26 26 0	0 0 0	0.0 0.0 0.0	0.0 0.0 0.	.111E+02 .111E+02 0.	66 66 0	22 22 0	37 37 0	64 64 0
	12/ 6/76	* DDA	327 25	331 34	258 14	FLT IN NOT	TØT: CLR: CLR:	59 57 2	0 0 0	0 0 0	0 0 0	0 0 0	1.1 0.0 33.3	.2 0.0 5.0	0. 0. 0.	0 0 0	0 0 0	0 0 0	59 57 2
BOM-FRA																			
	5/24/79	* BCB	330 36	370 49	213 20	FLT IN NOT	TØT: CLR: CLR:	80 58 22	80 58 22	52 37 15	40 31 9	1 0 1	9.5 0.0 34.5	1.3 0.0 4.8	.356E+06 .112E+04 .129E+07	98 92 114	40 36 55	70 52 131	30 58 22
BOM-IST																			
	1/ 6/79	* BBB	353 30	376 40	241 20	FLT IN NGT	TØT: CLR: CLR:	51 30 21	0 0 0	33 18 15	28 17 11	1 0 1	14.4 0.0 35.1	1.4 0.0 3.5	0. 0. 0.	59 37 26	52 41 68	32 27 38	51 30 21
	2/24/79	* BBB	340 34	371 40	206 20	FLT IN NOT	TØT: CLR: CLR:	15 15 0	0 0 0	10 10 0	7 7 0	0 0 0	0.0 0.0 0.0	0.0 0.0 0.	0. 0. 0.	160 150 0	15 15 0	18 18 0	11 11 0

APPENDIX B

DEP-ARR IM/10/1Y	CODE	AVFL ALAT	EXHI EXTN	EXLO EXTS	NUMBER OF OBS						AVERAGES FOR THE FLIGHT			TROP N	STRAT N				
					CLD	PD5	OZ	H2O, H2S	%TIC	PATCHES	PD5	OZ	RH			H2O			
1/ 7/77	DDA	325 37	350 52	206 19	FLT	TOT:	101	0	0	0	0	2.6	.3	0.	0	0	0	78	23
					IN	CLR:	91	0	0	0	0	0.0	0.0	0.	0	0	0	71	20
					NOT	CLR:	10	0	0	0	0	26.0	3.2	0.	0	0	0	7	3
1/ 8/77 *	DDA	310 37	370 51	249 20	FLT	TOT:	86	0	0	0	0	12.5	1.1	0.	0	0	0	81	5
					IN	CLR:	66	0	0	0	0	0.0	0.0	0.	0	0	0	61	5
					NOT	CLR:	20	0	0	0	0	53.9	4.7	0.	0	0	0	20	0
1/23/77	DDA	331 35	350 51	253 19	FLT	TOT:	107	107	71	0	0	13.3	.6	.318E+05	82	0	0	96	11
					IN	CLR:	76	76	49	0	0	0.0	0.0	.178E+03	88	0	0	65	11
					NOT	CLR:	31	31	22	0	0	45.9	1.9	.109E+06	66	0	0	31	0
1/24/77 *	DDA	340 32	371 39	330 21	FLT	TOT:	50	50	33	0	0	6.2	.4	.107E+05	76	0	0	42	8
					IN	CLR:	44	44	29	0	0	0.0	0.0	.451E+03	77	0	0	36	8
					NOT	CLR:	6	6	4	0	0	51.8	3.5	.860E+05	70	0	0	6	0
8/ 3/76	DDA	319 38	350 52	233 19	FLT	TOT:	78	0	47	0	0	2.1	.3	0.	98	0	0	68	10
					IN	CLR:	74	0	45	0	0	0.0	0.0	0.	100	0	0	65	9
					NOT	CLR:	4	0	2	0	0	41.7	6.3	0.	67	0	0	3	1
8/ 4/76 *	DDA	319 36	330 51	276 21	FLT	TOT:	84	0	53	0	0	10.2	.5	0.	79	0	0	84	0
					IN	CLR:	67	0	41	0	0	0.0	0.0	0.	85	0	0	67	0
					NOT	CLR:	17	0	12	0	0	50.3	2.5	0.	59	0	0	17	0
8/ 6/76	DDA	322 37	351 51	279 23	FLT	TOT:	70	0	45	0	0	.8	.2	0.	86	0	0	59	11
					IN	CLR:	66	0	43	0	0	0.0	0.0	0.	87	0	0	59	7
					NOT	CLR:	4	0	2	0	0	13.1	2.8	0.	79	0	0	0	4
8/ 7/76 *	DDA	320 37	330 51	199 20	FLT	TOT:	88	0	58	0	0	.0	.0	0.	84	0	0	88	0
					IN	CLR:	86	0	56	0	0	0.0	0.0	0.	84	0	0	86	0
					NOT	CLR:	2	0	2	0	0	1.8	1.0	0.	78	0	0	2	0
11/22/76 *	DDA	315 37	330 51	261 20	FLT	TOT:	87	0	0	0	0	16.4	1.2	0.	0	0	0	87	0
					IN	CLR:	63	0	0	0	0	0.0	0.0	0.	0	0	0	63	0
					NOT	CLR:	24	0	0	0	0	59.5	4.4	0.	0	0	0	24	0
12/ 9/76	DDA	321 36	350 52	250 19	FLT	TOT:	110	0	0	0	0	3.8	.4	0.	0	0	0	96	14
					IN	CLR:	101	0	0	0	0	0.0	0.0	0.	0	0	0	87	14
					NOT	CLR:	9	0	0	0	0	47.0	4.9	0.	0	0	0	9	0
12/10/76 *	DDA	313 37	330 51	234 20	FLT	TOT:	85	0	0	0	0	16.0	2.0	0.	0	0	0	85	0
					IN	CLR:	59	0	0	0	0	0.0	0.0	0.	0	0	0	59	0
					NOT	CLR:	26	0	0	0	0	52.2	6.5	0.	0	0	0	26	0
12/28/76	DDA	311 37	350 52	211 19	FLT	TOT:	113	0	0	0	0	17.1	.9	0.	0	0	0	101	12
					IN	CLR:	80	0	0	0	0	0.0	0.0	0.	0	0	0	68	12
					NOT	CLR:	33	0	0	0	0	58.4	3.2	0.	0	0	0	33	0

DEP-ARR	IM/ID/IY	CODE	AVFL ALAT	EXH1 EXTN	EXL0 EXTS	NUMBER OF OBS					AVERAGES FOR THE FLIGHT			TRCP	STRAT				
						CLD	PD5	OZ	H20, H2S	%TIC	PATCHES	PD5	OZ	RH	H2O	N	N		
BOM-PER																			
	1/ 7/77	* DDA	324 -7	350 17	240 -31	FLT IN NOT	T0T CLR CLR	87 74 13	0 0 0	0 0 0	0 0 0	2.8 0.0 18.8	.4 0.0 2.5	0. 0. 0.	0 0 0	0 0 0	87 74 13	0 0 0	
	1/ 8/77	DDA	327 -7	340 16	227 -31	FLT IN NOT	T0T CLR CLR	85 77 8	0 0 0	0 0 0	0 0 0	1.7 0.0 17.6	.3 0.0 3.0	0. 0. 0.	0 0 0	0 0 0	85 77 8	0 0 0	
	1/23/77	* DDA	350 11	351 18	345 3	FLT IN NOT	T0T CLR CLR	22 13 9	22 13 9	14 8 6	0 0 0	27.9 0.0 68.1	1.5 0.0 3.6	.201E+06 .123E+02 .492E+06	47 54 39	0 0 0	0 0 0	22 13 9	0 0 0
	1/24/77	DDA	324 -8	340 17	194 -31	FLT IN NOT	T0T CLR CLR	75 60 15	75 60 15	45 39 6	0 0 0	6.3 0.0 31.7	.9 0.0 4.5	.422E+05 .230E+02 .211E+06	50 53 33	0 0 0	0 0 0	75 60 15	0 0 0
	8/ 3/76	* DDA	329 -6	351 16	244 -31	FLT IN NOT	T0T CLR CLR	78 50 28	0 0 0	52 32 20	0 0 0	7.5 0.0 20.9	1.0 0.0 2.7	0. 0. 0.	50 55 42	0 0 0	0 0 0	78 50 28	0 0 0
	8/ 4/76	DDA	327 -7	341 16	249 -31	FLT IN NOT	T0T CLR CLR	87 87 0	0 0 0	54 54 0	0 0 0	0.0 0.0 0.0	0.0 0.0 0.0	0. 0. 0.	31 31 0	0 0 0	0 0 0	97 87 0	0 0 0
	8/ 6/76	* DDA	307 -5	350 17	199 -30	FLT IN NOT	T0T CLR CLR	82 71 11	0 0 0	55 48 7	0 0 0	2.7 0.0 20.2	.2 0.0 1.5	0. 0. 0.	44 45 37	0 0 0	0 0 0	82 71 11	0 0 0
	8/ 7/76	DDA	308 -6	341 16	205 -31	FLT IN NOT	T0T CLR CLR	76 56 20	0 0 0	47 34 13	0 0 0	7.3 0.0 27.7	.8 0.0 3.2	0. 0. 0.	36 36 36	0 0 0	0 0 0	76 56 20	0 0 0
	11/23/76	DDA	326 -7	360 17	253 -31	FLT IN NOT	T0T CLR CLR	88 57 31	0 0 0	0 0 0	0 0 0	12.7 0.0 36.0	1.4 0.0 4.0	0. 0. 0.	0 0 0	0 0 0	0 0 0	88 57 31	0 0 0
	12/ 9/76	* DDA	324 -7	350 17	192 -31	FLT IN NOT	T0T CLR CLR	90 75 15	0 0 0	0 0 0	0 0 0	4.5 0.0 27.1	.7 0.0 3.9	0. 0. 0.	0 0 0	0 0 0	0 0 0	90 75 15	0 0 0
	12/10/76	DDA	328 -7	341 17	251 -31	FLT IN NOT	T0T CLR CLR	88 79 9	0 0 0	0 0 0	0 0 0	1.0 0.0 9.5	.2 0.0 1.9	0. 0. 0.	0 0 0	0 0 0	0 0 0	88 79 9	0 0 0
	12/28/76	* DDA	334 -7	350 16	251 -31	FLT IN NOT	T0T CLR CLR	87 65 22	0 0 0	0 0 0	0 0 0	14.3 0.0 56.4	1.1 0.0 4.2	0. 0. 0.	0 0 0	0 0 0	0 0 0	87 65 22	0 0 0

DEP-ARR IM/ID/IY	CODE	AVFL ALAT	EXHI EXTN	EXLO EXTS			NUMBER OF OBS					AVERAGES FOR THE FLIGHT			WZ	RH	H20	TROP N	STRAT N
							CLD	PD5	OZ	H20, H2S		%TIC	PATCHES	PD5					
BOM-THR																			
1/ 7/79	BBB	343 28	361 35	272 22	FLT	TOT:	39	0	25	19	7	17.6	.9	0.	79	76	57	39	0
					IN	CLR:	24	0	15	12	1	0.0	0.0	0.	82	65	50	24	0
					NOT	CLR:	15	0	10	7	6	45.8	2.5	0.	76	95	70	15	0
2/25/79	BBB	325 25	351 35	202 19	FLT	TOT:	43	0	27	20	0	0.0	0.0	0.	52	13	70	43	0
					IN	CLR:	43	0	27	20	0	0.0	0.0	0.	52	13	70	43	0
					NOT	CLR:	0	0	0	0	0	0.0	0.0	0.	0	0	0	0	0
11/25/78	BBB	382 25	391 34	243 19	FLT	TOT:	41	41	26	21	2	.0	.0	.131E+02	66	45	26	41	0
					IN	CLR:	40	40	25	21	2	0.0	0.0	.134E+02	66	45	26	40	0
					NOT	CLR:	1	1	1	0	0	1.6	1.0	0.	64	0	0	1	0
11/25/78 *	BBB	359 27	370 35	191 20	FLT	TOT:	32	32	21	18	1	.6	.3	.980E+03	65	38	30	32	0
					IN	CLR:	30	30	19	17	1	0.0	0.0	.844E+01	69	38	28	30	0
					NOT	CLR:	2	2	2	1	0	9.4	4.0	.156E+05	26	39	56	2	0
12/17/78	BBB	344 28	350 35	219 21	FLT	TOT:	42	42	25	18	0	0.0	0.0	.459E+02	72	33	25	0	0
					IN	CLR:	42	42	25	18	0	0.0	0.0	.459E+02	72	33	25	0	0
					NOT	CLR:	0	0	0	0	0	0.0	0.0	0.	0	0	0	0	0
12/17/78 *	BBB	369 27	370 34	349 21	FLT	TOT:	27	27	15	12	0	0.0	0.0	.967E+01	69	32	23	0	0
					IN	CLR:	27	27	15	12	0	0.0	0.0	.967E+01	69	32	23	0	0
					NOT	CLR:	0	0	0	0	0	0.0	0.0	0.	0	0	0	0	0
12/23/78	BBB	347 28	350 35	280 21	FLT	TOT:	37	37	0	17	0	0.0	0.0	.273E+02	0	18	31	0	0
					IN	CLR:	37	37	0	17	0	0.0	0.0	.273E+02	0	18	31	0	0
					NOT	CLR:	0	0	0	0	0	0.0	0.0	0.	0	0	0	0	0
12/23/78 *	BBB	360 28	370 35	231 20	FLT	TOT:	31	31	0	14	0	0.0	0.0	.406E+02	0	23	34	0	0
					IN	CLR:	31	31	0	14	0	0.0	0.0	.406E+02	0	23	34	0	0
					NOT	CLR:	0	0	0	0	0	0.0	0.0	0.	0	0	0	0	0
BOS-DTW																			
9/15/76 *	BBA	344 42	370 43	196 42	FLT	TOT:	10	0	6	0	0	0.0	0.0	0.	52	0	0	10	0
					IN	CLR:	10	0	6	0	0	0.0	0.0	0.	52	0	0	10	0
					NOT	CLR:	0	0	0	0	0	0.0	0.0	0.	0	0	0	0	0
9/15/76	BBA	320 43	351 43	231 43	FLT	TOT:	11	0	8	0	0	0.0	0.0	0.	57	0	0	11	0
					IN	CLR:	11	0	8	0	0	0.0	0.0	0.	57	0	0	11	0
					NOT	CLR:	0	0	0	0	0	0.0	0.0	0.	0	0	0	0	0
9/16/76 *	BBA	350 42	369 43	269 42	FLT	TOT:	10	0	6	0	0	0.0	0.0	0.	70	0	0	10	0
					IN	CLR:	10	0	6	0	0	0.0	0.0	0.	70	0	0	10	0
					NOT	CLR:	0	0	0	0	0	0.0	0.0	0.	0	0	0	0	0
9/16/76	BBA	371 43	390 43	291 43	FLT	TOT:	10	0	6	0	0	0.0	0.0	0.	73	0	0	10	0
					IN	CLR:	10	0	6	0	0	0.0	0.0	0.	73	0	0	10	0
					NOT	CLR:	0	0	0	0	0	0.0	0.0	0.	0	0	0	0	0

DEP-ARR IM/ID/IY	CODE	AVFL ALAT	EXHI EXTN	EXLO EXTS			NUMBER OF OBS					AVERAGES FOR THE FLIGHT			OZ	RH	H2O	TROP N	STRAT N
							CLD	PD5	OZ	H2O	H2S	%TIC	PATCHES	PD5					
BOS-DTW (CONT.)																			
9/27/77	* ABA	328 42	330 43	311 42	FLT	TOT:	9	0	5	0	0	0.0	0.0	0.	124	0	0	9	0
					IN	CLR:	9	0	5	0	0	0.0	0.0	0.	124	0	0	9	0
					NOT	CLR:	0	0	0	0	0	0.0	0.0	0.	0	0	0	0	0
9/27/77	ABA	385 43	430 43	231 43	FLT	TOT:	8	0	5	0	0	0.0	0.0	0.	138	0	0	2	6
					IN	CLR:	8	0	5	0	0	0.0	0.0	0.	138	0	0	2	6
					NOT	CLR:	0	0	0	0	0	0.0	0.0	0.	0	0	0	0	0
BOS-LHR																			
5/28/77	* AAA	389 53	392 56	353 44	FLT	TOT:	31	31	17	0	0	0.0	0.0	.126E+02	383	0	0	1	30
					IN	CLR:	31	31	17	0	0	0.0	0.0	.126E+02	383	0	0	1	30
					NOT	CLR:	0	0	0	0	0	0.0	0.0	0.	0	0	0	0	0
5/28/77	AAA	370 47	370 50	369 43	FLT	TOT:	16	16	3	0	0	.5	.1	.116E+05	221	0	0	8	8
					IN	CLR:	15	15	2	0	0	0.0	0.0	.605E+02	303	0	0	7	8
					NOT	CLR:	1	1	1	0	0	8.2	2.0	.185E+06	58	0	0	1	0
5/29/77	* AAA	401 53	430 55	267 44	FLT	TOT:	37	37	18	0	0	0.0	0.0	.179E+02	449	0	0	3	34
					IN	CLR:	37	37	18	0	0	0.0	0.0	.179E+02	449	0	0	3	34
					NOT	CLR:	0	0	0	0	0	0.0	0.0	0.	0	0	0	0	0
5/29/77	AAA	380 50	390 52	273 44	FLT	TOT:	15	15	5	0	0	.6	.2	.208E+04	422	0	0	6	9
					IN	CLR:	14	14	5	0	0	0.0	0.0	.217E+04	422	0	0	5	9
					NOT	CLR:	1	1	0	0	0	9.4	3.0	.802E+03	0	0	0	1	0
9/15/76	* BBA	369 50	390 53	230 44	FLT	TOT:	73	0	48	0	0	0.0	0.0	0.	87	0	0	61	12
					IN	CLR:	73	0	48	0	0	0.0	0.0	0.	87	0	0	61	12
					NOT	CLR:	0	0	0	0	0	0.0	0.0	0.	0	0	0	0	0
9/16/76	* BBA	359 53	389 56	282 44	FLT	TOT:	71	0	39	0	0	0.0	0.0	0.	113	0	0	43	28
					IN	CLR:	71	0	39	0	0	0.0	0.0	0.	113	0	0	43	28
					NOT	CLR:	0	0	0	0	0	0.0	0.0	0.	0	0	0	0	0
9/16/76	BBA	317 50	369 53	246 44	FLT	TOT:	49	0	32	0	0	0.0	0.0	0.	75	0	0	48	1
					IN	CLR:	49	0	32	0	0	0.0	0.0	0.	75	0	0	48	1
					NOT	CLR:	0	0	0	0	0	0.0	0.0	0.	0	0	0	0	0
9/17/76	BBA	343 50	350 53	252 44	FLT	TOT:	56	0	35	0	0	0.0	0.0	0.	107	0	0	48	8
					IN	CLR:	56	0	35	0	0	0.0	0.0	0.	107	0	0	48	8
					NOT	CLR:	0	0	0	0	0	0.0	0.0	0.	0	0	0	0	0
9/26/77	ABA	406 50	411 52	291 43	FLT	TOT:	50	0	32	0	0	.0	.0	0.	301	0	0	3	47
					IN	CLR:	49	0	31	0	0	0.0	0.0	0.	297	0	0	3	46
					NOT	CLR:	1	0	1	0	0	.4	1.0	0.	428	0	0	0	1
9/26/77	* ABA	402 53	430 56	339 44	FLT	TOT:	68	0	42	0	0	.6	.1	0.	254	0	0	15	53
					IN	CLR:	65	0	41	0	0	0.0	0.0	0.	257	0	0	13	52
					NOT	CLR:	3	0	1	0	0	19.1	2.3	0.	160	0	0	2	1

APPENDIX B

DEP-ARR	IM/ID/IY	CODE	AVFL ALAT	EXHI EXTN	EXLO EXTS			NUMBER OF OBS				AVERAGES FOR THE FLIGHT								
								CLD	PD5	OZ	H2O	H2S	%TIC	PATCHES	PD5	OZ	RH	H2O	TRCP N	STRAT N
BOS-LHR (CONT.)																				
	9/27/77	* ABA	398 51	430 54	275 43	FLT TOT:	75	0	45	0	0		2.4	.3	0.	144	0	0	35	40
						IN CLR:	71	0	43	0	0		0.0	0.0	0.	147	0	0	35	36
						NOT CLR:	4	0	2	0	0		45.0	6.3	0.	81	0	0	0	4
	9/27/77	ABA	404 50	411 52	209 43	FLT TOT:	56	0	36	0	0		7.7	.5	0.	184	0	0	34	24
						IN CLR:	43	0	29	0	0		0.0	0.0	0.	209	0	0	19	24
						NOT CLR:	15	0	7	0	0		29.7	2.1	0.	80	0	0	15	0
	9/28/77	ABA	403 50	410 53	234 43	FLT TOT:	49	0	31	0	0		.2	.1	0.	167	0	0	9	40
						IN CLR:	48	0	31	0	0		0.0	0.0	0.	167	0	0	8	40
						NOT CLR:	1	0	0	0	0		10.2	3.0	0.	0	0	0	1	0
BOS-SFO																				
	12/29/75	* CAA	383 43	410 44	214 38	FLT TOT:	30	0	30	0	0		9.4	.7	0.	153	0	0	13	17
						IN CLR:	23	0	23	0	0		0.0	0.0	0.	190	0	0	6	17
						NOT CLR:	7	0	7	0	0		40.2	2.9	0.	31	0	0	7	0
	12/30/75	CAA	369 41	390 43	218 38	FLT TOT:	42	0	42	0	0		2.1	.0	0.	145	0	0	12	11
						IN CLR:	41	0	41	0	0		0.0	0.0	0.	147	0	0	11	11
						NOT CLR:	1	0	1	0	0		89.4	1.0	0.	35	0	0	1	0
CCS-GIG																				
	4/ 8/76	BBA	360 -6	371 9	207 -22	FLT TOT:	36	0	36	0	0		2.0	.3	0.	35	0	0	11	0
						IN CLR:	32	0	32	0	0		0.0	0.0	0.	35	0	0	11	0
						NOT CLR:	4	0	4	0	0		18.2	3.0	0.	39	0	0	0	0
	4/24/76	BBA	358 -4	370 9	208 -22	FLT TOT:	32	0	32	0	0		39.5	1.8	0.	33	0	0	13	0
						IN CLR:	13	0	13	0	0		0.0	0.0	0.	34	0	0	3	0
						NOT CLR:	19	0	19	0	0		66.6	3.1	0.	32	0	0	10	0
	4/24/76	* BBA	346 -1	352 9	303 -15	FLT TOT:	27	0	27	0	0		18.9	1.9	0.	33	0	0	12	0
						IN CLR:	12	0	12	0	0		0.0	0.0	0.	30	0	0	6	0
						NOT CLR:	15	0	15	0	0		34.1	3.5	0.	36	0	0	6	0
	4/25/76	BBA	348 -2	371 9	205 -15	FLT TOT:	28	0	28	0	0		.6	.2	0.	41	0	0	11	0
						IN CLR:	25	0	25	0	0		0.0	0.0	0.	39	0	0	10	0
						NOT CLR:	3	0	3	0	0		5.8	2.0	0.	57	0	0	1	0
	4/26/76	* BBA	386 -3	391 9	351 -16	FLT TOT:	30	0	30	0	0		30.8	1.5	0.	37	0	0	13	0
						IN CLR:	6	0	6	0	0		0.0	0.0	0.	26	0	0	3	0
						NOT CLR:	24	0	24	0	0		38.5	1.9	0.	39	0	0	10	0
	9/ 2/76	BBA	363 -6	369 9	221 -22	FLT TOT:	56	0	36	0	0		0.0	0.0	0.	52	0	0	56	0
						IN CLR:	56	0	36	0	0		0.0	0.0	0.	52	0	0	56	0
						NOT CLR:	0	0	0	0	0		0.0	0.0	0.	0	0	0	0	0

DEP-ARR 1M/1D/1Y	CODE	AVFL ALAT	EXHI EXTN	EXLO EXTS	NUMBER OF OBS					AVERAGES FOR THE FLIGHT			σZ	RH	H2σ	TROP N	STRAT N	
					CLD	PD5	σZ	H2σ	H2S	%TIC	PATCHES	PD5						
CCS-GUA																		
4/ 8/76 * BBA	354 12	374 14	210 11	FLT	TOT:	16	0	16	0	0	.5	.6	0.	48	0	0	16	0
				IN	CLR:	15	0	15	0	0	0.0	0.0	0.	45	0	0	15	0
				NOT	CLR:	1	0	1	0	0	7.5	9.0	0.	93	0	0	1	0
4/24/76 * BBA	361 12	371 14	213 10	FLT	TOT:	20	0	20	0	0	27.3	2.2	0.	62	0	0	20	0
				IN	CLR:	8	0	8	0	0	0.0	0.0	0.	60	0	0	8	0
				NOT	CLR:	12	0	12	0	0	45.5	3.7	0.	63	0	0	12	0
4/26/76 BBA	345 13	351 14	277 12	FLT	TOT:	12	0	12	0	0	28.5	2.8	0.	54	0	0	12	0
				IN	CLR:	2	0	2	0	0	0.0	0.0	0.	56	0	0	2	0
				NOT	CLR:	10	0	10	0	0	34.2	3.4	0.	53	0	0	10	0
5/ 2/76 * BBA	350 12	371 15	190 10	FLT	TOT:	31	0	20	0	0	28.3	1.5	0.	46	0	0	31	0
				IN	CLR:	13	0	9	0	0	0.0	0.0	0.	47	0	0	13	0
				NOT	CLR:	18	0	11	0	0	48.8	2.6	0.	44	0	0	18	0
9/ 1/76 * BBA	353 12	370 14	254 11	FLT	TOT:	26	0	17	0	0	0.0	0.0	0.	51	0	0	26	0
				IN	CLR:	26	0	17	0	0	0.0	0.0	0.	51	0	0	26	0
				NOT	CLR:	0	0	0	0	0	0.0	0.0	0.	0	0	0	0	0
CCS-MIA																		
4/25/76 * BBA	322 14	331 18	265 11	FLT	TOT:	8	0	8	0	0	29.5	.5	0.	46	0	0	8	0
				IN	CLR:	3	0	3	0	0	0.0	0.0	0.	48	0	0	3	0
				NOT	CLR:	5	0	5	0	0	47.2	.8	0.	45	0	0	5	0
CHC-SYD																		
1/ 2/77 DDA	367 -39	390 -35	286 -43	FLT	TOT:	25	0	0	0	0	14.5	1.2	0.	0	0	0	25	0
				IN	CLR:	19	0	0	0	0	0.0	0.0	0.	0	0	0	19	0
				NOT	CLR:	6	0	0	0	0	60.3	4.8	0.	0	0	0	6	0
1/ 2/77 * DDA	301 -39	330 -35	257 -42	FLT	TOT:	19	0	0	0	0	25.3	2.5	0.	0	0	0	19	0
				IN	CLR:	10	0	0	0	0	0.0	0.0	0.	0	0	0	10	0
				NOT	CLR:	9	0	0	0	0	53.3	5.2	0.	0	0	0	9	0
8/26/76 DDA	347 -39	350 -35	277 -43	FLT	TOT:	27	0	17	0	0	0.0	0.0	0.	194	0	0	24	3
				IN	CLR:	27	0	17	0	0	0.0	0.0	0.	194	0	0	24	3
				NOT	CLR:	0	0	0	0	0	0.0	0.0	0.	0	0	0	0	0
8/26/76 * DDA	321 -39	331 -35	199 -43	FLT	TOT:	22	0	14	0	0	1.1	.6	0.	176	0	0	22	0
				IN	CLR:	19	0	13	0	0	0.0	0.0	0.	185	0	0	19	0
				NOT	CLR:	3	0	1	0	0	8.1	4.7	0.	61	0	0	3	0
12/19/76 DDA	345 -39	350 -35	281 -43	FLT	TOT:	25	0	0	0	0	3.2	.9	0.	0	0	0	0	0
				IN	CLR:	21	0	0	0	0	0.0	0.0	0.	0	0	0	0	0
				NOT	CLR:	4	0	0	0	0	20.1	5.8	0.	0	0	0	0	0

DEP-ARR	IM/ID/IY	CODE	AVFL ALAT	EXHI EXTN	EXLO EXTS	NUMBER OF OBS					AVERAGES FOR THE FLIGHT			TROP			STRAT		
						CLD	PD5	OZ	H2O	H2S	%TIC	PATCHES	PD5	OZ	RH	H2O	N	N	
CHC-SYD (CONT.)																			
	12/19/76	* DDA	333 -39	350 -35	258 -43	FLT	TOT:	22	0	0	0	0	2.0	.5	0.	0	0	0	0
						IN	CLR:	19	0	0	0	0	0.0	0.0	0.	0	0	0	0
						NOT	CLR:	3	0	0	0	0	14.9	3.3	0.	0	0	0	0
CLE-ORD																			
	5/ 9/76	CAA	284 41	310 41	217 41	FLT	TOT:	5	0	3	0	0	0.0	0.0	0.	90	0	0	5
						IN	CLR:	5	0	3	0	0	0.0	0.0	0.	90	0	0	5
						NOT	CLR:	0	0	0	0	0	0.0	0.0	0.	0	0	0	0
	5/15/76	CAA	256 41	310 42	192 41	FLT	TOT:	5	0	2	0	0	60.7	2.0	0.	41	0	0	5
						IN	CLR:	1	0	1	0	0	0.0	0.0	0.	34	0	0	1
						NOT	CLR:	4	0	1	0	0	75.9	2.5	0.	47	0	0	4
CPH-JFK																			
	7/ 7/77	* ACA	400 53	411 58	303 41	FLT	TOT:	74	0	0	0	0	.0	0.0	0.	0	0	0	10
						IN	CLR:	73	0	0	0	0	0.0	0.0	0.	0	0	0	9
						NOT	CLR:	1	0	0	0	0	.4	0.0	0.	0	0	0	1
	7/ 7/77	ACA	407 55	430 60	200 41	FLT	TOT:	75	0	0	0	0	.1	0.0	0.	0	0	0	9
						IN	CLR:	72	0	0	0	0	0.0	0.0	0.	0	0	0	6
						NOT	CLR:	3	0	0	0	0	3.1	0.0	0.	0	0	0	3
	7/11/77	* ACA	368 57	370 63	288 41	FLT	TOT:	72	72	46	0	0	0.0	0.0	.206E+03	296	0	0	29
						IN	CLR:	72	72	46	0	0	0.0	0.0	.206E+03	296	0	0	29
						NOT	CLR:	0	0	0	0	0	0.0	0.0	0.	0	0	0	0
	7/11/77	ACA	391 54	430 58	293 42	FLT	TOT:	79	79	52	0	0	.1	0.0	.287E+03	323	0	0	25
						IN	CLR:	75	75	50	0	0	0.0	0.0	.372E+02	333	0	0	21
						NOT	CLR:	4	4	2	0	0	2.4	0.0	.497E+04	80	0	0	4
	7/16/77	ACA	380 57	391 63	304 42	FLT	TOT:	80	80	54	0	0	1.2	0.0	.154E+04	394	0	0	23
						IN	CLR:	78	78	53	0	0	0.0	0.0	.793E+02	397	0	0	21
						NOT	CLR:	2	2	1	0	0	46.7	0.0	.585E+05	223	0	0	2
	7/16/77	* ACA	394 49	410 54	296 41	FLT	TOT:	40	40	25	0	0	.4	0.0	.201E+04	210	0	0	22
						IN	CLR:	37	37	24	0	0	0.0	0.0	.154E+03	215	0	0	19
						NOT	CLR:	3	3	1	0	0	5.6	0.0	.248E+05	89	0	0	3
	8/22/77	* ABA	396 51	411 56	313 41	FLT	TOT:	64	64	42	0	0	1.1	.1	.335E+04	267	0	0	6
						IN	CLR:	61	61	41	0	0	0.0	0.0	.214E+02	271	0	0	3
						NOT	CLR:	3	3	1	0	0	23.0	2.0	.710E+05	107	0	0	3
	8/22/77	ABA	398 56	411 62	200 41	FLT	TOT:	76	76	50	0	0	0.0	0.0	.315E+02	334	0	0	5
						IN	CLR:	76	76	50	0	0	0.0	0.0	.315E+02	334	0	0	5
						NOT	CLR:	0	0	0	0	0	0.0	0.0	0.	0	0	0	0

APPENDIX B

DEP-ARR	IM/ID/IY	CODE	AVFL ALAT	EXHI EXTN	EXLO EXTS	NUMBER OF OBS					AVERAGES FOR		THE FLIGHT		RH H2O		TROP	STRAT		
						CLD	PD5	OZ	H2O	H2S	%TIC	PATCHES	PD5	OZ			N	N		
CPH-JFK (CONT.)																				
9/ 3/77		ABA	375 57	411 64	244 41	FLT IN NOT	TOT: CLR: CLR:	83 75 8	83 75 8	53 47 6	0 0 0	0 0 0	2.3 0.0 23.8	.5 0.0 5.1	.942E+04 .559E+02 .972E+05	312 337 118	0 0 0	0 0 0	9 9 0	74 66 8
9/ 3/77 *		ABA	395 52	410 56	235 41	FLT IN NOT	TOT: CLR: CLR:	71 62 9	71 62 9	46 42 4	0 0 0	0 0 0	4.1 0.0 32.2	.4 0.0 3.2	.239E+05 .235E+02 .188E+06	237 253 70	0 0 0	0 0 0	21 12 9	50 50 0
9/ 4/77 *		ABA	394 52	410 56	187 41	FLT IN NOT	TOT: CLR: CLR:	72 72 0	72 72 0	45 45 0	0 0 0	0 0 0	0.0 0.0 0.0	0.0 0.0 0.0	.202E+02 .202E+02 0.	258 258 0	0 0 0	0 0 0	13 13 0	59 59 0
9/ 4/77		ABA	401 56	430 62	200 41	FLT IN NOT	TOT: CLR: CLR:	78 77 1	78 77 1	49 49 0	0 0 0	0 0 0	.2 0.0 16.9	.0 0.0 2.0	.848E+02 .828E+02 .239E+03	359 359 0	0 0 0	0 0 0	6 6 0	72 71 1
9/ 9/77		ABA	402 56	430 62	207 41	FLT IN NOT	TOT: CLR: CLR:	83 83 0	83 83 0	56 56 0	0 0 0	0 0 0	0.0 0.0 0.0	0.0 0.0 0.0	.184E+02 .184E+02 0.	290 290 0	0 0 0	0 0 0	11 11 0	72 72 0
9/ 9/77 *		ABA	375 53	410 56	216 42	FLT IN NOT	TOT: CLR: CLR:	67 58 9	67 58 9	46 40 6	0 0 0	0 0 0	6.7 0.0 49.7	.7 0.0 5.0	.370E+05 .838E+02 .275E+06	214 236 63	0 0 0	0 0 0	25 16 9	42 42 0
CPT-LHR																				
10/29/77 *		ABB	363 8	430 50	283 -32	FLT IN NOT	TOT: CLR: CLR:	42 35 7	0 0 0	0 0 0	0 0 0	0 0 0	5.8 0.0 35.0	.7 0.0 4.0	0. 0. 0.	0 0 0	0 0 0	0 0 0	38 31 7	4 4 0
CTS-JFK																				
2/18/78 *		ABB	370 53	391 64	230 42	FLT IN NOT	TOT: CLR: CLR:	63 62 1	63 62 1	41 40 1	36 35 1	0 0 0	.7 0.0 47.1	.0 0.0 3.0	.105E+02 .198E+01 .540E+03	613 628 47	42 40 89	46 46 67	1 0 1	62 62 0
CUN-JFK																				
3/ 2/79 *		BBB	349 31	351 39	292 22	FLT IN NOT	TOT: CLR: CLR:	30 26 4	0 0 0	17 15 2	11 8 3	0 0 0	3.0 0.0 22.3	.6 0.0 4.8	0. 0. 0.	73 77 41	37 30 56	27 19 47	24 20 4	6 6 0
3/ 2/79		BBB	324 31	370 39	212 23	FLT IN NOT	TOT: CLR: CLR:	25 10 15	0 0 0	16 7 9	12 5 7	4 0 4	17.6 0.0 29.4	1.0 0.0 1.7	0. 0. 0.	57 68 49	72 38 96	82 43 110	23 9 14	2 1 1

APPENDIX B

DEP-ARR	IM/ID/IY	CODE	AVFL ALAT	EXHI EXTN	EXLO EXTS	NUMBER OF OBS					AVERAGES FOR			THE FLIGHT	ØZ	RH	H2Ø	TROP	STRAT	
						CLD	PD5	ØZ	H2Ø	H2S	%TIC	PATCHES	PD5				N	N		
DEL-FRA																				
	2/13/79	BBB	347 33	391 49	257 25	FLT IN NOT	TØT: CLR: CLR:	95 82 13	0 0 0	60 53 7	45 39 6	4 3 1	2.6 0.0 18.7	.6 0.0 4.1	0. 0. 0.	144 155 64	36 28 85	45 40 75	70 57 13	25 25 0
	2/16/79	* BBB	327 34	330 49	198 25	FLT IN NOT	TØT: CLR: CLR:	75 62 13	0 0 0	48 40 8	42 34 8	1 1 0	8.5 0.0 49.2	.7 0.0 3.9	0. 0. 0.	77 80 58	30 21 67	30 26 43	75 62 13	0 0 0
	2/22/79	BBB	332 32	391 49	247 25	FLT IN NOT	TØT: CLR: CLR:	83 81 2	0 0 0	54 53 1	47 45 2	0 0 0	1.5 0.0 63.1	.0 0.0 .5	0. 0. 0.	153 155 49	14 12 65	47 44 104	64 62 2	19 19 0
	3/ 9/79	* BBB	322 38	365 48	191 28	FLT IN NOT	TØT: CLR: CLR:	66 57 9	0 0 0	43 38 5	36 35 1	1 0 1	3.9 0.0 28.9	.3 0.0 2.4	0. 0. 0.	141 152 54	32 30 100	31 30 58	53 44 9	13 13 0
	3/14/79	BBB	360 37	391 49	280 28	FLT IN NOT	TØT: CLR: CLR:	90 68 22	0 0 0	56 43 13	43 31 12	4 0 4	11.8 0.0 48.1	.9 0.0 3.6	0. 0. 0.	144 172 52	50 39 81	28 18 54	51 32 19	39 36 3
DEL-HKG																				
	1/ 4/79	* BBB	332 20	350 28	251 15	FLT IN NOT	TØT: CLR: CLR:	61 59 2	0 0 0	38 37 1	27 26 1	0 0 0	.0 0.0 1.0	.1 0.0 2.0	0. 0. 0.	34 34 21	37 36 83	75 73 122	61 59 2	0 0 0
	2/13/79	* BBB	345 20	350 28	260 15	FLT IN NOT	TØT: CLR: CLR:	58 57 1	0 0 0	38 37 1	30 29 1	0 0 0	.1 0.0 8.2	.0 0.0 2.0	0. 0. 0.	43 43 52	32 30 74	78 77 109	58 57 1	0 0 0
	2/16/79	BBB	368 20	370 28	326 15	FLT IN NOT	TØT: CLR: CLR:	49 44 5	0 0 0	9 6 3	27 26 1	0 0 0	.6 0.0 5.6	.3 0.0 3.2	0. 0. 0.	39 38 40	43 42 52	50 49 66	49 44 5	0 0 0
	2/22/79	* BBB	332 20	351 28	280 15	FLT IN NOT	TØT: CLR: CLR:	60 60 0	0 0 0	39 39 0	32 32 0	0 0 0	0.0 0.0 0.0	0.0 0.0 0.0	0. 0. 0.	53 53 0	14 14 0	69 69 0	60 60 0	0 0 0
	3/ 9/79	BBB	354 25	371 27	291 19	FLT IN NOT	TØT: CLR: CLR:	10 10 0	0 0 0	6 6 0	6 6 0	0 0 0	0.0 0.0 0.0	0.0 0.0 0.0	0. 0. 0.	52 52 0	20 20 0	44 44 0	10 10 0	0 0 0
	3/14/79	* BBB	327 21	351 28	236 15	FLT IN NOT	TØT: CLR: CLR:	63 59 4	0 0 0	39 35 4	27 24 3	0 0 0	1.2 0.0 18.6	.1 0.0 1.5	0. 0. 0.	45 46 31	27 21 76	126 81 489	63 59 4	0 0 0
	5/11/79	* BDB	307 20	311 28	223 15	FLT IN NOT	TØT: CLR: CLR:	57 31 26	57 31 26	0 0 0	14 10 4	1 0 1	22.8 0.0 50.0	2.3 0.0 5.0	.440E+06 .155E+03 .965E+06	0 0 0	40 18 94	383 208 823	57 31 26	0 0 0

DEP-ARR IM/ID/IY	CODE	AVFL ALAT	EXHI EXTN	EXLO EXTS	NUMBER OF OBS						AVERAGES FOR THE FLIGHT			OZ	RH	H2O	TROP N	STRAT N	
					CLD	PD5	OZ	H2O, H2S	%TIC	PATCHES	PD5								
DEL-HKG (CONT.)																			
5/30/79	BDB	365 20	370 27	223 15	FLT	TOT:	57	57	36	29	6	12.1	1.2	.247E+06	73	70	179	57	0
					IN	CLR:	31	31	19	14	0	0.0	0.0	.433E+04	77	50	176	31	0
					NOT	CLR:	26	26	17	15	6	26.6	2.7	.537E+06	69	88	183	26	0
6/ 4/79 *	BDB	347 20	350 28	283 15	FLT	TOT:	55	55	35	17	0	10.4	1.6	.342E+06	78	60	227	55	0
					IN	CLR:	37	37	23	10	0	0.0	0.0	.834E+03	82	46	184	37	0
					NOT	CLR:	18	18	12	7	0	31.8	4.9	.104E+07	70	79	287	18	0
10/15/78 *	BBB	329 17	350 28	243 8	FLT	TOT:	72	72	47	0	0	4.8	.3	.278E+05	42	0	0	72	0
					IN	CLR:	64	64	43	0	0	0.0	0.0	.397E+02	43	0	0	64	0
					NOT	CLR:	8	8	4	0	0	43.3	2.4	.250E+06	35	0	0	8	0
10/29/78 *	BBB	331 20	350 28	207 15	FLT	TOT:	57	57	37	28	1	1.5	.5	.330E+04	34	44	197	57	0
					IN	CLR:	49	49	31	26	1	0.0	0.0	.931E+02	34	43	191	49	0
					NOT	CLR:	8	8	6	2	0	10.6	3.3	.230E+05	34	52	282	8	0
12/26/78	BBB	367 20	370 28	269 15	FLT	TOT:	55	55	0	28	0	0.0	0.0	.116E+02	0	19	26	0	0
					IN	CLR:	55	55	0	28	0	0.0	0.0	.116E+02	0	19	26	0	0
					NOT	CLR:	0	0	0	0	0	0.0	0.0	0.	0	0	0	0	0
DEL-IST																			
1/ 4/79	BBB	313 34	350 40	240 28	FLT	TOT:	57	0	34	29	0	11.6	.8	0.	63	36	40	57	0
					IN	CLR:	44	0	28	27	0	0.0	0.0	0.	65	33	40	44	0
					NOT	CLR:	13	0	6	2	0	50.7	3.7	0.	55	78	45	13	0
DEL-KHI																			
4/20/76 *	BBA	308 28	331 29	216 26	FLT	TOT:	5	0	5	0	0	12.9	2.0	0.	75	0	0	5	0
					IN	CLR:	2	0	2	0	0	0.0	0.0	0.	71	0	0	2	0
					NOT	CLR:	3	0	3	0	0	21.4	3.3	0.	77	0	0	3	0
5/11/79	BDB	346 28	351 29	300 26	FLT	TOT:	11	11	0	6	0	0.0	0.0	.143E+03	0	21	76	11	0
					IN	CLR:	11	11	0	6	0	0.0	0.0	.143E+03	0	21	76	11	0
					NOT	CLR:	0	0	0	0	0	0.0	0.0	0.	0	0	0	0	0
6/ 4/79	BDB	337 28	350 29	276 26	FLT	TOT:	11	11	7	5	3	0.0	0.0	.568E+03	77	75	244	11	0
					IN	CLR:	11	11	7	5	3	0.0	0.0	.568E+03	77	75	244	11	0
					NOT	CLR:	0	0	0	0	0	0.0	0.0	0.	0	0	0	0	0
DEL-THR																			
1/24/76	BBA	343 30	350 34	216 28	FLT	TOT:	25	0	25	0	0	24.1	2.2	0.	29	0	0	25	0
					IN	CLR:	9	0	9	0	0	0.0	0.0	0.	35	0	0	9	0
					NOT	CLR:	16	0	16	0	0	37.6	3.4	0.	25	0	0	16	0
3/20/76	BBA	337 30	350 35	206 28	FLT	TOT:	24	0	24	0	0	1.3	.1	0.	171	0	0	24	0
					IN	CLR:	23	0	23	0	0	0.0	0.0	0.	176	0	0	23	0
					NOT	CLR:	1	0	1	0	0	30.6	2.0	0.	55	0	0	1	0

DEP-ARR
 IM/ID/IY CODE AVFL EXHI EXLØ
 ALAT EXTN EXTS
 NUMBER OF OBS AVERAGES FOR THE FLIGHT
 CLD PD5 OZ H2O, H2S %TIC PATCHES PD5 OZ RH H2O TROP N STRAT N

DEL-THR (CONT.)

3/23/76	* BBA	363 30	372 35	221 28	FLT TOT: IN CLR: NOT CLR:	21 20 1	0 0 0	21 20 1	0 0 0	0 0 0	.0 0.0 .4	.0 0.0 1.0	0. 0. 0.	102 102 116	0 0 0	0 0 0	21 20 1	0 0 0
5/30/79	* BDB	326 30	331 34	270 29	FLT TOT: IN CLR: NOT CLR:	28 23 5	28 23 5	17 14 3	12 8 4	2 1 1	5.9 0.0 32.9	.6 0.0 3.4	.390E+05 .117E+05 .165E+06	66 67 61	58 50 74	183 198 151	28 23 5	0 0 0
9/ 7/76	BBA	339 30	350 35	198 28	FLT TOT: IN CLR: NOT CLR:	32 32 0	0 0 0	20 20 0	0 0 0	0 0 0	0.0 0.0 0.0	0.0 0.0 0.	0. 0. 0.	43 43 0	0 0 0	0 0 0	32 32 0	0 0 0
10/11/77	* BCB	326 30	331 34	259 28	FLT TOT: IN CLR: NOT CLR:	26 26 0	26 26 0	0 0 0	0 0 0	0 0 0	0.0 0.0 0.0	0.0 0.0 0.	.334E+02 .334E+02 0.	0 0 0	0 0 0	0 0 0	26 26 0	0 0 0
10/15/78	BBB	343 30	351 35	238 28	FLT TOT: IN CLR: NOT CLR:	30 30 0	30 30 0	10 10 0	0 0 0	0 0 0	0.0 0.0 0.0	0.0 0.0 0.	.235E+02 .235E+02 0.	90 90 0	0 0 0	0 0 0	30 30 0	0 0 0
10/29/78	BBB	280 30	280 35	269 28	FLT TOT: IN CLR: NOT CLR:	34 34 0	34 34 0	20 20 0	19 19 0	0 0 0	0.0 0.0 0.0	0.0 0.0 0.	.571E+01 .571E+01 0.	45 45 0	41 41 0	135 135 0	34 34 0	0 0 0
12/ 7/78	* BBB	290 30	290 34	290 28	FLT TOT: IN CLR: NOT CLR:	28 23 5	28 23 5	18 15 3	13 10 3	0 0 0	5.6 0.0 31.4	.9 0.0 5.2	.117E+06 .111E+02 .657E+06	51 52 42	35 23 75	80 59 148	28 23 5	0 0 0
12/26/78	* BBB	329 30	331 35	285 28	FLT TOT: IN CLR: NOT CLR:	29 18 11	29 18 11	0 0 0	16 10 6	1 0 1	21.6 0.0 57.0	.8 0.0 2.2	.645E+05 0. .170E+06	0 0 0	49 40 63	51 46 61	0 0 0	0 0 0

DEN-LAX

2/ 6/76	* CAA	339 37	370 39	212 34	FLT TOT: IN CLR: NOT CLR:	12 11 1	0 0 0	12 11 1	9 8 1	0 0 0	1.7 0.0 20.0	.1 0.0 1.0	0. 0. 0.	97 102 39	34 33 39	63 64 56	3 2 1	9 9 0
2/15/79	* CAB	352 37	371 40	221 35	FLT TOT: IN CLR: NOT CLR:	14 14 0	14 14 0	9 9 0	7 7 0	0 0 0	0.0 0.0 0.0	0.0 0.0 0.	.943E+02 .943E+02 0.	123 123 0	47 47 0	82 82 0	14 14 0	0 0 0
2/22/79	* CAB	360 37	371 39	281 35	FLT TOT: IN CLR: NOT CLR:	14 14 0	14 14 0	9 9 0	6 6 0	1 1 0	0.0 0.0 0.0	0.0 0.0 0.	.304E+02 .304E+02 0.	391 391 0	68 68 0	76 76 0	2 2 0	12 12 0
3/13/79	* CAB	347 36	370 39	246 35	FLT TOT: IN CLR: NOT CLR:	7 4 3	7 4 3	3 2 1	4 2 2	0 0 0	11.8 0.0 27.5	.4 0.0 1.0	.230E+05 .631E+04 .452E+05	349 346 354	31 37 24	28 17 38	1 0 1	6 4 2

DEP-ARR	IM/ID/IY	CODE	AVFL ALAT	EXHI EXTN	EXLO EXTS	NUMBER OF OBS					AVERAGES FOR		THE FLIGHT			TROP	STRAT			
						CLD	PD5	OZ	H2O	H2S	%TIC	PATCHES	PD5	OZ	RH	H2O	N	N		
DEN-LAX (CONT.)																				
	3/13/79	CAB	368 38	391 39	283 35	FLT	TOT:	7	7	2	2	1	.2	0.0	.110E+05	494	65	29	1	6
						IN	CLR:	5	5	1	2	1	0.0	0.0	.494E+02	454	65	29	1	4
						NOT	CLR:	2	2	1	0	0	.8	0.0	.385E+05	534	0	0	0	2
	3/17/79	* CAB	364 37	371 39	313 35	FLT	TOT:	13	13	8	7	1	0.0	0.0	.384E+03	417	75	58	1	12
						IN	CLR:	13	13	8	7	1	0.0	0.0	.384E+03	417	75	58	1	12
						NOT	CLR:	0	0	0	0	0	0.0	0.0	0.	0	0	0	0	0
	3/20/79	* CAB	318 37	332 39	211 35	FLT	TOT:	15	15	9	9	3	5.3	.1	.579E+04	189	64	86	10	5
						IN	CLR:	13	13	8	7	3	0.0	0.0	.412E+04	207	76	93	8	5
						NOT	CLR:	2	2	1	2	0	39.4	1.0	.166E+05	48	24	60	2	0
	3/22/79	* CAB	289 38	370 39	200 35	FLT	TOT:	14	14	6	5	0	3.3	.4	.133E+04	236	61	249	8	6
						IN	CLR:	11	11	5	4	0	0.0	0.0	.772E+03	264	53	211	5	6
						NOT	CLR:	3	3	1	1	0	15.3	1.7	.339E+04	95	95	400	3	0
	3/29/79	CAB	383 37	390 39	308 35	FLT	TOT:	14	14	9	1	1	0.0	0.0	.455E+02	509	100	123	1	13
						IN	CLR:	14	14	9	1	1	0.0	0.0	.455E+02	509	100	123	1	13
						NOT	CLR:	0	0	0	0	0	0.0	0.0	0.	0	0	0	0	0
	4/ 9/76	CAA	364 37	389 40	216 35	FLT	TOT:	9	0	9	9	2	1.2	.1	0.	159	94	158	9	0
						IN	CLR:	8	0	8	8	1	0.0	0.0	0.	170	94	170	8	0
						NOT	CLR:	1	0	1	1	1	11.0	1.0	0.	78	100	59	1	0
	4/ 9/76	* CAA	345 37	371 39	214 35	FLT	TOT:	8	0	8	8	4	0.0	0.0	0.	97	89	163	8	0
						IN	CLR:	8	0	8	8	4	0.0	0.0	0.	97	89	163	8	0
						NOT	CLR:	0	0	0	0	0	0.0	0.0	0.	0	0	0	0	0
	4/18/76	* CAA	346 36	370 38	216 34	FLT	TOT:	7	0	7	0	0	0.0	0.0	0.	194	0	0	5	2
						IN	CLR:	7	0	7	0	0	0.0	0.0	0.	194	0	0	5	2
						NOT	CLR:	0	0	0	0	0	0.0	0.0	0.	0	0	0	0	0
	5/11/76	* CAA	394 37	430 39	220 34	FLT	TOT:	17	0	11	0	0	3.0	.2	0.	255	0	0	7	10
						IN	CLR:	16	0	10	0	0	0.0	0.0	0.	275	0	0	6	10
						NOT	CLR:	1	0	1	0	0	51.0	3.0	0.	60	0	0	1	0
	5/11/76	CAA	362 37	409 40	220 34	FLT	TOT:	16	0	11	0	0	36.4	1.8	0.	144	0	0	16	0
						IN	CLR:	4	0	3	0	0	0.0	0.0	0.	193	0	0	4	0
						NOT	CLR:	12	0	8	0	0	48.6	2.4	0.	126	0	0	12	0
	6/15/78	CAB	375 37	391 39	261 35	FLT	TOT:	17	17	10	8	0	0.0	0.0	.677E+03	76	40	34	17	0
						IN	CLR:	17	17	10	8	0	0.0	0.0	.677E+03	76	40	34	17	0
						NOT	CLR:	0	0	0	0	0	0.0	0.0	0.	0	0	0	0	0
	6/28/78	CAB	365 37	390 39	240 35	FLT	TOT:	16	16	10	10	0	.5	.1	.787E+02	105	29	48	16	0
						IN	CLR:	15	15	10	9	0	0.0	0.0	.839E+02	105	29	51	15	0
						NOT	CLR:	1	1	0	1	0	8.2	2.0	0.	0	28	27	1	0
	6/ 3/79	CAB	362 37	390 39	228 34	FLT	TOT:	13	13	0	9	0	5.3	.2	.104E+05	0	30	25	13	0
						IN	CLR:	10	10	0	7	0	0.0	0.0	.225E+04	0	37	20	10	0
						NOT	CLR:	3	3	0	2	0	23.0	.7	.377E+05	0	7	43	3	0

APPENDIX B

DEP-ARR	IM/1D/1Y	CODE	AVFL ALAT	EXHI EXTN	EXLO EXTS	NUMBER OF OBS					AVERAGES FOR		THE FLIGHT		TROP			STRAT		
						CLD	PD5	OZ	H2O	H2S	%TIC	PATCHES	PD5	OZ	RH	H2O	N	N		
DEN-LAX (CONT.)																				
6/	5/79	* CAB	368 37	371 39	333 35	FLT IN NOT	TOT CLR CLR:	15 7 8	15 7 8	0 0 0	7 2 5	0 0 0	31.0 0.0 58.0	1.5 0.0 2.9	.988E+05 .103E+05 .176E+06	0 0 0	75 81 72	33 43 29	15 7 8	0 0 0
7/	1/78	* CAB	347 37	371 39	190 35	FLT IN NOT	TOT CLR CLR:	14 14 0	14 14 0	9 9 0	8 8 0	0 0 0	0.0 0.0 0.0	0.0 0.0 0.0	.123E+03 .123E+03 0.	74 74 0	17 17 0	261 261 0	14 14 0	0 0 0
7/	6/78	* CAB	347 37	371 39	230 35	FLT IN NOT	TOT CLR CLR:	13 12 1	13 12 1	7 7 0	7 7 0	0 0 0	.0 0.0 .4	.1 0.0 1.0	.349E+02 .327E+02 .616E+02	182 182 0	8 8 0	11 11 0	13 12 1	0 0 0
7/	8/78	* CAB	360 37	371 39	312 35	FLT IN NOT	TOT CLR CLR:	13 10 3	13 10 3	8 5 3	7 4 3	0 0 0	2.7 0.0 11.6	.7 0.0 3.0	.380E+04 .627E+01 .164E+05	45 47 42	5 6 3	6 8 3	13 10 3	0 0 0
DEN-ORD																				
2/15/79		CAB	360 41	370 42	290 40	FLT IN NOT	TOT CLR CLR:	12 12 0	12 12 0	7 7 0	6 6 0	0 0 0	0.0 0.0 0.0	0.0 0.0 0.0	.848E+02 .848E+02 0.	75 75 0	43 43 0	60 60 0	12 12 0	0 0 0
2/22/79		CAB	370 41	370 42	369 40	FLT IN NOT	TOT CLR CLR:	11 11 0	11 11 0	7 7 0	4 4 0	4 4 0	0.0 0.0 0.0	0.0 0.0 0.0	.458E+02 .458E+02 0.	111 111 0	100 100 0	36 36 0	9 9 0	2 2 0
3/13/79	*	CAB	316 41	391 42	201 40	FLT IN NOT	TOT CLR CLR:	14 8 6	13 7 6	6 4 2	6 4 2	0 0 0	36.7 0.0 85.6	.4 0.0 .8	.769E+05 .402E+04 .162E+06	322 434 99	21 20 21	46 28 81	6 1 5	8 7 1
3/13/79		CAB	352 41	371 42	283 40	FLT IN NOT	TOT CLR CLR:	10 6 4	8 4 4	5 4 1	5 3 2	0 0 0	25.6 0.0 64.1	.8 0.0 2.0	.424E+05 .171E+04 .831E+05	322 362 164	23 22 25	13 12 15	1 0 1	9 6 3
3/17/79		CAB	392 41	410 42	270 40	FLT IN NOT	TOT CLR CLR:	14 12 2	14 12 2	9 8 1	7 6 1	6 6 0	5.6 0.0 39.0	.6 0.0 4.0	.352E+05 .357E+03 .244E+06	346 383 51	89 100 25	37 32 65	2 0 2	12 12 0
3/20/79		CAB	345 41	371 42	260 40	FLT IN NOT	TOT CLR CLR:	12 5 7	12 5 7	8 5 6	6 2 4	4 1 3	23.1 0.0 39.6	1.3 0.0 2.3	.338E+05 .305E+03 .578E+05	121 186 100	90 99 86	66 64 67	6 0 6	6 5 1
3/22/79		CAB	343 41	370 42	210 40	FLT IN NOT	TOT CLR CLR:	9 6 3	9 6 3	4 6 2	4 3 1	0 0 0	1.4 0.0 4.3	.4 0.0 1.3	.124E+05 .274E+04 .317E+05	116 181 52	50 64 7	39 31 65	2 1 1	7 5 2
3/29/79	*	CAB	380 42	391 42	259 40	FLT IN NOT	TOT CLR CLR:	18 14 4	18 14 4	10 9 1	0 0 0	0 0 0	9.7 0.0 43.8	.4 0.0 2.0	.443E+05 .392E+03 .198E+06	190 209 36	0 0 0	0 0 0	10 6 4	8 8 0

DEP-ARR	IM/1D/1Y	CODE	AVFL ALAT	EXHI EXTN	EXLO EXTS	NUMBER OF OBS					AVERAGES FOR		THE FLIGHT			TROP	STRAT		
						CLD	PD5	OZ	H2O	H2S	%TIC	PATCHES	PD5	OZ	RH	H2O	N	N	
DEN-ORD (CONT.)																			
6/15/78	*	CAB	371 39	410 41	201 39	FLT TOT:	17	17	10	8	3	10.8	.4	.361E+05	78	82	105	17	0
						IN CLR:	13	13	8	8	3	0.0	0.0	.591E+02	80	82	105	13	0
						NOT CLR:	4	4	2	0	0	46.0	1.5	.153E+06	67	0	0	4	0
6/28/78	*	CAB	372 41	391 42	222 40	FLT TOT:	18	18	11	10	0	1.5	.2	.298E+03	65	43	27	18	0
						IN CLR:	17	17	10	10	0	0.0	0.0	.166E+03	67	43	27	17	0
						NOT CLR:	1	1	1	0	0	26.7	4.0	.255E+04	40	0	0	1	0
6/ 3/79	*	CAB	371 41	390 42	200 40	FLT TOT:	17	17	0	9	0	6.1	.1	.107E+05	0	43	29	6	11
						IN CLR:	15	15	0	9	0	0.0	0.0	.427E+04	0	43	29	4	11
						NOT CLR:	2	2	0	0	0	52.0	1.0	.593E+05	0	0	0	2	0
6/ 5/79		CAB	393 41	411 43	284 40	FLT TOT:	14	14	0	7	1	.8	.1	.272E+04	0	40	24	7	7
						IN CLR:	13	13	0	7	1	0.0	0.0	.188E+04	0	40	24	6	7
						NOT CLR:	1	1	0	0	0	11.8	1.0	.137E+05	0	0	0	1	0
7/ 1/78		CAB	352 41	370 42	203 40	FLT TOT:	16	16	10	10	0	.2	.3	.103E+03	91	4	6	16	0
						IN CLR:	14	14	9	9	0	0.0	0.0	.113E+03	92	4	6	14	0
						NOT CLR:	2	2	1	1	0	1.6	2.0	.319E+02	83	3	5	2	0
7/ 6/78		CAB	361 41	370 42	301 40	FLT TOT:	12	12	7	2	0	40.7	2.2	.128E+06	66	38	38	12	0
						IN CLR:	3	3	1	1	0	0.0	0.0	.152E+03	105	16	17	3	0
						NOT CLR:	9	9	6	1	0	54.2	2.9	.171E+06	59	59	59	9	0
7/ 8/78		CAB	356 41	371 42	232 40	FLT TOT:	14	14	8	8	0	0.0	0.0	.330E+02	56	26	68	14	0
						IN CLR:	14	14	8	8	0	0.0	0.0	.330E+02	56	26	68	14	0
						NOT CLR:	0	0	0	0	0	0.0	0.0	0.	0	0	0	0	0
DFW-HNL																			
3/28/77		AAA	408 30	421 35	272 21	FLT TOT:	85	85	0	70	1	0.0	0.0	.368E+01	0	18	12	0	0
						IN CLR:	85	85	0	70	1	0.0	0.0	.368E+01	0	18	12	0	0
						NOT CLR:	0	0	0	0	0	0.0	0.0	0.	0	0	0	0	0
3/30/77	*	AAA	418 30	431 34	221 22	FLT TOT:	64	64	0	54	0	0.0	0.0	.711E+01	0	15	17	0	0
						IN CLR:	64	64	0	54	0	0.0	0.0	.711E+01	0	15	17	0	0
						NOT CLR:	0	0	0	0	0	0.0	0.0	0.	0	0	0	0	0
5/ 2/77		AAA	410 31	420 35	326 21	FLT TOT:	78	78	52	0	0	4.6	.2	.102E+05	309	0	0	43	35
						IN CLR:	64	64	44	0	0	0.0	0.0	.588E+03	341	0	0	29	35
						NOT CLR:	14	14	8	0	0	25.7	1.4	.541E+05	138	0	0	14	0
5/ 4/77	*	AAA	380 30	390 33	247 22	FLT TOT:	72	72	44	0	0	11.7	.4	.515E+05	101	0	0	66	6
						IN CLR:	62	62	38	0	0	0.0	0.0	.118E+03	109	0	0	56	6
						NOT CLR:	10	10	6	0	0	84.5	2.9	.370E+06	53	0	0	10	0
5/ 9/77		AAA	405 32	420 38	224 22	FLT TOT:	86	86	55	0	0	2.9	.3	.408E+05	262	0	0	37	49
						IN CLR:	79	79	50	0	0	0.0	0.0	.127E+03	278	0	0	30	49
						NOT CLR:	7	7	5	0	0	35.1	4.0	.500E+06	102	0	0	7	0

APPENDIX B

DEP-ARR IM/ID/IY	CODE	AVFL ALAT	EXHI EXTN	EXLO EXTS	NUMBER OF OBS					AVERAGES FOR THE FLIGHT			OZ	RH	H2O	TROP N	STRAT N		
					CLD	PD5	OZ	H2O	H2S	%TIC	PATCHES	PD5							
DFW-HNL (CONT.)																			
5/11/77	* AAA	393 31	411 34	339 22	FLT	TOT:	66	66	45	0	0	10.7	.3	.146E+05	232	0	0	37	29
					IN	CLR:	49	49	34	0	0	0.0	0.0	.109E+03	298	0	0	20	29
					NOT	CLR:	17	17	11	0	0	41.4	1.2	.565E+05	29	0	0	17	0
5/16/77	AAA	390 30	401 35	235 21	FLT	TOT:	40	40	25	0	0	0.0	0.0	.900E+02	128	0	0	30	10
					IN	CLR:	40	40	25	0	0	0.0	0.0	.900E+02	128	0	0	30	10
					NOT	CLR:	0	0	0	0	0	0.0	0.0	0.	0	0	0	0	0
5/18/77	* AAA	400 27	411 32	370 22	FLT	TOT:	23	23	11	0	0	0.0	0.0	.228E+02	243	0	0	14	9
					IN	CLR:	23	23	11	0	0	0.0	0.0	.228E+02	243	0	0	14	9
					NOT	CLR:	0	0	0	0	0	0.0	0.0	0.	0	0	0	0	0
12/13/76	AAA	413 31	430 34	289 22	FLT	TOT:	80	0	52	0	0	0.0	0.0	0.	104	0	0	51	29
					IN	CLR:	80	0	52	0	0	0.0	0.0	0.	104	0	0	51	29
					NOT	CLR:	0	0	0	0	0	0.0	0.0	0.	0	0	0	0	0
12/15/76	* AAA	337 30	340 33	248 22	FLT	TOT:	72	0	48	0	0	.0	.1	0.	61	0	0	72	0
					IN	CLR:	71	0	48	0	0	0.0	0.0	0.	61	0	0	71	0
					NOT	CLR:	1	0	0	0	0	3.5	4.0	0.	0	0	0	1	0
12/20/76	AAA	347 32	350 38	190 22	FLT	TOT:	86	0	49	45	10	11.6	1.3	0.	95	73	64	72	14
					IN	CLR:	53	0	33	28	3	0.0	0.0	0.	113	62	65	39	14
					NOT	CLR:	33	0	16	17	7	30.1	3.4	0.	58	92	64	33	0
12/22/76	* AAA	426 29	450 33	280 22	FLT	TOT:	66	0	45	0	0	0.0	0.0	0.	160	0	0	42	24
					IN	CLR:	66	0	45	0	0	0.0	0.0	0.	160	0	0	42	24
					NOT	CLR:	0	0	0	0	0	0.0	0.0	0.	0	0	0	0	0
12/27/76	AAA	339 30	351 34	269 21	FLT	TOT:	95	0	13	0	0	16.4	1.0	0.	62	0	0	95	0
					IN	CLR:	52	0	9	0	0	0.0	0.0	0.	62	0	0	52	0
					NOT	CLR:	43	0	4	0	0	36.2	2.2	0.	62	0	0	43	0
12/29/76	* AAA	421 31	430 35	314 22	FLT	TOT:	67	0	44	53	0	.0	.0	0.	137	46	15	20	47
					IN	CLR:	66	0	43	53	0	0.0	0.0	0.	139	46	15	19	47
					NOT	CLR:	1	0	1	0	0	.6	1.0	0.	63	0	0	1	0
DFW-JFK																			
3/28/77	* AAA	420 37	433 40	217 33	FLT	TOT:	29	29	0	23	8	10.5	.5	.489E+05	0	54	13	0	0
					IN	CLR:	23	23	0	18	3	0.0	0.0	.180E+02	0	41	14	0	0
					NOT	CLR:	6	6	0	5	5	50.7	2.3	.236E+06	0	100	10	0	0
3/30/77	AAA	404 37	410 39	345 33	FLT	TOT:	22	22	0	19	0	.2	.0	.257E+01	0	23	15	0	0
					IN	CLR:	21	21	0	18	0	0.0	0.0	.270E+01	0	20	12	0	0
					NOT	CLR:	1	1	0	1	0	3.5	1.0	0.	0	64	53	0	0
5/ 2/77	* AAA	422 37	429 40	274 34	FLT	TOT:	29	29	18	0	0	2.0	.1	.125E+05	304	0	0	2	27
					IN	CLR:	27	27	17	0	0	0.0	0.0	.901E+02	318	0	0	1	26
					NOT	CLR:	2	2	1	0	0	28.6	1.5	.180E+06	74	0	0	1	1

DEP-ARR		IM/ID/IY	CODE	AVFL ALAT	EXHI EXTN	EXLO EXTS	NUMBER OF OBS					AVERAGES FOR THE FLIGHT			OZ	RH	H2O	TROP N	STRAT N
							CLD	PD5	OZ	H2O	H2S	%TIC	PATCHES	PD5					
DFW-JFK (CONT.)																			
5/	4/77	AAA	415 37	430 39	329 33	FLT TOT: IN CLR: NOT CLR:	24 12 12	24 12 12	15 8 7	0 0 0	0 0 0	23.5 0.0 47.1	.9 0.0 1.8	.628E+05 .515E+02 .126E+06	233 314 142	0 0 0	0 0 0	13 1 12	11 11 0
5/	9/77 *	AAA	417 37	430 40	264 33	FLT TOT: IN CLR: NOT CLR:	26 24 2	26 24 2	15 14 1	0 0 0	0 0 0	.9 0.0 12.2	.0 0.0 .5	.490E+04 .373E+02 .632E+05	472 503 39	0 0 0	0 0 0	2 0 2	24 24 0
5/	11/77	AAA	398 37	410 39	223 33	FLT TOT: IN CLR: NOT CLR:	24 22 2	24 22 2	16 15 1	0 0 0	0 0 0	1.1 0.0 12.7	.1 0.0 1.5	.227E+02 .247E+02 0.	348 369 38	0 0 0	0 0 0	2 0 2	22 22 0
5/	16/77 *	AAA	399 36	430 39	206 33	FLT TOT: IN CLR: NOT CLR:	10 9 1	10 9 1	4 4 0	0 0 0	0 0 0	5.1 0.0 50.6	.5 0.0 5.0	0. 0. 0.	90 90 0	0 0 0	0 0 0	6 5 1	4 4 0
5/	18/77	AAA	404 37	410 39	367 33	FLT TOT: IN CLR: NOT CLR:	7 5 2	7 5 2	3 3 0	0 0 0	0 0 0	10.3 0.0 35.9	.9 0.0 3.0	.855E+05 0. .299E+06	150 150 0	0 0 0	0 0 0	5 4 1	2 1 1
12/	13/76 *	AAA	425 37	430 40	342 34	FLT TOT: IN CLR: NOT CLR:	32 32 0	0 0 0	0 0 0	0 0 0	0 0 0	0.0 0.0 0.0	0.0 0.0 0.0	0. 0. 0.	0 0 0	0 0 0	0 0 0	6 6 0	26 26 0
12/	15/76	AAA	327 36	331 39	271 33	FLT TOT: IN CLR: NOT CLR:	25 23 2	0 0 0	17 16 1	0 0 0	0 0 0	3.5 0.0 43.3	.4 0.0 5.5	0. 0. 0.	59 60 51	0 0 0	0 0 0	25 23 2	0 0 0
12/	20/76 *	AAA	348 37	350 40	318 34	FLT TOT: IN CLR: NOT CLR:	36 28 8	0 0 0	23 18 5	0 0 0	0 0 0	7.5 0.0 34.0	1.4 0.0 6.4	0. 0. 0.	110 126 50	0 0 0	0 0 0	36 28 8	0 0 0
12/	22/76	AAA	438 37	450 39	314 33	FLT TOT: IN CLR: NOT CLR:	24 24 0	0 0 0	0 0 0	0 0 0	0 0 0	0.0 0.0 0.0	0.0 0.0 0.0	0. 0. 0.	0 0 0	0 0 0	0 0 0	2 2 0	22 22 0
12/	27/76 *	AAA	342 37	350 40	193 33	FLT TOT: IN CLR: NOT CLR:	32 20 12	0 0 0	21 11 10	0 0 0	0 0 0	13.3 0.0 35.6	1.0 0.0 2.6	0. 0. 0.	87 110 61	0 0 0	0 0 0	25 13 12	7 7 0
12/	29/76	AAA	398 37	410 39	240 33	FLT TOT: IN CLR: NOT CLR:	22 22 0	0 0 0	14 14 0	17 17 0	0 0 0	0.0 0.0 0.0	0.0 0.0 0.0	0. 0. 0.	492 492 0	23 23 0	19 19 0	4 4 0	18 18 0
DRW-SYD																			
8/	18/76 *	DDA	347 -23	352 -14	273 -33	FLT TOT: IN CLR: NOT CLR:	37 37 0	0 0 0	24 24 0	0 0 0	0 0 0	0.0 0.0 0.0	0.0 0.0 0.0	0. 0. 0.	35 35 0	0 0 0	0 0 0	37 37 0	0 0 0

APPENDIX B

DEP-ARR	IM/ID/IY	CODE	AVFL ALAT	EXHI EXTN	EXLO EXTS	NUMBER OF OBS					AVERAGES FOR THE FLIGHT			TRCP	STRAT					
						CLD	PD5	OZ	H2O	H2S	%TIC	PATCHES	PD5	OZ	RH	H2O	N	N		
DRW-SYD (CONT.)																				
	8/20/76	DDA	344 -24	370 -14	223 -33	FLT IN NOT	TOT CLR CLR	33 33 0	0 0 0	20 20 0	0 0 0	0 0 0	0.0 0.0 0.0	0.0 0.0 0.0	40 40 0	0 0 0	0 0 0	33 33 0	0 0 0	
DTW-HNL																				
	4/25/76	* CAA	326 38	370 42	194 29	FLT IN NOT	TOT CLR CLR	42 39 3	0 0 0	42 39 3	0 0 0	0 0 0	2.0 0.0 28.0	.3 0.0 4.3	0. 0. 0.	147 153 72	0 0 0	0 0 0	37 34 3	5 5 0
DTW-IAD																				
	6/ 6/79	* BDB	294 41	311 41	228 40	FLT IN NOT	TOT CLR CLR	5 5 0	5 5 0	2 2 0	1 1 0	1 1 0	0.0 0.0 0.0	0.0 0.0 0.0	.183E+04 .183E+04 0.	53 53 0	100 100 0	296 296 0	5 5 0	0 0 0
	9/30/78	* BBB	303 40	311 41	283 40	FLT IN NOT	TOT CLR CLR	5 3 2	5 3 2	3 1 2	0 0 0	0 0 0	22.5 0.0 56.3	1.6 0.0 4.0	.631E+06 .410E+04 .157E+07	75 55 85	0 0 0	0 0 0	5 3 2	0 0 0
	10/ 1/78	BBB	263 41	291 42	245 40	FLT IN NOT	TOT CLR CLR	6 1 5	6 1 5	3 1 2	0 0 0	0 0 0	54.1 0.0 64.9	3.2 0.0 3.8	.540E+06 .625E+02 .648E+06	67 50 76	0 0 0	0 0 0	6 1 5	0 0 0
	10/ 6/78	* BBB	298 41	310 41	250 40	FLT IN NOT	TOT CLR CLR	5 5 0	5 5 0	2 2 0	0 0 0	0 0 0	0.0 0.0 0.0	0.0 0.0 0.0	.798E+03 .798E+03 0.	148 148 0	0 0 0	0 0 0	5 5 0	0 0 0
	10/ 7/78	* BBB	300 40	310 41	258 40	FLT IN NOT	TOT CLR CLR	6 5 1	6 5 1	3 3 0	0 0 0	0 0 0	7.5 0.0 44.7	.2 0.0 1.0	.215E+05 .148E+03 .128E+06	115 115 0	0 0 0	0 0 0	6 5 1	0 0 0
	10/ 7/78	BBB	278 40	291 41	232 39	FLT IN NOT	TOT CLR CLR	5 5 0	5 5 0	2 2 0	0 0 0	0 0 0	0.0 0.0 0.0	0.0 0.0 0.0	.296E+03 .296E+03 0.	90 90 0	0 0 0	0 0 0	5 5 0	0 0 0
	11/16/78	BBB	277 40	290 41	226 39	FLT IN NOT	TOT CLR CLR	5 0 5	5 0 5	2 0 2	3 0 3	2 0 2	80.2 0.0 80.2	2.0 0.0 2.0	.230E+06 0. .230E+06	23 0 23	96 0 96	271 0 271	5 0 5	0 0 0
	12/15/78	BBB	277 40	289 41	227 39	FLT IN NOT	TOT CLR CLR	5 5 0	5 5 0	2 2 0	0 0 0	0 0 0	0.0 0.0 0.0	0.0 0.0 0.0	0. 0. 0.	46 46 0	0 0 0	0 0 0	0 0 0	0 0 0
	12/15/78	* BBB	294 40	310 41	240 40	FLT IN NOT	TOT CLR CLR	6 6 0	6 6 0	3 3 0	3 3 0	0 0 0	0.0 0.0 0.0	0.0 0.0 0.0	.110E+02 .110E+02 0.	30 30 0	53 53 0	55 55 0	0 0 0	0 0 0

DEP-ARR	IM/ID/IY	CODE	AVFL ALAT	EXHI EXTN	EXLO EXTS			NUMBER OF OBS					AVERAGES FOR		THE FLIGHT		OZ	RH	H2O	TROP	STRAT
								CLD	PD5	OZ	H2O	H2S	%TIC	PATCHES	PD5				N	N	
DTW-LHR																					
	5/26/77	AAA	393 47	410 51	270 42	FLT	TOT:	36	36	20	0	0	1.7	.3	.163E+03	543	0	0	5	31	
						IN	CLR:	33	33	19	0	0	0.0	0.0	.398E+01	560	0	0	3	30	
						NOT	CLR:	3	3	1	0	0	20.1	3.0	.191E+04	217	0	0	2	1	
	5/27/77	* AAA	382 51	391 56	216 43	FLT	TOT:	38	38	19	0	0	.8	.0	.106E+04	360	0	0	6	32	
						IN	CLR:	36	36	17	0	0	0.0	0.0	.136E+02	389	0	0	4	32	
						NOT	CLR:	2	2	2	0	0	16.1	.5	.199E+05	121	0	0	2	0	
FAI-SEA																					
	12/13/77	BCB	366 57	370 64	291 49	FLT	TOT:	27	27	17	0	0	0.0	0.0	.209E+02	259	0	0	1	26	
						IN	CLR:	27	27	17	0	0	0.0	0.0	.209E+02	259	0	0	1	26	
						NOT	CLR:	0	0	0	0	0	0.0	0.0	0.	0	0	0	0	0	
	12/13/77	* BCB	343 57	351 64	266 49	FLT	TOT:	29	29	18	0	0	0.0	0.0	.724E+02	196	0	0	15	14	
						IN	CLR:	29	29	18	0	0	0.0	0.0	.724E+02	196	0	0	15	14	
						NOT	CLR:	0	0	0	0	0	0.0	0.0	0.	0	0	0	0	0	
FCO-IST																					
	1/ 6/79	BBB	345 43	371 44	224 41	FLT	TOT:	16	0	9	7	2	.1	.1	0.	207	55	62	16	0	
						IN	CLR:	15	0	9	7	2	0.0	0.0	0.	207	55	62	15	0	
						NOT	CLR:	1	0	0	0	0	1.2	1.0	0.	0	0	0	1	0	
	1/ 7/79	* BBB	268 43	280 44	260 42	FLT	TOT:	18	0	11	10	0	0.0	0.0	0.	67	26	46	18	0	
						IN	CLR:	18	0	11	10	0	0.0	0.0	0.	67	26	46	18	0	
						NOT	CLR:	0	0	0	0	0	0.0	0.0	0.	0	0	0	0	0	
	2/24/79	BBB	326 43	330 44	276 41	FLT	TOT:	15	0	9	7	2	10.6	.5	0.	136	57	20	11	4	
						IN	CLR:	12	0	7	4	0	0.0	0.0	0.	152	27	10	8	4	
						NOT	CLR:	3	0	2	3	2	52.9	2.7	0.	82	97	34	3	0	
	2/25/79	* BBB	303 43	310 44	280 42	FLT	TOT:	18	0	11	7	0	.9	.2	0.	69	39	19	18	0	
						IN	CLR:	16	0	9	5	0	0.0	0.0	0.	74	35	15	16	0	
						NOT	CLR:	2	0	2	2	0	8.2	2.0	0.	48	49	27	2	0	
	3/16/79	BBB	317 43	331 44	230 41	FLT	TOT:	15	0	9	8	0	1.7	.3	0.	213	43	42	15	0	
						IN	CLR:	13	0	8	7	0	0.0	0.0	0.	202	36	40	13	0	
						NOT	CLR:	2	0	1	1	0	12.5	2.5	0.	303	99	55	2	0	
	3/17/79	* BBB	388 43	391 44	364 42	FLT	TOT:	12	0	0	4	0	4.7	.3	0.	0	19	35	0	12	
						IN	CLR:	11	0	0	4	0	0.0	0.0	0.	0	19	35	0	11	
						NOT	CLR:	1	0	0	0	0	56.9	4.0	0.	0	0	0	0	1	
	11/22/78	BBB	300 43	330 44	227 41	FLT	TOT:	18	18	11	10	0	0.0	0.0	.109E+02	56	44	74	18	0	
						IN	CLR:	18	18	11	10	0	0.0	0.0	.109E+02	56	44	74	18	0	
						NOT	CLR:	0	0	0	0	0	0.0	0.0	0.	0	0	0	0	0	

APPENDIX B

DEP-ARR	IM/1D/1Y	CODE	AVFL ALAT	EXHI EXTN	EXLO EXTS	NUMBER OF OBS					AVERAGES FOR THE FLIGHT			TROP	STRAT					
						CLD	PD5	OZ	H2O	H2S	%TIC	PATCHES	PD5	OZ	RH	H2O	N	N		
FCO-1ST (CONT.)																				
11/23/78	*	BBB	272 43	350 44	200 42	FLT	TOT:	16	16	10	10	0	0.0	0.0	.722E+02	52	18	40	16	0
						IN	CLR:	16	16	10	10	0	0.0	0.0	.722E+02	52	18	40	16	0
						NOT	CLR:	0	0	0	0	0	0.0	0.0	0.	0	0	0	0	0
11/25/78		BBB	342 43	370 44	265 41	FLT	TOT:	16	16	10	9	0	0.0	0.0	.841E+01	60	40	19	6	10
						IN	CLR:	16	16	10	9	0	0.0	0.0	.841E+01	60	40	19	6	10
						NOT	CLR:	0	0	0	0	0	0.0	0.0	0.	0	0	0	0	0
11/26/78	*	BBB	301 43	310 44	193 42	FLT	TOT:	18	18	11	8	1	6.4	1.3	.227E+05	75	56	33	18	0
						IN	CLR:	13	13	8	6	1	0.0	0.0	.102E+02	89	52	34	13	0
						NOT	CLR:	5	5	3	2	0	23.1	4.6	.817E+05	40	68	30	5	0
11/28/78		BBB	316 43	370 44	231 41	FLT	TOT:	17	17	10	10	0	26.1	2.4	.191E+06	231	30	33	8	9
						IN	CLR:	10	10	7	7	0	0.0	0.0	.670E+01	315	19	9	1	9
						NOT	CLR:	7	7	3	3	0	68.1	5.7	.464E+06	35	56	91	7	0
11/29/78	*	BBB	316 43	390 44	260 42	FLT	TOT:	12	12	5	6	1	43.4	2.2	.533E+06	313	56	53	7	5
						IN	CLR:	5	5	3	4	0	0.0	0.0	0.	515	35	17	0	5
						NOT	CLR:	7	7	2	2	1	74.3	3.7	.913E+06	10	97	125	7	0
12/ 4/78		BBB	309 43	331 44	230 42	FLT	TOT:	15	15	9	8	4	21.4	1.5	.411E+05	54	97	66	15	0
						IN	CLR:	5	5	2	3	1	0.0	0.0	.461E+03	75	96	23	5	0
						NOT	CLR:	10	10	7	5	3	32.1	2.3	.614E+05	48	97	91	10	0
12/17/78		BBB	309 43	331 44	257 41	FLT	TOT:	15	15	9	8	2	.9	.3	.183E+04	42	63	66	0	0
						IN	CLR:	13	13	8	7	1	0.0	0.0	.192E+03	41	58	64	0	0
						NOT	CLR:	2	2	1	1	1	6.5	2.0	.125E+05	53	100	80	0	0
12/18/78	*	BBB	298 43	310 44	240 42	FLT	TOT:	21	21	13	10	2	3.2	.7	.717E+04	41	55	87	0	0
						IN	CLR:	17	17	10	8	1	0.0	0.0	.347E+02	40	44	46	0	0
						NOT	CLR:	4	4	3	2	1	16.8	3.5	.375E+05	43	96	250	0	0
12/20/78		BBB	285 43	291 44	230 42	FLT	TOT:	13	13	8	7	0	0.0	0.0	.501E+02	89	36	48	0	0
						IN	CLR:	13	13	8	7	0	0.0	0.0	.501E+02	89	36	48	0	0
						NOT	CLR:	0	0	0	0	0	0.0	0.0	0.	0	0	0	0	0
12/21/78	*	BBB	296 43	310 44	240 42	FLT	TOT:	20	20	11	7	5	27.6	1.6	.693E+05	37	99	74	0	0
						IN	CLR:	9	9	5	0	0	0.0	0.0	.217E+02	41	0	0	0	0
						NOT	CLR:	11	11	6	7	5	50.2	2.9	.126E+06	34	99	74	0	0
12/23/78		BBB	293 43	331 44	250 42	FLT	TOT:	17	17	0	10	3	40.2	3.3	.154E+06	0	81	78	0	0
						IN	CLR:	3	3	0	1	0	0.0	0.0	.547E+03	0	53	32	0	0
						NOT	CLR:	14	14	0	9	3	48.8	4.0	.186E+06	0	84	83	0	0
12/24/78	*	BBB	364 43	389 44	267 42	FLT	TOT:	16	16	0	8	0	10.2	.6	.245E+05	0	43	22	0	0
						IN	CLR:	12	12	0	7	0	0.0	0.0	.221E+02	0	47	22	0	0
						NOT	CLR:	4	4	0	1	0	40.7	2.5	.981E+05	0	20	23	0	0

DEP-ARR	IM/ID/IY	CODE	AVFL ALAT	EXHI EXTN	EXLO EXTS		NUMBER OF OBS					AVERAGES FOR THE FLIGHT						STRAT	
							CLD	PD5	OZ	H2O	H2S	%TIC	PATCHES	PD5	OZ	RH	H2O	TROP N	STRAT N
FCO-JFK																			
	1/27/76	* BBA	349 47	370 51	165 41	FLT TOT:	52	0	52	0	0	15.6	.6	0.	180	0	0	31	21
						IN CLR:	32	0	32	0	0	0.0	0.0	0.	226	0	0	16	16
						NOT CLR:	20	0	20	0	0	40.7	1.5	0.	108	0	0	15	5
	1/28/76	* BBA	359 48	390 52	208 41	FLT TOT:	52	0	52	0	0	44.3	1.4	0.	158	0	0	34	18
						IN CLR:	23	0	23	0	0	0.0	0.0	0.	312	0	0	7	16
						NOT CLR:	29	0	29	0	0	79.5	2.4	0.	36	0	0	27	2
	1/28/76	BBA	329 44	390 48	203 41	FLT TOT:	66	0	66	0	0	22.9	1.1	0.	71	0	0	66	0
						IN CLR:	39	0	39	0	0	0.0	0.0	0.	91	0	0	39	0
						NOT CLR:	27	0	27	0	0	56.0	2.6	0.	41	0	0	27	0
	1/ 6/79	* BBB	330 51	369 55	246 42	FLT TOT:	67	0	44	38	3	19.6	1.2	0.	104	48	28	46	21
						IN CLR:	45	0	30	25	0	0.0	0.0	0.	134	33	20	26	19
						NOT CLR:	22	0	14	13	0	59.8	3.7	0.	41	79	44	20	2
	2/24/79	* BBB	326 46	370 48	202 41	FLT TOT:	69	0	44	34	2	9.1	.8	0.	137	53	39	49	20
						IN CLR:	49	0	30	20	2	0.0	0.0	0.	173	44	39	30	19
						NOT CLR:	20	0	14	14	0	31.4	2.9	0.	59	66	39	19	1
	2/25/79	BBB	327 47	370 49	199 41	FLT TOT:	71	0	47	34	1	17.7	1.5	0.	83	55	59	71	0
						IN CLR:	36	0	23	18	1	0.0	0.0	0.	96	48	24	36	0
						NOT CLR:	35	0	24	16	0	35.9	3.1	0.	71	62	98	35	0
	3/16/79	* BBB	331 44	371 46	260 41	FLT TOT:	82	0	53	45	3	6.2	.3	0.	214	35	30	15	35
						IN CLR:	73	0	49	41	1	0.0	0.0	0.	228	31	27	15	35
						NOT CLR:	9	0	4	4	2	56.7	2.8	0.	50	82	56	0	0
	4/12/76	BBA	361 45	390 46	194 41	FLT TOT:	56	0	56	0	0	.1	.1	0.	223	0	0	41	15
						IN CLR:	52	0	52	0	0	0.0	0.0	0.	215	0	0	39	13
						NOT CLR:	4	0	4	0	0	1.3	1.3	0.	328	0	0	2	2
	4/12/76	* BBA	306 47	370 51	203 41	FLT TOT:	49	0	49	0	0	1.0	.3	0.	172	0	0	38	11
						IN CLR:	44	0	44	0	0	0.0	0.0	0.	179	0	0	33	11
						NOT CLR:	5	0	5	0	0	9.6	3.2	0.	114	0	0	5	0
	5/28/79	* BDB	347 45	370 46	215 41	FLT TOT:	80	30	50	34	1	1.7	.4	.214E+05	206	52	43	58	22
						IN CLR:	69	69	44	30	1	0.0	0.0	.182E+04	223	49	43	47	22
						NOT CLR:	11	11	6	4	0	12.4	2.8	.144E+06	80	76	45	11	0
	5/28/79	BDB	325 50	350 56	215 41	FLT TOT:	94	94	62	54	10	4.8	1.0	.115E+06	183	59	82	72	22
						IN CLR:	73	73	50	40	3	0.0	0.0	.432E+04	206	49	61	51	22
						NOT CLR:	21	21	12	14	7	21.6	4.5	.499E+06	85	89	142	21	0
	9/20/76	BBA	362 50	370 56	240 42	FLT TOT:	89	0	57	0	0	0.0	0.0	0.	76	0	0	64	25
						IN CLR:	39	0	57	0	0	0.0	0.0	0.	76	0	0	64	25
						NOT CLR:	0	0	0	0	0	0.0	0.0	0.	0	0	0	0	0
	9/20/76	* BBA	332 45	370 47	269 41	FLT TOT:	75	0	43	0	0	0.0	0.0	0.	60	0	0	75	0
						IN CLR:	75	0	48	0	0	0.0	0.0	0.	60	0	0	75	0
						NOT CLR:	0	0	0	0	0	0.0	0.0	0.	0	0	0	0	0

APPENDIX B

DEP-ARR		CODE	AVFL ALAT	EXHI EXTN	EXLO EXTS	NUMBER OF OBS					AVERAGES FOR THE FLIGHT			OZ	RH	H2O	TRCP N	STRAT N		
IM/ID/IY						CLD	PD5	OZ	H2O, H2S	%TIC	PATCHES	POS								
FCO-JFK (CONT.)																				
9/22/76	*	BBA	344 45	370 47	199 41	FLT IN NOT	TOT CLR CLR	80 80 0	0 0 0	50 50 0	0 0 0	0 0 0	0.0 0.0 0.0	0.0 0.0 0.0	0. 0. 0.	61 61 0	0 0 0	0 0 0	0 0 0	
11/22/78	*	BBB	346 48	371 50	259 41	FLT IN NOT	TOT CLR CLR	75 58 17	75 58 17	48 37 11	38 30 8	1 0 1	4.3 0.0 18.8	1.1 0.0 4.8	.144E+05 .523E+02 .633E+05	85 96 46	48 38 85	16 13 26	60 43 17	15 15 0
11/23/78		BBB	334 45	371 48	200 41	FLT IN NOT	TOT CLR CLR	91 59 32	91 59 32	58 40 18	51 31 20	2 0 2	23.7 0.0 67.5	.9 0.0 2.5	.709E+05 .363E+03 .201E+06	63 70 47	53 43 69	51 17 103	87 55 32	4 4 0
11/25/78	*	BBB	333 47	370 50	268 41	FLT IN NOT	TOT CLR CLR	74 42 32	74 42 32	49 29 20	42 23 19	2 1 1	30.5 0.0 70.6	.7 0.0 1.6	.118E+06 .444E+02 .273E+06	71 90 43	45 32 60	28 22 34	55 23 32	19 19 0
11/26/78		BBB	342 46	370 48	200 41	FLT IN NOT	TOT CLR CLR	90 54 36	90 54 36	58 33 25	50 29 21	3 0 3	17.6 0.0 44.0	.9 0.0 2.2	.555E+05 .180E+02 .139E+06	114 163 50	43 20 75	28 19 39	64 28 36	26 26 0
11/28/78	*	BBB	354 47	370 49	238 41	FLT IN NOT	TOT CLR CLR	78 58 20	78 58 20	52 38 14	47 33 14	6 3 3	15.5 0.0 60.5	.7 0.0 2.9	.568E+05 .600E+03 .220E+06	118 152 27	46 37 68	37 20 77	51 31 20	27 27 0
11/29/78		BBB	332 53	349 59	219 41	FLT IN NOT	TOT CLR CLR	97 75 22	97 75 22	62 50 12	48 38 10	10 7 3	11.1 0.0 49.1	.5 0.0 2.2	.330E+05 .614E+02 .145E+06	169 198 48	52 43 89	74 69 95	45 27 18	52 48 4
12/ 4/78	*	BBB	339 44	370 46	236 41	FLT IN NOT	TOT CLR CLR	71 42 29	71 42 29	47 28 19	39 23 16	12 0 12	27.3 0.0 66.9	.6 0.0 1.6	.724E+05 .779E+01 .177E+06	147 216 45	58 30 98	37 16 68	31 2 29	40 40 0
12/17/78	*	BBB	330 46	371 48	238 41	FLT IN NOT	TOT CLR CLR	78 61 17	78 61 17	52 40 12	43 33 10	7 2 5	9.3 0.0 42.9	.9 0.0 4.2	.723E+05 .429E+01 .332E+06	123 144 51	55 44 92	38 29 66	0 0 0	0 0 0
12/18/78		BBB	340 47	371 49	201 41	FLT IN NOT	TOT CLR CLR	86 64 22	86 64 22	59 46 13	41 30 11	7 0 7	13.8 0.0 53.9	.8 0.0 3.0	.408E+05 .672E+02 .159E+06	175 207 62	54 40 91	30 26 41	0 0 0	0 0 0
12/20/78	*	BBB	289 46	291 49	236 41	FLT IN NOT	TOT CLR CLR	73 60 13	73 60 13	48 38 10	40 32 8	1 0 1	8.5 0.0 47.8	.6 0.0 3.6	.313E+05 .543E+02 .175E+06	106 124 38	52 47 75	64 51 116	0 0 0	0 0 0
12/22/78		BBB	331 51	352 56	220 41	FLT IN NOT	TOT CLR CLR	78 58 20	78 58 20	27 15 12	44 33 11	8 0 8	14.4 0.0 56.2	.5 0.0 2.1	.625E+05 .224E+03 .243E+06	141 208 57	42 26 91	31 29 37	0 0 0	0 0 0
12/23/78	*	BBB	317 42	350 43	207 40	FLT IN NOT	TOT CLR CLR	74 64 10	74 64 10	0 0 0	40 33 7	0 0 0	7.5 0.0 55.4	.4 0.0 3.0	.387E+05 .233E+02 .286E+06	0 0 0	40 30 86	41 36 65	0 0 0	0 0 0

DEP-ARR IM/ID/IY	CODE	AVFL ALAT	EXHI EXTN	EXLO EXTS	NUMBER OF OBS					AVERAGES FOR THE FLIGHT			OZ	RH	H2O	TROP N	STRAT N		
					CLD	PD5	OZ	H2O	H2S	%TIC	PATCHES	PD5							
FCO-JFK (CONT.)																			
12/24/78	BBB	300 51	310 56	200 41	FLT	TOT:	90	90	0	46	3	13.6	.3	.247E+05	0	46	108	0	0
					IN	CLR:	72	72	0	36	1	0.0	0.0	.409E+02	0	35	35	0	0
					NOT	CLR:	18	18	0	10	2	68.1	1.6	.123E+06	0	87	372	0	0
FCO-LHR																			
9/22/76	BBA	321 47	350 51	208 43	FLT	TOT:	16	0	9	0	0	0.0	0.0	0.	66	0	0	0	0
					IN	CLR:	16	0	9	0	0	0.0	0.0	0.	66	0	0	0	0
					NOT	CLR:	0	0	0	0	0	0.0	0.0	0.	0	0	0	0	0
FCO-SNN																			
1/27/76	BBA	387 49	390 52	353 43	FLT	TOT:	16	0	16	0	0	0.0	0.0	0.	354	0	0	1	15
					IN	CLR:	16	0	16	0	0	0.0	0.0	0.	354	0	0	1	15
					NOT	CLR:	0	0	0	0	0	0.0	0.0	0.	0	0	0	0	0
FCO-YQX																			
1/ 7/79	BBB	328 54	370 58	240 43	FLT	TOT:	75	0	51	42	0	2.2	.2	0.	184	29	19	38	37
					IN	CLR:	69	0	47	39	0	0.0	0.0	0.	196	28	17	32	37
					NOT	CLR:	6	0	4	3	0	27.6	2.2	0.	37	45	44	6	0
FRA-IST																			
1/24/76 *	BBA	283 45	310 49	213 42	FLT	TOT:	15	0	15	0	0	.1	.1	0.	130	0	0	11	4
					IN	CLR:	14	0	14	0	0	0.0	0.0	0.	137	0	0	10	4
					NOT	CLR:	1	0	1	0	0	.8	1.0	0.	32	0	0	1	0
1/ 5/79 *	BBB	329 45	351 49	249 42	FLT	TOT:	25	0	15	12	0	3.7	.3	0.	167	32	21	19	6
					IN	CLR:	23	0	14	12	0	0.0	0.0	0.	177	32	21	17	6
					NOT	CLR:	2	0	1	0	0	45.7	3.5	0.	34	0	0	2	0
3/20/76 *	BBA	330 45	351 49	217 41	FLT	TOT:	16	0	16	0	0	0.0	0.0	0.	262	0	0	4	12
					IN	CLR:	16	0	16	0	0	0.0	0.0	0.	262	0	0	4	12
					NOT	CLR:	0	0	0	0	0	0.0	0.0	0.	0	0	0	0	0
3/23/76	BBA	346 45	371 49	214 41	FLT	TOT:	14	0	14	0	0	0.0	0.0	0.	496	0	0	2	12
					IN	CLR:	14	0	14	0	0	0.0	0.0	0.	496	0	0	2	12
					NOT	CLR:	0	0	0	0	0	0.0	0.0	0.	0	0	0	0	0
4/19/76	BBA	356 45	371 48	220 41	FLT	TOT:	14	0	14	0	0	1.3	1.2	0.	360	0	0	2	12
					IN	CLR:	11	0	11	0	0	0.0	0.0	0.	357	0	0	2	9
					NOT	CLR:	3	0	3	0	0	6.1	5.7	0.	370	0	0	0	3

APPENDIX B

DEP-ARR	IM/ID/IY	CODE	AVFL ALAT	EXHI EXTN	EXLO EXTS	NUMBER OF OBS					AVERAGES FOR THE FLIGHT			TROP			STRAT			
						CLD	PD5	OZ	H2O, H2S	%TIC	PATCHES	PD5	OZ	RH	H2O	N	N			
FRA-JFK																				
1/30/76	*	BBA	341 51	370 54	209 41	FLT IN NOT	TOT: CLR: CLR:	45 32 13	0 0 0	45 32 13	0 0 0	0 0 0	15.0 0.0 52.1	1.6 0.0 5.5	0. 0. 0.	148 184 60	0 0 0	0 0 0	24 11 13	21 21 0
1/31/76		BBA	331 55	350 61	209 43	FLT IN NOT	TOT: CLR: CLR:	54 46 8	0 0 0	54 46 8	0 0 0	0 0 0	7.8 0.0 52.8	.4 0.0 2.9	0. 0. 0.	253 239 47	0 0 0	0 0 0	24 16 8	30 30 0
1/ 9/79	*	BBB	335 50	371 52	243 41	FLT IN NOT	TOT: CLR: CLR:	64 37 27	0 0 0	18 14 4	35 18 17	4 0 4	21.1 0.0 50.1	1.0 0.0 2.3	0. 0. 0.	182 226 28	55 30 82	35 19 51	51 24 27	13 13 0
1/10/79		BBB	339 55	370 62	271 42	FLT IN NOT	TOT: CLR: CLR:	90 83 2	0 0 0	0 0 0	37 36 1	1 0 1	1.2 0.0 53.9	.1 0.0 4.5	0. 0. 0.	0 0 0	21 18 100	17 16 44	7 5 2	83 83 0
1/12/79		BBB	349 54	391 58	210 41	FLT IN NOT	TOT: CLR: CLR:	91 86 5	0 0 0	33 33 0	36 35 1	3 2 1	1.9 0.0 34.0	.2 0.0 3.2	0. 0. 0.	304 304 0	32 30 100	26 26 27	7 4 3	84 82 2
1/12/79	*	BBB	324 49	370 52	288 42	FLT IN NOT	TOT: CLR: CLR:	67 56 11	0 0 0	3 3 0	38 34 4	0 0 0	3.6 0.0 22.2	.5 0.0 3.3	0. 0. 0.	407 407 0	35 31 70	31 29 49	37 26 11	30 30 0
2/23/79		BBB	347 50	351 52	220 41	FLT IN NOT	TOT: CLR: CLR:	82 64 18	0 0 0	53 41 12	47 36 11	0 0 0	10.5 0.0 47.7	.4 0.0 1.9	0. 0. 0.	177 217 39	37 30 60	27 15 66	41 23 18	41 41 0
2/27/79	*	BBB	335 45	369 50	198 41	FLT IN NOT	TOT: CLR: CLR:	19 12 7	0 0 0	12 7 5	10 6 4	4 1 3	27.9 0.0 75.6	.3 0.0 .9	0. 0. 0.	145 214 49	69 58 86	93 112 65	19 12 7	0 0 0
2/28/79		BBB	332 46	350 50	210 41	FLT IN NOT	TOT: CLR: CLR:	89 66 23	0 0 0	58 43 15	49 35 14	6 1 5	6.1 0.0 23.7	.8 0.0 3.1	0. 0. 0.	127 154 48	51 37 84	53 40 86	67 44 23	22 22 0
3/ 1/79	*	BBB	348 50	370 53	279 41	FLT IN NOT	TOT: CLR: CLR:	58 31 27	0 0 0	37 20 17	31 17 14	7 4 3	10.7 0.0 23.0	1.3 0.0 2.7	0. 0. 0.	99 146 44	66 52 83	40 31 50	51 26 25	7 5 2
3/ 1/79		BBB	323 46	331 50	242 41	FLT IN NOT	TOT: CLR: CLR:	84 51 33	0 0 0	55 33 22	45 28 17	4 0 4	13.3 0.0 33.7	1.3 0.0 3.2	0. 0. 0.	64 73 50	58 43 83	48 34 70	82 49 33	2 2 0
3/ 3/79	*	BBB	354 49	365 52	256 41	FLT IN NOT	TOT: CLR: CLR:	58 43 15	0 0 0	34 27 7	26 21 5	0 0 0	10.9 0.0 42.3	.4 0.0 1.7	0. 0. 0.	245 294 57	27 23 44	9 9 8	21 10 11	37 33 4
3/ 4/79		BBB	337 52	370 53	238 41	FLT IN NOT	TOT: CLR: CLR:	61 40 21	0 0 0	39 25 14	33 22 11	10 0 10	18.5 0.0 53.8	.9 0.0 2.5	0. 0. 0.	168 225 66	60 41 98	22 20 26	25 16 9	36 24 12

APPENDIX B

DEP-ARR	IM/1D/1Y	CODE	AVFL ALAT	EXHI EXTN	EXLC EXTS	NUMBER OF OBS					AVERAGES FOR THE FLIGHT			ØZ	RH	H2Ø	TROP N	STRAT N		
FRA-JFK (CONT.)						CLD	PD5	ØZ	H2Ø, H2S	%TIC	PATCHES	PD5	ØZ	RH	H2Ø	TROP N	STRAT N			
3/ 5/79	*	BBB	352 50	370 53	189 43	FLT IN NOT	TØT: CLR: CLR:	56 31 25	0 0 0	35 18 17	30 15 15	6 0 6	12.6 0.0 28.2	1.3 0.0 2.8	0. 0. 0.	169 285 46	63 41 86	30 23 38	31 14 17	25 17 8
3/ 5/79		BBB	345 58	371 62	221 41	FLT IN NOT	TØT: CLR: CLR:	56 39 17	0 0 0	36 25 11	31 23 8	4 1 3	18.1 0.0 59.5	.8 0.0 2.7	0. 0. 0.	256 343 57	50 37 87	16 16 18	16 5 11	39 34 5
3/ 6/79	*	BBB	343 50	377 53	280 43	FLT IN NOT	TØT: CLR: CLR:	51 30 21	0 0 0	31 18 13	21 11 10	11 3 8	17.3 0.0 42.1	1.1 0.0 2.7	0. 0. 0.	173 264 48	72 46 100	48 30 67	24 5 19	27 25 2
3/ 6/79		BBB	356 51	383 53	200 41	FLT IN NOT	TØT: CLR: CLR:	60 44 16	0 0 0	39 29 10	31 23 8	5 3 2	10.8 0.0 40.6	.6 0.0 2.3	0. 0. 0.	264 334 62	53 43 82	85 25 256	23 11 12	37 33 4
3/ 7/79		BBB	323 47	331 52	196 41	FLT IN NOT	TØT: CLR: CLR:	80 40 40	0 0 0	49 25 24	40 20 20	5 0 5	26.3 0.0 52.5	1.6 0.0 3.2	0. 0. 0.	102 147 55	64 43 85	95 36 154	72 32 40	8 8 0
3/ 7/79	*	BBB	351 51	371 53	193 43	FLT IN NOT	TØT: CLR: CLR:	49 22 27	0 0 0	32 14 18	26 10 16	8 0 8	36.5 0.0 66.2	.9 0.0 1.6	0. 0. 0.	102 162 54	84 81 87	43 18 58	39 12 27	10 10 0
4/12/76	*	BBA	331 50	341 52	207 41	FLT IN NOT	TØT: CLR: CLR:	45 40 5	0 0 0	45 40 5	0 0 0	0 0 0	.1 0.0 1.1	.1 0.0 1.2	0. 0. 0.	232 221 314	0 0 0	0 0 0	38 34 4	7 6 1
4/13/76		BBA	367 52	391 55	218 42	FLT IN NOT	TØT: CLR: CLR:	54 46 8	0 0 0	54 46 8	0 0 0	0 0 0	1.6 0.0 10.6	.6 0.0 3.8	0. 0. 0.	405 432 255	0 0 0	0 0 0	10 5 5	44 41 3
4/14/76	*	BBA	334 50	371 53	209 41	FLT IN NOT	TØT: CLR: CLR:	44 44 0	0 0 0	44 44 0	0 0 0	0 0 0	0.0 0.0 0.0	0.0 0.0 0.0	0. 0. 0.	252 252 0	0 0 0	0 0 0	21 21 0	23 23 0
4/14/76		BBA	373 56	410 59	296 43	FLT IN NOT	TØT: CLR: CLR:	54 53 1	0 0 0	54 53 1	0 0 0	0 0 0	.0 0.0 2.0	.1 0.0 3.0	0. 0. 0.	468 487 553	0 0 0	0 0 0	9 9 0	45 44 1
4/15/76	*	BBA	345 50	371 53	205 41	FLT IN NOT	TØT: CLR: CLR:	45 39 6	0 0 0	45 39 6	0 0 0	0 0 0	3.8 0.0 28.4	.4 0.0 3.0	0. 0. 0.	192 198 158	0 0 0	0 0 0	35 30 5	10 9 1
4/16/76		BBA	354 50	371 53	210 42	FLT IN NOT	TØT: CLR: CLR:	44 43 1	0 0 0	44 43 1	0 0 0	0 0 0	.0 0.0 .8	.0 0.0 2.0	0. 0. 0.	319 313 564	0 0 0	0 0 0	26 26 0	18 17 1
4/16/76	*	BBA	333 49	371 53	279 41	FLT IN NOT	TØT: CLR: CLR:	47 40 7	0 0 0	47 40 7	0 0 0	0 0 0	2.7 0.0 18.3	.2 0.0 1.3	0. 0. 0.	146 148 138	0 0 0	0 0 0	41 35 6	6 5 1

APPENDIX B

DEP-ARR IM/ID/IY	CODE	AVFL ALAT	EXHI EXTN	EXLO EXTS		NUMBER OF OBS					AVERAGES FOR THE FLIGHT			QZ	RH	H2O	TROP N	STRAT N
						CLD	PD5	OZ	H2O	H2S	%TIC	PATCHES	PD5					
FRA-JFK (CONT.)																		
4/17/76	BBA	364 53	391 58	201 41	FLT TOT: IN CLR: NOT CLR:	55 39 16	0 0 0	55 39 16	0 0 0	0 0 0	5.1 0.0 17.6	1.0 0.0 3.3	0. 0. 0.	347 425 157	0 0 0	0 0 0	29 14 15	26 25 1
5/23/79	BDB	335 53	373 56	219 41	FLT TOT: IN CLR: NOT CLR:	84 62 22	84 62 22	52 38 14	37 27 10	8 2 6	8.3 0.0 31.6	1.5 0.0 5.6	.134E+06 .610E+03 .510E+06	316 394 102	44 25 95	47 34 84	40 18 22	44 44 0
5/23/79 *	BDB	342 49	370 51	212 41	FLT TOT: IN CLR: NOT CLR:	72 49 23	72 49 23	48 32 16	40 25 15	10 1 9	5.1 0.0 15.9	1.3 0.0 4.0	.708E+05 .150E+04 .218E+06	286 394 69	51 29 88	78 63 102	37 15 22	35 34 1
9/14/76	BBA	355 53	390 56	226 41	FLT TOT: IN CLR: NOT CLR:	77 77 0	0 0 0	50 50 0	0 0 0	0 0 0	0.0 0.0 0.0	0.0 0.0 0.0	0. 0. 0.	99 99 0	0 0 0	0 0 0	52 52 0	25 25 0
9/14/76 *	BBA	347 52	369 56	248 42	FLT TOT: IN CLR: NOT CLR:	72 72 0	0 0 0	45 45 0	0 0 0	0 0 0	0.0 0.0 0.0	0.0 0.0 0.0	0. 0. 0.	103 103 0	0 0 0	0 0 0	58 58 0	14 14 0
9/18/76 *	BBA	342 50	369 52	244 41	FLT TOT: IN CLR: NOT CLR:	65 62 3	0 0 0	43 40 3	0 0 0	0 0 0	.1 0.0 1.7	.2 0.0 3.3	0. 0. 0.	92 87 152	0 0 0	0 0 0	49 48 1	16 14 2
9/18/76	BBA	327 54	370 60	252 42	FLT TOT: IN CLR: NOT CLR:	76 74 2	0 0 0	50 49 1	0 0 0	0 0 0	.0 0.0 .4	.0 0.0 1.0	0. 0. 0.	69 69 75	0 0 0	0 0 0	76 74 2	0 0 0
9/18/76 *	BBA	336 49	369 52	203 41	FLT TOT: IN CLR: NOT CLR:	72 72 0	0 0 0	47 47 0	0 0 0	0 0 0	0.0 0.0 0.0	0.0 0.0 0.0	0. 0. 0.	91 91 0	0 0 0	0 0 0	55 55 0	17 17 0
9/19/76	BBA	370 54	390 58	240 42	FLT TOT: IN CLR: NOT CLR:	76 76 0	0 0 0	49 49 0	0 0 0	0 0 0	0.0 0.0 0.0	0.0 0.0 0.0	0. 0. 0.	101 101 0	0 0 0	0 0 0	40 40 0	36 36 0
9/25/76 *	BBA	348 50	370 52	245 41	FLT TOT: IN CLR: NOT CLR:	71 71 0	0 0 0	44 44 0	0 0 0	0 0 0	0.0 0.0 0.0	0.0 0.0 0.0	0. 0. 0.	69 69 0	0 0 0	0 0 0	0 0 0	0 0 0
9/25/76 *	BBA	337 50	369 52	248 41	FLT TOT: IN CLR: NOT CLR:	73 73 0	0 0 0	48 48 0	0 0 0	0 0 0	0.0 0.0 0.0	0.0 0.0 0.0	0. 0. 0.	62 62 0	0 0 0	0 0 0	0 0 0	0 0 0
9/25/76	BBA	342 50	371 54	204 41	FLT TOT: IN CLR: NOT CLR:	84 84 0	0 0 0	56 56 0	0 0 0	0 0 0	0.0 0.0 0.0	0.0 0.0 0.0	0. 0. 0.	55 55 0	0 0 0	0 0 0	0 0 0	0 0 0
9/26/76	BBA	334 51	350 54	240 42	FLT TOT: IN CLR: NOT CLR:	81 81 0	0 0 0	52 52 0	0 0 0	0 0 0	0.0 0.0 0.0	0.0 0.0 0.0	0. 0. 0.	71 71 0	0 0 0	0 0 0	0 0 0	0 0 0

APPENDIX B

DEP-ARR	IM/1D/1Y	CODE	AVFL ALAT	EXHI EXTN	EXLO EXTS	NUMBER OF OBS					AVERAGES FOR		THE FLIGHT		RH H2O		TROP N	STRAT N		
						CLD	PD5	OZ	H2O,	H2S	%TIC	PATCHES	PD5	OZ						
FRA-JFK (CONT.)																				
10/ 1/78	*	BBB	343 51	351 54	197 42	FLT IN NOT	TOT: CLR: CLR:	67 38 29	67 38 29	43 26 17	0 0 0	22.1 0.0 51.0	1.4 0.0 3.2	.639E+05 .254E+03 .147E+06	85 81 91	0 0 0	0 0 0	67 38 29	0 0 0	
10/ 2/78	*	BBB	341 50	370 54	233 41	FLT IN NOT	TOT: CLR: CLR:	69 55 14	69 55 14	47 36 11	0 0 0	8.7 0.0 43.1	.8 0.0 4.1	.277E+05 .231E+03 .135E+06	98 101 89	0 0 0	0 0 0	69 55 14	0 0 0	
10/ 2/78		BBB	344 47	371 50	192 41	FLT IN NOT	TOT: CLR: CLR:	85 57 28	85 57 28	57 39 18	0 0 0	8.2 0.0 25.0	.7 0.0 2.1	.224E+05 .494E+02 .680E+05	76 83 59	0 0 0	0 0 0	85 57 28	0 0 0	
10/ 3/78		BBB	326 46	350 50	199 41	FLT IN NOT	TOT: CLR: CLR:	83 46 37	83 46 37	52 28 24	0 0 0	17.6 0.0 39.4	1.3 0.0 3.0	.475E+05 .392E+03 .106E+06	72 84 59	0 0 0	0 0 0	83 46 37	0 0 0	
10/ 4/78		BBB	359 47	371 52	220 41	FLT IN NOT	TOT: CLR: CLR:	32 17 15	32 17 15	21 10 11	0 0 0	14.3 0.0 30.5	1.4 0.0 3.1	.279E+05 .145E+03 .594E+05	105 140 73	0 0 0	0 0 0	22 7 15	10 10 0	
10/ 4/78	*	BBB	335 50	371 54	202 42	FLT IN NOT	TOT: CLR: CLR:	34 20 14	34 20 14	21 15 6	0 0 0	5.7 0.0 13.8	1.1 0.0 2.7	.180E+05 .562E+02 .436E+05	104 125 51	0 0 0	0 0 0	25 12 13	9 8 1	
10/ 5/78		BBB	347 50	371 52	246 42	FLT IN NOT	TOT: CLR: CLR:	79 46 33	79 46 33	49 28 21	0 0 0	11.9 0.0 28.6	1.0 0.0 2.5	.516E+05 .478E+02 .123E+06	93 122 54	0 0 0	0 0 0	67 34 33	12 12 0	
10/ 5/78	*	BBB	331 53	371 57	211 42	FLT IN NOT	TOT: CLR: CLR:	65 36 29	65 36 29	41 22 19	0 0 0	18.2 0.0 40.8	1.5 0.0 3.3	.446E+05 .327E+02 .999E+05	79 102 52	0 0 0	0 0 0	57 28 29	8 8 0	
11/24/78		BBB	351 53	391 57	220 41	FLT IN NOT	TOT: CLR: CLR:	90 64 26	90 64 26	61 43 18	51 37 14	5 1 4	19.2 0.0 66.4	1.0 0.0 3.5	.920E+05 .918E+02 .318E+06	150 190 52	42 29 78	21 22 18	34 13 21	56 51 5
11/24/78	*	BBB	348 49	361 52	272 41	FLT IN NOT	TOT: CLR: CLR:	66 42 24	66 42 24	42 26 16	28 17 11	2 0 2	22.9 0.0 62.9	1.0 0.0 2.8	.827E+05 .262E+03 .227E+06	76 92 50	58 44 81	16 16 16	53 29 24	13 13 0
11/27/78		BBB	319 51	349 54	209 41	FLT IN NOT	TOT: CLR: CLR:	87 66 21	87 66 21	54 39 15	49 36 13	1 1 0	11.1 0.0 45.8	.6 0.0 2.5	.263E+05 .798E+01 .109E+06	112 139 41	38 29 64	43 31 78	70 49 21	17 17 0
11/27/78	*	BBB	331 51	361 55	241 41	FLT IN NOT	TOT: CLR: CLR:	70 54 16	70 54 16	44 34 10	36 26 10	0 0 0	7.9 0.0 34.7	.5 0.0 2.3	.229E+05 .267E+02 .100E+06	102 121 36	37 28 60	30 30 29	61 45 16	9 9 0
11/30/78	*	BBB	334 48	370 51	290 42	FLT IN NOT	TOT: CLR: CLR:	65 34 31	65 34 31	44 24 20	40 22 18	8 0 8	31.0 0.0 65.1	1.3 0.0 2.8	.110E+06 .135E+02 .230E+06	91 135 37	59 33 90	54 22 93	40 9 31	25 25 0

APPENDIX B

DEP-ARR M/ID/Y	CODE	AVFL ALAT	EXHI EXTN	EXLØ EXTS	NUMBER OF OBS					AVERAGES FOR THE FLIGHT					TRCP N	STRAT N		
					CLD	PD5	ØZ	H2Ø, H2S	ØZ	ØZ	RH	H2Ø	ØZ	PATCHES			PD5	ØZ
FRA-JFK (CONT.)																		
12/ 1/78	BBB	333	390	240	FLT TØT:	85	85	55	47	2	5.4	.4	.288E+05	204	26	25	48	37
		52	56	42	IN CLR:	77	77	49	43	2	0.0	0.0	.494E+02	222	23	20	40	37
					NOT CLR:	8	8	6	4	0	57.9	4.1	.306E+06	49	63	81	8	0
12/ 1/78 *	BBB	346	370	262	FLT TØT:	63	63	42	34	5	22.2	.7	.746E+05	111	53	57	37	26
		47	51	41	IN CLR:	42	42	27	22	0	0.0	0.0	.178E+03	144	35	19	17	25
					NOT CLR:	21	21	15	12	5	66.5	2.2	.223E+06	51	85	126	20	1
FRA-KHI																		
5/11/79 *	BDB	329	352	217	FLT TØT:	79	79	0	39	0	.1	.0	.206E+04	0	39	44	79	0
		38	50	26	IN CLR:	78	78	0	38	0	0.0	0.0	.193E+04	0	37	45	78	0
					NOT CLR:	1	1	0	1	0	9.8	1.0	.123E+05	0	84	27	1	0
6/ 4/79 *	BDB	308	311	223	FLT TØT:	76	76	47	41	0	3.2	.8	.583E+05	90	49	112	76	0
		38	50	26	IN CLR:	57	57	36	32	0	0.0	0.0	.319E+04	92	42	102	57	0
					NOT CLR:	19	19	11	9	0	12.8	3.2	.224E+06	82	77	150	19	0
FRA-LHR																		
1/20/77	DDA	240	240	240	FLT TØT:	6	6	3	0	0	59.2	6.7	.342E+06	31	0	0	6	0
		51	52	50	IN CLR:	0	0	0	0	0	0.0	0.0	0.	0	0	0	0	0
					NOT CLR:	6	6	3	0	0	59.2	6.7	.342E+06	31	0	0	6	0
1/ 5/79	BBB	292	310	240	FLT TØT:	6	0	3	0	0	2.0	.3	0.	95	0	0	6	0
		51	52	50	IN CLR:	5	0	3	0	0	0.0	0.0	0.	95	0	0	5	0
					NOT CLR:	1	0	0	0	0	11.8	2.0	0.	0	0	0	1	0
2/14/77	DDA	240	240	240	FLT TØT:	6	6	3	0	0	0.0	0.0	.261E+03	53	0	0	6	0
		51	52	50	IN CLR:	6	6	3	0	0	0.0	0.0	.261E+03	53	0	0	6	0
					NOT CLR:	0	0	0	0	0	0.0	0.0	0.	0	0	0	0	0
2/14/79	BBB	286	310	212	FLT TØT:	7	0	3	3	0	1.7	.9	0.	115	49	33	2	5
		51	52	50	IN CLR:	5	0	2	2	0	0.0	0.0	0.	103	36	24	1	4
					NOT CLR:	2	0	1	1	0	6.1	3.0	0.	140	76	50	1	1
2/16/79 *	BBB	268	270	259	FLT TØT:	6	0	3	3	0	.1	.2	0.	57	38	35	6	0
		51	51	50	IN CLR:	5	0	2	2	0	0.0	0.0	0.	59	38	35	5	0
					NOT CLR:	1	0	1	1	0	.4	1.0	0.	55	39	35	1	0
3/15/79	BBB	322	351	224	FLT TØT:	5	0	3	0	0	10.5	.8	0.	167	0	0	0	0
		51	52	51	IN CLR:	4	0	2	0	0	0.0	0.0	0.	222	0	0	0	0
					NOT CLR:	1	0	1	0	0	52.5	4.0	0.	58	0	0	0	0
5/12/79	BDB	303	311	268	FLT TØT:	6	6	0	3	0	0.0	0.0	.114E+04	0	42	66	6	0
		51	52	50	IN CLR:	6	6	0	3	0	0.0	0.0	.114E+04	0	42	66	6	0
					NOT CLR:	0	0	0	0	0	0.0	0.0	0.	0	0	0	0	0

DEP-ARR IM/ID/IY	CODE	AVFL ALAT	EXHI EXTN	EXLO EXTS			NUMBER OF OBS					AVERAGES FOR THE FLIGHT		OZ	RH	H2O	TRCP N	STRAT N
					CLD	PD5	OZ	H2O	H2S	%TIC	PATCHES	PD5						
5/24/79 * BDB	276	291	201	FLT TØT:	6	6	3	1	1	40.1	4.7	.859E+06	78	100	177	6	0	
	51	51	50	IN CLR:	0	0	0	0	0	0.0	0.0	0.	0	0	0	0	0	
				NØT CLR:	6	6	3	1	1	40.1	4.7	.859E+06	78	100	177	6	0	
6/ 5/79 BDB	291	310	215	FLT TØT:	5	5	3	3	0	0.0	0.0	.226E+04	94	54	95	5	0	
	51	52	51	IN CLR:	5	5	3	3	0	0.0	0.0	.226E+04	94	54	95	5	0	
				NØT CLR:	0	0	0	0	0	0.0	0.0	0.	0	0	0	0	0	
9/ 7/76 BBA	352	390	280	FLT TØT:	6	0	2	0	0	.1	.2	0.	62	0	0	6	0	
	51	52	50	IN CLR:	5	0	2	0	0	0.0	0.0	0.	62	0	0	6	0	
				NØT CLR:	1	0	0	0	0	.4	1.0	0.	0	0	0	1	0	
10/ 9/77 BCB	303	311	286	FLT TØT:	5	5	0	0	0	5.1	0.0	.218E+05	0	0	0	5	0	
	51	52	50	IN CLR:	2	2	0	0	0	0.0	0.0	0.	0	0	0	2	0	
				NØT CLR:	3	3	0	0	0	8.5	0.0	.364E+05	0	0	0	3	0	
10/11/77 * BCB	277	290	228	FLT TØT:	5	5	0	0	0	5.8	0.0	.323E+05	0	0	0	5	0	
	52	52	52	IN CLR:	1	1	0	0	0	0.0	0.0	0.	0	0	0	1	0	
				NØT CLR:	4	4	0	0	0	7.3	0.0	.404E+05	0	0	0	4	0	
10/16/78 BBB	274	281	241	FLT TØT:	6	6	0	0	0	50.9	1.8	.177E+06	0	0	0	6	0	
	51	51	50	IN CLR:	0	0	0	0	0	0.0	0.0	0.	0	0	0	0	0	
				NØT CLR:	6	6	0	0	0	50.9	1.8	.177E+06	0	0	0	6	0	
10/30/78 BBB	294	310	240	FLT TØT:	7	7	3	3	0	0.0	0.0	.187E+02	41	45	65	7	0	
	51	52	50	IN CLR:	7	7	3	3	0	0.0	0.0	.187E+02	41	45	65	7	0	
				NØT CLR:	0	0	0	0	0	0.0	0.0	0.	0	0	0	0	0	
11/22/76 DDA	241	241	241	FLT TØT:	6	0	0	0	0	.4	.3	0.	0	0	0	6	0	
	51	52	50	IN CLR:	5	0	0	0	0	0.0	0.0	0.	0	0	0	5	0	
				NØT CLR:	1	0	0	0	0	2.4	2.0	0.	0	0	0	1	0	
11/29/76 DDA	240	240	238	FLT TØT:	7	0	0	0	0	51.5	2.0	0.	0	0	0	7	0	
	51	52	50	IN CLR:	2	0	0	0	0	0.0	0.0	0.	0	0	0	2	0	
				NØT CLR:	5	0	0	0	0	72.1	2.8	0.	0	0	0	5	0	
11/ 2/78 * BBB	281	290	257	FLT TØT:	5	5	2	3	0	0.0	0.0	0.	41	42	79	5	0	
	51	51	50	IN CLR:	5	5	2	3	0	0.0	0.0	0.	41	42	79	5	0	
				NØT CLR:	0	0	0	0	0	0.0	0.0	0.	0	0	0	0	0	
12/29/76 * DDA	230	230	230	FLT TØT:	5	0	0	0	0	0.0	0.0	0.	0	0	0	5	0	
	51	51	50	IN CLR:	5	0	0	0	0	0.0	0.0	0.	0	0	0	5	0	
				NØT CLR:	0	0	0	0	0	0.0	0.0	0.	0	0	0	0	0	
12/ 7/78 * BBB	267	271	252	FLT TØT:	6	6	3	4	1	0.0	0.0	.555E+02	41	68	131	6	0	
	51	51	50	IN CLR:	6	6	3	4	1	0.0	0.0	.555E+02	41	68	131	6	0	
				NØT CLR:	0	0	0	0	0	0.0	0.0	0.	0	0	0	0	0	
12/26/78 * BBB	274	291	209	FLT TØT:	5	5	0	2	0	64.8	1.2	.158E+06	0	67	56	0	0	
	51	51	50	IN CLR:	0	0	0	0	0	0.0	0.0	0.	0	0	0	0	0	
				NØT CLR:	5	5	0	2	0	64.8	1.2	.158E+06	0	67	56	0	0	

APPENDIX B

DEP-ARR IM/ID/IY	CODE	AVFL ALAT	EXHI EXTN	EXLØ EXTS	NUMBER OF CBS						AVERAGES FOR THE FLIGHT				TROP N	STRAT N			
					CLD	PD5	ØZ	H2Ø	H2S	%TIC	PATCHES	PD5	ØZ	RH	H2Ø				
FRA-THR																			
5/30/79	BDB	358 41	370 48	276 36	FLT IN NOT	TØT: CLR: CLR:	49 40 9	49 40 9	24 19 5	19 16 3	0 0 0	5.6 0.0 30.4	.9 0.0 5.1	.241E+06 .901E+03 .131E+07	226 239 177	37 36 43	20 21 16	39 36 3	10 4 6
9/ 7/76 *	BBA	341 42	350 50	198 36	FLT IN NOT	TØT: CLR: CLR:	54 54 0	0 0 0	33 33 0	0 0 0	0 0 0	0.0 0.0 0.0	0.0 0.0 0.0	0. 0. 0.	79 79 0	0 0 0	0 0 0	54 54 0	0 0 0
10/ 9/77 *	BCB	334 42	391 50	217 37	FLT IN NOT	TØT: CLR: CLR:	49 41 8	49 41 8	0 0 0	0 0 0	0 0 0	5.5 0.0 33.4	0.0 0.0 0.0	.201E+05 .863E+03 .119E+06	0 0 0	0 0 0	0 0 0	28 20 8	21 21 0
10/11/77	BCB	299 42	332 48	290 36	FLT IN NOT	TØT: CLR: CLR:	44 29 15	44 29 15	0 0 0	0 0 0	0 0 0	9.4 0.0 27.5	0.0 0.0 0.0	.340E+05 .499E+02 .997E+05	0 0 0	0 0 0	0 0 0	44 29 15	0 0 0
10/16/78 *	BBB	344 42	350 49	251 36	FLT IN NOT	TØT: CLR: CLR:	47 38 9	47 38 9	28 24 4	0 0 0	0 0 0	5.6 0.0 29.1	.7 0.0 3.7	.220E+05 .974E+03 .111E+06	68 70 59	0 0 0	0 0 0	47 38 9	0 0 0
10/30/78 *	BBB	279 42	280 49	250 36	FLT IN NOT	TØT: CLR: CLR:	41 29 12	41 29 12	25 18 7	22 18 4	3 1 2	11.5 0.0 39.3	1.0 0.0 3.3	.543E+05 .180E+02 .186E+06	56 52 65	62 55 93	125 125 122	41 29 12	0 0 0
11/23/77	BCB	352 41	370 48	266 36	FLT IN NOT	TØT: CLR: CLR:	41 41 0	41 41 0	25 25 0	0 0 0	0 0 0	0.0 0.0 0.0	0.0 0.0 0.0	.105E+02 .105E+02 0.	126 126 0	0 0 0	0 0 0	29 29 0	12 12 0
11/24/77 *	BCB	368 41	391 49	251 36	FLT IN NOT	TØT: CLR: CLR:	57 56 1	57 56 1	36 35 1	0 0 0	0 0 0	.5 0.0 26.3	0.0 0.0 0.0	.135E+02 .113E+02 .137E+03	130 134 0	0 0 0	0 0 0	27 26 1	30 30 0
11/ 2/78	BBB	328 42	331 49	260 37	FLT IN NOT	TØT: CLR: CLR:	45 39 6	45 39 6	22 19 3	25 23 2	1 0 1	3.2 0.0 23.8	.4 0.0 2.8	.601E+04 .506E+01 .451E+05	75 77 63	51 48 88	34 31 69	38 32 6	7 7 0
12/ 7/78	BBB	278 42	291 49	229 36	FLT IN NOT	TØT: CLR: CLR:	44 29 15	44 29 15	30 19 11	22 15 7	5 1 4	16.9 0.0 49.5	1.2 0.0 3.5	.120E+06 .787E+02 .351E+06	52 55 46	64 50 93	97 54 189	44 29 15	0 0 0
12/26/78	BBB	320 41	330 49	218 36	FLT IN NOT	TØT: CLR: CLR:	42 35 7	42 35 7	0 0 0	21 18 3	1 1 0	2.8 0.0 16.6	.6 0.0 3.6	.386E+05 .486E+02 .231E+06	0 0 0	47 45 55	32 25 72	0 0 0	0 0 0
GIG-JFK																			
4/10/76	BBA	325 7	350 39	204 -21	FLT IN NOT	TØT: CLR: CLR:	55 43 12	0 0 0	55 43 12	0 0 0	0 0 0	7.6 0.0 34.7	.9 0.0 4.0	0. 0. 0.	73 81 46	0 0 0	0 0 0	29 26 3	2 1 1

DEP-ARR IM/ID/IY	CODE	AVFL ALAT	EXHI EXTN	EXLG EXTS	NUMBER OF OBS					AVERAGES FOR THE FLIGHT			OZ	RH	H2O	TROP N	STRAT N
					CLD	PD5	OZ	H2O, H2S	%TIC	PATCHES	PD5						
GIG-JFK (CONT.)																	
4/ 9/77 * AAA	365 8	370 39	196 -22	FLT TOT:	97	0	0	0	0	10.9	.8	0.	0	0	0	92	5
				IN CLR:	67	0	0	0	0	0.0	0.0	0.	0	0	0	62	5
				NOT CLR:	30	0	0	0	0	35.2	2.5	0.	0	0	0	30	0
4/10/77 AAA	388 9	390 39	260 -21	FLT TOT:	99	0	0	0	0	7.6	.7	0.	0	0	0	89	10
				IN CLR:	76	0	0	0	0	0.0	0.0	0.	0	0	0	66	10
				NOT CLR:	23	0	0	0	0	32.5	2.9	0.	0	0	0	23	0
4/16/77 * AAA	368 9	371 39	291 -20	FLT TOT:	94	0	0	0	0	5.8	.7	0.	0	0	0	86	8
				IN CLR:	62	0	0	0	0	0.0	0.0	0.	0	0	0	54	8
				NOT CLR:	32	0	0	0	0	17.0	1.9	0.	0	0	0	32	0
4/17/77 AAA	388 9	430 40	235 -21	FLT TOT:	101	0	0	0	0	13.6	.9	0.	0	0	0	81	20
				IN CLR:	63	0	0	0	0	0.0	0.0	0.	0	0	0	43	20
				NOT CLR:	38	0	0	0	0	36.2	2.3	0.	0	0	0	38	0
4/23/77 * AAA	381 9	410 39	271 -21	FLT TOT:	93	0	0	0	0	14.5	.9	0.	0	0	0	93	0
				IN CLR:	65	0	0	0	0	0.0	0.0	0.	0	0	0	65	0
				NOT CLR:	28	0	0	0	0	48.2	3.0	0.	0	0	0	28	0
4/24/77 AAA	394 8	410 39	257 -21	FLT TOT:	99	0	0	0	0	23.7	1.0	0.	0	0	0	99	0
				IN CLR:	47	0	0	0	0	0.0	0.0	0.	0	0	0	47	0
				NOT CLR:	52	0	0	0	0	45.1	1.9	0.	0	0	0	52	0
GIG-PTY																	
9/ 4/76 BBA	364 -6	390 7	266 -21	FLT TOT:	66	0	33	0	0	0.0	0.0	0.	46	0	0	66	0
				IN CLR:	66	0	33	0	0	0.0	0.0	0.	46	0	0	66	0
				NOT CLR:	0	0	0	0	0	0.0	0.0	0.	0	0	0	0	0
GUA-LAX																	
4/ 7/76 * BBA	332 23	371 33	203 15	FLT TOT:	25	0	25	0	0	8.9	.7	0.	55	0	0	25	0
				IN CLR:	17	0	17	0	0	0.0	0.0	0.	60	0	0	17	0
				NOT CLR:	8	0	8	0	0	27.8	2.1	0.	45	0	0	8	0
4/23/76 * BBA	341 24	371 33	207 15	FLT TOT:	24	0	24	0	0	18.8	1.3	0.	85	0	0	24	0
				IN CLR:	17	0	17	0	0	0.0	0.0	0.	99	0	0	17	0
				NOT CLR:	7	0	7	0	0	64.4	4.6	0.	51	0	0	7	0
4/26/76 BBA	379 24	390 33	211 15	FLT TOT:	31	0	31	0	0	.3	.2	0.	99	0	0	31	0
				IN CLR:	29	0	29	0	0	0.0	0.0	0.	99	0	0	29	0
				NOT CLR:	2	0	2	0	0	4.7	2.5	0.	106	0	0	2	0
5/ 1/76 * BBA	337 23	371 33	208 15	FLT TOT:	41	0	27	0	0	1.7	.1	0.	98	0	0	41	0
				IN CLR:	36	0	24	0	0	0.0	0.0	0.	105	0	0	36	0
				NOT CLR:	5	0	3	0	0	13.6	1.2	0.	46	0	0	5	0

APPENDIX B

DEP-ARR	IM/ID/IY	CODE	AVFL ALAT	EXHI EXTN	EXLO EXTS	NUMBER OF OBS					AVERAGES FOR		THE FLIGHT			TROP	STRAT			
						CLD	PD5	OZ	H2O	H2S	%TIC	PATCHES	PD5	OZ	RH	H2O	N	N		
GUA-LAX (CONT.)																				
	5/19/79	* BDB	360 24	371 32	190 15	FLT IN NOT	TOT: CLR: CLR:	43 29 14	43 29 14	27 17 10	23 17 6	5 2 3	6.2 0.0 19.1	1.5 0.0 4.5	.103E+06 .295E+03 .316E+06	95 123 47	63 54 88	84 73 118	43 29 14	0 0 0
	5/20/79	BDB	363 24	392 33	215 16	FLT IN NOT	TOT: CLR: CLR:	46 41 5	46 41 5	29 26 3	23 21 2	0 0 0	.3 0.0 2.6	.2 0.0 1.6	.213E+04 .127E+03 .185E+05	133 142 52	40 39 48	65 66 54	39 34 5	7 7 0
	9/ 1/76	* BBA	324 23	331 32	210 15	FLT IN NOT	TOT: CLR: CLR:	38 38 0	0 0 0	22 22 0	0 0 0	0 0 0	0.0 0.0 0.0	0.0 0.0 0.0	0. 0. 0.	57 57 0	0 0 0	0 0 0	38 38 0	0 0 0
	9/ 4/76	BBA	367 24	390 33	296 15	FLT IN NOT	TOT: CLR: CLR:	43 43 0	0 0 0	28 28 0	0 0 0	0 0 0	0.0 0.0 0.0	0.0 0.0 0.0	0. 0. 0.	59 59 0	0 0 0	0 0 0	43 43 0	0 0 0
GUA-PTY																				
	9/ 4/76	* BBA	333 12	350 14	256 9	FLT IN NOT	TOT: CLR: CLR:	15 15 0	0 0 0	10 10 0	0 0 0	0 0 0	0.0 0.0 0.0	0.0 0.0 0.0	0. 0. 0.	44 44 0	0 0 0	0 0 0	15 15 0	0 0 0
GUA-SJO																				
	5/19/79	BDB	315 12	330 13	263 11	FLT IN NOT	TOT: CLR: CLR:	7 7 0	7 7 0	2 2 0	0 0 0	0 0 0	0.0 0.0 0.0	0.0 0.0 0.0	.430E+02 .430E+02 0.	38 38 0	0 0 0	0 0 0	7 7 0	0 0 0
	5/20/79	* BDB	325 13	350 14	261 12	FLT IN NOT	TOT: CLR: CLR:	8 8 0	8 8 0	4 4 0	0 0 0	0 0 0	0.0 0.0 0.0	0.0 0.0 0.0	.438E+02 .438E+02 0.	32 32 0	0 0 0	0 0 0	8 8 0	0 0 0
GUM-HNL																				
	2/ 3/76	* BBA	347 16	351 21	210 13	FLT IN NOT	TOT: CLR: CLR:	54 53 1	0 0 0	54 53 1	0 0 0	0 0 0	1.1 0.0 60.4	.0 0.0 1.0	0. 0. 0.	21 21 22	0 0 0	0 0 0	54 53 1	0 0 0
	3/28/76	* BBA	344 16	351 20	296 13	FLT IN NOT	TOT: CLR: CLR:	52 51 1	0 0 0	52 51 1	0 0 0	0 0 0	.0 0.0 .4	.0 0.0 1.0	0. 0. 0.	70 71 27	0 0 0	0 0 0	52 51 1	0 0 0
	3/29/76	BBA	353 19	390 21	261 14	FLT IN NOT	TOT: CLR: CLR:	36 30 6	0 0 0	36 30 6	0 0 0	0 0 0	.1 0.0 .4	.2 0.0 1.0	0. 0. 0.	52 53 48	0 0 0	0 0 0	36 30 6	0 0 0
	4/27/76	* BBA	344 20	351 23	207 14	FLT IN NOT	TOT: CLR: CLR:	50 44 6	0 0 0	50 44 6	0 0 0	0 0 0	6.8 0.0 56.4	.3 0.0 2.7	0. 0. 0.	84 88 52	0 0 0	0 0 0	50 44 6	0 0 0

DEP-ARR	IM/1D/1Y	CODE	AVFL	EXHI	EXLO	NUMBER OF OBS					AVERAGES FOR THE FLIGHT			ØZ	RH	H2Ø	TROP	STRAT		
			ALAT	EXTN	EXTS	CLD	PD5	ØZ	H2Ø	H2S	%TIC	PATCHES	PD5				N	N		
GUM-HNL (CONT.)																				
5/ 9/79	*	BDB	369	390	270	FLT	TØT:	86	86	0	43	7	5.8	1.3	.800E+05	0	56	89	86	0
			19	22	14	IN	CLR:	57	57	0	28	0	0.0	0.0	.222E+04	0	38	53	57	0
						NOT	CLR:	29	29	0	15	7	17.1	3.9	.233E+06	0	89	156	29	0
5/10/79		BDB	366	370	255	FLT	TØT:	68	68	0	35	10	8.4	1.1	.178E+06	0	64	97	68	0
			18	21	14	IN	CLR:	46	46	0	20	1	0.0	0.0	.517E+04	0	39	72	46	0
						NOT	CLR:	22	22	0	15	9	26.0	3.3	.539E+06	0	97	130	22	0
5/15/79	*	BDB	376	390	267	FLT	TØT:	78	78	0	38	0	.1	.1	.190E+04	0	38	35	78	0
			18	21	14	IN	CLR:	75	75	0	37	0	0.0	0.0	.826E+03	0	38	36	75	0
						NOT	CLR:	3	3	0	1	0	1.4	1.3	.289E+05	0	29	25	3	0
5/16/79		BDB	377	391	252	FLT	TØT:	75	75	0	40	0	.2	.0	.233E+04	0	38	34	75	0
			18	21	14	IN	CLR:	74	74	0	40	0	0.0	0.0	.266E+03	0	38	34	74	0
						NOT	CLR:	1	1	0	0	0	16.5	3.0	.155E+06	0	0	0	1	0
5/17/79	*	BDB	343	351	264	FLT	TØT:	75	75	48	39	0	0.0	0.0	.332E+03	77	29	61	75	0
			19	21	14	IN	CLR:	75	75	48	39	0	0.0	0.0	.332E+03	77	29	61	75	0
						NOT	CLR:	0	0	0	0	0	0.0	0.0	0.	0	0	0	0	0
5/18/79		BDB	330	370	277	FLT	TØT:	75	75	45	38	4	3.6	.6	.667E+05	60	49	164	75	0
			17	21	13	IN	CLR:	64	64	41	33	1	0.0	0.0	.139E+04	60	42	141	64	0
						NOT	CLR:	11	11	4	5	3	24.6	4.0	.447E+06	59	97	319	11	0
12/28/78	*	BBB	334	351	261	FLT	TØT:	83	83	52	47	0	0.0	0.0	.450E+01	49	15	60	0	0
			18	21	14	IN	CLR:	83	83	52	47	0	0.0	0.0	.450E+01	49	15	60	0	0
						NOT	CLR:	0	0	0	0	0	0.0	0.0	0.	0	0	0	0	0
12/29/78		BBB	324	370	229	FLT	TØT:	68	68	45	29	3	4.8	.9	.118E+05	73	26	140	0	0
			19	21	14	IN	CLR:	59	59	39	24	0	0.0	0.0	.837E+01	76	15	81	0	0
						NOT	CLR:	9	9	6	5	3	36.2	6.8	.891E+05	54	75	423	0	0
12/30/78	*	BBB	350	370	254	FLT	TØT:	73	73	47	41	0	0.0	0.0	.778E+01	61	16	47	0	0
			19	22	14	IN	CLR:	73	73	47	41	0	0.0	0.0	.778E+01	61	16	47	0	0
						NOT	CLR:	0	0	0	0	0	0.0	0.0	0.	0	0	0	0	0
12/31/78		BBB	367	370	287	FLT	TØT:	72	72	48	43	1	0.0	0.0	.134E+02	45	20	69	19	0
			23	27	15	IN	CLR:	72	72	48	43	1	0.0	0.0	.134E+02	45	20	69	19	0
						NOT	CLR:	0	0	0	0	0	0.0	0.0	0.	0	0	0	0	0
GUM-MNL																				
2/ 3/76		BBA	368	390	209	FLT	TØT:	21	0	21	0	0	2.0	.6	0.	7	0	0	21	0
			14	15	14	IN	CLR:	15	0	15	0	0	0.0	0.0	0.	7	0	0	15	0
						NOT	CLR:	6	0	6	0	0	7.1	2.0	0.	6	0	0	6	0
2/ 4/76	*	BBA	358	371	211	FLT	TØT:	17	0	17	0	0	7.0	1.0	0.	5	0	0	17	0
			14	15	14	IN	CLR:	13	0	13	0	0	0.0	0.0	0.	5	0	0	13	0
						NOT	CLR:	4	0	4	0	0	29.7	4.3	0.	6	0	0	4	0

APPENDIX B

DEP-ARR IM/ID/IY	CODE	AVFL ALAT	EXHI EXTN	EXLO EXTS		NUMBER OF OBS					AVERAGES FOR THE FLIGHT			QZ	RH	H2O	TROP N	STRAT N
						CLD	PD5	OZ	H2O	H2S	%TIC	PATCHES	PD5					
GUM-MNL (CONT.)																		
3/28/76	BBA	346 14	350 15	298 14	FLT TOT: IN CLR: NOT CLR:	14 10 4	0 0 0	14 10 4	0 0 0	0 0 0	.2 0.0 .7	.3 0.0 1.0	0. 0. 0.	24 24 26	0 0 0	0 0 0	14 10 4	0 0 0
5/17/79	BDB	308 14	311 15	272 14	FLT TOT: IN CLR: NOT CLR:	28 25 3	28 25 3	18 17 1	15 13 2	1 0 1	4.3 0.0 40.0	.3 0.0 3.0	.170E+05 .235E+04 .139E+06	44 45 30	34 28 69	301 227 785	23 25 3	0 0 0
5/18/79 *	BDB	357 14	370 15	234 14	FLT TOT: IN CLR: NOT CLR:	31 28 3	31 28 3	18 15 2	17 15 2	0 0 0	.5 0.0 5.2	.1 0.0 1.3	.298E+04 .105E+04 .210E+05	38 38 31	37 35 54	106 102 133	31 28 3	0 0 0
12/28/78	BBB	327 14	330 15	282 14	FLT TOT: IN CLR: NOT CLR:	29 28 1	29 28 1	18 18 0	16 16 0	0 0 0	.5 0.0 15.7	.2 0.0 6.0	.594E+03 .400E+02 .161E+05	26 26 0	29 29 0	115 115 0	0 0 0	0 0 0
12/29/78 *	BBB	351 14	370 15	210 14	FLT TOT: IN CLR: NOT CLR:	28 22 6	28 22 6	9 9 0	13 9 4	0 0 0	5.6 0.0 26.1	.5 0.0 2.3	.187E+05 .627E+03 .851E+05	29 29 0	46 27 87	66 39 125	0 0 0	0 0 0
GUM-NRT																		
5/10/79 *	BDB	367 25	370 34	328 15	FLT TOT: IN CLR: NOT CLR:	29 25 4	29 25 4	0 0 0	13 13 0	0 0 0	3.0 0.0 21.7	.4 0.0 3.0	.231E+05 .945E+03 .161E+06	0 0 0	47 47 0	72 72 0	29 25 4	0 0 0
5/10/79	BDB	381 25	390 35	218 16	FLT TOT: IN CLR: NOT CLR:	31 29 2	31 29 2	0 0 0	14 14 0	0 0 0	.4 0.0 6.3	.2 0.0 2.5	.618E+04 .247E+03 .921E+05	0 0 0	65 65 0	56 56 0	31 29 2	0 0 0
5/15/79	BDB	386 25	391 34	308 15	FLT TOT: IN CLR: NOT CLR:	31 17 14	31 17 14	0 0 0	14 10 4	4 0 4	6.3 0.0 13.9	1.6 0.0 3.6	.111E+06 .102E+03 .246E+06	0 0 0	82 74 100	72 59 104	31 17 14	0 0 0
5/16/79 *	BDB	368 25	371 34	328 15	FLT TOT: IN CLR: NOT CLR:	30 12 18	30 12 18	0 0 0	15 7 8	8 0 8	29.7 0.0 49.4	2.2 0.0 3.6	.283E+06 .238E+03 .472E+06	0 0 0	77 50 100	156 73 229	30 12 18	0 0 0
12/31/78 *	BBB	358 24	371 35	196 14	FLT TOT: IN CLR: NOT CLR:	31 31 0	31 31 0	19 19 0	16 16 0	0 0 0	0.0 0.0 0.0	0.0 0.0 0.	.302E+02 .302E+02 0.	38 38 0	24 24 0	40 40 0	0 0 0	0 0 0
12/31/78	BBB	378 25	390 34	231 15	FLT TOT: IN CLR: NOT CLR:	31 30 1	31 30 1	19 18 1	11 11 0	0 0 0	.1 0.0 2.0	.0 0.0 1.0	.106E+02 .109E+02 0.	53 54 38	25 25 0	24 24 0	0 0 0	0 0 0

DEP-ARR IM/ID/IY	CODE	AVFL ALAT	EXHI EXTN	EXLO EXTS	NUMBER OF OBS					AVERAGES FOR THE FLIGHT			ØZ	RH	H2Ø	TRØP N	STRAT N		
					CLD	PD5	ØZ	H2Ø	H2S	%TIC	PATCHES	PD5							
HKG-HND																			
1/23/76	* BBA	307 27	311 34	219 22	FLT	TØT:	30	0	30	0	0	0.0	0.0	0.	18	0	0	30	0
					IN	CLR:	30	0	30	0	0	0.0	0.0	0.	18	0	0	30	0
					NOT	CLR:	0	0	0	0	0	0.0	0.0	0.	0	0	0	0	0
3/19/76	* BBA	308 27	311 34	221 22	FLT	TØT:	28	0	28	0	0	0.0	0.0	0.	72	0	0	28	0
					IN	CLR:	28	0	28	0	0	0.0	0.0	0.	72	0	0	28	0
					NOT	CLR:	0	0	0	0	0	0.0	0.0	0.	0	0	0	0	0
3/25/76	BBA	351 28	371 35	213 21	FLT	TØT:	22	0	22	0	0	0.0	0.0	0.	98	0	0	20	2
					IN	CLR:	22	0	22	0	0	0.0	0.0	0.	98	0	0	20	2
					NOT	CLR:	0	0	0	0	0	0.0	0.0	0.	0	0	0	0	0
4/21/76	BBA	360 29	371 35	213 22	FLT	TØT:	19	0	19	0	0	26.6	1.2	0.	70	0	0	19	0
					IN	CLR:	8	0	8	0	0	0.0	0.0	0.	64	0	0	8	0
					NOT	CLR:	11	0	11	0	0	46.0	2.1	0.	75	0	0	11	0
9/ 6/76	* BBA	381 28	390 34	264 22	FLT	TØT:	32	0	19	0	0	2.5	.3	0.	64	0	0	32	0
					IN	CLR:	27	0	16	0	0	0.0	0.0	0.	62	0	0	27	0
					NOT	CLR:	5	0	3	0	0	16.2	1.8	0.	74	0	0	5	0
10/ 8/77	* BCB	345 28	351 34	250 22	FLT	TØT:	37	37	0	0	0	.3	0.0	.511E+01	0	0	0	37	0
					IN	CLR:	35	35	0	0	0	0.0	0.0	.541E+01	0	0	0	35	0
					NOT	CLR:	2	2	0	0	0	6.3	0.0	0.	0	0	0	2	0
10/13/77	BCB	361 29	371 35	212 22	FLT	TØT:	28	28	0	0	0	.8	0.0	.130E+04	0	0	0	28	0
					IN	CLR:	26	26	0	0	0	0.0	0.0	.265E+02	0	0	0	26	0
					NOT	CLR:	2	2	0	0	0	10.6	0.0	.178E+05	0	0	0	2	0
HKG-MNL																			
1/ 1/77	* DDA	341 19	350 21	283 16	FLT	TØT:	11	0	0	0	0	.5	.2	0.	0	0	0	11	0
					IN	CLR:	10	0	0	0	0	0.0	0.0	0.	0	0	0	10	0
					NOT	CLR:	1	0	0	0	0	5.5	2.0	0.	0	0	0	1	0
1/ 1/77	DDA	318 19	330 21	257 17	FLT	TØT:	8	0	0	0	0	3.8	1.1	0.	0	0	0	8	0
					IN	CLR:	6	0	0	0	0	0.0	0.0	0.	0	0	0	6	0
					NOT	CLR:	2	0	0	0	0	15.3	4.5	0.	0	0	0	2	0
1/ 4/77	DDA	321 19	330 21	263 16	FLT	TØT:	10	0	0	0	0	1.3	.2	0.	0	0	0	10	0
					IN	CLR:	8	0	0	0	0	0.0	0.0	0.	0	0	0	8	0
					NOT	CLR:	2	0	0	0	0	6.5	1.0	0.	0	0	0	2	0
1/ 4/77	* DDA	334 19	350 21	252 16	FLT	TØT:	12	0	0	0	0	0.0	0.0	0.	0	0	0	12	0
					IN	CLR:	12	0	0	0	0	0.0	0.0	0.	0	0	0	12	0
					NOT	CLR:	0	0	0	0	0	0.0	0.0	0.	0	0	0	0	0
2/ 3/76	* BBA	298 19	391 21	219 16	FLT	TØT:	5	0	5	0	0	0.0	0.0	0.	29	0	0	5	0
					IN	CLR:	5	0	5	0	0	0.0	0.0	0.	29	0	0	5	0
					NOT	CLR:	0	0	0	0	0	0.0	0.0	0.	0	0	0	0	0

DEP-ARR IM/ID/IY	CODE	AVFL ALAT	EXHI EXTN	EXLØ EXTS	NUMBER OF OBS					AVERAGES FOR THE FLIGHT			TROP			STRAT		
					CLD	PD5	OZ	H2O,	H2S	%TIC	PATCHES	PD5	OZ	RH	H2O	N	N	
HKG-MNL (CONT.)																		
2/ 4/76	BBA	259 18	341 22	210 16	FLT TOT:	6	0	6	0	0	0.0	0.0	0.	33	0	0	6	0
					IN CLR:	6	0	6	0	0	0.0	0.0	0.	33	0	0	6	0
					NOT CLR:	0	0	0	0	0	0.0	0.0	0.	0	0	0	0	0
3/28/76 *	BBA	381 19	391 21	340 17	FLT TOT:	8	0	8	0	0	.3	.6	0.	27	0	0	8	0
					IN CLR:	6	0	6	0	0	0.0	0.0	0.	28	0	0	6	0
					NOT CLR:	2	0	2	0	0	1.4	2.5	0.	25	0	0	2	0
3/29/76	BBA	355 18	371 21	293 16	FLT TOT:	7	0	7	0	0	.1	.1	0.	33	0	0	7	0
					IN CLR:	6	0	6	0	0	0.0	0.0	0.	29	0	0	6	0
					NOT CLR:	1	0	1	0	0	.4	1.0	0.	58	0	0	1	0
8/17/76	DDA	317 18	330 21	263 16	FLT TOT:	11	0	7	0	0	9.1	1.6	0.	31	0	0	11	0
					IN CLR:	6	0	3	0	0	0.0	0.0	0.	29	0	0	6	0
					NOT CLR:	5	0	4	0	0	20.0	3.6	0.	32	0	0	5	0
8/17/76 *	DDA	343 19	351 21	289 16	FLT TOT:	12	0	8	0	0	28.9	1.5	0.	20	0	0	12	0
					IN CLR:	5	0	5	0	0	0.0	0.0	0.	22	0	0	5	0
					NOT CLR:	7	0	3	0	0	49.5	2.6	0.	18	0	0	7	0
HKG-NRT																		
1/ 4/79 *	BBB	306 29	310 34	187 22	FLT TOT:	41	0	27	20	1	0.0	0.0	0.	51	25	52	41	0
					IN CLR:	41	0	27	20	1	0.0	0.0	0.	51	25	52	41	0
					NOT CLR:	0	0	0	0	0	0.0	0.0	0.	0	0	0	0	0
2/13/79 *	BBB	346 28	351 34	228 22	FLT TOT:	49	0	29	25	2	8.6	.6	0.	44	53	152	49	0
					IN CLR:	38	0	24	21	0	0.0	0.0	0.	42	45	74	38	0
					NOT CLR:	11	0	5	4	2	38.5	2.5	0.	57	96	560	11	0
2/17/79	BBB	354 28	370 34	245 22	FLT TOT:	31	0	19	11	0	0.0	0.0	0.	151	16	55	20	11
					IN CLR:	31	0	19	11	0	0.0	0.0	0.	151	16	55	20	11
					NOT CLR:	0	0	0	0	0	0.0	0.0	0.	0	0	0	0	0
2/22/79 *	BBB	347 28	351 34	251 22	FLT TOT:	41	0	26	21	0	5.9	.2	0.	58	21	35	41	0
					IN CLR:	35	0	24	21	0	0.0	0.0	0.	57	21	35	35	0
					NOT CLR:	6	0	2	0	0	40.5	1.7	0.	62	0	0	6	0
3/14/79 *	BBB	372 28	391 34	231 22	FLT TOT:	46	0	30	23	0	.1	0.0	0.	18	26	37	46	0
					IN CLR:	45	0	30	23	0	0.0	0.0	0.	18	26	37	45	0
					NOT CLR:	1	0	0	0	0	6.3	0.0	0.	0	0	0	1	0
5/11/79 *	BDB	341 29	350 34	274 22	FLT TOT:	44	44	0	24	7	13.0	1.0	.107E+06	0	67	137	44	0
					IN CLR:	24	24	0	15	1	0.0	0.0	.104E+05	0	50	114	24	0
					NOT CLR:	20	20	0	9	6	28.6	2.2	.223E+06	0	95	173	20	0
5/25/79	BDB	363 28	370 35	223 22	FLT TOT:	34	34	20	16	0	0.0	0.0	.996E+02	140	30	74	34	0
					IN CLR:	34	34	20	16	0	0.0	0.0	.996E+02	140	30	74	34	0
					NOT CLR:	0	0	0	0	0	0.0	0.0	0.	0	0	0	0	0

DEP-ARR IM/ID/IY	CODE	AVFL ALAT	EXHI EXTN	EXLO EXTS	NUMBER OF OBS						AVERAGES FOR THE FLIGHT				TRCP N	STRAT N			
					CLD	PD5	OZ	H2O	H2S	%TIC	PATCHES	PD5	OZ	RH			H2O		
HKG-NRT (CONT.)																			
5/31/79	BDB	361 29	370 35	258 22	FLT	TOT:	37	37	24	18	0	0.0	0.0	.118E+05	122	38	89	30	7
					IN	CLR:	37	37	24	18	0	0.0	0.0	.118E+05	122	38	89	30	7
					NOT	CLR:	0	0	0	0	0	0.0	0.0	0.	0	0	0	0	0
6/ 4/79 *	BDB	370 29	391 34	271 22	FLT	TOT:	38	38	25	22	4	10.6	2.1	.158E+06	105	73	89	38	0
					IN	CLR:	18	18	12	10	2	0.0	0.0	.111E+05	121	56	95	18	0
					NOT	CLR:	20	20	13	12	2	20.1	3.9	.290E+06	90	88	84	20	0
10/15/78 *	BBB	346 29	350 35	253 22	FLT	TOT:	35	35	23	0	0	10.4	.6	.475E+05	40	0	0	35	0
					IN	CLR:	29	29	20	0	0	0.0	0.0	.304E+03	39	0	0	29	0
					NOT	CLR:	6	6	3	0	0	60.6	3.3	.276E+06	43	0	0	6	0
10/29/78 *	BBB	335 27	351 34	243 22	FLT	TOT:	40	40	26	20	0	2.0	.2	.544E+04	30	53	190	40	0
					IN	CLR:	38	38	25	19	0	0.0	0.0	.833E+01	30	53	175	38	0
					NOT	CLR:	2	2	1	1	0	39.2	4.0	.109E+06	34	44	483	2	0
11/ 3/78	BBB	326 28	330 34	260 22	FLT	TOT:	32	32	20	17	0	0.0	0.0	.992E+01	61	34	114	32	0
					IN	CLR:	32	32	20	17	0	0.0	0.0	.992E+01	61	34	114	32	0
					NOT	CLR:	0	0	0	0	0	0.0	0.0	0.	0	0	0	0	0
12/ 8/78	BBB	352 29	370 35	252 22	FLT	TOT:	31	31	19	13	0	0.0	0.0	.188E+02	66	36	21	31	0
					IN	CLR:	31	31	19	13	0	0.0	0.0	.188E+02	66	36	21	31	0
					NOT	CLR:	0	0	0	0	0	0.0	0.0	0.	0	0	0	0	0
12/27/78	BBB	354 29	370 34	261 22	FLT	TOT:	31	31	0	13	2	0.0	0.0	.143E+02	0	31	139	0	0
					IN	CLR:	31	31	0	13	2	0.0	0.0	.143E+02	0	31	139	0	0
					NOT	CLR:	0	0	0	0	0	0.0	0.0	0.	0	0	0	0	0
HKG-SFO																			
1/18/78 *	ABB	381 43	430 55	187 22	FLT	TOT:	162	162	0	85	13	.3	.0	.548E+04	0	45	65	52	110
					IN	CLR:	160	160	0	85	13	0.0	0.0	.206E+03	0	45	65	50	110
					NOT	CLR:	2	2	0	0	0	27.8	4.0	.428E+06	0	0	0	2	0
1/20/78 *	ABB	421 25	430 28	254 22	FLT	TOT:	19	19	0	9	4	0.0	0.0	.289E+02	0	85	54	19	0
					IN	CLR:	19	19	0	9	4	0.0	0.0	.289E+02	0	85	54	19	0
					NOT	CLR:	0	0	0	0	0	0.0	0.0	0.	0	0	0	0	0
1/20/78	ABB	379 34	391 38	265 22	FLT	TOT:	117	117	0	67	9	0.0	0.0	.602E+01	0	64	76	75	42
					IN	CLR:	117	117	0	67	9	0.0	0.0	.602E+01	0	64	76	75	42
					NOT	CLR:	0	0	0	0	0	0.0	0.0	0.	0	0	0	0	0
1/27/78	ABB	392 35	411 38	335 32	FLT	TOT:	79	79	52	46	0	.2	.0	.351E+01	158	46	48	56	23
					IN	CLR:	77	77	51	45	0	0.0	0.0	.320E+01	160	46	48	54	23
					NOT	CLR:	2	2	1	1	0	7.5	1.5	.153E+02	57	33	61	2	0
1/27/78 *	ABB	388 39	410 54	369 22	FLT	TOT:	102	102	67	58	0	0.0	0.0	.395E+01	315	36	45	43	59
					IN	CLR:	102	102	67	58	0	0.0	0.0	.395E+01	315	36	45	43	59
					NOT	CLR:	0	0	0	0	0	0.0	0.0	0.	0	0	0	0	0

APPENDIX B

DEP-ARR	IM/1D/1Y	CODE	AVFL ALAT	EXHI EXTN	EXLO EXTS	NUMBER OF OBS					AVERAGES FOR		THE FLIGHT		TROP			STRAT		
						CLD	PD5	ØZ	H2Ø	H2S	%TIC	PATCHES	PD5	ØZ	RH	H2Ø	N	N		
HKG-SFO (CONT.)																				
	1/29/78	ABB	399 38	410 38	208 38	FLT	TØT:	20	20	11	10	1	0.0	0.0	.159E+01	283	71	44	1	19
						IN	CLR:	20	20	11	10	1	0.0	0.0	.159E+01	283	71	44	1	19
						NOT	CLR:	0	0	0	0	0	0.0	0.0	0.	0	0	0	0	0
	2/ 5/78	* ABB	389 43	430 55	201 22	FLT	TØT:	136	136	89	77	21	0.0	0.0	.866E+02	320	65	37	41	95
						IN	CLR:	136	136	89	77	21	0.0	0.0	.866E+02	320	65	37	41	95
						NOT	CLR:	0	0	0	0	0	0.0	0.0	0.	0	0	0	0	0
	5/24/78	* ABB	390 44	410 58	217 22	FLT	TØT:	141	141	91	40	6	.0	.0	.155E+02	398	40	35	56	85
						IN	CLR:	140	140	91	40	6	0.0	0.0	.905E+01	398	40	35	55	85
						NOT	CLR:	1	1	0	0	0	.4	1.0	.918E+03	0	0	0	1	0
	5/26/78	ABB	368 38	390 45	312 22	FLT	TØT:	116	116	70	0	0	0.0	0.0	.827E+01	245	0	0	92	24
						IN	CLR:	116	116	70	0	0	0.0	0.0	.827E+01	245	0	0	92	24
						NOT	CLR:	0	0	0	0	0	0.0	0.0	0.	0	0	0	0	0
	5/26/78	* ABB	377 43	430 55	266 22	FLT	TØT:	153	153	101	0	0	.0	.0	.343E+01	263	0	0	90	63
						IN	CLR:	152	152	100	0	0	0.0	0.0	.345E+01	265	0	0	89	63
						NOT	CLR:	1	1	1	0	0	.4	1.0	0.	57	0	0	1	0
	5/28/78	ABB	375 39	391 44	256 22	FLT	TØT:	130	130	84	0	0	0.0	0.0	.826E+01	158	0	0	110	20
						IN	CLR:	130	130	84	0	0	0.0	0.0	.826E+01	158	0	0	110	20
						NOT	CLR:	0	0	0	0	0	0.0	0.0	0.	0	0	0	0	0
	5/29/78	* ABB	371 43	411 55	213 22	FLT	TØT:	148	148	95	45	24	0.0	0.0	.820E+01	204	88	45	115	33
						IN	CLR:	148	148	95	45	24	0.0	0.0	.820E+01	204	88	45	115	33
						NOT	CLR:	0	0	0	0	0	0.0	0.0	0.	0	0	0	0	0
	5/30/78	ABB	374 39	410 45	259 22	FLT	TØT:	131	130	86	10	0	0.0	0.0	.657E+01	188	54	216	104	27
						IN	CLR:	131	130	86	10	0	0.0	0.0	.657E+01	188	54	216	104	27
						NOT	CLR:	0	0	0	0	0	0.0	0.0	0.	0	0	0	0	0
HKG-SIN																				
	1/20/78	* ABB	399 11	411 21	200 3	FLT	TØT:	32	32	0	2	0	1.7	.6	.406E+03	0	45	225	32	0
						IN	CLR:	28	28	0	2	0	0.0	0.0	.118E+03	0	45	225	28	0
						NOT	CLR:	4	4	0	0	0	13.8	4.5	.242E+04	0	0	0	4	0
	1/27/78	* ABB	403 11	410 21	295 3	FLT	TØT:	32	32	0	16	15	6.3	.9	.816E+04	0	95	74	32	0
						IN	CLR:	22	22	0	13	12	0.0	0.0	.186E+03	0	94	73	22	0
						NOT	CLR:	10	10	0	3	3	20.0	2.9	.257E+05	0	100	79	10	0
	5/27/78	ABB	422 12	432 21	271 3	FLT	TØT:	31	31	18	0	0	0.0	0.0	.145E+01	49	0	0	31	0
						IN	CLR:	31	31	18	0	0	0.0	0.0	.145E+01	49	0	0	31	0
						NOT	CLR:	0	0	0	0	0	0.0	0.0	0.	0	0	0	0	0
	5/28/78	* ABB	397 12	411 21	246 3	FLT	TØT:	33	33	21	0	0	0.0	0.0	.465E+01	41	0	0	33	0
						IN	CLR:	33	33	21	0	0	0.0	0.0	.465E+01	41	0	0	33	0
						NOT	CLR:	0	0	0	0	0	0.0	0.0	0.	0	0	0	0	0

DEP-ARR	IM/ID/IY	CODE	AVFL ALAT	EXHI EXTN	EXLO EXTS	NUMBER OF OBS					AVERAGES FOR THE FLIGHT					TROP	STRAT			
						CLD	PD5	OZ	H2O	H2S	%TIC	PATCHES	PD5	OZ	RH	H2O	N	N		
HKG-SIN (CONT.)																				
	5/29/78	ABB	426 11	431 21	321 4	FLT	TOT:	25	25	16	13	7	0.0	0.0	.256E+01	42	93	23	25	0
						IN	CLR:	25	25	16	13	7	0.0	0.0	.256E+01	42	93	23	25	0
						NOT	CLR:	0	0	0	0	0	0.0	0.0	0.	0	0	0	0	0
	5/30/78	* ABB	405 13	411 21	276 6	FLT	TOT:	27	27	17	7	3	0.0	0.0	.394E+01	57	58	189	27	0
						IN	CLR:	27	27	17	7	3	0.0	0.0	.394E+01	57	58	189	27	0
						NOT	CLR:	0	0	0	0	0	0.0	0.0	0.	0	0	0	0	0
HND-JFK																				
	1/21/77	* AAA	381 54	410 65	277 37	FLT	TOT:	148	148	94	123	0	.3	.0	.351E+03	472	24	14	14	134
						IN	CLR:	145	145	93	122	0	0.0	0.0	.861E+00	475	23	14	11	134
						NOT	CLR:	3	3	1	1	0	13.1	1.7	.173E+05	183	65	27	3	0
	1/23/77	AAA	388 51	410 60	269 36	FLT	TOT:	129	129	83	106	0	.1	.0	.337E+01	490	13	14	4	125
						IN	CLR:	128	128	83	105	0	0.0	0.0	.340E+01	490	12	13	3	125
						NOT	CLR:	1	1	0	1	0	18.8	3.0	0.	0	26	39	1	0
	1/28/77	* AAA	382 54	430 62	206 37	FLT	TOT:	134	134	0	113	0	0.0	0.0	.768E+01	0	18	17	15	119
						IN	CLR:	134	134	0	113	0	0.0	0.0	.768E+01	0	18	17	15	119
						NOT	CLR:	0	0	0	0	0	0.0	0.0	0.	0	0	0	0	0
	1/ 8/78	* ABB	381 56	411 65	334 37	FLT	TOT:	136	136	0	0	0	.3	.0	.109E+02	0	0	0	4	132
						IN	CLR:	134	134	0	0	0	0.0	0.0	.627E+01	0	0	0	2	132
						NOT	CLR:	2	2	0	0	0	21.8	1.5	.321E+03	0	0	0	2	0
	1/10/78	ABB	373 54	391 65	238 36	FLT	TOT:	132	132	0	0	0	1.1	.0	.290E+03	0	0	0	13	119
						IN	CLR:	129	129	0	0	0	0.0	0.0	.872E+01	0	0	0	12	117
						NOT	CLR:	3	3	0	0	0	47.1	2.0	.124E+05	0	0	0	1	2
	1/13/78	ABB	407 49	410 55	364 42	FLT	TOT:	23	23	0	10	0	.1	.0	.139E+01	0	51	46	1	22
						IN	CLR:	22	22	0	10	0	0.0	0.0	.145E+01	0	51	46	0	22
						NOT	CLR:	1	1	0	0	0	1.6	1.0	0.	0	0	0	1	0
	1/16/78	ABB	391 51	430 60	249 36	FLT	TOT:	122	122	0	70	2	2.3	.1	.158E+05	0	28	36	11	111
						IN	CLR:	118	118	0	69	1	0.0	0.0	.818E+01	0	27	36	7	111
						NOT	CLR:	4	4	0	1	1	69.7	3.8	.481E+06	0	100	35	4	0
	1/17/78	* ABB	379 53	410 62	270 37	FLT	TOT:	147	147	0	82	7	3.9	.2	.125E+05	0	43	44	3	144
						IN	CLR:	139	139	0	82	7	0.0	0.0	.556E+02	0	43	44	0	139
						NOT	CLR:	8	8	0	0	0	72.5	3.0	.229E+06	0	0	0	3	5
	2/11/78	ABB	403 46	410 47	195 41	FLT	TOT:	41	41	27	23	0	0.0	0.0	.383E+01	428	53	63	1	40
						IN	CLR:	41	41	27	23	0	0.0	0.0	.333E+01	428	53	63	1	40
						NOT	CLR:	0	0	0	0	0	0.0	0.0	0.	0	0	0	0	0
	3/26/77	AAA	352 46	370 50	261 41	FLT	TOT:	54	54	35	45	4	3.9	.4	.544E+04	213	61	21	0	0
						IN	CLR:	45	45	28	37	1	0.0	0.0	.258E+03	224	54	18	0	0
						NOT	CLR:	9	9	7	8	3	23.3	2.7	.313E+05	168	93	33	0	0

APPENDIX B

DEP-ARR	IM/ID/IY	CODE	AVFL ALAT	EXHI EXTN	EXLO EXTS	NUMBER OF OBS					AVERAGES FOR THE FLIGHT			OZ	RH	H2O	TROP N	STRAT N		
						CLD	PD5	OZ	H2O, H2S	%TIC	PATCHES	PD5								
HND-JFK (CONT.)																				
	4/ 6/77	* AAA	391 55	430 65	278 37	FLT IN NOT	TOT CLR CLR	151 150 1	0 0 0	0 0 0	0 0 0	0 0 0	.0 0.0 2.7	.0 0.0 1.0	0. 0. 0.	0 0 0	0 0 0	3 2 1	148 148 0	
	4/ 8/77	AAA	376 52	410 60	206 36	FLT IN NOT	TOT CLR CLR	131 125 6	0 0 0	0 0 0	0 0 0	0 0 0	1.1 0.0 24.4	.1 0.0 2.0	0. 0. 0.	0 0 0	0 0 0	31 25 6	100 100 0	
	4/10/77	* AAA	348 53	351 64	216 36	FLT IN NOT	TOT CLR CLR	144 133 11	0 0 0	0 0 0	0 0 0	0 0 0	2.6 0.0 33.4	.2 0.0 2.3	0. 0. 0.	0 0 0	0 0 0	35 24 11	109 109 0	
	4/12/77	AAA	347 46	370 51	265 36	FLT IN NOT	TOT CLR CLR	127 102 25	0 0 0	0 0 0	0 0 0	0 0 0	7.8 0.0 39.7	.5 0.0 2.8	0. 0. 0.	0 0 0	0 0 0	74 49 25	53 53 0	
	4/13/77	* AAA	386 54	431 65	264 37	FLT IN NOT	TOT CLR CLR	147 136 11	0 0 0	0 0 0	0 0 0	0 0 0	.9 0.0 11.5	.2 0.0 2.5	0. 0. 0.	0 0 0	0 0 0	46 35 11	101 101 0	
	4/15/77	AAA	377 52	410 60	270 36	FLT IN NOT	TOT CLR CLR	130 101 29	0 0 0	0 0 0	0 0 0	0 0 0	6.7 0.0 29.9	.5 0.0 2.2	0. 0. 0.	0 0 0	0 0 0	40 12 28	90 89 1	
	4/17/77	* AAA	383 53	431 64	281 37	FLT IN NOT	TOT CLR CLR	153 142 11	0 0 0	0 0 0	0 0 0	0 0 0	3.8 0.0 53.2	.2 0.0 3.5	0. 0. 0.	0 0 0	0 0 0	41 30 11	112 112 0	
	4/19/77	AAA	374 51	390 59	278 37	FLT IN NOT	TOT CLR CLR	126 93 33	0 0 0	0 0 0	0 0 0	0 0 0	13.1 0.0 49.9	1.0 0.0 3.7	0. 0. 0.	0 0 0	0 0 0	57 34 23	69 59 10	
	4/20/77	* AAA	378 53	411 61	276 37	FLT IN NOT	TOT CLR CLR	124 115 9	0 0 0	0 0 0	0 0 0	0 0 0	1.9 0.0 26.5	.2 0.0 2.1	0. 0. 0.	0 0 0	0 0 0	29 21 8	95 94 1	
	4/22/77	AAA	368 50	390 59	200 36	FLT IN NOT	TOT CLR CLR	135 113 22	0 0 0	0 0 0	0 0 0	0 0 0	4.4 0.0 27.1	.3 0.0 1.6	0. 0. 0.	0 0 0	0 0 0	44 29 15	91 84 7	
	4/24/77	* AAA	371 52	390 61	205 37	FLT IN NOT	TOT CLR CLR	151 129 22	0 0 0	0 0 0	0 0 0	0 0 0	6.5 0.0 44.8	.4 0.0 2.6	0. 0. 0.	0 0 0	0 0 0	63 41 22	88 88 0	
	4/25/77	AAA	383 53	410 63	243 36	FLT IN NOT	TOT CLR CLR	134 113 21	0 0 0	0 0 0	0 0 0	0 0 0	6.1 0.0 39.1	.4 0.0 2.5	0. 0. 0.	0 0 0	0 0 0	20 10 10	114 103 11	
	4/26/77	* AAA	358 51	370 59	279 37	FLT IN NOT	TOT CLR CLR	145 128 17	145 128 17	92 83 9	0 0 0	0 0 0	3.7 0.0 31.6	.3 0.0 2.6	.104E+05 .175E+04 .755E+05	345 373 87	0 0 0	0 0 0	87 70 17	58 56 0

APPENDIX B

DEP-ARR	IM/ID/IY	CODE	AVFL ALAT	EXHI EXTN	EXLO EXTS	NUMBER OF OBS					AVERAGES FOR THE FLIGHT			TROP			STRAT
						CLD	PD5	OZ	H2O, H2S	%TIC	PATCHES	PD5	OZ	RH	H2O	N	N
HND-JFK (CONT.)																	
4/28/77	AAA	361 52	410 59	200 37	FLT TOT: IN CLR: NOT CLR:	128 111 17	128 111 17	84 74 10	0 0 0	5.8 0.0 43.9	.3 0.0 2.2	.340E+05 .701E+02 .256E+06	521 578 99	0 0 0	0 0 0	28 12 16	100 99 1
4/29/77	* AAA	374 53	410 63	218 37	FLT TOT: IN CLR: NOT CLR:	148 148 0	148 148 0	96 96 0	0 0 0	0.0 0.0 0.0	0.0 0.0 0.0	.679E+03 .679E+03 0.	527 527 0	0 0 0	0 0 0	36 36 0	112 112 0
4/ 9/78	ABB	379 48	391 59	217 35	FLT TOT: IN CLR: NOT CLR:	81 73 8	81 73 8	0 0 0	41 35 6	6.8 0.0 68.4	.1 0.0 .9	.185E+05 .351E+03 .184E+06	0 0 0	73 68 100	50 54 28	29 22 7	52 51 1
4/28/78	* ABB	370 54	390 65	255 37	FLT TOT: IN CLR: NOT CLR:	145 132 13	145 132 13	0 0 0	74 66 8	3.0 0.0 33.6	.3 0.0 2.8	.263E+05 .925E+03 .283E+06	0 0 0	76 73 97	39 38 45	45 34 11	100 98 2
4/30/78	ABB	370 54	390 65	260 36	FLT TOT: IN CLR: NOT CLR:	134 128 6	134 128 6	0 0 0	71 70 1	1.1 0.0 24.3	.1 0.0 1.3	.322E+04 .106E+04 .492E+05	0 0 0	59 58 100	46 45 119	32 26 6	102 102 0
5/ 1/77	AAA	387 50	410 59	252 35	FLT TOT: IN CLR: NOT CLR:	130 123 7	130 123 7	79 79 0	0 0 0	1.4 0.0 26.0	.1 0.0 2.4	.522E+04 .460E+02 .961E+05	614 614 0	0 0 0	0 0 0	14 7 7	116 116 0
5/ 1/78	* ABB	382 54	431 65	264 37	FLT TOT: IN CLR: NOT CLR:	146 145 1	146 145 1	0 0 0	82 81 1	.1 0.0 13.7	.0 0.0 1.0	.362E+03 .316E+03 .703E+04	0 0 0	54 53 100	34 34 33	35 34 1	111 111 0
5/ 3/78	ABB	377 46	411 49	264 35	FLT TOT: IN CLR: NOT CLR:	124 101 23	124 101 23	0 0 0	71 60 11	9.6 0.0 52.0	.4 0.0 2.0	.198E+05 .804E+03 .103E+06	0 0 0	68 62 100	47 45 60	35 21 14	89 80 9
5/ 4/78	* ABB	378 54	431 65	199 36	FLT TOT: IN CLR: NOT CLR:	141 128 13	141 128 13	0 0 0	79 74 5	4.0 0.0 43.8	.2 0.0 2.0	.697E+04 .286E+03 .728E+05	0 0 0	68 68 65	60 58 100	32 22 10	109 106 3
5/ 6/78	ABB	379 51	410 60	261 35	FLT TOT: IN CLR: NOT CLR:	136 126 10	136 126 10	0 0 0	76 71 5	1.5 0.0 20.4	.1 0.0 1.9	.285E+04 .108E+03 .375E+05	0 0 0	53 56 97	47 41 135	28 18 10	108 108 0
5/ 7/78	* ABB	365 41	389 45	256 37	FLT TOT: IN CLR: NOT CLR:	19 5 14	19 5 14	0 0 0	10 5 5	32.0 0.0 43.4	1.8 0.0 2.5	.921E+05 .343E+04 .124E+06	0 0 0	93 100 86	65 41 89	18 5 13	1 0 1
5/19/78	* ABB	387 53	432 61	312 37	FLT TOT: IN CLR: NOT CLR:	144 144 0	144 144 0	87 87 0	70 70 0	0.0 0.0 0.0	0.0 0.0 0.0	.111E+02 .111E+02 0.	474 474 0	36 36 0	29 29 0	33 33 0	111 111 0
6/ 1/77	* AAA	388 53	430 65	349 37	FLT TOT: IN CLR: NOT CLR:	46 43 3	0 0 0	16 15 1	0 0 0	1.2 0.0 18.3	.2 0.0 2.3	0. 0. 0.	375 396 52	0 0 0	0 0 0	16 13 3	30 30 0

APPENDIX B

DEP-ARR	IM/ID/IY	CODE	AVFL ALAT	EXHI EXTN	EXLO EXTS	NUMBER OF OBS					AVERAGES FOR			THE FLIGHT			TROP	STRAT
						CLD	PD5	OZ	H2O	H2S	%TIC	PATCHES	PD5	OZ	RH	H2O	N	N
HND-JFK (CONT.)																		
6/ 2/77	AAA	382	410	345	FLT TOT:	29	0	13	0	0	1.5	.1	0.	321	0	0	6	23
		46	50	37	IN CLR:	26	0	12	0	0	0.0	0.0	0.	341	0	0	3	23
					NOT CLR:	3	0	1	0	0	14.5	1.3	0.	76	0	0	3	0
6/ 3/77	* AAA	391	430	205	FLT TOT:	149	149	98	0	0	3.6	.4	.502E+04	276	0	0	55	94
		50	50	35	IN CLR:	134	134	87	0	0	0.0	0.0	.297E+03	300	0	0	46	88
					NOT CLR:	15	15	11	0	0	36.2	3.7	.473E+05	88	0	0	9	6
7/ 4/77	* ACA	395	430	256	FLT TOT:	139	0	0	0	0	0.0	0.0	0.	0	0	0	52	87
		55	65	37	IN CLR:	139	0	0	0	0	0.0	0.0	0.	0	0	0	52	87
					NOT CLR:	0	0	0	0	0	0.0	0.0	0.	0	0	0	0	0
7/ 6/77	ACA	384	411	279	FLT TOT:	120	0	0	0	0	7.5	0.0	0.	0	0	0	89	31
		47	51	36	IN CLR:	94	0	0	0	0	0.0	0.0	0.	0	0	0	64	30
					NOT CLR:	26	0	0	0	0	34.4	0.0	0.	0	0	0	25	1
7/ 8/77	* ACA	376	410	248	FLT TOT:	135	135	86	0	0	.8	0.0	.156E+04	381	0	0	42	93
		55	65	37	IN CLR:	128	128	82	0	0	0.0	0.0	.947E+02	394	0	0	36	92
					NOT CLR:	7	7	4	0	0	16.1	0.0	.283E+05	107	0	0	6	1
7/10/77	ACA	378	410	218	FLT TOT:	133	133	85	0	0	6.9	0.0	.310E+05	310	0	0	59	74
		51	60	36	IN CLR:	105	105	71	0	0	0.0	0.0	.479E+03	357	0	0	35	70
					NOT CLR:	28	28	14	0	0	32.5	0.0	.145E+06	73	0	0	24	4
7/14/77	* ACA	350	370	205	FLT TOT:	85	85	54	0	0	3.3	0.0	.727E+04	298	0	0	39	46
		54	65	36	IN CLR:	78	78	50	0	0	0.0	0.0	.207E+03	315	0	0	32	46
					NOT CLR:	7	7	4	0	0	40.5	0.0	.860E+05	83	0	0	7	0
7/15/77	ACA	376	411	260	FLT TOT:	111	111	76	0	0	8.8	0.0	.511E+05	171	0	0	90	21
		47	51	35	IN CLR:	80	80	54	0	0	0.0	0.0	.205E+03	207	0	0	60	20
					NOT CLR:	31	31	22	0	0	31.5	0.0	.182E+06	82	0	0	30	1
7/17/77	* ACA	380	432	217	FLT TOT:	143	143	88	0	0	1.8	0.0	.884E+04	321	0	0	62	81
		55	66	37	IN CLR:	130	130	78	0	0	0.0	0.0	.199E+03	350	0	0	49	81
					NOT CLR:	13	13	10	0	0	20.2	0.0	.953E+05	90	0	0	13	0
7/19/77	ACA	381	410	211	FLT TOT:	124	124	80	0	0	4.3	0.0	.256E+05	231	0	0	79	45
		47	53	35	IN CLR:	89	89	58	0	0	0.0	0.0	.997E+03	272	0	0	45	44
					NOT CLR:	35	35	22	0	0	15.2	0.0	.881E+05	124	0	0	34	1
7/28/77	* ACA	397	431	289	FLT TOT:	118	118	71	0	0	1.7	0.0	.497E+04	277	0	0	51	67
		53	63	37	IN CLR:	109	109	67	0	0	0.0	0.0	.177E+03	287	0	0	45	64
					NOT CLR:	9	9	4	0	0	21.7	0.0	.630E+05	118	0	0	6	3
8/16/77	* ABA	379	431	225	FLT TOT:	138	138	86	0	0	7.3	.6	.319E+05	172	0	0	58	80
		54	65	37	IN CLR:	112	112	72	0	0	0.0	0.0	.572E+03	195	0	0	32	80
					NOT CLR:	26	26	14	0	0	38.9	2.9	.167E+06	54	0	0	26	0
8/18/77	ABA	383	411	313	FLT TOT:	98	98	49	0	0	2.2	.3	.280E+05	246	0	0	32	66
		54	67	37	IN CLR:	89	89	48	0	0	0.0	0.0	.396E+02	249	0	0	23	66
					NOT CLR:	9	9	1	0	0	24.2	3.0	.305E+06	104	0	0	9	0

DEP-ARR	IM/ID/IY	CODE	AVFL ALAT	EXHI EXTN	EXLO EXTS			NUMBER OF OBS				AVERAGES FOR		THE FLIGHT		TRCP		STRAT		
								CLD	PD5	OZ	H2O	H2S	%TIC	PATCHES	PD5	OZ	RH	H2O	N	N
	8/19/77	* ABA	381 54	430 63	275 37	FLT IN NOT	TOT: CLR: CLR:	148 139 9	148 139 9	79 75 4	0 0 0	0 0 0	.2 0.0 3.2	.1 0.0 1.6	.583E+03 .741E+02 .844E+04	208 214 93	0 0 0	0 0 0	65 57 8	83 82 1
	8/21/77	ABA	380 54	411 67	258 36	FLT IN NOT	TOT: CLR: CLR:	123 106 17	123 106 17	54 51 3	0 0 0	0 0 0	6.0 0.0 43.6	.3 0.0 1.9	.111E+05 .342E+03 .783E+05	259 270 72	0 0 0	0 0 0	56 39 17	67 67 0
	8/25/77	* ABA	381 53	430 65	243 37	FLT IN NOT	TOT: CLR: CLR:	141 120 21	141 120 21	93 82 11	0 0 0	0 0 0	3.3 0.0 21.9	.5 0.0 3.2	.140E+05 .184E+03 .928E+05	178 196 45	0 0 0	0 0 0	64 45 19	77 75 2
	8/27/77	ABA	363 44	411 50	237 35	FLT IN NOT	TOT: CLR: CLR:	106 89 17	106 89 17	67 56 11	0 0 0	0 0 0	5.2 0.0 32.4	.7 0.0 4.4	.173E+05 .106E+03 .107E+06	117 128 59	0 0 0	0 0 0	89 72 17	17 17 0
	8/28/77	* ABA	385 52	430 60	258 37	FLT IN NOT	TOT: CLR: CLR:	140 135 5	140 135 5	92 88 4	0 0 0	0 0 0	.5 0.0 15.0	.1 0.0 2.6	.167E+04 .145E+03 .430E+05	223 230 81	0 0 0	0 0 0	41 36 5	99 99 0
	8/30/77	ABA	396 45	430 50	266 36	FLT IN NOT	TOT: CLR: CLR:	115 97 18	115 97 18	73 61 12	0 0 0	0 0 0	6.4 0.0 41.0	.7 0.0 4.3	.316E+05 .663E+02 .202E+06	149 164 73	0 0 0	0 0 0	74 56 18	41 41 0
	8/31/77	* ABA	389 55	430 65	271 37	FLT IN NOT	TOT: CLR: CLR:	137 127 10	137 127 10	92 87 5	0 0 0	0 0 0	3.2 0.0 44.0	.2 0.0 2.8	.120E+05 .630E+02 .164E+06	237 247 54	0 0 0	0 0 0	42 32 10	95 95 0
	9/ 2/77	ABA	377 46	410 51	215 35	FLT IN NOT	TOT: CLR: CLR:	129 107 22	129 107 22	84 70 14	0 0 0	0 0 0	3.8 0.0 22.3	.7 0.0 3.9	.107E+05 .866E+02 .624E+05	181 204 66	0 0 0	0 0 0	83 61 22	46 46 0
	9/ 6/77	* ABA	388 54	431 65	235 37	FLT IN NOT	TOT: CLR: CLR:	152 146 4	152 146 4	99 95 4	0 0 0	0 0 0	.6 0.0 22.1	.1 0.0 4.3	.163E+04 .113E+03 .577E+05	202 208 74	0 0 0	0 0 0	78 74 4	74 74 0
	9/ 8/77	ABA	383 51	431 59	198 36	FLT IN NOT	TOT: CLR: CLR:	117 99 18	117 99 18	77 67 10	0 0 0	0 0 0	4.6 0.0 30.0	.6 0.0 3.6	.340E+05 .183E+03 .220E+06	199 218 73	0 0 0	0 0 0	50 37 13	67 62 5
	9/10/77	* ABA	379 55	430 65	267 37	FLT IN NOT	TOT: CLR: CLR:	143 126 17	143 126 17	93 80 13	0 0 0	0 0 0	2.0 0.0 16.5	.3 0.0 2.2	.474E+04 .682E+03 .349E+05	163 185 26	0 0 0	0 0 0	80 63 17	63 63 0
	9/12/77	ABA	364 52	410 60	204 36	FLT IN NOT	TOT: CLR: CLR:	121 101 20	121 101 20	74 59 15	0 0 0	0 0 0	5.7 0.0 34.7	.5 0.0 2.9	.151E+05 .755E+02 .909E+05	150 179 39	0 0 0	0 0 0	59 39 20	62 62 0
	9/13/77	* ABA	389 55	430 67	277 37	FLT IN NOT	TOT: CLR: CLR:	150 145 5	150 145 5	98 94 4	0 0 0	0 0 0	.6 0.0 18.4	.1 0.0 4.2	.209E+04 .676E+02 .609E+05	238 245 88	0 0 0	0 0 0	30 25 5	120 120 0

APPENDIX B

DEP-ARR	IM/ID/IY	CODE	AVFL ALAT	EXHI EXTN	EXLO EXTS	NUMBER OF OBS					AVERAGES FOR		THE FLIGHT		TROF		STRAT			
						CLD	PD5	OZ	H2O	H2S	%TIC	PATCHES	PD5	OZ	RH	H2O	N	N		
HND-JFK (CONT.)																				
	9/15/77	ABA	382 53	410 62	273 36	FLT IN NOT	TOT: CLR: CLR:	118 99 19	118 99 19	79 66 13	0 0 0	0 0 0	4.4 0.0 27.6	.5 0.0 2.8	.176E+05 .125E+03 .110E+06	166 186 54	0 0 0	0 0 0	57 38 19	61 61 0
	9/16/77	* ABA	377 50	410 60	216 35	FLT IN NOT	TOT: CLR: CLR:	145 118 27	145 118 27	96 76 20	0 0 0	0 0 0	7.1 0.0 37.9	.6 0.0 3.1	.171E+05 .545E+02 .915E+05	100 110 62	0 0 0	0 0 0	122 95 27	23 23 0
	9/20/77	* ABA	391 53	430 65	245 35	FLT IN NOT	TOT: CLR: CLR:	148 138 10	148 138 10	101 93 8	0 0 0	0 0 0	.8 0.0 12.2	.1 0.0 1.6	.126E+04 .381E+03 .133E+05	169 180 47	0 0 0	0 0 0	65 75 10	63 63 0
	9/23/77	* ABA	377 54	411 63	270 37	FLT IN NOT	TOT: CLR: CLR:	149 137 12	0 0 0	97 88 9	0 0 0	0 0 0	1.9 0.0 23.3	.3 0.0 4.1	0. 0. 0.	167 178 58	0 0 0	0 0 0	70 60 10	79 77 2
	9/25/77	ABA	358 45	410 52	198 35	FLT IN NOT	TOT: CLR: CLR:	132 126 6	0 0 0	87 84 3	0 0 0	0 0 0	1.4 0.0 30.7	.1 0.0 3.0	0. 0. 0.	138 142 40	0 0 0	0 0 0	74 69 5	58 57 1
	10/ 3/77	* ABA	382 54	430 65	209 37	FLT IN NOT	TOT: CLR: CLR:	132 127 5	0 0 0	80 77 3	0 0 0	0 0 0	.2 0.0 4.9	.2 0.0 4.6	0. 0. 0.	208 207 226	0 0 0	0 0 0	43 41 2	89 86 3
	10/17/77	* ABB	388 54	431 65	190 37	FLT IN NOT	TOT: CLR: CLR:	145 145 0	0 0 0	95 95 0	0 0 0	0 0 0	0.0 0.0 0.0	0.0 0.0 0.0	0. 0. 0.	261 261 0	0 0 0	0 0 0	18 18 0	127 127 0
	10/20/77	ABB	384 47	410 51	309 36	FLT IN NOT	TOT: CLR: CLR:	116 115 1	0 0 0	75 75 0	0 0 0	0 0 0	.0 0.0 .4	.0 0.0 1.0	0. 0. 0.	180 180 0	0 0 0	0 0 0	47 46 1	69 69 0
	10/31/77	* ABB	381 54	410 65	250 36	FLT IN NOT	TOT: CLR: CLR:	138 125 13	138 125 13	89 81 8	22 21 1	1 1 0	4.0 0.0 43.0	.3 0.0 3.5	.201E+05 .701E+02 .213E+06	183 197 39	47 44 100	89 43 042	37 24 13	101 101 0
	11/ 2/77	ABB	374 51	411 59	223 37	FLT IN NOT	TOT: CLR: CLR:	121 117 4	121 117 4	79 76 3	0 0 0	0 0 0	1.1 0.0 33.3	.1 0.0 1.8	.198E+04 .843E+02 .573E+05	183 187 83	0 0 0	0 0 0	51 47 4	70 70 0
HND-LAX																				
	1/22/77	AAA	407 37	430 39	217 35	FLT IN NOT	TOT: CLR: CLR:	94 94 0	94 94 0	61 61 0	78 78 0	0 0 0	0.0 0.0 0.0	0.0 0.0 0.0	.537E+01 .537E+01 0.	413 413 0	13 13 0	16 16 0	2 2 0	92 92 0
	1/22/77	* AAA	388 47	410 55	209 35	FLT IN NOT	TOT: CLR: CLR:	116 110 6	116 110 6	77 73 4	97 92 4	3 1 2	2.3 0.0 45.3	.2 0.0 3.2	.781E+04 .444E+02 .150E+06	550 576 75	27 24 94	15 15 13	9 9 0	107 101 6

DEP-ARR	IM/ID/IY	CODE	AVFL ALAT	EXHI EXTN	EXLO EXTS	NUMBER OF OBS					AVERAGES FOR THE FLIGHT			OZ	RH	H2O	TROP N	STRAT N		
						CLD	PCS	OZ	H2O	H2S	%TIC	PATCHES	PCS							
HND-LAX (CONT.)																				
	1/29/77	AAA	401 38	430 40	201 34	FLT IN NOT	TOT CLR CLR	100 99 1	100 99 1	59 83 1	84 0 1	0 0 0	.0 0.0 .4	.0 0.0 1.0	.210E+02 .212E+02 0.	381 383 253	15 15 14	18 18 17	15 15 0	85 84 1
	1/ 9/78	ABB	400 36	430 37	295 35	FLT IN NOT	TOT CLR CLR	93 93 0	93 93 0	0 0 0	0 0 0	0 0 0	0.0 0.0 0.0	0.0 0.0 0.0	.824E+01 .824E+01 0.	0 0 0	0 0 0	0 0 0	36 36 0	57 57 0
	1/ 9/78 *	ABB	389 50	391 55	309 37	FLT IN NOT	TOT CLR CLR	89 89 0	89 89 0	0 0 0	0 0 0	0 0 0	0.0 0.0 0.0	0.0 0.0 0.0	.353E+00 .353E+00 0.	0 0 0	0 0 0	0 0 0	1 1 0	88 88 0
	1/15/78 *	ABB	388 48	410 54	290 35	FLT IN NOT	TOT CLR CLR	116 116 0	116 116 0	0 66 0	66 0 0	0 0 0	0.0 0.0 0.0	0.0 0.0 0.0	.327E+01 .327E+01 0.	0 0 0	27 27 0	56 56 0	19 19 0	97 97 0
	1/18/78	ABB	402 39	430 40	297 35	FLT IN NOT	TOT CLR CLR	90 89 1	90 89 1	0 54 0	54 0 0	0 0 0	.8 0.0 70.6	.0 0.0 1.0	.254E+04 .599E+02 .223E+06	0 0 0	20 20 0	27 27 0	35 34 1	55 55 0
	2/ 8/78 *	ABB	369 46	390 54	350 36	FLT IN NOT	TOT CLR CLR	41 41 0	41 41 0	0 22 0	22 1 0	1 1 0	0.0 0.0 0.0	0.0 0.0 0.0	.297E+01 .297E+01 0.	0 0 0	49 49 0	75 75 0	12 12 0	29 29 0
	2/13/78 *	ABB	404 49	430 55	195 37	FLT IN NOT	TOT CLR CLR	103 102 1	103 102 1	67 67 0	52 52 0	0 0 0	.2 0.0 25.1	.0 0.0 5.0	.948E+02 .933E+02 .254E+03	661 661 0	35 35 0	52 52 0	2 1 1	101 101 0
	2/16/78	ABB	395 38	410 39	279 35	FLT IN NOT	TOT CLR CLR	92 90 2	92 90 2	0 51 0	53 3 2	4 3 1	.0 0.0 1.6	.0 0.0 1.5	.357E+02 .361E+02 .164E+02	0 0 0	37 36 61	14 14 19	60 59 1	32 31 1
	3/25/77	AAA	393 47	431 52	208 35	FLT IN NOT	TOT CLR CLR	50 35 15	50 35 15	24 15 9	41 29 12	11 1 10	9.4 0.0 31.2	1.1 0.0 3.8	.304E+05 0. .101E+06	395 593 66	44 21 98	12 9 18	0 0 0	0 0 0
	4/ 7/77	AAA	390 40	410 44	236 35	FLT IN NOT	TOT CLR CLR	100 91 9	0 0 0	0 0 0	0 0 0	0 0 0	3.6 0.0 39.5	.1 0.0 1.0	0. 0. 0.	0 0 0	0 0 0	0 0 0	49 40 9	51 51 0
	4/ 7/77 *	AAA	384 50	432 58	261 35	FLT IN NOT	TOT CLR CLR	117 115 2	0 0 0	0 0 0	0 0 0	0 0 0	.2 0.0 10.4	.0 0.0 1.5	0. 0. 0.	0 0 0	0 0 0	0 0 0	16 14 2	101 101 0
	4/11/77	AAA	368 41	370 44	271 34	FLT IN NOT	TOT CLR CLR	96 57 39	0 0 0	0 0 0	0 0 0	0 0 0	17.7 0.0 43.6	1.5 0.0 3.6	0. 0. 0.	0 0 0	0 0 0	0 0 0	52 25 27	44 32 12
	4/11/77 *	AAA	393 47	431 55	290 35	FLT IN NOT	TOT CLR CLR	122 104 16	0 0 0	0 0 0	0 0 0	0 0 0	3.3 0.0 22.2	.5 0.0 3.2	0. 0. 0.	0 0 0	0 0 0	0 0 0	36 20 18	84 84 0

APPENDIX B

DEP-ARR		CODE	AVFL ALAT	EXHI EXTN	EXLO EXTS	NUMBER OF OBS					AVERAGES FOR THE FLIGHT				TROP N	STRAT N		
IM/ID/IY						CLD	PD5	OZ	H2O	H2S	%TIC	PATCHES	PD5	OZ			RH	H2O
HND-LAX (CONT.)																		
4/14/77	* AAA	387 47	390 55	286 35	FLT TOT:	125	0	0	0	0	8.4	.3	0.	0	0	0	55	70
					IN CLR:	101	0	0	0	0	0.0	0.0	0.	0	0	0	31	70
					NOT CLR:	24	0	0	0	0	43.6	1.8	0.	0	0	0	24	0
4/14/77	AAA	367 41	370 45	205 35	FLT TOT:	95	0	0	0	0	5.5	.6	0.	0	0	0	63	32
					IN CLR:	77	0	0	0	0	0.0	0.0	0.	0	0	0	45	32
					NOT CLR:	18	0	0	0	0	29.0	3.3	0.	0	0	0	18	0
4/18/77	AAA	403 46	414 52	210 35	FLT TOT:	93	0	0	0	0	.8	.2	0.	0	0	0	33	60
					IN CLR:	89	0	0	0	0	0.0	0.0	0.	0	0	0	29	60
					NOT CLR:	4	0	0	0	0	19.5	5.5	0.	0	0	0	4	0
4/19/77	* AAA	395 39	432 43	200 35	FLT TOT:	125	0	0	0	0	8.8	.6	0.	0	0	0	99	26
					IN CLR:	93	0	0	0	0	0.0	0.0	0.	0	0	0	72	21
					NOT CLR:	32	0	0	0	0	34.3	2.3	0.	0	0	0	27	5
4/21/77	* AAA	389 50	411 59	298 35	FLT TOT:	120	0	0	0	0	1.7	.2	0.	0	0	0	26	94
					IN CLR:	111	0	0	0	0	0.0	0.0	0.	0	0	0	17	94
					NOT CLR:	9	0	0	0	0	22.4	2.2	0.	0	0	0	9	0
4/21/77	AAA	386 43	390 48	295 35	FLT TOT:	92	0	0	0	0	.6	.1	0.	0	0	0	60	32
					IN CLR:	88	0	0	0	0	0.0	0.0	0.	0	0	0	56	32
					NOT CLR:	4	0	0	0	0	14.6	2.5	0.	0	0	0	4	0
4/27/77	AAA	374 40	390 44	296 35	FLT TOT:	97	97	59	0	0	10.0	.2	.263E+05	367	0	0	52	45
					IN CLR:	75	75	47	0	0	0.0	0.0	.132E+04	434	0	0	30	45
					NOT CLR:	22	22	12	0	0	44.1	.9	.111E+06	104	0	0	22	0
4/27/77	* AAA	375 45	411 51	200 35	FLT TOT:	115	115	68	0	0	11.2	.4	.505E+05	429	0	0	59	56
					IN CLR:	95	95	56	0	0	0.0	0.0	.121E+04	506	0	0	39	56
					NOT CLR:	20	20	12	0	0	64.5	2.3	.285E+06	69	0	0	20	0
4/30/77	* AAA	390 49	410 58	287 35	FLT TOT:	113	113	76	0	0	3.2	.1	.149E+05	642	0	0	13	100
					IN CLR:	107	107	73	0	0	0.0	0.0	.328E+02	662	0	0	7	100
					NOT CLR:	6	6	3	0	0	60.0	1.2	.280E+06	163	0	0	6	0
4/30/77	AAA	361 41	370 46	280 35	FLT TOT:	90	90	58	0	0	12.4	.5	.512E+05	283	0	0	57	33
					IN CLR:	66	66	41	0	0	0.0	0.0	.407E+03	365	0	0	35	31
					NOT CLR:	24	24	17	0	0	46.5	2.0	.191E+06	83	0	0	22	2
4/ 8/78	* ABB	372 47	391 54	205 36	FLT TOT:	116	116	20	67	8	.1	.0	.243E+03	64	61	46	36	80
					IN CLR:	113	113	19	65	8	0.0	0.0	.195E+03	62	60	46	33	80
					NOT CLR:	3	3	1	2	0	4.1	1.3	.207E+04	87	72	45	3	0
4/20/78	ABB	387 42	390 45	241 35	FLT TOT:	94	94	0	19	11	11.4	.3	.236E+05	0	83	35	36	58
					IN CLR:	72	72	0	19	11	0.0	0.0	.962E+03	0	83	35	18	54
					NOT CLR:	22	22	0	0	0	48.6	1.4	.975E+05	0	0	0	18	4
4/29/78	* ABB	381 48	411 56	227 35	FLT TOT:	122	122	0	67	17	5.9	.2	.311E+05	0	67	55	29	93
					IN CLR:	109	109	0	63	13	0.0	0.0	.553E+03	0	65	55	16	93
					NOT CLR:	13	13	0	4	4	55.4	2.3	.288E+06	0	100	48	13	0

DEP-ARR	IM/ID/IY	CODE	AVFL ALAT	EXHI EXTN	EXLO EXTS	NUMBER OF OBS					AVERAGES FOR THE FLIGHT				TRCP	STRAT				
						CLD	PD5	OZ	H2O, H2S	%TIC	PATCHES	PD5	OZ	RH	H2O	N	N			
HND-LAX (CONT.)																				
5/ 5/78	*	ABB	368 46	411 54	197 35	FLT IN NOT	TOT: CLR: CLR:	118 92 26	118 92 26	0 0 0	66 52 14	21 7 14	7.0 0.0 31.9	.7 0.0 3.1	.130E+05 .255E+03 .582E+05	0 0 0	68 59 96	67 59 96	57 31 26	61 61 0
5/17/78	*	ABB	377 47	412 55	260 35	FLT IN NOT	TOT: CLR: CLR:	118 118 0	118 118 0	77 77 0	52 52 0	10 10 0	0.0 0.0 0.0	0.0 0.0 0.0	.460E+02 .460E+02 0.	347 347 0	45 45 0	34 34 0	50 50 0	68 68 0
6/ 4/77		AAA	389 39	410 42	257 35	FLT IN NOT	TOT: CLR: CLR:	94 72 22	94 72 22	62 48 14	0 0 0	0 0 0	6.9 0.0 29.6	1.0 0.0 4.1	.261E+05 .638E+03 .109E+06	186 221 67	0 0 0	0 0 0	72 50 22	22 22 0
7/ 5/77		ACA	393 42	429 46	213 35	FLT IN NOT	TOT: CLR: CLR:	87 62 25	0 0 0	0 0 0	0 0 0	0 0 0	7.4 0.0 25.8	0.0 0.0 0.0	0. 0. 0.	0 0 0	0 0 0	0 0 0	69 44 25	18 18 0
7/ 5/77	*	ACA	386 49	391 55	197 36	FLT IN NOT	TOT: CLR: CLR:	116 113 3	0 0 0	0 0 0	0 0 0	0 0 0	.9 0.0 33.5	0.0 0.0 0.0	0. 0. 0.	0 0 0	0 0 0	0 0 0	46 43 3	70 70 0
7/ 9/77	*	ACA	376 43	410 49	261 35	FLT IN NOT	TOT: CLR: CLR:	116 99 17	116 99 17	74 62 12	0 0 0	0 0 0	3.6 0.0 24.7	0.0 0.0 0.0	.156E+05 .140E+04 .984E+05	139 147 98	0 0 0	0 0 0	116 99 17	0 0 0
7/ 9/77		ACA	393 42	410 47	281 35	FLT IN NOT	TOT: CLR: CLR:	90 78 12	90 78 12	61 52 9	0 0 0	0 0 0	2.9 0.0 22.1	0.0 0.0 0.0	.155E+05 .119E+04 .108E+06	177 187 120	0 0 0	0 0 0	63 58 5	27 20 7
7/18/77	*	ACA	365 38	390 38	285 35	FLT IN NOT	TOT: CLR: CLR:	49 43 6	49 43 6	31 27 4	0 0 0	0 0 0	1.4 0.0 11.8	0.0 0.0 0.0	.916E+04 .264E+03 .729E+05	58 60 45	0 0 0	0 0 0	49 43 6	0 0 0
7/18/77		ACA	374 45	390 51	284 35	FLT IN NOT	TOT: CLR: CLR:	53 43 10	53 43 10	36 29 7	0 0 0	0 0 0	1.8 0.0 9.6	0.0 0.0 0.0	.741E+04 .246E+04 .287E+05	152 164 103	0 0 0	0 0 0	47 37 10	6 6 0
8/17/77	*	ABA	373 45	390 52	203 35	FLT IN NOT	TOT: CLR: CLR:	113 85 28	113 85 28	74 58 16	0 0 0	0 0 0	6.0 0.0 24.4	1.3 0.0 5.3	.391E+05 .138E+05 .116E+06	138 165 40	0 0 0	0 0 0	81 53 28	32 32 0
8/17/77		ABA	388 42	412 45	280 35	FLT IN NOT	TOT: CLR: CLR:	97 71 26	97 71 26	61 45 16	0 0 0	0 0 0	10.6 0.0 39.7	.8 0.0 3.0	.406E+05 .109E+03 .151E+06	133 166 39	0 0 0	0 0 0	68 42 26	29 29 0
8/20/77	*	ABA	365 48	370 55	209 35	FLT IN NOT	TOT: CLR: CLR:	105 99 6	105 99 6	68 66 2	0 0 0	0 0 0	2.9 0.0 51.4	.2 0.0 4.2	.111E+05 .113E+03 .193E+06	224 229 55	0 0 0	0 0 0	50 45 5	55 54 1
8/20/77		ABA	392 40	411 43	281 35	FLT IN NOT	TOT: CLR: CLR:	84 66 18	84 66 18	52 42 10	0 0 0	0 0 0	9.9 0.0 46.4	.8 0.0 3.5	.711E+05 .190E+03 .331E+06	91 104 36	0 0 0	0 0 0	83 65 18	1 1 0

APPENDIX B

DEP-ARR	IM/ID/IY	CODE	AVFL ALAT	EXHI EXTN	EXLO EXTS	NUMBER OF OBS				AVERAGES FOR THE FLIGHT			TRCP			STRAT		
						CLD	PD5	OZ	H2O, H2S	XTIC	PATCHES	PD5	OZ	RH	H2O	N	N	
HND-LAX (CONT.)																		
8/26/77	ABA	384	411	274	FLT TOT:	87	87	51	0	0	12.1	1.1	.328E+05	52	0	0	87	0
		42	47	35	IN CLR:	57	57	37	0	0	0.0	0.0	.802E+02	56	0	0	57	0
					NOT CLR:	30	30	14	0	0	35.2	3.3	.950E+05	40	0	0	30	0
8/26/77 *	ABA	379	411	236	FLT TOT:	116	116	74	0	0	1.9	.5	.630E+04	134	0	0	69	47
		46	55	35	IN CLR:	103	103	64	0	0	0.0	0.0	.138E+03	151	0	0	56	47
					NOT CLR:	13	13	10	0	0	16.7	4.3	.551E+05	20	0	0	13	0
8/29/77 *	ABA	384	410	206	FLT TOT:	108	108	70	0	0	.3	.2	.447E+03	173	0	0	58	50
		47	55	35	IN CLR:	102	102	65	0	0	0.0	0.0	.138E+03	182	0	0	52	50
					NOT CLR:	6	6	5	0	0	5.6	3.5	.571E+04	48	0	0	6	0
8/29/77	ABA	391	410	261	FLT TOT:	91	91	57	0	0	1.3	.3	.234E+04	115	0	0	83	8
		42	47	35	IN CLR:	86	86	53	0	0	0.0	0.0	.108E+03	119	0	0	78	8
					NOT CLR:	5	5	4	0	0	23.5	4.6	.407E+05	56	0	0	5	0
9/ 1/77 *	ABA	397	410	281	FLT TOT:	120	120	82	0	0	.9	.2	.939E+04	233	0	0	49	71
		47	54	35	IN CLR:	114	114	78	0	0	0.0	0.0	.131E+03	241	0	0	43	71
					NOT CLR:	6	6	4	0	0	18.6	3.3	.185E+06	69	0	0	6	0
9/ 1/77	ABA	396	430	206	FLT TOT:	103	103	69	0	0	1.6	.5	.371E+04	138	0	0	61	42
		43	47	34	IN CLR:	93	93	63	0	0	0.0	0.0	.990E+02	141	0	0	56	37
					NOT CLR:	10	10	6	0	0	16.5	5.0	.373E+05	102	0	0	5	5
9/ 7/77 *	ABA	384	430	280	FLT TOT:	115	115	74	0	0	1.2	.3	.336E+04	89	0	0	98	17
		40	43	35	IN CLR:	103	103	65	0	0	0.0	0.0	.237E+03	92	0	0	90	13
					NOT CLR:	12	12	9	0	0	11.7	3.3	.302E+05	69	0	0	8	4
9/ 7/77	ABA	390	411	240	FLT TOT:	102	102	61	0	0	3.7	.4	.996E+04	129	0	0	73	29
		46	54	35	IN CLR:	92	92	55	0	0	0.0	0.0	.120E+03	133	0	0	63	29
					NOT CLR:	10	10	6	0	0	37.8	3.7	.100E+06	87	0	0	10	0
9/11/77 *	ABA	382	390	254	FLT TOT:	109	109	73	0	0	1.7	.5	.360E+04	95	0	0	102	7
		41	45	35	IN CLR:	94	94	62	0	0	0.0	0.0	.494E+02	103	0	0	87	7
					NOT CLR:	15	15	11	0	0	12.2	3.7	.258E+05	48	0	0	15	0
9/11/77	ABA	388	410	278	FLT TOT:	107	107	72	0	0	4.2	.5	.935E+04	101	0	0	84	23
		45	50	35	IN CLR:	88	88	57	0	0	0.0	0.0	.636E+02	118	0	0	65	23
					NOT CLR:	19	19	15	0	0	23.4	3.1	.524E+05	39	0	0	19	0
9/14/77	ABA	398	430	250	FLT TOT:	99	99	67	0	0	4.4	1.1	.106E+05	133	0	0	71	28
		46	55	35	IN CLR:	74	74	51	0	0	0.0	0.0	.347E+02	154	0	0	46	28
					NOT CLR:	25	25	16	0	0	17.3	4.3	.418E+05	64	0	0	25	0
9/14/77 *	ABA	391	430	290	FLT TOT:	106	106	69	0	0	.0	.0	.255E+03	78	0	0	106	0
		39	42	35	IN CLR:	105	105	68	0	0	0.0	0.0	.403E+02	78	0	0	105	0
					NOT CLR:	1	1	1	0	0	2.4	4.0	.228E+05	62	0	0	1	0
9/17/77	ABA	410	410	410	FLT TOT:	6	6	2	0	0	0.0	0.0	0.	6	0	0	6	0
		37	38	36	IN CLR:	6	6	2	0	0	0.0	0.0	0.	6	0	0	6	0
					NOT CLR:	0	0	0	0	0	0.0	0.0	0.	0	0	0	0	0

DEP-ARR	IM/ID/IY	CODE	AVFL ALAT	EXHI EXTN	EXLØ EXTS	NUMBER OF OBS					AVERAGES FOR THE FLIGHT			TROP			STRAT			
						CLD	PD5	OZ	H2O	H2S	%TIC	PATCHES	PD5	OZ	RH	H2O	N	N		
HND-LAX (CONT.)																				
	9/21/77	ABA	386 47	410 49	369 42	FLT	TØT:	62	62	33	0	0	3.9	.4	.180E+05	95	0	0	56	6
						IN	CLR:	53	53	29	0	0	0.0	0.0	.359E+02	103	0	0	47	6
						NØT	CLR:	9	9	4	0	0	26.6	2.7	.124E+06	38	0	0	9	0
	9/24/77 *	ABA	374 42	410 45	318 35	FLT	TØT:	109	0	63	0	0	.8	.2	0.	133	0	0	90	19
						IN	CLR:	101	0	57	0	0	0.0	0.0	0.	141	0	0	82	19
						NØT	CLR:	8	0	6	0	0	10.8	2.8	0.	58	0	0	8	0
	9/24/77	ABA	397 44	429 50	276 35	FLT	TØT:	102	0	66	0	0	.1	.2	0.	108	0	0	84	18
						IN	CLR:	96	0	62	0	0	0.0	0.0	0.	109	0	0	79	17
						NØT	CLR:	6	0	4	0	0	2.4	3.2	0.	105	0	0	5	1
	10/ 4/77	ABB	400 43	410 48	304 35	FLT	TØT:	95	0	61	0	0	7.0	.9	0.	139	0	0	50	45
						IN	CLR:	80	0	52	0	0	0.0	0.0	0.	154	0	0	35	45
						NØT	CLR:	15	0	9	0	0	44.5	5.7	0.	48	0	0	15	0
	10/18/77	ABB	387 43	410 47	210 35	FLT	TØT:	76	0	50	0	0	7.5	.4	0.	118	0	0	44	32
						IN	CLR:	64	0	43	0	0	0.0	0.0	0.	132	0	0	32	32
						NØT	CLR:	12	0	7	0	0	47.5	2.7	0.	35	0	0	12	0
	10/18/77 *	ABB	390 47	450 54	285 35	FLT	TØT:	122	0	82	0	0	0.0	0.0	0.	244	0	0	38	84
						IN	CLR:	122	0	82	0	0	0.0	0.0	0.	244	0	0	38	84
						NØT	CLR:	0	0	0	0	0	0.0	0.0	0.	0	0	0	0	0
	10/19/77 *	ABB	394 48	430 55	287 35	FLT	TØT:	119	0	80	0	0	.1	.1	0.	243	0	0	31	88
						IN	CLR:	117	0	78	0	0	0.0	0.0	0.	247	0	0	30	87
						NØT	CLR:	2	0	2	0	0	5.5	5.0	0.	101	0	0	1	1
	10/19/77	ABB	381 42	390 45	268 35	FLT	TØT:	82	0	52	0	0	8.7	1.0	0.	102	0	0	68	14
						IN	CLR:	56	0	38	0	0	0.0	0.0	0.	118	0	0	42	14
						NØT	CLR:	26	0	14	0	0	27.5	3.3	0.	57	0	0	26	0
	11/ 1/77	ABB	390 44	409 48	329 35	FLT	TØT:	97	97	64	0	0	.6	.2	.135E+04	115	0	0	48	49
						IN	CLR:	92	92	59	0	0	0.0	0.0	.141E+03	120	0	0	43	49
						NØT	CLR:	5	5	5	0	0	11.9	3.2	.235E+05	60	0	0	5	0
	11/ 1/77 *	ABB	379 39	410 43	309 35	FLT	TØT:	120	120	80	1	0	0.0	0.0	.157E+02	79	70	203	101	19
						IN	CLR:	120	120	80	1	0	0.0	0.0	.157E+02	79	70	203	101	19
						NØT	CLR:	0	0	0	0	0	0.0	0.0	0.	0	0	0	0	0
HND-SFO																				
	1/22/76 *	BBA	343 49	370 56	205 37	FLT	TØT:	72	0	72	0	0	1.1	.3	0.	338	0	0	15	57
						IN	CLR:	67	0	67	0	0	0.0	0.0	0.	362	0	0	10	57
						NØT	CLR:	5	0	5	0	0	15.8	3.8	0.	9	0	0	5	0
	3/18/76 *	BBA	356 49	390 57	202 37	FLT	TØT:	76	0	76	0	0	0.0	0.0	0.	524	0	0	4	72
						IN	CLR:	76	0	76	0	0	0.0	0.0	0.	524	0	0	4	72
						NØT	CLR:	0	0	0	0	0	0.0	0.0	0.	0	0	0	0	0

DEP-ARR IM/ID/IY	CODE	AVFL ALAT	EXHI EXTN	EXLO EXTS	NUMBER OF OBS					AVERAGES FOR THE FLIGHT			OZ			TRCF N	STRAT N		
					CLD	PD5	OZ	H2O	H2S	%TIC	PATCHES	PD5	OZ	RH	H2O				
HND-SFO (CONT.)																			
3/25/76	BBA	355 41	371 44	208 35	FLT IN NOT	TOT: CLR: CLR:	56 45 11	0 0 0	56 45 11	0 0 0	0 0 0	4.6 0.0 23.2	.6 0.0 3.1	0. 0. 0.	309 352 213	0 0 0	0 0 0	25 17 8	31 28 3
4/21/76	BBA	363 42	391 46	203 36	FLT IN NOT	TOT: CLR: CLR:	47 44 3	0 0 0	47 44 3	0 0 0	0 0 0	5.7 0.0 88.9	.0 0.0 .7	0. 0. 0.	258 270 80	0 0 0	0 0 0	30 27 3	17 17 0
5/ 2/78	ABB	392 43	410 45	285 35	FLT IN NOT	TOT: CLR: CLR:	93 77 16	93 77 16	0 0 0	46 39 7	23 17 6	3.4 0.0 19.6	.2 0.0 1.1	.966E+04 .110E+04 .509E+05	0 0 0	75 72 92	35 34 43	43 32 11	50 45 5
5/ 5/78	ABB	372 43	391 47	282 36	FLT IN NOT	TOT: CLR: CLR:	94 73 21	94 73 21	0 0 0	51 40 11	23 12 11	7.4 0.0 33.2	.7 0.0 3.2	.282E+05 .540E+03 .125E+06	0 0 0	76 69 100	50 45 71	59 36 21	35 35 0
5/17/78	ABB	391 42	412 45	259 35	FLT IN NOT	TOT: CLR: CLR:	97 97 0	96 96 0	64 64 0	49 49 0	8 8 0	0.0 0.0 0.0	0.0 0.0 0.	.316E+01 .316E+01 0.	257 257 0	60 60 0	21 21 0	54 54 0	43 43 0
5/20/78	ABB	389 43	412 46	186 36	FLT IN NOT	TOT: CLR: CLR:	95 95 0	95 95 0	64 64 0	49 49 0	11 11 0	0.0 0.0 0.0	0.0 0.0 0.	.411E+01 .411E+01 0.	290 290 0	56 56 0	22 22 0	35 35 0	60 60 0
9/ 5/76 *	BBA	326 50	330 58	243 37	FLT IN NOT	TOT: CLR: CLR:	110 110 0	0 0 0	68 68 0	0 0 0	0 0 0	0.0 0.0 0.0	0.0 0.0 0.	0. 0. 0.	108 108 0	0 0 0	0 0 0	92 92 0	18 18 0
10/ 7/77 *	BCB	357 38	391 41	267 35	FLT IN NOT	TOT: CLR: CLR:	112 63 49	112 63 49	0 0 0	0 0 0	0 0 0	14.9 0.0 34.1	0.0 0.0 0.0	.453E+05 .122E+02 .104E+06	0 0 0	0 0 0	0 0 0	112 63 49	0 0 0
10/ 7/77	BCB	362 45	391 50	219 36	FLT IN NOT	TOT: CLR: CLR:	88 61 27	88 61 27	0 0 0	0 0 0	0 0 0	7.4 0.0 24.2	0.0 0.0 0.0	.175E+05 .983E+02 .569E+05	0 0 0	0 0 0	0 0 0	85 58 27	3 3 0
10/13/77	BCB	358 43	371 45	200 37	FLT IN NOT	TOT: CLR: CLR:	84 67 17	84 67 17	0 0 0	0 0 0	0 0 0	6.9 0.0 34.0	0.0 0.0 0.0	.167E+05 .914E+01 .823E+05	0 0 0	0 0 0	0 0 0	80 63 17	4 4 0
HND-YVR																			
10/ 6/77 *	BCB	356 41	391 49	272 35	FLT IN NOT	TOT: CLR: CLR:	104 86 18	104 86 18	0 0 0	0 0 0	0 0 0	5.6 0.0 32.2	0.0 0.0 0.0	.164E+05 .233E+03 .936E+05	0 0 0	0 0 0	0 0 0	104 86 18	0 0 0

DEP-ARR	IM/ID/IY	CODE	AVFL ALAT	EXHI EXTN	EXLO EXTS	NUMBER OF OBS					AVERAGES FOR THE FLIGHT			ØZ	RH	H2Ø	TROP N	STRAT N		
						CLD	PD5	ØZ	H2Ø, H2S		%TIC	PATCHES	PD5							
HNL-LAS																				
	5/12/76	CAA	335 29	370 35	208 21	FLT IN NOT	TØT: CLR: CLR:	53 51 2	0 0 0	35 33 2	0 0 0	0 0 0	.3 0.0 7.1	.1 0.0 1.5	0. 0. 0.	76 78 49	0 0 0	0 0 0	53 51 2	0 0 0
HNL-LAX																				
	1/27/76	* CAA	341 28	351 34	186 21	FLT IN NOT	TØT: CLR: CLR:	34 34 0	0 0 0	34 34 0	34 34 0	0 0 0	0.0 0.0 0.0	0.0 0.0 0.0	0. 0. 0.	52 52 0	33 33 0	54 54 0	34 34 0	0 0 0
	1/27/76	CAA	324 28	330 34	203 21	FLT IN NOT	TØT: CLR: CLR:	34 30 4	0 0 0	34 30 4	34 30 4	4 0 4	.6 0.0 5.4	.2 0.0 1.5	0. 0. 0.	36 37 35	46 39 100	75 73 85	34 30 4	0 0 0
	2/ 2/76	* CAA	381 28	390 34	223 21	FLT IN NOT	TØT: CLR: CLR:	41 40 1	0 0 0	41 40 1	36 36 0	8 8 0	.3 0.0 12.9	.0 0.0 1.0	0. 0. 0.	104 106 20	45 45 0	34 34 0	30 29 1	11 11 0
	2/ 3/76	CAA	360 29	371 33	209 21	FLT IN NOT	TØT: CLR: CLR:	37 37 0	0 0 0	37 37 0	31 31 0	1 1 0	0.0 0.0 0.0	0.0 0.0 0.0	0. 0. 0.	92 92 0	19 19 0	21 21 0	29 29 0	8 8 0
	2/ 5/76	CAA	361 28	371 34	209 21	FLT IN NOT	TØT: CLR: CLR:	35 20 15	0 0 0	35 20 15	29 16 13	16 3 13	10.3 0.0 23.9	1.3 0.0 3.1	0. 0. 0.	128 198 35	73 51 100	55 48 63	26 11 15	9 9 0
	2/ 5/76	* CAA	341 28	350 34	199 20	FLT IN NOT	TØT: CLR: CLR:	39 27 12	0 0 0	39 27 12	35 24 11	25 14 11	13.7 0.0 44.6	.6 0.0 1.9	0. 0. 0.	74 91 58	86 80 100	62 44 101	37 25 12	2 2 0
	2/ 6/76	* CAA	339 28	350 34	221 21	FLT IN NOT	TØT: CLR: CLR:	33 28 5	0 0 0	33 28 5	28 25 3	8 5 3	5.7 0.0 37.6	.3 0.0 2.2	0. 0. 0.	149 171 27	59 54 100	71 67 107	24 19 5	9 9 0
	2/ 6/76	* BBA	345 27	353 34	213 21	FLT IN NOT	TØT: CLR: CLR:	23 14 9	0 0 0	23 14 9	0 0 0	0 0 0	19.8 0.0 50.5	1.6 0.0 4.0	0. 0. 0.	67 99 18	0 0 0	0 0 0	20 11 9	3 3 0
	2/ 7/76	BBA	302 28	330 34	195 22	FLT IN NOT	TØT: CLR: CLR:	10 6 4	0 0 0	10 6 4	0 0 0	0 0 0	18.1 0.0 45.2	.5 0.0 1.3	0. 0. 0.	24 34 3	0 0 0	0 0 0	10 6 4	0 0 0
	2/ 8/76	* BBA	351 26	351 31	351 21	FLT IN NOT	TØT: CLR: CLR:	23 15 8	0 0 0	23 15 8	0 0 0	0 0 0	13.8 0.0 39.7	1.0 0.0 3.0	0. 0. 0.	17 19 14	0 0 0	0 0 0	23 15 8	0 0 0
	2/ 9/76	BBA	326 29	331 34	211 21	FLT IN NOT	TØT: CLR: CLR:	30 28 2	0 0 0	30 28 2	0 0 0	0 0 0	2.6 0.0 42.7	.2 0.0 3.0	0. 0. 0.	54 57 18	0 0 0	0 0 0	30 28 2	0 0 0

DEP-ARR IM/ID/IY	CODE	AVFL ALAT	EXHI EXTN	EXLO EXTS	NUMBER OF OBS					AVERAGES FOR THE FLIGHT			OZ	RH	H2O	TROP N	STRAT N
					CLD	PD5	OZ	H2O	H2S	%TIC	PATCHES	PD5					
HNL-LAX (CONT.)																	
2/10/76 * BBA	345 28	351 34	212 21	FLT TOT:	34	0	34	0	0	.4	.2	0.	73	0	0	30	4
				IN CLR:	32	0	32	0	0	0.0	0.0	0.	76	0	0	28	4
				NOT CLR:	2	0	2	0	0	6.3	3.0	0.	23	0	0	2	0
2/11/76 CAA	322 28	330 34	202 21	FLT TOT:	29	0	29	0	0	0.0	0.0	0.	50	0	0	29	0
				IN CLR:	29	0	29	0	0	0.0	0.0	0.	50	0	0	29	0
				NOT CLR:	0	0	0	0	0	0.0	0.0	0.	0	0	0	0	0
2/26/76 * CAA	330 29	390 34	215 21	FLT TOT:	40	0	40	39	39	20.0	1.4	0.	49	100	40	40	0
				IN CLR:	15	0	15	14	14	0.0	0.0	0.	59	100	26	15	0
				NOT CLR:	25	0	25	25	25	32.0	2.2	0.	44	100	48	25	0
2/27/76 CAA	363 29	370 34	238 22	FLT TOT:	26	0	26	26	26	29.6	2.1	0.	44	100	77	26	0
				IN CLR:	7	0	7	7	7	0.0	0.0	0.	46	100	33	7	0
				NOT CLR:	19	0	19	19	19	40.6	2.8	0.	43	100	94	19	0
2/29/76 * CAA	342 28	350 34	211 21	FLT TOT:	40	0	40	39	27	25.3	1.5	0.	42	77	74	40	0
				IN CLR:	19	0	19	18	6	0.0	0.0	0.	51	51	82	19	0
				NOT CLR:	21	0	21	21	21	48.2	2.8	0.	34	100	67	21	0
2/ 8/79 CAB	339 29	341 34	289 22	FLT TOT:	46	46	30	23	1	15.9	1.4	.344E+05	49	71	67	46	0
				IN CLR:	24	24	15	11	0	0.0	0.0	.265E+03	52	62	56	24	0
				NOT CLR:	22	22	15	12	1	33.1	2.9	.716E+05	45	80	77	22	0
2/10/79 CAB	337 29	342 34	278 22	FLT TOT:	43	43	26	22	12	36.1	2.6	.111E+06	46	91	120	43	0
				IN CLR:	7	7	4	2	0	0.0	0.0	.165E+04	54	83	111	7	0
				NOT CLR:	36	36	22	20	12	43.1	3.1	.132E+06	45	92	121	36	0
2/11/79 * BBB	378 28	401 34	264 22	FLT TOT:	55	0	35	27	1	14.0	1.5	0.	49	41	28	55	0
				IN CLR:	33	0	22	17	0	0.0	0.0	0.	53	24	18	33	0
				NOT CLR:	22	0	13	10	1	35.0	3.9	0.	43	70	44	22	0
2/12/79 * CAB	348 27	352 34	240 21	FLT TOT:	61	61	39	29	0	.1	.0	.297E+03	87	39	106	61	0
				IN CLR:	60	60	38	29	0	0.0	0.0	.133E+03	88	39	106	60	0
				NOT CLR:	1	1	1	0	0	4.7	1.0	.101E+05	37	0	0	1	0
2/14/79 * CAB	353 28	361 34	218 22	FLT TOT:	55	55	37	33	0	2.2	.3	.223E+04	171	43	86	38	17
				IN CLR:	50	50	34	31	0	0.0	0.0	.565E+02	180	43	74	33	17
				NOT CLR:	5	5	3	2	0	24.2	3.6	.240E+05	77	49	276	5	0
2/14/79 CAB	368 29	381 34	217 22	FLT TOT:	42	42	27	22	1	0.0	0.0	.809E+02	154	59	93	22	20
				IN CLR:	42	42	27	22	1	0.0	0.0	.809E+02	154	59	93	22	20
				NOT CLR:	0	0	0	0	0	0.0	0.0	0.	0	0	0	0	0
2/17/79 * CAB	346 27	350 34	200 21	FLT TOT:	61	61	38	35	11	31.7	.6	.603E+05	56	85	90	61	0
				IN CLR:	33	33	21	18	1	0.0	0.0	.396E+03	89	77	41	33	0
				NOT CLR:	28	28	17	17	10	69.1	1.3	.131E+06	16	92	143	28	0
2/27/79 * CAB	368 28	371 34	296 21	FLT TOT:	53	53	33	25	14	4.8	.4	.673E+04	89	80	40	53	0
				IN CLR:	44	44	27	20	9	0.0	0.0	.334E+03	95	76	42	44	0
				NOT CLR:	9	9	6	5	5	28.4	2.2	.380E+05	65	100	33	9	0

DEP-ARR IM/ID/IY	CODE	AVFL ALAT	EXHI EXTN	EXLO EXTS	NUMBER OF OBS					AVERAGES FOR THE FLIGHT					TROP N	STRAT N			
					CLD	PD5	OZ	H20,	H2S	%TIC	PATCHES	PD5	OZ	RH			H2O		
3/ 6/76	CAA	358 29	370 34	209 21	FLT	TOT:	30	0	30	30	25	7.4	1.5	0.	82	97	73	30	0
					IN	CLR:	21	0	21	21	16	0.0	0.0	0.	108	95	84	21	0
					NOT	CLR:	9	0	9	9	9	24.6	4.9	0.	21	100	49	9	0
3/ 6/79	CAB	355 29	360 34	285 21	FLT	TOT:	36	36	23	17	8	.8	.2	.376E+04	89	79	146	36	0
					IN	CLR:	34	34	21	15	7	0.0	0.0	.157E+03	92	81	157	34	0
					NOT	CLR:	2	2	2	2	1	15.3	3.0	.651E+05	56	66	64	2	0
3/ 7/79 *	CAB	346 28	351 34	206 21	FLT	TOT:	43	43	29	23	22	.1	.1	.244E+03	78	98	273	43	0
					IN	CLR:	41	41	27	22	21	0.0	0.0	.248E+03	80	97	282	41	0
					NOT	CLR:	2	2	2	1	1	2.7	2.5	.154E+03	52	100	69	2	0
3/12/79 *	CAB	367 28	371 34	266 21	FLT	TOT:	52	52	31	29	19	6.9	.7	.166E+05	163	92	53	33	19
					IN	CLR:	36	36	19	17	8	0.0	0.0	.358E+04	223	86	57	19	17
					NOT	CLR:	16	16	12	12	11	22.4	2.3	.459E+05	68	99	47	14	2
3/12/79	CAB	353 28	361 34	193 21	FLT	TOT:	41	41	26	24	0	1.5	.4	.237E+04	168	52	45	23	18
					IN	CLR:	36	36	23	21	0	0.0	0.0	.173E+04	184	54	38	18	18
					NOT	CLR:	5	5	3	3	0	12.0	3.2	.697E+04	47	37	97	5	0
3/13/79 *	CAB	347 31	371 33	243 21	FLT	TOT:	16	15	10	8	5	.5	.4	.633E+04	124	95	35	10	6
					IN	CLR:	14	13	10	8	5	0.0	0.0	.636E+04	124	95	35	9	5
					NOT	CLR:	2	2	0	0	0	4.1	3.0	.610E+04	0	0	0	1	1
3/15/79	CAB	355 27	387 34	252 21	FLT	TOT:	42	42	27	21	5	20.0	.8	.303E+05	90	81	52	0	0
					IN	CLR:	26	26	17	14	0	0.0	0.0	.720E+03	113	74	27	0	0
					NOT	CLR:	16	16	10	7	5	52.5	2.0	.785E+05	50	94	100	0	0
3/16/79	CAB	349 27	382 34	208 21	FLT	TOT:	14	9	9	10	0	1.3	.1	.513E+05	168	69	106	11	3
					IN	CLR:	13	8	9	10	0	0.0	0.0	.410E+05	168	69	108	10	3
					NOT	CLR:	1	1	0	0	0	18.0	2.0	.134E+06	0	0	0	1	0
3/16/79 *	CAB	343 33	370 34	295 32	FLT	TOT:	7	7	2	1	1	9.0	1.0	.356E+04	167	100	39	2	5
					IN	CLR:	4	4	1	1	1	0.0	0.0	.264E+04	213	100	39	2	2
					NOT	CLR:	3	3	1	0	0	20.9	2.3	.477E+04	120	0	0	0	3
3/19/79	CAB	351 25	381 34	214 21	FLT	TOT:	17	13	12	11	0	0.0	0.0	.363E+03	94	48	74	14	3
					IN	CLR:	17	13	12	11	0	0.0	0.0	.363E+03	94	48	74	14	3
					NOT	CLR:	0	0	0	0	0	0.0	0.0	0.	0	0	0	0	0
3/21/79	CAB	364 28	380 34	231 21	FLT	TOT:	43	43	26	24	0	0.0	0.0	.142E+03	182	35	35	35	8
					IN	CLR:	43	43	28	24	0	0.0	0.0	.142E+03	182	35	35	35	8
					NOT	CLR:	0	0	0	0	0	0.0	0.0	0.	0	0	0	0	0
3/21/79 *	CAB	361 28	370 34	196 21	FLT	TOT:	55	55	36	31	1	0.0	0.0	.248E+03	191	39	41	46	9
					IN	CLR:	55	55	36	31	1	0.0	0.0	.248E+03	191	39	41	46	9
					NOT	CLR:	0	0	0	0	0	0.0	0.0	0.	0	0	0	0	0
3/24/79 *	CAB	347 28	350 34	217 21	FLT	TOT:	55	55	35	29	16	0.0	0.0	.678E+03	159	94	67	35	20
					IN	CLR:	55	55	35	29	16	0.0	0.0	.678E+03	159	94	67	35	20
					NOT	CLR:	0	0	0	0	0	0.0	0.0	0.	0	0	0	0	0

APPENDIX B

DEP-ARR	IM/ID/IY	CODE	AVFL ALAT	EXHI EXTN	EXLO EXTS	NUMBER OF OBS					AVERAGES FOR		THE FLIGHT			TROP	STRAT			
						CLD	PD5	OZ	H2O	H2S	%TIC	PATCHES	PD5	OZ	RH	H2O	N	N		
HNL-LAX (CONT.)																				
3/25/79	*	CAB	347 28	351 34	218 21	FLT	TOT:	59	59	39	33	8	5.3	1.2	.148E+05	76	83	60	59	0
						IN	CLR:	38	38	26	21	4	0.0	0.0	.443E+03	84	84	62	38	0
						NOT	CLR:	21	21	13	12	4	14.8	3.4	.408E+05	61	82	58	21	0
3/27/79	*	CAB	348 28	351 34	242 21	FLT	TOT:	60	60	36	31	2	1.3	.2	.293E+04	139	75	84	37	23
						IN	CLR:	57	57	34	28	1	0.0	0.0	.800E+03	142	73	88	34	23
						NOT	CLR:	3	3	2	3	1	26.0	3.0	.434E+05	89	94	47	3	0
3/27/79		CAB	356 28	360 34	292 21	FLT	TOT:	44	44	28	21	4	1.4	.1	.290E+04	166	73	39	29	15
						IN	CLR:	41	41	25	19	2	0.0	0.0	.106E+04	180	71	38	26	15
						NOT	CLR:	3	3	3	2	2	20.3	1.7	.261E+05	47	100	53	3	0
3/28/79	*	CAB	344 31	392 34	234 21	FLT	TOT:	17	15	11	10	1	0.0	0.0	.838E+03	235	55	43	4	13
						IN	CLR:	17	15	11	10	1	0.0	0.0	.838E+03	235	55	43	4	13
						NOT	CLR:	0	0	0	0	0	0.0	0.0	0.	0	0	0	0	0
3/29/79	*	CAB	357 28	371 34	291 21	FLT	TOT:	56	56	36	6	6	15.2	.9	.479E+05	103	100	125	56	0
						IN	CLR:	32	32	20	4	4	0.0	0.0	.103E+04	145	100	145	32	0
						NOT	CLR:	24	24	16	2	2	35.5	2.1	.110E+06	62	100	84	24	0
4/ 3/76		CAA	363 27	370 33	213 21	FLT	TOT:	28	0	28	25	20	.1	.1	0.	139	93	33	28	0
						IN	CLR:	27	0	27	24	19	0.0	0.0	0.	141	93	33	27	0
						NOT	CLR:	1	0	1	1	1	2.7	2.0	0.	88	100	24	1	0
4/ 4/76		BBA	387 26	392 32	316 20	FLT	TOT:	27	0	27	0	0	0.0	0.0	0.	202	0	0	22	5
						IN	CLR:	25	0	25	0	0	0.0	0.0	0.	197	0	0	20	5
						NOT	CLR:	2	0	2	0	0	.4	1.0	0.	266	0	0	2	0
4/ 5/76	*	BBA	388 28	392 34	333 21	FLT	TOT:	36	0	36	0	0	0.0	.1	0.	190	0	0	32	4
						IN	CLR:	34	0	34	0	0	0.0	0.0	0.	191	0	0	30	4
						NOT	CLR:	2	0	2	0	0	.4	1.0	0.	165	0	0	2	0
4/ 8/76		CAA	359 29	370 34	211 22	FLT	TOT:	29	0	29	28	27	2.2	.4	0.	79	100	70	29	0
						IN	CLR:	24	0	24	23	22	0.0	0.0	0.	89	100	55	24	0
						NOT	CLR:	5	0	5	5	5	12.8	2.6	0.	32	100	136	5	0
4/ 9/76	*	CAA	307 28	310 34	205 21	FLT	TOT:	34	0	34	33	29	11.7	1.3	0.	66	95	235	34	0
						IN	CLR:	19	0	19	19	15	0.0	0.0	0.	76	92	174	19	0
						NOT	CLR:	15	0	15	14	14	26.5	3.0	0.	55	100	318	15	0
4/17/76		CAA	359 29	370 34	205 21	FLT	TOT:	29	0	29	0	0	11.9	.1	0.	81	0	0	29	0
						IN	CLR:	23	0	23	0	0	0.0	0.0	0.	78	0	0	23	0
						NOT	CLR:	6	0	6	0	0	57.5	.7	0.	93	0	0	6	0
4/18/76	*	CAA	343 28	350 34	213 21	FLT	TOT:	34	0	34	0	0	7.6	.9	0.	84	0	0	34	0
						IN	CLR:	23	0	23	0	0	0.0	0.0	0.	85	0	0	23	0
						NOT	CLR:	11	0	11	0	0	23.5	2.9	0.	83	0	0	11	0
5/10/76		CAA	368 30	407 35	190 22	FLT	TOT:	52	0	16	0	0	1.3	.4	0.	74	0	0	52	0
						IN	CLR:	46	0	16	0	0	0.0	0.0	0.	74	0	0	46	0
						NOT	CLR:	6	0	0	0	0	11.2	3.2	0.	0	0	0	6	0

DEP-ARR	IM/ID/IY	CODE	AVFL ALAT	EXHI EXTN	EXLO EXTS	NUMBER OF OBS					AVERAGES FOR			THE FLIGHT			TROP	STRAT		
						CLD	PD5	OZ	H20	H2S	%TIC	PATCHES	PD5	OZ	RH	H2O	N	N		
HNL-LAX (CONT.)																				
5/11/76	*	CAA	349 28	350 33	279 21	FLT IN NOT	TOT CLR CLR	46 38 8	0 0 0	7 7 0	0 0 0	7.2 0.0 41.5	.8 0.0 4.9	0. 0. 0.	67 67 0	0 0 0	0 0 0	46 38 8	0 0 0	
5/16/76	*	CAA	372 28	390 34	209 21	FLT IN NOT	TOT CLR CLR	55 55 0	0 0 0	14 14 0	46 46 0	11 11 0	0.0 0.0 0.0	0.0 0.0 0.0	0. 0. 0.	108 108 0	75 75 0	44 44 0	55 55 0	0 0 0
5/28/76		CAA	376 30	380 34	248 24	FLT IN NOT	TOT CLR CLR	38 38 0	0 0 0	24 24 0	0 0 0	0 0 0	0.0 0.0 0.0	0.0 0.0 0.	0. 0. 0.	92 92 0	0 0 0	0 0 0	38 38 0	0 0 0
5/29/76	*	CAA	355 29	360 34	213 22	FLT IN NOT	TOT CLR CLR	48 47 1	0 0 0	31 31 0	0 0 0	0 0 0	.0 0.0 .8	.0 0.0 1.0	0. 0. 0.	71 71 0	0 0 0	0 0 0	48 47 1	0 0 0
5/18/79		BDB	357 28	381 34	280 21	FLT IN NOT	TOT CLR CLR	51 42 9	51 42 9	32 26 6	27 21 6	2 0 2	2.9 0.0 16.7	.9 0.0 4.9	.108E+06 .102E+04 .605E+06	66 65 72	49 42 73	46 37 74	51 42 9	0 0 0
5/26/79	*	BDB	358 28	370 34	296 21	FLT IN NOT	TOT CLR CLR	51 42 9	51 42 9	31 27 4	26 21 5	2 0 2	3.4 0.0 19.5	.6 0.0 3.4	.356E+05 .104E+04 .197E+06	61 59 73	52 46 79	68 61 97	51 42 9	0 0 0
6/15/78	*	CAB	357 28	360 34	291 21	FLT IN NOT	TOT CLR CLR	58 43 15	58 43 15	38 30 8	33 26 7	5 4 1	4.8 0.0 18.4	.5 0.0 1.8	.781E+04 .366E+04 .197E+05	62 62 62	64 62 70	65 57 97	58 43 15	0 0 0
6/22/78	*	CAB	355 28	360 34	296 21	FLT IN NOT	TOT CLR CLR	56 48 8	56 48 8	36 31 5	31 29 2	5 3 2	3.9 0.0 27.1	.6 0.0 4.5	.905E+04 .560E+03 .600E+05	84 84 33	68 66 100	60 59 69	56 48 8	0 0 0
6/22/78	*	CAB	355 28	361 34	198 21	FLT IN NOT	TOT CLR CLR	56 55 1	56 55 1	37 37 0	32 31 1	0 0 0	.1 0.0 3.9	.0 0.0 2.0	.198E+03 .195E+03 .389E+03	100 100 0	50 49 80	44 44 41	56 55 1	0 0 0
6/22/78		CAB	364 28	371 34	284 21	FLT IN NOT	TOT CLR CLR	45 45 0	45 45 0	29 29 0	25 25 0	0 0 0	0.0 0.0 0.0	0.0 0.0 0.	.669E+02 .669E+02 0.	96 96 0	61 61 0	47 47 0	45 45 0	0 0 0
6/24/78	*	CAB	356 28	361 34	233 21	FLT IN NOT	TOT CLR CLR	59 59 0	59 59 0	39 39 0	34 34 0	0 0 0	0.0 0.0 0.0	0.0 0.0 0.	.413E+02 .413E+02 0.	73 73 0	42 42 0	57 57 0	59 59 0	0 0 0
6/28/78	*	CAB	357 28	360 34	288 21	FLT IN NOT	TOT CLR CLR	56 50 6	56 50 6	36 33 3	31 27 4	4 0 4	1.5 0.0 14.2	.4 0.0 3.8	.146E+04 .318E+03 .110E+05	73 78 22	54 47 100	61 49 141	56 50 6	0 0 0
6/30/78	*	CAB	355 28	360 34	197 21	FLT IN NOT	TOT CLR CLR	58 52 6	58 52 6	37 32 5	33 27 6	3 0 3	1.0 0.0 9.9	.5 0.0 4.5	.238E+04 .240E+03 .209E+05	45 47 29	46 37 85	63 55 98	58 52 6	0 0 0

APPENDIX B

DEP-ARR IM/ID/IY	CODE	AVFL ALAT	EXHI EXTN	EXLO EXTS	NUMBER OF OBS					AVERAGES FOR THE FLIGHT		CLD	PDS	QZ	RH	H2O	TROP N	STRAT N
					CLD	PDS	QZ	H2O	H2S	%TIC	PATCHES	PDS	QZ	RH	H2O	TROP N	STRAT N	
6/30/78	CAB	338 28	341 34	281 22	FLT TOT:	42	42	25	19	0	4.2	.6	.111E+05	38	27	53	42	0
					IN CLR:	37	37	21	19	0	0.0	0.0	.224E+03	40	27	53	37	0
					NOT CLR:	5	5	4	0	0	35.0	5.4	.916E+05	30	0	0	5	0
6/ 1/79 *	BDB	327 28	331 34	208 21	FLT TOT:	51	51	32	30	8	.1	.1	.484E+04	70	65	151	51	0
					IN CLR:	47	47	31	27	6	0.0	0.0	.248E+04	71	64	126	47	0
					NOT CLR:	4	4	1	3	2	1.4	1.3	.326E+05	37	75	375	4	0
6/ 2/79	BDB	358 28	380 34	224 21	FLT TOT:	49	49	31	20	0	.1	.0	.134E+04	119	43	41	49	0
					IN CLR:	48	48	30	19	0	0.0	0.0	.136E+04	121	42	40	48	0
					NOT CLR:	1	1	1	1	0	4.7	1.0	.665E+02	63	71	52	1	0
6/ 3/79 *	BDB	372 28	391 34	218 21	FLT TOT:	53	53	34	20	1	0.0	0.0	.645E+04	141	42	34	53	0
					IN CLR:	53	53	34	20	1	0.0	0.0	.645E+04	141	42	34	53	0
					NOT CLR:	0	0	0	0	0	0.0	0.0	0.	0	0	0	0	0
6/ 3/79 *	CAB	363 28	370 34	231 22	FLT TOT:	42	42	0	21	0	30.0	.0	.301E+05	0	32	40	42	0
					IN CLR:	24	24	0	9	0	0.0	0.0	.305E+04	0	34	23	24	0
					NOT CLR:	18	18	0	12	0	70.1	.1	.661E+05	0	30	54	18	0
6/ 4/79	CAB	376 28	381 33	295 21	FLT TOT:	48	48	0	25	2	2.4	.3	.748E+04	0	34	29	48	0
					IN CLR:	41	41	0	20	0	0.0	0.0	.311E+04	0	29	16	41	0
					NOT CLR:	-7	7	0	5	2	16.2	2.3	.331E+05	0	54	84	7	0
6/ 7/79 *	CAB	347 28	351 34	265 21	FLT TOT:	53	53	0	28	0	3.4	.2	.119E+05	0	39	42	53	0
					IN CLR:	45	45	0	24	0	0.0	0.0	.366E+04	0	38	42	45	0
					NOT CLR:	8	8	0	4	0	22.6	1.4	.585E+05	0	44	41	8	0
7/ 2/78 *	CAB	348 27	351 33	293 21	FLT TOT:	55	55	35	28	1	1.1	.5	.758E+03	33	44	72	55	0
					IN CLR:	50	50	32	26	0	0.0	0.0	.423E+02	34	40	66	50	0
					NOT CLR:	5	5	3	2	1	12.2	6.0	.792E+04	19	92	149	5	0
7/ 4/78 *	CAB	348 27	351 33	279 21	FLT TOT:	53	53	33	29	13	.5	.3	.337E+03	26	86	171	53	0
					IN CLR:	47	47	29	27	12	0.0	0.0	.280E+02	27	87	170	47	0
					NOT CLR:	6	6	4	2	1	4.8	2.8	.276E+04	24	85	194	6	0
7/ 5/78	CAB	365 28	370 34	254 21	FLT TOT:	47	47	31	26	3	0.0	0.0	.207E+02	36	35	59	47	0
					IN CLR:	47	47	31	26	3	0.0	0.0	.207E+02	36	35	59	47	0
					NOT CLR:	0	0	0	0	0	0.0	0.0	0.	0	0	0	0	0
7/ 7/78	CAB	365 28	371 34	239 21	FLT TOT:	48	48	32	27	0	0.0	0.0	.783E+02	61	18	30	46	0
					IN CLR:	48	48	32	27	0	0.0	0.0	.783E+02	61	18	30	48	0
					NOT CLR:	0	0	0	0	0	0.0	0.0	0.	0	0	0	0	0
7/10/78 *	CAB	358 28	360 34	311 21	FLT TOT:	52	52	32	30	0	0.0	0.0	.282E+02	39	19	28	52	0
					IN CLR:	52	52	32	30	0	0.0	0.0	.282E+02	39	19	28	52	0
					NOT CLR:	0	0	0	0	0	0.0	0.0	0.	0	0	0	0	0
7/10/78	CAB	337 29	341 34	262 22	FLT TOT:	48	48	32	24	0	0.0	0.0	.877E+02	34	18	54	48	0
					IN CLR:	48	48	32	24	0	0.0	0.0	.877E+02	34	18	54	48	0
					NOT CLR:	0	0	0	0	0	0.0	0.0	0.	0	0	0	0	0

DEP-ARR	IM/ID/IY	CODE	AVFL ALAT	EXHI EXTN	EXLO EXTS	NUMBER OF OBS					AVERAGES FOR THE FLIGHT			TRCP			STRAT			
						CLD	PD5	OZ	H20, H2S		%TIC	PATCHES	PD5	OZ	RH	H20	N	N		
HNL-LAX (CONT.)																				
	7/17/78	CAB	338 29	341 34	292 22	FLT IN NOT	TOT: CLR: CLR:	46 46 0	46 46 0	30 30 0	24 24 0	1 1 0	0.0 0.0 0.0	0.0 0.0 0.0	.384E+02 .384E+02 0.	52 52 0	34 34 0	76 76 0	46 46 0	0 0 0
	7/19/78	* CAB	354 28	361 34	205 21	FLT IN NOT	TOT: CLR: CLR:	52 52 0	52 52 0	34 34 0	31 31 0	0 0 0	0.0 0.0 0.0	0.0 0.0 0.0	.109E+02 .109E+02 0.	49 49 0	10 10 0	42 42 0	52 52 0	0 0 0
	7/19/78	CAB	365 29	381 34	277 22	FLT IN NOT	TOT: CLR: CLR:	46 46 0	46 46 0	29 29 0	23 23 0	0 0 0	0.0 0.0 0.0	0.0 0.0 0.0	.550E+01 .550E+01 0.	55 55 0	16 16 0	34 34 0	46 46 0	0 0 0
	7/19/78	* CAB	354 28	361 34	191 21	FLT IN NOT	TOT: CLR: CLR:	52 52 0	52 52 0	34 34 0	29 29 0	1 1 0	0.0 0.0 0.0	0.0 0.0 0.0	.278E+02 .278E+02 0.	50 50 0	26 26 0	70 70 0	52 52 0	0 0 0
	7/21/78	* CAB	357 28	361 34	291 21	FLT IN NOT	TOT: CLR: CLR:	51 50 1	51 50 1	33 33 0	30 29 1	0 0 0	.6 0.0 31.4	0.0 0.0 2.0	.754E+01 .769E+01 0.	47 47 0	25 23 74	53 39 475	51 50 1	0 0 0
	7/23/78	CAB	367 29	371 34	252 25	FLT IN NOT	TOT: CLR: CLR:	37 37 0	37 37 0	24 24 0	20 20 0	0 0 0	0.0 0.0 0.0	0.0 0.0 0.0	.258E+02 .258E+02 0.	56 56 0	21 21 0	28 28 0	37 37 0	0 0 0
	10/23/78	BBB	372 29	381 34	210 22	FLT IN NOT	TOT: CLR: CLR:	49 49 0	49 49 0	31 31 0	0 0 0	0 0 0	0.0 0.0 0.0	0.0 0.0 0.0	.130E+01 .130E+01 0.	39 39 0	0 0 0	0 0 0	49 49 0	0 0 0
	11/ 4/78	* BBB	355 28	360 34	251 21	FLT IN NOT	TOT: CLR: CLR:	51 29 22	51 29 22	32 18 14	26 13 13	6 1 5	15.4 0.0 35.7	1.3 0.0 3.0	.960E+05 .938E+05 .989E+05	32 46 14	67 48 86	94 76 112	51 29 22	0 0 0
	11/ 7/78	BBB	344 29	380 34	228 22	FLT IN NOT	TOT: CLR: CLR:	45 18 27	45 18 27	31 12 19	11 2 9	5 0 5	26.3 0.0 43.9	1.4 0.0 2.3	.831E+05 .350E+03 .138E+06	40 53 32	85 37 95	70 71 70	45 18 27	0 0 0
	11/12/78	* BBB	355 29	360 34	245 22	FLT IN NOT	TOT: CLR: CLR:	50 50 0	50 50 0	32 32 0	29 29 0	0 0 0	0.0 0.0 0.0	0.0 0.0 0.0	.389E+01 .389E+01 0.	83 83 0	18 18 0	25 25 0	50 50 0	0 0 0
	11/12/78	BBB	375 28	380 34	270 22	FLT IN NOT	TOT: CLR: CLR:	50 50 0	50 50 0	33 33 0	30 30 0	0 0 0	0.0 0.0 0.0	0.0 0.0 0.0	.394E+01 .394E+01 0.	58 58 0	21 21 0	27 27 0	46 46 0	4 4 0
	11/13/78	* BBB	332 28	360 34	239 21	FLT IN NOT	TOT: CLR: CLR:	48 48 0	48 48 0	33 33 0	27 27 0	0 0 0	0.0 0.0 0.0	0.0 0.0 0.0	.164E+02 .164E+02 0.	72 72 0	14 14 0	31 31 0	48 48 0	0 0 0
	11/14/78	BBB	337 29	340 34	265 22	FLT IN NOT	TOT: CLR: CLR:	45 45 0	45 45 0	29 29 0	20 20 0	0 0 0	0.0 0.0 0.0	0.0 0.0 0.0	.427E+01 .427E+01 0.	73 73 0	15 15 0	33 33 0	45 45 0	0 0 0

APPENDIX B

DEP-ARR	IM/ID/IY	CODE	AVFL ALAT	EXHI EXTN	EXLO EXTS	NUMBER OF OBS					AVERAGES FOR THE FLIGHT			OZ	RH	H2O	TROP N	STRAT N	
						CLD	PD5	OZ	H2O	H2S	%TIC	PATCHES	PD5						
HNL-LAX (CONT.)																			
12/31/75		CAA	363 29	370 34	213 22	FLT IN NOT	TOT CLR CLR	28 21 7	0 0 0	28 21 7	0 0 0	0 0 0	7.2 0.0 28.8	.7 0.0 2.7	0. 0. 0.	47 52 33	0 0 0	0 0 0	0 0 0
12/14/77		BCB	372 28	380 34	254 21	FLT IN NOT	TOT CLR CLR	45 44 1	45 44 1	30 29 1	0 0 0	0 0 0	.5 0.0 23.5	0.0 0.0 0.0	.101E+02 .962E+01 .306E+02	36 35 65	0 0 0	0 0 0	45 44 1
12/15/77	*	BCB	345 25	350 32	255 20	FLT IN NOT	TOT CLR CLR	54 54 0	54 54 0	34 34 0	0 0 0	0 0 0	0.0 0.0 0.0	0.0 0.0 0.0	.235E+01 .235E+01 0.	35 35 0	0 0 0	0 0 0	54 54 0
12/16/77		BCB	335 29	341 34	249 22	FLT IN NOT	TOT CLR CLR	37 37 0	37 37 0	20 20 0	0 0 0	0 0 0	0.0 0.0 0.0	0.0 0.0 0.0	.302E+02 .302E+02 0.	53 53 0	0 0 0	0 0 0	37 37 0
12/17/77	*	BCB	347 28	351 33	262 21	FLT IN NOT	TOT CLR CLR	59 59 0	59 59 0	36 36 0	0 0 0	0 0 0	0.0 0.0 0.0	0.0 0.0 0.0	.428E+01 .428E+01 0.	54 54 0	0 0 0	0 0 0	59 59 0
HNL-NAN																			
1/ 5/77	*	DDA	344 2	370 20	251 -15	FLT IN NOT	TOT CLR CLR	61 45 16	0 0 0	0 0 0	0 0 0	0 0 0	5.8 0.0 22.2	1.0 0.0 3.8	0. 0. 0.	0 0 0	0 0 0	0 0 0	61 45 16
1/ 6/77		DDA	292 1	310 19	253 -16	FLT IN NOT	TOT CLR CLR	56 54 2	0 0 0	0 0 0	0 0 0	0 0 0	.8 0.0 22.5	.1 0.0 4.0	0. 0. 0.	0 0 0	0 0 0	0 0 0	56 54 2
2/11/77	*	DDA	357 1	371 19	254 -15	FLT IN NOT	TOT CLR CLR	59 50 9	59 50 9	36 30 6	0 0 0	0 0 0	4.9 0.0 32.4	.5 0.0 3.4	.336E+05 .182E+02 .220E+06	32 35 18	0 0 0	0 0 0	59 50 9
2/12/77		DDA	336 1	350 19	220 -16	FLT IN NOT	TOT CLR CLR	59 55 4	59 55 4	37 35 2	0 0 0	0 0 0	1.8 0.0 27.1	.2 0.0 3.3	.984E+04 .977E+01 .145E+06	27 27 14	0 0 0	0 0 0	59 55 4
2/19/77	*	DDA	364 2	371 20	256 -15	FLT IN NOT	TOT CLR CLR	61 57 4	61 57 4	38 35 3	0 0 0	0 0 0	1.7 0.0 26.0	.3 0.0 4.0	.545E+04 .286E+01 .830E+05	24 24 25	0 0 0	0 0 0	0 0 0
2/20/77		DDA	345 1	350 19	248 -16	FLT IN NOT	TOT CLR CLR	60 54 6	60 54 6	38 34 4	0 0 0	0 0 0	.8 0.0 7.8	.2 0.0 1.5	.360E+04 .831E+01 .360E+05	22 23 16	0 0 0	0 0 0	0 0 0
6/ 1/79		BDB	344 1	370 19	203 -16	FLT IN NOT	TOT CLR CLR	63 51 12	63 51 12	41 34 7	19 16 3	0 0 0	5.4 0.0 28.5	1.0 0.0 5.4	.115E+06 .146E+04 .595E+06	41 43 31	56 52 77	129 122 167	63 51 12

DEP-ARR	IM/ID/IY	CODE	AVFL ALAT	EXHI EXTN	EXLO EXTS	NUMBER OF OBS					AVERAGES FOR THE FLIGHT			ØZ	RH	H2Ø	TROP N	STRAT N		
						CLD	PD5	ØZ	H2Ø, H2S	%TIC	PATCHES	PD5								
HNL-NAN (CONT.)																				
	6/ 2/79	* BDB	354 2	370 20	263 -14	FLT IN NOT	TØT CLR CLR	59 43 16	59 43 16	39 26 13	30 21 9	4 0 4	3.2 0.0 11.6	.6 0.0 2.1	.713E+05 .289E+04 .255E+06	50 55 39	55 41 89	121 100 169	59 43 16	0 0 0
	11/19/76	DDA	335 1	350 19	207 -16	FLT IN NOT	TØT CLR CLR	64 64 0	0 0 0	0 0 0	0 0 0	0 0 0	0.0 0.0 0.0	0.0 0.0 0.0	0. 0. 0.	0 0 0	0 0 0	0 0 0	64 64 0	0 0 0
	11/26/76	* DDA	343 2	370 20	246 -15	FLT IN NOT	TØT CLR CLR	59 42 17	0 0 0	0 0 0	0 0 0	0 0 0	10.9 0.0 37.8	1.4 0.0 4.8	0. 0. 0.	0 0 0	0 0 0	0 0 0	59 42 17	0 0 0
	11/27/76	DDA	330 1	350 19	258 -16	FLT IN NOT	TØT CLR CLR	61 51 10	0 0 0	0 0 0	0 0 0	0 0 0	4.8 0.0 29.5	.5 0.0 3.2	0. 0. 0.	0 0 0	0 0 0	0 0 0	61 51 10	0 0 0
	11/14/78	* BBB	353 2	370 20	246 -15	FLT IN NOT	TØT CLR CLR	59 55 4	59 55 4	39 36 3	31 28 3	0 0 0	.5 0.0 7.7	.1 0.0 1.5	.989E+01 .106E+02 0.	32 33 21	46 44 71	83 79 120	59 55 4	0 0 0
	12/ 2/76	* DDA	344 2	370 20	255 -15	FLT IN NOT	TØT CLR CLR	62 43 19	0 0 0	0 0 0	0 0 0	0 0 0	9.5 0.0 31.1	1.0 0.0 3.3	0. 0. 0.	0 0 0	0 0 0	0 0 0	62 43 19	0 0 0
	12/ 3/76	DDA	295 1	310 19	257 -16	FLT IN NOT	TØT CLR CLR	63 50 13	0 0 0	0 0 0	0 0 0	0 0 0	5.3 0.0 25.8	.6 0.0 2.8	0. 0. 0.	0 0 0	0 0 0	0 0 0	63 50 13	0 0 0
	12/13/76	* DDA	302 2	330 20	223 -15	FLT IN NOT	TØT CLR CLR	63 50 13	0 0 0	0 0 0	0 0 0	0 0 0	4.8 0.0 23.4	1.0 0.0 5.0	0. 0. 0.	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0
	12/14/76	DDA	337 1	350 19	249 -16	FLT IN NOT	TØT CLR CLR	59 31 28	0 0 0	0 0 0	0 0 0	0 0 0	31.5 0.0 66.4	1.9 0.0 4.0	0. 0. 0.	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0
	12/15/76	* DDA	336 2	370 20	250 -15	FLT IN NOT	TØT CLR CLR	59 44 15	0 0 0	0 0 0	0 0 0	0 0 0	14.3 0.0 56.2	.7 0.0 2.9	0. 0. 0.	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0
	12/16/76	DDA	298 1	310 19	238 -16	FLT IN NOT	TØT CLR CLR	62 51 11	0 0 0	0 0 0	0 0 0	0 0 0	4.8 0.0 27.1	.8 0.0 4.3	0. 0. 0.	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0
	12/23/76	* DDA	348 2	370 20	255 -15	FLT IN NOT	TØT CLR CLR	59 44 15	0 0 0	0 0 0	0 0 0	0 0 0	9.7 0.0 38.3	1.2 0.0 4.7	0. 0. 0.	0 0 0	0 0 0	0 0 0	59 44 15	0 0 0
	12/24/76	DDA	346 2	350 19	219 -16	FLT IN NOT	TØT CLR CLR	63 41 22	0 0 0	0 0 0	0 0 0	0 0 0	19.5 0.0 55.8	1.6 0.0 4.7	0. 0. 0.	0 0 0	0 0 0	0 0 0	63 41 22	0 0 0

APPENDIX B

DEP-ARR	IM/ID/IY	CODE	AVFL ALAT	EXHI EXTN	EXLG EXTS	NUMBER OF OBS					AVERAGES FOR THE FLIGHT			TRCP	STRAT					
						CLD	PD5	OZ	H2O	H2S	%TIC	PATCHES	PD5	OZ	RH	H2O	N	N		
HNL-NAN (CONT.)																				
	12/25/76	* DDA	349 2	370 20	260 -15	FLT IN NOT	TOT: CLR: CLR:	63 45 18	0 0 0	0 0 0	0 0 0	12.6 0.0 44.0	1.2 0.0 4.3	0. 0. 0.	0 0 0	0 0 0	0 0 0	63 45 18	0 0 0	
	12/26/76	DDA	347 1	350 19	266 -16	FLT IN NOT	TOT: CLR: CLR:	59 49 10	0 0 0	0 0 0	0 0 0	8.1 0.0 48.0	.7 0.0 4.1	0. 0. 0.	0 0 0	0 0 0	0 0 0	59 49 10	0 0 0	
	12/15/77	BCB	307 1	312 19	229 -16	FLT IN NOT	TOT: CLR: CLR:	54 46 8	54 46 8	32 28 4	0 0 0	6.1 0.0 41.3	0.0 0.0 0.0	.723E+05 .463E+01 .488E+06	29 30 21	0 0 0	0 0 0	54 46 8	0 0 0	
	12/16/77	* BCB	354 1	370 20	241 -15	FLT IN NOT	TOT: CLR: CLR:	61 44 17	61 44 17	39 29 10	0 0 0	7.8 0.0 27.8	0.0 0.0 0.0	.311E+05 .284E+01 .111E+06	29 32 20	0 0 0	0 0 0	61 44 17	0 0 0	
HNL-NRT																				
	1/ 2/78	* BCB	374 31	390 36	193 21	FLT IN NOT	TOT: CLR: CLR:	60 60 0	60 60 0	40 40 0	35 35 0	0 0 0	0 0 0	0. 0. 0.	65 65 0	23 23 0	37 37 0	0 0 0	0 0 0	
	1/ 3/79	BBB	335 25	350 35	251 21	FLT IN NOT	TOT: CLR: CLR:	92 92 0	0 0 0	59 59 0	45 45 0	0 0 0	0 0 0	0. 0. 0.	44 44 0	26 26 0	124 124 0	92 92 0	0 0 0	
	2/12/79	BBB	336 32	351 38	278 22	FLT IN NOT	TOT: CLR: CLR:	83 59 24	0 0 0	57 40 17	39 25 14	4 1 3	12.6 0.0 43.4	1.2 0.0 4.0	0. 0. 0.	156 193 69	55 37 87	65 70 55	61 37 24	22 22 0
	2/20/79	* BBB	359 32	370 36	254 22	FLT IN NOT	TOT: CLR: CLR:	21 21 0	0 0 0	12 12 0	11 11 0	1 1 0	0.0 0.0 0.0	0.0 0.0 0.0	0. 0. 0.	198 198 0	31 31 0	37 37 0	10 10 0	11 11 0
	2/21/79	BBB	339 32	351 36	251 22	FLT IN NOT	TOT: CLR: CLR:	95 60 35	0 0 0	63 40 23	49 33 16	0 0 0	11.1 0.0 30.2	2.1 0.0 5.6	0. 0. 0.	86 106 51	48 33 77	47 31 79	95 60 35	0 0 0
	3/13/79	BBB	372 34	390 40	303 22	FLT IN NOT	TOT: CLR: CLR:	90 66 24	0 0 0	57 42 15	52 38 14	6 0 6	13.5 0.0 50.5	1.1 0.0 4.0	0. 0. 0.	283 365 54	45 28 91	49 42 68	35 11 24	55 55 0
	3/13/79	* BBB	368 31	370 36	292 22	FLT IN NOT	TOT: CLR: CLR:	64 44 20	0 0 0	42 29 13	37 25 12	3 0 3	13.5 0.0 43.1	1.2 0.0 3.7	0. 0. 0.	120 142 72	48 32 83	45 51 33	29 13 16	35 31 4
	5/10/79	BDB	342 29	351 35	265 22	FLT IN NOT	TOT: CLR: CLR:	84 57 27	84 57 27	0 0 0	49 31 18	10 2 8	7.4 0.0 22.9	1.0 0.0 3.1	0. 0. 0.	0 0 0	65 51 88	110 90 146	84 57 27	0 0 0

DEP-ARR		CODE	AVFL ALAT	EXHI EXTN	EXLO EXTS	NUMBER OF OBS					AVERAGES FOR		THE FLIGHT		OZ	RH	H2O	TROP N	STRAT N
IM/ID/IY						CLD	PD5	OZ	H2O	H2S	%TIC	PATCHES	PD5						
HNL-NRT (CONT.)																			
6/ 3/79	BDB	375 29	390 35	263 22	FLT TØT:	80	80	54	38	1	.2	.1	.269E+04	79	45	45	80	0	
					IN CLR:	75	75	51	35	0	0.0	0.0	.969E+03	80	43	43	75	0	
					NØT CLR:	5	5	3	3	1	2.7	1.8	.285E+05	60	66	67	5	0	
10/14/78 *	BBB	361 33	370 38	256 22	FLT TØT:	65	65	43	0	0	9.1	1.2	.473E+05	59	0	0	65	0	
					IN CLR:	46	46	30	0	0	0.0	0.0	.906E+03	71	0	0	46	0	
					NØT CLR:	19	19	13	0	0	31.3	4.2	.160E+06	30	0	0	19	0	
10/14/78	BBB	349 28	370 35	258 22	FLT TØT:	80	80	52	0	0	10.0	1.3	.157E+05	36	0	0	80	0	
					IN CLR:	52	52	35	0	0	0.0	0.0	.217E+03	37	0	0	52	0	
					NØT CLR:	28	28	17	0	0	28.6	3.6	.444E+05	34	0	0	28	0	
10/25/78 *	BBB	365 32	371 37	261 21	FLT TØT:	66	66	44	36	2	3.5	.4	.268E+05	61	49	30	66	0	
					IN CLR:	61	61	40	33	1	0.0	0.0	.288E+02	61	46	29	61	0	
					NØT CLR:	5	5	4	3	1	46.3	5.0	.354E+06	54	85	44	5	0	
10/29/78	BBB	351 31	351 35	349 28	FLT TØT:	52	52	28	29	9	8.1	1.0	.267E+05	35	76	103	52	0	
					IN CLR:	32	32	18	15	0	0.0	0.0	.203E+02	31	59	86	32	0	
					NØT CLR:	20	20	10	14	9	21.1	2.7	.694E+05	42	93	121	20	0	
11/ 6/78 *	BBB	345 33	354 38	261 22	FLT TØT:	57	57	35	32	7	3.6	.9	.258E+04	57	58	142	57	0	
					IN CLR:	45	45	28	26	2	0.0	0.0	.243E+02	62	49	124	45	0	
					NØT CLR:	12	12	7	6	5	17.0	4.3	.122E+05	38	99	218	12	0	
HNL-ORD																			
2/ 9/79 *	CAB	343 32	352 42	278 21	FLT TØT:	89	89	57	52	5	21.4	1.8	.566E+05	58	79	63	89	0	
					IN CLR:	45	45	30	28	3	0.0	0.0	.305E+03	79	74	38	45	0	
					NØT CLR:	44	44	27	24	2	43.2	3.6	.114E+06	35	84	92	44	0	
2/ 9/79	CAB	348 35	371 42	232 23	FLT TØT:	77	77	50	42	9	8.3	.7	.138E+05	87	78	59	65	12	
					IN CLR:	54	54	35	30	5	0.0	0.0	.239E+03	112	73	33	42	12	
					NØT CLR:	23	23	15	12	4	27.9	2.4	.456E+05	29	90	124	23	0	
2/15/79 *	CAB	341 38	351 43	278 25	FLT TØT:	92	92	60	54	7	.1	.1	.210E+03	185	69	45	53	39	
					IN CLR:	89	89	58	54	7	0.0	0.0	.790E+02	189	69	45	50	39	
					NØT CLR:	3	3	2	0	0	2.6	1.7	.411E+04	79	0	0	3	0	
2/16/79	CAB	326 33	370 41	263 22	FLT TØT:	76	76	48	41	2	0.0	0.0	.117E+03	153	46	53	55	21	
					IN CLR:	76	76	48	41	2	0.0	0.0	.117E+03	153	46	53	55	21	
					NØT CLR:	0	0	0	0	0	0.0	0.0	0.	0	0	0	0	0	
2/22/79 *	CAB	339 37	352 43	274 23	FLT TØT:	89	89	57	47	9	3.1	.8	.163E+05	159	78	52	66	23	
					IN CLR:	73	73	49	38	7	0.0	0.0	.267E+03	173	77	49	50	23	
					NØT CLR:	16	16	8	9	2	17.5	4.4	.896E+05	71	85	64	16	0	
3/ 2/76	CAA	329 35	335 42	204 22	FLT TØT:	49	0	49	48	25	14.4	.7	0.	113	75	99	36	13	
					IN CLR:	34	0	34	34	11	0.0	0.0	0.	147	65	100	21	13	
					NØT CLR:	15	0	15	14	14	47.0	2.3	0.	36	100	96	15	0	

DEP-ARR MM/DD/YY	CODE	AVFL ALAT	EXHI EXTN	EXLO EXTS			NUMBER OF OBS					AVERAGES FOR THE FLIGHT			OZ	RH	H2O	TRCP N	STRAT N
							CLD	PD5	OZ	H20, H2S	%TIC	PATCHES	PD5						
HNL-ORD (CONT.)																			
3/ 4/76 *	CAA	347 36	390 43	204 22	FLT	TOT:	62	0	62	60	30	10.8	.7	0.	140	74	46	43	19
					IN	CLR:	47	0	47	46	16	0.0	0.0	0.	166	66	39	28	19
					NOT	CLR:	15	0	15	14	14	44.8	2.9	0.	56	100	69	15	0
3/ 5/76 *	CAA	334 37	355 44	197 22	FLT	TOT:	59	0	59	59	44	6.9	.7	0.	126	87	70	56	3
					IN	CLR:	47	0	47	47	32	0.0	0.0	0.	142	83	72	44	3
					NOT	CLR:	12	0	12	12	12	34.2	3.4	0.	62	100	60	12	0
3/ 5/76	CAA	343 35	370 42	204 22	FLT	TOT:	53	0	53	52	27	5.5	.3	0.	218	62	69	30	23
					IN	CLR:	39	0	39	38	13	0.0	0.0	0.	280	48	41	16	23
					NOT	CLR:	14	0	14	14	14	20.7	1.2	0.	45	100	142	14	0
3/30/76	CAA	335 36	370 42	203 22	FLT	TOT:	50	0	50	50	35	5.1	1.0	0.	253	75	93	33	17
					IN	CLR:	36	0	36	36	21	0.0	0.0	0.	319	65	73	19	17
					NOT	CLR:	14	0	14	14	14	18.1	3.4	0.	84	100	144	14	0
3/31/76 *	CAA	343 40	351 42	205 37	FLT	TOT:	28	0	28	27	13	.1	.0	0.	226	68	42	15	13
					IN	CLR:	27	0	27	26	12	0.0	0.0	0.	232	67	42	14	13
					NOT	CLR:	1	0	1	1	1	2.7	1.0	0.	80	100	42	1	0
3/ 2/79 *	CAB	339 35	351 42	275 22	FLT	TOT:	90	90	57	48	40	11.4	.7	.288E+05	85	99	101	85	5
					IN	CLR:	67	67	44	37	31	0.0	0.0	.762E+02	97	99	109	62	5
					NOT	CLR:	23	23	13	11	9	44.4	2.6	.113E+06	43	100	77	23	0
3/22/79 *	CAB	341 38	350 45	287 22	FLT	TOT:	88	88	55	50	19	13.2	.7	.477E+05	187	88	64	56	32
					IN	CLR:	64	64	39	34	12	0.0	0.0	.925E+03	238	87	62	32	32
					NOT	CLR:	24	24	16	16	7	48.4	2.5	.172E+06	62	91	66	24	0
3/23/79	CAB	341 31	370 41	221 21	FLT	TOT:	76	76	49	41	4	2.5	.2	.178E+05	186	62	99	32	44
					IN	CLR:	72	72	48	40	4	0.0	0.0	.240E+03	189	61	99	28	44
					NOT	CLR:	4	4	1	1	0	47.7	3.0	.334E+06	31	98	71	4	0
4/ 1/76	CAA	344 35	370 42	205 22	FLT	TOT:	58	0	58	0	0	.0	.0	0.	156	0	0	37	21
					IN	CLR:	56	0	56	0	0	0.0	0.0	0.	159	0	0	35	21
					NOT	CLR:	2	0	2	0	0	.6	1.0	0.	81	0	0	2	0
4/ 7/76 *	CAA	341 39	351 45	213 26	FLT	TOT:	56	0	56	0	0	4.1	.4	0.	193	0	0	49	7
					IN	CLR:	46	0	46	0	0	0.0	0.0	0.	219	0	0	39	7
					NOT	CLR:	10	0	10	0	0	23.2	2.0	0.	70	0	0	10	0
4/10/76	CAA	350 35	390 42	206 22	FLT	TOT:	52	0	52	51	14	1.2	.0	0.	179	78	94	42	10
					IN	CLR:	51	0	51	50	13	0.0	0.0	0.	182	78	91	41	10
					NOT	CLR:	1	0	1	1	1	61.6	2.0	0.	51	100	272	1	0
4/10/76 *	CAA	314 44	350 45	205 42	FLT	TOT:	17	0	17	17	8	1.2	.4	0.	124	90	170	17	0
					IN	CLR:	15	0	15	15	6	0.0	0.0	0.	131	89	165	15	0
					NOT	CLR:	2	0	2	2	2	10.0	3.0	0.	75	100	205	2	0
4/12/76	CAA	370 40	390 42	222 34	FLT	TOT:	28	0	28	27	13	0.0	0.0	0.	246	74	59	8	20
					IN	CLR:	28	0	28	27	13	0.0	0.0	0.	246	74	59	8	20
					NOT	CLR:	0	0	0	0	0	0.0	0.0	0.	0	0	0	0	0

DEP-ARR	IM/ID/IY	CODE	AVFL ALAT	EXHI EXTN	EXLO EXTS	NUMBER OF OBS					AVERAGES FOR THE FLIGHT			TROF			STRAT			
						CLD	PD5	OZ	H2O	H2S	%TIC	PATCHES	PD5	OZ	RH	H2O	N	N		
HNL-ORD (CONT.)																				
4/13/76	*	CAA	316 42	351 42	207 40	FLT IN NOT	TOT: CLR: CLR:	17 10 7	0 0 0	17 10 7	17 10 7	10 3 7	19.0 0.0 46.2	1.4 0.0 3.4	0. 0. 0.	179 241 91	80 66 100	135 142 127	14 7 7	3 3 0
4/14/76		CAA	323 27	330 32	204 22	FLT IN NOT	TOT: CLR: CLR:	27 21 6	0 0 0	27 21 6	26 20 6	16 10 6	1.7 0.0 7.8	.5 0.0 2.2	0. 0. 0.	68 71 57	84 80 100	185 180 203	27 21 6	0 0 0
4/19/76		CAA	335 31	370 39	210 22	FLT IN NOT	TOT: CLR: CLR:	37 33 4	0 0 0	37 33 4	36 32 4	28 24 4	1.3 0.0 12.1	.1 0.0 1.0	0. 0. 0.	104 108 72	92 91 100	160 161 152	35 31 4	2 2 0
4/20/76		CAA	340 32	370 40	208 22	FLT IN NOT	TOT: CLR: CLR:	40 34 6	0 0 0	40 34 6	40 34 6	35 29 6	1.3 0.0 8.7	.2 0.0 1.5	0. 0. 0.	85 84 89	97 96 100	147 147 152	40 34 6	0 0 0
4/21/76	*	CAA	364 41	391 43	206 35	FLT IN NOT	TOT: CLR: CLR:	43 30 13	0 0 0	43 30 13	42 29 13	22 9 13	9.6 0.0 31.9	.8 0.0 2.6	0. 0. 0.	228 285 98	73 61 100	35 31 46	32 20 12	11 10 1
4/26/76	*	CAA	341 35	351 43	187 22	FLT IN NOT	TOT: CLR: CLR:	60 50 10	0 0 0	60 50 10	60 50 10	8 1 7	5.7 0.0 34.3	.4 0.0 2.2	0. 0. 0.	220 247 87	57 49 98	57 51 85	53 43 10	7 7 0
4/ 4/79	*	CAB	387 35	410 42	235 22	FLT IN NOT	TOT: CLR: CLR:	96 89 7	96 89 7	63 58 5	55 52 3	30 28 2	1.0 0.0 13.7	.2 0.0 2.4	.120E+05 .106E+04 .151E+06	214 223 108	86 86 90	23 23 19	56 50 6	40 39 1
4/ 6/79		CAB	345 31	390 42	215 23	FLT IN NOT	TOT: CLR: CLR:	47 47 0	44 44 0	31 31 0	21 21 0	10 10 0	0.0 0.0 0.0	0.0 0.0 0.0	.433E+04 .433E+04 0.	121 121 0	86 86 0	49 49 0	45 45 0	2 2 0
5/ 7/76	*	CAA	340 35	350 42	208 22	FLT IN NOT	TOT: CLR: CLR:	89 88 1	0 0 0	48 48 0	0 0 0	0 0 0	0.0 0.0 .8	0.0 0.0 1.0	0. 0. 0.	58 58 0	0 0 0	0 0 0	89 88 1	0 0 0
5/ 9/76	*	CAA	345 35	350 42	207 22	FLT IN NOT	TOT: CLR: CLR:	85 71 14	0 0 0	25 21 4	0 0 0	0 0 0	1.9 0.0 11.3	.3 0.0 1.6	0. 0. 0.	117 117 120	0 0 0	0 0 0	85 71 14	0 0 0
5/13/76	*	CAA	367 32	390 42	205 21	FLT IN NOT	TOT: CLR: CLR:	90 85 5	0 0 0	49 46 3	73 70 3	23 20 3	1.0 0.0 18.6	.1 0.0 1.8	0. 0. 0.	129 134 46	76 75 100	53 51 100	90 85 5	0 0 0
5/14/76		CAA	342 35	370 43	207 22	FLT IN NOT	TOT: CLR: CLR:	83 62 21	0 0 0	37 25 12	0 0 0	0 0 0	5.4 0.0 21.3	.5 0.0 2.0	0. 0. 0.	105 132 50	0 0 0	0 0 0	83 62 21	0 0 0
5/15/76	*	CAA	339 34	351 42	214 22	FLT IN NOT	TOT: CLR: CLR:	88 62 26	0 0 0	30 25 5	73 50 23	56 33 23	13.1 0.0 44.4	1.0 0.0 3.5	0. 0. 0.	79 82 64	93 90 100	94 85 113	88 62 26	0 0 0

APPENDIX B

DEP-ARR IM/1D/1Y	CODE	AVFL ALAT	EXHI EXTN	EXLO EXTS	NUMBER OF OBS					AVERAGES FOR THE FLIGHT			TROP			STRAT		
					CLD	PD5	OZ	H2O	H2S	%TIC	PATCHES	PD5	OZ	RH	H2O	N	N	
HNL-ORD (CONT.)																		
5/30/79	* CAB	368 35	390 42	192 22	FLT TOT: IN CLR: NOT CLR:	87 80 7	87 80 7	0 0 0	48 44 4	5 4 1	2.8 0.0 34.6	.1 0.0 1.0	.919E+04 .332E+04 .762E+05	0 0 0	72 71 91	53 50 85	76 69 7	11 11 0
5/30/79	CAB	353 35	373 42	195 23	FLT TOT: IN CLR: NOT CLR:	81 71 10	81 71 10	9 9 0	42 33 9	4 0 4	7.4 0.0 60.3	.3 0.0 2.2	.231E+05 .295E+04 .166E+06	90 90 0	59 51 91	83 43 231	68 58 10	13 13 0
5/31/79	CAB	361 34	370 42	217 22	FLT TOT: IN CLR: NOT CLR:	83 80 3	83 80 3	0 0 0	46 43 3	2 1 1	1.6 0.0 45.1	.2 0.0 5.7	.545E+04 .271E+04 .783E+05	0 0 0	55 54 73	75 46 502	64 61 3	19 19 0
6/15/78	CAB	353 35	391 42	260 23	FLT TOT: IN CLR: NOT CLR:	79 65 14	79 65 14	51 44 7	42 39 3	1 1 0	7.7 0.0 43.2	.4 0.0 2.3	.396E+05 .185E+04 .215E+06	82 80 94	59 59 52	52 52 51	75 62 13	4 3 1
6/18/78	* CAB	341 38	361 45	266 22	FLT TOT: IN CLR: NOT CLR:	85 81 4	85 81 4	50 48 2	45 43 2	6 4 2	1.4 0.0 30.5	.2 0.0 4.5	.882E+04 .133E+04 .159E+06	150 151 115	65 64 100	76 71 176	74 70 4	11 11 0
6/20/78	* CAB	334 38	351 45	262 22	FLT TOT: IN CLR: NOT CLR:	90 87 3	90 87 3	58 56 2	50 49 1	0 0 0	.4 0.0 10.7	.2 0.0 6.7	.516E+04 .922E+03 .128E+06	121 122 82	53 52 90	56 55 104	84 81 3	6 6 0
6/28/78	CAB	347 36	370 42	192 23	FLT TOT: IN CLR: NOT CLR:	77 70 7	77 70 7	49 44 5	40 38 2	0 0 0	2.4 0.0 25.9	.3 0.0 3.3	.600E+04 .426E+03 .617E+05	134 143 53	29 26 87	33 31 83	68 61 7	9 9 0
6/ 3/79	CAB	371 31	404 41	253 21	FLT TOT: IN CLR: NOT CLR:	82 79 3	82 79 3	0 0 0	42 41 1	0 0 0	1.4 0.0 37.6	.0 0.0 1.0	.432E+04 .310E+04 .364E+05	0 0 0	25 25 6	23 22 47	71 68 3	11 11 0
6/ 5/79	* CAB	364 37	391 42	243 22	FLT TOT: IN CLR: NOT CLR:	46 42 4	25 21 4	0 0 0	33 29 4	1 1 0	2.5 0.0 28.5	.1 0.0 1.3	.278E+05 .202E+04 .163E+06	0 0 0	58 56 68	45 36 112	46 42 4	0 0 0
6/ 6/79	CAB	358 38	370 44	264 23	FLT TOT: IN CLR: NOT CLR:	78 68 10	78 68 10	0 0 0	45 39 6	0 0 0	3.4 0.0 26.2	.3 0.0 2.4	.112E+05 .297E+03 .850E+05	0 0 0	45 40 74	55 55 56	78 68 10	0 0 0
7/ 1/78	* CAB	349 38	390 45	258 22	FLT TOT: IN CLR: NOT CLR:	93 85 8	93 85 8	61 55 6	53 49 4	2 2 0	2.8 0.0 32.9	.5 0.0 5.6	.620E+04 .264E+03 .693E+05	219 235 72	32 34 3	29 31 13	74 66 8	19 19 0
7/ 2/78	CAB	343 32	370 41	240 21	FLT TOT: IN CLR: NOT CLR:	75 74 1	75 74 1	49 49 0	36 35 1	0 0 0	.0 0.0 2.4	.0 0.0 2.0	.151E+02 .136E+02 .128E+03	46 46 0	11 9 85	20 18 109	75 74 1	0 0 0
7/ 6/78	* CAB	338 37	351 43	197 22	FLT TOT: IN CLR: NOT CLR:	90 67 23	90 67 23	58 44 14	52 40 12	4 0 4	9.0 0.0 35.2	.8 0.0 3.2	.256E+05 .214E+03 .996E+05	115 130 70	50 41 79	88 47 226	90 67 23	0 0 0

DEP-ARR	IM/1D/1Y	CODE	AVFL	EXHI	EXLO	NUMBER OF OBS					AVERAGES FOR THE FLIGHT			TROP			STRAT			
			ALAT	EXTN	EXTS	CLD	PD5	OZ	H2O	H2S	%TIC	PATCHES	PD5	OZ	RH	H2O	N	N		
HNL-ORD (CONT.)																				
	7/ 8/78	* CAB	338	351	193	FLT	TOT:	90	90	58	31	0	3.8	.3	.147E+05	101	45	126	90	0
			37	44	22	IN	CLR:	83	83	54	31	0	0.0	0.0	.157E+03	101	45	126	83	0
						NOT	CLR:	7	7	4	0	0	49.4	4.3	.187E+06	94	0	0	7	0
	7/15/78	CAB	347	371	209	FLT	TOT:	77	77	49	45	0	0.0	0.0	.540E+02	76	17	28	77	0
			35	42	23	IN	CLR:	77	77	49	45	0	0.0	0.0	.540E+02	76	17	28	77	0
						NOT	CLR:	0	0	0	0	0	0.0	0.0	0.	0	0	0	0	0
	7/15/78	* CAB	342	351	272	FLT	TOT:	89	89	57	48	11	1.5	.3	.135E+05	58	63	143	89	0
			34	42	22	IN	CLR:	80	80	50	47	11	0.0	0.0	.727E+02	57	63	144	80	0
						NOT	CLR:	9	9	7	1	0	14.8	3.0	.133E+06	67	70	116	9	0
	7/17/78	* CAB	341	351	262	FLT	TOT:	91	91	56	49	0	.0	.0	.410E+02	67	24	84	91	0
			31	41	21	IN	CLR:	89	89	54	48	0	0.0	0.0	.412E+02	66	23	83	89	0
						NOT	CLR:	2	2	2	1	0	.8	1.0	.308E+02	104	64	135	2	0
	12/27/75	* CAA	346	351	210	FLT	TOT:	57	0	57	0	0	12.2	1.4	0.	64	0	0	50	7
			35	42	22	IN	CLR:	34	0	34	0	0	0.0	0.0	0.	79	0	0	28	6
						NOT	CLR:	23	0	23	0	0	30.3	3.4	0.	41	0	0	22	1
	12/27/75	CAA	366	408	210	FLT	TOT:	53	0	53	0	0	8.8	.8	0.	66	0	0	48	5
			34	42	22	IN	CLR:	37	0	37	0	0	0.0	0.0	0.	72	0	0	32	5
						NOT	CLR:	16	0	16	0	0	29.3	2.7	0.	52	0	0	16	0
HNL-OSA																				
	1/ 3/79	* BBB	345	350	271	FLT	TOT:	66	0	42	34	0	0.0	0.0	0.	61	19	47	66	0
			31	35	22	IN	CLR:	66	0	42	34	0	0.0	0.0	0.	61	19	47	66	0
						NOT	CLR:	0	0	0	0	0	0.0	0.0	0.	0	0	0	0	0
	1/ 3/79	BBB	338	370	220	FLT	TOT:	95	0	60	50	0	0.0	0.0	0.	50	18	64	95	0
			25	35	21	IN	CLR:	95	0	60	50	0	0.0	0.0	0.	50	18	64	95	0
						NOT	CLR:	0	0	0	0	0	0.0	0.0	0.	0	0	0	0	0
	2/11/79	BBB	374	391	284	FLT	TOT:	92	0	63	40	1	0.0	0.0	0.	274	29	42	32	60
			32	37	22	IN	CLR:	92	0	63	40	1	0.0	0.0	0.	274	29	42	32	60
						NOT	CLR:	0	0	0	0	0	0.0	0.0	0.	0	0	0	0	0
	2/12/79	* BBB	374	391	199	FLT	TOT:	66	0	42	36	1	.3	.1	0.	128	25	25	51	15
			28	35	21	IN	CLR:	64	0	41	34	0	0.0	0.0	0.	130	22	24	49	15
						NOT	CLR:	2	0	1	2	1	11.2	2.5	0.	51	34	49	2	0
	2/20/79	BBB	323	370	220	FLT	TOT:	15	0	6	6	3	0.0	0.0	0.	105	56	127	15	0
			27	35	22	IN	CLR:	13	0	6	6	3	0.0	0.0	0.	105	56	127	15	0
						NOT	CLR:	0	0	0	0	0	0.0	0.0	0.	0	0	0	0	0
	2/21/79	* BBB	335	371	196	FLT	TOT:	8	0	3	1	1	0.0	0.0	0.	166	100	192	3	5
			33	35	22	IN	CLR:	8	0	3	1	1	0.0	0.0	0.	166	100	192	3	5
						NOT	CLR:	0	0	0	0	0	0.0	0.0	0.	0	0	0	0	0

APPENDIX B

DEP-ARR	IM/ID/IY	CODE	AVFL ALAT	EXHI EXTN	EXLO EXTS		NUMBER OF OBS					AVERAGES FOR THE FLIGHT			TROP			STRAT	
							CLD	PD5	OZ	H2O, H2S	%TIC	PATCHES	PD5	OZ	RH	H2O	N	N	
HNL-OXA (CONT.)																			
	10/28/78	BBB	328 30	350 35	210 22	FLT TOT:	87	87	58	45	4	20.3	1.6	.837E+05	57	59	110	87	0
						IN CLR:	41	41	29	20	1	0.0	0.0	.104E+03	71	42	68	41	0
						NOT CLR:	46	46	29	25	3	38.4	3.0	.158E+06	43	73	144	46	0
	10/28/78 *	BBB	366 33	390 39	262 22	FLT TOT:	61	61	41	26	8	33.4	1.1	.930E+05	88	65	69	56	5
						IN CLR:	30	30	22	19	2	0.0	0.0	.273E+03	132	53	15	25	5
						NOT CLR:	31	31	19	7	6	65.6	2.3	.183E+06	38	99	215	31	0
	11/ 6/78	BBB	367 27	390 35	225 21	FLT TOT:	77	77	51	40	0	0.0	0.0	.925E+01	45	31	49	77	0
						IN CLR:	77	77	51	40	0	0.0	0.0	.925E+01	45	31	49	77	0
						NOT CLR:	0	0	0	0	0	0.0	0.0	0.	0	0	0	0	0
	11/ 7/78 *	BBB	358 29	390 35	230 22	FLT TOT:	76	76	50	42	7	5.1	.6	.133E+05	52	34	53	76	0
						IN CLR:	65	65	42	36	1	0.0	0.0	.203E+02	53	23	52	65	0
						NOT CLR:	11	11	8	6	6	35.1	4.2	.918E+05	47	100	56	11	0
HNL-PDX																			
	10/25/78	BBB	356 34	371 45	254 22	FLT TOT:	50	50	33	24	1	.0	.0	.519E+01	73	41	47	50	0
						IN CLR:	49	49	32	23	1	0.0	0.0	.530E+01	73	40	47	49	0
						NOT CLR:	1	1	1	1	0	.4	1.0	0.	69	73	34	1	0
	10/26/78 *	BBB	330 35	350 45	247 23	FLT TOT:	52	52	34	27	5	3.3	.2	.738E+04	54	48	86	52	0
						IN CLR:	48	48	32	25	3	0.0	0.0	.396E+01	55	44	82	48	0
						NOT CLR:	4	4	2	2	2	42.9	3.0	.959E+05	35	100	130	4	0
	10/27/78	BBB	361 35	370 45	230 22	FLT TOT:	46	46	28	23	0	3.3	.6	.258E+04	56	38	29	46	0
						IN CLR:	40	40	26	23	0	0.0	0.0	.646E+01	56	38	29	40	0
						NOT CLR:	6	6	2	0	0	25.2	4.3	.197E+05	58	0	0	6	0
	10/27/78 *	BBB	357 33	391 45	205 22	FLT TOT:	53	53	35	28	2	.8	.3	.517E+03	63	33	49	53	0
						IN CLR:	49	49	33	25	1	0.0	0.0	.406E+01	64	28	48	49	0
						NOT CLR:	4	4	2	3	1	10.9	3.5	.681E+04	50	81	58	4	0
HNL-PPG																			
	2/ 6/76	BBA	346 3	370 20	206 -12	FLT TOT:	22	0	22	0	0	13.4	.9	0.	7	0	0	11	0
						IN CLR:	17	0	17	0	0	0.0	0.0	0.	7	0	0	6	0
						NOT CLR:	5	0	5	0	0	59.1	4.0	0.	8	0	0	5	0
	2/ 7/76 *	BBA	351 8	351 14	351 5	FLT TOT:	5	0	5	0	0	17.3	.8	0.	41	0	0	5	0
						IN CLR:	4	0	4	0	0	0.0	0.0	0.	49	0	0	4	0
						NOT CLR:	1	0	1	0	0	86.7	4.0	0.	6	0	0	1	0
	3/29/77	AAA	386 4	389 20	315 -12	FLT TOT:	50	50	0	40	15	8.8	1.2	.103E+06	0	69	56	0	0
						IN CLR:	29	29	0	24	3	0.0	0.0	.311E+02	0	52	36	0	0
						NOT CLR:	21	21	0	16	12	20.8	2.9	.245E+06	0	95	86	0	0

DEP-ARR		CODE	AVFL ALAT	EXHI EXTN	EXLO EXTS	NUMBER OF OBS						AVERAGES FOR THE FLIGHT			OZ	RH	H2O	TRCP N	STRAT N
IM/ID/IY						CLD	PD5	OZ	H2O	H2S	%TIC	PATCHES	PD5						
HNL-PPG (CONT.)																			
3/29/77	* AAA	404	410	234	FLT TOT:	50	50	0	41	27	20.2	1.6	.688E+05	0	87	44	0	0	
		3	20	-12	IN CLR:	21	21	0	18	7	0.0	0.0	.121E+02	0	73	56	0	0	
					NOT CLR:	29	29	0	23	20	34.8	2.8	.119E+06	0	99	35	0	0	
5/ 3/77	* AAA	405	410	275	FLT TOT:	51	51	32	0	0	5.9	.6	.140E+05	40	0	0	51	0	
		3	20	-12	IN CLR:	40	40	26	0	0	0.0	0.0	.207E+02	36	0	0	40	0	
					NOT CLR:	11	11	6	0	0	27.4	3.0	.650E+05	61	0	0	11	0	
5/ 3/77	AAA	400	430	260	FLT TOT:	52	52	30	0	0	22.6	1.0	.574E+05	37	0	0	52	0	
		3	20	-12	IN CLR:	30	30	16	0	0	0.0	0.0	.366E+03	42	0	0	30	0	
					NOT CLR:	22	22	14	0	0	53.5	2.5	.135E+06	32	0	0	22	0	
5/10/77	AAA	398	410	313	FLT TOT:	49	49	30	0	0	17.8	.9	.291E+05	29	0	0	49	0	
		4	20	-12	IN CLR:	25	25	16	0	0	0.0	0.0	.541E+03	35	0	0	25	0	
					NOT CLR:	24	24	14	0	0	36.4	1.9	.589E+05	23	0	0	24	0	
5/10/77	* AAA	408	430	290	FLT TOT:	48	48	32	0	0	30.5	1.3	.125E+06	32	0	0	48	0	
		3	20	-12	IN CLR:	21	21	15	0	0	0.0	0.0	.908E+01	31	0	0	21	0	
					NOT CLR:	27	27	17	0	0	54.1	2.3	.223E+06	33	0	0	27	0	
5/17/77	* AAA	404	410	304	FLT TOT:	16	16	10	0	0	37.1	1.4	.130E+06	19	0	0	16	0	
		4	17	-12	IN CLR:	4	4	2	0	0	0.0	0.0	.154E+02	40	0	0	4	0	
					NOT CLR:	12	12	8	0	0	49.5	1.8	.174E+06	13	0	0	12	0	
5/17/77	AAA	398	410	382	FLT TOT:	15	15	4	0	0	3.0	.5	.536E+05	37	0	0	15	0	
		4	19	-12	IN CLR:	13	13	4	0	0	0.0	0.0	.500E+01	37	0	0	13	0	
					NOT CLR:	2	2	0	0	0	22.5	3.5	.402E+06	0	0	0	2	0	
5/14/79	* BDB	366	370	287	FLT TOT:	50	50	0	25	1	.2	.2	.258E+04	0	36	51	50	0	
		4	20	-11	IN CLR:	48	48	0	24	1	0.0	0.0	.271E+03	0	35	49	48	0	
					NOT CLR:	2	2	0	1	0	4.7	5.0	.580E+05	0	68	99	2	0	
5/26/79	BDB	348	350	282	FLT TOT:	50	50	31	24	7	15.7	1.7	.175E+06	25	73	195	50	0	
		3	19	-12	IN CLR:	27	27	18	13	0	0.0	0.0	.334E+04	27	56	128	27	0	
					NOT CLR:	23	23	13	11	7	34.1	3.6	.375E+06	23	93	274	23	0	
10/23/78	* BBB	365	369	295	FLT TOT:	46	46	0	0	0	2.9	.2	.192E+04	0	0	0	46	0	
		4	20	-11	IN CLR:	41	41	0	0	0	0.0	0.0	.476E+01	0	0	0	41	0	
					NOT CLR:	5	5	0	0	0	26.4	2.0	.176E+05	0	0	0	5	0	
11/ 4/78	B2B	345	350	248	FLT TOT:	50	50	32	23	0	4.0	.4	.101E+05	42	23	47	50	0	
		3	19	-12	IN CLR:	43	43	29	23	0	0.0	0.0	.458E+03	43	23	47	43	0	
					NOT CLR:	7	7	3	0	0	28.4	2.9	.691E+05	30	0	0	7	0	
12/14/76	AAA	410	430	294	FLT TOT:	51	0	33	0	0	33.9	1.1	0.	23	0	0	51	0	
		3	20	-12	IN CLR:	16	0	9	0	0	0.0	0.0	0.	23	0	0	16	0	
					NOT CLR:	35	0	24	0	0	49.4	1.7	0.	23	0	0	35	0	
12/15/76	* AAA	409	431	256	FLT TOT:	53	0	34	0	0	12.7	.8	0.	22	0	0	53	0	
		3	20	-12	IN CLR:	32	0	22	0	0	0.0	0.0	0.	23	0	0	32	0	
					NOT CLR:	21	0	12	0	0	32.2	2.0	0.	19	0	0	21	0	

APPENDIX B

DEP-ARR IM/1D/1Y	CODE	AVFL ALAT	EXHI EXTN	EXLO EXTS	NUMBER OF OBS					AVERAGES FOR THE FLIGHT					TROP N	STRAT N		
					CLD	PD5	OZ	H2O,	H2S	%TIC	PATCHES	PD5	OZ	RH	H2O			
HNL-PPG (CONT.)																		
12/21/76	* AAA	401	413	314	FLT TOT:	44	0	26	0	0	1.2	.3	0.	40	0	0	44	0
		3	19	-12	IN CLR:	39	0	23	0	0	0.0	0.0	0.	40	0	0	39	0
					NOT CLR:	5	0	3	0	0	10.4	2.6	0.	45	0	0	5	0
12/21/76	AAA	403	410	196	FLT TOT:	56	0	36	46	14	8.3	.7	0.	39	80	32	56	0
		3	20	-13	IN CLR:	40	0	28	35	6	0.0	0.0	0.	37	75	30	40	0
					NOT CLR:	16	0	8	11	8	29.1	2.5	0.	43	98	39	16	0
12/28/76	AAA	385	390	198	FLT TOT:	54	0	35	0	0	0.0	0.0	0.	35	0	0	54	0
		3	20	-13	IN CLR:	54	0	35	0	0	0.0	0.0	0.	35	0	0	54	0
					NOT CLR:	0	0	0	0	0	0.0	0.0	0.	0	0	0	0	0
12/28/76	* AAA	408	414	310	FLT TOT:	46	0	30	38	12	9.6	1.4	0.	30	79	31	46	0
		3	19	-12	IN CLR:	29	0	19	24	1	0.0	0.0	0.	32	68	29	29	0
					NOT CLR:	17	0	11	14	11	26.0	3.8	0.	27	97	34	17	0
12/12/77	* BCB	373	390	256	FLT TOT:	50	50	32	0	0	15.6	0.0	.170E+06	27	0	0	50	0
		4	20	-11	IN CLR:	35	35	22	0	0	0.0	0.0	.426E+02	28	0	0	35	0
					NOT CLR:	15	15	10	0	0	52.1	0.0	.567E+06	24	0	0	15	0
12/17/77	BCB	330	350	251	FLT TOT:	43	43	26	0	0	14.3	0.0	.348E+05	26	0	0	43	0
		3	19	-12	IN CLR:	24	24	15	0	0	0.0	0.0	.959E+02	28	0	0	24	0
					NOT CLR:	19	19	11	0	0	32.4	0.0	.786E+05	23	0	0	19	0
HNL-SEA																		
2/13/79	CAB	364	371	201	FLT TOT:	40	40	27	18	1	0.0	0.0	.462E+02	353	46	89	16	24
		34	47	23	IN CLR:	40	40	27	18	1	0.0	0.0	.462E+02	353	46	89	16	24
					NOT CLR:	0	0	0	0	0	0.0	0.0	0.	0	0	0	0	0
3/30/76	BBA	366	371	222	FLT TOT:	31	0	31	0	0	.1	.2	0.	296	0	0	31	0
		36	47	25	IN CLR:	25	0	25	0	0	0.0	0.0	0.	329	0	0	25	0
					NOT CLR:	6	0	6	0	0	.7	1.2	0.	161	0	0	6	0
3/30/76	* BBA	381	390	212	FLT TOT:	32	0	32	0	0	3.0	.1	0.	143	0	0	20	12
		32	44	21	IN CLR:	29	0	29	0	0	0.0	0.0	0.	150	0	0	19	10
					NOT CLR:	3	0	3	0	0	32.4	1.0	0.	76	0	0	1	2
3/31/76	* BBA	349	352	320	FLT TOT:	24	0	24	0	0	.1	.1	0.	108	0	0	18	6
		34	46	22	IN CLR:	22	0	22	0	0	0.0	0.0	0.	109	0	0	18	4
					NOT CLR:	2	0	2	0	0	1.0	1.5	0.	102	0	0	0	2
3/31/76	BBA	338	351	331	FLT TOT:	27	0	27	0	0	.7	.8	0.	91	0	0	17	10
		39	46	29	IN CLR:	23	0	23	0	0	0.0	0.0	0.	95	0	0	13	10
					NOT CLR:	4	0	4	0	0	4.8	5.3	0.	69	0	0	4	0
4/ 1/76	* BBA	327	337	305	FLT TOT:	35	0	35	0	0	.0	.1	0.	141	0	0	35	0
		36	46	22	IN CLR:	32	0	32	0	0	0.0	0.0	0.	137	0	0	32	0
					NOT CLR:	3	0	3	0	0	.4	1.0	0.	185	0	0	3	0

DEP-ARR	IM/ID/IY	CODE	AVFL ALAT	EXHI EXTN	EXLO EXTS		NUMBER OF OBS					AVERAGES FOR THE FLIGHT			TROP			STRAT	
							CLD	PDS	OZ	H2O	H2S	%TIC	PATCHES	PDS	OZ	RH	H2O	N	N
HNL-SEA (CONT.)																			
	4/ 1/76	BBA	312 35	334 46	290 23	FLT TOT:	33	0	33	0	0	.5	.4	0.	134	0	0	33	0
						IN CLR:	25	0	25	0	0	0.0	0.0	0.	140	0	0	25	0
						NOT CLR:	8	0	8	0	0	2.2	1.8	0.	114	0	0	8	0
	4/ 2/76	* BBA	378 34	390 46	291 22	FLT TOT:	35	0	35	0	0	.6	0.0	0.	134	0	0	27	8
						IN CLR:	34	0	34	0	0	0.0	0.0	0.	135	0	0	27	7
						NOT CLR:	1	0	1	0	0	22.4	0.0	0.	83	0	0	0	1
	4/ 2/76	BBA	290 36	292 46	285 23	FLT TOT:	34	0	34	0	0	3.6	.8	0.	88	0	0	34	0
						IN CLR:	24	0	24	0	0	0.0	0.0	0.	96	0	0	24	0
						NOT CLR:	10	0	10	0	0	12.3	2.7	0.	68	0	0	10	0
	4/ 3/76	BBA	361 37	371 47	209 23	FLT TOT:	32	0	32	0	0	2.3	.2	0.	93	0	0	24	8
						IN CLR:	27	0	27	0	0	0.0	0.0	0.	95	0	0	19	8
						NOT CLR:	5	0	5	0	0	14.4	1.4	0.	86	0	0	5	0
	4/ 3/76	* BBA	372 35	393 46	196 22	FLT TOT:	36	0	36	0	0	.0	.1	0.	273	0	0	32	4
						IN CLR:	35	0	35	0	0	0.0	0.0	0.	275	0	0	31	4
						NOT CLR:	1	0	1	0	0	.8	2.0	0.	181	0	0	1	0
	12/12/77	BCB	367 35	390 47	263 23	FLT TOT:	45	45	30	0	0	3.0	0.0	.287E+04	59	0	0	39	6
						IN CLR:	42	42	28	0	0	0.0	0.0	.794E+02	59	0	0	36	6
						NOT CLR:	3	3	2	0	0	45.1	0.0	.420E+05	56	0	0	3	0
	12/13/77	* BCB	373 34	391 47	203 22	FLT TOT:	62	62	39	0	0	3.9	0.0	.250E+05	73	0	0	56	6
						IN CLR:	57	57	37	0	0	0.0	0.0	.839E+01	74	0	0	51	6
						NOT CLR:	5	5	2	0	0	48.3	0.0	.310E+06	52	0	0	5	0
HNL-SFO																			
	1/26/76	* CAA	343 30	351 37	217 22	FLT TOT:	30	0	30	30	3	3.4	.2	0.	40	46	55	30	0
						IN CLR:	28	0	28	28	1	0.0	0.0	0.	38	42	54	28	0
						NOT CLR:	2	0	2	2	2	51.4	3.5	0.	63	100	67	2	0
	1/26/76	CAA	358 31	371 37	210 22	FLT TOT:	32	0	32	32	0	2.1	.7	0.	40	31	41	32	0
						IN CLR:	28	0	28	28	0	0.0	0.0	0.	39	28	36	28	0
						NOT CLR:	4	0	4	4	0	16.7	5.3	0.	51	55	76	4	0
	1/28/76	CAA	359 30	371 37	210 22	FLT TOT:	30	0	30	30	0	1.0	.4	0.	66	24	30	30	0
						IN CLR:	27	0	27	27	0	0.0	0.0	0.	67	23	32	27	0
						NOT CLR:	3	0	3	3	0	9.8	3.7	0.	52	36	14	3	0
	1/ 5/77	DDA	329 30	330 37	301 22	FLT TOT:	43	0	0	0	0	16.8	1.4	0.	0	0	0	43	0
						IN CLR:	26	0	0	0	0	0.0	0.0	0.	0	0	0	26	0
						NOT CLR:	17	0	0	0	0	42.4	3.5	0.	0	0	0	17	0
	1/ 6/77	* DDA	348 30	350 37	267 22	FLT TOT:	44	0	0	0	0	17.5	1.3	0.	0	0	0	44	0
						IN CLR:	27	0	0	0	0	0.0	0.0	0.	0	0	0	27	0
						NOT CLR:	17	0	0	0	0	45.4	3.2	0.	0	0	0	17	0

APPENDIX B

DEP-ARR	IM/ID/IY	CODE	AVFL ALAT	EXHI EXTN	EXLO EXTS	NUMBER OF OBS					AVERAGES FOR THE FLIGHT			TROP			STRAT		
						CLD	PD5	OZ	H2O, H2S	%TIC	PATCHES	PD5	OZ	RH	H2O	N	N		
HNL-SFO (CONT.)																			
2/	2/76	* CAA	342 30	351 37	216 22	FLT IN NOT	TOT: CLR: CLR:	36 36 0	0 0 0	36 30 0	15 15 0	0.0 0.0 0.0	0.0 0.0 0.0	0. 0. 0.	83 83 0	63 63 0	49 49 0	36 36 0	0 0 0
2/	2/76	CAA	358 30	370 37	218 22	FLT IN NOT	TOT: CLR: CLR:	35 35 0	0 0 0	35 31 0	0 0 0	0.0 0.0 0.0	0.0 0.0 0.0	0. 0. 0.	94 94 0	21 21 0	37 37 0	28 28 0	7 7 0
2/	3/76	* BBA	345 30	350 37	209 22	FLT IN NOT	TOT: CLR: CLR:	33 33 0	0 0 0	33 0 0	0 0 0	0.0 0.0 0.0	0.0 0.0 0.0	0. 0. 0.	75 75 0	0 0 0	0 0 0	33 33 0	0 0 0
2/10/76	* CAA	342 31	351 38	211 22	FLT IN NOT	TOT: CLR: CLR:	34 34 0	0 0 0	34 0 0	0 0 0	0 0 0	0.0 0.0 0.0	0.0 0.0 0.0	0. 0. 0.	34 34 0	0 0 0	0 0 0	34 34 0	0 0 0
2/11/76	BBA	324 30	330 37	214 22	FLT IN NOT	TOT: CLR: CLR:	31 26 5	0 0 0	31 26 5	0 0 0	0 0 0	2.6 0.0 16.3	.3 0.0 1.8	0. 0. 0.	32 32 34	0 0 0	0 0 0	31 26 5	0 0 0
2/26/76	CAA	364 29	370 35	214 22	FLT IN NOT	TOT: CLR: CLR:	24 9 15	0 0 0	24 9 15	23 8 15	23 8 15	14.2 0.0 22.7	2.2 0.0 3.5	0. 0. 0.	44 46 43	100 100 100	31 29 32	24 9 15	0 0 0
2/26/76	* CAA	375 30	390 37	209 23	FLT IN NOT	TOT: CLR: CLR:	30 21 9	0 0 0	30 21 9	30 21 9	27 18 9	5.2 0.0 17.2	.8 0.0 2.6	0. 0. 0.	58 65 43	96 95 100	61 74 32	30 21 9	0 0 0
2/29/76	CAA	363 30	390 37	206 22	FLT IN NOT	TOT: CLR: CLR:	27 25 2	0 0 0	27 25 2	26 24 2	14 12 2	5.9 0.0 80.0	.1 0.0 1.5	0. 0. 0.	150 156 69	76 76 100	116 114 135	13 11 2	14 14 0
2/11/77	DDA	368 30	371 36	295 22	FLT IN NOT	TOT: CLR: CLR:	41 14 27	41 14 27	26 9 17	0 0 0	0 0 0	49.1 0.0 74.6	2.1 0.0 3.2	.244E+06 .706E+01 .371E+06	66 102 47	0 0 0	0 0 0	41 14 27	0 0 0
2/12/77	* DDA	348 30	350 37	270 22	FLT IN NOT	TOT: CLR: CLR:	51 23 28	51 23 28	33 13 20	0 0 0	0 0 0	34.4 0.0 62.7	2.3 0.0 4.1	.285E+06 .241E+02 .520E+06	55 81 39	0 0 0	0 0 0	51 23 28	0 0 0
2/19/77	DDA	380 30	390 36	269 22	FLT IN NOT	TOT: CLR: CLR:	43 43 0	43 43 0	27 0 0	0 0 0	0 0 0	0.0 0.0 0.0	0.0 0.0 0.0	0. 0. 0.	54 54 0	0 0 0	0 0 0	0 0 0	0 0 0
2/20/77	* DDA	346 30	350 37	252 22	FLT IN NOT	TOT: CLR: CLR:	49 48 1	49 48 1	15 15 0	0 0 0	0 0 0	1.0 0.0 47.5	.2 0.0 9.0	.121E+05 .251E+02 .593E+06	29 29 0	0 0 0	0 0 0	0 0 0	0 0 0
2/	7/79	* CAB	344 30	352 36	271 22	FLT IN NOT	TOT: CLR: CLR:	52 22 30	52 22 30	33 15 18	30 14 16	17.3 0.0 29.9	2.6 0.0 4.5	.100E+06 .457E+03 .174E+06	49 56 44	82 77 86	94 105 84	52 22 30	0 0 0

DEP-ARR	IM/ID/IY	CODE	AVFL ALAT	EXHI EXTN	EXLO EXTS	NUMBER OF OBS					AVERAGES FOR THE FLIGHT				TROP	STRAT				
						CLD	PD5	OZ	H2O, H2S	%TIC	PATCHES	PD5	OZ	RH	H2O	N	N			
HNL-SFO (CONT.)																				
	2/ 8/79	* CAB	321 30	322 37	296 22	FLT IN NOT	TOT: CLR: CLR:	46 18 28	46 18 28	31 12 19	23 6 17	2 1 1	30.5 0.0 50.2	1.5 0.0 2.5	.487E+05 .923E+02 .799E+05	45 48 43	80 72 82	147 73 173	46 18 28	0 0 0
	2/17/79	CAB	327 30	330 37	272 22	FLT IN NOT	TOT: CLR: CLR:	43 22 21	43 22 21	27 14 13	24 16 8	8 3 5	18.5 0.0 37.8	.9 0.0 1.9	.401E+05 .932E+03 .811E+05	57 55 58	78 69 96	118 149 57	43 22 21	0 0 0
	2/18/79	CAB	365 30	371 37	292 22	FLT IN NOT	TOT: CLR: CLR:	40 9 31	40 9 31	23 3 20	14 5 9	9 3 6	10.1 0.0 13.0	2.5 0.0 3.2	.125E+05 .203E+04 .155E+05	33 47 31	92 96 91	42 46 40	40 9 31	0 0 0
	2/18/79	* CAB	354 30	360 37	194 22	FLT IN NOT	TOT: CLR: CLR:	49 27 22	49 27 22	31 17 14	27 13 14	11 4 7	18.2 0.0 40.5	1.2 0.0 2.6	.456E+05 .658E+03 .101E+06	33 43 21	90 92 88	141 40 235	49 27 22	0 0 0
	2/19/79	* CAB	358 31	360 37	295 22	FLT IN NOT	TOT: CLR: CLR:	60 33 27	60 33 27	39 33 27	34 19 15	10 2 8	19.8 0.0 44.1	.8 0.0 1.7	.372E+05 .436E+02 .826E+05	34 42 23	84 77 92	81 54 115	60 33 27	0 0 0
	2/19/79	CAB	362 30	370 37	254 22	FLT IN NOT	TOT: CLR: CLR:	34 12 22	34 12 22	21 7 14	15 7 8	13 5 8	13.3 0.0 20.5	1.4 0.0 2.2	.303E+05 .914E+03 .464E+05	35 59 23	96 92 100	67 49 83	34 12 22	0 0 0
	2/20/79	* CAB	342 30	351 36	241 22	FLT IN NOT	TOT: CLR: CLR:	55 33 22	55 33 22	35 21 14	31 19 12	9 4 5	22.9 0.0 57.2	1.1 0.0 2.6	.532E+05 .110E+03 .133E+06	83 112 38	82 79 88	129 80 206	53 31 22	2 2 0
	2/23/79	CAB	366 30	385 37	199 22	FLT IN NOT	TOT: CLR: CLR:	42 29 13	42 29 13	27 19 8	14 10 4	8 4 4	11.2 0.0 36.2	.8 0.0 2.5	.307E+05 .100E+03 .988E+05	99 105 84	94 78 100	124 162 30	42 29 13	0 0 0
	2/27/79	CAB	357 30	360 37	299 22	FLT IN NOT	TOT: CLR: CLR:	45 45 0	45 45 0	28 28 0	24 24 0	6 6 0	0.0 0.0 0.0	0.0 0.0 0.0	.669E+02 .669E+02 0.	86 86 0	76 76 0	52 52 0	45 45 0	0 0 0
	2/28/79	* CAB	375 31	390 37	287 22	FLT IN NOT	TOT: CLR: CLR:	51 50 1	51 50 1	33 32 1	26 26 0	10 10 0	.0 0.0 1.6	.0 0.0 1.0	.320E+03 .322E+03 .252E+03	111 112 90	90 90 0	64 64 0	48 47 1	3 3 0
	2/28/79	CAB	357 30	360 37	303 22	FLT IN NOT	TOT: CLR: CLR:	45 41 4	45 41 4	28 26 2	20 18 2	14 13 1	1.0 0.0 11.6	.2 0.0 2.3	.463E+03 .181E+03 .335E+04	98 100 71	95 98 65	58 61 27	45 41 4	0 0 0
	3/ 1/76	* CAA	343 30	350 37	210 22	FLT IN NOT	TOT: CLR: CLR:	36 26 10	0 0 0	36 26 10	36 26 10	32 22 10	13.3 0.0 47.7	.9 0.0 3.1	0. 0. 0.	103 128 38	99 99 100	102 88 139	34 24 10	2 2 0
	3/28/76	* BBA	343 29	351 37	250 22	FLT IN NOT	TOT: CLR: CLR:	30 26 4	0 0 0	30 26 4	0 0 0	0 0 0	1.1 0.0 8.3	.3 0.0 2.5	0. 0. 0.	95 39 71	0 0 0	0 0 0	30 26 4	0 0 0

APPENDIX B

DEP-ARR		CODE	AVFL ALAT	EXHI EXTN	EXLC EXTS	NUMBER OF OBS					AVERAGES FOR THE FLIGHT			OZ	RH	H2O	TROP N	STRAT N		
IM/ID/Y						CLD	PD5	OZ	H2O	H2S	%TIC	PATCHES	PD5							
HNL-SFO (CONT.)																				
3/	3/79	CAB	362 30	380 37	186 22	FLT IN NOT	TOT CLR CLR	49 49 0	49 49 0	30 30 0	28 28 0	12 12 0	0.0 0.0 0.0	0.0 0.0 0.0	.151E+03 .151E+03 0.	154 154 0	90 90 0	127 127 0	45 45 0	4 4 0
3/	5/79 *	CAB	364 28	370 36	209 21	FLT IN NOT	TOT CLR CLR	50 46 4	50 46 4	31 29 2	22 21 1	1 0 1	.8 0.0 10.2	.1 0.0 1.8	.105E+04 .252E+03 .102E+05	78 78 72	48 46 100	70 71 49	50 46 4	0 0 0
3/14/79		CAB	357 30	360 37	280 22	FLT IN NOT	TOT CLR CLR	43 38 5	43 38 5	26 24 2	21 21 0	8 8 0	2.3 0.0 19.6	.2 0.0 1.4	.274E+04 .105E+04 .156E+05	96 96 115	83 83 0	26 26 0	34 29 5	9 9 0
3/14/79 *		CAB	360 30	371 37	202 22	FLT IN NOT	TOT CLR CLR	49 29 20	49 29 20	29 16 13	24 17 7	21 15 6	12.6 0.0 30.9	1.4 0.0 3.4	.562E+05 .109E+04 .136E+06	126 166 78	97 97 99	45 47 40	34 16 18	15 13 2
3/19/79 *		CAB	355 34	370 37	308 23	FLT IN NOT	TOT CLR CLR	6 6 0	4 4 0	3 3 0	4 4 0	3 3 0	0.0 0.0 0.0	0.0 0.0 0.0	.104E+04 .104E+04 0.	187 187 0	87 87 0	112 112 0	3 3 0	3 3 0
3/30/79		CAB	368 30	381 37	201 22	FLT IN NOT	TOT CLR CLR	44 29 15	44 29 15	28 18 10	24 14 10	8 5 3	3.5 0.0 10.2	.6 0.0 1.9	.124E+05 .944E+03 .346E+05	92 109 61	84 78 93	59 83 24	43 28 15	1 1 0
4/	2/76 *	CAA	371 30	390 37	215 22	FLT IN NOT	TOT CLR CLR	34 28 6	0 0 0	34 28 6	33 27 6	23 17 6	4.4 0.0 24.8	.2 0.0 1.3	0. 0. 0.	187 203 109	90 88 100	52 60 15	34 28 6	0 0 0
4/11/76 *		CAA	349 30	350 37	317 22	FLT IN NOT	TOT CLR CLR	29 15 14	0 0 0	29 15 14	29 15 14	22 8 14	23.0 0.0 47.6	.8 0.0 1.6	0. 0. 0.	95 123 65	95 90 100	74 70 78	27 13 14	2 2 0
4/17/76 *		CAA	363 30	390 37	211 22	FLT IN NOT	TOT CLR CLR	30 30 0	0 0 0	30 30 0	4 4 0	4 4 0	0.0 0.0 0.0	0.0 0.0 0.0	0. 0. 0.	36 36 0	100 100 0	424 424 0	30 30 0	0 0 0
4/22/76		CAA	359 32	370 37	210 22	FLT IN NOT	TOT CLR CLR	33 27 6	0 0 0	33 27 6	33 27 6	24 18 6	1.7 0.0 9.4	.2 0.0 1.3	0. 0. 0.	102 100 110	91 89 100	88 95 52	33 27 6	0 0 0
4/23/76 *		CAA	364 30	390 37	217 22	FLT IN NOT	TOT CLR CLR	31 29 2	0 0 0	31 29 2	31 29 2	14 12 2	.1 0.0 1.8	.1 0.0 1.5	0. 0. 0.	98 99 85	81 80 100	76 76 85	31 29 2	0 0 0
4/23/76		CAA	357 27	370 32	205 22	FLT IN NOT	TOT CLR CLR	18 16 2	0 0 0	18 16 2	18 16 2	13 11 2	1.5 0.0 13.7	.6 0.0 5.0	0. 0. 0.	108 108 110	89 87 100	69 72 49	18 16 2	0 0 0
4/27/76 *		BBA	344 30	352 37	213 22	FLT IN NOT	TOT CLR CLR	34 32 2	0 0 0	34 32 2	0 0 0	0 0 0	.7 0.0 11.8	.1 0.0 1.0	0. 0. 0.	120 122 94	0 0 0	0 0 0	34 32 2	0 0 0

APPENDIX B

DEP-ARR		CODE	AVFL ALAT	EXHI EXTN	EXLO EXTS	NUMBER OF OBS					AVERAGES FOR THE FLIGHT			OZ	RH	H2O	TROP N	STRAT N
IM/ID/IY						CLD	PD5	OZ	H2O	H2S	%TIC	PATCHES	PD5					
HNL-SFO (CONT.)																		
4/27/76	CAA	359 30	370 37	211 22	FLT TOT: IN CLR: NOT CLR:	29 29 0	0 0 0	29 28 0	13 13 0	0.0 0.0 0.0	0.0 0.0 0.0	0. 0. 0.	134 134 0	86 86 0	61 61 0	29 29 0	0 0 0	
5/28/76	* CAA	344 30	350 37	211 22	FLT TOT: IN CLR: NOT CLR:	48 45 3	0 0 0	29 27 2	0 0 0	.2 0.0 3.3	.1 0.0 2.3	0. 0. 0.	80 79 91	0 0 0	0 0 0	48 45 3	0 0 0	
5/ 9/79	* BDB	329 30	331 37	275 22	FLT TOT: IN CLR: NOT CLR:	49 41 8	49 41 8	0 0 0	23 21 2	.8 0.0 5.0	.4 0.0 2.3	.115E+05 .132E+04 .636E+05	0 0 0	49 44 95	93 89 139	49 41 8	0 0 0	
5/14/79	BDB	355 30	361 37	199 22	FLT TOT: IN CLR: NOT CLR:	49 46 3	49 46 3	0 0 0	25 25 0	.2 0.0 2.5	.1 0.0 1.7	.128E+05 .100E+05 .556E+05	0 0 0	63 63 0	42 42 0	49 46 3	0 0 0	
5/15/79	* BDB	346 30	350 37	212 22	FLT TOT: IN CLR: NOT CLR:	46 44 2	46 44 2	0 0 0	24 23 1	.2 0.0 4.3	.2 0.0 3.5	.645E+04 .673E+04 .228E+03	0 0 0	59 58 62	68 69 44	46 44 2	0 0 0	
5/16/79	BDB	339 30	341 37	299 22	FLT TOT: IN CLR: NOT CLR:	48 48 0	48 48 0	0 0 0	22 22 0	0.0 0.0 0.0	0.0 0.0 0.0	.405E+04 .405E+04 0.	0 0 0	36 36 0	49 49 0	48 48 0	0 0 0	
5/17/79	* BDB	326 30	331 37	234 22	FLT TOT: IN CLR: NOT CLR:	45 45 0	45 45 0	29 29 0	25 25 0	0.0 0.0 0.0	0.0 0.0 0.0	.404E+04 .404E+04 0.	100 100 0	35 35 0	75 75 0	45 45 0	0 0 0	
5/29/79	* CAB	365 30	370 37	286 22	FLT TOT: IN CLR: NOT CLR:	43 37 6	43 37 6	26 22 4	23 19 4	2.5 0.0 17.6	.2 0.0 1.5	.835E+04 .170E+04 .494E+05	65 66 62	42 42 45	35 26 79	43 37 6	0 0 0	
6/14/78	* CAB	359 31	360 37	315 22	FLT TOT: IN CLR: NOT CLR:	51 27 24	51 27 24	33 17 16	28 14 14	20.1 0.0 42.8	.7 0.0 1.6	.372E+05 .477E+04 .736E+05	71 62 80	81 78 84	60 52 68	51 27 24	0 0 0	
6/16/78	CAB	368 30	373 37	292 22	FLT TOT: IN CLR: NOT CLR:	43 37 6	43 37 6	26 23 3	24 23 1	1.1 0.0 7.9	.2 0.0 1.7	.574E+04 .275E+04 .241E+05	242 262 83	69 68 96	48 47 75	43 37 6	0 0 0	
6/17/78	* CAB	348 31	350 38	289 22	FLT TOT: IN CLR: NOT CLR:	48 47 1	48 47 1	31 30 1	28 27 1	.0 0.0 1.2	.1 0.0 3.0	.164E+04 .167E+04 .187E+03	172 177 34	69 68 100	80 77 173	48 47 1	0 0 0	
6/17/78	CAB	365 30	370 36	285 22	FLT TOT: IN CLR: NOT CLR:	43 43 0	43 43 0	27 27 0	23 23 0	0.0 0.0 0.0	0.0 0.0 0.0	.112E+04 .112E+04 0.	233 233 0	61 61 0	42 42 0	43 43 0	0 0 0	
6/19/78	CAB	367 30	371 37	297 22	FLT TOT: IN CLR: NOT CLR:	43 41 2	43 41 2	28 27 1	24 23 1	.2 0.0 5.1	.1 0.0 1.5	.166E+04 .116E+04 .118E+05	104 106 69	78 77 100	47 47 54	43 41 2	0 0 0	

APPENDIX B

DEP-ARR IM/ID/IY	CODE	AVFL ALAT	EXHI EXTN	EXLO EXTS	NUMBER OF OBS						AVERAGES FOR THE FLIGHT			TROP			STRAT	
					CLD	PD5	QZ	H2O	H2S	%TIC	PATCHES	PD5	QZ	RH	H2O	N	N	
6/24/78	CAB	362 30	371 37	192 22	FLT TOT: IN CLR: NOT CLR:	42 42 0	42 42 0	27 27 0	24 24 0	0	0.0 0.0 0.0	0.0 0.0 0.0	.157E+03 .157E+03 0.	92 92 0	4 4 0	4 4 0	42 42 0	0 0 0
6/27/78	* CAB	357 30	363 37	272 22	FLT TOT: IN CLR: NOT CLR:	50 46 4	50 46 4	32 31 1	29 29 0	0	1.4 0.0 17.6	.2 0.0 2.5	.749E+03 .648E+03 .191E+04	93 94 61	37 37 0	59 59 0	50 46 4	0 0 0
6/ 2/79	* CAB	367 30	370 37	304 22	FLT TOT: IN CLR: NOT CLR:	46 23 23	46 23 23	0 0 0	24 12 12	1	28.7 0.0 57.4	.1 0.0 .2	.359E+05 .874E+04 .631E+05	0 0 0	40 45 36	27 29 25	46 23 23	0 0 0
6/ 7/79	CAB	356 30	360 37	291 22	FLT TOT: IN CLR: NOT CLR:	43 38 5	43 38 5	0 0 0	23 18 5	1	2.7 0.0 23.5	.2 0.0 2.0	.666E+04 .405E+04 .265E+05	0 0 0	43 41 49	36 36 35	43 38 5	0 0 0
6/ 8/79	CAB	365 30	381 37	287 22	FLT TOT: IN CLR: NOT CLR:	42 42 0	42 42 0	0 0 0	21 21 0	0	0.0 0.0 0.0	0.0 0.0 0.0	.149E+04 .149E+04 0.	0 0 0	60 60 0	40 40 0	42 42 0	0 0 0
6/ 8/79	* CAB	366 30	371 37	297 22	FLT TOT: IN CLR: NOT CLR:	50 47 3	50 47 3	0 0 0	28 26 2	1	.3 0.0 5.0	.1 0.0 1.3	.202E+04 .178E+04 .576E+04	0 0 0	34 30 82	25 22 56	50 47 3	0 0 0
7/ 4/78	CAB	363 30	370 37	214 22	FLT TOT: IN CLR: NOT CLR:	42 42 0	42 42 0	27 27 0	24 24 0	0	0.0 0.0 0.0	0.0 0.0 0.0	.638E+02 .638E+02 0.	58 58 0	6 6 0	6 6 0	42 42 0	0 0 0
7/ 5/78	* CAB	358 30	361 37	282 22	FLT TOT: IN CLR: NOT CLR:	53 53 0	53 53 0	34 34 0	28 28 0	7	0.0 0.0 0.0	0.0 0.0 0.0	.704E+02 .704E+02 0.	73 73 0	44 44 0	57 57 0	53 53 0	0 0 0
7/ 9/78	CAB	364 32	370 38	252 23	FLT TOT: IN CLR: NOT CLR:	43 42 1	43 42 1	20 19 1	24 23 1	2	.2 0.0 8.6	.0 0.0 1.0	.109E+03 .100E+03 .457E+03	81 82 57	32 29 100	41 39 81	43 42 1	0 0 0
7/ 9/78	* CAB	364 29	390 36	254 22	FLT TOT: IN CLR: NOT CLR:	50 50 0	50 50 0	32 32 0	27 27 0	0	0.0 0.0 0.0	0.0 0.0 0.0	.733E+02 .733E+02 0.	63 63 0	30 30 0	48 48 0	50 50 0	0 0 0
7/10/78	CAB	369 30	390 37	295 22	FLT TOT: IN CLR: NOT CLR:	44 44 0	44 44 0	27 27 0	24 24 0	0	0.0 0.0 0.0	0.0 0.0 0.0	.293E+02 .293E+02 0.	69 69 0	17 17 0	20 20 0	44 44 0	0 0 0
7/14/78	* CAB	358 30	361 37	290 22	FLT TOT: IN CLR: NOT CLR:	52 52 0	52 52 0	33 33 0	31 31 0	0	0.0 0.0 0.0	0.0 0.0 0.0	.308E+02 .308E+02 0.	72 72 0	23 23 0	26 26 0	52 52 0	0 0 0
7/16/78	* CAB	356 30	361 37	241 22	FLT TOT: IN CLR: NOT CLR:	51 51 0	51 51 0	24 24 0	30 30 0	0	0.0 0.0 0.0	0.0 0.0 0.0	.387E+02 .387E+02 0.	72 72 0	30 30 0	43 43 0	51 51 0	0 0 0

DEP-ARR		CODE	AVFL ALAT	EXHI EXTN	EXLO EXTS	NUMBER OF OBS					AVERAGES FOR THE FLIGHT			QZ	RH	H2O	TROP N	STRAT N	
IM/ID/IY						CLD	PD5	QZ	H2O	H2S	%TIC	PATCHES	PD5						
HNL-SFO (CONT.)																			
7/16/78	CAB	366 30	370 37	288 22	FLT IN NOT	TOT: CLR: CLR:	42 40 2	42 40 2	25 25 0	23 23 0	0 0 0	.0 0.0 .4	.0 0.0 1.0	.249E+02 .245E+02 .330E+02	65 65 0	35 35 0	34 34 0	42 40 2	0 0 0
7/21/78	CAB	363 30	370 37	200 22	FLT IN NOT	TOT: CLR: CLR:	46 45 1	46 45 1	29 29 0	26 26 0	0 0 0	.1 0.0 2.7	.0 0.0 1.0	.972E+01 .994E+01 0.	51 51 0	22 22 0	38 38 0	46 45 1	0 0 0
7/22/78	* CAB	354 30	361 37	192 22	FLT IN NOT	TOT: CLR: CLR:	48 48 0	48 48 0	31 31 0	23 23 0	0 0 0	0.0 0.0 0.0	0.0 0.0 0.0	.244E+02 .244E+02 0.	50 50 0	24 24 0	37 37 0	48 48 0	0 0 0
11/19/76	* DDA	348 30	350 37	271 22	FLT IN NOT	TOT: CLR: CLR:	47 47 0	0 0 0	0 0 0	0 0 0	0 0 0	0.0 0.0 0.0	0.0 0.0 0.0	0. 0. 0.	0 0 0	0 0 0	0 0 0	47 47 0	0 0 0
11/26/76	DDA	325 30	330 37	196 22	FLT IN NOT	TOT: CLR: CLR:	43 34 9	0 0 0	0 0 0	0 0 0	0 0 0	10.1 0.0 48.3	.7 0.0 3.4	0. 0. 0.	0 0 0	0 0 0	0 0 0	43 34 9	0 0 0
11/27/76	* DDA	347 30	350 37	271 22	FLT IN NOT	TOT: CLR: CLR:	44 29 15	0 0 0	0 0 0	0 0 0	0 0 0	12.4 0.0 36.5	.9 0.0 2.7	0. 0. 0.	0 0 0	0 0 0	0 0 0	44 29 15	0 0 0
12/26/75	* CAA	322 30	350 37	225 22	FLT IN NOT	TOT: CLR: CLR:	31 22 9	0 0 0	31 22 9	0 0 0	0 0 0	4.1 0.0 14.3	.7 0.0 2.6	0. 0. 0.	28 27 30	0 0 0	0 0 0	31 22 9	0 0 0
12/28/75	CAA	364 30	371 36	216 22	FLT IN NOT	TOT: CLR: CLR:	29 26 3	0 0 0	29 26 3	0 0 0	0 0 0	3.7 0.0 35.6	.2 0.0 2.0	0. 0. 0.	38 38 33	0 0 0	0 0 0	29 26 3	0 0 0
12/30/75	* CAA	344 32	350 38	210 23	FLT IN NOT	TOT: CLR: CLR:	31 25 6	0 0 0	31 25 6	0 0 0	0 0 0	5.9 0.0 30.6	.5 0.0 2.8	0. 0. 0.	39 38 43	0 0 0	0 0 0	0 0 0	0 0 0
12/ 2/76	DDA	326 30	330 37	217 22	FLT IN NOT	TOT: CLR: CLR:	46 30 16	0 0 0	0 0 0	0 0 0	0 0 0	18.4 0.0 52.9	1.3 0.0 3.6	0. 0. 0.	0 0 0	0 0 0	0 0 0	46 30 16	0 0 0
12/ 3/76	* DDA	347 30	350 37	285 22	FLT IN NOT	TOT: CLR: CLR:	48 34 14	0 0 0	0 0 0	0 0 0	0 0 0	16.5 0.0 56.5	.9 0.0 3.1	0. 0. 0.	0 0 0	0 0 0	0 0 0	48 34 14	0 0 0
12/13/76	DDA	302 30	332 37	244 22	FLT IN NOT	TOT: CLR: CLR:	45 45 0	0 0 0	0 0 0	0 0 0	0 0 0	0.0 0.0 0.0	0.0 0.0 0.0	0. 0. 0.	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0
12/14/76	* DDA	357 30	360 37	271 22	FLT IN NOT	TOT: CLR: CLR:	49 49 0	0 0 0	0 0 0	0 0 0	0 0 0	0.0 0.0 0.0	0.0 0.0 0.0	0. 0. 0.	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0

APPENDIX B

DEP-ARR	IM/ID/IY	CODE	AVFL ALAT	EXHI EXTN	EXLO EXTS		NUMBER OF OBS					AVERAGES FOR THE FLIGHT			OZ	RH	H2O	TROP N	STRAT N
							CLD	PD5	OZ	H2O, H2S	%TIC	PATCHES	PD5						
HNL-SFO (CONT.)																			
12/16/76	*	DDA	281 31	319 37	257 22	FLT TOT:	47	0	0	0	0	5.5	.6	0.	0	0	0	0	0
						IN CLR:	42	0	0	0	0	0.0	0.0	0.	0	0	0	0	0
						NOT CLR:	5	0	0	0	0	52.0	5.4	0.	0	0	0	0	0
12/16/76		DDA	325 30	330 37	207 22	FLT TOT:	39	0	0	0	0	7.5	1.3	0.	0	0	0	0	0
						IN CLR:	31	0	0	0	0	0.0	0.0	0.	0	0	0	0	0
						NOT CLR:	8	0	0	0	0	36.6	6.5	0.	0	0	0	0	0
12/23/76		DDA	327 30	330 37	259 22	FLT TOT:	46	0	0	0	0	14.3	1.5	0.	0	0	0	46	0
						IN CLR:	30	0	0	0	0	0.0	0.0	0.	0	0	0	30	0
						NOT CLR:	16	0	0	0	0	41.3	4.4	0.	0	0	0	16	0
12/24/76	*	DDA	346 30	350 37	254 22	FLT TOT:	50	0	0	0	0	18.6	1.8	0.	0	0	0	50	0
						IN CLR:	35	0	0	0	0	0.0	0.0	0.	0	0	0	35	0
						NOT CLR:	15	0	0	0	0	62.1	6.1	0.	0	0	0	15	0
12/25/76		DDA	329 30	330 37	269 22	FLT TOT:	46	0	0	0	0	27.9	1.6	0.	0	0	0	46	0
						IN CLR:	23	0	0	0	0	0.0	0.0	0.	0	0	0	23	0
						NOT CLR:	23	0	0	0	0	55.8	3.1	0.	0	0	0	23	0
12/26/76	*	DDA	348 30	350 36	275 22	FLT TOT:	46	0	0	0	0	25.2	1.3	0.	0	0	0	46	0
						IN CLR:	22	0	0	0	0	0.0	0.0	0.	0	0	0	22	0
						NOT CLR:	24	0	0	0	0	48.4	2.6	0.	0	0	0	24	0
12/28/78	*	BBB	348 30	361 37	219 22	FLT TOT:	46	46	24	24	0	4.6	.5	.246E+05	102	17	37	0	0
						IN CLR:	41	41	24	24	0	0.0	0.0	.467E+01	102	17	37	0	0
						NOT CLR:	5	5	0	0	0	42.7	4.8	.226E+06	0	0	0	0	0
12/29/78		BBB	334 31	341 37	219 22	FLT TOT:	40	40	26	22	13	16.1	3.2	.472E+05	48	83	101	0	0
						IN CLR:	12	12	7	6	0	0.0	0.0	.155E+04	65	48	29	0	0
						NOT CLR:	28	28	19	16	13	23.0	4.5	.667E+05	42	97	129	0	0
12/30/78	*	BBB	358 30	361 37	273 22	FLT TOT:	57	57	37	35	14	15.0	2.2	.491E+05	35	78	71	0	0
						IN CLR:	32	32	23	19	4	0.0	0.0	.426E+03	37	65	79	0	0
						NOT CLR:	25	25	14	16	10	34.3	4.9	.111E+06	32	93	62	0	0
12/31/79		BDB	362 29	391 37	227 22	FLT TOT:	33	23	17	19	4	13.5	.8	.277E+01	77	49	92	22	11
						IN CLR:	25	22	15	13	0	0.0	0.0	.290E+01	83	32	117	14	11
						NOT CLR:	8	1	2	6	4	55.5	3.3	0.	29	86	37	8	0
IAD-LHR																			
6/ 6/79	*	BDB	337 48	351 52	260 40	FLT TOT:	79	79	50	37	6	7.5	1.1	.879E+05	148	71	72	71	8
						IN CLR:	55	56	36	28	4	0.0	0.0	.135E+05	177	64	64	48	8
						NOT CLR:	23	23	14	9	2	25.8	3.8	.269E+06	73	93	99	23	0
6/ 7/79		BDB	348 49	370 53	285 40	FLT TOT:	68	68	45	34	2	.8	.4	.187E+05	207	55	49	42	26
						IN CLR:	57	57	39	31	1	0.0	0.0	.431E+04	228	52	46	31	26
						NOT CLR:	11	11	6	3	1	4.7	2.4	.934E+05	69	88	79	11	0

APPENDIX B

DEP-ARR		CODE	AVFL ALAT	EXHI EXTN	EXLO EXTS	NUMBER OF OBS					AVERAGES FOR THE FLIGHT			OZ	RH	H2O	TROP N	STRAT N	
IM/ID/IY						CLD	PD5	OZ	H2O	H2S	%TIC	PATCHES	PD5						
IAD-LHR (CONT.)																			
9/10/76	BBA	346 49	349 53	252 40	FLT IN NOT	TOT: CLR: CLR:	63 63 0	0 0 0	39 39 0	0 0 0	0 0 0	0.0 0.0 0.0	0.0 0.0 0.0	0. 0. 0.	85 85 0	0 0 0	0 0 0	53 53 0	10 10 0
9/13/76	BBA	332 49	340 52	253 40	FLT IN NOT	TOT: CLR: CLR:	67 67 0	0 0 0	40 40 0	0 0 0	0 0 0	0.0 0.0 0.0	0.0 0.0 0.0	0. 0. 0.	81 81 0	0 0 0	0 0 0	67 67 0	0 0 0
9/13/76 *	BBA	369 51	390 54	272 40	FLT IN NOT	TOT: CLR: CLR:	69 69 0	0 0 0	46 46 0	0 0 0	0 0 0	0.0 0.0 0.0	0.0 0.0 0.0	0. 0. 0.	108 108 0	0 0 0	0 0 0	47 47 0	22 22 0
9/17/76 *	BBA	341 53	370 58	254 40	FLT IN NOT	TOT: CLR: CLR:	74 72 2	0 0 0	48 46 2	0 0 0	0 0 0	0.0 0.0 .6	0.0 0.0 1.0	0. 0. 0.	92 93 80	0 0 0	0 0 0	54 52 2	20 20 0
9/24/76 *	BBA	358 48	369 52	267 40	FLT IN NOT	TOT: CLR: CLR:	80 80 0	0 0 0	51 51 0	0 0 0	0 0 0	0.0 0.0 0.0	0.0 0.0 0.0	0. 0. 0.	83 83 0	0 0 0	0 0 0	0 0 0	0 0 0
9/24/76	BBA	351 49	390 53	249 40	FLT IN NOT	TOT: CLR: CLR:	68 68 0	0 0 0	43 43 0	0 0 0	0 0 0	0.0 0.0 0.0	0.0 0.0 0.0	0. 0. 0.	85 85 0	0 0 0	0 0 0	0 0 0	0 0 0
9/30/78 *	BBB	322 47	370 52	255 41	FLT IN NOT	TOT: CLR: CLR:	80 60 20	80 60 20	52 38 14	0 0 0	0 0 0	4.9 0.0 19.5	.8 0.0 3.0	.117E+05 .120E+03 .463E+05	67 72 54	0 0 0	0 0 0	80 60 20	0 0 0
10/ 1/78	BBB	320 49	331 53	253 40	FLT IN NOT	TOT: CLR: CLR:	68 58 10	68 58 10	44 37 7	0 0 0	0 0 0	4.4 0.0 29.9	.4 0.0 2.6	.252E+04 .295E+02 .170E+05	70 71 65	0 0 0	0 0 0	68 58 10	0 0 0
10/ 6/78 *	BBB	337 49	392 52	239 40	FLT IN NOT	TOT: CLR: CLR:	76 51 25	76 51 25	52 36 16	0 0 0	0 0 0	13.0 0.0 39.7	.9 0.0 2.6	.341E+05 .273E+03 .103E+06	82 92 61	0 0 0	0 0 0	74 49 25	2 2 0
10/ 7/78 *	BBB	338 49	370 53	208 40	FLT IN NOT	TOT: CLR: CLR:	75 60 15	75 60 15	48 37 11	0 0 0	0 0 0	7.9 0.0 39.6	.6 0.0 3.1	.576E+05 .711E+02 .288E+06	115 131 61	0 0 0	0 0 0	56 41 15	19 19 0
10/ 7/78	BBB	338 49	350 53	256 40	FLT IN NOT	TOT: CLR: CLR:	64 51 13	64 51 13	43 33 10	0 0 0	0 0 0	11.3 0.0 55.6	.6 0.0 2.8	.375E+05 .155E+03 .184E+06	106 120 59	0 0 0	0 0 0	51 38 13	13 13 0
11/22/77 *	BCB	365 49	390 52	249 40	FLT IN NOT	TOT: CLR: CLR:	75 31 44	75 31 44	50 20 30	0 0 0	0 0 0	19.3 0.0 33.0	0.0 0.0 0.0	.628E+05 .361E+03 .107E+06	105 149 75	0 0 0	0 0 0	61 17 44	14 14 0
11/23/77	BCB	359 50	371 54	276 40	FLT IN NOT	TOT: CLR: CLR:	61 40 21	61 40 21	41 26 15	0 0 0	0 0 0	17.9 0.0 52.1	0.0 0.0 0.0	.430E+05 .210E+02 .125E+06	102 134 46	0 0 0	0 0 0	41 20 21	20 20 0

APPENDIX B

DEP-ARR IM/ID/IY	CODE	AVFL ALAT	EXHI EXTN	EXLO EXTS		NUMBER OF OBS					AVERAGES FOR		THE FLIGHT			TROP	STRAT		
						CLD	PD5	OZ	H2O	H2S	%TIC	PATCHES	PD5	OZ	RH	H2O	N	N	
IAD-LHR (CONT.)																			
11/16/78	* BBB	308 55	310 61	262 40	FLT TOT: IN CLR: NOT CLR:	85 79 6	85 79 6	57 53 4	46 43 3	1 0 1	4.2 0.0 59.6	.3 0.0 3.7	.993E+04 .319E+02 .140E+06	148 156 34	37 34 85	28 21 132	50 44 6	35 35 0	
11/17/78	BBB	328 48	331 52	254 40	FLT TOT: IN CLR: NOT CLR:	62 43 19	62 43 19	40 29 11	33 23 10	10 0 10	18.9 0.0 61.7	.9 0.0 2.9	.877E+05 .119E+02 .286E+06	134 173 30	47 23 100	48 21 110	43 24 19	19 19 0	
12/15/78	* BBB	332 53	350 57	252 40	FLT TOT: IN CLR: NOT CLR:	77 60 17	77 60 17	50 39 11	40 33 7	6 0 6	14.5 0.0 65.6	.6 0.0 2.6	.723E+05 .132E+02 .327E+06	158 187 56	48 39 93	29 26 43	29 22 7	46 36 10	
12/16/78	BBB	316 49	330 53	257 40	FLT TOT: IN CLR: NOT CLR:	64 43 21	64 43 21	39 26 13	30 18 12	11 0 11	15.6 0.0 47.4	.6 0.0 1.8	.453E+05 .754E+01 .138E+06	92 112 53	63 39 99	42 28 62	0 0 0	0 0 0	
IAH-JFK																			
2/15/79	BBB	360 35	370 39	276 30	FLT TOT: IN CLR: NOT CLR:	22 6 16	0 0 0	16 6 10	12 5 7	0 0 0	25.8 0.0 35.5	2.2 0.0 3.1	0. 0. 0.	46 62 36	64 37 84	43 34 50	22 6 16	0 0 0	
2/15/79	* BBB	362 36	390 40	301 31	FLT TOT: IN CLR: NOT CLR:	28 26 2	0 0 0	17 16 1	16 15 1	1 0 1	4.2 0.0 59.2	.1 0.0 1.5	0. 0. 0.	70 69 99	28 23 100	26 21 103	23 22 1	5 4 1	
3/ 8/79	BBB	357 32	371 39	298 30	FLT TOT: IN CLR: NOT CLR:	8 8 0	0 0 0	3 3 0	0 0 0	0 0 0	0.0 0.0 0.0	0.0 0.0 0.0	0. 0. 0.	122 122 0	0 0 0	0 0 0	1 1 0	7 7 0	
3/ 8/79	* BBB	363 38	390 40	232 31	FLT TOT: IN CLR: NOT CLR:	8 8 0	0 0 0	3 3 0	3 3 0	0 0 0	0.0 0.0 0.0	0.0 0.0 0.0	0. 0. 0.	555 555 0	23 23 0	33 33 0	1 1 0	7 7 0	
5/28/79	* BDB	374 35	391 40	216 30	FLT TOT: IN CLR: NOT CLR:	30 15 15	30 15 15	19 8 11	10 9 1	0 0 0	26.2 0.0 52.4	3.4 0.0 6.8	.731E+06 .513E+04 .146E+07	195 292 125	50 49 54	24 25 18	19 5 14	11 10 1	
5/29/79	BDB	355 35	371 40	213 31	FLT TOT: IN CLR: NOT CLR:	25 13 12	25 13 12	15 9 6	0 0 0	0 0 0	17.2 0.0 35.8	2.5 0.0 5.2	.402E+06 .408E+04 .833E+06	154 178 118	0 0 0	0 0 0	25 13 12	0 0 0	
10/12/78	* BBB	379 36	391 40	231 31	FLT TOT: IN CLR: NOT CLR:	28 28 0	28 28 0	17 17 0	0 0 0	0 0 0	0.0 0.0 0.0	0.0 0.0 0.0	.203E+03 .203E+03 0.	89 89 0	0 0 0	0 0 0	28 28 0	0 0 0	
10/16/78	* BBB	345 37	351 40	274 30	FLT TOT: IN CLR: NOT CLR:	30 29 1	30 29 1	18 17 1	0 0 0	0 0 0	.0 0.0 .4	.0 0.0 1.0	.177E+02 .193E+02 0.	166 173 44	0 0 0	0 0 0	17 16 1	13 13 0	

DEP-ARR	IM/ID/IY	CODE	AVFL ALAT	EXHI EXTN	EXLO EXTS	NUMBER OF OBS					AVERAGES FOR THE FLIGHT			TROP			STRAT		
						CLD	PD5	OZ	H2O	H2S	%TIC	PATCHES	PD5	OZ	RH	H2O	N	N	
IAH-JFK (CONT.)																			
10/17/78		BBB	359 35	371 39	237 30	FLT IN NOT	TOT CLR CLR:	25 24 1	25 24 1	16 16 0	0 0 0	.1 0.0 2.7	.1 0.0 2.0	.159E+02 .165E+02 0.	92 92 0	0 0 0	0 0 0	22 21 1	3 3 0
11/ 1/78		BBB	360 35	370 39	256 30	FLT IN NOT	TOT CLR CLR:	26 26 0	26 26 0	17 17 0	12 12 0	0.0 0.0 0.0	0.0 0.0 0.0	.249E+01 .249E+01 0.	151 151 0	26 26 0	38 38 0	26 26 0	0 0 0
11/ 1/78 *		BBB	380 35	390 40	255 30	FLT IN NOT	TOT CLR CLR:	27 27 0	27 27 0	17 17 0	14 14 0	0.0 0.0 0.0	0.0 0.0 0.0	.974E+01 .974E+01 0.	76 76 0	35 35 0	21 21 0	27 27 0	0 0 0
IAH-MEX																			
2/15/79		BBB	374 25	390 29	269 20	FLT IN NOT	TOT CLR CLR:	15 12 3	0 0 0	1 0 1	8 6 2	7.2 0.0 36.1	1.0 0.0 5.0	0. 0. 0.	23 0 23	58 65 37	53 34 110	15 12 3	0 0 0
2/15/79 *		BBB	389 25	410 29	302 21	FLT IN NOT	TOT CLR CLR:	12 11 1	0 0 0	8 7 1	6 5 1	.5 0.0 5.9	.2 0.0 2.0	0. 0. 0.	84 89 47	47 55 12	52 56 33	12 11 1	0 0 0
3/ 8/79		BBB	371 25	391 27	252 21	FLT IN NOT	TOT CLR CLR:	7 6 1	0 0 0	3 3 0	3 3 0	.1 0.0 .4	.1 0.0 1.0	0. 0. 0.	156 156 0	71 71 0	48 48 0	6 5 1	1 1 0
3/ 8/79 *		BBB	351 24	370 29	222 21	FLT IN NOT	TOT CLR CLR:	8 8 0	0 0 0	3 3 0	3 3 0	0.0 0.0 0.0	0.0 0.0 0.0	0. 0. 0.	62 62 0	49 49 0	88 88 0	8 8 0	0 0 0
5/29/79 *		BDB	355 27	370 30	216 21	FLT IN NOT	TOT CLR CLR:	19 19 0	19 19 0	10 10 0	7 7 0	0.0 0.0 0.0	0.0 0.0 0.0	.508E+03 .508E+03 0.	68 68 0	39 39 0	40 40 0	19 19 0	0 0 0
5/29/79		BDB	338 24	351 28	206 20	FLT IN NOT	TOT CLR CLR:	13 12 1	13 12 1	9 8 1	5 4 1	.5 0.0 6.3	.4 0.0 5.0	.916E+02 .620E+02 .447E+03	50 50 47	28 32 13	137 72 394	13 12 1	0 0 0
IAH-SFO																			
10/13/78		BBB	378 33	390 38	240 30	FLT IN NOT	TOT CLR CLR:	35 35 0	33 35 0	22 22 0	0 0 0	0.0 0.0 0.0	0.0 0.0 0.0	.170E+02 .170E+02 0.	74 74 0	0 0 0	0 0 0	35 35 0	0 0 0
IST-KHI																			
4/19/76		BBA	344 35	371 40	212 26	FLT IN NOT	TOT CLR CLR:	34 19 15	0 0 0	34 19 15	0 0 0	14.9 0.0 33.9	1.8 0.0 4.1	0. 0. 0.	170 168 174	0 0 0	0 0 0	32 18 14	2 1 1

APPENDIX B

DEP-ARR	IM/1D/1Y	CODE	AVFL ALAT	EXHI EXTN	EXLO EXTS			NUMBER OF OBS					AVERAGES FOR			THE FLIGHT			TROP	STRAT
								CLD	PD5	OZ	H2O	H2S	%TIC	PATCHES	PD5	OZ	RH	H2O	N	N
1/24/76	*	BBA	297 38	310 41	215 36	FLT IN NOT	TOT: CLR: CLR:	12 12 0	0 0 0	12 12 0	0 0 0	0 0 0	0.0 0.0 0.0	0.0 0.0 0.0	0. 0. 0.	76 76 0	0 0 0	0 0 0	12 12 0	0 0 0
1/ 7/79	*	BBB	320 39	350 41	241 36	FLT IN NOT	TOT: CLR: CLR:	30 28 2	0 0 0	19 19 0	18 18 0	1 1 0	.5 0.0 6.9	.2 0.0 3.0	0. 0. 0.	106 106 0	50 50 0	33 33 0	30 28 2	0 0 0
2/25/79	*	BBB	345 39	381 40	281 36	FLT IN NOT	TOT: CLR: CLR:	25 25 0	0 0 0	16 16 0	14 14 0	0 0 0	0.0 0.0 0.0	0.0 0.0 0.0	0. 0. 0.	277 277 0	22 22 0	19 19 0	16 16 0	9 9 0
3/20/76	*	BBA	334 39	351 40	212 36	FLT IN NOT	TOT: CLR: CLR:	16 16 0	0 0 0	16 16 0	0 0 0	0 0 0	0.0 0.0 0.0	0.0 0.0 0.0	0. 0. 0.	290 290 0	0 0 0	0 0 0	9 8 0	8 8 0
3/23/76		BBA	283 38	291 41	209 36	FLT IN NOT	TOT: CLR: CLR:	16 16 0	0 0 0	16 16 0	0 0 0	0 0 0	0.0 0.0 0.0	0.0 0.0 0.0	0. 0. 0.	82 82 0	0 0 0	0 0 0	16 16 0	0 0 0
3/16/79		BBB	289 38	291 40	247 36	FLT IN NOT	TOT: CLR: CLR:	23 23 0	0 0 0	15 15 0	10 10 0	0 0 0	0.0 0.0 0.0	0.0 0.0 0.0	0. 0. 0.	53 53 0	22 22 0	51 51 0	23 23 0	0 0 0
3/17/79	*	BBB	310 39	310 40	307 37	FLT IN NOT	TOT: CLR: CLR:	24 18 6	0 0 0	0 0 0	13 11 2	0 0 0	5.9 0.0 23.8	.6 0.0 2.5	0. 0. 0.	0 0 0	38 36 51	52 50 65	24 18 6	0 0 0
11/22/78		BBB	340 39	370 40	230 36	FLT IN NOT	TOT: CLR: CLR:	24 24 0	24 24 0	16 16 0	15 15 0	0 0 0	0.0 0.0 0.0	0.0 0.0 0.0	.140E+02 .140E+02 0.	106 106 0	27 27 0	47 47 0	6 6 0	18 18 0
11/23/78	*	BBB	308 39	310 40	281 36	FLT IN NOT	TOT: CLR: CLR:	25 25 0	25 25 0	17 17 0	13 13 0	1 1 0	0.0 0.0 0.0	0.0 0.0 0.0	.105E+02 .105E+02 0.	64 64 0	32 32 0	29 29 0	25 25 0	0 0 0
11/25/78		BBB	314 38	329 40	250 36	FLT IN NOT	TOT: CLR: CLR:	24 24 0	24 24 0	16 16 0	10 10 0	1 1 0	0.0 0.0 0.0	0.0 0.0 0.0	.136E+02 .136E+02 0.	47 47 0	31 31 0	47 47 0	24 24 0	0 0 0
11/26/78	*	BBB	325 39	350 40	272 36	FLT IN NOT	TOT: CLR: CLR:	22 22 0	22 22 0	14 14 0	10 10 0	1 1 0	0.0 0.0 0.0	0.0 0.0 0.0	.120E+02 .120E+02 0.	77 77 0	40 40 0	24 24 0	22 22 0	0 0 0
11/28/78		BBB	350 38	370 40	234 36	FLT IN NOT	TOT: CLR: CLR:	21 19 2	21 19 2	14 13 1	11 10 1	0 0 0	6.6 0.0 69.6	.8 0.0 8.5	.681E+05 .697E+01 .715E+06	131 136 59	23 20 57	11 8 39	21 19 2	0 0 0
11/29/78	*	BBB	339 39	352 41	199 36	FLT IN NOT	TOT: CLR: CLR:	27 18 9	27 18 9	16 11 5	12 9 3	5 2 3	15.6 0.0 46.7	1.6 0.0 4.9	.517E+05 .336E+02 .155E+06	93 113 51	94 92 100	38 34 49	27 18 9	0 0 0

DEP-ARR	IM/ID/IY	CODE	AVFL ALAT	EXHI EXTN	EXLS EXTS	NUMBER OF OBS					AVERAGES FOR THE FLIGHT					TRCP	STRAT			
						CLD	PD5	OZ	H2O, H2S	%TIC	PATCHES	PD5	OZ	RH	H2O	N	N			
IST-THR (CONT.)																				
	12/17/78	BBB	287 39	291 40	257 36	FLT	TOT:	19	19	10	8	3	5.0	.9	.627E+04	43	75	170	0	0
						IN	CLR:	13	13	7	6	1	0.0	0.0	.189E+04	49	67	139	0	0
						NOT	CLR:	6	6	3	2	2	15.8	3.0	.158E+05	30	100	264	0	0
	12/18/78 *	BBB	346 39	351 40	277 36	FLT	TOT:	26	26	14	15	4	10.2	1.8	.326E+05	60	64	29	0	0
						IN	CLR:	17	17	10	9	0	0.0	0.0	.785E+01	62	51	25	0	0
						NOT	CLR:	9	9	4	6	4	29.6	5.2	.941E+05	54	83	34	0	0
	12/20/78	BBB	346 38	371 40	216 36	FLT	TOT:	22	22	14	12	0	0.0	0.0	.615E+01	84	58	63	0	0
						IN	CLR:	22	22	14	12	0	0.0	0.0	.615E+01	84	58	63	0	0
						NOT	CLR:	0	0	0	0	0	0.0	0.0	0.	0	0	0	0	0
	12/23/78	BBB	324 38	331 40	258 36	FLT	TOT:	22	22	0	9	0	3.5	.7	.315E+05	0	54	33	0	0
						IN	CLR:	18	18	0	9	0	0.0	0.0	.409E+03	0	54	33	0	0
						NOT	CLR:	4	4	0	0	0	19.4	4.0	.171E+06	0	0	0	0	0
	12/24/78 *	BBB	358 39	390 40	280 36	FLT	TOT:	22	22	0	14	1	14.8	.6	.362E+05	0	49	25	0	0
						IN	CLR:	18	18	0	11	1	0.0	0.0	0.	0	45	26	0	0
						NOT	CLR:	4	4	0	3	0	81.2	3.5	.199E+06	0	64	22	0	0
ITD-LAX																				
	2/12/76 *	CAA	340 28	350 34	212 21	FLT	TOT:	26	0	26	0	0	.4	.2	0.	58	0	0	25	1
						IN	CLR:	24	0	24	0	0	0.0	0.0	0.	59	0	0	23	1
						NOT	CLR:	2	0	2	0	0	5.5	2.0	0.	44	0	0	2	0
	2/13/76	CAA	346 28	371 34	200 21	FLT	TOT:	28	0	28	0	0	0.0	0.0	0.	55	0	0	25	3
						IN	CLR:	28	0	28	0	0	0.0	0.0	0.	55	0	0	25	3
						NOT	CLR:	0	0	0	0	0	0.0	0.0	0.	0	0	0	0	0
	2/14/76 *	CAA	377 29	393 34	201 21	FLT	TOT:	29	0	29	0	0	0.0	0.0	0.	187	0	0	20	9
						IN	CLR:	29	0	29	0	0	0.0	0.0	0.	187	0	0	20	9
						NOT	CLR:	0	0	0	0	0	0.0	0.0	0.	0	0	0	0	0
	2/15/76	CAA	354 27	391 34	211 20	FLT	TOT:	28	0	28	0	0	0.0	0.0	0.	184	0	0	25	3
						IN	CLR:	28	0	28	0	0	0.0	0.0	0.	184	0	0	25	3
						NOT	CLR:	0	0	0	0	0	0.0	0.0	0.	0	0	0	0	0
	3/ 7/76 *	CAA	382 29	390 35	214 23	FLT	TOT:	27	0	27	27	4	0.0	0.0	0.	174	45	48	21	6
						IN	CLR:	27	0	27	27	4	0.0	0.0	0.	174	45	48	21	6
						NOT	CLR:	0	0	0	0	0	0.0	0.0	0.	0	0	0	0	0
	3/ 8/79	CAB	348 28	360 34	264 21	FLT	TOT:	37	37	20	18	13	.3	.0	.126E+04	129	93	167	37	0
						IN	CLR:	36	36	20	17	13	0.0	0.0	.142E+03	129	98	172	36	0
						NOT	CLR:	1	1	0	1	0	11.0	1.0	.415E+05	0	19	84	1	0
	3/26/79	CAB	369 28	380 34	268 22	FLT	TOT:	42	42	26	9	8	3.5	.9	.255E+05	109	99	82	20	22
						IN	CLR:	27	27	18	7	6	0.0	0.0	.433E+03	143	99	54	8	19
						NOT	CLR:	15	15	8	2	2	9.9	2.5	.706E+05	33	100	184	12	3

DEP-ARR	IM/ID/IY	CODE	AVFL ALAT	EXHI EXTN	EXLO EXTS	NUMBER OF OBS					AVERAGES FOR THE FLIGHT			QZ	RH	H2O	TROP N	STRAT N		
						CLD	PD5	OZ	H2O, H2S	%TIC	PATCHES	PD5								
ITG-LAX (CONT.)																				
	3/29/79	CAB	370 28	381 34	244 22	FLT IN NOT	TOT: CLR: CLR:	41 26 15	41 26 15	25 18 7	22 14 8	17 9 8	22.8 0.0 62.4	.8 0.0 2.1	.771E+05 .190E+04 .207E+06	126 163 32	95 92 100	45 47 40	32 21 11	9 5 4
	4/30/76 *	CAA	342 28	350 33	213 20	FLT IN NOT	TOT: CLR: CLR:	43 34 9	0 0 0	28 21 7	35 28 7	28 21 7	4.9 0.0 23.6	.6 0.0 2.9	0. 0. 0.	114 116 107	96 95 100	129 103 235	43 34 9	0 0 0
	5/ 1/76	CAA	370 27	389 34	208 20	FLT IN NOT	TOT: CLR: CLR:	40 28 12	0 0 0	24 18 6	33 23 10	28 18 10	12.6 0.0 41.9	.8 0.0 2.5	0. 0. 0.	115 122 95	96 94 100	74 61 102	40 28 12	0 0 0
	5/ 2/76 *	CAA	382 28	390 34	211 20	FLT IN NOT	TOT: CLR: CLR:	51 34 17	0 0 0	16 12 4	42 28 14	30 16 14	11.8 0.0 35.5	.7 0.0 2.2	0. 0. 0.	175 206 82	86 78 100	64 60 71	51 34 17	0 0 0
	5/ 3/76	CAA	358 27	370 33	206 20	FLT IN NOT	TOT: CLR: CLR:	49 41 8	0 0 0	32 29 3	40 35 5	30 25 5	4.1 0.0 25.3	.4 0.0 2.8	0. 0. 0.	140 148 65	86 84 100	61 83 63	49 41 8	0 0 0
	6/23/78	CAB	366 28	371 34	283 22	FLT IN NOT	TOT: CLR: CLR:	44 41 3	44 41 3	27 25 2	24 22 2	0 0 0	.3 0.0 4.7	.1 0.0 1.0	.572E+02 .521E+02 .126E+03	89 92 54	52 52 58	42 38 85	44 41 3	0 0 0
	7/20/78	CAB	347 28	371 34	194 22	FLT IN NOT	TOT: CLR: CLR:	46 46 0	46 46 0	30 30 0	26 26 0	0 0 0	0.0 0.0 0.0	0.0 0.0 0.0	.136E+02 .136E+02 0.	58 58 0	3 3 0	8 8 0	46 46 0	0 0 0
ITG-ORD																				
	2/ 7/76	CAA	355 31	371 41	204 20	FLT IN NOT	TOT: CLR: CLR:	61 55 6	0 0 0	61 55 6	0 0 0	0 0 0	2.2 0.0 22.0	.3 0.0 3.2	0. 0. 0.	153 167 23	0 0 0	0 0 0	27 21 6	34 34 0
	5/ 8/76	CAA	354 33	370 41	206 21	FLT IN NOT	TOT: CLR: CLR:	79 70 9	0 0 0	32 26 6	0 0 0	0 0 0	1.5 0.0 13.2	.3 0.0 2.4	0. 0. 0.	94 98 76	0 0 0	0 0 0	79 70 9	0 0 0
	6/21/78	CAB	358 34	390 43	268 22	FLT IN NOT	TOT: CLR: CLR:	75 75 0	75 75 0	49 49 0	41 41 0	0 0 0	0.0 0.0 0.0	0.0 0.0 0.0	.355E+03 .355E+03 0.	107 107 0	53 53 0	50 50 0	69 69 0	6 6 0
	6/29/78	CAB	347 33	371 41	234 22	FLT IN NOT	TOT: CLR: CLR:	79 74 5	79 74 5	51 49 2	44 43 1	1 1 0	1.8 0.0 29.0	.2 0.0 3.0	.796E+04 .213E+03 .123E+06	73 73 77	41 40 76	65 65 76	79 74 5	0 0 0
	7/ 3/78	CAB	347 33	371 41	216 22	FLT IN NOT	TOT: CLR: CLR:	77 74 3	77 74 3	50 49 1	45 44 1	8 7 1	.2 0.0 5.2	.1 0.0 1.3	.901E+02 .801E+02 .337E+03	67 68 19	44 43 100	84 81 208	77 74 3	0 0 0

DEP-ARR IM/1D/1Y	CODE	AVFL ALAT	EXHI EXTN	EXLO EXTS	NUMBER OF OBS						AVERAGES FOR THE FLIGHT			OZ	RH	H2O	TROP N	STRAT N	
					CLD	PD5	OZ	H2O	H2S	%TIC	PATCHES	PD5							
I TO ORD (CONT.)																			
7/18/78	CAB	347 35	371 41	252 23	FLT	TOT:	79	79	51	45	11	2.8	.2	.562E+04	68	54	144	79	0
					IN	CLR:	72	72	47	41	11	0.0	0.0	.297E+02	66	63	150	72	0
					NOT	CLR:	7	7	4	4	0	31.6	2.0	.631E+05	93	77	82	7	0
JFK-JFK																			
4/ 6/77	AAA	383 45	431 48	255 42	FLT	TOT:	19	0	0	0	0	0.0	0.0	0.	0	0	0	4	15
					IN	CLR:	19	0	0	0	0	0.0	0.0	0.	0	0	0	4	15
					NOT	CLR:	0	0	0	0	0	0.0	0.0	0.	0	0	0	0	0
JFK-LAS																			
2/12/79	CAB	364 39	391 40	204 36	FLT	TOT:	52	52	34	29	8	19.0	.7	.779E+05	144	82	75	34	18
					IN	CLR:	35	35	23	19	2	0.0	0.0	.434E+02	136	78	26	18	17
					NOT	CLR:	17	17	11	10	6	59.2	2.0	.238E+06	58	89	170	16	1
JFK-LAX																			
1/31/76 *	CAA	362 40	370 42	208 35	FLT	TOT:	36	0	36	31	21	25.2	.9	0.	157	79	34	21	15
					IN	CLR:	21	0	21	18	8	0.0	0.0	0.	246	64	43	6	15
					NOT	CLR:	15	0	15	13	13	60.5	2.3	0.	33	100	20	15	0
2/ 3/76 *	CAA	355 40	370 42	200 34	FLT	TOT:	34	0	34	28	17	1.5	.3	0.	118	36	48	21	13
					IN	CLR:	31	0	31	25	15	0.0	0.0	0.	122	86	42	19	12
					NOT	CLR:	3	0	3	3	2	16.7	3.7	0.	81	83	103	2	1
2/ 4/76	CAA	368 37	390 40	211 34	FLT	TOT:	42	0	42	37	21	1.1	.2	0.	113	69	41	25	17
					IN	CLR:	37	0	37	33	17	0.0	0.0	0.	119	65	42	20	17
					NOT	CLR:	5	0	5	4	4	9.3	1.4	0.	65	100	39	5	0
2/24/76 *	CAA	380 39	410 42	214 34	FLT	TOT:	31	0	31	30	15	0.	0.	0.	152	87	74	5	26
					IN	CLR:	30	0	30	29	14	0.0	0.0	0.	157	87	75	4	26
					NOT	CLR:	1	0	1	1	1	.4	1.0	0.	0	100	43	1	0
2/25/76	CAA	374 39	390 41	208 34	FLT	TOT:	36	0	36	33	26	0.	0.	0.	180	96	45	14	22
					IN	CLR:	35	0	35	32	25	0.0	0.0	0.	184	96	46	13	22
					NOT	CLR:	1	0	1	1	1	1.2	1.0	0.	39	100	21	1	0
2/28/76	CAA	359 38	390 40	213 34	FLT	TOT:	37	0	37	37	31	4.2	.5	0.	75	97	64	37	0
					IN	CLR:	28	0	28	28	22	0.0	0.0	0.	79	96	75	28	0
					NOT	CLR:	9	0	9	9	9	17.4	2.0	0.	63	100	31	9	0
2/ 8/79 *	CAB	332 37	371 41	195 35	FLT	TOT:	9	9	4	2	0	11.3	1.3	.193E+05	47	79	194	9	0
					IN	CLR:	3	3	1	1	0	0.0	0.0	.110E+04	46	82	366	3	0
					NOT	CLR:	6	6	3	1	0	17.0	2.0	.284E+05	47	73	23	6	0
2/10/79 *	CAB	368 40	372 42	298 35	FLT	TOT:	47	47	30	25	11	4.5	.6	.133E+05	197	85	55	21	26
					IN	CLR:	35	35	24	20	8	0.0	0.0	.336E+03	226	82	63	12	23
					NOT	CLR:	12	12	6	5	3	17.8	2.3	.512E+05	80	99	22	9	3

DEP-ARR	IM/ID/IY	CODE	AVFL ALAT	EXHI EXTN	EXLO EXTS	NUMBER OF OBS					AVERAGES FOR THE FLIGHT			TROP			STRAT			
						CLD	PD5	OZ	H2O, H2S	%TIC	PATCHES	PD5	OZ	RH	H2O	N	N			
JFK-LAX (CONT.)																				
2/11/79	*	CAB	364 40	370 42	199 35	FLT IN NOT	TOT CLR CLR	43 33 10	43 33 10	29 17 6	21 4 4	5 4 1	9.1 0.0 39.0	.4 0.0 1.9	.201E+05 .307E+03 .856E+05	190 215 94	83 81 90	43 47 29	19 9 10	24 24 0
2/16/79		CAB	356 38	391 40	282 34	FLT IN NOT	TOT CLR CLR	59 58 1	59 58 1	39 39 0	33 33 0	1 1 0	.0 0.0 2.4	.0 0.0 1.0	.330E+03 .602E+02 .160E+05	209 209 0	57 57 0	40 40 0	24 23 1	35 35 0
2/21/79	*	CAB	369 37	391 39	264 34	FLT IN NOT	TOT CLR CLR	43 25 18	43 25 18	27 15 12	14 4 10	14 4 10	19.4 0.0 46.4	1.4 0.0 3.3	.510E+05 .868E+02 .122E+06	108 151 56	100 100 100	33 32 33	32 15 17	11 10 1
2/24/79	*	CAB	345 38	370 42	235 34	FLT IN NOT	TOT CLR CLR	44 30 14	44 30 14	29 20 9	22 17 5	7 5 2	18.7 0.0 58.9	.8 0.0 2.4	.588E+05 .126E+04 .182E+06	204 264 72	91 90 92	97 47 267	30 16 14	14 14 0
2/25/79		CAB	350 39	390 42	308 35	FLT IN NOT	TOT CLR CLR	53 32 21	53 32 21	30 19 11	22 12 10	11 5 6	20.7 0.0 52.3	1.3 0.0 3.2	.538E+05 .118E+04 .134E+06	216 306 60	91 87 96	72 62 83	38 17 21	15 15 0
2/28/79		CAB	385 39	391 41	268 35	FLT IN NOT	TOT CLR CLR	52 48 4	52 48 4	34 31 3	30 27 3	18 15 3	1.9 0.0 24.1	.2 0.0 2.5	.985E+03 .725E+02 .119E+05	337 358 120	94 94 100	50 50 47	3 1 2	49 47 2
3/ 6/79	*	CAB	335 38	371 40	212 34	FLT IN NOT	TOT CLR CLR	37 29 8	37 29 8	25 18 7	19 12 7	13 9 4	10.8 0.0 49.8	.4 0.0 2.0	.148E+05 .166E+03 .679E+05	178 224 59	91 93 87	66 71 56	27 19 8	10 10 0
3/ 8/79	*	CAB	367 36	410 41	194 34	FLT IN NOT	TOT CLR CLR	42 42 0	42 42 0	28 28 0	19 19 0	10 10 0	0.0 0.0 0.0	0.0 0.0 0.0	.127E+03 .127E+03 0.	317 317 0	89 89 0	79 79 0	25 25 0	17 17 0
3/ 9/79		CAB	356 39	371 41	264 35	FLT IN NOT	TOT CLR CLR	47 42 5	47 42 5	29 27 2	27 24 3	10 7 3	3.4 0.0 32.4	.1 0.0 1.4	.116E+05 .575E+03 .104E+06	327 344 110	69 65 100	35 35 36	10 7 3	37 35 2
3/ 9/79	*	CAB	389 37	410 39	281 34	FLT IN NOT	TOT CLR CLR	41 39 2	41 39 2	27 26 1	22 21 1	6 6 0	.9 0.0 18.0	.1 0.0 2.0	.524E+02 .535E+02 .311E+02	421 434 87	58 60 11	70 73 15	16 14 2	25 25 0
3/10/79		CAB	333 40	368 41	230 34	FLT IN NOT	TOT CLR CLR	9 5 4	9 5 4	4 3 1	1 1 0	1 1 0	10.5 0.0 23.7	1.4 0.0 3.3	.203E+05 .184E+04 .434E+05	213 236 144	100 100 0	41 41 0	4 0 4	5 5 0
3/15/79	*	CAB	366 36	371 39	302 34	FLT IN NOT	TOT CLR CLR	42 41 1	42 41 1	26 26 0	21 21 0	1 1 0	.1 0.0 5.1	.0 0.0 2.0	.265E+03 .122E+03 .614E+04	225 225 0	61 61 0	49 49 0	0 0 0	0 0 0
3/17/79	*	CAB	379 40	411 42	283 35	FLT IN NOT	TOT CLR CLR	41 26 15	41 26 15	26 17 9	22 14 8	12 5 7	23.2 0.0 63.3	1.2 0.0 3.3	.738E+05 .501E+03 .201E+06	299 395 117	81 73 94	32 36 24	14 3 11	27 23 4

DEP-ARR	IM/ID/IY	CODE	AVFL ALAT	EXHI EXTN	EXLØ EXTS	NUMBER OF OBS					AVERAGES FOR THE FLIGHT				TROP			STRAT		
						CLD	PD5	OZ	H2Ø, H2S		ATIC	PATCHES	PD5	OZ	RH	H2Ø	N	N		
	3/23/79	CAB	377 39	391 41	202 34	FLT IN NOT	TØT: CLR: CLR:	53 45 8	53 45 8	34 28 6	30 27 3	6 4 2	8.1 0.0 53.5	.3 0.0 2.1	.171E+05 .169E+03 .112E+06	345 391 131	76 76 79	102 108 48	12 4 8	41 41 0
	3/24/79	* CAB	365 35	370 39	268 32	FLT IN NOT	TØT: CLR: CLR:	46 45 1	46 45 1	30 29 1	26 25 1	1 1 0	.9 0.0 41.2	.0 0.0 2.0	.156E+03 .155E+03 .190E+03	324 335 20	67 69 25	157 160 89	3 2 1	43 43 0
	3/24/79	CAB	383 39	391 41	252 34	FLT IN NOT	TØT: CLR: CLR:	51 51 0	51 51 0	33 33 0	28 28 0	4 4 0	0.0 0.0 0.0	0.0 0.0 0.0	.149E+03 .149E+03 0.	422 422 0	68 68 0	93 93 0	2 2 0	49 49 0
	3/26/79	CAB	374 38	391 40	238 34	FLT IN NOT	TØT: CLR: CLR:	57 57 0	57 57 0	37 37 0	32 32 0	1 1 0	0.0 0.0 0.0	0.0 0.0 0.0	.422E+03 .422E+03 0.	257 257 0	64 64 0	28 28 0	7 7 0	50 50 0
	3/27/79	* CAB	366 40	371 42	236 35	FLT IN NOT	TØT: CLR: CLR:	43 31 12	43 31 12	25 18 7	13 10 3	6 3 3	15.6 0.0 56.0	1.0 0.0 3.7	.774E+05 .728E+03 .276E+06	214 268 76	74 66 100	43 42 49	17 8 9	26 23 3
	3/28/79	CAB	380 38	391 40	201 34	FLT IN NOT	TØT: CLR: CLR:	59 44 15	59 44 15	38 28 10	32 23 9	12 6 6	18.7 0.0 73.4	.7 0.0 2.9	.756E+05 .549E+03 .296E+06	258 302 133	79 72 97	27 30 19	17 12 5	42 32 10
	5/12/76	* CAA	382 41	410 43	188 34	FLT IN NOT	TØT: CLR: CLR:	49 46 3	0 0 0	31 28 3	0 0 0	0 0 0	1.5 0.0 24.4	.0 0.0 .7	0. 0. 0.	299 307 230	0 0 0	0 0 0	18 15 3	31 31 0
	5/16/76	CAA	372 39	390 42	206 35	FLT IN NOT	TØT: CLR: CLR:	48 47 1	0 0 0	30 29 1	39 38 1	3 2 1	1.0 0.0 49.4	.1 0.0 3.0	0. 0. 0.	265 271 94	31 29 100	74 73 131	27 26 1	21 21 0
	5/12/79	BDB	363 37	391 40	233 34	FLT IN NOT	TØT: CLR: CLR:	55 52 3	55 52 3	0 0 0	29 26 3	2 0 2	.8 0.0 15.6	.2 0.0 4.3	.273E+05 .325E+03 .495E+06	0 0 0	34 27 97	45 33 144	21 18 3	34 34 0
	5/27/79	* BDB	357 37	370 39	236 34	FLT IN NOT	TØT: CLR: CLR:	48 47 1	48 47 1	30 30 0	24 24 0	4 4 0	.5 0.0 22.4	.2 0.0 10.0	.317E+04 .323E+04 .114E+03	233 233 0	49 49 0	50 50 0	30 29 1	18 18 0
	6/17/78	CAB	391 37	420 40	241 34	FLT IN NOT	TØT: CLR: CLR:	54 39 15	54 39 15	34 25 9	29 21 8	7 2 5	9.3 0.0 33.3	.3 0.0 2.9	.173E+05 .315E+03 .614E+05	55 54 56	81 76 96	44 42 47	54 39 15	0 0 0
	6/23/78	* CAB	379 36	410 39	271 34	FLT IN NOT	TØT: CLR: CLR:	46 33 13	46 33 13	30 22 8	19 16 3	8 5 3	11.9 0.0 42.1	.7 0.0 2.5	.198E+05 .174E+03 .696E+05	99 102 92	50 40 100	42 41 48	42 29 13	4 4 0
	6/24/78	CAB	386 38	391 40	249 34	FLT IN NOT	TØT: CLR: CLR:	54 47 7	54 47 7	32 29 3	30 27 3	0 0 0	2.6 0.0 19.9	.5 0.0 4.1	.275E+05 .236E+02 .212E+06	97 96 108	45 43 55	24 24 29	49 43 6	5 4 1

APPENDIX B

DEP-ARR IN/ID/IV	CODE	AVFL ALAT	EXHI EXTN	EXLO EXTS	NUMBER OF OBS					AVERAGES FOR THE FLIGHT			TROP			STRAT			
					CLD	PD5	OZ	H2O	H2S	%TIC	PATCHES	PD5	OZ	RH	H2O	N	N		
JFK-LAX (CONT.)																			
6/ 6/79	CAB	367 36	390 40	295 34	FLT IN NOT	TOT: CLR: CLR:	50 43 7	50 43 7	0 25 4	29 0 2	2 0 2	4.6 0.0 32.8	.2 0.0 1.4	.164E+05 .254E+04 .102E+06	0 0 0	39 34 69	38 32 75	50 43 7	0 0 0
7/ 2/78	CAB	375 38	391 40	288 34	FLT IN NOT	TOT: CLR: CLR:	51 42 9	51 42 9	33 29 4	30 25 5	0 0 0	4.7 0.0 26.4	.4 0.0 2.4	.856E+04 .567E+02 .482E+05	71 68 87	7 7 5	8 8 10	51 42 9	0 0 0
7/17/78 *	CAB	380 40	410 42	285 35	FLT IN NOT	TOT: CLR: CLR:	47 43 4	47 43 4	31 29 2	27 26 1	0 0 0	.9 0.0 11.0	.2 0.0 2.3	.174E+04 .270E+02 .202E+05	106 107 81	23 23 16	28 28 12	41 37 4	6 6 0
7/20/78 *	CAB	362 39	373 41	197 34	FLT IN NOT	TOT: CLR: CLR:	48 36 12	48 36 12	32 24 8	28 21 7	0 0 0	2.3 0.0 9.1	.7 0.0 2.6	.349E+04 .850E+02 .137E+05	109 111 105	48 47 50	93 102 65	48 36 12	0 0 0
7/21/78	CAB	369 38	391 40	241 34	FLT IN NOT	TOT: CLR: CLR:	48 35 13	48 35 13	30 20 10	23 15 8	5 3 2	4.9 0.0 18.1	.6 0.0 2.2	.698E+04 .415E+02 .257E+05	111 115 103	66 51 92	75 72 82	48 35 13	0 0 0
7/23/78 *	CAB	379 40	410 42	289 35	FLT IN NOT	TOT: CLR: CLR:	43 39 4	43 39 4	27 24 3	22 22 0	0 0 0	.7 0.0 7.6	.1 0.0 1.3	.452E+04 .465E+02 .481E+05	85 84 95	21 21 0	18 18 0	43 39 4	0 0 0
11/ 9/78 *	BBB	346 39	370 41	212 35	FLT IN NOT	TOT: CLR: CLR:	47 34 13	47 34 13	30 23 7	23 18 5	2 0 2	10.5 0.0 38.1	.5 0.0 1.8	.210E+05 .385E+01 .760E+05	43 42 47	61 53 91	40 38 49	47 34 13	0 0 0
JFK-LHR																			
1/24/76 *	BBA	349 53	370 57	211 41	FLT IN NOT	TOT: CLR: CLR:	47 36 11	0 0 0	47 36 11	0 0 0	0 0 0	11.5 0.0 49.2	.6 0.0 2.4	0. 0. 0.	215 268 41	0 0 0	0 0 0	21 10 11	26 26 0
1/25/76	BBA	326 50	330 52	206 41	FLT IN NOT	TOT: CLR: CLR:	36 26 10	0 0 0	36 26 10	0 0 0	0 0 0	8.9 0.0 32.1	.8 0.0 2.8	0. 0. 0.	36 33 41	0 0 0	0 0 0	36 26 10	0 0 0
1/26/76 *	BBA	368 46	390 50	201 41	FLT IN NOT	TOT: CLR: CLR:	42 31 11	0 0 0	42 31 11	0 0 0	0 0 0	9.9 0.0 37.7	.6 0.0 2.2	0. 0. 0.	78 83 62	0 0 0	0 0 0	42 31 11	0 0 0
1/29/76	BBA	362 48	371 51	212 41	FLT IN NOT	TOT: CLR: CLR:	43 33 10	0 0 0	43 33 10	0 0 0	0 0 0	14.4 0.0 62.0	.5 0.0 2.0	0. 0. 0.	204 250 54	0 0 0	0 0 0	26 16 10	17 17 0
1/30/76 *	BBA	354 53	390 57	209 42	FLT IN NOT	TOT: CLR: CLR:	52 40 12	0 0 0	52 40 12	0 0 0	0 0 0	11.8 0.0 51.2	.6 0.0 2.8	0. 0. 0.	283 354 44	0 0 0	0 0 0	25 13 12	27 27 0

DEP-ARR	IM/ID/IY	CODE	AVFL ALAT	EXHI EXTN	EXLO EXTS	NUMBER OF OBS					AVERAGES FOR THE FLIGHT			TROP			STRAT			
						CLD	PD5	OZ	H2O, H2S	%TIC	PATCHES	PD5	OZ	RH	H2O	N	N			
JFK-LHR (CONT.)																				
1/	5/79	* BBB	319 46	351 51	201 41	FLT IN NOT	TOT: CLR: CLR:	78 50 28	0 0 0	50 32 18	40 24 16	2 0 2	13.2 0.0 36.8	.9 0.0 2.5	0. 0. 0.	61 79 30	58 45 79	76 60 102	57 29 28	21 21 0
1/	8/79	BBB	352 51	371 55	254 42	FLT IN NOT	TOT: CLR: CLR:	56 25 31	0 0 0	36 18 18	18 13 5	0 0 0	43.4 0.0 78.3	.6 0.0 1.0	0. 0. 0.	185 329 41	52 39 86	25 14 53	23 1 22	33 24 9
1/	9/79	* BBB	348 46	391 52	197 41	FLT IN NOT	TOT: CLR: CLR:	75 31 44	0 0 0	49 19 30	43 18 25	5 0 5	40.0 0.0 68.2	1.4 0.0 2.4	0. 0. 0.	90 157 47	63 33 86	34 21 44	52 9 43	23 22 1
2/	9/79	BBB	338 46	370 50	255 41	FLT IN NOT	TOT: CLR: CLR:	64 63 1	0 0 0	42 42 0	27 27 0	2 2 0	.0 0.0 1.2	.0 0.0 1.0	0. 0. 0.	302 302 0	33 33 0	48 48 0	1 1 0	63 62 1
2/14/79	* BBB	364 53	390 57	251 42	FLT IN NOT	TOT: CLR: CLR:	68 67 1	0 0 0	46 46 0	35 34 1	0 0 0	0 0 14.9	.2 0.0 3.0	.0 0.0 0.	0. 0. 0.	443 443 0	20 21 17	28 28 25	8 7 1	60 60 0
2/16/79	BBB	329 47	351 51	211 41	FLT IN NOT	TOT: CLR: CLR:	60 38 22	0 0 0	37 24 13	36 22 14	0 0 0	0 0 59.9	22.0 0.0 59.9	.6 0.0 1.7	0. 0. 0.	215 304 52	41 20 74	48 33 72	30 9 21	30 29 1
3/20/76	* BBA	371 53	392 57	200 42	FLT IN NOT	TOT: CLR: CLR:	48 35 13	0 0 0	48 35 13	0 0 0	0 0 0	0 0 70.4	19.1 0.0 70.4	.8 0.0 3.1	0. 0. 0.	376 486 78	0 0 0	0 0 0	27 14 13	21 21 0
3/21/76	BBA	326 50	332 52	195 45	FLT IN NOT	TOT: CLR: CLR:	36 18 18	0 0 0	36 18 18	0 0 0	0 0 0	0 0 58.9	29.5 0.0 58.9	1.1 0.0 2.2	0. 0. 0.	142 208 76	0 0 0	0 0 0	36 18 18	0 0 0
3/22/76	* BBA	369 46	390 51	209 41	FLT IN NOT	TOT: CLR: CLR:	50 38 12	0 0 0	50 38 12	0 0 0	0 0 0	0 0 51.4	12.3 0.0 51.4	.6 0.0 2.3	0. 0. 0.	226 276 66	0 0 0	0 0 0	31 19 12	19 19 0
3/23/76	BBA	322 50	331 53	196 41	FLT IN NOT	TOT: CLR: CLR:	38 38 0	0 0 0	38 38 0	0 0 0	0 0 0	0 0 0.0	0.0 0.0 0.0	0.0 0.0 0.0	0. 0. 0.	174 174 0	0 0 0	0 0 0	38 38 0	0 0 0
3/	9/79	BBB	352 49	360 52	217 42	FLT IN NOT	TOT: CLR: CLR:	61 44 17	0 0 0	39 29 10	32 25 7	0 0 0	13.1 0.0 47.0	.7 0.0 2.4	0. 0. 0.	185 223 74	52 46 77	24 23 30	44 28 16	17 16 1
3/15/79	* BBB	326 50	331 53	221 41	FLT IN NOT	TOT: CLR: CLR:	71 58 13	0 0 0	46 37 9	37 29 8	7 6 1	0 0 1	5.5 0.0 30.3	.5 0.0 3.0	0. 0. 0.	188 219 63	75 74 80	61 68 39	0 0 0	0 0 0
4/10/76	BBA	336 49	371 52	202 41	FLT IN NOT	TOT: CLR: CLR:	40 37 3	0 0 0	40 37 3	0 0 0	0 0 0	0 0 0	6.9 0.0 91.5	.3 0.0 3.7	0. 0. 0.	147 149 113	0 0 0	0 0 0	40 37 3	0 0 0

APPENDIX B

DEP-ARR	IM/ID/IY	CODE	AVFL ALAT	EXHI EXTN	EXLO EXTS	NUMBER OF OBS					AVERAGES FOR THE FLIGHT			TROP		STRAT				
						CLD	PD5	OZ	H20, H2S	STIC	PATCHES	PD5	OZ	RH	H20	N	N			
JFK-LHR (CONT.)																				
4/11/76	*	BBA	342 52	390 56	201 41	FLT IN NOT	TOT: CLR: CLR:	49 42 7	0 0 0	49 42 7	0 0 0	0 0 0	7.1 0.0 50.0	.4 0.0 2.9	0. 0. 0.	266 297 63	0 0 0	0 0 0	27 20 7	22 22 0
4/18/76		BBA	324 49	340 53	204 41	FLT IN NOT	TOT: CLR: CLR:	38 33 5	0 0 0	38 33 5	0 0 0	0 0 0	.9 0.0 6.8	.7 0.0 5.2	0. 0. 0.	331 316 428	0 0 0	0 0 0	20 18 2	18 15 3
5/13/77		AAA	387 47	390 51	308 41	FLT IN NOT	TOT: CLR: CLR:	64 62 2	64 62 2	42 41 1	0 0 0	0 0 0	.4 0.0 13.1	.1 0.0 2.5	.317E+04 .409E+01 .101E+06	563 570 292	0 0 0	0 0 0	2 1 1	62 61 1
5/14/77	*	AAA	397 53	430 57	201 41	FLT IN NOT	TOT: CLR: CLR:	73 73 0	73 73 0	47 47 0	0 0 0	0 0 0	0.0 0.0 0.0	0.0 0.0 0.0	.421E+02 .421E+02 0.	524 524 0	0 0 0	0 0 0	3 3 0	70 70 0
5/15/77		AAA	369 46	371 51	308 41	FLT IN NOT	TOT: CLR: CLR:	61 61 0	61 61 0	40 40 0	0 0 0	0 0 0	0.0 0.0 0.0	0.0 0.0 0.0	.223E+02 .223E+02 0.	346 346 0	0 0 0	0 0 0	20 20 0	41 41 0
5/15/77	*	AAA	388 54	391 58	280 42	FLT IN NOT	TOT: CLR: CLR:	72 72 0	72 72 0	49 49 0	0 0 0	0 0 0	0.0 0.0 0.0	0.0 0.0 0.0	.889E+01 .889E+01 0.	418 413 0	0 0 0	0 0 0	1 1 0	71 71 0
5/30/77		AAA	397 49	410 52	338 42	FLT IN NOT	TOT: CLR: CLR:	28 28 0	0 0 0	0 0 0	0 0 0	0 0 0	0.0 0.0 0.0	0.0 0.0 0.0	0. 0. 0.	0 0 0	0 0 0	0 0 0	2 2 0	26 26 0
5/31/77	*	AAA	408 52	420 56	320 43	FLT IN NOT	TOT: CLR: CLR:	39 39 0	39 39 0	26 26 0	0 0 0	0 0 0	0.0 0.0 0.0	0.0 0.0 0.0	.851E+01 .851E+01 0.	450 450 0	0 0 0	0 0 0	3 3 0	36 36 0
5/12/79	*	BDB	338 50	371 53	213 41	FLT IN NOT	TOT: CLR: CLR:	66 50 16	66 50 16	0 0 0	32 25 7	4 1 3	1.8 0.0 7.6	.5 0.0 2.3	.199E+05 .246E+04 .744E+05	0 0 0	54 42 95	74 68 98	57 41 16	9 9 0
5/21/79	*	BDB	346 51	370 54	219 41	FLT IN NOT	TOT: CLR: CLR:	76 55 21	76 55 21	49 37 12	45 31 14	7 1 6	3.0 0.0 11.0	.8 0.0 3.0	.506E+05 .377E+04 .173E+06	246 300 81	59 45 89	76 59 115	46 27 21	28 28 0
5/24/79		BDB	353 49	370 52	249 42	FLT IN NOT	TOT: CLR: CLR:	63 50 13	63 50 13	41 33 8	29 22 7	11 5 6	4.6 0.0 22.5	.7 0.0 3.5	.623E+05 .423E+04 .286E+06	258 298 94	68 58 99	53 39 95	39 26 13	24 24 0
5/30/79		BDB	336 49	370 52	276 41	FLT IN NOT	TOT: CLR: CLR:	66 45 21	66 45 21	42 28 14	35 26 9	0 0 0	5.7 0.0 17.8	.7 0.0 2.3	.860E+05 .414E+04 .261E+06	218 275 103	29 27 33	28 21 46	48 27 21	18 18 0
6/ 5/79	*	BDB	362 49	390 52	201 41	FLT IN NOT	TOT: CLR: CLR:	72 51 21	72 51 21	45 33 12	36 25 11	19 9 10	4.7 0.0 16.1	.9 0.0 3.0	.799E+05 .622E+04 .259E+06	189 227 85	77 67 99	70 80 47	42 24 18	30 27 3

APPENDIX B

DEP-ARR		CODE	AVFL ALAT	EXHI EXTN	EXLO EXTS	NUMBER OF OBS					AVERAGES FOR		THE FLIGHT			TROP N	STRAT N	
IM/ID/Y						CLD	PD5	OZ	H2O	H2S	%TIC	PATCHES	PD5	OZ	-RH			H2O
JFK-LHR (CONT.)																		
6/ 6/79	BDB	355 49	370 52	264 41	FLT TOT:	66	66	42	31	9	5.6	.9	.954E+05	226	63	55	34	32
					IN CLR:	45	45	32	24	4	0.0	0.0	.148E+05	266	54	54	21	24
					NOT CLR:	21	21	10	7	5	17.6	2.8	.268E+06	95	94	59	13	8
9/ 7/76	* BBA	360 50	390 53	281 42	FLT TOT:	69	0	43	0	0	0.0	0.0	0.	86	0	0	51	18
					IN CLR:	69	0	43	0	0	0.0	0.0	0.	86	0	0	51	18
					NOT CLR:	0	0	0	0	0	0.0	0.0	0.	0	0	0	0	0
9/ 8/76	BBA	343 52	370 55	227 41	FLT TOT:	64	0	41	0	0	0.0	0.0	0.	128	0	0	37	27
					IN CLR:	64	0	41	0	0	0.0	0.0	0.	128	0	0	37	27
					NOT CLR:	0	0	0	0	0	0.0	0.0	0.	0	0	0	0	0
9/ 9/76	* BBA	344 48	370 52	199 41	FLT TOT:	73	0	48	0	0	0.0	0.0	0.	93	0	0	52	21
					IN CLR:	73	0	48	0	0	0.0	0.0	0.	93	0	0	52	21
					NOT CLR:	0	0	0	0	0	0.0	0.0	0.	0	0	0	0	0
9/10/76	* BBA	346 51	365 55	193 39	FLT TOT:	81	0	54	0	0	0.0	0.0	0.	98	0	0	64	17
					IN CLR:	81	0	54	0	0	0.0	0.0	0.	98	0	0	64	17
					NOT CLR:	0	0	0	0	0	0.0	0.0	0.	0	0	0	0	0
9/11/76	BBA	357 52	369 56	227 41	FLT TOT:	70	0	42	0	0	0.0	0.0	0.	90	0	0	60	10
					IN CLR:	70	0	42	0	0	0.0	0.0	0.	90	0	0	60	10
					NOT CLR:	0	0	0	0	0	0.0	0.0	0.	0	0	0	0	0
9/12/76	* BBA	354 48	390 52	195 41	FLT TOT:	69	0	45	0	0	0.0	0.0	0.	83	0	0	57	12
					IN CLR:	69	0	45	0	0	0.0	0.0	0.	83	0	0	57	12
					NOT CLR:	0	0	0	0	0	0.0	0.0	0.	0	0	0	0	0
9/15/76	BBA	341 49	349 53	251 41	FLT TOT:	63	0	42	0	0	0.0	0.0	0.	74	0	0	61	2
					IN CLR:	63	0	42	0	0	0.0	0.0	0.	74	0	0	61	2
					NOT CLR:	0	0	0	0	0	0.0	0.0	0.	0	0	0	0	0
9/22/76	* BBA	337 48	370 53	200 41	FLT TOT:	70	0	42	0	0	.0	.0	0.	80	0	0	0	0
					IN CLR:	69	0	41	0	0	0.0	0.0	0.	81	0	0	0	0
					NOT CLR:	1	0	1	0	0	.4	1.0	0.	41	0	0	0	0
9/28/77	* ABA	397 53	410 56	268 42	FLT TOT:	76	0	49	0	0	0.0	0.0	0.	208	0	0	17	59
					IN CLR:	76	0	49	0	0	0.0	0.0	0.	208	0	0	17	59
					NOT CLR:	0	0	0	0	0	0.0	0.0	0.	0	0	0	0	0
10/ 9/77	* BCB	343 54	370 57	268 46	FLT TOT:	68	68	0	0	0	21.5	0.0	.581E+05	0	0	0	43	25
					IN CLR:	39	39	0	0	0	0.0	0.0	.741E+01	0	0	0	16	23
					NOT CLR:	29	29	0	0	0	50.4	0.0	.136E+06	0	0	0	27	2
10/11/77	BCB	306 55	331 62	235 42	FLT TOT:	59	59	0	0	0	25.8	0.0	.845E+05	0	0	0	53	6
					IN CLR:	35	35	0	0	0	0.0	0.0	.310E+02	0	0	0	29	6
					NOT CLR:	24	24	0	0	0	63.5	0.0	.208E+06	0	0	0	24	0
10/ 1/78	* BBB	342 48	370 52	200 41	FLT TOT:	75	75	49	0	0	2.6	.4	.124E+05	74	0	0	75	0
					IN CLR:	65	65	43	0	0	0.0	0.0	.326E+03	76	0	0	65	0
					NOT CLR:	10	10	6	0	0	19.8	2.8	.906E+05	60	0	0	10	0

APPENDIX B

DEP-ARR	IM/ID/IY	CODE	AVFL ALAT	EXHI EXTN	EXLO EXTS	NUMBER OF OBS					AVERAGES FOR THE FLIGHT			ØZ	RH	H2Ø	TROP N	STRAT N		
						CLD	PD5	ØZ	H2Ø	H2S	%TIC	PATCHES	PD5							
JFK-LHR (CONT.)																				
10/10/78	*	BBB	349 51	371 53	220 41	FLT	TØT:	67	67	43	0	0	11.5	.7	.462E+05	219	0	0	29	38
						IN	CLR:	52	52	34	0	0	0.0	0.0	.110E+02	262	0	0	14	38
						NOT	CLR:	15	15	9	0	0	51.3	3.2	.206E+06	55	0	0	15	0
10/11/78		BBB	352 48	371 51	199 41	FLT	TØT:	68	68	43	0	0	.9	.1	.340E+03	177	0	0	34	34
						IN	CLR:	66	66	42	0	0	0.0	0.0	.182E+03	179	0	0	33	33
						NOT	CLR:	2	2	1	0	0	30.6	3.0	.555E+04	82	0	0	1	1
10/12/78	*	BBB	339 50	371 54	230 41	FLT	TØT:	68	68	43	0	0	5.0	.7	.681E+04	99	0	0	58	10
						IN	CLR:	56	56	37	0	0	0.0	0.0	.271E+03	105	0	0	48	8
						NOT	CLR:	12	12	6	0	0	28.4	3.8	.374E+05	65	0	0	10	2
10/16/78	*	BBB	336 48	351 52	201 41	FLT	TØT:	67	67	44	0	0	24.8	.7	.604E+05	66	0	0	67	0
						IN	CLR:	42	42	29	0	0	0.0	0.0	.796E+02	70	0	0	42	0
						NOT	CLR:	25	25	15	0	0	66.5	1.9	.162E+06	57	0	0	25	0
10/18/78		BBB	361 52	371 55	272 41	FLT	TØT:	60	60	38	0	0	4.2	.8	.219E+05	140	0	0	18	42
						IN	CLR:	47	47	31	0	0	0.0	0.0	.219E+03	146	0	0	13	34
						NOT	CLR:	13	13	7	0	0	19.2	3.7	.100E+06	111	0	0	5	8
10/19/78	*	BBB	353 49	371 52	206 41	FLT	TØT:	72	72	45	0	0	17.1	1.0	.580E+05	132	0	0	44	28
						IN	CLR:	47	47	30	0	0	0.0	0.0	.348E+02	170	0	0	19	28
						NOT	CLR:	25	25	15	0	0	49.3	2.9	.167E+06	56	0	0	25	0
10/20/78		BBB	333 50	341 53	199 41	FLT	TØT:	62	62	38	0	0	12.8	1.2	.532E+05	92	0	0	48	14
						IN	CLR:	41	41	23	0	0	0.0	0.0	.114E+02	119	0	0	28	13
						NOT	CLR:	21	21	15	0	0	37.7	3.5	.157E+06	52	0	0	20	1
10/30/78	*	BBB	332 53	350 57	220 41	FLT	TØT:	75	75	48	44	1	.9	.2	.205E+04	188	37	42	29	46
						IN	CLR:	68	68	44	41	0	0.0	0.0	.172E+02	201	33	38	22	46
						NOT	CLR:	7	7	4	3	1	9.5	2.6	.218E+05	51	93	100	7	0
11/21/77		BCB	345 52	351 55	262 41	FLT	TØT:	71	71	47	0	0	15.0	0.0	.221E+05	127	0	0	49	22
						IN	CLR:	42	42	27	0	0	0.0	0.0	.323E+02	173	0	0	20	22
						NOT	CLR:	29	29	20	0	0	36.7	0.0	.540E+05	65	0	0	29	0
11/ 2/78		BBB	327 49	350 53	232 41	FLT	TØT:	59	59	38	30	0	.7	.1	.115E+03	168	32	40	40	19
						IN	CLR:	57	57	37	29	0	0.0	0.0	.921E+02	172	31	28	38	19
						NOT	CLR:	2	2	1	1	0	21.8	2.5	.765E+03	4	51	402	2	0
11/21/78	*	BBB	326 52	370 56	193 41	FLT	TØT:	80	80	55	44	0	2.8	.6	.126E+05	150	35	35	37	43
						IN	CLR:	68	68	47	38	0	0.0	0.0	.314E+02	169	28	27	25	43
						NOT	CLR:	12	12	8	6	0	19.0	4.3	.840E+05	36	80	87	12	0
12/ 6/78		BBB	326 48	331 51	255 41	FLT	TØT:	61	61	37	30	0	1.8	.1	.159E+05	200	26	59	21	40
						IN	CLR:	58	58	35	30	0	0.0	0.0	.132E+02	208	26	59	18	40
						NOT	CLR:	3	3	2	0	0	37.5	1.7	.323E+06	55	0	0	3	0
12/16/78	*	BBB	343 51	370 53	219 41	FLT	TØT:	71	71	45	41	11	15.3	.9	.432E+05	154	64	33	0	0
						IN	CLR:	49	49	31	29	1	0.0	0.0	.204E+02	206	50	29	0	0
						NOT	CLR:	22	22	14	12	10	49.5	3.0	.139E+06	40	97	45	0	0

DEP-ARR IM/1D/1Y	CODE	AVFL ALAT	EXHI EXTN	EXLO EXTS	NUMBER OF OBS						AVERAGES FOR		THE FLIGHT			TROP N	STRAT N		
					CLD	PD5	OZ	H20	H2S	%TIC	PATCHES	PD5	OZ	RH	H20				
JFK-LHR (CONT.)																			
12/26/78	BBB	342 47	351 51	244 41	FLT TOT:	62	62	0	33	0	.5	.0	.832E+02	0	27	47	0	0	
					IN CLR:	61	61	0	33	0	0.0	0.0	.846E+02	0	27	47	0	0	0
					NOT CLR:	1	1	0	0	0	32.9	1.0	0.	0	0	0	0	0	0
JFK-ORD																			
2/28/76	* CAA	331 42	370 42	212 41	FLT TOT:	8	0	8	7	6	6.3	0.0	0.	154	99	81	3	5	
					IN CLR:	7	0	7	6	5	0.0	0.0	0.	167	99	91	2	5	
					NOT CLR:	1	0	1	1	1	50.6	0.0	0.	66	100	20	1	0	
2/16/79	* CAB	349 42	370 42	228 41	FLT TOT:	10	10	6	5	0	0.0	0.0	.357E+02	161	19	30	2	8	
					IN CLR:	10	10	6	5	0	0.0	0.0	.357E+02	161	19	30	2	8	
					NOT CLR:	0	0	0	0	0	0.0	0.0	0.	0	0	0	0	0	
2/21/79	CAB	380 41	391 42	265 40	FLT TOT:	16	16	11	9	1	0.0	0.0	.551E+02	273	83	44	1	15	
					IN CLR:	16	16	11	9	1	0.0	0.0	.551E+02	273	83	44	1	15	
					NOT CLR:	0	0	0	0	0	0.0	0.0	0.	0	0	0	0	0	
3/ 6/79	CAB	386 41	411 41	284 40	FLT TOT:	12	12	8	4	2	6.5	0.0	.120E+05	431	95	139	2	10	
					IN CLR:	10	10	7	4	2	0.0	0.0	.562E+02	447	95	139	2	8	
					NOT CLR:	2	2	1	0	0	39.0	0.0	.716E+05	317	0	0	0	2	
3/15/79	CAB	380 41	411 41	217 40	FLT TOT:	15	15	9	6	0	.3	.1	.275E+04	631	22	28	0	0	
					IN CLR:	14	14	9	5	0	0.0	0.0	.746E+02	631	24	26	0	0	
					NOT CLR:	1	1	0	1	0	5.1	1.0	.402E+05	0	10	42	0	0	
3/23/79	* CAB	385 42	411 42	248 41	FLT TOT:	12	12	8	6	0	7.0	.5	.178E+05	216	51	22	4	8	
					IN CLR:	9	9	7	5	0	0.0	0.0	.230E+03	231	47	22	2	7	
					NOT CLR:	3	3	1	1	0	28.0	2.0	.706E+05	107	69	20	2	1	
3/26/79	* CAB	389 42	411 42	310 41	FLT TOT:	11	11	7	6	0	0.0	0.0	.797E+03	302	31	37	1	10	
					IN CLR:	11	11	7	6	0	0.0	0.0	.797E+03	302	31	37	1	10	
					NOT CLR:	0	0	0	0	0	0.0	0.0	0.	0	0	0	0	0	
5/13/76	CAA	325 41	350 41	203 40	FLT TOT:	15	0	10	0	0	27.7	1.2	0.	80	0	0	15	0	
					IN CLR:	4	0	3	0	0	0.0	0.0	0.	80	0	0	4	0	
					NOT CLR:	11	0	7	0	0	37.8	1.6	0.	79	0	0	11	0	
6/20/78	CAB	337 41	390 41	191 40	FLT TOT:	12	12	8	7	0	.2	.2	.133E+04	117	40	124	12	0	
					IN CLR:	11	11	8	6	0	0.0	0.0	.143E+04	117	35	138	11	0	
					NOT CLR:	1	1	0	1	0	2.4	2.0	.200E+03	0	76	39	1	0	
6/26/78	CAB	293 43	390 43	210 42	FLT TOT:	21	21	15	8	2	17.0	.9	.506E+05	71	74	1542	21	0	
					IN CLR:	12	12	8	8	2	0.0	0.0	.682E+03	62	74	1542	12	0	
					NOT CLR:	9	9	7	0	0	39.7	2.1	.117E+06	81	0	0	9	0	
6/ 6/79	* CAB	348 42	380 42	207 41	FLT TOT:	11	11	0	5	1	8.9	.5	.154E+05	0	48	181	11	0	
					IN CLR:	6	6	0	2	1	0.0	0.0	.774E+04	0	70	54	6	0	
					NOT CLR:	5	5	0	3	0	19.5	1.0	.245E+05	0	34	265	5	0	

APPENDIX B

DEP-ARR	IM/ID/Y	CODE	AVFL ALAT	EXHI EXTN	EXLN EXTS	NUMBER OF OBS					AVERAGES FOR THE FLIGHT			TROP			STRAT			
						CLD	PD5	OZ	H20, H2S	%TIC	PATCHES	PD5	OZ	RH	H2O	N	N			
JFK-ORD (CONT.)																				
7/ 2/78	*	CAB	345 42	371 42	241 41	FLT IN NOT	TOT CLR CLR	10 4 6	10 4 6	6 2 4	6 2 4	0 0 0	19.7 0.0 32.8	1.0 0.0 1.7	.294E+05 .624E+04 .449E+05	85 11 86	8 21 6	12 4 7	10 4 6	0 0 0
7/12/78	*	CAB	396 42	410 42	336 41	FLT IN NOT	TOT CLR CLR	10 10 0	10 10 0	0 5 0	5 0 0	0 0 0	0.0 0.0 0.0	0.0 0.0 0.0	.604E+02 .604E+02 0.	0 0 0	11 11 0	6 8 0	4 4 0	6 6 0
7/12/78		CAB	335 42	351 43	264 42	FLT IN NOT	TOT CLR CLR	13 12 1	13 12 1	8 8 0	7 7 0	0 0 0	.7 0.0 8.6	.2 0.0 2.0	.155E+03 .968E+02 .856E+03	75 75 0	12 12 0	21 21 0	13 12 1	0 0 0
7/17/78		CAB	352 41	391 41	247 40	FLT IN NOT	TOT CLR CLR	13 11 2	13 11 2	9 8 1	5 4 1	0 0 0	3.6 0.0 23.3	1.1 0.0 7.0	.892E+04 .597E+01 .580E+05	214 202 309	30 36 10	219 269 19	13 11 2	0 0 0
JFK-SFO																				
2/ 1/76		BBA	369 42	390 43	211 38	FLT IN NOT	TOT CLR CLR	35 33 2	0 0 0	35 33 2	0 0 0	0 0 0	2.1 0.0 36.5	.0 0.0 .5	0. 0. 0.	201 212 20	0 0 0	0 0 0	15 13 2	20 20 0
2/ 2/77		AAA	421 43	430 45	196 38	FLT IN NOT	TOT CLR CLR	55 55 0	55 55 0	0 45 0	1 1 0	0 0 0	0.0 0.0 0.0	0.0 0.0 0.0	.267E+02 .267E+02 0.	0 0 0	23 23 0	22 22 0	3 3 0	52 52 0
2/ 8/79		CAB	367 41	391 43	253 38	FLT IN NOT	TOT CLR CLR	55 43 12	55 43 12	35 27 8	32 24 8	2 2 0	11.7 0.0 53.6	.9 0.0 4.0	.640E+05 .945E+02 .293E+06	286 358 42	61 57 73	59 69 28	14 2 12	41 41 0
2/10/79		CAB	382 38	391 40	257 36	FLT IN NOT	TOT CLR CLR	61 36 25	61 36 25	40 24 16	35 21 14	7 2 5	27.5 0.0 67.2	1.0 0.0 2.3	.898E+05 .200E+03 .219E+06	201 306 43	76 68 88	32 42 16	30 5 25	31 31 0
2/28/79	*	CAB	375 41	411 42	239 38	FLT IN NOT	TOT CLR CLR	48 33 15	48 33 15	32 23 9	20 14 6	18 12 6	12.8 0.0 40.9	.5 0.0 1.5	.205E+05 .700E+03 .641E+05	291 359 119	95 93 100	45 55 23	11 3 8	37 30 7
3/18/76		BBA	334 40	351 41	203 38	FLT IN NOT	TOT CLR CLR	38 22 16	0 0 0	38 22 16	0 0 0	0 0 0	18.8 0.0 44.7	1.6 0.0 3.7	0. 0. 0.	110 143 64	0 0 0	0 0 0	38 22 16	0 0 0
3/30/77		AAA	347 43	350 45	227 38	FLT IN NOT	TOT CLR CLR	58 57 1	58 57 1	0 0 0	48 47 1	2 2 0	.1 0.0 5.1	.0 0.0 2.0	.138E+02 .140E+02 0.	0 0 0	28 27 56	22 21 68	0 0 0	0 0 0
3/18/79		CAB	382 41	391 42	319 38	FLT IN NOT	TOT CLR CLR	54 30 24	54 30 24	32 20 12	24 13 11	9 1 8	21.6 0.0 48.6	.9 0.0 2.0	.637E+05 .506E+03 .143E+06	300 422 96	66 39 98	23 30 16	25 3 22	29 27 2

DEP-ARR	IM/ID/IY	CODE	AVFL ALAT	EXHI EXTN	EXLO EXTS		NUMBER OF OBS					AVERAGES FOR THE FLIGHT			TROP			STRAT	
							CLD	FD5	OZ	H2O, H2S	%TIC	PATCHES	PD5	OZ	RH	H2O	N	N	
JFK-SFO (CONT.)																			
	5/ 4/77	AAA	414 42	435 43	242 38	FLT TOT: IN CLR: NOT CLR:	57 48 9	57 48 9	38 34 4	0 0 0	0 0 0	4.1 0.0 25.7	.2 0.0 1.4	.118E+05 .534E+02 .747E+05	302 324 117	0 0 0	0 0 0	21 12 9	36 36 0
	5/ 8/77 *	AAA	389 41	410 42	198 38	FLT TOT: IN CLR: NOT CLR:	50 49 1	50 49 1	31 31 0	0 0 0	0 0 0	1.1 0.0 53.7	.1 0.0 3.0	.456E+04 .199E+03 .218E+06	356 356 0	0 0 0	0 0 0	4 4 0	46 45 1
	5/18/77	AAA	396 42	430 43	241 38	FLT TOT: IN CLR: NOT CLR:	22 17 5	22 17 5	8 6 2	0 0 0	0 0 0	4.6 0.0 20.1	.6 0.0 2.8	.105E+05 .865E+02 .458E+05	236 309 20	0 0 0	0 0 0	5 4 1	17 13 4
	5/22/77 *	AAA	370 41	372 42	370 38	FLT TOT: IN CLR: NOT CLR:	24 13 11	24 13 11	16 10 6	0 0 0	0 0 0	17.8 0.0 38.9	1.2 0.0 2.6	.990E+05 .146E+03 .216E+06	121 148 75	0 0 0	0 0 0	18 8 10	6 5 1
	6/17/78 *	CAB	359 41	372 43	203 38	FLT TOT: IN CLR: NOT CLR:	45 32 13	45 32 13	29 20 9	25 19 6	3 0 3	13.6 0.0 47.2	.6 0.0 2.2	.525E+05 .438E+04 .171E+06	107 132 52	66 56 97	191 49 641	45 32 13	0 0 0
	6/26/78 *	CAB	364 41	370 42	222 38	FLT TOT: IN CLR: NOT CLR:	44 40 4	44 40 4	29 26 3	25 24 1	0 0 0	6.0 0.0 66.1	.2 0.0 1.6	.108E+05 .113E+03 .118E+06	123 123 80	32 31 371	77 35 071	37 33 4	7 7 0
	6/27/78	CAB	364 37	391 39	287 35	FLT TOT: IN CLR: NOT CLR:	57 50 7	57 50 7	37 32 5	32 27 5	5 2 3	4.3 0.0 34.7	.3 0.0 2.3	.117E+05 .421E+02 .953E+05	165 192 54	32 24 77	54 39 133	49 42 7	8 8 0
	5/ 2/79	CAB	372 43	391 45	210 37	FLT TOT: IN CLR: NOT CLR:	53 46 7	53 46 7	0 0 0	28 26 2	2 1 1	2.1 0.0 16.0	.4 0.0 2.9	.569E+04 .340E+04 .207E+05	0 0 0	36 33 78	31 26 91	27 20 7	26 26 0
	6/ 7/79 *	CAB	359 41	370 42	250 38	FLT TOT: IN CLR: NOT CLR:	45 31 14	45 31 14	0 0 0	24 16 8	1 1 0	12.7 0.0 40.9	1.3 0.0 4.1	.518E+05 .189E+04 .162E+06	0 0 0	41 26 72	65 72 52	43 29 14	2 2 0
	6/ 8/79	CAB	364 40	391 41	274 38	FLT TOT: IN CLR: NOT CLR:	55 42 13	55 42 13	0 0 0	29 27 2	1 0 1	5.1 0.0 21.5	.5 0.0 2.0	.142E+05 .590E+03 .581E+05	0 0 0	30 26 82	53 47 133	36 23 13	19 19 0
	7/ 3/77 *	ACA	407 41	410 42	318 38	FLT TOT: IN CLR: NOT CLR:	46 46 0	0 0 0	0 0 0	0 0 0	0 0 0	0.0 0.0 0.0	0.0 0.0 0.0	0. 0. 0.	0 0 0	0 0 0	0 0 0	46 46 0	0 0 0
	7/13/78 *	CAB	376 41	410 42	309 38	FLT TOT: IN CLR: NOT CLR:	45 44 1	45 44 1	27 26 1	22 21 1	0 0 0	.1 0.0 3.5	.0 0.0 1.0	.143E+02 .146E+02 0.	44 44 45	21 18 65	34 24 248	0 0 0	0 0 0
	7/14/78	CAB	359 39	390 40	211 38	FLT TOT: IN CLR: NOT CLR:	56 53 3	56 53 3	33 33 0	19 19 0	0 0 0	3.9 0.0 73.3	.2 0.0 4.0	.140E+05 .219E+02 .262E+06	60 80 0	28 23 0	36 36 0	56 53 3	0 0 0

DEP-ARR		CODE	AVFL ALAT	EXHI EXTN	EXLO EXTS	NUMBER OF OBS					AVERAGES FOR THE FLIGHT			OZ	RH	H2O	TROP N	STRAT N
IM/ID/IY						CLD	PD5	OZ	H2O	H2S	%TIC	PATCHES	PD5					
JFK-SFO (CONT.)																		
9/28/77	ABA	419	430	231	FLT TOT:	54	0	34	0	0	.0	.0	0.	92	0	0	41	13
		40	40	38	IN CLR:	53	0	34	0	0	0.0	0.0	0.	92	0	0	40	13
					NOT CLR:	1	0	0	0	0	2.0	1.0	0.	0	0	0	1	0
10/ 2/77 *	ABA	384	410	315	FLT TOT:	23	0	14	0	0	.6	.5	0.	107	0	0	23	0
		40	41	38	IN CLR:	22	0	13	0	0	0.0	0.0	0.	109	0	0	22	0
					NOT CLR:	1	0	1	0	0	13.3	12.0	0.	79	0	0	1	0
10/31/77 *	ABB	347	350	330	FLT TOT:	47	47	30	0	0	12.8	1.8	.110E+06	90	0	0	36	11
		41	42	38	IN CLR:	32	32	20	0	0	0.0	0.0	.472E+02	117	0	0	21	11
					NOT CLR:	15	15	10	0	0	40.1	5.7	.345E+06	37	0	0	15	0
12/15/76	AAA	346	350	209	FLT TOT:	56	0	36	0	0	6.5	.3	0.	118	0	0	26	29
		41	43	38	IN CLR:	45	0	29	0	0	0.0	0.0	0.	134	0	0	15	29
					NOT CLR:	11	0	7	0	0	33.2	1.7	0.	50	0	0	11	0
12/19/76 *	AAA	411	430	224	FLT TOT:	47	0	31	0	0	.9	.2	0.	189	0	0	3	44
		41	42	38	IN CLR:	46	0	31	0	0	0.0	0.0	0.	189	0	0	2	44
					NOT CLR:	1	0	0	0	0	41.2	9.0	0.	0	0	0	1	0
12/22/76	AAA	347	350	240	FLT TOT:	56	0	27	0	0	19.2	.9	0.	143	0	0	33	23
		41	43	38	IN CLR:	39	0	16	0	0	0.0	0.0	0.	209	0	0	16	23
					NOT CLR:	17	0	11	0	0	63.1	3.1	0.	47	0	0	17	0
12/26/76 *	AAA	404	411	202	FLT TOT:	46	0	32	35	14	5.8	.6	0.	234	72	19	2	44
		41	42	39	IN CLR:	37	0	25	27	6	0.0	0.0	0.	279	63	21	2	35
					NOT CLR:	9	0	7	8	8	29.7	3.0	0.	76	100	13	0	9
12/29/76	AAA	416	434	316	FLT TOT:	54	0	0	0	0	.3	.1	0.	0	0	0	1	53
		41	43	38	IN CLR:	53	0	0	0	0	0.0	0.0	0.	0	0	0	0	53
					NOT CLR:	1	0	0	0	0	17.3	3.0	0.	0	0	0	1	0
JFK-SNN																		
1/27/76 *	BBA	362	391	201	FLT TOT:	44	0	44	0	0	57.4	2.3	0.	116	0	0	37	7
		49	53	41	IN CLR:	12	0	12	0	0	0.0	0.0	0.	329	0	0	5	7
					NOT CLR:	32	0	32	0	0	78.9	3.2	0.	37	0	0	32	0
11/30/78 *	BBB	324	350	220	FLT TOT:	69	69	44	38	3	8.5	.5	.176E+05	166	35	48	26	43
		51	55	41	IN CLR:	53	53	34	29	0	0.0	0.0	.171E+02	204	18	20	10	43
					NOT CLR:	16	16	10	9	3	36.5	2.1	.758E+05	38	91	138	16	0
JFK-YQX																		
1/ 8/79 *	BBB	326	351	201	FLT TOT:	13	0	8	8	5	88.8	3.0	0.	33	86	51	12	1
		44	48	41	IN CLR:	0	0	0	0	0	0.0	0.0	0.	0	0	0	0	0
					NOT CLR:	13	0	8	8	5	88.8	3.0	0.	33	86	51	12	1

DEP-ARR		CODE	AVFL ALAT	EXHI EXTN	EXLO EXTS	NUMBER OF OBS					AVERAGES FOR THE FLIGHT			OZ	RH	H2O	TRCP N	STRAT N
IM/ID/IY						CLD	PDS	OZ	H2O, H2S	%TIC	PATCHES	PD5						
JNB-MRU																		
1/27/77	* DDA	304	310	193	FLT TOT:	30	30	15	0	0	14.3	1.5	.124E+06	46	0	0	30	0
		-24	-21	-26	IN CLR:	19	19	12	0	0	0.0	0.0	.652E+01	47	0	0	19	0
					NOT CLR:	11	11	3	0	0	38.9	4.0	.338E+06	43	0	0	11	0
1/28/77	DDA	324	330	204	FLT TOT:	21	21	14	0	0	5.8	1.1	.184E+05	70	0	0	21	0
		-22	-21	-24	IN CLR:	14	14	9	0	0	0.0	0.0	.112E+02	68	0	0	14	0
					NOT CLR:	7	7	5	0	0	17.3	3.4	.552E+05	73	0	0	7	0
2/17/77	* DDA	309	310	272	FLT TOT:	30	30	19	0	0	.0	.1	.744E+02	43	0	0	0	0
		-24	-21	-26	IN CLR:	29	29	19	0	0	0.0	0.0	.117E+02	43	0	0	0	0
					NOT CLR:	1	1	0	0	0	1.2	3.0	.189E+04	0	0	0	0	0
2/18/77	DDA	338	370	255	FLT TOT:	35	35	23	0	0	1.3	.2	.147E+03	48	0	0	0	0
		-24	-21	-26	IN CLR:	33	33	21	0	0	0.0	0.0	.870E+01	46	0	0	0	0
					NOT CLR:	2	2	2	0	0	22.4	4.0	.244E+04	60	0	0	0	0
KHI-THR																		
3/16/79	* BBB	289	291	250	FLT TOT:	19	0	11	10	0	13.2	1.2	0.	54	46	204	19	0
		30	34	26	IN CLR:	13	0	8	7	0	0.0	0.0	0.	54	27	90	13	0
					NOT CLR:	6	0	3	3	0	41.9	3.7	0.	54	92	471	6	0
3/17/79	BBB	346	350	257	FLT TOT:	23	0	4	13	1	5.1	.7	0.	59	40	54	23	0
		31	35	27	IN CLR:	17	0	2	11	0	0.0	0.0	0.	60	30	34	17	0
					NOT CLR:	6	0	2	2	1	19.5	2.5	0.	58	98	165	6	0
10/ 9/77	BCB	385	390	311	FLT TOT:	23	23	0	0	0	0.0	0.0	.711E+01	0	0	0	23	0
		30	34	26	IN CLR:	23	23	0	0	0	0.0	0.0	.711E+01	0	0	0	23	0
					NOT CLR:	0	0	0	0	0	0.0	0.0	0.	0	0	0	0	0
11/22/78	* BBB	347	371	196	FLT TOT:	19	19	11	9	0	1.2	.4	.202E+02	93	30	18	14	5
		30	35	26	IN CLR:	18	18	11	9	0	0.0	0.0	.213E+02	93	30	18	13	5
					NOT CLR:	1	1	0	0	0	22.0	7.0	0.	0	0	0	1	0
11/23/78	BBB	385	390	294	FLT TOT:	27	27	10	15	0	0.0	0.0	.155E+02	141	32	15	14	13
		30	35	25	IN CLR:	27	27	10	15	0	0.0	0.0	.155E+02	141	32	15	14	13
					NOT CLR:	0	0	0	0	0	0.0	0.0	0.	0	0	0	0	0
12/20/79	* BBB	360	370	270	FLT TOT:	20	20	11	10	1	0.0	0.0	.230E+02	164	37	31	0	0
		30	34	26	IN CLR:	20	20	11	10	1	0.0	0.0	.230E+02	164	37	31	0	0
					NOT CLR:	0	0	0	0	0	0.0	0.0	0.	0	0	0	0	0
12/21/79	BBB	342	351	269	FLT TOT:	20	20	10	6	0	.7	.2	.982E+01	81	45	28	0	0
		30	35	25	IN CLR:	19	19	9	5	0	0.0	0.0	.103E+02	87	49	28	0	0
					NOT CLR:	1	1	1	1	0	13.7	3.0	0.	29	29	31	0	0

APPENDIX B

DEP-ARR 1M/1D/1Y	CODE	AVFL ALAT	EXHI EXTN	EXLO EXTS	NUMBER OF OBS					AVERAGES FOR THE FLIGHT			TROP N	STRAT N					
					CLD	PD5	OZ	H2O	H2S	%TIC	PATCHES	PD5			OZ	RH	H2O		
KUL-MEL																			
12/17/76	DDA	366 -19	370 1	241 -37	FLT	TOT:	78	0	0	0	0	.4	.1	0.	0	0	0	0	
					IN	CLR:	76	0	0	0	0	0.0	0.0	0.	0	0	0	0	0
					NOT	CLR:	2	0	0	0	0	15.1	2.5	0.	0	0	0	0	0
12/18/76 *	DDA	329 -17	350 1	228 -36	FLT	TOT:	77	0	0	0	0	1.1	.3	0.	0	0	0	0	
					IN	CLR:	68	0	0	0	0	0.0	0.0	0.	0	0	0	0	0
					NOT	CLR:	9	0	0	0	0	9.7	2.6	0.	0	0	0	0	0
KUL-SYD																			
12/17/76 *	DDA	338 -16	350 1	192 -33	FLT	TOT:	81	0	0	0	0	1.0	.1	0.	0	0	0	0	
					IN	CLR:	77	0	0	0	0	0.0	0.0	0.	0	0	0	0	0
					NOT	CLR:	4	0	0	0	0	20.1	2.3	0.	0	0	0	0	0
12/18/76	DDA	366 -16	390 1	249 -34	FLT	TOT:	79	0	0	0	0	3.6	.5	0.	0	0	0	0	
					IN	CLR:	68	0	0	0	0	0.0	0.0	0.	0	0	0	0	0
					NOT	CLR:	11	0	0	0	0	25.8	3.9	0.	0	0	0	0	0
LAS-ORD																			
1/29/76	CAA	360 40	410 42	211 37	FLT	TOT:	20	0	20	17	9	.0	.0	0.	83	73	44	14	6
					IN	CLR:	19	0	19	16	8	0.0	0.0	0.	85	72	46	13	6
					NOT	CLR:	1	0	1	1	1	.8	1.0	0.	37	100	24	1	0
1/29/76 *	CAA	372 38	390 42	202 36	FLT	TOT:	24	0	24	20	20	0.0	0.0	0.	48	100	38	20	4
					IN	CLR:	24	0	24	20	20	0.0	0.0	0.	48	100	38	20	4
					NOT	CLR:	0	0	0	0	0	0.0	0.0	0.	0	0	0	0	0
3/ 2/76 *	CAA	379 41	391 42	216 39	FLT	TOT:	17	0	17	16	9	26.8	.6	0.	239	73	32	8	9
					IN	CLR:	11	0	11	10	3	0.0	0.0	0.	339	57	40	2	9
					NOT	CLR:	6	0	6	6	6	76.0	1.8	0.	55	100	20	6	0
3/ 3/76	CAA	354 40	390 42	212 37	FLT	TOT:	17	0	17	16	2	3.5	.1	0.	323	51	41	5	12
					IN	CLR:	16	0	16	16	2	0.0	0.0	0.	340	51	41	4	12
					NOT	CLR:	1	0	1	0	0	60.0	2.0	0.	43	0	0	1	0
3/30/76	CAA	381 39	410 41	224 37	FLT	TOT:	18	0	18	18	6	0.0	0.0	0.	493	45	69	3	15
					IN	CLR:	18	0	18	18	6	0.0	0.0	0.	493	45	69	3	15
					NOT	CLR:	0	0	0	0	0	0.0	0.0	0.	0	0	0	0	0
3/30/76 *	CAA	372 40	390 42	227 37	FLT	TOT:	19	0	19	19	2	.6	.1	0.	556	20	45	3	16
					IN	CLR:	18	0	18	18	1	0.0	0.0	0.	583	15	39	2	16
					NOT	CLR:	1	0	1	1	1	10.6	2.0	0.	65	100	160	1	0
4/12/76 *	CAA	377 41	390 42	220 39	FLT	TOT:	15	0	15	15	10	0.0	0.0	0.	252	93	54	12	3
					IN	CLR:	15	0	15	15	10	0.0	0.0	0.	252	93	54	12	3
					NOT	CLR:	0	0	0	0	0	0.0	0.0	0.	0	0	0	0	0

DEP-ARR IM/ID/IY	CODE	AVFL ALAT	EXHI EXTN	EXLO EXTS			NUMBER OF OBS					AVERAGES FOR THE FLIGHT			TRCP			STRAT	
							CLD	PD5	OZ	H20,	H2S	%TIC	PATCHES	PD5	OZ	RH	H2O	N	N
LAS-ORD (CONT.)																			
4/20/76	* CAA	373 40	390 42	210 37	FLT	TOT:	20	0	20	20	4	5.5	.4	0.	279	55	145	7	13
					IN	CLR:	18	0	18	18	2	0.0	0.0	0.	293	50	159	5	13
					NOT	CLR:	2	0	2	2	2	55.1	3.5	0.	146	100	23	2	0
4/20/76	CAA	354 40	370 42	213 37	FLT	TOT:	19	0	19	19	8	21.7	.4	0.	141	88	159	19	0
					IN	CLR:	13	0	13	13	2	0.0	0.0	0.	158	83	120	13	0
					NOT	CLR:	6	0	6	6	6	68.8	1.3	0.	106	100	244	6	0
5/ 6/76	CAA	354 40	392 42	211 37	FLT	TOT:	30	0	10	0	0	24.2	.8	0.	100	0	0	30	0
					IN	CLR:	17	0	3	0	0	0.0	0.0	0.	103	0	0	17	0
					NOT	CLR:	13	0	7	0	0	56.0	1.9	0.	98	0	0	13	0
5/ 6/76	* CAA	380 39	410 42	214 36	FLT	TOT:	34	0	22	0	0	0.0	0.0	0.	166	0	0	25	9
					IN	CLR:	34	0	22	0	0	0.0	0.0	0.	166	0	0	25	9
					NOT	CLR:	0	0	0	0	0	0.0	0.0	0.	0	0	0	0	0
5/ 8/76	* CAA	374 40	390 42	215 36	FLT	TOT:	32	0	20	0	0	1.6	.1	0.	351	0	0	22	10
					IN	CLR:	31	0	19	0	0	0.0	0.0	0.	365	0	0	21	10
					NOT	CLR:	1	0	1	0	0	52.2	2.0	0.	64	0	0	1	0
5/ 8/76	CAA	350 39	370 41	215 37	FLT	TOT:	27	0	16	0	0	.6	.3	0.	259	0	0	27	0
					IN	CLR:	24	0	15	0	0	0.0	0.0	0.	272	0	0	24	0
					NOT	CLR:	3	0	1	0	0	5.0	2.3	0.	64	0	0	3	0
5/14/76	CAA	351 40	370 42	211 37	FLT	TOT:	24	0	14	0	0	0.0	0.0	0.	113	0	0	24	0
					IN	CLR:	24	0	14	0	0	0.0	0.0	0.	113	0	0	24	0
					NOT	CLR:	0	0	0	0	0	0.0	0.0	0.	0	0	0	0	0
5/14/76	* CAA	373 39	390 42	215 36	FLT	TOT:	27	0	17	23	2	1.2	.3	0.	153	45	131	18	9
					IN	CLR:	26	0	16	22	1	0.0	0.0	0.	150	42	131	17	9
					NOT	CLR:	1	0	1	1	1	32.2	7.0	0.	195	100	124	1	0
LAX-LHR																			
2/10/79	* BBB	336 53	390 59	193 35	FLT	TOT:	96	0	63	50	10	13.8	.8	0.	190	51	27	54	42
					IN	CLR:	69	0	45	36	4	0.0	0.0	0.	244	38	25	27	42
					NOT	CLR:	27	0	18	14	6	49.0	2.7	0.	56	82	31	27	0
5/21/79	BDB	352 53	371 62	286 35	FLT	TOT:	111	111	72	54	0	.0	.0	.254E+04	383	32	46	31	80
					IN	CLR:	110	110	71	53	0	0.0	0.0	.135E+04	387	31	46	31	79
					NOT	CLR:	1	1	1	1	0	1.6	2.0	.133E+06	164	84	30	0	1
11/15/78	BBB	349 48	370 57	250 34	FLT	TOT:	102	102	67	53	3	.5	.1	.571E+01	186	28	57	35	67
					IN	CLR:	97	97	63	50	1	0.0	0.0	.601E+01	194	24	55	30	67
					NOT	CLR:	5	5	4	3	2	10.4	2.2	0.	57	96	90	5	0
11/17/78	* BBB	350 59	390 70	260 35	FLT	TOT:	113	113	64	63	2	5.2	.2	.133E+05	256	37	28	27	86
					IN	CLR:	103	103	64	56	0	0.0	0.0	.827E+01	256	31	15	17	86
					NOT	CLR:	10	10	0	7	2	58.6	2.6	.150E+06	0	88	132	10	0

APPENDIX B

DEP-ARR	IM/ID/IY	CODE	AVFL ALAT	EXHI EXTN	EXLO EXTS	NUMBER OF OBS					AVERAGES FOR THE FLIGHT			TROP			STRAT			
						CLD	PD5	OZ	H2O	H2S	%TIC	PATCHES	PD5	OZ	RH	H2O	N	N		
LAX-LHR (CONT.)																				
	11/18/78	BBB	333 53	371 61	240 35	FLT IN NOT	TOT: CLR: CLR:	98 80 18	98 80 18	66 52 14	44 35 9	4 3 1	9.8 0.0 53.4	.8 0.0 4.4	.255E+05 .141E+03 .138E+06	178 206 78	45 37 78	32 27 50	39 25 14	59 55 4
	11/19/78	* BBB	343 61	370 73	208 35	FLT IN NOT	TOT: CLR: CLR:	109 100 9	109 100 9	71 65 6	54 51 3	1 0 1	2.4 0.0 28.8	.2 0.0 2.3	.583E+04 .297E+02 .703E+05	213 226 70	38 35 85	10 10 14	13 7 6	96 93 3
	11/20/78	BBB	344 46	370 53	263 35	FLT IN NOT	TOT: CLR: CLR:	100 92 8	100 92 8	65 59 6	56 51 5	5 5 0	1.6 0.0 19.9	.2 0.0 2.1	.164E+04 .286E+01 .204E+05	108 114 45	45 44 60	30 29 32	69 61 8	31 31 0
	12/ 9/78	BBB	344 50	370 56	262 35	FLT IN NOT	TOT: CLR: CLR:	112 107 5	112 107 5	73 70 3	56 54 2	2 1 1	1.7 0.0 37.3	.3 0.0 6.4	.611E+04 .650E+02 .135E+06	229 237 44	33 30 96	29 29 51	28 23 5	84 84 0
	12/14/78	BBB	346 46	370 53	208 35	FLT IN NOT	TOT: CLR: CLR:	105 90 15	105 90 15	66 59 7	49 42 7	11 5 6	5.8 0.0 40.3	.7 0.0 4.7	.293E+05 .206E+03 .204E+06	210 227 64	50 42 98	39 30 92	35 23 12	70 67 3
LAX-NRT																				
	2/17/79	* BBB	326 40	331 42	248 35	FLT IN NOT	TOT: CLR: CLR:	94 73 21	0 0 0	62 48 14	50 39 11	0 0 0	11.5 0.0 51.5	1.0 0.0 4.3	0. 0. 0.	92 104 49	40 27 85	24 19 42	94 73 21	0 0 0
	5/25/79	* BDB	347 39	370 41	245 35	FLT IN NOT	TOT: CLR: CLR:	98 77 21	98 77 21	62 47 15	47 36 11	13 5 8	4.7 0.0 21.9	.5 0.0 2.5	.635E+05 .961E+04 .261E+06	133 150 82	63 53 97	103 94 135	83 62 21	15 15 0
	5/31/79	* BDB	348 41	370 44	191 34	FLT IN NOT	TOT: CLR: CLR:	101 83 18	101 83 18	65 52 13	48 39 9	8 2 6	4.4 0.0 24.5	.4 0.0 2.1	.634E+05 .193E+05 .267E+06	141 166 42	53 44 92	75 51 180	85 67 18	16 16 0
	11/ 3/78	* BBB	348 44	370 50	252 35	FLT IN NOT	TOT: CLR: CLR:	82 47 35	82 47 35	54 31 23	44 27 17	9 1 8	21.8 0.0 51.0	1.6 0.0 3.7	.572E+05 .281E+03 .134E+06	86 109 56	58 38 90	40 31 53	71 38 33	11 9 2
	12/ 9/78	* BBB	349 39	370 41	238 35	FLT IN NOT	TOT: CLR: CLR:	94 84 10	94 84 10	63 57 6	51 45 6	9 6 3	3.0 0.0 28.1	.3 0.0 3.0	.322E+04 .495E+02 .298E+05	125 130 84	55 52 76	21 20 27	50 46 4	44 38 6
	12/27/78	* BBB	338 37	371 39	222 35	FLT IN NOT	TOT: CLR: CLR:	104 102 2	104 102 2	0 0 0	45 45 0	0 0 0	1.2 0.0 62.4	.2 0.0 9.5	.241E+05 .174E+04 .116E+07	0 0 0	26 26 0	26 26 0	0 0 0	0 0 0

DEP-ARR	IM/ID/IY	CODE	AVFL ALAT	EXHI EXTN	EXLO EXTS	NUMBER OF OBS					AVERAGES FOR THE FLIGHT			TROP			STRAT			
						CLD	PD5	OZ	H20, H2S	%TIC	PATCHES	PD5	OZ	RH	H2O	N	N			
LAX-ORD																				
	1/30/76	* CAA	384 39	411 42	210 35	FLT IN NOT	TOT: CLR: CLR:	29 0 3	29 26 3	25 23 2	2 1 1	6.1 0.0 58.6	.1 0.0 .7	0. 0. 0.	285 308 90	29 27 60	36 37 27	3 1 2	26 25 1	
	2/11/76	* CAA	376 39	390 42	217 35	FLT IN NOT	TOT: CLR: CLR:	24 0 0	24 0 0	0 0 0	0 0 0	0.0 0.0 0.0	0.0 0.0 0.0	0. 0. 0.	188 188 0	0 0 0	0 0 0	9 9 0	15 15 0	
	2/11/76	CAA	386 37	410 41	268 34	FLT IN NOT	TOT: CLR: CLR:	17 0 0	17 0 0	0 0 0	0 0 0	0.0 0.0 0.0	0.0 0.0 0.0	0. 0. 0.	173 173 0	0 0 0	0 0 0	4 4 0	13 13 0	
	2/13/76	CAA	354 38	371 41	218 34	FLT IN NOT	TOT: CLR: CLR:	18 0 0	18 0 0	0 0 0	0 0 0	0.0 0.0 0.0	0.0 0.0 0.0	0. 0. 0.	180 180 0	0 0 0	0 0 0	2 2 0	16 16 0	
	2/13/76	* CAA	382 39	390 42	290 35	FLT IN NOT	TOT: CLR: CLR:	25 0 0	25 0 0	0 0 0	0 0 0	0.0 0.0 0.0	0.0 0.0 0.0	0. 0. 0.	130 130 0	0 0 0	0 0 0	2 2 0	23 23 0	
	2/27/76	CAA	330 39	370 41	209 34	FLT IN NOT	TOT: CLR: CLR:	21 0 19	21 2 19	21 2 19	21 2 19	59.7 0.0 66.0	1.9 0.0 2.1	0. 0. 0.	39 19 41	100 100 100	137 584 90	21 2 19	0 0 0	
	2/13/79	* CAB	370 38	391 41	211 34	FLT IN NOT	TOT: CLR: CLR:	38 27 11	38 27 11	25 18 7	4 0 5	9.0 0.0 31.0	.9 0.0 3.0	.587E+05 .269E+03 .202E+06	54 61 35	73 63 100	63 52 96	38 27 11	0 0 0	
	2/21/79	* CAB	372 39	391 42	239 34	FLT IN NOT	TOT: CLR: CLR:	40 31 9	40 31 9	25 20 5	15 12 3	7.6 0.0 33.6	.4 0.0 1.8	.224E+05 .504E+02 .994E+05	286 344 57	91 89 100	68 74 35	16 7 9	24 24 0	
	2/25/79	CAB	333 39	371 41	201 36	FLT IN NOT	TOT: CLR: CLR:	40 31 9	40 31 9	26 21 5	19 15 4	12 8 4	5.5 0.0 24.5	.5 0.0 2.0	.112E+05 .235E+04 .415E+05	102 104 93	79 74 100	127 152 31	35 26 9	5 5 0
	2/26/79	* CAB	344 39	379 42	236 34	FLT IN NOT	TOT: CLR: CLR:	28 24 4	28 24 4	19 17 2	3 2 1	5.4 0.0 37.8	.2 0.0 1.5	.797E+04 .451E+03 .530E+05	153 165 50	84 83 91	47 51 30	25 21 4	3 3 0	
	3/ 6/76	CAA	348 38	370 41	203 34	FLT IN NOT	TOT: CLR: CLR:	21 21 0	0 21 0	21 21 0	5 5 0	0.0 0.0 0.0	0.0 0.0 0.0	0. 0. 0.	197 197 0	60 60 0	82 82 0	13 13 0	8 8 0	
	3/ 6/76	* CAA	388 40	411 42	215 35	FLT IN NOT	TOT: CLR: CLR:	22 22 0	0 22 0	22 22 0	0 0 0	0.0 0.0 0.0	0.0 0.0 0.0	0. 0. 0.	348 348 0	29 28 0	32 32 0	2 2 0	20 20 0	
	3/ 1/79	CAB	358 39	370 41	246 35	FLT IN NOT	TOT: CLR: CLR:	25 12 13	25 12 13	13 6 7	11 6 5	10 5 5	24.9 0.0 48.0	1.2 0.0 2.3	.478E+05 .119E+04 .909E+05	191 278 38	100 100 100	39 55 20	5 1 4	20 11 9

APPENDIX B

DEP-ARR		CODE	AVFL ALAT	EXHI EXTN	EXLO EXTS	NUMBER OF OBS					AVERAGES FOR THE FLIGHT			OZ	RH	H2O	TROP N	STRAT N
IM/ID/IY						CLD	PD5	OZ	H2O	H2S	%TIC	PATCHES	PD5					
LAX-ORD (CONT.)																		
3/ 6/79	* CAB	385	391	321	FLT TOT:	30	30	18	16	13	0.0	0.0	.113E+03	413	90	80	1	29
		39	42	35	IN CLR:	30	30	18	16	13	0.0	0.0	.113E+03	413	90	80	1	29
					NOT CLR:	0	0	0	0	0	0.0	0.0	0.	0	0	0	0	0
3/ 7/79	* CAB	359	390	272	FLT TOT:	7	7	3	0	0	0.0	0.0	.607E+02	623	0	0	1	6
		40	42	34	IN CLR:	7	7	3	0	0	0.0	0.0	.607E+02	623	0	0	1	6
					NOT CLR:	0	0	0	0	0	0.0	0.0	0.	0	0	0	0	0
3/ 7/79	CAB	344	371	230	FLT TOT:	11	9	6	4	1	0.0	0.0	.166E+03	107	78	78	10	1
		38	41	35	IN CLR:	11	9	6	4	1	0.0	0.0	.166E+03	107	78	78	10	1
					NOT CLR:	0	0	0	0	0	0.0	0.0	0.	0	0	0	0	0
3/10/79	CAB	331	370	201	FLT TOT:	11	10	5	6	2	0.0	0.0	.422E+03	303	57	116	9	2
		37	41	34	IN CLR:	11	10	5	6	2	0.0	0.0	.422E+03	303	57	116	9	2
					NOT CLR:	0	0	0	0	0	0.0	0.0	0.	0	0	0	0	0
3/11/79	* CAB	383	390	284	FLT TOT:	29	29	19	18	6	3.4	.0	.633E+04	160	84	64	4	25
		39	41	35	IN CLR:	28	28	18	17	6	0.0	0.0	.560E+02	164	86	61	3	25
					NOT CLR:	1	1	1	1	0	98.8	1.0	.182E+06	84	63	110	1	0
3/15/79	* CAB	358	391	229	FLT TOT:	36	36	20	20	3	2.3	.4	.333E+05	191	74	36	0	0
		38	42	34	IN CLR:	30	30	18	16	2	0.0	0.0	.707E+04	193	75	25	0	0
					NOT CLR:	6	6	2	4	1	13.5	2.7	.165E+06	171	74	78	0	0
3/17/79	* CAB	373	391	220	FLT TOT:	36	36	22	18	3	13.6	.4	.248E+05	365	54	34	13	23
		39	42	34	IN CLR:	26	26	16	16	1	0.0	0.0	.301E+03	463	48	33	3	23
					NOT CLR:	10	10	6	2	2	48.9	1.3	.886E+05	104	100	39	10	0
3/20/79	* CAB	361	390	211	FLT TOT:	36	36	24	21	7	15.8	.7	.372E+05	278	62	56	11	25
		38	42	34	IN CLR:	24	24	16	14	1	0.0	0.0	.277E+03	391	46	48	6	18
					NOT CLR:	12	12	8	7	6	47.5	2.2	.111E+06	51	94	72	5	7
3/26/79	CAB	363	391	240	FLT TOT:	30	30	19	14	1	.3	.2	.873E+03	226	59	29	16	14
		38	41	35	IN CLR:	29	29	18	14	1	0.0	0.0	.800E+03	236	59	29	15	14
					NOT CLR:	1	1	1	0	0	8.2	6.0	.299E+04	60	0	0	1	0
3/29/79	CAB	359	371	194	FLT TOT:	31	31	20	13	3	3.9	.2	.192E+05	261	84	55	16	15
		38	42	34	IN CLR:	29	29	19	13	3	0.0	0.0	.743E+03	270	84	55	14	15
					NOT CLR:	2	2	1	0	0	60.4	2.5	.287E+06	89	0	0	2	0
4/29/76	* CAA	367	390	216	FLT TOT:	9	0	9	9	8	0.0	0.0	0.	183	95	77	9	0
		40	42	39	IN CLR:	9	0	9	9	8	0.0	0.0	0.	183	95	77	9	0
					NOT CLR:	0	0	0	0	0	0.0	0.0	0.	0	0	0	0	0
5/ 1/76	CAA	362	371	252	FLT TOT:	35	0	11	28	14	0.0	0.0	0.	129	85	45	27	8
		39	42	34	IN CLR:	35	0	11	28	14	0.0	0.0	0.	129	85	45	27	8
					NOT CLR:	0	0	0	0	0	0.0	0.0	0.	0	0	0	0	0
5/ 1/76	* CAA	343	351	218	FLT TOT:	27	0	18	22	13	0.0	0.0	0.	140	90	57	27	0
		39	42	35	IN CLR:	27	0	18	22	13	0.0	0.0	0.	140	90	57	27	0
					NOT CLR:	0	0	0	0	0	0.0	0.0	0.	0	0	0	0	0

DEP-ARR 1M/1D/1Y	CODE	AVFL ALAT	EXHI EXTN	EXLO EXTS	NUMBER OF OBS							AVERAGES FOR THE FLIGHT					TROP N	STRAT N	
					CLD	PD5	OZ	H2O	H2S	%TIC	PATCHES	PD5	OZ	RH	H2O				
LAX-ORD (CONT.)																			
5/ 3/76	CAA	358 38	370 41	209 34	FLT	TOT:	33	0	18	27	21	20.8	1.4	0.	104	88	47	29	4
					IN	CLR:	12	0	4	9	3	0.0	0.0	0.	100	65	89	8	4
					NOT	CLR:	21	0	14	18	18	32.7	2.2	0.	106	100	26	21	0
5/ 3/76 *	CAA	375 39	390 42	215 35	FLT	TOT:	36	0	15	28	22	8.3	.4	0.	231	91	51	30	6
					IN	CLR:	26	0	9	20	14	0.0	0.0	0.	283	88	40	20	6
					NOT	CLR:	10	0	6	8	8	29.9	1.6	0.	152	100	78	10	0
5/ 4/76 *	CAA	375 39	390 42	192 34	FLT	TOT:	39	0	17	0	0	9.4	1.0	0.	242	0	0	39	0
					IN	CLR:	25	0	11	0	0	0.0	0.0	0.	299	0	0	25	0
					NOT	CLR:	14	0	6	0	0	26.1	2.9	0.	137	0	0	14	0
5/ 4/76	CAA	385 39	410 42	218 34	FLT	TOT:	34	0	11	27	19	.4	.2	0.	374	95	28	16	18
					IN	CLR:	31	0	11	24	16	0.0	0.0	0.	374	94	22	13	18
					NOT	CLR:	3	0	0	3	3	4.4	2.3	0.	0	100	76	3	0
5/ 5/76	CAA	358 38	410 41	209 34	FLT	TOT:	27	0	15	0	0	15.1	1.2	0.	175	0	0	27	0
					IN	CLR:	11	0	5	0	0	0.0	0.0	0.	262	0	0	11	0
					NOT	CLR:	16	0	10	0	0	25.6	2.1	0.	131	0	0	16	0
5/31/79 *	CAB	385 38	391 42	282 34	FLT	TOT:	35	35	0	6	0	.7	.1	.147E+04	0	56	50	6	29
					IN	CLR:	32	32	0	6	0	0.0	0.0	.495E+03	0	56	50	4	28
					NOT	CLR:	3	3	0	0	0	8.0	1.3	.119E+05	0	0	0	2	1
6/18/78	CAB	363 39	371 41	281 35	FLT	TOT:	30	30	19	16	2	19.9	1.4	.240E+05	59	59	97	30	0
					IN	CLR:	15	15	9	10	0	0.0	0.0	.125E+04	76	53	50	15	0
					NOT	CLR:	15	15	10	6	2	39.7	2.9	.467E+05	43	96	175	15	0
6/21/78 *	CAB	345 37	351 41	236 34	FLT	TOT:	36	36	22	21	0	.1	.0	.257E+03	53	41	81	36	0
					IN	CLR:	35	35	22	21	0	0.0	0.0	.179E+03	53	41	81	35	0
					NOT	CLR:	1	1	0	0	0	2.0	1.0	.299E+04	0	0	0	1	0
6/29/78 *	CAB	342 38	352 41	218 34	FLT	TOT:	31	31	20	16	0	.8	.5	.201E+03	80	28	59	31	0
					IN	CLR:	28	28	18	16	0	0.0	0.0	.214E+03	81	28	59	26	0
					NOT	CLR:	3	3	2	0	0	8.2	4.7	.850E+02	68	0	0	3	0
6/ 1/79	CAB	364 39	370 41	299 35	FLT	TOT:	30	30	0	16	1	4.3	.4	.686E+04	0	64	45	20	10
					IN	CLR:	27	27	0	14	1	0.0	0.0	.286E+04	0	60	44	17	10
					NOT	CLR:	3	3	0	2	0	42.6	4.0	.429E+05	0	90	47	3	0
7/ 3/78 *	CAB	374 38	391 41	201 34	FLT	TOT:	36	36	16	21	4	0.0	0.0	.156E+02	90	57	65	36	0
					IN	CLR:	36	36	16	21	4	0.0	0.0	.156E+02	90	57	65	36	0
					NOT	CLR:	0	0	0	0	0	0.0	0.0	0.	0	0	0	0	0
7/18/78 *	CAB	352 38	391 41	196 34	FLT	TOT:	35	35	22	8	4	.4	.2	.617E+03	97	68	533	35	0
					IN	CLR:	32	32	21	8	4	0.0	0.0	.424E+02	98	68	533	32	0
					NOT	CLR:	3	3	1	0	0	4.3	2.3	.675E+04	92	0	0	3	0

APPENDIX B

DEP-ARR 1M/1D/1Y	CODE	AVFL ALAT	EXHI EXTN	EXLO EXTS		NUMBER OF OBS					AVERAGES FOR		THE FLIGHT			TROP	STRAT		
						CLD	PD5	OZ	H2O,	H2S	%TIC	PATCHES	PD5	OZ	RH	H2O	N	N	
LAX-PIK																			
11/10/78	BBB	330	369	232	FLT TOT:	90	90	58	51	7	23.7	2.3	.109E+06	104	61	57	57	33	
		50	56	35	IN CLR:	40	40	26	25	0	0.0	0.0	.102E+04	180	32	25	10	30	
					NOT CLR:	50	50	32	26	7	42.7	4.1	.195E+06	42	90	88	47	3	
LAX-PPT																			
5/13/79	BDB	360	391	246	FLT TOT:	86	86	0	42	4	2.7	.5	.656E+05	0	47	113	86	0	
		8	32	-16	IN CLR:	75	75	0	38	1	0.0	0.0	.825E+03	0	43	59	75	0	
					NOT CLR:	11	11	0	4	3	21.4	3.6	.507E+06	0	90	623	11	0	
5/27/79	* BDB	364	370	265	FLT TOT:	80	80	54	34	2	4.0	.7	.732E+05	56	31	43	80	0	
		9	33	-14	IN CLR:	72	72	49	30	0	0.0	0.0	.174E+03	58	25	32	72	0	
					NOT CLR:	8	8	5	4	2	39.6	7.4	.730E+06	36	73	124	8	0	
10/22/78	BBB	371	390	251	FLT TOT:	76	76	47	0	0	7.0	.5	.185E+05	43	0	0	76	0	
		7	32	-15	IN CLR:	66	66	40	0	0	0.0	0.0	.691E+01	46	0	0	66	0	
					NOT CLR:	10	10	7	0	0	53.1	4.0	.141E+06	22	0	0	10	0	
11/ 5/78	* BBB	378	410	248	FLT TOT:	80	80	50	36	5	2.1	.4	.412E+04	58	43	56	80	0	
		9	33	-15	IN CLR:	72	72	46	33	2	0.0	0.0	.353E+02	61	38	50	72	0	
					NOT CLR:	8	8	4	3	3	21.3	3.6	.403E+05	21	100	117	8	0	
12/11/77	BCB	373	390	258	FLT TOT:	80	80	49	0	0	8.0	0.0	.280E+05	32	0	0	80	0	
		8	33	-15	IN CLR:	66	66	40	0	0	0.0	0.0	.197E+02	33	0	0	66	0	
					NOT CLR:	14	14	9	0	0	45.7	0.0	.160E+06	23	0	0	14	0	
12/18/77	* BCB	374	391	290	FLT TOT:	76	76	51	0	0	8.9	0.0	.294E+05	35	0	0	76	0	
		9	33	-14	IN CLR:	59	59	40	0	0	0.0	0.0	.136E+03	37	0	0	59	0	
					NOT CLR:	17	17	11	0	0	39.6	0.0	.131E+06	28	0	0	17	0	
LAX-SEA																			
6/ 4/77	AAA	380	390	253	FLT TOT:	15	15	8	0	0	1.3	.6	.926E+02	42	0	0	15	0	
		42	47	36	IN CLR:	12	12	6	0	0	0.0	0.0	.329E+02	50	0	0	12	0	
					NOT CLR:	3	3	2	0	0	6.5	3.0	.331E+03	20	0	0	3	0	
LAX-SFO																			
1/18/78	ABB	340	350	303	FLT TOT:	5	5	0	2	0	.9	.4	.131E+02	0	60	87	5	0	
		36	37	34	IN CLR:	4	4	0	2	0	0.0	0.0	.815E+01	0	60	87	4	0	
					NOT CLR:	1	1	0	0	0	4.7	2.0	.330E+02	0	0	0	1	0	
2/11/79	* CAB	274	331	201	FLT TOT:	6	6	3	3	1	3.5	.8	.247E+05	42	54	131	6	0	
		35	36	34	IN CLR:	3	3	2	1	0	0.0	0.0	.105E+04	47	22	132	3	0	
					NOT CLR:	3	3	1	2	1	7.1	1.7	.484E+05	33	70	131	3	0	
2/17/79	BBB	310	351	200	FLT TOT:	5	0	2	3	1	21.3	2.8	0.	54	78	32	5	0	
		36	37	35	IN CLR:	1	0	0	0	0	0.0	0.0	0.	0	0	0	1	0	
					NOT CLR:	4	0	2	3	1	26.7	3.5	0.	54	78	32	4	0	

DEP-ARR IM/ID/IY	CODE	AVFL ALAT	EXHI EXTN	EXLO EXTS	NUMBER OF OBS					AVERAGES FOR THE FLIGHT			ØZ	RH	H2Ø	TRØP N	STRAT N						
					CLD	PD5	ØZ	H2Ø,H2S	%TIC	PATCHES	PD5												
LAX-SFO (CONT.)																							
5/ 1/76 * BBA	269 36	292 37	214 35	FLT TØT:	6	0	2	0	0	0.0	0.0	0.	116	0	0	6	0						
				IN CLR:	6	0	2	0	0	0.0	0.0	0.						116	0	0	6	0	
				NØT CLR:	0	0	0	0	0	0.0	0.0	0.						0	0	0	0	0	
5/ 2/78 * ABB	333 36	370 37	219 35	FLT TØT:	5	5	0	1	0	0.0	0.0	.112E+02	0	20	292	5	0						
				IN CLR:	5	5	0	1	0	0.0	0.0	.112E+02						0	20	292	5	0	
				NØT CLR:	0	0	0	0	0	0.0	0.0	0.						0	0	0	0	0	
5/ 5/78 * ABB	323 36	370 37	186 34	FLT TØT:	5	5	0	1	0	22.7	.6	.346E+05	0	12	428	5	0						
				IN CLR:	3	3	0	1	0	0.0	0.0	.130E+03						0	12	428	3	0	
				NØT CLR:	2	2	0	0	0	56.7	1.5	.862E+05						0	0	0	2	0	
9/ 1/76 * BBA	275 36	289 37	225 35	FLT TØT:	5	0	3	0	0	0.0	0.0	0.	31	0	0	5	0						
				IN CLR:	5	0	3	0	0	0.0	0.0	0.						31	0	0	5	0	
				NØT CLR:	0	0	0	0	0	0.0	0.0	0.						0	0	0	0	0	
10/24/78	BBB	334 35	350 36	299 35	FLT TØT:	5	5	2	0	0	0.0	0.0	.266E+02	57	0	0	5	0					
					IN CLR:	5	5	2	0	0	0.0	0.0	.266E+02						57	0	0	5	0
					NØT CLR:	0	0	0	0	0	0.0	0.0	0.						0	0	0	0	0
11/ 5/78	BBB	324 35	350 36	265 35	FLT TØT:	5	5	2	2	1	44.1	3.2	.830E+05	35	100	73	5	0					
					IN CLR:	0	0	0	0	0	0.0	0.0	0.						0	0	0	0	0
					NØT CLR:	5	5	2	2	1	44.1	3.2	.830E+05						35	100	73	5	0
12/11/77 * BCB	271 36	291 37	195 35	FLT TØT:	5	5	2	0	0	3.1	0.0	.526E+04	35	0	0	5	0						
				IN CLR:	3	3	1	0	0	0.0	0.0	0.						45	0	0	3	0	
				NØT CLR:	2	2	1	0	0	7.6	0.0	.132E+05						24	0	0	2	0	
12/18/77	BCB	305 36	350 37	203 34	FLT TØT:	7	7	4	0	0	1.1	0.0	.103E+04	52	0	0	7	0					
					IN CLR:	5	5	3	0	0	0.0	0.0	.143E+04						54	0	0	5	0
					NØT CLR:	2	2	1	0	0	3.7	0.0	.334E+02						45	0	0	2	0
12/27/78	BBB	336 35	351 36	312 35	FLT TØT:	5	5	0	3	0	.2	.2	.930E+02	0	61	48	0	0					
					IN CLR:	4	4	0	3	0	0.0	0.0	.116E+03						0	61	48	0	0
					NØT CLR:	1	1	0	0	0	1.2	1.0	0.						0	0	0	0	0
LHR-LPA																							
12/13/78	BBB	384 33	390 37	301 29	FLT TØT:	16	16	2	7	4	7.9	1.4	.339E+05	16	97	30	16	0					
					IN CLR:	8	8	1	4	1	0.0	0.0	.108E+03						31	94	29	8	0
					NØT CLR:	8	8	1	3	3	15.9	2.9	.677E+05						1	100	33	8	0
LHR-PIK																							
11/11/78 * BBB	230 53	230 54	229 52	FLT TØT:	6	6	3	3	0	0.0	0.0	.111E+02	38	49	272	6	0						
				IN CLR:	6	6	3	3	0	0.0	0.0	.111E+02						38	49	272	6	0	
				NØT CLR:	0	0	0	0	0	0.0	0.0	0.						0	0	0	0	0	

APPENDIX B

DEP-ARR		CODE	AVFL ALAT	EXHI EXTN	EXLO EXTS	NUMBER OF OBS					AVERAGES FOR THE FLIGHT			OZ	RH	H2O	TROP N	STRAT N		
IM/ID/IY						CLD	PD5	OZ	H2O	H2S	%TIC	PATCHES	PD5							
LHR-SEA																				
2/18/79	* BBB	339 62	370 69	255 49	FLT IN NOT	TOT CLR CLR	91 58 33	0 0 0	57 36 21	42 25 17	3 0 3	19.2 0.0 53.0	1.0 0.0 2.9	0. 0. 0.	168 231 60	50 36 71	17 10 27	48 19 29	43 39 4	
2/18/79	BBB	339 61	351 68	230 48	FLT IN NOT	TOT CLR CLR	94 83 11	0 0 0	61 53 6	53 47 6	1 1 0	2.7 0.0 23.1	.5 0.0 4.4	0. 0. 0.	205 225 68	41 38 65	21 18 41	22 15 7	72 68 4	
3/25/76	* BBA	343 60	371 64	223 50	FLT IN NOT	TOT CLR CLR	53 47 6	0 0 0	53 47 6	0 0 0	0 0 0	.3 0.0 2.6	.1 0.0 1.0	0. 0. 0.	398 405 347	0 0 0	0 0 0	7 6 1	46 41 5	
3/26/76	BBA	343 65	391 76	224 48	FLT IN NOT	TOT CLR CLR	65 60 5	0 0 0	65 60 5	0 0 0	0 0 0	.1 0.0 .9	.1 0.0 1.6	0. 0. 0.	430 427 466	0 0 0	0 0 0	32 29 3	33 31 2	
4/22/76	BBA	359 61	371 69	291 49	FLT IN NOT	TOT CLR CLR	62 58 4	0 0 0	62 58 4	0 0 0	0 0 0	.9 0.0 14.1	.2 0.0 2.8	0. 0. 0.	452 477 79	0 0 0	0 0 0	17 13 4	45 45 0	
4/29/76	* BBA	345 62	371 69	203 49	FLT IN NOT	TOT CLR CLR	61 56 5	0 0 0	61 56 5	0 0 0	0 0 0	1.4 0.0 17.6	.2 0.0 2.2	0. 0. 0.	443 464 203	0 0 0	0 0 0	26 22 4	35 34 1	
4/30/76	BBA	349 62	371 70	206 49	FLT IN NOT	TOT CLR CLR	66 52 14	0 0 0	66 52 14	0 0 0	0 0 0	14.9 0.0 70.4	.5 0.0 2.6	0. 0. 0.	345 414 90	0 0 0	0 0 0	33 19 14	33 33 0	
6/10/77	AAA	396 63	429 70	283 48	FLT IN NOT	TOT CLR CLR	94 94 0	94 94 0	59 59 0	0 0 0	0 0 0	0.0 0.0 0.0	0.0 0.0 0.0	.612E+01 .612E+01 0.	512 512 0	0 0 0	0 0 0	4 4 0	90 90 0	
6/11/77	* AAA	397 60	410 65	295 48	FLT IN NOT	TOT CLR CLR	83 76 7	83 76 7	55 51 4	0 0 0	0 0 0	1.8 0.0 21.7	.3 0.0 3.4	0. 0. 0.	.668E+04 .690E+01 .791E+05	431 459 81	0 0 0	0 0 0	7 1 6	76 75 1
6/12/77	AAA	402 64	430 73	304 49	FLT IN NOT	TOT CLR CLR	90 88 2	90 88 2	59 56 1	0 0 0	0 0 0	.5 0.0 22.9	.0 0.0 2.0	0. 0. 0.	.488E+03 .705E+00 .219E+05	424 424 447	0 0 0	0 0 0	1 0 1	89 88 1
6/13/77	* AAA	390 58	411 64	249 48	FLT IN NOT	TOT CLR CLR	89 85 4	89 85 4	56 54 2	0 0 0	0 0 0	2.5 0.0 56.5	.2 0.0 4.5	0. 0. 0.	.446E+05 .294E+02 .992E+06	389 401 50	0 0 0	0 0 0	5 1 4	84 84 0
6/17/77	ACA	387 62	391 69	195 48	FLT IN NOT	TOT CLR CLR	100 98 2	100 98 2	66 65 1	0 0 0	0 0 0	.3 0.0 16.1	0.0 0.0 0.0	0. 0. 0.	.229E+03 .135E+03 .484E+04	543 550 101	0 0 0	0 0 0	9 7 2	91 91 0
6/18/77	* ACA	377 63	391 68	269 51	FLT IN NOT	TOT CLR CLR	83 81 2	83 81 2	56 54 2	0 0 0	0 0 0	.1 0.0 3.3	0.0 0.0 0.0	0. 0. 0.	.233E+03 .187E+03 .213E+04	528 533 388	0 0 0	0 0 0	3 2 1	80 79 1

APPENDIX B

DEP-ARR	IM/ID/IY	CODE	AVFL ALAT	EXHI EXTN	EXLØ EXTS			NUMBER OF OBS					AVERAGES FOR THE FLIGHT					TRCP	STRAT	
								CLD	PD5	ØZ	H2Ø	H2S	ØTIC	PATCHES	PD5	ØZ	RH	H2Ø	N	N
LHR-SEA (CONT.)																				
	6/19/77	ACA	402 59	430 62	301 52	FLT TOT:	67	67	38	0	0	0	0.0	0.0	.608E+02	526	0	0	2	65
						IN CLR:	67	67	38	0	0	0	0.0	0.0	.608E+02	526	0	0	2	65
						NOT CLR:	0	0	0	0	0	0	0.0	0.0	0.	0	0	0	0	0
	6/20/77	* ACA	391 64	410 69	356 53	FLT TOT:	78	78	44	0	0	0	1.1	0.0	.716E+04	553	0	0	5	73
						IN CLR:	77	77	44	0	0	0	0.0	0.0	.132E+03	553	0	0	5	72
						NOT CLR:	1	1	0	0	0	0	83.1	0.0	.548E+06	0	0	0	0	1
	6/21/77	ACA	400 62	430 68	195 49	FLT TOT:	96	96	61	0	0	0	.0	0.0	.122E+03	491	0	0	5	91
						IN CLR:	95	95	60	0	0	0	0.0	0.0	.561E+02	495	0	0	5	90
						NOT CLR:	1	1	1	0	0	0	3.5	0.0	.643E+04	252	0	0	0	1
	6/22/77	* ACA	394 62	410 59	289 48	FLT TOT:	89	89	60	0	0	0	0.0	0.0	.600E+02	481	0	0	16	73
						IN CLR:	89	89	60	0	0	0	0.0	0.0	.600E+02	481	0	0	16	73
						NOT CLR:	0	0	0	0	0	0	0.0	0.0	0.	0	0	0	0	0
	6/25/77	* ACA	392 61	410 67	245 49	FLT TOT:	92	92	56	0	0	0	0.0	0.0	.696E+02	484	0	0	10	82
						IN CLR:	92	92	56	0	0	0	0.0	0.0	.693E+02	484	0	0	10	82
						NOT CLR:	0	0	0	0	0	0	0.0	0.0	0.	0	0	0	0	0
	6/26/77	ACA	401 65	430 77	185 48	FLT TOT:	90	0	0	0	0	0	0.0	0.0	0.	0	0	0	2	88
						IN CLR:	90	0	0	0	0	0	0.0	0.0	0.	0	0	0	2	88
						NOT CLR:	0	0	0	0	0	0	0.0	0.0	0.	0	0	0	0	0
	6/27/77	* ACA	393 60	410 67	299 48	FLT TOT:	89	0	0	0	0	0	.0	0.0	0.	0	0	0	3	86
						IN CLR:	88	0	0	0	0	0	0.0	0.0	0.	0	0	0	3	85
						NOT CLR:	1	0	0	0	0	0	.4	0.0	0.	0	0	0	0	1
	6/28/77	ACA	387 64	410 73	304 49	FLT TOT:	97	0	0	0	0	0	1.8	0.0	0.	0	0	0	4	93
						IN CLR:	92	0	0	0	0	0	0.0	0.0	0.	0	0	0	0	92
						NOT CLR:	5	0	0	0	0	0	34.0	0.0	0.	0	0	0	4	1
	6/29/77	* ACA	395 57	410 51	296 48	FLT TOT:	39	0	0	0	0	0	1.0	0.0	0.	0	0	0	7	82
						IN CLR:	86	0	0	0	0	0	0.0	0.0	0.	0	0	0	4	82
						NOT CLR:	3	0	0	0	0	0	30.6	0.0	0.	0	0	0	3	0
	10/ 8/78	BBB	341 62	390 70	251 49	FLT TOT:	94	94	62	0	0	0	5.0	.3	.208E+05	159	0	0	53	41
						IN CLR:	84	84	56	0	0	0	0.0	0.0	.160E+03	168	0	0	44	40
						NOT CLR:	10	10	6	0	0	0	46.7	2.9	.194E+06	75	0	0	9	1
	10/ 9/78	* BBB	329 62	331 69	256 49	FLT TOT:	83	83	55	0	0	0	15.7	1.1	.520E+05	139	0	0	52	31
						IN CLR:	52	52	34	0	0	0	0.0	0.0	.161E+02	189	0	0	21	31
						NOT CLR:	31	31	21	0	0	0	42.1	2.9	.140E+06	58	0	0	31	0
	10/20/78	BBB	328 60	390 68	256 49	FLT TOT:	106	106	70	0	0	0	21.4	1.4	.645E+05	139	0	0	53	53
						IN CLR:	63	63	41	0	0	0	0.0	0.0	.220E+03	203	0	0	10	53
						NOT CLR:	43	43	29	0	0	0	52.9	3.4	.159E+06	49	0	0	43	0
	10/21/78	* BBB	328 58	331 61	254 48	FLT TOT:	87	87	54	0	0	0	4.1	.5	.507E+05	178	0	0	39	48
						IN CLR:	73	73	46	0	0	0	0.0	0.0	.274E+02	199	0	0	25	48
						NOT CLR:	14	14	8	0	0	0	25.6	3.1	.315E+06	54	0	0	14	0

DEP-ARR		IM/1D/1Y	CODE	AVFL ALAT	EXHI EXTN	EXLO EXTS	NUMBER OF OBS					AVERAGES FOR THE FLIGHT				TR0P N	STRAT N		
							CLD	PD5	OZ	H20	H2S	%TIC	PATCHES	PD5	OZ			RH	H20
LHR-SEA (CONT.)																			
12/ 7/77	* BCB	329	331	253	FLT	TOT:	95	95	63	0	0	0.0	0.0	.483E+01	238	0	0	5	90
		57	62	48	IN	CLR:	95	95	63	0	0	0.0	0.0	.483E+01	238	0	0	5	90
					NOT	CLR:	0	0	0	0	0	0.0	0.0	0.	0	0	0	0	0
12/ 8/77	BCB	341	370	240	FLT	TOT:	92	92	56	0	0	1.1	0.0	.366E+04	239	0	0	21	71
		62	70	48	IN	CLR:	86	86	52	0	0	0.0	0.0	.539E+02	253	0	0	15	71
					NOT	CLR:	6	6	4	0	0	16.8	0.0	.554E+05	59	0	0	6	0
12/ 9/77	* BCB	325	330	234	FLT	TOT:	90	90	47	0	0	3.6	0.0	.262E+05	228	0	0	9	81
		57	62	48	IN	CLR:	81	81	46	0	0	0.0	0.0	.889E+01	232	0	0	3	78
					NOT	CLR:	9	9	1	0	0	36.4	0.0	.262E+06	51	0	0	6	3
12/10/77	BCB	349	390	265	FLT	TOT:	94	94	52	0	0	.2	0.0	.194E+04	249	0	0	10	84
		63	70	49	IN	CLR:	92	92	51	0	0	0.0	0.0	.177E+01	252	0	0	10	82
					NOT	CLR:	2	2	1	0	0	9.2	0.0	.910E+05	93	0	0	0	2
LHR-SFO																			
6/10/77	* AAA	393	410	288	FLT	TOT:	93	93	60	0	0	5.7	.3	.213E+05	444	0	0	14	79
		58	67	39	IN	CLR:	83	83	54	0	0	0.0	0.0	.361E+02	487	0	0	4	79
					NOT	CLR:	10	10	6	0	0	53.3	2.7	.198E+06	58	0	0	10	0
6/11/77	AAA	387	410	267	FLT	TOT:	105	105	67	0	0	.2	.1	.867E+01	426	0	0	2	103
		59	69	38	IN	CLR:	103	103	67	0	0	0.0	0.0	.433E+01	426	0	0	0	103
					NOT	CLR:	2	2	0	0	0	11.0	3.0	.232E+03	0	0	0	2	0
6/12/77	* AAA	394	411	285	FLT	TOT:	94	94	63	0	0	2.9	.4	.133E+05	330	0	0	12	82
		54	64	38	IN	CLR:	83	83	55	0	0	0.0	0.0	.489E+02	355	0	0	7	76
					NOT	CLR:	11	11	8	0	0	25.2	3.0	.113E+06	158	0	0	5	6
6/13/77	AAA	394	410	212	FLT	TOT:	111	111	73	0	0	.4	.0	.126E+04	473	0	0	3	108
		61	73	39	IN	CLR:	109	109	72	0	0	0.0	0.0	.465E+01	478	0	0	1	108
					NOT	CLR:	2	2	1	0	0	23.1	1.5	.695E+05	98	0	0	2	0
6/17/77	* ACA	396	410	306	FLT	TOT:	106	106	67	0	0	3.1	0.0	.258E+05	486	0	0	14	92
		54	62	38	IN	CLR:	95	95	64	0	0	0.0	0.0	.181E+03	505	0	0	5	90
					NOT	CLR:	11	11	3	0	0	30.2	0.0	.247E+06	76	0	0	9	2
6/18/77	ACA	396	410	242	FLT	TOT:	112	112	72	0	0	.4	0.0	.926E+03	471	0	0	12	100
		56	62	39	IN	CLR:	108	108	70	0	0	0.0	0.0	.173E+03	481	0	0	10	98
					NOT	CLR:	4	4	2	0	0	11.9	0.0	.212E+05	119	0	0	2	2
6/19/77	* ACA	392	411	250	FLT	TOT:	98	98	65	0	0	2.2	0.0	.118E+05	464	0	0	18	80
		58	67	39	IN	CLR:	89	89	61	0	0	0.0	0.0	.448E+02	485	0	0	11	78
					NOT	CLR:	9	9	4	0	0	24.0	0.0	.128E+06	150	0	0	7	2
6/20/77	ACA	387	393	194	FLT	TOT:	110	110	74	0	0	3.8	0.0	.707E+04	451	0	0	19	91
		58	67	38	IN	CLR:	96	96	65	0	0	0.0	0.0	.101E+03	491	0	0	9	87
					NOT	CLR:	14	14	9	0	0	30.1	0.0	.549E+05	160	0	0	10	4

DEP-ARR	IM/ID/IY	CODE	AVFL ALAT	EXHI EXTN	EXLO EXTS		NUMBER OF OBS					AVERAGES FOR THE FLIGHT			TROP			STRAT	
							CLD	PD5	OZ	H2O	H2S	%TIC	PATCHES	PD5	OZ	RH	H2O	N	N
LHR-SFO (CONT.)																			
	6/21/77	* ACA	392 53	410 60	275 38	FLT TOT:	94	94	60	0	0	8.7	0.0	.145E+06	427	0	0	32	62
						IN CLR:	76	76	47	0	0	0.0	0.0	.362E+03	500	0	0	14	62
						NOT CLR:	18	18	13	0	0	45.5	0.0	.755E+06	162	0	0	18	0
	6/22/77	ACA	384 58	410 67	263 38	FLT TOT:	111	111	71	0	0	.2	0.0	.499E+04	424	0	0	23	88
						IN CLR:	110	110	70	0	0	0.0	0.0	.122E+03	427	0	0	23	87
						NOT CLR:	1	1	1	0	0	20.0	0.0	.540E+06	176	0	0	0	1
	6/25/77	ACA	385 62	410 77	190 38	FLT TOT:	106	106	53	0	0	.9	0.0	.375E+04	507	0	0	20	86
						IN CLR:	99	99	51	0	0	0.0	0.0	.298E+02	512	0	0	14	85
						NOT CLR:	7	7	2	0	0	14.0	0.0	.564E+05	379	0	0	6	1
	6/26/77	* ACA	385 58	411 67	291 39	FLT TOT:	95	0	0	0	0	2.4	0.0	0.	0	0	0	18	77
						IN CLR:	87	0	0	0	0	0.0	0.0	0.	0	0	0	10	77
						NOT CLR:	8	0	0	0	0	28.3	0.0	0.	0	0	0	8	0
	6/27/77	ACA	381 60	410 70	254 38	FLT TOT:	114	0	0	0	0	2.1	0.0	0.	0	0	0	21	93
						IN CLR:	107	0	0	0	0	0.0	0.0	0.	0	0	0	14	93
						NOT CLR:	7	0	0	0	0	34.1	0.0	0.	0	0	0	7	0
	6/28/77	* ACA	384 57	410 65	241 39	FLT TOT:	99	0	0	0	0	1.2	0.0	0.	0	0	0	19	80
						IN CLR:	97	0	0	0	0	0.0	0.0	0.	0	0	0	17	80
						NOT CLR:	2	0	0	0	0	59.2	0.0	0.	0	0	0	2	0
	6/29/77	ACA	365 60	410 69	220 39	FLT TOT:	107	0	0	0	0	3.8	0.0	0.	0	0	0	20	87
						IN CLR:	95	0	0	0	0	0.0	0.0	0.	0	0	0	9	86
						NOT CLR:	12	0	0	0	0	34.0	0.0	0.	0	0	0	11	1
	10/28/77	* ABB	384 66	430 88	290 40	FLT TOT:	42	0	0	0	0	1.6	.1	0.	0	0	0	3	39
						IN CLR:	41	0	0	0	0	0.0	0.0	0.	0	0	0	2	39
						NOT CLR:	1	0	0	0	0	65.5	3.0	0.	0	0	0	1	0
	10/ 9/78	BBB	349 58	391 67	219 39	FLT TOT:	113	113	63	0	0	4.4	.4	.156E+05	141	0	0	67	46
						IN CLR:	94	94	50	0	0	0.0	0.0	.223E+03	166	0	0	49	45
						NOT CLR:	19	19	13	0	0	26.3	2.6	.914E+05	46	0	0	18	1
	10/10/78	* BBB	329 58	372 67	203 39	FLT TOT:	95	95	61	0	0	13.3	.7	.530E+05	120	0	0	75	20
						IN CLR:	69	69	45	0	0	0.0	0.0	.344E+03	145	0	0	50	19
						NOT CLR:	26	26	16	0	0	48.5	2.7	.193E+06	51	0	0	25	1
	10/21/78	BBB	338 60	371 71	238 39	FLT TOT:	108	108	59	0	0	1.0	.2	.129E+04	223	0	0	28	80
						IN CLR:	100	100	63	0	0	0.0	0.0	.569E+02	238	0	0	20	80
						NOT CLR:	8	8	6	0	0	12.9	3.3	.166E+05	57	0	0	8	0
MEL-PER																			
	1/27/77	DDA	348 -35	350 -33	279 -38	FLT TOT:	36	36	16	0	0	0.0	0.0	.117E+02	84	0	0	36	0
						IN CLR:	36	36	16	0	0	0.0	0.0	.117E+02	84	0	0	36	0
						NOT CLR:	0	0	0	0	0	0.0	0.0	0.	0	0	0	0	0

APPENDIX B

DEP-ARR 1M/1D/1Y	CODE	AVFL ALAT	EXHI EXTN	EXLO EXTS	NUMBER OF OBS					AVERAGES FOR THE FLIGHT			OZ	RH	H2O	TROP N	STRAT N	
					CLD	FD5	OZ	H2O	H2S	%TIC	PATCHES	PD5						
MEL-PER (CONT.)																		
1/29/77 * DDA	359 -35	370 -33	201 -38	FLT	TOT:	30	30	8	0	0	0.0	0.0	.109E+02	61	0	0	30	0
				IN	CLR:	30	30	8	0	0	0.0	0.0	.109E+02	61	0	0	30	0
				NOT	CLR:	0	0	0	0	0	0.0	0.0	0.	0	0	0	0	0
2/ 2/77 DDA	383 -35	390 -33	291 -38	FLT	TOT:	35	35	12	0	0	.7	.3	.515E+04	79	0	0	35	0
				IN	CLR:	34	34	12	0	0	0.0	0.0	.684E+01	79	0	0	34	0
				NOT	CLR:	1	1	0	0	0	23.9	10.0	.180E+06	0	0	0	1	0
2/16/77 DDA	382 -35	390 -33	244 -38	FLT	TOT:	35	35	23	0	0	0.0	0.0	.103E+02	90	0	0	0	0
				IN	CLR:	35	35	23	0	0	0.0	0.0	.103E+02	90	0	0	0	0
				NOT	CLR:	0	0	0	0	0	0.0	0.0	0.	0	0	0	0	0
2/19/77 * DDA	362 -35	371 -33	261 -36	FLT	TOT:	30	30	19	0	0	.5	.1	.267E+02	92	0	0	0	0
				IN	CLR:	29	29	18	0	0	0.0	0.0	.265E+02	94	0	0	0	0
				NOT	CLR:	1	1	1	0	0	16.1	2.0	.310E+02	66	0	0	0	0
12/28/76 DDA	343 -35	350 -33	197 -37	FLT	TOT:	36	0	0	0	0	0.0	0.0	0.	0	0	0	36	0
				IN	CLR:	36	0	0	0	0	0.0	0.0	0.	0	0	0	36	0
				NOT	CLR:	0	0	0	0	0	0.0	0.0	0.	0	0	0	0	0
MEL-SIN																		
2/21/77 DDA	361 -20	390 0	265 -37	FLT	TOT:	73	73	47	0	0	23.5	1.6	.173E+06	41	0	0	0	0
				IN	CLR:	48	48	32	0	0	0.0	0.0	.106E+02	50	0	0	0	0
				NOT	CLR:	25	25	15	0	0	68.5	4.6	.506E+06	23	0	0	0	0
2/24/77 * DDA	314 -20	350 0	235 -37	FLT	TOT:	75	75	49	0	0	11.4	.6	.342E+05	44	0	0	0	0
				IN	CLR:	58	58	37	0	0	0.0	0.0	.180E+02	53	0	0	0	0
				NOT	CLR:	17	17	12	0	0	50.3	2.5	.151E+06	16	0	0	0	0
12/ 4/76 DDA	340 -21	350 0	243 -37	FLT	TOT:	79	0	0	0	0	12.0	1.8	0.	0	0	0	79	0
				IN	CLR:	48	0	0	0	0	0.0	0.0	0.	0	0	0	48	0
				NOT	CLR:	31	0	0	0	0	30.7	4.7	0.	0	0	0	31	0
12/ 6/76 * DDA	319 -20	350 0	251 -37	FLT	TOT:	71	0	0	0	0	5.5	1.2	0.	0	0	0	71	0
				IN	CLR:	53	0	0	0	0	0.0	0.0	0.	0	0	0	53	0
				NOT	CLR:	18	0	0	0	0	21.6	4.6	0.	0	0	0	18	0
MEL-SYD																		
1/21/77 * DDA	319 -36	351 -35	195 -37	FLT	TOT:	7	7	3	0	0	0.0	0.0	.461E+01	117	0	0	7	0
				IN	CLR:	7	7	3	0	0	0.0	0.0	.461E+01	117	0	0	7	0
				NOT	CLR:	0	0	0	0	0	0.0	0.0	0.	0	0	0	0	0
1/22/77 DDA	345 -36	371 -35	284 -37	FLT	TOT:	5	5	2	0	0	0.0	0.0	.131E+02	82	0	0	5	0
				IN	CLR:	5	5	2	0	0	0.0	0.0	.131E+02	82	0	0	5	0
				NOT	CLR:	0	0	0	0	0	0.0	0.0	0.	0	0	0	0	0

DEP-ARR	IM/ID/IY	CODE	AVFL ALAT	EXHI EXTN	EXLO EXTS	NUMBER OF OBS					AVERAGES FOR THE FLIGHT			TROP			STRAT			
						CLD	PD5	OZ	H20,	H2S	%TIC	PATCHES	PD5	OZ	RH	H20	N	N		
MEL-SYD (CONT.)																				
	1/29/77	DDA	313 -35	370 -34	220 -37	FLT IN NOT	TOT CLR:	7 2 5	7 2 5	3 1 2	0 0 0	43.8 0.0 61.3	3.3 0.0 4.6	.140E+06 .627E+03 .195E+06	57 24 74	0 0 0	0 0 0	7 2 5	0 0 0	
	2/15/77	* DDA	329 -36	351 -35	285 -37	FLT IN NOT	TOT CLR:	6 6 0	6 6 0	3 3 0	0 0 0	0.0 0.0 0.0	0.0 0.0 0.0	.111E+02 .111E+02 0.	32 32 0	0 0 0	0 0 0	0 0 0	0 0 0	
	2/16/77	* DDA	320 -36	350 -35	227 -37	FLT IN NOT	TOT CLR:	6 6 0	6 6 0	2 2 0	0 0 0	0.0 0.0 0.0	0.0 0.0 0.0	.535E+01 .535E+01 0.	61 61 0	0 0 0	0 0 0	0 0 0	0 0 0	
	2/16/77	DDA	335 -36	370 -35	271 -36	FLT IN NOT	TOT CLR:	5 5 0	5 5 0	3 3 0	0 0 0	0.0 0.0 0.0	0.0 0.0 0.0	.642E+01 .642E+01 0.	37 37 0	0 0 0	0 0 0	0 0 0	0 0 0	
	2/19/77	DDA	311 -36	330 -34	259 -37	FLT IN NOT	TOT CLR:	5 5 0	5 5 0	3 3 0	0 0 0	0.0 0.0 0.0	0.0 0.0 0.0	0. 0. 0.	52 52 0	0 0 0	0 0 0	0 0 0	0 0 0	
	2/21/77	* DDA	336 -36	351 -35	282 -37	FLT IN NOT	TOT CLR:	5 3 2	5 3 2	2 1 1	0 0 0	20.3 0.0 50.8	3.2 0.0 8.0	.531E+05 0. .133E+06	93 111 75	0 0 0	0 0 0	0 0 0	0 0 0	
	6/ 2/79	BDB	313 -35	331 -35	249 -36	FLT IN NOT	TOT CLR:	5 5 0	5 5 0	2 2 0	0 0 0	0.0 0.0 0.0	0.0 0.0 0.0	.149E+03 .149E+03 0.	70 70 0	0 0 0	0 0 0	5 5 0	0 0 0	
	6/ 2/79	* BDB	373 -36	391 -35	328 -37	FLT IN NOT	TOT CLR:	6 6 0	6 6 0	3 3 0	3 3 0	1 1 0	0.0 0.0 0.0	0.0 0.0 0.0	.148E+03 .148E+03 0.	126 126 0	71 71 0	34 34 0	6 6 0	0 0 0
	8/ 9/76	* DDA	295 -36	334 -35	200 -37	FLT IN NOT	TOT CLR:	7 7 0	0 0 0	3 3 0	0 0 0	0.0 0.0 0.0	0.0 0.0 0.0	0. 0. 0.	108 108 0	0 0 0	0 0 0	7 7 0	0 0 0	
	8/11/76	DDA	289 -35	290 -34	282 -36	FLT IN NOT	TOT CLR:	5 5 0	0 0 0	2 2 0	0 0 0	0.0 0.0 0.0	0.0 0.0 0.0	0. 0. 0.	42 42 0	0 0 0	0 0 0	5 5 0	0 0 0	
	8/14/76	* DDA	339 -36	350 -35	293 -37	FLT IN NOT	TOT CLR:	5 5 0	0 0 0	3 3 0	0 0 0	0.0 0.0 0.0	0.0 0.0 0.0	0. 0. 0.	90 90 0	0 0 0	0 0 0	4 4 0	1 1 0	
	8/16/76	DDA	321 -35	370 -34	206 -36	FLT IN NOT	TOT CLR:	6 5 1	0 0 0	3 3 0	0 0 0	.7 0.0 4.3	.2 0.0 1.0	0. 0. 0.	94 94 0	0 0 0	0 0 0	4 3 1	2 2 0	
	8/24/76	DDA	300 -35	370 -34	219 -36	FLT IN NOT	TOT CLR:	9 8 0	0 0 0	4 4 0	0 0 0	0.0 0.0 0.0	0.0 0.0 0.0	0. 0. 0.	200 200 0	0 0 0	0 0 0	5 5 0	3 3 0	

APPENDIX B

DEP-ARR	IM/ID/IY	CODE	AVFL ALAT	EXHI EXTN	EXLO EXTS	NUMBER OF OBS					AVERAGES FOR THE FLIGHT			TRCP	STRAT					
						CLD	PD5	OZ	H2O	H2S	%TIC	PATCHES	PD5	OZ	RH	H2O	N	N		
MEL-SYD (CONT.)																				
8/31/76	DDA	344 -36	371 -35	297 -37	FLT IN NOT	TOT: CLR: CLR:	6 4 2	0 0 0	2 0 0	0 0 0	0 0 0	16.3 0.0 48.8	.7 0.0 2.0	0. 0. 0.	297 297 0	0 0 0	0 0 0	2 0 2	4 4 0	
11/30/76 *	DDA	341 -36	350 -35	295 -37	FLT IN NOT	TOT: CLR: CLR:	6 6 0	0 0 0	0 0 0	0 0 0	0 0 0	0.0 0.0 0.0	0.0 0.0 0.	0. 0. 0.	0 0 0	0 0 0	0 0 0	6 6 0	0 0 0	
11/14/78	BBB	295 -35	330 -34	189 -36	FLT IN NOT	TOT: CLR: CLR:	6 6 0	6 6 0	3 3 0	0 0 0	0 0 0	0.0 0.0 0.0	0.0 0.0 0.	0. 0. 0.	43 43 0	0 0 0	0 0 0	6 6 0	0 0 0	
11/14/78 *	BBB	287 -36	310 -35	225 -37	FLT IN NOT	TOT: CLR: CLR:	6 6 0	6 6 0	3 3 0	0 0 0	0 0 0	0.0 0.0 0.0	0.0 0.0 0.	0. 0. 0.	.107E+02 .107E+02 0	38 38 0	0 0 0	0 0 0	6 6 0	0 0 0
12/ 1/76	DDA	318 -35	370 -34	201 -37	FLT IN NOT	TOT: CLR: CLR:	6 6 0	0 0 0	0 0 0	0 0 0	0 0 0	0.0 0.0 0.0	0.0 0.0 0.	0. 0. 0.	0 0 0	0 0 0	0 0 0	6 6 0	0 0 0	
12/ 4/76 *	DDA	334 -36	350 -35	262 -37	FLT IN NOT	TOT: CLR: CLR:	8 8 0	0 0 0	0 0 0	0 0 0	0 0 0	0.0 0.0 0.0	0.0 0.0 0.	0. 0. 0.	0 0 0	0 0 0	0 0 0	8 8 0	0 0 0	
12/ 6/76	DDA	284 -35	330 -34	219 -36	FLT IN NOT	TOT: CLR: CLR:	6 6 0	0 0 0	0 0 0	0 0 0	0 0 0	0.0 0.0 0.0	0.0 0.0 0.	0. 0. 0.	0 0 0	0 0 0	0 0 0	6 6 0	0 0 0	
12/28/76 *	DDA	335 -36	351 -35	290 -37	FLT IN NOT	TOT: CLR: CLR:	7 7 0	0 0 0	0 0 0	0 0 0	0 0 0	0.0 0.0 0.0	0.0 0.0 0.	0. 0. 0.	0 0 0	0 0 0	0 0 0	7 7 0	0 0 0	
12/30/76 *	DDA	328 -36	350 -35	242 -37	FLT IN NOT	TOT: CLR: CLR:	7 5 2	0 0 0	0 0 0	0 0 0	0 0 0	1.1 0.0 3.7	.3 0.0 1.0	0. 0. 0.	0 0 0	0 0 0	0 0 0	7 5 2	0 0 0	
12/31/76	DDA	301 -35	330 -34	190 -36	FLT IN NOT	TOT: CLR: CLR:	6 6 0	0 0 0	0 0 0	0 0 0	0 0 0	0.0 0.0 0.0	0.0 0.0 0.	0. 0. 0.	0 0 0	0 0 0	0 0 0	6 6 0	0 0 0	
12/16/77	BCB	289 -36	293 -35	281 -36	FLT IN NOT	TOT: CLR: CLR:	5 4 1	5 4 1	2 2 0	0 0 0	0 0 0	.4 0.0 2.0	0.0 0.0 0.0	.493E+03 .160E+02 .240E+04	32 32 0	0 0 0	0 0 0	5 4 1	0 0 0	
12/16/77 *	BCB	358 -36	390 -35	290 -37	FLT IN NOT	TOT: CLR: CLR:	7 6 1	7 6 1	3 2 1	0 0 0	0 0 0	1.7 0.0 11.8	0.0 0.0 0.0	.454E+01 .530E+01 0.	150 155 139	0 0 0	0 0 0	7 6 1	0 0 0	

DEP-ARR	IM/ID/IY	CODE	AVFL ALAT	EXHI EXTN	EXLO EXTS	NUMBER OF OBS					AVERAGES FOR THE FLIGHT			RH	H2O	TROP N	STRAT N		
						CLD	PD5	OZ	H2O, H2S	%TIC	PATCHES	PD5	OZ						
MNL-SYD																			
	1/ 1/77	DDA	347 -10	396 12	221 -33	FLT	TOT:	76	0	0	0	0	22.1	2.0	0.	0	0	76	
						IN	CLR:	36	0	0	0	0	0.0	0.0	0.	0	0	36	
						NOT	CLR:	40	0	0	0	0	42.0	3.8	0.	0	0	40	
	1/ 1/77 *	DDA	340 -11	351 12	253 -33	FLT	TOT:	75	0	0	0	0	25.7	2.1	0.	0	0	75	
						IN	CLR:	29	0	0	0	0	0.0	0.0	0.	0	0	29	
						NOT	CLR:	46	0	0	0	0	41.8	3.4	0.	0	0	46	
	1/ 4/77 *	DDA	337 -11	351 12	257 -33	FLT	TOT:	72	0	0	0	0	0.0	0.0	0.	0	0	72	
						IN	CLR:	72	0	0	0	0	0.0	0.0	0.	0	0	72	
						NOT	CLR:	0	0	0	0	0	0.0	0.0	0.	0	0	0	
	1/ 4/77	DDA	343 -9	370 12	190 -33	FLT	TOT:	78	0	0	0	0	17.3	1.1	0.	0	0	78	
						IN	CLR:	53	0	0	0	0	0.0	0.0	0.	0	0	53	
						NOT	CLR:	25	0	0	0	0	54.1	3.5	0.	0	0	25	
	8/17/76 *	DDA	334 -10	351 12	256 -33	FLT	TOT:	79	0	51	0	0	10.6	1.2	0.	29	0	79	
						IN	CLR:	57	0	36	0	0	0.0	0.0	0.	33	0	57	
						NOT	CLR:	22	0	15	0	0	37.9	4.2	0.	18	0	22	
	8/17/76	DDA	347 -10	370 12	255 -33	FLT	TOT:	77	0	52	0	0	7.1	.5	0.	32	0	77	
						IN	CLR:	61	0	44	0	0	0.0	0.0	0.	35	0	61	
						NOT	CLR:	16	0	8	0	0	34.0	2.3	0.	18	0	16	
MRU-PER																			
	1/27/77 *	DDA	266 -23	267 -21	266 -25	FLT	TOT:	14	14	9	0	0	0.0	0.0	.872E+01	76	0	0	14
						IN	CLR:	14	14	9	0	0	0.0	0.0	.872E+01	76	0	0	14
						NOT	CLR:	0	0	0	0	0	0.0	0.0	0.	0	0	0	0
	1/28/77	DDA	314 -28	321 -21	245 -32	FLT	TOT:	65	65	38	0	0	1.3	.0	.301E+03	69	0	0	65
						IN	CLR:	61	61	36	0	0	0.0	0.0	.103E+02	71	0	0	61
						NOT	CLR:	4	4	2	0	0	20.9	.8	.473E+04	49	0	0	4
	2/ 4/77	DDA	344 -28	370 -21	239 -32	FLT	TOT:	68	68	4	0	0	3.5	3.	.159E+05	70	0	0	68
						IN	CLR:	62	62	4	0	0	0.0	0.0	.621E+01	70	0	0	62
						NOT	CLR:	6	6	0	0	0	39.3	3.0	.180E+06	0	0	0	6
	2/17/77 *	DDA	331 -28	361 -21	227 -32	FLT	TOT:	69	69	46	0	0	0.0	0.0	.630E+01	53	0	0	0
						IN	CLR:	69	69	46	0	0	0.0	0.0	.630E+01	53	0	0	0
						NOT	CLR:	0	0	0	0	0	0.0	0.0	0.	0	0	0	0
	2/18/77	DDA	360 -28	380 -21	218 -32	FLT	TOT:	67	67	43	0	0	0.0	0.0	.429E+01	50	0	0	0
						IN	CLR:	67	67	43	0	0	0.0	0.0	.429E+01	50	0	0	0
						NOT	CLR:	0	0	0	0	0	0.0	0.0	0.	0	0	0	0

APPENDIX B

DEP-ARR IM/ID/IY	CODE	AVFL ALAT	EXHI EXTN	EXLO EXTS	NUMBER OF OBS					AVERAGES FOR THE FLIGHT			OZ	RH	H2O	TROP IN	STRAT N		
					CLD	PD3	OZ	H2O	H2S	%TIC	PATCHES	PD5							
MUC-SNN																			
11/30/78	BBB	342 52	349 54	264 50	FLT IN NOT	TOT CLR CLR	18 16 2	18 16 2	10 9 1	7 6 1	1 0 1	3.5 0.0 31.6	.3 0.0 2.5	.493E+05 .414E+01 .444E+06	145 147 130	50 42 100	15 12 32	3 1 2	15 15 0
NAN-SYD																			
1/ 5/77 *	DDA	324 -26	330 -19	239 -33	FLT IN NOT	TOT CLR CLR	35 34 1	0 0 0	0 0 0	0 0 0	0 0 0	.0 0.0 .4	.0 0.0 1.0	0. 0. 0.	0 0 0	0 0 0	0 0 0	35 34 1	0 0 0
1/ 6/77	DDA	346 -27	350 -19	266 -33	FLT IN NOT	TOT CLR CLR	38 31 7	0 0 0	0 0 0	0 0 0	0 0 0	14.6 0.0 79.3	1.1 0.0 6.0	0. 0. 0.	0 0 0	0 0 0	0 0 0	38 31 7	0 0 0
2/11/77 *	DDA	326 -27	330 -19	250 -33	FLT IN NOT	TOT CLR CLR	29 23 6	29 23 6	17 14 3	0 0 0	0 0 0	12.9 0.0 62.5	1.6 0.0 7.5	.323E+05 .411E+02 .156E+06	53 62 12	0 0 0	0 0 0	29 23 6	0 0 0
2/12/77	DDA	345 -27	350 -20	235 -34	FLT IN NOT	TOT CLR CLR	34 25 9	34 25 9	23 19 5	0 0 0	0 0 0	4.0 0.0 15.0	.6 0.0 3.0	.545E+04 .909E+01 .206E+05	43 48 26	0 0 0	0 0 0	34 25 9	0 0 0
2/19/77 *	DDA	324 -26	331 -19	218 -33	FLT IN NOT	TOT CLR CLR	35 30 5	35 30 5	23 20 3	0 0 0	0 0 0	3.0 0.0 21.2	.8 0.0 5.8	.450E+04 .172E+02 .314E+05	68 75 17	0 0 0	0 0 0	0 0 0	0 0 0
2/20/77	DDA	325 -27	351 -19	213 -34	FLT IN NOT	TOT CLR CLR	41 19 22	41 19 22	24 10 14	0 0 0	0 0 0	22.3 0.0 41.5	2.9 0.0 5.3	.202E+06 .511E+01 .377E+06	34 40 29	0 0 0	0 0 0	0 0 0	0 0 0
6/ 1/79	BDB	348 -27	351 -20	289 -34	FLT IN NOT	TOT CLR CLR	41 41 0	41 41 0	25 25 0	21 21 0	0 0 0	0.0 0.0 0.0	0.0 0.0 0.0	.318E+02 .318E+02 0.	70 70 0	23 23 0	40 40 0	41 41 0	0 0 0
6/ 2/79 *	BDB	364 -27	371 -19	288 -34	FLT IN NOT	TOT CLR CLR	36 36 0	36 36 0	22 22 0	16 16 0	1 1 0	0.0 0.0 0.0	0.0 0.0 0.0	.614E+03 .614E+03 0.	58 58 0	41 41 0	59 59 0	36 36 0	0 0 0
11/19/76	DDA	361 -27	390 -19	262 -33	FLT IN NOT	TOT CLR CLR	45 45 0	0 0 0	0 0 0	0 0 0	0 0 0	0.0 0.0 0.0	0.0 0.0 0.0	0. 0. 0.	0 0 0	0 0 0	0 0 0	44 44 0	1 1 0
11/26/76 *	DDA	302 -26	330 -19	255 -33	FLT IN NOT	TOT CLR CLR	31 15 16	0 0 0	0 0 0	0 0 0	0 0 0	37.5 0.0 72.7	3.1 0.0 5.9	0. 0. 0.	0 0 0	0 0 0	0 0 0	31 15 16	0 0 0
11/27/76	DDA	341 -27	350 -19	269 -33	FLT IN NOT	TOT CLR CLR	40 32 8	0 0 0	0 0 0	0 0 0	0 0 0	11.8 0.0 59.1	1.1 0.0 5.3	0. 0. 0.	0 0 0	0 0 0	0 0 0	40 32 8	0 0 0

DEP-ARR	IM/ID/IY	CODE	AVFL ALAT	EXHI EXTN	EXLO EXTS			NUMBER OF OBS					AVERAGES FOR THE FLIGHT			TROP			STRAT		
								CLD	PD5	OZ	H20	H2S	%TIC	PATCHES	PD5	OZ	RH	H2O	N	N	
	11/14/78	* BBB	326 -27	330 -19	255 -33	FLT IN NOT	TOT: CLR: CLR:	34 31 3	34 31 3	21 19 2	16 13 3	3 1 2	2.1 0.0 23.9	.4 0.0 4.0	.856E+03 .165E+02 .953E+04	86 90 50	48 40 84	93 72 185	34 31 3	0 0 0	
	12/ 2/76	* DDA	322 -26	330 -19	201 -33	FLT IN NOT	TOT: CLR: CLR:	33 25 8	0 0 0	0 0 0	0 0 0	0 0 0	3.2 0.0 13.3	1.1 0.0 4.4	0. 0. 0.	0 0 0	0 0 0	0 0 0	33 25 8	0 0 0	
	12/ 3/76	DDA	309 -27	311 -19	267 -34	FLT IN NOT	TOT: CLR: CLR:	35 30 5	0 0 0	0 0 0	0 0 0	0 0 0	6.4 0.0 44.5	.8 0.0 5.4	0. 0. 0.	0 0 0	0 0 0	0 0 0	35 30 5	0 0 0	
	12/13/76	* DDA	287 -26	290 -19	218 -33	FLT IN NOT	TOT: CLR: CLR:	36 35 1	0 0 0	0 0 0	0 0 0	0 0 0	.2 0.0 7.5	.0 0.0 1.0	0. 0. 0.	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	
	12/14/76	DDA	344 -28	350 -19	208 -34	FLT IN NOT	TOT: CLR: CLR:	41 40 1	0 0 0	0 0 0	0 0 0	0 0 0	.0 0.0 2.0	.0 0.0 1.0	0. 0. 0.	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	
	12/15/76	* DDA	319 -27	330 -19	245 -33	FLT IN NOT	TOT: CLR: CLR:	32 26 6	0 0 0	0 0 0	0 0 0	0 0 0	8.2 0.0 43.5	.7 0.0 3.8	0. 0. 0.	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	
	12/16/76	DDA	308 -27	310 -19	254 -34	FLT IN NOT	TOT: CLR: CLR:	41 32 9	0 0 0	0 0 0	0 0 0	0 0 0	8.7 0.0 39.5	.7 0.0 3.3	0. 0. 0.	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	
	12/23/76	* DDA	324 -27	330 -19	251 -33	FLT IN NOT	TOT: CLR: CLR:	33 5 28	0 0 0	0 0 0	0 0 0	0 0 0	63.0 0.0 74.3	4.1 0.0 4.8	0. 0. 0.	0 0 0	0 0 0	0 0 0	33 5 28	0 0 0	
	12/24/76	DDA	374 -27	390 -19	278 -33	FLT IN NOT	TOT: CLR: CLR:	39 22 17	0 0 0	0 0 0	0 0 0	0 0 0	19.0 0.0 43.6	2.1 0.0 4.8	0. 0. 0.	0 0 0	0 0 0	0 0 0	39 22 17	0 0 0	
	12/25/76	* DDA	323 -27	330 -19	214 -33	FLT IN NOT	TOT: CLR: CLR:	34 16 18	0 0 0	0 0 0	0 0 0	0 0 0	23.9 0.0 45.1	2.5 0.0 4.7	0. 0. 0.	0 0 0	0 0 0	0 0 0	34 16 16	0 0 0	
	12/26/76	DDA	370 -27	390 -19	271 -34	FLT IN NOT	TOT: CLR: CLR:	41 35 6	0 0 0	0 0 0	0 0 0	0 0 0	7.5 0.0 50.9	.2 0.0 1.7	0. 0. 0.	0 0 0	0 0 0	0 0 0	41 35 6	0 0 0	
	12/15/77	BCB	346 -27	351 -19	264 -34	FLT IN NOT	TOT: CLR: CLR:	41 32 9	41 32 9	26 19 7	0 0 0	0 0 0	3.2 0.0 14.7	0.0 0.0 0.0	.177E+05 .408E+02 .807E+05	67 53 77	0 0 0	0 0 0	0 0 0	41 32 9	0 0 0
	12/16/77	* BCB	344 -27	365 -19	250 -33	FLT IN NOT	TOT: CLR: CLR:	33 27 6	33 27 6	21 18 3	0 0 0	0 0 0	2.4 0.0 12.9	0.0 0.0 0.0	.182E+04 .116E+03 .947E+04	71 72 62	0 0 0	0 0 0	0 0 0	33 27 6	0 0 0

APPENDIX B

DEP-ARR	M/1D/1Y	CODE	AVFL ALAT	EXHI EXTN	EXLO EXTS	NUMBER OF OBS					AVERAGES FOR THE FLIGHT			TROP			STRAT N				
						CLD	PD5	OZ	H2O	H2S	%TIC	PATCHES	PD5	OZ	RH	H2O		N			
NOU-SYD																					
8/25/76	*	DDA	321 -29	330 -23	220 -34	FLT	TOT:	21	0	13	0	0	.4	.5	0.	87	0	0	21	0	
						IN	CLR:	18	0	11	0	0	0.0	0.0	0.	96	0	0	18	0	
						NOT	CLR:	3	0	2	0	0	2.5	3.3	0.	33	0	0	3	0	
8/25/76		DDA	324 -29	350 -23	252 -34	FLT	TOT:	26	0	16	0	0	2.1	.4	0.	67	0	0	26	0	
						IN	CLR:	23	0	14	0	0	0.0	0.0	0.	71	0	0	23	0	
						NOT	CLR:	3	0	2	0	0	17.8	3.3	0.	42	0	0	3	0	
NRT-SFO																					
1/ 1/78	*	BCB	326 48	331 54	223 36	FLT	TOT:	104	82	70	57	10	11.1	.6	0.	.167E+05	189	47	45	22	0
						IN	CLR:	75	68	51	39	1	0.0	0.0	0.	.242E+02	241	26	33	7	0
						NOT	CLR:	29	14	19	18	9	39.7	2.0	0.	.980E+05	47	93	70	15	0
2/20/79	*	BBB	348 49	351 55	281 36	FLT	TOT:	111	0	73	59	1	3.2	.2	0.	339	21	23	15	96	
						IN	CLR:	104	0	69	58	0	0.0	0.0	0.	355	20	23	9	95	
						NOT	CLR:	7	0	4	1	1	50.6	3.0	0.	59	100	29	6	1	
3/13/79	*	BBB	342 49	351 55	288 36	FLT	TOT:	111	0	72	62	4	3.5	.2	0.	359	34	37	36	75	
						IN	CLR:	97	0	63	58	4	0.0	0.0	0.	398	31	38	22	75	
						NOT	CLR:	14	0	9	4	0	27.4	1.6	0.	79	80	33	14	0	
10/13/78	*	BBB	347 47	371 55	209 36	FLT	TOT:	110	110	71	0	0	3.8	.3	0.	.641E+04	181	0	0	42	68
						IN	CLR:	99	99	63	0	0	0.0	0.0	0.	.195E+02	197	0	0	32	67
						NOT	CLR:	11	11	8	0	0	37.6	3.0	0.	.640E+05	52	0	0	10	1
10/24/78	*	BBB	348 47	391 54	218 36	FLT	TOT:	112	112	71	59	1	1.6	.3	0.	.712E+04	172	29	30	47	64
						IN	CLR:	104	104	66	58	0	0.0	0.0	0.	.236E+02	182	28	28	39	64
						NOT	CLR:	8	8	5	1	1	22.4	4.8	0.	.994E+05	35	100	188	8	0
11/ 5/78	*	BBB	331 50	350 58	252 36	FLT	TOT:	115	115	77	62	6	5.3	.4	0.	.133E+05	153	41	83	38	77
						IN	CLR:	100	100	67	52	0	0.0	0.0	0.	.811E+02	171	31	47	24	76
						NOT	CLR:	15	15	10	10	6	40.7	3.4	0.	.101E+06	29	91	268	14	1
ORD-PIT																					
5/ 1/76		CAA	296 42	332 42	218 41	FLT	TOT:	6	0	3	5	3	4.1	.7	0.	101	93	216	6	0	
						IN	CLR:	3	0	2	3	1	0.0	0.0	0.	93	89	271	3	0	
						NOT	CLR:	3	0	1	2	2	8.2	1.3	0.	116	100	135	3	0	
5/ 1/76	*	CAA	288 41	332 41	189 41	FLT	TOT:	8	0	5	5	3	8.9	1.0	0.	128	89	265	8	0	
						IN	CLR:	4	0	4	3	2	0.0	0.0	0.	136	87	81	4	0	
						NOT	CLR:	4	0	1	2	1	17.8	2.0	0.	86	92	541	4	0	
5/ 3/76		CAA	301 42	331 42	223 41	FLT	TOT:	6	0	3	5	1	0.0	0.0	0.	355	36	68	3	3	
						IN	CLR:	6	0	3	5	1	0.0	0.0	0.	355	38	68	3	3	
						NOT	CLR:	0	0	0	0	0	0.0	0.0	0.	0	0	0	0	0	

DEP-ARR IM/ID/IY	CODE	AVFL ALAT	EXHI EXTN	EXLO EXTS	NUMBER OF OBS					AVERAGES FOR THE FLIGHT			OZ	RH	H2O	TROP N	STRAT N					
					CLD	PD5	OZ	H2O	H2S	%TIC	PATCHES	PD5										
ORD-PIT (CONT.)																						
5/ 3/76 * CAA	323 41	391 41	200 41	FLT TOT:	8	0	4	6	1	0.0	0.0	0.	479	30	66	3	5					
				IN CLR:	8	0	4	6	1	0.0	0.0	0.						479	30	66	3	5
				NOT CLR:	0	0	0	0	0	0.0	0.0	0.						0	0	0	0	0
5/ 4/76 CAA	294 41	330 42	219 41	FLT TOT:	7	0	4	0	0	0.0	0.0	0.	52	0	0	7	0					
				IN CLR:	7	0	4	0	0	0.0	0.0	0.						52	0	0	7	0
				NOT CLR:	0	0	0	0	0	0.0	0.0	0.						0	0	0	0	0
5/ 4/76 * CAA	293 41	311 41	223 41	FLT TOT:	8	0	5	0	0	11.8	.4	0.	77	0	0	8	0					
				IN CLR:	5	0	4	0	0	0.0	0.0	0.						76	0	0	5	0
				NOT CLR:	3	0	1	0	0	31.4	1.0	0.						78	0	0	3	0
ORD-SEA																						
2/13/79 * CAB	393 46	412 47	205 43	FLT TOT:	26	26	17	15	3	5.7	.3	.652E+04	116	69	126	8	18					
				IN CLR:	24	24	16	14	3	0.0	0.0	.253E+02						119	70	77	6	18
				NOT CLR:	2	2	1	1	0	73.7	3.5	.845E+05						61	63	808	2	0
4/28/76 CAA	382 46	390 48	217 42	FLT TOT:	25	0	25	25	6	0.0	0.0	0.	457	50	31	9	16					
				IN CLR:	25	0	25	25	6	0.0	0.0	0.						457	50	31	9	16
				NOT CLR:	0	0	0	0	0	0.0	0.0	0.						0	0	0	0	0
4/29/76 * CAA	380 45	410 .47.	201 43	FLT TOT:	21	0	21	21	3	0.0	0.0	0.	498	38	67	5	16					
				IN CLR:	21	0	21	21	3	0.0	0.0	0.						498	38	67	5	16
				NOT CLR:	0	0	0	0	0	0.0	0.0	0.						0	0	0	0	0
ORD-SFO																						
1/24/76 * CAA	362 41	370 42	212 39	FLT TOT:	19	0	19	19	0	.2	.2	0.	287	21	34	1	18					
				IN CLR:	18	0	18	18	0	0.0	0.0	0.						301	13	17	0	18
				NOT CLR:	1	0	1	1	0	4.3	3.0	0.						45	78	341	1	0
1/28/76 * CAA	356 42	411 43	213 38	FLT TOT:	27	0	27	24	15	5.0	.5	0.	78	74	31	22	5					
				IN CLR:	21	0	21	18	9	0.0	0.0	0.						93	65	33	16	5
				NOT CLR:	6	0	6	6	6	22.5	2.3	0.						10	100	25	6	0
4/ 1/76 CAA	342 41	351 43	210 36	FLT TOT:	28	0	28	0	0	1.6	.2	0.	150	0	0	20	8					
				IN CLR:	26	0	26	0	0	0.0	0.0	0.						156	0	0	18	8
				NOT CLR:	2	0	2	0	0	22.0	3.0	0.						79	0	0	2	0
4/14/76 CAA	380 41	390 42	217 38	FLT TOT:	25	0	25	25	11	15.7	.9	0.	335	61	78	12	13					
				IN CLR:	19	0	19	19	6	0.0	0.0	0.						399	50	93	6	13
				NOT CLR:	6	0	6	6	5	65.4	3.8	0.						133	95	30	6	0
4/15/76 * CAA	359 41	390 42	214 38	FLT TOT:	20	0	20	20	1	9.5	.6	0.	360	36	68	10	10					
				IN CLR:	15	0	15	15	0	0.0	0.0	0.						455	22	27	5	10
				NOT CLR:	5	0	5	5	1	38.1	2.2	0.						77	81	189	5	0

APPENDIX B

DEP-ARR	IM/1D/1Y	CODE	AVFL ALAT	EXHI EXTN	EXLO EXTS	NUMBER OF OBS					AVERAGES FOR THE FLIGHT			TROP			STRAT			
						CLD	PD5	OZ	H20	H2S	%TIC	PATCHES	PD5	OZ	RH	H2O	N	N		
ORD-SFO (CONT.)																				
4/28/76	*	CAA	368 41	410 42	204 38	FLT IN NOT	TOT CLR CLR	22 17 5	0 0 0	22 17 5	22 17 5	14 9 5	8.4 0.0 37.1	.4 0.0 1.6	0. 0. 0.	156 170 108	90 88 100	78 91 33	14 9 5	8 8 0
6/25/78	*	CAB	368 39	371 41	313 38	FLT IN NOT	TOT CLR CLR	38 38 0	38 38 0	24 22 0	22 22 0	0 0 0	0.0 0.0 0.0	0.0 0.0 0.0	.743E+02 .743E+02 0.	106 106 0	14 14 0	17 17 0	38 38 0	0 0 0
6/26/78		CAB	379 41	391 42	307 38	FLT IN NOT	TOT CLR CLR	39 39 0	39 39 0	25 22 0	22 22 0	12 12 0	0.0 0.0 0.0	0.0 0.0 0.0	.396E+02 .396E+02 0.	216 216 0	85 85 0	119 119 0	27 27 0	12 12 0
7/11/78	*	CAB	377 41	410 43	234 38	FLT IN NOT	TOT CLR CLR	33 31 2	33 31 2	20 19 1	16 15 1	1 1 0	.2 0.0 2.9	.1 0.0 2.0	.183E+04 .252E+02 .299E+05	63 64 45	11 12 4	21 23 5	33 31 2	0 0 0
7/12/78		CAB	375 41	391 43	293 38	FLT IN NOT	TOT CLR CLR	37 32 5	37 32 5	24 22 2	20 18 2	1 0 1	5.0 0.0 37.3	.3 0.0 2.2	.149E+05 .165E+03 .109E+06	60 59 79	28 21 85	44 27 204	37 32 5	0 0 0
ORD-YYZ																				
2/ 9/79	*	CAB	309 43	350 43	230 42	FLT IN NOT	TOT CLR CLR	6 6 0	6 6 0	3 3 0	1 1 0	1 1 0	0.0 0.0 0.0	0.0 0.0 0.0	.356E+03 .356E+03 0.	219 219 0	100 100 0	327 327 0	2 2 0	4 4 0
3/ 5/76		CAA	241 43	332 43	214 42	FLT IN NOT	TOT CLR CLR	14 3 11	0 0 0	14 3 11	3 3 0	2 2 0	74.2 0.0 94.4	.4 0.0 .5	0. 0. 0.	41 67 34	84 84 0	232 232 0	14 3 11	0 0 0
3/ 5/76	*	CAA	334 43	390 44	215 42	FLT IN NOT	TOT CLR CLR	5 5 0	0 0 0	5 5 0	5 5 0	2 2 0	0.0 0.0 0.0	0.0 0.0 0.0	0. 0. 0.	212 212 0	56 56 0	208 208 0	3 3 0	2 2 0
PER-SYD																				
1/ 7/77	*	DDA	345 -33	351 -32	261 -34	FLT IN NOT	TOT CLR CLR	39 33 6	0 0 0	0 0 0	0 0 0	0 0 0	7.0 0.0 45.8	.6 0.0 3.7	0. 0. 0.	0 0 0	0 0 0	0 0 0	39 33 6	0 0 0
1/ 9/77		DDA	364 -34	370 -33	275 -35	FLT IN NOT	TOT CLR CLR	37 36 1	0 0 0	0 0 0	0 0 0	0 0 0	.1 0.0 4.7	.0 0.0 1.0	0. 0. 0.	0 0 0	0 0 0	0 0 0	37 36 1	0 0 0
1/25/77		DDA	356 -34	371 -33	199 -35	FLT IN NOT	TOT CLR CLR	36 36 0	36 36 0	18 18 0	0 0 0	0 0 0	0.0 0.0 0.0	0.0 0.0 0.0	.720E+01 .720E+01 0.	129 129 0	0 0 0	0 0 0	36 36 0	0 0 0

DEP-ARR	IM/ID/IY	CODE	AVFL ALAT	EXHI EXTN	EXLO EXTS	NUMBER OF OBS					AVERAGES FOR THE FLIGHT			ØZ	RH	H2Ø	TROP N	STRAT N		
						CLD	PD5	ØZ	H2Ø, H2S	%TIC	PATCHES	PD5								
PER-SYD (CONT.)																				
8/ 3/76	*	DDA	347 -33	351 -32	270 -34	FLT	TØT:	43	0	28	0	0	.6	.3	0.	79	0	0	38	5
						IN	CLR:	41	0	26	0	0	0.0	0.0	0.	82	0	0	36	5
						NOT	CLR:	2	0	2	0	0	13.5	5.5	0.	45	0	0	2	0
8/ 5/76		DDA	360 -34	370 -33	274 -35	FLT	TØT:	30	0	20	0	0	0.0	0.0	0.	162	0	0	8	22
						IN	CLR:	30	0	20	0	0	0.0	0.0	0.	162	0	0	8	22
						NOT	CLR:	0	0	0	0	0	0.0	0.0	0.	0	0	0	0	0
8/ 6/76	*	DDA	354 -33	390 -32	260 -34	FLT	TØT:	47	0	30	0	0	.4	.1	0.	120	0	0	32	15
						IN	CLR:	46	0	29	0	0	0.0	0.0	0.	122	0	0	31	15
						NOT	CLR:	1	0	1	0	0	18.8	4.0	0.	70	0	0	1	0
8/ 8/76		DDA	362 -34	370 -33	268 -35	FLT	TØT:	32	0	20	0	0	0.0	0.0	0.	86	0	0	24	8
						IN	CLR:	32	0	20	0	0	0.0	0.0	0.	86	0	0	24	8
						NOT	CLR:	0	0	0	0	0	0.0	0.0	0.	0	0	0	0	0
11/23/76		DDA	345 -34	370 -33	210 -35	FLT	TØT:	37	0	0	0	0	.0	.0	0.	0	0	0	37	0
						IN	CLR:	36	0	0	0	0	0.0	0.0	0.	0	0	0	36	0
						NOT	CLR:	1	0	0	0	0	.8	1.0	0.	0	0	0	1	0
12/ 9/76	*	DDA	353 -33	370 -32	260 -34	FLT	TØT:	48	0	0	0	0	0.0	0.0	0.	0	0	0	48	0
						IN	CLR:	48	0	0	0	0	0.0	0.0	0.	0	0	0	48	0
						NOT	CLR:	0	0	0	0	0	0.0	0.0	0.	0	0	0	0	0
12/11/76		DDA	347 -34	370 -33	241 -35	FLT	TØT:	33	0	0	0	0	0.0	0.0	0.	0	0	0	33	0
						IN	CLR:	33	0	0	0	0	0.0	0.0	0.	0	0	0	33	0
						NOT	CLR:	0	0	0	0	0	0.0	0.0	0.	0	0	0	0	0
PPG-PPT																				
3/29/77	*	AAA	416 -16	431 -14	218 -17	FLT	TØT:	25	25	0	21	16	16.4	1.0	.554E+05	0	95	123	0	0
						IN	CLR:	16	16	0	13	8	0.0	0.0	.354E+02	0	92	188	0	0
						NOT	CLR:	9	9	0	8	8	45.5	2.9	.154E+C6	C	100	19	0	0
3/29/77		AAA	416 -16	431 -15	327 -17	FLT	TØT:	25	25	0	22	21	24.8	1.3	.780E+05	0	98	35	0	0
						IN	CLR:	12	12	0	10	9	0.0	0.0	.104E+04	0	95	38	0	0
						NOT	CLR:	13	13	0	12	12	47.7	2.5	.149E+06	0	100	32	0	0
5/ 3/77		AAA	398 -16	410 -15	265 -17	FLT	TØT:	27	27	16	0	0	.4	.1	.165E+05	28	0	0	27	0
						IN	CLR:	24	24	14	0	0	0.0	0.0	0.	29	0	0	24	0
						NOT	CLR:	3	3	2	0	0	3.9	1.0	.148E+06	22	0	0	3	0
5/ 3/77	*	AAA	423 -16	430 -15	255 -17	FLT	TØT:	28	28	18	0	0	1.6	.3	.384E+03	35	0	0	28	0
						IN	CLR:	23	23	15	0	0	0.0	0.0	0.	35	0	0	23	0
						NOT	CLR:	5	5	3	0	0	8.8	1.8	.215E+C4	36	0	0	5	0
5/10/77		AAA	400 -16	410 -15	244 -17	FLT	TØT:	20	20	13	0	0	5.1	.9	.121E+05	29	0	0	20	0
						IN	CLR:	13	13	8	0	0	0.0	0.0	.104E+02	30	0	0	13	0
						NOT	CLR:	7	7	5	0	0	14.5	2.4	.344E+05	28	0	0	7	0

APPENDIX B

DEP-ARR IM/ID/IY	CODE	AVFL ALAT	EXHI EXTN	EXLO EXTS	NUMBER OF OBS					AVERAGES FOR THE FLIGHT			ØZ	RH	H2O	TROP N	STRAT N		
					CLD	PD5	ØZ	H2O, H2S	ØZ	ØZ	ØZ	ØZ						ØZ	
5/10/77	* AAA	421 -16	430 -15	299 -17	FLT IN NOT	TOT: CLR: CLR:	30 18 12	30 18 12	16 11 5	0 0 0	0 0 0	15.2 0.0 37.9	1.1 0.0 2.7	.444E+05 .129E+03 .111E+06	39 39 39	0 0 0	0 0 0	30 18 12	0 0 0
5/17/77	AAA	410 -16	410 -15	410 -17	FLT IN NOT	TOT: CLR: CLR:	5 2 3	5 2 3	0 0 0	0 0 0	0 0 0	1.0 0.0 1.7	.8 0.0 1.3	.788E+02 0. .131E+03	0 0 0	0 0 0	0 0 0	5 2 3	0 0 0
5/17/77	* AAA	416 -16	430 -15	278 -17	FLT IN NOT	TOT: CLR: CLR:	11 10 1	11 10 1	7 7 0	0 0 0	0 0 0	.1 0.0 1.6	.1 0.0 1.0	.552E+03 .607E+03 0.	67 67 0	0 0 0	0 0 0	11 10 1	0 0 0
5/14/79	* BDB	385 -16	398 -15	264 -17	FLT IN NOT	TOT: CLR: CLR:	26 8 18	26 8 18	0 0 0	6 4 2	1 0 1	29.3 0.0 42.3	4.7 0.0 6.7	.170E+07 .512E+04 .245E+07	0 0 0	76 69 91	61 54 76	26 8 18	0 0 0
5/26/79	BDB	321 -16	331 -15	195 -18	FLT IN NOT	TOT: CLR: CLR:	26 25 1	26 25 1	17 17 0	15 15 0	0 0 0	.3 0.0 9.0	.1 0.0 2.0	.627E+03 .403E+02 .153E+05	31 31 0	33 33 0	162 162 0	26 25 1	0 0 0
10/23/78	* BBB	382 -16	390 -15	287 -17	FLT IN NOT	TOT: CLR: CLR:	27 18 9	27 13 9	0 0 0	0 0 0	0 0 0	19.0 0.0 57.0	1.0 0.0 3.0	.393E+05 .140E+04 .115E+06	0 0 0	0 0 0	0 0 0	27 18 9	0 0 0
11/ 4/78	BBB	321 -16	331 -15	214 -17	FLT IN NOT	TOT: CLR: CLR:	21 20 1	21 20 1	16 15 1	14 13 1	3 2 1	.6 0.0 11.3	.1 0.0 3.0	.394E+02 .350E+02 .126E+03	32 32 24	60 57 100	394 401 306	21 20 1	0 0 0
12/14/76	* AAA	419 -16	430 -15	238 -17	FLT IN NOT	TOT: CLR: CLR:	30 19 11	0 0 0	19 12 7	14 6 8	11 5 6	13.5 0.0 36.9	1.1 0.0 3.1	0. 0. 0.	22 23 20	96 98 95	199 435 21	30 19 11	0 0 0
12/14/76	AAA	402 -16	410 -15	304 -17	FLT IN NOT	TOT: CLR: CLR:	25 16 9	0 0 0	16 10 5	0 0 0	0 0 0	11.7 0.0 32.5	1.1 0.0 3.0	0. 0. 0.	24 24 23	0 0 0	0 0 0	25 16 9	0 0 0
12/21/76	AAA	400 -16	410 -15	297 -17	FLT IN NOT	TOT: CLR: CLR:	25 12 13	0 0 0	16 8 8	20 10 10	14 4 10	31.5 0.0 60.6	1.3 0.0 2.5	0. 0. 0.	59 68 50	94 89 100	63 96 31	25 12 13	0 0 0
12/21/76	* AAA	427 -16	430 -15	347 -17	FLT IN NOT	TOT: CLR: CLR:	27 11 16	0 0 0	17 6 9	0 0 0	0 0 0	20.0 0.0 33.7	1.2 0.0 2.1	0. 0. 0.	67 70 64	0 0 0	0 0 0	27 11 16	0 0 0
12/28/76	* AAA	424 -16	430 -15	330 -17	FLT IN NOT	TOT: CLR: CLR:	29 7 22	0 0 0	19 5 14	0 0 0	0 0 0	35.3 0.0 46.6	1.6 0.0 2.0	0. 0. 0.	37 43 35	0 0 0	0 0 0	29 7 22	0 0 0
12/28/76	AAA	418 -16	430 -15	304 -17	FLT IN NOT	TOT: CLR: CLR:	25 1 24	0 0 0	17 1 16	0 0 0	0 0 0	48.8 0.0 50.8	1.3 0.0 1.3	0. 0. 0.	45 36 45	0 0 0	0 0 0	25 1 24	0 0 0

APPENDIX B

PPG-PPT (CONT.)

DEP-ARR IM/ID/IY	CODE	AVFL ALAT	EXHI EXTN	EXLO EXTS	NUMBER OF OBS					AVERAGES FOR THE FLIGHT				TRCP N	STRAT N		
					CLD	PD5	OZ	H2O	H2S	%TIC	PATCHES	PD5	OZ			RH	H2O
PPG-PPT (CONT.)																	
12/12/77 * BCB	380 -16	391 -15	272 -17	FLT TOT:	29	29	17	0	0	0.0	0.0	.557E+01	31	0	0	29	0
				IN CLR:	29	29	17	0	0	0.0	0.0	.557E+01	31	0	0	29	0
				NOT CLR:	0	0	0	0	0	0.0	0.0	0.	0	0	0	0	0
12/17/77 BCB	317 -16	330 -15	212 -18	FLT TOT:	24	24	15	0	0	0.0	0.0	.138E+02	36	0	0	24	0
				IN CLR:	24	24	15	0	0	0.0	0.0	.138E+02	36	0	0	24	0
				NOT CLR:	0	0	0	0	0	0.0	0.0	0.	0	0	0	0	0
PPG-SYD																	
2/ 6/76 BBA	377 -27	390 -18	206 -34	FLT TOT:	21	0	21	0	0	6.5	.2	0.	45	0	0	0	0
				IN CLR:	18	0	18	0	0	0.0	0.0	0.	53	0	0	0	0
				NOT CLR:	3	0	3	0	0	45.8	1.3	0.	0	0	0	0	0
2/ 7/76 * BBA	315 -23	330 -16	211 -34	FLT TOT:	16	0	16	0	0	18.4	1.5	0.	11	0	0	0	0
				IN CLR:	7	0	7	0	0	0.0	0.0	0.	24	0	0	0	0
				NOT CLR:	9	0	9	0	0	32.8	2.7	0.	0	0	0	0	0
SEA-SFO																	
2/18/79 * BBB	369 43	390 46	285 39	FLT TOT:	11	0	7	3	0	10.1	.8	0.	302	28	10	3	8
				IN CLR:	8	0	6	3	0	0.0	0.0	0.	345	28	10	1	7
				NOT CLR:	3	0	1	0	0	37.1	3.0	0.	43	0	0	2	1
2/19/79 BBB	350 42	370 46	248 39	FLT TOT:	12	0	8	4	0	.4	.3	0.	281	20	11	2	10
				IN CLR:	11	0	8	4	0	0.0	0.0	0.	281	20	11	1	10
				NOT CLR:	1	0	0	0	0	4.3	3.0	0.	0	0	0	1	0
3/25/76 * BBA	371 43	391 47	231 39	FLT TOT:	9	0	9	0	0	0.0	0.0	0.	307	0	0	2	7
				IN CLR:	9	0	9	0	0	0.0	0.0	0.	307	0	0	2	7
				NOT CLR:	0	0	0	0	0	0.0	0.0	0.	0	0	0	0	0
3/27/76 BBA	371 41	372 44	371 39	FLT TOT:	6	0	6	0	0	0.0	0.0	0.	643	0	0	0	6
				IN CLR:	6	0	6	0	0	0.0	0.0	0.	643	0	0	0	6
				NOT CLR:	0	0	0	0	0	0.0	0.0	0.	0	0	0	0	0
4/23/76 BBA	312 43	332 46	213 40	FLT TOT:	6	0	6	0	0	3.1	1.3	0.	111	0	0	6	0
				IN CLR:	4	0	4	0	0	0.0	0.0	0.	118	0	0	4	0
				NOT CLR:	2	0	2	0	0	9.2	4.0	0.	99	0	0	2	0
4/29/76 * BSA	372 44	390 47	274 40	FLT TOT:	8	0	8	0	0	1.2	.4	0.	350	0	0	2	6
				IN CLR:	7	0	7	0	0	0.0	0.0	0.	390	0	0	1	6
				NOT CLR:	1	0	1	0	0	9.4	3.0	0.	75	0	0	1	0
6/ 9/77 AAA	397 44	410 48	271 39	FLT TOT:	17	17	10	0	0	4.7	.5	.376E+05	343	0	0	3	14
				IN CLR:	15	15	9	0	0	0.0	0.0	.379E+05	381	0	0	1	14
				NOT CLR:	2	2	1	0	0	40.2	4.5	.317E+06	52	0	0	2	0

DEP-ARR		CODE	AVFL ALAT	EXHI EXTN	EXLO EXTS	NUMBER OF OBS					AVERAGES FOR THE FLIGHT			OZ	RH	H2O	TROP N	STRAT N
IM/ID/IY						CLD	PD5	OZ	H2O, H2S	%TIC	PATCHES	PD5						
SEA-SFO (CONT.)																		
12/ 7/77	* BCB	380 43	390 46	301 39	FLT TGT:	11	11	8	0	0	0.0	0.0	.244E+02	119	0	0	4	7
					IN CLR:	11	11	8	0	0	0.0	0.0	.244E+02	119	0	0	4	7
					NOT CLR:	0	0	0	0	0	0.0	0.0	0.	0	0	0	0	0
12/ 9/77	* BCB	358 43	391 46	195 39	FLT TGT:	11	11	8	0	0	5.6	0.0	.357E+05	77	0	0	4	7
					IN CLR:	9	9	7	0	0	0.0	0.0	.670E+03	78	0	0	3	6
					NOT CLR:	2	2	1	0	0	30.8	0.0	.194E+06	64	0	0	1	1
12/ 9/77	BCB	348 43	370 46	226 39	FLT TGT:	10	10	6	0	0	15.6	0.0	.628E+04	41	0	0	10	0
					IN CLR:	5	5	3	0	0	0.0	0.0	.404E+02	45	0	0	5	0
					NOT CLR:	5	5	3	0	0	31.2	0.0	.125E+05	38	0	0	5	0
12/11/77	BCB	348 43	370 46	266 39	FLT TGT:	12	12	7	0	0	19.9	0.0	.151E+06	69	0	0	7	5
					IN CLR:	7	7	5	0	0	0.0	0.0	0.	79	0	0	4	3
					NOT CLR:	5	5	2	0	0	47.7	0.0	.363E+06	44	0	0	3	2
SFO-SYD																		
1/ 2/77	* AAA	400 12	410 36	330 -32	FLT TGT:	70	0	45	0	0	2.0	.2	0.	94	0	0	57	13
					IN CLR:	66	0	42	0	0	0.0	0.0	0.	99	0	0	53	13
					NOT CLR:	4	0	3	0	0	34.2	3.3	0.	23	0	0	4	0
5/22/77	* AAA	373 1	410 37	263 -32	FLT TGT:	55	55	34	0	0	5.5	.4	.233E+05	64	0	0	54	1
					IN CLR:	45	45	29	0	0	0.0	0.0	.801E+03	69	0	0	44	1
					NOT CLR:	10	10	5	0	0	30.2	2.2	.124E+06	40	0	0	10	0
7/ 3/77	* ACA	392 1	430 37	202 -33	FLT TGT:	149	0	0	0	0	8.1	0.0	0.	0	0	0	149	0
					IN CLR:	119	0	0	0	0	0.0	0.0	0.	0	0	0	119	0
					NOT CLR:	30	0	0	0	0	40.1	0.0	0.	0	0	0	30	0
10/ 2/77	* ABA	376 2	410 37	238 -33	FLT TGT:	121	0	80	0	0	5.0	.6	0.	68	0	0	103	18
					IN CLR:	91	0	52	0	0	0.0	0.0	0.	80	0	0	73	18
					NOT CLR:	30	0	18	0	0	20.1	2.4	0.	26	0	0	30	0
12/19/76	* AAA	374 3	431 37	251 -33	FLT TGT:	142	0	89	0	0	4.7	.5	0.	77	0	0	126	16
					IN CLR:	113	0	70	0	0	0.0	0.0	0.	86	0	0	97	16
					NOT CLR:	29	0	19	0	0	23.1	2.3	0.	42	0	0	29	0
12/26/76	* AAA	377 -2	410 36	272 -34	FLT TGT:	143	0	94	0	0	8.0	.3	0.	81	0	0	116	27
					IN CLR:	115	0	76	0	0	0.0	0.0	0.	92	0	0	88	27
					NOT CLR:	28	0	18	0	0	41.0	1.7	0.	34	0	0	28	0
SFO-YVR																		
10/ 5/77	BCB	292 40	310 42	196 38	FLT TGT:	16	16	0	0	0	.9	0.0	.197E+04	0	0	0	16	0
					IN CLR:	14	14	0	0	0	0.0	0.0	.150E+04	0	0	0	14	0
					NOT CLR:	2	2	0	0	0	7.1	0.0	.525E+04	0	0	0	2	0

DEP-ARR	IM/ID/IY	CODE	AVFL ALAT	EXHI EXTN	EXLC EXTS	NUMBER OF OBS					AVERAGES FOR THE FLIGHT			TROP			STRAT			
						CLD	PD5	OZ	H2O, H2S	%TIC	PATCHES	PD5	OZ	RH	H2O	N	N			
SIN-SYD																				
	1/19/77	* DDA	354 -17	390 0	260 -33	FLT	TOT:	76	76	50	0	0	14.5	1.1	.481E+05	46	0	0	76	0
						IN	CLR:	54	54	34	0	0	0.0	0.0	.820E+01	55	0	0	54	0
						NOT	CLR:	22	22	16	0	0	50.0	3.7	.166E+06	27	0	0	22	0
	1/21/77	DDA	309 -17	331 0	199 -34	FLT	TOT:	72	72	47	0	0	13.4	.7	.391E+05	50	0	0	72	0
						IN	CLR:	54	54	36	0	0	0.0	0.0	.980E+01	57	0	0	54	0
						NOT	CLR:	18	18	11	0	0	53.8	2.7	.156E+06	30	0	0	18	0
	1/30/77	* DDA	340 -17	351 0	214 -33	FLT	TOT:	69	69	27	0	0	9.8	.7	.366E+05	42	0	0	69	0
						IN	CLR:	56	56	18	0	0	0.0	0.0	.908E+01	48	0	0	56	0
						NOT	CLR:	13	13	9	0	0	52.0	3.9	.194E+06	29	0	0	13	0
	2/ 1/77	DDA	322 -17	351 0	237 -33	FLT	TOT:	73	73	24	0	0	2.4	.5	.618E+04	63	0	0	73	0
						IN	CLR:	65	65	24	0	0	0.0	0.0	.562E+02	63	0	0	65	0
						NOT	CLR:	8	8	0	0	0	21.7	4.5	.559E+05	0	0	0	8	0
	2/13/77	* DDA	341 -17	351 0	188 -33	FLT	TOT:	75	75	51	0	0	20.6	1.5	.719E+05	45	0	0	75	0
						IN	CLR:	44	44	30	0	0	0.0	0.0	.377E+02	59	0	0	44	0
						NOT	CLR:	31	31	21	0	0	49.7	3.7	.174E+06	25	0	0	31	0
	2/15/77	DDA	346 -20	370 0	249 -34	FLT	TOT:	51	51	25	0	0	16.5	1.9	.423E+05	49	0	0	25	0
						IN	CLR:	31	31	17	0	0	0.0	0.0	.161E+03	56	0	0	10	0
						NOT	CLR:	20	20	8	0	0	42.1	4.8	.108E+06	34	0	0	15	0
	11/21/76	* DDA	348 -18	351 0	260 -34	FLT	TOT:	81	0	0	0	0	0.0	0.0	0.	0	0	0	81	0
						IN	CLR:	81	0	0	0	0	0.0	0.0	0.	0	0	0	81	0
						NOT	CLR:	0	0	0	0	0	0.0	0.0	0.	0	0	0	0	0
	11/28/76	* DDA	329 -14	350 0	247 -33	FLT	TOT:	82	0	0	0	0	28.7	2.7	0.	0	0	0	82	0
						IN	CLR:	32	0	0	0	0	0.0	0.0	0.	0	0	0	32	0
						NOT	CLR:	50	0	0	0	0	47.1	4.4	0.	0	0	0	50	0
	11/30/76	DDA	315 -18	330 0	211 -34	FLT	TOT:	72	0	0	0	0	5.7	.7	0.	0	0	0	72	0
						IN	CLR:	59	0	0	0	0	0.0	0.0	0.	0	0	0	59	0
						NOT	CLR:	13	0	0	0	0	31.7	3.7	0.	0	0	0	13	0
	12/20/76	* DDA	335 -17	351 0	197 -33	FLT	TOT:	80	0	0	0	0	0.0	0.0	0.	0	0	0	0	0
						IN	CLR:	80	0	0	0	0	0.0	0.0	0.	0	0	0	0	0
						NOT	CLR:	0	0	0	0	0	0.0	0.0	0.	0	0	0	0	0
	12/22/76	DDA	338 -17	370 0	248 -34	FLT	TOT:	71	0	0	0	0	5.5	.5	0.	0	0	0	0	0
						IN	CLR:	63	0	0	0	0	0.0	0.0	0.	0	0	0	0	0
						NOT	CLR:	8	0	0	0	0	48.8	4.3	0.	0	0	0	0	0
	12/30/76	DDA	334 -17	350 0	257 -34	FLT	TOT:	76	0	0	0	0	10.9	1.0	0.	0	0	0	76	0
						IN	CLR:	51	0	0	0	0	0.0	0.0	0.	0	0	0	51	0
						NOT	CLR:	25	0	0	0	0	33.3	3.2	0.	0	0	0	25	0

APPENDIX B

APPENDIX C

INDEPENDENCE OF CLOUD OBSERVATION PERIODS

The GASP cloud-encounter observation periods are normally repeated at 5-minute intervals, or about every 36 n.mi. at a ground speed of 500 knots. For two events to be statistically independent, the probability of occurrence of the second event cannot be conditionally dependent upon the occurrence of the first event. In fact, if two events are independent, the probability that both events occur is equal to the product of the probability that each event occurs. It is apparent from any satellite picture of the Earth that clouds are organized on scales from small to large. Adjacent cloud observation periods are, therefore, unlikely to be independent. The next two subsections discuss the degree of dependence between the cloud or no cloud ($TIC > 0$, $TIC = 0$) observations and, given a large cloud, the degree of dependence between values of TIC.

Independence of Cloud or No Cloud Observations

An example of dependence or persistence between adjacent cloud observation periods is shown in table CI. For the altitude band from 23.5 to 28.5 kft, 80 percent of the observation periods were clear, 20 percent had some clouds, and 14.5 percent had values of TIC greater than 10 percent. The next section of the table shows that the probability of a clear observation following a clear observation is 94.5 percent, while the probability of an observation with $TIC > 0$ following another observation with $TIC > 0$ is 81.7 percent. If all of the observation periods were statistically independent, these probabilities would be $(0.8)^2$ (or 0.64) and $(0.2)^2$ (or 0.04), respectively.

The dependence between observation periods should decrease as they become farther apart in time or space. In order to examine this relationship, all flights were separated into segments wholly contained within 500-ft altitude intervals. From these flight segments, the empirical probability that two cloud observation periods separated by N observation periods both contain some clouds ($TIC > 0$) was computed as a function of N . The results for the 23.5 to 28.5 kft altitude interval are shown in figure C1. The curve approaches the value of 0.04, the value expected if the observations were independent, after a separation of about 20 observation periods. This result suggests that observation of the cloud or no cloud condition should be separated by 1 1/2 to 2 hours to be statistically independent.

Similar analyses performed for 500-ft height intervals at higher altitudes showed some tendency for increased separation between independent observations. However, because the probability of clouds ($TIC > 0$) decreased with altitude and there were fewer long flight segments at these altitudes, no conclusive statement can be made. In any case, an observation separation of 90 to 120 minutes will likely yield nearly independent estimates of a cloud or no cloud condition at normal commercial flight levels.

Independence of TIC Values Within a Cloud

Another analysis was performed on series of sequential cloud observation periods for which $TIC > 0$. There were a total of 2068 series of two or more observation

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periods that fit this criterion. The breakdown of cloud-encounter series as a function of length (intervals of 5 observation periods) is presented in table CII. Over 85 percent of the cloud-encounter series consist of 10 intervals or less. This table also shows that the average value of TIC tends to increase as the length of cloud increases. Table CIII presents the percentage of observation periods which fall into each of four TIC classes. Relatively few observations fall into the high TIC classes compared with the low TIC classes.

The results of the analysis of the TIC values indicate that when TIC is less than 50 percent, the time between independent in-clouds observations is 10 to 20 minutes (2 to 4 observation periods). When TIC is greater than 50 percent, the sample-to-sample observations are highly correlated, and time between independent observation periods is too long to estimate reliably from the data available. It is safe to assume, however, that it is between the 20-minute value for low TIC and 90- to 120-minute value for the cloud or no cloud observations.

These results are consistent with intuition and meteorological observation. Large values of TIC tend to be associated with large (synoptic) scale storms where the clouds are uniform and extensive. Small values of TIC tend to be associated with individual convective storms or convective storm complexes. The resulting low values of TIC tend to vary appreciably from one observation period to another.

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TABLE CI.- PERSISTENCE OF CLOUD-ENCOUNTER DATA

[Altitude = 23.5 to 28.5 kft]

	Probability, percent, that present observation will be -		
	Clear	TIC > 0	TIC > 10
If previous observation was Random	80.0	20.0	14.5
If previous observation was Clear	94.5	5.5	2.1
TIC > 0	18.3	81.7	66.9
TIC > 10	9.6	90.4	79.2
If previous two observations were Clear	95.7	4.3	2.1
TIC > 0	16.5	83.5	73.2
TIC > 10	8.6	91.4	81.4

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TABLE CII.- DISTRIBUTION OF CLOUD EXTENT OBSERVATIONS AS MEASURED IN GASP

[Total number of cloud encounters (series of 2 or more sequential observations with TIC > 0) = 2068]

	Cloud length category (no. of sequential observation periods with TIC > 0)						
	2-5	6-10	11-15	16-20	21-25	26-30	31-35
Number of cloud-encounter series	1264	541	172	61	18	10	2
Average TIC, percent	23.3	38.9	47.5	52.1	51.2	58.3	72.0

TABLE CIII.- DISTRIBUTION OF TIC FOR OBSERVATION PERIODS WITH TIC > 0

TIC category, percent	Percentage of observation periods in category
1 to 20	37
21 to 50	24
51 to 80	20
81 to 100	19

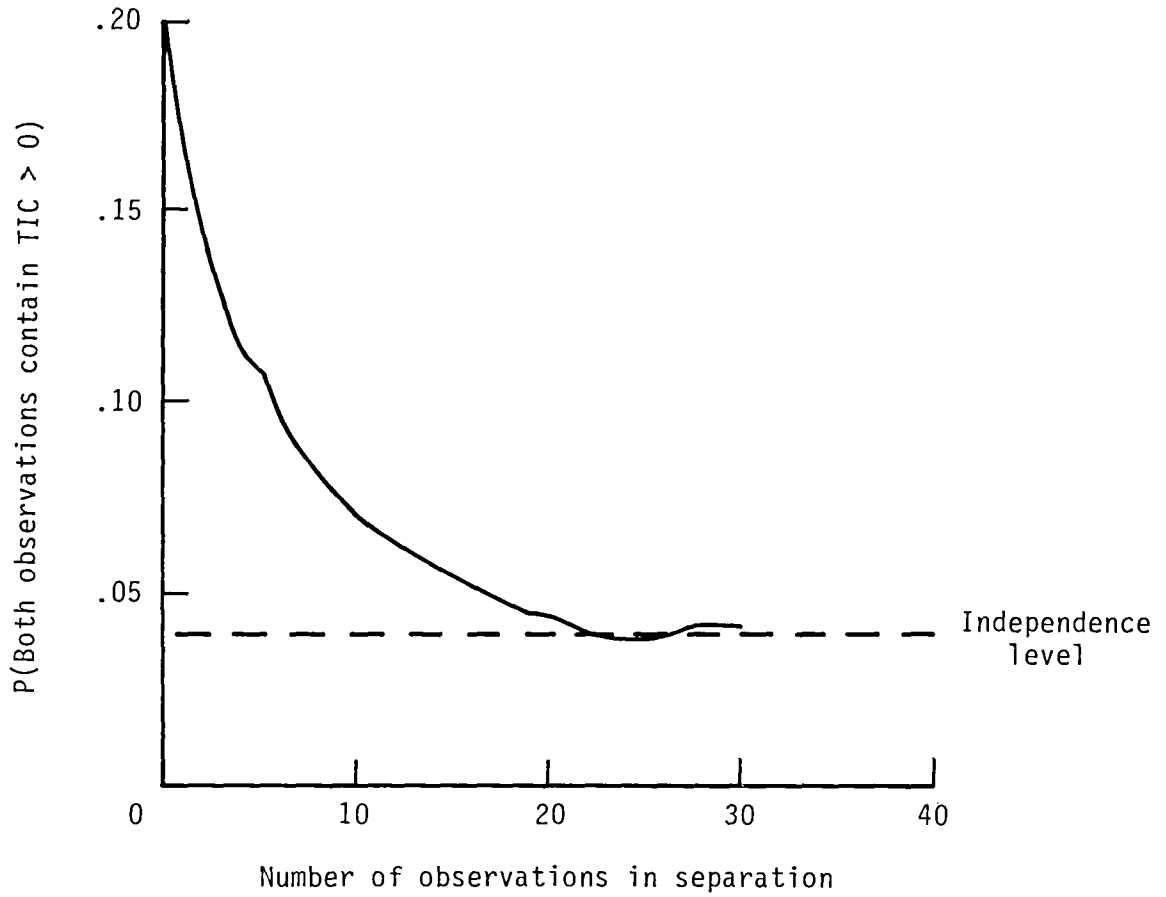


Figure C1.- The probability that two cloud-encounter observations both contain some clouds ($\text{TIC} > 0$), as a function of observation separation.

APPENDIX D

CLOUD-ENCOUNTER STATISTICS AS FUNCTIONS OF LATITUDE, LONGITUDE, NORTHERN HEMISPHERE SEASON, AND ALTITUDE

This appendix is a tabulation of statistics for several quantities related to cloud encounter over the geographic area covered by the GASP flights. These statistics are presented with respect to altitude. The geographic grid (latitude and longitude) chosen had cells small enough to uncover significant geographic variability but large enough to obtain an adequate number of samples for statistical analyses. The grid chosen appears in figure D1. Subsequent pages of this appendix give statistical data within each grid cell in accordance with the code given at the top of each page in this appendix. The season and altitude range appear near the top of each page. Appendix E presents similar data described in terms of altitude separation from the tropopause.

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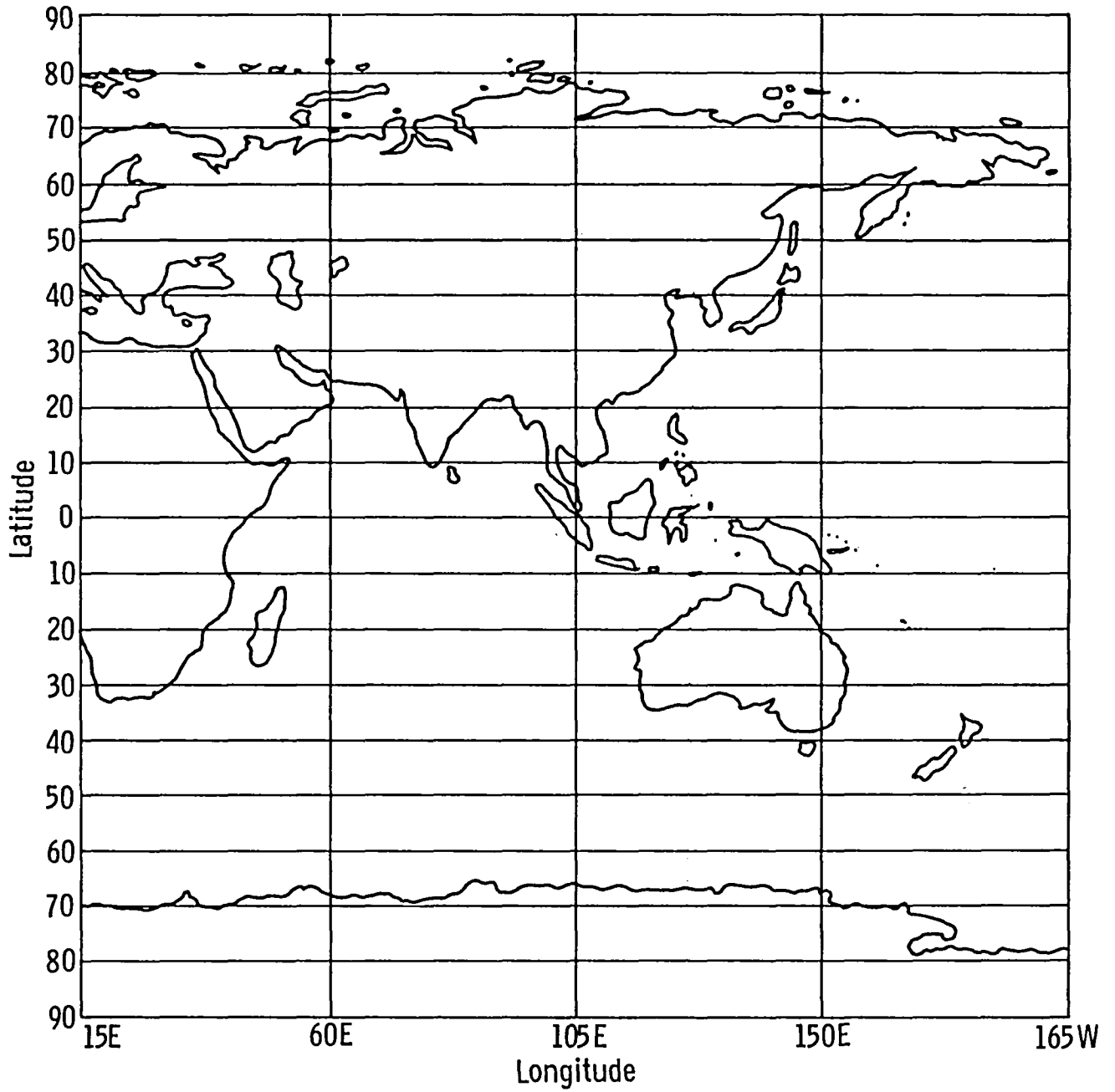


Figure D1.- Map of cell structure used in cloud-encounter and particle-concentration analysis.

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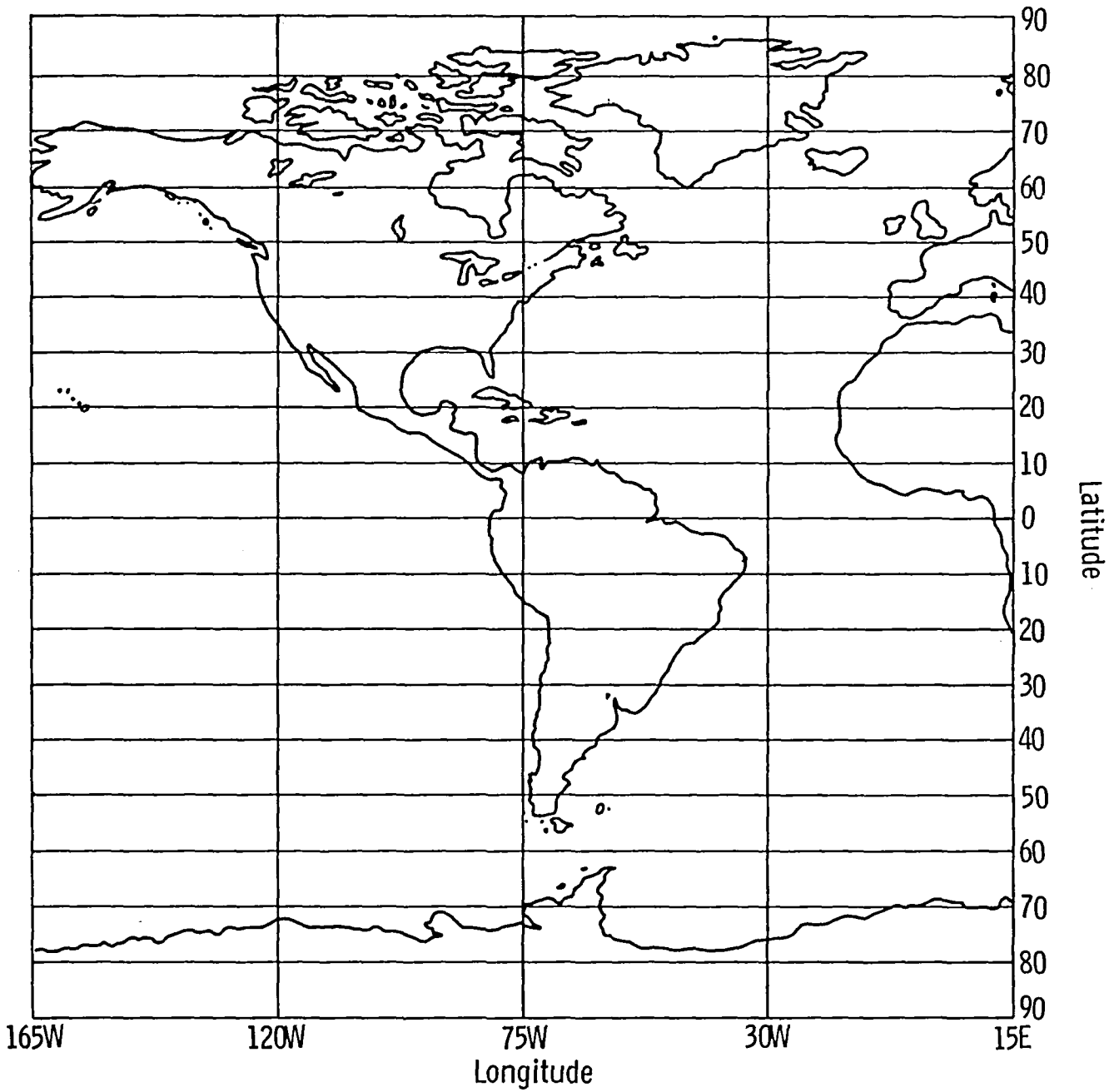


Figure D1.- Concluded.

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	N_{Flights}	$N_{\text{Indep. obs.}}$	$N_{\text{Total obs.}}$
	$\overline{\text{TIC}} \%$	$\text{SIGMA}_{\text{TIC}}$	$P(\text{TIC} > 0 \%)$
CODE:	$\text{TICIV} \%$	$\text{SIGMA}_{\text{TICIV}}$	$P(\text{TIC} > 10 \%)$
	$\overline{T}_{\text{CLEAR}}$	$\overline{T}_{\text{CLOUD}}$	$P(\text{TIC} > 25 \%)$
	$\overline{\Delta Z}_{\text{CLEAR}}$	$\overline{\Delta Z}_{\text{CLOUD}}$	$P(\text{TIC} > 50 \%)$

Explanation of entries:

- N_{Flights} - number of flights in latitude-longitude-altitude cell
- $N_{\text{Indep. obs.}}$ - number of observation periods considered independent in cell
- $N_{\text{Total obs.}}$ - total number of observation periods in cell
- $\overline{\text{TIC}} \%$ - average percentage of time in clouds, for all observation periods in cell
- $\text{SIGMA}_{\text{TIC}}$ - standard deviation of percentage of time in clouds, percent
- $\text{TICIV} \%$ - average percentage of time in clouds with clouds in vicinity
- $\text{SIGMA}_{\text{TICIV}}$ - standard deviation of percentage of time in clouds with clouds in vicinity
- $\overline{T}_{\text{CLEAR}}, \overline{T}_{\text{CLOUD}}$ - average temperature (Celsius) in clear or cloudy air
- $\overline{\Delta Z}_{\text{CLEAR}}, \overline{\Delta Z}_{\text{CLOUD}}$ - average distance above (negative values indicate below) the time-and-space-interpolated NMC tropopause, for observations made in the clear or cloudy air, kft
- $P(\text{TIC} > 0 \%)$ - probability, expressed in percent, that the time in clouds is greater than zero during an observation period in the cell (thus, the probability of cloud encounter; note that this is equal to PCE; see Vol. I)
- $P(\text{TIC} > 10 \%)$ } - probability that the time in clouds during an observation period
 $P(\text{TIC} > 25 \%)$ } in the cell will equal or exceed 10, 25, or 50 percent
 $P(\text{TIC} > 50 \%)$ }

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Code:	$N_{Flights}$	$N_{Indep. obs.}$	$N_{Total obs.}$
	$\bar{TIC} \%$	$SIGMA_{TIC}$	$P(TIC > 0 \%)$
	$TICIV \%$	$SIGMA_{TICIV}$	$P(TIC \geq 10 \%)$
	\bar{T}_{CLEAR}	\bar{T}_{CLOUD}	$P(TIC \geq 25 \%)$
	$\bar{\Delta Z}_{CLEAR}$	$\bar{\Delta Z}_{CLOUD}$	$P(TIC \geq 50 \%)$

WINTER
28.5-33.5 KFT

	15E	60E	105E	150E	165W
80N					
70N					
60N					
50N					1 2 32 .0 .1 3.1 .4 0.0 0.0 -44.6 -48.0 0.0 0.0 0.0 0.0
40N	33 37 341 14.6 28.7 32.0 45.7 34.0 25.8 -52.1 -52.5 18.8 -4.5 -4.8 15.2		2 2 10 0.0 0.0 0.0 0.0 0.0 0.0 -53.4 0.0 0.0 1.2 0.0 0.0	3 4 47 0.0 0.0 0.0 0.0 0.0 0.0 -51.7 0.0 0.0 -2.8 0.0 0.0	
30N	45 59 603 9.7 23.9 21.4 45.5 32.1 17.6 -49.7 -48.1 13.4 -6.5 -8.1 10.0		30 31 85 4.4 16.9 8.2 53.6 29.0 8.2 -45.5 -48.1 5.9 -6.3 -7.4 3.5	5 7 101 6.1 18.4 16.8 36.2 30.5 11.9 -50.6 -51.4 7.9 -3.7 -5.2 6.9	
20N	26 26 203 5.8 18.7 12.3 47.5 29.6 11.3 -41.5 -44.8 8.4 -15.4 -15.7 5.4	32 44 458 5.5 18.9 12.0 45.9 33.5 9.4 -40.5 -43.5 7.9 -17.6 -17.0 5.0	14 16 67 0.0 0.0 0.0 0.0 0.0 0.0 -36.9 0.0 0.0 -18.2 0.0 0.0	7 10 137 4.1 13.1 15.3 27.0 22.3 11.7 -35.5 -48.2 8.0 -21.2 -3.8 2.9	
10N		28 38 343 7.0 22.3 11.1 63.2 30.8 9.9 -35.5 -36.3 9.6 -25.2 -25.8 6.7	16 17 101 .8 3.7 5.0 16.3 4.1 5.0 -35.8 -35.4 0.0 -23.5 -25.6 0.0	2 3 45 0.0 0.0 0.0 0.0 0.0 0.0 -35.2 0.0 0.0 0.0 0.0 0.0	
0		19 22 162 6.7 18.2 19.8 33.9 27.3 14.8 -34.5 -36.1 10.5 -26.3 -26.1 6.2	3 4 36 24.7 29.0 58.3 42.4 26.4 50.0 -37.4 -37.2 38.9 -24.9 -25.2 22.2	10 10 78 6.3 16.8 21.8 28.8 25.4 12.8 -32.4 -33.4 11.5 -24.4 -24.6 5.1	
		7 7 28 11.3 19.6 60.7 18.7 22.2 21.4 -37.5 -38.1 17.9 -25.2 -24.7 7.1	10 14 150 26.7 31.4 61.3 43.6 29.5 50.7 -32.2 -32.5 42.7 -27.5 -26.8 27.3	12 12 170 9.5 21.4 31.8 29.9 28.9 21.8 -32.9 -33.9 14.1 -25.4 -24.3 6.5	
10S		3 4 52 1.6 5.9 11.5 14.0 11.5 5.8 -34.8 -36.7 1.9 -26.3 -25.3 0.0	10 11 125 2.6 9.5 13.6 19.1 18.7 8.0 -32.6 -31.7 4.0 -26.9 -25.4 1.6	42 42 179 10.5 22.4 30.7 34.2 28.7 22.3 -33.1 -34.2 16.2 -25.2 -24.2 7.3	
20S	4 8 101 5.6 15.8 19.8 28.3 25.0 11.9 -34.8 -35.9 8.9 -25.4 -25.6 3.0	7 9 77 4.2 14.1 13.0 32.0 25.3 10.4 -37.0 -41.1 6.5 -22.2 -20.1 3.9	15 20 215 1.7 10.0 3.3 51.0 22.9 2.8 -37.1 -38.9 2.8 -23.7 -25.6 2.3	15 26 259 13.6 28.0 29.0 47.1 33.6 21.2 -38.3 -38.6 18.9 -21.0 -22.8 15.4	
30S		2 2 30 0.0 0.0 0.0 0.0 0.0 0.0 -39.5 0.0 0.0 -19.3 0.0 0.0	39 39 152 4.0 14.2 13.8 29.2 27.1 9.2 -38.8 -40.7 5.9 -19.1 -14.9 3.3	41 48 349 9.7 24.2 22.9 42.5 34.0 17.2 -43.6 -41.7 12.9 -13.1 -12.2 9.5	
40S					

APPENDIX D

$N_{Flights}$	$N_{Indep. obs.}$	$N_{Total obs.}$
$\overline{TIC} \%$	$SIGMA_{TIC}$	$P(TIC > 0 \%)$
$TICIV \%$	$SIGMA_{TICIV}$	$P(TIC \geq 10 \%)$
\overline{T}_{CLEAR}	\overline{T}_{CLOUD}	$P(TIC \geq 25 \%)$
$\overline{\Delta Z}_{CLEAR}$	$\overline{\Delta Z}_{CLOUD}$	$P(TIC \geq 50 \%)$

WINTER
28.5-33.5 KFT

165W			120W			75W			30W			15E			ZONAL MEAN			
															60N			
															70N			
1	1	1	3	4	37	8	10	101	5	5	51	17	20	190				
0.0	0.0	0.0	.4	2.4	2.7	6.8	19.5	14.9	.3	2.4	2.0	3.8	14.6	8.9				
0.0	0.0	0.0	14.9	0.0	2.7	45.7	27.8	14.9	17.6	0.0	2.0	42.2	27.8	8.9				
-52.0	0.0	0.0	-60.0	-67.0	0.0	-54.1	-60.8	7.9	-53.2	-56.0	0.0	-55.0	-60.9	4.2				
-.2	0.0	0.0	2.3	-.4	0.0	2.0	-.6	6.9	.6	.6	0.0	1.6	-.5	3.7				
															60N			
															50N			
2	2	29	4	6	72	14	18	203	45	55	427	66	83	763				
6.4	14.6	24.1	12.3	27.6	20.8	11.0	25.8	23.2	10.1	24.9	21.8	10.0	24.7	21.4				
26.6	18.7	17.2	59.2	29.7	20.8	47.3	34.1	20.2	46.6	34.1	16.4	46.8	33.7	17.2				
-53.3	-58.3	13.8	-52.9	-53.5	16.7	-51.2	-56.2	14.3	-51.8	-54.5	14.3	-51.4	-55.0	13.9				
2.4	0.0	0.0	3.1	-5.1	13.9	.2	-1.5	10.3	-1.5	-5.3	9.8	-.4	-4.2	9.6				
															50N			
															40N			
11	12	77	43	47	170	44	59	549	33	45	420	169	206	1614				
24.0	33.6	50.6	8.2	21.7	21.2	12.2	27.4	23.7	17.1	31.2	33.8	13.7	28.4	28.3				
47.4	33.5	39.0	38.5	32.4	15.3	51.6	33.7	20.6	50.5	34.5	26.9	48.5	34.1	22.9				
-49.9	-51.5	33.8	-50.9	-51.5	11.2	-47.6	-50.2	16.4	-51.1	-53.9	22.6	-50.0	-52.1	18.2				
-7.0	-5.9	24.7	-1.6	-5.3	8.2	-1.5	-7.1	12.4	-4.1	-6.0	17.6	-2.9	-6.0	14.1				
															40N			
															30N			
81	92	431	50	54	165	3	4	31	1	1	8	215	248	1424				
10.4	23.3	27.8	13.6	26.5	32.1	28.1	35.5	48.4	0.0	0.0	0.0	10.2	23.8	23.9				
37.3	30.8	20.2	42.3	31.0	26.1	58.2	29.4	45.2	0.0	0.0	0.0	42.4	31.7	18.9				
-48.8	-50.0	14.8	-48.0	-46.0	19.4	-41.7	-42.1	38.7	-41.4	0.0	0.0	-48.9	-48.3	14.2				
-7.7	-7.8	10.0	-7.7	-9.6	14.5	-16.2	-12.0	29.0	-18.0	0.0	0.0	-7.2	-8.3	10.3				
															30N			
															20N			
74	82	432	2	2	3				2	2	7	157	182	1307				
13.6	26.9	30.1	2.0	2.8	33.3				0.0	0.0	0.0	7.8	21.3	17.8				
45.3	31.0	24.8	5.9	0.0	0.0				0.0	0.0	0.0	43.9	31.3	14.5				
-41.5	-42.8	19.7	-38.0	-40.0	0.0				-40.9	0.0	0.0	-40.2	-43.7	11.4				
-15.9	-13.6	13.4	-23.4	-23.7	0.0				-15.8	0.0	0.0	-17.1	-13.5	7.3				
															20N			
															10N			
15	15	80										61	73	569				
1.0	9.3	1.3										4.5	18.0	7.7				
83.9	0.0	1.3										58.4	32.5	7.0				
-33.6	-40.0	1.3										-35.2	-36.3	6.0				
-26.9	-16.9	1.3										-25.1	-25.3	4.2				
															10N			
															0			
5	5	10										37	41	286				
0.0	0.0	0.0										8.6	20.2	24.5				
0.0	0.0	0.0										35.2	27.1	18.2				
-31.0	0.0	0.0										-33.9	-35.8	14.0				
-26.7	0.0	0.0										-25.8	-25.4	7.7				
															0			
															10S			
												29	33	348				
												17.1	27.4	46.8				
												36.4	29.9	34.2				
												-32.9	-33.6	26.7				
												-25.9	-25.9	15.5				
															10S			
															20S			
5	5	23										60	62	379				
1.5	7.1	4.3										6.1	17.1	20.8				
34.9	0.0	4.3										29.4	26.8	14.2				
-34.1	-29.0	4.3										-33.3	-33.8	9.5				
-24.9	-29.5	0.0										-25.9	-24.6	4.0				
															20S			
															30S			
												41	63	652				
												7.3	20.8	17.2				
												42.6	31.9	12.4				
												-37.1	-38.3	10.6				
												-22.8	-23.3	7.8				
															30S			
															40S			
												82	89	531				
												7.6	21.3	19.0				
												39.8	33.1	13.9				
												-41.8	-41.5	10.2				
												-15.1	-12.9	7.2				

APPENDIX D

Code:
 SPRING
 28.5-33.5 KFT

$N_{Flights}$	$N_{Indep. obs.}$	$N_{Total obs.}$
$\overline{TIC} \%$	$SIGMA_{TIC}$	$P(TIC > 0 \%)$
$TICIV \%$	$SIGMA_{TICIV}$	$P(TIC \geq 10 \%)$
\overline{T}_{CLEAR}	\overline{T}_{CLOUD}	$P(TIC \geq 25 \%)$
$\overline{\Delta Z}_{CLEAR}$	$\overline{\Delta Z}_{CLOUD}$	$P(TIC \geq 50 \%)$

	15E	60E	105E	150E	165W
80N					
70N					
60N					1 2 21 0.0 0.0 0.0 0.0 0.0 0.0 -45.2 0.0 0.0 1.9 0.0 0.0
50N	6 8 64 4.6 12.2 21.9 21.1 18.1 14.1 -48.3 -45.6 7.8 -4.0 -5.7 1.6		2 2 7 25.5 21.0 85.7 29.8 19.7 71.4 -51.0 -49.3 42.9 -6.1 -6.7 14.3	4 5 44 21.2 33.8 45.5 46.7 36.3 29.5 -44.5 -44.7 29.5 -3.6 -7.7 22.7	
40N	10 14 142 3.1 13.1 13.4 23.0 28.7 5.6 -46.3 -49.2 4.2 -6.3 -4.0 2.8		47 47 105 8.9 21.7 26.7 33.3 30.9 17.1 -41.7 -44.3 14.3 -10.4 -9.9 6.7	4 5 42 2.1 7.6 14.3 14.4 15.0 7.1 -43.2 -41.3 2.4 -4.7 -6.6 0.0	
30N		12 13 71 6.9 17.8 19.7 35.2 24.8 14.1 -35.7 -40.0 14.1 -17.0 -13.3 7.0	15 18 90 .9 6.0 2.2 40.8 2.0 2.2 -36.0 -37.0 2.2 -21.5 -17.2 0.0	3 4 44 3.3 12.1 9.1 36.8 19.3 9.1 -43.6 -44.0 6.8 -15.5 -14.6 2.3	
20N		6 7 47 14.8 26.5 31.9 46.3 27.0 27.7 -32.8 -28.9 23.4 -18.6 -25.8 14.8	18 19 82 7.5 19.6 22.0 34.1 29.1 14.6 -32.8 -32.0 11.0 -21.3 -22.6 6.1	3 5 78 1.2 7.4 7.7 15.0 22.3 2.6 -40.0 -40.3 2.6 -17.2 -16.1 1.3	
10N		2 2 7 0.0 0.0 0.0 0.0 0.0 0.0 -38.0 0.0 0.0 -19.5 0.0 0.0	1 1 3 .3 .4 33.3 .8 0.0 0.0 -40.5 -41.0 0.0 -15.6 -15.6 0.0		
0					
10S					11 11 15 3.4 10.6 13.3 25.7 16.3 6.7 -34.8 -31.0 6.7 -24.2 -28.8 0.0
20S					3 3 18 0.0 0.0 0.0 0.0 0.0 0.0 -42.2 0.0 0.0 -20.5 0.0 0.0
30S					11 11 30 14.9 29.4 26.7 55.8 31.1 23.3 -48.3 -49.3 20.0 -9.6 -19.5 16.7
40S					

APPENDIX D

$N_{Flights}$	$N_{Indep. obs.}$	$N_{Total obs.}$
$\overline{TIC} \%$	$SIGMA_{TIC}$	$P(TIC > 0 \%)$
$TICIV \%$	$SIGMA_{TICIV}$	$P(TIC \geq 10 \%)$
\overline{T}_{CLEAR}	\overline{T}_{CLOUD}	$P(TIC \geq 25 \%)$
$\overline{\Delta Z}_{CLEAR}$	$\overline{\Delta Z}_{CLOUD}$	$P(TIC \geq 50 \%)$

SPRING
28.5-33.5 KFT

165W	120W	75W	30W	15E	ZONAL MEAN
			1 1 3 0.0 0.0 0.0 0.0 0.0 0.0 -56.0 0.0 0.0 -3.1 0.0 0.0		1 1 3 0.0 0.0 0.0 0.0 0.0 0.0 -56.0 0.0 0.0 -3.1 0.0 0.0
	2 2 17 .0 .1 5.9 .4 0.0 0.0 -56.6 -60.0 0.0 -.4 .5 0.0		3 3 24 28.8 38.6 41.7 69.2 28.0 37.5 -56.7 -57.0 37.5 -2.6 -3.0 33.3		5 5 41 16.9 32.8 26.8 63.0 33.2 22.0 -56.7 -57.3 22.0 -1.5 -2.7 19.5
3 3 23 11.0 28.6 13.0 84.1 11.4 13.0 -43.5 -53.0 13.0 1.8 -8.6 13.0	4 4 48 4.1 10.9 22.9 17.8 16.5 10.4 -50.9 -53.3 8.3 -1.6 -5.9 0.0	10 13 127 8.4 20.1 24.4 34.2 27.8 18.9 -49.9 -52.7 13.4 -2.6 -4.1 7.1	37 42 275 3.9 13.8 19.6 20.0 25.6 9.5 -49.3 -51.1 4.4 -2.9 -5.0 2.5		55 64 494 5.2 16.3 20.0 26.1 28.0 11.7 -49.1 -51.9 7.3 -2.2 -4.9 3.8
13 16 137 4.7 14.6 20.4 23.0 24.9 11.7 -49.6 -53.4 8.0 -4.1 -4.3 3.6	103 107 357 13.3 25.7 33.1 40.2 30.2 27.2 -48.9 -49.3 19.3 -4.6 -6.7 11.8	45 53 366 13.3 25.4 36.1 36.9 30.3 27.6 -49.3 -50.7 18.6 -5.6 -7.1 11.5	10 12 83 7.7 18.0 30.1 25.7 24.8 21.7 -47.4 -50.4 12.0 -4.8 -8.8 6.0		183 203 1058 11.6 24.0 32.4 35.9 30.1 24.5 -48.8 -49.8 16.9 -4.7 -6.8 10.0
70 72 331 2.6 9.3 18.1 14.2 17.6 7.9 -46.9 -47.3 3.0 -9.0 -9.0 1.2	64 65 159 9.8 22.1 27.0 36.2 29.3 22.0 -47.6 -47.5 14.5 -5.1 -7.2 8.8	4 4 4 3.4 5.9 25.0 13.7 0.0 25.0 -49.3 -46.0 0.0 -5.6 -5.7 0.0			199 207 783 5.0 15.6 20.1 24.7 27.0 11.6 -46.1 -46.8 7.0 -7.7 -8.0 3.7
81 88 375 4.0 13.1 20.8 19.4 22.9 10.1 -44.0 -42.4 6.1 -12.9 -13.7 2.9	7 7 55 13.3 25.8 38.2 35.0 31.4 23.6 -46.3 -44.7 18.2 -13.3 -13.3 10.9				118 130 635 4.7 14.8 18.7 25.0 25.7 10.6 -41.8 -42.5 7.6 -15.1 -13.6 3.6
4 4 4 0.0 0.0 0.0 0.0 0.0 0.0 -39.3 0.0 0.0 -17.4 0.0 0.0	4 4 10 .3 .8 10.0 2.7 0.0 0.0 -34.0 -36.0 0.0 -24.9 -18.7 0.0	2 2 8 19.7 31.3 50.0 39.4 34.4 37.5 -38.3 -39.3 25.0 -16.3 -15.8 12.5			37 41 229 6.8 19.2 19.2 35.4 29.9 13.1 -35.9 -32.8 10.5 -19.3 -22.1 5.7
	1 1 3 0.0 0.0 0.0 0.0 0.0 0.0 -25.3 0.0 0.0 -27.9 0.0 0.0	5 5 18 2.4 8.7 16.7 14.4 16.8 5.6 -37.9 -34.0 5.6 -18.6 -19.1 0.0			9 9 31 1.4 6.7 12.9 11.0 15.7 3.2 -36.7 -35.8 3.2 -19.6 -18.2 0.0
		1 1 10 11.1 26.0 30.0 37.0 36.0 30.0 -33.7 -34.3 10.0 0.0 0.0 10.0			1 1 10 11.1 26.0 30.0 37.0 36.0 30.0 -33.7 -34.3 10.0 0.0 0.0 10.0
5 6 24 .1 .4 4.2 2.0 0.0 0.0 -37.7 -37.0 0.0 -19.3 -25.1 0.0		1 1 12 12.5 22.6 33.3 37.6 24.1 25.0 -34.9 -34.3 25.0 0.0 0.0 16.7			17 18 51 4.0 13.3 13.7 29.1 23.6 7.8 -36.4 -33.7 7.8 -21.1 -27.0 3.9
		4 4 4 1.8 3.1 25.0 7.1 0.0 0.0 -32.3 -34.0 0.0 -26.8 -26.1 0.0			7 7 22 .3 1.5 4.5 7.1 0.0 0.0 -40.8 -34.0 0.0 -21.4 -26.1 0.0
					11 11 30 14.9 29.4 26.7 55.8 31.1 23.3 -48.3 -49.3 20.0 -9.6 -19.5 16.7

APPENDIX D

SUMMER
28.5-33.5 KFT

Code:

$N_{Flights}$	$N_{Indep. obs.}$	$N_{Total obs.}$
$\bar{TIC} \%$	$SIGMA_{TIC}$	$P(TIC > 0 \%)$
$TICIV \%$	$SIGMA_{TICIV}$	$P(TIC \geq 10 \%)$
\bar{T}_{CLEAR}	\bar{T}_{CLOUD}	$P(TIC \geq 25 \%)$
$\bar{\Delta Z}_{CLEAR}$	$\bar{\Delta Z}_{CLOUD}$	$P(TIC \geq 50 \%)$

	15E	60E	105E	150E	165W
80N					
70N					
60N					
50N					
40N	11 13 95 3.4 14.3 16.8 20.0 29.7 5.3 -43.4 -45.1 4.2 -9.9 -6.4 3.2				
30N	25 36 333 .6 4.8 4.2 14.9 18.1 1.8 -32.0 -41.3 .9 -23.3 -10.6 .6	1 1 1 0.0 0.0 0.0 0.0 0.0 0.0 -23.0 0.0 0.0 -27.8 0.0 0.0	19 19 29 19.0 34.1 31.0 61.1 34.4 24.1 -33.5 -36.4 24.1 -23.1 -17.5 17.2	1 2 19 0.0 0.0 0.0 0.0 0.0 0.0 -36.6 0.0 0.0 -17.8 0.0 0.0	
20N	9 11 76 0.0 0.0 0.0 0.0 0.0 0.0 -29.7 0.0 0.0 -26.1 0.0 0.0	16 26 297 11.4 25.5 27.9 40.8 33.5 20.5 -30.2 -31.6 15.5 -24.0 -23.9 10.8	2 2 2 1.4 1.4 50.0 2.7 0.0 0.0 -37.0 -29.0 0.0 -23.6 -26.1 0.0		
10N		15 17 168 23.8 31.0 53.6 44.5 29.6 43.5 -31.2 -32.1 37.5 -25.7 -25.1 23.2	4 4 15 26.9 34.2 60.0 44.9 33.8 46.7 -35.3 -33.7 40.0 -23.0 -24.3 20.0		
0		8 8 115 14.8 25.3 45.2 32.7 28.8 32.2 -33.7 -32.0 24.3 -24.7 -25.4 9.6	2 2 18 13.9 23.3 38.9 35.6 24.9 27.8 -38.3 -38.3 22.2 -22.6 -22.7 11.1		
10S		8 9 56 5.1 12.2 23.2 22.0 16.5 19.6 -35.7 -34.2 7.1 -24.2 -24.6 1.8	9 10 129 4.1 12.9 15.5 26.3 22.2 10.9 -36.2 -35.5 7.8 -23.4 -23.6 2.3	1 1 10 3.4 6.0 40.0 8.5 6.7 20.0 -37.5 -37.8 0.0 -19.2 -20.1 0.0	
20S		3 3 34 6.0 15.9 20.6 29.0 23.7 20.6 -32.5 -37.0 5.9 -25.3 -23.5 5.9	11 12 129 0.0 0.0 0.0 0.0 0.0 0.0 -36.5 0.0 0.0 -23.0 0.0 0.0	4 4 19 .0 .1 5.3 .4 0.0 0.0 -34.2 -38.0 0.0 -16.9 -15.8 0.0	
30S		2 2 5 0.0 0.0 0.0 0.0 0.0 0.0 -32.4 0.0 0.0 -25.0 0.0 0.0	10 14 163 .5 4.4 3.1 17.8 18.4 1.2 -37.6 -39.0 1.2 -19.0 -20.3 0.0	2 2 21 .4 1.1 14.3 2.5 1.6 0.0 -38.3 -43.0 0.0 -17.5 -15.3 0.0	
40S			19 20 80 4.7 14.8 16.3 29.1 25.1 12.5 -48.0 -47.9 7.5 -6.2 -9.8 2.5	7 7 29 2.4 10.3 10.3 22.7 23.5 6.9 -48.2 -49.0 3.4 -6.1 -6.6 3.4	

APPENDIX D

N_{Flights}	$N_{\text{Indep. obs.}}$	$N_{\text{Total obs.}}$
$\overline{\text{TIC}} \%$	$\text{SIGMA}_{\text{TIC}}$	$P(\text{TIC} > 0 \%)$
$\text{TICIV} \%$	$\text{SIGMA}_{\text{TICIV}}$	$P(\text{TIC} \geq 10 \%)$
$\overline{\text{T}}_{\text{CLEAR}}$	$\overline{\text{T}}_{\text{CLOUD}}$	$P(\text{TIC} \geq 25 \%)$
$\overline{\Delta Z}_{\text{CLEAR}}$	$\overline{\Delta Z}_{\text{CLOUD}}$	$P(\text{TIC} \geq 50 \%)$

SUMMER
28.5-33.5 KFT

165W	120W	75W	30W	15E	ZONAL MEAN	
						80N
						70N
	1 1 15 1.2 2.2 33.3 3.5 2.7 0.0 -55.8 -55.4 0.0 -.3 -1.3 0.0	1 1 2 .8 .8 50.0 1.6 0.0 0.0 -50.0 -51.0 0.0 -.9 -1.1 0.0	35 36 83 4.9 13.2 30.1 16.2 19.9 9.6 -46.7 -47.9 6.0 -4.1 -4.2 2.4		37 38 100 4.2 12.2 31.0 13.7 18.7 8.0 -48.1 -49.2 5.0 -3.5 -3.6 2.0	60N
8 8 17 .3 1.2 5.9 5.1 0.0 0.0 -43.3 -41.0 0.0 -6.9 -6.8 0.0	49 54 188 8.5 21.4 23.4 36.3 30.8 17.0 -40.0 -39.9 13.3 -13.9 -13.4 7.4	14 15 41 6.2 15.5 29.3 21.3 22.4 14.6 -44.4 -42.7 12.2 -6.5 -9.7 7.3	9 9 37 9.0 18.7 27.0 33.4 21.9 21.6 -45.9 -45.5 18.9 -6.2 -5.1 5.4		91 99 378 6.7 18.6 22.0 30.3 29.4 13.5 -42.1 -42.0 10.8 -11.0 -10.4 5.8	50N
59 62 177 1.3 8.8 4.5 29.9 29.3 3.4 -41.4 -40.1 1.7 -15.1 -14.2 1.1	37 37 68 6.0 21.2 16.2 37.2 40.3 8.8 -36.1 -40.5 5.9 -16.9 -15.1 5.9	1 1 1 0.0 0.0 0.0 0.0 0.0 0.0 -34.0 0.0 0.0 -11.0 0.0 0.0			143 158 628 2.2 12.4 6.7 33.5 35.2 4.0 -35.3 -39.8 2.7 -20.1 -13.9 2.1	40N
56 59 234 .9 6.5 5.1 17.9 22.9 2.1 -39.9 -38.5 1.7 -16.8 -16.7 .4					83 98 609 5.9 19.0 15.8 37.6 33.2 10.8 -34.4 -32.4 8.2 -21.2 -23.0 5.4	30N
1 1 13 0.0 0.0 0.0 0.0 0.0 0.0 -39.8 0.0 0.0 -17.3 0.0 0.0					20 22 196 22.5 30.8 50.5 44.5 30.0 40.8 -32.6 -32.2 35.2 -24.4 -25.0 21.4	20N
					10 10 133 14.7 25.1 44.4 33.0 28.4 31.6 -34.4 -32.7 24.1 -24.4 -25.1 9.8	10N
					18 20 195 4.3 12.5 19.0 22.9 19.9 13.8 -36.1 -35.3 7.2 -23.4 -23.6 2.1	0
					18 19 182 1.1 7.3 4.4 25.4 24.1 3.8 -35.7 -37.1 1.1 -22.7 -22.5 1.1	10S
					14 18 189 .5 4.1 4.2 12.1 16.3 1.1 -37.5 -40.5 1.1 -19.0 -18.4 0.0	20S
					26 27 109 4.1 13.7 14.7 27.9 24.9 11.0 -48.0 -48.1 6.4 -6.2 -9.2 2.8	30S
						40S

APPENDIX D

AUTUMN
28.5-33.5 KFT

Code:

$N_{Flights}$	$N_{Indep. obs.}$	$N_{Total obs.}$
$\overline{TIC} \%$	$SIGMA_{TIC}$	$P(TIC > 0 \%)$
$TICIV \%$	$SIGMA_{TICIV}$	$P(TIC \geq 10 \%)$
\overline{T}_{CLEAR}	\overline{T}_{CLOUD}	$P(TIC \geq 25 \%)$
$\overline{\Delta Z}_{CLEAR}$	$\overline{\Delta Z}_{CLOUD}$	$P(TIC \geq 50 \%)$

	15E	60E	105E	150E	165W
80N					
70N					
60N					2 3 38 0.0 0.0 0.0 0.0 0.0 0.0 -50.9 0.0 0.0 -1.9 0.0 0.0
50N	15 19 146 11.9 23.3 35.6 33.4 28.3 26.7 -51.0 -48.6 18.5 -5.9 -8.1 9.6		1 1 8 0.0 0.0 0.0 0.0 0.0 0.0 -42.9 0.0 0.0 -12.5 0.0 0.0	4 4 53 6.1 22.2 7.5 80.9 22.4 7.5 -44.1 -49.0 7.5 -9.2 -8.2 5.7	
40N	21 27 208 1.4 10.4 1.9 73.1 20.6 1.9 -48.4 -53.5 1.9 -8.0 -8.2 1.4		36 36 122 8.1 22.7 18.0 44.9 34.7 13.9 -39.6 -38.3 11.5 -15.0 -18.1 7.4	7 7 30 8.3 24.5 13.3 62.3 34.0 10.0 -40.9 -45.3 10.0 -10.8 -13.7 10.0	
30N	5 5 46 1.9 12.8 4.3 43.9 43.5 2.2 -38.5 -46.5 2.2 -21.5 -10.3 2.2	11 12 87 5.7 20.7 8.0 70.4 28.0 6.9 -37.6 -38.7 6.9 -22.2 -18.7 6.9	4 4 28 .7 3.9 3.6 20.8 0.0 3.6 -37.4 -34.0 0.0 -22.3 -26.7 0.0	2 4 48 12.6 17.7 50.0 25.2 17.5 37.5 -43.8 -42.3 25.0 -12.1 -15.0 6.3	
20N		13 19 167 6.6 19.7 15.6 42.1 31.6 12.0 -32.2 -34.0 9.0 -23.7 -22.0 6.6	3 3 43 1.0 3.9 9.3 10.3 8.2 4.7 -32.7 -33.3 0.0 -24.3 -24.1 0.0		
10N		5 5 39 13.3 24.4 35.9 36.9 28.0 25.6 -29.9 -30.0 20.5 -22.4 -19.9 10.3	3 3 13 .4 1.3 7.7 4.7 0.0 0.0 -33.0 -32.0 0.0 -23.4 -20.1 0.0	2 2 20 13.7 22.3 45.0 30.4 24.5 25.0 -33.7 -35.0 25.0 -22.5 -21.6 15.0	
0		1 1 7 1.2 2.7 28.6 4.1 3.7 0.0 -28.0 -30.5 0.0 -21.6 -20.4 0.0	2 2 23 22.1 26.4 69.6 31.7 26.4 56.5 -28.3 -28.7 34.8 -21.0 -21.0 17.4	2 2 25 3.9 8.5 24.0 16.4 9.8 16.0 -37.6 -37.5 4.0 -22.4 -22.0 0.0	
10S			2 3 28 1.4 7.1 3.6 38.0 0.0 3.6 -33.1 -31.0 3.6 -20.5 -20.9 0.0	9 9 32 5.6 18.3 12.5 44.4 30.6 9.4 -38.6 -30.0 9.4 -21.9 -22.8 6.3	
20S			2 4 42 18.8 29.4 35.7 52.6 25.4 31.0 -40.6 -35.6 31.0 -19.2 -21.2 19.0	5 7 58 9.5 23.2 17.2 54.9 25.0 15.5 -41.4 -37.8 15.5 -18.2 -20.9 10.3	
30S	2 2 2 0.0 0.0 0.0 0.0 0.0 0.0 -43.5 0.0 0.0 -13.9 0.0 0.0		7 7 39 0.0 0.0 0.0 0.0 0.0 0.0 -47.2 0.0 0.0 -11.1 0.0 0.0	14 16 79 8.8 24.1 13.9 62.9 27.8 12.7 -49.6 -47.9 11.4 -5.2 -10.1 10.1	
40S					

APPENDIX D

N_{Flights}	$N_{\text{Indep. obs.}}$	$N_{\text{Total obs.}}$
$\overline{\text{TIC}} \%$	$\text{SIGMA}_{\text{TIC}}$	$P(\text{TIC} > 0 \%)$
$\text{TICIV} \%$	$\text{SIGMA}_{\text{TICIV}}$	$P(\text{TIC} \geq 10 \%)$
$\overline{\text{T}}_{\text{CLEAR}}$	$\overline{\text{T}}_{\text{CLOUD}}$	$P(\text{TIC} \geq 25 \%)$
$\overline{\Delta Z}_{\text{CLEAR}}$	$\overline{\Delta Z}_{\text{CLOUD}}$	$P(\text{TIC} \geq 50 \%)$

AUTUMN
28.5-33.5 KFT

165W	120W	75W	30W	15E	ZONAL MEAN	
		1 1 9			1 1 9	80N
		0.0 0.0 0.0			0.0 0.0 0.0	
		0.0 0.0 0.0			0.0 0.0 0.0	
		-59.0 0.0 0.0			-59.0 0.0 0.0	
		3.3 0.0 0.0			3.3 0.0 0.0	
	4 5 52	12 16 166	10 11 125		26 32 343	70N
	14.6 27.5 34.6	21.6 35.4 32.5	9.3 23.4 20.0		16.1 30.9 28.3	
	42.2 32.0 26.9	66.5 29.4 30.1	46.4 32.0 16.8		56.8 32.5 24.8	
	-47.2 -53.3 21.2	-50.2 -52.6 28.3	-52.2 -51.2 13.6		-50.6 -52.4 21.9	
	3.8 -2.9 11.5	1.0 -3.9 23.5	-.2 -4.9 8.8		.9 -4.0 16.3	
4 6 71	6 7 86	25 36 408	84 100 793		121 152 1396	60N
5.3 13.4 16.9	13.5 27.2 27.9	3.2 13.8 8.1	10.6 23.6 30.0		8.1 21.0 22.0	
31.2 16.1 15.5	48.4 31.1 20.9	40.0 29.5 6.6	35.4 31.3 21.1		36.7 30.9 16.0	
-48.5 -45.8 11.3	-51.4 -53.1 20.9	-48.0 -47.8 4.9	-46.6 -47.7 15.1		-47.6 -48.0 11.9	
1.1 -2.9 1.4	-1.0 -3.0 14.0	-.5 -5.0 3.2	-5.0 -7.3 9.7		-2.7 -6.6 7.4	
13 17 153	29 33 151	76 93 794	26 32 253		164 199 1558	50N
6.7 18.7 19.6	11.6 25.0 29.1	12.1 27.7 22.4	9.4 23.5 22.1		10.8 25.4 23.4	
34.3 29.0 13.1	39.7 32.0 21.9	53.9 34.2 19.3	42.6 32.9 17.4		46.2 33.7 18.8	
-42.1 -45.0 10.5	-49.1 -47.2 17.2	-45.6 -47.4 16.1	-49.8 -52.3 12.6		-46.6 -48.1 15.0	
-10.5 -8.8 5.2	-5.4 -7.5 10.6	-6.2 -7.7 12.0	-5.8 -6.2 9.1		-6.7 -7.6 10.2	
27 29 120	30 32 106	1 1 1			122 132 587	40N
4.1 13.2 20.0	8.2 22.9 16.0	0.0 0.0 0.0			4.9 17.8 12.1	
20.5 23.1 12.5	51.4 32.6 13.2	0.0 0.0 0.0			40.8 33.9 9.0	
-42.9 -45.5 5.8	-43.9 -42.6 11.3	-25.0 0.0 0.0			-44.5 -43.0 6.8	
-11.9 -11.9 3.3	-10.0 -11.0 8.5	-11.2 0.0 0.0			-10.6 -13.5 4.8	
15 16 65	1 2 19				38 43 293	30N
7.7 21.9 15.4	0.0 0.0 0.0				5.8 18.1 15.0	
50.2 31.5 13.8	0.0 0.0 0.0				38.8 30.0 11.9	
-41.7 -41.4 9.2	-37.2 0.0 0.0				-39.2 -41.5 8.5	
-17.9 -17.0 7.7	-20.5 0.0 0.0				-20.0 -16.1 5.1	
5 5 31	3 3 14				24 30 255	20N
11.2 24.4 29.0	0.0 0.0 0.0				5.8 18.4 15.3	
38.4 31.6 22.6	0.0 0.0 0.0				38.0 31.5 11.4	
-35.3 -34.9 16.1	-34.9 0.0 0.0				-32.8 -34.1 7.8	
-20.4 -23.5 9.7	-22.0 0.0 0.0				-23.4 -22.6 5.5	
2 2 14	2 2 3	1 1 1			15 15 90	10N
7.1 21.6 14.3	0.0 0.0 0.0	0.0 0.0 0.0			9.9 21.6 28.9	
50.0 33.5 14.3	0.0 0.0 0.0	0.0 0.0 0.0			34.4 27.9 18.9	
-36.5 -35.0 7.1	-34.7 0.0 0.0	-29.0 0.0 0.0			-32.6 -32.2 15.6	
-24.3 -24.8 7.1	-23.6 0.0 0.0	-25.1 0.0 0.0			-23.1 -20.9 8.9	
					5 5 55	0
					11.2 20.3 43.6	
					25.6 24.0 30.9	
					-33.9 -31.0 16.4	
					-21.9 -21.2 7.3	
3 3 19		1 1 1			15 16 80	10S
.6 2.6 5.3		0.0 0.0 0.0			2.8 12.5 7.5	
11.8 0.0 5.3		0.0 0.0 0.0			37.9 27.7 6.3	
-39.2 -41.0 0.0		-39.0 0.0 0.0			-36.7 -32.0 5.0	
-21.4 -20.9 0.0		-25.6 0.0 0.0			-21.3 -22.2 2.5	
		1 1 1			8 12 101	20S
		0.0 0.0 0.0			13.3 26.3 24.8	
		0.0 0.0 0.0			53.5 25.3 21.8	
		-38.0 0.0 0.0			-41.1 -36.5 21.8	
		-25.7 0.0 0.0			-18.6 -21.1 13.9	
					23 25 120	30S
					5.8 20.0 9.2	
					62.9 27.8 8.3	
					-48.6 -47.9 7.5	
					-7.5 -10.1 6.7	40S

APPENDIX D

Code:

WINTER
33.5-38.5 KFT

$N_{Flights}$	$N_{Indep. obs.}$	$N_{Total obs.}$
$\overline{TIC} \%$	$SIGMA_{TIC}$	$P(TIC > 0 \%)$
$TICIV \%$	$SIGMA_{TICIV}$	$P(TIC \geq 10 \%)$
\overline{T}_{CLEAR}	\overline{T}_{CLOUD}	$P(TIC \geq 25 \%)$
$\overline{\Delta Z}_{CLEAR}$	$\overline{\Delta Z}_{CLOUD}$	$P(TIC \geq 50 \%)$

	15E	60E	105E	150E	165W
80N					
70N					1 1 8 0.0 0.0 0.0 0.0 0.0 0.0 -48.3 0.0 0.0 4.2 0.0 0.0
60N					9 14 179 0.0 0.0 0.0 0.0 0.0 0.0 -50.1 0.0 0.0 4.5 0.0 0.0
50N	13 18 158 6.6 20.0 17.7 37.1 33.6 12.7 -55.9 -61.4 7.6 -.8 -2.2 6.3		5 5 37 0.0 0.0 0.0 0.0 0.0 0.0 -49.3 0.0 0.0 5.7 0.0 0.0	8 12 135 0.0 0.0 0.0 0.0 0.0 0.0 -48.0 0.0 0.0 4.9 0.0 0.0	
40N	32 39 438 6.9 20.3 15.5 44.3 31.8 11.9 -54.0 -56.1 9.6 -3.3 -5.2 6.6		28 28 229 3.4 13.4 9.2 37.1 26.9 7.9 -49.3 -55.5 5.2 -3.6 -4.4 2.6	17 24 263 2.6 14.4 4.9 52.9 38.9 3.8 -48.1 -57.4 3.4 -3.7 -3.7 2.3	
30N	7 8 96 1.8 7.1 8.3 21.8 12.8 6.3 -46.3 -58.0 3.1 -11.7 -2.5 0.0	21 30 339 5.8 17.5 14.7 39.5 27.3 13.0 -48.8 -53.7 8.6 -10.9 -10.0 4.7	16 19 142 .2 2.6 .7 31.0 0.0 .7 -46.5 -51.0 .7 -15.1 -10.2 0.0	10 14 183 0.0 0.0 0.0 0.0 0.0 0.0 -44.2 0.0 0.0 -15.1 0.0 0.0	
20N	1 1 1 0.0 0.0 0.0 0.0 0.0 0.0 -44.0 0.0 0.0 -23.1 0.0 0.0	23 26 232 1.1 7.0 5.2 21.3 22.7 3.0 -46.0 -49.5 1.7 -20.5 -18.2 .9	17 18 128 2.6 10.6 14.8 17.8 21.9 5.5 -46.1 -48.7 4.7 -18.7 -15.2 1.6	5 10 138 0.0 0.0 0.0 0.0 0.0 0.0 -44.6 0.0 0.0 -12.6 0.0 0.0	
10N		15 16 152 10.9 23.8 32.9 33.1 31.5 20.4 -44.0 -44.8 15.1 -22.6 -22.1 8.6	7 7 35 27.0 34.4 45.7 59.1 26.3 40.0 -42.2 -42.3 40.0 -22.7 -23.3 34.3	15 15 181 17.6 29.4 35.9 49.0 29.5 31.5 -44.8 -44.6 26.0 -21.0 -20.8 18.2	
0		8 8 76 23.1 30.4 59.2 39.1 30.6 46.1 -41.5 -42.3 34.2 -23.5 -23.5 21.1	12 16 174 11.8 23.1 35.1 33.6 28.1 25.9 -42.6 -42.8 17.2 -22.5 -22.2 9.2	18 18 184 13.3 27.0 31.5 42.3 33.0 22.8 -44.8 -43.4 18.5 -21.7 -21.3 14.1	
10S		3 4 55 0.0 0.0 0.0 0.0 0.0 0.0 -40.8 0.0 0.0 -23.6 0.0 0.0	18 24 251 10.0 23.7 22.3 44.6 31.1 17.5 -42.4 -41.7 14.3 -22.5 -22.7 9.2	32 33 204 16.6 30.2 34.8 47.6 33.8 27.5 -46.1 -46.5 22.5 -20.9 -21.3 18.1	
20S	2 2 11 0.0 0.0 0.0 0.0 0.0 0.0 -47.0 0.0 0.0 0.0 0.0 0.0	6 10 102 0.0 0.0 0.0 0.0 0.0 0.0 -43.1 0.0 0.0 -19.3 0.0 0.0	18 27 294 1.1 8.2 3.4 32.7 30.8 2.0 -42.1 -45.8 1.7 -22.7 -22.2 1.0	16 23 241 11.8 26.0 28.6 41.2 33.9 20.3 -45.3 -47.4 15.8 -19.6 -19.3 11.6	
30S		2 2 30 0.0 0.0 0.0 0.0 0.0 0.0 -47.8 0.0 0.0 -16.3 0.0 0.0	38 48 480 1.9 11.4 4.2 45.5 33.9 3.3 -48.2 -49.5 2.3 -12.7 -11.7 1.9	24 28 186 8.3 22.4 21.0 39.7 34.0 15.1 -49.9 -50.0 11.3 -10.2 -8.0 8.6	
40S					

APPENDIX D

$N_{Flights}$	$N_{Indep. obs.}$	$N_{Total obs.}$
$\overline{TIC} \%$	$SIGMA_{TIC}$	$P(TIC > 0 \%)$
$TICIV \%$	$SIGMA_{TICIV}$	$P(TIC \geq 10 \%)$
\overline{T}_{CLEAR}	\overline{T}_{CLOUD}	$P(TIC \geq 25 \%)$
$\overline{\Delta Z}_{CLEAR}$	$\overline{\Delta Z}_{CLOUD}$	$P(TIC \geq 50 \%)$

WINTER
33.5-38.5 KFT

165W	120W	75W	30W	15E	ZONAL MEAN	
						80N
						70N
						60N
						50N
						40N
						30N
						20N
						10N
						0
						10S
						20S
						30S
						40S

APPENDIX D

Code:

SPRING
33.5-38.5 KFT

$N_{Flights}$	$N_{Indep. obs.}$	$N_{Total obs.}$
$\overline{TIC} \%$	$SIGMA_{TIC}$	$P(TIC > 0 \%)$
$TICIV \%$	$SIGMA_{TICIV}$	$P(TIC \geq 10 \%)$
\overline{T}_{CLEAR}	\overline{T}_{CLOUD}	$P(TIC \geq 25 \%)$
$\overline{\Delta Z}_{CLEAR}$	$\overline{\Delta Z}_{CLOUD}$	$P(TIC \geq 50 \%)$

	15E	60E	105E	150E	165W	
80N						
70N				1 1 7 0.0 0.0 0.0 0.0 0.0 0.0 -47.1 0.0 0.0 6.0 0.0 0.0		
60N				19 31 375 5.0 17.4 10.7 46.8 29.5 9.1 -52.4 -62.6 7.7 2.9 -.3 5.1		
50N	9 11 84 3.7 14.2 10.7 34.2 29.1 7.1 -54.9 -56.8 4.8 .0 1.1 4.8		8 8 48 7.0 19.3 22.9 30.4 30.1 16.7 -51.4 -56.7 8.3 1.3 -5.3 4.2	33 48 585 6.7 21.0 15.4 43.8 35.2 11.1 -53.8 -56.1 8.7 -.5 -4.5 7.0		
40N	11 15 174 5.5 16.7 16.7 32.7 28.1 11.5 -54.2 -56.3 8.6 -2.6 -4.2 3.4	3 3 3 28.9 40.9 33.3 86.7 0.0 33.3 -50.0 -51.0 33.3 -8.8 -7.5 33.3	46 47 321 11.1 24.1 29.9 37.0 31.3 21.5 -52.5 -53.5 16.2 -5.6 -7.7 9.7	24 25 191 8.2 21.8 20.4 40.1 32.4 14.7 -52.6 -52.3 12.0 -1.0 -6.3 8.9		
30N	3 3 8 0.0 0.0 0.0 0.0 0.0 0.0 -49.9 0.0 0.0 -17.4 0.0 0.0	14 17 174 5.4 18.7 13.2 40.5 34.8 8.6 -48.3 -50.2 7.5 -10.5 -9.7 5.2	13 15 129 5.7 16.2 20.9 27.2 25.8 14.0 -46.3 -46.5 7.8 -12.5 -14.1 4.7	9 12 177 5.3 13.6 31.6 16.9 19.8 14.1 -50.1 -49.4 9.0 -12.3 -12.6 2.8		
20N		9 11 71 9.5 19.9 31.0 30.6 25.0 22.5 -46.6 -46.0 15.5 -14.4 -16.3 8.5	16 17 113 2.7 10.4 16.8 16.3 20.5 5.3 -45.8 -45.2 4.4 -16.3 -17.5 2.7	9 14 180 4.6 16.4 11.7 39.3 30.8 9.4 -47.1 -48.6 7.2 -15.4 -14.7 3.9		
10N		2 2 5 0.0 0.0 0.0 0.0 0.0 0.0 -48.4 0.0 0.0 -11.8 0.0 0.0	1 1 6 2.4 4.2 33.3 7.1 4.3 16.7 -45.0 -45.5 0.0 -13.6 -13.7 0.0	5 5 11 5.2 12.0 18.2 28.4 11.6 18.2 -50.7 -43.0 9.1 -19.7 -17.2 0.0		
0				6 6 63 9.3 20.9 28.6 32.6 27.7 23.8 -47.6 -49.6 12.7 -17.8 -20.0 6.3		
10S				10 10 66 2.7 10.3 10.6 25.0 20.8 6.1 -50.3 -49.1 4.5 -19.1 -20.6 1.5		
20S				3 3 36 .1 .3 2.8 2.0 0.0 0.0 -52.1 -50.0 0.0 -13.8 -23.4 0.0		
30S				5 5 16 .4 1.5 6.3 6.3 0.0 0.0 -54.9 -57.0 0.0 -10.5 -9.0 0.0		
40S						

APPENDIX D

N_{Flights}	$N_{\text{Indep. obs.}}$	$N_{\text{Total obs.}}$
$\overline{\text{TIC}} \%$	$\text{SIGMA}_{\text{TIC}}$	$P(\text{TIC} > 0 \%)$
$\text{TICIV} \%$	$\text{SIGMA}_{\text{TICIV}}$	$P(\text{TIC} \geq 10 \%)$
$\overline{\text{T}}_{\text{CLEAR}}$	$\overline{\text{T}}_{\text{CLOUD}}$	$P(\text{TIC} \geq 25 \%)$
$\overline{\Delta Z}_{\text{CLEAR}}$	$\overline{\Delta Z}_{\text{CLOUD}}$	$P(\text{TIC} \geq 50 \%)$

SPRING
33.5-38.5 KFT

165W	120W			75W			30W			15E	ZONAL MEAN				
	1	1	8	2	2	14	1	1	3	4	4	25	80N		
	0.0	0.0	0.0	.1	.4	7.1	0.0	0.0	0.0	1	.3	4.0			
	0.0	0.0	0.0	1.6	0.0	0.0	0.0	0.0	0.0	1.6	0.0	0.0			
	-58.8	0.0	0.0	-52.9	-59.0	0.0	-59.0	0.0	0.0	-55.6	-59.0	0.0			
	2.4	0.0	0.0	1.9	-.7	0.0	.1	0.0	0.0	1.8	-.7	0.0			
10	11	151	13	13	122	6	6	88	4	4	40	34	35	408	70N
.0	.0	.7	.0	.1	3.3	.0	.2	4.5	0.0	0.0	0.0	.0	.1	2.2	
.4	0.0	0.0	.4	0.0	0.0	.7	.5	0.0	0.0	0.0	0.0	.5	.4	0.0	
-49.2	-47.0	0.0	-50.3	-49.0	0.0	-51.7	-57.8	0.0	-50.9	0.0	0.0	-50.2	-52.7	0.0	
4.9	5.4	0.0	4.3	5.9	0.0	3.8	2.8	0.0	3.8	0.0	0.0	4.4	4.4	0.0	
24	32	337	17	29	343	29	32	327	35	47	503	124	171	1885	60N
1.2	7.9	4.2	1.8	9.4	9.0	11.4	26.2	27.5	4.8	16.4	14.5	4.8	17.0	13.2	
27.8	27.4	2.1	20.1	24.6	4.1	41.4	35.5	18.7	32.9	30.6	9.9	36.4	32.5	8.8	
-50.4	-63.1	1.8	-55.4	-59.7	2.9	-52.8	-57.1	14.7	-53.7	-60.6	6.6	-53.0	-59.7	6.7	
3.4	-2.2	.9	.7	-3.2	1.2	1.1	-3.6	11.3	1.5	-1.6	4.2	1.9	-2.4	4.5	
36	50	531	115	136	1026	39	50	439	13	17	138	253	320	2851	50N
6.1	18.1	19.8	7.1	20.2	17.3	8.6	21.9	23.5	3.1	13.3	11.6	6.8	19.9	18.0	
30.7	30.1	12.4	41.1	31.0	13.5	36.7	31.9	16.9	26.6	30.0	6.5	37.7	32.1	12.9	
-54.5	-58.8	8.5	-54.4	-58.1	10.8	-54.2	-56.5	13.0	-52.5	-59.4	4.3	-54.1	-57.6	9.8	
-.4	-5.5	5.1	-.3	-3.4	6.4	-1.2	-3.2	7.7	.2	-2.9	2.2	-.4	-3.9	6.2	
130	162	1606	110	125	873	4	4	47				328	381	3215	40N
2.6	11.5	11.6	5.1	17.5	12.7	.0	.1	2.1				4.6	16.1	14.4	
22.5	26.2	6.1	40.1	31.8	9.5	.4	0.0	0.0				31.9	30.5	9.3	
-54.8	-57.5	3.8	-53.7	-59.7	7.4	-55.1	-38.0	0.0				-54.1	-56.6	6.7	
-4.3	-4.8	2.1	-.7	-3.1	4.8	-3.7	2.0	0.0				-3.2	-5.1	4.0	
95	137	1489	9	10	90	4	4	54				147	198	2121	30N
5.9	18.1	17.3	3.4	12.1	15.6	2.1	9.6	5.6				5.6	17.3	18.0	
34.2	30.3	12.2	21.8	23.1	7.8	38.4	16.4	5.6				31.2	29.5	11.8	
-52.2	-54.4	8.9	-48.1	-50.6	5.6	-53.8	-49.3	3.7				-51.2	-52.7	8.4	
-8.4	-7.9	5.0	-13.6	-14.9	2.2	-14.5	-13.5	1.9				-9.5	-9.5	4.6	
13	16	143	11	12	107	8	8	72				66	78	686	20N
2.4	8.2	11.9	11.1	23.4	34.6	10.4	25.1	29.2				6.0	17.5	20.0	
20.0	14.4	7.0	32.0	30.2	21.5	35.8	35.4	16.7				29.8	28.7	12.2	
-48.5	-46.6	4.2	-48.5	-48.8	15.9	-50.4	-49.9	13.9				-47.6	-47.7	9.0	
-15.5	-15.5	0.0	-14.8	-14.6	10.3	-18.6	-16.1	11.1				-15.7	-15.6	5.1	
11	13	142				7	7	76				26	28	240	10N
6.4	19.0	15.5				18.7	30.3	39.5				10.0	23.4	23.3	
41.6	29.7	12.7				47.4	31.2	34.2				43.0	30.6	19.6	
-48.2	-45.5	9.2				-48.3	-49.1	28.9				-48.3	-47.3	15.0	
-19.3	-17.4	7.0				-17.7	-16.5	17.1				-18.6	-16.8	9.6	
3	3	37				7	7	72				16	16	172	0
0.0	0.0	0.0				17.7	26.1	55.6				10.8	22.2	33.7	
0.0	0.0	0.0				31.9	27.9	41.7				32.1	27.8	26.2	
-47.3	0.0	0.0				-49.0	-48.9	25.0				-47.9	-49.1	15.1	
-20.1	0.0	0.0				-19.3	-19.2	15.3				-18.9	-19.6	8.7	
2	2	10				8	8	84				20	20	160	10S
4.5	11.2	20.0				12.0	23.1	41.7				7.7	18.8	27.5	
22.7	14.5	10.0				28.8	28.2	26.2				27.9	26.7	16.9	
-43.6	-46.5	10.0				-49.5	-48.7	16.7				-49.5	-48.6	11.3	
-20.7	-14.0	0.0				-20.1	-19.9	8.3				-19.5	-19.7	5.0	
						6	6	12				9	9	48	20S
						11.8	21.9	25.0				3.0	12.1	8.3	
						47.3	15.2	25.0				36.0	23.7	6.3	
						-50.0	-49.3	25.0				-51.6	-49.5	6.3	
						-20.2	-19.7	8.3				-14.7	-20.6	2.1	
												5	5	16	30S
												.4	1.5	6.3	
												6.3	0.0	0.0	
												-54.9	-57.0	0.0	
												-10.5	-9.0	0.0	40S

APPENDIX D

Code:
 SUMMER
 33.5-38.5 KFT

$N_{Flights}$	$N_{Indep. obs.}$	$N_{Total obs.}$
$\overline{TIC} \%$	$SIGMA_{TIC}$	$P(TIC > 0 \%)$
$TICIV \%$	$SIGMA_{TICIV}$	$P(TIC \geq 10 \%)$
\overline{T}_{CLEAR}	\overline{T}_{CLOUD}	$P(TIC \geq 25 \%)$
$\overline{\Delta Z}_{CLEAR}$	$\overline{\Delta Z}_{CLOUD}$	$P(TIC \geq 50 \%)$

	15E	60E	105E	150E	165W	
80N						
70N				2 2 16 1.8 7.0 6.3 29.0 0.0 6.3 -53.7 -58.0 6.3 .7 -4.4 0.0		
60N				7 10 107 1.3 5.0 10.3 12.3 10.5 4.7 -47.1 -57.0 .9 2.2 -.7 0.0		
50N	7 8 88 .3 2.0 2.3 12.9 3.5 1.1 -49.0 -54.0 0.0 -2.8 .5 0.0		6 6 26 .3 1.0 7.7 3.7 .2 0.0 -46.5 -44.0 0.0 -10.3 -16.4 0.0	17 28 350 12.7 24.0 38.3 33.3 28.7 26.6 -50.3 -51.8 18.6 -5.7 -8.6 12.0		
40N	13 20 232 0.0 0.0 0.0 0.0 0.0 0.0 -40.3 0.0 0.0 -20.4 0.0 0.0		27 27 132 16.9 27.4 42.4 39.8 29.3 31.8 -48.9 -47.3 25.0 -13.0 -14.2 15.2	11 11 53 6.7 15.1 22.6 29.4 18.5 18.9 -49.0 -51.8 11.3 -13.2 -11.9 3.8		
30N	4 6 56 0.0 0.0 0.0 0.0 0.0 0.0 -39.4 0.0 0.0 -22.9 0.0 0.0	5 7 67 4.1 16.5 6.0 69.0 9.5 6.0 -38.8 -39.5 6.0 -18.5 -15.6 6.0	1 1 2 0.0 0.0 0.0 0.0 0.0 0.0 -41.5 0.0 0.0 -21.4 0.0 0.0	1 2 35 0.0 0.0 0.0 0.0 0.0 0.0 -48.7 0.0 0.0 -14.3 0.0 0.0		
20N		9 11 108 29.8 31.5 71.3 41.9 29.8 58.3 -42.2 -44.2 46.3 -20.7 -19.5 29.6	3 3 25 21.2 28.3 56.0 37.8 28.3 44.0 -40.1 -41.5 32.0 -22.2 -21.3 20.0			
10N		6 6 74 9.5 22.2 29.7 32.0 30.7 17.6 -43.6 -42.9 12.2 -20.8 -20.7 8.1	3 3 21 6.2 13.4 23.8 26.0 15.5 19.0 -43.6 -43.2 14.3 -20.7 -20.7 0.0	2 2 32 1.7 6.0 21.9 7.7 10.8 6.3 -45.2 -48.1 3.1 -18.7 -18.4 0.0		
0		4 4 29 6.0 20.7 10.3 57.9 33.6 10.3 -43.0 -42.7 6.9 -21.0 -20.2 6.9	8 9 87 8.2 20.0 20.7 39.7 26.2 17.2 -44.5 -43.8 13.8 -20.2 -20.2 6.9	3 3 27 20.9 28.1 66.7 31.3 29.3 40.7 -47.7 -48.7 29.6 -14.3 -15.4 22.2		
10S		2 2 31 0.0 0.0 0.0 0.0 0.0 0.0 -41.1 0.0 0.0 -21.6 0.0 0.0	7 8 79 .0 .1 1.3 .8 0.0 0.0 -44.7 -49.0 0.0 -19.6 -17.8 0.0	4 4 38 1.6 9.2 5.3 30.2 27.1 2.6 -50.1 -50.0 2.6 -17.1 -20.1 2.6		
20S		2 2 7 0.0 0.0 0.0 0.0 0.0 0.0 -40.9 0.0 0.0 -21.4 0.0 0.0	9 12 130 .0 .4 .8 4.3 0.0 0.0 -46.1 -51.0 0.0 -15.4 -11.2 0.0	5 8 88 1.2 5.3 8.0 15.1 11.7 5.7 -46.6 -48.1 2.3 -13.4 -15.1 0.0		
30S			17 22 206 .1 1.4 1.0 13.5 5.7 .5 -48.7 -51.0 0.0 -2.0 -6.4 0.0	10 11 86 0.0 0.0 0.0 0.0 0.0 0.0 -50.9 0.0 0.0 -3.2 0.0 0.0		
40S						

APPENDIX D

N_{Flights}	$N_{\text{Indep. obs.}}$	$N_{\text{Total obs.}}$
$\overline{\text{TIC}} \%$	$\text{SIGMA}_{\text{TIC}}$	$P(\text{TIC} > 0 \%)$
$\text{TICIV} \%$	$\text{SIGMA}_{\text{TICIV}}$	$P(\text{TIC} \geq 10 \%)$
$\overline{\text{T}}_{\text{CLEAR}}$	$\overline{\text{T}}_{\text{CLOUD}}$	$P(\text{TIC} \geq 25 \%)$
$\overline{\Delta Z}_{\text{CLEAR}}$	$\overline{\Delta Z}_{\text{CLOUD}}$	$P(\text{TIC} \geq 50 \%)$

SUMMER
33.5-38.5 KFT

165W			120W			75W			30W			15E			ZONAL MEAN		
						1	1	7	1	1	7	2	2	14	80N		
						0.0	0.0	0.0	.1	.1	14.3	.0	.1	7.1			
						0.0	0.0	0.0	.4	0.0	0.0	.4	0.0	0.0			
						-42.0	0.0	0.0	-44.5	-45.0	0.0	-43.2	-45.0	0.0			
						5.5	0.0	0.0	4.6	4.7	0.0	5.1	4.7	0.0			
6	8	61	12	14	163	6	6	72	7	9	98	33	39	410	70N		
.0	.1	3.3	.7	6.5	4.9	0.0	0.0	0.0	0.0	0.0	0.0	.4	4.3	2.7			
.4	0.0	0.0	14.2	25.7	1.8	0.0	0.0	0.0	0.0	0.0	0.0	13.0	23.1	1.0			
-53.1	-56.5	0.0	-50.3	-55.3	.6	-45.3	0.0	0.0	-47.9	0.0	0.0	-49.3	-55.7	.5			
.4	-2.1	0.0	2.3	.1	.6	4.7	0.0	0.0	2.8	0.0	0.0	2.5	-.7	.2			
11	13	117	25	34	384	4	5	55	33	37	202	80	99	865	60N		
3.6	12.2	17.9	2.2	10.5	7.8	.7	1.8	16.4	1.2	5.9	8.9	2.0	9.0	10.3			
20.2	22.1	8.5	28.2	26.1	4.9	4.1	2.3	0.0	13.6	15.0	4.0	19.0	21.6	4.9			
-50.4	-56.1	5.1	-50.9	-54.6	3.4	-49.5	-53.8	0.0	-52.8	-55.9	2.0	-50.7	-55.4	2.8			
.7	-2.3	.9	1.2	-2.8	1.8	1.5	-2.9	0.0	.5	-2.2	0.0	1.1	-2.3	.9			
27	32	282	75	88	825	12	17	153	6	6	41	150	185	1765	50N		
7.4	18.0	25.2	8.3	21.1	23.2	10.0	21.0	32.7	3.5	13.5	12.2	8.5	20.6	25.8			
29.2	25.3	17.0	35.7	30.6	16.1	30.5	26.9	23.5	29.1	27.3	9.8	33.1	28.9	17.8			
-50.6	-54.7	11.7	-49.9	-51.6	12.6	-51.7	-52.3	13.7	-54.5	-55.0	4.9	-50.2	-52.3	12.7			
-5.3	-7.2	4.6	-9.2	-9.4	7.4	-2.1	-3.9	9.8	-.8	-.1	2.4	-6.8	-8.1	7.5			
83	125	1393	47	61	605							181	244	2415	40N		
2.4	11.8	7.0	2.5	10.9	11.2							3.1	13.0	9.6			
35.0	29.5	4.7	22.6	24.4	6.3							32.3	28.4	6.4			
-50.1	-52.8	3.7	-48.7	-51.1	3.6							-48.7	-50.9	4.7			
-10.9	-8.7	1.9	-12.9	-11.8	1.7							-12.5	-11.1	2.4			
64	110	1417										75	126	1577	30N		
1.8	10.1	7.0										1.8	10.2	6.5			
25.7	29.3	4.0										27.3	30.0	3.9			
-49.2	-51.0	2.5										-48.3	-50.6	2.5			
-13.0	-12.2	1.4										-13.6	-12.4	1.5			
4	5	54										16	19	187	20N		
.5	1.6	11.1										20.2	29.1	51.9			
4.2	2.7	0.0										39.0	30.0	39.6			
-47.5	-45.7	0.0										-44.8	-43.9	31.0			
-18.9	-23.2	0.0										-19.9	-20.0	19.3			
3	3	24										14	14	151	10N		
12.6	27.1	20.8										7.9	20.1	25.8			
60.5	25.0	20.8										30.5	29.6	15.9			
-46.3	-49.0	20.8										-44.4	-44.7	11.9			
-23.3	-23.0	12.5										-20.7	-20.6	6.0			
												15	16	143	0		
												10.1	22.5	27.3			
												37.2	29.2	20.3			
												-44.4	-46.0	15.4			
												-19.9	-18.0	9.8			
												13	14	148	10S		
												.4	4.7	2.0			
												20.4	26.1	.7			
												-45.3	-49.7	.7			
												-19.4	-19.3	.7			
												16	22	225	20S		
												.5	3.3	3.6			
												13.8	11.5	2.2			
												-46.1	-48.5	.9			
												-14.9	-14.7	0.0			
												27	33	292	30S		
												.1	1.2	.7			
												13.5	5.7	.3			
												-49.4	-51.0	0.0			
												-2.4	-6.4	0.0	40S		

APPENDIX D

AUTUMN
33.5-38.5 KFT

Code:

$N_{Flights}$	$N_{Indep. obs.}$	$N_{Total obs.}$
$\overline{TIC} \%$	$SIGMA_{TIC}$	$P(TIC > 0 \%)$
$TICIV \%$	$SIGMA_{TICIV}$	$P(TIC \geq 10 \%)$
\overline{T}_{CLEAR}	\overline{T}_{CLOUD}	$P(TIC \geq 25 \%)$
$\overline{\Delta Z}_{CLEAR}$	$\overline{\Delta Z}_{CLOUD}$	$P(TIC \geq 50 \%)$

	15E	60E	105E	150E	165W
80N					
70N					1 1 1 0.0 0.0 0.0 0.0 0.0 0.0 -50.0 0.0 0.0 .6 0.0 0.0
60N					10 16 193 4.0 16.1 9.3 43.3 32.8 6.7 -52.2 -53.7 5.2 .7 -5.4 4.7
50N	10 12 122 .8 5.7 4.1 19.8 20.5 3.3 -54.6 -57.4 .8 -3.5 -5.9 .8		9 9 33 2.9 11.4 6.1 47.6 1.8 6.1 -48.4 -49.0 6.1 -5.5 -12.9 0.0	25 35 453 7.0 18.2 24.7 28.5 27.1 15.5 -49.8 -52.0 10.2 -6.2 -9.2 6.4	
40N	16 18 186 2.4 11.1 7.0 34.0 26.2 5.4 -53.2 -58.6 4.3 -6.3 -3.8 2.2		32 32 215 11.3 25.7 27.4 41.3 34.2 20.0 -46.5 -48.4 15.3 -14.0 -14.0 11.6	19 29 287 11.2 24.4 33.4 33.5 32.0 23.0 -50.7 -51.4 14.6 -10.9 -12.0 9.8	
30N	1 1 12 0.0 0.0 0.0 0.0 0.0 0.0 -45.0 0.0 0.0 -21.4 0.0 0.0	13 18 197 .6 3.1 4.6 13.1 6.9 3.0 -45.7 -47.9 0.0 -16.8 -15.9 0.0	7 9 77 .0 2 1.3 1.6 0.0 0.0 -44.9 -40.0 0.0 -20.6 -23.8 0.0	7 9 98 2.2 8.8 14.3 15.3 18.3 7.1 -47.4 -48.9 2.0 -15.6 -15.2 1.0	
20N		10 10 79 5.0 15.1 16.5 30.5 24.8 13.9 -45.0 -46.1 7.6 -19.6 -18.4 2.5	3 3 30 28.6 37.2 46.7 61.2 31.0 40.0 -48.9 -49.1 36.7 -20.0 -19.9 33.3		
10N		3 3 22 36.4 33.4 72.7 50.1 29.1 63.6 -42.8 -43.4 50.0 -18.7 -18.8 40.9	1 1 6 7.3 7.1 83.3 8.7 6.9 50.0 -49.0 -49.0 0.0 -19.8 -19.7 0.0	8 8 56 9.3 22.3 26.8 34.8 31.1 17.9 -45.9 -48.0 16.1 -19.1 -17.6 7.1	
0		1 1 12 40.3 20.8 91.7 43.9 17.6 83.3 -40.0 -40.7 83.3 -14.0 -15.2 33.3	2 4 44 20.2 32.7 36.4 55.6 31.1 29.5 -42.0 -41.8 29.5 -14.9 -14.9 22.7	8 8 101 1.0 6.7 5.9 17.0 21.8 2.0 -45.5 -50.7 1.0 -19.3 -17.3 1.0	
10S		1 2 19 6.6 15.2 26.3 25.3 20.1 21.1 -44.2 -40.0 10.5 -13.0 -13.6 5.3	2 3 39 13.7 27.3 33.3 41.1 33.3 20.5 -41.9 -41.3 20.5 -16.1 -16.6 12.8	8 8 80 11.9 24.9 30.0 39.7 31.1 21.3 -46.2 -47.5 17.5 -19.0 -19.8 10.0	
20S		1 1 2 0.0 0.0 0.0 0.0 0.0 0.0 -45.0 0.0 0.0 -14.4 0.0 0.0	2 3 42 0.0 0.0 0.0 0.0 0.0 0.0 -46.7 0.0 0.0 -11.3 0.0 0.0	6 7 86 8.7 24.8 14.0 62.3 32.4 12.8 -47.4 -48.2 10.5 -13.7 -16.5 9.3	
30S	1 1 2 0.0 0.0 0.0 0.0 0.0 0.0 -55.5 0.0 0.0 -4.2 0.0 0.0		4 5 36 .0 1 2.8 .8 0.0 0.0 -52.7 -61.0 0.0 -3.9 -2.4 0.0	8 8 56 9.5 24.8 19.6 48.4 35.1 14.3 -51.0 -52.5 12.5 -3.4 -5.4 12.5	
40S					

APPENDIX D

$N_{Flights}$	$N_{Indep. obs.}$	$N_{Total obs.}$
$\overline{TIC} \%$	$SIGMA_{TIC}$	$P(TIC > 0 \%)$
$TICIV \%$	$SIGMA_{TICIV}$	$P(TIC \geq 10 \%)$
\overline{T}_{CLEAR}	\overline{T}_{CLOUD}	$P(TIC \geq 25 \%)$
$\overline{\Delta Z}_{CLEAR}$	$\overline{\Delta Z}_{CLOUD}$	$P(TIC \geq 50 \%)$

AUTUMN
33.5-38.5 KFT

165W			120W			75W			30W			15E			ZONAL MEAN			
1	1	5	1	1	8	4	4	41				6	6	54	80N			
0.0	0.0	0.0	0.0	0.0	0.0	.0	.1	2.4				.0	.1	1.9				
0.0	0.0	0.0	0.0	0.0	0.0	.4	0.0	0.0				.4	0.0	0.0				
-53.6	0.0	0.0	-61.1	0.0	0.0	-57.0	-62.0	0.0				-57.3	-62.0	0.0				
5.2	0.0	0.0	5.0	0.0	0.0	3.9	.6	0.0				4.2	.6	0.0				
9	10	108	14	17	198	5	6	46	1	2	26	30	36	379	70N			
.5	3.4	2.8	.8	6.9	3.0	9.5	26.3	15.2	7.0	13.5	26.9	2.2	11.6	6.1				
19.5	7.3	2.8	27.3	29.4	2.0	62.5	35.1	13.0	26.1	13.3	23.1	36.6	31.0	5.0				
-54.0	-57.0	.9	-53.7	-59.7	1.0	-52.4	-60.9	13.0	-52.2	-58.1	15.4	-53.6	-59.2	3.4				
2.7	-1.0	0.0	3.6	-1.3	.5	2.3	-.9	8.7	2.0	1.2	0.0	3.1	-.4	1.3				
7	7	48	14	23	261	51	72	872	66	95	1116	148	213	2490	60N			
0.0	0.0	0.0	3.7	12.7	14.2	6.6	21.0	12.2	4.7	15.7	14.8	5.1	17.5	13.1				
0.0	0.0	0.0	26.4	23.2	9.6	54.1	32.7	10.3	31.5	28.8	10.5	38.9	31.8	9.8				
-51.8	0.0	0.0	-54.2	-57.0	6.1	-49.8	-57.9	8.8	-51.9	-58.4	6.8	-51.4	-57.8	7.2				
3.0	0.0	0.0	.6	-2.8	1.9	-.1	-3.1	7.3	-1.5	-3.4	3.6	-.5	-3.3	4.7				
20	26	297	26	30	255	71	104	1114	17	22	219	178	238	2493	50N			
5.6	16.9	17.8	7.4	19.9	20.0	7.2	21.6	15.7	3.6	13.5	13.7	6.3	19.1	17.2				
31.2	28.4	11.4	36.8	30.0	15.7	45.9	34.7	12.1	26.2	27.0	9.6	36.8	31.9	12.3				
-52.5	-57.4	8.1	-52.0	-53.2	10.6	-51.9	-57.8	9.7	-55.9	-57.8	4.6	-52.1	-55.7	8.7				
-6.4	-6.8	4.7	-3.7	-7.3	6.7	-2.2	-4.5	7.1	-4.6	-6.2	2.3	-4.0	-6.5	5.8				
32	42	387	18	22	134	1	1	1	1	1	5	119	145	1215	40N			
3.0	13.5	9.3	4.2	15.2	10.4	0.0	0.0	0.0	0.0	0.0	0.0	6.4	19.4	17.9				
32.7	31.6	5.9	39.8	28.0	7.5	0.0	0.0	0.0	0.0	0.0	0.0	35.9	32.2	12.5				
-50.5	-52.9	3.9	-52.3	-52.2	6.0	-46.0	0.0	0.0	-56.2	0.0	0.0	-50.6	-51.3	8.7				
-11.0	-10.1	2.6	-7.8	-10.2	5.2	-12.6	0.0	0.0	-4.4	0.0	0.0	-10.2	-11.6	6.1				
20	29	341	1	1	9				1	1	4	50	68	738	30N			
5.5	17.6	16.7	0.0	0.0	0.0				31.8	26.8	75.0	3.1	13.0	11.4				
32.6	31.1	10.9	0.0	0.0	0.0				42.4	22.6	75.0	27.6	28.6	7.2				
-48.6	-49.1	7.9	-43.0	0.0	0.0				-49.0	-48.3	50.0	-47.0	-48.6	4.2				
-14.4	-15.0	5.0	-17.7	0.0	0.0				-16.0	-19.0	25.0	-16.1	-15.4	2.6				
9	10	113	3	3	39	1	1	8				26	27	269	20N			
4.9	16.9	17.7	0.0	0.0	0.0	0.0	0.0	0.0				6.7	20.1	17.5				
27.8	31.3	8.0	0.0	0.0	0.0	0.0	0.0	0.0				38.5	33.1	11.9				
-47.7	-49.6	6.2	-43.1	0.0	0.0	-43.6	0.0	0.0				-46.1	-48.4	8.9				
-18.8	-18.0	5.3	-19.4	0.0	0.0	-18.8	0.0	0.0				-19.2	-18.7	6.7				
9	9	61				1	1	16				22	22	161	10N			
4.7	15.3	14.8				0.0	0.0	0.0				10.3	23.1	28.0				
31.8	27.1	11.5				0.0	0.0	0.0				36.7	30.5	21.1				
-48.3	-51.4	6.6				-44.3	0.0	0.0				-46.6	-47.2	14.9				
-19.0	-17.3	3.3				-19.3	0.0	0.0				-19.1	-18.2	9.3				
1	1	15				2	2	30				14	16	202	0			
0.0	0.0	0.0				0.0	0.0	0.0				7.3	20.3	16.3				
0.0	0.0	0.0				0.0	0.0	0.0				44.7	29.3	12.4				
-50.6	0.0	0.0				-46.1	0.0	0.0				-45.4	-43.0	11.9				
-18.4	0.0	0.0				-20.5	0.0	0.0				-18.7	-15.4	7.4				
3	3	10				2	4	39				16	20	187	10S			
0.0	0.0	0.0				0.0	0.0	0.0				8.6	21.8	22.5				
0.0	0.0	0.0				0.0	0.0	0.0				38.4	31.1	15.5				
-51.0	0.0	0.0				-46.8	0.0	0.0				-45.7	-44.7	12.8				
-18.8	0.0	0.0				-20.6	0.0	0.0				-18.3	-18.1	7.5				
						1	1	2				10	12	132	20S			
						0.0	0.0	0.0				5.7	20.4	9.1				
						0.0	0.0	0.0				62.3	32.4	8.3				
						-42.0	0.0	0.0				-47.0	-48.2	6.8				
						-21.1	0.0	0.0				-13.0	-16.5	6.1				
												13	14	94	30S			
												5.7	19.7	12.8				
												44.5	36.1	8.5				
												-51.8	-53.3	7.4				
												-3.6	-5.2	7.4				
															40S			

APPENDIX D

WINTER
38.5-43.5 KFT

Code:

$N_{Flights}$	$N_{Indep. obs.}$	$N_{Total obs.}$
$\overline{TIC} \%$	$SIGMA_{TIC}$	$P(TIC > 0 \%)$
$TICIV \%$	$SIGMA_{TICIV}$	$P(TIC \geq 10 \%)$
\overline{T}_{CLEAR}	\overline{T}_{CLOUD}	$P(TIC \geq 25 \%)$
$\overline{\Delta Z}_{CLEAR}$	$\overline{\Delta Z}_{CLOUD}$	$P(TIC \geq 50 \%)$

	15E	60E	105E	150E	165W
80N					
70N					5 5 27 0.0 0.0 0.0 0.0 0.0 0.0 -49.7 0.0 0.0 7.4 0.0 0.0
60N					13 22 274 0.0 0.0 0.0 0.0 0.0 0.0 -48.5 0.0 0.0 8.0 0.0 0.0
50N	5 6 61 15.2 31.3 19.7 77.2 13.6 19.7 -56.5 -69.3 19.7 4.1 -2.3 19.7		10 10 102 0.0 0.0 0.0 0.0 0.0 0.0 -48.1 0.0 0.0 10.0 0.0 0.0	11 11 150 0.0 0.0 0.0 0.0 0.0 0.0 -47.0 0.0 0.0 10.1 0.0 0.0	
40N	3 4 38 0.0 0.0 0.0 0.0 0.0 0.0 -58.2 0.0 0.0 3.2 0.0 0.0		13 16 164 0.0 0.0 0.0 0.0 0.0 0.0 -51.1 0.0 0.0 4.3 0.0 0.0	9 17 207 0.0 0.0 0.0 0.0 0.0 0.0 -50.4 0.0 0.0 1.8 0.0 0.0	
30N	1 1 8 0.0 0.0 0.0 0.0 0.0 0.0 -58.5 0.0 0.0 1.0 0.0 0.0		7 10 111 .2 1.4 1.8 10.6 1.6 .9 -60.2 -62.5 0.0 -15.8 -17.4 0.0	2 3 38 0.0 0.0 0.0 0.0 0.0 0.0 -48.8 0.0 0.0 -3.2 0.0 0.0	
20N		1 1 2 0.0 0.0 0.0 0.0 0.0 0.0 -58.0 0.0 0.0 -6.7 0.0 0.0	6 6 61 1.5 5.5 11.5 13.2 10.3 4.9 -57.5 -57.7 1.6 -12.2 -11.9 0.0		
10N		3 3 5 .2 .5 20.0 1.2 0.0 0.0 -53.3 -54.0 0.0 -9.4 -18.2 0.0	4 4 32 6.1 14.9 28.1 21.5 21.4 18.8 -59.5 -60.1 9.4 -14.1 -16.0 3.1	6 6 11 13.2 29.2 18.2 72.7 19.0 18.2 -58.0 -63.0 18.2 -16.6 -13.4 18.2	
0		1 1 5 55.5 36.8 80.0 69.3 27.1 80.0 -54.0 -53.8 60.0 0.0 0.0 60.0	2 2 27 62.9 27.9 96.3 65.3 25.5 88.9 -53.0 -52.9 88.9 -18.8 -18.8 66.7	12 12 108 20.0 28.5 48.1 41.6 28.0 41.7 -57.2 -60.2 31.5 -17.4 -15.5 17.6	
10S			1 1 7 53.4 32.1 85.7 62.3 25.5 85.7 -52.0 -52.0 71.4 0.0 0.0 57.1	18 21 167 21.2 30.0 54.5 38.9 31.0 43.1 -57.3 -60.1 29.9 -16.9 -16.8 18.0	
20S			2 3 26 .1 .2 7.7 .8 .4 0.0 -50.0 -57.5 0.0 -17.9 -16.4 0.0	9 9 110 4.1 14.5 13.6 29.9 27.7 8.2 -58.2 -58.7 6.4 -11.8 -15.5 3.6	
30S			4 6 75 0.0 0.0 0.0 0.0 0.0 0.0 -53.0 0.0 0.0 -6.8 0.0 0.0	19 27 305 1.0 8.0 2.6 36.4 34.2 2.0 -57.7 -62.4 1.0 -3.3 -5.0 .7	
40S					

APPENDIX D

$N_{Flights}$	$N_{Indep. obs.}$	$N_{Total obs.}$
$\overline{TIC} \%$	$SIGMA_{TIC}$	$P(TIC > 0 \%)$
$\overline{TICIV} \%$	$SIGMA_{TICIV}$	$P(TIC \geq 10 \%)$
\overline{T}_{CLEAR}	\overline{T}_{CLOUD}	$P(TIC \geq 25 \%)$
$\overline{\Delta Z}_{CLEAR}$	$\overline{\Delta Z}_{CLOUD}$	$P(TIC \geq 50 \%)$

WINTER
38.5-43.5 KFT

165W			120W			75W			30W			15E			ZONAL MEAN			
															60N			
6	7	91	1	1	7							12	13	125	70N			
0.0	0.0	0.0	15.6	25.9	28.6							.9	7.1	1.6				
0.0	0.0	0.0	54.7	14.3	28.6							54.7	14.3	1.6				
-51.7	0.0	0.0	-65.0	-69.5	28.6							-51.8	-69.5	1.6				
5.7	0.0	0.0	2.1	2.3	14.3							5.9	2.3	.8				
															60N			
7	11	138	5	8	88	5	5	32	2	4	44	32	50	576	60N			
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0				
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0				
-49.2	0.0	0.0	-52.6	0.0	0.0	-50.0	0.0	0.0	-56.3	0.0	0.0	-50.0	0.0	0.0				
6.6	0.0	0.0	7.3	0.0	0.0	8.3	0.0	0.0	5.0	0.0	0.0	7.4	0.0	0.0				
															50N			
8	8	60	31	43	469	8	8	82	5	6	57	78	92	981	50N			
.5	4.0	3.3	1.7	10.8	3.8	20.7	36.3	28.0	17.7	34.2	22.8	4.6	18.6	6.9				
16.3	14.7	1.7	44.8	33.6	2.8	73.9	27.8	26.8	77.5	22.5	22.8	65.8	30.9	6.2				
-56.0	-62.0	1.7	-54.6	-67.2	2.6	-51.8	-69.3	24.4	-56.2	-70.1	21.1	-52.7	-68.7	5.8				
2.2	1.0	0.0	5.5	.3	1.7	6.1	-4.5	23.2	3.9	-2.5	21.1	6.5	-2.3	5.2				
															40N			
34	51	607	33	44	450				1	1	15	93	133	1481	40N			
1.8	11.1	4.4	7.4	22.5	12.0				8.5	14.4	53.3	3.1	14.7	6.0				
39.9	35.5	2.6	61.4	30.3	10.9				15.9	16.5	26.7	50.8	34.3	4.7				
-56.0	-63.9	2.5	-56.7	-65.7	9.6				-61.1	-62.5	13.3	-54.9	-64.9	4.1				
1.6	-2.1	2.0	.2	-2.0	8.4				-8.5	-8.4	0.0	1.6	-2.6	3.4				
															30N			
22	32	380	2	2	20							34	48	557	30N			
1.1	8.3	3.2	2.2	9.4	5.0							.8	7.1	2.7				
33.7	32.7	2.4	43.1	0.0	5.0							31.2	30.4	2.0				
-57.4	-63.5	1.3	-56.4	-57.0	5.0							-57.3	-62.9	1.1				
-8.7	-6.1	.8	-15.2	-18.3	0.0							-9.9	-8.4	.5				
															20N			
18	19	251										25	26	314	20N			
3.3	11.4	15.1										3.0	10.5	14.3				
22.0	21.2	9.2										20.6	20.2	8.3				
-57.2	-58.2	6.0										-57.3	-58.1	5.1				
-16.9	-15.6	2.0										-16.0	-15.0	1.6				
															10N			
17	20	229										30	33	277	10N			
11.1	24.2	26.2										10.4	23.5	26.0				
42.5	30.1	21.0										40.2	30.4	20.2				
-56.4	-56.6	16.6										-56.8	-57.1	15.5				
-17.8	-17.0	10.9										-17.1	-16.8	10.1				
															0			
9	9	118										24	24	258	0			
6.9	18.6	19.5										19.2	30.0	40.7				
35.3	27.9	13.6										47.2	29.9	34.5				
-54.5	-56.3	11.9										-55.5	-57.3	29.1				
-18.8	-17.0	6.8										-18.3	-16.4	18.6				
															10S			
8	11	143										27	33	317	10S			
22.4	31.3	52.4										22.4	31.0	54.3				
42.6	31.7	42.7										41.3	31.4	43.8				
-59.0	-64.1	32.9										-58.1	-61.6	32.2				
-16.0	-14.5	20.3										-16.5	-15.8	19.9				
															20S			
															11	12	136	20S
															3.3	13.1	12.5	
															26.5	27.7	6.6	
															-56.6	-58.6	5.1	
															-12.1	-15.6	2.9	
															30S			
															23	33	380	30S
															.8	7.2	2.1	
															36.4	34.2	1.6	
															-56.8	-62.4	.8	
															-3.7	-5.0	.5	
															40S			

APPENDIX D

Code:

SPRING
38.5-43.5 KFT

$N_{Flights}$	$N_{Indep. obs.}$	$N_{Total obs.}$
$\overline{TIC} \%$	$SIGMA_{TIC}$	$P(TIC > 0 \%)$
$TICIV \%$	$SIGMA_{TICIV}$	$P(TIC \geq 10 \%)$
\overline{T}_{CLEAR}	\overline{T}_{CLOUD}	$P(TIC \geq 25 \%)$
$\overline{\Delta Z}_{CLEAR}$	$\overline{\Delta Z}_{CLOUD}$	$P(TIC \geq 50 \%)$

	15E	60E	105E	150E	165W
80N					
70N					11 11 57 0.0 0.0 0.0 0.0 0.0 0.0 -50.8 0.0 0.0 6.7 0.0 0.0
60N					24 44 577 .0 .0 .2 .4 0.0 0.0 -52.1 -59.0 0.0 5.7 3.2 0.0
50N	4 6 59 0.0 0.0 0.0 0.0 0.0 0.0 -58.6 0.0 0.0 2.2 0.0 0.0		23 23 205 .0 .4 .5 5.9 0.0 0.0 -56.1 -63.0 0.0 3.3 -5.3 0.0	38 52 640 4.0 16.2 8.6 46.4 32.9 6.7 -56.1 -64.0 5.5 2.4 -3.8 4.2	
40N	3 4 37 .2 1.3 2.7 8.2 0.0 0.0 -57.6 -62.0 0.0 .7 1.5 0.0		30 33 264 8.3 24.1 17.0 48.6 37.9 12.9 -57.9 -61.6 10.2 -.2 -6.2 7.6	5 7 76 5.0 17.6 11.8 42.0 32.6 9.2 -51.3 -61.8 6.6 .6 -7.3 5.3	
30N	1 1 5 0.0 0.0 0.0 0.0 0.0 0.0 -55.8 0.0 0.0 -15.9 0.0 0.0	1 1 4 0.0 0.0 0.0 0.0 0.0 0.0 -56.5 0.0 0.0 -4.7 0.0 0.0	10 14 128 .4 3.6 5.5 7.9 13.3 .8 -57.3 -55.3 .8 -13.7 -11.6 0.0	2 3 25 .7 3.2 8.0 8.4 8.0 4.0 -57.9 -58.0 0.0 -10.4 -9.8 0.0	
20N		1 1 8 0.0 0.0 0.0 0.0 0.0 0.0 -57.5 0.0 0.0 -4.0 0.0 0.0	9 9 91 .2 1.2 3.3 4.7 4.7 1.1 -58.3 -54.0 0.0 -15.6 -9.8 0.0	3 5 69 0.0 0.0 0.0 0.0 0.0 0.0 -53.3 0.0 0.0 -14.0 0.0 0.0	
10N		3 3 6 0.0 0.0 0.0 0.0 0.0 0.0 -63.7 0.0 0.0 -14.4 0.0 0.0	4 4 36 0.0 0.0 0.0 0.0 0.0 0.0 -62.4 0.0 0.0 -15.3 0.0 0.0	7 7 13 4.9 13.4 15.4 32.2 17.3 15.4 -57.5 -57.5 7.7 -17.6 0.0 0.0	
0					14 14 113 14.4 24.9 43.4 33.1 28.3 30.1 -58.6 -59.8 21.2 -17.3 -16.2 13.3
10S					20 23 145 6.8 18.0 24.1 28.2 27.3 16.6 -58.4 -58.4 10.3 -16.3 -17.1 5.5
20S					5 6 72 .1 .9 4.2 3.1 2.8 0.0 -57.0 -58.7 0.0 -11.6 -15.0 0.0
30S					13 18 182 2.8 14.5 4.9 57.3 33.6 4.9 -57.4 -62.2 3.3 1.1 -11.6 2.7
40S					

APPENDIX D

$N_{Flights}$	$N_{Indep. obs.}$	$N_{Total obs.}$
$\overline{TIC} \%$	$SIGMA_{TIC}$	$P(TIC > 0 \%)$
$TICIV \%$	$SIGMA_{TICIV}$	$P(TIC \geq 10 \%)$
\overline{T}_{CLEAR}	\overline{T}_{CLOUD}	$P(TIC \geq 25 \%)$
$\overline{\Delta Z}_{CLEAR}$	$\overline{\Delta Z}_{CLOUD}$	$P(TIC \geq 50 \%)$

SPRING
38.5-43.5 KFT

165W			120W			75W			30W			15E			ZONAL MEAN		
															80N		
															70N		
12	15	200	3	3	28							26	29	285	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0							0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0							0.0	0.0	0.0	0.0	0.0	0.0
-49.7	0.0	0.0	-54.1	0.0	0.0							-50.4	0.0	0.0	0.0	0.0	0.0
6.5	0.0	0.0	4.7	0.0	0.0							6.4	0.0	0.0	6.4	0.0	0.0
															60N		
17	24	291	11	20	242	16	20	214	12	16	182	80	124	1506	0.0	0.0	0.0
.0	.3	1.7	0.0	0.0	0.0	.0	.1	.5	.1	.7	.5	.0	.3	.5	2.5	2.9	0.0
1.8	1.2	0.0	0.0	0.0	0.0	.8	0.0	0.0	9.4	0.0	0.0	2.5	2.9	0.0	2.5	2.9	0.0
-52.0	-60.0	0.0	-54.6	0.0	0.0	-49.0	-60.0	0.0	-53.6	-65.0	0.0	-52.2	-60.5	0.0	-52.2	-60.5	0.0
5.4	1.8	0.0	5.0	0.0	0.0	6.4	2.3	0.0	4.4	-1.2	0.0	5.5	1.7	0.0	5.5	1.7	0.0
															50N		
25	45	539	68	79	793	22	24	216	5	5	43	185	234	2495	3.6	15.2	8.9
2.2	10.4	8.0	6.0	19.1	13.4	2.9	14.9	8.3	0.0	0.0	0.0	3.6	15.2	8.9	3.6	15.2	8.9
27.3	26.1	5.2	44.7	31.7	10.7	35.1	39.1	3.7	0.0	0.0	0.0	40.8	32.5	6.6	40.8	32.5	6.6
-59.9	-65.1	3.5	-56.0	-65.0	8.6	-50.7	-60.2	3.7	-56.1	0.0	0.0	-56.5	-64.4	5.2	-56.5	-64.4	5.2
.7	-2.3	1.5	3.4	-1.0	6.2	5.4	1.0	3.2	4.1	0.0	0.0	2.7	-1.8	3.6	2.7	-1.8	3.6
															40N		
44	52	502	67	96	957	3	3	47				152	195	1883	4.3	17.1	9.8
1.3	7.8	7.4	4.7	17.9	8.7	9.3	23.8	21.3				4.3	17.1	9.8	4.3	17.1	9.8
17.3	23.4	3.0	54.0	31.8	7.6	43.6	34.2	14.9				44.0	35.0	7.2	44.0	35.0	7.2
-59.7	-66.0	1.8	-57.5	-64.1	6.7	-57.7	-67.3	14.9				-57.9	-63.9	5.9	-57.9	-63.9	5.9
-.5	-2.4	.8	2.4	-2.1	4.8	1.9	-6.4	8.5				1.1	-3.7	4.1	1.1	-3.7	4.1
															30N		
30	44	500	3	3	34	3	3	45				50	69	741	1.5	8.9	6.9
1.9	10.4	6.6	.5	1.7	11.8	1.7	6.8	11.1				1.5	8.9	6.9	1.5	8.9	6.9
28.9	29.4	3.8	4.3	3.0	0.0	15.0	14.6	6.7				21.9	26.5	3.2	21.9	26.5	3.2
-60.3	-63.3	3.0	-56.3	-58.5	0.0	-61.1	-64.6	2.2				-59.5	-61.7	2.3	-59.5	-61.7	2.3
-5.2	-9.5	1.8	-6.4	-6.6	0.0	-10.9	-7.0	0.0				-7.5	-9.3	1.2	-7.5	-9.3	1.2
															20N		
13	14	152	1	1	8	3	3	50				30	33	378	8.3	22.1	21.2
14.9	28.2	36.2	0.0	0.0	0.0	17.1	28.9	44.0				8.3	22.1	21.2	8.3	22.1	21.2
41.1	33.4	29.6	0.0	0.0	0.0	38.8	32.4	34.0				39.1	33.2	16.7	39.1	33.2	16.7
-58.1	-59.6	17.8	-56.4	0.0	0.0	-55.6	-56.2	24.0				-56.8	-58.4	10.3	-56.8	-58.4	10.3
-13.5	-15.4	13.8	-10.3	0.0	0.0	-16.6	-16.3	14.0				-14.3	-15.4	7.4	-14.3	-15.4	7.4
															10N		
13	15	138				5	5	61				32	34	254	12.3	25.7	30.7
16.1	28.5	39.1				13.8	27.0	36.1				12.3	25.7	30.7	12.3	25.7	30.7
41.1	32.4	29.0				38.2	33.1	23.0				40.0	32.3	22.0	40.0	32.3	22.0
-57.4	-57.8	23.9				-54.7	-55.6	23.0				-58.0	-57.2	18.9	-58.0	-57.2	18.9
-17.1	-17.4	14.5				-16.4	-14.2	13.1				-16.5	-16.2	11.0	-16.5	-16.2	11.0
															0		
8	9	111				5	5	68				27	28	292	14.9	26.2	40.4
2.8	11.1	11.7				35.3	32.5	82.4				14.9	26.2	40.4	14.9	26.2	40.4
24.2	23.3	7.2				42.9	30.9	63.2				36.7	29.8	29.1	36.7	29.8	29.1
-55.0	-56.1	4.5				-54.3	-56.3	54.4				-56.3	-57.7	22.6	-56.3	-57.7	22.6
-18.1	-18.5	1.8				-17.0	-16.4	35.3				-17.8	-16.5	14.0	-17.8	-16.5	14.0
															10S		
10	14	155				4	4	53				34	41	353	13.5	26.1	35.4
14.7	26.1	39.4				28.4	35.9	54.7				13.5	26.1	35.4	13.5	26.1	35.4
37.4	29.7	29.0				51.9	33.6	49.1				38.2	31.2	26.9	38.2	31.2	26.9
-63.3	-61.0	21.3				-57.7	-55.8	37.7				-60.3	-59.1	19.3	-60.3	-59.1	19.3
-15.6	-13.8	15.5				-16.2	-16.9	26.4				-16.0	-15.5	13.0	-16.0	-15.5	13.0
															20S		
															30S		
															40S		

APPENDIX D

Code:
 SUMMER
 38.5-43.5 KFT

N_{Flights}	$N_{\text{Indep. obs.}}$	$N_{\text{Total obs.}}$
$\overline{\text{TIC}} \%$	$\text{SIGMA}_{\text{TIC}}$	$P(\text{TIC} > 0 \%)$
$\text{TICIV} \%$	$\text{SIGMA}_{\text{TICIV}}$	$P(\text{TIC} \geq 10 \%)$
$\overline{\text{T}}_{\text{CLEAR}}$	$\overline{\text{T}}_{\text{CLOUD}}$	$P(\text{TIC} \geq 25 \%)$
$\overline{\Delta Z}_{\text{CLEAR}}$	$\overline{\Delta Z}_{\text{CLOUD}}$	$P(\text{TIC} \geq 50 \%)$

	15E	60E	105E	150E	165W
80N					
70N					8 8 45 0.0 0.0 0.0 0.0 0.0 0.0 -48.2 0.0 0.0 5.5 0.0 0.0
60N					15 26 338 .4 3.6 2.7 15.1 16.2 1.2 -50.7 -61.9 .6 4.4 .2 0.0
50N	3 3 45 0.0 0.0 0.0 0.0 0.0 0.0 -50.3 0.0 0.0 -2.3 0.0 0.0		12 12 91 3.8 14.5 8.8 42.7 27.2 6.6 -57.5 -63.6 6.6 -4.8 -8.8 5.5	24 31 363 2.6 11.6 9.9 26.3 27.0 6.1 -55.9 -59.7 3.9 -1.8 -7.7 1.9	
40N	2 4 41 0.0 0.0 0.0 0.0 0.0 0.0 -53.1 0.0 0.0 -16.0 0.0 0.0		17 17 110 3.4 12.8 14.5 23.3 25.6 8.2 -57.8 -58.4 3.6 -8.6 -12.9 2.7	5 5 41 3.3 11.0 17.1 19.6 19.8 7.3 -55.2 -54.4 7.3 -11.9 -13.0 0.0	
30N	2 2 6 9.2 16.6 33.3 27.6 17.8 16.7 -54.3 -55.0 16.7 -17.0 0.0 0.0		1 2 20 4.5 7.1 50.0 9.0 7.7 20.0 -51.7 -51.9 0.0 -12.1 -14.9 0.0	1 1 12 0.0 0.0 0.0 0.0 0.0 0.0 -54.0 0.0 0.0 -16.1 0.0 0.0	
20N		1 1 4 27.5 35.5 100.0 27.5 35.5 50.0 0.0 -52.3 25.0 0.0 -16.8 25.0			
10N		1 1 13 55.5 34.9 84.6 65.6 27.8 84.6 -53.5 -53.3 69.2 -16.8 -16.8 61.5	1 1 1 2.0 0.0 100.0 2.0 0.0 0.0 0.0 -53.0 0.0 0.0 -16.8 0.0	2 2 3 14.6 20.7 33.3 43.9 0.0 33.3 -57.5 -56.0 33.3 -18.8 -20.6 0.0	
0					4 4 33 22.1 29.1 54.5 40.5 28.4 42.4 -55.7 -56.2 30.3 -19.6 -19.5 24.2
10S					3 4 41 9.8 20.7 26.8 36.4 25.1 22.0 -56.1 -56.2 17.1 -15.9 -17.8 7.3
20S					2 3 37 .1 .6 2.7 3.5 0.0 0.0 -56.2 -56.0 0.0 -12.9 -17.9 0.0
30S			2 2 15 0.0 0.0 0.0 0.0 0.0 0.0 -54.5 0.0 0.0 -9.5 0.0 0.0	4 6 74 .0 .3 2.7 1.6 1.2 0.0 -51.8 -54.5 0.0 3.2 -1.7 0.0	
40S					

APPENDIX D

$N_{Flights}$	$N_{Indep. obs.}$	$N_{Total obs.}$
$\overline{TIC} \%$	$SIGMA_{TIC}$	$P(TIC > 0 \%)$
$TICIV \%$	$SIGMA_{TICIV}$	$P(TIC \geq 10 \%)$
\overline{T}_{CLEAR}	\overline{T}_{CLOUD}	$P(TIC \geq 25 \%)$
$\overline{\Delta Z}_{CLEAR}$	$\overline{\Delta Z}_{CLOUD}$	$P(TIC \geq 50 \%)$

SUMMER
36.5-43.5 KFT

165W	120W	75W	30W	15E	ZONAL MEAN	
	5 5 46 0.0 0.0 0.0 0.0 0.0 0.0 -42.7 0.0 0.0 7.8 0.0 0.0	6 9 82 0.0 0.0 0.0 0.0 0.0 0.0 -42.0 0.0 0.0 7.4 0.0 0.0	1 1 7 0.0 0.0 0.0 0.0 0.0 0.0 -42.3 0.0 0.0 7.1 0.0 0.0		12 15 135 0.0 0.0 0.0 0.0 0.0 0.0 -42.2 0.0 0.0 7.5 0.0 0.0	80N
11 19 236 .5 4.7 3.4 14.3 21.4 .8 -51.4 -62.3 .8 3.5 -1.6 .4	33 40 420 0.0 0.0 0.0 0.0 0.0 0.0 -45.7 0.0 0.0 6.5 0.0 0.0	30 47 545 .0 .0 .2 .8 0.0 0.0 -45.9 -52.0 0.0 6.9 5.1 0.0	25 25 295 .0 .2 .3 3.5 0.0 0.0 -49.1 -65.0 0.0 5.7 1.8 0.0		107 139 1541 .1 1.9 .6 11.8 19.8 .1 -47.4 -61.5 .1 6.0 -.6 .1	70N
15 18 148 0.0 0.0 0.0 0.0 0.0 0.0 -52.1 0.0 0.0 2.6 0.0 0.0	31 38 440 .0 .7 .5 9.6 3.3 .2 -50.1 -62.0 0.0 5.0 -1.6 0.0	15 23 264 .1 1.6 .8 18.6 3.7 .8 -50.1 -61.5 0.0 5.5 1.6 0.0	34 43 509 .0 .3 1.0 2.0 1.9 0.0 -51.6 -56.0 0.0 5.0 5.4 0.0		110 148 1699 .1 1.8 1.1 11.2 13.2 .4 -50.8 -60.2 .1 4.8 1.6 0.0	60N
28 36 324 3.0 11.2 14.2 21.3 22.3 8.3 -57.6 -63.3 4.6 -.8 -4.5 1.2	42 56 613 3.4 13.6 10.1 34.0 27.9 7.0 -55.4 -60.5 5.4 -2.0 -5.7 3.4	12 15 196 1.7 9.8 8.7 19.5 27.8 4.1 -54.2 -57.8 1.5 .7 -4.6 1.0	5 7 82 0.0 0.0 0.0 0.0 0.0 0.0 -53.1 0.0 0.0 1.9 0.0 0.0		126 160 1714 2.7 11.9 9.9 27.9 27.1 6.2 -55.6 -61.0 4.1 -1.5 -5.8 2.3	50N
21 24 198 .7 4.4 5.6 13.3 13.3 3.0 -57.6 -61.9 1.0 -4.9 -9.0 0.0	29 41 391 3.8 13.5 11.8 32.3 24.9 8.4 -54.4 -57.8 6.6 -9.4 -12.7 3.1				74 91 781 2.7 11.3 10.2 26.8 24.4 6.5 -55.7 -58.2 4.5 -8.4 -12.2 1.9	40N
5 7 94 0.0 0.0 0.0 0.0 0.0 0.0 -59.3 0.0 0.0 -9.8 0.0 0.0					9 12 132 1.1 5.1 9.1 12.1 12.3 3.8 -58.0 -52.4 .8 -10.8 -14.9 0.0	30N
2 2 35 3.3 14.4 8.6 38.0 33.3 5.7 -60.2 -58.7 2.9 -12.4 -15.6 2.9					3 3 39 5.7 19.2 17.9 32.0 35.0 10.3 -60.2 -55.0 5.1 -12.4 -16.3 5.1	20N
4 4 47 19.4 32.2 40.4 48.1 34.4 27.7 -56.0 -58.8 25.5 -19.6 -18.5 21.3					8 8 64 26.3 35.4 50.0 52.5 33.5 39.1 -56.0 -56.7 34.4 -19.4 -17.9 28.1	10N
2 2 31 54.8 30.1 93.5 58.6 27.3 90.3 -55.5 -55.5 77.4 -20.2 -20.1 54.8					6 6 64 37.9 33.8 73.4 51.7 29.1 65.6 -55.6 -55.8 53.1 -19.6 -19.9 39.1	0
					3 4 41 9.8 20.7 26.8 36.4 25.1 22.0 -56.1 -56.2 17.1 -15.9 -17.8 7.3	10S
					2 3 37 .1 .6 2.7 3.5 0.0 0.0 -56.2 -56.0 0.0 -12.9 -17.9 0.0	20S
					6 8 89 .0 .3 2.2 1.6 1.2 0.0 -52.3 -54.5 0.0 1.0 -1.7 0.0	30S
						40S

APPENDIX D

AUTUMN
38.5-43.5 KFT

Code:

$N_{Flights}$	$N_{Indep. obs.}$	$N_{Total obs.}$
$\overline{TIC} \%$	$SIGMA_{TIC}$	$P(TIC > 0 \%)$
$TICIV \%$	$SIGMA_{TICIV}$	$P(TIC \geq 10 \%)$
\overline{T}_{CLEAR}	\overline{T}_{CLOUD}	$P(TIC \geq 25 \%)$
$\overline{\Delta Z}_{CLEAR}$	$\overline{\Delta Z}_{CLOUD}$	$P(TIC \geq 50 \%)$

	15E	60E	105E	150E	165W
80N					
70N					8 8 55 0.0 0.0 0.0 0.0 0.0 0.0 -47.6 0.0 0.0 7.5 0.0 0.0
60N					16 28 379 .2 2.6 1.3 13.9 17.6 .5 -52.0 -55.8 .3 3.9 -5.2 0.0
50N	3 5 53 0.0 0.0 0.0 0.0 0.0 0.0 -56.2 0.0 0.0 3.1 0.0 0.0		12 12 108 2.4 8.9 8.3 28.5 14.6 7.4 -56.2 -62.4 4.6 -1.4 -8.1 .9	27 39 526 .8 4.4 5.9 12.8 13.4 2.3 -55.4 -59.2 1.0 -1.3 -9.1 0.0	
40N	3 3 31 0.0 0.0 0.0 0.0 0.0 0.0 -54.5 0.0 0.0 -6.1 0.0 0.0		23 23 185 5.0 18.8 10.3 49.1 35.8 7.6 -56.7 -57.1 7.0 -8.8 -13.2 5.4	12 15 159 4.3 15.0 11.9 36.0 27.0 9.4 -57.8 -55.6 6.3 -10.2 -13.7 5.0	
30N	1 1 16 .1 .4 6.3 1.6 0.0 0.0 -59.9 -61.0 0.0 -7.5 -9.2 0.0	3 3 32 0.0 0.0 0.0 0.0 0.0 0.0 -57.9 0.0 0.0 -9.7 0.0 0.0	1 2 19 4.2 12.4 21.1 19.9 20.3 10.5 -49.7 -52.0 5.3 -18.4 -18.8 5.3	3 4 54 4.7 17.0 11.1 42.7 31.2 7.4 -53.8 -56.2 7.4 -11.5 -10.9 5.6	
20N		2 2 7 0.0 0.0 0.0 0.0 0.0 0.0 -54.6 0.0 0.0 -14.1 0.0 0.0	1 1 14 0.0 0.0 0.0 0.0 0.0 0.0 -52.2 0.0 0.0 -17.8 0.0 0.0		
10N		1 1 6 0.0 0.0 0.0 0.0 0.0 0.0 -52.7 0.0 0.0 -16.9 0.0 0.0	1 1 6 0.0 0.0 0.0 0.0 0.0 0.0 -53.0 0.0 0.0 -17.0 0.0 0.0	1 1 2 32.7 32.7 50.0 65.5 0.0 50.0 -56.0 -55.0 50.0 -17.6 -17.5 50.0	
0				3 3 4 18.4 31.9 25.0 73.7 0.0 25.0 -58.7 -55.0 25.0 -16.2 -17.2 25.0	
10S				4 5 46 2.4 13.6 10.9 22.0 35.6 4.3 -58.3 -55.8 2.2 -15.5 -17.0 2.2	
20S				3 3 33 .0 .1 3.0 .8 0.0 0.0 -55.5 -56.0 0.0 -10.2 -17.6 0.0	
30S	1 1 1 0.0 0.0 0.0 0.0 0.0 0.0 -61.0 0.0 0.0 -13.2 0.0 0.0			7 9 104 .0 .3 1.9 2.0 1.6 0.0 -51.1 -53.0 0.0 3.0 5.6 0.0	
40S					

APPENDIX D

N_{Flights}	$N_{\text{Indep. obs.}}$	$N_{\text{Total obs.}}$
$\overline{\text{TIC}} \%$	$\text{SIGMA}_{\text{TIC}}$	$P(\text{TIC} > 0 \%)$
$\text{TICIV} \%$	$\text{SIGMA}_{\text{TICIV}}$	$P(\text{TIC} \geq 10 \%)$
$\overline{\text{T}}_{\text{CLEAR}}$	$\overline{\text{T}}_{\text{CLOUD}}$	$P(\text{TIC} \geq 25 \%)$
$\overline{\Delta Z}_{\text{CLEAR}}$	$\overline{\Delta Z}_{\text{CLOUD}}$	$P(\text{TIC} \geq 50 \%)$

AUTUMN
38.5-43.5 KFT

165W	120W	75W	30W	15E	ZONAL MEAN	
			1 1 4		1 1 4	80N
			0.0 0.0 0.0		0.0 0.0 0.0	
			0.0 0.0 0.0		0.0 0.0 0.0	
			-51.5 0.0 0.0		-51.5 0.0 0.0	
			8.3 0.0 0.0		8.3 0.0 0.0	
9 13 168	2 2 14	3 3 27	3 5 56		25 31 320	70N
.1 .9 .6	0.0 0.0 0.0	0.0 0.0 0.0	0.0 0.0 0.0		.0 .7 .3	
12.2 0.0 .6	0.0 0.0 0.0	0.0 0.0 0.0	0.0 0.0 0.0		12.2 0.0 .3	
-51.9 -59.0 0.0	-57.6 0.0 0.0	-45.6 0.0 0.0	-47.8 0.0 0.0		-50.1 -59.0 0.0	
3.9 -2.7 0.0	3.6 0.0 0.0	7.7 0.0 0.0	5.8 0.0 0.0		5.2 -2.7 0.0	
13 18 212	10 14 149	16 25 283	14 21 232		69 106 1255	60N
1.0 5.1 6.1	0.0 0.0 0.0	.0 .4 1.1	1.1 6.9 3.9		.4 3.9 2.4	
16.6 12.8 3.8	0.0 0.0 0.0	3.1 2.8 0.0	28.9 20.8 3.0		18.5 17.7 1.4	
-53.5 -65.5 1.4	-53.6 0.0 0.0	-52.8 -56.3 0.0	-54.3 -65.8 1.7		-53.0 -63.1 .6	
2.6 -2.3 0.0	4.6 0.0 0.0	4.2 5.7 0.0	3.9 -2.0 .4		3.8 -1.9 .1	
22 38 502	13 18 219	23 29 314	2 2 7		102 143 1729	50N
2.0 9.7 10.8	2.0 9.8 6.8	4.9 18.2 10.2	.7 1.6 14.3		2.1 10.6 8.2	
19.0 23.5 5.2	29.9 24.1 5.0	47.6 35.0 7.6	4.7 0.0 0.0		25.8 27.7 4.7	
-58.0 -64.4 3.2	-57.6 -64.1 3.7	-55.9 -65.5 6.7	-56.5 -64.0 0.0		-56.6 -63.4 3.2	
-.3 -3.3 1.6	.6 -2.7 1.4	.4 -2.3 5.1	2.8 -2.1 0.0		-.3 -4.6 1.6	
16 16 135	13 17 137				67 74 647	40N
.0 .1 1.5	.1 1.1 .7				2.5 12.7 6.3	
1.2 0.0 0.0	13.3 0.0 .7				39.8 32.7 4.6	
-58.9 -57.5 0.0	-56.6 -51.0 0.0				-57.3 -56.2 3.6	
-3.7 -4.9 0.0	-7.9 -5.4 0.0				-7.6 -12.8 2.8	
7 8 86	1 1 13		1 1 1		17 20 221	30N
2.9 12.1 16.3	0.0 0.0 0.0		0.0 0.0 0.0		2.7 12.0 11.3	
17.8 25.2 7.0	0.0 0.0 0.0		0.0 0.0 0.0		23.5 28.0 5.4	
-59.4 -60.6 3.5	-52.8 0.0 0.0		-57.0 0.0 0.0		-56.6 -58.2 3.6	
-11.1 -11.0 2.3	-14.0 0.0 0.0		-17.3 0.0 0.0		-11.5 -12.1 2.7	
4 4 53			1 1 6		8 8 80	20N
8.8 19.6 30.2			.8 1.8 16.7		5.9 16.5 21.3	
29.1 26.2 20.8			4.7 0.0 0.0		27.7 26.0 13.8	
-58.6 -58.2 13.2			-56.0 -56.0 0.0		-56.5 -58.1 8.8	
-14.9 -16.1 7.5			-18.5 -18.8 0.0		-15.7 -16.3 5.0	
6 6 58	1 1 6	1 1 13	1 1 5		12 12 96	10N
4.6 17.4 8.6	0.0 0.0 0.0	0.0 0.0 0.0	22.7 22.4 60.0		4.7 16.5 9.4	
53.7 29.9 6.9	0.0 0.0 0.0	0.0 0.0 0.0	37.8 16.3 60.0		49.7 25.9 8.3	
-57.3 -57.0 6.9	-55.0 0.0 0.0	-53.8 0.0 0.0	-54.5 -55.3 40.0		-55.9 -56.2 7.3	
-16.7 -15.7 5.2	-16.8 0.0 0.0	-17.2 0.0 0.0	-18.7 -18.8 20.0		-16.9 -16.9 5.2	
5 5 69		1 1 9	1 1 6		10 10 88	0
2.0 12.3 7.2		0.0 0.0 0.0	0.0 0.0 0.0		2.4 13.3 6.8	
27.2 37.4 2.9		0.0 0.0 0.0	0.0 0.0 0.0		35.0 38.3 3.4	
-55.6 -57.4 2.9		-55.4 0.0 0.0	-54.7 0.0 0.0		-55.7 -57.0 3.4	
-17.6 -17.0 1.4		-17.4 0.0 0.0	-18.1 0.0 0.0		-17.6 -17.0 2.3	
2 2 26			1 1 5		7 8 77	10S
19.7 32.8 30.8			0.0 0.0 0.0		8.1 23.3 16.9	
63.9 25.9 30.8			0.0 0.0 0.0		47.8 36.3 13.0	
-57.1 -58.0 26.9			-61.2 0.0 0.0		-58.2 -57.2 10.4	
-14.9 -16.8 23.1			-14.3 0.0 0.0		-15.2 -16.9 9.1	
			1 1 4		4 4 37	20S
			0.0 0.0 0.0		.0 .1 2.7	
			0.0 0.0 0.0		.8 0.0 0.0	
			-60.8 0.0 0.0		-56.1 -56.0 0.0	
			-14.9 0.0 0.0		-10.8 -17.6 0.0	
					8 10 105	30S
					.0 .3 1.9	
					2.0 1.6 0.0	
					-51.2 -53.0 0.0	
					2.9 5.6 0.0	40S

APPENDIX E

CLOUD-ENCOUNTER STATISTICS AS FUNCTIONS OF LATITUDE, LONGITUDE, NORTHERN HEMISPHERE SEASON, AND DISTANCE FROM THE NMC TROPOPAUSE

This appendix is a tabulation of statistics for several quantities related to cloud encounter over the geographic area covered by the GASP flights. These statistics are presented with respect to distance from the tropopause. The latitude and longitude grid chosen appears in figure D1. Subsequent pages of this appendix give statistical data within each grid cell in accordance with the code given at the top of each page. The variables in the code and their explanation are identical to those for appendix D. The season and distance from the tropopause appear near the top of each page.

APPENDIX E

Code:

WINTER
10-15 KFT
BELOW TROP

$N_{Flights}$	$N_{Indep. obs.}$	$N_{Total obs.}$
$\overline{TIC} \%$	$SIGMA_{TIC}$	$P(TIC > 0 \%)$
$TICIV \%$	$SIGMA_{TICIV}$	$P(TIC \geq 10 \%)$
\overline{T}_{CLEAR}	\overline{T}_{CLOUD}	$P(TIC \geq 25 \%)$
$\overline{\Delta Z}_{CLEAR}$	$\overline{\Delta Z}_{CLOUD}$	$P(TIC \geq 50 \%)$

	15E	60E	105E	150E	165W
80N					
70N					
60N					
50N	8 8 18 33.8 38.5 55.6 60.9 31.9 44.4 -40.4 -40.2 44.4 -11.6 -11.6 38.9				
40N	21 21 97 12.7 25.4 33.0 38.5 31.1 22.7 -46.9 -44.2 18.6 -12.2 -11.9 12.4		17 17 53 3.0 15.4 3.8 80.4 9.8 3.8 -43.3 -38.5 3.8 -12.1 -13.2 3.8	4 4 37 0.0 0.0 0.0 0.0 0.0 0.0 -43.7 0.0 0.0 -12.2 0.0 0.0	
30N	17 17 87 2.2 11.0 5.7 37.8 27.3 5.7 -43.0 -47.6 2.3 -12.9 -12.2 1.1	19 20 149 5.8 19.3 10.7 53.9 29.2 9.4 -45.5 -50.2 8.7 -12.3 -12.1 6.7	12 13 75 .4 3.6 1.3 31.0 0.0 1.3 -46.3 -51.0 1.3 -13.4 -10.2 0.0	6 6 27 0.0 0.0 0.0 0.0 0.0 0.0 -42.8 0.0 0.0 -13.3 0.0 0.0	
20N		5 5 13 1.0 3.4 15.4 6.7 6.3 7.7 -46.2 -50.5 0.0 -13.0 -14.3 0.0	4 4 22 5.5 16.9 27.3 20.1 27.5 9.1 -49.6 -51.2 9.1 -12.5 -11.2 4.5	1 3 45 0.0 0.0 0.0 0.0 0.0 0.0 -46.8 0.0 0.0 -12.6 0.0 0.0	
10N				1 1 2 72.7 19.0100.0 72.7 19.0100.0 0.0 -63.0100.0 0.0 -13.4100.0	
0				1 1 15 47.5 23.2100.0 47.5 23.2 93.3 0.0 -63.6 86.7 0.0 -13.6 40.0	
10S				5 5 27 35.7 36.6 70.4 50.8 33.8 63.0 -63.4 -65.8 48.1 -14.0 -14.0 33.3	
20S		1 1 1 0.0 0.0 0.0 0.0 0.0 0.0 -46.0 0.0 0.0 -14.5 0.0 0.0	1 1 6 0.0 0.0 0.0 0.0 0.0 0.0 -42.0 0.0 0.0 -13.5 0.0 0.0	15 15 56 2.9 7.6 17.9 16.4 10.1 10.7 -54.5 -52.1 3.6 -13.2 -12.2 0.0	
30S		1 1 7 0.0 0.0 0.0 0.0 0.0 0.0 -47.6 0.0 0.0 -14.0 0.0 0.0	22 27 203 2.1 10.6 8.4 24.8 27.9 4.4 -48.7 -44.1 2.5 -12.6 -13.0 1.5	30 31 162 8.0 21.5 21.0 38.1 32.6 14.8 -47.4 -44.5 11.1 -12.0 -13.0 8.0	
40S					

APPENDIX E

$N_{Flights}$	$N_{Indep. obs.}$	$N_{Total obs.}$
$\overline{TIC \%}$	$SIGMA_{TIC}$	$P(TIC > 0 \%)$
$TICIV \%$	$SIGMA_{TICIV}$	$P(TIC \geq 10 \%)$
\overline{T}_{CLEAR}	\overline{T}_{CLOUD}	$P(TIC \geq 25 \%)$
$\overline{\Delta Z}_{CLEAR}$	$\overline{\Delta Z}_{CLOUD}$	$P(TIC \geq 50 \%)$

WINTER
10-15 KFT
BELOW TROP

165W	120W	75W	30W	15E	ZONAL MEAN	
						80N
						70N
		1 1 11 45.7 27.9 90.9 50.2 25.1 81.8 -54.0 -53.6 81.8 -10.1 -11.4 36.4	15 15 33 17.6 30.2 33.3 52.7 29.7 27.3 -41.4 -37.8 24.2 -11.7 -12.6 18.2		16 16 44 24.6 32.0 47.7 51.5 27.6 40.9 -41.9 -45.3 38.6 -11.6 -12.0 22.7	60N
7 7 21 4.2 15.0 14.3 29.2 29.1 9.5 -43.4 -45.0 4.8 -12.1 -10.2 4.8	21 21 40 11.5 28.2 22.5 51.0 38.8 15.0 -37.2 -37.7 15.0 -12.3 -12.0 10.0	28 30 117 27.1 35.1 50.4 53.7 31.9 44.4 -42.6 -50.7 38.5 -11.6 -12.3 29.1	11 11 36 12.7 23.9 41.7 30.4 28.9 25.0 -43.3 -44.8 19.4 -11.7 -11.7 8.3		75 77 232 20.6 32.7 41.4 49.8 33.5 33.2 -41.5 -47.3 28.9 -11.9 -12.0 21.1	50N
58 59 237 12.5 24.8 30.8 40.7 29.3 24.9 -47.1 -49.9 18.6 -12.1 -11.7 11.8	38 40 115 13.1 26.4 31.3 42.0 32.0 26.1 -45.4 -46.6 19.1 -12.3 -12.8 11.3	3 3 8 51.2 30.4 100.0 51.2 30.4 87.5 0.0 -40.5 75.0 0.0 -12.7 50.0			141 144 547 11.5 24.6 27.6 41.6 30.7 21.9 -45.9 -47.3 16.8 -12.2 -12.1 10.8	40N
85 94 655 17.7 28.9 42.1 41.9 31.2 33.1 -50.5 -49.0 25.2 -12.5 -12.4 17.1	1 1 9 0.0 0.0 0.0 0.0 0.0 0.0 -55.2 0.0 0.0 -11.9 0.0 0.0		1 1 1 0.0 0.0 0.0 0.0 0.0 0.0 -42.0 0.0 0.0 -14.5 0.0 0.0		141 152 1003 12.6 25.3 29.7 42.4 31.1 23.6 -48.0 -49.0 18.0 -12.6 -12.4 12.3	30N
10 11 62 11.6 22.8 38.7 30.0 28.1 25.8 -58.2 -57.9 19.4 -13.8 -14.0 11.3					20 23 142 6.0 17.3 22.5 26.7 27.9 13.4 -51.1 -56.2 9.9 -13.1 -13.5 5.6	20N
6 6 25 25.2 32.9 44.0 57.3 24.8 44.0 -53.9 -63.0 36.0 -13.0 -13.6 28.0					7 7 27 28.7 34.4 48.1 59.7 24.7 48.1 -53.9 -63.0 40.7 -13.0 -13.6 33.3	10N
					1 1 15 47.5 23.2 100.0 47.5 23.2 93.3 0.0 -63.6 36.7 0.0 -13.6 40.0	0
4 7 77 27.0 31.5 68.8 39.2 31.1 54.5 -64.8 -65.8 39.0 -14.0 -13.9 23.4					9 12 104 29.3 33.1 69.2 42.3 32.2 56.7 -64.4 -65.8 41.3 -14.0 -13.9 26.0	10S
					17 17 63 2.6 7.2 15.9 16.4 10.1 9.5 -52.9 -52.1 3.2 -13.2 -12.2 0.0	20S
					53 59 372 4.6 16.5 13.7 33.6 31.8 8.9 -48.2 -44.4 6.2 -12.4 -13.0 4.3	30S
						40S

APPENDIX E

Code:

SPRING
10-15 KFT
BELOW TROP

$N_{Flights}$	$N_{Indep. obs.}$	$N_{Total obs.}$
$\overline{TIC} \%$	$SIGMA_{TIC}$	$P(TIC > 0 \%)$
$TICIV \%$	$SIGMA_{TICIV}$	$P(TIC \geq 10 \%)$
\overline{T}_{CLEAR}	\overline{T}_{CLOUD}	$P(TIC \geq 25 \%)$
$\overline{\Delta Z}_{CLEAR}$	$\overline{\Delta Z}_{CLOUD}$	$P(TIC \geq 50 \%)$

	15E	60E	105E	150E	165W
80N					
70N					
60N					
50N	5 5 5 0.0 0.0 0.0 0.0 0.0 0.0 -33.6 0.0 0.0 -13.4 0.0 0.0				7 7 43 6.7 19.1 18.6 35.8 30.3 11.6 -57.4 -56.3 11.6 -11.8 -12.3 4.7
40N	8 8 16 0.0 0.0 0.0 0.0 0.0 0.0 -39.3 0.0 0.0 -12.2 0.0 0.0		44 45 145 15.1 29.0 32.4 46.6 33.7 26.9 -45.9 -48.1 19.3 -12.3 -11.8 15.2		4 4 21 17.0 24.0 66.7 25.4 25.4 38.1 -44.3 -46.2 28.6 -12.6 -13.4 14.3
30N	2 2 3 0.0 0.0 0.0 0.0 0.0 0.0 -52.0 0.0 0.0 -13.6 0.0 0.0	10 11 83 8.4 22.9 18.1 46.7 33.3 14.5 -45.1 -49.7 13.3 -12.5 -12.1 8.4	19 20 110 6.6 17.5 24.5 26.8 26.5 15.5 -50.9 -48.6 9.1 -12.5 -12.7 5.5		8 10 135 5.4 14.2 25.9 20.9 21.4 13.3 -50.0 -48.4 9.6 -12.9 -13.3 3.7
20N		7 7 29 9.2 18.8 27.6 33.4 21.8 24.1 -45.9 -46.9 17.2 -12.6 -11.7 6.9	14 14 72 .3 1.4 8.3 3.1 4.0 1.4 -48.6 -44.8 0.0 -12.9 -12.7 0.0		8 13 174 4.7 17.0 10.3 45.9 29.9 9.2 -48.7 -47.2 7.5 -13.1 -13.7 4.6
10N		4 4 10 0.0 0.0 0.0 0.0 0.0 0.0 -56.8 0.0 0.0 -12.8 0.0 0.0	3 3 24 .6 2.3 8.3 7.1 4.3 4.2 -61.5 -45.5 0.0 -14.2 -13.7 0.0		
0					2 2 21 23.4 32.4 57.1 40.9 33.5 38.1 -48.4 -63.6 33.3 -14.6 -14.6 23.8
10S					7 7 41 3.1 9.4 17.1 18.2 15.7 12.2 -58.9 -61.6 2.4 -13.4 -14.0 2.4
20S					7 8 48 .2 1.0 4.2 4.5 2.5 0.0 -56.6 -58.0 0.0 -12.4 -14.3 0.0
30S					12 12 23 3.8 17.9 4.3 87.8 0.0 4.3 -49.3 -61.0 4.3 -12.9 -14.8 4.3
40S					

APPENDIX E

$N_{Flights}$	$N_{Indep. obs.}$	$N_{Total obs.}$
$\overline{TIC} \%$	$SIGMA_{TIC}$	$P(TIC > 0 \%)$
$TICIV \%$	$SIGMA_{TICIV}$	$P(TIC \geq 10 \%)$
\overline{T}_{CLEAR}	\overline{T}_{CLOUD}	$P(TIC \geq 25 \%)$
$\overline{\Delta Z}_{CLEAR}$	$\overline{\Delta Z}_{CLOUD}$	$P(TIC \geq 50 \%)$

SPRING
10-15 KFT
BELOW TROP

165W	120W	75W	30W	15E	ZONAL MEAN	
						80N
						70N
						60N
		1 1 6	17 17 28	18 18 34		50N
		0.0 0.0 0.0	5.2 15.5 25.0	4.3 14.2 20.6		40N
		0.0 0.0 0.0	20.8 25.1 10.7	20.8 25.1 8.8		30N
		-37.5 0.0 0.0	-37.2 -32.9 10.7	-37.3 -32.9 8.8		20N
		-13.0 0.0 0.0	-12.6 -12.8 3.6	-12.7 -12.8 2.9		10N
7 7 19	54 54 63	37 38 80	11 11 42	121 122 252		0
2.4 6.3 31.6	11.5 24.7 27.0	13.6 26.4 31.3	5.8 16.1 26.2	9.5 22.3 26.6		10S
7.6 9.3 10.5	42.7 30.4 20.6	43.5 30.4 25.0	22.2 24.9 14.3	35.7 30.6 18.3		20S
-45.7 -55.8 5.3	-34.1 -34.7 17.5	-40.4 -39.8 21.3	-39.3 -46.4 9.5	-42.1 -43.0 15.1		30S
-12.9 -12.2 0.0	-12.4 -12.6 11.1	-12.1 -12.0 13.8	-12.3 -11.8 4.8	-12.2 -12.2 8.7		40S
47 47 234	52 52 67	5 5 10		160 161 493		50S
2.2 9.7 12.8	11.1 23.8 28.4	2.4 6.7 20.0		7.7 20.8 22.7		60S
16.8 22.0 5.6	39.2 30.0 20.9	12.0 10.4 10.0		34.1 31.8 15.2		70S
-46.8 -45.5 3.0	-37.9 -37.6 16.4	-49.9 -29.5 0.0		-45.2 -45.1 10.5		80S
-12.0 -11.7 1.3	-12.3 -12.5 11.9	-12.1 -11.6 0.0		-12.1 -12.1 7.3		90S
98 103 601	11 11 69	7 7 27		155 164 1028		100S
6.0 18.1 19.3	9.7 23.1 27.5	4.3 13.3 11.1		6.4 18.3 20.9		110S
30.9 30.5 13.0	35.2 32.2 15.9	38.4 16.4 11.1		30.4 29.6 13.5		120S
-49.3 -49.9 9.0	-49.9 -47.3 13.0	-56.5 -49.3 7.4		-49.5 -49.2 9.6		130S
-12.2 -12.7 4.5	-12.5 -12.8 10.1	-12.9 -13.5 3.7		-12.4 -12.8 5.2		140S
15 15 77	8 8 73	6 6 21		58 63 446		150S
8.4 22.2 19.5	10.5 23.7 31.5	29.1 37.0 57.1		7.0 20.3 16.4		160S
43.1 32.1 14.3	33.3 32.1 19.2	50.9 35.8 38.1		38.2 32.4 12.8		170S
-54.4 -57.1 11.7	-51.1 -49.7 13.7	-51.2 -53.0 38.1		-49.9 -50.4 10.1		180S
-12.2 -13.6 6.5	-12.2 -13.4 9.6	-13.2 -13.4 33.3		-12.8 -13.3 6.5		190S
2 2 14		3 3 31		12 12 79		200S
21.5 31.9 42.9		42.8 40.1 71.0		20.8 34.4 38.0		210S
50.3 30.6 28.6		60.3 34.7 58.1		54.8 35.4 29.1		220S
-51.6 -48.8 28.6		-49.1 -51.3 58.1		-56.6 -50.4 27.8		230S
-13.2 -13.1 28.6		-13.1 -12.1 41.9		-13.5 -12.4 21.5		240S
				2 2 21		250S
				23.4 32.4 57.1		260S
				40.9 33.5 38.1		270S
				-48.4 -63.6 33.3		280S
				-14.6 -14.6 23.8		290S
5 6 65				12 13 106		300S
19.4 27.0 49.2				13.1 23.4 36.8		310S
39.4 26.4 40.0				35.6 26.1 29.2		320S
-65.3 -59.5 29.2				-62.0 -59.8 18.9		330S
-14.4 -12.6 21.5				-13.9 -12.9 14.2		340S
				7 8 48		350S
				.2 1.0 4.2		360S
				4.5 2.5 0.0		370S
				-56.6 -58.0 0.0		380S
				-12.4 -14.3 0.0		390S
				12 12 23		400S
				3.8 17.9 4.3		
				87.8 0.0 4.3		
				-49.3 -61.0 4.3		
				-12.9 -14.8 4.3		

APPENDIX E

Code:

SUMMER
10-15 KFT
BELOW TROP

$N_{Flights}$	$N_{Indep. obs.}$	$N_{Total obs.}$
$\overline{TIC} \%$	$SIGMA_{TIC}$	$P(TIC > 0 \%)$
$TICIV \%$	$SIGMA_{TICIV}$	$P(TIC \geq 10 \%)$
\overline{T}_{CLEAR}	\overline{T}_{CLOUD}	$P(TIC \geq 25 \%)$
$\overline{\Delta Z}_{CLEAR}$	$\overline{\Delta Z}_{CLOUD}$	$P(TIC \geq 50 \%)$

	15E	60E	105E	150E	165W
80N					
70N					
60N					
50N	10 10 36 3.6 15.9 8.3 43.8 35.7 5.6 -40.8 -37.0 5.6 -12.3 -12.0 2.8		7 7 16 3.4 12.4 12.5 27.5 23.9 6.3 -53.5 -54.5 6.3 -11.6 -12.6 6.3	14 14 114 15.3 23.9 50.9 30.0 26.1 35.1 -50.9 -50.7 23.7 -12.2 -12.1 12.3	
40N	9 10 43 3.8 12.3 18.6 20.4 21.6 9.3 -41.8 -38.9 7.0 -12.8 -13.3 4.7		23 23 84 12.6 25.7 35.7 35.3 32.4 21.4 -51.9 -51.3 16.7 -12.4 -13.0 11.9	12 12 56 5.6 14.4 23.2 24.0 21.2 14.3 -49.5 -52.5 8.9 -13.1 -13.4 3.6	
30N		3 3 18 4.1 16.9 5.6 73.7 0.0 5.6 -39.8 -40.0 5.6 -13.2 -14.9 5.6	1 1 7 9.0 9.3 71.4 12.6 8.6 42.9 -51.5 -51.8 0.0 -12.1 -13.5 0.0	1 2 26 0.0 0.0 0.0 0.0 0.0 0.0 -49.0 0.0 0.0 -13.9 0.0 0.0	
20N		1 1 5 7.3 7.0 60.0 12.2 4.7 40.0 -39.0 -38.7 0.0 -14.5 -14.7 0.0			
10N					
0				1 1 17 18.7 27.3 58.8 31.8 29.1 35.3 -47.3 -48.3 29.4 -13.7 -13.3 23.5	
10S				3 3 17 0.0 0.0 0.0 0.0 0.0 0.0 -53.1 0.0 0.0 -13.0 0.0 0.0	
20S			11 11 48 .1 .6 2.1 4.3 0.0 0.0 -44.6 -51.0 0.0 -12.8 -11.2 0.0	5 6 45 .1 .4 2.2 2.7 0.0 0.0 -50.7 -43.0 0.0 -12.6 -14.2 0.0	
30S			17 17 48 .4 2.7 4.2 10.6 8.2 2.1 -43.0 -36.0 0.0 -12.3 -12.0 0.0	7 7 22 2.5 11.6 4.5 55.7 0.0 4.5 -44.9 -41.0 4.5 -12.2 -12.5 4.5	
40S					

APPENDIX E

$N_{Flights}$	$N_{Indep. obs.}$	$N_{Total obs.}$
$\overline{TIC} \%$	$SIGMA_{TIC}$	$P(TIC > 0 \%)$
TICIV %	$SIGMA_{TICIV}$	$P(TIC \geq 10 \%)$
\overline{T}_{CLEAR}	\overline{T}_{CLOUD}	$P(TIC \geq 25 \%)$
$\overline{\Delta Z}_{CLEAR}$	$\overline{\Delta Z}_{CLOUD}$	$P(TIC \geq 50 \%)$

SUMMER
10-15 KFT
BELOW TROP

165W	120W	75W	30W	15E	ZONAL MEAN	
						80N
						70N
						60N
						50N
						40N
						30N
						20N
						10N
						0
						10S
						20S
						30S
						40S

APPENDIX E

Code:

AUTUMN
10-15 KFT
BELOW TROP

$N_{Flights}$	$N_{Indep. obs.}$	$N_{Total obs.}$
$\overline{TIC} \%$	$SIGMA_{TIC}$	$P(TIC > 0 \%)$
$TICIV \%$	$SIGMA_{TICIV}$	$P(TIC \geq 10 \%)$
\overline{T}_{CLEAR}	\overline{T}_{CLOUD}	$P(TIC \geq 25 \%)$
$\overline{\Delta Z}_{CLEAR}$	$\overline{\Delta Z}_{CLOUD}$	$P(TIC \geq 50 \%)$

	15E	60E	105E	150E	165W
80N					
70N					
60N					
50N					2 2 17 8.5 17.8 23.5 36.1 18.5 23.5 -50.8 -53.8 11.8 -12.1 -13.2 5.9
40N	13 13 63 14.2 27.0 31.7 44.7 30.5 27.0 -41.8 -46.0 20.6 -11.5 -11.4 12.7		6 6 19 5.0 14.6 10.5 47.6 1.8 10.5 -46.5 -49.0 10.5 -12.6 -12.9 0.0		21 23 188 7.5 17.1 30.3 24.6 23.4 19.1 -51.5 -53.0 11.2 -12.4 -12.1 5.9
30N	16 16 75 0.0 0.0 0.0 0.0 0.0 0.0 -44.9 0.0 0.0 -12.5 0.0 0.0		37 37 151 11.6 25.4 28.5 40.8 32.7 21.2 -50.2 -49.7 16.6 -12.3 -13.0 11.3		22 25 200 8.8 19.6 32.5 27.2 26.2 22.5 -52.0 -50.4 11.5 -12.4 -12.5 7.0
20N	2 2 9 17.1 32.3 33.3 51.2 37.0 22.2 -45.3 -43.0 22.2 -13.5 -11.8 22.2	10 10 88 2 1.5 2.3 9.4 2.7 1.1 -46.3 -49.5 0.0 -12.7 -12.9 0.0			6 6 68 6.2 14.9 27.9 22.1 21.0 16.2 -50.8 -48.2 10.3 -12.3 -12.2 2.9
10N		1 1 5 0.0 0.0 0.0 0.0 0.0 0.0 -54.4 0.0 0.0 -11.2 0.0 0.0			
0		1 1 6 31.4 16.6 83.3 37.6 9.7 83.3 -40.0 -40.4 83.3 -14.0 -14.6 16.7	2 2 30 22.0 32.9 40.0 55.1 29.8 33.3 -41.9 -41.8 33.3 -14.6 -14.8 23.3		1 1 3 9.5 9.0 66.7 14.3 7.3 33.3 -51.0 -51.5 0.0 -14.6 -15.0 0.0
10S		1 2 19 6.6 15.2 26.3 25.3 20.1 21.1 -44.2 -40.0 10.5 -13.0 -13.6 5.3	1 1 2 0.0 0.0 0.0 0.0 0.0 0.0 -42.0 0.0 0.0 -15.0 0.0 0.0		3 3 19 0.0 0.0 0.0 0.0 0.0 0.0 -58.7 0.0 0.0 -13.7 0.0 0.0
20S		1 1 2 0.0 0.0 0.0 0.0 0.0 0.0 -45.0 0.0 0.0 -14.4 0.0 0.0	2 2 17 0.0 0.0 0.0 0.0 0.0 0.0 -44.2 0.0 0.0 -13.7 0.0 0.0		9 10 57 3.2 15.3 7.0 45.3 38.0 5.3 -47.8 -49.5 3.5 -12.9 -13.6 3.5
30S	1 1 1 0.0 0.0 0.0 0.0 0.0 0.0 -61.0 0.0 0.0 -13.2 0.0 0.0		7 7 14 0.0 0.0 0.0 0.0 0.0 0.0 -45.9 0.0 0.0 -12.1 0.0 0.0		8 8 19 20.4 33.1 31.6 64.4 25.0 31.6 -40.2 -43.2 26.3 -12.1 -12.2 26.3
40S					

APPENDIX E

$N_{Flights}$	$N_{Indep. obs.}$	$N_{Total obs.}$
$\overline{TIC} \%$	$SIGMA_{TIC}$	$P(TIC > 0 \%)$
$TICIV \%$	$SIGMA_{TICIV}$	$P(TIC \geq 10 \%)$
\overline{T}_{CLEAR}	\overline{T}_{CLOUD}	$P(TIC \geq 25 \%)$
$\overline{\Delta Z}_{CLEAR}$	$\overline{\Delta Z}_{CLOUD}$	$P(TIC \geq 50 \%)$

AUTUMN
10-15 KFT
BELOW TROP

165W			120W			75W			30W			15E			ZONAL MEAN		
															60N		
															70N		
															60N		
1	1	2				6	6	23	48	49	172	57	58	214	7.5	19.0	26.6
0.0	0.0	0.0				0.0	0.0	0.0	8.5	20.2	30.8	7.5	19.0	26.6	28.1	27.8	16.4
0.0	0.0	0.0				0.0	0.0	0.0	27.5	28.3	18.0	28.1	27.8	16.4	28.1	27.8	16.4
-56.5	0.0	0.0				-43.6	0.0	0.0	-38.1	-40.0	12.8	-40.2	-40.9	11.2	-40.2	-40.9	11.2
-11.9	0.0	0.0				-11.6	0.0	0.0	-11.9	-12.5	7.0	-11.9	-12.6	6.1	-11.9	-12.6	6.1
															50N		
19	20	149	20	20	51	57	58	224	25	25	63	161	165	757	9.3	22.8	22.6
4.0	15.5	9.4	17.4	32.7	33.3	13.4	28.0	24.1	2.5	10.8	11.1	9.3	22.8	22.6	9.3	22.8	22.6
42.5	30.1	6.7	52.1	37.4	25.5	55.7	29.9	21.9	22.2	24.7	6.3	41.1	31.6	17.3	41.1	31.6	17.3
-46.7	-52.4	6.7	-46.1	-45.4	21.6	-41.4	-45.5	18.8	-43.8	-42.9	3.2	-45.6	-48.5	13.3	-45.6	-48.5	13.3
-12.7	-11.6	4.0	-11.4	-11.7	17.6	-12.4	-11.2	14.7	-11.9	-11.5	3.2	-12.3	-11.6	9.1	-12.3	-11.6	9.1
															40N		
32	32	179	27	30	124	3	3	3				137	143	732	7.5	20.4	21.2
3.8	15.1	11.7	10.6	25.2	21.0	0.0	0.0	0.0				7.5	20.4	21.2	7.5	20.4	21.2
32.4	31.8	7.8	50.5	31.8	16.1	0.0	0.0	0.0				35.6	31.1	15.2	35.6	31.1	15.2
-48.8	-48.3	5.6	-50.3	-46.3	14.5	-34.7	0.0	0.0				-49.5	-49.2	10.4	-49.5	-49.2	10.4
-12.6	-12.0	2.8	-12.3	-11.7	12.9	-11.8	0.0	0.0				-12.5	-12.4	7.1	-12.5	-12.4	7.1
															30N		
21	23	224	1	1	13							40	42	402	5.3	17.2	17.9
6.9	20.0	21.4	0.0	0.0	0.0							5.3	17.2	17.9	5.3	17.2	17.9
32.3	32.4	11.6	0.0	0.0	0.0							29.8	30.4	10.0	29.8	30.4	10.0
-52.1	-51.4	10.7	-52.8	0.0	0.0							-50.3	-50.2	8.2	-50.3	-50.2	8.2
-12.6	-13.9	6.7	-14.0	0.0	0.0							-12.7	-13.3	4.7	-12.7	-13.3	4.7
															20N		
5	5	42										6	6	47	6.7	19.6	19.1
7.5	20.6	21.4										6.7	19.6	19.1	6.7	19.6	19.1
35.0	32.0	11.9										35.0	32.0	10.6	35.0	32.0	10.6
-57.8	-56.8	9.5										-57.4	-56.8	8.5	-57.4	-56.8	8.5
-14.1	-14.6	9.5										-13.7	-14.6	8.5	-13.7	-14.6	8.5
															10N		
2	2	9										2	2	9	0.0	0.0	0.0
0.0	0.0	0.0										0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0										0.0	0.0	0.0	0.0	0.0	0.0
-52.1	0.0	0.0										-52.1	0.0	0.0	-52.1	0.0	0.0
-13.5	0.0	0.0										-13.5	0.0	0.0	-13.5	0.0	0.0
															0		
												4	4	39	22.5	30.1	48.7
												22.5	30.1	48.7	22.5	30.1	48.7
												46.2	27.7	41.0	46.2	27.7	41.0
												-42.3	-42.5	38.5	-42.3	-42.5	38.5
												-14.6	-14.8	20.5	-14.6	-14.8	20.5
															10S		
2	2	11				1	1	4	8	9	55	2.3	9.5	9.1	2.3	9.5	9.1
0.0	0.0	0.0				0.0	0.0	0.0	2.3	9.5	9.1	2.3	9.5	9.1	2.3	9.5	9.1
0.0	0.0	0.0				0.0	0.0	0.0	25.3	20.1	7.3	25.3	20.1	7.3	25.3	20.1	7.3
-56.5	0.0	0.0				-62.5	0.0	0.0	-53.8	-40.0	3.6	-53.8	-40.0	3.6	-53.8	-40.0	3.6
-13.5	0.0	0.0				-13.4	0.0	0.0	-13.5	-13.6	1.8	-13.5	-13.6	1.8	-13.5	-13.6	1.8
															20S		
						1	1	2	13	14	78	2.3	13.2	5.1	2.3	13.2	5.1
						0.0	0.0	0.0	2.3	13.2	5.1	2.3	13.2	5.1	2.3	13.2	5.1
						0.0	0.0	0.0	45.3	38.0	3.8	45.3	38.0	3.8	45.3	38.0	3.8
						-60.5	0.0	0.0	-47.3	-49.5	2.6	-47.3	-49.5	2.6	-47.3	-49.5	2.6
						-14.3	0.0	0.0	-13.2	-13.6	2.6	-13.2	-13.6	2.6	-13.2	-13.6	2.6
															30S		
									16	16	34	11.4	26.7	17.6	11.4	26.7	17.6
									11.4	26.7	17.6	11.4	26.7	17.6	11.4	26.7	17.6
									64.4	25.0	17.6	64.4	25.0	17.6	64.4	25.0	17.6
									-43.8	-43.2	14.7	-43.8	-43.2	14.7	-43.8	-43.2	14.7
									-12.1	-12.2	14.7	-12.1	-12.2	14.7	-12.1	-12.2	14.7
															40S		

APPENDIX E

Code:

WINTER
5-10 KFT
BELOW TROP

$N_{Flights}$	$N_{Indep. obs.}$	$N_{Total obs.}$
$\overline{TIC} \%$	$SIGMA_{TIC}$	$P(TIC > 0 \%)$
$TICIV \%$	$SIGMA_{TICIV}$	$P(TIC \geq 10 \%)$
\overline{T}_{CLEAR}	\overline{T}_{CLOUD}	$P(TIC \geq 25 \%)$
$\overline{\Delta Z}_{CLEAR}$	$\overline{\Delta Z}_{CLOUD}$	$P(TIC \geq 50 \%)$

	15E	60E	105E	150E	165W
80N					
70N					
60N					
50N	17 18 129 12.5 28.0 24.0 51.9 34.9 20.2 -48.0 -50.1 14.7 -7.1 -6.5 13.2		1 1 1 47.1 0.0100.0 47.1 0.0100.0 0.0 -48.0100.0 0.0 -8.5 0.0		
40N	29 31 253 14.1 27.5 28.9 48.9 30.2 24.9 -48.6 -49.1 19.8 -7.4 -7.5 13.4		24 24 96 3.2 11.9 10.4 30.9 22.6 10.4 -48.1 -49.8 4.2 -7.3 -7.0 1.0	6 6 55 7.8 21.6 18.2 43.1 32.4 12.7 -46.4 -52.5 10.9 -6.8 -6.3 10.9	
30N	11 11 47 7.1 21.8 10.6 66.9 21.5 10.6 -45.7 -45.2 10.6 -8.2 -7.9 6.4	16 16 115 6.2 17.2 20.9 29.8 26.8 13.9 -47.5 -52.9 9.6 -7.7 -7.1 3.5	4 4 11 0.0 0.0 0.0 0.0 0.0 0.0 -52.0 0.0 0.0 -7.4 0.0 0.0	4 4 25 0.0 0.0 0.0 0.0 0.0 0.0 -48.8 0.0 0.0 -7.8 0.0 0.0	
20N		2 2 5 0.0 0.0 0.0 0.0 0.0 0.0 -53.0 0.0 0.0 -7.2 0.0 0.0	3 3 27 1.5 5.5 14.8 10.2 10.8 3.7 -56.7 -56.0 3.7 -6.0 -7.9 0.0		
10N		1 1 3 0.0 0.0 0.0 0.0 0.0 0.0 -57.3 0.0 0.0 -7.4 0.0 0.0	1 1 5 0.0 0.0 0.0 0.0 0.0 0.0 -58.0 0.0 0.0 -7.0 0.0 0.0		
0					
10S					
20S				6 6 17 0.0 0.0 0.0 0.0 0.0 0.0 -60.4 0.0 0.0 -8.1 0.0 0.0	
30S			13 14 87 4.2 16.3 8.0 52.2 28.1 8.0 -50.1 -50.0 6.9 -7.9 -7.9 4.6	24 26 198 5.5 18.5 14.1 39.2 33.2 9.6 -54.6 -50.3 7.6 -7.2 -7.4 5.1	
40S					

APPENDIX E

$N_{Flights}$	$N_{Indep. obs.}$	$N_{Total obs.}$
$\overline{TIC} \%$	$SIGMA_{TIC}$	$P(TIC > 0 \%)$
TICIV %	$SIGMA_{TICIV}$	$P(TIC \geq 10 \%)$
\overline{T}_{CLEAR}	\overline{T}_{CLOUD}	$P(TIC \geq 25 \%)$
$\overline{\Delta Z}_{CLEAR}$	$\overline{\Delta Z}_{CLOUD}$	$P(TIC \geq 50 \%)$

WINTER
5-10 KFT
BELOW TROP

165W	120W	75W	30W	15E	ZONAL MEAN	
						80N
						70N
	1 1 11 56.6 34.0 90.9 62.2 30.3 90.9 -52.0 -52.7 72.7 -6.8 -6.6 63.6	6 6 13 41.5 43.5 53.8 77.1 27.9 53.8 -56.3 -61.3 46.2 -6.2 -6.2 46.2	33 33 154 23.4 33.0 50.6 46.2 33.2 37.0 -51.5 -55.1 33.1 -7.0 -6.9 22.1		40 40 178 26.8 35.1 53.4 50.2 33.7 41.6 -51.9 -55.3 36.5 -6.9 -6.8 26.4	60N
11 11 30 31.9 36.3 60.0 53.1 32.7 50.0 -47.7 -48.6 43.3 -7.6 -7.6 33.3	28 28 64 19.3 30.8 42.2 45.7 32.4 32.8 -47.4 -51.3 26.6 -6.8 -6.7 21.9	31 32 169 47.6 40.5 70.4 67.6 31.2 67.5 -47.2 -54.6 59.2 -7.0 -7.4 51.5	27 28 131 23.2 35.1 43.5 53.2 35.0 35.1 -50.3 -52.1 30.5 -7.2 -7.3 23.7		115 118 524 28.5 37.7 48.3 59.0 33.8 42.6 -48.4 -52.7 36.3 -7.1 -7.2 30.3	50N
89 94 594 10.9 24.5 27.8 39.3 32.4 20.7 -52.5 -53.3 15.0 -7.3 -7.3 10.1	49 49 196 15.6 27.1 35.2 44.2 28.6 30.6 -49.4 -53.0 23.0 -7.2 -7.5 15.8	3 3 9 53.4 39.5 66.7 80.1 13.9 66.7 -45.7 -42.7 66.7 -6.5 -7.9 66.7	1 1 15 8.5 14.4 53.3 15.9 16.5 26.7 -61.1 -62.5 13.3 -8.5 -8.4 0.0		201 208 1218 11.9 25.2 28.0 42.4 31.4 22.4 -50.5 -52.2 16.6 -7.3 -7.4 11.3	40N
71 76 575 7.9 19.6 24.3 32.3 28.1 17.4 -51.7 -53.5 11.5 -7.7 -8.1 6.4					106 111 773 7.2 19.0 21.9 33.0 28.4 15.7 -50.5 -53.1 10.6 -7.7 -8.0 5.7	30N
1 1 3 0.0 0.0 0.0 0.0 0.0 0.0 -61.7 0.0 0.0 -7.5 0.0 0.0					6 6 35 1.2 4.9 11.4 10.2 10.8 2.9 -56.6 -56.0 2.9 -6.4 -7.9 0.0	20N
					2 2 8 0.0 0.0 0.0 0.0 0.0 0.0 -57.8 0.0 0.0 -7.2 0.0 0.0	10N
						0
						10S
						20S
					6 6 17 0.0 0.0 0.0 0.0 0.0 0.0 -60.4 0.0 0.0 -8.1 0.0 0.0	30S
					37 40 285 5.1 17.9 12.3 41.8 32.7 9.1 -53.1 -50.2 7.4 -7.4 -7.5 4.9	40S

APPENDIX E

Code:

SPRING
5-10 KFT
BELOW TROP

$N_{Flights}$	$N_{Indep. obs.}$	$N_{Total obs.}$
$\bar{TIC} \%$	$SIGMA_{TIC}$	$P(TIC > 0 \%)$
$TICIV \%$	$SIGMA_{TICIV}$	$P(TIC \geq 10 \%)$
\bar{T}_{CLEAR}	\bar{T}_{CLOUD}	$P(TIC \geq 25 \%)$
$\bar{\Delta Z}_{CLEAR}$	$\bar{\Delta Z}_{CLOUD}$	$P(TIC \geq 50 \%)$

	15E	60E	105E	150E	165W
80N					
70N					
60N					
50N	9 10 38 7.1 14.9 26.3 26.9 17.6 21.1 -43.4 -43.7 13.2 -7.2 -6.7 2.6		7 7 15 21.6 25.2 73.3 29.4 25.2 53.3 -61.8 -52.0 26.7 -5.6 -7.2 13.3	16 17 145 26.0 35.5 53.8 48.3 35.6 38.6 -57.3 -53.6 35.2 -6.9 -6.8 27.6	
40N	14 17 116 5.1 16.0 18.1 28.1 27.8 9.5 -46.0 -50.7 8.6 -8.1 -7.3 4.3	3 3 3 28.9 40.9 33.3 86.7 0.0 33.3 -50.0 -51.0 33.3 -8.8 -7.5 33.3	46 46 194 13.0 24.9 37.1 34.9 30.1 26.8 -53.6 -54.2 20.1 -7.4 -7.2 9.3	12 12 54 4.0 14.2 16.7 23.9 27.1 11.1 -53.2 -49.2 3.7 -7.3 -7.3 1.9	
30N		12 13 93 5.8 17.2 16.1 35.8 27.6 10.8 -49.5 -47.5 9.7 -8.2 -7.7 5.4	8 8 37 .1 .7 2.7 4.3 0.0 0.0 -52.8 -51.0 0.0 -7.9 -9.9 0.0	3 3 15 2.3 6.9 26.7 8.5 11.2 6.7 -54.0 -53.8 6.7 -9.4 -7.6 0.0	
20N		3 3 9 0.0 0.0 0.0 0.0 0.0 0.0 -50.1 0.0 0.0 -8.8 0.0 0.0	2 2 5 .5 .8 40.0 1.4 .6 0.0 -52.7 -55.0 0.0 -9.2 -8.6 0.0		
10N					
0					
10S					
20S					
30S				3 3 15 0.0 0.0 0.0 0.0 0.0 0.0 -54.2 0.0 0.0 -7.1 0.0 0.0	
40S				11 11 36 2.5 7.2 16.7 15.0 11.1 11.1 -54.5 -60.8 2.8 -7.4 -7.5 0.0	

APPENDIX E

$N_{Flights}$	$N_{Indep. obs.}$	$N_{Total obs.}$
$\bar{TIC} \%$	$SIGMA_{TIC}$	$P(TIC > 0 \%)$
$TICIV \%$	$SIGMA_{TICIV}$	$P(TIC \geq 10 \%)$
\bar{T}_{CLEAR}	\bar{T}_{CLOUD}	$P(TIC \geq 25 \%)$
$\bar{\Delta Z}_{CLEAR}$	$\bar{\Delta Z}_{CLOUD}$	$P(TIC \geq 50 \%)$

SPRING
5-10 KFT
BELOW TROP

165W			120W			75W			30W			15E			ZONAL MEAN		
															80N		
															70N		
															60N		
1	1	3	5	5	44	10	10	81	35	35	115	51	51	243			
84.1	11.4	100.0	6.8	13.6	27.3	24.0	29.8	67.9	5.6	14.0	33.0	12.9	23.7	44.4			
84.1	11.4	100.0	25.0	14.9	20.5	35.4	30.2	45.7	17.0	20.0	14.8	29.1	28.1	27.2			
0.0	-53.0	100.0	-56.1	-55.1	13.6	-52.4	-54.3	35.8	-51.1	-49.3	7.8	-52.5	-52.6	19.3			
0.0	-8.6	100.0	-6.1	-7.1	0.0	-6.3	-6.3	22.2	-6.9	-6.9	1.7	-6.6	-6.7	9.5			
															50N		
22	24	167	86	87	277	41	42	205	13	13	51	194	200	898			
11.7	22.9	37.7	17.6	28.3	44.0	15.9	27.2	43.4	11.7	23.1	35.3	16.8	28.1	43.5			
31.1	28.0	24.6	39.9	30.4	34.3	36.7	30.6	33.2	33.1	28.3	27.5	38.5	31.3	32.3			
-56.4	-57.7	17.4	-48.2	-49.5	27.4	-50.6	-50.2	22.0	-47.0	-50.5	17.6	-51.4	-51.7	24.4			
-6.8	-6.8	9.6	-7.4	-7.4	14.8	-7.2	-7.2	13.7	-7.9	-7.8	11.8	-7.2	-7.1	14.9			
															40N		
102	111	803	73	73	186	8	8	32				258	270	1368			
3.0	11.9	14.1	12.5	25.0	31.2	9.1	18.2	31.3				6.1	17.7	20.5			
21.5	24.7	8.2	40.1	30.0	25.3	29.2	21.9	21.9				29.8	28.7	13.7			
-53.2	-54.2	4.1	-49.7	-50.6	18.8	-56.8	-59.8	18.8				-52.3	-53.2	9.1			
-7.1	-7.1	2.1	-7.0	-7.0	10.8	-7.8	-7.8	6.3				-7.3	-7.1	4.6			
															30N		
95	102	860	8	8	37	6	6	24				132	140	1066			
4.1	13.8	16.2	3.6	11.0	18.9	3.1	9.0	16.7				4.1	13.7	15.9			
25.5	25.3	9.7	19.0	18.7	8.1	18.5	14.2	12.5				25.5	25.2	9.4			
-53.8	-55.6	6.7	-52.7	-53.9	5.4	-59.1	-64.3	4.2				-53.5	-55.0	6.7			
-7.8	-7.6	3.1	-8.0	-7.6	0.0	-8.6	-7.6	0.0				-7.9	-7.6	3.0			
															20N		
6	6	22	1	1	2							12	12	38			
6.4	21.5	9.1	0.0	0.0	0.0							3.8	16.6	10.5			
70.8	22.9	9.1	0.0	0.0	0.0							36.1	38.3	5.3			
-57.9	-67.0	9.1	-56.0	0.0	0.0							-55.3	-61.0	5.3			
-8.2	-7.9	4.5	-9.9	0.0	0.0							-8.6	-8.3	2.6			
															10N		
															0		
															10S		
															20S		
															30S		
															40S		

APPENDIX E

Code:

SUMMER
5-10 KFT
BELOW TROP

$N_{Flights}$	$N_{Indep. obs.}$	$N_{Total obs.}$
$\overline{TIC} \%$	$SIGMA_{TIC}$	$P(TIC > 0 \%)$
$TICIV \%$	$SIGMA_{TICIV}$	$P(TIC \geq 10 \%)$
\overline{T}_{CLEAR}	\overline{T}_{CLOUD}	$P(TIC \geq 25 \%)$
$\overline{\Delta Z}_{CLEAR}$	$\overline{\Delta Z}_{CLOUD}$	$P(TIC \geq 50 \%)$

	15E	60E	105E	150E	165W	
80N						
70N						
60N						
50N				1 17.3 34.5 -51.0 -9.1	1 17.3 0.0 -51.0 -6.2	2 50.0 50.0 50.0 0.0
40N	13 2.9 15.9 -45.4 -7.7	14 12.3 25.3 -44.7 -6.7	67 17.9 4.5 3.0	11 6.0 41.5 -55.1 -7.1	11 18.3 28.9 -63.7 -8.5	48 14.6 10.4 10.4 8.3
30N	6 1.9 7.6 -46.2 -7.5	6 4.8 7.1 -44.5 -7.0	24 25.0 8.3 0.0 0.0	14 3.8 22.4 -57.6 -7.1	14 11.4 18.7 -51.1 -8.1	53 17.0 11.3 7.5 1.9
20N		1 0.0 0.0 -38.7 -9.5	1 0.0 0.0 0.0 0.0	3 0.0 0.0 0.0 0.0	1 0.0 0.0 -51.8 -8.0	4 0.0 0.0 0.0 0.0
10N						
0						
10S						
20S				1 0.0 -48.0 -8.8	1 0.0 0.0 0.0	2 0.0 0.0 0.0
30S				7 0.0 0.0 -43.8 -8.2	7 0.0 0.0 0.0 0.0	24 0.0 0.0 0.0 0.0
40S				17 1.0 19.4 -47.7 -7.2	18 4.8 8.3 -48.8 -7.7	75 5.3 4.0 1.3 0.0
				9 .3 7.3 -52.0 -6.9	9 1.8 4.5 -47.5 -8.6	42 4.8 2.4 0.0 0.0

APPENDIX E

$N_{Flights}$	$N_{Indep. obs.}$	$N_{Total obs.}$
$\bar{TIC} \%$	$SIGMA_{TIC}$	$P(TIC > 0 \%)$
TICIV %	$SIGMA_{TICIV}$	$P(TIC \geq 10 \%)$
\bar{T}_{CLEAR}	\bar{T}_{CLOUD}	$P(TIC \geq 25 \%)$
$\bar{\Delta Z}_{CLEAR}$	$\bar{\Delta Z}_{CLOUD}$	$P(TIC \geq 50 \%)$

SUMMER
5-10 KFT
BELOW TROP

165W	120W	75W	30W	15E	ZONAL MEAN										
						80N									
						70N									
1 0.0 0.0 -48.0 -7.9	1 0.0 0.0 0.0 0.0	2 0.0 0.0 0.0 0.0	7 7.2 14.5 34.6 20.7 18.1 23.1	7 14.5 34.6 20.7 18.1 23.1	26 34.6 23.1 11.5 3.8	1 0.9 1.5 25.0 3.5 0.0 0.0	4 25.0 0.0 0.0 0.0 0.0	28 8.8 21.3 29.4 29.8 30.2 14.7	28 21.3 29.4 30.2 14.7 11.8	68 29.4 14.7 11.8 7.4	38 8.0 19.2 30.4 26.5 26.8 16.7	38 19.2 30.4 26.8 16.7 11.8	102 30.4 16.7 11.8 5.9	60N	
22 7.1 24.7 -54.0 -7.5	24 16.4 22.2 -58.8 -7.4	160 28.8 18.8 13.8 2.5	52 7.0 31.4 -53.2 -7.9	54 18.7 28.2 -53.4 -7.6	335 22.4 14.6 11.0 6.6	16 8.7 33.0 -52.6 -7.2	16 18.9 23.6 -48.7 -7.8	57 26.3 19.3 14.0 10.5	6 2.2 18.4 -43.4 -7.3	6 7.3 11.8 5.9 -6.8	17 11.8 5.9 0.0	143 8.0 31.0 -52.6 -7.6	149 19.7 28.1 -54.2 -7.4	854 25.8 16.9 12.5 7.1	50N
63 1.4 19.8 -52.6 -7.9	70 7.1 19.0 -53.6 -8.4	490 6.9 3.9 2.2 .8	28 4.9 37.5 -53.1 -7.5	29 16.1 27.6 -53.2 -7.6	114 13.2 9.6 8.8 4.4	1 0.0 0.0 -35.0 -9.6	1 0.0 0.0 0.0 0.0	1 0.0 0.0 0.0 0.0			118 2.3 23.9 -52.9 -7.8	126 9.8 22.1 -52.4 -8.0	708 9.6 5.9 4.0 1.4	40N	
34 .8 17.7 -52.8 -7.9	41 6.3 25.3 -52.7 -8.3	424 4.2 1.7 1.2 .5									36 .7 17.7 -52.7 -7.9	43 6.3 25.3 -52.7 -8.3	431 4.2 1.6 1.2 .5	30N	
2 1.1 20.4 -58.5 -9.0	2 4.6 0.0 -66.0 -8.9	19 5.3 5.3 0.0 0.0									2 1.1 20.4 -58.5 -9.0	2 4.6 0.0 -66.0 -8.9	19 5.3 5.3 0.0 0.0	20N	
1 0.0 0.0 -60.0 -9.7	1 0.0 0.0 0.0 0.0	1 0.0 0.0 0.0 0.0									1 0.0 0.0 -60.0 -9.7	1 0.0 0.0 0.0 0.0	1 0.0 0.0 0.0 0.0	10N	
														0	
														10S	
														20S	
														30S	
														40S	

APPENDIX E

Code:

AUTUMN
5-10 KFT
BELOW TROP

$N_{Flights}$	$N_{Indep. obs.}$	$N_{Total obs.}$
$\overline{TIC} \%$	$SIGMA_{TIC}$	$P(TIC > 0 \%)$
$TICIV \%$	$SIGMA_{TICIV}$	$P(TIC \geq 10 \%)$
\overline{T}_{CLEAR}	\overline{T}_{CLOUD}	$P(TIC \geq 25 \%)$
$\overline{\Delta Z}_{CLEAR}$	$\overline{\Delta Z}_{CLOUD}$	$P(TIC \geq 50 \%)$

	15E	60E	105E	150E	165W
80N					
70N					
60N					
50N				9 9 46 4.6 15.9 15.2 30.0 29.8 8.7 -54.8 -51.9 6.5 -6.9 -6.9 6.5	
40N	19 20 117 13.5 26.0 35.0 38.4 31.1 28.2 -51.0 -47.3 20.5 -7.8 -7.7 11.1		9 9 29 8.9 15.5 31.0 28.5 14.6 27.6 -53.2 -62.4 17.2 -7.7 -8.1 3.4	28 32 249 7.9 19.7 25.7 30.9 28.3 16.5 -51.3 -52.6 11.6 -7.8 -7.9 6.8	
30N	19 20 139 4.3 17.5 6.5 66.1 25.3 6.5 -50.5 -49.6 5.8 -7.3 -7.9 5.0		27 27 112 3.9 15.0 8.9 43.3 28.4 6.3 -51.4 -56.0 6.3 -7.6 -8.9 5.4	18 18 110 14.9 30.8 27.3 54.5 36.5 21.8 -52.9 -55.7 19.1 -8.0 -8.5 15.5	
20N	2 2 20 .1 .3 5.0 1.6 0.0 0.0 -56.8 -61.0 0.0 -8.0 -9.2 0.0	4 4 15 0.0 0.0 0.0 0.0 0.0 0.0 -57.5 0.0 0.0 -7.9 0.0 0.0		4 4 19 14.6 25.7 26.3 55.5 15.8 26.3 -47.9 -49.2 26.3 -8.0 -9.5 15.8	
10N					
0					
10S					
20S			1 1 6 0.0 0.0 0.0 0.0 0.0 0.0 -50.3 0.0 0.0 -7.5 0.0 0.0	7 7 26 0.0 0.0 0.0 0.0 0.0 0.0 -54.3 0.0 0.0 -8.4 0.0 0.0	
30S	1 1 1 0.0 0.0 0.0 0.0 0.0 0.0 -45.0 0.0 0.0 -9.5 0.0 0.0		4 4 24 0.0 0.0 0.0 0.0 0.0 0.0 -50.0 0.0 0.0 -7.3 0.0 0.0	13 13 58 11.4 26.2 19.0 60.2 26.0 17.2 -50.0 -50.0 15.5 -7.6 -7.7 15.5	
40S					

APPENDIX E

$N_{Flights}$	$N_{Indep. obs.}$	$N_{Total obs.}$
$\overline{TIC} \%$	$SIGMA_{TIC}$	$P(TIC > 0 \%)$
$TICIV \%$	$SIGMA_{TICIV}$	$P(TIC \geq 10 \%)$
\overline{T}_{CLEAR}	\overline{T}_{CLOUD}	$P(TIC \geq 25 \%)$
$\overline{\Delta Z}_{CLEAR}$	$\overline{\Delta Z}_{CLOUD}$	$P(TIC \geq 50 \%)$

AUTUMN
5-10 KFT
BELOW TROP

165W	120W	75W	30W	15E	ZONAL MEAN	
						80N
	1 1 1	6 6 26	4 4 18	11 11 45		70N
	37.6 0.0 100.0	66.8 34.2 88.5	40.3 39.9 72.2	55.6 38.6 82.2		
	37.6 0.0 100.0	75.5 25.8 88.5	55.9 36.6 55.6	67.6 31.6 75.6		
	0.0 -52.0 100.0	-51.3 -50.3 84.6	-53.8 -49.5 50.0	-52.9 -50.1 71.1		
	0.0 -5.3 0.0	-6.5 -6.7 69.2	-6.0 -6.4 38.9	-6.2 -6.6 55.6		
	4 4 15	20 20 137	72 76 484	109 113 712		60N
7.9 16.8 26.7	13.9 24.9 46.7	16.3 30.6 30.7	14.9 26.9 40.9	14.3 27.0 37.2		
29.5 20.6 20.0	29.7 29.3 26.7	53.1 33.1 25.5	36.5 31.3 29.8	38.5 32.0 27.2		
-58.5 -46.0 13.3	-50.0 -52.3 16.7	-48.3 -49.3 21.9	-47.3 -48.6 21.1	-48.6 -49.0 19.9		
-8.2 -6.3 6.7	-5.9 -5.5 13.3	-7.4 -6.7 17.5	-7.2 -7.4 13.2	-7.2 -7.2 13.5		
25 27 177	31 33 182	73 79 515	27 32 217	212 232 1486		50N
9.0 20.6 28.8	12.0 23.9 30.2	16.0 31.4 29.1	12.4 26.0 31.3	12.5 26.3 29.5		
31.3 27.8 18.6	39.6 28.1 24.7	55.0 35.2 24.5	39.7 32.9 23.5	42.3 33.0 22.7		
-53.6 -52.5 13.6	-52.2 -51.8 19.2	-48.1 -49.7 20.8	-50.9 -52.4 17.1	-50.5 -51.2 17.6		
-7.6 -7.9 6.8	-7.5 -7.7 10.4	-7.1 -7.4 16.1	-7.1 -7.1 12.0	-7.4 -7.6 11.5		
38 39 214	24 25 116		1 1 3	127 130 694		40N
3.1 12.5 14.0	1.1 6.6 4.3		0.0 0.0 0.0	5.0 18.0 12.1		
22.4 26.1 7.9	26.0 19.0 3.4		0.0 0.0 0.0	41.2 34.3 8.8		
-51.4 -51.9 3.7	-52.0 -44.6 1.7		-54.3 0.0 0.0	-51.5 -53.1 6.6		
-7.8 -8.2 2.3	-8.2 -8.3 .9		-7.9 0.0 0.0	-7.8 -8.4 5.2		
11 11 52				21 21 106		30N
2.5 12.1 11.5				3.9 14.7 11.3		
21.7 29.3 7.7				34.1 29.8 8.5		
-54.9 -59.0 1.9				-54.7 -55.1 5.7		
-8.4 -7.5 1.9				-8.2 -8.5 3.8		
						20N
						10N
						0
						10S
						20S
				8 8 32		
				0.0 0.0 0.0		
				0.0 0.0 0.0		
				-53.6 0.0 0.0		
				-8.3 0.0 0.0		
						30S
				18 18 83		
				8.0 22.5 13.3		
				60.2 26.0 12.0		
				-49.9 -50.0 10.8		
				-7.5 -7.7 10.8		
						40S

APPENDIX E

Code:

WINTER
0-5 KFT
BELOW TROP

$N_{Flights}$	$N_{Indep. obs.}$	$N_{Total obs.}$
$\overline{TIC} \%$	$SIGMA_{TIC}$	$P(TIC > 0 \%)$
$TICIV \%$	$SIGMA_{TICIV}$	$P(TIC \geq 10 \%)$
\overline{T}_{CLEAR}	\overline{T}_{CLOUD}	$P(TIC \geq 25 \%)$
$\overline{\Delta Z}_{CLEAR}$	$\overline{\Delta Z}_{CLOUD}$	$P(TIC \geq 50 \%)$

	15E	60E	105E	150E	165W
80N					
70N					
60N					
50N					1 1 8 0.0 0.0 0.0 0.0 0.0 0.0 -68.9 0.0 0.0 -.9 0.0 0.0
40N	25 29 239 14.2 28.9 29.7 47.8 34.8 23.4 -55.0 -60.5 18.0 -2.4 -2.7 15.5		2 2 5 0.0 0.0 0.0 0.0 0.0 0.0 -49.6 0.0 0.0 -1.0 0.0 0.0	4 5 36 0.0 0.0 0.0 0.0 0.0 0.0 -52.6 0.0 0.0 -2.6 0.0 0.0	
30N	28 32 281 6.7 20.2 16.7 40.0 33.2 12.8 -53.3 -54.5 8.5 -2.6 -3.3 6.8		32 32 125 6.6 19.5 14.4 45.7 29.0 12.0 -50.0 -55.7 10.4 -2.5 -3.8 5.6	14 20 200 4.4 17.5 10.0 43.5 36.7 7.5 -52.2 -54.7 5.5 -2.4 -3.7 3.5	
20N	5 5 25 7.0 12.5 32.0 21.8 12.8 24.0 -48.0 -58.0 12.0 -2.8 -2.5 0.0	8 8 33 2.4 13.6 3.0 79.6 0.0 3.0 -48.2 -54.0 3.0 -3.1 -4.8 3.0	2 2 11 0.0 0.0 0.0 0.0 0.0 0.0 -51.8 0.0 0.0 -3.1 0.0 0.0	5 6 47 11.5 20.0 42.6 27.0 22.8 31.9 -50.2 -48.9 21.3 -2.8 -3.8 8.5	
10N					
0					
10S					
20S					4 4 17 0.0 0.0 0.0 0.0 0.0 0.0 -63.7 0.0 0.0 -3.1 0.0 0.0
30S			5 5 39 .6 3.8 2.6 23.9 0.0 2.6 -53.3 -59.0 0.0 -4.0 -3.0 0.0	20 20 149 2.7 10.9 12.1 22.5 23.2 8.7 -58.0 -52.8 3.4 -3.0 -3.4 2.0	
40S					

APPENDIX E

N_{Flights}	$N_{\text{Indep. obs.}}$	$N_{\text{Total obs.}}$
$\overline{\text{TIC}} \%$	$\text{SIGMA}_{\text{TIC}}$	$P(\text{TIC} > 0 \%)$
$\text{TICIV} \%$	$\text{SIGMA}_{\text{TICIV}}$	$P(\text{TIC} \geq 10 \%)$
$\overline{\text{T}}_{\text{CLEAR}}$	$\overline{\text{T}}_{\text{CLOUD}}$	$P(\text{TIC} \geq 25 \%)$
$\overline{\Delta Z}_{\text{CLEAR}}$	$\overline{\Delta Z}_{\text{CLOUD}}$	$P(\text{TIC} \geq 50 \%)$

WINTER
0-5 KFT
BELOW TROP

165W	120W	75W	30W	15E	ZONAL MEAN	
						80N
						70N
2 2 2 0.0 0.0 0.0 0.0 0.0 0.0 -52.0 0.0 0.0 -7.7 0.0 0.0	2 2 12 4.8 12.3 16.7 29.0 14.1 16.7 -63.9 -66.0 8.3 -7.7 -3.3 0.0	3 3 12 43.2 33.6 75.0 57.6 25.9 75.0 -58.3 -61.1 58.3 -9 -1.4 50.0	5 5 25 0.0 0.0 0.0 0.0 0.0 0.0 -51.4 0.0 0.0 -1.7 0.0 0.0	12 12 51 11.3 24.9 21.6 52.4 26.6 21.6 -55.1 -62.0 15.7 -1.3 -1.2 11.8		
1 1 11 0.0 0.0 0.0 0.0 0.0 0.0 -54.6 0.0 0.0 -5.0 0.0 0.0	4 4 31 7.6 22.1 16.1 47.1 34.3 12.9 -60.7 -56.6 9.7 -1.5 -2.4 9.7	13 14 104 23.4 34.9 41.3 56.6 32.6 36.5 -54.0 -61.8 30.8 -2.2 -2.7 24.0	37 38 246 14.2 28.4 30.5 46.5 33.9 23.6 -55.9 -59.9 19.9 -2.4 -2.6 13.8	56 58 400 15.4 29.8 30.8 50.1 33.8 25.0 -56.2 -60.5 21.0 -2.2 -2.6 15.5		60N
20 20 88 10.8 23.6 28.4 37.9 30.6 20.5 -55.3 -56.3 19.3 -2.1 -3.1 8.0	57 56 298 9.7 23.3 29.5 32.8 32.9 17.4 -56.4 -60.0 13.4 -1.7 -2.7 9.1	35 36 256 23.6 34.5 42.2 55.9 31.9 35.9 -54.1 -58.7 32.0 -2.1 -2.9 24.6	26 27 175 23.1 35.0 42.9 54.0 34.5 34.9 -55.6 -60.7 29.1 -3.0 -2.6 24.0	169 177 1097 15.8 29.9 33.5 47.2 34.4 25.4 -55.2 -59.6 21.2 -2.2 -2.8 16.0		50N
92 97 760 8.5 22.4 22.1 38.7 33.3 15.5 -55.6 -58.5 11.4 -2.4 -3.3 8.6	49 56 469 15.1 29.2 30.9 48.8 33.3 24.9 -57.8 -62.6 20.9 -2.3 -2.5 15.6	1 1 1 0.0 0.0 0.0 0.0 0.0 0.0 -43.0 0.0 0.0 -4.7 0.0 0.0		216 238 1836 9.3 23.7 21.7 43.1 33.6 16.4 -54.9 -59.2 12.7 -2.4 -3.0 9.3		40N
44 45 271 4.5 17.1 9.6 47.2 32.3 7.7 -52.6 -56.2 5.9 -3.1 -3.1 4.8				64 66 387 5.2 16.9 14.2 36.7 29.3 11.1 -51.8 -53.8 7.8 -3.1 -3.3 4.7		30N
1 1 3 0.0 0.0 0.0 0.0 0.0 0.0 -59.0 0.0 0.0 -3.2 0.0 0.0				1 1 3 0.0 0.0 0.0 0.0 0.0 0.0 -59.0 0.0 0.0 -3.2 0.0 0.0		20N
						10N
						0
						10S
						20S
					4 4 17 0.0 0.0 0.0 0.0 0.0 0.0 -63.7 0.0 0.0 -3.1 0.0 0.0	
					25 25 188 2.3 9.9 10.1 22.6 22.6 7.4 -56.9 -53.2 2.7 -3.2 -3.3 1.6	30S
						40S

APPENDIX E

SPRING
0-5 KFT
BELOW TROP

Code:

$N_{Flights}$	$N_{Indep. obs.}$	$N_{Total obs.}$
$\overline{TIC} \%$	$SIGMA_{TIC}$	$P(TIC > 0 \%)$
$TICIV \%$	$SIGMA_{TICIV}$	$P(TIC \geq 10 \%)$
\overline{T}_{CLEAR}	\overline{T}_{CLOUD}	$P(TIC \geq 25 \%)$
$\overline{\Delta Z}_{CLEAR}$	$\overline{\Delta Z}_{CLOUD}$	$P(TIC \geq 50 \%)$

	15E	60E	105E	150E	165W	
80N						
70N						
60N						
50N				9 10 72 12.1 23.5 27.8 43.4 25.2 25.0 -58.8 -62.1 20.8 -1.3 -1.5 12.5		
40N	8 9 80 .3 2.5 5.0 6.6 9.2 1.3 -55.8 -50.3 0.0 -1.2 -3.1 0.0		14 14 61 3.2 13.2 11.5 27.9 29.0 8.2 -60.7 -58.7 4.9 -2.2 -3.6 1.6	34 40 379 6.0 19.3 14.0 43.2 32.6 11.1 -57.3 -60.9 7.7 -2.1 -2.7 6.3		
30N	12 13 146 5.2 17.0 16.4 31.9 30.2 11.0 -53.8 -55.8 7.5 -2.4 -1.9 3.4		39 40 183 9.9 25.9 21.9 45.1 38.5 14.8 -57.4 -60.4 12.6 -2.9 -2.9 9.8	20 20 92 13.2 27.0 26.1 50.4 30.2 22.8 -53.5 -56.4 19.6 -2.7 -2.8 15.2		
20N		5 5 21 .1 .7 4.8 3.1 0.0 0.0 -52.6 -49.0 0.0 -3.5 -4.8 0.0	4 4 11 0.0 0.0 0.0 0.0 0.0 0.0 -46.4 0.0 0.0 -3.2 0.0 0.0	2 2 30 6.6 17.2 26.7 24.7 25.9 13.3 -56.2 -57.3 10.0 -3.4 -4.3 3.3		
10N		1 1 7 0.0 0.0 0.0 0.0 0.0 0.0 -58.0 0.0 0.0 -3.7 0.0 0.0				
0						
10S						
20S				2 2 7 0.0 0.0 0.0 0.0 0.0 0.0 -54.6 0.0 0.0 -3.2 0.0 0.0		
30S				8 8 42 0.0 0.0 0.0 0.0 0.0 0.0 -57.2 0.0 0.0 -2.6 0.0 0.0		
40S						

APPENDIX E

$N_{Flights}$	$N_{Indep. obs.}$	$N_{Total obs.}$
$\overline{TIC} \%$	$SIGMA_{TIC}$	$P(TIC > 0 \%)$
$TICIV \%$	$SIGMA_{TICIV}$	$P(TIC \geq 10 \%)$
\overline{T}_{CLEAR}	\overline{T}_{CLOUD}	$P(TIC \geq 25 \%)$
$\overline{\Delta Z}_{CLEAR}$	$\overline{\Delta Z}_{CLOUD}$	$P(TIC \geq 50 \%)$

SPRING
0-5 KFT
BELOW TROP

165W	120W	75W	30W	15E	ZONAL MEAN	
		1 1 7 .2 .5 14.3 1.6 0.0 0.0 -58.7 -59.0 0.0 -.5 -.7 0.0	1 1 1 0.0 0.0 0.0 0.0 0.0 0.0 -56.5 0.0 0.0 -2.4 0.0 0.0	1 1 4 0.0 0.0 0.0 0.0 0.0 0.0 -56.5 0.0 0.0 -2.4 0.0 0.0	2 2 11 .1 .5 9.1 1.6 0.0 0.0 -57.8 -59.0 0.0 -1.3 -.7 0.0	80N
	2 2 13 0.0 0.0 0.0 0.0 0.0 0.0 -57.1 0.0 0.0 -1.8 0.0 0.0	1 1 1 0.0 0.0 0.0 0.0 0.0 0.0 -58.0 0.0 0.0 -.1 0.0 0.0	3 3 28 24.7 37.2 35.7 69.2 28.0 32.1 -57.0 -57.0 32.1 -2.5 -3.0 28.6		6 6 42 16.5 32.5 23.8 69.2 28.0 21.4 -57.1 -57.0 21.4 -2.1 -3.0 19.0	70N
10 10 79 5.0 15.7 19.0 26.1 27.2 8.9 -59.3 -63.1 7.6 -1.3 -2.2 3.8	16 18 174 3.0 12.2 15.5 19.1 25.6 5.7 -59.2 -59.5 4.6 -1.8 -3.1 2.3	27 28 169 13.0 27.9 29.0 44.9 35.5 22.5 -54.9 -56.5 16.6 -2.1 -2.9 13.0	42 43 287 8.8 22.0 27.5 31.9 31.9 17.4 -56.5 -56.5 11.5 -2.1 -2.7 8.4		104 109 781 8.3 21.7 24.3 34.2 32.3 15.7 -57.4 -58.1 11.5 -1.9 -2.6 7.9	60N
48 53 415 5.6 17.2 20.2 27.9 29.1 12.5 -57.4 -59.7 8.2 -2.1 -3.5 4.6	122 129 805 12.6 26.4 27.8 45.4 31.7 23.1 -56.7 -60.2 18.1 -2.2 -2.7 12.5	50 54 381 11.2 24.5 29.1 38.3 31.9 21.8 -55.0 -57.3 16.8 -2.3 -3.1 10.0	13 14 72 6.1 17.0 22.2 27.3 26.7 13.9 -53.4 -57.9 9.7 -2.5 -3.2 4.2		289 313 2193 9.0 22.5 22.8 39.5 32.0 17.3 -56.6 -59.4 12.9 -2.2 -3.0 8.5	50N
119 128 911 2.6 10.9 13.6 19.1 23.6 5.9 -57.8 -60.3 4.0 -2.7 -2.9 1.8	100 106 663 9.3 23.5 20.5 45.5 32.2 17.0 -57.0 -61.3 13.4 -2.1 -2.7 9.0	6 6 23 8.9 27.6 13.0 68.0 42.5 8.7 -52.9 -67.3 8.7 -2.3 -3.2 8.7			296 313 2018 6.2 19.3 17.4 35.7 32.8 11.5 -57.0 -60.2 8.9 -2.5 -2.7 5.7	40N
52 58 507 4.6 16.9 12.0 37.9 33.1 8.1 -56.9 -57.3 6.3 -2.8 -2.7 4.1	4 4 15 0.0 0.0 0.0 0.0 0.0 0.0 -52.9 0.0 0.0 -3.0 0.0 0.0	2 2 6 .1 .3 16.7 .8 0.0 0.0 -64.0 -66.0 0.0 -2.5 -4.4 0.0			69 75 590 4.3 16.2 12.0 35.4 32.7 7.6 -56.5 -57.3 5.9 -2.8 -2.9 3.7	30N
1 1 1 0.0 0.0 0.0 0.0 0.0 0.0 -63.0 0.0 0.0 -4.8 0.0 0.0					2 2 8 0.0 0.0 0.0 0.0 0.0 0.0 -58.6 0.0 0.0 -3.9 0.0 0.0	20N
						10N
						0
						10S
					2 2 7 0.0 0.0 0.0 0.0 0.0 0.0 -54.6 0.0 0.0 -3.2 0.0 0.0	20S
					8 8 42 0.0 0.0 0.0 0.0 0.0 0.0 -57.2 0.0 0.0 -2.6 0.0 0.0	30S
						40S

APPENDIX E

Code:

SUMMER
0-5 KFT
BELOW TROP

$N_{Flights}$	$N_{Indep. obs.}$	$N_{Total obs.}$
$\overline{TIC} \%$	$SIGMA_{TIC}$	$P(TIC > 0 \%)$
$TICIV \%$	$SIGMA_{TICIV}$	$P(TIC \geq 10 \%)$
\overline{T}_{CLEAR}	\overline{T}_{CLOUD}	$P(TIC \geq 25 \%)$
$\overline{\Delta Z}_{CLEAR}$	$\overline{\Delta Z}_{CLOUD}$	$P(TIC \geq 50 \%)$

	15E	60E	105E	150E	165W
80N					
70N					1 1 9 3.2 9.1 11.1 29.0 0.0 11.1 -57.0 -58.0 11.1 -2.8 -4.4 0.0
60N					7 7 41 1.3 4.4 19.5 6.5 8.0 4.9 -53.9 -59.5 0.0 -1.4 -1.5 0.0
50N	12 12 69 1.9 11.8 4.3 43.1 37.5 2.9 -50.0 -47.7 2.9 -2.1 -3.4 1.4		9 9 35 0.0 0.0 0.0 0.0 0.0 0.0 -57.1 0.0 0.0 -3.6 0.0 0.0	28 30 243 4.4 14.2 15.6 28.0 25.1 10.7 -54.8 -57.6 6.6 -2.2 -2.8 3.7	
40N	3 3 6 0.0 0.0 0.0 0.0 0.0 0.0 -52.5 0.0 0.0 -3.8 0.0 0.0		7 7 38 6.9 17.2 21.1 32.7 23.7 13.2 -57.6 -54.5 13.2 -3.5 -4.1 5.3		
30N					
20N					
10N					
0					
10S					
20S			1 1 3 0.0 0.0 0.0 0.0 0.0 0.0 -48.7 0.0 0.0 -1.7 0.0 0.0	1 1 3 0.0 0.0 0.0 0.0 0.0 0.0 -45.3 0.0 0.0 -4.3 0.0 0.0	
30S			18 19 97 1.4 9.5 6.2 22.0 31.8 3.1 -50.7 -53.7 1.0 -2.7 -2.8 1.0	9 9 63 .2 1.3 3.2 6.3 3.9 1.6 -52.3 -53.0 0.0 -2.9 -3.6 0.0	
40S					

APPENDIX E

$N_{Flights}$	$N_{Indep. obs.}$	$N_{Total obs.}$
$\overline{TIC} \%$	$SIGMA_{TIC}$	$P(TIC > 0 \%)$
$TICIV \%$	$SIGMA_{TICIV}$	$P(TIC \geq 10 \%)$
\overline{T}_{CLEAR}	\overline{T}_{CLOUD}	$P(TIC \geq 25 \%)$
$\overline{\Delta Z}_{CLEAR}$	$\overline{\Delta Z}_{CLOUD}$	$P(TIC \geq 50 \%)$

SUMMER
0-5 KFT
BELOW TROP

165W	120W	75W	30W	15E	ZONAL MEAN	
						30N
						70N
4 6 65 1.8 8.8 15.4 11.5 19.9 3.1 -58.3 -61.1 3.1 -2.1 -1.7 1.5	2 2 22 5.1 17.0 27.3 18.6 28.4 13.6 -56.3 -56.0 4.5 -.8 -.6 4.5		2 2 14 0.0 0.0 0.0 0.0 0.0 0.0 -57.0 0.0 0.0 -2.1 0.0 0.0		9 11 110 2.3 10.6 15.5 15.0 23.3 5.5 -57.6 -59.1 3.6 -1.9 -1.4 1.8	
12 13 71 5.5 15.1 25.4 21.8 23.5 11.3 -55.3 -55.7 8.5 -1.9 -2.7 1.4	26 27 126 4.3 14.7 16.7 25.9 27.0 8.7 -54.9 -56.7 6.3 -1.7 -1.5 4.0	5 5 21 1.5 2.5 33.3 4.4 2.4 0.0 -54.5 -52.0 0.0 -1.3 -3.5 0.0	36 38 132 3.6 11.0 20.5 17.6 18.5 9.1 -53.6 -52.4 6.1 -2.2 -2.5 .8		86 90 391 3.8 12.5 20.7 18.4 21.9 8.4 -54.4 -54.9 5.6 -1.9 -2.3 1.8	60N
31 34 236 5.2 15.4 16.1 32.4 24.2 12.3 -55.6 -58.6 8.1 -2.6 -3.2 3.4	51 52 306 8.1 20.2 21.6 37.4 28.3 16.0 -54.2 -57.9 12.4 -2.7 -2.3 6.9	14 19 154 6.6 18.0 26.6 24.6 27.7 16.9 -53.5 -54.3 7.1 -2.3 -2.5 5.2	8 8 60 5.7 16.6 15.0 37.8 24.9 13.3 -55.7 -48.7 10.0 -1.8 -3.2 3.3		153 164 1103 5.7 16.8 17.7 32.0 27.3 12.7 -54.4 -56.6 8.3 -2.5 -2.7 4.4	50N
30 33 241 4.4 14.4 11.6 37.6 23.1 9.5 -53.7 -54.7 7.9 -3.4 -2.7 2.9	19 20 114 4.8 16.4 14.0 34.4 30.1 8.8 -53.3 -57.9 7.0 -2.1 -2.7 5.3				59 63 399 4.7 15.2 13.0 35.9 25.6 9.5 -53.9 -55.6 8.0 -3.1 -2.9 3.8	40N
5 5 18 1.0 3.5 16.7 6.3 6.4 5.6 -52.6 -51.7 0.0 -3.8 -3.3 0.0					5 5 18 1.0 3.5 16.7 6.3 6.4 5.6 -52.6 -51.7 0.0 -3.8 -3.3 0.0	30N
						20N
						10N
						0
						10S
						20S
					2 2 6 0.0 0.0 0.0 0.0 0.0 0.0 -47.0 0.0 0.0 -3.0 0.0 0.0	30S
					27 28 160 .9 7.5 5.0 18.0 28.5 2.5 -51.4 -53.5 .6 -2.8 -3.0 .6	40S

APPENDIX E

Code:

AUTUMN
0-5 KFT
BELOW TROP

N_{Flights}	$N_{\text{Indep. obs.}}$	$N_{\text{Total obs.}}$
$\overline{\text{TIC}} \%$	$\text{SIGMA}_{\text{TIC}}$	$P(\text{TIC} > 0 \%)$
$\text{TICIV} \%$	$\text{SIGMA}_{\text{TICIV}}$	$P(\text{TIC} \geq 10 \%)$
$\overline{\text{T}}_{\text{CLEAR}}$	$\overline{\text{T}}_{\text{CLOUD}}$	$P(\text{TIC} \geq 25 \%)$
$\overline{\Delta Z}_{\text{CLEAR}}$	$\overline{\Delta Z}_{\text{CLOUD}}$	$P(\text{TIC} \geq 50 \%)$

	15E	60E	105E	150E	165W
80N					
70N					1 1 1 0.0 0.0 0.0 0.0 0.0 0.0 -50.0 0.0 0.0 - .6 0.0 0.0
60N					13 14 87 5.6 19.7 11.5 48.7 35.8 8.0 -53.0 -55.9 6.9 -2.4 -3.0 5.7
50N	14 16 116 2.5 10.8 11.2 21.9 24.6 6.0 -53.5 -55.9 3.4 -2.7 -2.7 2.6		11 11 52 0.0 0.0 0.0 0.0 0.0 0.0 -56.7 0.0 0.0 -2.6 0.0 0.0	23 26 280 1.8 10.9 6.8 26.5 32.9 2.9 -54.9 -57.4 1.8 -2.6 -3.0 1.4	
40N	16 18 144 2.7 11.7 8.3 32.2 26.4 6.3 -55.1 -58.8 4.9 -3.3 -3.6 2.1		15 15 62 0.0 0.0 0.0 0.0 0.0 0.0 -53.5 0.0 0.0 -3.1 0.0 0.0	7 7 60 0.0 0.0 0.0 0.0 0.0 0.0 -56.5 0.0 0.0 -3.0 0.0 0.0	
30N		2 2 13 1.7 5.9 7.7 22.0 0.0 7.7 -59.3 -58.0 0.0 -2.5 -2.7 0.0		2 2 8 0.0 0.0 0.0 0.0 0.0 0.0 -58.6 0.0 0.0 -2.2 0.0 0.0	
20N					
10N					
0					
10S					
20S			1 1 9 0.0 0.0 0.0 0.0 0.0 0.0 -50.7 0.0 0.0 -2.8 0.0 0.0	2 2 5 0.0 0.0 0.0 0.0 0.0 0.0 -50.0 0.0 0.0 -1.8 0.0 0.0	
30S	1 1 2 0.0 0.0 0.0 0.0 0.0 0.0 -55.5 0.0 0.0 -4.2 0.0 0.0		2 2 28 .0 .1 3.6 .8 0.0 0.0 -53.7 -61.0 0.0 -2.2 -2.4 0.0	11 13 75 1.7 10.5 4.0 41.8 32.5 2.7 -51.2 -56.0 2.7 -2.2 -3.5 1.3	
40S					

APPENDIX E

$N_{Flights}$	$N_{Indep. obs.}$	$N_{Total obs.}$
$\overline{TIC} \%$	$SIGMA_{TIC}$	$P(TIC > 0 \%)$
TICIV %	$SIGMA_{TICIV}$	$P(TIC \geq 10 \%)$
\overline{T}_{CLEAR}	\overline{T}_{CLOUD}	$P(TIC \geq 25 \%)$
$\overline{\Delta Z}_{CLEAR}$	$\overline{\Delta Z}_{CLOUD}$	$P(TIC \geq 50 \%)$

AUTUMN
0-5 KFT
BELOW TROP

165W	120W	75W	30W	15E	ZONAL MEAN	
						80N
						70N
4 4 34 .7 2.9 5.9 12.2 0.0 5.9 -57.1 -57.0 0.0 -1.1 -3.1 0.0	7 7 39 21.7 31.8 53.8 40.3 33.5 41.0 -56.7 -54.9 28.2 -1.1 -2.7 17.9	9 9 68 30.2 37.4 48.5 62.2 29.9 44.1 -51.7 -55.2 41.2 -2.0 -2.1 32.4	9 9 61 7.1 17.3 19.7 36.0 22.0 18.0 -52.6 -53.2 13.1 -1.7 -3.2 6.6	30 30 203 16.5 29.9 33.5 49.3 32.3 29.1 -53.9 -54.8 23.2 -1.5 -2.5 16.3		
11 11 77 5.9 12.7 24.7 23.9 15.0 19.5 -58.3 -58.9 11.7 -1.8 -2.2 0.0	16 20 180 8.9 21.3 23.3 38.1 28.9 17.8 -55.7 -55.8 14.4 -1.6 -2.5 7.2	54 56 512 8.4 22.9 17.0 49.2 32.7 14.1 -50.5 -58.1 11.5 -2.1 -2.5 9.2	76 87 800 3.0 21.0 22.1 36.2 31.2 16.4 -52.4 -57.6 11.1 -2.6 -2.9 7.1	170 188 1656 8.0 21.3 20.2 39.5 31.5 15.5 -52.4 -57.5 11.4 -2.3 -2.7 7.4		60N
25 30 243 5.3 16.1 22.2 24.1 26.8 12.8 -57.1 -63.1 8.2 -2.2 -2.6 4.5	29 30 199 3.6 13.3 15.1 24.2 26.1 9.5 -54.8 -54.8 5.0 -2.1 -3.8 3.0	72 82 738 10.7 25.8 23.8 45.1 35.4 17.9 -53.1 -58.5 14.4 -2.5 -3.3 10.2	19 21 170 7.7 21.1 18.2 42.4 31.2 15.3 -54.1 -55.7 11.2 -3.2 -3.3 5.9	193 216 1798 6.7 20.3 18.0 37.3 33.8 12.4 -54.4 -58.5 9.1 -2.5 -3.2 6.1		50N
23 23 96 .7 6.6 2.1 33.3 32.2 1.0 -54.7 -52.0 1.0 -3.0 -4.3 1.0	12 13 60 1.1 6.2 3.3 31.8 12.9 3.3 -56.1 -56.5 1.7 -2.4 -1.1 0.0			73 76 422 1.2 8.0 3.8 32.3 26.0 2.8 -55.1 -57.7 2.1 -3.0 -3.4 .9		40N
2 2 3 0.0 0.0 0.0 0.0 0.0 0.0 -56.7 0.0 0.0 -2.1 0.0 0.0				6 6 24 .9 4.4 4.2 22.0 0.0 4.2 -58.7 -58.0 0.0 -2.3 -2.7 0.0		30N
						20N
						10N
						0
						10S
						20S
					3 3 14 0.0 0.0 0.0 0.0 0.0 0.0 -50.4 0.0 0.0 -2.5 0.0 0.0	30S
					14 16 105 1.2 8.9 3.8 31.6 33.3 1.9 -51.9 -57.3 1.9 -2.3 -3.2 1.0	40S

APPENDIX E

Code:

WINTER
0-5 KFT
ABOVE TROP

$N_{Flights}$	$N_{Indep. obs.}$	$N_{Total obs.}$
$\overline{TIC} \%$	$SIGMA_{TIC}$	$P(TIC > 0 \%)$
$TICIV \%$	$SIGMA_{TICIV}$	$P(TIC \geq 10 \%)$
\overline{T}_{CLEAR}	\overline{T}_{CLOUD}	$P(TIC \geq 25 \%)$
$\overline{\Delta Z}_{CLEAR}$	$\overline{\Delta Z}_{CLOUD}$	$P(TIC \geq 50 \%)$

	15E	60E	105E	150E	165W
80N					
70N				2 0.0 0.0 -48.8 4.4	2 0.0 0.0 0.0 0.0 2 10
60N				9 0.0 0.0 -50.8 3.7	11 0.0 0.0 0.0 0.0 118
50N	10 11 62 2.7 11.0 9.7 28.0 23.3 8.1 -58.6 -62.2 3.2 .7 .8 1.6		2 2 16 0.0 0.0 0.0 0.0 0.0 0.0 -54.6 0.0 0.0 3.0 0.0 0.0	7 10 75 0.0 0.0 0.0 0.0 0.0 0.0 -49.8 0.0 0.0 3.5 0.0 0.0	
40N	12 12 102 0.0 0.0 0.0 0.0 0.0 0.0 -54.7 0.0 0.0 1.5 0.0 0.0		14 14 77 0.0 0.0 0.0 0.0 0.0 0.0 -52.0 0.0 0.0 2.3 0.0 0.0	9 13 145 0.0 0.0 0.0 0.0 0.0 0.0 -50.3 0.0 0.0 2.5 0.0 0.0	
30N	2 2 12 0.0 0.0 0.0 0.0 0.0 0.0 -53.3 0.0 0.0 1.6 0.0 0.0		1 1 2 0.0 0.0 0.0 0.0 0.0 0.0 -46.0 0.0 0.0 1.1 0.0 0.0	1 1 10 0.0 0.0 0.0 0.0 0.0 0.0 -47.5 0.0 0.0 1.6 0.0 0.0	
20N					
10N					
0					
10S					
20S				1 0.0 0.0 -54.5 1.1	1 0.0 0.0 0.0 0.0 2
30S				10 0.0 0.0 -55.4 2.3	11 0.0 0.0 0.0 0.0 68
40S					

APPENDIX E

$N_{Flights}$	$N_{Indep. obs.}$	$N_{Total obs.}$
$\overline{TIC} \%$	$SIGMA_{TIC}$	$P(TIC > 0 \%)$
$TICIV \%$	$SIGMA_{TICIV}$	$P(TIC \geq 10 \%)$
\overline{T}_{CLEAR}	\overline{T}_{CLOUD}	$P(TIC \geq 25 \%)$
$\overline{\Delta Z}_{CLEAR}$	$\overline{\Delta Z}_{CLOUD}$	$P(TIC \geq 50 \%)$

WINTER
0-5 KFT
ABOVE TROP

165W			120W			75W			30W			15E			ZONAL MEAN			
						1 1 6						1 1 6			80N			
						0.0 0.0 0.0						0.0 0.0 0.0			0.0 0.0 0.0			
						-54.5 0.0 0.0						-54.5 0.0 0.0			-54.5 0.0 0.0			
						2.7 0.0 0.0						2.7 0.0 0.0			2.7 0.0 0.0			
7 10 93			10 11 94			8 10 120			5 5 48			32 38 365			70N			
0.0 0.0 0.0			1.2 8.2 2.1			1.4 7.5 5.0			.4 2.5 2.1			.8 6.1 2.5			0.0 0.0 0.0			
0.0 0.0 0.0			54.7 14.3 2.1			27.8 19.9 5.0			17.6 0.0 2.1			32.6 21.4 2.5			0.0 0.0 0.0			
-55.4 0.0 0.0			-59.5 -69.5 2.1			-55.2 -60.3 .8			-54.4 -56.0 0.0			-56.1 -61.9 .8			0.0 0.0 0.0			
3.5 0.0 0.0			2.5 2.3 1.1			2.2 .6 .8			1.8 .6 0.0			2.6 .9 .5			0.0 0.0 0.0			
9 12 123			12 18 189			20 22 194			30 35 312			80 98 936			60N			
0.0 0.0 0.0			.2 2.2 .5			8.7 26.1 12.9			.5 4.3 3.2			2.0 12.6 3.8			0.0 0.0 0.0			
0.0 0.0 0.0			30.6 0.0 .5			67.7 35.8 10.8			15.4 18.6 1.3			52.1 39.3 2.8			0.0 0.0 0.0			
-51.0 0.0 0.0			-55.3 -55.0 .5			-52.5 -60.6 9.8			-53.2 -60.7 1.0			-52.9 -60.5 2.5			0.0 0.0 0.0			
3.4 0.0 0.0			3.0 0.0 0.0			2.4 .7 9.3			2.3 1.1 .3			2.8 .8 2.0			0.0 0.0 0.0			
22 23 165			65 72 592			28 37 332			20 22 157			154 177 1399			50N			
2.5 12.5 7.3			1.6 9.9 4.6			1.1 8.7 2.4			.6 6.5 1.9			1.4 9.4 4.0			0.0 0.0 0.0			
34.0 32.8 4.8			35.2 30.9 3.2			44.9 34.4 1.8			33.7 33.3 1.3			35.5 31.6 2.9			0.0 0.0 0.0			
-54.2 -63.2 3.6			-54.4 -63.7 2.5			-50.7 -60.3 1.5			-53.9 -61.0 .6			-53.3 -62.8 2.1			0.0 0.0 0.0			
2.3 1.7 1.8			2.5 1.5 1.4			2.2 1.4 1.2			2.0 .7 .6			2.3 1.4 1.2			0.0 0.0 0.0			
42 46 368			37 43 357									114 128 1049			40N			
.7 6.0 1.9			.2 1.9 1.1									.3 3.7 1.0			0.0 0.0 0.0			
36.6 23.4 1.6			14.3 10.8 .8									28.5 22.5 .9			0.0 0.0 0.0			
-55.1 -66.6 1.1			-56.2 -62.3 .3									-54.5 -65.0 .5			0.0 0.0 0.0			
2.2 2.0 .5			2.3 .2 0.0									2.2 1.3 .2			0.0 0.0 0.0			
11 11 76												15 15 100			30N			
0.0 0.0 0.0												0.0 0.0 0.0			0.0 0.0 0.0			
0.0 0.0 0.0												0.0 0.0 0.0			0.0 0.0 0.0			
-52.6 0.0 0.0												-52.0 0.0 0.0			0.0 0.0 0.0			
1.6 0.0 0.0												1.6 0.0 0.0			0.0 0.0 0.0			
															20N			
															10N			
															0			
															10S			
															20S			
												1 1 2			0.0 0.0 0.0			
												0.0 0.0 0.0			0.0 0.0 0.0			
												-54.5 0.0 0.0			-54.5 0.0 0.0			
												1.1 0.0 0.0			1.1 0.0 0.0			
															30S			
												10 11 68			0.0 0.0 0.0			
												0.0 0.0 0.0			0.0 0.0 0.0			
												-55.4 0.0 0.0			-55.4 0.0 0.0			
												2.3 0.0 0.0			2.3 0.0 0.0			
															40S			

APPENDIX E

Code:

SPRING
0-5 KFT
ABOVE TR0P

$N_{Flights}$	$N_{Indep. obs.}$	$N_{Total obs.}$
$\overline{TIC} \%$	$SIGMA_{TIC}$	$P(TIC > 0 \%)$
$TICIV \%$	$SIGMA_{TICIV}$	$P(TIC \geq 10 \%)$
\overline{T}_{CLEAR}	\overline{T}_{CLOUD}	$P(TIC \geq 25 \%)$
$\overline{\Delta Z}_{CLEAR}$	$\overline{\Delta Z}_{CLOUD}$	$P(TIC \geq 50 \%)$

	15E	60E	105E	150E	165W
80N					
70N					2 2 4 0.0 0.0 0.0 0.0 0.0 0.0 -54.3 0.0 0.0 3.3 0.0 0.0
60N					34 45 487 2.1 12.0 4.3 47.9 33.8 3.3 -54.1 -62.8 2.9 3.0 1.0 2.1
50N	9 9 60 5.1 16.6 15.0 34.2 29.1 10.0 -56.0 -56.8 6.7 1.6 1.1 6.7		16 16 91 0.0 0.0 0.0 0.0 0.0 0.0 -55.1 0.0 0.0 2.6 0.0 0.0		41 46 469 1.9 11.4 4.7 41.0 34.3 3.4 -55.3 -61.1 2.6 2.5 2.2 2.1
40N	6 7 57 .7 3.1 7.0 9.7 7.3 1.8 -56.7 -57.0 0.0 1.1 .7 0.0		23 23 103 .9 5.2 4.9 19.3 14.5 2.9 -55.6 -61.4 1.9 2.7 1.8 0.0		11 11 76 3.1 15.5 6.6 47.5 39.2 3.9 -52.1 -56.8 3.9 2.0 1.2 3.9
30N			1 1 5 0.0 0.0 0.0 0.0 0.0 0.0 -45.8 0.0 0.0 .6 0.0 0.0		
20N					
10N					
0					
10S					
20S					1 1 5 0.0 0.0 0.0 0.0 0.0 0.0 -54.2 0.0 0.0 1.5 0.0 0.0
30S					9 10 72 0.0 0.0 0.0 0.0 0.0 0.0 -58.6 0.0 0.0 2.1 0.0 0.0
40S					

APPENDIX E

$N_{Flights}$	$N_{Indep. obs.}$	$N_{Total obs.}$
$\overline{TIC} \%$	$SIGMA_{TIC}$	$P(TIC > 0 \%)$
TICIV %	$SIGMA_{TICIV}$	$P(TIC \geq 10 \%)$
\overline{T}_{CLEAR}	\overline{T}_{CLOUD}	$P(TIC \geq 25 \%)$
$\overline{\Delta Z}_{CLEAR}$	$\overline{\Delta Z}_{CLOUD}$	$P(TIC \geq 50 \%)$

SPRING
0-5 KFT
ABOVE TROP

165W	120W			75W			30W			15E	ZONAL MEAN				
	1	1	8	1	1	2	1	1	2	3	3	12	80N		
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
	-58.8	0.0	0.0	-60.0	0.0	0.0	-59.5	0.0	0.0	-59.1	0.0	0.0			
	2.4	0.0	0.0	0.0	0.0	0.0	.3	0.0	0.0	1.6	0.0	0.0			
10	13	110	13	13	87	6	6	68	3	3	20	34	37	289	70N
0.0	0.0	0.0	.0	.1	3.4	.0	.2	5.9	0.0	0.0	0.0	.0	.1	2.4	
0.0	0.0	0.0	.4	0.0	0.0	.7	.5	0.0	0.0	0.0	0.0	.6	.4	0.0	
-51.4	0.0	0.0	-53.7	-53.3	0.0	-52.7	-57.8	0.0	-51.9	0.0	0.0	-52.4	-55.9	0.0	
3.2	0.0	0.0	2.7	2.9	0.0	3.0	2.8	0.0	3.1	0.0	0.0	3.0	2.8	0.0	
25	27	283	23	26	266	30	30	198	39	42	382	151	170	1616	60N
.0	.2	.7	.0	.1	1.1	3.1	15.2	7.6	1.5	8.6	5.8	1.4	9.5	3.9	
1.8	1.4	0.0	.5	.2	0.0	40.8	39.0	4.5	25.9	25.7	3.7	34.8	34.0	2.4	
-52.8	-61.5	0.0	-55.7	-56.0	0.0	-52.6	-62.6	3.5	-52.5	-62.7	2.1	-53.6	-62.4	1.8	
2.9	1.4	0.0	2.6	1.5	0.0	2.4	1.9	3.0	2.5	1.2	1.0	2.7	1.3	1.2	
48	57	531	97	103	754	33	34	202	13	15	107	257	280	2214	50N
.5	5.1	1.9	2.4	11.9	6.4	1.3	8.2	5.9	.9	8.3	1.9	1.6	10.0	4.7	
25.1	27.5	.9	37.5	29.9	4.9	21.4	26.5	3.0	50.6	34.5	1.9	35.1	31.1	3.3	
-56.3	-62.3	.8	-55.4	-62.8	3.4	-51.9	-54.5	1.5	-51.7	-59.0	.9	-55.1	-60.8	2.3	
2.1	1.6	.4	2.2	1.6	2.1	2.3	2.0	1.0	2.6	1.6	.9	2.3	1.7	1.6	
60	62	393	84	97	743	5	5	26				189	205	1398	40N
.9	7.4	3.8	2.0	12.2	4.0	.0	.1	3.8				1.6	10.5	4.3	
22.6	30.8	1.5	49.2	37.2	3.0	.4	0.0	0.0				36.4	36.2	2.5	
-55.7	-61.9	1.0	-56.6	-62.9	2.6	-56.7	-38.0	0.0				-56.0	-61.2	2.0	
2.0	1.0	1.0	2.2	1.1	2.2	2.2	2.0	0.0				2.1	1.1	1.6	
13	15	83	1	1	1	1	1	4				16	18	93	30N
1.5	7.9	6.0	0.0	0.0	0.0	0.0	0.0	0.0				1.3	7.4	5.4	
24.2	21.8	3.6	0.0	0.0	0.0	0.0	0.0	0.0				24.2	21.8	3.2	
-58.0	-61.8	1.2	-59.0	0.0	0.0	-63.5	0.0	0.0				-57.6	-61.8	1.1	
1.3	.4	1.2	.2	0.0	0.0	.7	0.0	0.0				1.3	.4	1.1	
															20N
															10N
															0
															10S
															20S
												1	1	5	
												0.0	0.0	0.0	
												0.0	0.0	0.0	
												-54.2	0.0	0.0	
												1.5	0.0	0.0	
															30S
												9	10	72	
												0.0	0.0	0.0	
												0.0	0.0	0.0	
												-58.6	0.0	0.0	
												2.1	0.0	0.0	40S

APPENDIX E

Code:

SUMMER
0-5 KFT
ABOVE TROP

N_{Flights}	$N_{\text{Indep. obs.}}$	$N_{\text{Total obs.}}$
$\overline{\text{TIC}} \%$	$\text{SIGMA}_{\text{TIC}}$	$P(\text{TIC} > 0 \%)$
$\text{TICIV} \%$	$\text{SIGMA}_{\text{TICIV}}$	$P(\text{TIC} \geq 10 \%)$
$\overline{\text{T}}_{\text{CLEAR}}$	$\overline{\text{T}}_{\text{CLOUD}}$	$P(\text{TIC} \geq 25 \%)$
$\overline{\Delta Z}_{\text{CLEAR}}$	$\overline{\Delta Z}_{\text{CLOUD}}$	$P(\text{TIC} \geq 50 \%)$

	15E	60E	105E	150E	165W	
80N						
70N					5 5 25 0.0 0.0 0.0 0.0 0.0 0.0 -51.6 0.0 0.0 2.4 0.0 0.0	
60N					18 24 263 .7 4.4 4.2 16.8 14.0 2.3 -51.1 -59.7 .8 2.9 1.1 0.0	
50N	6 6 35 .7 3.1 5.7 12.9 3.5 2.9 -50.3 -54.0 0.0 1.7 .5 0.0		2 2 12 0.0 0.0 0.0 0.0 0.0 0.0 -54.9 0.0 0.0 2.0 0.0 0.0		24 24 143 .0 .4 .7 4.3 0.0 0.0 -53.8 -64.0 0.0 1.9 0.0 0.0	
40N						
30N						
20N						
10N						
0						
10S						
20S						
30S			1 1 2 0.0 0.0 0.0 0.0 0.0 0.0 -50.0 0.0 0.0 .7 0.0 0.0			
40S			11 12 95 0.0 0.0 0.0 0.0 0.0 0.0 -48.6 0.0 0.0 1.9 0.0 0.0		3 3 28 .0 .1 3.6 .4 0.0 0.0 -51.1 -54.0 0.0 3.0 4.7 0.0	

APPENDIX E

N_{Flights}	$N_{\text{Indep. obs.}}$	$N_{\text{Total obs.}}$
$\overline{\text{TIC}} \%$	$\text{SIGMA}_{\text{TIC}}$	$P(\text{TIC} > 0 \%)$
$\text{TICIV} \%$	$\text{SIGMA}_{\text{TICIV}}$	$P(\text{TIC} \geq 10 \%)$
$\overline{\text{T}}_{\text{CLEAR}}$	$\overline{\text{T}}_{\text{CLOUD}}$	$P(\text{TIC} \geq 25 \%)$
$\overline{\Delta Z}_{\text{CLEAR}}$	$\overline{\Delta Z}_{\text{CLOUD}}$	$P(\text{TIC} \geq 50 \%)$

SUMMER
0-5 KFT
ABOVE TROP

165W	120W			75W			30W			15E	ZONAL MEAN				
	1	1	1	1	1	3	1	1	7	3	3	11	60N		
	0.0	0.0	0.0	0.0	0.0	0.0	.1	.1	14.3	.0	.1	9.1			
	0.0	0.0	0.0	0.0	0.0	0.0	.4	0.0	0.0	.4	0.0	0.0			
	-48.0	0.0	0.0	-44.0	0.0	0.0	-44.5	-45.0	0.0	-44.7	-45.0	0.0			
	5.0	0.0	0.0	4.8	0.0	0.0	4.6	4.7	0.0	4.7	4.7	0.0			
10	12	144	27	29	243	18	18	151	20	20	187	80	84	750	70N
0.0	0.0	0.0	.0	.1	.8	0.0	0.0	0.0	.0	.3	.5	.0	.1	.4	
0.0	0.0	0.0	1.2	.8	0.0	0.0	0.0	0.0	3.5	0.0	0.0	2.0	1.3	0.0	
-53.1	0.0	0.0	-49.5	-53.0	0.0	-50.2	0.0	0.0	-51.1	-65.0	0.0	-50.8	-57.0	0.0	
2.3	0.0	0.0	3.1	2.0	0.0	3.9	0.0	0.0	3.3	1.8	0.0	3.2	1.9	0.0	
14	19	176	38	46	437	14	15	134	37	41	331	121	145	1341	60N
.2	1.5	1.7	.3	4.3	1.6	.3	2.3	3.0	.1	.7	2.1	.3	3.3	2.4	
11.0	3.9	1.1	21.6	26.8	.7	10.3	8.8	1.5	3.8	3.2	.3	13.6	16.7	1.0	
-50.5	-58.3	0.0	-51.4	-58.3	.5	-53.2	-60.8	0.0	-53.6	-59.1	0.0	-51.9	-59.3	.3	
2.8	.2	0.0	2.7	.8	.2	2.7	1.5	0.0	2.9	1.8	0.0	2.8	1.2	.1	
21	21	127	36	38	238	11	11	105	8	8	39	108	110	699	50N
2.0	12.1	7.1	1.5	8.3	5.5	1.3	6.7	7.6	1.1	4.9	7.7	1.2	7.7	5.2	
28.1	36.4	3.9	27.7	23.4	3.8	17.2	17.8	3.8	14.4	10.7	5.1	22.9	25.6	3.0	
-54.2	-63.2	1.6	-54.5	-60.2	2.9	-53.5	-55.9	1.9	-53.5	-54.0	2.6	-53.9	-59.2	1.7	
1.9	2.6	1.6	2.0	.9	.8	2.6	1.0	1.0	1.9	.4	0.0	2.0	1.3	.7	
10	10	54	10	10	63							20	20	117	40N
.9	6.7	1.9	.1	.7	1.6							.5	4.6	1.7	
49.8	0.0	1.9	5.5	0.0	0.0							27.6	22.2	.9	
-54.5	-55.0	1.9	-51.0	-56.0	0.0							-52.6	-55.5	.9	
2.4	.3	0.0	2.2	1.1	0.0							2.3	.7	0.0	
															30N
															20N
															10N
															0
															10S
															20S
												1	1	2	
												0.0	0.0	0.0	
												0.0	0.0	0.0	
												-50.0	0.0	0.0	
												.7	0.0	0.0	
															30S
												14	15	123	
												.0	.0	.8	
												.4	0.0	0.0	
												-49.2	-54.0	0.0	
												2.2	4.7	0.0	40S

APPENDIX E

Code:

AUTUMN
0-5 KFT
ABOVE TROP

$N_{Flights}$	$N_{Indep. obs.}$	$N_{Total obs.}$
$\overline{TIC} \%$	$SIGMA_{TIC}$	$P(TIC > 0 \%)$
$TICIV \%$	$SIGMA_{TICIV}$	$P(TIC \geq 10 \%)$
\overline{T}_{CLEAR}	\overline{T}_{CLOUD}	$P(TIC \geq 25 \%)$
$\overline{\Delta Z}_{CLEAR}$	$\overline{\Delta Z}_{CLOUD}$	$P(TIC \geq 50 \%)$

	15E	60E	105E	150E	165W
80N					
70N					3 3 5 0.0 0.0 0.0 0.0 0.0 0.0 -49.4 0.0 0.0 4.5 0.0 0.0
60N					16 20 246 .0 .0 .4 .4 0.0 0.0 -53.7 -57.0 0.0 2.8 1.1 0.0
50N	5 7 72 0.0 0.0 0.0 0.0 0.0 0.0 -56.7 0.0 0.0 2.3 0.0 0.0		10 10 47 0.0 0.0 0.0 0.0 0.0 0.0 -53.2 0.0 0.0 1.9 0.0 0.0	20 21 194 .0 .2 .5 2.7 0.0 0.0 -53.7 -51.0 0.0 2.2 1.0 0.0	
40N	5 5 50 0.0 0.0 0.0 0.0 0.0 0.0 -54.0 0.0 0.0 1.9 0.0 0.0		3 3 7 0.0 0.0 0.0 0.0 0.0 0.0 -49.9 0.0 0.0 .7 0.0 0.0	2 2 5 0.0 0.0 0.0 0.0 0.0 0.0 -57.4 0.0 0.0 1.2 0.0 0.0	
30N					1 1 2 0.0 0.0 0.0 0.0 0.0 0.0 -60.0 0.0 0.0 .3 0.0 0.0
20N					
10N					
0					
10S					
20S					2 2 4 0.0 0.0 0.0 0.0 0.0 0.0 -48.3 0.0 0.0 1.6 0.0 0.0
30S					8 8 57 .0 .1 5.3 .5 .2 0.0 -51.2 -52.0 0.0 3.0 3.1 0.0
40S					

APPENDIX E

N_{Flights}	$N_{\text{Indep. obs.}}$	$N_{\text{Total obs.}}$
$\overline{\text{TIC}} \%$	$\text{SIGMA}_{\text{TIC}}$	$P(\text{TIC} > 0 \%)$
$\text{TICIV} \%$	$\text{SIGMA}_{\text{TICIV}}$	$P(\text{TIC} \geq 10 \%)$
$\overline{\text{T}}_{\text{CLEAR}}$	$\overline{\text{T}}_{\text{CLOUD}}$	$P(\text{TIC} \geq 25 \%)$
$\overline{\Delta Z}_{\text{CLEAR}}$	$\overline{\Delta Z}_{\text{CLOUD}}$	$P(\text{TIC} \geq 50 \%)$

AUTUMN
0-5 KFT
ABOVE TROP

155W			120W			75W			30W			15E			ZONAL MEAN		
1	1	2	1	1	4	4	4	33				6	6	39	80N		
0.0	0.0	0.0	0.0	0.0	0.0	.0	.1	3.0				.0	.1	2.6			
0.0	0.0	0.0	0.0	0.0	0.0	.4	0.0	0.0				.4	0.0	0.0			
-52.0	0.0	0.0	-63.5	0.0	0.0	-57.4	-62.0	0.0				-57.7	-62.0	0.0			
4.3	0.0	0.0	4.7	0.0	0.0	2.9	.6	0.0				3.2	.6	0.0			
10	15	168	18	18	160	12	13	107	10	13	98	53	62	538	70N		
.3	2.6	1.2	.3	2.6	1.3	2.2	12.6	4.7	1.9	7.6	7.1	.9	6.9	3.0			
23.1	6.3	1.2	20.0	11.4	.6	47.7	35.1	2.8	25.1	13.3	6.1	31.7	24.6	2.2			
-53.6	-58.0	.6	-54.5	-56.5	.6	-51.3	-57.4	2.8	-51.7	-58.1	4.1	-53.0	-57.7	1.7			
2.7	.3	0.0	3.2	.4	0.0	2.3	1.2	2.8	2.6	1.2	0.0	2.8	1.0	.6			
16	17	154	18	21	197	50	61	576	52	54	446	152	173	1619	60N		
.1	1.1	1.3	.6	4.9	2.5	1.0	8.0	1.9	.5	3.8	2.7	.6	5.5	1.9			
9.2	2.9	.6	24.5	19.1	1.5	50.4	29.2	1.7	13.9	13.6	1.6	29.8	26.3	1.3			
-51.7	-49.5	0.0	-54.2	-61.8	1.5	-50.4	-60.1	1.4	-52.2	-59.2	1.1	-52.0	-59.2	1.0			
2.7	.3	0.0	2.4	1.5	0.0	2.3	.7	1.0	2.2	.5	0.0	2.4	.7	.4			
26	32	301	20	21	167	46	51	421	5	5	28	132	147	1230	50N		
.5	4.1	4.0	1.5	9.2	4.2	.8	6.0	2.4	.4	2.1	3.6	.6	5.3	2.5			
11.7	17.3	1.0	36.2	27.4	3.6	33.5	20.8	2.1	11.4	0.0	3.6	23.9	23.8	1.5			
-56.3	-62.5	.7	-54.7	-62.3	2.4	-52.8	-63.3	1.4	-57.0	-62.0	0.0	-54.4	-62.3	1.0			
1.8	.8	.3	2.2	2.4	1.2	2.2	.4	.7	1.7	.4	0.0	2.1	1.0	.5			
8	8	40	8	8	42				1	1	2	27	27	146	40N		
0.0	0.0	0.0	0.0	0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0			
0.0	0.0	0.0	0.0	0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0			
-58.9	0.0	0.0	-51.5	0.0	0.0				-59.0	0.0	0.0	-54.6	0.0	0.0			
1.3	0.0	0.0	1.3	0.0	0.0				.8	0.0	0.0	1.5	0.0	0.0			
1	1	2										2	2	4	30N		
0.0	0.0	0.0										0.0	0.0	0.0			
0.0	0.0	0.0										0.0	0.0	0.0			
-62.5	0.0	0.0										-61.3	0.0	0.0			
.6	0.0	0.0										.4	0.0	0.0			
															20N		
												2	2	4	20S		
												0.0	0.0	0.0			
												0.0	0.0	0.0			
												-48.3	0.0	0.0			
												1.6	0.0	0.0			
												8	8	57	30S		
												.0	.1	5.3			
												.5	.2	0.0			
												-51.2	-52.0	0.0			
												3.0	3.1	0.0			
															40S		

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16. Abstract Summary studies are presented for the entire cloud observation archive from the NASA Global Atmospheric Sampling Program (GASP). Studies are also presented for GASP particle-concentration data gathered concurrently with the cloud observations. Cloud encounters are shown on about 15 percent of the data samples overall, but the probability of cloud encounter is shown to vary significantly with altitude, latitude, and distance from the tropopause. Several meteorological circulation features are apparent in the latitudinal distribution of cloud cover, and the cloud-encounter statistics are shown to be consistent with the classical mid-latitude cyclone model. Observations of clouds spaced more closely than 90 minutes are shown to be statistically dependent. The statistics for cloud and particle encounter are utilized to estimate the frequency of cloud encounter on long-range airline routes, and to assess the probability and extent of laminar flow loss due to cloud or particle encounter by aircraft utilizing laminar flow control (LFC). It is shown that the probability of extended cloud encounter is too low, of itself, to make LFC impractical. This report is presented in two volumes. Volume I contains the narrative, analysis, and conclusions. Volume II contains five supporting appendixes.					
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