SI-MNH-958e
7-28-64

SMITHSONIAN INSTITUTION
DIVISION OF BIRDS
AT SEA DAILY LOG -- E

PBS
DATE 26 February 1966
Pg.# 1

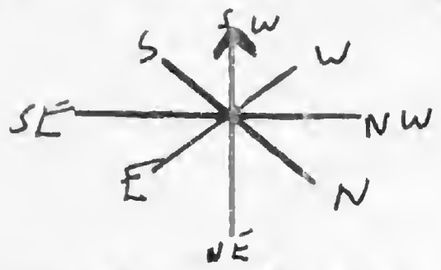
NOON 21° 14.6' N 157° 59.2' W

	time	species	#	dir.	hgt.	remarks	loc.
	1126					Now clear of Pearl Harbor - underway	
	1128	Brown Booby	1			on buoy - adult	
	1130	" "	2			on buoys adult and subadult	
	1135	Brown Booby	1	W			
	1142	B-f Albatross	4	O			
	1143	B-f Alba	3			Total 7	
	1150	jaeger (sp)	1			distant.	
	1156	jaeger (sp)	2				
	1208	Pom. Jaeger	1			light Phase.	
	1210	B-f Alba	3			distant	
	1223	B-F Alba	15				
	1225	Ruddy Turnstone	1			following cable ship	
	1241	Pomarine J.	3				
	1241	B-f Alba	9			Ad.	
	1241	R-f Booby	1				
TF	1245	Sooty Tern	8	N			
TF	1247	" "	5	N			
TF	1250	Sooty Tern	5	N			
TF	1258	" "	5	NE			
TF	1259	Sooty Tern	2	W			
	1303	Sooty Tern	2	NE			
	1306	Sooty Tern	3	E			
	1311	Sooty Tern	2	E			
	1315	Sooty Tern	3	NE			
	1316	Sooty Tern	2	NE			
TF	1320	Sooty Tern	15	E			
	1325	Sooty Tern	2	NW			
	1336	B-f Alba	4			Total of 20 following ship	
	1341	Sooty Tern	1	S			
	1341	Sooty Tern	1	N			
	1345	Sooty Tern	1	N			
	1347	Sooty Tern	1	N			
	1359	Sooty Tern	1	NE			

SI-MNH-958e
7-28-64

SMITHSONIAN INSTITUTION
DIVISION OF BIRDS
AT SEA DAILY LOG — E

Pelagic Bird Survey
DATE 26 February 1966
Pg.# 2



1837 55

	time	species	#	dir.	hgt.	remarks	loc.
	1405	Pom Jaeger	1			Total of 6 on H_2O	
	1415	Sooty Tern	1	NW			
	1425	Sooty Tern	2	~~E~~			
	1440	B-F Albatross	18	O		total of 38 following Ship.	
	1510	Pom. Jaeger	2	ON Water		Total of 8	
	1517	B-F Albatross	4	O		42 following Ship	
	1550	Pom. Jaeger	2	O		Total of 10 among those present all day	
	~~1615~~	~~B-F Albatross~~	~~4~~	~~lr~~			
	~~1615~~	~~Pom Jaeger~~	~~2~~	~~S~~			
	1620	Pom Jaeger	1	S			
TF	1621	Pom. Jaeger	10	lr		most birds just above H_2O	
		Sooty Tern	100+	hr		most birds high	
	1622	R-f Boob	1	W		adult	
	1647	B-F Albatross	46	lr		46 present.	
	1710	Sooty Tern	2	NW			
	1711	Sooty Tern	2	N			
	1718	Sooty Tern	1	N		at least 3 Pom Jaegers still present.	
	1720	Sooty Tern	1	N			
TF	1723	Sooty Tern	6	NW			
	1733	Pomarine J.	1	SW			
	1736	Sooty Tern	2	NW			
	1745					2 Pomarine J. still present	
	~~1748~~	~~Pomarine J.~~	~~7~~			sitting on H_2O	
	1753	Sooty Tern	1	NE		being chased by Pomarine Jaeger	
	~~1804~~	~~Pomarine J.~~	~~1~~			plus 7 above sitting down on H_2O	
	1838					8 Pomarine J. on H_2O	
	~~1837~~					Sunset; end diurnal observation	
	1837						

SI-MNH-958e
7-28-64

SR-0705

SMITHSONIAN INSTITUTION
DIVISION OF BIRDS
AT SEA DAILY LOG — E

PBS

DATE 27 Feb 1966
Pg.# 1

NOON 19°01'N 161°28'W

	time	species	#	dir.	hgt.	remarks	loc.
	0645	Begin observation					
	0647	B-F Albatross	3			following ship	
	0654	" "	3			total of 6	
	0705	~~Sooty Tern~~	1			SUNRISE	
	0707	Sooty Tern	1	N			
	0710	Sooty Tern	1	S			
	0710	B-f Alba	7			Total 7	
	0722	B-F Albatross	6			Total 13	
	0736	Sooty Tern	1	W			
	0745	B-f Booby	1	NE		adult	
FF	0755	Sooty Tern	20±2			feeding.	
	0805	Sooty Tern	3	NE		calling.	
	0813	Sooty Tern	2	N			
	0816	Sooty Tern	1	NE			
	0818	Sooty Tern	3	N			
	0818	Sooty Tern	1	N			
	0826	Sooty Tern	2	N			
	0832	~~Tropicbird~~					
	0834	Sooty Tern	2	E			
	0837	W-T Tropic	1				
	0850	Sooty Tern	2	N			
	0900	Sooty Tern	4	E			
	1015	Sooty Tern	2	NW			
	1017	Sooty Tern	2	E			
	1037	Sooty - Tern	2	NE			
	1053	G. Frigatebird	2	fg		100 ft over H2O off stbd.	
	1138	Sooty tern	2	W			
	1208	" "	1	W			
	1208	Great Frigate	1	S		several hundred feet up.	
	1227	Sooty tern	1	SE			
	1237	B-F Albatross	3			total 16 - following ship	
	1240	Sooty tern	2	?			
	1343	Frigate(sp)	1				
	1345	Sooty Tern	1	SW			
	1400	Sooty Tern	1	W			

SI-MNH-958e
7-28-64

SMITHSONIAN INSTITUTION
DIVISION OF BIRDS
AT SEA DAILY LOG — E

PBS

DATE 27 February 1966
Pg.# 2

1856

	time	species	#	dir.	hgt.	remarks	loc.
	1515	Jaeger	1	NE	10ft±	looks like a Pomarine; has wing patches on wrists	
	1547	Red-footed B.	1	N,l	5ft±		
	1559	Great Frig.	1	W	100+		
FF	1615	Sooty Tern	8	—	—	— feed off port side	
	1623	Blue-faced B.	1	SW	—	circled then sat down on H_2O joining 13 B-F Alba's	
	1640	~~Petrel sp.~~ Pterodroma	1	NE	—	low to water and far off (port side)	
	1700	B-f Alba	5	—	—	Total of 21 following	
	1705	B-f Albatross	8	—	—	" " 29 "	
	1717	Storm Petrel sp.	1	NW			
	1830	B-f Albatross	4			total 33 following ship	
	1832	Sooty Tern	1	NE			
	1840	Pterodroma sp.	1	N			
	1856	sunset.	—	—	—	end observation	

SI-MNH-958e
7-28-64

SR-0716

SMITHSONIAN INSTITUTION
DIVISION OF BIRDS
AT SEA DAILY LOG — E

PIPS

DATE 28 February 1966
Pg.# 1

NOON 16° 44.5'N 164° 51'W

time	species	#	dir.	hgt.	remarks	loc.
0716					Sunrise	
0716	B-f Albatross	3			- following ship	
0730	R-F Booby	1	N			
0837	B-F Booby	1	N		immature	
0900					Whale - small 30'; small blow.	
0902					whales - 2 ea. 6-10 ft blows.	
0908	Sooty Tern	2	NE			
0944	~~Sooty Tern~~ Ptero. hypo.	1	NE			
0955	Bonin Island P	1	W			
1006	WTTB	1	E			
1117	Sooty Tern	3	W			
1145	B. f Alba	1			Total of 4 following ships.	
1219	Pterodroma	1				
1308	Pterodroma	1	E			
1315	shear pets	4	S		Have been underway but at dawn	
1350	Frigate sp.	1			1/4 speed for the last 20 minutes	
1400	~~Pterodroma~~ Bonin Isl. Petrel	1	NW		nearly all dark underwings. Dark head on top with mask thru eye. Belly & breast light up to wings. Dark on Tops.	
1448						
1534					whale - small - short blow - may have been angular.	
1552	Great Frigate.	1		low	whale - s/b port side	100+
1600	Bonin Isl. Pet.	1				
1653	Pterodroma sp.	1	W			
1700					1 Sperm Whale - positive Identification - long slant of back with small fin. Blow is angular to front	
1715	Sooty Tern	5			potential feeding flock	RLD
1723	Sooty Tern	2				
1730					Ahi jumping.	

SI-MNH-958e
7-28-64

SMITHSONIAN INSTITUTION
DIVISION OF BIRDS
AT SEA DAILY LOG — E

Pelagic Bird Survey
DATE 28 February 1966
Pg.# 2

time	species	#	dir.	hgt.	remarks	loc.
1753	Sooty Tern	2	N			
1813	B-G. Noddy	2	N			
1847	Sooty Tern	3	E		small terns appeared to be gray but couldn't be 100% sure.	
1910					SUNSET (Observed) green flash.	

SI-MNH-958e
7-28-64

SMITHSONIAN INSTITUTION
DIVISION OF BIRDS
AT SEA DAILY LOG — E

Pelagic Bird Survey
DATE 01 March, 1966
Pg.# 1

NOON 14°55'N 168° 11.5'W

	time	species	#	dir.	hgt.	remarks	loc.
						Sunrise	
	0657	Sooty Tern	2	S	10ft±		
	0730	Ptero. hypoleuca	1	NW	10ft±		
	0800	Sooty Tern	2	S	10ft±		
	0800					Started manuvering for Man Overboard Drills.	
	0805	Shear-Pet	1				
	0940	Brown Booby	1			adult	
	1020					St. // Manuvering for M. O.	
	1120						
	1130	R-F Booby	1	O		Now under way after manuvers.	
	1249	Black-footed A.	1	Br		sub adult	
	1253	Red-footed B.	2	W	10ft±		
	1354	Red-footed B	1	NE		one adult, one immature following close behind immature	
	1430	Sooty Tern	2	NW			
	1447	Red-footed Boob	1	E		subadult - Pink bill. Brown breastband, wing and lower back. Tail-mixed brown and white. Rest of bird white. (PwW)	
TF	1450	Sooty Tern	6	N			
TF	1455	Sooty Tern	8	N			
	1545	Brown Booby	1	NE			
	1620					Close Now - Grid Observation.	

Grid

SI-MNH-958e
7-28-64

SMITHSONIAN INSTITUTION
DIVISION OF BIRDS
AT SEA DAILY LOG — E

DATE 1 March 1966
Pg.# 2

Diurnal — Grid

SS-1825

	time	species	#	dir.	hgt.	remarks	loc.
	1620					Enter Grid.	
TF	1640	Sooty Tern	10	NE			
	1652	B-w Petrel	2	E		(BF Albatross is still with us).	
	1700	~~B-f Alba~~	1				
	1734	Sooty Tern	4	W		+ trailing	
	1735	B-w Petrel	1	W			
	1750	BF Booby	1	E		imm.	
	1824	Red-footed B	1	E		Immature	

SI-MNH-958e
7-28-64

SMITHSONIAN INSTITUTION
DIVISION OF BIRDS
AT SEA DAILY LOG — E

Nocturnal Grid

Pelagic Bird Survey
DATE 01 Mar. 1966
Pg. # 1
1-2 March

time	species	#	dir.	hgt.	remarks	loc.
1825					Sunset; begin observation	
1830	Booby sp.	1	S			
1910	Red-footed B	1			caught aboard ship; bled, marked, released; sub adult	
2010	R-F Booby	1	O		possibly same bird as above	
2045	Booby sp	1			over head. May still be the above R-F.	
2050	Sooty tern	1	?			
2102	Sooty tern	1	?			
2137	Sooty tern	2	N			
~~2200~~						
2140					captured R-F Booby on fantail - Bled marked & released.	
2200	Sooty tern	1	?			
~~2220~~	~~Booby sp~~					
2330	Red-footed B	2			adult + immature → subadult flying around fantail - trying to land	
2340	Sooty Tern	1				
0045	Sooty Tern	2				
0055	Sooty Tern	1	N			
0142	Sooty Tern	2				
0147	Sooty Tern	2				
0214	Sooty Tern	1	?			
0237	Sooty Tern	2	NW			
0400	Sooty tern	2	?			
0442	Sooty tern	1	N			
0540	Sooty tern	1	?			
0555					Weather: Heavy clouds, light showers throughout Night. Slight Breeze.	
0630					Sunrise; end observation	

15 80
16 20
01 57
9 23

SI-MNH-958e
7-28-64

SMITHSONIAN INSTITUTION
DIVISION OF BIRDS
AT SEA DAILY LOG — E

Pelagic Bird Survey
DATE 02 March, 1966
Pg.# 1

SS 1836

Diurnal Johnston Grid

NOON — ~~12°28'~~ 12°32'N 170°52'W

time	species	#	dir.	hgt.	remarks	loc.
0630					Sunrise; begin observation	
0647	Red-tailed TB	1	~~N~~ N	120'±		
0840	Frigate (Gr ~~Cay~~)	1			Male	
0840	Sooty Tern	2	NNW			
0900	Frigate (yg)	1				
	Sooty Tern	3			feeding.	
1030	Sooty tern	1	E			
1142	Great Frigate	1	S			
1142	R-F Booby	1				
~~1147~~					feeding	
1251	R. F Booby	2	by		one subadult; one immature	
1531	Pterodroma	1	S			
1540	Sheat-Pet	1				
1645	Pterodroma sp	1				
1655	Frigatebird sp	~~2~~ 1			feeding	
1710	frigate	2				
1712	Red-footedB	1			feeding.	
1917					~~Tues~~ Change Course 301°	
1836					Sunset; end observation	

SI-MNH-958e
7-28-64

301

SMITHSONIAN INSTITUTION
DIVISION OF BIRDS
AT SEA DAILY LOG — E

Nocturnal Johnston Grid

DATE 02 March 1964
Pg. # 1

time	species	#	dir.	hgt.	remarks	loc.
1836					Sunset; begin observation	
2105	Sooty tern	1	?		sky clear with a big moon. this is the first activity.	
2150	Sooty tern	1	NE			
2250	Sooty Tern	1				
2255	Sooty Tern	1				
0050	Sooty Tern	1				
0322	Sooty Tern	1	E			
0439	sooty tern	2	?			
0638					Sunrise; end observation	

SI-MNH-958e
7-28-64

053-
045 mg.

NE

SMITHSONIAN INSTITUTION
DIVISION OF BIRDS
AT SEA DAILY LOG — E

Diurnal Johnston Grid

DATE 03 March 1946
Pg.# 1

NOON 13°59'N 170°44'W

	time	species	#	dir.	hgt.	remarks	loc.
	0638					Sunrise; begin observation	
	0714	R-F Booby	1	low		subadult	
	0845	R-T Tropic	1				
	0845	Bulwer's ?	1			Flying like Bulwer's. appeared to be all dark but couldn't be sure.	
	0855	Bulwer's Pet	1	N			
	1050	Oceans Petrel	1	?		seen for only an instant. by my home	
	1107	Sooty Tern	2	SW		seen between Petrel	
	1113	Christmas Isl. Shearwater	1	NE ~~SE~~			
	1253	Black-footed A.	1	W			
	1435	Bulwer's Pet	1	N		Feeding. Flew low over H2O. Landed with wings outstretched put bill in H2O and then flew away carrying a small squid. (PWW). Brown wing coverts conspicuous	
	1510	Shear Pet	1	E			
TF	1540	Sooty Tern	5	NE			
	1555	RF Booby	1			subadult.	
	1740	W-Winged Petrel	1	NW			
	1747	R-F Booby	2	E		1 Ad 1 subad. — Dark Plumaged	
FF	1828	Sooty Tern	70+	N		feeding but many 100 ft + above H2O	
	1829					Sunset; end observation	

SI-MNH-958e
7-28-64

SMITHSONIAN INSTITUTION
DIVISION OF BIRDS
AT SEA DAILY LOG — E

Nocturnal Johnston Atoll Grid

DATE 03 March 1964
Pg.# 1

time	species	#	dir.	hgt.	remarks	loc.
~~06~~						
1826					Sunset; begin observation	
1907	R-F Booby	1	NE		Immature	
2110	Bird sp	1	S			
2142	R-F Booby	1	?		Ad.	
2210	bird	1				
0001	R-f Booby	1				
0056	Sooty Tern	1	—			
0135	Sooty Tern	1	N			
0303	Sooty Tern	1	N			
0311	Sooty Tern	2	?			
0638					Sunrise; ~~beg~~ end observation	

SI-MNH-958e
7-28-64

SMITHSONIAN INSTITUTION
DIVISION OF BIRDS
AT SEA DAILY LOG — E

DATE 04 March 1964
Pg.# 1

Diurnal Johnston Grid
NOON 14° 38'N 171° 01'W

time	species	#	dir.	hgt.	remarks	loc.
0638					Sunrise; begin observation	
0642	B-F Albatross	1	lg		partial white rump	
0724	R-F Booby	1	N	10ft±	adult	
0737	Ptero. hypoleucus	1	W	10ft±		
0739	Bulwer Petrel	1	SE	10ft±		
0744	Sooty Tern	1	NW	10ft±		
0751	Black-winged P.	1	N-NW	10ft±		
0758	Ptero. externa	1	NW	15ft±	all white beneath	
0925	Sooty Tern	1	SW			
0945	Sooty Tern	1	SW			
TF 1000	Sooty Tern	11	N			
	Pterodroma sp	1	N			
1236	Bulwer Pet.	1	N	10ft±		
1315	R-F Booby	1	E	10ft±	immature	
1329	Bonin Is. Pet.	1	S	10ft±		
~~1329~~	~~B-F Albatross~~	~~1~~	~~SE~~			
1337	B-f Albatross	1				
1425	R-f Booby	1			Immature → Subadult Bill-pink dark tip. Lower chest and abdomen white. Rest of plumage brown. (Pale)	
1425	~~B f Albat~~	~~1~~	~~SW~~		Two Bf albatross following ship-different than this other kind of stern. Both playing albatross and following ship.	
1430	R-f Booby	1				
1440	Bulwer's	1			~~joined~~ other bird → Subadult. Joined	
1445	Sooty Tern	2			Flying 1 to wind.	
1513	B-F Booby	1			Adult.	
1530	JF Petrel	1				
1530	~~BF Albatross~~	~~1~~			Total of 3 BFA following ship. One with partial white rump.	
1543					Both Red-footed Boobies - still present - in same plumage but one has dark bill.	
1705	B-f Albatross	1			Total 4	
1710	R-f Booby	1				
1710	frigate	1				
1710	Sooty Tern	1				
1730	J-F Petrel	1	N			
1732	Storm Petrel	1	S		(W-f) Bulwer's - last record below W.O.T. seen	
1735	Bulwer's Petrel	1	S			
1746	~~Bf~~ Frigate	1			Last Frigate sighted	
1837					Sunset; end of observation	

SI-MNH-958e
7-28-64

SMITHSONIAN INSTITUTION
DIVISION OF BIRDS
AT SEA DAILY LOG — E

Nocturnal Johnston Atoll Grid

DATE 04 March 1964
Pg. # 1

time	species	#	dir.	hgt.	remarks	loc.
1837					Sunset; begin observation	
2100	Sooty tern	1	?			
2135	Sooty tern	1				
2200	Sooty Tern	1				
2225	Sooty Tern	1	NE			
2345	Sooty Tern	1	—			
2348	Sooty Tern	1	—			
2358	Sooty Tern	1				
0048	Sooty Tern	1	~~NE~~			
0057	Sooty Tern	1				
0147	Sooty Tern	1	N			
0425	Sooty tern	1				
0440	" "	1				
0455	sooty tern	1				
0648					Sunrise; end observation	

~~24~~ 23:60
18:37
5:33
6:44
12.19

SI-MNH-958e
7-28-64

SMITHSONIAN INSTITUTION
DIVISION OF BIRDS
AT SEA DAILY LOG — E

Diurnal Johnston Atoll Grid

NOON 14° 45.5'N 172°16'W

DATE 05 March, 1966
Pg. # 1

time	species	#	dir.	hgt.	remarks	loc.
0646					Sunrise; began observation	
0735	R-F Booby	1	→	50ft±	subadult	
0947	Booty Tern	1	E			
~~1821~~						
1821	R-F Booby	2	→		subadult → immature	
1836					S.S.	

SI-MNH-958e
7-28-64

SMITHSONIAN INSTITUTION
DIVISION OF BIRDS
AT SEA DAILY LOG — E

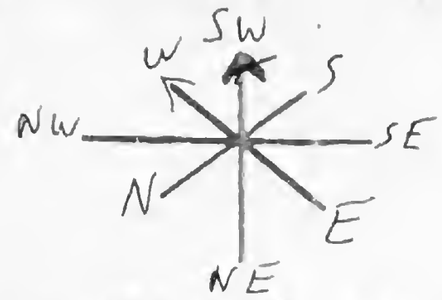
Nocturnal Johnston Atoll Card

DATE 05 March 1966
Pg.# 1

time	species	#	dir.	hgt.	remarks	loc.
1836					Sunset; begin observation	
2025	R-F Booby	1			flying around ship	
0340	Sooty Tern	1				
0452	Sooty tern	1				
0637					Sunrise; end observation	

SI-MNH-958e
7-28-64

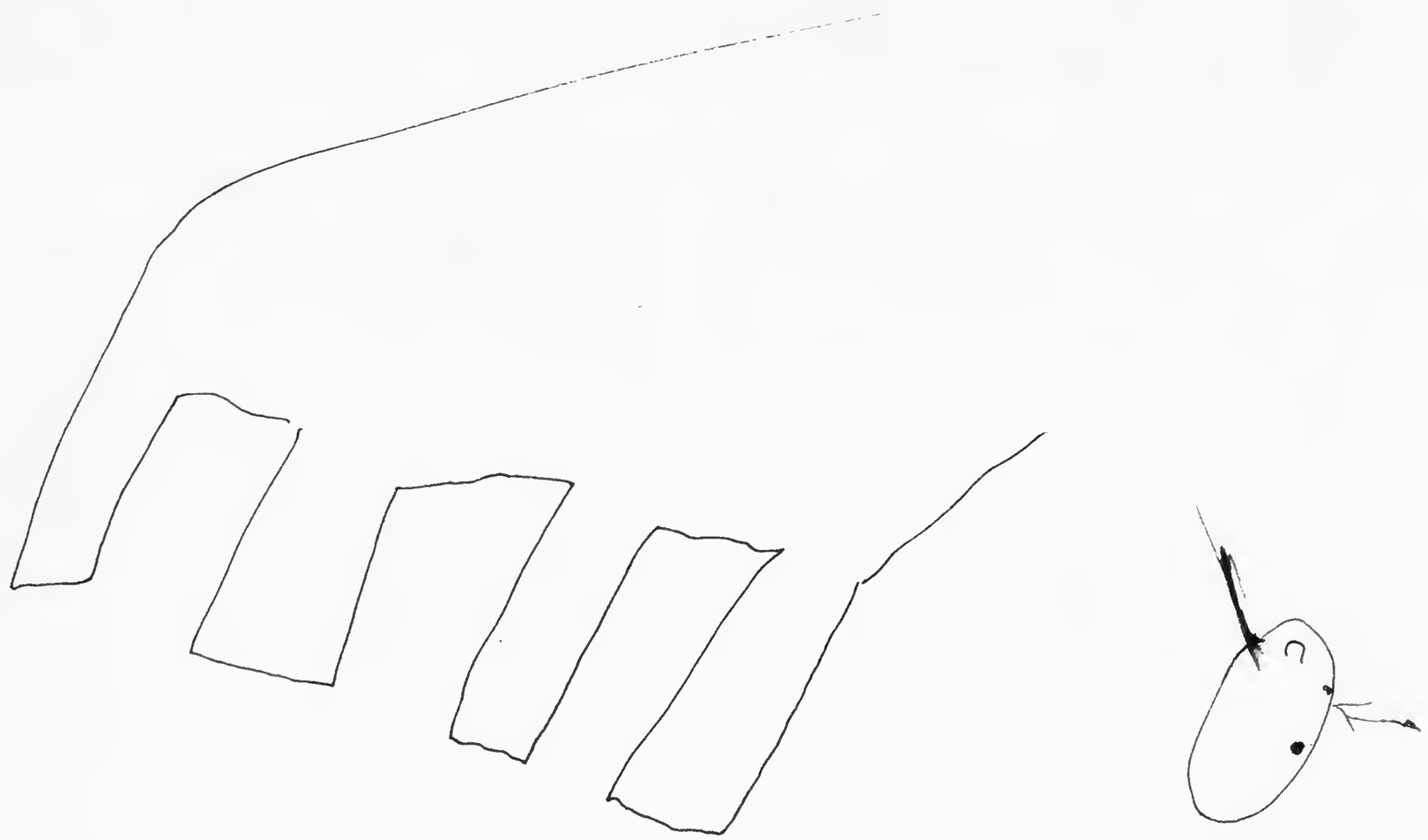
SMITHSONIAN INSTITUTION
DIVISION OF BIRDS
AT SEA DAILY LOG — E



Diurnal - Johnston Atoll Grid
NOON 16°46'N 171°15'W

DATE 06 March, 1966
Pg. # 1

	time	species	#	dir.	hgt.	remarks	loc.
	0637					Sunrise; begin observation	
	0726	Bonin Is. Petrel	1	SW	10ft±		
	0746	Sooty Tern	2	NW	10ft±		
	0747	Red-footed Booby	1	W	10ft±	subad-lt	
	0750	Shear. - Petrel	3	N	10ft±	might have been Juan Fernandez Petrels	
	0758	Sooty Tern	1	SE	30ft±		
	0759	Red-footed Booby	1	W	10ft±	adult	
	0810	Sooty Tern	3	E			
	0825	Sooty Tern	2	SE			
	0838	Sooty Tern	4	NW			
	0842	Sooty Tern	4	SE			
	0847	Sooty Tern	1	SE			
	0850	Sooty Tern	1	N			
	0853	Sooty Tern	3	N	70'	One had orange streamer. Showed up well at ca 75-100 yds. (New streamer).	
TF	0856	Sooty Tern	9	N			
	0856	Sooty Tern	1	S			
	0906	~~Sooty Tern~~					
	0906	R-f Booby	1	NW		Subadult.	
	0945	Sooty Tern	1	NE			
	1010	Sooty Tern	2	SE			
	1130	RF Booby	1			imm to Subad.	
	1130					Change course to S.W.	
	1222	Red-footed Booby	1	W	15ft±	immature → subadult	
	1340	RTTB	1	SE	100ft±		
	1415	Sooty Tern	2	N			
	1425					~~whale~~ Whale 25' Sperm?	
	1450	Sooty Tern	1	N			
FF	1500	Sooty Tern	100	±10		Fish jumping. Fairly active feeding.	
	↓	Fairy Tern	1				
	1540	Red foot Boob	2			Imm → subadult.	
FF	1605	Sooty Tern	250				
		Fairy Tern	20				
		Booby Sp.	1	E to NE		Movements slow	
		[redacted]	•				
		Frigate sp.	1				
FF	1655	Sooty Tern	200	± NE			
	1705	Red-f Booby	2			Movements slow subadult & immature → subadult	
	1705	Brown Booby	1			adult.	
	1745	RF Booby	4	SE		3 imm 1 subad	



SI-MNH-958e
7-28-64

SMITHSONIAN INSTITUTION
DIVISION OF BIRDS
AT SEA DAILY LOG — E

DATE 6 March 1966
Pg.# 2

	time	species	#	dir.	hgt.	remarks	loc.
	1750	RF Booby	1	sw			
FF	1752	Frigate sp	1				
		Sooty tern	6				
	1835					Sunset.	

FORM SMNH-958e
6-28-64

SMITHSONIAN INSTITUTION
DIVISION OF BIRDS
AT SEA DAILY LOG — E
NOCTURNAL

6-7
DATE 06 March 1966
Pg.# 1

time	species	#	dir.	hgt.	remarks	loc.
1836					Begin Observations	
1845	Sooty Tern	1				
1907	R-F Booby	1	L			
1920	R-F Booby	1			Landed on Ship, & left	
2020	Bird sp.	1			Large - light color, tropic bird or Booby.	
2030	Sooty tern	1				
2045	Sooty tern	1				
2200	Sooty tern	1	NE			
2232	bird	1				
0047	Sooty Tern	1	NE			
0105	Sooty Tern	1				
0305	Sooty Tern	1				
0355	Sooty Tern	1	NW			
0440	Sooty tern	1				
0524	Sooty tern	1				
0646					Sunrise; end observation	

SI-MNH-958e
7-28-64

SMITHSONIAN INSTITUTION
DIVISION OF BIRDS
AT SEA DAILY LOG — E

DATE 07 March, 1964
Pg. # 1

Diurnal - Johnston Atoll Grid

NOON 14° 31' N 173° 39' W

time	species	#	dir.	hgt.	remarks	loc.
0646					Sunrise; begin observation	
0744	Juan Fernandez P.	1	SE	10ft±		
0840	Sooty Tern	1				
0918	B-f Albatross	1			White rump.	
1230					Leave Grid	

58a

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SMITHSONIAN INSTITUTION
DIVISION OF BIRDS
AT SEA DAILY LOG — E

Diurnal Non-grid to Samoa

DATE 07 March, 1966
Pg.# 1

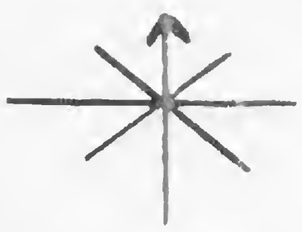
time	species	#	dir.	hgt.	remarks	loc.
1230					leave Johnston Atoll Grid; begin observation	
1241	RTTB	1	S	10ft±		
1415	Bulwer's	1				
1450	Bulwer's	1				
1541	Bulwer's	1				
1831					Sun Set	

SI-MNH-958e
7-28-64

SMITHSONIAN INSTITUTION
DIVISION OF BIRDS
AT SEA DAILY LOG — E

PBS

DATE 8 March 1966
Pg.# 1



0646

NOON 11°12'N 173°24'W

	time	species	#	dir.	hgt.	remarks	loc.
	0646					sunrise	
FF	0646	Sooty Tern	10			Feeding.	
		Pterodroma sp.	1				
	0657	Sooty Tern	2	NE			
	0725	B-W Petrel	1	N			
	0735	Sooty terns	3			Feeding	
	0852	Sooty Tern	24	NE		one with pink orange streamer.	
	0858	Shearwind?	1	N		distant. small rapid flight. white belly gray? Typ. Red Pk alongside?	
	0910	Shear-Pet	1				
	0925	Mottled Pet	1	N			
	0925	Shearwind?	1	N		distant. same as 0858.	
	1021	Sooty Tern	2	NE			
	1044	Sooty Tern	1				
	1047	Bulwer's Pet	1				
	1113	Bulwer's Petrel	1	W	10ft±		
	1229	Bulwer Petrel	1	W	10ft±		
	1245	Bulwers Petrel	1				
	1315	Bulwers Pet	1				
	1400					Turning N	
	1603	Bulwer Pet	1				
	1645	Mottled Pet	1	N			
	1815	Fairy Tern	1	E	25ft±		
	1842					Sunset; end observation	

SI-M~~958e~~
7-28-64

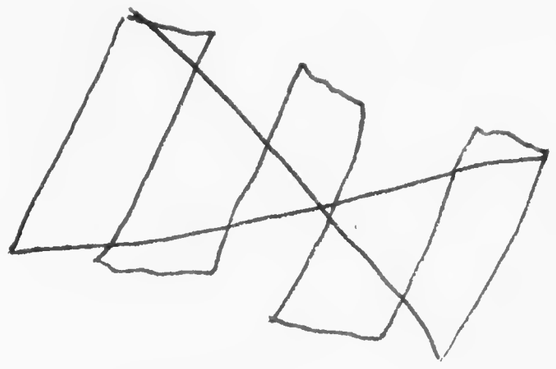
SMITHSONIAN INSTITUTION
DIVISION OF BIRDS
AT SEA DAILY LOG — E

PBS

DATE 9 March 1966
Pg.# 1

NOON 7°21'N 172°41.5'W

time	species	#	dir.	hgt.	remarks	loc.
0643					Sunrise?	
0650	Wedgetail	1	SE		Dark Phase.	
0807	Puffinus	1	S		Much gliding.	
	& puffinus					
0855	Phoenix Is.? P. a'Tahiti	1	E	10ft±	Rapid flight.	
0902	Red Phalarope	1	NW	10ft±	low to H_2O, ~~[illegible]~~	
0911	Bulwer Petrel	1	E	10ft±	sat down on water; belly light gray → washed white	
0912	Christmas Is. Sh.	1	N	10ft±		
0915	Shear.-Petrel	1	NW			
0918	JF Petrel	1	N			
0934	Red Phala.	1	NW		gray back.	
0935	Mottled Pet	1	N			
0950	Pterodroma externa	1	SW	10ft±		
1025	Mottled Petrel	1	N	10ft±		
1027	Black-winged P.	1	S	10ft±		
1135	B-W Petrel	1	SE			
1215	Fairy Tern	1	SE			
1224	Bulwer's Petrel	2	⊙			
1230	Bulweri	1	S		2 Dark Phase Wedgetails	
1257	Pterodroma	3			Large.—on H_2O. Distant. Appeared to	
1305 → 1310	Mottled Pet	1	NW		have dark border to underwings.	
1322	Wedgetail	1			Dark-rumped Petrel ? (Pr)	
1325	Wedgetail	1			Dark phase.	
1325	Red? Phala	2	NW		Light phase	
1328	P. puffinus	1	~		Lazy flight. Not at all typical.	
1332	R-f Booby	1			Subadult. ~~Probably dark phase bird.~~	
1343	Wedgetail	2	S		~~Brown Tailed, wings & back dark, rest of~~	
1345	W-T Tropic	1			~~underneath white. head white-crown.~~	
1352	Bulwer's	2			[~~light yellow bill (tip)~~.	
1412	R-f Booby	1			Dark phase.	
1423	P. puffinus	2	E		calling	
1440	P. Iar Tahate	1	~		subadult with 1332 bird.	
1443	Kermadec P	1			Slow flight. Some gliding. into wind.	
1447	bird	1			Light phase	
1515	Bulwer's	1				
1525	Shear.-Pet	1				
1531	Bulwer's P	1				



SI-~~MNH~~-958e
7-28-64

SMITHSONIAN INSTITUTION
DIVISION OF BIRDS
AT SEA DAILY LOG — E

PBS
DATE 9 March 1966
Pg.# 2

time	species	#	dir.	hgt.	remarks	loc.
1603	Wedgetail	1			Dark Phase.	
1603	Shear. Pet	1				
1611	Wedgetail	2			Dark Phase.	
1613	P. puffinus	1	E			
1624	P. puffinus	1				
1630	Bulwer's	1				
1635	R-F Booby	4			Subadult with other Two.	
1645	P. puffinus	1				
1646	wedge-tailed Sh.	1			dark phase	
1702	Shear Pet	1	E			
1708	Bulwer's Pet	2	⊙			
1710	Storm Pet	1	⊙		Like mopped.	
1722	C-I Shearwater	1	⊙			
1725	Bulwer Petrel	1	SE			
1726	R-F Booby	2	↳			
1735	Bulwer Petrel	1	E	10ft±		
1736	Hawaiian Noddy	1	W	30ft±		
1737	Wedge-tailed S.	1	W	10ft±	dark phase	
1816	R-F Booby	1	⊙			
1834	Bulwer Petrel	1	⊙			
1828	~~Nat~~ P. Puffinus	1	S			
1836	Sooty Tern	4	N			
1837	Shear Pet	1	S			
1843					Sun Set	

SI-MNH-958e
7-28-64

SMITHSONIAN INSTITUTION
DIVISION OF BIRDS
AT SEA DAILY LOG — E

Pelagic Bird Survey.

DATE 10 March 1966
Pg.# 1

Diurnal Johnston Grid → Samoa

Noon 3°19'N 172°20'W

time	species	#	dir.	hgt.	remarks	loc.
0639					Sunrise; begin observation	
0653	Bulwer Petrel	1	E	10ft±		
0707	Blue-faced B.	1	S	10ft±	adult	
0725	Storm-Petrel	1	S	5ft±	white-rumped	
0738	Shear.-Petrel	1	E			
0743	Bulwer Petrel	1	E	10ft±		
0743	J.-F. Petrel	1	E	15ft±		
0835	Bulwer Petrel	1	L→		on H_2O for 1 min. or less	
0836	~~J.-F. Petrel~~					
~~0836~~	~~Mottled~~ Petrel	1	NW	15ft±		
	~~Mottled~~					
1052	Shear Pet	1				
1106	Bulwer's Pet	1				
FF 1120	frigate	1			feeding only occasionally.	
	Sooty Tern	~~8~~ 10				
1130	W-T Tropic	1			adult - calling.	
1141	Wedge-tailed S.	2	SE	10ft±		
1142	Bulwer's	1				
1158	Bulwer's	1				
1220	Bulwer's	1				
1220	Bulwer's	1			heavy wing molt.	
1220	Bird	1			F-T or T-B.	
1243	Leach's Type	1				
1255	R-F. Booby	1	L→		~~ad~~ immature → subadult	
1307	Wedge-tailed	3	L→		dark phase; eventually moved to west	
1338	Wedge-tailed	1	N	10ft±	dark phase	
1338	Leach's Storm P.	1	L→		feeding	
1428	Leach's Storm P.	1	L→		feeding; landing on H_2O, may be same as 1338 because ship has been going in a big circle	
1455	Bulwer's P.	1	SE			
FF 1605	Frigatebirds	5				
	Sooty tern	30±			feeding	
1627	Bulwer's Pet	1	E			
1630						
1715	Sooty Tern	2				
1725	Frigate	2				
1730	Bulwer's	1				
FF 1740	frigate	1			Feeding.	
1840	Sooty Tern	8				
1840	Storm Petrel	1				
1844					Sunset.	

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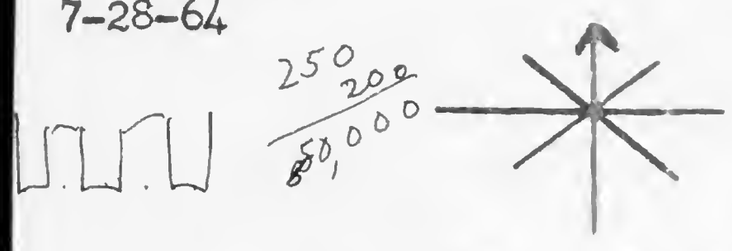
SI-MNH-958e
7-28-64

SMITHSONIAN INSTITUTION
DIVISION OF BIRDS
AT SEA DAILY LOG — E

PBS
DATE 11 March 1966
Pg.# 1



Noon 01'S 172°08.2'W

	time	species	#	dir.	hgt.	remarks	loc.
	0636					SR begin Observation	
	0640	RT Tropicbird	1	SE			
MF	0905	Sooty Tern	8			Milling + reaching for food.	
		frigate sp	1			immature	
		Fairy Tern	1				
	0910	Bl-face Booby	1			adult Feeding. Flying fish would break surface. Bird would fly down and follow fish along surface.	
	1305	R.F Booby	1	W		Ad	
	1405	BF Booby	1	E		SAd	
TF	1430	Sooty tern	8	S		Travelling	
TF	1458	Sooty Tern	5	SW		Travelling	
	1506	B-f Booby	2				
FF	1530	Sooty Tern	45 ±10			Feeding.	
		B-f Booby	1				
		booby sp	1				
	1542	frigatebird	1				
	1697	Wedgetail	1			Dark phase.	
	1650	Storm Petrel	1	S		white rumped	
	1708	Leach's S.P.	1	low	5ft±		
	1842					Sunset; end observation	

SI-MNH-9582
7-28-64

SMITHSONIAN INSTITUTION
DIVISION OF BIRDS
AT SEA DAILY LOG — E

Pelagic Bird Survey

DATE 12 March 1966
Pg.# 1

NOON 03°23'S 171°48'W

	time	species	#	dir.	hgt.	remarks	loc.
	0631					SUNRISE	
	0707	Sooty Tern	1				
	0707	Sooty Tern	2				
	0715	Sooty Tern	1				
	0721	Golden Plov	1			calling. Few black specks on belly.	
	0727	Tern	3				
	0727	B-f Booby	1			Canton Is. ahead.	
FF	0757	Can. Noddy	2			feeding.	
		Gray-back T	8				
	0808	Brown Booby	1				
		Tern	1				
	0818	B-f booby	1				
	0825	Terns	2				
MF	0830	C. Noddy	2				
		Gray-back T.	8			Searching + milling.	
	0848	Gray-back T	1				
	0920	Gray-back T.	2	E	20ft±		
FF	0932	Gray-back T.	7	E	10ft±	Feeding	
		Wedge-tail	1	E	10ft±	moving with GBT's but was not seen feeding; dark phase	
	0940	Great Frigate	1	E	10ft±	female, adult	
	1022	Wedge-tailed S.	1	E-NE	10ft±	dark phase	
	1259	R-T Tropic	1				
	1326	B-f Booby	1	E			
	1336	booby sp.	1				
	1341	B-F Booby	1				
	1352	B-F Booby	1				
F	1358	Fairy Tern	1	E		Some feeding + Drifting	
		Wedgetail	1			dark Phase	
		Sooty Tern	12				
		Hawn Noddy	1				
TF	1405	Sooty Tern	10	E		Traveling	
	1423	WedgeTail	1			Dark Phase.	
	1424	WedgeTail	2	E		Dark Phase.	
	1502	B-F Booby	1	N		adult	
	1532	B-F Booby	2	E	10ft±	adults	
	1547	B-F Booby	1	E	10ft±	- adult	
	1554	Frigate sp.	1	E	200ft±	adult?	
	1605	Leach's type	1	S	5ft±		

SI-MNH-958e
7-28-64

SMITHSONIAN INSTITUTION
DIVISION OF BIRDS
AT SEA DAILY LOG — E

Diamond [redacted]

DATE 12 March, 1966
Pg.# 2

	time	species	#	dir.	hgt.	remarks	loc.
	1614					65+ ~~Est~~ porpoise (Spinner porpoise); long snots; 3-5ft; roll completely over in air; gray-black; 2 groups heading East; jump high out of H_2O	
FF	1616	Fairy Tern	1			near porpoise	
		Sooty Tern	3				
	1616	B-F Booby	1				
	1616	Storm Petrel	2				
	1642	B.F Booby	2	E	10ft±		
	1725	Sooty tern	1	N			
	1750	Golden Plover	1				
	1840					Sun set.	

SI-MNH-958e
7-28-64

SMITHSONIAN INSTITUTION
DIVISION OF BIRDS
AT SEA DAILY LOG — E

DATE 13 March, 1966
Pg.# 1

Diurnal Johnston Atoll Grid
to American Samoa
NOON 7°26'S 171° 04'W.

time	species	#	dir.	hgt.	remarks	loc.
0631					Sunrise; begin observation; squalls off port side around to bow	
0747	Pterodroma sp.	1	S	10ft±		
0852	Bulwers Petrel	1	S			
0858	Storm Petrel	1	W		white rumped	
093	Storm Petrel	1	W		white rumped	
1104	Leach's Type	1				
1419	WTTB	1	S			
1550	Common Noddy Tern	1	W			
1600	Storm Petrel	1	S		white rumped	
1644	Leach's Type	1				
~~1858~~	~~Booby~~	~~1~~				
1809	Wedgetail	1			D.F.	
1838					SUNDOWN	

SI-MNH-958e
7-28-64

SMITHSONIAN INSTITUTION
DIVISION OF BIRDS
AT SEA DAILY LOG — E

CBS

DATE 14 March 1966
Pg.# 1

	time	species	#	dir.	hgt.	remarks	loc.
	0624					Sunrise begin Observations.	
	0658	Fairy tern	1	O		feeding	
	0708	Sooty tern	2	O			
	0720	Sheen-Petrel	2	SW		feeding with fairy tern also large bird & medium bird sized	
	0740	Fairy tern	1	E			
	0810	Sheen-Petrel	1	O		feeding dark.	
	0925	W-T Tropic	2				
	0944	Wedgetail	2			DARK PHASE.	
TF	1100	Sooty Tern	6	E		Traveling	
	1101	Wedge-tailed	2	E		dark phase	
	1102	Golden Plover	1	S			
	1210	Common Noddy T.	1	NE	100ft±		
	1222	Fairy Tern	2	S			
	1257	WTTB	1	SE	10ft± 10ft±		
	1400					Squalls Starting on Horizon	
	1440	WTTB	2	E		passed above ship	
	1507	tropicbird	1				
	1521	Wedgetail	1			Dark Phase.	
	1545					20+ Porpoises jumping. Didn't get good looks at them.	
	1605	FairyTern	1			Feeding.	
FF	1620	SootyTern	6				
		FAiryTern	4			→ Fish jumping Birds feeding.	
	1625	Wedgetail	1			Dark phase.	
	1700	Wedge-tailed S	1				
FF	1722	Fairy Tern	1	E		dark phase	
			6			all feeding; moved east when ship approached	
		Wedge-tailed S.	1			dark phase	
	1743	Red-footed B.	1	E	20ft±	immature → subadult	
	1746	Wedge-tailed S.	1	E		dark phase	
	1836					Sunset; end observation	

SI-MNH-958e
7-28-64

SMITHSONIAN INSTITUTION
DIVISION OF BIRDS
AT SEA DAILY LOG — E

PBS

DATE 20 March 1966
Pg.# 1

To Marcus Group

	time	species	#	dir.	hgt.	remarks	loc.
	0700	Blue Pbs.				leaving Iwo Jima.	
	0800	[redacted]				in the Harbor and along the islands there have been many C. Noddy Terns, and all are headed toward the islands. There were small numbers of fairy terns about.	
	0800	Start Observation					
	0810	fairy tern	3	E			
	0815	C Noddy tern	4	SE		position is about 1.5 miles off a small isl.	
TF	0820	" "	20+	SE		strung out	
TF	0822	RF Booby	3	S		2 Ad; 1 imm	
		Noddy tern	20	S			
		Fairy tern	1	S		— it is a continual string of birds	
	0830	RF Booby	2	S		1 Ad; 1 Sad.	
	0830	Noddy tern	4	S			
TF	0834	Wedge tail	2	SE		d & Phase	
		Noddy tern	7	SE			
TF	0842	Unidentified	1			dk	
		Noddy tern	8				
TF	0850	Fairy Tern	5				
		Sheerwater	2				
		RF Booby	1				
	0853	RF Booby	3			2 Ad 1 imm	
	0853	Wedge tail	2			dk.	
	0905	Fairy Tern	1				
	0910	C. Noddy	2				
	0915	R-F Booby	1			white phase.	
TF [redacted]	0916	C Noddy	12				
		R-F Booby	2			Loosely organized.	
	0923	R-F Booby	2			Adults	
	0928	R-F Booby	2				

FT 10
NT 77
RFB 16
WTS 5
SP 2

SI-MNH-958e
7-28-64

SMITHSONIAN INSTITUTION
DIVISION OF BIRDS
AT SEA DAILY LOG -- E

PBS

DATE 20 March 1966
Pg.# 2

To Tau

	time	species	#	dir.	hgt.	remarks	loc.
	0930	R-f Booby	1			ad	RFB 9
	0934	Fairy Tern	1				FT 24
TF	0936	C. Noddy	7				CNT 320
	0936	Red-f Tropic	1			ad	WTTB 3
	0941	W-T Tropic	1				SP 1
	0941	R-f Booby	1			ad	~~WTSB~~
	0953	C. Noddy	4				BBS
	0955	C. Noddy	2				Tern sp 1
	0959	C. Noddy	3				
	1005	Fairy Tern	2				
	1005	Sheas-Pet	1				
	1008	C Noddy	4				
	1008	Red-f Boob	2			ad	
	1018	W-T Tropic	1				
	1023	Fairy Tern	1				
	1030	Wedgetail	1			Dark.	
	1035	Wedgetail	1			Dark	
	1040	Wedgetail	1			dark	
	1047	Brown Boob.	2			ad	
	1057	Wedgetail	1			dark	
1113	~~1013~~	Pterodroma	1				
	1200	~~b~~ W/TTB	1				
	1224	Fairy Tern	1				
	1245	R-F Booby	2			adults	
	1300	Wedgetail	1			dark phase	
	1301	Fairy Tern	1				
	1315	Fairy tern	1	W			
	1322	Fairy Tern	1	W			
	1324	" "	2	O		two miles + off island	
	1344	R-F Booby	2	S		Adjuvenile	
	1345	Fairy tern	4				
	1358	Wedgetail	1	S			
FF	1420	Noddy tern	300±			just off island	
		Fairy tern	10				
	1425	Brown Booby	3			1 Ad 2 juv	
	1430					Leave Obz.	
	1710					Leave Manua Group Resume	

SI-MNH-958e
7-28-64

SMITHSONIAN INSTITUTION
DIVISION OF BIRDS
AT SEA DAILY LOG — E

PBS
DATE 20 March 1966
Pg.# 3

To Manua Group

	time	species	#	dir.	hgt.	remarks	loc.
	1711	C. Noddy	1				
	1715	Red-foot	1				
	1715	Brown Boob	1			adult	
	1715	Brown Boob	1			subadult	
	1717	C. Noddy	2				
FF	1720	C. Noddy	150	E	15	feeding.	
		tern	50				
	1730	Fairy Tern	3				
FF	1734	Fairy Tern	5			Feeding	
	1736	Shear-Pet	1				
	1752	Fairy Tern	2				
	1800	Brown Booby	1				
	1805	Fairy Tern	2				
	1808	Fairy Tern	2				
	1809	Fairy Tern	1				
	1817	Fairy Tern	1				
	1820	Wedgetail	1			dark.	
	1829					SUNDOWN	

CNT 153
RFB 1
BB 3
Tern 30
FT 16
SP 1
~~BTS+~~

SI-MNH-958e
7-28-64

SS 1829

SMITHSONIAN INSTITUTION
DIVISION OF BIRDS
AT SEA DAILY LOG — E

Pelagic Bird Survey
DATE 2 March 1966
Pg. # 1

To Canton
NOON 11°18'S 17°17'W

	time	species	#	dir.	hgt.	remarks	loc.
	0625					Sun Up + heavy cloud cover. Sea calm. light wind.	
	0632	Wedgetail	1			dark.	
	0635	Wedgetail	1			dark.	
	0654	Wedgetail	1			Dark	
FF	0815	Wedgetail	6			~~feeding~~	
		Sooty Tern	2			Sooties feeding. Others not seen	
		Fairy Tern	1			To feed	
	0835	Bird sp.	1	E			
	0838	WTTB	1			feeding.	
	0930	WTTB	1				
	1130	WTTB	2			Pair of two (both birds together sitting on Nest. same two as before?	
	1205	Wedge-tailed S.	1	N		dark phase	
	1412	Fairy Tern	1				
	1425	Wedgetail	1			dark	
	1500	Wedgetail	1	SE		dark	
	1530	Wedgetail	1	SE		dark	
	1532	"	2	NE		dark.	
	1545	Sooty tern	2	O			
	1545	WTTB	1	On	Nest		
	1545	Bird sp.	1	E		may have been a tern pictured	
	1735	Wedge-tailed	2	E		dark phase	
	1737	Wedge-tailed	2	E		dark	
	1829	Sunset				end observation	

Md 3
Tom 1
Mun 4
Stara. 2

SI-MNH-958e
7-28-64

SMITHSONIAN INSTITUTION
DIVISION OF BIRDS
AT SEA DAILY LOG — E

PBS

DATE 22 March, 1966
Pg.# 1

Diurnal Am. Samoa to Chanton Is.

MOON 7° 21'S 171°W

	time	species	#	dir.	hgt.	remarks	loc.
	0627					Sunrise; begin observation	
	0747	Wedge-tailed S.	2	E		dark phase	
	0800	Wedge-tailed S.	1	E		dark phase	
	0855	Wedgetail	1				
	0905	Wedgetail	1			dark	
	0917	Leach's Type	1			dark.	
TF	0930	Wedgetail	8	E		dark	
		Sooty Tern	4				
	0932	Fairy Tern	3			feeding.	
	0948	Wedgetail	2			dark.	
	1000	Leach's Type	1				
	1039	Wedgetail	1			d/k	
	1042	"	3			d/k	
	1045	Sooty Tern	2	NE			
TF	1050	Sooty Tern	12	E			
	1054	Sooty Tern	3	NE			
	1054	Wedgetail	1	N		d/k	
	1110	Sheartail	1				
	1017	Sooty Tern	1	NE			
	1124	Wedgetail	3			1 d/k; [illegible] - 1 light phase; 1 [illegible]	
	1135	Wedgetail	3			Dark phase	
	1145	Wedge-tail					
	1147	Wedge-tail	1	NE		dark phase	
	1147	Wedge-tail	1	NE		dark phase	
	1162	Wedge-tail	2	NE		dark phase	
	1158	Wedge-tail	2	NE		dark phase	
	1258	Shear.-Petrel	1	N			
	1320	Wedge-tail	1	NE		dark phase	
FF	1437	terns	10			distant appeared to be feeding	
	1437	Wedgetail	1			dark.	
MF	1520	Sooty Tern	6			milling about	
	1532	Wedgetail	1			dark	
	1543	Wedgetail	1			dark.	
	1552	Wedgetail	1			dark	

2

SP- 97

WS -98

LP- 2

ST- 82 88

FT- 4

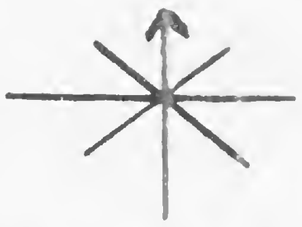
T 10

202

SI-MNH-958e
7-28-64

SMITHSONIAN INSTITUTION
DIVISION OF BIRDS
AT SEA DAILY LOG — E

Pelagic Bird Survey
DATE 22 March 1966
Pg. # 2



	time	species	#	dir.	hgt.	remarks	loc.
MF	1605	Sooty Tern	20	±5		Milling about - not feeding - searching for food?	
		Wedgetail	40	±5			
	1628	WedgeTail	2			1 Light Phase Rest dark.	
	1635	WedgeTail	2			DARK Dark.	
FF	1705	Wedgetail	10				
		Sooty tern	20				
		S Tern Sp	5			may have been Wedgetail - light Phase.	
FF	1800	Sooty tern	20	+			
		Wedgetail	5			dark	
		Juv tern	1				
	1822	Wedgetail	2			dark	
	1834					Sunset	

$$
\begin{array}{r}
.287 \\
209 \overline{)60.0} \\
\underline{41} \\
1820 \\
\underline{1672} \\
1480
\end{array}
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100.0 \\
28.7 \\
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71.3
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SI-MNH-958e
7-28-64

(341°)

SMITHSONIAN INSTITUTION
DIVISION OF BIRDS
AT SEA DAILY LOG — E

Pelagic Bird Survey
DATE 23 March 1966
Pg.# 1

Noon 3° 27'S 171° 41'W
1534 55

	time	species	#	dir.	hgt.	remarks	loc.
	0629	Sunrise				begin observation	
	0635	Wedgetail	1	0		dark ? hare.	
	0700	Bulwer's Pet	1	0		feeding	
	0715	Ruddy turnstone	1	N			
	0740					Ruddy turnstone just made another pass by the ship	
	0718	Storm Petrel	1				
TF	0720	Tern sp.	12	N		light meny.	
FF	0845	Sooty Tern	60±5			Very little feeding Taking place.	
		Wedgetail	1			dark Terns moving all over area	
		Blue-f Boob	1				
		Fairy Tern	2				
MF	0855	Sooty Tern	40	±10		Milling about.	
	0940	Sooty Tern	3	SW			
	0940	Golden Plover	2				
	0953	Blue-f Boob	1				
	0958	Sooty Tern	3	SW			
TF	1003	Sooty Tern	5	N		Traveling.	
	1025	Fairy Tern	1				
		Sooty Tern	3				
	1057	Fairy Tern	1	E			
	1102	Sooty Tern	1	E			
	1111	Leach's type	2	E			
	1121	Wedge-tailed	1	E		dark phase	
	1139	Tern	1			prob. a Sooty Tern	
	1145	Sooty Tern	1				
	1200	Sooty Tern	4	S	50 ft±		
	1202	Sooty Tern	1	S	50 ft±		
FF	1245	Tern sp	50±			Probably Sooties but could be G-B	
		Fairy Terns	5				
TF	1306	Tern sp.	27			Sooties G-Backed.	
		G-B Tern	3				
	1305	G-B Tern	1				
	1306	G-B Tern	2	C		Traveling together	
		Sooty Tern	2				

SI-MNH-958e
7-26-64

SMITHSONIAN INSTITUTION
DIVISION OF BIRDS
AT SEA DAILY LOG — E

PBS

DATE 23 March 1966
Pg.# 2

1N34158

	time	species	#	dir.	hgt.	remarks	loc.
	1330	BF Booby	1	NE		Ad	
	1350	LG-B Tern	1	W			
	1415					Canton now in Sight	
TF	1420	SG B Terns	10				
	1440	Sooty Tern	3				
FF	1443	Terns	30			feeding.	
	1450	Terns	2				
MF	1454	Terns	5			milling.	
	1502	Brownbooby	1				
	1518	Sooty Tern	4			~~adult~~ abroad. Adult	
TF	1523	G-B Tern	5	S		TRAVELING	
	1524	Brown Booby	1				
	1540	tern (sp).	1				
	1607	G-B Tern	2				
TF	1615	Sooty Tern	10	N		TRAVELING	
FF	1620	B. Booby	1			Feeding. Approaching Canton.	
		c Noddy	40±				
	1635	G-B Tern	2				
FF	1654	Brown Booby	2			feeding off stbd. stern; all feeding; two groups of porpoise perhaps 100+ total	
		Common Noddy	17				
		Wedge-tailed	1			dark phase	
		Sooty Tern	1				
	1656	Brown Booby	1	SE			
	1712	Blue-faced Booby	4	SE		adults	
	1715	Sooty Tern	1	E			
	1731	Gray-backed T.	2	NE			
TF	1731	Common Noddy	5	SE			
	1734	Gray-backed T.	1	NE			
	1734	Blue-faced Booby	1	E		adult	
	1738	Sooty Tern	4	E	100ft±		
	1740	Gray-backed T.	2	E	30ft±		
	1750	Gray-backed T.	2	E	20ft±		
	1753	Sooty Tern	3	S	10ft±		

SI-MNH-958e
7-28-64

SMITHSONIAN INSTITUTION
DIVISION OF BIRDS
AT SEA DAILY LOG — E

PBS
DATE 23 March, 1966
Pg.# 3

	time	species	#	dir.	hgt.	remarks	loc.
	1759	Gray-backed T.	2	E	30ft±		
	1803	Sooty Tern	1	E	50ft±		
	1813	Sooty Tern	2	E	50ft±		
	1822	Wedgetail	1	E		dark phase	
	1828	Blue-faced Booby	1	SE	10ft±		
TF	1832	Sooty Tern	16	SW	15ft±		
	1837					Sunset; end observation	

Prof McCambridge

WTS	5 ✓
BP	1 ✓
RT	1 ✓
white-rumped SP	1 ✓
Tern sp.	133 134
ST	165 168
BFB	✗ 9
FT	9 ✓
GP	3 2
Leach's Type	2 ✓
GBT	35 ✓
BB	5 6
CNT	62 ✓
	429
	6

84
49
21
50
40
45
32
40
49
23
433

245
166
23
434

#3
GBT 2
ST 19
WTS 1
BFB 1
23

#2
BFB 6
GBT 27
ST 26
Terns 38
BB 6
CNT 62
WTS 1
166

#3
WTS 3
BP 1
RT 1
white SP 1
Tern 95
ST 123
BFB 2
FT 9
GP 2
Leach's type 2
GBT 6
245

enter on log sheet

WTS	5
BP	1
RT	1
white-r SP	1
Tern	133
ST	168
BFB	9
FT	9
GP	2
Leach's type	2
GBT	35
BB	6
CNT	62
	434

149
16
165

68
27
38
133

38
95
134

48
27
75

95
38
133

14
24
123
168

123
19
26
168

SI-MNH-958e
7-28-64

SMITHSONIAN INSTITUTION
DIVISION OF BIRDS
AT SEA DAILY LOG — E

Pelagic Bird Survey.
DATE 24 March 1966
Pg.# 1

NOON 0°41'S 174°05'W

time	species	#	dir.	hgt.	remarks	loc.
0633						
0735	Wedge Tail	1			Juvenile	
0750	Leach's Type	1			dark.	
0825	Wedge Tail	1			light.	
0912	Pterodroma sp.	1	E		~~dark~~ some white beneath	
1014	Wedge-tailed S.	1	N		dark phase	
1220	Bulwer's Pet	1				
1225	Golden Plover	1	NE			
1225	Juvenile ? Storm Pet	1			Clean dove. White patch in Tail much broader than black. Tail short. (PW)	
1225	~~Leach's type~~ Storm Pet	2				
1240	Sooty Tern	1				
1303	Bulwer's	1				
1335	Leach's Type	1				
1358	Leach's Type	2				
1535	Bulwer's Petrel	1	NE			
1615	Bulwer's Petrel	1				
1710	B-F Booby	2			feeding Adults	
1725	Sooty tern	4	NW			
1800	Leach's Petrel	4	NW			
1847					Sundown.	

$$
\begin{array}{r}
.23 \\
60 \overline{)\,14.0} \\
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Haviland - Baker Island

SI-MNH-958e
7-28-64

SMITHSONIAN INSTITUTION
DIVISION OF BIRDS
AT SEA DAILY LOG — E

Pelagic Bird Survey
DATE 27 March 1966
Pg. # 1
25 March 66

Nocturnal

time	species	#	dir.	hgt.	remarks	loc.
1847						
1936					Begin	
2012	Sooty Tern	1			100 miles from Baker	
2050	Sooty Tern	1				
2210	Sooty Tern	1				
2324	Sooty Tern	1				
0146	Sooty Tern	2				
0245	Sooty tern	1				
0300	Sooty tern	1				
0350	Sooty tern	1				
0506					Stop observation	

Howland - Baker Grid

SI-MNH-958e
7-28-64

SMITHSONIAN INSTITUTION
DIVISION OF BIRDS
AT SEA DAILY LOG — E

Pelagic Bird Survey
DATE 26 March 1966
Pg. # 1

To Canton

	time	species	#	dir.	hgt.	remarks	loc.
	1150					Begin Observation off Howland Island.	
	1153	B-f Booby	1				
	1155	frigate (sp)	4				
TF	1157	Lesr Frigate	8	W		Travelling	
	1158	B. f Booby	1				
MF	1200	Sooty Tern	20±5			Milling about	
	1200	B-f Booby	3				
	1200	B-f Booby	1			Immature.	
	1202	B. f Booby	3				
	1202	B-f booby	1				
	1207	frigate sp	1				
	1207	B-f Booby	1				
	1207	Brown Booby	1				
	1210	frigate (sp)	4				
	1211	B f Booby	1				
TF	1214	Sooty Tern	7	E			
	1215	Sooty Tern	3				
	1215	Brown Booby	1			Subadult	
	1215	B-f Booby	1				
	1219	B-f Booby	1				
FF	1225	Sooty Tern	25±5			feeding	
	1229	Leach's Type	1				
	1230	B-f Booby	1				
	1237	Sooty Tern	4				
	1243	B-f Booby	2				
	1243	B-f Booby	1				
	1243	B-f Booby	1				
	1244	B-F Booby	3				
	1250	B-F Booby	3				
	1255	B-F Booby	1				
	1303	Bulwer's P.	1				
	1305	Leach's Type	2				
	1310	B-F Booby	1			Subadult.	
	1313	B-F Booby	1				
	1315	B-f Booby	2			adults are with B lue Streamer.	
	1320	B-f Booby	4				
	1320	B-f Booby	1				
	1324	B-f Booby	1				

Howland - Baker Gnd

SI-MNH-958e
7-28-64

SMITHSONIAN INSTITUTION
DIVISION OF BIRDS
AT SEA DAILY LOG -- E

Pelagic Bird Survey.
DATE 26 March 1966
Pg. # 2

	time	species	#	dir.	hgt.	remarks	loc.
	1325	Bulwer's	1			Feeding.	
	1326	B-f Booby	2				
	1333	B-f Booby	1			Subadult.	
	1339	B-f Booby	1			Adult.	
	1340	Brown Booby	2			adults.	
	1432	Blue-faced B.	1	SE		adult	
	1459	Blue-faced Booby	1	SE		adult	
FF	1502	Blue-faced B	3			definitely feeding; two landed on H_2O after diving	
		Lesser Frigatebird	5				
	1520	Phoenix Is. Petrel	1	E			
	1525	Sooty Tern	1	NE			
	1544	Blue-faced B.	2	S			
	1546	Fairy Tern	2	N			
		Sooty Tern	1				
	1551	Sooty Tern	1	E			
TF	1601	Sooty Tern	50±				
		Blue-faced B.	1				
		Fairy Tern	1				
	1715	Leach's Type	1				
	1727	Sooty tern	2				
	1740	Leach's [redacted]	1			Black dividing line on white rump	
	1911	Sooty Tern	1				
	1826	Sooty Tern	1				
TF	1829	Sooty Tern	6			Travelling	
	1833	Mottled Pet	1	N			
	1845	Mottled Pet	1	N			
	1845	Sooty? Shear	1	N			
	1851					SUNDOWN	

THE AMERICAN MUSEUM OF NATURAL HISTORY
CENTRAL PARK WEST AT 79th STREET
NEW YORK 24, N. Y.

Dear Mac cg. 8-16-67

These are complete day cards for this cruise. Around the 25-27? March this cruise was operating in the Southern Grid (How-Baker) but without the Oreg. cruise tracks I have no idea as to duration or geographic coverage. Could you check this.

Still need the Jan-March Shearwater 5 Grid cruise tracks. Have you checked the warehouse material in Hono? In the large file cabinet in Pyle?
I don't have the old day cards either, so no help.

Best regards,
Chris.

Howland-Baker Gnd.

SI-MNH-958e
7-28-64

SMITHSONIAN INSTITUTION
DIVISION OF BIRDS
AT SEA DAILY LOG — E

Pelagic Bird Survey

DATE 26 March 1966
Pg.# 1

Nocturnal.

time	species	#	dir.	hgt.	remarks	loc.
1851					Begin Observations.	
1933	Sooty Tern	1				
2145	Sooty Tern	1				
2200					100 mi from Howland	

#1

BFB	36
Frigate	9
LF	8
ST	64
BB	2
Leach's type	3
BP	1
	123

#2

BP	1
BFB	12
BB	2
LF	5
PIP	1
ST	63
FT	3
L type	2
MP	2
SS	1
	92

BFB	48
Frigate	9
LF	13
ST	127
BB	4
Leach's type	5
BP	2
PIP	1
MP	2
SS	1
FT	3
	215

123
92
215

SI-MNH-958e
7-28-64

SMITHSONIAN INSTITUTION
DIVISION OF BIRDS
AT SEA DAILY LOG -- E

Pelagic Bird Survey

DATE 27 March 1966
Pg.# 1

0645 ON 1°08'S 174°08'W

	time	species	#	dir.	hgt.	remarks	loc.
	0645					Sunrise	
	0728	Leach's Type	1				
	0750	Leach's type	1				
	0753	Storm Petrel sp	1			feeding	
	0815	B-F Booby	1				
	0851	Sooty Tern	1				
TF	0900	Sooty Tern	5	N		Travelling.	
	0903	Mottled Pet	1	N			
	0913	Leach's Type	1				
	0918	Sooty Tern	1				
	0921	Mottled Pet	1	N			
	0928	Sooty? Shear	1	N			
	0935	Sooty Tern	3	N			
TF	0940	Sooty Tern	10	[illegible]		Travelling but in no special direction	
	0953	Shear-Pet	1				
	0956	Bulweri's	1				
	0956	Sooty Tern	1				
	1005	Mottled Pet	1	N			
	1016	Wedgetail	1			dark.	
	1026	Frigate sp.	1			Immature	
	1029	Bird (sp)	1				
	1031	Less Frigate	1			Female.	
	1059	Sooty Tern	1				
	1100	Bird	1				
	1101	Sooty Tern	3				
	1110	Sooty Tern	1				
	1113	Sooty Tern	1				
	1117	Sooty Tern	4				
	1118	Sooty Tern	2				
	1123	Less Frig	1			Male.	
	1123	Sooty Tern	1				
	1127	Sooty Tern	1				
	1133	Sooty Tern	3				
	1138	Sooty Tern	1				
	1150	Frigate sp.	1				
	1158	Sooty Tern	4				
	1205	Sooty Tern	3				

64

SI-MNH-938e
7-28-64

SMITHSONIAN INSTITUTION
DIVISION OF BIRDS
AT SEA DAILY LOG — E

DATE 27 March 1964
Pg. # 2

	time	species	#	dir.	hgt.	remarks	loc.
	1223	Sooty Tern	3	NE			
	1310	Sooty tern	1	NW			
	1312	Bulwer's P.	1	[illegible]			
	1315	Mottled Pet.	1				
	1320	Sooty Tern	1	NE			
	1330	Bulwer's Pet.	1	[illegible]			
	1330	Sooty Tern	4	NE			
	1405	Scaled Pet.	1	NE		(Mottled Pet.)	
	1418	Scaled Pet.	1	NE			
FF	1500	Sooty Tern	45±10			Appeared to be feeding.	
	1515	Bulwer's	1				
	1516	Mottled Pet	1	N			
	1517	Mottled Pet	1	N			
FF	1520	Fairy Tern	10				
		Sooty Tern	10			Very little feeding	
		G-B Tern	5				
TF	1545	Sooty Tern	10	N		Travelling.	
	1604	Bulwer's	2				
	1623	Frigate (spp.)	1				
	1628	Golden Plover	1				
	1649	Mottled Petrel	1	NW			
	1721	Blue-faced B.	1	NE			
	1728	Mottled Petrel	3	N			
	1754	Wedge-tailed S.	1	E		dark phase	
	1801	Mottled Petrel	1	N			
	1822	Blue-faced B.	1	N			
	1832	Sooty Tern	1	NE			
	1841	Common Noddy	1	N			
	1841	Sooty Tern	1	N			
	1842					Sunset; end observation	

(112)

SI-MNH-958e
7-28-64

SMITHSONIAN INSTITUTION
DIVISION OF BIRDS
AT SEA DAILY LOG — E

DATE 28 March 1964
Pg.# 1

NOON 2°22'S 171°45'W

	time	species	#	dir.	hgt.	remarks	loc.
	0631					Sunrise; begin observation	
	0639	Wedge-tail	1	NE		dark phase	
	0646	Mottled Petrel	1	W			
	0653	Ruddy Turnstone	1	SE			
	0703	Wedge-tailed	1	N		dark phase	
	0706	Fairy Tern	1	NE			
	0712	Bulwer Petrel	1	ltr			
	0714	Golden Plover	2	NE			
	0716	Tern sp.	1				
	0721	Blue-faced B.	1	NE			
	0731	Bird sp.	1				
	0755					Canton Is. spotted	
	0805	Blue-faced B.	1	NE			
	0807	Bulwer Petrel	1	SE			
TF	0811	Common Noddy	50±				
		Wedge-tail S.	1			dark phase	
	0818	Mottled Petrel	1	N			
TF	0824	Gray-backed T.	27±			feeding	
		Common Noddy	5				
		Blue-faced B.	1				
	0830					25+ porpoise; nearing Canton Is	
	0838	terns sp	3				
	0840	tern sp	2				
	0841	~~Tern~~ Tern	3				
	0847	Tern	3				
	0847	tern	2				
	0851	G-B Tern	2				
	0851	Noddy Tern	1				
	0855					light off Canton. Ceare observers.	
	0940					Resume Watch.	
	0943	G-B Tern	2				
	0946	G-B Tern	1				
	0950	Tern (sp.)	2				
	0955	Brown Body	1			Subadult	
MF	0955	G-B Tern	60 ±10			Milling about.	
		Noddy Tern	20±5				

0940
335

SI-MNH-958e
7-28-64

SMITHSONIAN INSTITUTION
DIVISION OF BIRDS
AT SEA DAILY LOG -- E

Pelagic Bird Survey

DATE 28 March 1966
Pg. # 1

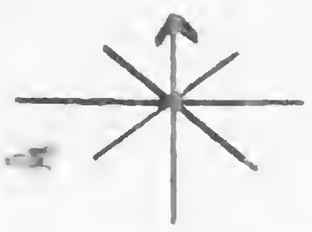
	time	species	#	dir.	hgt.	remarks	loc.
	0959	Tern (spp)	3				
MF	1000	tern (spp)	7			Milling about.	
	1010	Wedgetail	1			Dark.	
	1011	Leach's Type	1				
	1011	G-B Tern	1				
	1016	Wedgetail	1			DARK.	
F	1025	tern (spp)	40 ±10			Distant appears to be feeding.	
	1115	Bulwers Pet	1				
	1125	5 Lear-Pet	1				
TF	1130	G-B tern	20				
		[redacted]					
		Noddy tern	15				
		Wedgetail	3				
		Fairy tern	2				
		Bulwers Pet	1				
		[redacted]	1				
	1145	Bulwer Petrel	3				
FF	1240	Sooty Tern	40+				
		Fairy Tern	5				
		Wedge-tail	3			one light phase; two dark phase	
		Mottled Petrel	1			flying among other birds but not feeding	
		Common Noddy	10+				
		Gray-backed	15±				
	1252	P. hypoleuca	1	S		white on underwings, with black margin but belly not distinguished; too small to be Mottled too big to be Bulwer's	
	1300	Great Frigatebird	1	NE	100ft±		
	1335	Golden Plover	3	[redacted]		flew northward; bellies on all birds black	
	1345	Golden Plover	1				
	1355	Golden Plover	1	N		black belly	
	1358	Wedge-tailed S.	1	N[redacted]		black belly	
	1414	Leach's Storm Pet.	2	W		dark phase	
	1437	Sooty Tern	2	Ea			
	1446	tern (spp)	1				
	1509	B-f Booby	1				

SI-MNH-958e
7-28-64

SMITHSONIAN INSTITUTION
DIVISION OF BIRDS
AT SEA DAILY LOG — E

Pelagic Bird Survey.

DATE 28 March 1966
Pg.# 3



time	species	#	dir.	hgt.	remarks	loc.
1518	W-T Tropic	1				
1519	Red-f Booby	1			Subadult.	
1520	Wedge Tail	1			Dark	
1545	Sooty Tern	1				
1605	Bulwer's	1				
1605	Leach's Type	2				
1624	Bl-f Booby	1				
1636	Mottled Pet.	1	N			
1638	Sheam-Pet	1				
1648	Golden Plover	3	N			
1718	Pterodroma sp.	1	N		white beneath but pattern not determined	
1730					Pilot Whale??? jumped out of water.	
1738	Leach's Type	1				
1742	Leach's Storm Petrel	1	L→			
1835	— Sun Set					

It was an all dark animal. The fact that it cleared the water completely three times. It was almost dolphin-like, but that's not really true either as it came straight out of the water. It was 8–12 feet in length, had a stubby forehead with a beak, and long "pectoral" fins. The dorsal was high and rounded.

SI-MNH-958e
7-28-64

SMITHSONIAN INSTITUTION
DIVISION OF BIRDS
AT SEA DAILY LOG — E

Pelagic Bird Survey.

DATE 29 March 1966
Pg.# 1

NOON 1°27'N 171°53'W

time	species	#	dir.	hgt.	remarks	loc.
0629					Sunrise	
0640	Wedgetail	1			dark.	
0655	Leach's Type	1				
0700	Frigate (type)	1			immature	
0700	Noddy Tern	1				
0727	Wedgetail	1			light	
0806	Leach's Type	1				
0925	Sooty tern	1				
0935	Bulwer's Pet	1				
0942	Leach's type	1				
0945	Wedgetail	1			Dark Phase	
1015	"	3			2 Light Phase; 1 DK	
1025	Wedgetail	8			7 light; 1 Dark	
	Sooty tern	30				
1030	Wedgetail	3			dark Phase	
1054	Sooty Tern	2				
1115	Wedge-tail	1			dark phase	
1145	Leach's Type	1			slightly forked tail	
~~1240~~	~~Leach's type~~	~~1~~				
1255	Sheen-Pet	1				
1321	Wedgetail	1			DARK	
1331	Mottled Pet	1	NW			
1345	B-f Booby	1			Subadult.	
1345					4 ~~sharks~~ Sharks at surface. Too far away for identification.	
1422	Wedgetail	2			dark	
1422	Bulwer's Pet	1				
1445	Wedgetail	2			Ideal 1 light.	
1457	Wedgetail	1			light	
1500	Leach's type	1				
1515	Leachs type	2			very broad white rump patch	
1522	Bulwer's Pet	1				
1525	Leach Pelrl	1	W			

SI-MNH-958e
7-28-64

SMITHSONIAN INSTITUTION
DIVISION OF BIRDS
AT SEA DAILY LOG — E

Pelagic Bird Survey

DATE 29 March
Pg.# 2

	time	species	#	dir.	hgt.	remarks	loc.
	1550	Bulwer's Pet.	1				
	1550	storm Pet.	1			dark type	
	1600	storm Pet	1			dark type	
	1605	Bulwers Petrel	2				
FF	1615	Sooty tern	40			6 dark - 4 immature.	
		Wedgetail	10				
	1620	Bulwers Petrel	1				
	1621	Blue-footed Booby	1	SE			
	1635	Wedgetail	1			light phase	
	1705	Wedge-tailed S.	1	N		dark phase	
	1712	Wedge-tailed S.	1	N		dark phase	
	1745	Wedge-tailed S.	2	NE		dark phase; landed on H_2O	
C	1748	~~Common~~ Noddy	1			landed aboard ship; collected	
	1758	Bulwer's Petrel	1	SE			
	1758	Wedge-tailed S.	1	E		light phase	
	1800	Wedge-tailed S.	1	SE		dark phase	
	1802	Wedge-tailed S.	1	N		dark phase	
	1809					3 yellowish-white bellied, gray backed tuna jumping clear of H_2O ~~mean~~ may be 10+ present	
	1819	Bulwer's Petrel	1	SW			
	1827	Wedge-tailed S.	1	NE		dark phase	
	~~1845~~					Sunset; end observation	
	1836						

SI-MNH-958e
7-28-64

SMITHSONIAN INSTITUTION
DIVISION OF BIRDS
AT SEA DAILY LOG — E

PBS

DATE 30 March 1966
Pg.# 1

NOON 5°12'N 171°46'W

time	species	#	dir.	hgt.	remarks	loc.
0626					Sun rise	Rgh seas strong wind poor ~~conditions for observation~~ observing Conditions.
0632	Wedgetail	1			light phase	
0645	Bulwers Pet	1	E			
0645	Shear-Pet.	1	E		showed some white	
0650	Wedgetail	1			light Phase	
0700	Puffinus Puffinus	1			Dark back, dark cap on head, ~~light~~ Lite belly & underwings	
0720	P. Puffinus	2				
0720	Wedgetail	1			flight with much wing flapping.	
0832	Wedge-tailed	1			light phase	
0832	Phoenix Is. P.	1	NW		dark phase	
0850	Bulwer's Petrel	1	E		on Tahitian	
0933	Mottled Petrel	1	W			
1029	Wedge-tailed S.	1	E		light phase	
1035	Bulwer's	1				
1055	Shear-Pet	1				
1113	Shear-Pet	1				
1136	Shear-Pet	1				
1148	Wedge-tailed	1	E			
1154	Bird sp.	1				
1217	Mottled Pet	1	NW			
1220	P. puffinus	1				
1242	Bulwers Pet	1				
1255	Leach's type	1				
1352	m. Hal Pet	1	NW			
1355	Bulwers Petrel	1				
1400	Bulwers Pet	1				
1415	" "	1				
1426	g-f Petrel	3			Molting showing White on wing and back.	
1430	Bulwers Pet	1				
1513	Juan Fernandez P.	1	N			
1528	Black-winged P	1	W			
1530	Shear.-Pet.	1	N			
1600	Leach's SP	1				

SI-MNH-958e
7-28-64

SMITHSONIAN INSTITUTION
DIVISION OF BIRDS
AT SEA DAILY LOG — E

Pelagic Bird Survey
DATE 30 March 1964
Pg.# 2

	time	species	#	dir.	hgt.	remarks	loc.
	1628	Juan Fernandez P.	1	[redacted]			
	1645	Wedgetail	1			Light	
	1718	Mottled Pet	1	NNW		Flying ⊥ To strong wind	
	1725	Wedgetail	2			dark	
FF	1740	Fr. gate	1			[redacted] appeared to be feeding.	
		Sooty Tern	60	E10			
		Wedgetail	5			dark	
	1741	Bulwer's	1				
	1745	Shear-Pet	1	S		[redacted]	
	1805	WedgeTail	1			DARK	
	1832					Sundown.	

SI-MNH-958e
7-28-64

SMITHSONIAN INSTITUTION
DIVISION OF BIRDS
AT SEA DAILY LOG — E

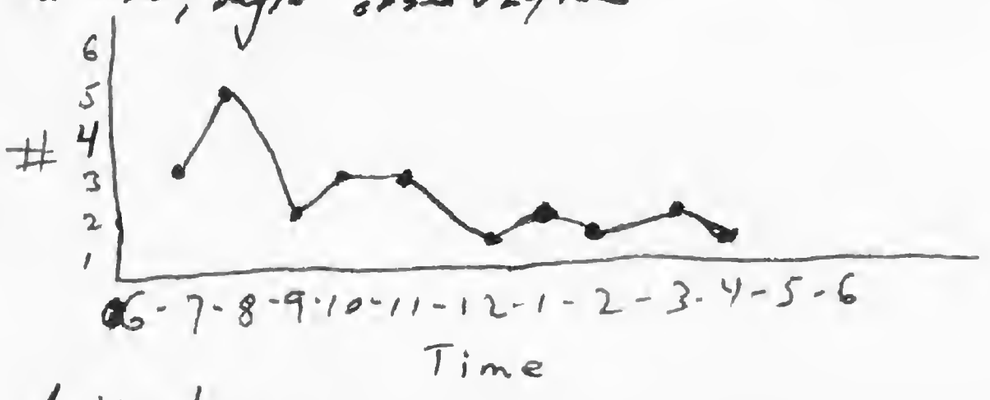
Pelagic Bird Survey

DATE 3 March 1966
Pg. # 1

NOON 8°26'N 171°26'W

(22)

time	species	#	dir.	hgt.	remarks	loc.
0625					Sunrise; begin observation	
0705	Tern sp.	1				
0719	Bird sp.	1	N			
0728	Bird sp.	1				
0737	Puffinus puffinus	1	W			
0737	Bulwer's Petrel	1	[illegible]			
0745	Wedge-tailed S.	1	W		light phase	
0755	Juan Fernandez P.	1	W			
0828	Juan Fernandez P.	1	N			
0841	R-T Tropicbird	1				
0910	Shear-Pet	1				
0931	Mottled Pet	1	NNW		⊥ to wind.	
0938	Shear-Pet	1				
1017	Shear-Pet	1				
1025					Change course to NE. & reduced speed to ½ ahead.	
~~1045~~ 1047	Bird sp.	1				
1115	Sooty/Slender	1	NW			
1130	J-F Petrel	1	[illegible]			
1158	Fairy Tern	1				
1318	Bird sp.	1				
1324	Leach's type	1	NW			
1426	Wedge-tailed S.	1	W		light phase	
1455	Wedge Tail	1			DARK	
1457	Shear-Pet	1				
1620	Shear-Pet	1				
1715	J-F Petrel	1				
1747	Bird sp.	1				
1750	Pterodroma	1	W			
1755	Pterodroma	1	W			
1838					Sunset; end observation	



SI-MNH-958e
7-28-64

SMITHSONIAN INSTITUTION
DIVISION OF BIRDS
AT SEA DAILY LOG — E

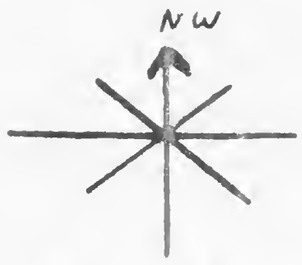
Pelagic Bird Survey.

DATE 1 April 1966
Pg.# 1

Non grid

time	species	#	dir.	hgt.	remarks	loc.
ca 0626					Sunrise.	
0805	Sooty/Slender	1	NNW			
0837	Bird sp.	1			Small — possible Storm Petrel.	
0935					Weather: clear & windy. Wind about 20+ knots @ 045°. The seas are coming down after three days of hard blow. Scattered cumulus clouds. Ceiling and visibility are unlimited.	
1203	Shear. - Pet.	1				
1325	Sooty Tern	2	N			
1400					Leave Non-Grid.	

SI-MNH-958e
7-28-64



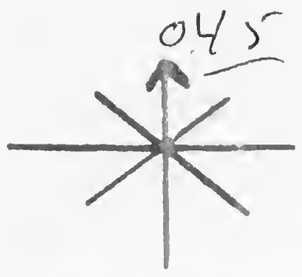
SMITHSONIAN INSTITUTION
DIVISION OF BIRDS
AT SEA DAILY LOG -- E

SI Grid #1
April

Pelagic Bird Survey
DATE 1 April 1966
Pg.# 1

time	species	#	dir.	hgt.	remarks	loc.
1400					Start Grid	
1709	Bird sp.	1				
1753	Juan Fernandez P.	1	N			
1755	Fairy Tern	1	E			
1837					Sunset and observation	

SI-MNH-958e
7-28-64



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DIVISION OF BIRDS
AT SEA DAILY LOG — E

Pelagic Bird Survey

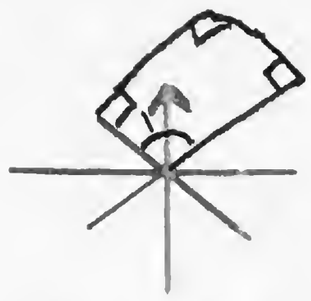
DATE 1 April 1966.
Pg.# 1

NOCTURNAL

time	species	#	dir.	hgt.	remarks	loc.
1837					→ Begin.	
1930					Change course To ~~NW~~ NE.	
2300	Sooty tern	1				
2355	Sooty Tern	1			Bright moon. No luminescent shrimp seen.	
0010	Sooty tern	1				
0125	Sooty Tern	2	S			
0227	Sooty Tern	1				
0613	Sheam-Pet	1				
0615					Cease Observations.	

SI-MNH-958e
7-28-64

270
45
315



SMITHSONIAN INSTITUTION
DIVISION OF BIRDS
AT SEA DAILY LOG — E
Noon Pos. 14-38 N 170-06 W
Grid

Pelagic Bird Survey
DATE 2 April 1966
Pg. # 1

	time	species	#	dir.	hgt.	remarks	loc.
	0615					Sunrise.	-16 -C -106
	0652	Shear.-Pet	1				
	0713	P. cyterna	1				
MF	0724	Sooty Tern	6			Milling about probably incipient feeding flocks as 2 birds flew about ½ mile to join other birds, which seemed to appear out of nowhere.	
	0728	Sooty Tern	2				
	0735	Pterodroma	1				
	0741	Shear.-Pet	1				
	0745	P. cyterna	1				
	0747	Shear.-Pet	1				
	0752	Sooty Tern	1				
	0752	Wedgetail	1			Light.	
	0808	Pterodroma	3				
	0811	Wedgetail	1			Light.	
	0842	Bird sp.	1				
	0845	Pterodroma sp.	1	W			
MF	1000	Sooty Tern	100	±		milling very high in the air - several hundred feet - Not seen to feed on trawl.	
	1010	Bird sp.	1				
	1050	Shear.-Petrel	1	SW			
	1056	Wedge-tail S.	1	N (?)		light phase	
	1120	Sooty Tern	1				
	1125	Sooty Shear	1	NNW		Light underwings. Not circling high.	
	1156	Shear.-Petrel	1				
	1225	Sooty Tern	1				
	1245	Sooty Tern	4				
	1247	Sooty Tern	1				
MF	1255	Sooty Tern	11		90'	Milling about high.	
	1307	Leach's Type	1	N			
MF	1307	Sooty Tern	100	±10		Milling. Many over 100 feet up in the air. 10+ birds seen close - no new orange streamers.	
	1400					at 1244 a course change of 055° was made to 050° to account for a set in the ship's course. Log to be completed @ 1600.	
	1504	Bird sp.	2				
	1555	Sooty Tern	1	N			
	1600					Change heading to 315°	

SI-MNH-958e
7-28-64

SMITHSONIAN INSTITUTION
DIVISION OF BIRDS
AT SEA DAILY LOG — E

Pelagic Bird Survey.
DATE 02 April 1966
Pg.# 2

Grid

time	species	#	dir.	hgt.	remarks	loc.
1617	Blue-faced B.	1	NE	50 ft±	— adult	
1710	Shear-Pet	1				
1733	Blue-faced B.	1	SW	30 ft±	— adult	
1750	Shear.-Petrel	1	NE	10 ft±	— white ~~[illegible]~~ beneath	
1811	Ptenodroma	1				
1831					— SUNSET	

SI-MNH-958e
7-28-64

SMITHSONIAN INSTITUTION
DIVISION OF BIRDS
AT SEA DAILY LOG — E

Grid - Nocturnal

Pelagic Bird Survey
DATE 2 April 1966
Pg.# 1

time	species	#	dir.	hgt.	remarks	loc.
1831					Begin Observation.	
1950						
2155	Sooty Tern	2	NE		Change Course to SW. Begin 3rd Rang Leg.	
2305	Sooty Tern	1				
2325	Sooty Tern	1				
2340	Sooty Tern	3				
1205	Sooty Tern	1				
1225	Sooty Tern	1				
0231	Sooty Tern	1				
~~0515~~	~~Blue-footed Booby~~				~~Likely the same one seen at~~	
0515	B-F Booby	1			sundown is still hanging around the fantail; luminescent shrimp are appearing for first time tonight — the moon has set.	
0625					CEASE	

10 Sooty
1 B-F B

SI-MNH-958e
7-28-64

SR-0621
SS. 1846

SMITHSONIAN INSTITUTION
DIVISION OF BIRDS
AT SEA DAILY LOG — E

Grid

PBS

DATE 3 April 1966
Pg. # 1

Now Pos. 13-45N 172-23W

	time	species	#	dir.	hgt.	remarks	loc.
ca	0621 ~~0605~~					Sunrise	
	0652	R-T Tropic	1				
	0704	Sooty Tern	1				
	0705	Sooty Tern	1				
	0713	Pterodroma	1				
	0720	Sooty Shear	1	NW		Light underwing, NO TAIL	
	0735	Sooty Shear	1	NW		Definite - White underwing	
	0745	Shear-Pet	1				
	0750	Sooty Shear	1	NW		white underwing	
	0801	Sooty Shear	1	NW			
	0807	Shear-Pet	1				
FF	0807	Sooty Tern	6			feeding actively.	
	0812	Mottled Pet	1	NW			
	0825	Sooty/Slb Sh.	2	NW			
FF	0845	Sooty tern	6			feeding.	
	0903	Pterodroma	1	NW		Pacing in the ~~[illegible]~~ way the mottled Pet does.	
	0910	Sooty tern	3	N			
	1100	Sooty Tern	2				
FF	1100	Sooty Tern	10			Adults - No new orange streamers. One large (3') Mahimahi at surface. Birds hovering 5-6' overhead occ. coming down to surface to pick up food. Once seen diving near Mahimahi. (Mahi must have been feeding). Watched and Four Mahimahi.	
FF	1127	Sooty Tern	13				
	1133	Wedge-tailed S.	1	SW		light phase	
	1145					changed course 325° (NNW)	
	1243	Shear-Pet	1				
	1308	Pterodroma	1				
ca	1305					Change cource to W to compensate for turning too soon.	
	1320	Sooty Tern	1				
	1355	Sooty Tern	1				
	1445	B-F Booby	1			immature	
FF	1540	Sootytern	350+			First they were milling around high in the air then all began feeding in a small area.	
	1550					Same Bird in view in a small several hundred feet in the air. Looked as if I was probably how on night status.	

SI-MNH-958e
7-28-64

SMITHSONIAN INSTITUTION
DIVISION OF BIRDS
AT SEA DAILY LOG — E

Pelagic Bird Survey.
DATE 03 April, 1966
Pg. # 2

time	species	#	dir.	hgt.	remarks	loc.
1600	Sooty Tern	1	E			
1615					changed course to 045° (NE)	
1705	Sooty Tern	1				
1820	P. hypoleuca	1				
1822	Ptenodroma	1				
1846					sunset.	

410
4
414

SI-MNH-958e
7-28-64

SMITHSONIAN INSTITUTION
DIVISION OF BIRDS
AT SEA DAILY LOG — E

Pelagic Bird Survey
DATE 3 April 1966
Pg.# 1

Nocturnal 1846 sunset

time	species	#	dir.	hgt.	remarks	loc.
1840					Begin Heading NE into strong wind. Watching from FANTAIL.	
2130	Sooty Tern	1				
0015	Sooty tern	1				
0015					The moon is very bright, this may account for some of the lack of birds. Am working this by moon-light.	
0140	Sooty tern	2				
0310	Sooty Tern	1				
0615					Coast.	

1846

5:14

6:15

11:29

12:21

2?:50

SI-MNH-958e
7-28-64

SMITHSONIAN INSTITUTION
DIVISION OF BIRDS
AT SEA DAILY LOG — E

Pelagic Bird Survey

DATE 4 April 1966
Pg. # 1

Ship

Noon Pos. 16-12N 171-00W

	time	species	#	dir.	hgt.	remarks	loc.
ca	0615					Sunrise	
	0635	Shear-Pet	1				
	0648	Sooty Tern	2				
	0715	Shear-Pet	1				
	0718	Pterodroma	2				
FF	0730	Sooty Tern	75±5			Actively feeding	
		[redacted]					
		[redacted]					
		P. externa	5				
	0758	Sooty/Shear	1	NW		White underwings.	
	0800	Sooty/Shear.	1	NNW			
	0820	sooty tern	1	NW			
	0830	Sooty/Slender Brll Shear	1	NW			
FF	0835	Sooty tern	42				
		Wedge tail	2				
	0835	Pterodroma	1	NW		moving fast — flying like no. Hal	
	0915	Sooty tern	1	NE		Pet. — much light darking.	
MF	0920	Sooty tern	9				
FF	0922	Sooty tern	50+			Feeding actively — estimate conservative.	
	0930	Sooty/S/b.	1	NW		flight pattern was like a Slenderbill, but	
	0940	Pterodroma sp.	2	NW		how good is that ? ! ! * *	
	0950	Pterodroma sp.	2	NW		moving fast & straight	
						" " " — I think they are	
						mottled Pets. but they are so far out there is	
	1015	J-F Petrel	1	NW		only flight pattern to go by.	
FF	1024	Sooty Tern	6	do		one with orange streamer	
	1030	Sooty Tern	1	NW		with orange streamer	
	1070	Storm Pet	1	[redacted]		feeding	

$\frac{1}{3.8}$ 3.8/100

SI-MNH-958e
7-28-64

SMITHSONIAN INSTITUTION
DIVISION OF BIRDS
AT SEA DAILY LOG — E

Pelagic Bird Survey.

DATE 4 April 1966
Pg.# 2

Grid

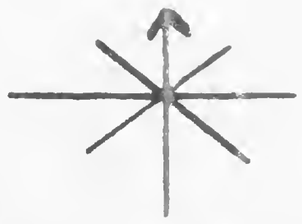
	time	species	#	dir.	hgt.	remarks	loc.
	1117	Shear-Pet	2				
	1120	Shear-Pet	1				
FF	1230	Sooty Tern	50±5			Feeding slightly.	
		Fairy Tern	2				
	1235					Change course To NW.	
	1300	P. hypoleuca	1				
	1305	Shear-Pet	1				
	1305					One MATS Carhawk.	
	1307	Sooty Tern	3				
	1307	Fairy Tern	1				
	1320	Red-f Booby	1			Subadult.	
	1323	Sooty Shear	1	NW			
	1325					Japanese Fishing Boat.	
	1328	Sooty Tern	2				
FF	1328	Sooty Tern	25	±5		Feeding.	
	1358	P. hypoleuca	1				
FF	1430	Sooty tern	13			are Ad Sooty with bright orange Streamer	
		C. Noddy tern	1				
		Wedgetail Shear	1			light Phase	
	1452	Terns sp.	2	W			
	1452	Pterodroma sp	1	⊖			
	1458	R-T Tropic bird	1	NE		Cock sitting on Holt	
	1500	P. ex Terns	1				
	1505	Sooty/Slb. Shear	1	NW			
	1600	Sooty tern	1	S			
	1612	Blue-faced B.	1	NW		subadult	
	1635					Change course to SW.	
	1735	Sooty Tern	4				
	1735	Wedge-tailed S.	3			light phase; squalls about and over ship	
	1755	Sooty Tern	1	NE			
	1758	Reach's Type	2				
FF	1803	Sooty Tern	12			Feeding.	
	1805	Wedgetail	1			Light.	
	180	Sooty Tern	2				

SI-MNH-958e
7-28-64

SMITHSONIAN INSTITUTION
DIVISION OF BIRDS
AT SEA DAILY LOG — E

Pelagic Bird Survey.

DATE 4 April 1966
Pg.# 3



Grid

	time	species	#	dir.	hgt.	remarks	loc.
TF	1825	Sooty Tern	5	E		Travelling	
	1830	Shear-Pit	1				
TF	1931	Sooty Tern	35	NE		Travelling.	152
	1837					Sunset.	

#1

Shear. Pef.	2 ✓
ST	187 ✓
Pfero.	7 ✓
P. externa	5 ✓
Sooty Shear.	2 ✓
S/Sl S	2 ✓
W TS	2 ✓
IFP	1 ✓
SP sp.	1 ✓
	209

#2

Shear. Pef.	4 ✓
ST	114 ✓
FT	3 ✓
RFB	1 ✓
Sooty Sh.	1 ✓
P. hypo.	1 ✓
CNT	1 ✓
WTS	5 ✓
Tern sp.	2 ✓
Pfero.	1 ✓
RTTB	1 ✓
P. externa	1 ✓
S/Sl Sh.	1 ✓
BFB	1 ✓
Leach's type	2 ✓
	139

#3

ST	40 ✓
Shear-Pef.	1 ✓
	41

209
139
41
389

Totals

Shear-Pef.	7 ✓
ST	341 ✓
Pterodroma sp	8 ✓
P. externa	6 ✓
Sooty Shear.	3 ✓
S/Sl-B Sh.	3 ✓
W TS	7 ✓
IFP	1 ✓
SP sp.	1 ✓
FT	3 ✓
RFB	1 ✓
P. hypoleuca	1 ✓
CNT	1 ✓
Tern sp.	2 ✓
RTTB	1 ✓
BFB	1 ✓
Leach's type	2 ✓
	389

SI-MNH-958e
7-28-64

SMITHSONIAN INSTITUTION
DIVISION OF BIRDS
AT SEA DAILY LOG — E

Nocturnal

Pelagic Bird Survey.
DATE 4 April 1966
Pg.# 1

time	species	#	dir.	hgt.	remarks	loc.
1837					Begin. Watching from Helio Deck	
1945	Sooty Tern	1	NE			
1955	Sooty Tern	1	—			
2043	Sooty Tern	1	NE			
2102	Bird (sp)	1				
2117	Sooty Tern	1	—			
2205	Sooty tern	2				
2210	Sooty tern	1				
2235	Sooty tern	1				
0015	Sooty tern	1				
0030	Sooty tern	1	NE			
0130	Sooty tern	2				
0150	Sooty tern	3			Moon light very bright. Sooties can occasionally be seen as a shadow when crossing the moon light.	
0236	Sooty Tern	1				
0235	Sooty Tern	1				
0317	Sooty Tern	1				
0324	Bird sp.	1				
0431	Sooty Tern	1	SE			
0615	Mottled Pet	1	NW			
0622					Ceare.	
		22				

1
87
86
56
229

396
229
67

ST 19
Bird sp. 2
MP 1
22

~~Sandblast~~

- CIS
- WTS
- BP
- RFB
- BB
- GF
- RTTB
- S—
- CNT
- HNT
- GBT
- BFB
- LF
- WTSP
- BGN

(11)

C | W
H
W | T
R | EV

SI-MNH-958e
7-28-64

SMITHSONIAN INSTITUTION
DIVISION OF BIRDS
AT SEA DAILY LOG — E

Pelagic Bird Survey

DATE 5 April 1966
Pg.# 1

Grid

Noon Pos. 15-30N 173-37W

	time	species	#	dir.	hgt.	remarks	loc.
	0628					Sunrise - Observed.	
	0627	Sooty Tern	2				
	0629	Sooty Shear	1	NW		White underwing.	
	0631	Shear-Pet	1				
	0657	Shear-Pet	1				
	0702	Pterodroma	1				
	0703	Pterodroma	1				
	0711	Sooty Tern	2				
	0715	Sooty Shear	3	WNW		white underwing	
	0717	Sooty Tern	1				
	0718	Sooty Tern	1				
	0721	Sooty Tern	1				
MF	0725	Sooty Tern	7			Milling about	
	0742	Sooty Tern	2				
	0750					Change course to NW	
	0755	Sooty Tern	1				
	0759	Sooty Shear	1	WNW			
	0810	Shear-Petrel	1	WNW			
	0828	Pterodroma	1	W			
•	0833	Sooty tern	3				
	0833	C. Noddy tern	1				
•	0920	Shear-Pet	1	NE			
	0940	B-W Petrel	1	—			
	1000	Sooty tern	1	NW			
	1005	Sooty tern	1				
	1005	Wedgetail	2			light phase	
	1045					changed course to NE (045°) wind moderately strong obs. somewhat difficult.	
	1223	Sooty Tern	1	SE			
	1229	Sooty Shear	1	N		white underwing	
	1231	Sooty Shear	1	N			
TF	1235	Sooty Tern	5	NE			
	1240	Sooty Tern	1	—			
	1258	Sooty Shear	1	N			
	1305	Sooty Shear	1	NW			
	1310	Shear-Pet	1				
FF	1340	Sooty Tern	55	±5		Feeding.	
FF	1345	Sooty Tern	70	±5		Some feeding taking place.	
	1452	R-T-B	1	N			
	1455					Changing course to 055° for 1 hr. to get on line.	

1 8 8
2 24 24
3 24 24
4 24 24
5 24 24
8 24
12
1
24
4
96
6
112
48

SI-MNH-958e
7-28-64

SMITHSONIAN INSTITUTION
DIVISION OF BIRDS
AT SEA DAILY LOG — E

PBS Yacht

DATE 5 April 1966
Pg.# 2

	time	species	#	dir.	hgt.	remarks	loc.
	1525	Shear - Petrel	1	NW		Could have been Red or Wedge-tailed or even a Sanderling.	
	1530	Sooty Shearwater	1	NW			
	1620	Shorebird sp.	1	N		looked like a Phalarope, [redacted]	
	1632	Sooty Shear	1	N		[redacted]	
	1639	Pterodroma	1			[redacted]. Belly & underwings were light	
	1706	Wedge-tailed S.	1	N		light phase	
	1748	Sooty/Slender-billed Shear.	2	NW		one individual with dark underwings the other with light underwings	
	1754	Sooty Tern	2	SE.			
	1800	Sooty/Sl-Billed	1	NW		light underwings	
FF	1805	Sooty Tern	~~30~~ 40 ±10			feeding.	
	1815	Brown Booby.	1			Adult ♀ landed on ship. Unbanded Caught.	
MF	1815	Sooty Tern	55 ±10			Milling.	
MF	1820	Sooty Tern	15			may be part of 1815 flock.	
	1835	Sooty Shear	1	N			
	~~1844~~						
ca	1842					Ceara Summit.	

SI-MNH-958e
7-28-64

SMITHSONIAN INSTITUTION
DIVISION OF BIRDS
AT SEA DAILY LOG — E

DATE 5 April
Pg.#

Nocturnal (Leave grid 2345)

time	species	#	dir.	hgt.	remarks	loc.
2145	— begin observation					
	Sooty tern	2				
	"	1				
2345					leave grid c low obs.	

SI-MNH-958e
7-28-64

SMITHSONIAN INSTITUTION
DIVISION OF BIRDS
AT SEA DAILY LOG — E

PBS
DATE 6 April 1966
Pg.# 1

To Hono.
Noon Pos 17-33 N 170-33 W

	time	species	#	dir.	hgt.	remarks	loc.
c.	0610					Sunrise	
	0623	Sooty Shear	1	NW			
	0625	Sooty Shear	1	N		White underwing.	
	0630	Sooty Shear	1	NW			
	0635	Shear-Pet	1				
	0637	Sooty Shear	1	NNW			
	0643	Shear-Pet	1				
	0646	Bird(sp)	1				
	0647	Shear-Pet	1				
	0650	Sooty Shear	2	NNW			
	0650	Shear-Pet	1				
	0657	Sooty Shear	2	NNW			
	0707	Sooty Tern	4				
	0708	Sooty Tern	1				
	0714	Sooty Shear	1	NNW			
	0716	Sooty Shear	1	NNW			
	0720	Leach's SP	1	NNW		Moving rapidly - migrating?	
	0721	Sooty Shear	2	NNW			
	0723	Sooty Shear	1	NNW			
	0725	Sooty Shear	1	NNW			
	0725	Sooty Shear	1	NNW			
	0728	Sooty Shear	1	NNW			
	0732	Sooty Shear	1	NNW			
	0732	Sooty Shear	1	NNW			
	0742	Sooty Shear	1	NNW			
	0745	Mottled Pet	1	NNW.			
	0746	Sooty Shear	1	NNW			
	0748	Sooty Shear	1	NNW			
	0755	Sooty Shear	2	NNW			
	0755	Shear-Pet	1				
	0759	Sooty Shear	2	NNW		white underwings	
	0805	Sooty Shear	2	NNW			
	0805	Sooty Tern	1				
	0806	Sooty Shear	1			~~of~~ white underwing.	
	0810	Sooty Shear	2	NW		light underwing	
	0813	Sooty Shear	1	NW			
	0825	Sooty Tern	2				
	0825	Sooty Shear	2	NE			
	0828	R-T Tropic	1				
	0828	Sooty Tern	4	NE			
	0830	Sooty Shear	1	NW			
	0834	Sooty Shear	1	NW			

55 35
ST 12
S-P 5
Bird 1
Mottled 1
RTTB 1
Leach's 1
56

41

35
21
56

SI-MNH-958e
7-28-64

SMITHSONIAN INSTITUTION
DIVISION OF BIRDS
AT SEA DAILY LOG — E

POS

DATE 6 April 1966
Pg.# 3

	time	species	#	dir.	hgt.	remarks	loc.
	0835	Sooty Shear	1	UW			
	0835	Sooty Shear	1	NW.			
	0856	Pterodroma sp	1	N			
	0858	Sooty Shear.	2	NW		one with light underwings the other with dark underwings	
	0902	Sooty Shear.	1	NW			
	0907	Sooty Shear.	1	NW			
FF	0943	Sooty Tern	10				
	1007	Sooty Shear.	1	NW		dark underwings	
	1032	Sooty/Slb	1	NW			
	1035	Sooty Shear	1	NW			
	1040	Sooty/Slb	1	NW			
	1044	Sooty/Slb	1	NW			
	1045	Shear-Pet	1				
	1048	Booby sp.	1				
	1052	Sooty Shear	3				
	1054	" "	1	NW			
	1055	" "	1	NW			
	1057	" "	2	NW			
	1059	" "	1	NW			
	1115	Shear Pet	1	N			
	1116	Shear-Pet	1				
	1124	Pterodroma sp	1	NE			
	1135	Sooty Shear.	2	NW			
	1137	" "	1	NW			
	1140	" "	2	NNW			
	1147	" "	1				
	1152	" "	2	N			
	1154	" "	1	NNW			
	1200	" "	1	NW			
	1202	" "	1	NW			
	1205	Sooty tern	1	N			
	1212	Sooty Shear	1	—			
	1230	" "	1				
	1240	" "	1	NW			
	1255	Sooty Shear	1	NW			
	1256	Sooty Shear	1	NNW			
	1307	Laysan Alba	1				
	1310	Shear-Pet	1				

SS 35
Ptero 2
ST 11
Booby 1
S-P 4
Laysan 1
54

SI-MNH-958e
7-28-64

SMITHSONIAN INSTITUTION
DIVISION OF BIRDS
AT SEA DAILY LOG — E

PBS

DATE 6 April 1966
Pg. # 2

	time	species	#	dir.	hgt.	remarks	loc.
	1403	Sooty Shear	1	NNW			
	1404	Shear-Pet	1				
	1405	Sooty Tern	3				
	1410	Bird (2 sp)	1				
	1411	Sooty Tern	1				
	1413	Sooty Tern	4				
	1418	Shear-Pet	1				
	1423	Sooty Shear.	1	NW			
	1425	Sooty Shear	1	NNW		light underwing	
	1427	Sooty Shear	1	NNW			
	1427	Sooty Shear	2	NNW			
	428	Sooty Shear	1	NNW			
	1429	Sooty Shear	1	NNW			
	1430	Sooty Shear	1	NNW			
	1430	Sooty Shear	1	NNW			
	1435	Shorebird	1	N	50'	Distant. Couldn't make out any field marks, but I don't think it was a Plover. Small - maybe a Phalarope?	
	1435	Sooty Shear	1	NNW			
	1500	Sooty Tern	1	SW			
	1503	Pterodroma sp.	1	NW			
	1503	Sooty Shear.	1	NNW			
	1505	Storm Petrel	1	NE			
	1510	Sooty Shear.	1	NNW		dark underwings	
	1510	Sooty Tern	2	ENE			
	1511	Sooty Tern	1	NW			
	1513	Sooty Shear.	1	NNW			
	1526	Sooty Shear.	1	NNW			
F	1542	Bird sp.	5	E			
	1546	Sooty Shear.	1	NW			
	1604	Wedge-tailed S.	1	NW		light phase	
TF	1606	Sooty Shear.	5	NW		2 with light underwings	
	1610	Sooty Tern	1	W			
	1626	Sooty Shear.	1	NE			
	1628	Black-footed Alb.	1			completely dark gray except about base of bill	
	1645	Sooty Shear	1	N			
	1650	B-F Booby	1	Q		Subadult	
	1710	B-F Petrel	1	N			
	1710	Sooty Shear	1	N			
	1711	Sooty Shear	2	N			
	1715	" "	2	N			
	1716	" "	2	NW			

58
299
241
50
121
135
42
298
51
247
298
(1844)

SI-MNH-958e
7-28-64

SMITHSONIAN INSTITUTION
DIVISION OF BIRDS
AT SEA DAILY LOG — E

DATE 6 April 1966
Pg.# 4

	time	species	#	dir.	hgt.	remarks	loc.
	1718	Sooty Shear	1	N-NW			
	1730	" "	1	N			
	1731	Pterodroma sp.	1	N		— large - may have had dark breast band or it may have been shadows. Didn't see underwings. belly white — no back Pt Hare.	
	1740	Sooty Shear	1	N			
FF	1745	Sooty tern	100	±			
		Fairy tern	15	±			
	1750	Pterodroma	1	S			
	1758	Sooty Shear	1	N			
	1800	" "	1	W			
	1802	" "	3	N-NW			
	1810	" "	1	W-NW			
	1815	" "	1	N-NW			
	1817	" "	2	N NW			
	1818	R-T T B	1	⊖			
	1816	~~Sooty Shear~~ Shear-Pet	1	W			
	1824	Smut					

SS — 12
Pter 2
SP 1
ST 100
FT 15
RTTB 1

131

Noon Pos. 18-38N 166-33W

PBS
7 April 1966

To date

ca 0700 ——— Sunrise clocks advanced 1 hour

0747	Sooty Shearwater	1	NNW
0748	Sooty Shearwater	1	NNW
0757	Sooty Shearwater	1	N
0759	Sooty Shearwater	2	NNW — light underwing
0802	Sooty Shear	1	NNW
0809	Shear - Pet	1	
0811	Shear - Pet	1	
0827	Sooty Shear	1	NNW
0827	Sooty Shear	1	NNW
0828	Sooty Shear	1	NNW
0840	Sooty Shear	1	NNW
0850	Sooty Shear	1	NNW.
0902	Wedgetail	1	——— Light Phase
0907	Sooty Shear	1	NNW
0908	Wedgetail	1	——— Light Phase
0910	Sooty Shear	2	NNW
0913	Sooty Shear	1	NNW
0916	Sooty Shearwater	1	NNW
0945	Shear. - Petrel	1	NE
0958	Sooty Shearwater	1	NE — light underwings
1002	Sooty Shearwater	1	NW
1009	Sooty Shearwater	1	NW
1032	Sooty Shearwater	1	NNW
1045	Sooty Shearwater	1	NNW
TF 1104	Wedge-tail Sh.	2	——— light phase
	Sooty Tern	4	
1105	Sooty Shearwater	1	NNW
1108	Wedgetail Shear.	1	Dk Phase
1121	Sooty Shearwater	1	NNW
1131	Sooty Shearwater	1	NNW
1140	——— Enter squall winds to 20.		
1145	Sooty Shearwater	2	NNW
1155	Sooty Shearwater	2	NNW
1202	Sooty Shearwater	3	NNW
1215	Sooty Shearwater	2	NNW
1220	Sooty tern	4	E
1230	Sooty ~~Sto~~ Shearwater	4	NE

V37

V8 ST

53

63

SI-MNH-955a
3-4-64

SMITHSONIAN INSTITUTION
DIVISION OF BIRDS
AT SEA SURVEY CHART A

DATE:_____ Total Minutes:_____ Total Miles _____

I. Total Abundance of birds:

No. Sightings	No. Birds	Birds/Sighting	Birds/Mile

II. Abundance of the Shearwater-Petrel-Albatross Group:

No. Sightings				No. Birds				Birds/Sighting				Birds/Mile			
T	WT	P	B	T	WT	P	B	T	WT	P	B	T	WT	P	B

III. Abundance of Tropicbirds:

No. Sightings			No. Birds			Birds/Sighting			Birds/Mile		
T	RT	WT	T	RT	WT	T	RT	WT	T	RT	WT

IV. Abundance of Terns:

No. Sightings	No. Birds	Birds/Sighting	Birds/Mile

V. Abundance of Shorebirds:

No. Sightings	No. Birds	Birds/Sighting	Birds/Mile

VI. Abundance of Boobys:

No. Sightings				No. Birds				Birds/Sighting				Birds/Mile			
T	BF	RF	B	T	BF	RF	B	T	BF	RF	B	T	BF	RF	B

VII. Abundance of Frigatebirds:

No. Sightings	No. Birds	Birds/Sighting	Birds/Mile

VIII. Abundance of Flocks:

Total No. Flocks	Total No. Birds	Total No. F/Mi.	No. Feeding Flocks	No. Feeding Birds	No. Feeding F/MI.

1245	Sooty Shearwater	1	N
1248	Sooty Shearwater	2	N
1310	Sooty Shear	1	NNW
1315	Sooty Shear	2	NNW — Light underwing. One bird had white marks ½ way down the wing on Top.
1316	Birds sp	1	
TF 1320	Sooty Tern	5	ENE
	Common Noddy	3	
1325	Sooty Shear	1	NNW
1327	Sooty Shear	1	NNW — Light underwing.
1330	Pom. Jaeger	1	NNW
1330	Sooty Shear	1	NNW
1333	Sooty Shear	1	N
1340	Sooty Shear	1	N
1340	Sooty Shear	1	N
1340	Sooty Shear	1	N
1405	Sooty Shear	1	N
1421	Sooty Shear	1	N
1437	Sooty Shear	1	N
FF 1445	frigate (sp)	1	
	Sooty Tern	20±5	O — feeding
1449	Phalarope (sp)	1	N
1515	Sooty Shear	1	N — White underwing.
1521	Sooty Shearwater	1	N
1529	Storm Petrel sp.	1	S
1531	Shear.-Petrel	1	NE
1533	Sooty Shearwater	1	N
1539	Sooty Shearwater	2	N
1541	Sooty Shearwater	1	N
1543	Sooty Shearwater	2	N
1546	Sooty Shearwater	3	N
1550	Sooty Shearwater	1	N
1561	Sooty Shearwater	2	N
1558	Sooty Shearwater	1	N
1569	Fairy Tern	1	O — feeding
1605	Sooty Shearwater	3	N
1612	Sooty Shearwater	1	NNW

70

70

SI-MNH-955a
3-4-64

SMITHSONIAN INSTITUTION
DIVISION OF BIRDS
AT SEA SURVEY CHART A

DATE:_____ Total Minutes:_____ Total Miles _____

1. Total Abundance of birds:

No. Sightings	No. Birds	Birds/Sighting	Birds/Mile

II. Abundance of the Shearwater-Petrel-Albatross Group:

No. Sightings				No. Birds				Birds/Sighting				Birds/Mile			
T	WT	P	B	T	WT	P	B	T	WT	P	B	T	WT	P	B

III. Abundance of Tropicbirds:

No. Sightings			No. Birds			Birds/Sighting			Birds/Mile		
T	RT	WT	T	RT	WT	T	RT	WT	T	RT	WT

IV. Abundance of Terns:

No. Sightings	No. Birds	Birds/Sighting	Birds/Mile

V. Abundance of Shorebirds:

No. Sightings	No. Birds	Birds/Sighting	Birds/Mile

VI. Abundance of Boobys:

No. Sightings				No. Birds				Birds/Sighting				Birds/Mile			
T	BF	RF	B	T	BF	RF	B	T	BF	RF	B	T	BF	RF	B

VII. Abundance of Frigatebirds:

No. Sightings	No. Birds	Birds/Sighting	Birds/Mile

VIII. Abundance of Flocks:

Total No. Flocks	Total No. Birds	Total No. F/Mi.	No. Feeding Flocks	No. Feeding Birds	No. Feeding F/MI.

1615 ——————————— squall off port side 3 miles+ at mid-ship
1622 Sooty Shearwater 2 N
1632 Sooty Shearwater 1 N
1633 Frigatebird sp. 1 @ 150+ ft.
1634 Sooty Shearwater 1 NW —— light underwings
~~1640~~
1650 Sooty Shearwater 1 N
1705 Sooty Shearwater 1 N
1707 Pomarine jaeger 1 N — light Phase
1710 Sooty Shearwater 1 NW
1712 Sooty Shearwater 2 NW
1720 Pterodroma hypoleuca 1 N
1722 Sooty Shearwater 2 NW
1735 Sooty Shearwater 1 NW
~~1738 Birds~~ — one of the Sooty terns from flock below.
1742 Sooty Shearwater 1 NW
FF1746 Sooty tern 25± @ — Milling & feeding lightly on carcass
1749 Sooty Shearwater 1 NW-NW
1752 Sooty Shearwater 1 W-NW
1758 Sooty Shearwater 1 NW
1800 Sooty Shearwater 1 NW
1803 Sooty Shearwater 3 NW
1809 Sooty Shearwater 1 NW
1815 Sooty Shear 1 NW
1815 Bulwers Petrel 1 E
1818 Sooty Shearwater 1 NW
1825 Shem-Petrel 1 N
1835 Sooty Shearwater 1 NW
1835 C-I Shearwater 1 E
1845 Sooty Shearwater 1 NW
1802 " " 1 NW
1907 " " 1 NW
1912 " " 1 NW
1917 ——————————— Sunset

The Sooty Shearwaters are not arcing high as they have the past several days. The only change is that the wind has dropped to 10-14 Kn. and changed a few degrees on the compass.

SI-MNH-955a
3-4-64

SMITHSONIAN INSTITUTION
DIVISION OF BIRDS
AT SEA SURVEY CHART A

DATE:_____ Total Minutes:_____ Total Miles _____

1. Total Abundance of birds:

No. Sightings	No. Birds	Birds/Sighting	Birds/Mile

II. Abundance of the Shearwater-Petrel-Albatross Group:

No. Sightings				No. Birds				Birds/Sighting				Birds/Mile			
T	WT	P	B	T	WT	P	B	T	WT	P	B	T	WT	P	B

III. Abundance of Tropicbirds:

No. Sightings			No. Birds			Birds/Sighting			Birds/Mile		
T	RT	WT	T	RT	WT	T	RT	WT	T	RT	WT

IV. Abundance of Terns:

No. Sightings	No. Birds	Birds/Sighting	Birds/Mile

V. Abundance of Shorebirds:

No. Sightings	No. Birds	Birds/Sighting	Birds/Mile

VI. Abundance of Boobys:

No. Sightings				No. Birds				Birds/Sighting				Birds/Mile			
T	BF	RF	B	T	BF	RF	B	T	BF	RF	B	T	BF	RF	B

VII. Abundance of Frigatebirds:

No. Sightings	No. Birds	Birds/Sighting	Birds/Mile

VIII. Abundance of Flocks:

Total No. Flocks	Total No. Birds	Total No. F/Mi.	No. Feeding Flocks	No. Feeding Birds	No. Feeding F/MI.

Smithsonian Institution
Division of Birds
At Sea Daily log — E

Date 8 April
Page 1

Noon 800, 162-31 W 19-53 N

Time	Species	#	direction	
0630				Sunrise
0645	Sooty Shearwater	1	NW	
0655	Sooty Shearwater	4	NW	
0656	Tern sp.	1		
0709	Sooty Shearwater	1	NW	
0712	Sooty Shearwater	1	NW	
0718	Sooty Shearwater	1	NW	
0720	Sooty Shearwater	1	NW	
0724	Sooty Shearwater	1	NW	
0739	Bulwer Petrel	1	SE	
0743	Sooty Shearwater	2	NW	
0746	Sooty Shearwater	1	NW	
0752	Sooty Shearwater	1	NW	
0816	Sooty Shearwater	1	N	
0819	Juan Fernandez Petrel	2	N	
0820	Sooty Shearwater	1	NW	— white beneath wings tipped black; light gray above with whitish nape
0825	Booby sp.	1		
0829	Sooty Tern	1	NW	— either BFB or RFB; too distant to tell
0831	Sooty Shearwater	1	E	— perhaps feeding; seen diving to H_2O
0835	Sooty Shearwater	1	NW	
0842	Sooty Shearwater	1	NW	
0845	Sooty Shearwater	1	NW	
0846	Sooty Shearwater	2	N	
0847	Sooty Shearwater	2	N	
0848	Sooty Shearwater	1	NW	
0848	Sooty Shearwater	2	NW	
0855	Frigatebird sp.	1	E	100ft+
0902	Sooty Shearwater	1	O	100+
0924	Great frigate bird	2	NW	
0930	Shear-Petrel	1	over ship	— Ad. male - gular pouch very red.
0940		1	N	
0955	Birds sp.	1		— man-overboard exercise.
1015	~~—~~			— on temporary heading 360° — Tests
1030				— coming around to 070°
1034	Sooty Shearwater	1	N	
1037	Sooty Shearwater	2	N	
1045	Sooty Shearwater	2	N	
1050	Sooty Shear	2	NNW	
1055	Sooty Shear	1	NNW	
1100	Sooty Shear	1	NNW	
1105	Booby sp	1	—	
1108	Sooty Shear	1	NNW	

50
81
27
43
63
264

53

50

Booby
1 Bulwer
1 SS
1 SE
1 BFB
1 RFB
1 SS
1 Tern sp.
1 BP
1 JFP
1 DMP
1 ST
1 SS

SI-USNM-239
1/21/63

ECTOPARASITE DATA SHEET

Host _____ Field No. _____ U.S. Band No. _____

Date _____ Sex ♀ ♂ Im U.S.N.M. No. _____

Locality _____

Body Regions	Mites	Ticks	Mallophaga
Head: Forehead			
Crown			
Ear			
Other			
Body: Neck			
Back			
Breast			
Other			
Wing Feather: Prim.			
Vane: Sec.			
Vane: Cov.			
In shaft: Prim.			
In shaft: Sec.			
In shaft: Cov.			
Other			
Tail Feather: Vane			
Shaft			

Hippoboscidae

Other Ectoparasi

Comments:

Pelagic Bird Survey Date 8 April 1966

At Sea Daily log Page 2

	1115	frigate (spp)	2		
TF	1118	Sooty Shearwater	#6	NNW	Very loosely ~~organized~~ organized.
	1120	Sooty Shear	1	NNW	
	1121	Sooty Tern	3		
	1125	Sooty Shear	2	NNW	
	1125	Sooty Shear	1	NNW	White underwing.
	1130	Pomarine Jaeger	1	NNW	light Phase : Adult
	1130	Christmas Isl. Shear	1		
	1137	Sooty Shearwater	2	NNW	
FE	1145	Sooty tern	14		
		Fairy tern	3		
	1145	RT Tropicbird	1		light rosy color.
	1145	Sooty Shearwater.	1	NNW	
	1147	Sooty Tern	2		
	1155	~~Sheartail~~ Shearwater	1	~~NNW~~	~~maybe Pinks-footed Shear~~
	1158	Sooty Shear	1	NNW	
	1159	Sooty Tern	2		
	1206	Sooty Shear	1	NNW	
	1210	Sooty Shearwater	2	NNW	
FF	1218	Sooty Tern	8		Same feeding
		Comm Noddy	3		
		Fairy Tern	2		
		~~tern~~ tern	8		
	1219	Sooty Shear	1	NNW	Appeared as
	12 26	Pink-footed? Shearwater	1	NNW	Range as S.S. brown on back
	1232	Sooty Shear	1	NNW	white underneath Gentle gliding
	1236	Sooty Shear	1	NNW.	PW- bill not seen well.
	1243	Wedge-tailed Shearwater	1		light underwings
	1249	Sooty Shearwater	2	ENE	light phase
				NW	both with light underwings
	1250	Wedge-tailed Shear.	1	NW	light phase
	1258	Sooty Shearwater	1	NW	
	132	Great Frigatebird	1	NW	~~dived~~ dived to H_2O just off bow; caught on flying fish
	1335	Sooty Shearwater	1	NW	
	1338	Sooty Shearwater	1	NW	
	1341	Sooty Shearwater	1	NW	

55 - 26
Tor. - 2
WT - 29
PJae. 1
LEIS. 6
WFT - 5
RFTB - 1
CNT - 3
PFSh. - 1
LWTS - 2
WF - 1
S-P - 1
TM 8

81

81

SI-USNM-239
1/21/63

ECTOPARASITE DATA SHEET

Host _____ Field No. _____ U.S. Band No. _____

Date _____ Sex ♀ ♂ Im U.S.N.M. No. _____

Locality _____

Body Regions	Mites	Ticks	Mallophaga	Hippoboscidae
Head: Forehead				
Crown				
Ear				Other Ectoparasi
Other				
Body: Neck				
Back				
Breast				
Other				Comments:
Wing Feather: Prim.				
Vane: Sec.				
Vane: Cov.				
In shaft: Prim.				
In shaft: Sec.				
In shaft: Cov.				
Other				
Tail Feather: Vane				
Shaft				

1358				
~~1358~~	Fairy Tern	1	E	
1412	Sooty Tern	1	E	
1414	Red-tailed TB	1	NE	
1416	Frigatebird sp.	1	alt 150ft+	
1419	Sooty Shearwater	1	N	
1431	Wedge-tailed Shear.	1	NE — light phase	
1433	Sooty Shearwater	2	NW	
1433	Sooty Shearwater	1	NW	
1505	sooty Shearwater			
1510	" "	1	NW	
1545	Wedgetail	2	NW	
		1	E — light phase	
1546	Shear-Pet	1	N	
1550	Sooty Shearwater	1	NW	
1550	Sooty tern	2	S	
1620	B-F Booby	1	O — SAd.	
1620	Bird sp.	1	N — The bird was dusky white or light grey. It looked like a medium sized Larus sp. The head, belly, & underwings were not seen. The tail was short and either square or rounded.	
1625	Shearwater sp.	1	Possible B-F Shear. The bird was not studied as it is moth. The background was grey - Belly light & underwings light. Flight like Sooty Shearwater. Size about as dimmer or perhaps slightly larger than SS.	
1635	Wedgetail Shear — 1 — E — light Phase			
1637	Sooty Shearwater	1	NW	
1640	B-F Booby	1	O — ~~imm~~ adult. immature	
1645	Wedgetail	1	N — light phase	
1650	Sooty Shear	2	N	
1650	Sooty Tern	1		
↳2B				

Fairy Tern - 1
Sooty Tern - 1
Red-T TB - 1
Frigatebird sp. - 1
Sooty Shearwater - 11
Wedge-T Shear - 4
Sooty Shearwater - 5
Sooty Shearwater - 1
Wedgetail - 1
Shear-Pet - 1
Bird sp. - 1
B-F Shear - 1

SI-USNM-239
1/21/63

ECTOPARASITE DATA SHEET

Host _____ Field No. _____ U.S. Band No. _____

Date _____ Sex ♀ ♂ Im U.S.N.M. No. _____

Locality _____

Body Regions		Mites	Ticks	Mallophaga
Head: Forehead				
Crown				
Ear				
Other				
Body: Neck				
Back				
Breast				
Other				
Wing Feather: Prim.				
Vane	Sec.			
	Cov.			
In shaft	Prim.			
	Sec.			
	Cov.			
	Other			
Tail Feather: Vane				
Shaft				

Hippoboscidae

Other Ectoparasi

Comments:

8 April 1966
4

1655	Sooty Shear 1	NNW	
1700	Sooty Shear 3	NNW	
1701	Sooty Tern 2	~~NNW~~	
1702	Sooty Shear 2	NNW	— Light underwing
1703	Sooty Shear 2	NNW	"
1704	Sooty Shear 1	NNW	
1705	Sooty Shear 2	NNW	"
1705	Shear Pet 1		"
1713	Sooty Shear 1	NNW	"
1720	Bird (sp) 1		— Light underwing.
1725	Sooty Shear 2	NNW	
1725	~~Shearwater - Pet~~ [illegible]	1 NNW	L. under
1725	Phalarope? [illegible]	NNW	
1729	Sooty Sh 2	NNW	Light underwing
1730	Sooty Sh 2	NNW	
1730	Sooty Sh 1	NNW	
1731	Sooty Sh 1	NNW	
1735	Mottled Pet 1	N	
1735	Phalarope? 1	N	— appeared all white in flying sun
1738	Sooty Shear 1	NNW	— Light underwing
1739	Sooty Shear 1	NNW	— Light underwing
1740	Bulwers 1		
1741	R-F Booby 1		— Subadult
1744	Sooty Sh 1	~~NNW~~	— Light underwing.
1744	Sooty Sh 1	NNW	
1746	Sooty Shear 1	NNW	
1747	Sooty Shear 1	NNW	— Light underwing.
1749	Sooty Shear 1	NNW	
1752	Wedgetail 1		— Light
1753	Wedgetail 1		— Light
1753	Sooty Sh 1	NNW	
1759	Sooty Shear 2	NNW	

Wed. t.s. 2
RFB – 1
SS – 31
ST – 10
S-P – 2
Bird sp – 1
? Phalarope 2
m. Pet – 1
Bld. Pet – 1

43

8 April 1966
5

1802	Sooty Shear	1	NNW	
1803	Tern sp.	2		
1809	Sooty Shear	1	NNW	
1810	Sooty Shear	1	NNW	— light undercast
1811	Birds	2		
1813	Sooty Shear	1	NNW	
1813	Sooty Shear	1	NNW	
1815	Sooty Shear	1	NNW	
1817	Sooty Shear	1	NNW	
1823	Sooty Shear	1	NNW	
1824	Sooty Shear	1	NNW	— Light undercast
1825	Sooty Shear	1	NNW	"
1825	Sooty Shear	1	NNW	— "
1827	Sooty Shear	2	NNW	
1830	Bulwer's	1		
1830	Tern (sp.)	1		
1831	Sooty Shear	1	NNW	
TF 1834	Wedgetail	2	— Light Traveling.	
	CI Shear	2	N	CIS-2
	Sooty Tern	4		SS-18
1839	Sooty Shear	1	NNW	Top-8
FF 1843	Sooty Tern	5		Bap. 2
	Common Noddy Tern	10	Feeding	Bul P. 1
	Wedgetail	1	— Light	WTS-6
	Gray-backed Tern	2		ST-9
	terns sp.	5		Nod Sp. — 10
1846	Sooty Shear	1		GBT sp. - 7
TF 1846	G-B Tern	5	N Traveling.	
1850	Wedgetail	1	— Light	
1852	Sooty Shear	1	NNW — Light undercast.	
1855	Sooty Shear	1	NNW — Light undercast.	
1856	Wedgetail	1	N — Light	
1856	Wedgetail	1	N — Light	1901 — Sunset Green Flash.

SI-USNM-239
1/21/63

ECTOPARASITE DATA SHEET

Host _____ Field No. _____ U.S. Band No. _____

Date _____ Sex ♀ ♂ Im U.S.N.M. No. _____

Locality _____

Body Regions		Mites	Ticks	Mallophaga
Head: Forehead				
Crown				
Ear				
Other				
Body: Neck				
Back				
Breast				
Other				
Wing Feather: Prim.				
Vane	Sec.			
	Cov.			
In shaft	Prim.			
	Sec.			
	Cov.			
Other				
Tail Feather: Vane				
Shaft				

Hippoboscidae

Other Ectoparasi

Comments:

PBS

log sheet

9 April 1966

	Noon Pos	Obs in Sight		
	0624	SR		
	0627	Sooty Tern	3	W
	0630	Sooty Tern	2	W
	0631	Shear - Pet	1	E
	0635	CF Shearwater	3.	NW
	0638	~~Sooty Shearwater~~ Shear - Pet	1	
	~~0640~~ 1640	Pomarine Jaeger	2	N — flying high
	0643	~~Sooty Shearwater~~ Shear - Pet	2	NNW — ? Probable S.S.
	0645	Sooty Shearwater ?	2	WNW
	0648	Shearwater ?	1	W — white belly — wedgetail like but wing tips slight.
	0650	Shear-Pet	1	N
	0651	Bird sp.	1	O
	0652	Sooty tern	1	W
	0653	Wedgetail	1	~~S~~ — Light + Phase
	0658	Shear Pet	1	N
	0725	Shear pet	4	N
	0733	Sooty Shearwater	1	WNW
	0734	Sooty tern	1	W
	0738	Shear Pet	1	W
	0741	Sooty Shearwater	1	WNW
	0743	Blue B Tern	1	
	0747	Sooty Shearwater	1	NNW
TF	0752	Sooty Shearwater	5	NNW — loosely Associated
	0758	Sooty Shearwater	2	NNW
	0805	Pomarine Jaeger	1	N
	0808	Sooty Shearwater	2	N-NW
	9822	9 aeger sp.	1	N
	0833	Pom Jaeger	1	
	0835	Haw Noddy Tern	1	
	0837	Sooty Shear.	1	NNW
	0845	Pom Jaeger	3.	Four following ship
	0855	Sooty Shear	2	2 light phase adults
	0905	Sooty Shear	1	NNW

(52)

SI-USNM-239
1/21/63

ECTOPARASITE DATA SHEET

Host _____ Field No. _____ U.S. Band No. _____

Date _____ Sex ♀ ♂ Im U.S.N.M. No. _____

Locality _____

Body Regions	Mites	Ticks	Mallophaga
Head: Forehead			
Crown			
Ear			
Other			
Body: Neck			
Back			
Breast			
Other			
Wing Feather: Vane: Prim.			
Vane: Sec.			
Vane: Cov.			
In shaft: Prim.			
In shaft: Sec.			
In shaft: Cov.			
Other			
Tail Feather: Vane			
Shaft			

Hippoboscidae

Other Ectoparasi

Comments:

0910	Sooty Tern	2	
0923	Sooty Shear	2	NNW
0925	Sooty Shear	1	NNW
0935	Sooty Shear	1	NNW
0935	Sooty Tern	2	NW
0937	Sooty Tern	1	N
0950	Sooty Tern	1	NW
0950	Sooty Shear	1	NNW
0953	Sooty Shear	1	NNW
0955	Tern sp.	1	
0957	Sooty Tern	1	
1001	Wedgetail	1	—— Light Phase.
1002	Sooty Shear	1	NNW
1003	B-f Alba	1	
1005	Sooty Shear	1	NNW
1010	Sooty Shear	1	NNW
1012	Wedgetail	1	—— Light Phase.
1020	Sooty Shear	2	NNW
1020	Sooty Shear	1	NNW
1020	Wedgetail	1	NNW —— light phase
1022	Sooty Tern	1	NNW
1025	Wedgetail	1	—— Light phase.
1028	Sooty Shear	1	
1038	Wedgetail	1	—— Light Phase
1030	Sooty Shear	1	NNW
1030	Sooty Tern	1	
1032	Sooty Shear	1	NNW
1034	Sooty Shear	1	NNW
1040	Bird sp.	1	NNW
1045	Black-footed A.	1	[illegible]
1048	Sooty Shear.	1	NNW
1055	Sooty Shear.	1	NNW
1058	Sooty Shear.	1	NNW
1100	Sooty Shear.	1	N
1103	Sooty Shear.	3	NW
1105	Wedge-tailed S.	1	N —— light phase
1108	Sooty Shear.	3	NNW
1110	Sooty Shear.	1	NW
1112	Sooty Shear.	1	N —— dark underwings
1115	Sooty Shear.	1	N
		4	NNW

SI-USNM-239
1/21/63

ECTOPARASITE DATA SHEET

Host _____ Field No. _____ U.S. Band No. _____

Date _____ Sex ♀ ♂ Im U.S.N.M. No. _____

Locality _____

Body Regions	Mites	Ticks	Mallophaga
Head: Forehead			
Crown			
Ear			
Other			
Body: Neck			
Back			
Breast			
Other			
Wing Feather: Vane Prim.			
Vane Sec.			
Vane Cov.			
In shaft Prim.			
In shaft Sec.			
In shaft Cov.			
Other			
Tail Feather: Vane			
Shaft			

Hippoboscidae

Other Ectoparasi

Comments:

1118	Sooty Shearwater	3	NW
1118	Sooty Shear.	1	NW
1130	Sooty Shearwater	1	NNW
1141	Sooty Tern	2	to astern ship
1145	Sooty Shear.	3	NW
1149	Sooty Shear.	1	NW
1215	Sooty Shear.	1	NW
1215	Pomarine Jaeger	1	W
1221	Sooty Tern	2	E
1235	Sooty Shear.	1	N
1240	Sooty Shear.	1	N
1242	Pomarine Jaeger	5	
1242	B-F Albatross	1	
1250	Sooty Shearwater	1	NW
1300	Sooty Shearwater	1	NW
1305	Sooty Shearwater	1	NW
1315	Sooty Shear	2	NW
1325	Sooty Shear	2	NW
1345	Sooty tern	2	E

1350 Whales (2) — Gray backs with a second dorsal. Blow is about 6-8 feet & well spread.

FF 1410 Sooty Tern BF 35
Brown Booby + — adult
Red-foot Booby 5 — adult — Flock feeding, but not Sooty Tern
Comm Noddy 5
Wedgetail 10 — Light

1420	Long-Tailed Jaeger	1	P	— Flew over Pom. Jaeger appeared ½ size of Pom. Dove at Pom. white belly rest brown.
1425	Sooty Shear	3	NNW	
1432	Sooty Shear	1	NNW	
1432				— 6 Pom Jaeger & 3 BF Alba
1440	B-f Albatross	1		
1447				— 20+ ~~Lagenorhynchus~~ ~~Porpoise~~ Porpoise - Two tone gray small 4' Spinner's? (95)
1450	B-f Albatross	1		

SI-MNH-955a
3-4-64

SMITHSONIAN INSTITUTION
DIVISION OF BIRDS
AT SEA SURVEY CHART A

DATE:_____ Total Minutes:_____ Total Miles _____

1. Total Abundance of birds:

No. Sightings	No. Birds	Birds/Sighting	Birds/Mile

II. Abundance of the Shearwater-Petrel-Albatross Group:

No. Sightings				No. Birds				Birds/Sighting				Birds/Mile			
T	WT	P	B	T	WT	P	B	T	WT	P	B	T	WT	P	B

III. Abundance of Tropicbirds:

No. Sightings			No. Birds			Birds/Sighting			Birds/Mile		
T	RT	WT	T	RT	WT	T	RT	WT	T	RT	WT

IV. Abundance of Terns:

No. Sightings	No. Birds	Birds/Sighting	Birds/Mile

V. Abundance of Shorebirds:

No. Sightings	No. Birds	Birds/Sighting	Birds/Mile

VI. Abundance of Boobys:

No. Sightings				No. Birds				Birds/Sighting				Birds/Mile			
T	BF	RF	B	T	BF	RF	B	T	BF	RF	B	T	BF	RF	B

VII. Abundance of Frigatebirds:

No. Sightings	No. Birds	Birds/Sighting	Birds/Mile

VIII. Abundance of Flocks:

Total No. Flocks	Total No. Birds	Total No. F/Mi.	No. Feeding Flocks	No. Feeding Birds	No. Feeding F/MI.

1454	Sooty Shear	1	NNW
FF 1508	Sooty Tern	10	
	Wedgetail	20	
	Can Noddy	5	
	Tern (sp.)	10	
1513	Sooty Tern	1	
1523	Red-foot B (ad)	1	
1533	Sooty Shear	1	NNW
1610	Red-footed B.	1	E
TF 1630	Sooty Tern	6	SE
1629	Black-footed A.	2	
1630	B-f Alba	4	
1636	Red-footed B.	1	
1636	Pomarine Jaeger	1	
1637	Black-footed	2	
1641	Red-footed B.	3	
1652	Wedge-tailed S.	1	
1652	Pomarine Jaeger	2	
TF 1653	Red-footed B.	5	
1653	Brown Booby	1	
1654	Sooty Tern	2	
1656	Sooty Tern	3	
1656	Red-footed B.	3	E
1657	Red-footed B.	4	E
1657	Red-footed B.	4	E
1658	Red-footed B.	2	E
1659	Common N.T.	3	E
1700			

6 — Feeding

— Adult

— Light underwings.

— adult

— adults

— Total of 11 birds following.

— adults; all but two B-F Albatross have left — no longer following ship

— light phase

— 3 adults; 2 immatures

— adults

— adults

— adults

— adults

— end observations; enter Pearl Harbor

SI-MNH-955a
3-4-64

SMITHSONIAN INSTITUTION
DIVISION OF BIRDS
AT SEA SURVEY CHART A

DATE:_____ Total Minutes:_____ Total Miles _____

1. Total Abundance of birds:

No. Sightings	No. Birds	Birds/Sighting	Birds/Mile

II. Abundance of the Shearwater-Petrel-Albatross Group:

No. Sightings				No. Birds				Birds/Sighting				Birds/Mile			
T	WT	P	B	T	WT	P	B	T	WT	P	B	T	WT	P	B

III. Abundance of Tropicbirds:

No. Sightings			No. Birds			Birds/Sighting			Birds/Mile		
T	RT	WT	T	RT	WT	T	RT	WT	T	RT	WT

IV. Abundance of Terns:

No. Sightings	No. Birds	Birds/Sighting	Birds/Mile

V. Abundance of Shorebirds:

No. Sightings	No. Birds	Birds/Sighting	Birds/Mile

VI. Abundance of Boobys:

No. Sightings				No. Birds				Birds/Sighting				Birds/Mile			
T	BF	RF	B	T	BF	RF	B	T	BF	RF	B	T	BF	RF	B

VII. Abundance of Frigatebirds:

No. Sightings	No. Birds	Birds/Sighting	Birds/Mile

VIII. Abundance of Flocks:

Total No. Flocks	Total No. Birds	Total No. F/Mi.	No. Feeding Flocks	No. Feeding Birds	No. Feeding F/MI.

DATE 26 FEB 1966

Time at sunrise = 0654 Position at sunrise = PEARL HARBOR

Time at sunset = 1839 Position at sunset = 20.38N 159-00W

Miles traveled from 0000 hours to sunrise = NA

Miles traveled ~~from sunrise~~ since underway to sunset = 77 MILES

Miles traveled from sunset to 2400 hours = 55 MILES

	TIME OF FIX	TYPE OF FIX	LONGITUDE	LATITUDE
1.				
2.				
3.	1200 W	VISUAL	157.59 2W	21-16.6N
4.	1600 W	DR	158-36W	20-51.5N
5.	1900 W	CORAN	159-02W	20-30N
6.	2400 W	DR	159-50W	20-06N

DATE 27 FEB 1966

Time at sunrise = 0705 Position at sunrise = 19-20N 160-49W

Time at sunset = 1856 Position at sunset = 18-21N 162-29.5W

Miles traveled from 0000 hours to sunrise = 67 MILES

Miles traveled from sunrise to sunset = 116 MILES

Miles traveled from sunset to 2400 hours = 50 MILES

	TIME OF FIX	TYPE OF FIX	LONGITUDE	LATITUDE
1.	0400	DR	160-28W	19 42N
2.	0635	CORAN / CELESTIAL	160-43W	19-29N
3.	1254	CELESTIAL	161-37W	18-56N
4.	~~2000~~ 1600	DR	162-03W	18-39N
5.	2000	DR	162-38W	18-16N
6.	2400	DR	163-13W	17-56N

DATE 28 FEB 1966

Time at sunrise = 0716 Position at sunrise = ~~17-11N~~ 17-11N 164-09W

Time at sunset = 1910 Position at sunset = 16-00N 165-44W

Miles traveled from 0000 hours to sunrise = 66 miles

Miles traveled from sunrise to sunset = 112 miles

Miles traveled from sunset to 2400 hours = 72 miles

	TIME OF FIX	TYPE OF FIX	LONGITUDE	LATITUDE
1.	0400 W	DR	163-48 W	17-3N
2.	0635 W	LORAN/CELESTIAL	164-03 W	17-15.5 N
3.	1128 W	LORAN/CELESTIAL	164-05 W	16-48 N
4.	15-42 W	LORAN/CELESTIAL	165-15 W	16-24N
5.	18-42 X	LORAN/CELESTIAL	165-55 W	16-02-4N
6.	2400 X	DR	166-46 W	15-37 W

DATE 1 MAR 1966

Time at sunrise = 0628 Position at sunrise = 15-04N 167-46W

Time at sunset = 1825 Position at sunset = 14-13N 169-04W

Miles traveled from 0000 hours to sunrise = 67

Miles traveled from sunrise to sunset = 91

Miles traveled from sunset to 2400 hours = 52

	TIME OF FIX	TYPE OF FIX	LONGITUDE	LATITUDE
1.	0400 X	DR	167-24W	15-17 N
2.	0552 X	CELESTIAL	167-41 W	15-0 N
3.	1126 X	LORAN / CELESTIAL	168-06 N	14-58 N
4.	1600 X	DR	165-45.5 W	14-30N
5.	1902 X	LORAN/CELESTIAL	167-12 W	14-06N
6.	2400 X	DR	169-42 W	13-36N

DATE 2 MAR 1966

Time at sunrise = 0630 Position at sunrise = 12-58N 170-19W

Time at sunset = 1836 Position at sunset = 12-15N 171-26W

Miles traveled from 0000 hours to sunrise = 52

Miles traveled from sunrise to sunset = 93

Miles traveled from sunset to 2400 hours = 54

	TIME OF FIX	TYPE OF FIX	LONGITUDE	LATITUDE
1.	0400 X	DR	170-05W	13-19N
2.	0626 X	LORAN/CELESTIAL	170-18W	13-00N
3.	1234 X	CELESTIAL	170-54W	12-30N
4.	1600 X	DR	171-07W	12-16N
5.	1851 X	CELESTIAL	171-28W	12-16.5N
6.	2400 X	DR	171-40W	12-53N

DATE 3 MAR 1966

Time at sunrise = 0638 Position at sunrise = 13-28N 171-15W

Time at sunset = 1829 Position at sunset = 14-37N 170-02W

Miles traveled from 0000 hours to sunrise = 43

Miles traveled from sunrise to sunset = 99

Miles traveled from sunset to 2400 hours = 48

	TIME OF FIX	TYPE OF FIX	LONGITUDE	LATITUDE
1.	0400 X	DR		
2.	0605 X	CELESTIAL	171-17W	13-25N
3.	1236 X	CELESTIAL	170-41W	14-03N
4.	1500 X	CELESTIAL	170-28W	14-15N
5.	1902 X	CELESTIAL	169-59W	14-40N
6.	2400 X	DR	169-52W	15-06N

DATE 4 MAR 1966

Time at sunrise = 0631 Position at sunrise = 15-16N 170-20W

Time at sunset = 1837 Position at sunset = 13-45N 171-58W

Miles traveled from 0000 hours to sunrise = 75

Miles traveled from sunrise to sunset = 132

Miles traveled from sunset to 2400 hours = 53

	TIME OF FIX	TYPE OF FIX	LONGITUDE	LATITUDE
1.	0400X	DR	169-57W	15-34N
2.	0605X	CELESTIAL	170-15.5W	15-30N
3.	1236X	CELESTIAL	171-05.5W	14-34N
4.	1455X	CELESTIAL	171-26W	14-16N
5.	1907X	CELESTIAL	172-01W	13-43W
6.	2400X	DR	172-38W	13-25W

DATE 5 MAR 1966

Time at sunrise = 0646 Position at sunrise = 14-12N 172-51W

Time at sunset = 1836 Position at sunset = 15-12N 171-53W

Miles traveled from 0000 hours to sunrise = 66

Miles traveled from sunrise to sunset = 107

Miles traveled from sunset to 2400 hours = 45

	TIME OF FIX	TYPE OF FIX	LONGITUDE	LATITUDE
1.	0400X	DR	173-04W	13-50N
2.	0800X	LORAN	172-44W	14-20N
3.	1100X	LORAN	172-23W	14-39N
4.	1400X	DR	172-03W	14-57N
5.	1852	CELESTIAL	171-51W	15-14N
6.	2400X	DR	171-18W	15-42N

DATE 6 MAR 1966

Time at sunrise = 0637 Position at sunrise = 16-22N 170-35W

Time at sunset = 1835 Position at sunset = 16-13N 171-44W

Miles traveled from 0000 hours to sunrise = 63

Miles traveled from sunrise to sunset = 91

Miles traveled from sunset to 2400 hours = 49

	TIME OF FIX	TYPE OF FIX	LONGITUDE	LATITUDE
1.	0400 X	DR	170-51W	16-04N
2.	0548 X	CELESTIAL	170-53W	16-18N
3.	1236 X	CELESTIAL	171-19W	16-41N
4.	1400 X	DR	171-29W	16-33N
5.	1900X	CELESTIAL	171-47W	16-11N
6.	2400X	DR	172-22W	1541

DATE 7 MAR 1966

Time at sunrise = 0646 Position at sunrise = 15-02N 173-08W

Time at sunset = 1844 Position at sunset = 13-32N 173-37W

Miles traveled from 0000 hours to sunrise = 61

Miles traveled from sunrise to sunset = 103

Miles traveled from sunset to 2400 hours = 45

	TIME OF FIX	TYPE OF FIX	LONGITUDE	LATITUDE
1.	0400 X	DR	172-50W	15-15N
2.	0610X	CELESTIAL	173-06W	15-05N
3.	1246X	CELESTIAL	173-41W	14-26N
4.	1512X	CELESTIAL	173-39W	14-05N
5.	1917X	CELESTIAL	173-36W	13-29N
6.	2400X	DR	173-33W	12-47N

DATE 8 MAR 1966

Time at sunrise = 0646 Position at sunrise = 11-55N 173-36W

Time at sunset = 1842 Position at sunset = 10-10N 173-13W

Miles traveled from 0000 hours to sunrise = 51

Miles traveled from sunrise to sunset = 121

Miles traveled from sunset to 2400 hours = 56

	TIME OF FIX	TYPE OF FIX	LONGITUDE	LATITUDE
1.	0400 X	DR	173-29W	12-11N
2.	0615 X	CELESTIAL	173-37W	12-00N
3.	1244X	CELESTIAL	173-22W	11-05N
4.	1915 X	CELESTIAL	173-12W	10-05N
5.	1600 X	~~CELESTIAL~~ DR	173 12W	10-30N
6.	2400X	DR	172-57W	09-47N

DATE 9 MAR 1966

Time at sunrise = 0641 Position at sunrise = 08-14N 172-46W

Time at sunset = 1843 Position at sunset = 06-15N 172-36W

Miles traveled from 0000 hours to sunrise = 65

Miles traveled from sunrise to sunset = 120

Miles traveled from sunset to 2400 hours = 55

	TIME OF FIX	TYPE OF FIX	LONGITUDE	LATITUDE
1.	0400 X	DR	172-46W	08-37N
2.	0630X	LORAN/CELESTIAL	172-46W	08-15N
3.	1239 X	CELESTIAL	172-40W	07-15N
4.	1600 X	DR	172-36W	06-40N
5.	1905 X	CELESTIAL	172-35W	06-12N
6.	2400 X	DR	172-31W	05-20N

DATE 10 MAR 1966

Time at sunrise = 0639 Position at sunrise = 04-28N 172-26W

Time at sunset = 1842 Position at sunset = ~~53~~ 02-48N 172-16W

Miles traveled from 0000 hours to sunrise = 53

Miles traveled from sunrise to sunset = 101

Miles traveled from sunset to 2400 hours = 57

	TIME OF FIX	TYPE OF FIX	LONGITUDE	LATITUDE
1.	0400 X	DR	172-28W	04-38N
2.	0605 X	CELESTIAL	172-25W	04-22N
3.	1200 X	DR	172-20W	03 20N
4.	1900 X	CELESTIAL	172-16W	02-45N
5.	1400 X	DR	172-18W	03-05N
6.	2400 X	DR	172-11W	01-51N

DATE 11 MAR 1966

Time at sunrise = 0636 Position at sunrise = 00-51N 172-20W

Time at sunset = ~~1846~~ 1841 Position at sunset = 01-07S 172-16W

Miles traveled from 0000 hours to sunrise = 60

Miles traveled from sunrise to sunset = 118

Miles traveled from sunset to 2400 hours = 46

	TIME OF FIX	TYPE OF FIX	LONGITUDE	LATITUDE
1.	0400X	DR	172-08W	01-08N
2.	0605 X	CELESTIAL	172-15W	00-54N
3.	1241 X	CELESTIAL	172-07W	00-08S
4.	1400 X	DR	172-06W	00-22S
5.	1911 X	CELESTIAL	172-15W	01-11S
6.	2400X	DR	172-06W	01-50S

DATE 12 MARCH 1966

Time at sunrise = 0631 Position at sunrise = 02-34S 172-01W

Time at sunset = 1840 Position at sunset = 04-33S 171-53W

Miles traveled from 0000 hours to sunrise = 52

Miles traveled from sunrise to sunset = 120

Miles traveled from sunset to 2400 hours = 53

	TIME OF FIX	TYPE OF FIX	LONGITUDE	LATITUDE
1.	0400 X	DR	171-58W	02-26S
2.	0552 X	CELESTIAL	172-13W	02 36S
3.	0800 X	DR	171-54W	02-45S
4.	1239 X	CELESTIAL	171-46W	03-30S
5.	1909 X	CELESTIAL	171-52W	04-36S
6.	2400 X	~~CELESTIAL~~ DR	171-37W	05-25S

DATE 13 MARCH 1966

Time at sunrise = 0630 Position at sunrise = 06-30S 171-18W

Time at sunset = 1838 Position at sunset = 08-34S 170-37W

Miles traveled from 0000 hours to sunrise = 43

Miles traveled from sunrise to sunset = 130

Miles traveled from sunset to 2400 hours = 57

	TIME OF FIX	TYPE OF FIX	LONGITUDE	LATITUDE
1.	0400 X	DR	171-25W	0605 S
2.	0800 X	DR	171-13W	06-45S
3.	1234 ~~0930~~ X	CELESTIAL	171-02W	07-30S
4.	1600 X	DR	170-48W	08-05S
5.	1900 X	CELESTIAL	170-37W	08-37S
6.	2400 X	DR	170-21W	09-27S

DATE 14 MARCH 1966

Time at sunrise = 0624 1830 Position at sunrise = 10-34 S 170-19 W

Time at sunset = [redacted] Position at sunset = 11-30 S 170-18 W

Miles traveled from 0000 hours to sunrise = 67

Miles traveled from sunrise to sunset = 114

Miles traveled from sunset to 2400 hours = 57

	TIME OF FIX	TYPE OF FIX	LONGITUDE	LATITUDE
1.	0400 X	DR [redacted]	170-18 W	10 07 S
2.	0554 X	CELESTIAL	170-19 W	10-27 S
3.	1200 X	CELESTIAL	170°-17 W	11-28 S
4.	1400 X	DR	170°-17 W	11-47 S
5.	2000 X	CELESTIAL	170-18 W	12 43 S
6.	2400 X	DR	170-18W	13 25 S

DATE 15 March 1966

Time at sunrise = 0000 Position at sunrise = 06 25 PAGO PAGO

Time at sunset = Position at sunset =

Miles traveled from 0000 hours to sunrise = 56 MILES

Miles traveled from sunset to 2400 hours = —

	TIME OF FIX	TYPE OF FIX	LONGITUDE	LATITUDE
1.	0400 X	VISUAL	170 25 W	13 55 S
2.	0700 X	VISUAL	170 28 W	14-17 S
3.	— PAGO PAGO			
4.	—			
5.	—			
6.	—			

DATE 20 MARCH 1966

Time at sunrise = 0627 Position at sunrise = Pago Pago

Time at sunset = 1829 Position at sunset = 14-00 S 169-46 W

Miles traveled from 0000 hours to sunrise = N.A

Miles traveled from ~~sunrise~~ Pago Pago to sunset = 85

Miles traveled from sunset to 2400 hours = 44

	TIME OF FIX	TYPE OF FIX	LONGITUDE	LATITUDE
1.	0850	Pago Pago	170 40	14 18
2.	1000	DR	170°22'	14°16'
3.	~~1200~~		170°05'	14°14'
4.	1430	ofu (manua group)	169 43	14 11
	1710 Depart Ofu			
5.	2000 X	VISUAL	169-49 W	13-44 S
6.	2400 X	DR	169-58 W	13-03 S

Depart 0850

DATE 21 MARCH 1966

Time at sunrise = 0624 Position at sunrise = 12-06 S 170 11 W

Time at sunset = 1832 Position at sunset = 10-11 S 170-31 W

Miles traveled from 0000 hours to sunrise = 58

Miles traveled from sunrise to sunset = 117

Miles traveled from sunset to 2400 hours = 58

	TIME OF FIX	TYPE OF FIX	LONGITUDE	LATITUDE
1.	0400 X ~~DR~~	DR	170 06 W	12-21 S
2.	0555	CELESTIAL	172 -12W	12-10 S
3.	1228 X	CELESTIAL	170 18 W	11-07 S
4.	1400 X	DR	170-20 W	10-53 S
5.	1700	CELESTIAL	170 32 W	10-02 S
6.	2400	DR	170-41 W	09-14 S

DATE 22 MARCH 1966

Time at sunrise = 0627 Position at sunrise = 08 00 S 170 53 W

Time at sunset = 1834 Position at sunset = 06 25 S 171 09 W

Miles traveled from 0000 hours to sunrise = 69

Miles traveled from sunrise to sunset = 101

Miles traveled from sunset to 2400 hours = 57

	TIME OF FIX	TYPE OF FIX	LONGITUDE	LATITUDE
1.	0400 X	DR	170 48 W	08-31 S
2.	0600 X	DR	170-56 W	07-44 S
3.	1231 X	CELESTIAL	171-01 W	07-16 S
4.	1400 X	DR	171-05 W	07-00 S
5.	1913 X	CORR/CELESTIAL	171-10 W	06-04 S
6.	2400 X	DR	171-18 W	05-28 S

DATE 23 MARCH 1966

Time at sunrise = 0630 Position at sunrise = 04-21 S 171-30 W

Time at sunset = 1838 Position at sunset = 03-16 S 171-54 W

Miles traveled from 0000 hours to sunrise = 68

Miles traveled from sunrise to sunset = 40

Miles traveled from sunset to 2400 hours = 59

	TIME OF FIX	TYPE OF FIX	LONGITUDE	LATITUDE
1.	0400 X	DR	171-26 W	04-47 S
2.	0600 X	DR	171-32 W	04-06 S
3.	1235 X	CELESTIAL	171-40 W	03-20 S
4.	1400 X	DR	171-43 W	03-05 S
5.	2000 X	DR/VISUAL	172-05 W	02-32 S
6.	2400 X	DR	172-33 W	02-00 S

DATE 24 MARCH 1966

Time at sunrise = 0637 Position at sunrise = 01-17S 173-34 W

Time at sunset = 1849 Position at sunset = 0006 174-50 W

Miles traveled from 0000 hours to sunrise = 75

Miles traveled from sunrise to sunset = 106

Miles traveled from sunset to 2400 hours = 39

	TIME OF FIX	TYPE OF FIX	LONGITUDE	LATITUDE
1.	0400	DR	172-56 W	01-33S
2.	0603	CELESTIAL	173-30 W	01-21 S
3.	1243	CELESTIAL	174-07W	00-37S
4.	1453	CELESTIAL	174-18W	00-26S
5.	1915	CELESTIAL	174-53W	00-05S
6.	2400	DR	175-25W	00-05N

DATE 25 MARCH 1966

Time at sunrise = 0649 Position at sunrise = BAKER ISLAND

Time at sunset = 1852 Position at sunset = BAKER ISLAND

Miles traveled from 0000 hours to sunrise = 65

Miles traveled from sunrise to sunset = BAKER ISLAND

Miles traveled from sunset to 2400 hours = BAKER ISLAND

	TIME OF FIX	TYPE OF FIX	LONGITUDE	LATITUDE
1.	0400	DR	175-55W	00-10N
2.	0613	CELESTIAL	176-21W	00-14N
3.		BAKER ISLAND		
4.				
5.				
6.				

DATE 26 MARCH 1966

Time at sunrise = 0649 Position at sunrise = HOWLAND ISLAND

Time at sunset = 1852 Position at sunset = 00-12N 175-38W

Miles traveled from 0000 hours to sunrise = 38 MILES

Miles traveled from sunrise to sunset = 62

Miles traveled from sunset to 2400 hours = 51

	TIME OF FIX	TYPE OF FIX	LONGITUDE	LATITUDE
1.	0400	BAKER	ISLAND	
2.	0500	HOWLAND	ISLAND	
3.	1200	HOWLAND	ISLAND 176-39	00-45
4.	1400	DR	176-16W	00-38N
5.	2000	DR	175-28W	00-08N
6.	0000	DR	174-50W	00-08S

DATE 27 MARCH 1966

Time at sunrise = 0645 Position at sunrise = 00-42S 174-20W

Time at sunset = 1847 Position at sunset = 01-46S 173-25W

Miles traveled from 0000 hours to sunrise = 44

Miles traveled from sunset to 2400 hours = 45

Miles traveled from sunset to 2400 hours = 61

	TIME OF FIX	TYPE OF FIX	LONGITUDE	LATITUDE
1.	0400	DR	174-33W	00-28S
2.	0800	DR	174-12W	00-32S
3.	1243	CELESTIAL	174-02W	01-12S
4.	1400	DR	173-53W	01-23S
5.	1900	CELESTIAL	173-26W	01-48S
6.	~~0000~~ 2301	DR	172-50W	02-10S

DATE 28 MARCH 1966

Time at sunrise = 0631 Position at sunrise = 02-37 S 172-05 W

Time at sunset = 1835 Position at sunset = 01-18 S 171-59 W

Miles traveled from 0000 hours to sunrise = 56

Miles traveled from sunrise to sunset = 90

Miles traveled from sunset to 2400 hours = 56

	TIME OF FIX	TYPE OF FIX	LONGITUDE	LATITUDE
1.	0400	DR	172-23 W	02 28 S
2.	0800	DR	171-55 W	02 45 S
3.	1200	DR/ESTIMATE	171-45 W	02-22 S
4.	1400	DR	171-50 W	02-00 S
5.	1900	CELESTIAL	171-58 W	01-15 S
6.	2400	DR	171-58 W	00-26 S

DATE 29 MARCH 1966

Time at sunrise = 0629 Position at sunrise = 0°-33'N 171-52 W

Time at sunset = 1838 Position at sunset = 02-33 N 172-03 W

Miles traveled from 0000 hours to sunrise = 60

Miles traveled from sunrise to sunset = 120

Miles traveled from sunset to 2400 hours = 56

	TIME OF FIX	TYPE OF FIX	LONGITUDE	LATITUDE
1.	0400	DR	171-58 W	00-15 N
2.	0800	LORAN	171-53 W	00-50 N
3.	1200	DR	171-53 W	01-27 N
4.	1400	DR	171-55 W	01-47 N
5.	2000	LORAN	172-00 W	02-48 N
6.	2400	DR	171-53 W	03-27 N

DATE 30 MARCH 1966

Time at sunrise = 0627 Position at sunrise = 04-36N 171-42W

Time at sunset = 1837 Position at sunset = 06-08N 171-33W

Miles traveled from 0000 hours to sunrise = 68

Miles traveled from sunrise to sunset = 93

Miles traveled from sunset to 2400 hours = 59

	TIME OF FIX	TYPE OF FIX	LONGITUDE	LATITUDE
1.	0400	DR	171-42W	04-10N
2.	0800	DR	171-43W	04-48N
3.	1237	CELESTIAL	171-45W	05-18N
4.	1600	DR	171-44W	05-33N
5.	1859	CELESTIAL	171-54W	06-12N
6.	2400	DR	171-46W	07-05N

DATE 31 MARCH 1966

Time at sunrise = 0625 Position at sunrise = 07-51N 171-44W

Time at sunset = 1834 Position at sunset = 09-20N 171-33W

Miles traveled from 0000 hours to sunrise = 45

Miles traveled from sunrise to sunset = 108

Miles traveled from sunset to 2400 hours = 58

	TIME OF FIX	TYPE OF FIX	LONGITUDE	LATITUDE
1.	0400	DR	171-43W	07-25N
2.	0601	CELESTIAL	171-45W	07-46N
3.	1230	CELESTIAL	171-25W	08-31N
4.	1400	DR	171-24W	08-48N
5.	1901	CELESTIAL	171-34W	09-25N
6.	2400	DR	171-22W	10-27N

Non-grid Pelagic SIC XIA

		Total #	Direct Migrant	Lat.	Long.	Hours of Obs.	Total Miles	No. of Flocks	Total in Flocks
26	Feb. '66 AM	14	4	21-16 N	58-00 W	0-34		0	0
	PM	295	201	20-57	58-25	6-39		0	0
27	AM	74	51	19-16 N	61-05 W	4-55		0	0
	PM	44	16	18-43	61-56	6-56		0	0
28	AM	14	5	17-01 N	64-29 W	4-44		0	0
	PM	25	14	16-27	65-09	7-10		0	0
8	March '66	30	22	11-37 N	73-32 W	5-14		0	0
	AM	8	1	10-48	73-17	6-42		0	0
	PM								
9	AM	14	0	08-51 N	72-42 W	5-19		0	0
	PM	59	6	06-51	72-38	6-43		0	0
10	AM	24	8	03-51 N	72-23 W	5-21		0	0
	PM	43	40	03-01	72-18	6-42		1	5
11	AM	12	9	00-26 N	72-42 W	5-21		0	0
	PM	68	58	00-30	72-08	6-41		0	0
12	AM	47	41	02-56	71-52	5-29		0	0
	PM	50	29	03-50	71-49	6-40		0	0
13	AM	5	0	06-56	71-25	5-30		0	0
	PM	5	1	07-56	70-52	6-38		0	0
14	AM	20	11	10-30 S	70-19 W	5-36		0	0
	PM	30	20	11-47	70-17	6-34		0	0
20	AM	149	99	14-18 S	70-30 W	4-00		0	0
	PM	555	539	14-10	69-46	6-29		0	0
21	AM	17	3	11-40	70-14	5-36		1	6
	PM	15	3	10-44	70-23	6-29		0	0

SITE	#		Total Direct Migrant	LAT.	LONG.	Hours of Obs.	Miles	Total No. of FLOCKS	Total FLOCKS
22 March 66	AM	60	25	S 07-47	W 71-00	5-33		0	0
	PM	159	77	06-52	71-06	6-34		0	0
23	AM	150	141	S 04-56	W 71-34	5-30		0	0
	PM	284	265	02-59	71-44	6-38		0	0
24.	AM	5	0	S 01-00	W 73-43	5-23		0	0
	PM	22	6	0020	74-24	6-49		0	0
25	AM			N 00-12	W 76-29	Jakes Jo. Hobbs			
	PM			00-12	76-29				
26	AM	14	0	N 00-48	W 76-38	0-10		1	8
	PM	201	131	00-33	76-08	6-52		1	5
27	AM	60	43	00-56	74-10	5-15		0	0
	PM	115	96	01-28	73-46	6-43		0	0
28	AM	301	276	S 02-40	W 71-53	5-29		0	0
	PM	104	82	02-51	71-51	6-35		0	0
29	AM	58	34	N 00-59	W 71-53	5-31		1	8
	PM	64	41	01-59	71-56	6-36		1	10
30	AM	19	0	N 04-54	W 71-43	5-34		0	0
	PM	90	60	05-40	71-46	6-35		1	5
31	AM	17	2	N 08-10	W 71-36	5-35		0	0
	PM	10	0	08-56	71-30	6-34		0	0

DATE 1 April 1966

Time at sunrise = 0621 Position at sunrise = 11-03N 171-19W

Time at sunset = 1839 Position at sunset = 12-34N 171-44W

Miles traveled from 0000 hours to sunrise = 47

Miles traveled from sunrise to sunset = 107 (65 Nonguid; 42 guid)

Miles traveled from sunset to 2400 hours = 59

	TIME OF FIX	TYPE OF FIX	LONGITUDE	LATITUDE
1.	0400	DR	171-22W	10-46N
2.	0600	CELESTIAL	171-20W	10-58N
3.	1227	CELESTIAL	171-27W	11-52N
4.	1400	DR	171-27W	12-05N (Enter grid - change zone)
5.	1900	CELESTIAL	171-47W	12-45N change zone
6.	2000 2400	DR	171-18W	13-21N

DATE 2 April 1966

Time at sunrise = 0616 Position at sunrise = 13-55N 170-41W

Time at sunset = 1832 Position at sunset = 15-29N 170-04W

Miles traveled from 0000 hours to sunrise = 50

Miles traveled from sunset to 2400 hours = 53

Miles traveled from sunrise to sunset = 135

	TIME OF FIX	TYPE OF FIX	LONGITUDE	LATITUDE
1.	0400	DR	170 58W	13-04N
2.	0555	CELESTIAL	170 44W	13-55N
3.	1223	CELESTIAL	170-03W	14-41N
4.	1600	DR	169-32W	15-05N
5.	1904	DR	170-05W	15-30N
6.	2400	DR	170-43W	15-03N

DATE 5 April

Time at sunrise = 0631 Position at sunrise = 14-10N 171-52W

Time at sunset = 1848 Position at sunset = 14-06N 172-45W

Miles traveled from 0000 hours to sunrise = 86

Miles traveled from sunrise to sunset = 114

Miles traveled from sunset to 2400 hours = 56

	TIME OF FIX	TYPE OF FIX	LONGITUDE	LATITUDE
1.	0400	DR	171-14W	14-34N
2.	0555	CORRAN	171-48W	14-13N
3.	1034	CELESTIAL	172-17W	13-38N
4.	1504	CELESTIAL	172-46W	13-33N
5.	1903	CELESTIAL	172-43W	14-08N
6.	2400	DR	172-08W	14-48N

DATE 4 April

Time at sunrise = 0618 Position at sunrise = 15-33N 171-01W

Time at sunset = 1839 Position at sunset = 16-27N 171-49W

Miles traveled from 0000 hours to sunrise = 53

Miles traveled from sunset to 2400 hours = 138

Miles traveled from sunset to 2400 hours = 57

	TIME OF FIX	TYPE OF FIX	LONGITUDE	LATITUDE
1.	0400	DR	171-45W	15-21N
2.	0546	DR	171-49W	15-30N
3.	1226	CELESTIAL	170-54W	16-15N
4.	1400	~~DR~~ CELESTIAL	171-04W	16-27N
5.	1900	CELESTIAL	171-52W	16-24N
6.	2400	DR	172-31W	15-47N

DATE 5 April 1966

Time at sunrise = 0626 Position at sunrise = 15-04N 173-20 W

Time at sunset = 1844 Position at sunset = 16-20N 173-04 W

Miles traveled from 0000 hours to sunrise = 57

Miles traveled from sunrise to sunset = 123

Miles traveled from sunset to 2400 hours = 61

	TIME OF FIX	TYPE OF FIX	LONGITUDE	LATITUDE
1.	0400	DR	173-02W	15-16N
2.	0537	CELESTIAL	173-13W	15-10N
3.	1235	CELESTIAL	173-33W	15-34N
4.	1445	DR	173-16W	15-51N
5.	1900	CELESTIAL	173-02W	16-22N
6.	2400	DR	172-18W	16-53N

DATE _____

Time at sunrise = Position at sunrise =

Time at sunset = Position at sunset =

Miles traveled from 0000 hours to sunrise =

Miles traveled from sunrise to sunset =

Miles traveled from sunset to 2400 hours =

	TIME OF FIX	TYPE OF FIX	LONGITUDE	LATITUDE
1.				
2.				
3.				
4.				
5.				
6.				

DATE 6 April 1966

Time at sunrise = 0617 Position at sunrise = 17-10N 171-22W

Time at sunset = 1832 Position at sunset = 17-52N 169-23W

Miles traveled from 0000 hours to sunrise = 58

Miles traveled from sunrise to sunset = ~~124~~ 121

Miles traveled from sunset to 2400 hours = 54

	TIME OF FIX	TYPE OF FIX	LONGITUDE	LATITUDE
1.	0400	DR	171-35W	17-06N
2.	0800	CELESTIAL	171-04W	17-19N
3.	1225	CELESTIAL	170-23W	17-34N
4.	~~1400~~	DR	170-05W	17-38N
5.	1900	LORAN	169-20W	17-53N
6.	2401	DR	168-27W	18-07N

DATE 7 April 1966

AT 0100 ADVANCED CLOCKS 1 HR TO CONFORM WITH +10(W) TIME ZONE

Time at sunrise = 0658 Position at sunrise = ~~[illegible]~~ 18-24N 167-24W

Time at sunset = 1917 Position at sunset = 17-00N 165-15W

Miles traveled from 0000 hours to sunrise = 62

Miles traveled from sunrise to sunset = 127

Miles traveled from sunset to 2400 hours = 80

	TIME OF FIX	TYPE OF FIX	LONGITUDE	LATITUDE
1.	0400	DR	167-55W	18-15N
2.	0635	LORAN	167-28W	18-23N
3.	1100	LORAN	166-43W	18-35N
4.	1400	DR	166-12W	18-44N
5.	1935	LORAN	165-13W	19-00N
6.	2400	DR	164-25W	19-14N

DATE 8 April 1966

Time at sunrise = 0640 Position at sunrise = 19-32N 163-18W

Time at sunset = 1900 Position at sunset = 20-28N 161-20W

Miles traveled from 0000 hours to sunrise = 67

Miles traveled from sunrise to sunset = 120

Miles traveled from sunset to 2400 hours = 56

	TIME OF FIX	TYPE OF FIX	LONGITUDE	LATITUDE
1.	0400	DR	163-40W	19-26N
2.	0604	CELESTIAL	163-23W	19-31N
3.	1200	LORAN	162-31W	19-53N
4.	1400	DR	162-10W	20-00N
5.	1914	LORAN	161-17W	20-21N
6.	2400	DR	160-24W	20-30N

DATE 9 April 1966

Time at sunrise = 0624 Position at sunrise = 20-25N 159-14

Time at sunset = Position at sunset =

Miles traveled from 0000 hours to sunrise = 67

Miles traveled from sunrise ~~to sunset~~ Pearl = 86

Miles traveled from sunset to 2400 hours =

	TIME OF FIX	TYPE OF FIX	LONGITUDE	LATITUDE
1.	0400	DR	159-40	20-30N
2.	0800	LORAN	159-00W	20-45N
3.				
4.	1700 - Arr Pearl Harbor			
5.				
6.				

160
24
136

2120

SIC 12

Preliminary At-Sea Survey [redacted]

February-March and April 1966

Non-Grid - north of Southern Grid

This report summarizes observations made by Robert DeLong, Paul Woodward, and Richard Maze between Oahu and S.I. Grid No. 1 during periods 26 February to 1 March and 8 through 9 April 1966. Watches, totaling 97.5 hours (40.2 in February-March and 47.3 in April), were held daily from sunrise to sunset. During this time 830 miles were taveled---375 in February-March and 455 in April.

Generally favorable weather prevailed throughout both periods.

During February-March 451 birds of 11 species were seen. A total of 1041 birds of 22 species were redorded in April. Terns comprised 63% of the February-March total while they were only 37% of the April total. Shearwater-Petrels accounted for 52% of the April total and only 26% in February-March. All groups showed an increase during the period.

Migrating Sooty Shearwaters accounted for most of the increase in the numbers between the two periods. Wedge-tailed Shearwaters were seen for the first time in April. Unusual birds included a Long-tailed Jaeger, A Mottled Petrel, two phalaropes (possibly Red Phalaropes), and two possible Pink-footed Shearwaters.

No birds were collected.

Species Accounts

Black-footed Albatross A = 102 B = 14

A larger number of birds were seen in February-March. Most of these birds were seen as we left Oahu, and on the following day. These numbers around Oahu are probably due to birds following ships to and from the island.

Laysan Albatross A = 0 B = 1

Only one bird of this species was recorded north of Johnston Atoll in April. Unlike Black-footed Albatross, it did not follow the ship.

Wedge-tailed Shearwaters A = 0 B = 58

During the February-March survey the birds were not in the area---there was no breeding activity at that time. The presence of Wedge-tails in April was expected as they were starting a new nesting cycle.

Christmas Island Shearwater A = 0 B = 7

Seven birds of this species were noted in April. Their breeding cycle may have influenced the increased number of sightings for April.

Sooty Shearwaters A =0 B = 412

The spring migration of the Sooty Shearwaters was first noted in late March when we were near the equator. By the time we had left the Grid the migration had increased. Birds traveled in singles, pairs, and occasional small, loosely associated groups---up to five birds. All birds recorded were flying in a northwesterly direction. Birds were seen to within a few miles of Oahu. These birds seemed to be flying around the island (Oahu) but not crossing over the mountains as has reported for some Shearwater-Petrels.

Pink-footed Shearwater A = 0 B = 2

Two birds believed to be of this species were seen on 6 April. They were moving in a northerly direction and appeared to be migrating.

Juan Fernandez Petrel A = 0 B = 2

Only two birds of this species were noted, both in April.

Bonin Island Petrel A = 3 B = 0

Three birds were seen north of the Grid on 26 February.

Mottled Petrel A = 0 B = 2

The two birds of this species seen in April probably represent birds outside the normal migration routes.

Pterodroma hypoleuca A = 5 B = 1

Of the five birds of this species seen in February-March three were identified as members of the Bonin Island race. The one seen in April was not identified to race.

Bulwer's Petrel A = 0 B = 4

The four birds that were seen on 7 and 8 April were too far from land to be breeding birds and therefore were considered nonbreeding birds.

Leach's Storm Petrel A = 0 B = 3

Three were seen in April.

Red-tailed Tropicbird A = 0 B = 4

All sightings of this species were taken in April.

White-tailed Tropicbird A = 2 B = 0

One bird was seen on 27 February, the other on 28 February.

Blue-faced Booby A = 3 B = 2

Blue-faced Boobies, present both months, were not sighted near Oahu. At least two were subadults.

Red-footed Booby A = 9 B = 31

Distribution did not have a definite pattern; all birds were immature-subadults.

Brown Booby A = 6 B = 2

Most of the Brown Boobies were seen near Oahu on 26 February and 9 April, but two were sighted on 1 March. These two were probably Sand Island birds.

Frigatebird A = 7 B = 9

There was no appreciable difference in the number of birds seen in the two months.

Sooty Tern A = 280 B = 317

Sooty Terns were the most abundant species recorded. They were seen each day during both periods and were the most common species occurring in the recorded flocks. The greater number seen during April is probably not significantly different from the number seen February-March.

Blue-gray Noddy Tern A = 2 B = 0

Two individuals were sighted on 28 February.

Pomarine Jaeger A = 21 B = 19

Nearly all (92/) of the iddividuals were seen within 100 miles of Oahu.

Long-tailed Jaeger A = 0 B = 1

One individual was identified on 9 April within 100 miles of Oahu.

Phalarope A = 0 B = 3

A phalarope sighted on 7 April was not identified to species. Two others were seen on 8 April which were possibly Red Phalaropes.

TABLE 1. Summary of Diurnal observations.

Honolulu to Grid

Date	No. Miles	No. Hours	Sightings	No. Birds	No. Species	No. Flocks
26 February	77	7.2	51	270	5	7
27	116	11.9	42	112	9	2
28	112	11.9	22	39	10	1
01 March	70	9.2	14	30	5	2
Total	375	40.2	129	451	11	12

Grid to Honolulu

Date	No. Miles	No. Hours	Sightings	No. Birds	No. Species	No. Flocks
06 April	121	12.1	134	298	12	4
07	127	12.3	99	182	11	4
08	118	12.5	142	164	17	6
09	89	10.4	115	297	12	5
Total	455	47.3	490	1041	22	19
Grandtotal	830	87.3	619	1494	25	31

TABLE 2. Diurnal Density of Species Groups. (Oahu to Grid).

Species Group	No. Birds	Birds/Linear mile	Birds/Mile^2
Shearwater-Petrel	117	0.31	0.156
Terns	282	0.75	0.252
Tropicbirds	2	0.01	0.002
Frigatebirds	7	0.02	0.004
Boobies	18	0.05	0.024
Storm Petrels	1	0.005	0.005
Miscellaneous	24	0.060	0.032
Total	451	1.203	0.473

TABLE 2. Diurnal Density of Species Groups,(Cont.).

Grid to Oahu

Species Group	No. Birds	Birds/Linear Mi.	Birds/Mi.^{2}
Shearwater-Petrel	542	1.19	0.59
Tern	405	0.89	0.22
Frigatebirds	9	0.02	0.004
Tropicbirds	4	0.01	0.004
Boobies	38	0.08	0.04
Storm Petrels	3	0.010	0.007
Shorebirds	4	0.01	0.01
Miscellaneous	36	0.08	0.04
Total	1041	2.29	0.915

TABLE 3. Diurnal abundance of species.

Between Oahu and SI Grid No. 1, (February-March) 1966.

Species	No. Birds	Birds/Linear Mile
Black-footed Albatross	102	0.275
Bonin Island Petrel	3	0.008
Pterodroma hypoleuca	2	0.005
Pterodroma sp.	5	0.013
White-tailed Tropicbird	2	0.005
Blue-faced Booby	3	0.008
Red-footed Booby	9	0.024
Brown Booby	6	0.016
Great Frigatebird	5	0.013
Frigate sp	2	0.005
Sooty Tern	280	0.746
Blue-gray Noddy	2	0.005
Pomarine Jaeger	21	0.059
Jaeger sp.	3	0.008
Storm Petrel sp.	1	0.003
Shearwater-Petrel	5	0.013
Total	451	1.206

TABLE 3. Diurnal abundance of species (Cont.).

Between SI Grid No. 1 and Oahu April 1966.

Species	No. Birds	Birds/linear Mile
Black-footed Albatross	14	0.031
Laysay Albatross	1	0.002
Wedgetail Shearwater	58	0.128
Christmas Island Shearwater	7	0.015
Sooty Shearwater	412	0.905
Pink-footed Shearwater	2	0.004
Juan Fernandez Petrel	2	0.004
Mottled Petrel	2	0.004
Pterodroma hypoleuca	1	0.002
Pterodroma sp.	5	0.011
Bulwers Petrel	4	0.008
Shearwater-Petrel	34	0.075
Leaches Storm Petrel	3	0.006
Red-tailed Tropicbird	4	0.008
Blue-faced Booby	2	0.004
Red-footed Booby	31	0.068
Brown Booby	2	0.004
Great Frigatebird	2	0.004
Frigate sp	7	0.015
Sooty Tern	317	0.696
Grey-backed Tern	8	0.017
Hawaiian Noddy Tern	1	0.002
Common Noddy Tern	29	0.064
Fairy Tern	22	0.049
Pomarine Jaeger	19	0.042
Long-tailed Jaeger	1	0.002
Jaeger sp	1	0.002
Phalarope sp	1	0.002
Shorebird sp	3	0.006
Bird sp	15	0.033
Tern sp.	28	0.062
Booby sp.	3	0.006
Total	1041	2.281

PHS

SMITHSONIAN GRID Survey No. 27

April 1966

Observations were made in Smithsonian Grid No. 1 from 1 - 5 April, 1966. The Smithsonian Party consisted of Robert DeLong, Paul Woodward, and Richard Maze. Normal grid procedure was followed with the exception that the eastern-most leg was not included. Continuous observations were made throughout the grid. During diurnal periods 552 miles were traveled in 53.5 hours; during nocturnal periods 526 miles were traveled in 48.7 hours.

Moderate to heavy seas and accompanying strong northeast winds made observing difficult. Due to these conditions many birds were undoubtably missed, especially shearwaters and petrels.

During diurnal observations 1359 birds of fourteen species were recorded. This total represents a 67% increase over last month. Sooty Terns numbering 1231 accounted for 91% of the total. Procellarids accounted for 7.4% of the total. Twenty-seven flocks were seen in diurnal periods. They accounted for 1182 birds (or 87%) of the total. The flocks consisted almost entirely of Sooty Terns. Forty-eight birds---43 of them Sooty Terns---were recorded during night watches.

The following changes were noted from March: Shearwaters-Petrels increased 188%; Terns increased 65%; Tropicbirds did not change; Boobies decreased 83%; Frigatebirds decreased 100%; Storm Petrels increased 100%. In addition six species recorded last month were not seen this month. The lack of Bulwer's Petrels and frigatebirds, and the great reduction in the number of Red-footed Boobies is noteworthy. These species may be concentrated around Johnston Atoll and not ranging far out to sea. Five new species were seen this month including

migrant Sooty Shearwaters and Mottled Petrels. The first Wedge-tailed Shearwaters of the year were also seen.

Three orange streamered birds, all Sooty Terns, were seen in the grid (Table 5). No birds were collected. A blood sample was taken from a Brown Booby that landed on the ship.

SPECIES ACCOUNTS

Wedge-tailed Shearwater

Fourteen Wedge-tailed Shearwaters were seen in the grid this month. All were ligh phase birds. This species was absent from the grid last month, and its presence now represents the return of the species to the breeding grounds.

Sooty Shearwaters

Twenty-eight birds believed to be this species were seen this month. None were seen last month. Many of the birds seen had the characterstic white underwings, but one was recorded as having dark underwings. This bird may have been one of that proportion of Sooty Shearwaters that have dark underwings. It is, however, possible that it was a Slender-billed Shearwater.

The birds were moving in a northwesterly direction. If their direction of flight is indicative of origin, it is likely that these represent South American birds. Since the frequency of occurance increased during each day spent in the grid, these Sooty Shearwaters probably represented the first spring migrants.

Mottled Petrel

One bird was identified as this species. The grid may represent a fringe area for the migration of this species, as greater numbers were seen southwest of the grid area. All of the Mottled Petrels observed both in and outside the grid were moving in a northerly direction.

Pterodroma sp.

Strong winds and rough seas made specific identification of this genus difficult. Birds definitely identified were 10 P. externa (two identified as Juan Fernandez Petrel) and 3 P. hypoleuca(one identified as a Black-winged Petrel). Another 22 birds were identified only to the Genus Pterodroma; these probably belong to P. hypoleuca and P. externa groups. Few, if any, of the unidentified Pterodroma are believed to be Mottled Petrels, because in high winds the flight pattern of this bird is usually distinctive.

The group showed an increase of 175% over the last month. This build-up will continue until the high densities of mid-summer are reached.

Leach's Storm Petrel

Four birds, probably of this species, were seen this month compared with two seen last month.

Red-tailed Tropicbird

Three birds of this species were recorded. This is the same number as was seen in the grid last month.

Blue-faced Booby

Four Blue-faced Boobies,an increase of 100% from last month, were seen.

Brown Booby

On the evening of the 5th while over 200 miles from Johnston Island an adult female landed on the ship. It was chased off by

members of the crew who attempted to catch it. It then circled, again landed, and was captured. The bird was bled, color-marked with black paint, and released.

Red-footed Booby

There was a notable decrease in this species over the last month. Last month 31 birds were recorded and this month there was only one.

Sooty Tern

This species showed a 76% increase over last month. Large concentrations were found throughout the grid in comparison to last month when there was only one large concentration in the northwest corner of the grid. The largest number,396, were seen throughout the day on April 3rd over 200 miles southeast of Johnston. Birds were recorded every night in the grid.

Three orange streamered birds were seen on 4 April due west of Johnston Atoll.

Over 90% of the birds were seen in flocks. Of the twenty-seven flocks twenty were feeding flocks.

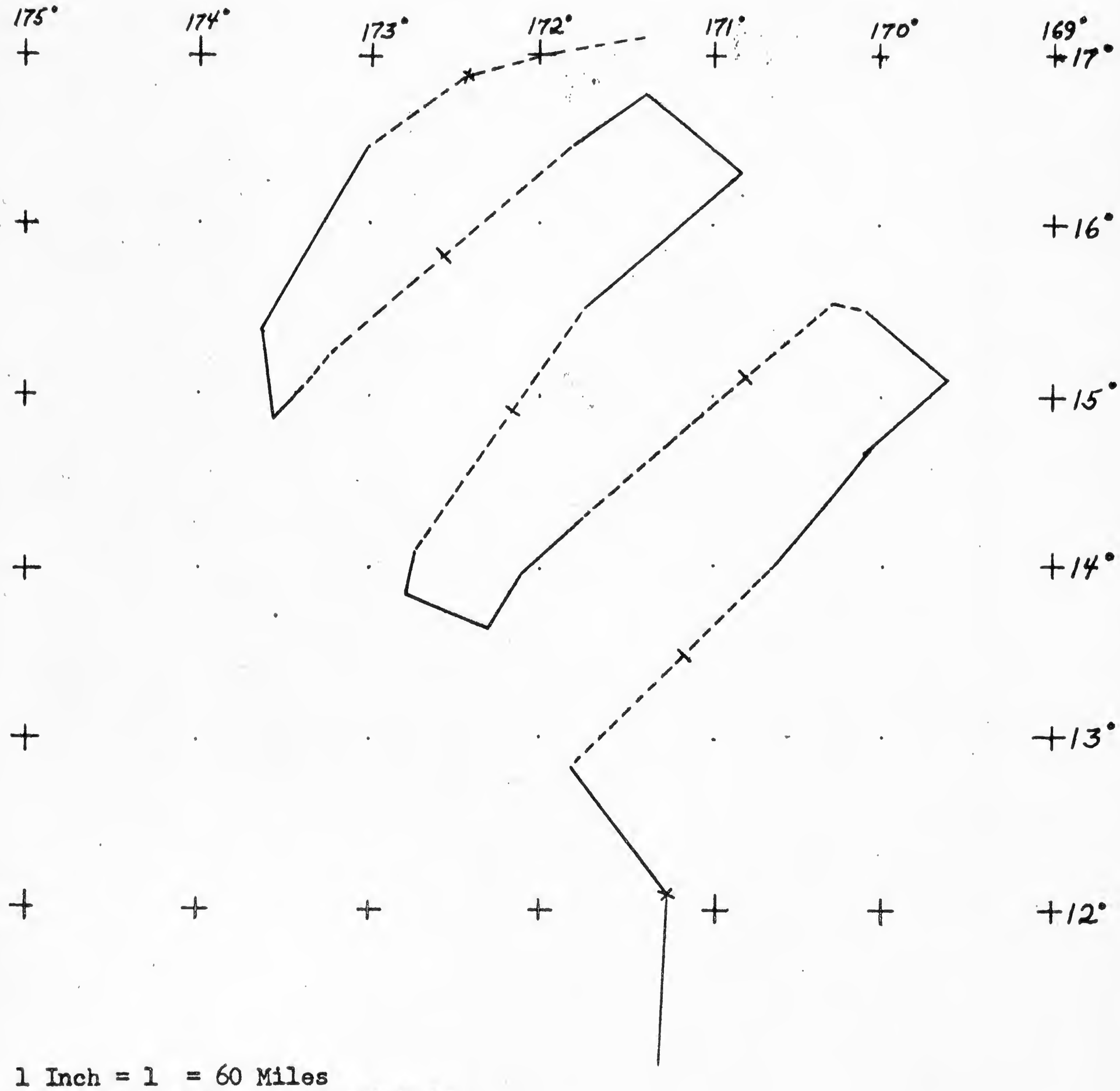
Fairy Tern

This species decreased 80% from last month.

Phalarope ?

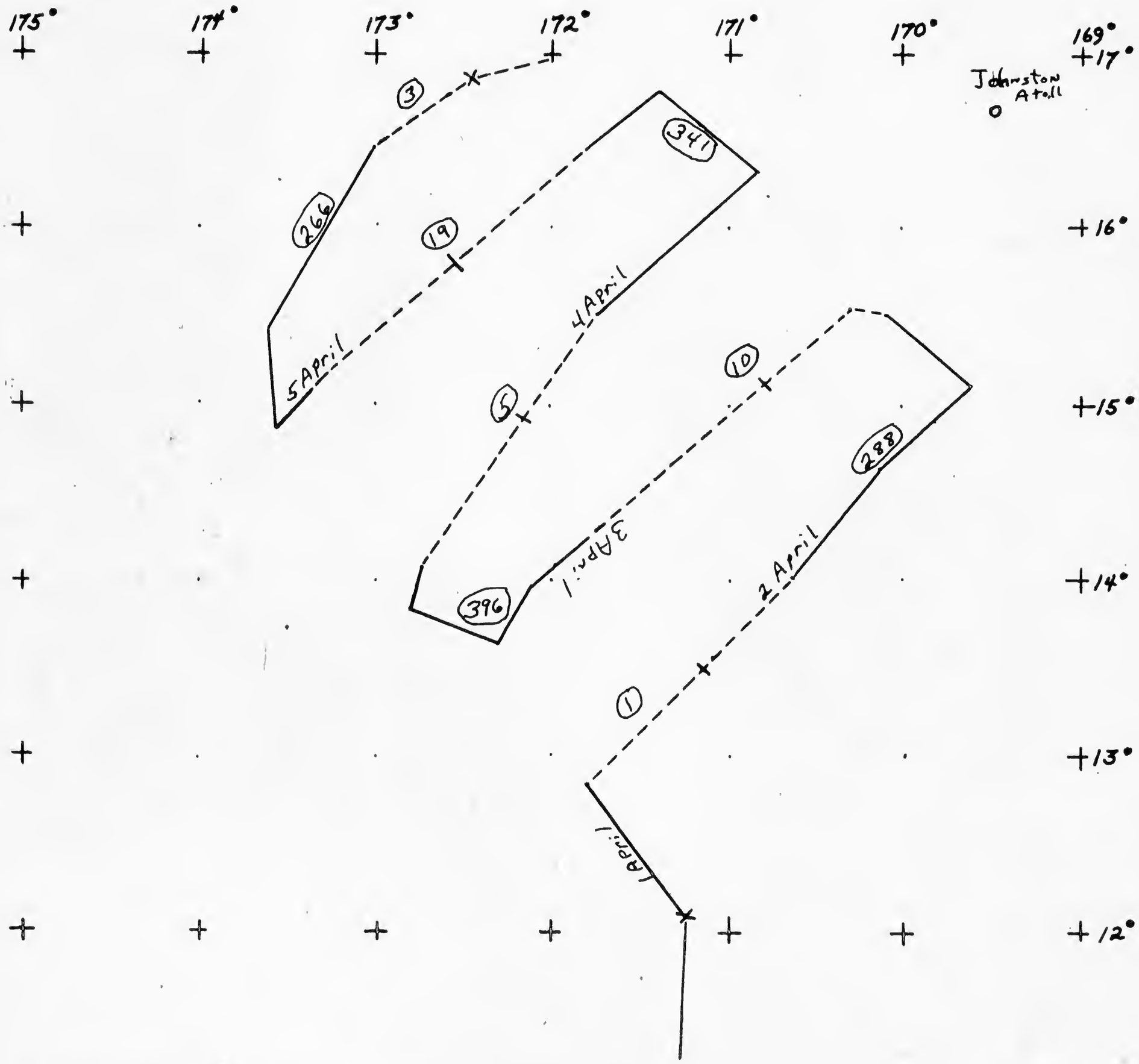
On 5 April what was believed to be a phalarope was observed flying in a northerly direction.

FIGURE 1. Smithsonian Grid Track, April 1966.



1 Inch = 1 = 60 Miles
X -- Entry and Departure Points
_____ Diurnal Travel
_ _ _ _ Nocturnal Travel

FIGURE 2. Sooty Tern distribution in the Grid, April 1966.



1 inch = 1 = 60 miles
X -- Entry and Departure Points
_____ Diurnal Travel
_ _ _ _ Nocturnal Travel

TABLE 1. Summary of Diurnal Grid Observations, April 1966.

Date	No. of Birds	Sightings	Species	Flocks	Miles	Hours	Birds/ Linear mile
1 April	3	3	2	0	42	4.4	0.07
2	254	34	6	4	135	12.3	1.88
3	414	30	8	5	114	12.4	3.63
4	389	51	11	11	138	12.1	2.81
5	299	49	8	7	123	12.3	2.43
Totals	1359	167	14	27	552	53.5	2.46

TABLE 2. Diurnal density of species groups in Grid, April 1966.

Species Group	No. Birds	Birds/Mi.^{2}	Estimated Population/ 50,000 Mi.^{2}	Percent of Total Birds
Shearwater-Petrel	101	0.091	4,550	7.4
Tern	1239	0.754	37,700	91.2
Tropicbird	3	0.003	150	0.2
Booby	6	0.005	250	0.4
Frigate	--	--	--	--
Storm Petrel	4	0.007	350	0.3
Shorebird sp.	1	0.001	50	0.1
Miscellaneous	5	0.006	300	0.4
Totals	1359	0.867	43,350	100.0

TABLE 3. Summary of Nocturnal Grid Observations, April 1966.

Date	No. Miles	No. Hours	No. Birds	No. Species
1 April	109	11.8	7	2
2	139	11.7	11	2
3	109	11.5	5	1
4	114	11.7	22	2
5	55	2.0	3	1
Totals	526	48.7	48	3

TABLE 4. Diurnal abundance of species in Grid, April 1966.

Species	No. Birds	Birds / linear mile
Wedge-tailed Shearwater	14	0.025
Sooty Shearwater	20	0.036
Sooty/Slender-billed Shearwater	8	0.014
Juan Fernandez Petrel	2	0.004
Pterodroma externa	8	0.014
Black-winged Petrel	1	0.002
Pterodroma hypoleuca	2	0.004
Mottled Petrel	1	0.002
Pterodroma sp.	22	0.039
Shearwater-Petrel	23	0.041
Leach's-type Storm Petrel	3	0.005
Storm Petrel sp.	1	0.002
Red-tailed Tropicbird	3	0.005
Blue-faced Booby	4	0.007
Brown Booby	1	0.002
Red-footed Booby	1	0.002
Sooty Tern	1231	2.230
Common Noddy Tern	2	0.004
Fairy Tern	4	0.007
Tern sp.	2	0.004
Shorebird sp.	1	0.002
Miscellaneous	5	0.009
Totals	1359	2.460

TABLE 5. Streamer sightings in the Grid, April 1966.

Date	Species	Streamer Color	Location of Sighting	Origin of Bird	Distance from Origin
4 April	Sooty Tern	Orange	16-7N 171-11W	Sand Island (Johnston Atoll)	83 Miles
4 April	Sooty Tern	orange	16-7N 171-11W	"	83 Miles
4 April	Sooty Tern	Orange	16-31 171-8W	"	72 Miles

[redacted] SIC #12

NORTHERN GRID SURVEY NO. 25

SMITHSONIAN GRID Survey No. ~~26~~

1–7 March 1966

This report summarizes observations made in the Smithsonian Grid from 1 to 7 March 1966. Members of the Smithsonian Party were Robert DeLong, Paul Woodward, and Richard Maze. Excellent cooperation was extended by the officers and crew throughout the grid survey.

During the grid survey 1,350 miles were covered in 140.2 hours. Only five legs of the six-legged grid were run (from the NE corner to southern end of the fifth leg). Observations were treated in two categories: diurnal, from sunrise to sunset, and nocturnal, from sunset to sunrise.

Diurnal observations covered 589 miles in 67.5 hours of daylight. A total of 815 birds, representing at least fourteen species, was seen during diurnal periods of seven days spent in the grid. Sooty Terns comprised 86 % of the total diurnal birds. Procellarids accounted for only 5% of the total. The absence of Wedge-tailed Shearwaters was noted.

Nine flocks were seen during diurnal watches; they comprised 84.2% of the diurnal birds. Five of the nine flocks were sighted on the 6th of March. Of the 686 birds seen in flocks 96.3% were Sooty Terns. No other species predominated in any individual flocks.

During nocturnal observation 761 miles were traveled in 72.7 hours. A total of 74 birds was noted either by sight or call. Two species, Sooty Terns and Red-footed Boobies, accounted for 68 of the 74 birds recorded.

Sooty Terns were the most common -- a total of fifty-eight. They were heard every night while in the grid.

One orange-streamered bird, a Sooty Tern, was seen in the grid. No birds were collected. Blood samples were taken from three Red-footed Boobies.

Weather throughout the grid survey was favorable. The wind did not exceed 35 knots and swells remained small. Rainfall was limited to small afternoon and evening squalls.

Species Accounts

Black-footed Albatross

Seven Black-footed Albatross were seen in the grid. They were seen throughout the grid. The occurrence is not unexpected as they once bred on Johnston Atoll.

Christmas Island Shearwater

One bird of this species was seen in the eastern section of the grid.

Juan Fernandez Petrel

Five birds of this race plus one Pterodroma externa (probably a Juan Fernandez Petrel) were seen in the grid. Although numbers were low this species was seen throughout the grid.

Pterodroma hypoleuca

A total of seven birds of this species was observed in the grid. Four of these were Black-winged Petrels and two were identified as Bonin Island Petrels.

White-winged Petrel

One bird was identified as this species.

Bulwer's Petrel

Six were seen on the 3rd and 4th of March. These sightings were on the 2nd and 3rd leg of the grid. It is interesting to note that this species was noted and not the Wedgetail Shearwater, as they occur on Johnston Atoll at about the same time.

Storm Petrel sp.

Two storm petrels were recorded that were not identified to species. One was a possible Bulwer's Petrel.

Red-tailed Tropicbird

Three individuals of this species were seen.

Blue-faced Booby

Two individu ls of this species were seen this month.

Brown Booby

One individual was seen on 6 March in the northwest corner of the grid west of Johnston Atoll.

Red-footed Booby

Thirty-one individuals were seen in the grid. They were seen on six of seven days, and were seen on five of six nights in the grid. The greatest concentration of birds (14) were seen on 6 March in the northwest section of the grid. Three birds landed on the ship and were captured, bled, color marked, and released. Black spray paint was used for marking these boobies.

Great Frigatebird

Ten individuals were identified. Three were positively identified as this species and seven were identified only as Frigates sp.(they were probably Great Frigatebirds). The greatest concentration was seen on 2 March in the southeast corner of the grid.

Sooty Tern

A total of 709 Sooty Terns was seen in the grid. They were seen throughout the grid (see Figure 2). Three large feeding flocks were encountered in the northwest corner of the grid just west of Johnston Atoll. These three flocks contained 450 Sooty Terns. One orange-streamered sooty was seen on 6 March 81 miles from Johnston Atoll.

Nocturnal observations produced 58 Sooty Terns. They were heard each night while in the grid. Winds to 35 knots blew on the nights of 2 and 4 March. Winds of this velocity make nocturnal observing difficult as terns can be heard only when close to the ship. On the nights before and after 6 March (the day 593 Sooty Terns were seen) few birds were heard.

Fairy Tern

Twenty-one Fairy Terns were seen. They were all in feeding flocks observed on 6 March in the northwest corner of the grid.

TABLE 1. Summary of diurnal observations within the Grid, March 1966.

Date	Birds	Sightings	Species	Flocks	Miles	Hours	Linear Birds/Mile
1 March	20	7	5	1	21	2.1	0.95
2	20	14	5	0	93	12.1	0.21
3	90	15	7	2	99	11.8	0.84
4	41	29	8	1	132	12.0	0.31
5	4	3	2	0	107	11.8	0.04
6	637	31	7	5	91	12.0	7.00
7	3	3	3	0	46	5.7	0.06
Totals	815	102	14	9	589	67.5	1.38

TABLE 2. Diurnal density of species groups within the Grid, March 1966.

Species Group	No. Birds	Birds/Mi^2	Estimated Population/ 50,000 Mi^2	Total Birds
Shearwater-Petrel	35	0.03	1500	6.3
Tern	730	0.41	20700	85.6
Tropicbirds	3	0.003	150	0.63
Boobies	35	0.03	1500	6.3
Frigates	10	0.004	200	0.63
Storm Petrels	2	0.003	150	0.63
	815	0.479	23,950	100

TABLE 3. Summary of Nocturnal Observations, March 1966.

Date	No. Birds	No. Sooty Terns	NO. Hours	No. Miles
1-2 March	26	20	12.1	104
2-3	8	8	12.0	97
3-4	10	5	12.2	123
4-5	13	13	12.2	119
5-6	3	2	12.0	108
6-7	14	10	12.2	110

TABLE 4. Diurnal abundance of species in the Grid, 1-7 March 1966.

Species	No. Birds	Birds/Linear Mile
Black-footed Albatross	7	0.012
Christmas Island Shearwater	1	0.002
Shearwater-Petrel	4	0.007
Juan-Fernandez Petrel	5	0.008
Pterodroma externa	1	0.002
Bonin Island Petrel	2	0.003
Black-winged Petrel	4	0.007
Pterodroma hypoleuca	1	0.002
White-winged Petrel	1	0.002
Pterodroma sp.	3	0.005
Bulwers Petrel	6	0.010
Storm Petrel sp.	2	0.003
Red-tailed Tropicbird	3	0.005
Blue-faced Booby	2	0.003
Brown Booby	1	0.002
Red-footed Booby	31	0.053
Booby sp.	1	0.002
Great Frigatebird	3	0.005
Frigate sp.	7	0.012
Sooty Tern	709	1.201
Fairy Tern	21	0.036

TABLE 5. Streamer sightings in Smithsonian Grid.

Date	Species	Streamer Color	location of sighting	Origin of Bird	Distance from Origin
6 March	Sooty Tern	orange	16-36N 170-54W	Sand Island (Johnston Atoll)	81 Miles

FIGURE 1 Grid Pattern

—— Daylight
---- Darkness

Pelagic Bird Survey March 1966 Smithsonian Grid #1

CENTRAL PACIFIC OCEAN

HAWAIIAN ISLANDS

KURE I.
MIDWAY I.
PEARL AND HERMES REEF
LISIANSKI I.
LAYSAN I.
GARDNER PINNACLES
FRENCH FRIGATE SHOALS
NECKER I.
NIHOA I.
NIIHAU I.
KAULA I.
KAUAI I.
OAHU I.
MOLOKAI I.
LANAI I.
MAUI I.
KAHOOLAWE I.
HAWAII I.

JOHNSTON-SAND I.

KINGMAN REEF
PALMYRA I.
WASHINGTON I.
FANNING I.
CHRISTMAS I.
LINE ISLANDS
HOWLAND I.
BAKER I.
JARVIS I.
PHOENIX ISLANDS
CANTON I.
ENDERBURY I.
McKEAN I.
BIRNIE I.
PHOENIX I.
HULL I.
SYDNEY I.
GARDNER I.
MALDEN I.
STARBUCK I.
TOKELAU ISLANDS
ATAFU I.
NUKUNONO I.
FAKAOFU I.
TONGAREVA I.
CAROLINE I.

180° WEST 170° 160° 150° WEST
30° NORTH 20° 10° 0° 10° SOUTH
EQUATOR

0 100 200 300 400 500 STATUTE MILES

FIGURE 2
Distribution of Sooty Terns in Grid #1 March 1966

—— Daylight
---- Darkness

17°N

170°W

• Johnston Atoll

March 6 (593)

(10) (2)

(1) March 7

March 5 (1)

March 4 (17) (5)

(13)

March 3 (72)

March 1 (14)

(8) (20)

(6) March 2

10°N

Non-grid

Sic XIA

		Total # Migrants	Direct Flt.	Long.	Lat.	Hours of Obs.	Total No. Miles	Total No. of Flocks	Total in Flocks
				N	W				
6 APRIL 66	AM	100	22	17-26	70-58	5-34		0	0
	PM	199	126	17-41	69-56	6-44		1	5
				N	W				
7	AM	40	4	18-31	67-05	4-43		0	0
	PM	81	60	18-47	66-02	6-32		0	0
				N	W				
8	AM	104	29	19-42	63-56	5-20		2	15
	PM	170	62	20-04	62-10	7-00		0	0
				N	W				
9	AM	112	26	20-49	59-00	5-36		1	5
	PM	179	91	21-16	58-14	5-00		4	40

SI-MNH-142
6-64

SMITHSONIAN INSTITUTION
DIVISION OF BIRDS

Bi-Weekly Bird Summary Report

1) Total Survey Unit: Baker Island, Pacific Ocean (2) Observer(s): DeLong Woodward Maze

3) YEAR: 1966 (4) MONTH: March (5) PERIOD: [redacted] 16-end of month

6) Species	(7) Date	(8) Number	(9) Rel. Class	(10) No. of Nests	(11) Rel. Class	(12) Date	(13) No. of Young	(14) Rel. Class	(15) Age of Young 0-10 11-20 21+	(16) Date	(17) Young Banded	(18) Others Banded
Blue-faced Booby	25	65	B									
Brown Booby	25	1	B									
Frigatebird sp.	25	30	B									
Golden Plover	25	108	B									
Ruddy turnstone	25	200	B									
Wandering tattler	25	8	B									
Sooty tern	25	10	B									
Gray-Backed tern	25	2	B									
Common Noddy tern	25	600	B	272	A	25	10	B	0-0-10			

Baker Island Survey

25 March 1966

The island was visited from 0900 to 1300 on 25 March. A brief biological sur survey was conducted. A club of about 50 Blue-faced Boobies were seen on the south beach. Frigatebirds were seen overhead and a few Sooty Terns were present. The colony of Noddy Terns is still breeding. There were 283 eggs and a few chicks on the island in the lagoon. The water level of the lagoon has again lowered.

The vegetation is showing definite signs of drying. Leaves of the grasses Lepturus and Digitera are now only half green. There is a noticeable amount of drying since early February. The leaves are dropping from some of the Sida although they are still in bloom. The drying in the vegetation and the lowered-level of the lagoon indicate that the amount of precipitation has decreased in the last month.

The mouse population seems to have started down. In early February mice were to be seen everywhere, but only a few were seen during this survey of the island.

One black-and-white cat was seen on the northeast side of the island. Its pelage was good and it looked to be in good physical condition.

One return was taken on a Blue-faced Booby. No collecting was done, and no blood was taken.

SI-MNH-142
6-64

SMITHSONIAN INSTITUTION
DIVISION OF BIRDS

Bi-Weekly Bird Summary Report
(Partial Survey)

1) Total Survey Unit: Howland Island, Pacific Ocean (2) Observer(s): DeLong, Woodward, Maze

3) YEAR: 1966 (4) MONTH: March (5) PERIOD: ~~1-15~~ 16-end of month

6) Species	(7) Date	(8) Number	(9) Rel. Class	(10) No. of Nests	(11) Rel. Class	(12) Date	(13) No. of Young	(14) Rel. Class	(15) Age of Young 0-10 11-20 21+	(16) Date	(17) Young Banded	(18) Others Banded
Red-tailed tropicbird	26 *	2	C									
Blue-faced Booby		300	C	53	C	26*	21	C				
Brown Booby		60	C	1	C	26	3	C				
Red-footed Booby		75	C	7	A		15	A				
Great Frigatebird		300	C	64	A							
Lesser Frigatebird		300	C	13	A							
Golden Plover		6	C									
Wandering tattler		2	C									
Sooty tern		60	C									
Gray-backed tern		30	C									

* Landed 0800 and departed 1030 of same day.

The island was visited for only two and one-half hours, thus the survey data is incomplete. Only the south end of the island, the Cordia grove, and a portion of the northwest beach were covered.

Sooty Terns still are not nesting. It is believed that the lush vegetation is preventing the birds finding suitable nesting sites,i.e. large open areas. There were no swirls present during the few morning hours of the survey.

Lesser Frigatebirds have started a new colony in the Cordia grove. Nesting has just begun. This may represent a renesting effort of the unsuccessful colony of last fall.

One band was recovered;it was a Blue-faced Booby (568-70617).

Area A

(Oahu to Southern Grid via Johnston Atoll)

30 March - 5 April 1966

TABLE I. Birds recorded on SIC 12 in AREA A (Oahu to Southern Grid via Johnston Atoll)
30 March - 5 April 1966.

Species	30	31	1	2	3	4	5	TOTAL	No. Coll.
Laysan Albatross	1	1						2	
Black-footed Albatross	7	4	1					12	
Wedge-tailed Shearwater	48	11	41	3		97	23	223	2
Sooty/Slender-billed Shearwater	19	25	176	79	50	156	2	507	
Christmas Island Shearwater			1	1				2	
Newell's Shearwater	1							1	
Pale-footed Shearwater				1				1	
Juan Fernandez Petrel			1	2		4	1	8	
Phoenix Island/Tahitian Petrel			1			1		2	
Bonin Island Petrel				1				1	
Black-winged Petrel		3	1	4	1	1		10	
Pterodroma hypoleuca (unid. to race)		3	1		2	1		7	
Mottled Petrel		2		3	7	25	4	41	
Bulwer's Petrel	3					12	11	26	
Pterodroma species	2	1					2	5	
unid. Shearwater-Petrel	4	13	27	5	9	64	6	128	
Leach's Storm Petrel						3	2	5	4
unid. White-rumped Storm Petrels		2	3		4	24	18	51	
Storm Petrel species (rump ?)						1		1	
White-tailed Tropicbird		1	4			1	1	7	1
Red-tailed Tropicbird	1		16		2		1	20	
tropicbird species	1				2			3	
Blue-faced Booby			3		1		3	7	
Brown Booby			2					2	
Red-footed Booby	4	3	109	1		4	1	122	
Great Frigatebird	9	5	23					37	
Lesser Frigatebird							1	1	
Frigatebird species							9	9	
Red Phalarope/Sanderling	9	8	2	4				23	1 (Red Phal.)
Shorebird species			1		1			2	
Long-tailed Jaeger				1				1	
Jaeger species	1			3		2		6	
Sooty Tern	73	25	1007	131	50	807	167	2260	7
Gray-backed Tern	6		8					14	
Common Noddy			7			4		11	
White (Fairy) Tern	4			1	3	5	4	17	
Tern species				1				1	
Miscellaneous unidentified	5	8	5	1			2	21	
TOTALS	198	116	1439	242	132	1212	258	3597	15

Summary SIC 12 AT-SEA (NON-GRID) bird numbers--Area B Southern Grid to Samoa- 12-21 April 1966.

Species	12	13	14	16	17	19	20	21	Totals
Wedge-tailed Shearwater	4	1	5	17	1	4	47	40	119
Sooty/Sl-bill Shearwater				3		1			4
Christmas Island Shearwater	1			1					2
Audubon's Shearwater					7	1	1		9
Pterodroma hypoleuca							1		1
Cook's Petrel	2			1					3
Mottled Petrel	2								2
Bulwer's Petrel	2		7	5		4	1		19
Pterodroma species	2	1	1						4
shearwater-petrel	11	1	2	15			4	5	38
White-throated Storm Petrel					1				1
Wilson's Storm Petrel							1		1
white-rumped storm petrels	23	2	2	1		4	7		39
Red-tailed Tropicbird							2	1	3
White-tailed Tropicbird							6	2	8
Blue-faced Booby	3	6	43	1	2	6			61
Brown Booby		2	1						3
Red-footed Booby			4	3			2		9
Booby species				2					2
Great Frigatebird					2				2
frigatebird species	1	1	1	5	2	1	8		19
Golden Plover						2			2
Ruddy Turnstone					13				13
Shorebird species							1		1
Jaeger species	1						1		2
Sooty Tern	57	47	58	1343	76	44	86	15	1726
Gray-backed Tern		19	9		19	12			59
Common Noddy	1			4	2		50		57
White-capped Noddy	4								4
Blue-gray Noddy					8				8
White Tern	14		1		1	1	33	14	64
Tern species	1		1			13	1		16
bird species						1	2		3
TOTALS	129	80	135	1401	134	94	254	77	2304

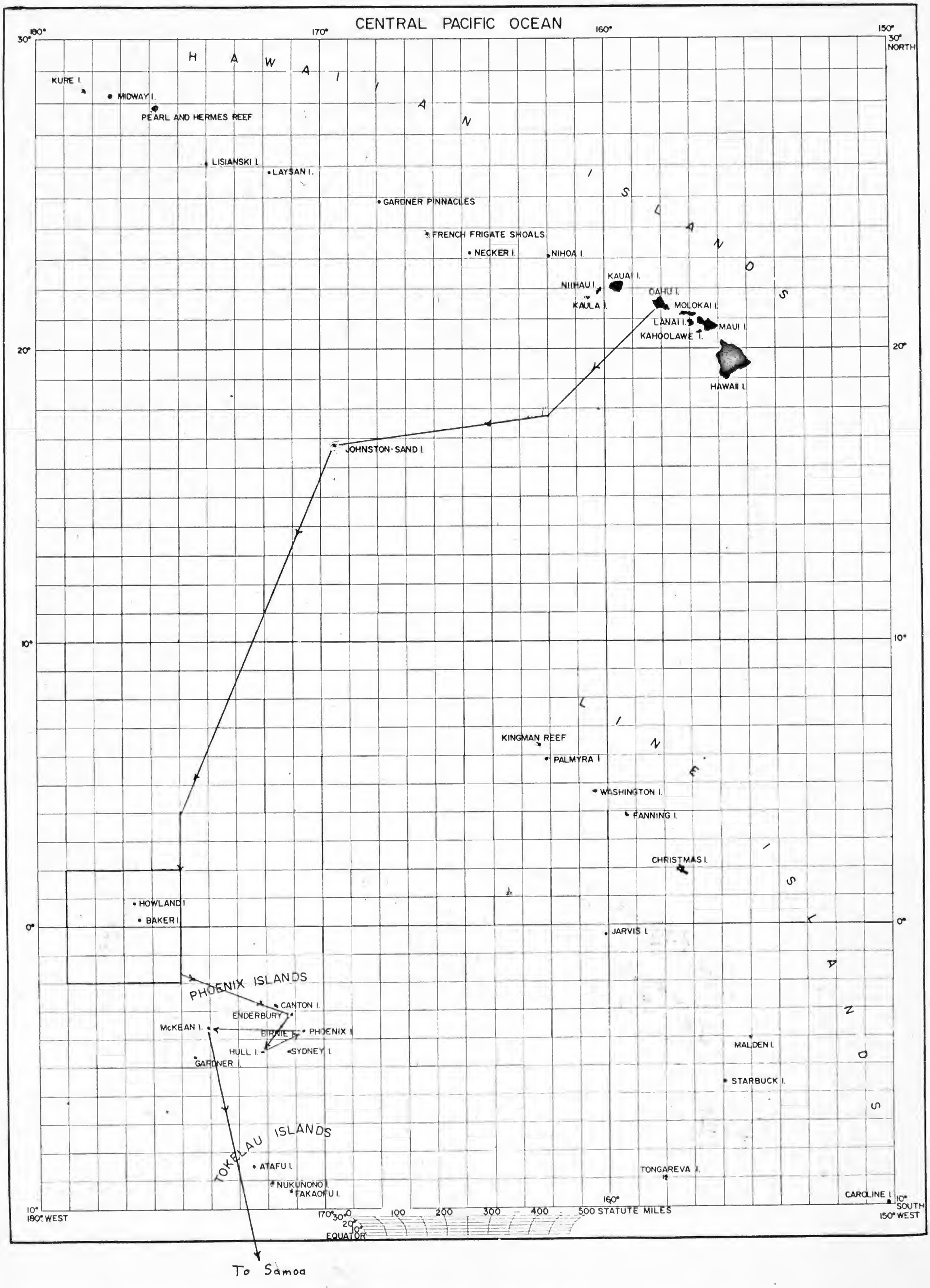


Fig. 1. SIC 12 Cruise Track (1st half) 29 March- 21 April 1966.

AT-SEA ONLY
Summary of birds collected on SIC 12 (first half)
29 March-- 21 April 1966

Species	Oahu to Southern Grid	Southern Grid	Southern Grid to Samoa	TOTALS
Wedge-tailed Shearwater	2	11	1	14
Audubom's Shearwater		1		1
Cook's Petrel		2		2
Mottled Petrel		3		3
Tahitian Petrel		1		1
Bulwer's Petrel		1		1
Leach's Storm Petrel	4	26		30
Wilson's Storm Petrel			1	1
Red-tailed Tropicbird		1		1
White-tailed Tropicbird	1			1
Blue-faced Booby		1		1
Brown Booby		1		1
Red-footed Booby		8		8
Greater Frigatebird		2		2
Lesser Frigatebird		2		2
Red Phalarope	1			1
Sooty Tern	7	90	29	126
Gray-backed Tern		1		1
Common Noddy		2		2
White-capped (Hawaiian) Noddy		1		1
White (Fairy) Tern			1	1
TOTALS	15	154	32	201

Preliminary At-Sea Survey Survey No.28

March 1966

Non-Grid

This report summarizes twenty days of observations made by Smithsonian personnel Paul Woodward, Robert De Long, and Richard Maze. The cruise tract was from S.I. Grid No. 1 to Pago Pago, then to the Manua Islands, Canton Island, Howland Island, Baker Island and then north again to the Grid. During diurnal watches, 1935 miles were covered in 221.5 hours. Night watches were held on 24 and 26 March, during which time 72 miles were traveled in 12.5 hours.

Weather conditions were generally good throughout the trip. From 29 March to 1 April rough seas and strong winds made watching difficult.

A total of 2927 birds of 27 species was seen during diurnal watches. Another 11 birds were recorded at night. Terns accounted for 74% of the total, while shearwaters and petrels constituted 15 % of the total. Almost 65% of the birds were seen in flocks. Large numbers of birds were seen near Howland Island, the Phoenix Islands, and the Samoan Islands. A lesser concentration was recorded between 4^{O}N and 8^{O}N. Shearwaters and petrels were common in this area.

Interesting sightings included 30 Mottled Petrels, 4 Sooty Shearwaters, 4 Red Phalarope, and 13 Puffinus puffinus.

One Sooty Tern with a new orange streamer was seen. A Common Noddy Tern was collected.

The following area abbreviations are used in the species accounts to show a more corredt distribution pattern of the forms involved.

Area A= SI Grid No.1 to Samoa (7-14 March 1966)

Area B= Canton Island to Howland Island and Baker Island to Canton (24 March and 26-27 March 1966)

Area C= Samoa to SI Grid via Manua Islands (20-23 & 28-31 March 1 April)

Species Account

Wedge-tailed Shearwater A=35 B=5 C=208

Southern dark phase birds were found as far north as $8^{0}50'$. The largest number of birds (98) was seen over 100 miles south of the Phoenix Islands on 22 March. Birds were almost four times as numerous between Canton Island and the Grid in late March than in early March. This may represent the beginning of the northward movement of southern birds which has been recorded in the past.

Sooty Shearwater A=0 B=2 C=2

Four birds believed to be this species were seen flying north. The first one was noted on 26 March.

Christmas Island Shearwater A=2 B=0 C=0

Two individuals of this species were seen on 9 March.

Puffinus puffinus A=8 B=0 C=5

This species was found between $4^{0}36'$ N and $8^{0}14'$N. Although the birds were not identified to race, it is quite possible that they were newelli from the Hawaiian Islands. If this is the case, then this area must be the wintering grounds of the subspecies. Of course it is also possible that the birds are a different race from another group of islands.

Juan Fernandez Petrel A=3 B=0 C=9

This species increased threefold during the month.

Kermadec Petrel A=1 B=0 C=0

One light phase bird was seen on 9 March.

Phoenix Island or Tahiti Petrel A=2 B=1 C=1

It is extremly difficult if not impossible to separate these two species in the field, but it is likely that they are Phoenix Island Petrels because of the nearnest of its breeding grounds to the area where these birds were seen.

Mottled Petrel A=5 B=15 C=10

The first migrant of this species was noted on 8 March. The largest number of birds (13) was seen on 27 March between Howland Island and Canton Island. It is interesting to note that the first Mottled Petrel was seen 18 days before the first migrant Sooty Shearwater.

Black-winged Petrel A=3 B=0 C=2

Five birds of this race were seen between 4^{0}N and 12^{0}N.

Bulwer's Petrel A=35 B=12 C=28

This species was well distributed throughout the area.

Storm Petrel sp. A=14 B=20 C=25

Included here are all black birds with white rumps. Since three species have been collected in the area, positive identification in the field is not possible, but it is believed that at this time of year the birds are most likely Leach's Storm Petrels. On 24 March one bird was seen that may have been a Haurcourt's Storm Petrel.

Forty-seven of the fifty-nine birds seen were in the Howland-Baker--Canton area.

White-throated Storm Petrel A=2 B=0 C=0

Two birds of this species were seen on 12 March when the ship was within 100 miles of Phoenix Island, the nearest breeding area.

Red-tailed Tropicbird A=3 B=0 C=1

As usual no pattern was evident in the distribution of this species.

White-tailed Tropicbird A=8 B=0 C=9

Most of the birds were seen within 200 miles of the Samoan Islands.

Blue-faced Booby A=19 B=53 C=16

The majority of individuals of this species were seen in the vicinity of Howland Island, Baker Island, and the Phoenix Islands.

Brown Booby A=1 B=4 C=15

All of the Brown Boobies were seen close to land.

Red-footed Booby A=11 B=0 C=27

Nine individuals of this species were seen on 9 March between 6^0N and 8^0N. None were seen in this area later in the month. On 20 March, twenty-six birds were seen between Tutuila and the Manua Islands.

Great Frigatebird A=1 B=0 C=1

Only two birds of this species were identified positively- both were near Canton Island. Another twenty-six frigatebirds, probably of this species, were also recorded. Eleven of them were seen north of the Phoenix Islands on 10 and 11 March. Only two birds were seen in this area on the return trip.

Lesser Frigatebird A=0 B=15 C=0

All individuals of this species were seen between Howland Island and Canton Island.

Golden Plover A=3 B=2 C=12

All Golden Plovers were seen in the vicinity of land. On 28 March while the ship was near Canton Island, ten birds-many with black bellies-were noted flying in a northerly direction. This may represent the beginning of spring migration.

Ruddy Turnstone A=0 B=0 C=2

Two birds of this species were seen close to Canton Island.

Red Phalarope A=4 B=0 C=0

Four birds believed to be this species were seen flying north on 9 March.

Sooty Tern A=186 B=254 C=438

This species was fairly well-distributed over the area with no large concentrations noted anywhere, which is interesting because the ship passed within 100 miles of Enderbury Island and Phoenix Island where there are large breeding colonies. The largest numbers of birds were found between Howland Island and Canton Island and in the immediate vicinity of the latter. No immature birds were noted.

On 8 March an adult with a new orange streamer was seen 391 miles south-west of Johnston Atoll.

Gray-backed Tern A=26 B=5 C=163

Almost all individuals of this species were recorded near Canton Island, where it breeds in large numbers. Five birds were seen on 27 March over 180 miles from Canton.

Noddy Tern A=6 B=1 C=715

Ninety-one percent of the Noddy Terns were seen on 20 March between Tutuila and the Manua Islands. Most of the remaining birds were found near Canton Island.

On the evening of 29 March an adult bird flew aboard the ship and was collected. It was almost 300 miles from the nearest breeding colony-Baker Island.

Hawaiian Noddy Tern A=2 B=0 C=0

Two individuals of this species were seen-one near Canton Island and the other one over 400 miles from the nearest land.

Fairy Tern A=20 B=13 C=74

This species was seen over the entire area, but concentrations were noted north of Samoa, between Tutuila and the Manua Islands, and in the vicinity of Canton Island.

Table 1. Summary of Non-Grid Pelagic Observations, March 1966

Date	Miles	Hours	Sightings	No. Birds	Species	Flocks
S.I. Grid No. 1 to Samoa						
07 March	57	6.5	4	4	2	0
08	121	12.0	19	36	6	1
09	120	12.0	59	76	16	0
10	101	12.0	32	89	9	3
11	118	12.1	13	80	7	4
12	126	12.2	35	97	13	6
13	130	12.2	10	10	6	0
14	114	12.1	23	50	7	3
Total	887	91.1	195	442	24	17
Canton to Howland and Baker to Canton						
24 March	106	12.2	18	27	8	0
26	62	7.0	59	215	9	7
27	61	12.0	63	176	12	5
Total	229	31.2	140	418	15	12
Samoa to S.I. Grid No. 1						
20 March	85	7.8	67	704	7	10
21	117	12.1	19	32	4	1
22	101	12.1	37	209	4	7
23	40	12.1	59	434	11	15
28	90	11.2	62	405	16	7
29	120	12.1	46	142	8	2
30	93	1211	40	109	10	1
31	108	12.2	27	27	9	0
01 April	65	7.5	4	5	2	0
Total	819	99.2	361	2067	21	43
GRAND TOTAL	1935	221.5	696	2927	27	72

Table 2. Summary of Nocturnal Observations, March 1966

Date	No. Birds	No. Sooty Terns	No. Hours	No. Miles
24-25 March	9	9	9.3	42
26	2	2	3.2	30

Table 3. Diurnal Density of Species Groups outside the Grid, March 1966.

Species Group	No. Birds	Birds/linear mile	Birds/square mile
S.I. Grid to Samoa			
Shearwater-Petrel	110	.12	.06
Terns	246	.28	.09
Shorebirds	9	.01	.01
Storm Petrels	17	.02	.02
Tropicbirds	12	.01	.005
Boobies	33	.04	.02
Frigatebirds	13	.01	.005
Miscellaneous	2	.002	.001
Total	442	.492	.211
Canton to Howland and Baker to Canton			
Shearwater-Petrel	37	.16	.08
Terns	273	1.19	.39
Shorebirds	2	.01	.01
Storm Petrels	20	.09	.09
Boobies	57	.25	.125
Frigatebirds	27	.12	.024
Miscellaneous	2	.01	.005
Total	418	1.83	.724
Samoa to S.I. Grid No. 1			
Shearwater-Petrel	296	.36	.18
Terns	1651	2.01	.67
Shorebirds	14	.02	.02
Storm Petrels	25	.03	.03
Tropicbirds	10	.01	.005
Boobies	58	.07	.035
Frigatebirds	3	.004	.001
Miscellaneous	10	.01	.005
Total	2067	2.514	.946
GRAND TOTAL	2927	1.513	1.881

Table 4. Abundande of Species Outside the Grid, March 1966

Species	No. Birds	Birds/linear mile
Wedge-tailed Shearwater	248	.13
Sooty Shearwater	4	.002
Christmas Island Shearwater	2	.001
Puffinus puffinus	13	.007
Juan Fernandez Petrel	12	.007
Pterodroma externa	1	.001
Kermadec Petrel	1	.001
Phoenix Island Petrel	4	.002
Mottled Petrel	30	.02
Black-winged Petrel	4	.002
Pterodroma hypoleuca	1	.001
Bulwer's Petrel	75	.04
Leach's Type Petrel	44	.02
White-throated Storm Petrel	2	.001
Red-tailed Tropicbird	4	.002
White-tailed Tropicbird	17	.009
Blue-faced Booby	88	.05
Brown Booby	20	.01
Red-footed Booby	38	.02
Great Frigatebird	2	.001
Lesser Frigatebird	15	.008
Frigate sp.	26	.01
Golden Plover	17	.009
Ruddy Turnstone	2	.001
Red Phalarope	4	.002
Sooty Tern	878	.45
Gray-backed Tern	194	.1
Common Noddy Tern	722	.32
Hawaiian Noddy Tern	2	.001
Fairy Tern	107	.06
Unidentified Pterodroma	11	.006
Unidentified Shearwater-Petrel	38	.02
Unidentified Terns	267	.13
Unidentified Shorebirds	2	.001
Unidentified Storm Petrels	15	.007
Unidentified Boobies	2	.001
Unidentified Tropicbirds	1	.001
Unidentified Birds	14	.007
Total	2927	1.461

Table 5. Streamer Sightings, March 1966

Species	Date	Tag	Position	Miles from Origin
Sooty Tern	8	Orange Streamer	11°37' N 173°33' W	391

CTE

Preliminary At-Sea Survey Survey No. 28

No. 27

February-March and April 1966

This report summarizes observations made by Robert DeLong, Paul Woodward, and Richard Maze between Oahu and S.I. Grid No. 1 during periods 26 February to 1 March and 8 through 9 April 1966. Watches, totaling 97.5 hours (40.2 in February-March and 47.3 in April), were held daily from sunrise to sunset. During this time 830 miles were taveled---375 in February-March and 455 in April.

Generally favorable weather prevailed throughout both periods.

During February-March 451 birds of 11 species were seen. A total of 1041 birds of 22 species was recorded in April. Terns comprised 63% of the February-March total while they were only 37% of the April total. Shearwater-Petrels accounted for 52% of the April total and only 26% in February-March. All groups showed an increase during the period.

Migrating Sooty Shearwaters accounted for most of the increase in the numbers between the two periods. Wedge-tailed Shearwaters were seen for the first time in April. Unusual birds included a Long-tailed Jaeger, a Mottled Petrel, two phalaropes (possibly Red Phalaropes), and two possible Pink-footed Shearwaters.

No birds were collected.

Species Accounts

Black-footed Albatross A = 102 B = 14

A larger number of birds was seen in February-March. Most of these birds were seen as we left Oahu, and on the following day. These numbers around Oahu are probably due to birds following ships to and from the island.

Laysan Albatross A = 0 B = 1

Only one bird of this species was recorded north of Johnston Atoll in April. Unlike Black-footed Albatross, it did not follow the ship.

Wedge-tailed Shearwaters A = 0 B = 58

During the February-March survey the birds were not in the area---there was no breeding activity at that time. The presence of Wedge-tails in April was expected as they were starting a new nesting cycle.

Christmas Island Shearwater A = 0 B = 7

Seven birds of this species were noted in April. Their breeding cycle may have influenced the increased number of sightings for April.

Sooty Shearwaters A =0 B = 412

The spring migration of the Sooty Shearwaters was first noted in late March when we were near the equator. By the time we had left the Grid the migration had increased. Birds traveled in singles, pairs, and occasional small, loosely associated groups---up to five birds. All birds recorded were flying in a northwesterly direction. Birds were seen to within a few miles of Oahu. These birds seemed to be flying around the island (Oahu) but not crossing over the mountains as has been reported for some Shearwater-Petrels.

Pink-footed Shearwater A = 0 B = 2

Two birds believed to be of this species were seen on 6 April. They were moving in a northerly direction and appeared to be migrating.

Juan Fernandez Petrel A = 0 B = 2

Only two birds of this species were noted, both in April.

Bonin Island Petrel A = 3 B = 0

Three birds were seen north of the Grid on 26 February.

Mottled Petrel A = 0 B = 2

The two birds of this species seen in April probably represent birds outside the normal migration routes.

Pterodroma hypoleuca A = 5 B = 1

Of the five birds of this species seen in February-March three were identified as members of the Bonin Island race. The one seen in April was not identified to race.

Bulwer's Petrel A = 0 B = 4

The four birds that were seen on 7 and 8 April were too far from land to be breeding birds and therefore were considered nonbreeding birds.

Leach's Storm Petrel A = 0 B = 3

Three were seen in April.

Red-tailed Tropicbird A = 0 B = 4

All sightings of this species were taken in April.

White-tailed Tropicbird A = 2 B = 0

One bird was seen on 27 February, the other on 28 February.

Blue-faced Booby A = 3 B = 2

Blue-faced Boobies, present both months, were not sighted near Oahu. At least two were subadults.

Red-footed Booby A = 9 B = 31

Distribution did not have a definite pattern; all birds were immature-subadults.

Brown Booby A = 6 B = 2

Most of the Brown Boobies were seen near Oahu on 26 February and 9 April, but two were sighted on 1 March. These two were probably Sand Island birds.

Frigatebird A = 7 B = 9

There was no appreciable difference in the number of birds seen in the two months.

Sooty Tern A = 280 B = 317

Sooty Terns were the most abundant species recorded. They were seen each day during both periods and were the most common species occurring in the recorded flocks. The greater number seen during April is probably not significantly different from the number seen February-March.

Blue-gray Noddy Tern A = 2 B = 0

Two individuals were sighted on 28 February.

Pomarine Jaeger A = 21 B = 19

Nearly all (92%) of the individuals were seen within 100 miles of Oahu.

Long-tailed Jaeger A = 0 B = 1

One individual was identified on 9 April within 100 miles of Oahu.

Phalarope A = 0 B = 1

A phalarope sighted on 7 April was not identified to species. Two others were seen on 8 April which were possibly Red Phalaropes.

TABLE 1. Summary of Diurnal observations.

Honolulu to Grid

Date	No. Miles	No. Hours	Sightings	No. Birds	No. Species	No. Flocks
26 February	77	7.2	51	270	5	7
27	116	11.9	42	112	9	2
28	112	11.9	22	39	10	1
01 March	70	9.2	14	30	5	2
Total	375	40.2	129	451	11	12

Grid to Honolulu

Date	No. Miles	No. Hours	Sightings	No. Birds	No. Species	No. Flocks
06 April	121	12.1	134	298	12	4
07	127	12.3	99	182	11	4
08	118	12.5	142	264	17	6
09	89	10.4	115	297	12	5
Total	455	47.3	490	1041	22	19
Grandtotal	830	87.3	619	1494	25	31

TABLE 2. Diurnal Density of Species Groups. (Oahu to Grid).

Species Group	No. Birds	Birds/Linear mile	Birds/Mile^2
Shearwater-Petrel	117	0.31	0.156
Terns	282	0.75	0.252
Tropicbirds	2	0.01	0.002
Frigatebirds	7	0.02	0.004
Boobies	18	0.05	0.024
Storm Petrels	1	0.005	0.005
Miscellaneous	24	0.060	0.032
Total	451	1.203	0.473

TABLE 2. Diurnal Density of Species Groups, (Cont.).

Grid to Oahu

Species Group	No. Birds	Birds/Linear Mi.	Birds/Mi.^{2}
Shearwater-Petrel	542	1.19	0.59
Tern	405	0.89	0.22
Frigatebirds	9	0.02	0.004
Tropicbirds	4	0.01	0.004
Boobies	38	0.08	0.04
Storm Petrels	3	0.010	0.007
Shorebirds	4	0.01	0.01
Miscellaneous	36	0.08	0.04
Total	1041	2.29	0.915

TABLE 3. Diurnal abundance of species.

Between Oahu and SI Grid No. 1, (February-March) 1966.

Species	No. Birds	Birds/Linear Mile
Black-footed Albatross	102	0.275
Bonin Island Petrel	3	0.008
Pterodroma hypoleuca	2	0.005
Pterodroma sp.	5	0.013
White-tailed Tropicbird	2	0.005
Blue-faced Booby	3	0.008
Red-footed Booby	9	0.024
Brown Booby	6	0.016
Great Frigatebird	5	0.013
Frigate sp.	2	0.005
Sooty Tern	280	0.746
Blue-gray Noddy	2	0.005
Pomarine Jaeger	21	0.059
Jaeger sp.	3	0.008
Storm Petrel sp.	1	0.003
Shearwater-Petrel	5	0.013
Total	451	1.206

TABLE 3. Diurnal abundance of species (Cont.).

Between SI Grid No. 1 and Oahu April 1966.

Species	No. Birds	Birds/linear Mile
Black-footed Albatross	14	0.031
Laysan Albatross	1	0.002
Wedgetail Shearwater	58	0.128
Christmas Island Shearwater	7	0.015
Sooty Shearwater	412	0.905
Pink-footed Shearwater	2	0.004
Juan Fernandez Petrel	2	0.004
Mottled Petrel	2	0.004
Pterodroma hypoleuca	1	0.002
Pterodroma sp.	5	0.011
Bulwers Petrel	4	0.008
Shearwater-Petrel	34	0.075
Leache's Storm Petrel	3	0.006
Red-tailed Tropicbird	4	0.008
Blue-faced Booby	2	0.004
Red-footed Booby	31	0.068
Brown Booby	2	0.004
Great Frigatebird	2	0.004
Frigate sp	7	0.015
Sooty Tern	317	0.696
Grey-backed Tern	8	0.017
Hawaiian Noddy Tern	1	0.002
Common Noddy Tern	29	0.064
Fairy Tern	22	0.049
Pomarine Jaeger	19	0.042
Long-tailed Jaeger	1	0.002
Jaeger sp.	1	0.002
Phalarope sp.	1	0.002
Shorebird sp.	3	0.006
Bird sp.	15	0.033
Tern sp.	28	0.062
Booby sp.	3	0.006
Total	1041	2.281

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SMITHSONIAN INSTITUTION
DIVISION OF BIRDS
AT SEA CLIMATOLOGICAL DATA

DATE 26 Feb 66

TIME	LAT	LONG	PRES WEA	VIS	SLP	DRY B	DEW PT	HUM %	TL SKY	OPA SKY	WAVES	SEA TEMP	WIND S	WIND D	SHIP COURSE/SPD.
0100															
0200															
0300															
0400															
0500															
0600															
0700															
0800															
0900															
1000															230 / 10
1100	21° 16'	158° 03'													" / "
1200	21 14	157 59													" / "
1300	21° 08	158-08													" / "
1400	21 02	158-17													" / "
1500	20-57	58-25													" / "
1600	20 51	158-27													" / "
1700	20 45	158-44													" / "
1800	20° 39.1 N	158° 55.2 W	OVERCAST	8 m	1010	76°	70.3°	65.7%	100%	1800'	2'	76°	14	145°	230° / 10 K
1900			Partly cldy	8m	1011	74	69.7°	63.5%	80%	1800	3'	78	17.5	145°	230° / 10 K
2000			Partly cldy	6m	1010.5	75	69.3°	63.5%	80%	1800'	3'	78°	20.5	165°	230° / 10 K
2100			Partly cldy	7m	1010.5	77	69.3°	62.3%	60%	2000'	3'	78°	25	175°	230° / 10 K
2200			Partly cldy	8m	1010.9	74	69.7	69.9%	80%	2000'	3'	78°	20.5	165°	230° / 10 K
2300			Partly cldy	8m	1010.5	76	68.8	75%	90%	2100'	3'	78°	20	182°	230° / 10 K
2400			PARTLY CLDY	8M	1010.2	76	~~71~~ 69.5°	79%	60%	2000'	3'	78°	20	182°	230° / 10 K

REMARKS:

ALL TIMES LOCAL (WHISKEY); WIND DIR. IN WHOLE DEGREES; WIND SPEED IN KNOTS; TEMPERATURES IN FAHRENHEIT; VISIBILITY IN NAUTICAL MILES; WAVES IN WHOLE DEGREES; WAVE PERIOD IN SECONDS; WAVE HEIGHT IN WHOLE FEET; SEA LEVEL PRESSURE IN MILLIBARS

215

SI-MNH-955b
Rev. 4-9-64

SMITHSONIAN INSTITUTION
DIVISION OF BIRDS
AT SEA CLIMATOLOGICAL DATA

DATE 27 FEB 1966

TIME	LAT	LONG	PRES WEA	VIS	SLP	DRY B	DEW PT	HUM %	TL SKY	OPA SKY	WAVES	SEA TEMP	WIND S	WIND D	SHIP COURSE/SPD.
0100	—	—	PRTLY CLOUDY	8	1009.8	77	68.8	76	60%	2000'	3'	78°	27	326	236° 10.6 KTS
0200	—	—	PRTLY CLOUDY	8	1009.5	77	68.4	74	60%	2000'	3'	78°	29.5	326	" "
0300	—	—	PRTLY CLOUDY	8	1009.1	77	66.7	70.1	80%	2000'	3'	78°	27	328	
0400	—	—	PRTLY CLD	8	1009.1	76	71.8	~~73~~ 84	40%	3000	3	77	20	312	
0500	—	—	PRTLY CLD	8	1009.1	74	68.2	~~70~~ 83	80%	2000	3	77	18	333	
0600	19°33'	160°39'	PRTLY CLD	8	1009.1	76	71.8	~~73~~ 82	80%	2000	3	76	19	337	
0700	19°26'N	160°43.5'W	PRTLY CLD	9	1009.1	76	70.3	~~72~~ 82.5	90%	3000	3	76	19	337	
0800	19-20	160 54	CLOUDY	10	1010.2	76	70.3	82	90%	2000	3'	78	20	336	236° / 10.6 KTS
0900	19°15.5'N	161°05'W	RAINING	3	1010.9	76	68.8	76.5	100%	1800	2'	76	23	12	236° / 10.6 KTS
1000	19 10	161 13	CLOUDY	10	1011.1	76	71.7	82	90%	1800	2'	78	10	167	" "
1100	19 05	161 21	Cloudy	10	1011.1	76	71.7	82	90%	1500	4'	76	19	167	236° / 10.6 KTS
1200	19° 01'N	161°26'W	Cloudy	10	1010.2	74	71.2	90%	90%	1800	2'	80	17	167	236° / 10.6 KTS
1300	18 55	161 37	Cloudy	10	1009.5	77	72.8	85%	90%	1800	2'	80	30	196	236° / 10.6 KTS
1400	18 49	161 47	Over Cast	5	1007.1	76	20.3	~~96%~~ 89%	100%	1500	2'	80	30	220	236° / 10.6 KTS
1500	18° 43'N	161° 56'W	Cloudy	3	1008.5	72	67.6	~~96%~~ 81%	100%	1000	2'	79	19.5	220	236° / 10.6 KTS
1600	18 38	162-04	CLOUDY	10	1008.5	76	67.7	76%	95%	1000	2'	78	24	230	" "
1700	18 33	162-12	Cloudy	10	1008.5	74	69.7	85%	100%	1500	2'	78	29.5	238	236° / 10.6 KTS
1800	18° 27.5'N	162° 20'W	CLOUDY	~~5~~	1008.5	75	68.7	81%	100%	1500	2'	78	8	087	236° / 10.6 KTS
1900	18 33	162 28	CLOUDY	10	1008.5	75	68.7	81%	100%	1500	2'	78	8	087	236° / 10.6 KTS
2000			CLDY	8	1008.1	73	69.1	90%	100%	1500	3'	78	16	286	236° / 10.6 KTS
2100			CLDY	6	1009.8	73	70.1	90.1%	100%	1500	3'	80	14	276	236° / 10.6 KTS
2200			CLDY	7	1010.2	73	70.1	90.2%	100%	1540	3'	80	12.5	271	236° / 10.6 KTS
2300			PARTLY	7	1010.5	75	68.2	94	60%	1500	1'	80	20	259	236° / 10.6 KTS
2400			PARTLY CLDY	9	1010.2	75	68.2	94	60%	1500	2	80	7	324	236° / 10.6 KTS

REMARKS:

ALL TIMES LOCAL (WHISKEY); WIND DIR. IN WHOLE DEGREES; WIND SPEED IN KNOTS; TEMPERATURES IN FAHRENHEIT; VISIBILITY IN NAUTICAL MILES; WAVES IN WHOLE DEGREES; WAVE PERIOD IN SECONDS; WAVE HEIGHT IN WHOLE FEET; SEA LEVEL PRESSURE IN MILLIBARS

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SMITHSONIAN INSTITUTION
DIVISION OF BIRDS
AT SEA CLIMATOLOGICAL DATA

DATE 28 FEB 1966

TIME	LAT	LONG	PRES WEA	VIS	SLP	DRY B	DEW PT	HUM %	TL SKY	OPA SKY	WAVES	SEA TEMP	WIND S	WIND D	SHIP COURSE/SPD.
0100	NA	NA	PARTLY CLDY	10	1010.2	75	69.2	82%	60%	6500	3	80	9	320	236°T / 10.6 KTS
0200	NA	NA	PARTLY CLDY	10	1010.2	75	69.2	82%	60%	6500	2	80	9	320	236°T / 10.6 KTS
0300	NA	NA	PARTLY CLDY	10	1009.1	75	69.2	82%	60%	6500	2	80	11	300	236°T / 10.6 KTS
0400	—	—	Partly CLDY	10	1008.8	75	67.7	78%	40%	6500	2	80	14.5	279	236°T / 10.6 KTS
0500	—	—	Partly CLDY	10	1008.8	75	67.7	78%	40%	6500	2	80	15	280	236°T / 10.6 KTS
0600	17-19	164 00	Partly Cldy	10	1009.1	74	67.1	80%	40%	6500	1	79	15	280	236°T / 10.6 KTS
0700	17-13N	164-07W	Partly Cldy	10	1009.8	74	68.2	82%	60%	8000	2	80	15	280	236°T / 10.6 KTS
0800	17-07	164-16	PARTLY CLDY	10	1010.2	74	68.2	82%	60%	6500	2	80	8	330	239°T / 10.6 KTS
0900	17-01N	164-26W	PARTLY CLDY	10	1011.2	77	72.8	87%	60%	6500	2	80	8	330	239°T / 10.6 KTS
1000	16-56	164 34	PARTLY CLDY	10	1011.2	78	65.1	67%	60%	6500	2	80	18	265	239°T / 10.6 KTS
1100	16-50	164-42	PARTLY CLDY	10	1011.9	79	64.1	60%	60%	6500	2	80	16.5	272	239°T / 10.6 KTS
1200	16-45N	164-50W	PARTLY CLDY	10	1011.2	82	72.2	68%	30%	1800	3	82	17	280	239°T / 10.6 KTS
1300	—	—	PARTLY CLDY	10	1011.2	86	76.5	53%	50%	1600	3	83	6	135	160° / 8 KTS
1400	16 33	165-03	PARTLY CLDY	10	1010.5	85	70.9	62%	60%	1800	2	83	4.6	229	239° / 10.6 KTS
1500	16-27N	165-09W	PARTLY CLDY	10	1010.5	85	74	74.3%	60%	1800	2	83	2.6	233	239° / 10.6 KTS
1600	16-22	165-18	PARTLY CLDY	10	1010.5	86	63.8	43.5%	60%	1800	2	83	16	257	239° / 10.6 KTS
1700	16-17	165-27	Partly CLDY	10	1007.8	82	67.5°	62%	50%	2000	2'	79	10.5	177	239° / 10.6 KTS
1800	16-11N	165-37W	Partly Cloudy	10	1010.2	80	65.5	69%	70%	2500	3'	84	8	190	239° / 8 KTS
1900	—	—	Partly Cloudy	10	1009.8	82	65.9	68.5%	80%	2500	3'	84	9.5	192	239° / 9.5 KTS
2000	—	—	Partly Cloudy	10	1009.5	80	65.2	69.5%	90%	2000	3'	83	13	270	239° / 13 KTS
2100	—	—	PARTLY CLDY	12	1011.2	78	66.2	67%	50%	2500	3'	83	12.5	276	242° / 10.6 KTS
2200	—	—	PARTLY CLDY	12	1012.2	78	66.2	67%	90%	2500	3'	83	15	288	242° / 10.6 KTS
2300	—	—	PARTLY CLDY	12	1012.5	77	66.8	70.1%	80%	2500	3'	83	12.5	275	242° / 10.6 KTS
2400	—	—	PARTLY CLDY	11	1012.5	78	67.8	71%	80%	2500	3'	83	13	290	245° / 10.6 KTS

REMARKS:

ALL TIMES LOCAL (WHISKEY); WIND DIR. IN WHOLE DEGREES; WIND SPEED IN KNOTS; TEMPERATURES IN FAHRENHEIT; VISIBILITY IN NAUTICAL MILES; WAVES IN WHOLE DEGREES; WAVE PERIOD IN SECONDS; WAVE HEIGHT IN WHOLE FEET; SEA LEVEL PRESSURE IN MILLIBARS

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SMITHSONIAN INSTITUTION
DIVISION OF BIRDS
AT SEA CLIMATOLOGICAL DATA

DATE 7 MARCH

TIME	LAT	LONG	PRES WEA	VIS	SLP	DRY B	DEW PT	HUM %	TL SKY	OPA SKY	WAVES	SEA TEMP	WIND S	WIND D	SHIP COURSE/SPD.
0100			PartlyCldy	10	1012.4	77	71.3	82%	50%	2500	3'	84	17	225	242 / 10.6 KTS
0200			Partly Cldy	10	1011.3	78	70.9	77%	50%	2500	3'	84	11	214	242 / 10.6 KTS
0300			Partly Cldy	10	1011.9	77	74.2	91%	10%	3500	3'	84	7	242	242 / 10.6 KTS
0400			Partly Cldy	10	1011.9	77	69.9	84%	50%	4000	3	84	4	242	242 / 10.6 KTS
0500			Partly Cldy	10	1012.5	78	70.9	78%	50%	4000	3	84	5	210	242 / 10.6 KTS
0600	15 06	167 42	Partly Cldy	10	1012.5	78	70.9	78%	40%	4000	1	84	5	360	242 / 10.6 KTS
0700			Partly Cloud	10	1012.5	79	68.9	71%	30%	4000	2	84	10	254	242 / 10.6 KTS
0800	14-56N	168-01W	Partly Cloudy	10	1013.5	80	70	72%	50%	4000	2	84	15	234	242 / 10.6 KTS
0900			Partly Cldy	10	1013.9	80	70	65.9%	50%	4000	2	84	10	210	MANUEVERING
1000	14 56	168 06	Partly Cldy	10	1013.9	81	63	64%	50%	4000	2	84	10	200	"
1100			Partly Cldy	10	1013.9	80	70	65.9%	50%	4000	2	84	10	200	"
1200	14-55N	168 11W	PARTLY CLDY	10	1013.2	86	72.5	64.9%	50%	4000	2	84	11	207	233° / 10.6 KTS
1300			PARTLY CLDY	10	1012.9	91	76.2	61%	50%	4000	2	84	7.6	230	233° / 10.6 KTS
1400	14°42	168°29'	PARTLY CLDY	10	1012.9	89	74	61%	80%	3000	2	84	6.5	256	233° / 10.6 KTS
1500			PARTLY CLDY	10	1011.9	86	73.6	67%	90%	2000	2	84	3.6	230	233° / 10.6 KTS
1600			PARTLY CLDY	10	1011.9	81	73.6	82%	90%	2100	3'	85	5	200	233 / 10.6 KTS
1700			PartlyCld	10	1011.9	81	73	65%	90%	2000	2'	84	9.6	225	225 / 10.6 KTS
1800	14 14	169 03	PARTLY CLDY	10	1013.5	80	70.3	74%	90%	2000	3'	85	14	225	250 / 10.6 KTS
1900	14 07	69 11	PartlyCldy	9	1013.5	80	70.5	74%	100%	2000	3'	85	11	250	225 / 10.6 KTS
2000	13-59N	169-19W	CLOUDCAST	5	1010.2	75	67.7	74%	100%	2000	2	85	13	045	225 / 8 KTS
2100	53		PARTLY CLDY	7	1014.2	76	70.3	82%	90%	2000	2	84	12	045	225 / 8 KTS
2200	13 47	69 31	RAINCLOUDS	2	1014.6	76	70.3	82%	100%	4000	2	84	10	045	225 / 8 KTS
2300	42	26	QUICKCAST	7	1014.2	76	70.3	82%	100%	4000	2	84	12	045	225 / 8 KTS
2400	13 26	169 42	Partly Cldy	10	1013.9	77	66.8	86%	50%	4000	3'	86	15	045	225 / 8 KTS

REMARKS:

ALL TIMES LOCAL (WHISKEY); WIND DIR. IN WHOLE DEGREES; WIND SPEED IN KNOTS; TEMPERATURES IN FAHRENHEIT; VISIBILITY IN NAUTICAL MILES; WAVES IN WHOLE DEGREES; WAVE PERIOD IN SECONDS; WAVE HEIGHT IN WHOLE FEET; SEA LEVEL PRESSURE IN MILLIBARS

SI-MNH-955b
Rev. 4-9-64

SMITHSONIAN INSTITUTION
DIVISION OF BIRDS
AT SEA CLIMATOLOGICAL DATA

DATE 2 MAR 1966

TIME	LAT	LONG	PRES WEA	VIS	SLP	DRY B	DEW PT	HUM %	TL SKY	OPA SKY	WAVES	SEA TEMP	WIND S	WIND D	SHIP COURSE/SPD.
0100	13 3°	69 48	OVC.	10	1012.9	77	71.3	92%	100%	4000	3'	84	20	045	225°/8KTS
0200	13-25	169 54	Partly Cldy	10	1011.9	75	70.7	85%	80%	2000	3'	84	16	045	225°/8KTS
0300	20	59	Partly cldy	10	1011.9	75	70.7	85%	80%	2000	3'	84	16	045	225°/8KTS
0400	14	176 04	PARTLY CLDY	10	1011.9	75	70.7	85%	60%	4000	3'	84	4	221°	225°/8KTS
0500	08	10	PARTLY CLDY	10	1011.5	75	69.3	83%	60%	4000	3'	86	4	225°	225°/8KTS
0600	13-02	170 16	CLOUDY	10	1011.9	76	73.7	90%	90%	2000	3'	86	18	200	225°/8KTS
0700	12-57	170-21	CLOUDY	10	1012.5	76	68.1	76%	90%	4000	3'	83	9	225°	225°/8KTS
0800	12-51N	170-27W	Partly Cldy	10	1012.5	79	70.5	75%	90%	4000	3'	86	9	226	226°/8KTS
0900	12-47	170-34	CLDY	10	1013.2	80	71.3	75%	100%	3500	4'	83	10	045	226°/8KTS
1000	12°42'	170°42'	CLDY	8	1014.6	81	71.1	72%	100%	3500	3'	86	20	045	226°/8KTS
1100		48	Partly CLR.	10	1014.6	82	72.7	72%	80%	2500	3'	86	11	045	226°/8KTS
1200	12-33N	170-54W	Partly Cld	10	1014.6	82	72	73	90%	2500	4	86	15	045	226°/8KTS
1300	29	57	Partly Cldy	10	1012.5	82	72	72	90%	4000	5'	86	10	045	WINDWARD/SPD
1400	12-25	171°02'	Partly cldy	10	1012.2	84	74.7	82	80%	4000	4	85	11	045	222/8KTS
1500	12-22		Partly cldy	10	1011.9	84	70.7	82	80%	4000	4	85	15	045	222/8KTS
1600	12 18	14	Partly CLDY	8	1011.2	79	72°	76%	30%	1500	4'	84	18	042	222/8KTS
1700	14	19	Partly CLDY	10	1011.5	78	20.9	28%	60%	2000	5'	87	20	042	222/8KTS
1800	12° 11'	171°23'	Partly CLDY	10	1011.5	77	71.3	83%	60%	2500	4'	87	18	041	314/10.6
1900			Partly cldy	10	1012.5	76	69.7	82%	60%	3000	4'	87	22	047	314/10.6
2000	12-25N	171-37W	PARTLY CLDY	12	1012.9	77	71.3	82%	20%	3000	4'	87	17.5	055	314/10.6
2100	11-32	44	PARTLY CLDY	12	1013.2	76	70.3	83%	40%	3000	4'	83	14.5	042	314/10.6
2200	12°39'	171°52'	PARTLY CLDY	12	1013.5	76	71.7	87%	90%	2000	4'	83	11	049	314/10.6
2300	46	71	CLDY	10	1014.2	75	70.7	87%	100%	2000	5	83	30	090	045/9KTS
2400	12 53	71	CLDY	10	1013.9	78	72.4	87%	90%	2000	5	85	21	098	045/9KTS

REMARKS:

ALL TIMES LOCAL (WHISKEY); WIND DIR. IN WHOLE DEGREES; WIND SPEED IN KNOTS; TEMPERATURES IN FAHRENHEIT; VISIBILITY IN NAUTICAL MILES; WAVES IN WHOLE DEGREES; WAVE PERIOD IN SECONDS; WAVE HEIGHT IN WHOLE FEET; SEA LEVEL PRESSURE IN MILLIBARS

SI-MNH-955c
3-4-64

SMITHSONIAN INSTITUTION
DIVISION OF BIRDS
AT SEA SURVEY CHART C

DATE 3 May

TIME	LAT	LONG	PRES WEA	VIS	SLP	DRY B	DEW PT	HUM %	TL SKY	OPA SKY	WAVES	SEA TEMP	WIND S	WIND D	SHIP COURSE/SPD.
0100	[illegible]	171 [illegible]	PartlyCldy	10	1012.5	78	73.4	81%	50%	1400	4'	85	32	079	045/9KTS
0200	13 02	171 33	PartlyCldy	10	1011.9	78	72.4	82%	60%	1800	4'	83	26.5	076	045/9KTS
0300	[illegible]	[illegible]	PartlyCldy	10	1012.5	77	71.3	83%	30%	1500	4'	84	27	067	045/9KTS
0400	[illegible]	[illegible]	PartlyCldy	10	1011.9	77	71.3	83%	30%	2000	5'	84	26	100	045/9KTS
0500	[illegible]	21	CLEAR	10	1011.9	77	71.3	83%	20%	2000	4'	84	29	100	045/9KTS
0600	13°25'	171° 17'	CLEAR	10	1012.5	77	71.3	83%	20%	2000	3'	85	25	100	045/9KTS
080 0800	13-36N	171-04W	Clear	10	1012.5	77	69.8	79%	50%	2000	3'	84	25	090	045/9KTS
0700	13 20	171-13	Clear	10	1012.9	76	68.8	80%	30%	2000	3'	84	18	110	047/9KTS
0900	13-42	171-23	Clear	10	1013.2	80	25	85%	30%	20,000	3'	84	20	110	047/9KTS
1000	13°48'	170°56'	Clear	10	1013.2	81	72.6	75.6%	30%	20,000	3'	84	20	110	042/9KTS
1100	53	-50	Partly Cldy	10	1013.2	81	72.6	75.6%	50%	2000	5'	84	17.5	090	053/10.6
1200	13-54N	170-44W	PARTLY CLDY	10	1012.2	82	67.5	61%	50%	2000	3'	84	32	084	053/10.6
1300	14-4	170-39	[illegible]	[illegible]	1012.2	82	73.1	76%	[illegible]	1000	3'	84	29	060	053/10.6
1400	14° 10N	170° 33'	PARTLY CLDY	10	1010.5	79	73.4	83%	70%	1000	3'	83	36.5	076	053/10.6
1500	16	30	PARTLY CLDY	10	1010.2	81	72.6	92%	70%	1000	3'	83	37.5	076	053/10.6
1600	22	25	PARTLY CLDY	10	1011.2	81	76.9	87%	70%	1000	4'	83	36	086	053/10.6
1700	21	18	PARTLY CLDY	10	1011.9	78	73.8	87%	60%	1000	4'	83	35.5	087	053/10.6
1800	14°34'	170°06'	PARTLY CLDY	10	1012.5	77	72.	85%	70%	1000	4'	83	34	085	053/10.6
1900	40	1[illegible]	PARTLY CLDY	10	1012.5	78	72.4	83%	70%	1000	4'	83	21	090	053/10.6
2000	14-45.9N	169 52W	PartlyCldy	10	1013.2	78	72.4	83%	70%	1000	4'	84	21	095	065/10.6
2100	50	42	PartlyCldy	10	1013.9	78	72.4	83%	70%	2000	4'	84	21	095	065/10.6
2200	14°54'	169°32'	PartlyCldy	10	1013.9	78	72.4	83%	70%	2000	4'	84	21	085	065/10.6
2300			PartlyCldy	10	1013.9	78	72.4	83%	70%	2000	4'	84	21	085	065/10.6
2400			PartlyCldy	8	1014.5	78	72.4	83%	70%	2000	2	82	23	105	324/10.6

REMARKS:

ALL TIMES LOCAL (WHISKEY); WIND DIR. IN WHOLE DEGREES; WIND SPEED IN KNOTS; TEMPERATURES IN FAHRENHEIT; VISIBILITY IN NAUTICAL MILES; WAVES IN WHOLE DEGREES; WAVE PERIOD IN SECONDS; WAVE HEIGHT IN WHOLE FEET; SEA LEVEL PRESSURE IN MILLIBARS

SI-MNH-955c
3-4-64

SMITHSONIAN INSTITUTION
DIVISION OF BIRDS
AT SEA SURVEY CHART C

DATE 4 MARCH

TIME	LAT	LONG	PRES WEA	VIS	SLP	DRY B	DEW PT	HUM %	TL SKY	OPA SKY	WAVES	SEA TEMP	WIND S	WIND D	SHIP COURSE/SPD.
0100	15 16	169-47	PARTLY CLDY	8	1013.2	78	72.4	83	60%	2000	2	82	15	105	321° / 10.6 KTS
0200	15-25	169-42	PARTLY CLDY	8	1012.5	78	69.8	76	70%	2500	2	81	13	105	321 / 10.6
0300	29	50	PARTLY CLDY	10	1012.2	77	69.8	76	70%	2500	3	83	13	105	321 / 10.6
0400	15 34	169 57	PARTLY CLDY	10	1013.5	79	76.4	82%	70%	2500	3	83	14	105	321 / 10.6 KTS
0500			PARTLY CLDY	10	1012.3	78	72.6	83%	70%	2500	3'	84	21	201	325 / 10.6 KTS
0600	15-38	170-10	PARTLY CLDY	10	1012.2	78	76.6	95%	60%	2500	3'	84	14	080	325 / 10.6 KTS
0700	15	23	PARTLY CLDY	10	1013.2	78	76.1	95%	60%	2500	3'	84	20	280	325 / 10.6 KTS
0800	15-06N	170-30.7W	PARTLY CLDY	10	1012.5	78	72.4	83%	60%	2500	3	84	15	280	325 / 10.6 KTS
0900	14 50	170 13	PARTLY	10	1013.2	78	72.4	83%	60	2500	3	84	15	270	326 / 10.6 KTS
1000	14 53	170 11E	PARTLY CLDY	10	1013.2	80	74.5	84%	60%	2500	2	85	9	270	326 / 10.6 KTS
1100	14 46	170 53	PARTLY CLDY	10	1012.9	83	76.2	74	60%	2500	2	85	15	270	326 / 10.6 KTS
1200	14-38.5N	171-01W	PARTLY CLDY	10	1012.2	81	74.1	80%	60%	2000	2'	84	22	135	326 / 10.6 KTS
1300	21	171 08	Partly CLDY	10	1010.5	82	74.20	66%	60%	2000	2'	84	22	135	326 / 10.6
1400	14°23'	171° 18'	Partly CLDY	10	1009.8	82	81	90%	60%	2000	4'	84	22	135	326 / 10.6
1500	14 16	171 26	PARTLY CLDY	10	1009.8	84	77.9%	80%	80%	2000	4'	84	19	120	326 / 10.6
1600	08	36	PARTLY CLDY	10	1009.5	84	76.9%	79.9%	90%	1000	3'	84	16	093	326 / 10.6
1700	14-00	46	PARTLY CLDY	10	1009.5	83	74.8	76%	80%	2000	3'	84	12	093	326 / 10.6
1800	13-52	171° 56'	PARTLY CLDY	10	1010.5	80	75.2	85%	80%	1000	3'	84	14	093	326 / 10.6
1900	13 43	172 01	PARTLY CLDY	10	1012.9	79	75.9	90%	80%	2000	3'	83	13	095	326 / 10.6
2000	13-37N	172-08W	PARTLY CLDY	10	1012.2	80	77	90%	80%	2000	3	83	32	206	326 / 10.6
2100	13	16	PARTLY CLDY	10	1012.5	79	74.8	87%	90%	2000	3	84	20	086	326 / 10.6
2200	13°24'	172° 23'	PARTLY CLDY	10	1012.5	79	74.8	87%	90%	2000	3'	84	29	086	326 / 10.6
2300	13 20	172 30	PARTLY CLDY	10	1012.5	79	74.4	83%	70%	2000	3'	85	26	093	326 / 10.6
2400	13 23	172 38	PARTLY CLDY	10	1012.2	79	73.4	83	80%	2000	3	85	25	134	314 / 9 KTS

REMARKS:

ALL TIMES LOCAL (WHISKEY); WIND DIR. IN WHOLE DEGREES; WIND SPEED IN KNOTS; TEMPERATURES IN FAHRENHEIT; VISIBILITY IN NAUTICAL MILES; WAVES IN WHOLE DEGREES; WAVE PERIOD IN SECONDS; WAVE HEIGHT IN WHOLE FEET; SEA LEVEL PRESSURE IN MILLIBARS

SI-MNH-955c
3-4-64

SMITHSONIAN INSTITUTION
DIVISION OF BIRDS
AT SEA SURVEY CHART C

DATE 5 MARCH

TIME	LAT	LONG	PRES WEA	VIS	SLP	DRY B	DEW PT	HUM %	TL SKY	OPA SKY	WAVES	SEA TEMP	WIND S	WIND D	SHIP COURSE/SPD.
0100	31	45	PARTLY CLDY	10	1012.5	78	76.6	76%	70%	2000	2	85	32	137	314°T / 9KTS
0200	13 38	172 51	PARTLY CLDY	10	1011.9	78	76.6	76%	70%	2000	3	86	31	040	314°T / 9KTS
0300			OVERCAST	6	1010.8	78	76.6	76%	100%	4000	3	86	33	048	314°T / 9KTS
0400	13 58	173 04	PARTLY CLDY	8	1010.5	77	72.6	83%	80%	4000	3'	83	35	065	314°T / 9KTS
0500			PARTLY CLDY	8	1010.2	78	72.6	83%	80%	4000	3'	83	25	105	314°T / 9KTS
0600	14 10	172 55	PARTLY CLDY	6	1010.5	77	72.6	83%	80%	4000	3'	83	25	105	314°T / 9KTS
0700	15	49	PARTLY CLDY	8	1010.8	77	71.3	83%	100%	4000	3'	83	34	95	314 / 9KTS
0800	14-20N	172-43W	PARTLY CLDY	8	1010.5	77	71.3	83%	100%	4000	3'	83	32	112	314° / 9KTS
0900	26	37	PARTLY CLDY	8	1010.8	78	70.9	93%	100%	4000	3'	83	33	122	314° / 9KTS
1000	14 33	172 30	PARTLY CLDY	8	1011.5	78	70.5	92%	100%	4000	3'	83	35	123	314° / 9KTS
1100			OVERCAST	9	1011.5	78	70.5	92%	100%	4000	4'	83	35	080	048 / 9KTS
1200	14-45N	172-16.5W	OVERCAST	9	1011.2	80	73	93%	100%	4000	3'	83	35	254	048 / 9KTS
1300			OVC	9	1011.2	80	73	93%	100%	4000	3'	83	35	254	048 / 9KTS
1400	14 57	172-03	OVC	9	1010.5	80	72	55%	100%	2500	3'	83	35	254	048 / 9KTS
1500			OVC	9	1010.5	80	70	72%	100%	2500	4'	83	37	263	048 / 9KTS
1600			OVC	10	1009.5	80	70	71	100%	2500	4	83	37	263	048 / 9KTS
1700			OVC	10	1010.5	80	70	71	100%	2500	4	85	35	263	048 / 9KTS
1800	15-11	171-33	OVC	10	1010.5	78	76.2	65%	100%	2500	4	83	37	263	048 / 9KTS
1900	15	49	OVC	10	1010.5	78	76.2	65%	100%	2500	4	83	37	263	048 / 9KTS
2000	15-19N	171-45W	~~OVC~~ CLDY	10	1011.2	77	76.2	65%	90%	3000	2'	81	24	108	048 / 9KTS
2100	25		PARTLY CLDY	10	1012.2	77	76.2	65%	90%	3000	2	81	24	108	~~048~~ / ~~9KTS~~ 055 / 10.6KTS
2200	15-31	171-18	PARTLY CLDY	10	1012.5	78	76.2	65%	80%	3000	2'	81	24	103	055 / 10.6
2300			PARTLY CLDY	10	1012.5	77	71.3	83%	80%	3000	3'	81	21	093	055 / 10.6
2400			PARTLY CLDY	10	1012.9	76	69.2	86%	80%	3000	3'	82	24	108	055 / 10.6

REMARKS:

ALL TIMES LOCAL (WHISKEY); WIND DIR. IN WHOLE DEGREES; WIND SPEED IN KNOTS; TEMPERATURES IN FAHRENHEIT; VISIBILITY IN NAUTICAL MILES; WAVES IN WHOLE DEGREES; WAVE PERIOD IN SECONDS; WAVE HEIGHT IN WHOLE FEET; SEA LEVEL PRESSURE IN MILLIBARS

SI-MNH-955c
3-4-64

SMITHSONIAN INSTITUTION
DIVISION OF BIRDS
AT SEA SURVEY CHART C

DATE 6 MARCH

TIME	LAT	LONG	PRES WEA	VIS	SLP	DRY B	DEW PT	HUM %	TL SKY	OPA SKY	WAVES	SEA TEMP	WIND S	WIND D	SHIP COURSE/SPD.
0100			PARTLY CLD	10	1012.2	76	70.3	80.2%	100%	3000	3'	82	24	120	055° / 10.6 KTS
0200	15-51	171 02	PARTLY CLD	10	1011.5	76	68.2	70.7	100%	3000	3'	82	25	120	055° / 10.6 KTS
0300			CLOUDY	10	1010.8	76	68.2	70.7	100%	3000	3'	83	26	118	055° / 10.6 KTS
0400	16 04	170 51	CLDY	10	1010.2	76	68.2	70.7	100%	3000	3'	83	37	263	055° / 10.6 KTS
0500	11	40	CLDY	10	1011.3	77	24.2	91 %	100%	3000	3'	82	37	270	055° / 10.6 KTS
0600	16-18	170 33	PARTLY CLD	10	1012.3	79	68.8	91%	[illegible]	[illegible]	3'	82	24	223	055° / 10.6 KTS
0700	25	10	PARTLY CLD	10	1013.2	76	70.3	84%	[illegible]	3000	3'	82	18	182	055° / 10.6 KTS
0800	16-32N	170-47W	PARTLY CLDY	10	1013.2	81	73.3	84 %	30%	2000	3	82	14	256	325° 9 KTS
0900	37	54	PARTLY CL	10	1013.2	81	70.3	84 %	30%	2000	3	82	17	256	325° 10 KTS
1000	16-41	171-01	PARTLY	10	1014.9	81	70.3	84 %	30%	2000	3	82	18	256	325° 10 KTS
1100	16-46	71-58	PARTLY CLDY	10	1014.9	81	71.1°	74%	30%	2000	3'	83	28	082	225° / 9 KTS
1200	16-46N	171-15W	PARTLY CLDY	10	1014.2	81	71.1°	74%	30%	2000	3'	83	17	348	225° / 9 KTS
1300	40	32	PARTLY CLDY	10	1013.5	81	70.1°	74%	30%	2000	3'	83	17	348	225° / 9 KTS
1400	16-33	171-29	PARTLY CLDY	10	1013.2	85	72.5°	65%	40%	2000	3'	84	6	155	225° / 7 KTS
1500	29	22	PARTLY CLDY	10	1012.5	85	72.5°	65%	50%	2000	3'	84	20	176	240° / 7 KTS
1500	24	36	PARTLY CLDY	10	1012.5	88	74.3°	64%	50%	2000	3'	84	7	136	225° / 7 KTS
1700	20	39	PARTLY CLDY	10	1012.9	87	74.3	71 %	50%	2000	2'	83	3	045	225° / 7 KTS
1800	16-15	171-43	PARTLY CLDY	10	1013.2	87	74.3	71 %	30%	2000	3'	84	3	045	225° / 7 KTS
1900	10	47	PARTLY CLDY	10	1013.2	81	72.0	91 %	50%	2000	2'	84	3	045	225° / 7 KTS
2000	16-06N	171-52W	PARTLY CLDY	10	1013.9	81	77.0	91%	30%	2000	2	84	3	045	225° / 7 KTS
2100	16 [illegible]	[illegible]	PARTLY CLDY	10	1014.2	81	77.0	91%	50%	2000	2	84	3	045	225° / 9 KTS
2200	15-53	172-08	PARTLY	10	10.14.6	80	74.5	72 %	30%	2000	2	85	3	047	224° / 9
2300			PARTLY	10	1014.9	80	74.5	72 %	30%	2000	2	85	15	045	224° / 9
2400		PARTLY	PARTLY	08	1014.8	80	74.5	77%	30%	2000	2'	84	24	028	223° / 9

REMARKS:

ALL TIMES LOCAL (WHISKEY); WIND DIR. IN WHOLE DEGREES; WIND SPEED IN KNOTS; TEMPERATURES IN FAHRENHEIT; VISIBILITY IN NAUTICAL MILES; WAVES IN WHOLE DEGREES; WAVE PERIOD IN SECONDS; WAVE HEIGHT IN WHOLE FEET; SEA LEVEL PRESSURE IN MILLIBARS

D m c r t

SI-MNH-955c
3-4-64

SMITHSONIAN INSTITUTION
DIVISION OF BIRDS
AT SEA SURVEY CHART C

DATE 7MAR

TIME	LAT 13	LONG 172	PRES WEA	VIS	SLP	DRY B	DEW PT	HUM %	TL SKY	OPA SKY	WAVES	SEA TEMP	WIND S	WIND D	SHIP COURSE/SPD.
0100	15 35	72-29	Partly Cldy	8	1014.8	80	74.5	77%	40%	2000	2'	83	19	048	228 / 9 KTS
0200	15-28	172-36	Partly Cldy	8	1013.9	78	67.8	72%	40%	2000	2'	83	24	048	228 / 9 KTS
0300	22	43	Partly Cldy	8	1013.2	78	67.8	72%	40%	2000	2'	83	24	048	228 / 9 KTS
0400	15 15	172-50	PARTLY CLDY	8	1013.2	77	69.8	79%	50%	2000	2'	83	5	048	228 / 9 KTS
0500	10	58	PARTLY CLDY	8	1012.9	77	69.4	77%	50%	2000	2'	83	11	048	228 / 9 KTS
0600	15 05	173-06	PARTLY CLDY	8	1012.9	77	69.4	77%	60%	2000	2'	83	6	048	228 / 9 KTS
0700	15 00	173 11	PARTLY CLDY	8	1013.5	77	71.3	83%	70%	2000	2'	83	12	048	228 / 9 KTS
0800	14-54N	173-16W	Partly Cldy	10	1014.1	78	70.8	82%	70%	2000	2'	84	27	076	228 / 9 KTS
0900	49	21	Partly Cldy	10	1013.5	80	71.5	75%	70%	2000	2'	84	26	024	228 / 9 KTS
1000	14-43	173-26	Partly Cldy	10	1014.6	81	73.6	75%	40%	2000	2'	84	26	043	228 / 9 KTS
1100			Partly Cldy	10	1015.2	84	74.4	73%	50%	2000	3'	84	22	043	228 / 9 KTS
1200	14-31N	173-37.0	Partly Cldy	10	1011.2	84	74.6	74%	60%	2000	3	84	19	253	228 / 9 KTS
1300	22	38	PARTLY	10	1014.2	83	73.3	77%	60%	2000	3	84	24	253	174 / 9 KTS
1400	14-13	173-40	PARTLY CLDY	10	1013.2	87	80.4	81%	60%	2000	2	85	33	253	174 / 9 KTS
1500	07	173-39	PARTLY CLDY	10	1012.8	87	80.4	81	60%	2000	2	85	33	253	174 / 9 KTS
1600	01		Partly Cldy	10	1011.9	87	74.7	65%	80%	2000	2'	88	35	253	174 / 9 KTS
1700	55		Partly Cldy	10	1011.9	87	74.7	65%	70%	2000	2'	87	35	253	174 / 9 KTS
1800	13-49	173-38	Partly Cldy	10	1012.5	87	74.7	65%	80%	2000	2'	84	31	253 100	174 / 9 KTS
1900		173-36	Partly Cldy	10	1012.5	87	74.7	65%	80%	2000	2'	84	31	100	174 / 9 KTS
2000	13-22N	173-30W	PARTLY CLDY	10	1013.2	78	73.8	87%	80%	2000	2'	84	33	100	174 / 9 KTS
2100			PARTLY CLDY	10	1013.5	78	76.9	95%	80%	2000	2'	84	33	100	174 / 9 KTS
2200			PARTLY CLDY	10	1013.9	78	73.8	87%	80%	2000	2'	84	33	100	174 / 9 KTS
2300			PARTLY CLDY	10	1013.9	78	76.9	95%	80%	2000	2'	84	33	100	174 / 9 KTS
2400			Partly Cldy	10	1013.9	78	76.9	95%	80%	2000	2'	84	33	100	174 / 9 KTS

REMARKS:

ALL TIMES LOCAL (WHISKEY); WIND DIR. IN WHOLE DEGREES; WIND SPEED IN KNOTS; TEMPERATURES IN FAHRENHEIT; VISIBILITY IN NAUTICAL MILES; WAVES IN WHOLE DEGREES; WAVE PERIOD IN SECONDS; WAVE HEIGHT IN WHOLE FEET; SEA LEVEL PRESSURE IN MILLIBARS

SI-MNH-955c
3-4-64

SMITHSONIAN INSTITUTION
DIVISION OF BIRDS
AT SEA SURVEY CHART C

DATE 8 March

TIME	LAT	LONG	PRES WEA	VIS	SLP	DRY B	DEW PT	HUM %	TL SKY	OPA SKY	WAVES	SEA TEMP	WIND S	WIND D	SHIP COURSE/SPD.
0100		Partly Cldy	~~~	10	1013.9	78	76.5	95%	90%	2000	3'	86	33	2~~	174/9KTS
0200			Partly Cldy	10	1012.2	79	72	80%	40%	2000	3'	86	34	~~2~~ 119	174/9KTS
0300															
0400			Partly Cldy	10	1012.2	79	72	80%	70%	2000	4	86	35	~~2~~ 110	174/9KTS
0500			Partly Cldy	10	1011.2	79	72	80%	70%	2000	4	86	35	~~2~~ 119	174/9KTS
0600	12.01	173-36	Partly Cldy	10	1011.2	79	72	80%	70%	2000	3	86	20	100	174/9KTS
0700	11.53	34	Partly Cldy	10	1011.2	80	70	71%	70%	2000	3	84	30	100	174/9KTS
0800	11-45N	173-35W	Partly Cldy	10	1011.5	80	71.5	75%	70%	2000	3'	86	26	~~110~~ 080	174/9KTS
0900	39	173 32	Partly Cldy	10	1012.2	80	71.5	75%	70%	2000	3'	86	26	~~110~~ 080	174/10.6
1000	11-28	173-28	Partly Cldy	10	1012.2	80	71.5	75%	70%	2000	3'	84	26	~~110~~ 080	174/10.6
1100	20	26	Partly Cldy	10	1012.2	80	71.5	75%	70%	2000	3'	84	26	083	174/10.6 KTS
1200	11-12N	173-24W	PARTLY CLDY	10	1011.5	75	72.2	73%	70%	2000	3'	84	28	072	174/10.6 KTS
1300	11-00	73-21	PARTLY CLDY	10	1011.2	75	72.6	73%	70%	2000	3'	84	25	072	174/10.6 KTS
1400	10-48	173-17	PARTLY CLDY	10	1010.8	74	70.7	69%	80%	2000	3'	84	31	072	174/10.6 KTS
1500			PARTLY CLDY	10	1010.2	80	70	72%	50%	2000	3'	84	36	083	174/10.6 KTS
1600	30	12	Partly Cldy	8	1010.2	80	70%	72%	60%	2000	3	84	31	083	174/10.6 KTS
1700	21		Partly Cldy	8	1010.2	81	72.6%	76%	80%	2000	3'	84	38	083	174/10.6 KTS
1800	10-12	173-12	Partly Cldy	8	1010.5	80	74.5	83%	80%	2000	3'	84	385	086	174/10.6 KTS
1900		12	Partly Cldy	8	1016.5	80	74.5	83%	80%	2000	3	84	36 16	054	174/10.6 KTS
2000	04-57N	173-10W	Partly Cldy	8	1011.5	80	74.5	83%	80%	2000	X5'	84	26 16	054	174/10.6 KTS
2100			Partly Cldy	8	1011.5	80	74.5	83%	80%	2000	3 5'	84	26 16	054	174/10.6 KTS
2200			Partly Cldy	8	1011.9	80	74.5	83%	80%	2000	3	84 85	26 16	054	174/10.6 KTS
2300			Partly Cldy	8	1011.9	80	74.5	83%	90%	3000	3'	85			
2400			PARTLY CLDY	9	1011.9	80	74.5	83%	90%	3000	3	85	16	050	164/10.6 KTS

REMARKS:

ALL TIMES LOCAL (WHISKEY); WIND DIR. IN WHOLE DEGREES; WIND SPEED IN KNOTS; TEMPERATURES IN FAHRENHEIT; VISIBILITY IN NAUTICAL MILES; WAVES IN WHOLE DEGREES; WAVE PERIOD IN SECONDS; WAVE HEIGHT IN WHOLE FEET; SEA LEVEL PRESSURE IN MILLIBARS

SI-MNH-955c
3-4-64

SMITHSONIAN INSTITUTION
DIVISION OF BIRDS
AT SEA SURVEY CHART C

DATE 9 MARCH

TIME	LAT	LONG	PRES WEA	VIS	SLP	DRY B	DEW PT	HUM %	TL SKY	OPA SKY	WAVES	SEA TEMP	WIND S	WIND D	SHIP COURSE/SPD.
0100			PARTLY	10	1011.9	80	74.5	83%	90%	3000	4	86	18	050	164 / 10.6 KTS
0200			PARTLY C/DY	10	1011.5	80	74.5	83%	90%	3000	4	86	18	050	164 / 10.6 KTS
0300			PARTLY CLDY	10	1009.5	80	74.5	83%	90%	3000	4	86	18	050	164 / 10.6 KTS
0400	08-37	176-46	PARTLY CLDY	10	1009.5	80	74.5	83%	90%	3000	4	85	14	031	164 / 10.6 KTS
0500			PARTLY CLDY	10	1009.1	80	74.5	83%	90%	3000	4	85	25	031	164 / 10.6 KTS
0600	08-19	172-46	PARTLY CLDY	10	1009.1	80	74.5	83%	90%	3000	4	85	26	049	164 / 10.6 KTS
0700	10	44	PARTLY CLDY	10	1009.5	81	74.1	80%	70%	3000	4	85	32	048	164 / 10.6 KTS
0800	08-04N	172-42W	PARTLY CLDY	10	1009.5	81	73.3	83%	70%	1000	4	86	22	057	175 / 10.6 KTS
0900	51		PARTLY CLDY	10	1009.5	81	76.2	83%	80%	1000	4	86	24	055	175 / 10.6 KTS
1000	07-41	172-42	PARTLY CLDY	10	1011.2	81	76.5	87%	70%	1000	4	86	34	057	174 / 10.6 KTS
1100	31		PARTLY CLDY	10	1011.2	83	78	87%	80%	1000	4	86	24	055	174 / 10.6 KTS
1200	07-21N	172-41.5W	PARTLY CLDY	10	1011.2	84	80	76%	70%	1500	4	86	20	059	174 / 10.6 KTS
1300	11		PARTLY CLDY	10	1010.2	85	81.1	87%	80%	2500	4	86	18	058	174 / 10.6 KTS
1400	07-01	172-38	PARTLY CLDY	10	1009.1	85	81.1	87%	90%	2500	4	86	18	054	174 / 10.6 KTS
1500	06-51	38	PARTLY CLDY	10	1008.5	85	81.1	87%	90%	2500	4	86	22	054	174 / 10.6 KTS
1600	6-40	172-36	PARTLY CLDY	10	1007.5	85	81.1	87%	90%	2000	4	86	16	059	175 / 10.6 KTS
1700	31	36	PARTLY CLDY	10	1007.5	83	80	90%	80%	2000	4	86	16	062	175 / 10.6 KTS
1800	06-22	172-35	PARTLY CLDY	10	1007.8	79	76.6	90.2%	90%	2000	4	86	17	082	175 / 10.6 KTS
1900	6-13	172-35	PARTLY CLDY	10	1008.1	81	76.9	87%	70%	2000	4	86	18	093	175 / 10.6 KTS
2000	06-02.5N	172-34.5W	PARTLY CLDY	10	1008.1	81	76.3	87%	70%	3000	4	86	17	083	175 / 10.6 KTS
2100			PARTLY CLDY	10	1008.1	81	76.3	87%	70%	3000	4	87	14	083	175 / 10.6 KTS
2200			PARTLY CLDY	10	1007.8	82	77.9	87%	70%	2000	4	87	17.5	082	175 / 10.6 KTS
2300			PARTLY CLDY	10	1007.8	82	77.9	87%	70%	2000	4	87	17.5	082	175 / 10.6 KTS
2400			PARTLY CLDY	10	1008.5	82	77.9	87%	70%	2000	4	87	14	082	175 / 10.6 KTS

REMARKS:

ALL TIMES LOCAL (WHISKEY); WIND DIR. IN WHOLE DEGREES; WIND SPEED IN KNOTS; TEMPERATURES IN FAHRENHEIT; VISIBILITY IN NAUTICAL MILES; WAVES IN WHOLE DEGREES; WAVE PERIOD IN SECONDS; WAVE HEIGHT IN WHOLE FEET; SEA LEVEL PRESSURE IN MILLIBARS

SI-MNH-955c
3-4-64

29.7

SMITHSONIAN INSTITUTION
DIVISION OF BIRDS
AT SEA SURVEY CHART C

DATE 10 MAR 196 C

TIME	LAT	LONG	PRES WEA	VIS	SLP	DRY B	DEW PT	HUM %	TL SKY	OPA SKY	WAVES	SEA TEMP	WIND S	WIND D	SHIP COURSE/SPD.
0100	—	—	Partly CLDY	10	1010.5	83	79	76%	20%	2000	3'	82	16	052	175/10.6
0200			Partly CLDY	10	1009.5	83	79	76%	60%	2000	3'	83	16	052	175/10.6
0300			Partly CLDY	8	1009.1	83	79	76%	20%	2000	3'	85	13	131	175/10.6
0400			Partly CLDY	8	1008.8	83	77.4	83%	50%	2000	2'	85	10	141	175/10.6
0500			Partly CLDY	8	1008.8	82	76.6	82%	50%	2000	3'	85	12	141	175/10.6
0600	04-22	172-25	Partly CLDY	8	1008.8	82	76.6	82%	50%	2000	3'	86	10	141	175/10.6
0700	16	24	Partly CLDY	10	1009.5	85	76.9	76%	50%	2000	4'	~~86~~ 84	9.5	120	175/10.6
0800	04-02N	172-23W	Partly CLDY	10	1009.5	83	76.9	76%	50%	2000	4'	84 78	9.5	120	175/10.6
0900	03 51		PARTLY CLD	10	1010.5	85	76.3	76%	30%	2000	4	86	9.5	120	175/10.6 KTS
1000	03-41	172-22	Partly CLDY	10	1010.5	85	76.9	76%	20%	2000	4'	86	9.5	120	175/10.6
1100	30		Partly CLDY	10	1010.5	85	76.9	76%	40%	2000	3'	86	9.5	120	175/10.6
1200	03-19N	172-20W	PARTLY CLDY	10	1009.8	86	79.4	68%	30%	2000	3	86	9	150	175/10.6
1300	12	19	RAIN	2	1009.5	82	76.6	82%	70%	2000	1	86	16	249	190/10.6
1400	03-05	172-18	SWINGING	SHIP											
1500	01		SWINGING	SHIP											
1600	57		GQ												
1700	53		PARTLY CLDY	10	1008.1	84	79.25	80%	50%	2000	2'	87	7	124	175/10.6
1800	02-49	172-16	Partly Cloudy	10	1008.5	83	79.1	94%	40%	2000	2'	87	10	080	175-10.6
1900			Partly Cloudy	8	1008.5	84	76.5	78%	40%	2000	2	87	10	084	175-10.6
2000	02-34N	172-15W	PARTLY CLDY	10	1009.1	86	76.5°	78%	30%	2000	2	87	14	089	175/10.6
2100			PARTLY CLDY	8	1009.5	86	82°	87%	30%	2500	2	87	14	089	175/10.6
2200			PARTLY CLDY	8	1010.5	86	82°	87%	30%	2500	2	87	12	089	175/10.6
2300			PARTLY CLDY	8	1010.5	86	82°	87%	30%	2500	2	87	13	089	175/10.6
2400			Partly CLDY	8	1010.2	85	76.90	81%	30%	2500	1'	86	11.5	124	175/10.6

REMARKS:

ALL TIMES LOCAL (WHISKEY); WIND DIR. IN WHOLE DEGREES; WIND SPEED IN KNOTS; TEMPERATURES IN FAHRENHEIT; VISIBILITY IN NAUTICAL MILES; WAVES IN WHOLE DEGREES; WAVE PERIOD IN SECONDS; WAVE HEIGHT IN WHOLE FEET; SEA LEVEL PRESSURE IN MILLIBARS

SI-MNH-955c
3-4-64

Octant
Sq Equator in 6

SMITHSONIAN INSTITUTION
DIVISION OF BIRDS
AT SEA SURVEY CHART C

DATE 11 MARCH

TIME	LAT	LONG	PRES WEA	VIS	SLP	DRY B	DEW PT	HUM %	TL SKY	OPA SKY	WAVES	SEA TEMP	WIND S	WIND D	SHIP COURSE/SPD.
0100			Partly Cldy	10	1008.1	82	76.6	84%	30%	4000	1'	86	11.5	126	175 / 10.6 KTS
0200			Partly Cldy	10	1009.1	82	76.4	84%	30%	4000	1'	86	11.5	126	175 / 10.6 KTS
0300			Partly Cldy	10	1008.5	82	76.6	84%	30%	4000	2'	86	11.5	126	175 / 10.6 KTS
0400			PARTLY CLDY	10	1007.5	83	77.6	84%	20%	4000	2'	86	8	149	175 / 10.6 KTS
0500			PARTLY CLDY	10	1007.4	83	77.6	84%	20%	2000	2'	86	6	145	175 / 10.6 KTS
0600	00-54	172-15	PARTLY CLDY	10	1008.1	83	77.6	84%	40%	2000	2'	87	7	145	175 / 10.6 KTS
0700	44		PARTLY CLDY	10	1008.5	83	76.6	84%	40%	3000	2'	87	8	145	175 / 10.6 KTS
0800	0-34N	172-14W	Partly Cldy	10	1009.8	84	77.3	90%	40%	3000	2'	87	7	145	175 / 10.6 KTS
0900	26	12	Partly Cldy	10	1010.5	85	76.9	77%	30%	2000	2'	87	10	120	172 / 10.6 KT
1000	00-17	172-10	Partly Cldy	10	1010.2	85	76.9	77%	30%	2000	2'	87	10	120	172 / 10.6
1100		9	Partly Cldy	10	1010.2	87	77.1	74%	30%	2000	2	87	9	206	172 / 10.6
1200	0-01 S	172-08.2W													
1300	19														
1400	37	172-06													
1500	53	8	Partly Cldy	10	1006.8	88	~~77~~ 78.2	88%	30%	2000	1'	86	15	142	172 / 10.6
1600	20	10	Partly Cldy	10	1006.4	84	77.3°	81%	30%	2000	1'	86	6	133	172 / 10.6
1700	37	12	Partly Cldy	10	1007.1	84	75.8°	76%	30%	2000	1'	86	6	133	172 / 10.6
1800	01-00 S	172-13	Partly Cldy	10	1007.1	84	75.8°	76%	30%	2000	1'	87	5.5	130	172 / 10.6
1900			Partly Cldy	10	1007.8	82	74.5°	83%	30%	2000	1'	87	11.5	085	172 / 10.6
2000	01-19S	172-14W													
2100															
2200															
2300															
2400															

REMARKS:

ALL TIMES LOCAL (WHISKEY); WIND DIR. IN WHOLE DEGREES; WIND SPEED IN KNOTS; TEMPERATURES IN FAHRENHEIT; VISIBILITY IN NAUTICAL MILES; WAVES IN WHOLE DEGREES; WAVE PERIOD IN SECONDS; WAVE HEIGHT IN WHOLE FEET; SEA LEVEL PRESSURE IN MILLIBARS

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SI-MNH-955b
Rev. 4-9-64

SMITHSONIAN INSTITUTION
DIVISION OF BIRDS
AT SEA CLIMATOLOGICAL DATA

DATE 17 MAY

TIME	LAT	LONG	PRES WEA	VIS	SLP	DRY B	DEW PT	HUM %	TL SKY	OPA SKY	WAVES	SEA TEMP	WIND S	WIND D	SHIP COURSE/SPD.
0100			Partly cldy	10	1004.5	80	79.6	95%	30%	2000	1'	87	14	075	167/8KTS
0200			Partly cldy	10	1004.5	80	78.6	95%	20%	2000	1'	87	15.6	080	165 8 KTS.
0300			Partly cldy	10	1007.5	80	78.6	95%	30%	2000	1'	87	15.2	080	167 8 KTS.
0400			PARTLY CLDY	10	1007.1	80	75.0	94%	30%	2000	1	87	16	080	167/8KTS
0500			PARTLY CLDY	10	1007.1	80	75.0	94	30	2000	1	87	13	133	162/8KTS
0600	02-35	172-12	PARTLY CLDY	10	1007.5	80	75.0	94	50	2000	1	87	25	107	120°/10.6KTS
0700	41	03	Partly cldy	10	1007.5	84	76.9	92%	50%	2000	1'	87	25	022	120°/10.6KTS
0800	02-47S	171-54W	Partly cldy	10	1007.8	85	76.9	92%	50%	2000	1'	87	—	—	Maneuvering
0900	56	52	Partly cldy	10	1008.5	85	76.9	92%	50%	2000	1'	87	15.5	025	181°/10.6KTS
1000	03-05	171-50	Partly cldy	10	1008.5	85	76.9	92%	50%	2000	1'	87	15	085	181°/10.6KTS
1100	14		Partly cldy	10	1008.5	85	76.9	92%	50%	2000	1'	87	15	085	181°/10.6KTS
1200	03-23S	171 48W	Overc cldy	10	1007.5	89	81.1	70.7%	30%	2000	1'	87	16	070	168/10.6
1300	22	41	Partly cldy	10	1006.8	87	77.6	70.4%	30%	2000	1'	87	15	080	168/10.6
1400	03-42	171-49	Partly cldy	10	1006.4	88	82.8	82%	30%	2000	1'	87	14	086	175/10.6
1500	58	49	Partly cldy	10	1005.4	88	77.3	70.1	30%	2000	1'	87	15	086	175/10.6
1600	03 57	50	Partly cldy	10	1004.2	88	77.3	70.1	30%	2000	2	88	16	093	175/10.6
1700	04 05	51	PARTLY CLDY	10	1005.8	86	76.5	74%	30%	2000	2	88	20	10	175/10.6
1800	04-12	171-52	PARTLY CLDY	10	1006.1	86	76.5	74%	40%	2000	2	88	18	20	175/10.6
1900		52	PARTLY CLDY	10	1006.4	85	75.5	77%	80%	2000	2	90	13	50	165/10.6
2000	04-45S	171-50W	Partly cldy	10	1007.5	85	78.3	80%	80%	2000	2'	89	10	085	165/10.6
2100			Partly cldy	10	1007.5	85	78.3	80%	80%	2000	2'	89	10	085	165/10.6
2200			Partly cldy	10	1007.5	85	75.5	77%	40%	2000	2'	89	11	085	165/10.6
2300			Partly cldy	10	1007.2	85	75.5	77%	40%	2000	2'	89	11	085	165/10.6
2400			Partly cldy	8	1007.2	83	76.2	72%	20%	2000	2'	89	9	070	165/10.6

REMARKS:

ALL TIMES LOCAL (WHISKEY); WIND DIR. IN WHOLE DEGREES; WIND SPEED IN KNOTS; TEMPERATURES IN FAHRENHEIT; VISIBILITY IN NAUTICAL MILES; WAVES IN WHOLE DEGREES; WAVE PERIOD IN SECONDS; WAVE HEIGHT IN WHOLE FEET; SEA LEVEL PRESSURE IN MILLIBARS

SI-MNH-955b
Rev. 4-9-64

SMITHSONIAN INSTITUTION
DIVISION OF BIRDS
AT SEA CLIMATOLOGICAL DATA

DATE 13 March 1966

TIME	LAT	LONG	PRES WEA	VIS	SLP	DRY B	DEW PT	HUM %	TL SKY	OPA SKY	WAVES	SEA TEMP	WIND S	WIND D	SHIP COURSE/SPD.
0100			Partly Cloudy	8	1007.1	83	76.2	72%	20%	2000	2'	88	10	070	163T / 10.6KTS.
0200			Partly CLDY	8	1006.4	85	76.9	72%	40%	2000	2'	87	10	075	163T / 10.6 KTS.
0300			Partly CLDY	8	1006.4	85	76.9	72%	50%	1000	2'	88	10	075	163T / 10.6KTS
0400			Partly Cloud	8	1006.4	85	78.3	80%	40%	2000	2'	88	9	080	163T 10.6KTS
0500			Partly Cloud	8	1006.4	85	78.2	79%	40%	2000	2'	87	9	077	163T 10.6KTS
0600	06-25	171-19	Partly Cloud	8	1006.8	84	77.2	80%	40%	2000	2'	88	8	118	163 10.6KTS
0700	35	25	Partly Cloud	10	1008.8	84	77.2	80%	40%	2000	2'	88	8	130	163 10.6KTS
0800	06-46.5	171-31W	RAINING	10	1009.5	84	78.7	84%	90%	2000	2	88	8	124	165 10.6 KTS
0900	56	35	PARTLY CLDY	10	1009.1	84	78.7	84%	70%	2000	2	88	10	124	165 / 10.6 KTS
1000	07-05	171-18	PARTLY CLDY	10	1009.1	86	77.9	76%	70%	2000	2	88	14	124	155 / 10.6 KTS
1100	15	11	PARTLY CLDY	10	1008.5	88	78.7	74%	90%	2000	2	88	16	124	155 / 10.6 KTS
1200	07-26.5	171-04W	OVERCAST	10	1007.3	86	76	75%	100%	2000	3	88	11	127	155 / 10.6 KTS
1300	36		PARTLY CLDY	10	1006.8	85	76.4	76%	70%	2000	3	87	15	124	155 / 10.6 KTS
1400	07-46	170-55	PARTLY CLDY	10	1006.4	85	76.4	76%	60%	2000	3	87	12	124	155 / 10.6 KTS
1500	56	52	PARTLY CLDY	10	1006.4	86	82.3	91%	80%	2000	3	87	7	145	155 / 10.6 KTS
1600	08-06	48	PARTLY CLDY	10	1006.1	87	81.5	84%	60%	2000	3	89	8	126	155 / 10.6
1700	16	45	PARTLY CLDY	10	1006.1	86	85.1	97%	60%	2000	3	89	7	126	155 / 10.6
1800	08-27	170-41	PARTLY CLDY	10	1006.1	85	83.5	92%	70%	2000	3	89	12	141	155 / 10.6
1900			PARTLY CLDY	10	1006.8	85	79.5	84%	60%	2000	3	89	12	154	155 / 10.6
2000	08-48.5	170-34W	PARTLY CLOUDY	10	1008.5	85	79.7	84%	60%	2000	3	90	14	133	160 10.6
2100			PARTLY CLOUDY	10	1008.5	85	78.3	80%	60%	2000	3	90	13-14	133	160 10.6
2200			PARTLY CLOUDY	10	1008.4	85	78.3	80%	60%	2000	3	90	14-14	135	160 10.6
2300			PARTLY CLDY	10	1009.1	85	78.3	80%	70%	2000	3	90	14	133	160 10.6
2400			PARTLY CLDY	5	1009.1	84	77.3	93%	20%	2000	2	90	19	036	176 10.2

REMARKS:

ALL TIMES LOCAL (WHISKEY); WIND DIR. IN WHOLE DEGREES; WIND SPEED IN KNOTS; TEMPERATURES IN FAHRENHEIT; VISIBILITY IN NAUTICAL MILES; WAVES IN WHOLE DEGREES; WAVE PERIOD IN SECONDS; WAVE HEIGHT IN WHOLE FEET; SEA LEVEL PRESSURE IN MILLIBARS

SI-MNH-955b
Rev. 4-9-64

DATE 14 March

SMITHSONIAN INSTITUTION
DIVISION OF BIRDS
AT SEA CLIMATOLOGICAL DATA

TIME	LAT	LONG	PRES WEA	VIS	SLP	DRY B	DEW PT	HUM %	TL SKY	OPA SKY	WAVES	SEA TEMP	WIND S	WIND D	SHIP COURSE/SPD.
0100															
0200															
0300															
0400	10-09 S	170-18 W													
0500															
0600	10-30 S	170-19													
0700															
0800															
0900															
1000															
1100															
1200	11-28 S	170-17													
1300															
1400	11-47 S	170-17													
1500															
1600															
1700															
1800															
1900															
2000	12-43 S	170-18 W													
2100															
2200															
2300															
2400	13-25 S	170-18 W													

REMARKS:

ALL TIMES LOCAL (WHISKEY); WIND DIR. IN WHOLE DEGREES; WIND SPEED IN KNOTS; TEMPERATURES IN FAHRENHEIT; VISIBILITY IN NAUTICAL MILES; WAVES IN WHOLE DEGREES; WAVE PERIOD IN SECONDS; WAVE HEIGHT IN WHOLE FEET; SEA LEVEL PRESSURE IN MILLIBARS

SI-MNH-955b
Rev. 4-9-64

SMITHSONIAN INSTITUTION
DIVISION OF BIRDS
AT SEA CLIMATOLOGICAL DATA

DATE 20 March

TIME	LAT	LONG	PRES WEA	VIS	SLP	DRY B	DEW PT	HUM %	TL SKY	OPA SKY	WAVES	SEA TEMP	WIND S	WIND D	SHIP COURSE/SPD.
0100															
0200															
0300															
0400															
0500															
0600															
0700															
0800	14-53	170-40													
0900															
1000	14-16	170-22													
1100															
1200	14-14	170-05													
1300															
1400	14-12	169-46													
1500															
1600															
1700	off														
1800															
1900															
2000	13-44	169-49													
2100															
2200															
2300															
2400	13-025	169-58													

REMARKS:

ALL TIMES LOCAL (WHISKEY); WIND DIR. IN WHOLE DEGREES; WIND SPEED IN KNOTS; TEMPERATURES IN FAHRENHEIT; VISIBILITY IN NAUTICAL MILES; WAVES IN WHOLE DEGREES; WAVE PERIOD IN SECONDS; WAVE HEIGHT IN WHOLE FEET; SEA LEVEL PRESSURE IN MILLIBARS

SI-MNH-955c
3-4-64

SMITHSONIAN INSTITUTION
DIVISION OF BIRDS
AT SEA SURVEY CHART C

DATE 21 MARCH

TIME	LAT	LONG	PRES WEA	VIS	SLP	DRY B	DEW PT	HUM %	TL SKY	OPA SKY	WAVES	SEA TEMP	WIND S	WIND D	SHIP COURSE/SPD.
0100			PARTLY CLDY	10	1010.4	83	77.6	84%	30%	4000	2	88	15	280	350°T / 10.6 KTS
0200			[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
0300			[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
0400			Partly Cldy	8	1008.5	83	77.6	84%	30%	4000	1	89	20	205	350 T / 10.6 KTS
0500			Partly Cldy	8	1008.5	83	77.6	84%	30%	4000	1	89	16	205	350 T / 10.6 KTS
0600	12-10	170-12	Partly Cldy	10	1008.5	84	75.8	77%	60%	2000	2'	89	14	205	350 / 10.6 KTS
0700	11-51	170-15	Partly Cldy	10	1008.5	84	75.8	77%	60%	2000	2'	89	14	205	350 / 10.6 KTS
0800	11°48'S	176°14'W	Partly Cldy	10	1008.5	85	76.3	78%	60%	2000	2'	89	17	117	350 / 10.6 KTS
0900	46	[illegible]	Partly Cldy	10	1010.8	85	77	77%	60%	2000	2'	89	14	104	350 / 10.6 KTS
1000	11-33	170-15	Partly Cldy	10	1011.2	85	77	77%	60%	2000	2'	87	15	117	350 / 10.6 KTS
1100	26	16	Partly Cldy	10	1011.2	87	83.6	87%	50%	2000	2'	87	17.5	105	350 10.6 KTS
1200	11°19'	17°17' W	PARTLY CLDY	10	1010.8	84	83.8	85%	60%	2000	1'	89	12	117	350 / 10.6 KTS
1300	12	18	PARTLY CLDY	10	1010.2	86	76.5	73%	60%	2000	1'	89	11	078	350 / 10.6 KTS
1400	10-53	170-20	PARTLY CLDY	10	1008.8	86	76.5	73%	60%	2000	1'	89	11	105	350 / 10.6 KTS
1500	44	22	PARTLY CLDY	10	1008.5	86	76.5	73%	60%	2000	1'	90	9	108	350 / 10.6 KTS
1600	35	26	PARTLY CLDY	10	1008.5	88	77	69%	60%	3000	1'	90	13	110	350 / 10.6 KTS
1700	25	25	PARTLY CLDY	10	1008.5	88	77	73%	60%	2000	1	90	23	260	350 / 10.6 KTS
1800	10-16	170-32	PARTLY CLDY	10	1009.1	84	80	87%	60%	2000	2	89	24	235	350 / 10.6 KTS
1900			PARTLY CLDY	10	1009.1	83	82.7	92	50%	2000	2	89	24	255	350 / 10.6 KTS
2000	09°56'S	170°33'W	Partly CLDY	10	1009.8	84	78.2	84%	50%	2000	2	89	19	045	350 / 10.6 KTS
2100			Partly CLDY	10	1009.8	84	78.2	84%	50%	2000	2'	89	19	045	350 / 10.6 KTS
2200			Partly CLDY	6	1009.8	84	78.2	84%	50%	2000	2'	89	19	045	350 / 10.6 KTS
2300			Partly CLDY	6	1009.8	84	77.2	81%	70%	1000	2'	88	18	100	350 / 10.6 KTS
2400			PARTLY CLDY	6	1009.8	83	77.6	84%	70%	1000	2'	88	19	104	350 / 10.6 KTS

REMARKS:

ALL TIMES LOCAL (WHISKEY); WIND DIR. IN WHOLE DEGREES; WIND SPEED IN KNOTS; TEMPERATURES IN FAHRENHEIT; VISIBILITY IN NAUTICAL MILES;
WAVES IN WHOLE DEGREES; WAVE PERIOD IN SECONDS; WAVE HEIGHT IN WHOLE FEET; SEA LEVEL PRESSURE IN MILLIBARS

SI-MNH-955c
3-4-64

SMITHSONIAN INSTITUTION
DIVISION OF BIRDS
AT SEA SURVEY CHART C

DATE 22 MARCH 1966

TIME	LAT	LONG	PRES WEA	VIS	SLP	DRY B	DEW PT	HUM %	TL SKY	OPA SKY	WAVES	SEA TEMP	WIND S	WIND D	SHIP COURSE/SPD.
0100			PARTLY CLDY	6	1009.5	83	74.8	77%	70%	2000	2'	88	20	104	350° / 10.6
0200			PARTLY CLDY	6	1008.1	83	76.2	80%	80%	2000	2'	88	18	097	350° / 10.6
0300			PARTLY CLDY	5	1007.8	81	76.4	87%	70%	2000	2'	88	24	128	350° / 10.6
00			PARTLY CLDY	5	1008.3	81	76.4	87%	70%	2000	2'	88	24	310	350/10.6
0-00			PARTLY CLDY	6	1007.6	81	76.3	87%	70%	2000	2'	88	24	310	350/10.6
0.00	08-10	170-52	OVC	8	1007.3	82	76.6	84%	100%	2000	2'	88	13	246	350/10.6
0700	03	56	OVC	10	1008.1	81	75.5	83.5%	80%	2000	1'	88	9	172	350/10.6
0800	07° 55'S	171°00'W	PRTLY CLDY	10	1009.1	82	76.6	84%	90%	2000	2'	88	22	860	350/10.6
0900	47		PRTLY CLDY	10	1009.1	84	75.8	75%	90%	2000	2'	88	22	235	350/10.6
1000	07-38	171-00	PRTLY CLDY	10	1009.5	84	77.3	79%	90%	2000	2'	88	23	210	350/10.6
1100	30		PRTLY CLDY	10	1009.3	84	75	65%	90%	2000	1'	88	21	196	350/10.6
1200	07° 21'S	171°00W	PRTLY CLDY	10	1008.5	83	77.6	89%	70%	2000	1'	87	9	035	350/10.6
1300	11	02	PRTLY CLDY	10	1008.5	83	77.6	89%	70%	2000	1'	87	9	035	350/10.6
1400	07-00	171-05	PRTLY CLDY	10	1006.4	83	77.6	89%	70%	2000	1'	88	8	030	350/10.6
1500	06-52	06	PRTLY CDY	10	1006.4	83	77.6	89%	80%	2000	1'	88	8	030	350/10.6
1,00	44	07	PARTLY CLDY	10	1006.4	86	73.6	66%	80%	2000	1'	88	5	051	350/10.6
1700	36	08	PARTLY CLDY	10	1006.4	85	76.9	77%	90%	1000	1'	88	6	050	350/10.6
1800	06-28	171-09	PARTLY CDY	10	1006.8	81	74.1	79%	90%	1000	1'	88	18	096	350/10.6
1900			PARTLY CDY	8	1007.5	82	75.2	80%	80%	1000	1'	88	19	124	350/10.6
2000	06° 10'S	171° 11'W	PartlyCLD	8	1008.2	82	75.2	80%	80%	1000	1'	88	17	056	350/10.6
2100			PartlyCLD	8	1008.2	82	74.1	77%	80%	1000	1'	88	8	102	350/10.6
2200			PartlyCLD	8	1007.3	82	74.1	79%	80%	1000	1'	88	8	102	350/10.6
2300															
2400			PartlyCld	8	1009.5	82	74.1	79%	80%	4000	1	88	14	135	350/10.6 kts

REMARKS:

ALL TIMES LOCAL (WHISKEY); WIND DIR. IN WHOLE DEGREES; WIND SPEED IN KNOTS; TEMPERATURES IN FAHRENHEIT; VISIBILITY IN NAUTICAL MILES; WAVES IN WHOLE DEGREES; WAVE PERIOD IN SECONDS; WAVE HEIGHT IN WHOLE FEET; SEA LEVEL PRESSURE IN MILLIBARS

SI-MNH-955c
3-4-64

SMITHSONIAN INSTITUTION
DIVISION OF BIRDS
AT SEA SURVEY CHART C

DATE 23 - March

TIME	LAT	LONG	PRES WEA	VIS	SLP	DRY B	DEW PT	HUM %	TL SKY	OPA SKY	WAVES	SEA TEMP	WIND S	WIND D	SHIP COURSE/SPD.
0100			Partly Cldy	6	1004.2	92	76.5	82%	90%	4000	1'	90	10	125	350°T/10.6 KTS.
0200			Partly Cldy	6	1007.1	85	76.9	75%	80%	4000	1'	90	13	128	350°T/10.6 KTS.
0300			Partly Cldy	6	1006.8	85	76.9	75%	80%	+4000	1'	89	14	125	350°T/10.6 KTS
0400			Partly Cldy	6	1006.8	85	76.9	75%	60%	2000	1'	90	12	137	350°T/10.6 KTS
0500			Partly Cldy	6	1007.2	85	76.9	75%	60%	2000	1'	90	12	137	350°T/10.6
0600	04-27	171-29	Partly Cldy	7	1006.8	85	76.9	75%	60%	2000	1'	90	13	140	350°T/10.6
0700	17	"	Partly Cldy	8 10	1006.8	85	76.9	75%	50%	2000	1'	90	14	145	350T/10.6
0800	04° 06 S	171° 32' W	Partly Cldy	10	1006.3	85	76.9	75%	80%	2000	1'	90	13	140	350T/10.6
0900	56	34	Partly Cldy	10	1007.8	85	75.5	73%	80%	2000	1'	90	20	138	350T/10.6
1000	03-46	171-37	PARTLY CLDY	10	1008.1	86	78.0	77%	60%	2000	1'	90	20	147	350T/10.6
1100	36	39	PARTLY CLDY	10	1008.1	86	78.0	77%	60%	2000	1'	90	23	147	350T/10.6
1200	03° 27' S	171° 41' W	Partly Cldy	10	1007.1	87	85.5	77%	40%	2000	1'	90	21	133	013/10.6
1300	16	42	Partly Cldy	10	1007.1	87	85.5	77%	40%	3000	1'	94	21	151	350/10.6
1400	03-05	171-43	Partly Cldy	10	1005.8	90	45.1	95%	80%	3000	1'	88	22	151	350/10.6
1500	0259	44	Partly Cldy	10	1006.5	87	43.4	43%	40%	3000	1'	87	12.5	128	020/10.6
1600	0254	45	Partly Cldy	10	1004.7	84	77.2	79%	20%	3000	1'	85	8	110	Dead in Water
1700	02 48	46	Partly Cldy	10	1003.1	85	81.1	87	80%	2000	1'	87	10	093	" " "
1800	02-43	171-48	Partly Cldy	10	1005.4	86	80.7	83	60%	3000	2'	90	11	005	318/10.6 KTS
1900	39	56	Partly Cldy	10	1005.8	86	90.7	82	60%	2000	3'	90	11	005	318/10.6 KTS
2000	02° 22' S	172° 05' W	Partly Cldy	10	1006.4	84	75.9	64	60%	2000	2'	87	15	358	318/10.6 KTS
2100			Partly Cldy	10	1007.5	83	77.6	83	50%	2000	2'	87	22	355	318/10.6 KTS
2200			Partly Cldy	10	1007.8	82	76.5	83	50%	2000	2'	86	19	005	318°T/10.6 KNTS
2300			PARTLY CLDY	10	1008.1	82	76.5	83	60%	2000	2'	86	16	030	318°T/10.6 KTS
2400			Partly Cldy	10	1007.8	82	76.5	83	60%	2000	2	86	13	043	318/10.6 (4)

REMARKS:

ALL TIMES LOCAL (WHISKEY); WIND DIR. IN WHOLE DEGREES; WIND SPEED IN KNOTS; TEMPERATURES IN FAHRENHEIT; VISIBILITY IN NAUTICAL MILES; WAVES IN WHOLE DEGREES; WAVE PERIOD IN SECONDS; WAVE HEIGHT IN WHOLE FEET; SEA LEVEL PRESSURE IN MILLIBARS

SI-MNH-955b
Rev. 4-9-64

SMITHSONIAN INSTITUTION
DIVISION OF BIRDS
AT SEA CLIMATOLOGICAL DATA

DATE 24 MARCH, 1966

TIME	LAT	LONG	PRES WEA	VIS	SLP	DRY B	DEW PT	HUM %	TL SKY	OPA SKY	WAVES	SEA TEMP	WIND S	WIND D	SHIP COURSE/SPD.
0100			RAINING	1	1007.8	82	76.5	83	100%	2000	2	86	17	040	318 / 10.6 KTS
0200	01-42	172-45	PARTLY CLDY	5	1002.1	82	76.5	83	70%	2000	2	86	12	025	318 / 10.6 KTS
0300			PARTLY CLDY	10	1002.1	82	76.5	83	30%	2000	2	86	12	025	318 / 10.6 KTS
0400			PARTLY CLDY	8	1005.4	82	76.5	83	70%	2000	2	86	16	130	318 / 10.6 KTS
0500			PARTLY CLDY	8	1005.1	82	76.5	83	60%	2000	2	86	16	100	318 / 10.6 KTS
0600	01-21	173 30	PARTLY CLDY	10	1005.4	83	76.2	80	40%	2000	2	86	18	100	318 / 10.6 KTS
0700	14	36	PARTLY CLDY	10	1007.8	83	81.4	94%	30%	2000	2	86	18	100	318 / 10.6
0800	01° 06'S	173°43'W	PARTLY CLDY	10	1007.1	84	83.4	98%	60%	2000	2	86	24	093	318 / 10.6
0900	01-00	48	PARTLY CLDY	10	1007.8	85	84.2	99%	60%	2000	2	88	24	093	332 / 9
1000	00-54	173-54	PARTLY CLDY	10	1007.8	86	85.4	99%	60%	2000	2	89	24	093	332 / 9
1100	00-48	173-59	PARTLY CLDY	10	1007.8	86	85.4	99%	60%	2000	2	89	22	102	332 / 9
1200	00°41'S	174°05W	PARTLY CLDY	10	1007.5	86	85.4	99%	60%	2000	2	89	24	102	332 / 9
1300	33	11	PARTLY CLDY	10	1006.8	86	85.4	99%	60%	2000	2	89	18	090	332 / 9
1400	00-24	174-16	PARTLY CLDY	10	1005.1	86	85.4	99%	60%	2000	2	89	18	090	347 / 9
1500	20	24	PARTLY CLDY	10	1004.1	86	85.4	99%	60%	2000	2	89	18	102	347 / 9
1600	16	31	PARTLY CLDY	10	1004.1	86	88.4	90%	40%	2000	2	88	17	042	347 / 5 KTS
1700	12	38	PARTLY CLDY	10	1004.1	90	78	65%	50%	2000	2	88	3	093	225 / 8 KTS
1800	00-08	174-45	PARTLY CLDY	10	1004.4	90	79.4	68%	50%	2000	2	88	3	105	285 / 8 KTS
1900		52	PARTLY CLDY	10	1004.1	88	78.1	72%	60%	2000	2	88	4	105	285 / 8 KTS
2000	00°03'S	174°59W	PARTLY CLDY	10	1005.8	86	77.9	77%	80%	2000	2	89	8	080	285 / 8 KTS
2100	15	15.06	PARTLY CLDY	10	1006.4	84	78.6	84%	50%	2000	21	89	17	078	288 / 6.5 KTS
2200	00-01 N	175-13	PARTLY CLDY	10	1006.4	84	78.6	84%	40%	2000	21	89	17	078	288 / 6.5 KTS
2300		19	PARTLY CLDY	10	1007.1	83	77.6	84%	40%	2000	21	90	18	078	288 / 6.5 KTS
2400	05N	175 25	PARTLY CLDY	10	1006.8	83	77.6	84%	20%	4000	2	87	18	093	288 / 6.5 KTS

REMARKS:

ALL TIMES LOCAL (WHISKEY); WIND DIR. IN WHOLE DEGREES; WIND SPEED IN KNOTS; TEMPERATURES IN FAHRENHEIT; VISIBILITY IN NAUTICAL MILES; WAVES IN WHOLE DEGREES; WAVE PERIOD IN SECONDS; WAVE HEIGHT IN WHOLE FEET; SEA LEVEL PRESSURE IN MILLIBARS

SI-MNH-955b
Rev. 4-9-64

SMITHSONIAN INSTITUTION
DIVISION OF BIRDS
AT SEA CLIMATOLOGICAL DATA

DATE 25 MARCH 1966

TIME	LAT	LONG	PRES WEA	VIS	SLP	DRY B	DEW PT	HUM %	TL SKY	OPA SKY	WAVES	SEA TEMP	WIND S	WIND D	SHIP COURSE/SPD.
0100	6	32	PARTLY CLDY	8	100.6	83	77.6	84%	10%	2000	2'	87	16	102	
0200	8	40	PARTLY CLDY	8	1005.4	83	77.6	84%	10%	2000	2'	87	16	112	
0300	9	47	PARTLY CLDY	8	1005.1	83	76.2	77.5%	20%	2000	2'	87	15	110	
0400	00 10	175 55	PARTLY CLDY	10	1006.4	84	77.3	73%	40	2000	2'	89	17	105	11 knots
0500			PARTLY CLDY	10	1005.8	87	75.3	65%	30	2000	2'	87	20	100	DRW
0600	00-14	176-21	PARTLY CLDY	10	1005.4	87	76.2	69%	30	2000	2'	87	13.4	110	MANEUVERING
0700			"	10	1007.4	85	76.5	79%	40%	3000	2	86	14	040	
0800	00°12'N	176°29'W	"	10	1007.4	85	76.9	79%	40%	3000	2	86	15	100	
0900			"	10	1007.4	85	76.5	79%	50%	2000	2	86	14	115	
1000			"	10	1007.6	85	76.4	79%	80%	2000	2	86	14	104	
1100			"	10	1007.4	85	76.9	79%	80%	2000	2	86	15	107	
1200	00°12N	176°29W	"	10	1007.8	84	77.2	79%	60%	2000	2	87	18	080	
1300			"	10	1005.4	86	77.9	79%	60%	2000	2	89	18	030	
1400			"	10	1005.1	86	77.4	79%	60%	2000	2	89	19	040	
1500			"	10	804.1	86	77.9	79%	50%	2000	2	86	16	100	
1600			Partly Cldy	10	1005.1	84	75.8	74%	40%	2000	2	89	14	100	
1700			Partly Cldy	10	1004.7	83	77.6	84%	50%	2000	3	87	13	110	
1800			Partly Cldy	10	1004.7	83	77.6	84%	30%	4000	2	87	16	103	
1900			Partly Cldy	10	1005.4	83	77.6	84%	30%	4000	2	87	16	105	
2000	00° 12'N	176° 34'W	PARTLY CLDY	10	1006.1	83	77.6	84%	20%	4000	2	87	18	093	
2100			PARTLY CLDY	10	1006.4	83	77.6	84%	40%	4000	2	87	18	093	
2200			CLR	10	1006.4	83	77.6	84%	0	—	2	87	17	105	
2300			CLR	10	1007.1	83	77.6	84%	0	—	2	87	19	145	
2400			Partly Cldy	10	1007.1	83	77.6	84%	0						

REMARKS:

ALL TIMES LOCAL (WHISKEY); WIND DIR. IN WHOLE DEGREES; WIND SPEED IN KNOTS; TEMPERATURES IN FAHRENHEIT; VISIBILITY IN NAUTICAL MILES; WAVES IN WHOLE DEGREES; WAVE PERIOD IN SECONDS; WAVE HEIGHT IN WHOLE FEET; SEA LEVEL PRESSURE IN MILLIBARS

SI-MNH-955c
3-4-64

SMITHSONIAN INSTITUTION
DIVISION OF BIRDS
AT SEA SURVEY CHART C

DATE 26 march

TIME	LAT	LONG	PRES WEA	VIS	SLP	DRY B	DEW PT	HUM %	TL SKY	OPA SKY	WAVES	SEA TEMP	WIND S	WIND D	SHIP COURSE/SPD.
0100			PARTLY CLDY	8	1006.4	83	77.6	84%	10%	2000	2	87	16	102	
0200	00-13	176-28	" "	8	1005.4	83	77.6	84%	10%	2000	2	87	16	112	
0300			" "	8	1005.1	83	76.2	80.1%	20%	2000	2	87	15	110	
0400	-12	176.29	"	8	1005.1	83	76.2	80.1%	20%	2000	2	87	18	106	
0500			"	8	1004.7	82	76.6	84%	20%	2000	2	87	20	108	
0600	0 31	176-33	"	10	1005.8	82	77.9	87%	20%	2000	2	87	20	100	
0700	43	176-38	"	10	1006.4	82	77.9	87%	20%	2000	2	87	19	097	
0800	00°48 N	176°38 W	"	10	1006.8	82	76.2	80%	40%	2000	2	87	18	112	
0900			" "	10	1006.8	82	76.2	80%	40%	2000	2	87	16	105	
1000	00-48	176-38	" "	10	1006.4	83	77.6	84%	40%	2000	2	87	12	105	
1100		37	" "	10	1006.4	83	77.5	84%	40%	2000	2	87	19	100	
1200	00°48 N	176°38 W	" "	10	1006.4	84	77.2	83%	40%	2000	2	89	20	105	
1300	43	26	" "	10	1006.4	84	77.2	83%	40%	2000	2	85	15	043	15 112 k
1400	00-38	176-16	" "	10	1005.8	84	74.6	74%	30%	2000	2	85	14	035	" " MNC
1500	33	8	" "	10	1005.1	85	81.1	86%	20%	2000	2	85	15	043	" "
1600	28	76 00	PARTLY CLDY	10	1005.1	86	79	77%	60%	1000	3'	86	20-25	125	
1700	23	52	PARTLY CLDY	10	1005.1	86	79	77%	60%	1000	3'	86	23-25	125	" 11
1800	00-18	175.44	PARTLY CLDY	10	1005.1	86	79	77%	60%	1000	3'	86	23-25	117	350 10.6
1900	13	36	PARTLY CLDY	10	1005.8	85	73.7	78.5%	60%	1000	3'	86	23-25	117	350 11 10.2
2000	00°08 N	175°38 W	PARTLY CLDY	10	1009.8	83	76.2	80%	50%	1000	1'	88	17	115	350 11 10.6
2100		18	PARTLY CLDY	10	1010.2	83	76.2	80%	50%	1000	1'	88	19	120	350 11 10.6
2200	00-00	175.09	PARTLY CLDY	10	1010.4	83	77.6	84%	50%	2000	1'	88	20	120	350 11 10.6
2300			PARTLY CLDY	10	1010.8	83	77.6	84%	50%	2000	1'	88	18	125	350 11 10.6
2400	08 S	174.50 W	PARTLY CLDY	10	1010.2	83	77.6	84%	60%	2000	3	88	17	086	350 11 10.6 MD

REMARKS:

ALL TIMES LOCAL (WHISKEY); WIND DIR. IN WHOLE DEGREES; WIND SPEED IN KNOTS; TEMPERATURES IN FAHRENHEIT; VISIBILITY IN NAUTICAL MILES; WAVES IN WHOLE DEGREES; WAVE PERIOD IN SECONDS; WAVE HEIGHT IN WHOLE FEET; SEA LEVEL PRESSURE IN MILLIBARS

SI-MNH-955b
Rev. 4-9-64

SMITHSONIAN INSTITUTION
DIVISION OF BIRDS
AT SEA CLIMATOLOGICAL DATA

DATE 27 March 1966

TIME	LAT	LONG	PRES WEA	VIS	SLP	DRY B	DEW PT	HUM %	TL SKY	OPA SKY	WAVES	SEA TEMP	WIND S	WIND D	SHIP COURSE/SPD.
0100			PARTLY CLDY	8	1010.1	83	80.3	91	70%	2000	4	≤80	19	090	105 / 10.6 KTS
0200			PARTLY CLDY	4	1008.5	83	80.3	91	70%	2000	4	≤80	15	085	115 / 10.6 KTS
0300			PARTLY CLDY	5	1007.8	82	80.3	94%	70%	2000	4	86	9	090	115 / 10.6
0400	00-28 S	174-33 W	Partly CLDY	2	1007.8	81	80.5	96%	90%	2000	4	86	12.5	081	115 / 8
0500	32	28	Partly CLDY	5	1007.5	81	78.3	91%	90%	2000	3	86	12.5	069	115 / 8
0600	37	23	Partly CLDY	10	1006.1	81	76.9	86%	80%	1000	2	86	13	051	115 / 10.6
0700	00-43	174-19	Partly CLDY	10	1006.1	82	78.9	91%	90%	1000	2	87	12	053	115 / 10.6
0800	00-52 S	174-12	Partly CLDY	10	1007.5	84	78.6	84%	90%	1000	2	87	12	055	127 / 10.6
0900	56	10	Partly CLDY	10	1007.8	83	79	85%	90%	1000	2	87	12	055	127 / 10.6
1000	01-00	08	Partly CLDY	10	1007.1	83	79	85%	70%	2000	2'	87	15	050	125 / 10.6
1100	1-05	06	Partly CLDY	10	1007.1	84	72.6	84%	60%	2000	2'	87	13	058	127 / 10.6
1200	01-08	174-03	PARTLY CLDY	10	1006.8	85	78.3	80%	40%	2000	2'	87	~~21~~	020	127 / 10.6
1300	14	59	PARTLY CLDY	10	1006.4	84	77.3	80%	40%	2000	2'	85	15	043	120° / 10.6
1400	01-23 S	173-53	PARTLY CLDY	10	1005.8	84	78.6	84%	50%	2000	2'	85	18	055	120° / 10.6
1500	28	46	PARTLY CLDY	10	1005.1	85	81.0	88%	50%	2000	2'	85	15	043	120° / 10.6
1600	33	39	PARTLY CLDY	10	1005.1	87	80.4	81%	60%	2000	2'	84	15	074	120 / 10.6
1700	38	32	PARTLY CLDY	10	1004.5	87	80.4	81%	50%	2000	3	84	15	074	120 / 10.6
1800	01-43	173-29	PARTLY CLDY	10	1005.8	85	78.3	80%	50%	2000	3	86	12	067	120 / 10.6
1900	01-48	173-26	PARTLY CLDY	10	1006.4	85	79.7	80%	30%	2000	2	88	12	067	120 / 10.6
2000			PARTLY CLDY	8	1007.1	84	80	87%	50%	3000	2'	88	10	078	118 / 10.6
2100			PARTLY CLDY	8	1006.8	84	78.6	84%	50%	3000	2'	88	10	078	118 / 10.6
2200			PARTLY CLDY	8	1007.8	84	78.6	84%	40%	3000	3'	88	10	080	112 / 10.6
2300			PARTLY CLDY	7	1007.8	84	78.6	84%	30%	2000	3'	87	11	080	118 / 10.6
2400	02-10	172-50	PARTLY CLDY	5	1007.8	83	79	80%	30%	1500	3'	87	13.5	082	118 / 10.6 KTS

REMARKS:

ALL TIMES LOCAL (WHISKEY); WIND DIR. IN WHOLE DEGREES; WIND SPEED IN KNOTS; TEMPERATURES IN FAHRENHEIT; VISIBILITY IN NAUTICAL MILES; WAVES IN WHOLE DEGREES; WAVE PERIOD IN SECONDS; WAVE HEIGHT IN WHOLE FEET; SEA LEVEL PRESSURE IN MILLIBARS

SI-MNH-955b
Rev. 4-9-64

SMITHSONIAN INSTITUTION
DIVISION OF BIRDS
AT SEA CLIMATOLOGICAL DATA

DATE 28 MAR 66

TIME	LAT	LONG	PRES WEA	VIS	SLP	DRY B	DEW PT	HUM %	TL SKY	OPA SKY	WAVES	SEA TEMP	WIND S	WIND D	SHIP COURSE/SPD.
0100			PCLDY	10	1007.8	80									
0200			PCLDY	5	1007.8	83	80	79	87						
0300			PCLDY	5	1007.8	83	80	79	87%	3	1500	2	87	12.5	80	118 / 10.6 KTS
0400	2-28S	172-23	PCLDY	5	1007.3	83	77.6	83%	4	2000	2	87	14.5	82	118 / 10.6 KTS
0500			PCLDY	5	1007.1	83.5	77.4	81%	3	1500	2	88	12.5	81	118 / 10.6 KTS
0600	02-32	172-09	PCLDY	10	1007.1	83	77.4	81	3	1500	2	88	22	080	118 / 10.6 KTS
0700		72-02	RAINING	5	1007.1	83	77.4	81	60%	7500	4	88	36	065	115 / 10.6 KTS
0800	2-45	71-53	PARTLY CLDY	10	1008.5	80	78.9	90	80%	5000	2	88	17	084	105 / 10.6 KTS
0900			PARTLY CLDY	10	1009.5	86	80.7	85%	50%	6000	1	87	4	270	350 / 9.8 KTS
1000	02-34	171-50	PARTLY CLDY	10	1009.5	86	79.4	81%	50%	6000	2	87	17	130	005 / 10.6 KTS
1100	28	47	PARTLY CLDY	10	1009.1	88	80.1	77%	50%	6000	2	87	18	122	005 / 10.6 KTS
1200	02°22'S	171°45'W	PARTLY CLDY	10	1008.1	84	80.1	77%	50%	2000	3	87	14	122	005 / 10.6 KTS
1300	11	47	PARTLY CLDY	10	1007.6	83	82.2	94%	50%	2000	2	89	17	102	005 / 10.6 KTS
1400	02-00	171-50	PARTLY CLDY	10	1006.8	83	82.2	94%	50%	2000	2	88	14.5	115	005 / 10.6 KTS
1500	51	51	PARTLY CLDY	10	1006.4	84	82.4	93%	50%	2000	2	89	14.5	115	005 / 10.6 KTS
1600	42	53	PARTLY CLDY	10	1006.1	88	71.4	81%	60%	2000	2'	88	8	122	005 / 10.6 KTS
1700	33	55	PARTLY CLDY	10	1005.8	88	71.4	81%	60%	2000	2'	88	8	122	005 / 10.6 KTS
1800	01-24	171-56	PARTLY CLDY	10	1005.6	86	78.4	80%	50%	2000	4'	88	12	135	005 / 10.6 KTS
1900	1-15	71-58	PARTLY CLDY	10	1005.1	86	78.4	80%	60%	2000	4'	88	12	135	005 / 10.6 KTS
2000	01°04'S	171°57'W	PARTLY CLDY	10	1007.8	83	79	87%	50%	2000	4'	88	11.3	092	010 / 10.6 KTS
2100			PCLDY	10	1008.8	83	79	87%	50%	2000	4'	88	10	097	010 / 10.6 KTS
2200			PARTLY CLDY	10	1009.1	83	80.3	91%	50%	2000	4'	88	13	092	010 / 10.6 KTS
2300			PARTLY CLDY	10	1009.1	83	80.3	91%	50%	2000	4'	88	9	077	010 / 10.6 KTS
2400			PARTLY CLDY	10	1009.1	83	80.3	91%	50%	2000	3	84	9	077	010 / 10.6 KTS

REMARKS:

ALL TIMES LOCAL (WHISKEY); WIND DIR. IN WHOLE DEGREES; WIND SPEED IN KNOTS; TEMPERATURES IN FAHRENHEIT; VISIBILITY IN NAUTICAL MILES; WAVES IN WHOLE DEGREES; WAVE PERIOD IN SECONDS; WAVE HEIGHT IN WHOLE FEET; SEA LEVEL PRESSURE IN MILLIBARS

SI-MNH-955b
Rev. 4-9-64

SMITHSONIAN INSTITUTION
DIVISION OF BIRDS
AT SEA CLIMATOLOGICAL DATA

DATE 29 March

TIME	LAT	LONG	PRES WEA	VIS	SLP	DRY B	DEW PT	HUM %	TL SKY	OPA SKY	WAVES	SEA TEMP	WIND S	WIND D	SHIP COURSE/SPD.
0100			PARTLY CLDY	8	1009.1	83	80.3	91%	60%	2000	3	88	8	010	010/10.6 KTS
0200			PARTLY CLDY	8	1009.5	83	80.3	91%	60%	2000	3	88	7	055	010/10.6 KTS
0300			RAINING	4	1009.5	83	80.3	91%	80%	2000	3	88	7	055	010/10.6 KTS
0400			RAINING	4	1007.5	80	77.3	91%	80%	2000	3	88	12	136	010/10.6 KTS
0500			PARTLY CLDY	4	1007.8	80	77.3	91%	90%	2000	3	88	9	040	010/10.6 KTS
0600	00-34	171-55	PARTLY CLDY	5	1008.1	80	77.3	91%	90%	2000	3	88	10	104	010/10.6 KTS
0700	42	54	RAINING	1	1008.5	80	77.3	91%	100%	2000	3	88	13	130	010/10.6 KTS
0800	00°50'N	171°53W	RAINING	1	1009.4	80	77.3	91%	100%	600	3	85	14	130	010/10.6 KTS
0900	59	53	RAINING	1	1010.5	80	77.3	91%	100%	600	3	85	14	110	010/10.6 KTS
1000	01-08	171-53	RAINING	1	1010.4	80	77.3	91%	100%	600	10	85	41	115	010/10.6 KTS
1100	17	53	RAINING	1	1011.3	80	77.3	91%	100%	600	10	85	36	117	010/10.6 KTS
1200	01°27'N	171°53W	OVERCAST	4	1010.2	80	77.3	91	100%	1000	5	85	20	100	010/10.6 KTS
1300	37	54	OVERCAST	5	1009.5	79	77.9	96	100%	1000	5	85	18	095	010/10.6 KTS
1400	01-47	171-55	OVERCAST	8	1009.1	79	77.9	96	100%	1000	5	86	22	055	010/10.6 KTS
1500	59	56	OVERCAST	10	1008.5	77	77.9	86	100%	1000	4	85	14	055	010/10.6 KTS
1600	02-11	56	OVERCAST	10	1008.5	80	75.9	87	100%	1500	4	86	16	100	010/10.6 KTS
1700	23	57	OVERCAST	20	1009.1	80	75.9	87	100%	1500	4	86	15	095	010/10.6 KTS
1800	02-36	171-58	OVERCAST	10	1009.8	80	77.9	87	100%	1500	4	87	8	110	010/10.6 KTS
1900	41	59	OVERCAST	10	1009.1	80	77.3	90	100	1500	4	87	15	93	010/10.6 KTS
2000	02°47'N	172°00'W	OVERCAST	10	1009.8	81	74.1	80%	100	1500	4	88	10.5	075	013/10.6 KTS
2100			PARTLY CLDY	8	1010.2	81	74.1	80%	80%	15000	3	88	10.5	075	013/10.6 KTS
2200			PARTLY CLDY	8	1011.2	81	74.1	80%	70%	15000	2	88	9	020	013/10.6 KTS
2300			PARTLY CLDY	8	1011.2	82	75.1	81%	90%	10000	2	88	3	010	013/10.6 KTS
2400			PARTLY CLDY	8	1011.5	82	75.1	81%	90%	2000	2	84	5	005	013/10.6 KTS

REMARKS:

ALL TIMES LOCAL (WHISKEY); WIND DIR. IN WHOLE DEGREES; WIND SPEED IN KNOTS; TEMPERATURES IN FAHRENHEIT; VISIBILITY IN NAUTICAL MILES; WAVES IN WHOLE DEGREES; WAVE PERIOD IN SECONDS; WAVE HEIGHT IN WHOLE FEET; SEA LEVEL PRESSURE IN MILLIBARS

SI-MNH-955b
Rev. 4-9-64

SMITHSONIAN INSTITUTION
DIVISION OF BIRDS
AT SEA CLIMATOLOGICAL DATA

DATE 30 MAY

TIME	LAT	LONG	PRES WEA	VIS	SLP	DRY B	DEW PT	HUM %	TL SKY	OPA SKY	WAVES	SEA TEMP	WIND S	WIND D	SHIP COURSE/SPD.
0100			PARTLY CLDY	2	1010.7	82	75.1	80%	9	2000	2	88	7	140	
0200			RAIN	0	1010.2	79	78.6	94%	10	2000	4	88	22	080	
0300			RAIN	0	1009.8	78	76.9	96%	10	2000	4	85	27	105	
0400			RAINY	0	1010.5	78	75.3	96%	100%	1400	4	85	27	105	013 / 10.6 KTS
0500			RAINY	0	1010.5	79	78	97%	100%	1400	4	87	17	091	013 / 10.6 KTS
0600	04-29	171-41	RAINY	6	1011.5	79	78	97%	100%	1400	4	86	15	089	013 / 10.6 KTS
0700	39	42	RAINING	8	1011.5	79	78	97%	100%	1000	4	86	14	036	013 / 10.6 KTS
0800	05-49N	171-35W	OVERCAST	8	1011.5	79	78	97%	100%	1000	4	86	19	046	013 / 10.6 KTS
0900	54	43	OVERCAST	10	1012.5	80	74.4	70%	100%	1000	4	87	22	050	005 / 10.6 KTS
1000	6-00	171-44	OVERCAST	10	1012.5	80	74.4	70%	100%	1000	4	87	20	050	005 / 10.6 KTS
1100	06	45	OVERCAST	10	1012.5	80	74.4	70%	100%	1000	4	87	24	050	005 / 10.6 KTS
1200	05-12N	171-46W	[illegible]	10	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	4	87	[illegible]	[illegible]	[illegible]
1300	22	45	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
1400	05 33	171-44	[illegible]	8	1009.5	[illegible]	76.6	[illegible]	[illegible]	2000	4	87	27	050	005 / 10.6 KTS
1500	40	44	[illegible]	10	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
1600	48	44	Partly CLDY	10	1009.8	83	76.2	80%	90%	2000	5	87	19	051	005 / 10.6 KTS
1700	56	50	Partly CLDY	10	1009.5	83	76.2	80%	90%	2000	5	87	23	063	005 / 10.6 KTS
1800	06-04	171-52	OVERCAST	7	1010.5	82	76.5	81%	100%	1500	5	87	21	050	005 / 10.6 KTS
1900			OVERCAST	7	1011.2	82	76.5	81%	100%	1500	5	87	21	063	005 / 10.6 KTS
2000	06-24N	171-52W	OVERCAST	7	1011.9	82	76.5	81%	100%	1500	5	87	21	050	005° / 10.6 KTS
2100			OVERCAST	5	1012.2	81	76.9	87%	100%	1500	5	87	25	052	010° / 10.6 KTS
2200			OVERCAST	8	1012.5	81	76.9	87%	100%	1500	5	87	32	052	010° / 10.6 KTS
2300			PARTLY CLDY	8	1012.5	82	75.1	80%	90%	1500	5	87	31	063	010° / 10.6 KTS
2400			PARTLY CLDY	9	1012.2	73	75.1	80%	90%	1500	5	87	32	060	010° / 10.6 KTS

REMARKS:

ALL TIMES LOCAL (WHISKEY); WIND DIR. IN WHOLE DEGREES; WIND SPEED IN KNOTS; TEMPERATURES IN FAHRENHEIT; VISIBILITY IN NAUTICAL MILES; WAVES IN WHOLE DEGREES; WAVE PERIOD IN SECONDS; WAVE HEIGHT IN WHOLE FEET; SEA LEVEL PRESSURE IN MILLIBARS

SI-MNH-955b
Rev. 4-9-64

SMITHSONIAN INSTITUTION
DIVISION OF BIRDS
AT SEA CLIMATOLOGICAL DATA

DATE MAR 31, 1966

TIME	LAT	LONG	PRES WEA	VIS	SLP	DRY B	DEW PT	HUM %	TL SKY	OPA SKY	WAVES	SEA TEMP	WIND S	WIND D	SHIP COURSE/SPD.
0100			Partly	9	1011.2	85	75	80%	80%	1500	5'	87	33	062	010/10.6 KTS
0200			OVC	9	1010.3	93	91.1	91%	100%	1500	5'	86	38	084	010/10.6 KTS
0300			Cloudy	8	1010.2	91	89.7	96%	100%	1500	5'	86	35	061	010/10.6 KTS
0400			OVC/115T	8	1010.5	91	89.7	96%	100%	1500	C	86	32	063	010/10.6KTS
0500			" "	9	1010.3	91	89.7	96%	100%	1500	C	86	34	055	010/9.4KTS
0600	07-46	171-45	PARTLY	8	1010.5	91	89.7	96%	80%	1500	8	85	36	055	010/9.4KTS
0700	56	03 200	Partly Cldy	8	1012.2	81	77	87%	60%	2000	7	86	28.5	063	010/9.4 KTS
0800	08-06N	171-41W 200	Partly Cldy	8	1012.5	82	76.5	83%	60%	2000	8	86	30	060	010/9.4 KTS
0900	10	36 600	Partly Cldy	6	1013.2	83	74	86%	80%	2000	11	86	32	064	010°T/9.4KTS
1000	08-14	171-32 000	Partly Cldy	5	1012.5	82	75.2	79%	60%	2000	12	86	24	054	010T/9.4KTS
1100	20	29 400	" "	"	"	"	"	"	"	"	"	"	31	050	050T/5.6KTS
1200	08-26N	171-26W	Partly Cldy	6	1012.5	85	76.9	79%	50%	2000	10'	86	24	050	050T/5.6KTS
1300	39	[illegible]	Partly Cldy	6	1012.3	85	76.9	79%	50%	2000	10	86	27	067	013T/9.6KTS
1400	08-48	171-29	Partly Cldy	20	1011.5	83	76.2	80%	60%	2000	10'	87	26	062	005/10.6
1500	56	30	Partly Cldy	10	1010.2	83	76.2	80%	70%	2000	10'	87	29	062	005/10.6
1600	09-03	31	PARTLY Cldy	10	1010.2	81	72.8	76%	80%	2000	10'	87	26	067	005/10.6
1700	09-11	31	PARTLY Cldy	10	1010.5	81	72.8	76%	70%	2000	10'	87	25	075	005/10.6
1800	09-18	171-32	PARTLY Cldy	10	1010.5	80	73	79%	60%	2000	10'	86	28	065	005/10.6
1900			PARTLY Cldy	10	1011.2	80	72.9	79%	70%	2000	10'	86	27	075	005/10.6
2000	09-35N	171-32W	Partly Cldy	10	1012.5	80	78.6	96%	70%	2000	10'	86	27	066	005/10.6
2100			Partly Cldy	10	1012.9	80	73.6	86%	60%	2000	10'	86	24	077	013/10.6
2200			Partly Cldy	10	1013.3	80	78.3	94%	60%	2000	10'	85	23	103	003/10.6
2300			Partly Cldy	10	1013.2	80	78.6	96%	60%	2000	10'	85	23	103	003/10.6
2400			" "	10	1013.2	80	78.6	96%	60%	2000	15	85	27	063	013/10.6KTS

REMARKS:

ALL TIMES LOCAL (WHISKEY); WIND DIR. IN WHOLE DEGREES; WIND SPEED IN KNOTS; TEMPERATURES IN FAHRENHEIT; VISIBILITY IN NAUTICAL MILES; WAVES IN WHOLE DEGREES; WAVE PERIOD IN SECONDS; WAVE HEIGHT IN WHOLE FEET; SEA LEVEL PRESSURE IN MILLIBARS

SI-MNH-955b
Rev. 4-9-64

SMITHSONIAN INSTITUTION
DIVISION OF BIRDS
AT SEA CLIMATOLOGICAL DATA

DATE 1 APRIL 66

TIME	LAT	LONG	PRES WEA	VIS	SLP	DRY B	DEW PT	HUM %	TL SKY	OPA SKY	WAVES	SEA TEMP	WIND S	WIND D	SHIP COURSE/SPD.
0100			PARTLY CLDY	10	1012.5	80	74.6	96%	70%	2000	7	85	26	054	013/10.6 KTS
0200			" "	10	1012.5	80	74.6	96%	70%	2000	7	85	24	053	013/10.6 KTS
0300			" "	10	1012.5	80	74.6	96%	50%	1500	7	85	28	036	013/10.6 KTS
0400			PARTLY CLDY	10	1012.5	81	74.2	83%	50%	1500	7	83	18	063	013T/10.6 KTS
0500			PARTLY CLDY	10	1012.2	79	73.4	83%	40%	2000	8	85	18	066	013T/10.6 KTS
0600	10-58	171-20	PARTLY CLDY	10	1012.2	79	76.2	91%	30%	2000	5	85	22	070	013T/10.6 KTS
0700			PARTLY CLDY	10	1012.9	79	76.2	91%	20%	2000	7	85	22	070	013T/10.6 KTS
0800	11-15N	171-16W	PARTLY CLDY	10	1014.2	80	77.3	92%	30%	2000	7	82	20	075	013T/10.6 KTS
0900	11		PARTLY CLDY	10	1014.2	80	77.3	92%	20%	2000	7	82	20	072	005/10.6
1000	11-32	171-17	PARTLY CLDY	10	1014.2	79	72.0	79%	20%	2000	6	85	24	070	005/10.6
1100			PARTLY CLDY	10	1014.2	79	72.0	79%	30%	2000	6	85	23	070	005/10.6
1200	11-48N	171-18W	PARTLY CLDY	10	1013.5	79	77.6	95%	40%	2000	6	84	22	070	005/10.6
1300	36	23	PARTLY CLDY	10	1013.5	81	78.0	91%	50%	2000	6	84	24	065	011/10.6
1400	12-05	171-27	PARTLY CLDY	10	1012.9	81	78.0	91%	50%	2000	6	84	16	055	326/10.6
1500	13	31	PARTLY CLDY	10	1013.2	81	75.5	84%	40%	2000	6	84	14	060	326/10.6
1600	21	35	PARTLY CLDY	10	1013.2	81	78	94%	40%	2000	6	84	14	044	326/10.6
1700	29	39	PARTLY CLDY	10	1013.2	80	78.3	94%	40%	2000	6	84	15	052	326/10.6
1800	12-37	171-43	PARTLY CLDY	10	1014.2	80	75	86%	40%	2000	6	84	15	045	326/10.6
1900			PARTLY CLDY	10	1014.9	81	79.4	95%	40%	2000	6	84	15	044	326/10.6
2000	12-51N	171-46W	" "	10	1014.9	81	79.4	95%	40%	2000	6	84	20	045	045/10.6 KTS
2100															
2200	13-07	171-31													
2300			" "	10	1015.9	81	79.4	95%	50%	2000	5	85	18	073	045/10.6 KTS
2400	12 21	171-[illegible]	" "	10	1015.9	79									

REMARKS:

ALL TIMES LOCAL (WHISKEY); WIND DIR. IN WHOLE DEGREES; WIND SPEED IN KNOTS; TEMPERATURES IN FAHRENHEIT; VISIBILITY IN NAUTICAL MILES; WAVES IN WHOLE DEGREES; WAVE PERIOD IN SECONDS; WAVE HEIGHT IN WHOLE FEET; SEA LEVEL PRESSURE IN MILLIBARS

SI-MNH-955b
Rev. 4-9-64

SMITHSONIAN INSTITUTION
DIVISION OF BIRDS
AT SEA CLIMATOLOGICAL DATA

DATE APR. 2, 1960

TIME	LAT	LONG	PRES WEA	VIS	SLP	DRY B	DEW PT	HUM %	TL SKY	OPA SKY	WAVES	SEA TEMP	WIND S	WIND D	SHIP COURSE/SPD.
0100	26	13	PartlyCldy	10	1015.2	77	77	100	3	2000	050	83°	15,5	070	045°T/10.6 KTS.
0200	31	08	P " "	10	1014.2	77		100	3	2000	050	83°	13,3	060	045°T/10.6 KT
0300	37	03	" "	10	1013.2	77		95 75	3	2000	050	83	15-0	050	045°T/10.6 KT
0400	13 44	170-58	Partly CLDY	10	1013.2	76	62.2°	[illegible]	30%	2000	4	83	15	021	045° T / 10.6 KTS
0500	50	51	PARTLY CLDY	10	1013.2	76	66.1°	71%	30%	2000	3	85	20	060	045° T / 10.6 KTS
0600	13-55	170 48	Partly Cldy	10	1014.2	76	66.1°	71%	30%	2000	3	83	17	060	045° T / 10.6 KTS
0700	14-03	39	PARTLY CLDY	10	1014.9	78	67.8	66.5%	70%	2000	3	85	30	045	045° T / 10.6 KTS
0800	14-11N	170-29W	PARTLY CLDY	10	1016.3	79	76.3	91%	70%	2000	3	85	28	045	045° T / 10.6 KTS
0900	18	23	PARTLY CLDY	10	1016.9	78	70.9	79%	80%	2000	3	85	31	050	045° T / 10.6 KTS
1000	14-25	170-17	PARTLY CLDY	10	1016.9	78	73.5	87%	70%	2000	3	85	29	045	045° T / 10.6 KTS
1100	32	12	PARTLY CLDY	10	1016.6	79	72.0	79%	30%	10,000	3	82	34	045	045° T / 10.6 KTS
1200	14-38N	170-06W	PARTLY CLDY	10	1016.6	80	78.3	94%	30%	10,000	3	85	19	055	045 / 10.6 KTS
1300	45	58	Partly CLDY	10	1015.5	80	78.3	94%	30%	10,000	3	85	18	050	050 / 10.6 KTS
1400	14-51	169-49	PARTLY CLDY	10	1014.6	81	78.3	91%	50%	10,000	3	83	15	050	050 / 10.6 KTS
1500	58	40	PARTLY CLDY	10	1013.9	78	76.5	92%	50%	10,000	3	83	14	050	050 / 10.6 KTS
1600	15-06	169-32	PARTLY CLDY	10	1014.6	79	78.3	97%	50%	3,000	2'	83	15	329	315 / 10.6 KTS
1700	14	43	PARTLY CLDY	10	1014.6	79	78.3	97%	50%	3,000	2'	83	24	072	315 / 10.6 KTS
1800	15-22	169-54	PARTLY CLDY	10	1014.2	79	76.9	93%	60%	5,000	2'	83	26	070	315 / 10.6 KTS
1900	38	69-04	PARTLY CLDY	10	1014.6	77	76.3	99%	80%	3,000	2'	83	19	060	315 10.6 KTS
2000	15-34N	170-13W	PARTLY CLDY	10	1015.0	77	76.3	98%	60%	2000	2'	83	23	050	225°T/10.6KTS
2100	27	21	PARTLY CLDY	10	1015.9	77	76.3	98%	70%	2000	2'	83	22	037	225°T/10.6KTS
2200	15-19	170-28	PARTLY CLDY	10	1015.9	79	73.5	87%	30%	2500	2'	83	21	050	225°T/10.6KTS
2300	11	36	PARTLY CLDY	10	1015.5	78	72.4	83%	70%	2000	2'	83	21.5	050	225°T/10.6KTS
2400	15-02	170 43	Partly CLDY	10	1015.9	77	67.3	72%	60%	3000	2'	83	20	057	225 / 10.6 KTS

REMARKS:

ALL TIMES LOCAL (WHISKEY); WIND DIR. IN WHOLE DEGREES; WIND SPEED IN KNOTS; TEMPERATURES IN FAHRENHEIT; VISIBILITY IN NAUTICAL MILES; WAVES IN WHOLE DEGREES; WAVE PERIOD IN SECONDS; WAVE HEIGHT IN WHOLE FEET; SEA LEVEL PRESSURE IN MILLIBARS

SI-MNH-955b
Rev. 4-9-64

SMITHSONIAN INSTITUTION
DIVISION OF BIRDS
AT SEA CLIMATOLOGICAL DATA

DATE 3 APRIL

TIME	LAT	LONG	PRES WEA	VIS	SLP	DRY B	DEW PT	HUM %	TL SKY	OPA SKY	WAVES	SEA TEMP	WIND S	WIND D	SHIP COURSE/SPD.
0100	14-55	171-54	PARTLY CLDY	10	1015.2	77	68.3	72%	60%	3000	3	83	20.5	058	228 / 10.6
0200	14-48	171-05	"	10	1014.6	77	69.8	79%	60%	3000	3	83	21	068	228 / 10.6
0300	14-39	171-16	"	10	1013.9	77	69.8	78%	60%	3000	3	83	23	074	228 / 10.6
0400	14-31	171-27	PARTLY CLDY	10	1010.9	77.5	69.8	78%	60%	2000	3	83	22	073	228 / 10.6 KTS
0500	14-22	171-37	" "	10	1012.9	77	69.8	78%	60%	2000	3	83	19	047	228 / 10.6 KTS
0600	14-13	171-48	" "	8	1011.2	77	69.8	78%	80%	2000	3	84	16	040	228 / 10.6 KTS
0700	14 05	17154	" "	8	1011.2	77	69.8	78%	80%	2000	3	84	15	040	228 / 10.6 KTS
0800	13 57	172 02	" "	10	1013.2	77	69.8	78%	80%	3000	3	83	16	036	228 / 10.6 KTS
0900	13 50	172 07	" "	10	1016.6	81	73.7	85%	10%	2000	3	82	18	037	228 / 10.6 KTS
1000	13 42	172-13	" "	10	1016.6	81	73.3	84%	70%	2000	3	84	21	060	215 / 10.6 KTS
1100	1334	172-19	" "	10	1016.6	81	73.7	85%	60%	2000	3	85	21	060	216 10.6 KTS
1200	13 24	172-25	"	10	1015.9	79	72	80%	90%	2000	2	85	19	063	325 / 10.6 KTS
1300	1332	172-33	"	10	1015.6	81	73.3	84	50%	1500	2	85	19	104	325 / 10.6 KTS
1400	1340	172-39	"	10	1014.9	81	73.3	84	50%	1500	2	85	16	100	270 / 10.6 KTS
1500	1348	172-47	"	10	1014.6	81	73.3	84	50%	1500	2	85	8	130	270 / 10.6 KTS
1600	1356	172-53	"	10	1013.9	81	73.3	84	70%	2000	2	85	7.5	100	270 / 10.6 KTS
1700	1402	172 52	"	10	1013.1	78	69.8	90%	70%	2000	2	83	9.5	85	045 / 10.6 KTS
1800	1405	172 48	"	10	1013.1	78	75%	90%	70%	2000	2	83	9.5	85	045 / 10.6 KTS
1900	14 08	172 42	"	10	1013.9	78	75%	90%	70%	2000	2	83	20 KT	60°	045 / 10.6
2000	14-10N	172-35W	"	10	1014.6	78	69.4	75%	80%	2000	2	85	22 KT	060	045 / 10.6
2100	14	19	"	10	1015.2	78	72.4	79%	80%	2000	2	83	19.5 KT	055	040 / 10.6
2200	14-32	172-22	"	10	1015.9	78	72.4	79%	60%	2000	2	83	20 KT	055	040 / 10.6
2300	14-25	15	"	10	1015.9	78	72.4	79%	60%	2000	2	83	20 KT	060	040 / 10.6
2400	14 18	172-8	"	10	1015.6	77	74.2	91%	20%	2000	2	81	20	060	040 / 10.6

REMARKS:

ALL TIMES LOCAL (WHISKEY); WIND DIR. IN WHOLE DEGREES; WIND SPEED IN KNOTS; TEMPERATURES IN FAHRENHEIT; VISIBILITY IN NAUTICAL MILES; WAVES IN WHOLE DEGREES; WAVE PERIOD IN SECONDS; WAVE HEIGHT IN WHOLE FEET; SEA LEVEL PRESSURE IN MILLIBARS

SI-MNH-955b
Rev. 4-9-64

SMITHSONIAN INSTITUTION
DIVISION OF BIRDS
AT SEA CLIMATOLOGICAL DATA

DATE 4 APR 66

TIME	LAT 49	LONG 49-68	PRES WEA	VIS	SLP	DRY B	DEW PT	HUM %	TL SKY	OPA SKY	WAVES	SEA TEMP	WIND S	WIND D	SHIP COURSE/SPD.
0100	36	72-02	PARTLY CLDY	10	1014.9	77	71.3	82%	40%	2000	2'	81	20	060	040° / 10.6
0200	15-05	171-56	" "	10	1014.9	77	71.3	82%	20%	2000	2'	81	19	060	040° / 10.6
0300	15	53	" "	10	1014.6	76	73.5	91%	20%	2000	2'	81	17	075	040° / 10.6
0400	34	49	" "	10		77	74	81%	40%	2000	2'	82	19	040	040°/10.6 KTS
0500	34	45	" "	10	1014.6	78	72.4	77%	30%	2000	2'	82	19	056	040/10.6 KTS
0600	15 32	171-42	" "	10	1015.2	78	72.4	74%	30%	2000	2	82	22	063	040 / 10.6 KTS
0700	40	36											18	055	05
0800	15-48N	171-25W	" "	10	1016.6	81	76.6	82%	40%	2000	2	82	18	055	055/10.6 KTS
0900	54	22	" "	10	1016.6	81	76.6	82%	40%	2000	2	82	16	060	055/10.6 KTS
1000	16-00	171-14	" "	10	1016.6	79	73.4	82%	50%	2000	2	82	21	063	055/10.6 KTS
1100	6	07	" "	10	1016.6	79	73.4	82%	30%	2000	2	82	21	063	055/10.6 KTS
1200	16-12N	171-00 W	PARTLY CLDY	10	1015.5	78	72.3	82%	60%	2000	2'	82	19	066	315°T/10.6 KT
1300	20	02	PARTLY CLDY	10	1014.6	80	71.5	75%	50%	2000	2'	82	21	075	315°T/10.6KT
1400	16-27	171-04	PARTLY CLDY	10	1014.6	81	69.5	69%	50%	2000	2'	82	22	073	315°T/10.6KT
1500	11	12	" "	10	1014.6	81	69.5	69%	50%	2000	2'	82	22	073	315°T/10.6KT
1600	32	20	Partly CLDY	10	1014.2	81	69.6	68%	50%	3000	3'	82	18	081	315°T/10.6
1700	34	28	Partly CLDY	10	1014.2	81	69.6	68%	50%	3000	3'	82	18	080	230/10.6
1800	16 30	171 3	Partly CLDY	10	1014.6	81	69.6	68%	50%	1000	3'	82	16	070	230/10.6
1900	16-24	171 52	Partly CLDY	10	1015.2	79	70.5	74%	50%	2000	3'	82	20	050	230/10.6
2000	16-17N	172-00W	PARTLY CLDY	10	1015.6	78	69.4	75%	60%	2000	2'	82	19	068	224°/10.6
2100	08	172-07	PARTLY CLDY	10	1015.9	76	71.8	87%	50%	2000	2'	82	24	074	224°/10.6
2200	16-02	172-15	PARTLY CLDY	10	1016.9	76	71.8	87%	40%	2000	2'	82	24	055	224°/10.6
2300	54	23	PARTLY CLDY	10	1016.6	76	71.8	87%	70%	2000	2'	82	20	059	224°/10.6
2400	15-40	172-31	" "	10	1016.6	78	75.8	93%	40%	2000	2	82	23	224	224/10.6 KTS

REMARKS:

ALL TIMES LOCAL (WHISKEY); WIND DIR. IN WHOLE DEGREES; WIND SPEED IN KNOTS; TEMPERATURES IN FAHRENHEIT; VISIBILITY IN NAUTICAL MILES; WAVES IN WHOLE DEGREES; WAVE PERIOD IN SECONDS; WAVE HEIGHT IN WHOLE FEET; SEA LEVEL PRESSURE IN MILLIBARS

SI-MNH-955b
Rev. 4-9-64

SMITHSONIAN INSTITUTION
DIVISION OF BIRDS
AT SEA CLIMATOLOGICAL DATA

DATE 5 April

TIME	LAT 47	LONG 31	PRES WEA	VIS	SLP	DRY B	DEW PT	HUM %	TL SKY	OPA SKY	WAVES	SEA TEMP	WIND S	WIND D	SHIP COURSE/SPD.
0100	39	39	Partly Cldy	10	1016.6	78	75.8	93%	70%	5000	2	82	28	224	224/10.6
0200	15-32	172-46	" "	10	1015.6	77	73.1	84%	70%	2000	3	82	28	224	224/10.6
0300	26	54	" "	10	1014.2	76	74.1	94%	70%	2000	3	83	23	224	224/10.6
0400	19	71-01	" "	10	1014.2	76	74.1	94%	50%	2000	2	83	20	044	224/10.6
0500	13	09	" "	10	1014.2	75	74.1	94%	50%	2000	2	83	22	053	224/10.6
0600	15-06	173-17	" "	10	1014.2	77	69.4	77%	30%	2000	2	84	23	061	224/10.6
0700	14-59	24	Partly Cldy	10	1014.2	78			50%	2000	2	84	22	068	224/10.6KTS
0800	14-57N	173-31W	Partly Cldy	10	1014.2	79	73.4	83%	50%	2000	2	82	20.5	073	340/10.6KTS
0900	15-01	33	Partly Cldy	10	1015.0	80	74.5	83%	30%	2000	2	82	21	068	340/10.6KTS
1000	15-11	173-34	Partly Cldy	10	1015.0	78	72.4	83%	30%	2000	3	82	19	073	340/10.6KTS
1100	20	37	Partly Cldy	10	1015.0	79	73.4	83%	20%	2000	2	82	16	078	045/10.6KTS
1200	15-30N	173-37W	" "	10	1014.6	78	69.4	[illegible]	30%	2000	2	82	18	045	050/10.6KTS
1300	38	21	Partly Cldy	10	1013.9	78	69.4	[illegible]	30%	2000	2	82	16	045	050/10.6KTS
1400	15-45	173-22	Partly Cldy	10	1013.5	78	69.4	[illegible]	30%	2000	2	82	18	045	050/10.6KTS
1500	52	18	Partly Cldy	10	1013.2	77	69.4	[illegible]	30%	2000	2	82	17	045	050/10.6KTS
1600	59	13	PARTLY CLDY	10	1013.9	78	72.4	83%	60%	2000	2	82	18	075	025/10.6
1700	16-06	09	PARTLY CLDY	10	1013.9	78	72.4	83%	60%	2000	2	82	19	070	045/10.6
1800	16-14	173-05	PARTLY CLDY	10	1014.2	77	74.2	90%	40%	2000	2	82	15	060	045/10.6
1900	22	73-05	PARTLY CLDY	10	1014.9	77	75.2	94%	60%	2000	2	82	19	073	045/10.6
2000	16-30N	172-54W	" "	10	1015.2	77	73.2	94%	60%	2000	2	82	15	045	045/10.6
2100	35	45	OVC	10	1015.2	77	73.6	93%	[illegible]	2000	3	82	17	100	031/10.6
2200	16-41	172-36	Partly Cldy	10	1016.6	75	73.4	96%	90%	2000	3	81	9	117	054/10.6
2300			" "	10	1016.6	77	74.8	91%	60%	2000	2	81	13	097	054/10.6
2400	16-53	172-18	" "	10	1016.6	77	74.2	91%	30%	2000	8	81	16	072	076/10.6

REMARKS:

ALL TIMES LOCAL (WHISKEY); WIND DIR. IN WHOLE DEGREES; WIND SPEED IN KNOTS; TEMPERATURES IN FAHRENHEIT; VISIBILITY IN NAUTICAL MILES; WAVES IN WHOLE DEGREES; WAVE PERIOD IN SECONDS; WAVE HEIGHT IN WHOLE FEET; SEA LEVEL PRESSURE IN MILLIBARS

SI-MNH-955b
Rev. 4-9-64

SMITHSONIAN INSTITUTION
DIVISION OF BIRDS
AT SEA CLIMATOLOGICAL DATA

DATE 6 April

TIME	LAT	LONG	PRES WEA	VIS	SLP	DRY B	DEW PT	HUM %	TL SKY	OPA SKY	WAVES	SEA TEMP	WIND S	WIND D	SHIP COURSE/SPD.
0100			PARTLY CLDY	10	1016.6	77	74.4	91%	50%	2000	2	81	15	067	072/10.6
0200			" "	10	1016.6	77	74.4	91%	50%	2000	2	81	15	070	072/10.6
0300			" "	10	1015.9	77	74.8	91%	70%	2000	3	81	14	062	072/10.6
0400			PARTLY CLDY	10	1015.9	77	74.8	91%	70%	2000	2	81	18	063	072/10.6 KTS
0500			PARTLY CLDY	10	1015.2	77	74.3	89%	40%	2000	3	81	19	057	072/10.6 KTS
0600	17-14	171-23	PARTLY CLDY	10	1015.2	75	71.3	83%	40%	2000	3	81	19	057	072/10.6 KTS
0700	16	14	PARTLY CLDY	10	1015.2	76	68.7	75%	20%	2000	3	81	18	057	072/10.6 KTS
0800	17-19N	171-06W	PARTLY CLDY	10	1015.9	72	65.1	68%	50%	2000	3	81	18	049	073/10.6
0900	26	170-58	PARTLY CLDY	10	1016.6	78	66.2	67%	20%	3000	3	82	17	049	073/10.6
1000	17-33	170-49	PARTLY CLDY	10	1016.9	78	66.2	67%	20%	3000	3	82	18	055	073/10.6
1100	33	41	PARTLY CLDY	10	1016.9	79	67.3	67%	50%	2000	3	82	18	049	073/10.6
1200	17-33N	170-33W	PARTLY CLOY	10	1016.	76	67.2	74.3%	50%	2000	3	82	20	030	073/10.6
1300	35	11	" "	10		77	68.3	75%	50%	2000	3	82	29	073	073/10.6
1400	17-38	170-05	" "	10		76	67.2	74.3%	50%	2000	3	82	38	073	073/10.6
1500	41	69-56	" "	10		77	68.3	75%	40%	2000	3	82	35	073	073/10.6
1600	44	47	" "	10		77	68.3	75%	70%	2000	3	81	18	045	073/10.6
1700	47	38	" "	10		77	75.2	95%	70%	2000	3	81	13.5	073	073/10.6
1800	17-50	169-29	" "	8		75	73.8	93%	100%	2000	3	81	16	073	073/10.6
1900	53	20	PARTLY CLOY	8											6 KTS
2000	17-55N	169-10W	PARTLY CLDY	8	1015.9	76	68.8	76%	60%	2000	3	81	16	074	074/10.6 KTS
2100			PARTLY CLDY	8	1015.9	76	68.8	76%	50%	2000	3	81	14	074	074/10.6 KTS
2200			PARTLY CLDY	8	1016.6	75	67.7	76%	50%	2000	3	81	14	080	074/10.6 KTS
2300			PARTLY CLDY	8	1016.9	75	67.7	76%	50%	2000	2	81	15	080	074/10.6 KTS
2400	18-07	168-27	PARTLY CLDY	8	1015.9	77	68.3	75%	60%	2000	3	82	14	041	074/10.6 KTS

REMARKS:

71

ALL TIMES LOCAL (WHISKEY); WIND DIR. IN WHOLE DEGREES; WIND SPEED IN KNOTS; TEMPERATURES IN FAHRENHEIT; VISIBILITY IN NAUTICAL MILES; WAVES IN WHOLE DEGREES; WAVE PERIOD IN SECONDS; WAVE HEIGHT IN WHOLE FEET; SEA LEVEL PRESSURE IN MILLIBARS

1148 S/W

SI-MNH-955b
Rev. 4-9-64

SMITHSONIAN INSTITUTION
DIVISION OF BIRDS
AT SEA CLIMATOLOGICAL DATA

DATE 7 APR 66

TIME	LAT	LONG	PRES WEA	VIS	SLP	DRY B	DEW PT	HUM %	TL SKY	OPA SKY	WAVES	SEA TEMP	WIND S	WIND D	SHIP COURSE/SPD.
~~0100~~ 0200			PARTLY CLDY	10	1015.9	77	65.2	68%	30%	2000	3	82	18	4ϕ	074°T/10.6 KTS
0200 ~~0300~~			PARTLY CLDY	10	1015.9	77	65.2	68%	30%	2000	3	82	18	4ϕ	074°T/10.6 KTS
0300			" "	10	1015.9	77	65.2	68%	30%	2000	3	81	19	06Y	074/10.6 KTS
0400			" "	8	1015.9	76	67.2	73%	70%	2000	3	81	16	034	074/10.6KTS
0500			" "	8	1015.9	76	67.2	73%	70%	2000	3	81	14	044	074/10.6KTS.
0600	18-21	167-34	" "	8	1016.2	75	68.3	79%	80%	2000	3	81	12	046	074/10.6
0700	25	24	" "	10	1017.4	76	73.2	91%	60%	2000	3	81	16	074	074/10.6
0800	18-28N	167-14W	" "	10	1017.5	77	68.3	74%	40%	2000	3	81	15	000	074/10.6
0900	31	05	" "	10	1018.0	77	68.3	74%	30%	2000	3	81	19	000	074/10.6
1000	18-33	166-55	" "	10	1018.2	77	68.3	74%	40%	2000	3	81	17	003	074°/10.6
1100	35	44	" "	10	1019.0	77	65.3	64%	30%	2000	3	81	15	024	074/10.6
1200	18-38N	166-33W	" "	10	1018.6	77	64.3	64%	20%	2000	3	81	16	029	073/10.6
1300	41	23	" "	10	1017.4	78	70.4	81%	40%	2000	3	81	15	556	073/10.6
1400	18-44	166-12	" "	10	1016.9	78	75.8	93%	40%	2000	3	81	16	338	073/10.6
1500	47	02	" "	10	1015.9	78	75.4	91%	40%	2000	3	81	16	028	073/10.6
1600	50	42-51	" "	10	1015.6	75	67.7	78%	60%	2000	3	81	9	028	073/10.6
1700	52	41	" "	10	1015.9	75	68.2	79%	60%	2000	3	81	9	028	073/10.6
1800	18-55	165-29	" "	10	1016.3	75	67.7	78%	60%	2000	3	81	15	038	073/10.6
1900	58	19	" "	10	1016.6	76	67.3	74%	80%	2000	3	82	12	057	073/10.6
2000	19-01N	165-08W	" "	10	1017.6	75	69.2	82%	60%	2000	3	82	12.5	075	074/10.6 KTS
2100			" "	10	1017.6	75	69.2	82%	60%	2000	3	82	12.5	057	074/10.6 KTS
2200			" "	10	1017.6	75	69.2	82	50%	2000	3	81	12.5	054	074°/10.6KTS
2300			" "	10	1017.6	75	69.2	82%	50%	2000	3	81	15	050	074/10.6
2400			" "	10	1017.9	75	69.2	82	50%	2000	2	81	16	062	074/10.6 KTS

REMARKS:

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SI-MNH-955b
Rev. 4-9-64

SMITHSONIAN INSTITUTION
DIVISION OF BIRDS
AT SEA CLIMATOLOGICAL DATA

DATE 8 APRIL

TIME	LAT	LONG	PRES WEA	VIS	SLP	DRY B	DEW PT	HUM %	TL SKY	OPA SKY	WAVES	SEA TEMP	WIND S	WIND D	SHIP COURSE/SPD.
0100			PARTLY CLDY	10	1014.6	75	69.2	82%	70%	2000	2	81	15	049	072/10.6KTS
0200			" "	10	1015.6	75	69.2	82%	70%	2000	2	81	14	049	072/10.6KTS
0300			" "	10	1015.6	75	69.2	82%	70%	2000	2	81	12	042	072/10.6 KTS
0400	~~19-44~~ 19-26N	163-44W	" "	10	1016.6	73	63.9	73%	60%	2000	2	81	20	005	072/10.6KTS
0500		34	" "	10	1016.6	73	65.5	78%	50%	2000	2	81	20	005	072/10.6KTS
0600	19-31 N	163-24W	" "	10	1017.3	72	64.5	78%	60%	2000	1	81	18	015	072/10.6KTS
0700	35	14	" "	10	1017.3	73	63.9	73%	60%	2000	1	81	12.5	025	072/10.6 KTS
0800	38	05	" "	10	1018.3	74	63.9	73%	40%	2000	1	81	14	003	072/10.6
0900	42	56	" "	10	1018.3	76	73.2	87%	40%	2000	1	81	14	041	068/10.6
1000	19-46	162-48	" "	10	1018.6	77	74	93%	40%	2000	1	81	14	065	068/10.6 068/10.6 KTS
1100	50	40	" "	10	1018.3	76	73.3	91%	40%	2000	1	81	14	042	068/10.6
1200	19-53N.	162-31W	" "	10	1018.3	76	73.3	91%	40%	2000	1	81	12	050	068/10.6KTS
1300	57	21	" "	10	1017.6	76	73.3	91	40%	2000	1	82	13	024	068/10.6KTS
1400	20-00	162-10		10	1016.6	76	73.3	91	40%	2000	2	82	15	024	068/10.6KTS
1500	04	61 00	" "	10	1016.6	76	73.3	91%	50%	2000	2	82	17	024	068/10.6KTS
1600	08	61 50	" "	10	1015.9	72	69.1	91%	50%	2000	2	80	19	000	069/10.6KTS
1700	12	61 40	"	10	1015.9	72	69.1	91%	50%	2000	2	80	19	000	069/10.6KTS
1800	20-16	161-21	" "	10	1015.9	75	74.6	94%	70%	2000	2	80	15.5	015	069/10.6KTS
1900	20	21	Partly CLDY	10	1015.9	71	66.5	50%	85%	50%	2	80	17	010	069/10.6
2000			Partly CLDY	10	1015.9	70	65.5	50%	85%	50%	2	79	18	000	069/10.6
2100			Partly CLDY	10	1016.8	72	64.4	50%	77%	50%	2	79	18	000	069/10.6
2200			Partly CLDY	10	1017.8	72	64.4	30%	77%	30%	2	79	17	010	090/10.6
2300			Partly Cloudy	10	1017.8	74	65.0	40%	74%	40%	2	79	17	359	090/10.6
2400	20-30N	160-24W	" "	10	1016.9	75	72.2	91%	30%	2000	2	81	15	014	090/10.6

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5 4/3/2

SI-MNH-955b
Rev. 4-9-64

SMITHSONIAN INSTITUTION
DIVISION OF BIRDS
AT SEA CLIMATOLOGICAL DATA

DATE 9 APRIL 66

TIME	LAT	LONG	PRES WEA	VIS	SLP	DRY B	DEW PT	HUM %	TL SKY	OPA SKY	WAVES	SEA TEMP	WIND S	WIND D	SHIP COURSE/SPD.
0100	DA		PARTLY CLDY	10	1016.3	73	69.1	87%	10%	2000	2	81	14	010	
0200			" "	10	1015.9	73	69.1	87%	0	2000	2	81	11	050	
0300			" "	10	1014.9	73	69.6	89%	10%	2000	2	79	15	013	
0400			" "	10	1015.2	74	69.9	87%	10%	2000	2	79	11	060	090/10.6
0500			" "	10	1015.9	74	65.5	81%	10%	2000	2	79	10	337	061/10.6
0600	20-38	159-20	" "	10	1015.9	74	71.5	92%	10%	2000	2	79	9	319	061/10.6
0700			" "	10	1016.6	74	71.5	92%	100%	2000	2	79	8	061	061/10.6KTS
0800	20-45N	158.00W	" "	10	1016.6	74	71.5	92%	50%	2000	1	78	10	045	070/10.6KTS
0900		58-56	" "	10	1017.3	74	71.5	92%	90%	2000	1	79	10	070	070/10.6KTS
1000	20-53	158-49	" "	10	1017.3	75	72	90%	50%	2000	1	79	10	045	070/10.6KTS
1100		42	" "	10	1017.3	75	73	90%	30%	2000	1	78	11	070	070/10.6KTS
1200	21-05	35	PARTLY CLDY	10	1016.6	75	73	90%	30%	2000	1	79	11	051	070/10.6KTS
1300		28	PARTLY CLDY	10	1016.3	76	67.2	81%	70%	6400	1	79	10	070	070/10.6KTS
1400	21-05	158-21	PARTLY CLDY	10	1015.9	76	68.8	79%	60%	6400	1	79	12.5	070	070/10.6KTS
1500	10	14	PARTLY CLDY	10	1015.6	79	73.4	82	50	2000	1	79			070/10.6KTS
1600	21	01													
1700	21-30	57-00													
1800															
1900															
2000															
2100															
2200															
2300															
2400															

REMARKS:

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