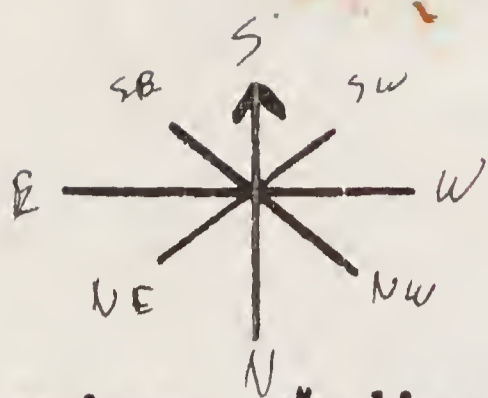


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SMITHSONIAN INSTITUTION
DIVISION OF BIRDS
AT SEA DAILY LOG -- E

DATE 2 Apr 65
Pg. # 1

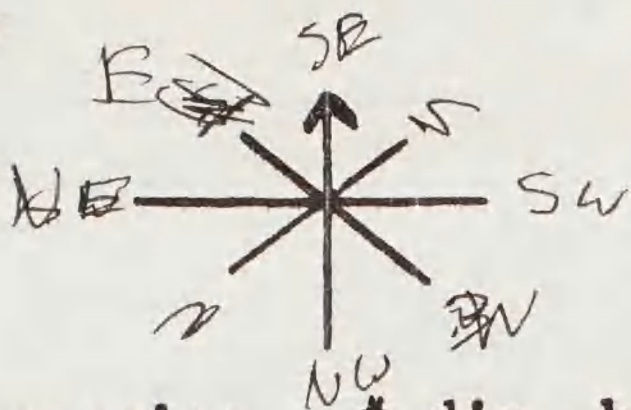


time	species	#	dir.	hgt.	remarks	loc.
0937	Brown Booby	1	W	10'-30'	circling; flying away from perching buoy	
0938	Bird sp.	1	D	low	circling about pleasure craft at harbor mouth	
0941	Jaegers (sp.?)	6±1	D	low-mod.	circling after moving fishing craft	
0942	Pom. Jaeger	1			Ad.	
0945	" "	1			going SE on water; flew off to S.	
0940	Wedgetail	1	E	low	Dennis mentioned seeing it off port side earlier	
0958	Pom Jaeger(?)	1	DW		sitting on water; bright breeding plumage; considerable white on neck, sides of head.	
1002	Bird sp.	1	S	?	Dale on bow pointed it;	
1006	Pom. Jaeger	3	W	low	Traveling loosely	
1008	" "	13	SE	low-mod.	loose flock; traveling	
FF 1010		20±10	S		feeding flock - moving eastward, terns 7 - probably Noddys Wedgetail -	PK-16/1 BB-1/1 Bird-2/2 Jaeger-8/2 PJ-19/5 W-49/15 Tern-7/1 RFB-6/2 CN-35/1 HN-5/1 ST-3/1 GB-1
	Terns (probably C. Noddys)	7±1				
	Wedgetails	2				
	RFB	3			Adults	
1012	Jaeger	2	W	low		
1014	Wedgetails	3	SW	low		
FF 1017		50±10	S	low-mod.	Apparently combined with previous flock; Boobies diving; no fish jumping to be seen.	
	Noddy Terns	35±4				
	H Noddy Terns	5±1				
	Sooty Terns	3			Adults	
	Wedgetails	2				
	RFB	3			Adults	
1019	Wedgetail	4	SW	low		
F 1021	Wedgetails	10	E	low	Traveling; direct flight - toward feeding flock	
1024	Wedgetails	2	SW	low	traveling	
1027	Wedgetails	3	E	low		
1029	"	2	W	low		
1030	"	4	SE	low	Traveling; direct flight	
F 1034	Phalaropes	16	got off water	low	Were spinning and sitting; 2 closest ones were Red Phal. - bill short and no back striping	
1034	Wedget.	2	SW	low		
1035	Grey-back Tern	1	W	mod/low	seen close	
1036	Wedget	4				
F 1038	Wedget	6				
1038	Wedget	2				
1039	"	2				

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AT SEA DAILY LOG -- E

DATE 2 Apr 65
Pg. # 2



	time	species	#	dir.	hgt.	remarks	loc.
	1039	Wedge-tail	3				
	1040	Red-foot	1			Ad.	
FF	1040	Noddy sp.	9			feeding	
	1040	Wedgetail	4				
	1042	Sooty Tern	3				
NF	1043	Wedgetail	10			string	
	1043	Tern sp.	2			Prob. Sooties, possibly 1042	
	1046	Wedgetail	3				
	1046	Terns	5				
	1051	Wedge-tails	18±3	E	low	loose flock; string out	W-402/15
	1051	P. Jaeger	1	W	low		RF-7/5
	1055	Sooty Tern	1	N	med	direct, non-feeding flight	Noddy-69/2
NF	1058	Wedgetails	4	NE	low	loose string	ST-17/5
	1100	"	4			" "	Tern-22/3
	1100	Sooty Tern	2			" "	PJ-1
F	1103	Wedgetail	100±10			} Distant	J-1
		Noddy sp.	60±10				Booby-5
		Red-foot	2				Sh-1
	1104	Wedgetail	1			Two flock	CN-15/1
	1104	Gaeger	1				
	1106	Wedgetail	1				
F	1110	Booby sp.	3			RF?	
		Tern sp.	15±				
		Wedgetail	20±			whole bunch	
	1116	Shearwater sp.	2			Sooty (?)	
	1116	Wedgetail	1				
	1118	RFB	1				
	1118	Wedgetails	2				
	1118					2 whales off Moleikai	
F	1120	Wedgetail	230±30				
		Common Noddy	15±3				
		Sooty Tern	3				
		Red-foot	2-3			Ad.	
	1125	Red-foot	1			on water	
	1130	S. Terns	5				
	1130	wedgetail	1				

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AT SEA DAILY LOG -- E

DATE March April 2
Pg. # 3



time	species	#	dir.	hgt.	remarks	loc.
1134	Red-foot	1				
1135	Wedgetail	1	NE			
1138	Sooty Tern	1	N			
1138	Wedgetail	4	NE			
1142	"	1	SE			
1142	"	1	N			
1145	Sooty Tern	2	NE			RF-1
1147	Wedge-tail	1	"			W-15/12
1147	" "	1	"			ST-6/4
1147	" "	1	"			SS-9/8
1147	" "	1	"			Noddy - 2/1
1159	Sooty Tern	1	NE			S-P-3/2
1159	Sooty Shearwater	1	"			BFA-3
1201	-	-	-	-	-	CIS-1
1202	Wedge-tail	1			whales (2) NW - all black	CN-1
1202	Sooty Tern	2	NW			SH-4/2
1203	Wedge-tail	2	SE	low		
1208	Sooty (?) Shearwater	2	⊙			
1210	Shearwater/Pet	2	⊙	low		
1212	" "	1				
1212	Black-footed albatross	1				
1215	Christmas Is. Shearwater	1	NE			
1223	Sooty Shearwater	1	NE			
1225	Black-footed Albatross	1	-	-	now 2 following ship	
1226	Sooty Shearwater	1	N			
1227	" "	1	N			
1230	" "	1	N			
1230	Wedgetail Shear	1	NW			
1252	Common Noddy Tern	1	-	-	standing on a small drifting board.	
1246	Sooty Shearwater	1	N			
1240	Wedgetail	1	N			
1245	Black-footed Alb.	1	-	-	now 3 following ship	
1248	Shearwater	3				
1250	Shearwater	1				
1251	Sooty (?) Shearwater	1	W			
1252	Wedge-tail	1				

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SMITHSONIAN INSTITUTION
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AT SEA DAILY LOG -- E

DATE 2 April, 1965
Pg. # 4



time	species	#	dir.	hgt.	remarks	loc.
1253	WEDGETAIL	1	N			
1255	Christmas Is. S.	1	N			
1300	"	1	N			
1303	Sooty Sh.	1	N			
1308	Wedgetail	1				W-33/17
1310	Sooty Tern	1	N			C15-4/4
1310	Sooty Sh.	1	N			55-10/7
1312	" "	1	N			57-1
1314	" "	2	N			S-P-4/3
1315	Wedgetail	1	N			LSP-1
1317	"	1	N			
1318	"	2				
1322	"	1	N			
1327	"	1	N			
1330	"	2	N			
1335	"	1	N			
1335	Sooty Sh.	1	N			
1337	"	1				
"	Wedgetail	1				
"	Shear water on Petrel	1				
1338	Wedgetail	1	NE			
P 1340	wedgetails	15			Sitting on water in close flock 10ft across N	
"	wedgetail	1	NE			
1343	"	1	NE			
1345	"	1	N			
1345	Sooty Sh.	3	N			
1347	Wedgetail	1	N			
1350	Shear water or Petrel	1	N			
1350	"	2	N			
1351	Christmas Is	1	NW			
1354	"	1	"			
1355	Leache's sp	1				
1358	Wedgetail	1	NE			

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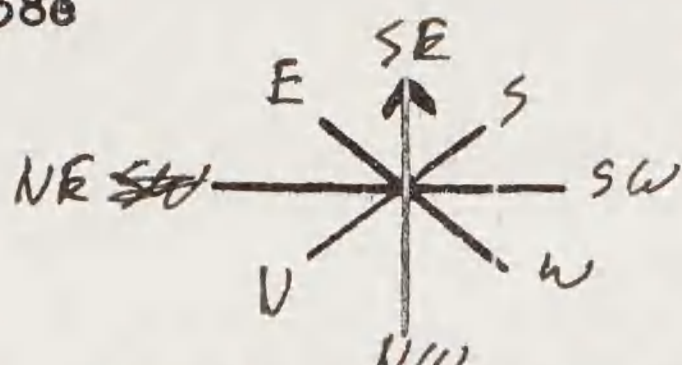
DATE April 2
Pg. # 25

time	species	#	dir.	hgt.	remarks	loc.
1400	Puffinus	1	NW			
1400	Common N	1			sitting on a block of wood	
1405	Christmas Is	1	N			
1407	"	1	N			
1407	Sooty S.P. Bulwers	3				
1409	Puffinus	1	N			
1410	Wedgetail	1	NW			
1410	Jaeger	1	NW		lit on water behind ship	
1411	Puffinus	1	NW			Sh - 3/3
1414	Sooty Sh	1	NW			CN - 1
1417	Wedgetail	1	NW			CIS - 3/3
1417	Christmas Is	1	NW			BP - 15/5
1418	Wedgetail	1	NW			W - 10/7
1418	Sooty sh.	2	N			J - 1
1420	"	3	NW			SS - 13/8
1422	Bulwers P	1				ST - 2/1
1422	Sooty S	1				
1427	Wedgetail	1				
1427	Jaeger	1			On water probably same as above	
1428	Sooty sh.	1	N			
1428	Bulwers	3				
1432	Bulwers	2				
1435	Wedgetail	2	N			
1436	Sooty Sh	2	N			
1437	"	1	NW			
1437	Wedgetail	1	N			
1438	"	3				
1439	Sooty Sh	1	N			
1439	Sooty Tern	2	SE			
F 1443	Bulwers	6			Sitting on water in a bunch, flew when ship approached	
"	Sooty Sh.	1	NW			

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DATE April 2
Pg. # 6

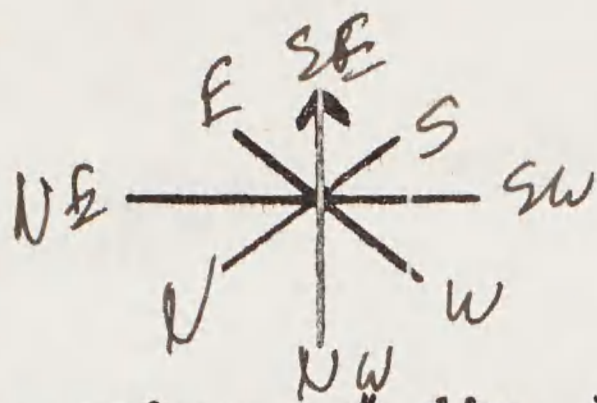


	time	species	#	dir.	hgt.	remarks	loc.
	1444	Bulwers	1				
	"	Sooty Sh	1	S			
	1446	Sooty Sh	2				
	1447	Sooty T	4				BP-36/17
	1448	Shear Sooty Sh	3				SS-17/8
	1449	Sooty T	2				ST-7/3
	1450	Bulwer's P	1				W-10/8
	1451	Wedge-tail	2				Ph-2/1
	1452	"	1				CN-7 1/2
	1453	Sooty Sh	4				
	1457	Bulwer's P.	1	SW	low		
	1458	Phalaropes	2	SE	low	dropped into H ₂ O	
	1502	Bulwer's P.	1	E	low		
	1504	"	1	SW	low		
	1504	Wedge-t.	1	SW	low		
	1505	Bulwer's P	1	E	low		
	1506	"	3				
	1506	Wedge-tail	2	S	low		
	1507	Sooty Sh.	2				
	1510	Bulwer's P	1	N			
	1512	Wedge-t	1	N	low		
	1513	Bulwer's P	2	W	low		
	1516	Sooty Sh	2			- Boat changing course often now - bird directions - ?	
	1517	Wedge-t	1				
	1526	Sooty T	1				
	1526	Wedge-t	1				
NF	1526	Bulwer's Pet	5			individuals	
	1527	Sooty Sh	2				
	1530	Wedgetail	1				
	1533	Bulwer's P	3				
F	1539	Bulwer's P	15			loose flock - travelling	
	1539	Sooty Sh	1				
	1542	Bulwer's P	1				
	1545	C. Noddy T	1		low	by self - flying to flock	
PF	1549	C. Noddy T	20±15		low	Tight feeding flock, rectangular shape; moving E; quite far away; no fish rumping; birds on water and just above surface	

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DATE 2 Apr 65
Pg. # 8



time	species	#	dir.	hgt.	remarks	loc.
1830	Leach's Petrel	1	NW	low		
1832	Wedge-tail	1	NE	low		
1836	Sooty Sh	1	NE		scaling + low flying; scant white underwing lining	
1837	" "	1	N			
1838	Wedge-tail	1	N			
1846					→ apparent sunset	

LSP-1

W-212

SS-210

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AT SEA DAILY LOG -- E

DATE 3 APRIL 1965
Pg. # 1



time	species	#	dir.	hgt.	remarks	loc.
0650	Sooty Tern	1	N			
0720	Shear-Petrel	1				
F 0712	Sooty Tern	75±5				
	Wedgetail	5±				
0715	Bulwers	1				
0723	Sooty Tern	3	NW			
0723	Sh. Pet	2	NW			
0724	Wedgetail	1	SW			
0730	"	1	SE			
0748	"	2	W			ST-81/4
0758	"	1				S-P-4/3
0758	"	1				W-30/11
0759	Sooty Sh	1				B-1
0759	"	1				SS-20/12
0800	"	1				PK-1
0803	"	1	N			Sh-1
	Phalarope				seen by purser	LSP-1
0811	Sooty Tern	2				
0817	Wedgetail	2				
	" Sooty Sh	1				
0820	Rain					
0828	Sooty Sh	2				
F 0835	"	6				
	" Wedgetail	3				
0840	Shearwater	1	N			
0842	Wedgetail	1				
	"	1				
0847	Leach's SP	1	SNW			
0850	Sooty Sh	1	NW			
0850	Shear-Petrel	1	NW			
0853	Wedgetail	2				
0858	Sooty Sh	2				
0907	"	1				
0912	"	1				
0915	"	2				

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AT SEA DAILY LOG -- E

DATE 3 April
Pg. # 12

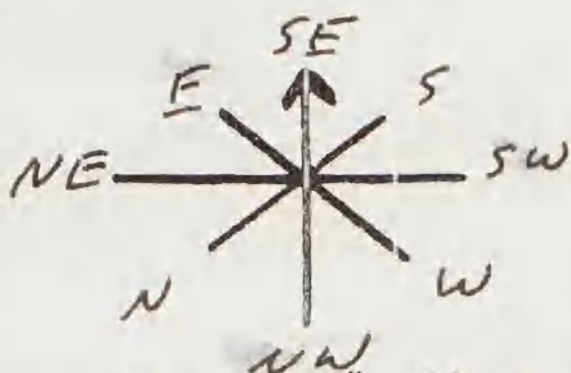


time	species	#	dir.	hgt.	remarks	loc.
0917	wedgetail	1				
"	Sooty Sh	4				
0919	Leaches SP	1				
0923	Sooty Sh	3				
F 0930	Sooty tern	25			Flock.	W-39/8
	wedgetail	25				SS-43/22
	Sooty Sh.	3				LSP-3/3
						ST- 53 53/3
F 0940	Sooty tern	2			Flock	FT-2
	Fairy Tern	2				C-B-1
	wedgetails	8				
	sooty Sh.	8				
0941	Sooty sh	3				
0941	Sooty tern	1				
0945	Sooty sh	1	NW			
1002	"	1	NW			
1005	"	1				
1009	"	1				
1018	"	1				
1020	wedgetail	1	NW			
1029	SS	3	N			
1030	"	3				
1032	"	1				
1040	"	1	N			
1040	"	1	N			
1048	WFS	1	W			
1048	WFS	1	W			
1054	Sooty Sh	1				
1100	"	1				
1106	WFS	1	NW			
1107	SS	2	N			
1117	"	1	W			
1124	"	1	W			
1125	Leach's	1	SE			
1134	SS	1	NW			
1137	"	1	NW			
1155	Wedge tail	1				
1203	Leaches SP	1	NW			
1213	Bonin or Cook's Petrel	1	NW			

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SMITHSONIAN INSTITUTION
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AT SEA DAILY LOG -- E

DATE 3 APRIL 1965
Pg. # 3

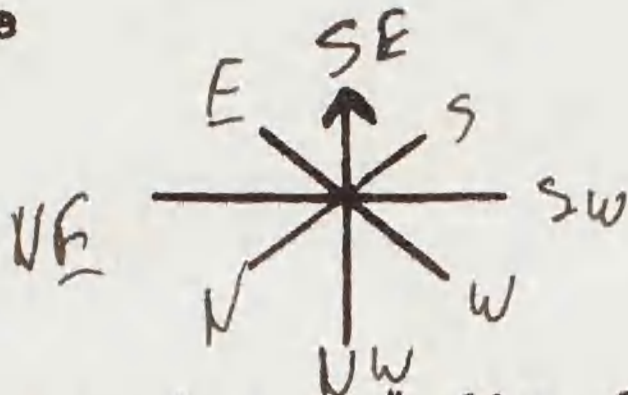


	time	species	#	dir.	hgt.	remarks	loc.
1	1217	Sooty SHEAR	1	N		no flapping	
	1225	" (3) "	1	S			
	1227	" " "	1	N			
	1227	" " "	1	N			
	1229	" " "	2				
	1240	" " "	2	N			SS-24/17
	1250	" " "	2				SH-1
	1258	Leaches	1				LSP-4/4
	1302	Sooty Sh	1				ST-94/3
	1302	Sooty tern	4				W 37/7
F	1305	Sooty Terns	50+			Flock	S-P-1
		wedgetails	20				Fi-1
		Sooty Sh	5				
	1310	Sooty sh	1				
F	1315	Sooty Tern	40			Flock	
		wedgetail	10				
	1317	Shear-Petrel	1	N			
	1330	Sooty Sh	1				
	1332	Leaches	1				
	1333	wedgetail	2				
	1335	Sooty Sh.	1				
	1341	"	1				
	1410	Leach's Petrel	1	N			
	1410	Wedge-tail	1				
	1411	Sooty Sh.	1				
	1415	wedge-tail	1	NW			
	1436	Leach's Petrel	1	W			
	1441	Sooty Sh	1	NW		Definitely sat on water for 3-4 seconds; not "dancing" on surface.	
	1441	" "	1	NW			
	1442	" "	1	W			
	1442	" "	1	U			
	1445	wedget-	1	NW			
	1450	wedget	2	NW			
	1503	Fairy Tern	1	NW		low over Hsd	

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AT SEA DAILY LOG -- E

DATE 3 Apr 65
Pg. # 4



time	species	#	dir.	hgt.	remarks	loc.
1519	Sooty Sh	1	N			
1546	Wedgetail	1				
1630	White Neck	1	E			
1640	Sooty Sh.	1	NW			
1643	"	1	NW			SS - 2/1/18
1643	"	1	NW			W - 8/5
1658	"	1	NW			WNP - 1
1650	"	1	NW			
1652	"	1	"			
1701	Small Pterodroma	2	NW		Probably Cook's	PT - 2/1
1702	Shear/Petrel	1	NW			S-P - 2/2
1706	Sooty Shearwater	1	NW			GF - 1
1710	Frigatebird	1	Ø			LSP - 3/3
1715	Sooty Shearwater	1	NW			SSP - 1
1729	Leach's Petrel	1				Sh - 2/1
1737	SS	3	NW			BFA - 1
1738	"	1	NW			
1739	WTS	1	N			
1742	Sooty Storm	1	W			
1744	" Shear	2	NW			
1753	Shear-Pet	1	NW		Pterodroma?	
1756	Sooty Shear	1	NW			
1756	Shearwater	2	NW		SS?	
1759	Sooty Shear	1	NW			
1759	"	1	"			
1759	"	1	"			
1759	"	1	"			
1759	Wedgetail	1	"			
1807	"	1	"			
1810	SS	1	"			
1811	Wedgetail	4	"			
1820	Leach's P	1	NW			
1826	"	1	NW			
1828	Shear/Petrel BFA	1	NW		following ship	
1836					Sunset	

at 2400 there were a lot of
bird flying around the lighted ship.
5+ Sooty Terns
1 small, white bellied shearwater
with short & very ruffled wing web
like a little or audubons - could have
been a Newell's
1 all dark bird possibly a sooty
shearwater

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SMITHSONIAN INSTITUTION
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AT SEA DAILY LOG -- E

DATE 4 April 65
Pg. # 1



time	species	#	dir.	hgt.	remarks	loc.
0600	Begin Observations					
0620	Sooty Shear	1				
0630	Sooty Shear	3				
0637	Sooty Shear	1				
0638	Shear Petrel	1				
0700	wedgetail	1				
0705	wedgetail	1			dark phase	
0707	Sooty Shear	2				SS 33/24
0720	Shear-Petrel	1				S-P 2/2
0720	Sooty Shear.	1				W 5/5
0725	"	1				LSP 4/3
0735	"	2				Pet - 1
0736	"	1				WTT - 1
0742	"	3				ST - 2/1
0746	Heach's	2				48
0748	Sooty Shear	1				
0754	Sooty Tern	2				
0755	wedgetail	1				
0803	SS	2				
0803	"	1				
0803	"	1				
0804	WTS	1	NW			
0807	SS	1				
0808	"	2				
0818	"	2				
0819	Leach's	1	SW			
0822	SS	1				
0826	SS	1				
0826	Petrel	1	NW		Bulwers or Leach's	
0835	WTS	1				
0835	WTTropic	1				
0846	SS	1				
0850	"	1				
0850	"	1				
0851	"	1				
0852	"	1				
0855	"	1				
0905	Leach's	1				
0906						

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SMITHSONIAN INSTITUTION
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AT SEA DAILY LOG -- E

DATE 4 April
Pg. # 2



time	species	#	dir.	hgt.	remarks	loc.
0920	SS	1				
0922	SS	1				
0929	SS	1				
0935	WTS	1	W			
0946	WTS	1	NE			
0950	SS	1				
0955	Leach's	1	NW			
0956	SS	1				
0958	Shearwater	1			SS? 3 mi	SS 23/20
1014	S.S.	3				W 3/8
1014	heaches	1				LSP 4/4
1019	Shearwater/ Petrel	1	N			Sh 2/2
1020	Sooty Shearwater	1				S-P 1
1023	Leach's S. Petrel	1	NW			BP 3/3
1032	Bulwer Petrel	1	N			JFP 1
1058	" "	1	N			ST 3/1
1103	Sooty Shearwater	1	N			
1105	Bulwer's Petrel	1	N			4R
1120	Sooty Shearwater	1	N			
1125	" "	1	N			
1145	" "	2	N			
1155	Juan Fernandez	1	NW			
1226	Sooty Tern	3	NW			
1245	WTS	1	W			
1252	SS	1				
1259	SS	1	N			
1257	SS	1	N			
1257	SS	1	N			
1301	SS	1	N			
1315	SS	1	N			
1326	SS	1	N			
1328	Leach's	1	NE			
1339	Wedgetail	1	NE			
1340	SS	1	NE			
1350	Shearwater sp	1	N		All dark, no wing linings apparent; more willowy, buoyant, leisure flight; little scaling; wings narrow across width, giving long narrow wing span; perhaps a slender-billed Shearwater	
1401	Wedgetail	1	N			
1430	Sooty Shearwater	1	N			

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

DATE 4 April
Pg. # 3

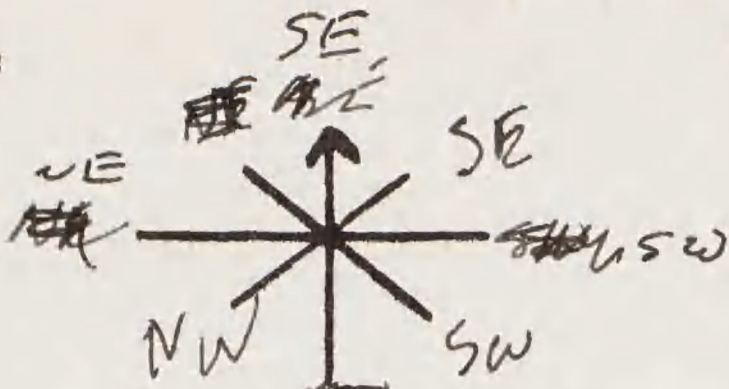


time	species	#	dir.	hgt.	remarks	loc.
1445	Sooty Shear	1				
1448	"	2				
1506	"	1				
1514	"	1				
1516	"	1				
1523	Slender-bill?	1			Arising but no white visible	
1525	Leach's	1	NW			
1526	"	1	W			
1529	Sooty Shear	1				
1533	"	1				SS - 18/15
1535	Bulwers	1	NW			SH - 2/2
1538	Leach's	1				LSP - 3/3
1549	Sooty Shear	1				BP - 1
1607	Wedgetail	1				W - 3/2
1634	sooty shear	2				
1635	wedgetail	2				27
1638	Sooty Shear	1	NW			
1648	" "	1	NW			
1655	" " "	1	NW			
1659	"	1	"			
1720	Sooty? Shear	1				
1730	Sooty Shear	2				
1746	"	1				
1824	Sunset					

SI-MNH-958e
7-28-64

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

DATE 5 April
Pg. # 1



time	species	#	dir.	hgt.	remarks	loc.
0601					Sunrise	
0605					Begin observations	
0624	Sooty Shear	1				
0630	"	2				
0646	Sooty(?) Shear	1				
0724	Sooty Shearw	1	SW			SS 21/20
0725	Sooty Shear	1				SA 12/12
0726	Sooty Shear	1	NW			LSP 1
0727	Sooty Shear	1				PT 1
0733	Sooty(?) Shear	1	NW			JFP 1
0734	Sooty(?) Shear	1				W 1
0736	Leach's Petrel	1	SW			STP - 1
0737	Sooty(?) Shear	1				
0743	Sooty Shear	1	NW			38
0748	Sooty Shear	1	NW			
0754	Sooty(?) Shear	1	N			
0807	Sooty Shear.	1	N			
0816	" (?) "	1	NW			
0816	Pterodroma	1			--- probably Juan Fernandez Is. Petrel	
0818	Sooty(?) Shear.	1	W			
0837	Sooty Shear	1	N			
0849	Leaches? sp	1				
0851	Sooty(?) Shear	1	NW			
0952	Sooty Shear	1	NW			
0905	Juan Fernandez Petrel	1	NW			
0911	Sooty(?) Shear	1	NW			
0917	Sooty Shearwater	1	N			
0923	" "	1	N			
0927	" (?) "	1	N			
0940	Sooty Shearwater	1	N			
0941	" (?) "	1	N			
0942	" " "	1	N			
0956	Sooty Shearwater	1	NW			
0958	" (?) "	1	NW			
1022	Sooty Shear	1				
1037	Sooty Shear	1	N			
1050	Wedge-tail Sooty Shearw.	1	N			
1055	Sooty Shearw.	1	N			
1102	Sooty Shear	1	N			

(Turn Page Over)

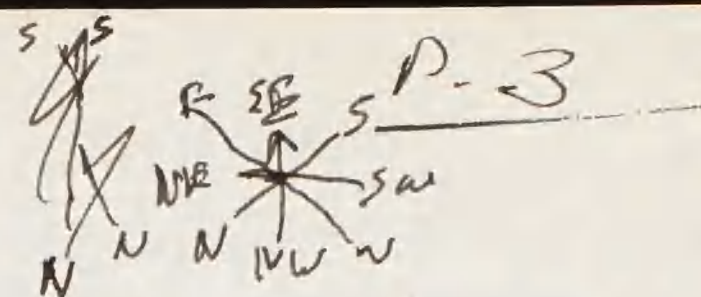
1104	Sooty Shearwater	1	U
1104	Sooty Shear	1	N
1111	Sooty Shear	1	N
1126	Sooty Shear	1	N
1126	Sooty Shear	1	NW
1134	Sooty Shear	2	N
1137	Shear/Petrel	1	NW
1156	Sooty Shear	1	N
1157	Sooty Shear	1	N
1200	Shear-pet	1	
1218	Bulwers? Petrel	1	SS
1235	Sooty Shear	1	
1246	Leach's	2	
1246	Leach's	2	
1252	Sooty Shearwater	1	
1252	Wedg-tail Shearwater	1	NW
1255	Leach's Storm Petrel	2	
1309	Sooty Shear	1	
1314	Sooty (?) Shear	1	
1322	"	1	
1326	Sooty Shearwater	1	
1335	Bird	1	
1336	Leach's	1	
1349	Sooty? Shear	1	
1350	Sooty Tern	4	
1401	Sooty Shear	1	
1430	Sooty Tern	1	
1435	Leach's S.P.	1	
1525	Sooty Shear	1	
1545	Leach's	1	
1544	Sooty Shear	1	

WT	1
SS	16/15
S-P	2/2
Petrel	1
LSP	9/6
Sh	3/3
Bird	1
ST	5/2
<hr/>	
	38

All dark, 1/2 way bet. Bulwers & Wedgetail in size?
 or Bulwers; flight intermediate, tail seemed short?

Small, grey above, white below; no circling in brief glimpse; possibly Cook's, shorebird or Grayback.

Time	Species	#	Direction
1801	Leach's Petrel	6	NW
1803	Juan F. Petrel	1	NW
1623	Sooty Shearw	1	NW
1639	Shearwater/Petrel	1	NW
1644	Wedge-tail	1	N
1647	Sooty Shear	1	N
1650	Sooty Shear	1	NW
1650	Sooty Shear	1	N
1657	Wedge-tail	1	
1720	Flock		
	Sooty Tern	14	
	Wedgetail	7±1	
	Newell's	1	
	Kermadec	1	
	Fairy Tern	1	
	Shear-Pet	2±1	
1730	Sooty Shear	1	
1730	" "	1	
1735	" "	1	
1740	Leach's	1	
1752	Shearwater/Petrel	1	
1757	Sooty Storm Petrel(?)	1	N
1810			



going South, ship is now!

LSP	7/2
JFP	1
SS	7/7
S-D	4/2
W	9/3
ST	14/1
N	
KP	1
FT	1
Petrel SP	1
	<hr/> 46

1 coll. - DH

Wedgetail feeding on small flying fish

light phase

cooks on storm petrels

white below

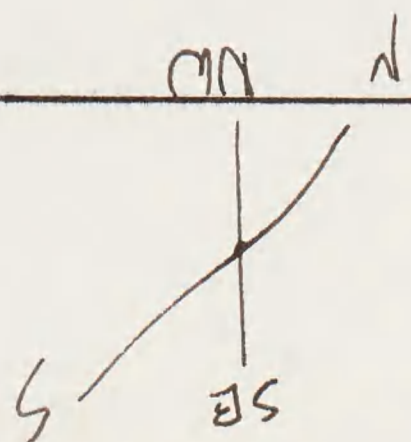
Quicker wing beats, darting flight; all dark; diagonal wing bars show; tail not, not short; suggested Sooty Storm over Bulwers.

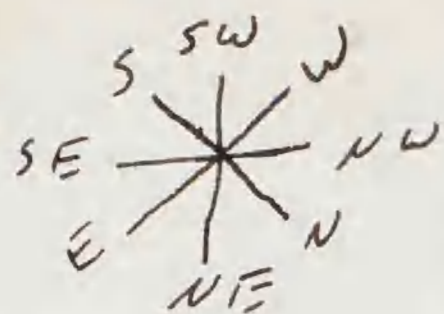
apparent species

ISLAND SUMMARY

S1-USNM-914
8-6-63

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec



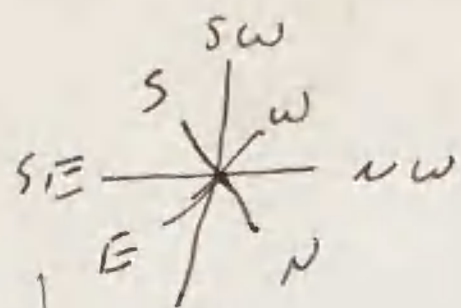


6 APRIL, 1965

Pg. 1

Sunrise ca 05:50

0600	Storm Petrel	1	NE		
0610	Wedge-tail Shearwater	1		light phase	SP 1
0615	Kermadec Petrel	1		light phase	W 3/3
0632	Pterodroma	1	N		KP 1
0634	Juan Fernandez Petrel	1			PT 2/2
0640	Shearwater - Petrel	1	N		JFP 16/6
0650	Flock - feeding				S-P 6/6
	Juan Fernandez Petrel	10+			PIP 1
	Phoenix Island Petrel	1+		well seen 1/2	AS 2/1
	Audubon's Shearwater	2+			PFS 2/2
	Pale footed Shearwater	1		large light bill & flesh feet well seen 1/2	ST 5/1
	Wedge-tail Shearwater	1			SH 2/2
	Sooty Tern	5			SS 10/7
0715	Shearwater - Petrel	1			BP 1
0716	Pterodroma	1	S		LSP 1
0722	Shearwater	1		- all dark brown but belly very light - large bird	53
0726	Shearwater/Petrel	1			
0726	Sooty Shearwater	1	N		
0735	Shearwater - Petrel	1			
0737	Bulwers Petrel	1			
0740	Sooty Shearwater	2			
0742	" "	2			
0742	Juan Fernandez Petrel	2		on H ₂ O	
0746	" " "	1			
0746	" " "	1			
0749	Sooty Shearwater	2	N		
0749	Juan Fernandez Petrel	1			
	Pale footed Shearwater	1			
0751	Sooty Shearwater	1	N		
0751	" "	1			
0752	Wedge-tail Shearwater	1		on water	
0757	Sooty Shearwater	1	N		
0801	Leach's Storm Petrel	1	NW		
0802	Sooty(?) Shear	1			
0905	Shearwater/Petrel	1	N		
0905	" "	1	N		



6 April, 1965

Pg 2

Time	Species	Count	Notes	Direction	Other
0815	Petrel	1	Sooty Storm or Bulwers		
0820	Sooty Shear	1			
0821	"	1			
0822	Wedgetail	1	Dark phase	S	Petrel 1
0832	Shearwater/Petrel	1			SS 15/13
0832	Sooty Shear	1			W 11/4
0832	"	1			S-P 2/2
0836	Sooty(?) Shear	1			SA 4/4
0856	Sooty Shear	1			ST 20/3
0856	Sooty(?) Shear	1			AS 1
0900	Sooty Shear	2		N	LSP 1
0900	Shear-Pet	1			DRP? 2/2
0902	Shearwater	1	All dark not Sooty		GFP 4/2
0903	Sooty Tern	3			FI 1
0912	Audubons	1	White curved upon rump, but back brownish, dark leading edge to underwing flight banking, fluttering, dark under tail		MB 1
0928	Sooty Shear	1		NW	PT 2/2
0930	"	1			65
0933	Sooty(?) Sh.	1			
0941	Leach's	1			
0942	Sooty Shear	1			
0942	"	1			
0950	Flock				
	Sooty Tern	15±2			
	Wedgetail	5±1	Dark phase		
	Dark-rump?	1			
	Juan Fernandez	3+			
	Fairy Tern	1			
1000	Mashed Booby	1	Imm. - collected DM		
1015	Wedgetail	1	D.P.		
1015	Pterodroma	1	Dark rump or GF } possibly from flock		
1015	Sooty Tern	2			
1030	Sooty Shear	2			
1035	Wedgetail	4	3 dark, 1 light		
	Dark rump?	1	may have been l.p. Wedgetail with very heavy dark border to underwing on water		
	Pterodroma	1			
1037	Sooty Shear	1			
1038	"	1			
1038	Juan Fernandez	1		N	

ISLAND SUMMARY

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
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S1-USNM-914
8-6-63

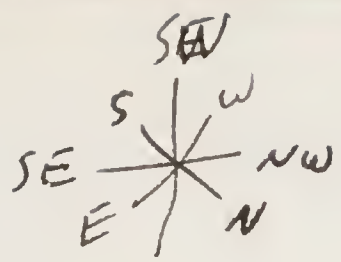
6 April, 1966
Pg 3

SE SW
NW
NE

Time	Species	M. Dir		
1040	Sooty Shear	1		
1041	"	1		
1042	"	1		
F 1042	Sooty Shear	250 4-5		off water some sitting on water
	Wedgetail	15±5		2 dark phase collected
	Shearwater Dark rump	15±5		some on water
	Juan Fernandez	10+		" " "
	Sooty Tern	20±3		
	Fairy Tern	1		
	Cook's Black-winged Petrel	1		
	Noddy?	1		
1106	Sooty Shear	1		
1107	"	1		
1110	Shearwater	1		SS?
1117	Wedgetail	1		l.p.
1117	Shearwater Leach's Petrel	1		
1118	Audubon's Shearwater	1		
	Shearw / Petrel	1		
1122	Sooty Shearwater	1		
1125	Audubon's	1	SE	
1125	Sooty Shear	1		
1127	"	1		
1130	"	1		
1137	"	1		
1137	"	1		
1140	Masked Booby (Imm)	1		
1147	Juan Fernandez Petrel	1		
1202	Leach's Petrel	1	NE	
1202	Shearwater / Petrel	1		
1208	Audubon's Shearwater	1		
	Wedgetail	1		
1221	Bird	1		Dark phase
1221	Shearwater / Petrel	1		
1222	whale sp	1		black, large fluke,
1232	Phoenix Island Petrel	1		
1235	Sooty Shearwater	1		
1235	Leach's Storm Petrel	1	NW	
1239	Wedgetail Shearwater	1	NW	
1240	Bulwer's Petrel	1		
1244	Sooty Shearwater	1	NW	
1254	" "	1	NW	

SS 39/15
W 18/4
PT 15/1
9FP 11/2
ST 26/1
FT 1
CP 1
N? 1
SH 1
BP 2/2
LSP 3/3
AS 3/3
S-P 3/3
MB 1
Bird 1
PIP 1

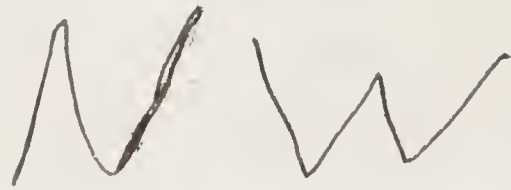
121



6 APRIL, 1965

P 84

- 1256 Sooty Shear 1
- 1257 Leach's P 1
- ~~1258~~ 1258 Sooty Shear 1
- 1259 Sooty Shear 1
- 1300 Sooty Shear 1
- 1306 Sooty Shear 3
- 1308 Sooty Shear 1
- 1313 Sooty Shear 2
- 1318 Sooty Shear 1
- 1320 Bulwers? Petrel 1
- 1321 Sooty Shear 1
- 1326 Wedgetail 3
- 1329 Sooty Shear 1
- 1330 " 1
- 1331 Shearwater 1
- 1335 Juan Fernandez 1
- 1342 Sooty Shear 1
- 1356 " 2
- 1400 " 1
- 1404 Sooty? Shear 1
- 1410 " 1
- 1415 Sooty Shear 3
- 1418 " 1
- 1421 " 2
- 1425 " 1
- 1425 Phoenix Island 1
- 1426 Sooty Shear 1
- 1427 " 2
- 1431 " 1
- 1431 " 1
- 1431 " 1
- 1432 " 1
- 1432 Leach's 2
- 1434 Sooty Shear 1
- 1436 Juan Fernandez 1
- 1437 Sooty Storm Petrel? 1
- 1437 Sooty Shear 1
- 1440 " 2
- 1441 " 1
- 1443 " 1
- 1443 Sooty? Shear 1
- 1443 Sooty Shear 1
- 1443 Sooty? Shear 1
- 1444 Leach's 1



SS	39/30
LSP	4/3
Pet	2/2
W	3/1
SA	5/5
JFP	2/2
PIP	1
PIP	<u>1</u>
	55

d.p

SS?

SE

AW

6 April pg 5

SE SW NW
NE

1449	Sooty Shear	1	NW
1450	"	1	
1450	"	1	
1452	"	1	
1452	Sooty ? Shear	1	
1454	Sooty Shear	1	
1456	"	1	
1459	Sooty Tern	1	
1459	Sooty Shear	1	
1501	Sooty ? Shear	1	
1504	Sooty Tern	1	
1504	Sooty ? Shear	1	
1505	Bird	2	
1509	Sooty Shear	1	
1512	Sooty Shear	1	
1519	Sooty Shear	2	
FF 1520	Sooty Tern	40±2	
	Masked Booby	1	
1530	Shear-Petrel	7±2	
1536	^{sooty shearwater} Phoenix Is.	1	5
1540	Shearwater	1	
1540	Sooty ? Shear	1	
1542	Leach's	1	
1543	Wedgetail	1	NW
1547	Sooty Shearwater	1	
1550	Sooty ? Shear	1	
1550	"	1	
1550	"	1	
1555	"	1	
1556	"	4	--- separate
1604	Sooty Shear	1	
1606	Sooty ? Shear	2	--- all separate
1611	"	2	
1618	"	6	--- all separate
1620	"	1	
1624	"	5	--- " "
1626	"	2	--- " "
1626	Sooty Shear	1	
1630	Sooty Shearwater	1	
1633	Wedg-tail Shearwater	1	--- dark phase
1636	Sooty (?) Shearwater	2	--- separate
1637	" " "	2	--- "
1645	Sooty Shearwater	1	
1648	Wedg-tail Shearwater	1	--- dark phase

SS 17/17 40
 Sh ~~40/17~~ 41/17
 ST 42/3
 Bird 2
 MB 1
 S-P 7/1
 PID 1
 LSP 1
 W 3/3
 115

Imm. - collected DS - banded

2

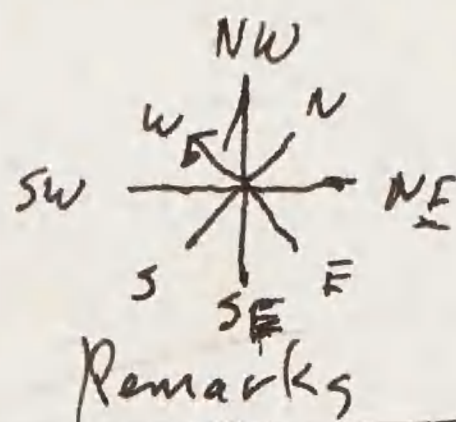
6 April 1919

SE SW NW
NE

1700	Pterodroma	1	S	Dark above, wedgetail underwing pattern, light under tail & breast. Dark rump?
1704	Masked Booby	1	NE	Subadult
1707	"	1	"	Collected - D S + DK not seen as above
1720	Juan Fernandez Petrel	1		
1720	Sooty Shearwater	1		
1728	" "	3		
1730	" "	2		
1740	Audubons	1	SE	
1740	Sooty Shear	1		
1740	Bulwers?	1		
1749	Sooty? Shear	2		
1752	Sooty Shear	2		
1757	Bulwers Petrel	1		
1758	Sooty? Shearwater	1		
1759	"	1		
1802	Sooty Shear	1		
1802	"	1		
1803	"	2		
1805	Bulwer's Petrel	1	NE	
1806	Sooty Shear	2		
1806	Pterodroma sp	1	N	
1810	Audubons Shearwater	10±2	-	on water in tight flock
1812	Sooty (?) Shearwater	3	-	separate
1813	" " "	1		
-	-	-	-	observed ca 1815

PT 2/2
 MB 2/2
 JFP 1
 SS 15/19
 AS 11/2
 Pet 1
 Sh 8/9
 BP - 2/2

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Apr. 7, 1965
Page 1

Time	Species	#	Dir.	Remarks
0602				Began observations
0629	Blue-f. Booby	1	overhd	Shot; downed; had no die markers up on flying bridge; lost bird. An immature going into sub-adult.
0644	Bl-f Booby	2	N	Full imm to sub-adult
0653	Sooty Storm Petrel	1	SE	
0658	Sooty Sh.	1	NE	
0725	Juan Fernandez Petrel	1	SW	
0732	Sooty Shear	2	N	
0732	wedgetail	1		
0738	Shearwater/Petrel	1	N	
0751	Shearwater/Petrel	1	SW	
0752	Sooty Shearwater	1	N	
0810	Masked Booby	1		Imm coll - Hatched
0811	" "	1		Ad. coll. "
0815	" "	1		Subad. coll. "
0820	wedge-tail Shearwater	1		Dark phase
0821	Juan Fernandez	1		
0845	wedgetail Shearwater	1		d. phase
0850	Masked Booby	1	W	Imm.
0850	wedgetail Shearwater	1		d. phase
0910	Flock			
	Sooty Tern	40±5		
	Shearwater/Petrel	5±1		
	birds	2		
0935	Masked Booby	1		Imm. - coll DT1
0945	Juan Fernandez	1	S	
0948	Sooty (?) Shear	2	NW	
0951	"	1	NW	
0952	Sooty Shear	2	NW	
0955	"	1	NW	
1002	"	1	NW	
1002	Sooty (?) Shear	1	NW	
1002	Booby sp.	1		
1003	Shear-Petrel	1		
1008	Sooty (?) Shear	3		separate

BFB 8/7
SSP 1
SS 8/6
9FP 3/3
W 4/4
S-P 8/4
ST 40/1
Birds 2/1
Sh 2/6
Booby 1

82

NW
SW → NE
SE

7 April 1997

1015	Sooty Shear	2	NW
1018	Shear-Pet	3	
1020	Sooty(?) Shear	1	NW
1032	Juan Fernandez Petrel	1	NW
1035	Juan Fernandez (?) Petrel	1	S
1038	Sooty (?) Shearwater	1	NE
1040	Shearwater/Petrel	1	SE
1041	Sooty Shearwater	1	NW
1043	Sooty Shearwater	2	N
1045	Sooty Shearwater	2	N
1047	Sooty Shear	1	N
1048	Sooty Shear	4	N
1050	Sooty Shear	1	N
1054	Sooty Shear	1	
1066	Sooty Shear	1	
1059	Sooty Shear	1	
1100	Sooty Shear	1	
1102	Sooty Shear	2	
1103	Sooty Shear	1	
1105	Sooty Shear	1	
1106	Sooty Shear	1	
1112	" "	3	
1112	Juan Fernandez P.	1	
1115	" "	2	
1119	Sooty Shearwater	1	
1122	Shearwater/Petrel	1	
1124	Sooty? Shear	1	
1126	" " "	1	
1128	" " "	1	
1133	Sooty Shearwater	1	
1135	" "	1	
1135	" (?) "	2	
1137	" "	1	
1140	" "	1	
1141	" "	1	
1143	" "	5	
1147	" ? "	1	
1147	" ? "	1	
1150	" " "	1	
1150	" " "	1	
1152	Masked Booby	1	
1204	Juan Fernandez	1	
1204	Sooty Shear	2	

left
primaries some feathers

possibly same bird as 1032

4 different individuals

SS 39/28
S-P 5/3
SH 14/10
9FP 5/4
MB 1
PT - 1

62

sub adult on 1152

NE
NW SW SE

ID	Species	Count	Notes	Observations
1209	Sooty(?) Shear	1		
1210	"	2		
1214	Sooty Shear	3		SS 25/22
1214	Sooty(?) Shear	1		PIP 2/2
1214	Phoenix Is.	1		WT 2/2
1216	Sooty(?) Shear	1		BP 1/1
1228	"	3	separate	LP 2/2
1228	Sooty Shear	1		JFP 2/2
1232	Wedgetail	1	d. phase	BFB 4/3
1233	Sooty(?) Shear	2		Sh sp 12/10
1235	Sooty Shear	1		Storm P 1/1
1236	Sooty Shear	1		
1238	Sooty(?) Shear	1		
1270	"	1		
1240	Bulwers	1		
1242	Sooty Shear	3	separate	51
1246	Leach's	1		
1250	Sooty Shear	1		
1252	Sooty(?) Shear	2		
1258	Sooty Shear	1		
1302	Juan Fernandez	1		
1302	Wedgetail	1	d. phase	
1302	Phoenix Is.	1	SE	
1305	Sooty Shear	1		
1306	Storm Petrel	1	No white seen	
1306	Sooty Shear	1		
1315	Sooty(?) Shear	1		
1320	Sooty Shear	1		
1327	Sooty(?) Shear	1		
1333	Masked Booby	1	Ad.	
1335	Sooty Shear	1		
1342	"	1	got off water	
1343	"	1		
1345	Leach's	1		
1346	Sooty Shear	1		
1351	Sooty? Shear	1		
1351	Masked Booby	1	Subad.	
1351	Sooty(?) Shear	1		
1353	"	1		
1402	Masked Booby	2	Subad. - both collected; 1 banded	
1404	Juan Fernandez	1	over-sounded bird	

NW NE SE
SW

April 7 1954

1435	Sooty Shear	1	
1436	"	1	
1445	Bulwers	2	
1450	Shear-Pet	1	
1453	Leach's	1	
1455	Shear-Pet	1	
1455	Sooty Shear	2	
1524	Shear/Petrel	1	N
1545	Sooty Shear.	1	
1610	sooty shear	1	
1613	Audubons Shear	2	
1615	Wedgetail	1	
1622	Masked Booby	3	
1627	Jaeger	1	E
1627	Sooty Shear	2	
1637	Shearwater/Petrel	1	
1639	Sooty Shear	1	NW
1640	Juan Fernandez Petrel	1	N
1643	Sooty Shear	1	NW
1646	Shear/Petrel	1	W
1648	Sooty Shear	1	NW
1649	Sooty Shear	1	N
1652	Sooty Shear	1	N
1654	Sooty Shear	1	N
1654	Sooty Shear	1	NW
1654	Shearwater/Petrel	1	NW
1655	Masked Booby	1	
1700	"	1	
1700	Leach's	1	
1700	Juan Fernandez Pet.	1	N
1727	Sooty Shearwater	1	
1727	Juan Fernandez Petrel	1	
1731	Sooty Shearwater	2	
1739	Juan Fernandez Petrel	1	
1741	Sooty Shearwater	1	
1752	"	1	
1810	"	3	
1811	"	1	
1813	Bulwers? Petrel	1	

Got off water
small, dark above, light below; Cook's?

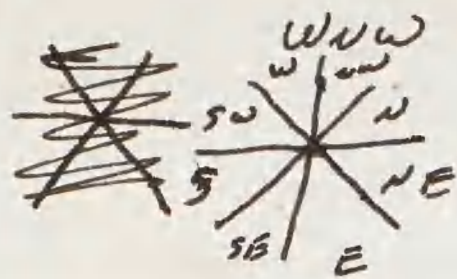
Bulwers or storm petrel
off water?

1 SA, nearly adult, 2 1/2 imm., 1/2 subad.

	SS	24/19	25/20	26/21
✓	BP	2/1		
✓	LP	2/2		
✓	S/P	6/6		
✓	AB	2/1		
✓	WT	1/1		
✓	BFB	1/2	5/3	
✓	JFP	4/4		
✓	P spp.	1/1		
✓	J	1/1		

Subadult - coll. Husted Band # 757-61382
Imm. circled

Sunset ca 1817



8 APRIL, 1965

Pg. 1

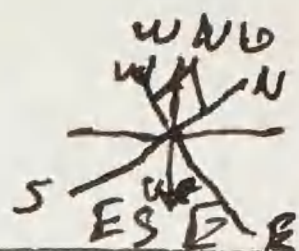
begin observations 0605
sunrise ca 0612

0618	Shearwater /a Petrel	1	N	
0633	Fork-tailed Storm Petrel /a blue grey Noddy Tern	1	NE	- too far out to be sure
0645	Sooty Shearwater	1	N	
0648	Shearwater /a Petrel	1	NW	
0703	"	1		
0703	Sooty Tern	2	E	
0705	Bird	2		same as 0633
0705	Sooty Shearwater	1	NW	
0705	Pterodroma	1	NW	Juan Fernandez?
0728	Sooty Shearwater	1	N	
0745	" "	1	N	
0746	" "	1	N	
0746	" "	1	N	
0747	" "	1	N	
0802	" "	2		
0812	" "	1		
0831	" "	1	NW	
0834	" "	1		
0840	" "	1		
0850	Bulwers Petrels	3		Sitting on water
0854	Sooty Shear.	1		
0858	shear / Petrel	1		
0900	Sooty Shearwater	1		
0905	Bulwers Petrel	1		
0910	shearwater / Petrel	1		
0917	Sooty Shearwater	3		
0918	" "	1		
0920	" "	1		
0920	Juan Fernandez Petrel	1		
0930	Shearwater / Petrel	1		
0938	sooty Shearwater	3		
0939	" "	1		
0940	" "	3		
0945	" "	2		
0952	" "	3		

S-P 6/6
Bird 3/2
SS 32/22
ST 2/1
PT 1
BP 4/2
SFP 1

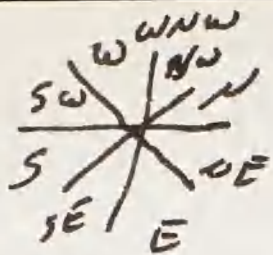
49/35

8 April 1968
Pg 2



Time	Species	Count	Direction	Notes
FF 1015	Sooty Tern	14 ± 2		Flying fish beneath - Sooty Shear actively feeding; booger chasing Sooty Terns. School of porpoise between us + flock - perhaps these scared birds. Grayback terns or Blue-gray - Noddy - Fork tail Petrel
	Wedgetail	3-4		
	Sooty Shear	1		
	Jarvis Bird	1		
	Bird	3		
1032	Sooty Shear	1	NW	
1034	Leach's Petrel	1	W	
1047	Sooty Shear	2		
1047	Sooty(?) Shear	1		
1047	Petrel sp.	1		Bulwers or Sooty Storm - Pterodroma flight, fast, str. line
1052	Sooty Tern	1	ESE	
1055	Sooty Shear	1		
1055	Sooty(?) Shear	2		
1107	Sooty Shear	3		separate
1115	"	2		
1115	Sooty(?) Shear	4		separate
F 1121	Sooty Shear	12		
1121	Sooty(?) Shear	3		
1122	Sooty Shear	2		
1122	Bulwers	1		
1123	Sooty(?) Shear	1		
1128	Sooty Shear	1		
1131	Sooty(?) Sh	1		
1131	"	1		
1134	"	1		
1142	"	1		
1149	Sooty Shear	1		
1152	Sooty(?) Shear	1		
1152	Petrel	1		Bulwers or Sooty Storm
1155	Sooty Shearwater	1		
1200	" "	1		
1204	" "	1		
1210	" "	2		
1210	" "	1		
1211	" (?) "	1		
1218	" "	1		
1225	" "	5		
1228	" "	7		
1255	" "	5		separate birds
1242	" "	3		
1247	" "	1		
1255	Wedgetail Shearwater	1		
1259	Sooty Shearwater	1		
1307	" "	3		
1309	Sooty Shear	3		
1319	" "	1		

ST 15/2
W 4/2
SS 56/25
9 1 31
Bird 3
LSP 1
Pet 2
BP 1
SH 17/13
100/51



8 APRIL, 1965

P. 3

1315	Sooty ? Shearwater	1		
1315	" " "	1		
1322	" " "	1		
1334	" " "	2	Separate	SH 17/12
1336	Sooty ? Shearwater	3		SS 52/38
1338	" "	4	separate	LSP 3/3
1339	" "	3	"	Petrel 1
1340	" "	3	"	SP 1
1343	" ? "	2		74/59
1343	" " "	1		
1344	" " "	1		
1352	" " "	1		
1352	" ? "	1		
1358	" ? "	1		
1402	" ? "	2		
1404	" "	3		
1405	Sooty Shear	1		
1407	Sooty Shear	2	N	
1413	Leach's Petrel	1	S	
1421	Sooty Shear	1	NW	
1424	Sooty Shear	1	NW	
1425	Sooty Shear	1	NW	
1427	Sooty Shear	1	NW	
1428	Sooty Shear	3	separate	94 sightings
1429	Sooty Shear	1	N	
1431	Sooty Shear	1	NW	
1432	Dark Petrel sp.	1	W	
1437	Sooty Shear	2	NW	
1445	Sooty Shear	1	W	
1448	Sooty (?) Shear	1	N	
1458	Sooty Shear	1		
1501	Sooty Shear	1	W	
1502	Sooty (?) Shear	2	NW	
1507	Sooty Shear	2	N	
1508	Sooty (?) Shear	1	N	
1528	Sooty Shear	1	N	
1528	Shear Pet	1	W	
1544	Sooty Sh	1		
1545	Sooty Sh	1	NW	
1546	Sooty Sh	1		
1547	Sooty Sh	4	NW	
1548	Leach's Petrel	1	NW	
1552	Sooty Sh	5	NW	separate sightings
1552	Sooty Sh	3	NW	
1559	Leach's Pet	1	N	

1608	Sooty? Shearwater	1	N
1608	" " "	1	N
1610	" " "	2	N
1611	" " "	2	N
1616	" ? "	1	N
1616	" " "	1	N
1622	" " "	1	N
1625	" " "	1	N
1635	" " "	1	N
1635	Leach's Storm Petrel	1	N
1639	Sooty? Shearwater	1	
1645	" " "	3	--- separate
1650	" " "	1	
1652	Sooty Shear	1	
1656	"	1	
1658	"	1	
1658	Sooty (?) Shear	1	
1710	Sooty Shear	1	
1712	Sooty? Shear	1	
1714	Sooty Shear	1	
1716	Sooty? Shear	1	
1720	Sooty Shear	3	
1725	Sooty? Shear	1	
1725	"	1	
1731	"	1	
1734	"	1	
1742	"	1	
1745	Sooty Shear	1	
1746	Sooty (?) Shear	1	
1747	"	1	
1748	"	1	
1758	Sooty Shearwater	1	
1802	" " "	1	
1803	" " "	1	
1804	" " "	1	
1805	Sooty? Shear	1	
1806	" " "	1	
1812	" " "	1	
0815	" " "	1	
01818	" " "	1	
1822	" " "	1	
1822	" " "	1	
1824	Sooty Shear	1	
1824	Sooty? Shear	2	
1825	"	1	
1825	Sooty Shear	1	
1828	Sooty? Shear	2	
1832	"	3	
1832	Wedgetail	1	separate
1833	Sooty? Shear	1	light phase
1834	Sooty	2	separate

Sh 41/36
SS 21/16
LSP 1
W 1

64/52

1835 Sooty? Shear 2
1839 - Sunset

N
↑

9 APR 12, 1965
Pg 1

0617	Sooty Shear	1
0620	Sooty Shear	1
0650	Sooty Shear	1
0657	Sooty ? Shear	1
0703	Sooty Shear	1
0707	Sooty Shear	1
0711	Shear. Petrel	1
0712	Sooty Shear	1
0713	Sooty ? Shear	1
0716	Sooty Shear	1
0717	Sooty ? Shear	2
0719	Sooty Shear	1
0720	Wedgetail	2
0722	Sooty Shear	1
0724	Sooty Shear	1
0725	Leach's s. Petrel	1
0726	Sooty Shear	1
0727	Sooty ? Shear	1
0729	Shear-Petrel	1
0753	Shear-Petrel	1
0818	Sooty Shear	2
0820	Sooty ? Sh	1
0820	"	1
0822	Sooty Shear	1
0827	Leach's	1
0829	Sooty Shear	1
0830	Sooty ? Shear	2
0835	Sooty Shear	1
0839	Mottled Petrel	1
0842	Sooty Shear	1
0845	Leach's	1
0845	Sooty Shear	3
0847	"	1
0857	Sooty Shear	2
0901	Petrel	1
0910	Sooty Shear	2
0912	"	1
0912	Leach's	1
0914	Sooty ? Shear	1
0915	Sooty Shear	1
0916	"	1
0917	Leach's	1
0933	Shear-Pet	1
1006	"	1
1010	Sooty Shearwater	2
1017	Sooty Storm Petrel	1

begin observation 0600

SS	30/24
Sh	10/8
S-P	5/5
W	2/1
LSP	5/5
MP	1
Pet	1
SSP	1
<hr/>	
55	46

30' in front of bow

Bulwers or Sooty Storm - hit briefly

hit briefly

Gould - good view, definite storm petrel flight relatively
small & skirted across the bulwers & short tail

↑

1021	Sooty ? Shearwater	1
1026	" " "	1
1031	" " "	1
1043	" " "	1
1047	" " "	1
1047	Sooty Shearwater	1
1113	" " "	2
1113	" ? "	1
1125	Sooty Shearwater	1
1134	" " "	1
1137	" " "	1
1137	Sooty ? Shearwater	1
1142	Sooty Shearwater	2
1150	" " "	2
1152	" ? "	1
1221	Leach's Petrel	1
1221	Sooty Shear	2
1224	Sooty Shear	1
1229	Sooty Shear	1
1239	Shear/Petrel	1
1254	Sooty Shear	2
1300	Sooty Shear	1
1306	Sooty Shear	2
1307	Sooty Storm Petrel (?)	1
1308	Sooty Shear	1
1308	Sooty (?) Shear	2
1313	Sooty Shear	1
1355	Shear/Petrel	1
1356	Sooty Shear	1
1400	Sooty Shear	1
1402	Sooty Shear	1
1432	" "	1
1504	Leach's Storm Petrel	1
1517	Sooty Shear	1
1534	Bulwer's Petrel	1
1545	Sooty Shearwater	1
1548	" ? "	1
1551	Sooty Shearwater	1
1555	"	1
1658	"	1
1659	"	3
1700	"	3
1700	Leach's	1

SH 4/10
 SS 36/26
 LSP 3/3
 S-P 2/2
 Pet 1
 BIP 1

 54/43

1202	Sooty Shearwater	2
1720	" "	2
1740	" "	1
1743	" "	1
1743	Shearwater/Petrel	1
1751	Sooty Shearwater	2
1751	Leaches Petrel	2
1752	Sooty Shearwater	1
1755	" "	1
1757	Sooty ? Shearwater	1
1800	Sooty Shearwater	2
"	Wedge tail	1
1805	Sooty Shearwater	1
1808	" "	1
1816	" "	1
1823	sooty shear	1
1828	sooty ? shear	1
1838	" " "	1
1838	Sooty Shearwater	1

SS 17/13
 S-P 1
 LSP 2/1
 SA 3/3
 W 1
 —
 24/19

ISLAND SUMMARY

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
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10 APRIL, 1965



Time	Species	#	Dir	Remarks
0615				apparent sunrise
0618	Sooty Shear	1		
0629	Cook / Bonin Petrel	1	NE	
0630	Sooty (?) Shear	1	N	
0634	Sooty (?) Shear	1	NW	
0641	sooty Shear	2		
0646	Sooty Shear	1		
0647	Sooty Shear	1	NW	
0654	Sooty Shear	1	N	
0654	Sooty Shear	1	NW	
0713	Leach's Petrel	1	N	
0716	Sooty (?) Shear	1	NW	
0727	Sooty Shear	1	NW	
0728	Pom Jaeger	1	W	
0730	Sooty Shear	1	N	
0730	Sooty Shear	2		
0731	Sooty Shear	1	NW	
0734	Sooty Shear	1		
0735	Sooty Shear	1		
0741	Sooty Shear	1		
0748	Sooty Shear	1	N	
0748	Sooty Shear	1	NW	
0752	Sooty Shear	2	NW	
0753	Shear / Petrel	1		
0756	Sooty Shear	1	N	
0802	Sooty Shear	1	NW	
0811	" ? "	1	NW	
0815	Shearwater / Petrel	1	N	
0822	Sooty ? Shearwater	1		
0828	Sooty Shear	1	N	
0833	Sooty ? Shearwater	2	NW	
0838	" " "	3	NW	
0858	Sooty Shear	1	NW	
0904	Sooty Shear	2		
0905	" "	2		
0906	" "	1		
0907	" ? "	2		
0910	Leach's s.p	1	⊙	
0912	Sooty Shear	1		
0913	Sooty Shear	1		
0922	Sooty Shear	2		
0927	Sooty Shear	1		
0933	Sooty Shear	1		
0933	Sooty Shear	1	N	
0934	Sooty Shear	1	N	
0936	Shear / Petrel	1	NW	
0937	Shear (Sooty)	1		
0947	Sooty Shear	2		Separate sightings

SS 39/33
 CP 1
 SA 12/8
 LSP 2/2
 PJ 1
 S-P 3/3

 58/48

Time	sp.	#	Dir	Rem	N	10 Apr	P 2
0952	Sooty Sh	1	N				
0954	Sooty (?) Shear	2	NW				
1005	Sooty Shear	1	N				
1006	Sooty Shear	1	NW				
1012	Sooty Shear	1	N				
1020				2 Porpoises headed SE, by ship			
1023	Sooty Shear	1	NW				
1023	Sooty Terns	2					SS 19/16
1024	Sooty Shear	1	N				Sh 7/5
1026	Sooty Shear	1	NW				LSP 1
1039	Sooty Shear	2	NW				W 1
1046	Sooty Shear	1	NW				S-P 1
1047	Sooty Shear	1	NW				H&P? 1
1048	Sooty Shear	1	NW				FT 2
1049	Sooty (?) Shear	2	N				ST 2/1
1051	Sooty Shear	2	N				
1052	Sooty Shear	1	NW				
1052	Sooty (?) Shear	1	NW				
1052	Leach's SP	1	NR				
1053	Wedge-tail	1	S				
1053	Shear/Petrel	1	NW				
1055	Sooty (?) Shear	1	NW				
1111	Sooty Shear Harold's Petrel? (late phase)	1	NW				
				<p>Small - Cook's size or bit larger; brown above - no white in or lighter brown in dorsal wing surface; white below on body. Underwing with small but distinct white stripe along thru dingy wing; dark part of wing only partly dark - mix of white and grey or brown. Whitish on sides of face, + shoulder, running up into small but distinctly white collar. White on face appeared to extend above eye. No distinct dark grey in front of eye (or around it). Loose relaxed flight in fairly steep banks and low arcs, but slower than small petrels. Slows ^{nearly} all flaps from shoulder, not wrist. Wings crooked when flapping, but straighter when gliding. No distinct slash marks or dark leading edge on underwing part</p> <p>Doyle saw grey to grey-white on side of neck, neck collar and breast + throat instead of white - he saw the back a little darker brown; he saw white undertail coverts; he realizes bird size of Har. is bit larger than this bird appeared.</p>			
1112	Sooty Shear	1	N				
1138	Sooty Sh	2	NW				
1139	Sooty Sh. (?)	1	NW				
1143	Sooty Sh.	1					
1235	Fairy Tern	2	S				

separate sightings
separate sightings

SS 19/16
Sh 7/5
LSP 1
W 1
S-P 1
H&P? 1
FT 2
ST 2/1

34/27

10 April

W N E
5

1250	Leachs	1	NE
1340	Shear-Pet	1	NW
1345	Leachs	1	
1359	Sooty Shear	1	NW
1413	sooty shear	1	
1415	sooty shear	1	
1416	sooty shear	1	
1419	Sooty Shear	1	
1420 1420	shear-petrel	1	
1423	shear-petrel	1	
1515	Sooty Shear	1	
1525	sooty shear	1	
1634	sooty shear	1	
1540	Shearwater/Petrel	1	
1542	Wedgetail	1	Intermediata
1557	Wedgetail	1	
1609	Shearwater/Petrel	1	NW
1610	Sooty Shear	1	N
1620	Sooty Shear	1	N
1631	sooty Shear	2	NW
1631	sooty Shear	1	N
1640	sooty ? Shear	1	NW
1640	Shearwater	1	NW
1652	Sooty Shear	1	NW
1653	Sooty (?) Shear	1	NW
1658	Sooty Shearwater	1	NW
1658	Sooty (?) Shearw	1	NW
1659	Sooty (?) Shearw	1	NW
1659	Sooty Shear	1	NW
1715	white-tail Tropicbird	1	
1716	Shearwater/Petrel	1	
1719	Wedge-tail Shearwater	1	
1727	Sooty (?) Shear	1	N
1735	Sooty Shear	1	
1736	"	2	N
1740	sooty Shear	1	NW
1742	sooty Shear	1	N
1743	sooty Shear	1	
1745	"	1	
1748	sooty (?) Shear	1	N
1752	sooty Shear	1	

glimpsed

LSP 2/2
 S-P 5/5
 SS 25/23
 W 3/3
 SH 9/7
 WTT 1

43/41

heading W. now; we are

possibly sooty, but seemed larger, slower, lumbering flight - suggested Pale-foot

ISLAND SUMMARY

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec

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W
S N
E

1757	Sooty Shear	1
1757	Sooty ? Shear	2
1802	"	1
1802	Sooty Shear	1
1802	Frigate	1
1802	Shear-Pet	1
1802	Wedgetail	1
1803	Sooty Tern	2
1805	Sooty ? Shear	1
1809	"	1
1814	Sooty ? Shear	1
1815	"	3
1817	"	1
1822	Audubon's Sh	1

SS	6/3
SA	11/8
F	1
S-P	1
W	1
ST	2/1
AS	1
<hr/>	
	23/14

Correct pattern but odd flight - more like Pterodroma. Steep banks, several ~~flaps~~^{slow} flaps while banking, short glide.

1835	Sooty Shear	3
1840	Sooty ? Shear	1

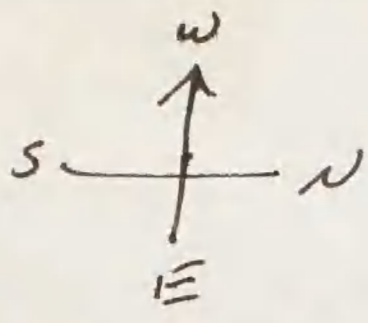
Very slow gliding & slow flapping
Sunset

1844

ISLAND SUMMARY

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----

S1-USNM-914
8-6-63



11 APRIL, 1965
Pg 1

Sunrise 0628

Time	Species	Count	Notes
0632	sooty? Shearwater	2	separate sightings
0635	" " "	5	" "
0638	" " "	9	" "
0639	" " "	2	
0640	" " "	2	
0640	" " "	2	
0640	" " "	1	
0642	" " "	2	separate sightings
F 0650	" " "	13	widely spaced but apparently together
0650	" " "	2	
0651	" " "	2	
0654	" " "	4	separate sightings
0712	" " "	1	
0713	sooty Shearwater	1	
0714	" "	2	
0720	sooty shear	1	
0721	sooty shear	1	
0726	sooty Shearwater	1	
0744	sooty shear	1	
0752	sooty shear	1	
0755	sooty shear	1	
0756	sooty shear	1	
0757	sooty shear	1	
0758	sooty shear	1	
0800	sooty shear	1	
0801	sooty shear	2	
0802	sooty shear	1	
0803	sooty shear	2	
0804	sooty shear	3	
0805	sooty shear	1	
0806	sooty? shear	1	
0807	sooty shear	1	
0808	sooty shear	1	
0809	sooty shear	1	
0813	sooty Tern	4	
0813	sooty Shearwater	3	
F 0815	" "	6	
0820	sooty? Shearwater	1	
0830	sooty shear	3	
0900	Bulwers Petrel	1	
P 0902	sooty Shearwater	8	
0912	" "	1	
0935	sooty shear	2	
0937	sooty shear	1	
0950	sooty? shear	1	
0954	sooty(?) Shear	1	

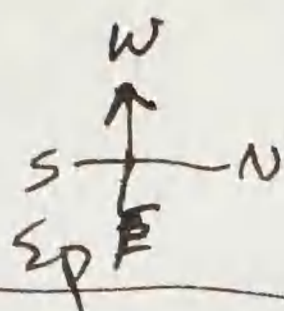
see heading N to W
↓

SH 52/35
SS 49/27
SI 411
BP 1

106/64

ISLAND SUMMARY

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec



Time	Sp	#	Dir	Rem
0956	Sooty Shear	2		
0958	Sooty Shear	2		
1004	sooty ? Shear	1		
1006	Sooty Shear	1		
1012	"	4		
1015	"	1		
1018	Sooty ? Shear	2		
1024	Sooty Shear	2		
1025	sooty ? Shear	1		
1028	sooty shear	1		
1029	"	2		
1049	"	2		
1100	Sooty ? Shear	3		
1105	Bulwers	1		
1109	Sooty ? Shear	2		
1109	"	2		
1109	"	1		
1112	"	1		
1112	Sooty ? Shear	2		
1116	Sooty Shear	2	NW	
1116	" "	1	NW	
1116	" "	1	NW	
1119	" "	2	NW	
1118	Sooty(?) Shear	1	NW	
1118	sooty shear	2	N	
1119	"	2		
1125	"	2		
1125	"	1		
1125	"	1		
1128	"	2		
1129	"	2		
1130	"	1		
1131	Leachs	1		
1133	"	2		
1136	Sooty ? Shear	2		
1142	Sooty Tern	2		
1150	Sooty ? Shearwater	1		
1158	sooty ? Shear	1	NW	
1159	sooty Shear	1		
1200	" "	3		
1212	" "	2		
1213	" "	2		
1214	" "	2		
1224	Bulwers Petrel	1		
1224	Sooty Shearwater	2		
1226	sooty Shear	6		
1230	" "	15		

55 58 / 38
 SN 20/13
 BP 2/2
 LSP 3/2
 ST 2/1

 85 / 56

very erratic butterfly-like flight, whirling around each other

with a flock.

11 April 1965

P 3

Time	Species	#	Dir	Rem.
1234	Wedgetail	1		
1235	Sooty shear	3		
1237	Sooty shear	2		
1240	Sooty shear	5		not a flock.
1241	Sooty shear	1		
1242	Sooty Tern	3		
1243	Christmas Is shear?	1		
1244	Lewer's S. Petrel	1		
1249	Sooty Shearwater	3		
"	Bulwers Petrel	1		
"	Sooty Tern	1		
1250	sooty shear	4		
1251	Sooty shear	2		
1252	Sooty? shear	3		
1253	" "	2		
"	Sooty Tern	2		
"	Sooty shear	2		
"	Sooty shear	1		
1258	" "	4		
1259	Sooty shear	3		
1300	Sooty shear	2		
1301	Sooty Tern	1		
1306	Sooty Shearwater	2		
13.10	" "	2		
1313	" "	1		
1315	Sooty Shearwater	4		Separate
1319	" "	1		
1322	" "	2		
1324	Sooty shear	2		
1327	Sooty shear	2		
1332	Sooty shear	1		
1335	Sooty shear	1		
1335	Bulwers? Petrel	1		
1341	Sooty shear	1		
1350	Sooty? shear	2		
1352	Lewer's S. Petrel	1		
1357	Wedg-tail Shearwater	1		
1400	Sooty? Shearwater	2		et. plane
1400	" "	2		
1400	Fearn's Storm Petrel	1		
1400	Sooty Tern	4		
1402	Sooty Shearwater	2		
1402	" ? "	2		

✓ W 2/2
 ✓ SS 53/ AM 32
 ✓ CIS? 1/1
 ✓ LSP 39/3
 ✓ BP 1/1
 ✓ ST 11/5
 ✓ Sh 11/5
 (Bulwers?) → Pet 1/1

~~79~~
 85 43+7
 ✓
 ✓
 TS=50
 TB=85

1410	Sooty? Shear	2
"	Sooty Tern	2
"	Bulwers Petrel	1
1412	Sooty Shear	1
1414	"	1
1414	Sooty? Shear	1
1415	" " "	1
1436	Sooty Shear	1
1444	"	1
1446	"	2
1448	"	1
1448	Sooty? Shear	1
1449	" " "	1
1452	" " "	1
1452	" " "	1
1452	" " "	1
1455	" " "	2
1456	" " "	1
1456	Frigate	1
1459	Sooty? Shear	1
1459	" " "	3 - separate
1459	" " "	1
1502	" " "	1
1502	" " "	1
1503	" " "	1
1503	" " "	1
1514	" " "	1
1515	" " "	2
1516	" " "	2 separate
1520	" " "	1
1521	" " "	3 separate
1522	Bulwers	1
1524	Sooty Shear	1
1524	WT Tropic	1
1525	Sooty? Shear	5 separate
1526	Bulwers	1
1532	Sooty? Shear	1
1534	Bulwers	1

Sub Ad 57 →

- ✓ SH 29/26
- ✓ ST 2/1
- ✓ BP 4/4
- ✓ SS 15/14
- ✓ GF 1/1
- ✓ WTT 1/1

52/28+9

TB = 52
TS = 47

Assum. Subad - 57

11 April 1975

W
S N
E

1536	Sooty ? Shear	4	separate
1542	" " "	1	
F 1545	Sooty Tern -	30 ± 5	- 1 collected feeding
	Wedgetail -	15 ± 3	
	Sooty Shear	2-3	
1550	"	1	
1551	"	3	
1552	"	1	
F 1555	Sooty Tern	175 ± 25	feeding
	Wedgetail	60 ± 15	
	Sooty ? Shear	10 ±	
1556	Sooty Shear	1	
F 1558	Sooty Shear	10	scattered but apparently together
1607	" ? "	2	
1607	" " "	3	separate
16010	" " "	1	
1620	" " "	2	
1620	" " "	1	
1620	white-tail Tropicbird	1	collected
F 1630	Sooty Tern	35 ±	
	Shear-Pet	20 ±	
1635	sooty shear	1	
"	" "	1	
"	" "	1	
"	" "	1	
"	" "	1	
1637	sooty shear	1	
1638	" "	3	
1639	" "	2	
1640	sooty shear	2	
"	" "	2	
"	" "	2	
"	" "	1	
"	" "	1	
"	" "	2	
1641	sooty Tern	2	
1645	sooty Tern	4	
1646	sooty shear	1	
1649	sooty shear	3	
"	" "	1	
"	" "	1	
"	" "	2	

1 coll. → ✓ SS 49/26
 ✓ ST 51/25
 ✓ W 246/5
 ✓ WTTB 75/2
 coll. ← ✓ WTTB 1/1
 ✓ Sh 23/12
 ✓ Sh/P 20/1
 — 43 + 5 ✓
 ✓ 414

TS = 43
 TB = 414

April 11 1966

1658	Sooty ? Shear	3	separate
1658	Sooty Shear	1	
1658	"	1	
1658	Bulwers	1	
1703	Sooty ? Shearwater	2	
1703	Bulwers Petrel	1	
1704	Sooty ? Shear	2	
1704	" " "	1	
1710	" " "	1	
1716	" " "	1	
1716	" " "	1	
1718	" " "	4	separate
1718	" " "	1	
1729	Sooty Tern	1	
1730	Sooty ? Shear	1	
1730	" " "	1	
1730	" " "	1	
1731	" " "	2	
1731	Sooty Shearwater	1	
1734	Sooty ? Shear	1	
F 1738	Sooty Shear	7	
1738	Sooty ? Shear	4	separate
1738	Bulwers	1	
1740	Sooty ? Shear	3	"
1741	"	2	
1741	Petrel	1	Bulwers or Leachs
1742	Sooty Tern	3	
1742	Sooty Shear	1	
1743	"	2	
1743	Sooty ? Shear	1	
1748	"	5	
1748	"	1	
1748	"	1	
F 1754	Sooty Tern	50 ± ?	
	Shear - Pet	30 ± ?	
1754	Sooty Shear	3	
1754	Bulwers	1	
1758	Sooty ? Shear	1	

SS	17/8
ST	56/5
BP	4/4
Sh	37/29
S/P	30/1
(Bulwers or Leach)	Pet 1/1

145 / 38 + 10 ✓

TS = 47
TB = 145

145

April 11 1957

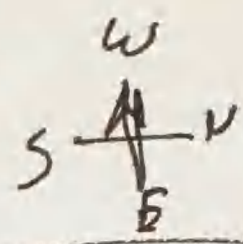
1759	Sooty Shear	1
1802	Sooty ? Shear	1
1804	Wedge-tail Shearwater	1
1806	Sooty ? Shear	1
1809	" " "	1
1810	" " "	1
1815	" " "	1
1816	" " "	1
1823	" " "	1
1823	Sooty Shearwater	4
1840	" ? "	2
1843	Sooty Shearwater	1
1845	Leachs	1

W	1/1
SS	6/3
Sh	9/8
LP	1/1

17	13
✓	✓

TS = 13
TB = 17

Sunset ca 1902



Time	Spec	#	Run
0714			Survive
0716	Leach's Pet	1	N
0723	Bulwer's Petrel	2	E
0724	Sooty Shear	5	N
0724	shear/petrel	1	NW
0728	Sooty Shear	3	U
0736	Sooty Shear	3	U
0758	Sooty Shear	1	N
0739	Leach's Pet	1	
0744	Sooty Shear	1	N
0753	sooty shear	1	
0754	white-tailed Tropicbird	2	W
0759	sooty shear	1	
"	"	1	
"	Shear - Petrel	1	
0801	sooty Shear	1	NW
0802	"	2	SE
0812	Wedge-tail	1	W
0812	Sooty (?) Shear	1	N
0815	Sooty Shear	1	
0825	"	1	
0833	"	1	
0838	Sooty Tern	18 ± 2	
	Sooty Shear	3	
0843	"	1	
0847	White-tail Tropicbird	1	
0848	Sooty Shear	1	
0850	"	3	
0852	"	2	
0854	"	1	
0855	"	1	
0900	"	1	
0903	"	1	
0911	Sooty Tern	2	NE
0913	Sooty Shear	2	
0914	Sooty Tern	8	
	Shear-pet	1-2	

separate entries
separate entries
separate ent.
got off water
apparent just got off water; all flapping + low w/ no gliding + banking despite stiff wind

- W 1/1
 - ✓ L/P 2/2
 - ✓ B/P 2/1
 - ✓ S/S 38/31
 - ✓ S/P 3/3
 - ✓ W/T/B 3/2
 - ✓ S/H 4/1
 - ✓ S/T 28/3
- TS = 411
TB = 78

feeding passively

Fish ball ~~blown~~ blown to smithereens

plus previous terns

ISLAND SUMMARY

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----

S1-USNM-914
8-6-63

12 April pg 2

	0916	Sooty ? Shearwater	1		
	0920	Sooty Shear	2		
	0926	"	1		
	0930	Sooty Tern	2		
	0932	Sooty ? Shear	1		
	0940	Sooty Shear	1		
	0950	" "	1		
F	0953	" "	7	on water	✓ Sh 2/2
	"	Sooty Tern	2	over shearwaters	✓ SS 27/17
	1008	Porpoise	4		✓ ST 52/11
	1010	sooty shear	1		✓ GF 1/1
	1015	Great Frigatebird	1		✓ SP 3/3
	1027	Shearwater / Petrel	1		LP 1/1
	1032	Sooty Tern	1	E	W 1/1
	1034	" "	1	E	87 / 36
	1036	Sooty Shearwater	1		✓
	1040	sooty shearwater	1		TS = 36
	1041	" "	1		TB = 87
	1042	Sooty Shear	2		Porp = 4
	"	" "	2		
	"	" "	2		
	1043	sooty shear	1		
	1050	Sooty Tern	4		
	1058	Sooty Shearwater	1		
	1102	sooty shear	1		
	1111	Leaches Petrel	1		
	1115	Sooty Tern	2	S	
	1115	Sooty Shearwater	1		
	1135	sooty shear	1		
	1143	shear-Petrel	1		
	1148	Sooty Tern	2	SW	
	1201	" "	2	SE	
	1240	shear pet	1		Pale back, underside not seen
F	1242	Sooty Tern	25+?	horizon, high	
P	1243	"	9		
	1245	"	2		
	1255	Wedgetail	1		

ISLAND SUMMARY

Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov Dec

SI-USNM-914
8-6-63

1257	Sooty Shearwater	1	
1300	Fairy Tern	1	
1314	Sooty Tern	2	←
1320	Sooty Shearwater	1	
1330	Sooty Tern	2	←
1330	Shear-Pet	1	
1336	Sooty Shear	1	
1338	Wedgetail	1	
P 1342	Sooty Tern	100 ± ?	
	Shear-Pet	25 ±	
1345	Tropic bird	1	
1352	Sooty Tern	2	→
1353	"	2	←
1357	"	2	
1420	"	1	↓
1422	"	2	↓
1623	Sooty Shearwater	1	
1623	" "	1	
1428	sooty ? Shearwater	1	
1430	" " "	1	
1431	Shearwater/Petrel	1	
1431	Sooty Tern	3	
1457	" "	1	SE
1457	Sooty Shearwater	3	
1505	" "	2	
1512	Sooty Tern	5	SE
1513	sooty shear	1	
1540	heaches P.	1	
1546	Sooty Tern	1	
1603	Great Frigatebird	1	Adult ♂
1626	shear/Petrel	1	
1627	Sooty Shear	1	
1643	wedge-tail	1	
1645	Sooty Shear	1	
1652	Whit Tropicbird	1	on water
1653	sooty shear	1	
1656	sooty shear	1	
1659	sooty shear	1	
1703	Great Frigatebird	1	
	Shearwater/Petrel	1	
1703	" "	1	

wedgetails & sooty shearwaters on water

SS	16/13
FT	1/1
ST	123/12
S/P	30/6
W	2/2
(sp?) TB	1/1
Sh	2/2
LP	1/1
1A Ad ♂ GF	2/2
WTB	1/1

179/41+

TB = 179
TS = 39

	1710	Sooty Tern	1	
	1717	Mottled ? Petrel	1	Pale above & below, too distant to see abdomen, underwings uniform pale gray.
	1721	Sooty Shearwater	1	
	1729	"	1	
	1735	"	1	
	1752	Sooty (?) Shear	1	
	1756	Sooty Terns	2	
FF	1825	Sooty Terns	28 ± 5	
		Fairy Tern	1	
		Lesch's Pet.	1	leaving flock
	1831	Sooty Shear	1	
FF	1834	Sooty Tern	4	breaking up; Sooty T feeding actively on flying fish; fish jumping
		wedgetail	1	
FE	1838	Sooty Terns	13 ± 2	loose, drifting flock; quite spread out in long rectangle
		wedge-tail	2	
	1845	Bulwer's Pet	1	
FF	1857	Sooty Tern	77+	Terns fishing high up; fish apparently deep; some steep diving; no color tags seen.
		wedg-tail	2	
		Sooty Shear	1	

1918

Sunset

(Mottled?)	ST	125/6
	P	1/1
	SS	5/5
	Sh	1/1
	FT	1/1
	LP	1/1
	W	5/3
	BP	1/1

140/19

TB = 140
TS = 13

Time	Species	Count	Direction	Notes
0655X	Sooty Tern	2	→	
0656	"	7	→	
0700				Sunrise
0712	Sooty Tern	6	→	
"	"	1	↓	
0714	"	2	↓	
0715	"	2	↓	
0716	"	2	→	
0720	"	2	↓	
0720	"	3	→	
0729	"	2	↓	
0735	"	1	↓	
0735	"	1	↓	
0737	"	1	↓	
0739	"	2	↓	
0740	"	2	↓	
0740	"	1	↓	
0740	"	1	↓	
0744	"	2	↓	
0745	"	1	→	
0747	Whitetail Tropicbird	1		
0800	Wedgetail "	1	↘	
0805	Sooty Tern	1	←	shot & went down 1/2 mi. from ship
0812	"	1	↑	
0814	"	1	↑	
0816	"	1	↑	
0818	"	2	↑	
0820	"	3	↑	
0825	Wedge tail	1	↓	
0828	Red-footed Booby	2	↓	Sub-adults
0830	Sooty Tern	3	↓	
0837	"	2	↓	
0842	Red-foot	1	↓	Sub adult
0845	Sooty Tern	1	↓	
0848	Sooty Tern	9	↑	
	Wedge tail	1		
0849	Red-foot	1	↓	Sub Adult
0859	Sooty Tern	4	↓	

ST 61/28
WTTB 1/1
W 3/3
all Sub-Ad. RFB 4/3

69/35
✓ ✓
TB = 69
TS = 34

ISLAND SUMMARY

S1-USNM-914
8-6-63

Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov Dec

13 April 1965

P 2

0859	Sooty Tern	3	↑
0900	Sooty Tern	1	↓
"	" "	5	↓
"	" "	9	↑
0902	" "	2	↓
0910	" "	2	↓
0917	" "	4	↔
"	Red foot	1	↓
"	Sooty Tern	1	↓
0918	" "	2	↔
0920	" "	4	↓
0925	" "	4	↓
0935	" "	3	↓
0940	" "	1	
0942	" "	1	↓
0944	" "	3	SE
0945	" "	1	SE
0950	" "	1	collected by D. N. Husted + D. L. Stadel
1007	" "	1	
1015	White-neck (?) Petrel	1	
1019	Wedge-tail (?)	2	
1021	Sooty Terns	2	
1027	Sooty Tern	6	
1028/1	" "	2	
1028	" "	1	
1028	Mottled Petrel	1	- Ken ID: abdomen patch + pale gray body + wing coloration
1034	Sooty (?) Shear	1	
1051	Sooty Tern	1	
1055	Red-foot B.	1	F.F.
	Sooty Terns	10 ± 2	
1059	Sooty Terns	2	
1104	Cook's Petrel	1	
1105	Sooty Tern	1	
1106	" "	1	
1112	" "	2	
1113	" "	1	
1115	" "	1	

1 coll. ← ST 78/30
 RFB 2/2
 (Wh-neck?) Pet 1/1
 " "
 (desc.) MP 1/1
 Sh 3/2
 CP 1/1

86/37
 ✓/✓

TB = 86
 TS = 36



13 Apr 65
P. 3

Time	Spec	#	Dir	Rem.
1116	Sooty Tern	1		
1123	" "	1		
1125	" "	2		separate
1126	" "	1		
1126	" "	1		
1127	" "	2		
1128	" "	1		
1132	Wedge-tail Petrel	1		Sitting on H ₂ O
1133	Sooty Terns	2		
1136	Grey-bk Tern	1		
1137	FF Sooty Tern	60±10		Flock scattered to winds as ship passed thru middle of flock
	Grey-bk Tern	2		
	Noddy Tern	2		
	Haw. Noddy Tern	1		
	Wedge-tail	1		
1143	Sooty Tern	1		
1147	Sooty Tern	2		
1155	Sooty Tern	2		
1155	Sooty Tern	1		
1158	Sooty Tern	5		separate
1200	" "	5		separate
1201	" "	2		
1203	" "	1		
1203	" "	1		
1204	" "	1		
1205	" "	1		
1207	" "	1		
1210	" "	1		
1211	Sooty Tern	50+		
	Common Noddy Tern	1		
1212	Sooty Tern	4		
1213	" "	4		separate
1214	" "	1		
1214	Wedge-tail Shearwater	1		
1216	Sooty Tern	3		
1216	" "	2		
1220	" "	2		
1220	" "	1		
1223	" "	1		
1225	" "	1		
1225	" "	1		
1228	" "	5		
1231	Common Noddy Tern	1		
	Sooty Tern	1		

ST 169/47
CP 1/1
GBT 3/2
NT 4/3
HWT 1/1
W 2/2

180/44+12

TB = 180
TS = 51

13 April 1965

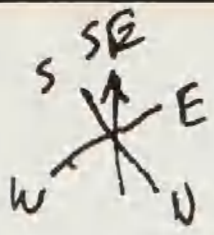
pg 4

1233	Sooty Tern	5	
1234	" "	1	
1235	Red-footed Booby	1	ad.
1238	Sooty Tern	4	
1238	" "	1	
1240	" "	1	
1247	Sooty Tern	3	
1250	" "	3	
1251	" "	2	
1252	" "	4	
1253	" "	1	
1255	" "	3	Underway
1257	" "	1	
1259	" "	2	
1300	" "	7	
1310	" "	1	
1310	" "	1	
1310	" "	2	
1317	Sooty Tern	2	
1320	" "	1	
1321	" "	1	
1324	" "	1	
1330	" "	1	
1334	" "	1	
1334	" "	1	
1334	Booby sp.	1	
1335	Sooty Tern	4	separate
1337	" "	2	
1338	" "	1	
1339	" "	1	
1342	" "	1	
1348	" "	1	
1350	" "	1	
1353	" "	1	
1357	" "	6	separate
1402	Wedge-tail	1	
1404	Sooty Tern	2	separate
1409	" "	2	
1410	" "	1	
1412	" "	2	
1412	" "	2	
1412	" "	1	
1414	" "	2	
1415	" "	1	
1415	" "	1	
1415	" "	1	

Ad. ST 86/52
 RFB 1/1
 Bobby 1/1
 W 1/1

89/46-9
 ✓ ✓

TB = 89
 TS = 54



13 Apr 65

P. 5

Time	Spec	#	Dir	Remarks
1422	Sooty Tern	1		
1422	c. Noddy Tern	1		
1424	Wedge tail	2		1 dark phase
1424	Sooty Tern	1		
1427	" "	2		Separate
1432	" "	2		
1432	" "	1		
1433	" "	2		
1433	c. Noddy Tern	1		
1435	Sooty Tern	2		
1435	" "	2	←	
1435	" "	2	↓	
1437	" "	2	←	
1437	" "	2		
1437	" "	8		
1439	" "	3		
1439	" "	1	↓	
1440	" "	1		
1442	Wedgetail	1		
1444	Sooty Shearwater	1		
1451	Sooty Tern	1		
1458	Sooty Tern	2		
1458	Sooty Tern	3		Separate
1500	Red-f Booby	1		Imm
1501	Wedge-tail	2		
1502	Sooty Tern	2		
1505	FF Sooty + Noddy T	10		
1505	Sooty Tern	1		
1506	Sooty Tern	1		
1507	Sooty Tern	450 ± 50	---	at least 2 with red tops
	Noddy Tern	10 ± 3		
	RFB	18 ± 2		
	Sooty Shear	3		
	Wedge-tail	25 ± 5	---	at least 1 with red top
1520	Sooty Tern	1		
1527	" "	1		
1535	F Sooty Tern	5		Traveling 450
1536	" "	1		
1536	" "	4		

2 w/ Red T. ← ST 502/29
 ✓ NT 12/3
 1 w/ Red T. ← W 30/4
 ✓ SS 4/2
 ✓ RFB 19/2
 ✓ T 10/1

577/38+3
 ✓
 TB = 577
 TS = 37

13 APRIL, 1965

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1540	Sooty Tern	1	
1540	"	1	
1544	"	1	
1547	"	1	
1548	Shear/Petrel	1	
1551	Sooty Tern	1	
1552	"	2	separately
1554	"	1	
1555	Sooty Tern	42 ± 5	
1600	RFB	1	imm
1601	Sooty Tern	5	
1603	"	7	↓
1605	"	7	
1605	Blue-faced Booby	1	
1608	Sooty Tern	8	↓
1608	"	2	↓
1609	"	2	↓
1615	Flock - apparently feeding		
	Sooty Tern	150 ± 15	
	Common Noddy Tern	5 ± 1	
	Sooty Shearwater	2+	
	Wedge-tail Shearwater	4 ± 1	
	Red-footed Booby	15 ± 2	
	Blue-faced Booby	2+	
1634	Sooty Tern	9	
1634	c. Noddy	1	
1640	Sooty Tern	2	
1642	"	1	
1642	Sooty Shearwater	1	
1649	Sooty Tern	4	
1650	Blue-faced Booby	1	
1700	Sooty Tern	4 ↑	
1703	"	6 (2, 1, 1, 1, 1) ↑	5 sightings
1708	"	4 ↑	
1717	"	1	

ST	259/38
S/P	1/1
RFB	16/2
BFB	4/3
NT	6/2
SS	3/2
W	4/1

293/32+17
✓ ✓

TB = 293

TS = 44

13 April - 1965

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1722	Sooty Tern	2
1724	"	1
1730	Sooty Tern	1
1736	"	2
1740	"	3
1743	"	3
1745	"	2
"	"	1
"	"	1
1750	"	3
1751	"	13
1753	"	1
1753	"	1
1758	"	1
1758	Masked Cook's Petrel	1

} joined

1 coll. (8 shots)

♀♀

ST	305/21
CP	1/1
W	2/1
SS	7/2
RFB	5/1
GF	2/1
LP	1/1

331/58

FF

1814	Sooty Tern	250 ± 50
	Wedge-tail	2
	Sooty Shear	6 ±
	RFB	5 ± 1
	Frigatebird	2 ♀

feeding, large school of Tern
 flying fish in the area
 1 call. Halls + Husted (took 8 shots)

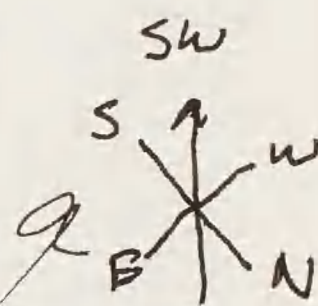
TB = 331
 TS = 24

1857	Leach's Petrel	1
1816	Sooty Tern	6
1817	"	4
"	"	3
"	"	2
"	"	2
1818	"	3
1818	Sooty Shearwater	1

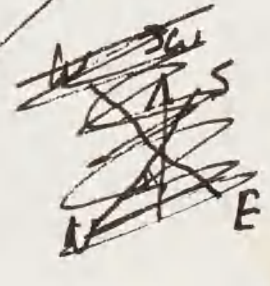
apparent sunset 1819

14 Apr 65
P. 1

Time	Sp	#	Dir	Re
0600				Apparent sunrise
0647	Mottled (?) Petrel	1		going toward oil slick
0658	Sooty Shear	1	U	
0659	" "	1	NW	
0702	Wedge-tail	1	SW	
0704	Sooty (?) Shear	1	NW	toward slick
0719	" " "	2	U	" " (?)
0721	Wedge-tail	1		
0724	Sooty Terns	3	E	not toward slick
0731	Sooty (?) Shear (0728 Sooty? Shear)	1		
0738	Sooty Shear	2		
0740	" "	1		
0809	" "	1	UW	
0812	Sooty ? Shear	1		
0826	Pterodroma	1		Small
0826	Sooty Tern	1		
0831	Sooty Shear	1	UW	
0915				Small craft returned.
0920	Sooty Shearwater	1		
0941	Pterodroma	1	SW	ship going SW
1000	Sooty Shear	1	NW	
1020	Wedge-tail	1	NE	
1035	Sooty Tern	1	W	
1040	Sooty Shear	1		
1110	" ? "	1		
1120	" "	3		
1126	Leach's	2		
1135	Sooty Tern	1		
1212	Sooty Shearwater	1	N	
1220	Wedge-tail	1	E	
1237	Sooty Tern	2	NE	
1243	Shear-Petrel	1		
1246	Sooty Shear	1		
1254	Leach's Storm Petrel	1		
1303	R-F Booby	1		Call. D.N. Husted ; imm. birds
1311	Booby Shear	1		
1407	Sooty ? Shearwater	2		



- Birds from craft:
- Wedgetails - 3 (sep.)
 - Leach's - 5 (1-1-1-2)
 - Sooty Tern - 4 (3+1)
 - Sooty Sh - 4 sep.
 - Pterodroma - 1



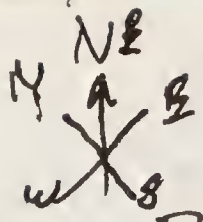
PT.	2/2	
Pat	1/1	
SS	16/13	
W	4/4	
Sh	9/7	
ST	8/5	
LP	3/2	
S/P	1/1	
RFB	1/1	
CRAFT	W 3/3	2 dup ship
	L 5/4	
	ST 4/2	4 dup ship
	SS 4/4	2 dup ship
	PT 1/1	1 dup ship

TB = 53
TS = 43

62 41 + 9

1410	Frigate	1		♀ or imm		
1433	Sooty? Shear	1				
1445	Wedge-tail Shearwater	1				
1450	Sooty Shearwater	1				
1511	Leach's or Bulwer's Petrel	1				
1520	Shearwater/Petrel	1				
1524	White-tail Tropicbird	1				
1530	Red-footed Booby	1	Imm.	collected by Amerman		
1540	Mottled Petrel	1				
1556	Shearwater/Petrel	1				
1634	Sooty Shearwater	1			♀ or imm ← GF	1/1
1655	Sooty Tern	2			Sh	2/2
1700	"	2	NE		W	2/2
1702	Wedgetail	1			SS	6/4
1705	Leachs	1			P	2/2
1713	Mottled? Petrel	1		(1-Mottled?, 1-Leach's or Bulwer's)	S/P	2/6
1715	Sooty Shear	1		Distant	ATB	2/2
1715	Sooty? Shear	1				
1718	Cook's Petrel	1	E		1 imm - coll. ← RFB	1/1
1718	Shear - Petrel	1			MP	1/1
1719	"	1			ST	20/5
1729	Sooty Tern	1		Cook's?	LP	1/1
1737	Shearwater/Petrel	2			CP	3/2
1740	Flock - feeding - flying fish					109 29
	Sooty Tern	35 ± 1				✓ ✓
	Cook's Petrel	2				
	Sooty Shearwater	3				TB = 109
1810	Flock - feeding					TS = 26
	Sooty Tern	40 ± 3				
	Shearwater/Petrel	2				
1822	White-tail Tropicbird	1				
1833	Sunset, apparent					
1837	Wedge-tail Shearwater					

15 April - 1



0600 Begin observations

0605 Wedgetail 1 d. phase

0605

 course change to NE

0612

 Sunrise

0629 Cooks 1
 0650 " 1 } Jaeger chasing petrel - imm. jaeger,
 Jaeger 1 } only slightly larger than Cooks, not
 0651 Cooks 1 } chunky - possibly Parasitic or Longtailed?

0659 Cook's sp. 1 ~~had darker head~~ ~~make a Bonin's~~

0704 Booby sp 1 on horizon

0711 Pterodroma 1 Way off stem - Mottled? arriving

0715 Shear-Pet 1 flying like wedgetail but may also have been mottled; poor light

0755 Cook's Petrel 1

0806 Red-tail Tropicbird 1 } 2 birds

0807 " " " 1

0808 mottled Petrel 1 NW

0815 Cook's Petrel 1 SE

0827 Leach's Storm Petrel 1 W

0905 Sooty Shearwater 1 NW

0945 mottled Petrel 1 NW

1014 ~~Mottled~~ Med. Pterodroma 1 NW had underwing like Hevolds - irregular white stripe down center. No breast band or abdominal patch. Cracked wings. ^{Body} Under sides white to grey. Dorsal probably solid grey-brown. Poor lighting for color differentiation. Steep arcs + banks, loose flapping. ~~that~~ between Cook's + Juan F. in size.

1109 Sooty (?) Shear 1 FIVE

1111 Cook's Pter 1 SE

1125 Mottled Petrel 1 NW

1130 Leach's Petrel 1

1204 Mottled Petrel 1 NW

1204 " 1 NW

1208 Sooty Shear 1 NW

1223 White tail Tropic 1

1252 Leach's 1 SE

1954 " 1 SW

Got off water

- (mottled?) ← Med. P 1/1
- CP 7/2 TB=27
- Parasitic or LT-dase ← J 1/1 TB=27
- Booby 1/1
- (mottled?) ← PT 1/1
- S/P 1/1
- RTTB 2/2
- MP 5/5
- LP 4/4
- SS 2/2
- Sh 1/1
- WTTB 1/1

2/1/27

1309	Sooty Shearwater	1	NW		
1327	"	1	W		
1344	Mottled Petrel	1	W		
1352	"	1	NE	SS	5/5
148	Black-winged Cook-Bonin	1		MP	10/9
1433	Juan Fernandez	2		C/B	2/2
1436	Mottled Petrel	1		JFP	2/1
1444	"	1			
1480	mottled Petrel	1		ST	7/3
1508	Sooty Tern	1		LP	2/2
1512	Leach's S.P. Pet	1		CP	3/2
1514	Black-winged Leach's Petrel	1		S/P	3/2
1515	mottled Petrel	1		(1-Mottled?) ← Pet	4/4
1516	Short Petrel	1		(1-Mottled?) (2-JFP or MP) ← PT	4/4
1519	mottled? Petrel	2		W	2/2
1527	mottled Petrel	1		(1-almost sure on Pale-foot) ← Sh	2/2
1535	Leach's	1			
1535	Pterodroma	1		JFP or Mottled	46 38
1538	Sooty Tern	2			✓ ✓
1540	Wedgetail	1			
1540	Shear-Tail	1		Looks? - on water -	
1603	Pterodroma	1		JFP or Mottled	TB = 46
1633	mottled Petrel	1	NW		TS = 37
1655	Sooty Tern	1			
1722	Sooty Shearwater	1			
1727	Black-winged mottled Petrel	1			
1741	" " "	1			
1747	Pterodroma	1			
1749	Black-winged Cook's Pet	2			
1756	Sooty Shear	1			
1800	Mottled Pet	2			
	Pale-footed (?) Shear	1			
1810	Sooty (?) Shear	1			
1815	Wedge-tail	1			
1816	Black-winged Cook/Bonin	1			
1821	Mottled Pet	1			
1826	Sooty Shear	1			
1835	Pterodroma	1			

} possibly feeding; birds may have come off the
 large, heavy, all brown, no white underwing (solid dark even w/sun on it); didn't see bill color

He's about 16 pellets heavier than
 those still flying
 possibly mottled

Sunset ca 1833

NW ↑ Sunrise ca 0600 (on watch)

0622	looks Petrel	1	NW	
0630	Juan Fernandez leg Petrel	1	NW	
0631	Red-tail Tropicbird	1		
0650	Sooty? Shearwater	1	NW	
0650	Sooty Tern feeding	19		
0655	" "	1		heading toward flock
0656	Blue-faced booby	1		imm. feeding - collected as straggler
0719	Bonin Island Petrel	1	SW	
0718	Sooty Tern	1	SE	
0725	white-tail Tropicbird	1		
0742	Shearwater/Petrel	1		(probably pterodroma)
0749	" "	1		
0749	Sooty Tern	2	E	
0755	Leach's S. Petrel	2	NW	
0802	Sooty Tern	1	SE	
0806	Wh-t TBird	2		
0808	Sooty Tern	1		
0814	" "	3		
F 0817	" "	11	traveling	NW
0824	Cook's Petrel	1	SW	
0824	Cook/Bonin Petrel	2	SW	
F 0827	Sooty Tern	9	traveling	
0831	Traveling SW now			
0835	Bird	1	too distant, too only wing flash	
0838	Leach's Petrel	2		
0845	Sooty Tern	5	Traveling	
F { 0854	Sooty Tern	4	} loosely traveling; no feeding observed	
0854	Wedge-tails	2		
0900	Flock - feeding			
	Sooty Tern	40+	1 collected by K. E. Lamerman	
	Wedge-tail Shearwater	2+		
	Shearwater/Petrel	3+		
	Red-tail(2) Tropicbird	1		
0919	Sooty Tern	2		
0922	"	1	coll. - Hurst	} perhaps part of flock

CP	2/2
JFP	1/1
RTTB	1/1
SA	1/1
(2 coll.) ← ST	99/14
(imm. coll.) ← BFB	1/1
BIP	1/1
WTB	3/2
SIP	5/3
LP	4/2
C/B	2/1
Bird	1/1
W	4/2
(Red-tail?) ← TB	1/1

126/33 ✓
 TB = 126
 TS = 29

16 April - 2

	0936	Sooty Tern	3		
	0940	Sooty Tern	3		
	0941	Sooty Tern	2		
	0956	"	8	SW	
	1002	"	1	NE	
	1002	"	1	SW	
	1006	"	3	⊙	1 coll - Hunted
	1031	"	2	⊙	
FF	1042	Sooty Tern	26		- a few birds feeding - most seen and high in the air.
		Sooty Shear	1		1 coll from ship, probably from flock
	1115	Sooty Tern	1		
	1116	" "	3		
	1122	" "	4		
	1127	" "	4		
	1150	" "	84		- Joined by four at 1122
			1		(6 coll. - 1 w/ streamer) ^{or.}
	1155	" "	1		SS 1/1
					← ST 158/25
	1200	" "	2		MP 2/2
					LP 1/1
	1202	" "	1		(coll.) ← RFB 1/1
					(coll.) ← W 1/1
	1204	Mottled Petrel	1		(1 coll.) ← WTTB 3/2
		Shearwater Petrel			RTTB 2/2
	1204	Sooty Tern	1		
	1215	" "	3		2 collected
	1225	" "	2		
					169 / 35
	1240	Leaches Petrel	1		TB = 169
	1258	Mottled Petrel	1		TS = 32
	1300	Red-footed Booby	1		coll. - Gauled & Hunted
		Red-footed			
	1335	Sooty Terns	16±1		feeding passively
FF	1405	Sooty Tern	26		1 coll - bands & streamer
		Wedgetail	1		coll
	1415	W.T. Tropic	1		
	1420	Sooty Tern	1		collected - Hunted + Hunted
	1500	Red-tail Tropicbird	1		
	1504	Sooty Tern	6		
	1534	" "	37+		
	1535	Red-tail Tropicbird	1		} flying together collected 1 white-tail Tropic (Hunted - Hunted - Gauled)
		White-tail Tropicbird	2		

- 1556 Leach's Storm Petrel 1 NW
- 1610 Sooty Shearwater 2 NW
- 1631 Mottled Petrel 1 NW
- 1650 Pterodroma 1 NW probably Mottled.
- 1702 Sooty Tern 3 NE
- 1728 Juan Fernandez Petrel 1
- 1731 Shearwater/Petrel 1
- 1800 Flock - actively feeding

Sooty Tern 225 ± 25 - collected 6, one red-footed bird collected
 Wedge-tail Shearwater 4+
 Frigatebird 2
 Sooty Shearwater 4
 Red-footed Booby Imm. 3+
 Sun set ca 1835

LP 1/1
 SS 6/2
 MP 1/1
 (Mottled?) ← PT. 1/1
 (6 coll., 1w/streamer) ← SF 228/2
 JFP 1/1
 S/P 1/1
 W 4/1
 FF 2/1
 (all imm.) ← RFB 3/1

248 / 12 ✓
 TB = 248
 TS = 8

17 APRIL, 1966
Pg 1

0610	Begin observations					
0653	RTTB	1	collected by <u>Husted</u>	} initially seen together		
0653	WTTB	1	" " "			
0747	Cook's Bonin	1				
0757	Juan F. Pet.	1				
0822	"	1				
0900	----- turn to NE			(2 coll.) ← RTTB	2/2	
0908	Shear Pet	1	horizon	(1 coll.) ← WTTB	1/1	
0917	Leach's	1		C/B	1/1	
0929	Sooty Shear	1		JFP	7/7	
0938	Leach's	1		S/P	3/3	
1107	3/4 8-117 Cook's Petrel	2		(1 coll.) ← LP	5/5	
1115	Shear-Petrel	1		SS	1/1	
1145	Blue-face B.	1	collected <u>Husted</u>	CP	3/2	
1325	Noddy Tern?	1		(coll.) ← BFB	1/1	
1335	Juan Fer-pet	1		(Noddy?) ← Tern	1/1	
1338	Leach's Pet	1		MP	5/5	
1342	Mottled Pet	1		(Wedgetail?) ← Sh	1/1	
1345	Mottled Pet	1				
1407	RTTB	1	collected <u>Husted</u>			
1431	Leach's Storm Petrel	1				
1434	Mottled Petrel	1				
1510	Leach's Storm Petrel	1	collected <u>Stadler</u>			
1520	1520 Cook's Petrel	1				
1600	Mottled Petrel	1	~ u			
1602	Juan Fernandez Petrel	1				
1620	" " "	1				
1643	Mottled Petrel	1				
1710	Juan F. Petrel	1				
1730	" " "	1				
1750	Shear-Petrel	1				
1815	wedgetail?	1				

31 / 30
✓ ✓
TB = 31
TS = 30

begin observations 0600
Sunrise ca 0605

0609	Sooty Terns	2	E	
0612	" "	5	⊙	
0621	" "	2		
0625	Pterodroma	1		
0650	mottled Petrel	1	nw	
0700	shear - Pet	1	nw	all dark
0718	Sooty Tern	2	SE	
0721	Masked Booby	1	⊙	ed. collected - Husted FWS 558-82653
0730	" "	1		
0733	Sooty Tern	1		
0810	" "	1		
0813	" "	1		
0832	Sooty Tern	3	w	
0854	Sooty tern	5		
0858	Juan Fernandez P.	1		
0903	Sooty Tern	2		
0914	Sooty shear	1		
0910	Sooty Terns	5	sw	
0912	Sooty terns	2	sw	
0914	" "	2	w	
0919	" "	2	w	
0940	Flock - feeding			
	Sooty Tern	125±20		3 collected by Husted
	Fairy Tern	1		
	Frigatebird	1		
	Sooty Shearwater	1		
0957	mottled Petrel	1	nw	
1002	Blue-faced Booby	1	on H ₂ O	collected by Husted
1037	Leach's Storm Petrel	1		
1108	Wedgetail	1		
1108	Sooty Tern	1		
1115	" "	2		
1118	" "	1		

(3 coll.) ← ST	164/18
Pt	1/1
MP	1/1
S/P	1/1
(2 coll.; 1 an Ad. FWS 558-82653) ← BFB	3/3
JFP	1/1
SS	2/2
FyT	1/1
GF	1/1
(Mottled?) ← Pet	1/1
W	1/1
LP	1/1

178	32
178	32

TB = 178
TS = 29

18 April - 2

1126	Red-tailed Tropicbird	1	
1128	Sooty Tern	1	
1135	White-tail Tropicbird	1	
1156	Sooty Tern	2	
1203	" "	6	
1219	" "	2	
1340	Sooty Tern	3	
1350	Sooty Tern	3	
1438	WT Tropicbird	1	
1510	Leach's	1	collected - DuMort
1520	Macleay's Cook's Petrel	1	
1545	Sooty Tern	2	NE
1546	" "	1	
1600	Leach's	1	
1622	Jaeger	1	NW
1635	Macleay's Cook's	1	
1648	Shear-Pet	1	
1654770	Mottled Booby	1	sub adult
16554755	1248 Cook's Petrel	1	

1705-1800 Flock - Feeding

Sooty Terns	100 ± 10	- 9 collected	1 banded with orange tag
Sooty Shearwater	1		
Bonin Island (?) Petrel	1	- collected	
Frigate Booby Bird	1		

1855 Wedge-tail Shearwater 2 on 420
 1948 Sunset.

(9 coll., 1 w/ streamer)	RTTB	1/1	
	ST	125/9	
	WTTB	2/2	
(1-coll.)	LP	2/2	
	CP	2/2	
	J	1/1	
	S/P	1/1	
(sub Ad.)	BFB	1/1	
	C/B	1/1	TB=141
	SS	1/1	TS=21
(coll. - Bonin ?)	Pet	1/1	
(Frigate ?)	Bird	1/1	
	W	2/1	

141 / 24
 141 / 24

19 April 1965
P.1

0620	Common Noddy	1	Collected sitting on a log → D. Stadel
0658	RTTB	1	
0700	Sooty tern	3	↑
0700	" "	2	↓
0715	Leaches	1	
0720	"	1	
0725	Ship is going North around a rain squall		
0804	Shear-Pet	1	
0827	Bulwer's Petrel	1	
0828	Wedge-tail	1	
0829	Blue-faced Booby	1	Adult
0840	Sooty Tern	3	
0852	Bird	1	
0858	Cook's Petrel	1	
0902	black-wing Frigatebird	1	possibly a ♀; now turning NE
0905	Wh-t Tropicbird	1	
0914	black-wing Cook's Petrel	1	
0927			
0930	Wedge-tail	1	
0943	Wedge-tail	1	dark phase
0952	Wedge-tail	1	
1000	Sooty Tern	2	
1018	sooty? Shearwater	5+	
1025	Terns	6+	
1037	Birds	2	seen by watch
1120	Sooty Shear	1	
1123	down to Wedge Petrel	1	
1121	Sooty Tern	1	
1126	Sooty Tern	1	
1130	Leaches S. Petrel	1	
1142	Sooty Tern	2	
1148	Sooty Shearwater	1	sw
1148	" ? "	1	sw
1200	Sooty tern	2	←



- # 1215 Leaches 1 School of porpoise under them.
~~1215~~ Bonin Is. Pet. 4
 Sooty Tern 15±2 One with bright orange streamer.
 Fairy Tern 1
 1228 Sooty Tern 1 - collected by Husted
 1230 Bonin Is. Petrel 1
 1300 Sooty Tern 1
 1338 " " 2 ✓
- 1340 Bonin Is P 1 ✗
 1350 Leaches P 1
 1423 Sooty Shear. 1 ✗
 1447 Sooty ? Shearwater 2 NW
 1457 Sooty Shearwater 1 NW
 1510 " " 1 NW
 1520 Blue-faced Booby 1 almost adult.
 1524 Sooty Tern 2 S
 1543 Bonin Is. ? Petrel 1 NW
 1600 Sooty Shear 1
 1602 Wedgetail 1
 1607 Sooty Shear 1
- 1630 Feeding Flock
 Sooty Terns 45±3 at least 4 with red tags
 Pomarine Jaeger 2
 Sooty Shearwater 4
 Bonin Island Petrel 1
 Pale-footed Shearwater 1
 Shearwater/Petrel 3+
 Blue-faced Booby 2
 Wedgetail Shearwater 2
- 1710 Blue-faced Booby 1
 1800 Booby ? 1
 1810 Cook's/Bonin Petrel 1
 1820 Sooty Shear 1
 1825 Leaches S.P. 1
 1828 Sooty ? Shear 1

20 April - 1

0600	Begin observations			
0602	Sooty Tern	2		
0610	"	1	coll. - Stadel	
0610	Red-tail Tropic	1		
0615	Sooty Tern	2		
0642	"	3		
0642	Red-tailed-Tropic	1		
0650	Shearwater	1	Newell's or Audubons - low to water	
0652	Sooty Tern	1		
0652	Wedgetail	1		
0700	Sooty Tern	3	↓	
0705	" "	1	↓	
0737	" "	2	→	
0740	" "	1	←	
0747	Wedge tail	1	↖	
0800	Sooty Tern	1	N	
0802	Sooty Tern	1	NN	
0805	Wedgetail	1	W	
0807	Sooty Tern	1	N	
0808	Sooty? Shear	1		
0809	Wedgetail	1		
0815	Sooty Tern	1	N	
0823	" "	1	S	
0840	" "	1	W	
0823	Sooty Tern	1	N	
0842	Wedge-tail	1	SW	
0955	Flock Feeding			
1100	Sooty Tern	275 ± 25	14 collected	10+ red tagged birds <u>Waters</u>
	Wedge-tail Shearwater	5+	1 dead phone	
	Pale-footed Shearwater	1		
	Sooty Shearwater	2+	1 collected	
	Jays? (small)	1		
	Leach's Storm Petrel	1		
1148	Slender-billed Shearwater	1		
1205	Sooty Tern	2		
1315	Sooty Tern	15		
	Wedgetail	5	2 collected Waters, Stadel	1 red tagged coll.
1355	Sooty Tern	2		
1359	Sooty Tern	2		

20 April 1965
P2

1410	Sooty Tern	1	
1415	Sooty Tern	4	
1416	Cook's Petrel	1	
1418	Sooty Tern	2	
1453	Sooty Tern	1	
1456	Sooty Tern	1	←
1502	Great Frigate	1	↓ Adult ♀
1510	Sooty Tern	3	- 1 collected (a red leg bird)
1552	Leach's Storm Petrel	1	
1600	Sooty Tern	1	NE
1607	" "	2	SE
1636	" "	1	W
1641	" "	1	SE
1654	Sooty Tern	2	SE
1659	Sooty Tern	2	SE
1705	"	1	
1705	"	2	
1705	"	1	
1721	"	1	
1741	"	2	ENE
1751	"	4	SE
1752	"	1	SE
1800	"	2	W
1805	"	3	
1837	----- Apparent sunset		

21 April, 1965

Pg 1

begin observations 0545

Scoring ca 0047

	0550	Wedge-tail Shearwater	1	
	0551	" " "	1	
	0613	" " "	3	
	0615	Sooty Tern	1	W
	0622	Sulphur or Storm Petrel	1	(in sun)
	0647	Sooty Tern	1	SE
	0653	Wedge-tail Shearwater	1	
	0703	Blue-faced Booby	1	coll. by Gould sub. 00.
	0737	Sooty Tern	2	NW
	0742	Wedge-tail Shearwater	1	SE
	0805	Frigate	1	
F	0830	Sooty Tern	12 ± 3	
		Shear-Petrel	3 ±	probably wedgetails
	0837	wedgetail	1	
	0858	Red-tail T.B.	1	
	0932	Sooty Shear	2	N
	0950	Wedge-tail	1	
	1004	Sooty Tern	2	
	1005	wedgetail	1	
FF	1035	Sooty Tern	65 ± 5	2 coll. } originally about 35 birds
		Wedgetail	7 ± 1	1 coll. } not feeding actively at first, then doubled in size and feeding with tuna collected by Husted
	1126	wedgetail	1	
	1144	Sooty Tern	3	
	1153	" "	1	
		Fairy "	3	- 2 sitting on water when first blown.
	1215	Sooty Tern	2	
	1230	Pink-footed Shear	1	
	1315	wedgetail	1	
	1350	Leach's S. Petrel	1	
	1358	Shear-Petrel	1	
	1400	Leach's Petrel	1	
	1441	Wedge-tail	1	W
	1449	Sooty Shear	1	
FF	1515	Sooty Tern	75 ± 10	Feeding on fish school which was breaking water; large flock broke up into 3 or 4 small components. Skua observed chasing Booby; all dark with white in wing; size of bobby; stocky. One Sooty Tern collected - Husted
		Leach's Petrel	2	
		Sooty Shear	1	
		Wedge-tail	5+	
		Skua	1	
		Booby sp.	1	
		Red-tailed Tropicbird	1	

21 April, 1965

2

1530	Bulwer's Petrel	1	
1610	Sooty Tern	2	
1612	Leach's	1	
1615	Leach's Storm Petrel	1	
1648	Sooty Shearwater	1	sw
1657	Palefooted Shearwater	1	sw flying towards flock
1700	Flock - feeding		
	Sooty Tern	75+15	
	Wedge-tail Shearwater	25±5	- 1 collected
	Sooty Shearwater	5+	
	Pale-footed Shearwater	1	
	Man-o-war birds	2	1 ^{ad.} coll., 1 ^{ad.} ♀
	Pomarine Jaeger	2+	adult's in full breeding plumage chasing terns & shearwaters.

22 April 1965

P 1

0536	Begin observations		
0540	Wedgetail	2	
0551	Sooty Tern	1	
0605	Sooty Tern	1	
0618	Bulwers Petrel	1	
0621	Sooty Shear	1	
0624	Wedgetail	1	
0630	"	5	- 2 coll. - H - 1 lost
0630	Bulwers?	1	
0630	Sooty Tern	1	
0630	"	1	
0645	Blufaced Booby	1	coll - A
0710			underway
0711	Sooty Terns	2	
0713	Wedgetail	1	
0713	Leach's	1	
0724	Leach's	1	
F 0745	Sooty Tern	20±5	- 1 coll - 5
	Wedgetail	5-6	
	Jaeger	1	
	C. Noddy	1	
	Sooty Shear	2	
0805	Sooty Tern	3	
0807	Leach's Storm Petrel	1	
0832	Bulwers Petrel	1	
0843	Sooty Shearwater	1	
0847	Wedgetail	1	
0850	"	2	
0851	Bulwers Petrel	1	✓
0853	" "	1	✓
0853	Leach's Storm Petrel	1	
0901	" " "	1	
0912	Bulwers? Petrel	1	
0915	Bulwers Petrel	2	- 1 collected - 1 Hatched
0921	" "	1	✓
0925	Shearwater/Petrel	1	
0935	Flock - possibly feeding		
	Sooty Tern	13	- 3 collected Banded - Hatched
	wedg-tail	5	
	Bulwers Petrel	2	- 1 collected Hatched

22 April, 1965

pg 2

1006	Bulwer's Petrel	1	
1008	" "	1	
1009	Sooty Tern	2	
100R	Leach's Storm Petrel	1	
1020	Sooty Tern	15±3	1 collected H
	Wedgetail	4	
	Shear-Pet	1	— Audubons or <u>Newells</u>
	Fairy Tern	1	
1042	Bulwers Petrel	1	
1044	Bulwers Petrel	1	
1102	Wedgetail	1	
1104	Leach's Storm Petrel	1	
1106	Sooty Shear	1	
1112	Sooty Tern	6	
	Wedgetail	3	
1116	Bulwers Petrel	1	
1118	Bulwers Petrel	1	
1120	Leach's S. Petrel	1	
1121	Leach's S. Petrel	1	
1128	Bulwers Petrel	1	
1130	Bulwers Petrel	1	
1138	Wedge-tail	1	
1140	Wedge-tail	1	
1140	" "	1	
1141	" "	1	
1159	Leach's Storm Petrel	1	
1200	Bulwers Petrel	1	
1203	Sooty? Shearwater	2	
1211	Fairy Tern	1	
1211	Bulwer? Petrel	1	
1211	Wedge-tail	1	
1213	Leach's Storm Petrel	1	
1232	Bulwers Petrel	1	
1237	" "	1	— collected <u>Gold</u>
1242	Sooty Tern	3	
1243	Wedge-tail	1	
1252	Bulwers Petrel	1	— collected <u>the feed</u>
1254	Sooty Tern	1	
1257	Wedge-tail	1	

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pg 3

1305	Sooty Tern	1	
1310	Sooty Shearwater	1	vw
1313	Red-footed Booby	1	ad
1314	Bulwers Petrel	1	
1319	" "	1	
1320	Sooty Tern	3	
1324	Bulwers Petrel	1	
1325	Leach's S. Petrel	1	
1330	Wedgetail	1	
1331	Sooty Tern	1	
1335	Bulwers Petrel	1	collected H ?
1338	Wedgetail	3	
1339	Leach's S. Petrel	1	
1347	Leach's S. Petrel	1	
1360	Wedgetail	2	
1365	Bulwers Petrel	1	collected H
1402	Wedgetail	1	
1405	Frigate	2	
1410	Bulwers Petrel	1	
1417	Wedgetail	2	
1424	Leach's S. Petrel	1	
1433	Bulwers Petrel	1	
1436	Bulwers Petrel	1	
1448	Wedgetail	2	
1452	Sooty Tern	1	
1500	Bulwers Petrel	1	
1521	Bulwers Petrel	1	collected H
1522	Bulwers Petrel	1	
1524	Bulwers Petrel	1	
1537	Bulwers Petrel	1	
1539	Wedgetail	1	
1540	Shear-Petrel	1	
1542	Bulwers Petrel	2	
1552	Bulwers Petrel	1	collected H
1600	" "	1	
1613	wedge-tail	1	
1613	Sooty? Shear Pet	2	
1620	Leach's Shear Petrel	1	

22 April, 1965

Pg 4

- 1622 Wedge-tail Shearwater 1
- 1635 Bulwer's Petrel 1
- 1636 Leach's Storm Petrel 1
- 1636 Sooty Tern 5
- 1637 " " 3
- 1640 Flock - feeding
 - Sooty Terns 30±5
 - Wedge-tail Shearwater 50±10
 - Pale-footed Shearwater 1
 - Bulwer's Petrel 2
 - Leach's Storm Petrel 1
 - Grey-back Tern 1
 - Fairy Tern 1
 - Common Noddy Tern 10±2
 - Red-footed Booby 1 An.
- 1655 Sooty Tern 1
- 1701 Leach's 1 ↑
- 1702 Bulwer's 1
- 1706 " " 1
- 1707 wedge-tail 1
- 1707 " " 1
- 1708 " " 1
- 1708 " " 1
- 1710 Shearwater/Petrel 2
- 1711 Wedge-tail Shearwater 1
- 1712 " " " 1
- 1712 Bulwer's Petrel 1
- 1713 " " " 1
- 1714 Wedge-tail 2
- 1725 Christmas Island Shearwater 1
- 1734 Bulwer's Petrel 1
- 1734 Wedge-tail Shearwater 1
- 1745 Bulwer's Petrel 1
- 1754 Sooty Tern 1

sunset ca. 1806

Sunrise ca 0615

0615	Wedge-tail Shearwater	1
0624	Wedge-tail Shearwater	1
0628	Sooty Tern	1
0632	Newell's Shearwater	1
0638	Leach's Storm Petrel	2
0640	Shearwater / Petrel	1
0641	Bulwer's Petrel	1
0623	Booby Shearwater	1
0648	Sooty Shearwater	1
0656	Wedge-tail Shearwater	1
0658	Sooty Tern	1
0658	Small Shearwater Bulwer's Petrel	1
0701	Wedge-tail Shearwater	1
0704	Sooty Shearwater	1
0706	0704 Wedge-tail Shearwater	1
0706	0704 Sooty Tern	1
0710	Sooty? Shearwater	1
0710	Bulwer's Petrel	1
0712	Newell's? Shearwater	1
0712	Leach's Storm Petrel	1
0715	Wedge-tail Shearwater	1
0719	Whales, 3 heading South	
0722	Wedge-tail Shearwater	1
0730	Bulwer's Petrel	1
0730	Newell's	1
0732	Wedge-tail Shearwater	1
	Shearwater / Petrel	1
0735	Shearwater	1
0738	Wedgetail	1
0744	Sooty Tern	2
0748	Newell's	1
0748	Shearwater	1
0750	Leach's	1

All dark, not banking, flight appeared more like Pale foot than Sooty

→

All dark, appeared more like Sooty

23 April - 2

0755	Sooty Shearwater?	1	
0759	" "	1	
0800	Shearwater/Petrel	1	
0802	Sooty Shearwater?	1	
0805	Sooty Tern	1	
0811	Bulwers?	1	
0813	Grey-backed Tern	1	
0814	Sooty Shearwater	1	
0815	Leaches S.P.	1	
0816	Bulwers	1	
0816	Sooty Tern	1	
0814	" "	1	
0825	Bulwers	1	
"	Sooty Shearwater?	2	
0828	Bulwers	3	
0832	Sooty Shearwater	1	
0838	Wedge tail	1	
0839	Bulwers?	1	
0845	"	1	
0847	Sooty Terns	5	✕
0850	Wedge tail	1	
0853	Bulwers P	1	
0900	Common Noddy	55	moving slowly south west. One big
	Wedge tail	3	fish to broke the water
	Sooty Tern	5	
0900	The flock is growing in size, it moved around behind the ship and now has 25 birds in it. (3)		
0910	Bulwers	1	
0910	Sooty Tern	1	going to flock
0912	Bulwers	1	
0914	Leaches	1	
0920	Bulwers	1	
0925	Sooty Tern	1	
0925	Sooty Shear	1	

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P 3

0930	Wedgetail	1	
0935	Sooty Tern	1	
0936	Wedgetail	1	
0939	"	1	
0946	Bulwers	1	
0950	Leaches	3	Feeding & landing on water
0952	Wedgetail	1	
0953	Wedgetail	1	
0954	Wedgetail	1	
0955	Bulwers	1	
1000	Leaches	2	5 sharks under them
1005	Leaches	3	
F			
F			
1008	Wedgetail	12	
	Sooty Tern	9	
	Mottled P ?	1	
1012	Leaches	3	
"	Bulwers	1	
1013	Newell's Sh.	1	
1013	Sooty Tern	1	
1014	Leach's	2	separate
1017	Newell's	1	
1019	Sh/Pet	1	
1021	Wedge tail	1	
1024	"	1	
1022	Wedge	1	
1022	Sooty T	2	
1022	Bulwers	1	
1023	Sooty T.	3	separate
1026	Leach's	1	on dtd
1027	Wedge-tail	1	Trolling
1028	"	1	
1028	Leach's	2	separate
1028	Bulwer's	1	
1031	Sooty (?) Sh	1	
1032	Bulwer's P	1	
1034	Leach's	1	
1037	Bulwer's	1	
1039	Wedge tail	2	

22 April, 1965

184

23?

1044	Com Noddy Tern	2
1047	Com Noddy	1
1047	R-f Booby	1
1059	Bulwers	1
1107	Leach's Storm Petrel	1
1110	Bird	1
1111	Bulwers Petrel	1
1112	" " "	1
1113	wedge-tail Shearwater	2
1113	Cook's Booby Petrel	1
1122	Sharks	4-5
1124	Dark Shearwater	1
1132	Bulwers	1
	Wedge-tail	1
1135	Tern sp.	1

Resting on H₂O
" " "

Dorsal fins + backs breaking H₂O

Similar to Gray back but much paler ^{and upper rump area}
~~mantle~~ black cap, long white tail. Wings
& mantle uniform gray, Arctic Tern? - Dunnet
no contrast in primaries

Secure observations 1200

miles from Harbor to sunset =

DATE 2 Apr. 1965

Time at sunrise = Position at sunrise =
Time at sunset = 1843 Position at sunset = 20°-05'N, 156°-54'W
Miles traveled from 0000 hours to sunrise = ~~18°-33'N 155°-42'W~~
Miles traveled from ^{Honolulu} ~~sunrise~~ to sunset = 91 mi.
Miles traveled from sunset to 2400 hours = 49 mi.

	TIME OF FIX	TYPE OF FIX	LONGITUDE	LATITUDE
1.	1700	Vis. ϕ 's	157°-05'W	20°-20'N
2.	2000	LORAN	156°-47'W	19°-56'N
3.	2330	"	156°-24'W	19°-31'N
4.				
5.				
6.				

DATE 3 Apr. 1965

Time at sunrise = 0617 Position at sunrise = 18°-33'N, 155°-42'W
Time at sunset = 1831 Position at sunset = 17°-00'N, 154°-56'W
Miles traveled from 0000 hours to sunrise = 63 mi.
Miles traveled from sunrise to, sunset = 105
Miles traveled from sunset to 2400 hours = 62

	TIME OF FIX	TYPE OF FIX	LONGITUDE	LATITUDE
1.	0300	LORAN/Radar	156°-05'W	19°-00'N
2.	0554	LORAN	155°-45'W	18°-35'N
3.	1200	"	155°-06'W	17°-44'N
4.	1654	"	154°-56'W	17°-16'N
5.	2200	"	154°-51'W	16°-17'N
6.				

DATE 4 April 1965

Time at sunrise = 0611 Position at sunrise = L 14°-58'N λ 154°-25'W
 Time at sunset = 1824 Position at sunset = L 13°-45'N λ 154°-03'W
 Miles traveled from 0000 hours to sunrise = 64 mi.
 Miles traveled from sunrise to sunset = 109
 Miles traveled from sunset to 2400 hours = 47

152-00°
180

	TIME OF FIX	TYPE OF FIX	LONGITUDE	LATITUDE
1.	0430	LORAN	154°34'W	15°14'N
2.	0630	"	154°24'W	14°52'N
3.	0930	"	154°05'W	14°38'N
4.	1200	"	153°41'W	14°16'N
5.	1500	"	153°27'W	14°03'N
6.	2200	"	152°41'W	13°27'N

DATE MON. 5 APRIL 1965

Time at sunrise = 0601 Position at sunrise = L 12°-39'N λ 151°-45'W
~~L 11°-27'N λ 150°-28'W~~
 Time at sunset = 1811 Position at sunset = ~~L 12°-39'N λ 151°-45'W~~
 L 11°-27'N λ 150°-28'W
 Miles traveled from 0000 hours to sunrise = 54 mi.
 Miles traveled from sunrise to sunset = 107 mi.
 Miles traveled from sunset to 2400 hours = 56 mi.

	TIME OF FIX	TYPE OF FIX	LONGITUDE	LATITUDE
1.	0300	LORAN	152°-11'W	13°-00'N
2.	0830	VENUS STAR/LORAN	151°-21'W	12°-27'N
3.	1200	SUN	150°-57'W	12°-07'N
4.	1830	STARS	150°-27'W	11°-26'N
5.	2200	LORAN	150°-21'W	10°-55'N
6.				

DATE TUES 6 APRIL 1965

Time at sunrise = 0559 Position at sunrise = $29^{\circ}-59'N$, λ $151^{\circ}-10'W$

Time at sunset = 1820 Position at sunset = $28^{\circ}-40'N$, λ $152^{\circ}-35'W$

Miles traveled from 0000 hours to sunrise = 56 mi.

Miles traveled from sunrise to sunset = 116 mi.

Miles traveled from sunset to 2400 hours = 26 mi.

	TIME OF FIX	TYPE OF FIX	LONGITUDE	LATITUDE
1.	0600	LORAN	$151^{\circ}-10'W$	$9^{\circ}-59'N$
2.	1200	SUN, LAN	$151^{\circ}-57'W$	$9^{\circ}-12'N$
3.	1500	SUN, LORAN	$152^{\circ}-14'W$	$8^{\circ}-59'N$
4.	1845	STARS	$152^{\circ}-48'W$	$8^{\circ}-38'N$
5.				
6.				

DATE WED 7 APRIL 1965

Time at sunrise = 0559 Position at sunrise = $28^{\circ}N$ λ $153^{\circ}-20'W$

Time at sunset = 1822 Position at sunset = $28^{\circ}-40'N$ λ $153^{\circ}-28'W$

Miles traveled from 0000 hours to sunrise = 37 mi

Miles traveled from sunrise to sunset = 65 mi.

Miles traveled from sunset to 2400 hours = 49 mi.

	TIME OF FIX	TYPE OF FIX	LONGITUDE	LATITUDE
1.	0500	LORAN	$153^{\circ}-18'W$	$08^{\circ}-02'N$
2.	1200	SUN	$153^{\circ}-40'W$	$8^{\circ}-22'N$
3.	1900	STARS	$153^{\circ}-26'W$	$8^{\circ}-43'N$
4.	2200	LORAN	$153^{\circ}-40'W$	$8^{\circ}-54'N$
5.				
6.				

DATE TUURS 8 APRIL 1965

Time at sunrise = 0614 Position at sunrise = 9°-25'N, 155°-05W
 Time at sunset = 1837 Position at sunset = 9°-34'N, 157°-05W
 Miles traveled from 0000 hours to sunrise = 70 mi.
 Miles traveled from sunrise to sunset = 122 mi.
 Miles traveled from sunset to 2400 hours = 32 mi.

	TIME OF FIX	TYPE OF FIX	LONGITUDE	LATITUDE
1.	0600	Stars	155°-03'W	9°-24'N
2.	0830	SUN	155°-28W	9-30'N
3.	1200	SUN/LORAN	156°-01W	9°-42'N
4.	1900	Stars	157°-09W	9-33N
5.	2311	LORAN	157°-17'W	9°-45'N
6.				

DATE FRI, 9 APRIL 1965

Time at sunrise = 0624 Position at sunrise = L 10°-34N λ 157-21W
 Time at sunset = 1840 Position at sunset = L 12°-23N λ 157-22
 Miles traveled from 0000 hours to sunrise = 45 mi.
 Miles traveled from sunrise to sunset = 109 mi.
 Miles traveled from sunset to 2400 hours = 56

	TIME OF FIX	TYPE OF FIX	LONGITUDE	LATITUDE
1.	0600	*/LORAN	157°-21W	10°-31N
2.	0813	⊙/LORAN	157°-22W	10°48N
3.	1230	SUN	157-21W	11°-20
4.	1400	SUN/LORAN	157-22W	11°-35N
5.	1900	Stars	157-22W	12-27N
6.	2200	LORAN	157°-20W	12°-58N

DATE SAT 10 APRIL 1965

Time at sunrise = 0620 Position at sunrise = $14^{\circ}-15'N, 157^{\circ}-19'W$
Time at sunset = 1844 Position at sunset = $15^{\circ}-51'N, 157^{\circ}-53'W$
Miles traveled from 0000 hours to sunrise = 56 mi
Miles traveled from sunrise to sunset = 121 mi
Miles traveled from sunset to 2400 hours = 57 mi

	TIME OF FIX	TYPE OF FIX	LONGITUDE	LATITUDE
1.	0600	stars	$157^{\circ}-18'W$	$14^{\circ}-12'N$
2.	0800	LORAN	$157^{\circ}-19'W$	$14^{\circ}-34'N$
3.	1200	SUN/LORAN	$157^{\circ}-23'W$	$15^{\circ}-09'N$
4.	1515	LORAN	$157^{\circ}-27'W$	$15^{\circ}-42'N$
5.	1920	LORAN	$157^{\circ}-59'W$	$15^{\circ}-51'N$
6.	2230	LORAN	$158^{\circ}-35'W$	$15^{\circ}-55'N$

DATE SUN 11 APRIL 1965

Time at sunrise = 0628 Position at sunrise = $16^{\circ}-00'N, 160^{\circ}-00'W$
Time at sunset = 1902 Position at sunset = $16^{\circ}-11'N, 162^{\circ}-07'W$
Miles traveled from 0000 hours to sunrise = 65 mi
Miles traveled from sunrise to sunset = 123
Miles traveled from sunset to 2400 hours = 47

	TIME OF FIX	TYPE OF FIX	LONGITUDE	LATITUDE
1.	0315	LORAN	$159^{\circ}-24'W$	$16^{\circ}-00'N$
2.	0720	"	$160^{\circ}-05'W$	$16^{\circ}-01'N$
3.	1100	LORAN	$160^{\circ}-47'W$	$16^{\circ}-02'N$
4.	1500	"	$161^{\circ}-27'W$	$16^{\circ}-06'N$
5.	1700	"	$161^{\circ}-46'W$	$16^{\circ}-09'N$
6.	1930	"	$162^{\circ}-12'W$	$16^{\circ}-11'N$
	2200	"	$162^{\circ}-39'W$	$16^{\circ}-12'N$

DATE MON 12 APRIL 1965

Time at sunrise = 0644 Position at sunrise = L 16°-15'N λ 164°-10W
 Time at sunset = 1918 Position at sunset = L 16°-25'N λ 166°-30'W
 Miles traveled from 0000 hours to sunrise = 71 mi
 Miles traveled from sunrise to sunset = 136
 Miles traveled from sunset to 2400 hours = 44

	TIME OF FIX	TYPE OF FIX	LONGITUDE	LATITUDE
1.	0300	LORAN	163°-30W	16°-13N
2.	1000	"	164°-46W	16°-17N
3.	1154	"	165°-08W	16°-19N
4.	1600	LORAN	165°-54W	16°-24N
5.	1900	"	166°-26W	16°-25N
6.	2200	"	166°-57W	16°-26N

DATE TUE 13 APRIL 1965

Time at sunrise = 0700 Position at sunrise = L 16°-33N, λ 168°-32W
 Time at sunset = 1931 Position at sunset = L 15°-39'N, λ 169°-16W
 Miles traveled from 0000 hours to sunrise = 75 mi
 Miles traveled from sunrise to sunset = 117 mi
 Miles traveled from sunset to 2400 hours = 48 mi

	TIME OF FIX	TYPE OF FIX	LONGITUDE	LATITUDE
1.	0300	LORAN	167°-50W	16°-30N
2.	0600	"	168°-22W	16°-32N
3.	0742	50 mi from Johnston Is.	168°-40'W	16°-34'N
4.	1200	Visual	169°-24'W	16°-40'N
5.	1550		169°-21W	16°-12N
6.	1736	50 mi from Johnston Is. (98 mi total)	169°-15'W	15°-56'N
7.	2000	STARS	169°-12W	15°-33N

DATE WED 14 APRIL 1965 ALL TIMES (XRAY) +11

Time at sunrise = 0603 Position at sunrise = $L 13^{\circ}-59'N, \lambda 169^{\circ}-08W$
 Time at sunset = 1833 Position at sunset = $L 12^{\circ}-52'N, \lambda 170^{\circ}-20W$
 Miles traveled from 0000 hours to sunrise = 69 mi.
 Miles traveled from sunrise to sunset = 98 mi.
 Miles traveled from sunset to 2400 hours = 56 mi.

	TIME OF FIX	TYPE OF FIX	LONGITUDE W	LATITUDE N
1.	0440 ⊗	LORAN	168°-58'	14°-08'
2.	0900 ⊗	LORAN	169-10'	13°-56'
3.	1220 ⊗	LAN/LORAN	169°-33'	13°-35'
4.	1500 ⊗	SUN/LORAN	169°-54'	13°-17'
5.	1900	STARS	170-22	12-48
6.	2200	"	170-47	12-27N

DATE THUR. 15 APRIL 1965 (+11)

Time at sunrise = 0615 Position at sunrise = $L 12^{\circ}-45N, \lambda 171^{\circ}-48'W$
 Time at sunset = 1835 Position at sunset = $L 14^{\circ}-03'N, \lambda 170^{\circ}-27W$
 Miles traveled from 0000 hours to sunrise = 62
 Miles traveled from sunrise to sunset = 108
 Miles traveled from sunset to 2400 hours = 48

	TIME OF FIX	TYPE OF FIX	LONGITUDE W	LATITUDE N
1.	0300	LORAN	171°-23	12°-21'
2.	0600	LORAN	171-45	12-43
3.	1226	LAN/⊗	171°-05'W	13°-23N
4.	1505	⊗/LAN	170°-45W	13°-40N
5.	1900	STARS LORAN	170°-24W	14-06N
6.	2200	STARS	170°-47'	12-27'

1700
96-12 mi.

DATE FRIDAY 16 APRIL 1965

Time at sunrise = 0605 Position at sunrise = $15^{\circ}-17'N, \lambda 169^{\circ}-46W$
Time at sunset = 1838 Position at sunset = $14^{\circ}-34'N \lambda 171^{\circ}-05W$
Miles traveled from 0000 hours to sunrise = 59 mi.
Miles traveled from sunrise to sunset = 107 mi.
Miles traveled from sunset to 2400 hours = 58 mi.

	TIME OF FIX	TYPE OF FIX	LONGITUDE W	LATITUDE N
1.	0542	STARS	$169^{\circ}48'W$	$15^{\circ}14'N$
2.	0800	LORAN	$170^{\circ}-02'W$	$15^{\circ}-29'N$
3.	1200	SUN	$170^{\circ}-27'$	$15^{\circ}-09'$
4.	1450	SUN	$170^{\circ}46'$	$14^{\circ}-52'$
5.	1900	STARS	$171^{\circ}-07'$	$14^{\circ}-33'$
6.	2300	STARS/LORAN	$172^{\circ}-41'$	$14^{\circ}-04'$

DATE SATURDAY 17 APRIL 1965

Time at sunrise = 0616 Position at sunrise = $13^{\circ}-35'N, 172^{\circ}-46'W$
Time at sunset = 1843 Position at sunset = $14^{\circ}-58'N, 171^{\circ}-56'W$
Miles traveled from 0000 hours to sunrise = 70 mi.
Miles traveled from sunrise to sunset = 119 mi.
Miles traveled from sunset to 2400 hours = 55

	TIME OF FIX	TYPE OF FIX	LONGITUDE W	LATITUDE N
1.	0300	LORAN	$172^{\circ}-16'$	$13^{\circ}-39'$
2.	0800	Q/LORAN	$172^{\circ}-56'$	$13^{\circ}-45'$
3.	1200	SUN	$172^{\circ}-41'$	$14^{\circ}-16'$
4.	1900	STARS	$171^{\circ}-56'$	$15^{\circ}-00'$
5.	2300	LORAN	$171^{\circ}-27'$	$15^{\circ}-27'$
6.				

DATE SUNDAY 18 APRIL 1965

Time at sunrise = 0608 Position at sunrise = L 16°-19'N λ 171°-00'W
Time at sunset = 1845 Position at sunset = L 15°-38'N λ 172°-29'W
Miles traveled from 0000 hours to sunrise = 51 mi
Miles traveled from sunrise to sunset = 117 mi
Miles traveled from sunset to 2400 hours = 53

	TIME OF FIX	TYPE OF FIX	LONGITUDE W	LATITUDE N
1.	0545	Stars/LORAN	170°-58'W	16°-16'N
2.	1100	⊙/LORAN	171°-33'	16°-26'
3.	1430	⊙/LORAN	171°-59'	16°-03'
4.	1900	Stars/LORAN	172-31	15-36
5.	2300	*LORAN	173°-00'	15°-08'
6.				

DATE MONDAY 19 APRIL 1965

Time at sunrise = 0619 Position at sunrise = L 14°-49'N 173°-59'W
Time at sunset = 1848 Position at sunset = L 16°-15'N 172°-57'W
Miles traveled from 0000 hours to sunrise = 69
Miles traveled from sunrise to sunset = ~~114~~ 120
Miles traveled from sunset to 2400 hours = 54

	TIME OF FIX	TYPE OF FIX	LONGITUDE W	LATITUDE N
1.	0600	LORAN	173-55W	14-46 N
2.	1245	⊙/LORAN	173°-31'W	15°-38'N
3.	1500	⊙/LORAN	173°-20'W	15°-55'N
4.	2000	*LORAN	172°-46'W	16°-24'N
5.	2300	LORAN	172°-24'W	16°-45'N
6.				

DATE TUE. 20 APRIL 1965

Time at sunrise = 0605 Position at sunrise = L 17°-16'N λ 171°-09'W
Time at sunset = 1835 Position at sunset = L 17°-52'N λ 169°-08'W
Miles traveled from 0000 hours to sunrise = 64 mi.
Miles traveled from sunrise to sunset = 122
Miles traveled from sunset to 2400 hours = 61 mi.

	TIME OF FIX	TYPE OF FIX	LONGITUDE W	LATITUDE N
1.	0300	LORAN	171°-43'	17°-06'
2.	0655	*LORAN	171°-01'	17°-19'
3.	1200	⊙/LORAN	170°-14'	17°-35'
4.	1610	⊙/LORAN	169°-38'	17°-44'
5.	1900	*LORAN	169°-03'	17°-54'
6.	2200	LORAN	168°-31'	18°-05'

DATE WED. 21 APRIL 1965

Time at sunrise = 0547 Position at sunrise = L 18°-33'N λ 167°-04'W
Time at sunset = 1819 Position at sunset = L 19°-05'N λ 165°-15'W
Miles traveled from 0000 hours to sunrise = 65 mi.
Miles traveled from sunrise to sunset = 107
Miles traveled from sunset to 2400 hours = 60

	TIME OF FIX	TYPE OF FIX	LONGITUDE W	LATITUDE N
1.	0300	LORAN	167°-37'	18°-25'
2.	0800	⊙/LORAN	166°-41'	18°-40'
3.	1225	⊙/LORAN	166°-06'	18°-51'
4.	1538	"	165°-37'	19°-01'
5.	1900	Stars & LORAN	164°-58'	19°-11'
6.	2300	LORAN	164°-28'	19°-22'

DATE THURS. 22 APRIL 1965

Time at sunrise = 0530 Position at sunrise = L 19°-42'N, λ 163°-21W
Time at sunset = 1806 Position at sunset = L 20°-11'N, λ 161°-27W
Miles traveled from 0000 hours to sunrise = 56 mi.
Miles traveled from sunrise to sunset = 110 mi.
Miles traveled from sunset to 2400 hours = 57 mi.

	TIME OF FIX	TYPE OF FIX	LONGITUDE W	LATITUDE N
1.	0300	LORAN	163-46W	19°-35
2.	0718	"	163°-08	19°-47
3.	1200	O/LORAN	162°-22	19°-57
4.	1615	LORAN	161°-48	20°-05
5.	2253	LORAN	160°-42	20°-28
6.				

DATE FRI 23 APRIL 1965

Time at sunrise = 0614 Position at sunrise = L 20°-44N λ 159°-33W
Time at sunset = 1854 Position at sunset = HONOLULU L 21°-19.5N
λ 157°-52.7W
Miles traveled from 0000 hours to sunrise = 59 mi.
Miles traveled from sunrise to sunset = 103 mi.
Miles traveled from sunset to 2400 hours =

	TIME OF FIX	TYPE OF FIX	LONGITUDE W	LATITUDE N
1.	0300	RAAB LORAN	160°-04'	20°-36'
2.	0744	LORAN	159°-18'	20°-48'
3.	1125	LORAN	158°-36'	21°-01'
4.				
5.				
6.				

Gould

PRELIMINARY REPORT AT-SEA SURVEY

APRIL 1965

Smithsonian Grid Only - SURVEY NO 20

This report is based on the collections and observations made within the Smithsonian Grid during mid April, 1965. A total of six days, 14-19 April, were completed covering a total of 669 linear miles and 74.9 hours of diurnal observations (see Table 1).

The Smithsonian team consisted of Patrick Gould (Biologist in charge), Ken Amerman, Dayle Husted, Dennis Stadel and Paul DuMont. Excellent cooperation was received from the officers and crew of the U.S.N.S. SHEARWATER.

TABLE 1

DAILY SUMMARY

<u>Date</u>	<u>No. Miles</u>	<u>No. Hours</u>	<u>No. Birds</u>	<u>No. Species</u>
14	98	12.5	160	9
15	108	12.3	74	9
16	107	12.6	542	13
17	119	12.4	31	8
18	117	12.6	419	13
19	120	12.5	156	14
Total	669	74.9	1,382	17 (11.0/day)

With the exception of Sooty Shearwaters and Bulwer's Petrels, all species were found in greater numbers than during April, 1964. The major reason for this difference is probably the fact that the 1964 cruise was aboard a one hundred foot harbor tug that proved very inadequate for observations. Weather conditions were also less favorable

during 1964. The scarcity of Sooty Shearwaters and Bulwer's Petrels this month was not expected, and cannot be explained at this time. It is felt, however, that the 1965 cruise is more indicative of the normal avian composition than was 1964.

The large number of birds collected on this trip was due primarily to the use of a small skiff which could enter flocks without scaring away the fish and/or the birds.

TABLE 2

SPECIES OBSERVED WITHIN THE GRID AREA

<u>Species</u>	<u>Number</u>	<u>Per linear miles</u>	<u>Number collected</u>
Wedge-tail Shearwater	29	0.043	1
Sooty Shearwater	52	0.078	0
Pale-footed Shearwater	1	0.002	0
Bonin Island Petrel	10	0.015	1
Cook's Petrel	22	0.033	0
Mottled Petrel	27	0.040	0
Juan Fernandez Petrel	12	0.018	0
Bulwer's Petrel	1	0.002	0
Leach's Storm Petrel	35	0.052	2
Red-tail Tropicbird	9	0.014	2
White-tail Tropicbird	13	0.019	2
Blue-faced Booby	11	0.016	4
Red-footed Booby	6	0.009	3
Great Frigatebird	5	0.007	0
Sooty Tern	1,051	1.571	27
Common Noddy Tern	1	0.002	1
Fairy Tern	2	0.003	0
Total Birds	1,382	2.066	43

TABLE 3

DIURNAL DENSITY OF SPECIES GROUPS WITHIN THE GRID

<u>Group</u>	<u>Number of birds</u>	<u>Birds/sq.mile</u>	<u>Estimated Population</u>
Shearwater-Petrel	229	0.17	8,550
Tern	1,060	0.53	26,400
Booby	18	0.01	675
Tropicbird	23	0.02	850
Storm Petrel	35	0.05	2,600
Frigatebird	5	0.001	100
Total Birds	1,382		40,000 plus

TABLE 4

SPECIES GROUP PERCENTAGE OF TOTAL BIRDS OBSERVED IN GRID

<u>Group</u>	<u>Percent</u>
Shearwater-Petrel	17
Tern	77
Booby	01
Tropicbird	02
Storm Petrel	03
Frigatebird	0.1

TABLE 5

BANDED AND/OR RED TAGGED BIRDS OBSERVED AND/OR COLLECTED IN THE GRID

<u>Species</u>	<u>Band Number</u>	<u>Latitude</u>	<u>Longitude</u>	<u>Miles from Johnston Atoll</u>
Sooty Tern	753-79962	14-59 N	170-37 W	123 mi. SW
Sooty Tern	753-76120	14-36 N	171-03 W	156 mi. SW
Sooty Tern	753-92732	15-44 N	172-20 W	174 mi. WSW
Sooty Tern	Red-tag	16-04 N	173-09 W	218 mi. W
Sooty Tern	"	"	"	"
Sooty Tern	"	"	"	"
Sooty Tern	"	"	"	"
Blue-faced Booby	558-82653	16-28 N	171-10 W	98 mi. W

TABLE 6

DIURNAL DENSITY OF BIRDS IN DIFFERENT GRID QUADRANTS

<u>Miles</u>	<u>North</u> <u>Birds</u>	<u>Miles</u>	<u>South</u> <u>Birds</u>	<u>Miles</u>	<u>East</u> <u>Birds</u>	<u>Miles</u>	<u>West</u> <u>Birds</u>
117	419	125	159	188	617	239	187
	<u>North</u> <u>Birds/lin.mile</u>		<u>South</u> <u>Birds/lin.mile</u>		<u>East</u> <u>Birds/lin.mile</u>		<u>West</u> <u>Birds/lin.mile</u>
	3.581		1.272		3.282		0.782

PRELIMINARY REPORT AT-SEA SURVEY
 NORTHERN GRID CRUISE NO 20
 APRIL 1965

Not including Grid

This report is based on the collections and observations made at-sea during mid April 1965. A total of 16 days, 2-13, 20-23 April, were completed covering a total of 1,730 linear miles and 188.4 hours of diurnal observations (See Table 1).

The Smithsonian team consisted of Patrick Gould (Biologist in charge), Ken Amerman, Dayle Husted, Dennis Stadel and Paul DuMont. Excellent cooperation was received from the officers and crew of the U.S.N.S. Shearwater.

TABLE 1

DAILY SUMMARY

<u>Date</u>	<u>No. Miles</u>	<u>No. Hours</u>	<u>No. Birds</u>	<u>No. Species</u>
02	91	9.1	1,118	14
03	105	12.2	484	11
04	109	12.2	117	7
05	107	12.2	122	8
06	116	12.3	429	13
07	65	12.3	239	10
08	122	12.4	290	6
09	109	12.3	133	6
10	121	12.4	157	9
11	123	12.6	904	7
12	136	12.6	473	8
13	117	12.5	1,630	13
20	122	12.5	385	9
21	107	12.4	328	12
22	110	12.6	332	13
23	70	5.8	182	9
TOTAL	1,730	188.4	7,323	32 (9.7/day)

This trip was unusual in that instead of heading straight for the Smithsonian Grid we headed Southeast from Oahu to about eight degrees North and 150 degrees west. This overlaps the southern part of the BCF area where birds are generally abundant.

1730
 669
 2399

TABLE 2

SPECIES OBSERVED THROUGHOUT THE AT-SEA AREA

<u>Species</u>	<u>Number</u>	<u>Per Linear Mile</u>	<u>Number collected</u>
Black-footed Albatross	4	0.002	0
Wedge-tailed Shearwater	1,136	0.657	7
Sooty Shearwater	1,200	0.694	1
Slender-billed (?) Shearwater	1	0.001	0
Pale-footed Shearwater	6	0.003	1
Christmas Island Shearwater	9	0.005	0
Audubon's Shearwater	20	0.012	0
Newell's Shearwater	6	0.003	0
White-necked Petrel	1	0.001	0
Juan Fernandez Petrel	52	0.030	0
Phoenix Island Petrel	6	0.003	0
Kermadec Petrel	2	0.001	0
Herold's Petrel	1	0.001	0
Mottled Petrel	2	0.001	0
Cook's Petrel	5	0.003	0
Bulwer's Petrel	242	0.140	7
Sooty Storm Petrel	3	0.002	0
Leach's Storm Petrel	124	0.072	1
Red-tailed Tropicbird	4	0.002	0
White-tailed Tropicbird	9	0.005	1
Blue-faced Booby	58	0.034	11
Brown Booby	1	0.001	0
Red-footed Booby	65	0.038	1
Great Frigatebird	14	0.008	1
Arctic Skua	1	0.001	0
Pomarine Jaeger	14	0.008	0
Sooty Tern	3,303	1.909	27
Grey-backed Tern	6	0.003	0
Common Noddy Tern	174	0.101	0
Hawaiian Noddy Tern	6	0.003	0
Fairy Tern	18	0.010	0
Total Birds	7,323	4.233	58

TABLE 3

DIURNAL DENSITY OF SPECIES GROUPS

Species Group	3-12, 20-23 April			2 and 13 April (near Oahu - Johnston)		
	<u>No. Birds</u>	<u>Sq. Mi.</u>	<u>Est. Pop.*</u>	<u>No. Birds</u>	<u>Sq. Mi.</u>	<u>Est. Pop.*</u>
Shearwater-Petrel	2,513	0.826	41,280	848	2.038	101,900
Terns	1,826	0.400	20,000	1,787	2.864	143,200
Tropicbirds	13	0.004	200	1	0.002	100
Boobys	31	0.010	500	72	0.173	8,650
Storm Petrels	139	0.047	2,300	4	0.019	950
Frigatebirds	14	0.002	100	0	0.000	0
Total Birds	4,575		65,000	2,748		255,000

* for a 50,000 sq. mile area.

TABLE 4

SPECIES GROUP PERCENTAGE OF TOTAL BIRDS

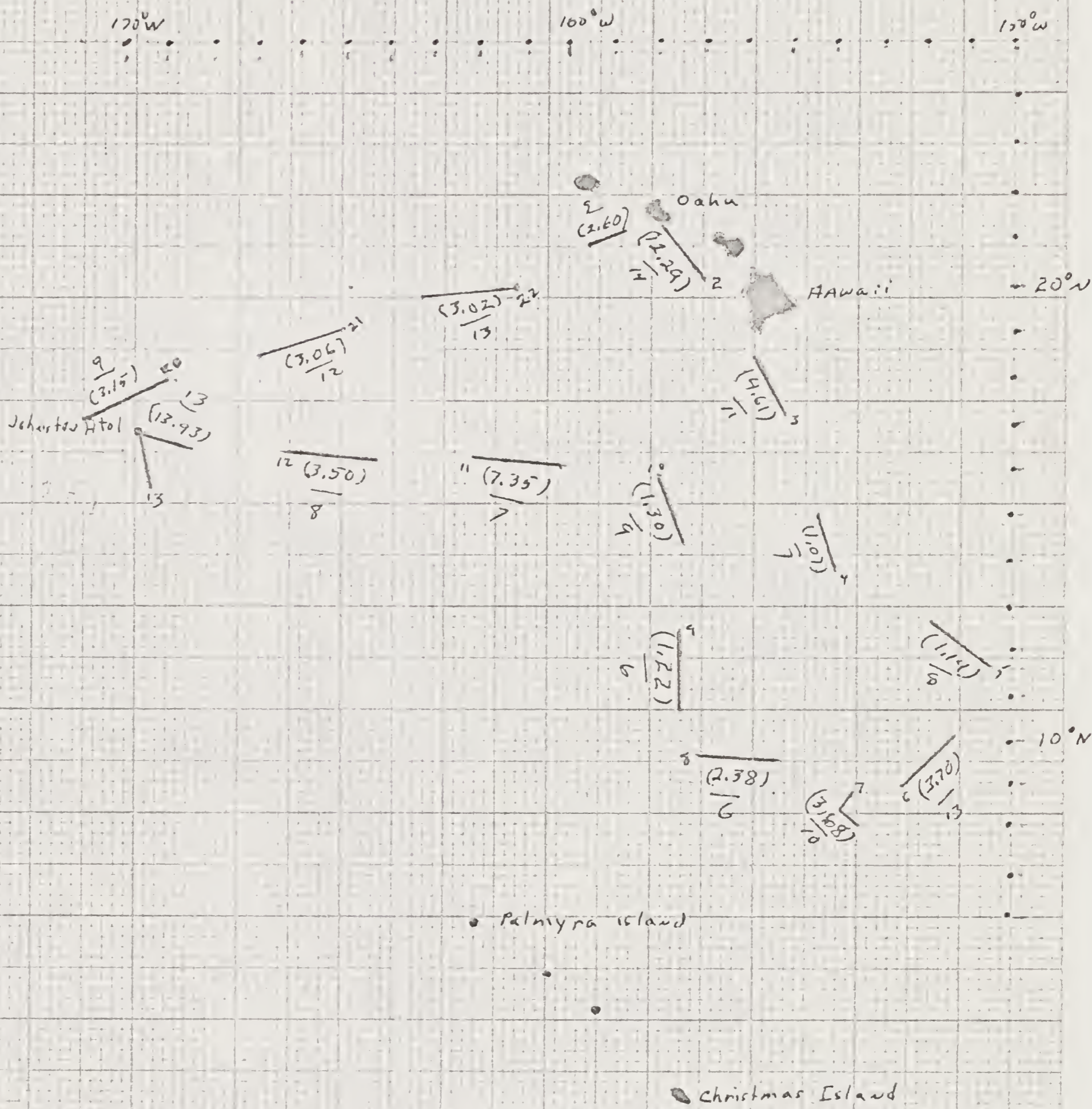
Species Group	3-12, 20-23 April		2 and 13 April (near Oahu - Johnston)	
	<u>Percent</u>		<u>Percent</u>	
Shearwater-Petrel	55		31	
Tern	40		65	
Tropicbird	00.3		00.04	
Booby	01		03	
Storm Petrel	03		00.1	
Frigatebirds	00.3		00	

TABLE 5

BANDED AND/OR RED TAGGED BIRDS OBSERVED AND/OR COLLECTED

<u>Species</u>	<u>Band Number</u>	<u>Latitude</u>	<u>Longitude</u>	<u>Atoll</u> <u>Miles from Johnston /</u>
Blue-faced Booby	757-67344	8 56 N	152 17 W	
" " "	568-72295	8 09 N	153 43 W	
" " "	757-69457	8 28 N	153 35 W	
" " "	757-67382	8 35 N	153 28 W	
Wedge-tailed Shearwater	565-12113	17 40 N	169 57 W	
Sooty Tern	753-98028	17 42 N	169 47 W	
Sooty Tern (10 birds in one flock).	Red Tag	" " "	" " "	

APRIL AT-SEA TRACT
(NOD grid)



BEE 20x20 TO INCH

— = diurnal observations
 — 1-13 = DATE
 (#) = birds per linear mile
 # = number of species identified

Relationship between diurnal abundance of birds and hours after sunrise

data based on only birds observed over 50 miles from nearest land
includes the following dates; 3-12 APRIL, 1965

Total linear miles covered = 1,113
area covered between 8°00'N and 18°30'N
150°30'W and 166°30'W

Ledger

Sooty Shearwater	n = 1432
Wedge-tail Shearwater	n = 281
Sooty Tern	n = 986
Total Birds	n = 3166

% Total Birds

30
20
10
0

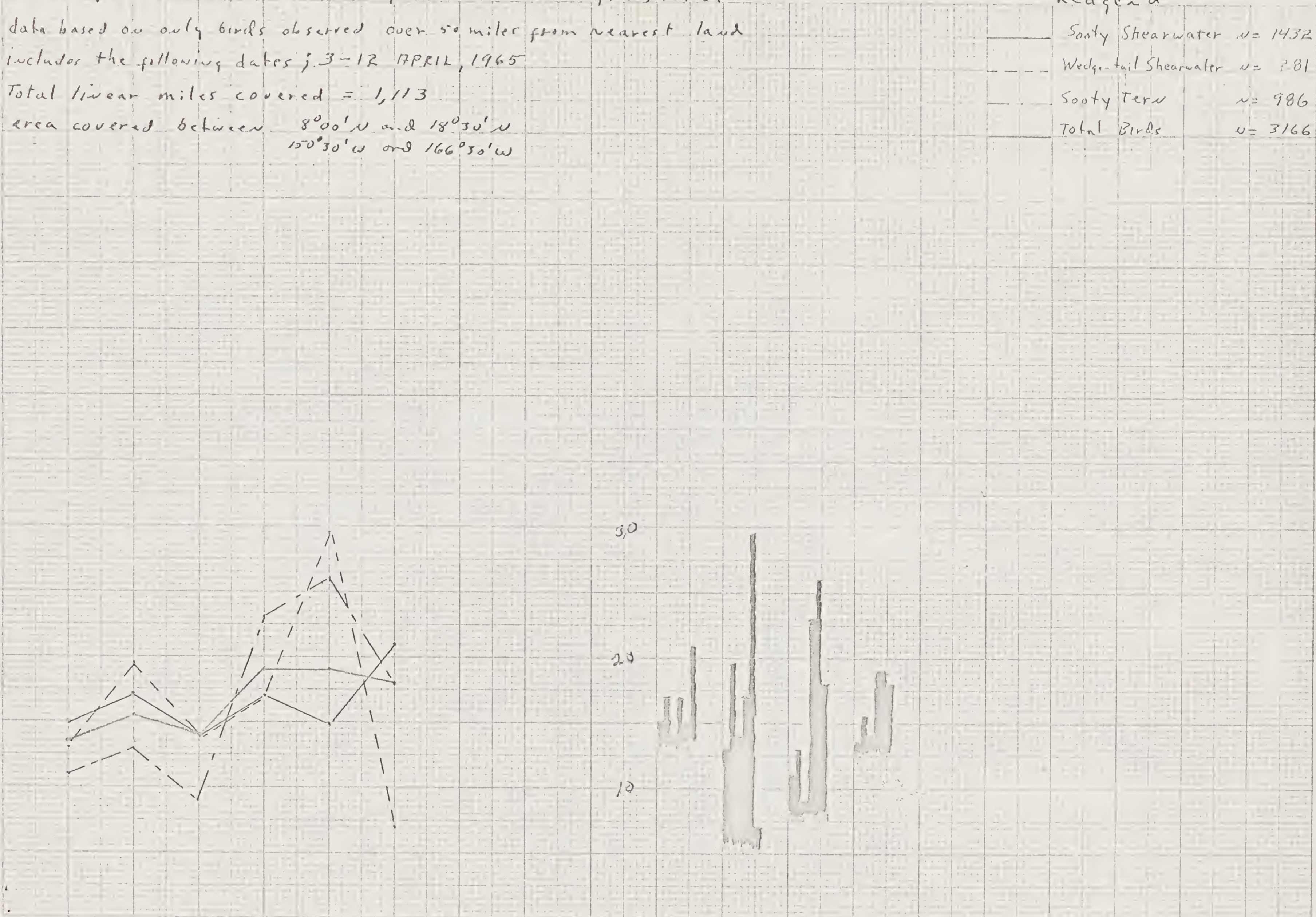
0-2 3-4 5-6 7-8 9-10 11-12

hours after sunrise

30
20
10

S.S. W.T.S. S.T. Total Birds

BEE 20x20 10 INCH



DATE 2 April 1965 Fri.

TIME	LAT <u>N</u>	LONG <u>W</u>	PRES	WEA	VIS	SLP	DRY B	DEW PT	HUMID %	TL SKY	OPA SKY	WAVES	SEA TEMP	WIND S	WIND D	SHIP COURSE/SPD.
0100																
0200																
0300																
0400																
0500																
0600																
0700																
0800																
0900																
1000	21° 16'	57° 49'														
1100	21° 07'	57 43														
1200	20° 59'	57 36														
1300	20° 51'	57 30														
1400	20 43'	57 24														
1500	20 35	57 18														
1600	20 27	57 11														
1700	20-20	157-05	bcast	30	1016	75	71	86	10	8	Calu	75	150	3	148° / 10.5 kts	
1800	20-10	157-00	"	30	1016	75	71	86	10	8	Calu	75	150	4	143 / 10	
1900	20-03	156-53	"	30	1016	75	71	86	10	8	Calu	75	150	3	143 / 10	
2000	19-55	156-46	"	10	1012	75	71	86	10	8	Calu	75	110	3	143 / 10	
2100	19 56	156-42	"	15	1018	76	70	82	10	10	Calu	75	RT. AIRS		142 - 10	
2200	19-50	156-33	"	15	1018	76	70	82	10	10	Calu	75	"	"	142 - 10	
2300	19-36	156-27	"	15	1018	76	70	82	10	10	Calu	75	"	"	150 10	
2400	19-27	156-23	"	15	1018	76	70	82	10	10	Calu	75	"	"	150 10	

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-955
12-5-63

DATE SAT, 3 APRIL 1965

TIME	LAT N	LONG W	PRES WEA	VIS	SLP	DRY B	DEW PT	HUMID %	TL SKY	OPA SKY	WAVES	SEA TEMP	WIND S	WIND D	SHIP COURSE/SPD.
0100	14-18	156-16	OVCST	15	1017	77.2	70	79	10	10	CALM		5	285	149/10
0200	14-10	156-10	O'CAST	15	1016	76.2	70	82	10	10	"		7	030	"
0300	14-00	156-05	LT. RAIN	8	1016	76.2	70	82	10	10	"		5	030	144/10
0400	13-52	155-58	LT. RAIN	6	1016	76.2	70	82	10	10	"	76	6	035	"
0500	13-45	155-52	"	15	1016	74	71	91	10	10	"	76	13	060	143/10
0600	13-37.35	155-45	O'cast	30	1016	74	71	91	10	10	100/4/3	76	10	060	143/10
0700	13-29	155-38	"	30	1017	74	71	91	10	10	100/4/3	76	13	060	143/10
0800	13-20	155-32	"	30	1017	74	71	91	10	10	100/4/4	76	13	060	143/10
0900	13-11	155-25	90% CUMUL	10	1018	72	69	91	10	10	100-4-4	76	12	060	143-10
1000	13-03	155-19	"	10	1018	72	69	91	10	10	100-4-5	76	12	060	143-10
1100	12-54	155-12	"	10	1018	72	69	91	10	10	100-4-5	76	12	060	143-10
1200	12-44.4	155-06	"	10	1018	72	69	91	10	10	100-4-5	76	12	060	143-10
1300	12-39	155-00	O'cast	8	1017	74.1	70	86	10	10	045-4-6	75	21	035	143-10
1400	12-33	154-56	"	8	1017	73.1	70	91	10	10	045-5-7	74	20	035	143-10
1500	12-27	154-50	"	8	1016	74.1	70	86	10	10	045-5-8	74	20	030	" "
1600	12-20	154-46	"	8	1016	74.1	70	86	10	10	045-6-9	74	20	030	" "
1700	12-15	154-56	"	20	1016	73	69	86	10	10	045/6/9	74	20	050	180 " 10
1800	12-05	154-52	Mostly CUMUL	20	1016	73	69	86	9	7	045/6/9	74	17	040	180 " 10
1900	12-55	154-56	"	20	1017	73	69	86	8	7	045/6/9	75	20	030	180 " 10
2000	12-39	154-52	O'CAST	15	1017	76	70	82	10	10	045-6-8	75	15	040	180 10
2100	12-29	154-52	"	15	1017	76	70	82	10	10	045-6-7	75	15	040	180 10
2200	12-18	154-51	"	15	1017	76	70	82	10	10	045-6-8	75	15	040	180 10
2300	12-08	154-51	"	15	1017	76	70	82	10	10	045-6-8	75	15	040	180 10
2400	12-57	154-51	"	15	1017	76	70	82	10	10	045-6-8	75	15	040	180 10

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-955
12-5-63

DATE SUN, 4 APRIL, 1965

TIME	LAT N	LONG W	PRES WEA	VIS	SLP	DRY B	DEW PT	HUMID %	TL SKY	OPA SKY	SWELL WAVES	SEA TEMP	WIND S	WIND D	SHIP COURSE/SPD.
0100	15-46	154-49	O'CAST	15	1016	76.74	73	91	10	10	045-6-8	76	12	060	160-10
0200	15-38	154-44	"	15	1016	76.74	73	91	10	10	045-6-8	76	10	065	160-10
0300	15-28	154-40	LT RAIN	6	1014	78.74	72	83	10	10	045-6-8	76	8	065	160-10
0400	15-18	154-36	O'CAST	10	1014	78.74	72	83	10	10	045-6-8	76	12	080	160-10
0500	15-10	154-33	"	15	1015	78	72	83	10	10	045/6/8	76	15	085	160-10
0600	15-01	154-28	"	20	1015	78	72	83	10	8	Cont.	76	11	080	160-10
0700	14-54	154-20	"	20	1016	78	72	83	10	9	090/6/6	76	11	080	132-10
0800	14-47	154-18	"	20	1016	78	72	83	10	9	090/6/6	77	13	080	132-10
0900	14-39	154-08	"	15	1017	78	72	83	10	9	100-6-6	77	12	100	132-9
1000	14-34	154-01	"	15	1017	78	72	83	10	9	100-6-6	77	12	100	132-9
1100	14-28	153-53	"	15	1017	78	72	83	10	9	100-6-6	77	12	100	132-9
1200	14-21	153-47	"	15	1017	78	72	83	10	9	100-6-6	77	12	100	132-9
1300	14-13	153-38	"	10	1016	80.76	74	83	10	10	090-6-8	76	11	080	132-9
1400	14-09	153-33	"	10	1015	80.76	74	83	10	10	090-6-8	76	8	075	132-9
1500	14-03	153-27	LT RAIN	10	1015	80.76	74	83	10	10	090-6-8	76	14	080	132-9
1600	13-57	153-20	O'CAST	12	1014	80.76	74	83	10	10	090-6-8	76	11	085	132-9
1700	13-50	153-13	"	20	1016	78	69	75	10	10	090-6-8	76	10	090	132-9
1800	13-49	153-07	"	20	1016	78	69	75	10	10	090-6-8	76	10	080	132-9
1900	13-41	152-59	"	20	1017	78	69	75	10	10	090-6-8	76	10	080	132-9
2000	13-34	152-52	"	20	1017	78	69	75	10	10	090-6-8	76	10	070	132-10
2100	13-30	152-46	Cloudy	15	1017	78	69	75	8	7	080-6-8	76	20	080	132-9
2200	13-27	152-41	"	15	1017	78	69	75	8	7	080-6-8	76	20	080	132-9
2300	13-20	152-33	"	15	1017	78	69	75	8	7	080-6-8	76	20	080	132-9
2400	13-13	152-27	"	15	1017	78	69	75	8	7	080-6-8	76	20	080	132-9

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

SI-MNH-955
12-5-63

DATE MON 5 APR '65

TIME	LAT ^N	LONG ^W	PRES WEA	VIS	SLP	DRY B	DEW PT	HUMID %	TL SKY	OPA SKY	SWELL WAVES	SEA TEMP	WIND S	WIND D	SHIP COURSE/SPD.
0100	13-11	152-24	Few clds	15	1016	79 ⁷⁵	73	83	3	3	075-6-9	77	17	085	132-9
0200	13-06	152-18	clear	15	1015	79 ⁷⁵	73	83	0	0	075-6-9	77	19	075	132-9
0300	13-00	152-12	0'cast	15	1015	79 ⁷⁵	73	83	10	10	075-6-9	77	20	070	132-9
0400	12-55	152-06	0'cast	15	1014	79 ⁷⁵	73	83	10	10	075-6-9	77	20	070	132-9
0500	12-45	151-52	"	15	1015	78	69	75	10	8	080-6-9	77	18	080	132-9
0600	12-39	151-45	"	20	1015	78	69	75	8	6	080-6-9	77	20	080	132-9
0700	12-34	151-36	pthy cldy	20	1015	78	69	75	9	8	080-6-9	77	18	090	132-9
0800	12-31	151-27	cloudy	15	1016	79	71	79	8	7	090-6-9	77	18	080	136-9
0900	12-24	151-17	"	15	1016	79	71	79	8	7	090-6-9	77	18	090	136-9
1000	12-18	151-11	"	15	1017	79	71	79	8	7	090-6-9	77	18	090	136-9
1100	12-11	151-05	"	15	1017	79	71	79	8	7	090-6-9	77	18	090	136-9
1200	12-05	150-58	"	15	1017	79	71	79	8	7	090-6-9	77	18	090	136-9
1300	12-02	150-49	cloudy	15	1015	79 ⁷⁴	72	79	8	7	090-6-9	76	16	075	142-9
1400	11-52	150-42	"	15	1015	79 ⁷⁴	72	79	10	10	090-6-10	76	15	085	142-9
1500	11-43	150-35	"	15	1014	80 ⁷⁴	72	75	9	9	090-6-10	76	16	070	142-9
1600	11-37	150-30	"	15	1014	80 ⁷⁴	72	75	9	8	090-6-10	76	15	075	142-9
1700	11-33	150-31	"	20	1015	78	72	83	8	7	090-6-10	76	15	080	142-9
1800	11-29	150-30	"	20	1015	78	72	83	8	7	090-6-10	76	15	080	"
1900	11-21	150-34	"	20	1015	78	72	83	7	6	090-6-10	76	15	080	"
2000	11-13	150-22	"	15	1016	78	72	83	9	7	080-6-10	78	18	060	180-9
2100	11-03	150-22	Few clds	15	1016	79	71	79	2	1	080-6-8	78	20	070	180-10
2200	10-55	150-22	"	15	1016	79	71	79	2	1	080-6-8	78	20	070	180-10
2300	10-43	150-22	"	15	1016	79	71	79	2	1	080-6-8	78	20	070	180-10
2400	10-35	150-27	"	15	1016	79	71	79	2	1	080-6-8	78	20	070	180-10

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-955
12-5-63

DATE TUES. 6 APRIL 1965

120/12

TIME	LAT <i>N</i>	LONG <i>W</i>	PRES WEA	VIS	SLP	DRY B	DEW PT	HUMID %	TL SKY	OPA SKY	<i>SWELL</i> WAVES	SEA TEMP	WIND S	WIND D	SHIP COURSE/SPD.
0100	10-28	150-35	CLEAR	15	1015	80 ⁷⁴	72	75	0	0	080-6-8	80	16	050	228°-10
0200	10-22	150-43	Few Clds	15	1015	80 ⁷⁵	73	79	2	2	080-6-8	80	17	045	228-10
0300	10-15	150-50	"	15	1014	80 ⁷⁵	73	79	2	2	080-6-8	80	18	080	228-10
0400	10-08	150-57	"	15	1014	80 ⁷⁵	73	79	3	3	080-6-8	80	17	070	228-10
0500	10-04	151-03	"	15	1014	79	72	79	2	0	080-6-8	80	18	080	228-10
0600	9-59	151-11	"	15	1014	79	72	79	8	5	080-6-8	80	18	070	228-10 6
0700	9-53	151-17	"	20	1015	80	73	79	6	4	080-6-8	80	18	070	228-10 7
0800	9-47	151-24	"	20	1015	80	73	79	5	3	080-6-8	80	18	070	228-10 8
0900	9-37	151-35	Cloudy	20	1015	82	69	65	5	3	080-6-8	80	20	070	228 10
1000	9-30	151-43	"	20	1015	82	69	65	5	3	080-6-8	80	20	070	228 10
1100	9-23	151-51	"	20	1015	82	69	65	5	3	080-6-8	80	20	070	228 10
1200	9-16	151-59	"	20	1015	82	69	65	5	3	080-6-8	80	20	070	228 10
1300	9-09	152-03	Ptly cldy	20	1014	83 ⁷⁶	73	72	4	2	080-6-8	80	20	075	225 10
1400	9-04	152-08	"	20	1013	83 ⁷⁶	73	72	4	2	080-6-8	80	18	075	" "
1500	9-00	152-14	"	20	1013	83 ⁷⁶	73	72	3	2	080-6-8	80	19	080	" "
1600	8-53	152-21	"	20	1012	83	73	72	3	2	080-6-8	80	21	065	" "
1700	8-47	152-27	"	20	1012	82	74	76	3	1	080-6-8	80	20	070	" "
1800	8-42	152-34	"	20	1013	81	73	75	5	2	080-6-8	80	20	080	" "
1900	8-36	152-40	"	20	1014	80	73	79	5	3	080-6-8	80	20	070	" "
2000	8-33	152-43	"	20	1014	80	73	79	5	2	080-6-8	80	15	060	" "
2100	8-31	152-45	Cloudy	15	1014	80	73	79	10	9	080-6-8	80	15	070	228 4
2200	8-28	152-48	"	15	1014	80	73	79	10	9	080-6-8	80	15	070	228 4
2300	8-25	152-51	"	15	1014	80	73	79	10	9	080-6-8	80	15	070	228-4
2400	8-22	152-54	"	15	1014	80	73	79	10	9	080-6-8	80	15	070	228 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-955
12-5-63

DATE WED. 7 APRIL 1965

TIME	LAT <u>N</u>	LONG <u>W</u>	PRES WEA	VIS	SLP	DRY B	DEW PT	HUMID <u>10</u>	TL SKY	OPA SKY	<u>SWELL</u> WAVES	SEA TEMP	WIND S	WIND D	SHIP COURSE/SPD.
0100	8°-16	153-02	O'CAST	10	1013	81.76	74	79	10	9	080-6-8	80	17	065	225-4
0200	8°-11	153-07	"	10	1013	81.77	75	83	10	10	080-6-8	80	12	060	225-4
0300	8°-08	153-11	pt. cldy	12	1012	82.76	71	69	5	5	080-6-8	80	15	065	225-4
0400	8°-04	153-16	"	15	1012	82.76	71	69	6	6	080-6-8	80	18	070	225-4
0500	8°-01	153-18	"	15	1012	80	74	83	5	3	080-6-8	80	15	070	" "
0600	8°-00	153-22	"	20	1013	80	74	83	8	6	080-6-8	80	18	070	" "
0700	8°-05	153-28	"	20	1013	80	74	83	7	4	060-6-8	80	18	070	" "
0800	8°-07	153-36	"	20	1013	82	75	80	3	1	050-6-8	81	18	070	304-10
0900	8°-09	153-43	"	20	1014	82	72	72	3	1	070-6-8	81	20	070	304-10
1000	8°-09	153-43	"	20	1014	82	72	72	3	1	070-6-8	81	20	070	210-
1100	8°-14	153-44	"	20	1014	82	72	72	3	1	070-6-8	81	20	070	042-7
1200	8°-20	153-39	"	20	1014	82	72	72	3	1	070-6-8	81	20	070	042-7
1300	8°-25	153-38	"	20	1012	82.76	74	69.76	5	4	065-7-9	81	18	060	042-7
1400	8°-28	153-35	"	20	1011	81.76	74	79	5	4	065-7-9	81	20	070	042-7
1500	8°-33	153-32	"	"	1014	81.76	74	79	6	5	065-7-9	81	19	075	" "
1600	8°-38	153-28	"	"	1011	80.76	74	83	7	5	065-7-9	81	18	075	" "
1700	3 5		"	20	1014	80	74	83	5	3	060-8-9	81	22	070	" 5
1800	8°-39	153-29	"	20	1011	80	74	83	6	3	060-8-9	81	20	070	" 5
1900	8°-43	153-25	"	15	1012	80	74	83	7	5	060-8-9	81	20	070	" 5
2000	8°-48	153-21	"	15	1012	80	74	83	7	5	070-8-9	81	20	070	" 5
2100	8°-50	153-30	"	15	1014	80	74	83	5	4	070-8-9	81	18	070	290 10
2200	8°-54	153-40	"	15	1014	80	74	83	5	4	070-8-9	81	18	070	290 10
2300	8°-58	153-50	"	15	1014	80	74	83	5	4	070-8-9	81	18	070	290 10
2400	9°-01	153-59	"	15	1014	80	74	83	5	4	070-8-9	81	18	070	290 10

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-955
12-5-63

DATE THURS. 8 APRIL 1965

TIME	LAT	LONG	PRES WEA	VIS	SLP	DRY B	DEW PT	HUMID	TL SKY	OPA SKY	SWELL WAVES	SEA TEMP	WIND S	WIND D	SHIP COURSE/SPD.
0100	9-03	154-07	Cloudy	20	1013	80.25	73	79	8	6	070-8-8	80	20	060	287-10
0200	9-07	154-18	Few clds	15	1013	80.25	73	79	2	1	070-8-8	80	23	045	" "
0300	9-10	154-27	"	15	1013	80.75	73	79	2	1	070-8-8	80	20	075	" "
0400	9-14	154-37	"	15	1012	80.75	73	79	1	1	070-8-8	80	22	075	" "
0500	9-21	154-52	Clear	20	1012	80	73	79	0	0	070-8-9	80	22	075	" "
0600	9-24	155-03	Few clds	20	1012	80	73	79	1	0	070-8-9	80	20	075	" "
0700	9-28	155-12	" "	20	1013	80	73	79	2	0	070-8-9	80	20	075	" "
0800	9-31	155-21	" "	20	1013	82	70	72	3	1	070-9-9	80	21	075	" "
0900	9-32	155-32	"	20	1014	82	74	76	3	1	070-9-9	80	20	070	287 10.5
1000	9-35	155-43	"	20	1014	82	74	76	3	1	070-8-9	80	20	070	287 10.5
1100	9-38	155-50	"	20	1014	82	74	76	3	1	070-8-9	80	20	070	287 10.5
1200	9-42	156-00	"	20	1014	82	74	76	3	1	070-8-9	80	20	070	287 10.5
1300	9-46	156-11	PT. CLOUDY	20	1013	81.76	74	79	5	3	070-8-9	80	22	055	" "
1400	9-51	156-25	"	20	1012	81.76	74	79	4	2	070-8-9	80	20	070	" "
1500	9-54	156-34	"	20	1012	81.76	74	79	4	3	070-8-9	80	21	075	" "
1600	9-57	156-44	"	20	1011	81.76	74	79	5	4	070-8-9	80	20	060	" "
1700	9-406	156-49	"	20	1011	81	74	79	3	2	070-9-9	80	20	070	" "
1800	9-36	156-59	"	20	1011	81	74	79	4	2	070-9-9	80	20	075	" "
1900	9-33	157-09	"	20	1012	80	75	79	6	4	070-9-9	80	18	070	" "
2000	9-31	157-14	"	20	1012	80	75	79	5	3	070-9-9	80	18	070	" "
2100	9-32	157-17	Few clds	20	1013	79	72	83	2	1	070-9-9	80	17	070	003 5kts
2200	9-37	157-17	"	20	1013	79	72	83	2	1	070-8-9	80	15	070	003 5kts
2300	9-42	157-17	"	20	1013	79	72	83	2	1	070-8-9	80	15	070	003 5kts
2400	9-	157-17	"	20	1013	79	72	83	2	1	070-8-9	80	15	070	003 5kts

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-955
12-5-63

DATE FRI 9 APRIL 1965

TIME	LAT	LONG	PRES WEA	VIS	SLP	DRY B	DEW PT	HUMID %	TOT SKY	OPA SKY	SWELL WAVES	SEA TEMP	WIND S	WIND D	SHIP COURSE/SPD.
0100	9-54	157-17	O'cast	15	1013	80.75	73	79	10	10	070-8-9	79	16	070	002-5
0200	10-02	157-17	"	15	1013	80.75	73	79	10	10	070-8-9	79	17	070	002-5
0300	10-11	157-17	"	15	1012	80.75	73	79	4	3	070-8-9	79	21	080	002-5
0400	10-17	157-17	"	15	1011	80.75	73	79	3	2	070-8-9	79	20	075	" "
0500	10-25	157-20	"	20	1011	80.75	72	83	10	8	070-8-9	79	20	075	" "
0600	10-31	157-22	"	20	1012	80.75	72	83	9	7	070-8-9	79	18	075	002-10
0700	10-40	157-22	"	20	1012	80.75	72	83	8	6	070-8-9	79	20	075	" "
0800	10-48	157-19	Partly cl	20	1013	80.75	73	83	7	4	070-8-9	79	20	075	017 "
0900	10-55	157-20	"	20	1013	80.75	73	79	5	3	070-8-9	79	20	070	002 8
1000	11-03	157-20	"	20	1014	80.75	73	79	5	3	070-8-9	79	20	070	002 8
1100	11-11	157-21	"	20	1014	80.75	73	79	5	3	070-8-9	79	20	070	002 8
1200	11-18	157-21	"	20	1014	80.75	73	79	5	3	070-8-9	79	20	070	002 8
1300	11-25	157-21	"	20	1013	80.75	72	75	5	4	070-8-9	79	18	075	" 10
1400	11-35	157-21	"	20	1012	80.75	72	75	5	4	070-8-9	79	17	070	" 10
1500	11-45	157-22	Few clods	20	1012	80.75	72	75	4	3	070-8-9	79	17	085	" "
1600	11-55	157-22	"	20	1012	80.75	72	75	3	2	070-8-9	79	18	080	" "
1700	12-05	157-20	"	20	1012	79.75	72	79	3	1	070-8-9	79	17	080	" "
1800	12-15	157-21	"	20	1012	79.75	72	79	7	5	070-8-9	79	15	080	" "
1900	12-26	157-22	"	20	1013	79.75	72	79	5	2	070-8-9	79	15	080	" "
2000	12-37	157-22	"	20	1013	79.75	72	79	3	1	070-8-9	79	15	080	" "
2100	12-48	157-22	Partly cl	20	1015	78.75	72	83	5	2	070-8-8	78	10	080	002 10
2200	12-57	157-22	"	20	1015	78.75	72	83	5	2	070-8-8	78	10	080	002 10
2300	13-09	157-22	"	20	1015	78.75	72	83	5	2	070-8-8	78	10	080	002 10
2400	13-19	157-22	"	20	1015	78.75	72	83	5	2	070-8-8	78	10	080	002 10

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-955
12-5-63

DATE SAT 10 APRIL 1965

TIME	LAT	LONG	PRES WEA	VIS	SLP	DRY B	DEW PT	HUMID %	TL SKY	OPA SKY	SWELL WAVES	SEA TEMP	WIND S	WIND D	SHIP COURSE/SPD.
0100	13-25	157-23	Few CLDS	20	1014	78.74	72	83	1	1	070-8-8	77	13	080	002-10
0200	13-31	157-23	"	20	1013	78.73	71	79	1	1	070-8-8	77	11	075	" "
0300	13-40	157-22	"	20	1013	78.73	71	79	1	1	070-8-8	77	14	070	" "
0400	13-50	157-22	"	20	1013	78.73	71	79	1	1	070-8-8	77	12	075	" "
0500	14-02	157-19	Ptly Cldy	20	1013	76	70	82	4	2	070-8-8	77	15	085	" "
0600	14-12	157-18	Lt rain	20	1014	77	73	87	7	5	070-8-8	77	17	085	" "
0700	14-21	157-18	Ptly Cldy	20	1014	77	73	87	5	3	070-8-8	77	17	085	" 9.5
0800	14-31	157-18	" "	20	1015	76	72	87	7	4	070-8-8	77	17	085	" "
0900	14-40	157-20	" "	20	1016	80	72	75	7	5	070-8-8	77	15	090	357 9.5
1000	14-49	157-21	" "	20	1016	80	72	75	7	5	070-8-8	77	15	090	357 9.5
1100	14-59	157-22	" "	20	1016	80	72	75	7	5	070-8-8	77	15	090	357 9.5
1200	15-09	157-23	" "	20	1016	80	72	75	7	5	070-8-8	77	15	090	357 9.5
1300	15-19	157-24	Cloudy	8	1015	81.75	73	75	8	7	070-8-8	75	16	090	" "
1400	15-30	157-25	"	20	1015	81.75	73	75	8	7	070-8-8	75	18	085	" "
1500	15-40	157-26	Ptly Cldy	20	1014	79.74	72	79	5	4	070-8-8	75	18	090	" "
1600	15-50	157-27	"	20	1014	78.73	71	79	4	3	070-8-8	75	19	090	" "
1700	15-51	157-36	"	20	1014	77	71	83	4	2	070-8-8	75	17	090	274 10
1800	15-51	157-45	80% w/ rain	15	1014	76	72	87	10	9	070-8-8	75	17	090	274 "
1900	15-52	157-56	"	15	1015	76	72	87	9	8	070-8-8	75	13	090	274 "
2000	15-57	158-07	100% w/ rain	10	1016	76	73	89	10	9	070-8-8	76	15	090	274 "
2100	15-54	158-19	0' Coast - Squalls	15	1017	75	70	86	5	4	070-8-6	76	15	090	274 10.5
2200	15-55	158-30	"	15	1017	75	70	86	5	4	070-8-6	76	15	090	274 10.5
2300	15-55	158-41	"	15	1017	75	70	86	5	4	070-8-6	76	15	090	274 10.5
2400	15-56	158-52	"	15	1017	75	70	86	5	4	070-8-6	76	15	090	274 10.5

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-955
12-5-63

DATE SUN 11 APRIL, 1965

TIME	LAT N	LONG W	PRES WEA	VIS	SLP	DRY B	DEW PT	HUMID %	TL SKY	OPA SKY	SWELL WAVES	SEA TEMP	WIND S	WIND D	SHIP COURSE/SPD.
0100	15-57	159-03	Rain	8	1016	74.2	70	86	10	10	070-8-6	75	15	090	274-10.5
0200	15-59	159-13	RAIN	6	1015	74.1	70	86	10	10	070-8-6	75	15	095	" "
0300	16-00	159-23	B'CAST	10	1014	74.1	70	86	10	9	070-8-6	75	14	090	" "
0400	16-01	159-32	CLOUDY	10	1014	74.1	70	86	9	8	070-8-6	75	13	095	" "
0500	15-59	159-45	B'CAST	10	1014	75	71	87	10	9	070-8-6	75	18	070	" "
0600	16-00	159-56	"	10	1015	74	71	91	10	9	070-8-6	75	13	095	" "
0700	16-01	160-07	"	10	1015	74	71	91	10	9	070-8-6	75	15	090	" "
0800	16-01	160-17	B'CAST	15	1016	74	71	91	10	9	070-8-6	75	17	090	" "
0900	16-01	160-26	"	15	1015	78	69	75	10	9	070-8-6	75	15	100	274 10.2
1000	16-02	160-37	"	15	1015	78	69	75	10	9	070-8-6	75	15	100	274 10.2
1100	16-02	160-47	"	15	1015	78	69	75	10	9	070-8-6	75	15	100	274 10.2
1200	16-03	160-58	"	15	1015	78	69	75	10	9	070-8-6	75	15	100	274 10.2
1300	16-04	161-06	"	15	1014	80.1	70	72	10	10	070-8-6	76	12	085	" "
1400	16-05	161-17	"	15	1013	82.1	72	72	10	10	070-8-6	76	11	075	" "
1500	16-06	161-27W	"	15	1013	82.1	71	69	10	9	070-8-5	76	12	090	" "
1600	16-07	161-38W	"	15	1013	82.1	71	69	10	9	070-8-5	76	13	085	" "
1700	16-09	161-48W	"	20	1012	81	75	84	10	9	070-8-5	76	13	090	" "
1800	16-11	161-56	"	20	1012	80	77	84	10	9	070-8-5	76	15	110	" "
1900	16-11	162-07	"	20	1012	80	77	84	10	9	070-8-5	76	11	130	272 "
2000	16-11	162-18	"	20	1013	78	77	83	10	9	070-8-5	76	13	120	272 "
2100	16-12	162-29	SPRINKLY	10	1014	77	71	91	10	10	070-8-4	76	13	120	274-10.2
2200	16-12	162-39	"	10	1014	74	71	91	10	10	070-8-4	76	13	120	274-10.2
2300	16-13	162-47	"	10	1014	74	71	91	10	10	070-8-4	76	13	120	274-8.0
2400	16-13	162-56	"	10	1014	74	71	91	10	10	070-8-4	76	13	120	274-8.0

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-955
12-5-63

DATE MON 12 APRIL 1965

TIME	LAT N	LONG W	PRES WEA	VIS	SLP	DRY B	DEW PT	HUMID %	TL SKY	OPA SKY	SWELL WAVES	SEA TEMP	WIND S	WIND D	SHIP COURSE/SPD.
0100	16°-13	163°-07	Heavy RAIN	2	1013	74.2	71	91	10	10	070-8-4	76	12	170	274-10
0200	16°-13	163-19	O'CAST	8	1012	73.2	73	95	10	10	070-8-4	76	9	170	" "
0300	16-13	163-30	"	10	1012	74.2	71	91	10	10	070-8-4	76	10	170	" "
0400	16°-13	163-40	"	10	1012	74.2	71	91	10	10	070-8-3	76	8	165	" "
0500	16-14	163-51	Partly cldy	20	1012	75	71	87	2	1	070-8-3	76	8	160	" "
0600	16-15	164-02	Cldy 4/10	20	1012	76	70	82	8	5	070-8-3	76	5	160	" "
0700	16-15	164-12	" "	20	1013	76	70	82	7	6	070-8-3	76	8	180	" "
0800	16-16	164-23	Partly Cldy	20	1013	76	70	82	7	8	070-8-3	76	Airs	" "	" "
0900	16-17	164-33	Partly Cldy	20	1014	79	71	79	3	1	070-8-3	76	230	4	274 10.2
1000	16-17	164-46	"	20	1014	79	71	79	3	1	070-8-3	77	230	4	274 10.2
1100	16-18	164-57	"	20	1014	79	71	79	3	1	070-8-3	77	230	4	274 10.2
1200	16-19	165-07	"	20	1014	79	71	79	3	1	070-8-3	77	230	4	274-10.2
1300	16-21	165-20	"	20	1013	80.2	72	75	2	1	CONF	77	CALM		277-10.2
1400	16-22	165-31	"	20	1012	80.2	72	75	2	1	CONF	77	310	6	277-10.2
1500	16-23	165-41	"	20	1012	80	72	75	2	1	"	77	315	7	" "
1600	16-25	165-51	"	20	1011	80	72	75	2	1	"	77	310	7	" "
1700	16-24	166-03	"	20	1011	80	72	75	2	1	320-10-4	77	310	7	" "
1800	16-24	166-15	Partly Cldy	20	1012	79	71	75	5	2	320-10-4	77	310	7	" "
1900	16-25	166-26	" "	20	1013	79	71	75	3	1	320-10-4	77	310	7	" "
2000	16-26	166-37	" "	20	1013	78	71	79	3	1	320-10-4	77	310	5	" "
2100	16-27	166-48	"	20	1015	75	70	86	5	4	320-10-4	77	350	8	274 10
2200	16-27	166-57	"	20	1015	75	70	86	5	4	320-10-4	77	350	8	274 10
2300	16-28	167-05	"	20	1015	75	70	86	5	4	320-10-4	77	350	8	274 10
2400	16-28	167-15	"	20	1015	75	70	86	5	4	320-10-4	77	350	8	274 10

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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12-5-63

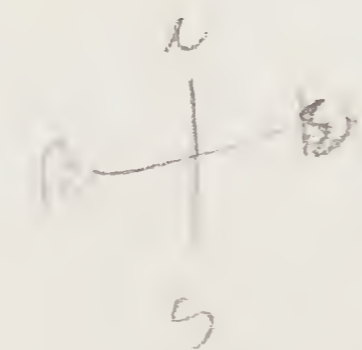
DATE TUE. 13 APRIL 1965

TIME	LAT <i>N</i>	LONG <i>W</i>	PRES	WEA	VIS	SLP	DRY B	DEW PT	HUMID %	TL SKY	OPA SKY	SWELL		SEA TEMP	WIND S	WIND D	SHIP COURSE/SPD.
												WAVES	PERIOD				
0100	16-29	167-26		PT. CLDY	20	1015	76.0	67	74	4	3	320-10-5	76	10	355	274-10	
0200	16-29	167-38		"	20	1015	77.2	68	74	3	2	320-10-5	76	13	000	" "	
0300	16-30	167-50		"	20	1015	77.2	68	74	5	4	320-9-5	76	12	005	" "	
0400	16-31	168-03		"	20	1015	77.2	68	74	6	5	320-9-6	76	14	010	" "	
0500	16-29	168-12		"	20	1015	76	67	74	7	4	320-9-6	76	15	000	280-10	
0600	16-30	168-24		0'cast	20	1015	76	67	74	9	7	320-9-6	76	14	010	" "	
0700	16-31	168-34		"	20	1015	75	68	78	9	6	320-9-6	76	14	015	" "	
0800	16-33	168-45		Partly cldy	20	1016	76	67	74	2	0	340-8-7	78	15	020	" "	
0900	16-34	168-54		"	20	1016	76	67	74	2	1	340-8-7	78	13	010	" "	
1000	16-39	169-05		Few CLDS	20	1016	76	67	74	2	1	350-8-5	78	12	010	" "	
1100	16-39	169-16		"	20	1017	76	67	74	2	1	350-8-5	78	13	010	" "	
1200	16-40	169-24		Few CLDS	20	1017	76	67	74	2	1	000-8-4	78	8	005	270-10	
1300	16-38	169-31		Few CLDS	20	1017	80.7	67	64	3	2	010/8/5	78	10	000	160-10	
1400	16-29	169-28		"	20	1017	80	67	64	3	2	010/8/5	78	10	000	" "	
1500	16-18	169-25		"	20	1016	79.7	66	63	4	3	010/8/5	78	10	000	" "	
1600	16-12	169-20		"	20	1016	78.6	65	63	5	4	010/8/5	78	10	000	" "	
1700	16-02	169-17		"	20	1015	77	65	67	3	1	020/8/5	78	13	020	160-10	
1800	15-52	169-16		"	20	1015	77	65	67	3	1	020/8/5	78	13	020	" "	
1900	15-44	169-16		"	20	1015	77	65	67	5	2	020/8/5	78	11	020	" "	
2000	15-34	169-13		"	20	1015	76	66	70	3	1	020/8/5	78	11	020	" "	
2100	15-25	169-11		"	20	1016	76	66	70	3	1	020-8-4	78	10	040	160 10	
2200	15-15	169-08		"	20	1017	76	66	70	3	1	020-8-4	78	10	040	160 10	
2300	15-05	169-05		"	20	1017	76	66	70	3	1	020-8-4	78	10	040	160 10	
2400	14-53	169-01		"	20	1017	76	66	70	3	1	020-8-4	78	10	040	160 10	

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-955
12-5-63



DATE WED 14 APRIL 1965

TIME	LAT N	LONG W	PRES WEA	VIS	SLP	DRY B	DEW PT	HUMID %	TL SKY	OPA SKY	SWELL WAVES	SEA TEMP	WIND S	WIND D	SHIP COURSE/SPD.
0100	14-42	168-58	FEW CLOS	20	1016	77.21	71	82	1	1	020-8-5	77	12	030	160-10
0200	14-37	168-55	FEW CLOS	20	1016	77.23	71	82	1	1	020-8-5	77	14	025	160-10
0300	14-31	168-48	"	20	1015	77.22	70	78	1	1	020-8-5	77	12	040	222-10
0400	14-24	168-54	"	20	1014	77.22	70	78	1	1	020-8-5	77	12	050	222-10
0500	14-08	168-59	PLY CLOS	20	1015	77	70	79	4	3	220-8-5	77	11	050	22 - 10
0600	14-00	169-07	"	20	1016	80	72	75	5	4	045-8-5	77	12	045	DRIFT 10.6
0700	14-00	169-07	"	20	1016	80	72	75	5	4	045-8-4	77	12	045	"
0800	13-57	169-07	"	20	1017	83	72	72	5	4	045-8-4	77	12	045	"
0900	13-57	169-09	"	20	1017	83	72	72	5	4	045-8-4	77	12	045	DRIFT 10.6
1000	13-52	169-14	"	20	1017	83	72	72	5	4	045-8-4	77	12	045	227 10.2
1100	13-45	169-22	"	20	1017	83	72	72	5	4	045-8-4	77	12	045	227 10.2
1200	13-38	169-30	"	20	1017	83	72	72	5	4	045-8-4	77	12	045	227 10.2
1300	13-30	169-38	"	20	1016	82.25	72	72	5	4	045-8-4	77	12	040	225 10.2
1400	13-23	169-46	FEW CLOS	20	1015	82.25	72	72	3	2	045-8-4	77	14	035	225 10.2
1500	13-17	169-54	"	20	1014	83.26	73	72	3	2	045-8-4	77	13	035	"
1600	13-10	170-02	"	20	1013	84.26	73	69	4	3	045-8-4	77	12	045	"
1700	13-03	170-08	"	20	1013	85	73	67	2	0	045-8-4	77	12	045	"
1800	12-56	170-14	"	20	1013	82	72	72	3	1	045-8-4	77	12	045	"
1900	12-48	170-22	"	20	1014	80	72	75	4	1	045-8-4	77	11	045	"
2000	12-41	170-31	"	20	1014	80	72	75	3	1	045-8-4	77	12	045	"
2100	12-35	170-38	"	20	1015	78	74	87	3	2	045-8-4	80	12	045	228 10
2200	12-28	170-47	"	20	1015	78	74	87	3	2	045-8-4	80	12	045	228 10
2300	12-21	170-54	"	20	1015	78	74	87	3	2	045-8-4	80	12	045	228 10
2400	12-15	171-02	"	20	1015	78	74	87	3	2	045-8-4	80	12	045	228 10

REMARKS:

XRAY after 0500

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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12-5-63

7 771
14 736
21 731
28 734
35 733
42 732
49 731
56

DATE THURS 15 APRIL 1965

TIME	LAT N	LONG W	PRES WEA	VIS	SLP	DRY B	DEW PT	HUMID %	TL SKY	OPA SKY	SWELLS WAVES	SEA TEMP	WIND S	WIND D	SHIP COURSE/SPD.
0100	12° 08'	171° 10'	PT CLOUD	20	1014	78 ₂₀	72	83	5	3	045-8-4	77	12	040	228°-10
0200	12° 15'	171° 17'	"	20	1013	78 ₂₀	72	83	5	3	045-8-4	77	14	055	315 "
0300	12° 21'	171° 23'	CLOUDY	20	1012	78 ₂₀	72	83	9	8	045-8-5	77	16	055	315 "
0400	12° 28'	171° 30'	O'CAST	20	1012	78 ₂₀	72	83	10	10	045-8-5	77	17	045	" "
0500	12-35	171-37	"	20	1012	78	69	75	9	8	045-8-5	77	15	045	" "
0600	12-43	171-45	"	20	1013	78	69	75	9	8	045-8-5	77	13	045	" "
0700	12-50	171-53	"	20	1013	78	69	75	9	7	045-8-5	77	13	045	047 "
0800	12-54	171-58	"	20	1014	78	69	75	7	6	045-8-5	77	15	030	" 6
0900	13-03	171-29	Few CLOUD	20	1014	80	67	67	2	1	040-8-5	77	14	040	047 9
1000	13-09	171-22	"	20	1014	80	67	67	2	1	040-8-5	77	14	040	047 9
1100	13-14	171-15	"	20	1014	80	67	67	2	1	040-8-5	77	14	040	047 9
1200	13-20	171-08	"	20	1014	80	67	67	2	1	040-8-5	77	14	040	047 9
1300	13-27	171-02	CLEAR	20	1013	80 ₂₀	68	68	0	0	040-8-5	79	13	045	045 9
1400	13-33	170-56	"	20	1012	80 ₂₀	68	68	0	0	040-8-5	79	13	045	045 9
1500	13-40	170-50	"	20	1012	80 ₂₀	68	68	0	0	040-8-5	79	14	040	045-9
1600	13-46	170-44	"	20	1011	80 ₂₀	68	68	0	0	040-8-5	79	15	035	045-9
1700	13-53	170-37	"	20	1011	80	67	72	0	0	040-8-5	78	13	030	" "
1800	13-59	170-31	"	20	1012	78	69	75	0	0	040-8-5	78	11	020	" "
1900	14-06	170-24	"	20	1012	78	69	75	0	0	Cont	78	10	045	" "
2000	14-12	170-17	"	20	1013	78	69	75	0	0	Cont	78	9	050	" "
2100	14-18	170-10	"	20	1014	77	67	74	0	0	070-8-4	78	5	050	045 9
2200	14-25	170-04	"	20	1014	77	67	74	0	0	070-8-4	78	5	060	045 9
2300	14-30	169-58	Few CLOUD	20	1014	77	67	74	1	0	070-8-4	78	5	060	045 7 1/2
2400	14-36	169-52	"	20	1014	77	67	74	1	0	070-8-4	78	5	060	045 9

REMARKS:

XRAY
 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-955
 12-5-63

DATE FRI 16 APRIL 1965

TIME	LAT N	LONG W	PRES WEA	VIS	SLP	DRY B	DEW PT	HUMID %	TL SKY	OPA SKY	SWELL WAVES	SEA TEMP	WIND S	WIND D	SHIP COURSE/SPD.
0100	14-43	169-44	PT. CLDY	20	1013	76.1	69	78	6	4	070-8-4	79	8	040	045-9
0200	14-49	169-37	"	20	1013	76.0	69	78	5	4	070-8-4	79	10	020	045-9
0300	14-55	169-31	FEW CLDS	20	1013	76.0	67	74	3	2	070-8-4	79	9	035	" "
0400	15-02	169-31	"	20	1012	76.0	67	74	1	1	070-8-4	79	9	030	315-9
0500	15-09	169-39	"	20	1012	76	67	74	1	0	070-8-4	78	10	050	" 10
0600	15-16	169-47	"	20	1013	76	66	72	1	0	070-8-4	78	11	045	21 10
0700	15-24	169-54	"	20	1013	82	67	62	1	0	070-8-4	78	9	045	" "
0800	15-31	170-01	"	20	1014	82	67	62	1	0	080-8-3	78	9	045	22 11
0900	15-30	170-08	"	20	1015	81	64	57	1	0	100-1	78	8	060	225-10
1000	15-24	170-16	"	20	1015	81	64	57	1	0	"	78	8	060	225-10
1100	15-17	170-24	"	20	1015	81	64	57	1	0	"	78	5	060	225-10
1200	15-09	170-27	"	20	1015	81	64	57	1	0	"	78	5	060	225-10
1300	15-06	170-31	"	20	1013	82.0	64 67	58 62	1	1	"	78	6	045	" "
1400	14-59	170-37	"	20	1012	82.0	64 67	58 62	1	1	"	78	7	030	" "
1500	14-51	170-46	"	20	1011	82.0	67	62	2	1	"	78	6	045	" "
1600	14-44	170-54	"	20	1011	82.0	67	62	2	1	"	78	8	050	" "
1700	14-33	171-02	"	20	1014	83	67	59	1	0	"	78	10	050	" "
1800	14-26	171-03	"	20	1011	82	67	62	1	0	"	78	10	045	" "
1900	14-23	171-07	"	20	1012	80	68	68	1	0	"	78	10	045	" "
2000	14-22	171-14	"	20	1012	79	69	75	1	0	"	78	10	045	" "
2100	14-19	171-22	"	20	1013	77	69	78	1	0	"	78	10	050	230 11
2200	14-11	171-30	"	20	1013	77	69	78	1	0	"	78	10	070	230 11
2300	14-04	171-41	"	20	1013	77	69	78	1	0	"	78	10	070	230 11
2400	13-57	171-50	"	20	1013	77	69	78	1	0	"	78	10	050	230 11

REMARKS:

XRAY

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-955
12-5-63

DATE SAT. 17 APRIL 1965

TIME	LAT N	LONG W	PRES WEA	VIS	SLP	DRY B	DEW PT	HUMID %	TL SKY	OPA SKY	SEWELL WAVES	SEA TEMP	WIND S	WIND D	SHIP COURSE/SPD.
0100	13-52	171-57	FBW CLOUD	20	1013	77.1	70	78	3	2	CONE	77	10	050°	230°-11
0200	13-45	172-06	"	"	1012	77.2	70	78	4	3	"	77	12	050	" "
0300	13-38	172-16	"	"	1012	77.2	70	78	3	2	"	77	11	050	" "
0400	13-31	172-25	"	"	1011	77.2	70	78	2	1	"	77	13	045	" "
0500	13-27	172-35	Modly Cld	20	1011	77	70	78	8	6	"	75	15	045	235-10
0600	13-33	172-43	"	20	1012	77	70	78	9	7	"	77	15	050	" "
0700	13-40	172-49	Ply Cld	20	1012	78	68	71	7	4	500-9-4	77	12	050	" "
0800	13-45	172-55	"	20	1012	81	68	65	3	1	200-9-4	79	15	055	" "
0900	13-53	173-04	Few Cld	20	1013	78	68	71	2	1	000-8-4	77	12	060	045 10
1000	14-00	173-08	"	20	1013	78	68	71	2	1	000-8-4	77	12	060	045 10
1100	14-09	172-48	"	20	1013	78	68	71	2	1	000-8-4	77	12	060	045 10
1200	14-16	172-41	"	20	1013	78	68	71	2	1	000-8-4	77	12	060	045 10
1300	14-22	172-35	CLEAR	20	1013	79.1	67	67	0	0	000-8-4	79	10	060	" "
1400	14-26	172-32	"	20	1012	79.1	67	67	0	0	000-8-4	79	9	065	" "
1500	14-31	172-25	"	20	1011	79.1	69	71	0	0	000-8-4	79	10	075	" "
1600	14-38	172-19	"	20	1011	79.1	69	71	0	0	000-8-4	79	10	070	" "
1700	14-40	172-11	"	20	1011	78	66	67	0	0	000-8-4	79	12	107	" "
1800	14-53	172-03	Few Cld	20	1012	78	66	69	3	2	000-8-4	79	15	105	" "
1900	15-00	171-56	"	20	1012	77	68	70	1	0	000-8-4	79	12	105	" "
2000	15-08	171-42	"	20	1012	77	68	70	2	0	000-8-4	78	9	075	" "
2100	15-17	171-40	CLEAR	20	1013	78	68	71	10	10	000-8-4	78	8	100	045 10
2200	15-25	171-34	"	20	1013	78	68	71	10	10	000-8-4	78	8	100	045 10
2300	15-33	171-28	"	20	1013	78	68	71	10	10	000-8-4	78	8	100	045 10
2400	15-40	171-19	"	20	1013	78	68	71	10	10	000-8-4	78	8	100	047 10

REMARKS:

XRAY

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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DATE EASTER
SUNDAY 18 APRIL 1965

TIME	LAT N	LONG W	PRES WEA	VIS	SLP	DRY B	DEW PT	HUM %	TL SKY	OPA SKY	SWELL WAVES	SEA TEMP	WIND S	WIND D	SHIP COURSE/SPD.
0100	15° 48	171° 12	CLOUDY	20	1013	78.0	66	67	9	9	000-8-4	78	9	080	047-10
0200	15° 55	171° 04	"	20	1013	78.0	66	67	8	8	000-8-4	78	8	070	047-10
0300	16° 03	170° 57	"	20	1012	77.0	67	70	9	9	000-8-4	78	9	080	"-6
0400	16° 09	170° 49	"	20	1012	77.0	67	70	6	6	000-8-4	78	9	075	"-10
0500	16-12	170-42	"	20	1012	76	69	72	8	6	000-8-4	78	9	090	215-10
0600	16-18	171-35	"	20	1012	76	69	72	7	5	000-8-4	78	9	090	"-10
0700	16-25	171-27	"	20	1013	77	68	75	6	3	000-8-4	78	11	090	"-10
0800	16-32	171-19	Partly Cloudy	20	1014	78	68	71	3	0	000-8-4	78	10	130	225 10
0900	16-39	171-12	"	20	1014	78	68	71	3	0	000-8-4	78	10	130	225 10
1000	16-31	171-29	"	20	1014	78	68	71	3	0	000-8-4	78	10	130	225 10
1100	16-26	171-37	"	20	1014	78	68	71	3	0	000-8-4	78	10	120	225 10
1200	16-19	171-41	"	20	1014	78	68	71	3	0	000-8-4	78	10	130	225 10
1300	16-12	171-49	"	20	1012	80.0	68	68	2	1	000-8-4	79	10	120	225 10
1400	16-00	171-55	"	20	1011	80.0	68	68	2	1	000-8-4	79	10	100	225 10
1500	15-59	172-03	"	20	1011	80.0	68	68	3	2	000-8-4	79	9	105	" "
1600	15-52	172-11	"	20	1010	80.0	68	68	4	2	000-8-4	79	9	110	" "
1700	15-44	172-18	"	20	1010	80	68	68	3	1	000-8-4	79	9	110	" "
1800	15-37	172-23	"	20	1011	78	69	70	3	1	000-8-4	79	9	110	Stopped
1900	15-30	172-31	"	20	1011	78	70	70	3	1	000-8-4	79	9	115	225 10
2000	15-25	172-38	"	20	1010	78	70	70	4	2	000-8-4	78	9	115	" "
2100	15-22	172-45	O'CAST	15	1013	78	72	83	10	10	000-8-3	78	5	120	225 10
2200	15-14	172-53	"	15	1013	78	72	83	10	10	000-8-3	78	5	120	225 10
2300	15-07	172-00	"	15	1013	78	72	83	10	10	000-8-3	78	5	120	225 10
2400	15-00	173-07	"	15	1013	78	72	83	10	10	000-8-3	78	5	120	225 10

REMARKS:

XRAY

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-955
12-5-63

DATE MON 19 APRIL 1965

TIME	LAT N	LONG W	PRES WEA	VIS	SLP	DRY B	DEW PT	HUM %	TL SKY	OPA SKY	SWELL WAVES	SEA TEMP	WIND S	WIND D	SHIP COURSE/SPD.
0100	14-54	173-15	O'cast	20	1011	80.1	76	87	9	9	000/8/3	78	10	105	225-10
0200	14-46	173-22	"	20	1010	80.1	76	87	10	10	000/8/3	78	10	105	" "
0300	14-40	173-29	"	20	1009	79.1	75	87	10	10	000/8/3	78	12	115	" "
0400	14-33	173-36	"	20	1009	79.1	75	87	7	6	000/8/3	78	9	120	" "
0500	14-39	173-48	" / squalls	20	1009	78	72	83	10	8	100-8-3	78	9	110	315-10
0600	14-46	173-55	"	10	1010	78	69	75	9	7	100-8-3	78	9	110	" "
0700	14-53	174-03	CLDY	20	1011	78	69	75	9	7	100-8-3	78	9	120	" "
0800	15-01	174-10	"	20	1011	78	69	75	9	7	100-8-3	78	9	120	" "
0900	15-13	174-05	O'cast squalls	10	1012	77	72	87	10	10	000-8-3	78	10	130	047-10
1000	15-20	173-58	"	10	1012	77	72	87	10	10	000-8-3	78	10	150	047-10
1100	15-28	173-50	"	10	1012	77	72	87	10	10	000-8-3	78	10	180	047-10
1200	15-35	173-43	"	10	1012	77	72	87	10	10	040-8-3	78	10	180	047-10
1300	15-40	173-35	CLDY	15	1011	80.1	73	79	8	8	100-6-3	79	7	240	045-10
1400	15-47	173-27	"	20	1011	82.1	74	76	9	9	100-6-3	79	6	215	045-10
1500	15-55	173-20	PT CLDY	20	1010	80.1	74	83	5	4	100-6-3	79	5	190	" "
1600	16-03	173-12	FEW CLDS	20	1010	80.1	74	83	3	2	100-6-3	79	6	195	" "
1700	16-08	173-06	"	20	1011	80	74	83	3	2	07/100	79	"	"	" "
1800	16-08	173-00	"	20	1011	79	75	87	3	1	"	79	"	"	" "
1900	16-14	172-53	"	20	1012	79	75	87	7	5	"	79	"	"	" "
2000	16-22	172-45	Clear	20	1013	78	75	91	0	0	000	79	"	"	045-10
2100	16-31	172-39	"	20	1013	78	75	91	0	0	"	79	"	"	045-10
2200	16-38	172-31	"	20	1013	78	75	91	0	0	"	79	"	"	045-10
2300	16-45	172-24	"	20	1013	78	75	91	0	0	"	79	"	"	045-10
2400	16-52	172-17	"	20	1013	78	75	91	0	0	"	79	"	"	045-10

REMARKS:

XRAY

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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0-4=01 43-47=10
 5-9=02 48-52=11
 10-14=03 53-57=12
 15-19=04
 20-24=05
 25-29=06
 30-33=07
 34-38=08
 39-43=09

DATE TUES 20 APRIL 1965

TIME	LAT N	LONG W	PRES WEA	VIS	SLP	DRY B	DEW PT	HUMID %	TL SKY	OPA SKY	SWELLS		SEA TEMP	WIND S	WIND D	SHIP COURSE/SPD.
											WAVES					
0100	17-00	172-03	PT CLDY	20	1012	78.2	75	91	7	5	CALM	79	9	205	072-10	
0200	17-03	171-53	FEW CLOS	20	1011	78.2	75	91	3	2	"	79	14	195	072-10	
0300	17-06	171-43	PT CLDY	20	1011	78.2	75	91	6	5	4	79	13	190	" "	
0400	17-09	171-32	"	20	1011	78	75	91	4	3	"	79	12	195	" "	
0500	17-12	171-22	"	20	1011	78	74	87	2	1	"	79	10	210	" "	
0600	17-15	171-11	"	20	1012	78	74	87	4	2	"	79	11	200	" "	
0700	17-19	171-02	"	20	1012	78	74	87	5	2	"	79	11	225	" 10.5	
0800	17-23	170-49	"	20	1013	79	75	87	3	1	COND.	79	12	220	" 10.5	
0900	17-26	170-40	Few CLOS	20	1013	80	74	83	3	1	130-6-3	79	10	200	072 10.1	
1000	17-28	170-31	"	20	1013	80	74	83	3	1	130-6-3	79	10	200	072 10.1	
1100	17-29	170-32	"	20	1013	80	74	83	3	1	130-6-3	79	10	200	072 10.1	
1200	17-32	170-22	"	20	1013	80	74	83	3	1	130-6-3	79	10	200	072 10.1	
1300	17-38	170-10	"	20	1012	80.2	74	83	2	1	130/5/3	80	11	200	" "	
1400	17-40	169-56	"	20	1012	81.2	75	84	3	2	130/5/3	80	9	200	" "	
1500	17-42	169-48	Rain Sprinkle	20	1012	81.2	75	84	5	4	130/6/3	80	10	200	" "	
1600	17-44	169-39	PT CLDY	20	1012	81.2	74	79	7	5	130/6/3	80	11	200	" "	
1700	17-47	169-28	" "	20	1012	80	74	83	8	5	130/6/3	80	11	200	" "	
1800	17-49	169-15	" "	20	1013	78	78	91	8	7	130/6/3	80	11	200	" "	
1900	17-54	169-03	" "	20	1014	78	78	91	3	1	130/6/3	80	12	200	" "	
2000	17-57	168-52	" "	20	1014	78	78	91	3	1	130/6/3	80	12	200	" "	
2100	18-01	168-40	" "	20	1015	78	78	91	1	0	130-6-3	78	10	200	072 11.0	
2200	18-04	168-29	" "	20	1015	78	78	91	1	0	130-6-3	78	10	200	072 11.0	
2300	18-07	168-19	" "	20	1016	78	78	91	1	0	130-6-3	78	10	200	072 11.0	
2400	18-08	168-08	" "	20	1016	78	78	91	1	0	130-6-3	78	10	200	072 11.0	

REMARKS:

XRAY
 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-955

12-5-63

DATE WED. 21 APRIL 1965

TIME	LAT <u>N</u>	LONG <u>W</u>	PRES	WEA	VIS	SLP	DRY B	DEW PT	HUM %	TL SKY	OPA SKY	SWELLS		WIND S	WIND D	SHIP COURSE/SPD.
												WAVES	SEA TEMP			
0100	18-18	167-58	CLEAR		20	1015	78.5	74	87	0	0	130/6/3	80	12	190	072-11
0200	18-21	167-47	"		"	1014	78.5	74	87	1	1	130/6/3	80	13	185	072-11
0300	18-25	167-36	FEW CLDS		"	1013	78.5	72	83	3	2	130/6/3	80	11	185	" "
0400	18-28	167-25	"		20	1013	78	72	83	4	3	130/6/3	80	12	190	" "
0500	18-32	167-13	"		20	1014	78	72	83	3	1	130/6/3	80	12	180	" "
0600	18-35	167-02	"		20	1015	78	72	83	3	1	130/6/3	80	12	180	" "
0700	18-38	166-51	"		20	1015	78	72	83	2	0	130/6/3	80	13	180	" "
0800	18-41	166-40	"		20	1016	78	72	83	1	0	130/6/3	80	12	180	" "
0900	18-45	166-29	"		20	1017	79	72	83	1	0	130-6-3	80	10	180	072-11
1000	18-48	166-19	"		20	1017	79	72	83	1	0	130-6-3	80	8	180	072-11
1100	18-48	166-19	"		20	1017	79	72	83	1	0	130-6-3	80	8	180	072-11
1200	18-52	166-08	"		20	1017	79	72	83	1	0	130-6-3	80	8	180	072-11
1300	18-54	166-01	PT. CLOUDY		20	1016	80.5	73	79	5	4	130-6-3	77	6	185	074-11
1400	18-57	165-49	"		20	1016	80.5	73	79	7	5	130-6-3	77	4	190	074-11
1500	19-02	165-38	CLOUDY		20	1016	79.5	72	79	8	5	130-6-3	77	5	185	" "
1600	19-03	165-33	"		20	1016	80.5	73	79	8	5	130-6-3	77	5	185	" "
1700	19-06	165-23	PT. CLOUDY		20	1017	80	73	79	4	2	130-6-4	77	7	160	" "
1800	19-08	165-13	" "		20	1017	79	72	79	3	1	130-6-4	77	7	135	" "
1900	19-08	165-09	" "		20	1017	79	72	79	2	0	130-6-4	77	7	135	" "
2000	19-11	164-58	" "		20	1017	79	72	79	1	0	130-6-4	77	8	140	" "
2100	19-15	164-48	FEW CLDS		20	1017	78	72	83	1	0	130-6-3	77	5	140	074 10.3
2200	19-18	164-38	"		20	1017	78	72	83	1	0	130-6-3	77	5	140	074 10.3
2300	19-22	164-28	"		20	1017	78	72	83	1	0	130-6-3	77	5	140	074 10.3
2400	19-25	164-16	"		20	1017	78	72	83	1	0	130-6-3	77	5	140	074 10.3

REMARKS:

ALL TIMES LOCAL (XRAY); 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-955
12-5-63

DATE THURS 22 APRIL 1965

TIME	LAT N	LONG W	PRES WEA	VIS	SLP	DRY B	DEW PT	HUM %	TL SKY	OPA SKY	SWELL WAVES	SEA TEMP	WIND S	WIND D	SHIP COURSE/SPD.
0100	19-28	164-08	Few CLDS	20	1017	78.74	72	83	1	1	130/6/3	77	7	130	074-10
0200	19-32	163-57	"	20	1017	78.74	72	83	1	1	130/6/3	77	8	120	" "
0300	19-35	163-47	"	20	1017	77.73	71	82	3	2	130/6/3	77	10	130	" "
0400	19-38	163-36	"	20	1017	77.73	71	82	2	1	130/6/3	77	10	140	076 "
0500	19-41	163-25	"	20	1018	77	70	79	4	1	130/6/3	77	7	150	" "
0600	19-43	163-15	Mly Cldy	20	1018	77	70	79	5	2	130/6/3	77	8	140	" "
0700	19-46	163-10	" "	20	1019	78	69	75	4	1	120/6/3	77	8	135	" "
0800	19-49	163-30	" "	20	1020	78	69	75	6	5	120-6-4	77	10	130	076 10
0900	19-52	162-50	" "	20	1020	78	69	75	6	5	120-6-4	77	10	130	076 10
1000	19-53	162-45	" "	10	1020	78	69	75	8	6	120-6-4	77	12	130	076 10
1100	19-56	162-36	SQUALL	10	1020	78	69	75	8	6	120-6-4	77	8	130	076 10
1200	20-00	162-25	"	10	1020	78	69	75	8	6	120-6-4	77	8	130	076 10
1300	20-01	162-12	PT CLOUD	20	1019	80.74	72	75	5	4	120-6-4	78	8	140	076-10
1400	20-03	162-05	"	20	1017	79.74	71	75	7	5	120-6-4	78	9	150	076-10
1500	20-05	161-56	"	20	1017	79.74	71	75	6	5	120-6-4	78	10	155	076-10
1600	20-08	161-47	"	20	1017	79.74	71	75	8	6	120-6-4	78	8	120	" "
1700	20-08	161-40	CLOUDY	20	1016	78	69	75	9	7	120-6-4	78	9	130	" "
1800	20-10	161-29	"	20	1017	77	72	83	9	7	120-6-4	78	12	120	074 10
1900	20-13	161-19	" off rain	15	1018	77	72	83	10	8	120-6-4	78	13	120	" "
2000	20-17	161-10	0'cast	15	1018	77	72	83	10	8	120-6-4	78	8	090	074 10
2100	20-21	160-59	0'cast	15	1018	77	72	83	10	8	120-6-4	78	8	090	074 10
2200	20-24	160-48	Few clbs	20	1018	77	72	83	5	4	120-6-4	78	8	090	074 10
2300	20-27	160-40	Few clbs	20	1018	77	72	83	2	1	120-6-4	78	8	090	076 10
2400	20-30	160-33	" "	20	1018	77	72	83	2	1	120-6-4	78	8	090	076 10

REMARKS:

XRAY TO 2400

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-955
12-5-63

00-06 = +0
 07-12 = +1
 13-18 = +2
 19-24 = +3
 25-30 = +4
 31-36 = +5
 37-42 = +6
 43-48 = +7
 49-54 = +8
 54-59 = +9

27 and 0520-1806-

19-412, 163 21
20 01 168 27

176 mi

36

$$\begin{array}{r}
 110 \overline{) 332.000} \\
 \underline{330} \\
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 20
 \end{array}$$

DATE FRI 23 APRIL 1965

TIME LAT N LONG W PRES WEA VIS SLP DRY B DEW PT HUM% TL SKY OPA SKY SWELLS WAVES SEA TEMP WIND S WIND D SHIP COURSE/SPD.

TIME	LAT N	LONG W	PRES WEA	VIS	SLP	DRY B	DEW PT	HUM%	TL SKY	OPA SKY	SWELLS WAVES	SEA TEMP	WIND S	WIND D	SHIP COURSE/SPD.
+10-40 0100	20-32	160-25	Few clds	20	1018	77.13	71	82	1	1	120/6/4	75	6	110	076-10
0200	20-34	160-14	"	20	1017	77.24	73	87	1	1	120/6/4	75	8	130	076-10
+10-20 0300	20-36	160-04	CLEAR	20	1017	77.22	71	82	0	0	120/6/8	75	6	125	" "
0400	20-39	159-53	"	20	1017	77.13	71	82	0	0	120/6/5	75	7	120	" "
0500	20-40	159-42	Few clds	20	1017	76	70	82	1	0	120/6/5	75	0	—	072 10
0600	20-42	159-36	Partly "	20	1018	76	70	82	4	2	120/6/4	75	2	—	" "
0700	20-46	159-26	"	20	1018	77	70	79	6	4	120/6/4	75	0	—	" "
0800	20-50	159-16	Few clds	20	1018	77	70	76	6	4	120-6-4	75	0	—	" "
0900	20-53	159-05	Partly cld	20	1018	79	69	75	5	4	120-6-4	75	0	—	072 10
1000	20-56	158-52	"	20	1018	79	69	75	5	4	120-6-4	75	0	—	072 10
+10 1100	21-00	158-41	"	20	1018	79	69	75	5	4	120-6-4	75	5	200	072 10
1200	21-05	158-31	"	20	1018	79	69	75	5	4	120-6-4	75	5	200	072 10
1300															
1400															
1500															
1600															
1700															
1800															
1900															
2000															
2100															
2200															
2300															
2400															

REMARKS:

AFTER 0500

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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