AT SEA RECORDS - JUNE 1963 - Leewards

June 4, 1963--0935--Clearing harbor mouth. Two Brown Boobies sitting on buoy.

0958--Sighted Wedge-tailed Shearwater.

1004--Wedge-tailed Shearwater off port.

1009--Common Noddy off port.

1018--Common Noddy and three Gray-backed Terns flying northeast.

1025--Two Sooty Terns flying northeast.

1029--Wedge-tailed Shearwater, Grinnell off Barber's Point.

1034--Common Noddy, starboard side.

1035--Two Common Noddies, way off starboard.

1040--Common Noddy, port side, flying west.

1043--Common Noddy, port side, flying southwest.

1045--Common Noddy, starboard, flying north.

1051--Wedge-tailed Shearwater, off port.

1058--Seven Sooty Terns off starboard.

1059--Seven Sooty Terns off starboard, flying northeast.

1100--Six Sooty Terns off starboard. It appears that the Sooty Terns are sort of in a continuous stream, flying toward the northeast.

1101--Small craft off starboard bow, with many birds behind it. There are approximately forty Common Noddies, and ten Wedge-tailed Shearwaters, which are feeding in the water.

1110--Approximately 300 birds feeding off the bow, very close. There appears to be a 3:1 ratio of Common Noddies (225) to Wedge-tailed Shearwaters (75). One Brown Booby sighted.

1130--Red-footed Booby off starboard.

1200--We went for lunch and didn't return until 1400.

1421--One Wedge-tailed Shearwater was sighted off port, going southeast.

1450--An LST passed us going toward Pearl Harbor. We were interested, and

there was no Black-footed Albatross following it. At this point, no Black-footed Albatrosses are following us either.

1600--At this point, the sun is shining, as it has been all morning, and there are high scattered clouds. The wind is blowing from our rear, coming from the northeast. The seas are very calm, with many whitecaps, but not high seas at all. This has been a very nice, calm trip so far.

~~330--One Wedge-tailed Shearwater flying northeast.~~

~~345--Two Wedge-tailed Shearwaters flying northeastt~~

1610--Approximately twenty Red-footed Boobies 300yards off starboard bow flying in a northeast direction. There are also about ten Wedge-tailed Shearwaters in this group, and one Frigatebird. These birds are skimming right over the top of the water and appear to be possibly feeding. The Frigatebird is flying high over the group.

1622--One Red-footed Booby flying off the starboard side from south to north east.

1635--Five Sooty Terns flying northeast off port rear, about 300 yards. Also one Wedge-tailed Shearwater.

1644--One Wedge-tailed Shearwater off port side, flying west.

1645--One White-tailed Tropicbird which left off port side approximately 100 yards, got up again and crossed our rear, flying northeast. One Wedge-tailed Shearwater off port rear.

1650--Two porpises off starboard, very close. I can now count five of these. They are breaking the water close to the ship. They have a slightly curved dorsal fin, and are dark gray in color.

1700 to 1720--Supper. Upon returning , the porpises are still with us.

1722--A large flock of birds was sighted off the port bow. This included approximately five Red-footed Boobies, 25 Wedge-tailed Shearwaters, and approximately one dozen Sooty Terns. These were headed in an easterly

direction and passed on our port side, about 300 yards off.

1725--Two Wedge-tailed Shearwaters passed across the bow from port to starboard.

1727--One Wedge-tailed Shearwater off starboard side. We have still seen no Albatrosses since leaving Pearl Harbor.

1729-- Another Wedge-tailed Shearwater directly off the bow, very close.

1730--Kauai sighted off starboard bow. It is distant.

1738--One White-tailed Tropicbird off port side, flying east. One Wedge-tailed Shearwater crossed bow from port to starboard.

1808--One Wedge-tailed Shearwater off bow.

1812--One Wedge-tailed Shearwater far off starboard bow.

1829--Three Wedge-tailed Shearwaters, intermittently spaced across rear of ship. One Wedge-tailed Shearwater off starboard, approximately 100 yards.

1838--Two Wedge-tailed Shearwaters, off starboard side, between ship and Kauai.

1845--Two Wedge-tailed Shearwater off port bow.

1855--One Wedge-tailed Shearwater off starboard bow.

1857--At this point and LSP is passing us between us the island of Kauai. There are three or four Wedge-tailed Shearwaters betweenus. He is approximately 600 yards away. There are some other birds there...These all appear to be Wedge-tailed Shearwaters. There are approximately one dozen of them.

1905--Two Wedge-tailed Shearwaters way off bow,headed toward island. The sun is beginning to set behing the clouds at this time. It is not dark, but it beginning to get dark. I expected the ship to encounter many birds wading off shore just before dark, but these have not yet appeared in such numbers.

1906--Four Wedge-tailed Shearwaters behind the ship, head toward island.

1910--The wind speed now is 20 knots, relative.

1911--Wedge -tailed Shearwater off starboard, between us and island.

1912--One Wedge-tailed Shearwater extremely close to ship on starboard side.

1915--Three Wedge-tailed Shearwaters off bow.

1920--ThreeWedge-tailed Shearwaters off bow, going toward island.

1921--The sun has now set below the horizon.

1923--One Wedge-tailed Shearwater off starboard side, very close.

1926--Two Wedge-tailed Shearwaters off starboard bow, headed toward Kauai. Another Wedge-tailed Shearwater crossing bow.

1928--Flock of approximately 25 Wedge-tailed Shearwaters crossed directly in front of ship, headed toward the island of Kauai.

1932-- Wdge-tailed Shearwater headed east, off port.

1933--One Wedge-tailed Shearwater off starboard side, headed toward the island of Kauai.

1934--One Wedge-tailed Shearwater crossed bow, port to starboard.

1935--Since the ship has been passing Kauai, and it still has not passed it completely, we have been approximately four or five miles south of the island

1939--One Wedge-tailed Shearwater off Starboard side.

1940--One Wedge-tailed Shearwater crossed bow.

1941--One Wedge-tailed Shearwater crossed bow from port to starboard.

1942--Two Wedge-tailed Shearwaters crossed the bow.

1943--Wedge-tailed Shearwater off starboardHeaded toward Kauai.

1944--Two Wedge-tailed Shearwaters crossed bow, headed for Kauai. One Wedge-tailed Shearwater, additional.

1945--One Wedge-tailed Shearwater crossed bow, headed toward Kauai. Another Wedge-tailed Shearwater crossed the bow shortly after it.

1946--One Wedge-tailed Shearwater crossed bow, headed toward land.

1947--One Wedge-tailed Shearwater crossed bow.

1950--It is now too dark to count the number of birds crossing our bow. We are now apparently in the lee of the island, as the winds have dies down considerably and the white-caps, also. The trip today has been quite nice and calm, and the ship has rolled very little. There will be a full moon tonight, and it may be possible to spot birds which might happen to pass by. No Albatrosses have been spotted today.

June 5, 1963--0633--Two Sooty Terns sighted off center of ship.

0645--Three Sooty Terns off center of ship. We are now headed directly to Nihoa Island, which is approximately 20 miles to our fromt. The weather at this time is partly cloudy, high clouds on all sides. Directly over us, however, a large blue patch. There are still no Albatrosses with the ship this morning.

0650--Two Sooty Terns very close to the stern of the ship.

0652--One Wedge-tailed Shearwater off starboard stern. Also one Fairy Tern.

0654--Seven Noddies off starboard side. Four Sooty Terns flying high overhead.

0655--One Red-footed Booby flying east off our starboard.

0656--Five Common Noddies flying off starboard bow. Also one Christmas Island Shearwater.

0657--One Gray-backed Tern off starboard bow.

0659--One Red-footed Bobby flying east off port side.

0700-- One Fairy Tern off bow flying northeast.

0750--Three Christmas Island Shearwaters off bow, starboard side. Also several Wedge-tailed Shearwaters flying around. One Fairy Ternoff bow in the distance.

0750--One Christmas Island Shearwater off bow, flying eastward.

0755--Sooty Tern, immediately off starboard,

0758--Frigatebird between us and the island, which is about four to five miles away.

0800--One Blue-gray Noddy passed ship on starboard side.

0803-- There are now thirteen Frigatebirds over the ship, all of which appear to be immatures.

0805--One Fairy Tern off bow.

0808--One Red-footed Booby coming toward ship off starboard side, very close. Also one Wedge-tailed Shearwater off port, and one Christmas Island Shearwater

0810--Approximately 20 Bowler's Petrels off starboard side. All identifieations of Christmas Island Shearwater and Bowler's Petrel are doubtful, and interchangeable. There appears to be a patch of sand at a distance. This is hard to tell.

0814-- Five Sooty Terns off port. Also, two Wedge-tailed Shearwaters off starboard bow.

0815-- Three Wedge-tailed Shearwaters off starboard side. Also three off bow.

0816--Two Fairy Terns passed on starboard side.

0817--One Blue-gray Noddy off starboard. Flock of Shearwaters off starboard, approximately 25 to 50. They are very close to the island, approximately half a mile, and the birds are actually too numerous to count. Due to the sea, we were unable to land on Nihoa all during today, although a rubber boat went in three times to check on the possiblity of landing. During the day many birds flew around the ship, including Fairy Terns, which were quite numerous. These appeared to be nesting or roostingon the cliffs. These were on the northwest cliffs of the island, in the very center of the cliffs. Also many Blue-gray Noddies were around the ship, both species of Noddies. The Sooty Terns and Gray-backed Terns. We saw several flocks of Red-tailed Tropicbirds flying over, and also a very large flock of Frigatebirds, stayed around. Most of these were immatures. Only two females were seen throughout the day. Both Bulwer's Petrels and Christmas Island Petrels were quite numerous, especially just before dusk.

Approximately 2015 p.m. the chief boatswain's mate and several of the officer

spotted a Hawaiian Monk Seal close to the ship. They estimated it to be ~~a~~ approximately six or seven feet long.

June 6, 1963--Another attempt was made to land on Nihoa Island at 5 a.m., but, due to rough seas again, we were unable to land. Approximately ~~8:15~~ 0815, the first Black-footed Albatross was seen. This approached the ship from ~~the~~ northwest, but did not stay. During the morning we were able to collect three Blue-gray Noddies, four Bulwer's Petrels, and one Christmas Island Shearwater. The ship left left Nihoa bound for French Frigate Shoals at 10:30 a.m. At ~~10:45~~ 1045 another Black-footed Albatross approached from the Northwest, and passed the ship on the starboard side, going astern. It did not follow the ship. Leaving Nihoa, many flocks, 50 and up, of Bulwer's Petrels were seen, flying over the water feeding. One Masked Booby was also seen.

1112--Four Petrels passed on the starboard side.

1113--One Blue-gray Noddy, flying toward Nihoa. Also one Christmas Island Shearwater, way off starboard side. Three Bulwer's Petrels, close in on starboard side.

1115--Three Bulwer's Petrels off port side.

1116--One Fairy Tern way off starboard side. Also one Brown Booby, going south.

1117--Three Bulwer's Petrels off starboard side, and one off port side.

1120--Three Bulwer's Petrels off starboard side. Also three off port side.

1121--Two Bulwer's Petrels off starboard side, one off port stern.

1124--Two Bulwer's Petrels off starboard side. also five more. Also one Red-footed Booby close to bow headed north.

1125--Another Red-footed Booby crossed the bow headed north.

1126--Two Sooty Terns off starboard side, flying northwest.

1129--One Bulwer's Petrel off starboard bow. Make that two. Also one Black-

footed Albatross following right behind the ship. This marks the first one that actually followed the ship.

1130--Two Sooty Terns passed the ship.

1132-- One Bulwer's Petrel passed close in on starboard side. Also one Wedge-tailed Shearwater and three Sooty Terns.

Since our last report we have been eating lunch, and it is now 1211..One Black-footed Albatross behind the ship at the time. Also one Red-tailed Tropicbird flying overhead. The Albatross reported earlier, right after we left Nihoa, did not stay with the ship very long. The one following the ship, now, however, does not appear to be the same one. This one has a white patch on its rump.

1213--One Bulwer's Petrel off starboard side flying east.

1215--Two Bulwer's Petrels off starboard side.

1217--One Bulwer's Petrel crossed the bow.

1220--One Bulwer's Petrel crossed bow, headed in a northeast direction. Also three Sooty Tern overhead.

1222--Two Bulwer's Petrels crossed bow, headed northeast. Also, two more Sooty Terns

1224--Two Fairy Terns, one of which is way off on the port side. The other is way off starboard stern.

1226--One Bulwer's Petrel off stern. Also five Sooty Terns off port side, crossing to our stern.

1228--One Bulwer's Petrel off stern. Also one Fairy Tern off starboard stern, headed east.

1230--The Black -footed Albatross which has been with us since it was reported is still with us. There are also now two Fairy Terns, three Fairy Terns,

flying off our starboard side.

1232--One Fairy Tern crossed bow, headed northeast.

1236--One Fairy Tern feeding one hundred yards off bow. AlsoOne Sooty Tern.

1237--Flock of five Sooty Terns, two Gray backed Terns, and one Bulwer's Petrel.

1240--Two Sooty Terns flying east. One Fairy Tern way off starboard side.

1242--Three Sooty Terns passed starboard side, headed east.

1245--The Albatross which was following us earlier has now disappeared; we have not seen him for the past five or ten minutes.

1248--Two Bulwer's Petrels off port bow.

1249--One Wedge-tailed Shearwater crossed bow off starboard side. Also one Fairy Tern 600 yards off starboard side.

1251--One Bulwer's Petrel off stern. Also one Wedge-tailed Shearwater off port side.

1256--Two Red-tailed Tropicbirds, far off stern of ship, flying north. Also two Sooty Terns off starboard side. One Fairy Tern off starboard bow.

1300--Zero Albatross following ship. One Bulwer's Petrel off port side. One Wedge-tailed Shearwater off starboard bow.

1307--Also two Sooty Terns.

1308--One Wedge-tailed Shearwater off port side.

1312--One Bulwer's Petrel off stern. Also three Sooty Terns on the port side.

1315--No Albatrosses following the ship at this time.

1317--Six Sooty TErns following ship, one Bulwer's Petrel off port side. One Red-footed Booby off bow.

1320--One Bulwer's Petrel off port bow.

1323--One Bulwer's Petrel off bow.

1330--No Albatross following ship.

1337--One Fairy Tern off starboard bow.

1340--One Fairy Tern off starboard side headed northeast.

1350--One Bulwer's Petrel off bow.

1358--One Bulwer's Petrel off port side.

1415--No Albatross. Four Sooty Terns

1430--One Bulwer's Petrel. No Albatross. Sooty Terns off port bow--saw four.

1436--Three Sooty Terns, far off port side.

1445--No Albatross following ship.

1448--~~One~~ Two Red-tailed Tropicbird flying overhead. Also one Bulwer's Petrel.

1457--Petrel off port side, headed east.

1458--Two Bulwer's Petrels, 200 yards off port.

1500--Zero Albatross. One Bulwer's Petrel.

1503--One Bulwer's Petrel off port bow.

1511--One Bulwer's Petrel off port side.

1513--One Bulwer's Petrel off port side, flying east.

1515--Two Sooty Terns, way off stern, flying north. Nor Albatross.

1518--Four Sooty Terns flying north off starboard side.

1519--One Bulwer's Petrel off starboard side., flying east.

1520--One Bulwer's Petrel off starboard side, flying east. Also, one Wedge-tailed Shearwater crossed our ship, starboard to port side.

1522--One Bulwer's Petrel off port side, flying east, very close. Two Sooty Terns flying east off starboard side. Also two Wedge-tailed Shearwaters off starboard bow. These crossed the bow headed southward.

1524--Another Sooty Tern off starboard headed east.

1525--Seven Sooty Terns off port side flying east. One Fairy Tern off starboard side along with one Bulwer's Petrel.

1527--One Wedge-tailed Shearwater off port bow.

1530--No Albatross follwoing ship.

1630--One Laysan Albatross foll owing ship. Considerable distance behind.

1815-- Ten Sooty Terns, one Wedge-tailed Shearwater off starboard stern .

Two Wedge-tailed Shearwaters off starboard, approximately 100 yards. No Albatross at this time.

1817--A Laysan Albatross is following the ship, way back.

1818--One Wedge-tailed Shearwater off starboard.

1819--Three Wedge-tailed Shearwaters off starboard side, approximately 200 yards.

1820--One Red-tailed Tropicbird flying northeast and one Sooty Terns.

1821--One Wedge-tailed Shearwater off starboard side. Also one Bulwer's Petrel.

1822--Two Wedge-tailed Shearwaters off stern.

1824--~~////~~,Seven Sooty Terns flying east off port side.

1826--One Wedge-tailed Shearwater off starboard bow. Identification of this bird is questionable due to the fact that athis may be a Wedge-tailed Shearwater or a Bonin Island Petrel.

1829--Three Sooty Terns off stern, crossing to s tarboard side. One Wedge-tailed Shearwater off bow.

1836--One Wedge-tailed Shearwater off port bow. One off starboard, also.

1842--One Wedge-tailed Shearwater off starboard bow.

1845--One Wedge-tailed Shearwater off bow. No Albatross. Haven't seen it for the last 15 or 20 minutes. It is now getting quite dark--almost dark. The moon is coming out and will be full tonight. The sun had set. There are a few cloud s in the sky. The sea is rather calm, and the wind is blowing slightly, it appears to be coming out ~~to~~/ of the north.

1848--One Wedge-tailed Shearwater off port.

1849--Two Sooty Terns off port bow, flying east.

1850--One Wedge-tailed Shearwater off port bow, very close.

1854--Two Wedge-tailed Shearwaters off bow.

1855--One questionable Shearwater off bow.

1857-- Three Shearwaters off bow, two of which were Wedge-tailed and one of which was questionable. Also seven Sooty Terns, flying high, crossing bow of ship, headed northwest.

1858-- One Sooty Tern high overhead.

1859--Two Wedge-tailed Shearwaters off starboard side.

1900--Getting quite dark toward the stern of the ship, and no Albatross can be seen at this time.

1901--One Wedge-tailed Shearwater on starboard side. It is getting too dark to successfully make identification.

June 17, 1963--0730--Albatross count: seven Black-footed, one Laysan; Sooty Terns, three; Red-tailed Tropicbirds, two.

0845--Albatross count, 8 Black-foots. Flock of 8 Sooty Terns.

0852--One Laysan Albatross off bow. Three Red-tailed Tropicbirds flying northwest.

0854--Two Wedge -tailed off starboeard, flying northeast.

0800--Albatross Count--11 Black-foots. Seven Red-tailed Tropicbirds high over ship flying north. Approximately seven or eight Sooty Terns flying around the ship. Our position now is north of Laysan Island approximately 47 miles. We will be abeam of Laysan at approximately 9 a.m.

0805--Two Wedge-tailed Shearwaters off port bow, headed south.

0810--One Wege-tailed Shearwater off bow.

0812--Flock of 20 Sooty Terns.

0825--Approximately 30 Sooty Terns off starboard bow, in large flock circling overhead. Seven Black-footed Albatrosses around ship. One Wedge-tailed Shearwater off stern.

0819--Two Red-tailed Tropicbirds off starboard, along with four Sooty Terns and one flying fish.

0821--Approximately 15 Sooty Terns off port bow, 300 yards, appear to be feeding.

0824--One Wedge-tailed Shearwater off port side, headed southeast. Also two Wedge-tailed Shearwaters off port bow, 200 yards, also headed southeast. Also ten Sooty Terns overhead, headed west.

0825--One Wedge-tailed Shearwater off port bow, headed northwest.

0826--Three Wedge-tailed Shearwaters very close off starboard bow.

0828--One Red-tailed Tropicbird flew over ship headed north. Three Sooty Terns approaching starboard stern.

0830--One Red-tailed Tropicbird flying over ship. ~~Four~~ Five Sooty Terns around ship. Albatross count--four Black-foot.

0831--One Wedge-tailed Shearwater crossed ship headed southy very close to ship. The sea this morning is very nice. The ship is hardly rolling and pitching at all, and the weatheris clear with clouds on the horizon in almost all directions. We are traveling at 11 knots this morning, after traveling all night at 13 knots .

0832-- Two Red-tailed Tropicbirds flying overhead, from north to south. ~~One Wedge-tailed Shearwater headed south very close to ship~~.Approach ship, headed northeast, circling back.

0834--Approximately 25 Sooty Terns off starboard bow. One Wedge-tailed Shearwater off port stern.

0835--Flock of 7 Sooty Terns off starboard bow, 600 yards. 0

0836--~~One~~ Three Wedge-tailed Shearwater off starboard bow. The Red-tailed Tropicbirds are still with us.

0837--Eight Sooty Terns Around ship. Two Wedgd-Tailed Shearwaters off bow, 100 yards.

0839--Two Wedge-tailed Shearwaters off port bow.

0840--One Laysan Albatross, way off port side.

0841--Red-tailed Tropicbird on the water off bow. Could have been one of the two which have been flying around the ship, since last reported. Three Black-footed Albatrosses in the water in the same vicinity.

0842--The two Red-tailed Tropicbirds are still with us, but are now flying toward the southwest. There are approximately 15 Sooty Terns circling ship. Albatross count at 0845--three Black-foots. Also one Wedge-tailed Shearwater on starboard side.

0846--One Wedge-tailed Shearwater off starboard bow.

0849--Ten Sooty Terns in flock off starboard side.

0900--Albatross count--five Black-foots

0902--Approximately flock of 30 Sooty Terns, flying very low over the water. Appear to be feeding off starboard side 600 yards. Also among them were approximately ten to fifteen Wedge-tailed Shearwaters. Most of these were on the water, and would occasionally fly.

0905--One Laysan Albatross off bow. Flock of 40 Sooty Terns flying around ship

0906--One Wedge-tailed Shearwater immediately off starboard bow.

0908--One Wedge-tailed Shearwater off starboard bow. More than eight Sooty Terns around ship, headed northwest.

0910--Wedge-tailed Shearwater off port side. Approximately one dozen Sooty Terns flying continuously around ship. Also three Wedge-tailed Shearwaters off starboard bow.

0914--Four Wedge-tailed Shearwaters off starborad bow. Also six Sooty Terns flying across from port to starboard off the bow.

0915--Two Black- footed Albatrosses. Also flock of approximately ten Sooty Terns around ship.

0920--Two Wedge-tailed Shearwaters off port side, one off starboard side.

0921--Shearwaters off port bow of ship.

0930--Zero Albatrosses behind ship. Two Wedge-tailed Shearwaters off port side, two off starboard.

0932-- One Laysan Albatross way off starboard bow

0934-- One Wedge~~d~~-tailed Shearwater off starboard bow

0936-- Three Wedge~~d~~-tailed Shearwater stern (off), we are now meeting a ship off starboard side, approximately 2 miles

0942-- Three to ~~-~~Four Sooty Terns flying around ship, also one Wedge~~d~~-tailed Shearwater off starboard bow.

0945-- One Black footed Albatross following ship, also one Wedge~~d~~-tailed Shearwater off port side, and eleven ~~seven~~ Sooty Terns. ~~correction eleven~~

0950-- One Laysan Albatross directly off bow of ship approaching ~~to~~ port side, also one Wedge~~d~~-tailed Shearwater off starboard side and five ~~two~~ Sooty Terns following ship, ~~correction five sooty terns~~

0955-- Seven Sooty Terns crossed bow ship, three more off stern.

0958-- One Laysan Albatross off ~~starboard~~ port ~~correction~~ bow; also a flock of approximately fiftteen sooty terns off stern of ship

1000-- Two Black-foot~~ed~~ Albatross~~es~~ following ship, large flock of Sooty Terns way off port bow on the horizon, approximately five around ship.

1003-- Approximately fourteen sooty terns off starboard side

1015-- Two Sooty terns overhead, three Black-foot~~ed~~ Albatross~~es~~ following ship

1021-- One Laysan Albatross off bow, also one Wedge~~d~~ tailed Shearwater off bow, five Sooty Terns passed ship

1023-- One Wedged tailed Shearwater off starboard side

1024-- Flock of twenty Sooty Terns, off starboard side, headed northwest.

1026-- Two Wedge~~d~~-tailed Shearwaters crossed bow from starboard to port.

1030-- No Albatross behind ship

1035-- Two Black-foot~~ed~~ Albatross following ship, also two Sooty Terns passed starboard side, headed east.

1052-- One Laysan Albatross off port side, six ~~four~~ Black-foot~~ed~~ Albatrosses behind ship, ~~correction six black foot~~

also one Laysan Albatross off starboard side crossing to port.

1054-- One Sooty Tern, and ~~also~~ two Red-tailed Tropicbirds circling ship.

1100-- Six Black-footed Albatrosses following ship, two Sooty Terns off bow, also two tropicbirds still with us, one Wedge-tailed shearwater off starboard bow.

1112-- One Wedged tailed shearwater off bow, headed north

1114-- Five Sooty terns over ship

1115-- Nine Blacked footed Albatross behind ship

1127-- Three Red tailed Tropicbirds over ship

1130-- Four Black foot Albatross, one Laysan Albatross

1134-- One Wedge-tailed Shearwater off stern, a flock of approximately fiftteen Sooty Terns off bow, Red-tailed Tropicbirds are still with us

1230-- Five Black-footed Albatross following ship, one Wedge-tailed Shearwater off starboard, one Red-tailed Tropicbird over ship

1242-- Two Wedge-tailed Shearwaters off bow

1244-- Garbage dumped over fantail, fourteen Albatrosses around the ship also one Laysan Albatross, the Red-tailed Tropicbird is still with us

1247-- One Wedge-tailed Shearwater passed starboard side, headed east; also four Sooty Terns off starboard headed north.

1251-- Flock of seven Sooty Terns over ship high, headed northeast

1256-- One Red tailed Tropicbird over head

1300-- Five Black-footed Albatross following ship, one Red-tailed Tropicbird and three Sooty Terns

1315-- Five Black-footed Albatrosses, one Red-tailed Tropicbird, one Sooty Tern

1330-- One Black footed Albatross

1345-- Four Black footed Albatross

1415-- Three Black footed Albatross, one Laysan Albatross

1430-- Three Black footed Albatross following ship

1444-- Flock of ten Sooty terns off starboard

1445-- Two Black foot Albatross and one Laysan

1500-- Two Black foot Albatross following ship

1515-- Five Black footed Albatross following ship, also two Sooty terns

1530-- Four Black foot Albatross following ship, one Laysan Albatross

1533-- Four Sooty terns off port

1540-- One Sooty tern off port

1545-- Five Black footed Albatross, two Laysan following ship

1600-- Four Black-footed Albatross, and one Laysan also two Red-tailed Tropicbirds

1604-- One Sooty Tern off port side, Red-tailed Tropicbird still with us

1615-- ~~Four Black-footed Albatross,~~ ~~correction~~ Five Black-footed Albatrosses behind ship and one Laysan Albatross

1621-- Bonin Island Petrel off port bow, possibly very very small, appears to be smaller than the Wedge-tailed Shearwater but positive identification was not made

1624-- Sooty terns following ship

1628-- Three Sooty terns past over ship headed northwest

1630-- Three Black foot Albatross following ship, one Wedge-tailed Shearwater off stern

1635-- Laysan Albatross back with us

1640-- Four Sooty Terns off rear of ship head north

1645-- Four Black-footed Albatross following ship

1815-- Six Black foot Albatross following ship

1857-- One Wedge-tailed Shearwater off stern

1830-- Four Black foot Albatross following ship, also Wedge-tailed Shearwaters off stern

1840-- Seven Sooty Terns off starboard side

1845-- Five Black footed Albatross behind ship

1421 Wabgetable Sluewater — off port going SB

June 4, 1963

09:35 - clearing harbor mouth
- Brown Booby - R

0958 - Wedge Tailed Shearwater

1004 " " " - off port

1009 Common Noddy " "

1018 - Common Noddy + 3 grey-backed terns → NE

1025 - 2 sooty terns → NE

1029 wedge Tailed Shearwater - off Barbers Point

1034 common Noddy - Starboard

1035 2 common noddies - way off Starboard

1040 common noddy - Port side → W

1043 " - Port side → SW

1045 " " Starboard → N

1051 wedgetailed Shearwater - port

1058 sooty tern (6) + 1 off starboard

1059 " " (4) + (3) " " → NE

1100 " " (6) sort of a continuous stream

1101 small craft off starboard bow with many birds behind it.

Approx 40 common noddies
and 10 wedgetailed shearwaters
~~20 wedgetails~~
~~40 sooties~~

1110 Approx 300 birds feeding off bow
3 to 1 ratio com. noddies to wedgetail
1 brown booby

1130 Red footed Booby off starboard

Location At Sea

Observer Marshall & Trevor Date June 30 Time 12:00 to 5:00

Weather clear 5/10 cloud cover

SPECIES	Abundance 1-10	10-100	100-1000	1000 +	Breeding Nests	Eggs	Young	Remarks	12:00			3:00			4:00	
Laysan Albatross		2	2	2	2	1	1	5		1	1	1	1	1	1	1
Black-footed Albatross		3	3	2	2	2	1	6	2	1	3	3	3	3	3	3
Wedge-tailed Shearwater												1			1	
Christmas I. Shearwater																
Audubon's Shearwater																
Bonin I. Petrel		1						3 2				1		1		
Phoenix I. Petrel																
Bulwer's Petrel																
Sooty Petrel																
Red-tailed Tropicbird			1			1	1	2								
White-tailed Tropicbird																
Masked Booby																
Brown Booby																
Red-footed Booby																
Great Frigatebird																
Golden Plover																
Ruddy Turnstone																
Wandering Tattler																
Sanderling																
Bristle-thighed Curlew																
Sooty Tern							1	5	2			1				
Gray-backed Tern																
Brown-winged Tern																
Common Noddy			1		2											
Hawaiian Noddy																
Blue-gray Noddy																
Fairy Tern							1	2				1				

Location: At Sea

Observer: Marshall & Trevor Date: June 30 Time: 7 AM to 12 AM

Weather: clear 5/10th cloud cover

SPECIES	Abundance				Breeding				9:00								10:00				11:00				
	7:00	8:00	9:00	10:00 +	Nests	Eggs	Young		Remarks																
Laysan Albatross		24			10	8	8	7	10	4	4	2	4	2	4	3	2								
Black-footed Albatross								2	2	3		3	4	3	5	3	3	2							
Wedge-tailed Shearwater						2				1				1		2									
Christmas I. Shearwater																									
Audubon's Shearwater																									
Bonin I. Petrel		1					1			2		2						1		1					
Phoenix I. Petrel																									
Bulwer's Petrel																									
Sooty Petrel																									
Red-tailed Tropicbird				1	1						1				1			1							
White-tailed Tropicbird																									
Masked Booby																									
Brown Booby																									
Red-footed Booby																									
Great Frigatebird													1												
Golden Plover																									
Ruddy Turnstone																									
Wandering Tattler																									
Sanderling																									
Bristle-thighed Curlew																									
Sooty Tern		1	1	2		10	8				4	1			3	2	1	2							
Gray-backed Tern																									
Brown-winged Tern																									
Common Noddy						2																			
Hawaiian Noddy																									
Blue-gray Noddy																									
Fairy Tern					1										1										

HOURLY POSITIONS.

1200W TO 2400X 6-4-63

1200 W	21-21 N 158-20 W
1300 W	21-25 N 158-31 W
1400 W	21-29 N 158-41 W
1500 W	21-33 N 158-51 W
1600 W	21-37 N 159-02 W
1700 W	21-41 N 159-12 W
1800 W	21-45 N 159-23 W
1900 W	21-49 N 159-33 W
1900 X	21-53 N 159-44 W
2000 X	21-59 N 159-54 W
2100 X	22-06 N 160-02 W
2200 X	22-12 N 160-13 W
2300 X	22-17 N 160-24 W
2400 X	22-22 N 160-35 W

HOURLY POSITIONS.

0100X TO 0200X 6-5-63

0100 X	22-28 N 160-45 W
0200 X	22-33 N 160-56 W
0300 X	22-39 N 161-07 W
0400 X	22-44 N 161-19 W
0500 X	22-49 N 161-29 W
0600 X	22-55 N 161-39 W
0700 X	23-00 N 161-50 W
800	23-05 162-01

HOURLEY POSITIONS.

1100 X TO 2400 X 6-6-63

1100 X	23-05 N 162-01 W
1200 X	23-09 N 162-14 W
1300 X	23-13 N 162-28 W
1400 X	23-17 N 162-42 W
1500 X	23-21 N 162-58 W
1600 X	23-24 N 163-08 W
1700 X	23-26 N 163-22 W
1800 X	23-29 N 163-36 W
1900 X	23-30 N 163-50 W
2000 X	23-31 N 164-03 W
2100 X	23-34 N 164-16 W
2200 X	23-37 N 164-28 W
2300 X	23-41 N 164-42 W
2400 X	23-44 N 164-55 W

HOURLY POSITIONS.

0100X TO 0700 X 6-7-63

0100 X	23-46 N 165-07 W
0200 X	23-48 N 165-20 W
0300 X	23-51 N 165-33 W
0400 X	23-53 N 165-46 W
0500 X	23-55 N 165-58 W
0600 X	23-58 N 166-11 W
0700 X	23-52 N 166-26 W

HOURLY POSITIONS 15 JUNE, 63

1600X TO 2400X

1600	23-50 N 166-19 W
1700	23-54 N 166-26 W
1800	23-58 N 166-33 W
1900	24-03 N 166-40 W
2000	24-08 N 166-46 W
2100	24-13 N 166-53 W
2200	24-17 N 166-59 W
2300	24-22 N 167-06 W
2400	24-26 N 167-13 W

HOURLY POSITIONS 16 JUNE, 63

0100X TO 2400X

0100	24-31 N 167-20 W
0200	24-36 N 167-26 W
0300	24-41 N 167-33 W
0400	24-45 N 167-40 W
0500	24-50 N 167-46 W
0600	24-55 N 167-53 W
0700	25-00 N 168-00 W
1600	25-05 N 168-04 W
1700	25-14 N 168-12 W
1800	25-24 N 168-21 W
1900	25-29 N 168-32 W
2000	25-32 N 168-45 W
2100	25-37 N 168-59 W
2200	25-43 N 169-13 W
2300	25-47 N 169-26 W
2400	25-51 N 169-40 W

HOURLY POSITIONS 17 JUNE, 63

0100 X TO 2400 X

0100	25-56 N 169-54 W
0200	26-01 N 170-08 W
0300	26-06 N 170-22 W
0400	26-11 N 170-35 W
0500	26-16 N 170-49 W
0600	26-19 N 171-01 W
0700	26-24 N 171-15 W
0800	26-29 N 171-28 W
0900	26-32 N 171-39 W
1000	26-36 N 171-51 W
1100	26-40 N 172-03 W
1200	26-43 N 172-15 W
1300	26-47 N 172-26 W
1400	26-51 N 172-39 W
1500	26-55 N 172-51 W
1600	26-59 N 173-04 W
1700	27-03 N 173-16 W
1800	27-07 N 173-28 W
1900	27-11 N 173-41 W
2000	27-15 N 173-53 W
2100	27-17 N 174-04 W
2200	27-20 N 174-14 W
2300	27-22 N 174-24 W
2400	27-24 N 174-35 W

HOURLY POSITIONS 18 JUNE, 63

0100 X TO 0700 X

0100	27-27 N 174-45 W
0200	27-29 N 174-56 W
0300	27-31 N 175-07 W
0400	27-34 N 175-17 W
0500	27-36 N 175-27 W
0600	27-39 N 175-38 W
0700	27-43 N 175-47 W

HOURLY POSITIONS

0700 X TO 2000 X 6-30-63

0700	28-06 N 177-23 W
0800	27-56 N 177-21 W
0900	27-46 N 177-19 W
1000	27-36 N 177-18 W
1100	27-25 N 177-16 W
1200	27-15 N 177-14 W
1300	27-05 N 177-12 W
1400	26-54 N 177-10 W
1500	26-44 N 177-08 W
1600	26-34 N 177-07 W
1700	26-23 N 177-06 W
1800	26-13 N 177-04 W
1900	26-03 N 177-02 W
2000	25-53 N 177-01 W

Location

Observer Date July 1 Time to

Weather

SPECIES	Abundance 1-10	10-100	100-1000	1000 +	Breeding Nests	Eggs	Young	Remarks 9:00	10:00	11:00
Laysan Albatross										
Black-footed Albatross										
Wedge-tailed Shearwater										1
Christmas I. Shearwater										
Audubon's Shearwater										
Bonin I. Petrel								1		
Phoenix I. Petrel										
Bulwer's Petrel										
Sooty Petrel										
Red-tailed Tropicbird					1		1		2 2	1 1
White-tailed Tropicbird										
Masked Booby										
Brown Booby										
Red-footed Booby										
Great Frigatebird										
Golden Plover										
Ruddy Turnstone										
Wandering Tattler										
Sanderling										
Bristle-thighed Curlew										
Sooty Tern	1				6	3	6	1		1 102
Gray-backed Tern										
Brown-winged Tern										
Common Noddy										
Hawaiian Noddy										
Blue-gray Noddy										
Fairy Tern										

Location

Observer Date Time to

Weather

SPECIES	Abundance				Breeding			Remarks 2:00 3:00 4:00
	1-10	10-100	100-1000	1000 +	Nests	Eggs	Young	
Laysan Albatross								
Black-footed Albatross						1		
Wedge-tailed Shearwater	1							
Christmas I. Shearwater								
Audubon's Shearwater								
Bonin I. Petrel								
Phoenix I. Petrel								
Bulwer's Petrel								
Sooty Petrel								
Red-tailed Tropicbird								
White-tailed Tropicbird								
Masked Booby								
Brown Booby								
Red-footed Booby								
Great Frigatebird								
Golden Plover								
Ruddy Turnstone								
Wandering Tattler								
Sanderling								
Bristle-thighed Curlew								
Sooty Tern	63							
Gray-backed Tern								
Brown-winged Tern								
Common Noddy								
Hawaiian Noddy								
Blue-gray Noddy								
Fairy Tern								

Location

Observer Date Time to

Weather

SPECIES	Abundance				Breeding			Remarks			
	1-10	10-100	100-1000	1000 +	Nests	Eggs	Young	8:00	9:00	10:00	11:00
Laysan Albatross											
Black-footed Albatross											
Wedge-tailed Shearwater	1	21	1	6	8	94	7		2	6	3
Christmas I. Shearwater											
Audubon's Shearwater											
Bonin I. Petrel								1			
Phoenix I. Petrel											
Bulwer's Petrel											
Sooty Petrel											
Red-tailed Tropicbird											
White-tailed Tropicbird											
Masked Booby											
Brown Booby											
Red-footed Booby											
Great Frigatebird											
Golden Plover											
Ruddy Turnstone											
Wandering Tattler											
Sanderling											
Bristle-thighed Curlew											
Sooty Tern		1		1	11	4	10	17	2	11	16 7 1
Gray-backed Tern											
Brown-winged Tern											
Common Noddy											
Hawaiian Noddy											
Blue-gray Noddy											
Fairy Tern											

Location at Sea

Observer

Date July 2 Time 17:00 to 5:00

Weather

SPECIES	Abundance 1-10	Abundance 10-100	Abundance 100-1000	Abundance 1000 +	Breeding Nests	Breeding Eggs	Breeding Young	Remarks 2:00	3:00	4:00
Laysan Albatross										
Black-footed Albatross										
Wedge-tailed Shearwater	1	1	10			1	3		26	4 1
Christmas I. Shearwater										
Audubon's Shearwater										
Bonin I. Petrel										
Phoenix I. Petrel										
Bulwer's Petrel										
Sooty Petrel										
Red-tailed Tropicbird								1		
White-tailed Tropicbird										
Masked Booby										
Brown Booby										
Red-footed Booby										
Great Frigatebird										
Golden Plover										
Ruddy Turnstone										
Wandering Tattler										
Sanderling										
Bristle-thighed Curlew										
Sooty Tern	2		30			12	6		30	12 B
Gray-backed Tern										
Brown-winged Tern										
Common Noddy										
Hawaiian Noddy										
Blue-gray Noddy										
Fairy Tern							1			

Location

Observer Date Time 7 to 12 A.M

Weather

SPECIES	Abundance				Breeding			Remarks
	1-10	10-100	100-1000	1000 +	Nests	Eggs	Young	
Laysan Albatross								
Black-footed Albatross								
Wedge-tailed Shearwater	2		1	2				
Christmas I. Shearwater								
Audubon's Shearwater								
Bonin I. Petrel			1	1				
Phoenix I. Petrel								
Bulwer's Petrel								
Sooty Petrel								
Red-tailed Tropicbird								
White-tailed Tropicbird								
Masked Booby								
Brown Booby								
Red-footed Booby								
Great Frigatebird								
Golden Plover								
Ruddy Turnstone								
Wandering Tattler								
Sanderling								
Bristle-thighed Curlew								
Sooty Tern								
Gray-backed Tern								
Brown-winged Tern								
Common Noddy								
Hawaiian Noddy								
Blue-gray Noddy								
Fairy Tern								

Location

Observer Date July 3 Time 12 to 5 P.M

Weather clear 5/10 cloud cover

SPECIES	Abundance				Breeding				12:00	1:00	2:00	3:00	4:00
	1-10	10-100	100-1000	1000+	Nests	Eggs	Young		Remarks				
Laysan Albatross													
Black-footed Albatross													
Wedge-tailed Shearwater													1
Christmas I. Shearwater													
Audubon's Shearwater													
Bonin I. Petrel	1									1			1
Phoenix I. Petrel													
Bulwer's Petrel													
Sooty Petrel													
Red-tailed Tropicbird												1	
White-tailed Tropicbird													
Masked Booby													
Brown Booby													
Red-footed Booby													
Great Frigatebird													
Golden Plover													
Ruddy Turnstone													
Wandering Tattler													
Sanderling													
Bristle-thighed Curlew													
Sooty Tern													
Gray-backed Tern													
Brown-winged Tern													
Common Noddy													
Hawaiian Noddy													
Blue-gray Noddy													
Fairy Tern													

Location

Observer Date July 4 Time 7 to 12 P.M.

Weather Clear 2/10 clouds

SPECIES	Abundance 7:00+ 1-10	10-100	100-1000	1000+	Breeding 8:00 Nests	Eggs	Young		9:00 Remarks	10:00	11:00
Laysan Albatross											
Black-footed Albatross											
Wedge-tailed Shearwater											
Christmas I. Shearwater											25
Audubon's Shearwater											
Bonin I. Petrel								5		1	2
Phoenix I. Petrel											
Bulwer's Petrel											
Sooty Petrel											
Red-tailed Tropicbird		1									
White-tailed Tropicbird											
Masked Booby										1	
Brown Booby											
Red-footed Booby											
Great Frigatebird											
Golden Plover											
Ruddy Turnstone											
Wandering Tattler											
Sanderling											
Bristle-thighed Curlew											
Sooty Tern											
Gray-backed Tern											
Brown-winged Tern											
Common Noddy											
Hawaiian Noddy											
Blue-gray Noddy											
Fairy Tern											

Location

Observer — Date July 4 — Time 12 to 5

Weather

SPECIES	Abundance 12:00 1-10	10-100	100-1000	1000+	Breeding 1:00 Nests	Eggs	Young		2:00 Remarks				3:00				4:00				
Laysan Albatross																					
Black-footed Albatross																					
Wedge-tailed Shearwater																					
Christmas I. Shearwater										3		8		1			2				
Audubon's Shearwater																					
Bonin I. Petrel				1							1					1					
Phoenix I. Petrel																					
Bulwer's Petrel																					
Sooty Petrel																					
Red-tailed Tropicbird																					
White-tailed Tropicbird																					
Masked Booby																					
Brown Booby																					
Red-footed Booby																					
Great Frigatebird																					
Golden Plover																					
Ruddy Turnstone																					
Wandering Tattler																					
Sanderling																					
Bristle-thighed Curlew																					
Sooty Tern																					
Gray-backed Tern																					
Brown-winged Tern																					
Common Noddy																					
Hawaiian Noddy																					
Blue-gray Noddy																					
Fairy Tern																					

Location at sea

Observer

Date JULY 5 Time 7 to 12

Weather

SPECIES	Abundance 7:00 1-10	10-100	100-1000	1000 +	Breeding 8:00 Nests	Eggs	Young	Remarks 9:00	10:00	11:00
Laysan Albatross										
Black-footed Albatross										
Wedge-tailed Shearwater										
Christmas I. Shearwater										1
Audubon's Shearwater										
Bonin I. Petrel										
Phoenix I. Petrel										
Bulwer's Petrel										
Sooty Petrel									1	
Red-tailed Tropicbird										1
White-tailed Tropicbird										
Masked Booby										
Brown Booby										
Red-footed Booby										
Great Frigatebird										
Golden Plover										
Ruddy Turnstone										
Wandering Tattler										
Sanderling										
Bristle-thighed Curlew										
Sooty Tern										
Gray-backed Tern										
Brown-winged Tern										
Common Noddy										
Hawaiian Noddy										
Blue-gray Noddy										
Fairy Tern										

Location

Observer — Date JULY 5 — Time 12 to 5

Weather

SPECIES	Abundance 12:00 1-10	10-100	100-1000	1000 +	Breeding 1:00 Nests	Eggs	Young	Remarks 2:00				3:00				4:00				
Laysan Albatross																				
Black-footed Albatross																				
Wedge-tailed Shearwater																				
Christmas I. Shearwater																				
Audubon's Shearwater																				
Bonin I. Petrel			1						1											
Phoenix I. Petrel																				
Bulwer's Petrel																				
Sooty Petrel																				
Red-tailed Tropicbird																				
White-tailed Tropicbird																				
Masked Booby				1																
Brown Booby																				
Red-footed Booby																				
Great Frigatebird																				
Golden Plover																				
Ruddy Turnstone																				
Wandering Tattler																				
Sanderling																				
Bristle-thighed Curlew																				
Sooty Tern																				
Gray-backed Tern																				
Brown-winged Tern																				
Common Noddy																				
Hawaiian Noddy																				
Blue-gray Noddy																				
Fairy Tern																				

Location At Sea between Baker & Enderbury

Observer Marshall & Trevor Date July 5 Time 10:00 to 3:00

Weather clear 4/10

SPECIES	Abundance 10	100	1000	+	Breeding Nests	Eggs	Young		12:00 Remarks				1:00 13:00				2:00				3
Laysan Albatross																					
Black-footed Albatross																					
Wedge-tailed Shearwater																					
Christmas I. Shearwater																			1		
Audubon's Shearwater																					
Bonin I. Petrel																					
Phoenix I. Petrel			1	1																	
Bulwer's Petrel																					
Sooty Petrel																					
Red-tailed Tropicbird							P														
White-tailed Tropicbird																					
Masked Booby		1																	1	1	
Brown Booby																					
Red-footed Booby																					
Great Frigatebird																					
Golden Plover																					
Ruddy Turnstone																					
Wandering Tattler																					
Sanderling																					
Bristle-thighed Curlew																					
Sooty Tern		1		1	1														P		
Gray-backed Tern																					
Brown-winged Tern																					
Common Noddy																					
Hawaiian Noddy																					
Blue-gray Noddy																					
Fairy Tern																			P		

300

Location

Observer Date Time to

Weather

SPECIES	Abundance				Breeding			Remarks
	1-10	10-100	100-1000	1000 +	Nests	Eggs	Young	
Laysan Albatross								
Black-footed Albatross								
Wedge-tailed Shearwater								
Christmas I. Shearwater								
Audubon's Shearwater								
Bonin I. Petrel								
Phoenix I. Petrel								
Bulwer's Petrel								
Sooty Petrel								
Red-tailed Tropicbird								
White-tailed Tropicbird								
Masked Booby								
Brown Booby								
Red-footed Booby								
Great Frigatebird								
Golden Plover								
Ruddy Turnstone								
Wandering Tattler								
Sanderling								
Bristle-thighed Curlew								
Sooty Tern								
Gray-backed Tern								
Brown-winged Tern								
Common Noddy								
Hawaiian Noddy								
Blue-gray Noddy								
Fairy Tern								

HOURLY POSITIONS

0700X TO 2000X 7-1-63

	23-57 N
0700	176-49 W
	23-47 N
0800	176-47 W
	23-37 N
0900	176-45 W
	23-27 N
1000	176-43 W
	23-17 N
1100	176-41 W
	23-07 N
1200	176-39 W
	22-59 N
1300	176-38 W
	22-49 N
1400	176-36 W
	22-39 N
1500	176-34 W
	22-29 N
1600	176-32 W
	22-19 N
1700	176-30 W
	22-09 N
1800	176-28 W
	21-59 N
1900	176-26 W
	21-49 N
2000	176-25 W

HOURLY POSITIONS

0700X - 2000X 7-2-63

0700	19-58N 176-13W
0800	19-46N 176-12W
0900	19-34N 176-10W
1000	19-22N 176-08W
1100	19-10N 176-06W
1200	18-58N 176-04W
1300	18-46N 176-02W
1400	18-34N 176-01W
1500	18-22N 175-59W
1600	18-10N 175-57W
1700	17-58N 175-55W
1800	17-46N 175-53W
1900	17-34N 175-52W
2000	17-22N 175-50W

HOURLY POSITIONS

0700 X TO 2000X 2-3-63

0700	15-00N 175-26W
0800	14-48N 175-24W
0900	14-35N 175-22W
1000	14-23N 175-20N
1100	14-11N 175-19W
1200	13-58N 175-17W
1300	13-46N 175-16W
1400	13-34N 175-14W
1500	13-21N 175-12W
1600	13-09N 175-11W
1700	12-57N 175-09W
1800	12-44N 175-08W
1900	12-32N 175-06W
2000	12-18N 175-05W

HOURLY POSITIONS

0700 X TO 2000 X 7-4-63

0700	10-14 N 174-55 W
0800	10-05 N 174-54 W
0900	09-56 N 174-52 W
1000	09-46 N 174-51 W
1100	09-37 N 174-50 W
1200	09-27 N 174-48 W
1300	09-18 N 174-47 W
1400	09-08 N 174-46 W
1500	08-59 N 174-45 W
1600	08-49 N 174-44 W
1700	08-40 N 174-42 W
1800	08-30 N 174-40 W
1900	08-21 N 174-39 W
2000	08-11 N 174-38 W

HOURLY POSITIONS

0700 X TO 2000 X 7-5-63

0700	06-15 N 174-17 W
0800	06-04 N 174-14 W
0900	05-53 N 174-12 W
1000	05-41 N 174-10 W
1100	05-30 N 174-08 W
1200	05-19 N 174-06 W
1300	05-08 N 174-04 W
1400	04-57 N 174-02 W
1500	04-47 N 174-05 W
1600	04-37 N 174-10 W
1700	04-28 N 174-15 W
1800	04-17 N 174-19 W
1900	04-07 N 174-24 W
2000	03-56 N 174-29 W

HOURLY POSITIONS

0200X TO 1400X 7-6-63

0700	01-57 N 175-48 W
0800	01-47 N 175-55 W
0900	01-38 N 176-03 W
1000	01-28 N 176-10 W
1100	01-18 N 176-18 W
1200	01-08 N 176-36 W
1300	00-58 N 176-34 W
1400	00-50 N 176-39

HOURLY POSITIONS

0200X TO 1900X 7-17-63

0200	01-56 S 170-23 W
0800	01-49 S 170-17 W
0900	01-32 S 170-09 W
1000	01-21 S 170-03 W
1100	01-09 S 169-55 W
1200	00-56 S 169-48 W
1300	00-45 S 169-41 W
1400	00-33 S 169-34 W
1500	00-21 S 169-27 W
1600	00-09 S 169-20 W
1700	00-03 N 169-13 W
1800	00-15 N 169-06 W
1900	00-27 N 168-58 W

HOURLY POSITIONS

0700 X TO 1900 X 7-18-63

0700	02-58 N 167-40 W
0800	03-11 N 167-32 W
0900	03-23 N 167-24 W
1000	03-34 N 167-15 W
1100	03-46 N 167-07 W
1200	03-57 N 166-59 W
1300	04-10 N 166-51 W
1400	04-21 N 166-42 W
1500	04-33 N 166-34 W
1600	04-45 N 166-26 W
1700	04-56 N 166-18 W
1800	05-09 N 166-10 W
1900	05-20 N 166-02 W

HOURLY POSITIONS

0700 X TO 1900 X 7-19-63

0700	07-52 N 164-23 W
0800	08-03 N 164-18 W
0900	08-14 N 164-12 W
1000	08-25 N 164-07 W
1100	08-37 N 164-02 W
1200	08-48 N 163-57 W
1300	08-59 N 163-52 W
1400	09-10 N 163-47 W
1500	09-22 N 163-41 W
1600	09-33 N 163-36 W
1700	09-44 N 163-31 W
1800	09-55 N 163-26 W
1900	10-06 N 163-21 W

HOURLY POSITIONS
0200X TO 1900X 7-20-63

0200	12-25 N 162-11 W
0800	12-35 N 162-06 W
0900	12-45 N 162-01 W
1000	12-54 N 161-56 W
1100	13-04 N 161-50 W
1200	13-13 N 161-45 W
1300	13-23 N 161-40 W
1400	13-33 N 161-35 W
1500	13-43 N 161-30 W
1600	13-53 N 161-25 W
1700	14-02 N 161-19 W
1800	14-12 N 161-14 W
1900	14-21 N 161-09 W

HOURLY POSITIONS
0200X TO 1900X 7-21-63