

Field Notes Available for CHG Cruise 76
Sept.-Oct. 1964

<u>Personnel</u>	<u>Status of Notes</u>	<u>Islands Visited</u>
R. Standen	Catalog entries available for PALMYRA (Sept.). Notes available for PALMYRA (Sept., Oct.), FANNING (Sept.) CHRISTMAS (Oct.-twice) Some notes available for offshore WASHINGTON (Sept., Oct.) FANNING (Sept.)	Visited Palmyra (Sept. and Oct.), Fanning (Sept.) and Christmas (Oct.) Offshore Washington and Fanning.

Xmas

Date 20 Oct. 1964 Time 0700 to 5/10
 Location Point Ledge
 Observer W. H. ...

SPECIES	Abundance				Breeding			Observations (counts of flocks only since the distance was in doubt at all times) Remarks
	1-10	11-50	100-250	250+	Incub.	Eggs	Young	
Great Albatross								
Wedge-tailed Shearwater		20						
Christmas I. Shearwater								
Newell's Shearwater								
White-t. Petrel								
Pink-t. Petrel								
Bulwer's Petrel								
Sooty Petrel								
White-tailed Tropicbird								
White-tailed Tropicbird								
Mottled Booby		52						
Brown Booby		12						
Red-footed Booby		103						
Great Frigatebird		16						
Golden Plover								
Ruddy Turnstone								
Mourning Tattler								
Sandpiper								
Bristle-thighed Curlew								
Sooty Tern		250						
Green-backed Tern		1						
Brown-winged Tern								
Common Noddy								
Hawaiian Noddy		58						
Grey Noddy								
Shearwater		20						

No Grand Total

R. J. Standen

DARK PHASE WT. 595 - 65381

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Journal

FLEW Aboard GILBERT AT CHRISTMAS ISLAND

XMAS

1964

3 October To Christmas Island aboard C.H. Gilbert

Up 6:30 AM & began watch immediately. many sooty terns today. all flying toward Christmas Island. Came by us in groups of 10-20 birds. Also saw many fairy terns tropicbird (red tail), frigate birds, dark phase wedgetails, Phoenix Is. Pet. & masked booby.

Arrived at Christmas Island at 1335 hr. & dropped the hook. Mr. Robert the District Administrator came out & checked passport. Then some of us went over to the island. Had a good chat with Mr. Robert (from New Zealand) a very nice chap who has been here for 11 years. He took us around the island in his land rover. Saw boobies & frigates nesting. Also saw plover, wandering tattler & Phoenix Is. Pet. over the Islands as well as sooty tern colony with all young just beginning to fly. Are also large land crabs on the island. Their holes are everywhere. Saw gray back terns for the first time up close.

Ate dinner at Mr. Robert's & then returned to the ship. Plan to go to Cook Is. tomorrow. Also want to skin birds if can get sandalwood.

Saw copra drying on drying racks on Christ. Is. Took picture. Copra is shipped out about 2 times a year.

R. J.

Journal

1964

Xmas

4 October Cook Is. Christmas Island Atoll C.H. Gilbert

Arrived here at Cook Is., one of the small islets of the Christmas Island atoll, at 0930 hr by skiff from the C.H. Gilbert, anchored about $\frac{1}{2}$ mile from here. Was little worried getting in as we couldn't get the boat in too close because of coral heads & strong winds from the large lagoon. Saw a large shark about 5 feet long as it was wading ashore in waist deep water. Needless to say this hastened my pace ashore.

I was greeted even before I reached the beach by a group of about 15 Fairy Terns hovering over head & gurgling at me. Total relief of the islet doesn't exceed 15 feet with a narrow beach (about 40 feet) most of the way around. The beach varies from very sandy to very "rocky" with chunks of coral up to about a foot in diameter. The first plant as you walk up the beach is the scaevola which clearly defines the limits of the beach about the entire islet. The scaevola belt rarely exceeds 20 feet in width & surrounds the low, dry, succulent plants of the interior of the island. The whole island is then covered with a veil of ^{yellow} "fodder" like parasitic growth. On many of the scaevola bushes the parasite seems to have the upper hand but there is still plenty left. The "fodder" hangs thickly on some of the bushes like Spanish moss much of it dead from past years still clinging to the bushes. The succulent plants

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4 October cont. Cook Is. Christmas Is. Atoll.

of the interior are about a foot apart, 3 to 4 ft wide high, 2 or 3 miles in diameter. Many or most are almost completely dead as there has been no rain here since March according to the district administrator Mr. Roberts.

The islet is about $\frac{1}{2}$ to $\frac{3}{4}$ of a mile around and not more than 100 yds wide at any point. It is shaped in a curved arc with the concave ^{lee} side facing west & being the low side. There is a small lagoon open to the sea on this side of the islet. I am sitting on the beach on this side of the island now & a Bristle-thighed Curlew has just landed down the beach & is walking my way. He was just buzzed by an inquisitive blue gray noddy & subsequently left the scene. A little further down the beach is a pair of wandering tattlers in non-breeding plumage. As I walked across the interior of the island I saw many of the blue gray noddy sitting on the ground, their small head being taller than any of the vegetation on the interior.

Another curlew has just landed on the sand just to my right & is probing with his 3" ^{downward} bill into the coarse sand. Now he walks a few steps & raises his wings, and lifts stuff into the air, ~~and~~ while it calls several times EEEOWIT - EEEOWIT.

All around me small bits of coral rubble in a fresh stage that's just good in the hot sun.

4 October cont. Cook Island Christmas Is. atoll C. N. Helms

It is now 1340 hr. and I am still here on Cook Is.
 made a brief survey of the island. Found 61
 tropicbirds (Red tail), 38 of which were on eggs. Also
 found 27 young. Checked first 2 for bands. One
 of the pair had ^{FWS} NO. 595-5608. The second bird bit
 me on the right fore-finger & put me out of
 commission as far as checking for band No's. There
 are probably about 100 nesting pairs on the
 island. I'm sure I missed a few. Most did not
 have bands.

I counted 7 Christmas Island shearwaters, 2 on
 eggs & 2 with ^{young} (one egg & one young one). One
 had band ^{FWS} NO 544-10937 & no egg.

I also found 2 Hawaiian Noddies dead with bands
 on. I took them both. The band No.s are 652-43760 and
 652-44457. I could not tell the cause of death.

The sooty terns here are all hatched & the young
 are about ready to fly. There is a large section
 of the island with hundreds of rookeries.

The blue-gray noddies are not nesting yet or
 have already, but are here in good numbers -
 (several hundred).

Fairy terns are nesting with some eggs & some
 young & a few young flying. Most of the fairy terns
 seem to have small nests as do the Hawaiian Noddy.
 Both are in the same stage of nesting.

There were a few common Noddy (stolidus) eggs
 about but not many. This bird is not nearly
 as numerous as any of the other terns here.

Graybacks seem flying off shore but no nests.

1954

4 October cont. Cook. Is. Christmas Is. Atoll C.H. Gilbert

Found about 20 Red footed boobies roosting in a large *Caecola* bush.

The island is somewhat larger than first estimated being much wider at both ends of the isle. It may be almost 200 yds at the widest point. In these areas the vegetation is much thicker & more extensive. It is possibly because these sections are also lower than the narrow part of the island that the vegetation is thicker. At the northern end there are a few young coconut palms & a 40 ft. high signal beacon. I climbed it several days & signaled the ship to come get me. No one saw me I guess because that was about 1 hour ago. It has clouded up a little & a light mist has fallen twice in the last hour. I counted eight good sized sharks in the lagoon about 1 hour ago & scared them off with some rocks.

about 15:30 today I spotted the skiff coming after me. They found a smoother beach & there was no trouble getting off the island.

The rest of the day was spent aboard the *Silbert*.

R.S.

After breakfast today, Mr. Holloway, the Captain and I took the skiff over to the main island. This is where Mr. Roberts lives & the settlement of about 200 natives. The place is called London. Here I bought a few Gilbertese stamps and then Mr. Roberts took us in his Land Rover to show us a Coconut palm with 5 Crowns. This is quite a rare thing and no one of us has ever heard of one before.

Much of the island has been planted to new coconut palms in the last 2 years & still more are being planted. It takes 6-8 years for the trees to come into bearing so the island will not benefit for about 5 more years. Most of the island was originally planted in about 1900 so most of the trees are about 60 yrs. old. They can be expected to bear for about 90 years but the island has already felt the decrease in yield from these older trees.

The natives obtain sugar from the coconut palm by tapping the bud & catching the sweet sap in a bottle hung from the bud. The sap runs down a blade of a leaf into the bottle. The same result can be obtained by cutting off a new branch and catching the sap. But since a new, green branch is the only thing that benefits the tree

19⁴⁴
5⁴ October Christmas Island & at sea. E. D. Hubert

in the photosynthetic process, this usually kills the tree. In some places like Honolulu it is against the law to cut a new branch on a coconut palm.

The only use economically for the coconut palm in these islands is for Copra. The nut is cracked in the field & the meat of the nut removed. This is then sun dried in large vats of which there are about 18 (- 20 x 20 ft.) on Christmas Island at London. Drying for about 5 days in the hot sun removes about 30% of the water & reduces considerably the shipping weight of the Copra. The dried coconut meat is called Copra. Green coconuts are the kind that milk is obtained from. There is less ^{meat} ~~meat~~ in them & more milk. The meat is called Spoon meat at this time because it is very soft & easily eaten with a spoon. On most Copra plantations only coconuts which have fallen from the trees are used. On some plantations it is against the law to pick a coconut for Copra since the % of meat in a fallen coconut is much greater than in a green one.

The copra is pressed for oil that has many uses.

The plantations on Christmas Island are worked by natives & run by the English government. The workers are required to fill 2 bags with coconut meat for

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1964
5 October Christmas Island at sea. C.H. Island

each days work. If they produce more
there is a bonus for them.

We returned to the ship at 1230 hr. and
lifted the anchor at 1320 hr. As the anchor
came up we noticed it had hooked onto
a cable to the buoy about 200 yds. from
the ship. After a little work they got it off
and were on our way by 1340 hr.

We expect to be out now for 2 weeks
the back here at Christmas Island on the
20th of October.

Stood watch today from 1400 to sunset.
Saw one very odd bird. It was of storm
petrel size & was gliding along beside the
boat never flapping. Occasionally it would
drop one foot into the water but still would
not flap its wings. Its head was dark
& it had a complete white band around
the neck. Its back & forked tail were black
& the under side except for the tail was white.
Underwings were white except for a dark band
on the leading edge. I fired at it twice &
missed. Have now fired 3 shots & got 4 birds.
Saw 2 flocks today both moving very fast &
we were unable to catch them.

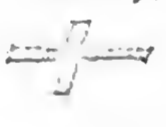
Boobies all appeared to be heading toward
the island at dusk. Saw sooty shearwaters
again & some Cook's Petrels.

R.S.

Stayed aboard the ship today until 5:00 p.m. when the Capt, Chief Eng, Mr. Holloway & myself went in to the island. Spent 6 hours there. Talked to one of the natives about birds. Says he has seen fairy terns eat gecko's.

The natives say they can predict the condition of the sea by the way the crabs burrow. Also tell whether the fish are inside or outside of the lagoon by some means.

When the bird all take of & circle higher & higher there is a storm coming. Captain tells me that the natives on Makarua Island knew a hurricane was coming 3 days before the Army did.

On the barracks of the R.A.F. station here there is flying on the flag pole the "Homeward Bound" Pennant. It is a long (15') narrow flag about 1 foot wide at the loose end & 2 ft at the pole. It is white & has a thin red cross like so:  near the pole end. With its long length it waves slowly in the faithful east end. In the middle there is a large hole worn there by time. The flag hasn't been touched since the R.A.F. left in February.

R.N.S.

18 October Christmas Island at sea C. H. Gilbert Cruise 76

Lifted hook at 0100 hrs. Healed south around the end of the island & back up the east side. Did not keep continuous water today as there were too many scattered birds about the vessel. Christmas Island is still in sight tonight & has been all day. By tomorrow morning we will be almost to Fanning.

Encountered six good flocks today & the fishing was especially good. Caught 54 yellow fin tuna average weight 60 lbs. They are using a new bait now - mullet. It's a little slow because they have to bait the hook. To save time they keep an extra mullet in their mouth while their line is in the water.

Flocks were largely boobies (masked & red-foot with a few brown) noddies, and sooty terns.

✓ - Saw imm. sooty tern on water with adult hovering overhead.

Shearwaters were out in larger number tonight. Saw another odd storm petrel this evening like the one I saw on 5 October. It flew behind the ship just before sunset.

It rained once today & the wind was strong all day.

Hawaiian name for Plover - Mame Kolia - Bird that gets fat on someone else's land. R.S.S.

Collection Record

1964

C. H. Hitchcock Oct 26

1. Enteropneustus (?): 24 Sept. 64 (112) # 0551
 Parasites collected + preserved in alcohol
 Collected from flock of birds, collected + preserved in
 sea ocean bottom, depth 200m. King
 specimen frozen. Collected with 12 ga. shot gun.
 Obtained on October 27, 1964 - 7:30 AM ^{100% formalin} black stomach
 preserved in 10% formalin 15° 40' N - 159° 55' W
2. Thaliacean: 23 Sept. '64 # 0552
Palomares shot on surface. Shot with 12 ga. shot-
 gun. Specimen frozen - no parasites collected. Bird
 was shot on it but left it under a bush while I
 collected 2 pieces below. minute fat
 Obtained 2 Nov. 1964 by R. S. Hansen. Stomach preserved
 in 10% formalin
3. Pluteus: 23 Sept. '64 # 0553
Palomares shot (same as above).
 Specimen frozen. Obtained 3 Nov. 1964 by R. S. Hansen
 Ovary 5x3 mm. one the the two minute fat ^{stomach} preserved.
4. Pluteus: 23 Sept. '64 # 0554
Palomares shot (same as above) specimen frozen. Stomach
 2 Nov. 1964 by R. S. Hansen. minute fat. Stomach not
 preserved - Very fat
5. Enteropneustus: 23 Sept. 1964 # 0555
 Parasites collected + preserved in alcohol.
 Shot with 12 ga. shot gun. Collected from flock of birds
 shot, shot, other shot. Collected from birds shot.
 Tissue shot from day 200m. Stomach preserved in
 formalin. Collected with 12 ga. shot gun. Shot with
 12 ga. shot gun. Collected from flock of birds shot with shot gun. col
 specimen frozen

1954

C.H. Gilbert Cruise No.

5. Islet - Bird skinned on Oct. 16 '64 by me and J.
found little fat. Skinned in white gas for 1 hour &
dried in open air. Skipped with shredded "Islet"
magazine.
Locality of collection: 7° 55' N - 152° 07' W H. A. Gilbert
open ocean

6. Buff-breast crested islet: ♂ 14 October 1964 (1945) 40556
Bird skinned in alcohol. Still had
gray on top & at tips. Bird on lower 1/2 of upper hill -
lower hill pink except for gray tips. Iris brown, Tarsus
pink. This marked gray except for white tips & webbing
between all toes gray. Laceration frozen.
Bird skinned by me on Oct. 1964. Testis 2mm long black
little fat - skinned in white gas & skipped with shredded
magazine.
Locality of collection: 6° 45' N - 152° 27' W

Location 1st day out of Oahu
 Observer _____ Date 22 Sept. 64 Time 1415 to 1830
 Weather South wind calm seas. clear.

SPECIES	Abundance				Breeding			Remarks
	1-10	10-100	100-1000	1000 +	Nests	Eggs	Young	
Laysan Albatross								
Black-footed Albatross								
Wedge-tailed Shearwater	15							
Christmas I. Shearwater								
Audubon's Shearwater								
Laysan I. Petrel								
Phoenix I. Petrel								
Bonin's Petrel								
Sooty Petrel								
Red-tailed Tropicbird								
White-tailed Tropicbird	1							
Masked Booby	2							
Brown Booby								
Red-footed Booby	3							
Great Frigatebird								
Golden Plover								
Ruddy Turnstone								
Mourning Tattler								
Sanderling								
Bristle-thighed Curlew								
Sooty Tern	4							
Gray-backed Tern								
Brown-winged Tern								
Common Noddy	6							
Hawaiian Noddy								
Blue-gray Noddy								
Fairy Tern								
Green-tailed Petrel	1							
Pomarine Jaeger	1							
Murrelets	1							
	<u>24</u>							
Total birds <u>(24)</u>								
No flocks								

Location about 7.5° N on route to Kingman Reef South day out of Galapagos
 Observer K. S. Stender Date 27 Sept 64 Time 5:00 to 5:55
 Weather Partly during morning; heavy clouds & sea all day
 Observations Observations Pape

SPECIES	Abundance				Breeding			Remarks
	1-10	10-100	100-1000	1000 +	Nests	Eggs	Young	
Laysan Albatross								
Black-footed Albatross								
Wedge-tailed Shearwater	3							
Christmas I. Shearwater								
Audubon's Shearwater								
Bonin I. Petrel	2							
Phoenix I. Petrel	2							
Bulwer's Petrel								
Sooty Petrel								
Red-tailed Tropicbird								
White-tailed Tropicbird								
Masked Booby	1							
Brown Booby								
Red-footed Booby	1							
Great Frigatebird								
Golden Plover								
Ruddy Turnstone	1?							
Wandering Tattler								
Sanderling								
Bristle-thighed Curlew								
Sooty Tern	7							
Gray-backed Tern								
Brown-winged Tern								
Common Noddy								
Hawaiian Noddy								
Blue-gray Noddy								
Fairy Tern								
<i>Sooty Shearwater</i>		20						
<i>Booby Pet</i>		11						<i>Pterodroma cooki</i>
<i>Jaeger Ternally Pet</i>	1							<i>Externa externa</i>
<i>Externa cervicalis</i>	2							
<i>Shearwater</i>	1							

Total birds 137
 flocks - 2 (16 birds)

Location Nearby Fanning Island Enroute to Christmas Is.
 Observer Sladden Date 2 Oct. 64 Time 1:20 to 5:5
 Weather Partly cloudy & windy 20 kts.

SPECIES	Abundance				Breeding			Remarks
	1-10	10-100	100-1000	1000+	Nests	Eggs	Young	
Laysan Albatross								
Black-footed Albatross								
Wedge-tailed Shearwater	2							
Christmas I. Shearwater								
Audubon's Shearwater								
Bonin I. Petrel								
Phoenix I. Petrel	1							
Bulwer's Petrel								
Sooty Petrel								
Red-tailed Tropicbird	1							<i>Total birds</i>
White-tailed Tropicbird								<u>(200)</u>
Masked Booby	2							
Brown Booby								<i>flocks 3 - 88 birds</i>
Red-footed Booby		81						
Great Frigatebird	3							
Golden Plover								
Ruddy Turnstone								
Wandering Tattler								
Sanderling								
Bristle-thighed Curlew								
Sooty Tern		19						
Gray-backed Tern								
Brown-winged Tern								
Common Noddy	4							
Hawaiian Noddy		75						
Blue-gray Noddy								
Fairy Tern		41						
<i>Comp's Pet</i>	5							
<i>Sooty Shear</i>	1							

Location *45 miles NW of Christmas Is. 40 Is.*

Observer *Handen*

Date *3 October 64* Time *0630 to 1335*

Weather *Clear Scattered Clouds*

SPECIES	Abundance				Breeding			Remarks
	1-10	10-100	100-1000	1000 +	Nests	Eggs	Young	
Laysan Albatross								
Black-footed Albatross								
Wedge-tailed Shearwater			157					<i>all dark phase</i>
Christmas I. Shearwater								
Audubon's Shearwater								
Bonin I. Petrel								
Phoenix I. Petrel	5							
Bulwer's Petrel								
Sooty Petrel								
Red-tailed Tropicbird		40						
White-tailed Tropicbird								
Masked Booby	8							
Brown Booby	3							
Red-footed Booby		18						
Great Frigatebird		25						
Golden Plover								<i>seen on Christmas Is.</i>
Ruddy Turnstone								
Wandering Tattler								" "
Sanderling								
Bristle-thighed Curlew								
Sooty Tern	54							
Gray-backed Tern								<i>several seen on Christmas Is.</i>
Brown-winged Tern								
Common Noddy								
Hawaiian Noddy	8							
Blue-gray Noddy	2							
Fairy Tern		29						
<i>Cook's Petrel</i>	1							<i>Pterodroma Cooki</i>
								<i>total birds seen</i>
								<i>840</i>
								<i>1 flock of 100 wedgetails</i>

Location *At sea North of Christmas I.*

Observer *(STANLEN)*

Date *6 OCTOBER*

Time *5R*

to *5P*

Weather *Cloudy + overcast all day*

SPECIES	Abundance				Breeding			Remarks
	1-10	10-100	100-1000	1000 +	Nests	Eggs	Young	
Laysan Albatross								
Black-footed Albatross								
Wedge-tailed Shearwater		<i>169</i>						
Christmas I. Shearwater	<i>2</i>							
Audubon's Shearwater								
Sonin I. Petrel								
Phoenix I. Petrel	<i>7</i>							
Bulwer's Petrel								
Sooty Petrel								
Red-tailed Tropicbird	<i>3</i>							
White-tailed Tropicbird								
Masked Booby	<i>2</i>							
Brown Booby								
Red-footed Booby	<i>1</i>							
Great Frigatebird	<i>6</i>							
Golden Plover								
Ruddy Turnstone								
Wandering Tattler								
Sanderling								
Bristle-thighed Curlew								<i>Total birds</i>
Sooty Tern			<i>157</i>					<i>477</i>
Gray-backed Tern								<i>flocks 6</i>
Brown-winged Tern								
Common Noddy								
Hawaiian Noddy								
Blue-gray Noddy								
Fairy Tern	<i>6</i>							
<i>Shear Pet.</i>		<i>45</i>						
<i>Antip. Pet.</i>		<i>25</i>						
<i>Sooty Shearwater</i>		<i>44</i>						
<i>Shearwater</i>	<i>4</i>							
<i>Pterodroma</i>	<i>1</i>							
<i>Terns</i>	<i>10</i>							
<i>Pterodroma</i>	<i>5</i>							

Location About 350 Miles ^ENE of Palmyra Pacific Ocean C. H. Gilbert Crest 46
 Observer R. S. Standen Date 7 October 1964 Time SR to SS
 Weather Rainy & mostly overcast.

SPECIES	Abundance				Breeding			Remarks
	1-10	10-100	100-1000	1000 +	Nests	Eggs	Young	
Laysan Albatross								
Black-footed Albatross								
Wedge-tailed Shearwater		30						
Christmas I. Shearwater								
Audubon's Shearwater								
Bonin I. Petrel								
Phoenix I. Petrel	99							
Bulwer's Petrel								
Sooty Petrel								
Red-tailed Tropicbird								
White-tailed Tropicbird								
Masked Booby								Total 166
Brown Booby								50 birds
Red-footed Booby								
Great Frigatebird								1 flock 25 birds
Golden Plover	4							
Ruddy Turnstone								
Wandering Tattler								
Sanderling								
Bristle-thighed Curlew								
Sooty Tern		11						
Gray-backed Tern								
Brown-winged Tern								
Common Noddy								
Hawaiian Noddy	1							
Blue-gray Noddy								
Fairy Tern								
<i>Externa externa</i>		49						
<i>Pterodroma cookii</i>		20						
<i>Externa cervicalis</i>	1							
<i>Neuwelt's Shearwater</i>		12						
<i>Pterodroma sp.</i>		2						
<i>Sooty Shearwater</i>		9						
<i>Shear Pet. sp.</i>		9						
<i>Black-capped Pet</i>		3						
<i>Skua?</i>		1						

Location 9°N-155°W

Pacific Ocean C.H. Gilbert Is.

Observer STAN OEN

Date 8 OCTOBER 1964 Time 5:11 to 5:55

Weather Cloudy + Rainy all day Heavy seas.

SPECIES	Abundance				Breeding			Remarks
	1-10	10-100	100-1000	1000 +	Nests	Eggs	Young	
Laysan Albatross								
Black-footed Albatross								
Wedge-tailed Shearwater	5							
Christmas I. Shearwater								
Audubon's Shearwater								
Bonin I. Petrel								
Phoenix I. Petrel								
Dulver's Petrel								
Sooty Petrel								Total birds 73
Red-tailed Tropicbird								1 flock 19 birds
White-tailed Tropicbird								
Masked Booby								
Brown Booby								
Red-footed Booby								
Great Frigatebird								
Golden Plover								
Ruddy Turnstone								
Wandering Tattler								
Sandpiper								
Bristle-thighed Curlew								
Sooty Tern		15						
Gray-backed Tern								
Brown-winged Tern								
Common Noddy								
Hawaiian Noddy								
Blue-gray Noddy								
Fairy Tern								
<i>Shearwater</i>	4							
<i>Shearwater</i>	11							
<i>Shearwater</i>	15							
<i>Pt. sp.</i>	6							
<i>Murrelets sp.</i>	2							
<i>Sooty Shear.</i>	16							
<i>Hawaiian St. Pt.</i>	1							

Location 13°N-150°W Pacific Ocean CH. HILLIARD Cross 76
 Observer STANDEN Date 9 OCTOBER 1968 Time 8:00 to 5:15
 Weather _____

SPECIES	Abundance				Breeding			Remarks
	1-10	10-100	100-1000	1000 +	Nests	Eggs	Young	
Leysan Albatross								
Black-footed Albatross								
Wedge-tailed Shearwater	2							
Christmas I. Shearwater								
Audubon's Shearwater								
bonin I. Petrel								
Phoenix I. Petrel								
Bulwer's Petrel								
Sooty Petrel								TOTAL BIRDS
Red-tailed Tropicbird								
White-tailed Tropicbird								(266)
Masked Booby								
Brown Booby								1 flock 155 birds
Red-footed Booby								NOT feeding
Great Frigatebird								
Golden Plover	1							
Ruddy Turnstone								
Wandering Tattler								
Sanderling								
Bristle-thighed Curlew								
Sooty Tern			15					
Gray-backed Tern								
Brown-winged Tern								
Common Noddy								
Hawaiian Noddy								
Blue-gray Noddy								
Fairy Tern								
<u>Sooty Shearwater</u>		53						
<u>Pterodroma Sp.</u>		10						Maybe Pt. sp. Estan
<u>Externa sp.</u>		1						
<u>Externa leucorhynchos</u>		1						
<u>Externa estana</u>		8						from Foreman's Net
<u>Pterodroma</u>		11						
<u>Shear-Pet. Sp.</u>		29						

Location Palmyra Island C. H. Gilbert Cruise
 Observer J. L. Liden Date 10 October 64 Time 5:15 to 6:15
 Weather Overcast & Rainy

SPECIES	Abundance				Breeding			Remarks
	1-10	10-100	100-1000	1000 +	Nests	Eggs	Young	
Laysan Albatross								
Black-footed Albatross								
Wedge-tailed Shearwater	7							
Christmas I. Shearwater								
Audubon's Shearwater								
Bonin I. Petrel								
Phoenix I. Petrel								
Bulwer's Petrel								
Sooty Petrel								Total birds 56
Red-tailed Tropicbird								
White-tailed Tropicbird								1 small flock
Masked Booby								
Brown Booby								
Red-footed Booby								
Great Frigatebird								
Golden Plover	1							
Ruddy Turnstone								
Wandering Tattler								
Senderling								
Bristle-thighed Curlew								
Sooty Tern	3							
Gray-backed Tern								
Brown-winged Tern								
Common Noddy								
Hawaiian Noddy								
Blue-gray Noddy								
Fairy Tern								
<u>Sooty Shearwater</u>	<u>6</u>							
<u>Shearwater sp.</u>	<u>15</u>							
<u>Pterodroma sp.</u>	<u>15</u>							<u>Pt. a. externa</u>
<u>Common Pet.</u>	<u>3</u>							
<u>External externa</u>	<u>2</u>							
<u>External externa</u>	<u>1</u>							
<u>Harporhynchus</u>	<u>1</u>							
<u>Storm Pet. sp.</u>	<u>1</u>							

Location 11.5°N - 150°W Pacific Ocean C. H. Gilbert Cruise 76
 Observer R. S. Standen Date 12 OCTOBER '64 Time 6:45 to
 Weather Variable Rainy & clear + cloudy

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	1							Total birds
White-tailed Tropicbird								100
Masked Booby								
Brown Booby								1 fresh
Red-footed Booby								
Great Frigatebird								
Golden Plover	1							
Ruddy Turnstone								
Wandering Tattler								
Sanderling								
Bristle-thighed Curlew								
Sooty Tern	3							
Gray-backed Tern								
Brown-winged Tern								
Common Noddy								
Hawaiian Noddy								
Blue-gray Noddy								
Fairy Tern								
<i>Pterodroma sp.</i>	1							
<i>Sterna fuscata sp.</i>		33						
<i>Externa externa</i>		23						
<i>Coccyz Pet</i>	3							
<i>Sooty Shearwater</i>		14						
<i>Sterna pet sp.</i>	1							

Location 20°N - 150°W Pacific Ocean C.H. Gilbert Cruise 71
 Observer R. S. Standen Date 13 October 1967 Time 0600 to 1200
 Weather Clear in morning rain in afternoon 8 Rows

SPECIES	Abundance				Breeding			Remarks
	1-10	10-100	100-1000	1000 +	Nests	Eggs	Young	
Laysan Albatross								
Black-footed Albatross								
Wedge-tailed Shearwater	1							dark place
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		10						
Gray-backed Tern								
Brown-winged Tern								Total birds
Common Noddy								123
Hawaiian Noddy								flock
Black Noddy								
Red-tail								
Masked Booby	1							
Newell Booby	2							
Puffin species	1							
<i>L. externa</i>			38					
Shear. Pet. sp.			30					
Coastal Pet.			25					
Sooty Shearwater	2							
<i>L. externa</i>			11					
Harcourt's Pt. Pet.	7							

Location 7°N - 152°W Pacific Ocean C.H. Gilbert Cruise 76

Observer R. Standen Date 14 October 1965 Time 0600 to 1100

Weather White caps, partly cloudy. Rain in morning

SPECIES	Abundance				Breeding			Remarks
	1-10	10-100	100-1000	1000 +	Nests	Eggs	Young	
Laysan Albatross								
Black-footed Albatross								
Wedge-tailed Shearwater			141					
Christmas I. Shearwater								
Audubon's Shearwater								
Bonin I. Petrel								
Phoenix I. Petrel		15						
Bulwer's Petrel								
Sooty Petrel								
Red-tailed Tropicbird	1							
White-tailed Tropicbird	1							
Masked Booby								
Brown Booby								
Red-footed Booby								
Great Frigatebird	6							Total 691 4 flocks
Golden Plover								
Ruddy Turnstone								
Wandering Tattler								
Sanderling								
Bristle-thighed Curlew								
Sooty Tern			417					
Gray-backed Tern								
Brown-winged Tern								
Common Noddy								
Hawaiian Noddy								
Blue-gray Noddy								
Fairy Tern								
Shear. Pet sp.		35						
Wedge-tailed Shearwater		3						
Cook's Pet.		14						
Pterodroma externa		45						#0555
Pink-footed Shearwater?		1						collected #0556
Pterodroma sp.		1						
Muller's Shearwater		6						
Shear. Pet sp.		1						
Wedge-tailed Shearwater		4						

Location 5°N - 155°W Pacific Ocean C.H. Gilbert Cruise 76
 Observer W.H. Standen Date 15 October Time 0600 to 1600
 Weather Clear + sunny. Calm in morning steady in afternoon.

SPECIES	Abundance				Breeding			Remarks
	1-10	10-100	100-1000	1000 +	Nests	Eggs	Young	
Laysan Albatross								
Black-footed Albatross								
Wedge-tailed Shearwater		37						
Christmas I. Shearwater								
Audubon's Shearwater								
Bonin I. Petrel								
Phoenix I. Petrel		17						
Bulwer's Petrel	1?							Total birds (863)
Sooty Petrel								
Red-tailed Tropicbird	2							5 flocks.
White-tailed Tropicbird								
Masked Booby	2							
Brown Booby								
Red-footed Booby								
Great Frigatebird		37						
Golden Plover	1							
Ruddy Turnstone								
Wandering Tattler								
Sanderling								
Bristle-thighed Curlew								
Sooty Tern		737						
Gray-backed Tern								
Brown-winged Tern								
Common Noddy								
Hawaiian Noddy								
Blue-gray Noddy								
Fairy Tern								
Shear. Petrel sp.		22						
Pterodroma sp.		1						
Cook's Petrel		4						
Sooty Albatross		1						
Dark-rumped Petrel		1						

Location *British Island visited by aircraft; C.H. Allbird Cruise No.*

Observer *R. S. Standen* Date *16 October 1964* Time *0815* to *1200*

Weather *Clear & sunny*

SPECIES	Abundance				Breeding			Remarks
	1-10	10-100	100-1000	1000 +	Nests	Eggs	Young	
Laysan Albatross								
Black-footed Albatross								
Wedge-tailed Shearwater		23						
Christmas I. Shearwater	1							
Audubon's Shearwater								
Bonin I. Petrel								
Phoenix I. Petrel	3							
Sulwer's Petrel								<i>Total birds (178)</i>
Sooty Petrel								<i>1 flock</i>
Red-tailed Tropicbird	6							
White-tailed Tropicbird								
Masked Booby		18						
Brown Booby								
Red-footed Booby								
Great Frigatebird	1							
Golden Plover	1							
Ruddy Turnstone								
Wandering Tattler								
Sanderling								
Bristle-thighed Curlew								
Sooty Tern		71						
Gray-backed Tern								
Brown-winged Tern								
Common Noddy								
Hawaiian Noddy		15						
Blue-gray Noddy	1							
Pale Tern	2							
<i>Shear. Pet. sp.</i>	1							
<i>Shearwater-like Pet.</i>	1							
<i>Albatross</i>	1							
<i>Booby sp.</i>		20						
<i>Tern sp.</i>	3							

F

Location Approaching Fanning Island C.H. Kellett Cruise 76
 Observer R.D. Stabler Date 19 October 1964 Time 0610 to 1000
 Weather Clear strong wind from SE & heavy seas at our back. Site # 0845

SPECIES	Abundance				Breeding			Remarks
	1-10	10-100	100-1000	1000 +	Nests	Eggs	Young	
Laysan Albatross								Typical flocks seen around island later in day Red-footed Boobies & Na. Noddy Terns flew unpaired + Fairy Terns + Frigatebird.
Black-footed Albatross								
Wedge-tailed Shearwater		31						
Christmas I. Shearwater								
Audubon's Shearwater								
Bonin I. Petrel								
Phoenix I. Petrel	9							
Bulwer's Petrel								
Sooty Petrel								
Red-tailed Tropicbird	1							no ground total
White-tailed Tropicbird								
Masked Booby	1							Adult
Brown Booby								
Red-footed Booby		34						mostly all immatures heavy flocks seen in flocks later in day.
Great Frigatebird								
Golden Plover								
Ruddy Turnstone								
Wandering Tattler								
Sanderling								
Bristle-thighed Curlew								
Sooty Tern		20						
Gray-backed Tern								
Brown-winged Tern								
Common Noddy								few seen later
Hawaiian Noddy	1							numerous flocks with this species seen over island at least seen later in day.
Blue-gray Noddy								
Fairy Tern		12						
<u>Cooks 25'</u>	5							
<u>Shear. Pet sp.</u>	3							
<u>PT Shearwater</u>	1							
<u>Sooty Shearwater</u>	2							

Location 30-40 miles North of Palmyra C. H. Gilbert Cruise 7b
 Observer R. J. Handley Date 22 October 1964 Time 1400 to 1830
 Weather Clear

SPECIES	Abundance				Breeding			Remarks
	1-10	10-100	100-1000	1000 +	Nests	Eggs	Young	
Masked Booby								
Black-footed Albatross								
Wedge-tailed Shearwater		45						
Christmas I. Shearwater								
Audubon's Shearwater								
Bonin I. Petrel								
Phoenix I. Petrel	1							
Sulwer's Petrel								
Sooty Petrel								
Red-tailed Tropicbird								
White-tailed Tropicbird								Total birds
Masked Booby								200
Brown Booby	1							
Red-footed Booby		49						3 flocks
Great Frigatebird								
Golden Plover								
Sooty Tern			35					
Gray-backed Tern								
Brown-winged Tern								
Common Noddy								
Hawaiian Noddy								
Blue-gray Noddy								
Fairy Tern		3						
Cook's Petrel		12						Placidus Court
Eastern Petrel		2						
Wedge-tailed Shear		1						

R. S. Standen

Journal

1964

22 September Honolulu Hawaii at Sea C.N. Gilbert Coast

Came on board the Charles N. Gilbert of the Fish and Wildlife Service - Bureau of Commercial Fisheries today about 1100 hrs. met the Captain William Mount, & the first mate Gary Miller. Mr. Richard Holloway of B.C.F. is my immediate superior & I take all the orders from him. He is Biologist in Charge.

We left port at 1415 hrs. & I began the bird watches immediately. The Kona or south winds were blowing bring humid warm weather to Oahu and calm seas for us. Calm weather was also the reason most birds did not fly the way they usually (?) do. Most were flapping more than usual. Saw one Pomarine jaeger very well. Cook's Petrel had very light back & darker wings dorsally. Saw the white-tailed tropic bird dive from quite high, & slightly back from its course of flight, into the water.

Picked up a good size fish ball today about 12" dia.

Took several pictures tonight through the binocular lens. Not through the lens back used (wide angle) then telephoto. Camera - Retinette IA with Sky light filter - at $f. 5.6 - \frac{1}{60}$ sec. & $f. 2.8$ at $\frac{1}{30}$ sec. respectively. Film K11.

R. S.

R. S. Standen

1964

Journal

23 Sept. C.D. Gilbert

2.

Second day out of Oahu toward Christmas Is.

Restless night spent freezing in part of an conditioner
Antenna + heater. Both gave me trouble.

Morning more rain + had some congestion.

Early morning squalls gave way to heavy overcast
& little sunline. Very few birds seen although
observations were continuous.

Late morning came upon some good flocks
one of about 150 birds. Had ample ample time
to observe as we were in the middle of the flock fishing
for about 45 min. Caught about ~~20~~ 65 Skip jack
are about 18 inches length + 4 lbs.

Shot about 25 ft. of movie film in flock.

Feeding of midgetails was unusual. They seem to
feed just as they hit the water with legs
extended + wings flapping - sometimes running
across the H₂O. (Chasing fish?) when they fly
off. Only one bird was observed to actually
sit on the water + feed. This one did so by
dipping its head under the water for a few
seconds (2-3) at a time. Two flocks seen
sitting on the H₂O about 20 birds in both. The birds
never appeared to feed only dipping their heads
in the H₂O + preening their breast + back feathers.
Perhaps drinking H₂O also. All birds faced into
the wind (2-15 knots). Some were observed to take off
without running on the H₂O by extending the wings
& gliding down the back side of the wave.
The wind was strong enough that by extending
the wings a little the birds would come

R. L. Standen

Journal
1984

3.

23 Sept. A.C. Gilbert Cove.

Almost completely out of the water as a white
Coug passed under them.

Several unidentified birds all the same were
observed & photographed. I think it to be some kind
of Pterodroma but am not sure. White forehead
but very dark head white rest neck all the
way around & dark gray on the back & wings.
Bill was heavy, hooked, & black. Under wings
was white. (Extern cervicalis?)

Only 2 of the wedgetails were dark phase.

They remained over east through night. Only
saw one was observed just before sunset.

RS

W. H. Steadman
Journal
1964

4.

24 Sept C.H. Gilbert Cruise Pacific Ocean Oahu to Christmas.

Up at 7:00 AM today. Was not called as I ~~was~~ ^{had} called to be so I missed sunrise. Morning began quite clearly. Most of the Pterodroma are not flying typically - that is they are flapping & awful lot. Underwing identifications are the greatest help. At a great distance they are hard to tell from Wedgetail even in flocks.

At 0930 I saw a bird that looked like a sooty shearwater but was flapping & body looked rather heavy. Had light patches underwings like Puffinus griseus.

Began seeing larger Pterodroma in the flocks with light necks but not white & light back & not much black underwing. Looks like from Fernandez Petrel Externa externa. Was lucky enough to collect one in a flock at about 1100 this evening. It is as large as a dark rump & very well may be. Since it is not very dark in the back I'm calling it from Fernandez. Collected parasites from the specimen (#0551) & put it in plastic bag & froze it. Was quite happy to collect this bird as I was greatly confused by what I was seeing. In the evening when they were hard to see from the ship I saw the underside.

The one man in the air around the ship & I asked the Captain if it was all right to get out the gun. I specifically tried to shoot this bird & got it on the second shot. Crew cooperated in picking up the bird.

25. September Half way to Christmas Island on CH Gilbert

Lunch called at 6:00 PM today as I could so get off to a good start with a cup of tea. Weather today was not as good as yesterday - little more cloudy.

About 0700 hr. began seeing *Pterodroma* at a great distance flying in singles + double headed south. This southerly trend of the birds continued throughout the day as did the regular observation of single birds. Observing was hard + there was a lot of recording to do. Almost always I could find a bird or 2 on the horizon by scanning with the binoculars.

About noon the first mate (Gary Miller) who was taking a noon fix from the fore-castle spotted a bird coming up behind the ship. It was sailing at about 60-70 ft. It was mottled gray + had light white patches on ^{on the inner part of the} wings but not reaching the tips of the wings. The white shown from both sides (top + bottom). The bird was only slightly larger than a wedgetail. I identified it as a skua as it fit the description + picture in Peterson "to a tee".

No. of birds dropped off considerably in the late afternoon today. The cloudiness increased making it impossible to get a star fix after sunset.

A note on the feeding habits of the frigate birds seen yesterday. One was seen to catch a small fish in flight + carry it in its bill until it sat down on the water then it ate it.

R. S.

R. L. Anderson
Journal
1964

6.

26 September Mt. Belknap Cruise 76 Fifth day out 10°N

Birds pretty scarce today - many singles & not as regular as yesterday. One good flock spotted in late morning had first good number of dark phase wedge tailed, more than formerly noticed in this flock but no cooks. No feeding observed. Late in the evening today saw Phoenix Is Petrel today for the first time. Am quite sure of the identification. Saw one sooty shearwater sitting on the deck today. I saw it take off & that was when I was able to identify it.

Jobs: - A weather man was fired because he predicted the wrong weather. When he applied for a new job he answered the question as to why he left his previous job by saying the weather did not agree with him.

Ship & crew all well a.k. Think I may have picked up a slight cold. Should arrive at Kingman Reef tomorrow. Had potatoes tonight for the first time. If this ship gets any wave in it it will split wide open when all this rice swells up. There is rice on the table 3 times a day. Got my tape recorder going last night & connected it to another amplifier & heard L. Williams in stereo. Really great. Now for a hot shower & sleep.

R.L.

R. V. Standen
Journal
1964

7.

27 September C.H. Gilbert Cruise South day out $7\frac{1}{2}^{\circ}$ North

Up at 6:10 AM. Caught & enjoyed all night long - guess I've got a cold. Powering down now this morning - were in the sub-tropics $5-10^{\circ}$ N as the seamen call it. Start 12 hour watch for the 5th day in a row. It's starting to get to me. Birds scarce today increasing the boredom of a usually boring watch. One thing about monotony - it's all the same. Ah well! Start here in the library of the Gilbert with my tape recorder playing in stereo & can't really complain for the moment. But after 5 or 6 hours on watch you begin to ask yourself why. It is different from the other cruises I've been on. It's the only one here. We may get to Palmyra tomorrow. The best speed this ship can make is 8 knots. A little land will certainly help after six days.

The bird situation for today is as follows. Began picking up birds (all ^{small, fast} ~~small~~ & mostly ~~small~~ ^{small}) for the first time today. There were very few as they were ^{spending} ~~spending~~ ^{spending} ~~spending~~. Petrels are still a little tricky. Cooks lead the group & the identity-criticism of Extern-cunicus & Antera is getting hard. The transition from white head on the neck to mottled neck is sometimes hard to distinguish. I have chided some from many many & just called them Pt. sp. Sooty shearwaters are here for sure & in today's high winds they began to fly like they should. I still

27 September cont. C.H. Fieldcrest 76

did not mark them as Sooties unless I could see the white patches. Visibility was quite poor because of rain & heavy clouds today resulting in the high loss of Shearwater-petrel entries on the log.

May have seen another skua at 0800 today. It was quite a ways off. It was flapping alot & flying very near the water. It continued there for a while then lit on the water & then flew off. I could see some white on the wings but could not be sure.

About 9:00 AM we ran head on into another rain squall. This one really poured. As we were coming out of it I saw a bird flying toward the ship. It was flapping very rapidly. This did not bother me because the way it was raining any bird would have to flap pretty hard to stay up. But as it came closer I saw that it had definite dark & light markings on both the top & bottom of the wings. About this time the rain was letting up & the bird took on lap around the Charlie H. & was off. I logged it as a Ruddy Turnstone?? --- About this time a swirl of cloud on the water ahead caught my eye. I immediately recognized it as a water spout. I got out the movie camera & cranked off a few frames before the thing blew itself out. There was just a cloud of water-spray on the water - but way up in the cloud over to the west was a long dark ribbon - like tail hanging down out of the cloud & sweeping down & over in the direction of the cloud of spray on the water. There was no visible

R. B. Sander
Journal
1954

9.

21 September cont. Cont. Distant Eves 75

connections between the water spray & the spout
hanging out of the cloud but they were obviously
mistaken. Anyway I've got it on film - I hope.
That was the first time I've ever seen a water spout
that everyone has seen them so I feel quite
lucky about it. The first mate steered the ship
right toward it so I could see it well.

The trouble with this "bird watching" at sea
is it gives you too much time to think - or is
it day dreaming - especially by yourself. One
can think a lot but you need the chance to
do something with these thoughts. The only place
I've got now is to think more about it. At
the end of today or any day I'm very tired but
don't want to sleep because if I do then
the day is shot because the next thing you
know you're watching them land, again. So I sit up
here in the library & read & write for awhile
& don't go to bed until about 10:00 PM. After
a few days of this I'm getting really tired on
my watch. Eight hours sleep is just not enough.
And during the day I can hardly get keep my eyes open.
Today I took a nice sea shower. I washed down with
that salt water then got a shower of well rain water
on the deck & equal. I'm feeling good & clean.

Guests will call an end to this for today. I considered
today the most boring day of the trip & now I've
written these pages about it in the journal.

R.B.S.

23 Sept. Palmyra Atoll Line Islands About C. H. Gilbert

After watch at 0700 today we were about 20 miles
west of Palmyra. Birds were the kind for today -
mostly red foots but a few browns. No
masked boobies. Chased 2 bird flocks & fished
the schools of fish for yellow fin terns.
Caught about 73 of them & helped take blood
samples. Palmyra was in sight by 0930
& we docked on side a quiet lagoon at
1340 hrs. Red footed boobies were seen nesting ^{roosting}
in the scrubola as we came in.

After docking I went ashore to look the area over.
The old before used to be here until '62, I understood.
There are still tents & things here that haven't
been left alone for too long.

Presently there are no inhabitants what-
soever on Palmyra Atoll. It must be one
of those little inhabited parts of Honolulu. That
right - according to the book I have Palmyra is
part of the City & County of Honolulu. There is an old
air strip on the island. On my first walk
over there I saw some plovers & curlews. My
knowledge of shore birds is not very good & I wasn't
sure about these birds either. I decided to try
and collect the ones I wasn't sure about.
I went the half mile back to the ship & got
the "long Tom" shot gun I've been using and
some ammunition. Also took the camera & binoculars.
Loaded in this manner & wearing a pair of
jean shorts & T-shirt & again set out for the

20 September - Palmyna Atoll C.H. Kellner's Cross

runway. Mr. Kellner was already over there & I had told him that I would be doing some shooting. It was very hot & my legs were already beginning to burn. My head was also very hot so I got some scaevola leaves & old strips of canvas & made myself a hat. It worked quite well & kept me very cool. I took the gun & hid in a scaevola bush at the edge of the runway. I waited about 15 minutes but the shore birds would not land or come near - so I took the gun & binoculars & started down the runway staying in about the middle of it. After I had walked a ways I came upon some plovers flying near the edge of the runway. I fired at one & it fell into a bush? I thought. Anyway I never found it. I had only 2 shells with me & now only one was left so I started back to the end of the runway where I left the ammo to get some more. Down the way I saw a curlew take off & come flying my way - at about 50 yds. I let fly with the long tailed 3" shell & the bird hit the dust. I carried it back to the ammo & wrapped it in scaevola leaves & put it in the shade. Then I set out again to try for one of the plovers. It wasn't hard. I just waited till I scared them up & followed them with the binoculars until they lit. Then I would creep up on them - not too close because with

23 September cont: Palmyra Atoll C.H. Stubbins Cruise

The "Long Tom" 50gds is close enough. Then I would check with the binoculars to see if the bird was still there then I just shoot + pick up the bird. I got in luck today -- and today I saw two shots + I had a ♂ + ♀ American Black Plover. The Curlew is the Bristle-Thighed Curlew.

I brought the birds back to the ship + banded them + put them in the freezer. I didn't bring any sawdust so I haven't done any skinning yet. If I can get some corn meal from the cook perhaps I'll give it a try. I wasn't sure if I should collect the shorebirds or not but since it satisfied my own mind to know what they were -- for sure -- I'm glad I did. I don't enjoy killing birds that much -- especially something as pretty as a shorebird. But only this morning I thought I saw a plover out at sea. I've never seen one at sea before in fact the only ones I've seen are around the zoo last week in Hawaii -- Oahu. They are easy to recognize on the ground but in flight it's a different story. Now I can be almost positive that the bird I saw this morning was a plover + I can prove it.

There is a sooty tern colony nesting about half way down the runway. The chicks vary from eggs (chicks??) to birds almost ready to fly but not flying yet. I'm not sure of the size of the colony -- I've never made any

28 September cont. Palmyra Atoll C.H. Bellbird Cruise.

estimates of colony size. I'd say this one has about 2000 adults. These birds are not at all well represented at sea around the island. I saw very few terns both yesterday & today - so was surprised to see all the sooties when I got here.

Palmyra Atoll ~~is~~ itself is very beautiful place. It gets lots of rain & the coconut palms flourish - as does the casuarina trees & scaevola. The runway is 6000 ft. long & still quite usable. A private developer bought the island in hopes of turning it into a tropical paradise for tourists. Since all goods must be brought from Hawaii - a distance of about 1000 miles the costs were just too high. There is no need for this place. It is not on a travel route anywhere & does not supply anyone with anything. So here it sits everything that was once here is now falling down & in a few more years there will be nothing left. The runway will soon be run over with vegetation.

So much for today. Tomorrow we leave & cruise down the chain to Christmas Island but that will take a couple of days at least.

Went out tonight & checked the terns for bands. Did not find one with a band & I checked about 300 adults.

Journal

1964

29 September Palmyra Atoll Lt. Gilbert Cruise

up at 7:30 AM today. Captain must plan to stay here until sometime after lunch. I took off to explore some of the other parts of the atoll. There are common noddies nesting in many of the coconut palms. I also noted some Ruddy Turnstones flying about the lagoon this morning. The island is much grown over since the air force left. All the old roads are somewhat hard to follow. Off the roads the vegetation is very thick & hard to get through except near the shore where the coconut palms predominate & it is fairly easy going beneath them. One must be careful, however, because the rats get up in the palms & eat the coconuts while they are still on the tree. This means that a coconut can fall off a tree almost anytime. I was about 20 feet away today when one fell from about 40 ft up & smashed on the ground. Although it was still green it had a large hole in it where a rat had been eating it. As I looked over the area beneath the trees I noticed that about 90% of the coconuts lying on the ground (there were hundreds in the small 20 ft sq. area) had similar holes in them.

I worked my way along the northern shore & noticed many Curlew & plovers. There were also many small striped fish in the water.

R. S. Standen
Journal
1964

7

15.

29 September Cont. Palmyra Atoll

(about 4 inches) & a larger variety (from 10-20") white with large dark eyes & large dorsal fin. Washed up on the shore of the island was a type of seaweed & at certain places it collects in greater abundance than in others. Here it will form a mat about 6" deep & brings with it a smell that's not the best. The north side of the island is protected by ~~an~~ ^a ~~offshore~~ reef about 1/8 to 1/4 mile offshore. At various points along the shore are the remains of bunkers & pill boxes from W.W.II. At one point I climbed an old radio antenna about 150-200 feet high & took a picture. A higher antenna made out of steel & badly rusted, I didn't dare to climb. I climbed down in one of the bunkers & found a giant coconut crab. About noon the Chief Engineer & I went over & caught it. It must have weighed 10 lbs. & was about 20 inches long & a foot wide.

A few fairy terns kept circling about my head as I walked around. There were also some frigate birds hanging high in the sky.

at 1320 hr. we cast off & set to sea. The rest of the afternoon we sailed? around Palmyra and about 1600, after making the circuit, we headed for Washington Island - about 50 mi to the SE. Since we were in sight of Palmyra for the whole day it was impossible to

R. S. Standen
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1964

16.

29 Sept. Cont. Palmyra + at sea C. G. Robert Cruise

Keep complete record of all the birds seen. There were simply too many + it was hard to tell if I was counting them twice. We saw one flock today. It was mostly Red footed boobies. We chased it for an hour + a half but didn't catch any fish. I particularly was watching the terns - Common Noddy - sooty - Fairy - for feeding behavior. I didn't see the noddies feed at all. The fairy terns + sooties followed the same pattern of swooping down to the water + making a splash but not going under the H₂O - then flying off right away. They are never on the water more than a second. Many times only their bill will touch the H₂O as they hover above. I hope to be able to get into some flocks with more terns so I can observe better. It was hard today to find the sooties since there weren't too many of them.

The boobies feed by diving from the air. I even observed ones that were sitting on the water would fly just a few feet above the water as they could dive again.

Don't plan to include today's observations in Trip totals for at sea -

Should get a full day tomorrow.

R.S.

R. A. Standen
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1964

W

17.

20 Sept. Palmyra to Washington Atoll

Not far from Washington Atoll this morning. Island
was in sight at 0930. One R.F. Booby landed on
deck this morning. I checked it for a band then
threw it back.

Watched several flocks today. Definitely saw the
Hawaiian Noddy sitting on the water many times.
Fairy terns did not. Saw hundreds of fairy terns today.
Some make a big splash when hitting the water
to go catch food but never go under the water.
At one time I saw 5 Hawaiian noddies sitting
on the water for 2 or 3 minutes.

Also saw ~~some~~ Blue gray Noddies today for the first
time. Many large flocks of ~~the~~ Red footed
Boobies. All around Washington could see nothing
but boobies, Noddies & White terns.

Dropped anchor at 1730 but couldn't get a good
hook so we headed slowly toward Fanning Is.
Whistling is strictly out aboard ship. Several
times I've been given bad looks by members
of the crew when I was whistling. Mr. Albery
told me today that it's a sailor's superstition that
whistling makes the wind blow harder. Hence
the phrase "whistling on the wind".

Should be at Fanning in the morning.

RA

1964 1 October off Fanning Island Line Islands C.H. Gilbert

Observations made in Bird Flocks:

Hawaiian Noddy (Anous minutus) and Common or brown noddy (Anous stolidus) were observed sitting on the water. The smaller (minutus) were much more numerous in the area but at one instance both species were seen sitting together on the water. They remained on the water for more than a minute after I noticed them & I don't know how long they had been there. They didn't appear to be doing anything while on the water. One (A. minutus) I watched was hovering over the water trying to catch some food. It did so without making any splash at all on the water. It did not swoop down but hovered & just dipped the beak. I saw what looked like a small fish in its bill and it carried it a ways then sat on the water for about 15-20 seconds while it ate it. Immediately it flew off the water.

The entire flock of about 75 A. minutus flew along very near the water while the Red footed boobies were flying over head & diving here & there ~~into~~ ~~the water~~. The noddies would flutter along sometimes hovering en masse near the water & dipping their bills to feed. Every now and then I would come upon a group of them sitting on the water. Usually as the boat approached they would take off.

R. S. Standen
Journal
1964

F

19.

1 October Cont. Off Fanning Island Line Island Group C.H. Bellant

Boobies were also observed feeding today. They were all red foots & were in large numbers - about 100. The proportion of adults to immatures is quite striking. In a flock that size there are seldom more than 2 full adults. This has been the case since I first began seeing boobies. On entering the lagoon at Palmyra I noticed the the boobies sitting or roosting in the scaevola bushes were all or most all adults. It may be the case that the adults are staying ashore during the day & feeding at night. I have no evidence to show that they are feeding at night. Since Palmyra was the only place I got close enough to see the birds roosting, I can only talk for there. Another case may be that the adults are much further out to sea. All the boobies I have seen so far have been within 100 miles of land but right from the start I was seeing more immatures than adults. Perhaps I will have another chance to see more adults roosting here on Fanning if I ever get a chance to land.

It was about 1000 hr. today when Fanning finally came into view. We chased birds until we were almost out of sight of the island. It is a large island with a large lagoon in the middle, completely closed to the sea. In the noon day sun the cumulus congestus clouds over the island had a green hue to

1964
1 October off Fanning Island C.H. Gilbert Cruise.

them as they reflected the green water of the lagoon. It is a very striking thing to see & occurs in that part of the cloud that is usually darkest.

We chased another flock later this afternoon for about 1 hour. It had about 110 Hawaiian Noddies in it and I photographed one sitting on the water with the 8mm movie camera. Frigate birds were much more common over Fanning Island.

Towards evening we anchored about 200 yds off the Harbor Entrance at Fanning Is. Mr. Palmer, The District Administrator, came out in a launch & asked us over to his place for a get together. We had to keep it on the quiet though because we didn't have official permission to land & had not been through customs.

After dark 9 of us got in our runabouts and went ashore. Mr. Palmer was too nice. He had beer & all the better things ready for us & was just so happy to have visitors. He hasn't been off the island in 5 years. He has a large wooden house with about 20 rooms. Native servants & electricity (batteries)

Everyone enjoyed themselves & we sang songs & had a ball. I asked Mr. Palmer about the ATC crew & he gave me a band #747-53669 that he said one of the natives

Journal

1964

1 October cont. Fanning Island C.H. Gilbert

had brought to him. He suggested that the natives had probably killed the bird & eaten it. He also gave me a small fan made by the natives of the island. He said it was made out of hookey feathers. Mr. Palmer asked Mr. Holloway & myself & one other crewman to stay the night - so we did.

RB.

R. S. Standen
Journal
1964

F

C. H. Gilbert
Cruise 76

22.

2 October Fanning Island - At sea en route to Christmas

Up about 0630. Slept in big double bed in Mr. Palmer's house on Fanning Island. After tea & toast we left via small skiff for the ship. The three of us from the Gilbert had to keep low as the customs inspector could see the skiff as it left. He didn't know we were on the island & we weren't supposed to be. The engine in the skiff knocked out about half way so the guys from the ship pulled us the rest of the way. The customs official was on his way out to the Gilbert by this time so we went behind the ship & came aboard while he did so on the other side. Everything came off without a hitch. We weighed anchor at 0930 & set course for Christmas Island about 158 miles or 2 days travel.

There were very few birds seen today. I stood watch from 1000 to 1835 hr. In the evening the numbers of birds increased greatly as large numbers (about 50) boobies flew by the ship in the opposite direction toward Fanning Island. ^{Two} One masked booby seen today & one seen yesterday also. After the island passed out of sight today you could still see the green color of the clouds over the lagoon. Quite striking & an obvious navigational aid. The weather today was quite variable

1964

2 October En route to Christwood from Fanning Is.

beginning as partly cloudy then clearing later + heavy overcast in mid-afternoon.

Hazy at sunset.

I was very tired today, from last night's party to some how managed to last the day. Saw a dark phase wedge tail today. Thought it was a sooty at first but had no wing patches. Definitely did see some sooty shearwaters. No good size flocks today. Small group of noddies seen about 1000h. were not worth chasing. Noddies are poor fish indicators. That is - all the fishing we've done in flocks of predominantly noddies have yielded few if any fish. The crew feels that the cause is the poor bait we are using - because we have seen the fish jumping but have been unable to catch them.

Joke: 1st man - "How's your wife?"

2nd " - "Compared to who?"

R.S.

R.S. Standen
Journal

DARK PHASE WT. 595 - 65381

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FLEW ABOARD GILBERT AT CHRISTMAS ISLAND

1964

3 October To Christmas Island aboard C.H. Gilbert

Up 6:30 AM & began watch immediately. many sooty terns today. all flying toward Christmas Island. Came by us in groups of 10-20 birds. Also saw many fairy terns tropicbird (red tail), frigate birds, dark phase wedgetails, Phoenix Is. Pet. & masked booby.

Arrived at Christmas Island at 1335 hr. & dropped the hook. Mr. Robert The District Administrator came out & checked passports. Then some of us went over to the island. Had a good chat with Mr. Roberts (from New Zealand) a very nice chap who has been here for 11 years. He took us around the island in his land rover. Saw boobies & frigates nesting. Also saw plumer, wandering tattler & Phoenix Is. Pet. over the Islands as well as sooty tern colony with all young just beginning to fly. Are also large land crabs on the island. Their holes are everywhere. Saw gray back terns for the first time up close.

All dinner at Mr. Roberts & then returned to the ship. Plan to go to Cook Is. tomorrow. Also want to skin birds if can get seawater. Saw copra drying on drying racks on Christ. Is. Took picture. Copra is shipped out about 2 times a year.

R.S.

Journal

1964

4 October Cook Is. Christmas Island Atoll C.H. Gilbert

Arrived here at Cook Is., one of the small islets of the Christmas Island atoll, at 0930 hr. by skiff from the C.H. Gilbert, anchored about $\frac{1}{2}$ mile from here. Was little rough getting in as we couldn't get the boat in too close because of coral heads & strong winds from the large lagoon. Saw a large shark about 5 feet long as I was wading ashore in waist deep water. Needless to say this hastened my pace ashore.

I was greeted even before I reached the beach by a group of about 15 Fairy Terns hovering over head & gurgling at me. Total relief of the islet doesn't exceed 15 feet with a narrow beach (about 40 feet) most of the way around. The beach varies from very sandy to very "rocky" with chunks of coral up to about a foot in diameter. The first plant as you walk up the beach is the *Scaevola* which clearly defines the limits of the beach about the entire islet. The *Scaevola* belt rarely exceeds 20 feet in width & surrounds the low, dry, succulent plants of the interior of the area. The whole island is then covered with a veil of ^{yellowish} "fodder" like parasitic growth. On many of the *Scaevola* bushes the parasite seems to have the upper hand but there is still plenty left. The "fodder" hangs thickly on some of the bushes like Spanish moss much of it dead from just years still clinging to the bushes. The succulent plants

4 October Cont. Cook Is. Christmas Is. Atoll.

of the interior are about a foot apart, 3 to 4 inches high, & 2 or 3 miles in diameter. Many or most are almost completely dead as there has been no rain here since March according to the District Administrator Mr. Roberts.

The islet is about $\frac{1}{2}$ to $\frac{3}{4}$ of a mile around and not more than 100 yds wide at any point. It is shaped in a curved arc with the concave ^{lee} side facing west & being the lee side. There is a small lagoon open to the sea on this side of the islet. I am sitting on the beach on this side of the island now & a Brattle thighed Curlew has just landed down the beach & is walking my way. He was just buzzed by an inquisitive blue gray noddy & subsequently left the scene. A little further down the beach is a pair of wandering Tattlers in non-breeding plumage. As I walked across the interior of the island I saw many of the blue gray noddies sitting on the ground, their small head being taller than any of the vegetation on the interior.

Another curlew is prodding on the sand just to my right & is probing with his 3" ^{downed} ~~downed~~ ^{bill} into the coarse sand. Now he walks a few steps & raises his wings, and lifts ~~itself~~ into the air, ~~and~~ while it calls several times EEEOWIT - EEEOWIT.

All around me small bits of coral whistle in a fresh breeze that's felt good in the hot sun.

Journal

1964

4 October cont. Cook Island Christmas Is atoll C.H. Helbat

It is now 1340 hr. and I am still here on Cook Is.
 Made a brief survey of the island. Found 61
 tropicbirds (Red-tail), 38 of which were on eggs. Also
 found 27 young. Checked first 2 for bands. One
 of the pair had ^{FWS} NO. 595-56608. The second bird bit
 me on the right fore-finger + put me out of
 commission as far as checking for band NO's. There
 are probably about 100 nesting pairs on the
 island. I'm sure I missed a few. Most did not
 have bands.

I counted 7 Christmas Island shearwaters, 2 on
 eggs + 2 with ^{young} (one egg + one young one). One
 had band ^{FWS} NO. 544-10937 + no egg.

I also found 2 Hawaiian Noddies dead with bands
 on. I took them both. The band NO.s are 652-43700 and
 652-44457. I could not tell the cause of death.

The sooty terns here are all hatched + the young
 are about ready to fly. There is a large section
 of the island with hundreds of sooties.

The blue-gray noddies are not nesting yet or
 have already, but are here in good numbers -
 (several hundred).

Fairy terns are nesting with some eggs, some
 young + a few young flying. Most of the fairy terns
 seem to have small nests as do the Hawaiian Noddy.
 Both are in the same stage of nesting.

There were a few common Noddy (stolidus) eggs
 about but not many. This bird is not nearly
 as numerous as any of the other terns here.

Graybacks seen flying off shore but no nests.

1964

4 October cont. Cook. Is. Christmas Is. Atoll C.H. Gilbert

Found about 20 Red footed boobies roosting in a large *Scaevola* bush.

The island is somewhat larger than first estimated being much wider at both ends of the arc. It may be almost 200 yard at the widest point. In these areas the vegetation is much thicker + more extensive. It is possibly because these sections are also lower than the narrow part of the island that the vegetation is thicker. At the northern end there are a few young coconut palms + a 40ft. high signal beacon. I climbed it and laid eggs + signaled the ship to come get me. No one saw me I guess because that was about 1 hour ago.

It has clouded up a little + a light mist has fallen twice in the last hour. I counted eight good sized sharks in the lagoon about 1 hour ago + scared them off with some rocks.

about 15:30 today I spotted the skiff coming after me. They found a smoother beach + there was no trouble getting off the island.

The rest of the day was spent aboard the *Silbert*.

R.S.

Journal

1967

5 October Christmas Island & At Sea C.H. Gilbert Cruise 76

After breakfast today, Mr Holloway, the Captain and I took the skiff over to the main island. This is where Mr. Roberts lives & the settlement of about 200 natives. The place is called London. Here I bought a few Gilbertese stamps and then Mr. Roberts took us in his Land Rover to show us a Coconut palm with 5 Crowns. This is quite a rare thing and no one of us have ever heard of one before.

Much of the island has been planted to new coconut palms in the last 2 years & still more are being planted. It takes 6-8 years for the trees to come into bearing so the island will not benefit for about 6 more years. Most of the island was originally planted in about 1900 so most of the trees are about 60 yrs. old. They can be expected to bear for about 90 years but the island has already felt the decrease in yield from these older trees.

The natives obtain sugar from the coconut palm by tapping the bud & catching the sweet sap in a bottle hung from the bud. The sap runs down a plate of a leaf into the bottle. The same result can be obtained by cutting off a new branch and catching the sap. But since a new, green branch is the only thing that benefits the tree

19⁴⁴
5th October Christmas Island & at sea. C. D. Gilbert

in the photosynthetic process, this usually kills the tree. In some places like Honolulu it is against the law to cut a new branch on a coconut palm.

The only use economically for the coconut palm in these islands is for copra. The nut is cracked in the field & the meat of the nut removed. This is then sun dried in large vats of which there are about 18 (- 20x20 ft.) on Christmas Island at London. Drying for about 5 days in the hot sun removes about 30% of the water & reduces considerably the shipping weight of the copra. The dried coconut meat is called copra. Green coconuts are the kind that milk is obtained from. There is less ^{meat} ~~meat~~ in them & more milk. The meat is called spoon meat at this time because it is very soft & easily eaten with a spoon. On most copra plantations only coconuts which have fallen from the trees are used. On some plantations it is against the law to pick a coconut for copra since the % of meat in a fallen coconut is much greater than in a green one.

The copra is pressed for oil that has many uses.

The plantations on Christmas Island are worked by natives & run by the English government. The workers are required to fill 2 bags with coconut meat for

Journal

X

1944
5 October

Christmas Island at Sea. C.H. killed

each days work. If they produce more there is a bonus for them.

We returned to the ship at 1230 hr. and lifted the anchor at 1320 hr. As the anchor came up we noticed it had hooked onto a cable to the buoy about 200 yds. from the ship. After a little work they got it off and ^{we} were on our way by 1340 hr.

We expect to be out now for 2 weeks & be back here at Christmas Island on the 20th of October.

Stood watch today from 1400 to sunset. Saw one very odd bird. It was a storm petrel size & was gliding along beside the boat never flapping. Occasionally it would drop one foot into the water but still would not flap its wings. Its head was dark & it had a complete white band around the neck. Its back & forked tail were black & the underside except for the tail was white. Underwing was white except for a dark band on the leading edge. I fired at it twice & missed. Have now fired 3 shots & got 4 birds. Saw 2 flocks today both moving very fast & we were unable to catch them.

Boobies all appeared to be heading toward the island at dusk. Saw sooty shearwaters again & some Cooks Petrel.

R.S.

1964

6 October At Sea Pacific Ocean N of Christmas Is. about 7°N.

At 1200 hr. today we encountered a flock of about 90 birds - mostly ~~shearwaters~~ ^{Wedgetail (Duck)} shearwaters. While watching the flock I observed one immature sooty tern sitting on the water feeding. An adult bird was hovering over it. Then the imm. flew off the water with a small fish in its bill. It then took it a few seconds to turn the fish so it could be swallowed head first. Also present in the flock were 2 Juan Fernandez Petrels (*Externa externa*) & one Phoenix Island Petrel.

In later flock I observed a sooty tern dive in the water but only the head went under - its wings kept flapping but were not in the water. The bird dove down hard & really looked as if it were going deep - but did not.

Had several flocks late this afternoon as we hit the equatorial counter current. Had no luck trying to shoot *Pterodroma*. Fired 3 shots.

All the wedgetails are dark phase & did most of their feeding sitting on the H₂O with their heads underwater.

Saw few boobies this morning & none since. We are now heading N. toward 10° where we will work back & forth across that latitude. Studied morse code for 1 hour tonight.

R. S.

Began watches with the sunrise as usual. Shearwaters were the bird for today - 144 out of the 166 birds seen. Several interesting birds today. The first was a golden plover seen first after breakfast. It flew very near the ship & I made a good identification. It stayed around for about an hour. Three more were seen throughout the day that I considered different birds. All of them circled the ship several times while calling.

The pterodroma today were very numerous making up half of all the shearwaters seen. The all white neck Externa cervicalis is starting to show up again as we move north. Others were Cooks, Phoenix Is., & Juan Fernandez (Externa externa).

Two of the wedgetails seen today were light phase. There were 38 wedgetails in all.

Tentative sighting on a Skua today. I saw a gray bird flying very fast over the water - it had white patches on top the wings.

Storm petrels were also present today. Just the Star count? was seen - 4 in all. Can't be sure it's even Starcount - may be Leeches.

About mid-afternoon I was surprised to see Newell's shearwaters (eventually 12 in all). Our latitude was about 8° N at the most. Seems pretty far south to me, but several flew very close & I'm sure about them.

I guess there is only one sour note for the entire day. About 0700 hr. This day

R. S. Standen

34.

Journal

7¹⁹⁶⁴ October Pacific Ocean at Sea Ckt. Gilbert Cruise 76

we came upon a small flock (25) of shearwaters mostly wedgetails & Juan Fernandez Petrel. I asked permission to shoot & was given it. I shot one Externa externa on the first shot. Through uncooperativeness of the crew (too early for them) & the officers - 2 in all - one asleep - the bird was lost. In general the first mate doesn't like to stop for anything. I was pretty mad about it because I kept my eye on the bird until I couldn't see it anymore - then they turned the ship around. Oh well! Next time I'll wait until later in the day.

All is well aboard ship. Took a shower in the rain today. Felt quite refreshing. Raw fish for dinner tonight. Our Hawaiian crew loved it - I satisfied myself with a bowl of rice & a peanut butter & jelly sandwich.

R.S.

Journal

1964

8 October Pacific Ocean about 9°N-155°W C.H. Gilbert Cruise 76

Watch continues today sunrise to sunset. Very few birds - 73 in all. Sooty shearwaters out number all other species. Saw 2 Bonin's Shearwaters in a small flock of 15 sooty terns about noon.

Little else to report for today.

Enjoyed eating green coconuts from Christmas I. today. They were delicious. When they are green they are mostly water & the meat is very soft. They call it spoon meat because you can eat it with a spoon.

Took a shower in a heavy rain squall today.

Turkey dinner tonight was very good. We are in Radio contact with the Cromwell every day now.

R.S.

Journal

1964

9 October 13.5°N - 155°W Pacific Ocean C. H. Gilbert Cruise 76

Awake to sunset watch again today. Very poor observing conditions in the morning. Heavy winds & salt spray over the whole ship made identification of species almost impossible. Most of the day's observations were made from atop the flying bridge. This point is a little too high for a good view of the birds on the horizon.

Consequently I'm sure I missed quite a few birds today but this was the only dry place & they don't have windshield wipers on the pilot house.

- Sooty shearwaters again the most numerous except for a flock of 150 sooty terns seen in the morning. The terns were flying very high in a rain cloud. I've never seen terns in as large a number, at sea, that weren't feeding.

Pterodroma present in good numbers but at times hard to identify. In the field notes the word Pterodroma refers to both Pt. & Externa sp. Did see one Externa cervicalis today. Saw the white neck band very clearly.

Another golden plover tonight about 1700hr. It circled the ship as usual then flew off.

We came north to about 13.5° today then turned south. ~~Found~~ Very few birds & no flocks has the fishermen down as well as the scientific staff. Bad weather kept the crew out of sight & makes observation difficult & most trying.

Journal

1964

9 October 13°5'N - 150°W Pacific Ocean C. H. Gilbert

Will try to continue the 12 hr. a day watches for another couple of days if I can hold out. If we have bad weather again tomorrow I think I will cut the watches & set up a new schedule.

R.S.

Journal

1964

10 October Pacific Ocean 10°N-153°W C.N. Helms Cruise 76

Usual 12 hour watch today for the last time. Will begin new schedule for the rest of the trip. Very few birds today - 70 in all. Most birds were flying south i.e. away from us making identification for hard. Saw one plover again today. Only one small flock of 8 birds. No fishing. Wish I had more to write but I don't so won't clutter these pages with junk.

Passed through several rain squalls this day. Most of the crew was on hand with soap in hand for a quick shower. Hope to spend much of the time in the next three weeks with gear in hand - & try to collect as many *Pterodroma* sp. as possible. The last few weeks has been quite a strain - writing down every bird sunrise to sunset. Will try to get as much watch time as possible but will concentrate on collection & flock activity - if we have any. Gary (first mate) reported contact with FWS. Ship out of Atka Alaska last night & plans to communicate with them tonight. They mentioned Max Thompson last night & asked if we had any S.I. "Bird People" aboard.

R.S. Standen
Journal
1964

39.

11 October Pacific Ocean 8.5°N - 153°W C.N. Helbert Cruise 76

Today was Sunday & the first day since we left Christmas Island that I didn't stand a 12 hour watch. I began the watch at 0730 - 1100. Then again from 1500 - 1800. We were headed south all morning & came upon 2 flocks before noon. One was all wedgetail sitting on the water in a very close bunch. Three or four of the birds flying around gave them away & we went over that way to investigate. The sea was completely calm & the flock of about 30 birds were sitting on the water. They took off as we approached. About 15 minutes later we came upon a somewhat larger flock composed of ²⁰ wedgetails (both phases) ¹⁰ few Fernandez Petrels (Externa externa), ²⁰ Sooty terns, 1 Golden Plover & 2 fairy terns. This flock was feeding but we were unable to catch any fish. I also saw an ORANGE TAG on one of the wedgetails in the flock. I saw it quite easily without the aid of binoculars as the bird was very close. (0945 hr)

Saw one Newell's Shearwater this evening the only one all day. Didn't see any yesterday.

Power or auto pilot on the ship went out today so must now steer the ship manually.

Changed course at 1400 today & are now heading back up north. Took picture thru binoculars today of thunder head F 11 40 sec. K-I. Inf.

R.S.

R. S. Standen
Journal

1964

12 October 11.5°N - 150°W Pacific Ocean C.H. Robert Cruise

Took six hours of watches today on every other hour between sunrise & sunset.

But one flock seen today. Only about 10 birds. One plover seen today as well as 1 red tailed tropicbird first in almost a week. Sooty shearwaters, Juan Fernandez Pet., Cook's Pet most common species.

Turned south tonight to run along long. 150°W down to about 5°N then across on the Equatorial current to Christmas Island. Auto-pilot on ship repaired - all is well.

R.S.

R. S. Standen
Journal
1964

41.

13 October 8°N-150°W Pacific Ocean C.H. Walcott Cruise

Began watch at 0600 hr. this day. Had 2 4 hr. watches 0600-1000 and 1400-1800.

Very good flock of Externa externa and Externa cervicalis this morning but because of repairs were unable to go into the flock. Missed a good chance for collecting.

Saw one petrel today that looked like Cook's petrel but had the same color below as above (immature?).

I spent the last half hour of the morning on the fore-castle with the gun but got nothing. Did some in the afternoon but heavy rain stopped all but observations.

Several Cook's petrels were seen flying in heavy rain + two newell's shearwaters were seen flying in light rain quite near the vessel.

We change course tonight + are now headed WSW toward Christmas Island.

R.S.

1964

14 October 7°N - 152°W Pacific Ocean L. N. Gilbert Cruise 76

Watch began at 0600 hr. today. Several birds were seen right away & our first flock was sighted at 0630 hrs. Several more were sighted before the day's end.

Second flock was the largest & although it broke up once it regrouped a second time & we were in it for about 3 hours. It was mostly sooty terns (200) with many immatures, and dark phase wedgetails (100). There were also Newell's Shearwaters (5) Juan Fernandez (20) & Phoenix Is. (1) Petrel in the flock. Many of the wedgetails were observed sitting on the H₂O in large flocks very close together but apparently not feeding. Feeding birds that were seen sitting on the water were usually by themselves. Saw many chasing the flying fish that were running from the tuna.

Took some movies in the flock but nothing important. Without the camera I did see 2 sooty terns sitting on the water. I don't know how long they had been there but they flew off just after I saw them. One adult & 1 immature. Many of the sooties were also chasing fly fish. Later I saw them eating squid.

Late in the flock I got out the gun & after a long wait finally picked out a bird & collected it #0555 (Externa externa) Juan Fernandez Petrel. At least that's what I've been calling them.

Journal

1964

14 October Cont. 7°N-152°W Pacific Ocean C. H. Gilbert.

also saw another dark phase Cook Petrel today in a flock.

Saw one Cooks Petrel today that didn't fit in with the others. Most of the Cooks have a definite dark border all around the underside of the wings but this one only had it on the leading edge of the wing. The back was a very uniform gray with the M on it.

One Swan Fernandez Petrel was seen on the deck at 1505 hrs. It appeared as though it could not fly. It was very near the ship & seemed to be trying to fly but couldn't control its wings. Then it suddenly flew off the water no trouble at all. Again it sat on the water & went through the same behavior. This is the second time I've seen it ~~for~~ happen but the first time I've thought it significant enough to write about.

In a late flock this evening I collected what I think is a Pink-footed Shearwater #2556. It is a large white-bellied Shearwater with a bit of pink in the bill. It is much larger than a wedgetail & the belly is slightly mottled at the edges as are the underparts of the wings.

Seem to have been in a very strong area for birds today. Popoet continues & the ammunition holds out.

R.S.

Journal

1964

15 October 5°N - 155°W Pacific Ocean C.H. Bellut Cruise 76

Watches began at 0615 today. Same schedule has been followed since the 13th. That is 4 hrs watch in the morning 0600 - 1000 hrs. & 4 in the afternoon 1400 - 1800 hrs. Things started off very slow today. In fact birds were very few all day except for the flock (5 total with 781 birds)

Two very large flocks seen today with 200 terns in each. They all were flying high & fast so we didn't follow any except the first which proved to be hopeless as far as fish were concerned. Seemed to be more Phoenix Is. Pets. out today & no J.F. Pets.

Possible Bulwer's Petrel today. Thought it was a Christmas Is. Shear. at first but it had long tail & light buff patches on top of the wings. It's the first one seen the whole trip that's why I'm not sure.

Only one (1) Sooty Shearwater all day.
 ✓ Another of the very distinctly colored "Cook" Pet with the very deep dark patch at the side of the head. Shear.

Lots of Frigate bird today & first booby in about 1 week (Masked adult).

One plover seen this afternoon.

Last night I sawed up an orange crate for sawdust & today I used the sawdust to skin the pink footed Shearwater. I soaked it in white goo & tonight I stuffed it with a shredded book magazine. It worked pretty well and the

R. S. Standen

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15 October 5°N-155°W Pacific Ocean C. H. Gilbert Cruise 76

bird doesn't look half bad.

It has been a long day. I also managed to clean up the "Log-Tom" today so it's ready for another "go" with the birds.

Automatic Pilot is out on the ship so they have to steer by hand. Everyone is getting anxious to get back to Christmas Island. It should be in sight by tomorrow night. Am looking forward to a days rest myself.

R.S.

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C. H. Gilbert

16 October Christmas Island in sight at sunset Cross #6

usual watch today. Very slow in the morning.
 - saw skua today. It was very near the ship when I first saw it. Looked as though it may have flown off the water. Saw the wing patches very clearly. Bird was much darker than the first one I saw on 25 September 1964. It was definitely a large bird. Spent the next half hour on the fore castle with the shot gun in hand.

After the morning watch I skinned the J.F. Petrel (*Externa externa*) collected on 14 October #0555 soaked it in white gas & stuffed it before the second watch. If I can get more cotton I should be able to finish all the birds by the time we get back to Honolulu.

Radio news this day says Khrushchev ousted. Wonder what it all will mean.

afternoon watch full of birds - mostly boobies & sooty terns. First Hawaiian Noddies & Blue-gray Noddies seen. Saw Golden Plover again this evening.

Just after sunset Christmas Island was sighted. The crew hopes to drop the hook some time before midnight.

Will call it a day.


- note: Anchored at Christmas Island 2030.
 Spent night on deck.

R.S.

Stayed aboard the ship today until 5 o'clock when the Capt, Chief Eng, Mr. Holloway & myself went in to the island. Spent 6 hours there. Talked to one of the natives about birds. Says he has seen fairy terns eat gecko's.

The native says they can predict the condition of the sea by the way the crabs burrow. Also tell whether the fish are inside or outside of the lagoon by some means.

When the bird all take of & circle higher & higher there is a storm coming. Captain tells me that the natives on Maresma Island knew a hurricane was coming 3 days before the army did.

On the barracks of the RAF station here there is flying on the flag pole the "Homeward Bound" Pennant. It is a long (15') narrow flag about 1 foot wide at the loose end & 2 ft at the pole. It is white & has a thin red cross like so:  near the pole end. With its long length it waves slowly in the faithful east end. In the middle there is a large hole worn there by time. The flag hasn't been touched since the RAF left in February.

R.S.

18 October Christmas Island at sea C.H. Gilbert Cruise 76

Lifted hook at 0700 hrs. Headed south around the end of the island & back up the east side. Did not keep continuous watch today as there were too many scattered birds about the vessel. Christmas Island is still in sight tonight & has been all day. By tomorrow morning we will be almost to Fanning.

Encountered six good flocks today & the fishing was especially good. Caught 54 yellowfin tuna average weight 60 lbs. They are using a new bait now - mullet. It's a little slow because they have to bait the hook. To save time they keep an extra mullet in their mouth while their line is in the water.

Flocks were largely boobies (masked & Red-foot with a few Brown) noddies, and sooty terns.

✓ - Saw imm. sooty tern on water with adult hovering overhead.

- Shearwaters were out in larger number tonight. Saw another odd Storm Petrel this evening like the one I saw on 5 October. It flew behind the ship just before sunset.

It rained once today & the wind was strong all day.

Hawaiian name for Plover - Mame Koloa - Bird that gets fat on someone else's land. R.S.

Journal

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October Approaching Fanning from So. C. H. Gilbert Cruise 76

Began watch before sunrise today. Fanning Island was sighted at 0945 hours. I concluded the watch at 1000 hrs. The rest of the day I made only casual observations of flocks & took a few movies.

at 1130 hrs. we dropped off the mail for Fanning then when fishing along the western coast of the island. at 1600 hrs we returned to the island southern tip to pick up our clearance paper to re-enter the U.S.

Red-footed boobies outnumber by far all the other birds seen today. Most of them were all dark immatures with only a few subadults & adults.

next in abundance for today would be the Hawaiian Noddy. Both Washington & Fanning islands are characterized by large flocks of Red-footed boobies & Hawaiian noddy terns. Christmas Island on the other hand is characterized by Red-tailed tropicbirds & fairy terns as well as red-footed boobies but with a greater percentage of masked boobies.

Other species noted today were Phoenix Is. Petrel, Wedgetail (dark phase) Sooty Shearwater & Cook's Petrel

During one of the flocks this afternoon I again saw Hawaiian Noddies sitting on the water. It has been seen so often that I'd say it is almost common to see them

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19 October Off Fanning Island C. H. Gilbert Cruise 76

sitting on the water.

Boobies were feeding in either of two ways.

(1) with head underwater while sitting on the water.

(2) by diving from flight into the water.

Saw fairy tern eating a flying fish today.

Fish was about 4 inches long. Carried it in its bill in flight. Fairy tern hit water & was on the water about 2 seconds the right of again.

Mr. Holloway doesn't want anymore yellow fin tuna but would like some skipjack. Most of the fishermen aboard believe they can tell if a flock is over skipjack or yellow fin. They say that the yellow fin usually fly swim deeper than skipjack & only come to the surface occasionally to feed. The usual way to catch yellow fin is "long line" (long - several miles) line with baited hooks towed behind ship very deep.) When yellow fin feed at the surface they remain deeper than most fish thus the small bait they are after stays deeper too. Only momentarily do the fish chase the bait to the surface & it is at this time that the birds over head dip down to the water. Thus over ~~at~~ yellow fin you will have a flock hovering over the water with only an occasional bird or birds dipping down to the water to feed.

Over skipjack which feed at the surface the bait is actually chased out of the water.

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19 October off Fanning Island C.H. Gilbert Cruise 76

and the birds overhead are continually diving in or at the water making a very active flock. This type of flock may also be moving very fast since the bait has only one way out - away from the area instead of a vertical distance also.

Spent most of the afternoon getting some of the data in order species collected, band recoveries, locality of collection, Body chart from level + light + dark phase wedgetail ratios in various areas of the trip. Distance for the orange tag bird seen on 11 Oct. '64 was about 1225 miles from Johnston Is.

Should arrive at Washington Island in the morning to deliver the mail. Then up to Palmyra. Latest scoop puts us in Honolulu on the 26th.

R.N.S.

Journal

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October Around Washington Island C. H. Hebbert

Washington Island was in sight today before the sun was up. It was 11:00 hr. before the boat came out to pick up the mail. The Mr. Wm. Frew came out with 11 natives in a life raft + stayed aboard while we chased flocks around the island. We dropped them off again at 1600 hr. + set course for Palmyra.

Mr. Frew had a map of the island showing improvements of over the map the ship has. There are about 3 miles of canals through the peat bogs in the centre of the island west of the fresh water lagoon. A tramway runs from the settlement to the end of the canal. There are about 13 miles of trackless roads for hauling copra.

Nothing exciting today in the way of observations. Observed Hawaiian Noddies + Common Noddies sitting on the water in flocks today. Saw Fairy terns hitting the water + remaining on it for 2-3 seconds at the most while feeding. Shot about 25 feet of movie film. All boobies were seen. Red-foots not as many as at Fanning.

We are scheduled to arrive at Palmyra in the morning.

R.D.S.

19 64
21

October Palmyra Atoll Linné Islands, C.H. Gilbert Cruise 76

Just off Palmyra at sunrise today. Dropped the hook about 2 miles from the island & fished for porcupine fish - red snappers. He came in to the lagoon and docked at 09:15 hr.

I immediately took off to see the sooty tern colony on the airstrip. The young all fly now except for a few stragglers that still have a long way to go. My original estimate of 2000 adult birds about right. There appear to be many more birds now since the young are bigger & flying.

at the NE end of the runway I found a dozen Red-footed Boobies roosting with no young. I followed a road off that end of the runway to the east where it joins a causeway that was constructed years ago. Along the causeway I found Wandering Tattlers, one Brown Booby on a egg, and 2 glass balls. At this point I returned to the ship with my load.

Then I went over to the sooty terns again and caught 5 & brought them back to the ship. One at a time I took them out of the bag. The first I held completely under water for 2 seconds then let go of it. It came to the surface & with little difficulty took off. I repeated this with similar results. The third bird I set on the water & it immediately flew off. The 4th bird was set on the water but did not take off. It drifted along the side

1964

21 Oct. Cont. *Palmyra Atoll*

C. V. Gilbert Cruise 76

of the ship for a full minute. Its head was back & its wings were spread but laying on the water. After a minute I picked the bird off the water & immediately set it back down at which time it flew off the water. The final bird flew away quite readily when placed on the water.

The first bird was soaking wet after being dunked & still was able to fly off the water. The bird which sat on the water for a minute did not sink at all. I also took moving pictures of the whole thing.

About 1330 I went back out on the airstrip & took a few pictures & generally watched birds. Instead of going on out the causeway I went straight along the windward side of the island. I found an old airplane that had crashed. Further down the island is broken by a 50 ft passage of water. It was almost high tide & the current running into the lagoon was very strong. On returning to the ship I checked the map & there is no record there of this opening into the lagoon. The palms along the edge of the opening were all being undermined by the water indicating the ^{process} somewhat youthful stage of development of the small straight was still going on. Elsewhere on the island I have seen evidence of more youthful stages of this process of breaking large atoll islands into smaller islets.

In the first instance I was on the causeway. The causeway actually cuts the lagoon in half thus water flowing in the windward side can not get all the way thru the lagoon. This means there is a piling up of water on the windward side of the causeway. At some places, like the one I saw, water manages to seep thru the causeway to the lower water on the other side. But since the water that seeps through is at a higher level than that on the other side (or there would be no seepage at all) it must run down a little ways to the new water body. It is here that the erosional process begins by headward erosion or sapping as it is called. The water that gets through the causeway & runs down the other side slowly eats its way particle by particle back to the cut the causeway until a complete break is made. The one I noted today on the causeway was about 6 feet back into the causeway already.

The fact that this process goes on on the windward side of the atoll is perhaps important. It might be valuable to look at maps of many different atolls & see on which side lee or windward the smaller islands are located. Food for thought.

R.S.

Journal

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October Leaving Palmyra for Hawaii, C. H. Gilbert Cruise 76

Cast off from dock inside the lagoon at Palmyra at 0630 hours. Circled the island counterclockwise then headed north about 1000 hrs. Did not begin watch until 1400 hrs. During morning hours I worked on the report.

In the first flock sighted, just after 1400 there were 3 light phase wedge tails. This is further south than I saw them coming down. Saw Cook's⁽¹²⁾, Juan Fernandez⁽²⁾, Phoenix⁽¹⁾ Island Petrels today as well as 1 Newell's Shearwater. Saw 49 Red footed boobies & 1 brown booby, 3 Fairy terns & 86 Sooty terns.

Found myself aching from sore muscles today. According to the map of Palmyra I walked at least 13 miles yesterday.

Arrival date for Honolulu still uncertain. We may go to Kauai first & see if they can catch anymore tuna.

Am spending time with the air gun on the fore-castle trying to collect some more Pterodroma but no luck so far. Will probably skin the first Juan Fernandez Petrel I shot, tomorrow. Found some wood fiber & cotton on Palmyra so am all set.

RSS

R. J. Standen

Journal

1964

23 October 10°N - 160°W C.H. Gilbert Cruise 76

56.

Very wet + rainy weather today cut observations to only 4 hours. Only species seen were Juan Fernandez Petrel, Cooks Petrel, Sooty Tern + skua. Skua was close to the ship and seen very well.

Worked on the report again today. Few more days should have it completed. Poor weather kept me from skinning a birds so I still have that to do.

Definition: waffles - are non-skid pancakes.

RJS

Journal

1964

24 October 12°-13° N - 160° W C.H. Gilbert Cruise 76

Watchers began at sunrise today despite water spray coming over the bow. Saw 1 Sooty Shearwater today, 9 Cooks Pet. and 1 wedgetail. Total watch time 6 1/2 hours. One storm petrel seen this morning probably Harcourt's.

- One unidentified bird flew very near the ship at about 50 ft. gliding & slow flapping. Dark above & light body mottled at breast and dark neck.

Very few birds today except in 2 flocks both with sooty terns.

Worked on report again today. Still must work on the distribution of flocks and sum up the major body - the at sea section.

Time now beginning to drag out as we are heading home.

R.S.

1964

25 October

15-16°N - 161°W Going North C. H. Gilbert Cruise

Up with the sun again today. Heavy seas & strong winds made observations useless. Could not identify birds because of spray coming off bow. About 50 shearwaters were all that were seen for the whole day. These were seen by the crew who stood various watches throughout the day. Very strong trades were reported in Hawaii for the 2 previous days & have been the cause of the heavy seas we've encountered since leaving Palmyra.

A note here concerning an incident on Oct 20.
- On first arriving of Washington island 2 natives in a small outrigger canoe came out to meet us with a message. It was in a small flat tobacco tin & was from Mr. Trew. It said that they were presently inflating a life boat and would be out soon.

The 2 native men remained in the canoe while several of the crew held 2 lines to their boat. They were there for about 15 minutes during which time not a word was exchanged. We just looked & they laughed & looked back. Finally the mate brought a reply message & gave it to one of the natives still in the tobacco tin. The native took it & put it in a twist of his Lava-lava about the waist. He waited a few minutes then took it out again & said very clearly "Shall I take this to the manager?"

We thought they didn't speak English. RJS

R. S. Standen
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59.

26 October 19°N - 161°W Toward Hawaii C.H. Gilbert Cruise

Little change in weather today. Strong winds continued to make observations all but impossible. Birds seen today were 21 terns (sooty) 15 Cook Pet? which may be Bonin Island Petrel. They seem darker than the bird to the south & have darker underwing. 1 Sooty sp. was seen to day in a loose flock of about 25 birds. 1 white tailed tropicbird, 1 storm petrel & 1 white neck petrel *Externa cervicalis* seen very clearly. Total watch time only 3 hours 0800 - 0900 & 1300 - 1500.

Should arrive off Kaula Rock sometime tomorrow.

RS

1964

27 October Near Kaula Rock Hawaiian Is. C.H. Melbert Cruise

Another rough day as Kaula Is. was sighted at 1330. Managed to skin + stuff Juan Fernandez Petrel shot on 24 September 1964 - #0551.

About 1515 hrs. today we came upon a huge flock of about ⁴⁵⁰⁰⁰ 2000 birds. This is only a guess as to size but I have never seen a flock anywhere near this size. All the men on board agree it was the largest flock they have ever seen. There were better than 1000 wedgetails - this being the most abundant bird in the flock. There were about 500 Sooty Terns. The rest of the flock was composed of Red-footed + Brown Boobies, Hawaiian Noddies, + Common Noddies. We were with the flock until sunset (1830) but only caught 124 fish both Yellowfin + Sheepshead (AKA). A large whale was also observed in the ~~flock~~ school.

- During the time we were in the flock the fish bounded (dove down deep) several times. When this happened the Sooty Terns would fly up high but the wedgetails would remain low in their usual manner of flight. Then when the school would come to the surface again (usually at a different location) all the Sooty Terns, that were way up high, would suddenly begin flying toward one spot. It was very striking because all the Sooty Terns in the sky would converge on a central point.

There were so many fish in the water today

1964

27 October Off Kaula Rock Hawaiian Is. C.H. Kellert Cruise

that at one time the ship was surrounded by foaming water. It was a fantastic sight. Hundreds of wedgetail would be sitting on the water. When feeding they would skitter along the water chasing fish then glide away.

Took about 50 feet of movie film on the flock.

- The flock was still actively feeding after sunset & I soon lost sight of it. The first mate says he has seen flocks feeding at night.

New ETA is 1900 Tomorrow night. We shall see.

Helped measure, weigh, & take blood samples from all the tuna before dinner.

- There were also many frigate birds over the flock today. Some as low as 100 ft. others were just spots in the sky.

R.S.

Journal

1964

28 October off S. W. Tip of Oahu Last Day C.H. Gilbert Cruise

No watches today. Finished first draft of report
& clean room. Very long day as usual.
At sunset we were just off Honolulu & in
almost total darkness we are now about
to enter Kiloala Basin. Will have to wait for
customs inspectors before we can go ashore.

R.S.