

Ship
Direction

SMITHSONIAN INSTITUTION
DIVISION OF BIRDS
AT SEA DAILY LOG - E

OBSERVERS:

CHAN
HOFF

Date 10 JULY '67
Pg.# 1

SPECIMEN
or

TIME SPECIES # DIR. BAND NO. REMARKS

TIME	SPECIES	#	DIR.	BAND NO.	REMARKS
1520					BEGIN OBS
1523	WEDGETAIL	2	ce		lt ph.
1526	"	1	ce		"
FF 1530	"	30±	ce		lt ph seen
	SOOTY TERN	3	ce		ads
	COM. NOD	20±			
1531	WEDGETAIL	3	ce		lt ph
1532	COM NOD	3	E		
P 1536	RFB	1	ce		ad. lt ph.
1537	RTTB	1	ce		ONH ₂ O NO TAIL
1540	RFB	1	ce		ad lt ph
Q 1541	DRP/WTS	1	ce		DRP LOOKING searching?
1542	WTS	3	ce		lt ph.
1542	CNT	1	E		
1545	SOOTY TERN	1	E		ad.
1549	CNT	1	ce		
1550	WTS	1	ce		lt ph
FF 1555	CNT	10±	ce		
1603	WTS	1	ce		lt ad.
1605	WTS	2	N		lt ph
1606	SOOTY TERN	1	NE		ad.
1610	"	3	ce		ads
1611	WTS	3	ce		lt ph.
TF 1613	SOOTY TERN	1	E		ad.
	CNT	6±	E		
1615	WTS	4	ce		lt ph.
1616	"	2	N		lt ph.
1619	"	1	N		lt ph.
1620	CNT	1	ce		
1628	WTS	1	N		lt ph.
1630					CLOSE OBS
1800					Open obs. - Molo Kai few miles to the right
1809	CNT	1	E		

TOTALS

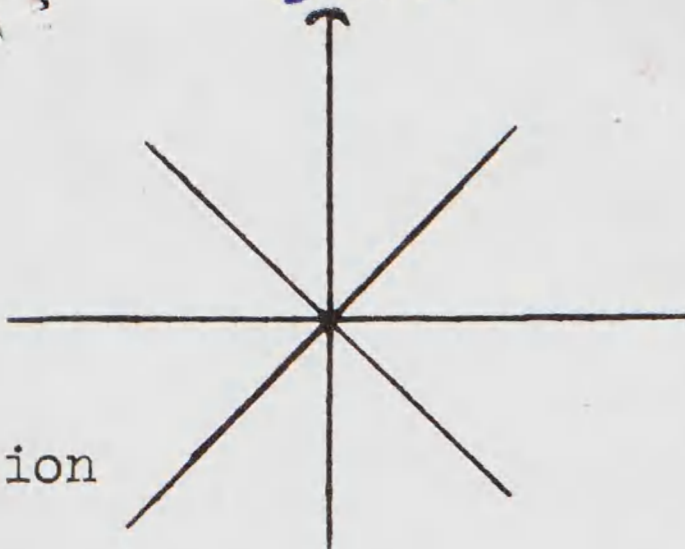
NEW.	- 2
WTS	- 56
ST	- 10
CNT	- 43
RFB	- 2
RTTB	- 1
DRP?	- 1
	<u>115</u> ✓

ENE

2

OBSERVERS:

Hoff



SMITHSONIAN INSTITUTION
 DIVISION OF BIRDS
 AT SEA DAILY LOG - E

Ship Direction

Date Pg.#

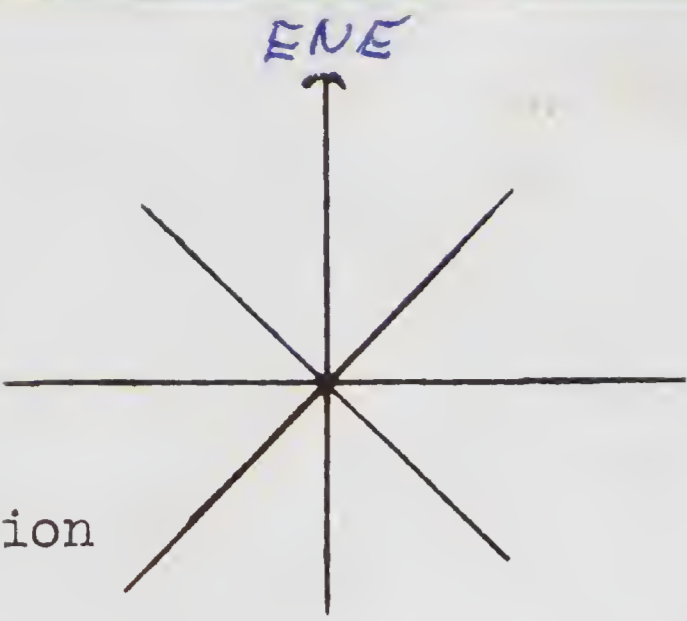
10 July '67
2

SPECIMEN or

TIME	SPECIES	#	DIR.	BAND NO.	REMARKS
18 20	WTS	1	E		LT. ph.
18 35	WTS	1	E		" "
18 45	Newell's S.	1	E		
19 00	Sooty Tern	1	E		
19 05	Newell's	1	E		
1913					Close Obs. <u>SS</u>

$$\begin{array}{r} 20.7 \\ 9.5 \overline{) 1970.} \\ \underline{190} \\ 700 \end{array}$$

$$\begin{array}{r} 8.6 \\ 24 \overline{) 207} \\ \underline{192} \\ 150 \end{array}$$



Ship
Direction

SMITHSONIAN INSTITUTION
DIVISION OF BIRDS
AT SEA DAILY LOG - E

OBSERVERS:

0715-0845 CHAN
0845-1015 HOFF
1015-1130 CHAN
1230-200 HOFF
2:00-3:30 Chan
3:30-

Date 11 JULY 1967
Pg.# 1

SPECIMEN
or

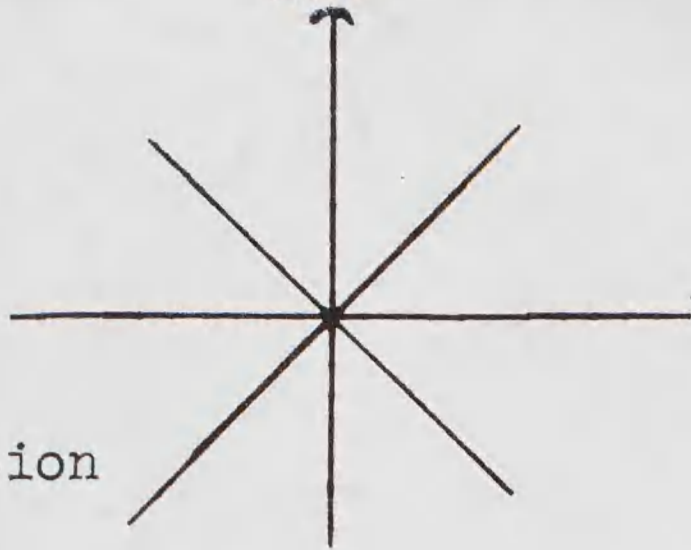
TIME SPECIES # DIR. BAND NO. REMARKS

TIME	SPECIES	#	DIR.	BAND NO.	REMARKS
0715					BEGIN OBS.
0820	SOOTY TERN	3	W		1 ad, 2 ? NOT SEEN WELL
TF 1000	"	26	E		traveling F.
1040	BWP	1	ce		
1055	SM. PTERO SP	1	ce		BWP prob - distant
FF 1102	SOOTY TERN	40±5	ce		
	WTS	3+	ce		lt ph.
Q 1128	SOOTY TERN	1	ce		ad astern, no albatross following
1130	} NO OBS				but crew reported a possible Jaeger? AROUND 1000
1230	}				
1310	Sooty Tern	4	SW		Ad. - Traveling
1320	" "	2	ce		above the ship's bow - no bands or streamers - Ad.
1410	WTS	1	NE		lt ph.
1425	SOOTY TERN	3	ce		2 ads 1 imm calling
Q 1500	WW? IP	1	S		SMALL, DARK W HEAD? LITTLE BLACK BORDERS
Q 1505	SHEARWATER	1	ce		dark S/SB / DARK WEDGEE MUST LOOKED LIKE
1512	WTS	3	ce		lt ph WEDGEE
FF 1515	SOOTY TERN	150±20	ce		distant
	WTS	5+	ce		lt ph seen; probably many more → 25?
1516	SOOTY TERN	3	SW		ads.
FF 1520	" "	60±5	ce		
	WTS	3+	ce		lt ph
Q 1520	BUL/S SP	1	ce		large storm pet tail not seen well
FF 1615	Sooty Tern	23	ce		Bulwers or Sooty
RF 1630	" "	150±15	ce		feeding
RF 1630	WTS	10	ce		WT below the sooties
1640	PT. SP	2	NE		2 small - distant
1650	WTS	1	ce		
1700	BWP	1	SE		
	PT. EXTERNA	1	ce		JFP T&PE
1710		1	ce		
1715	PT. SP.	2	ce		
1743	SM. PTERO SP	1	S		
1755	WTS	1	ce		lt ph
1815	SOOTY TERN	1	S		ad

ST - 466
BWP - 2
SPTERO - 5
WTS - 27
SHEARW - 1
STORM - 1
PTER - 2
PEX - 1

505 ✓

ENE



Ship
Direction

SMITHSONIAN INSTITUTION
DIVISION OF BIRDS
AT SEA DAILY LOG - E

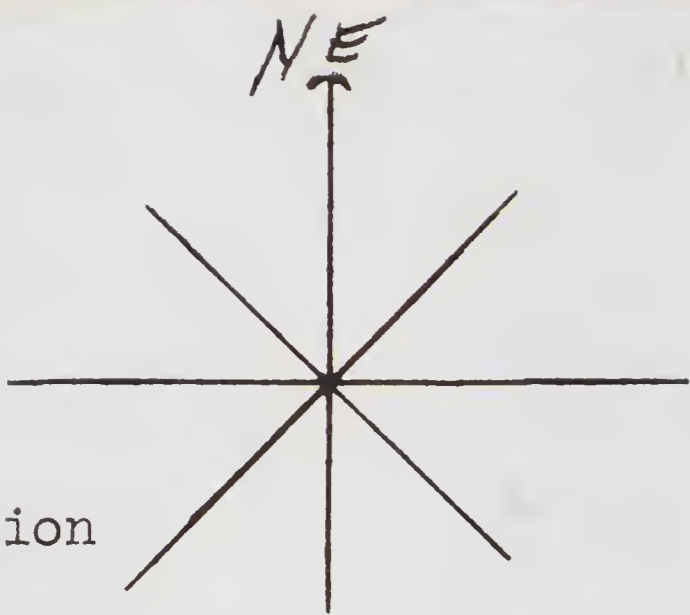
OBSERVERS:

CHANE HOFF

Date 12 JULY 1967
Pg.# 1

SPECIMEN
or

TIME	SPECIES	#	DIR.	BAND NO.	REMARKS
0700					BEGIN OBS
0845	PTEROSP	1	ca		distinct
0925	PTEROSP	1	ca		EXTERNA ?
R 0940	JAEV. SP	2	ca		
1130					CLOSE OBS
1200					RESUME
1700					CLOSE
1815					RESUME
1845					CLOSE OBS FOR DAY SSCA 1845



Ship
Direction

SMITHSONIAN INSTITUTION
DIVISION OF BIRDS
AT SEA DAILY LOG - E

OBSERVERS:

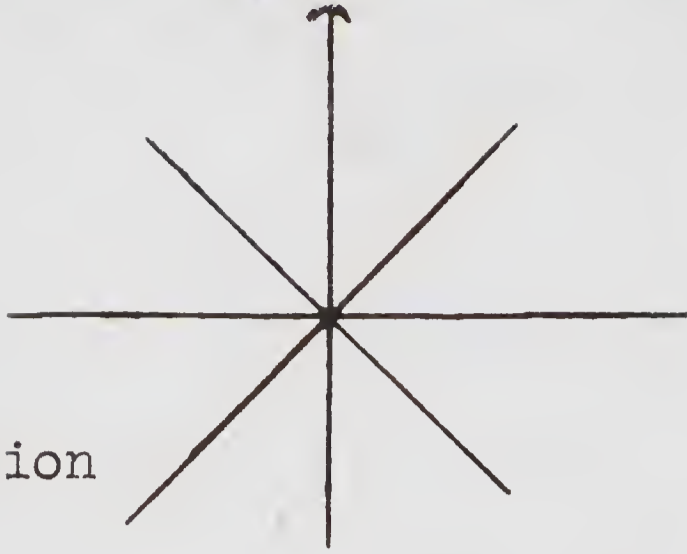
Chan
HoFF 11:00 -

Date 13 July
Pg.# 1

SPECIMEN
or

TIME	SPECIES	#	DIR.	BAND NO.	REMARKS
0930					BEGIN OBS
1530	WTTB	1	(oe)		sitting on water, flushed by the ship
1930					close observations
1947					Sunset

ENE



Ship
Direction

SMITHSONIAN INSTITUTION
DIVISION OF BIRDS
AT SEA DAILY LOG - E

OBSERVERS:

HOFF & CHAN

Date 14 JULY 1967

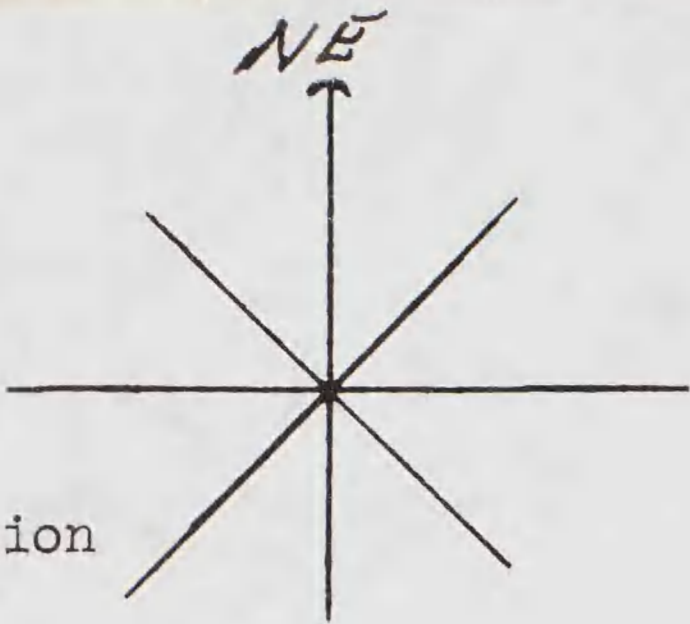
Pg.# 1

SPECIMEN
or

TIME SPECIES # DIR. BAND NO. REMARKS

	0800				BEGIN OBS.
R	0820	S/BB.	1	W	lite underwings
	0930				CLOSE OBS.
	1200				RESUME OBS
R	1500	TROPIC BIRD SP.	1	ca	
	1640	S/BB.	1	SW	SITTING ON H ₂ O, LARGE, PINKISH BILLS DARK BILL, LONG LITETAIL
	1730				CLOSE OBS
	1830				RESUME OBS.
	1930				CLOSE OBS 551937

8.0 HRS.



Ship
Direction

SMITHSONIAN INSTITUTION
DIVISION OF BIRDS
AT SEA DAILY LOG - E

OBSERVERS:

H₂FF 8:00

Date 15 July
Pg.# 1

SPECIMEN
or

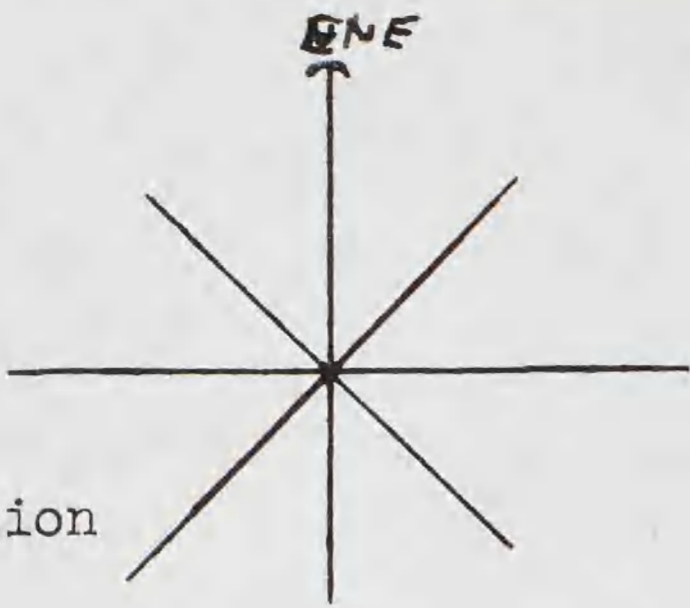
TIME SPECIES # DIR. BAND NO. REMARKS

630	B.F. Alb.				possible Laysan - sighted by Mrs. Howard
800					- open obs. \ PUT ON GREEN SHEET
1100					CLOSE OBS.
1230					
1245	BFA	1	ca		OPEN OBS dark rump close obs.
1250					
1830					

3
6

9.0 hrs

$$\begin{array}{r} 1. \\ \hline 66 \overline{) 80.} \\ \underline{66} \\ 140 \\ \underline{82} \\ 58 \end{array}$$



Ship
Direction

SMITHSONIAN INSTITUTION
DIVISION OF BIRDS
AT SEA DAILY LOG - E

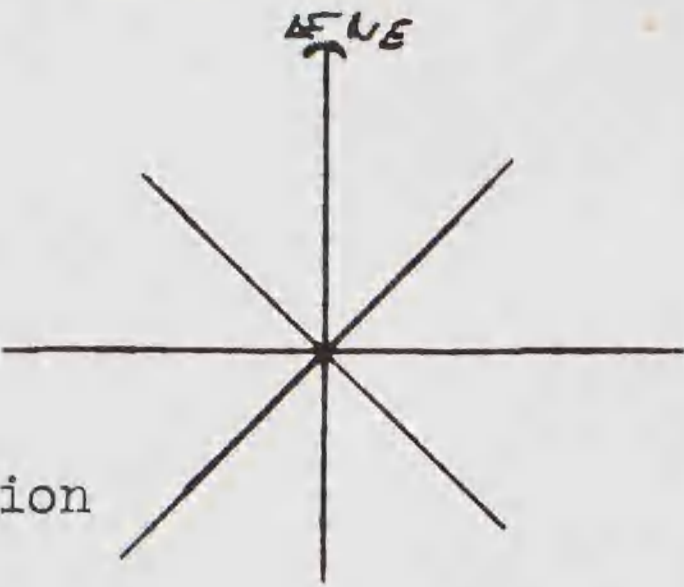
OBSERVERS:

HOFF & CHAN

Date 16 July
Pg. # 1

SPECIMEN
or

TIME	SPECIES	#	DIR.	BAND NO.	REMARKS
1230					BEGIN OBS
1530	BFA	1			WT. sp. - 1610 PRESENT
1645	"	2			eating refuse astern ^{1 darker - light} white wings, tail on top
1740	"	3			2 light 1 dk eastern
1750	SHEAR/PET	1	☉		WTS SIZE DARK ^{BR} ABOVE NO UPPER PATTERN ON WINGS OR BACK; BELLY-WHITE UNDERSIDE OF WINGS WITH BROAD WHITE CENTER MORE PRONOUNCED TOWARD PRIMARIES; DARKER CLOSE TO AXILLARY REGION. DEEP WING BEATS FLAPPING ERRATICALLY AND CONSTANTLY BRINGS WING HIGH ABOVE BACK NIGHTHAWK LIKE APPEARANCE? LITHE? KERM?
1810	SHEAR-PET	1	☉		ALL DARK W/ WHITE PATCH UNDER SURFACE OF WING TIP - ? DAPH. KERM?
1900	Shear/pet	1	W		low on waves 1 narrow wings slate-white difficult + distant, no discernible pattern
1900					CLOSE OBS.



Ship
Direction

SMITHSONIAN INSTITUTION
DIVISION OF BIRDS
AT SEA DAILY LOG - E

OBSERVERS:

CHAS E HOFF

Date 17 JULY 1967

Pg.# 1

SPECIMEN
or

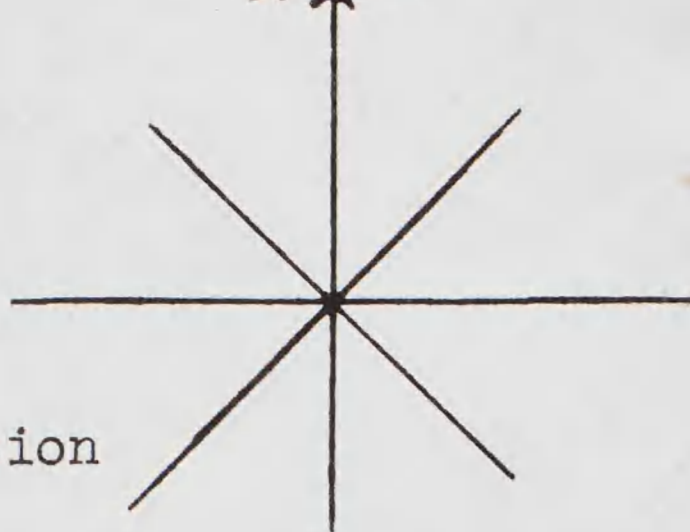
TIME SPECIES # DIR. BAND NO. REMARKS

0700					BEGINNERS
0700	BFA	2	a		all sunny
0715	JAEGERSP	2	ce		
0750	BFA	3	ce		1 dark immature 1 subad?? with parasitic-type pointed central rect.
0800					eating garbage water
0900					3 NOORS
0900	RTTB	1			had a suspiciously short tail - like a few Enderberg birds I know.
0920	BFA	1	a		birds - close obs.
0955	BFA	2	ce		2b. sp.
1145					2b. sp.
1300					close obs.
1400					open
1600					close
1600					open
1845					CLOSE OBS 551857

1.0
2.75
1.0
2.75

7.50

ENE



Ship
Direction

SMITHSONIAN INSTITUTION
DIVISION OF BIRDS
AT SEA DAILY LOG - E

OBSERVERS:

Hoff + Chan

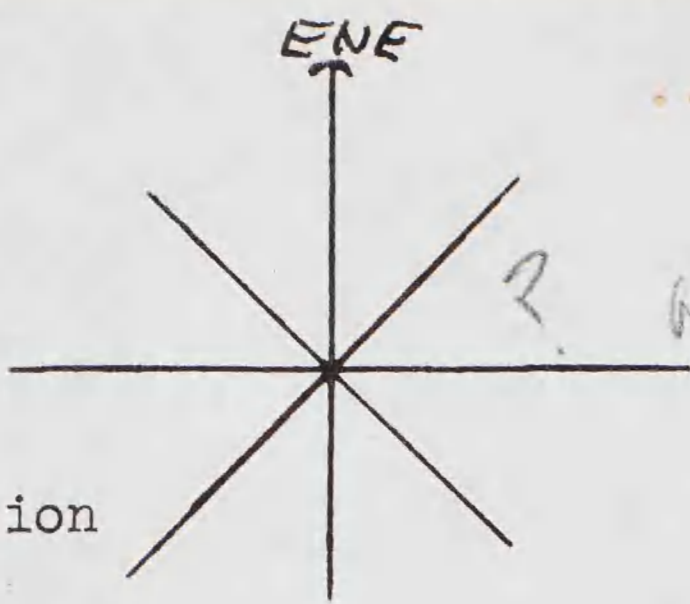
Date 18 July 1967
Pg.# 1

SPECIMEN
or

TIME SPECIES # DIR. BAND NO. REMARKS

TIME	SPECIES	#	DIR.	BAND NO.	REMARKS
0800					open observations 2 6 BFA were feeding off portail at 730
0800	BFA	2			db. rumps.
0900	BFA	6			2 wt. rumps, 4 db. rumps
1000					CLOSE
1200					OPEN
1400					CLOSE
1500					OPEN
1830					CLOSE

7.5 hrs.



Station 52

SMITHSONIAN INSTITUTION
DIVISION OF BIRDS
AT SEA DAILY LOG - E

OBSERVERS:

HOFF & CRAN

Ship
Direction

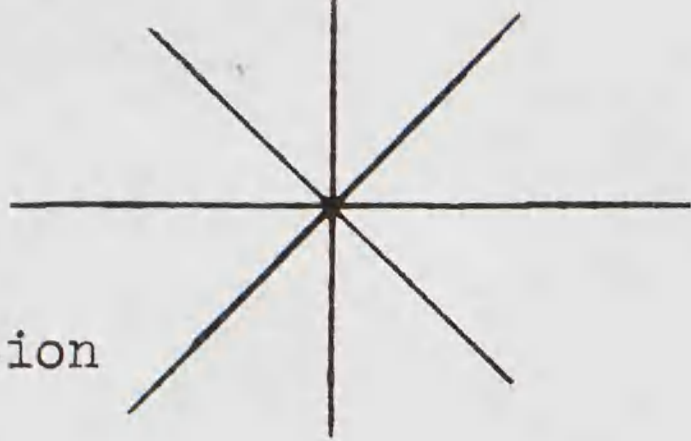
SPECIMEN
or

Date 19 JULY 1967
Pg.# 1

TIME SPECIES # DIR. BAND NO. REMARKS

0700					BEGIN OBS
0700	BFA	2	ce		1 lt
0730	"	3	ce		
0930	BFA	4	ce		2 lt.
1200					CLOSE
1430					OPEN
1800	BFA	4	ce		after
1928					SUNSET CLOSE OBS.

ENE

Ship
DirectionSMITHSONIAN INSTITUTION
DIVISION OF BIRDS
AT SEA DAILY LOG - E

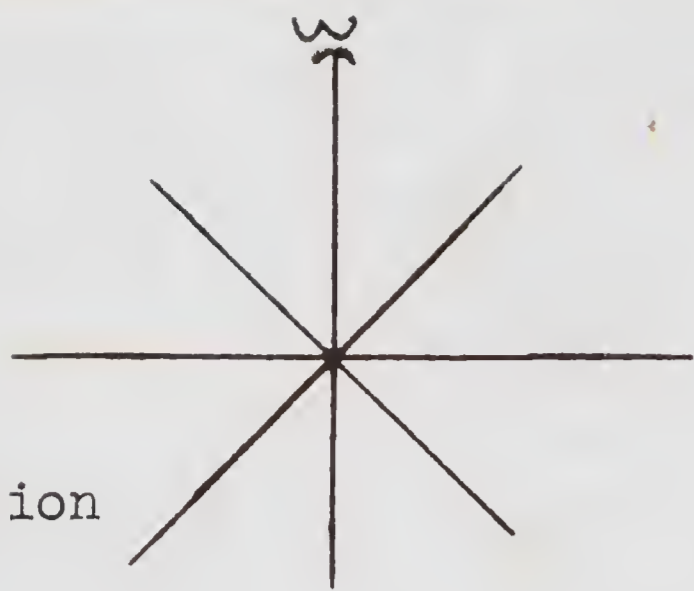
OBSERVERS:

HOFF & CHAN

SPECIMEN
or
GRID AREA
NON-TRACKDate 20 JULY 1967
Pg. # 1

TIME	SPECIES	#	DIR.	BAND NO.	REMARKS
0630					open obs
0630	BFA	1			db. sp.
0730	BFA	3			1 db. sp.
0820	Shear/pet	1			dusky brown both dorsally + ventrally size of pt. hypoleuca, fast, fluttering flight relatively close to the water, stayed with the ship a long time, in front of bow - pointed wings bent at wrist, pointed tail
0900	Dove	1			lt brown belly, darker dorsally - large dove - no light markings
0945	STORM PET	1	N		leach type dark rump.
0950	BFA	4	ce		
1010	TERN	1	ce		flushed common/arctic-type - adult no frosted wing tips
					1015 C/C → 030 1030 C/C 030 → 015 PM? CLKW 000
1730	BFA	4			2 lt sp., 2 db. sp.
1750	Shear/pet	1	SW		moving fast, gray + white pt. externa size - distant
1840	STORM PET	1	ce		LEACH SIZE RUMP NOT SEEN
1848	" "	1	ce		" " " "
1903	BFA	4	ce		" " " "
1920	STORM PET	1	ca		as above
1921					SS CLOSE OBS.





Ship
Direction

SMITHSONIAN INSTITUTION
DIVISION OF BIRDS
AT SEA DAILY LOG - E

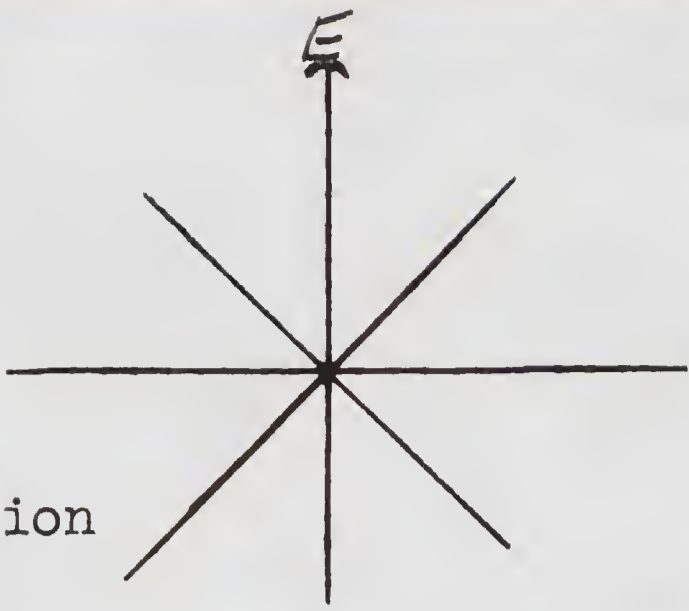
OBSERVERS:

CHAN E HOAP

Date 21 July 1967
Pg. # 1

SPECIMEN
or

TIME	SPECIES	#	DIR.	BAND NO.	REMARKS
0514					SR BEGIN OBS.
0519	WRSP	1	col		
0545	BFA	6	col		rep by fontail as all dark rumped.
0618	SABIVESG.	1	col		
0624	" "	1	col		flushed non breeding (head not dark) different from 0618 bird I believe
0629	N. PHAL. SP.	2	col		ALL WHITE BELOW, APPEAR TO BE NORTHERNS BUT POSSIBLY NONBREEDING REDS (VERY LATE!) RECORD AS NORTHERN - CHAN
0630	STORM PET	1	col		GLIMPSED IN TROUGHS
0637	SOOTY SHEAR	1	col		
0732	N. PHAL	6	SE		
0815					
1030	BFA	4			2 "WHALES" LIGHT OLIVE BROWN, SMALL STRAIGHT DORSAL 20-25"
1055	Skua	1			2 wht. sp. flushed a skua type from water by a log, I will chocolate brown white back beyond wrist to tips both dorsal + ventral - very chunky short neck grouse like tail - slightly smaller than on albatross
1150	RED PHAL.	1	S		breeding or partly breeding plum.
1200	STORM PET	1	col		DARK RUMP <u>O. HOMOCORON</u> / <u>O. LEUCORHOA SOCORROENSIS</u>
1245	Jaeger SP.	1	col		Sub-adult? PARASITIC??
TF 1400	jaeger sp.	9	col		appeared exactly as the above sighting
1602	PTERO (SMALL)	1	E		
1615	RED PHAL	1	col		flushed
1820	Phal	1	E		light belly
1930	STORM PETREL	1	col		db. sp.
1983					smat
2300					full moon - no birds noted.
2400					



Ship
Direction

SMITHSONIAN INSTITUTION
DIVISION OF BIRDS
AT SEA DAILY LOG - E

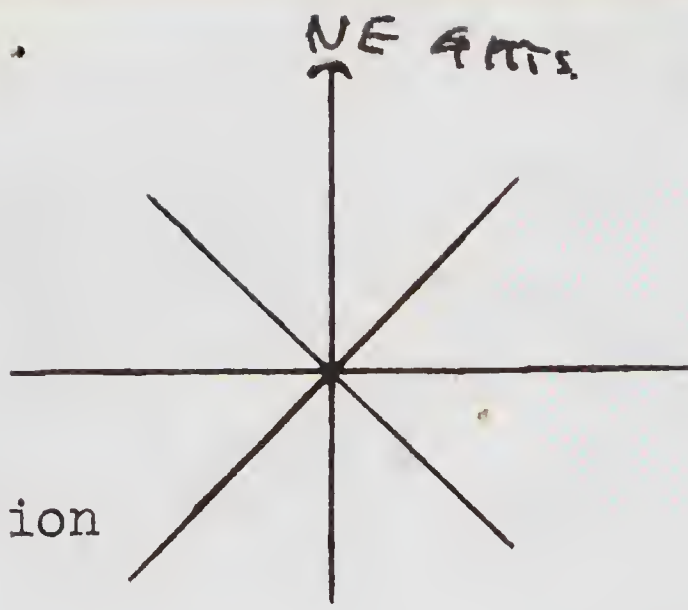
OBSERVERS:

CHAN & HOFF

Date 22 JULY 1967
Pg. # 1

SPECIMEN
or

TIME	SPECIES	#	DIR.	BAND NO.	REMARKS
0615					BEGIN OBS. SR 0523 (NO CALL?)
0617	WRSP	1	ce		
0630	BFA	9	ce		astern 1 lt & dl. (9 rep by watch at 0530 0705 C/C 080 → 085
0740	SOOTY SHEAR	1	NW		
0743	WRSP	1	ce		
0746	WRSP	1	ce		
0810	WRSP	1	ce		
0900	WRSP	1	ce		fast, flipping flight low to water with occasional high angular swoosh, fan tail + pointed wings -
0915	WRSP	1	ce		same as above
1105	WRSP	1	ce		"
1140	STORM PET	1	ce		dh rump.
1145	WRSP	1	ce		
1155	STORM PET.	1	ce		glimpsed
1200	WRSP	1	ce		sitting on H ₂ O
1432	STORM PET.	1	ce		dorsal white slash on outer primaries - dark rump Leach's type
1622	WRSP	1	ce		
1702	JAEGERSP.	1	N		ad parasitic? no cert tail f. seen.
1703	STORM PET	1	ce		astern
1705	STORM PET	1	ce		dh. rump underwings dark.
1710	" "	1	ce		distant
1725	WRSP	1	ce		astern - following ? 15 MIN.
1748	STORM PET	1	ce		rump?
FF 1810	Storm Pet BFA	6 4	ce ce		feeding with BFA astern on <u>garbage</u>
1920					swart



SMITHSONIAN INSTITUTION
DIVISION OF BIRDS
AT SEA DAILY LOG - E

OBSERVERS:
CHANEHOFF

Ship
Direction

SPECIMEN
or
BAND NO.

Date 23 July 1967
Pg. # 1

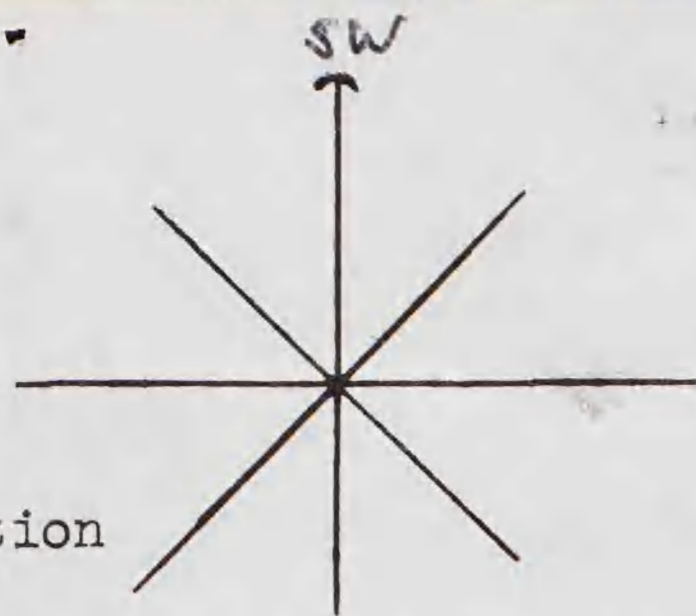
NON GRID

TIME SPECIES # DIR. BAND NO. REMARKS

TIME	SPECIES	#	DIR.	BAND NO.	REMARKS
0600					OPEN OBS JUST OUT OF GRID
0602	NIGHTHAWK	1	ce		!
0610	LT JAEGER	1	a		ad.
	J SP.	3	ce		imm?
0611	PHAL. SP	3	SE		
0625	BFA	19+	ce		1 lt rump seen, no bands seen
	STORM PET	17+	ce		1 dk rump seen mostly WRSP's many sitting
	CAL. GULL	1	ce		imm sitting
	JAEG. SP	1	ce		
0635	W. PHAL	4	S		
0638	DRSP	1	ce		undulating?
0650	STORM PET	7	ce		rump?
0657	HEERMANS	2	ca		astern
0700	STORM PET	20+	ce		SCATTERED OVER AREA
0700					CLOSE OBS.
0800					BEGIN ON MENURS AT 10KTS
0802	JAEG SP	1	ce		Par.?
0807	STORM PET	10+	ce		} IN MENUR AREA
	BFA	10+	ce		
0817	LAND BIRD	1	ce		INVEST SHIP BROWN ABOVE HOUSE SPARROW/FINCH?
0825	JAEG. SP.	3	ce		tailless
	GULL SP.	1	ce		being harassed imm! nest?
0828	SOOTY SHEAR	1	ce		
0830	STORM PET.	10+	ce		
0832	NIGHTHAWK				ON COURSE 040 FULL
0838	STORM PET	4	ce		STILL PRESENT LANDING ON DECKS AND FLYING ABOUT SUPERSTRUCTURE
0844	SOOTY SHEAR	1	SE		
0846	WRSP	1	ce		} 100-125' !! DRSP WITH SOMETHING IN BILL LAST CRASIE BOTH FLUTTERED & STAYED ACOFT 15-20 SEC. RETURNED TO H2O AND DISPERSED DRW/THAWA STILL.
	DRSP	1	ce		
0857	GULL SP	1	ce		imm astern
	HEERM. GULL	1	ce		all dark imm.
	STORM PET	10+	ce		in area
	BFA	15+	ce		astern in area
0859	DRSP	1	ce		ca 1:7-10 WRDRSPS
0900					CLOSE OBS.

0640 C/S 30-50 RPM
4.8 - 8.0 KTS - 10-6

0645 5 0645 → MENCOURAGED
06-0700 5 MI.



Ship
Direction

SMITHSONIAN INSTITUTION
DIVISION OF BIRDS
AT SEA DAILY LOG - E

OBSERVERS:

CHAN

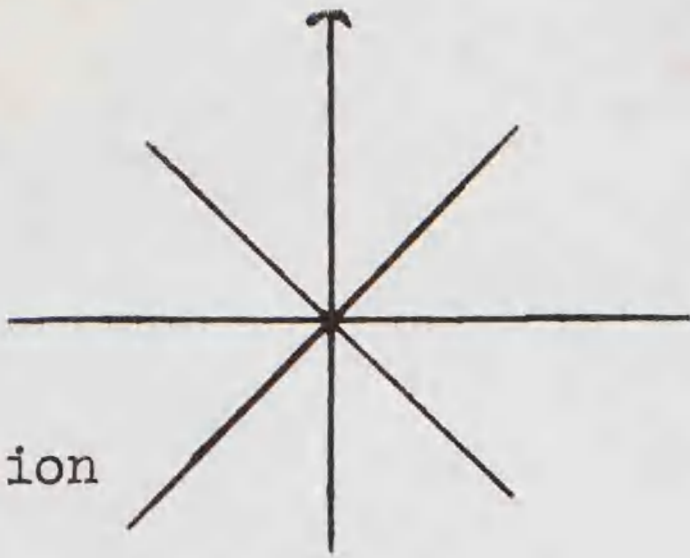
Date 23 JULY 1967

Pg.# 2

SPECIMEN
or

TIME SPECIES # DIR. BAND NO. REMARKS

	1800				BEGIN OBS	11 MI.
	1800	WEST. G.	1	ce	ad asteron	
	1802	SOOTY SHEAR	7	W	SCATTERED	
	1804	" "	4	S	"	
	1805	WEST. G.	1	ce	ad.	
	1807	SOOTY SH.	3	W		
	1807	BFA	1	ce	dh ring asteron	
	1810	SOOTY SHEAR	4	ce	SCATTERED	
	1817	" "	7	ce	"	
	1823	SEALS?			1 in net?	
F	1825	SOOTY SHEAR	35±	ce		
		PINKFOOT SH.	3	ce		
F	1828	PINKFOOT SH.	4	ce		
		SOOTY SHEAR.	8	ce		
	1830	SM. GULL	2	SW	BON. NOT SAB. MYSTIC TERN?	
	1832	SOOTY SHEAR	5	ce		
	1833	BFA	3	ce	3 dh.	
	1834	JAEGER SP	3	ce	long harassing seal.	
		SEALS?			1	
	1840	SOOTY SHEAR	7	ce		
		PINKFOOT S.	2	ce		
	1850	SOOTY SHEAR	7	ce	SCATTERED	
	1855	" "	5	ce	flushed	
	1857	" "	5	SW		
	1900				1900 PT ARGUELLO 20 MI.	
					CLOSE OBS. 551912	



Ship
Direction

SMITHSONIAN INSTITUTION
DIVISION OF BIRDS
AT SEA DAILY LOG - E
SECTION CE SR-CA1500
CW CA1500-SS

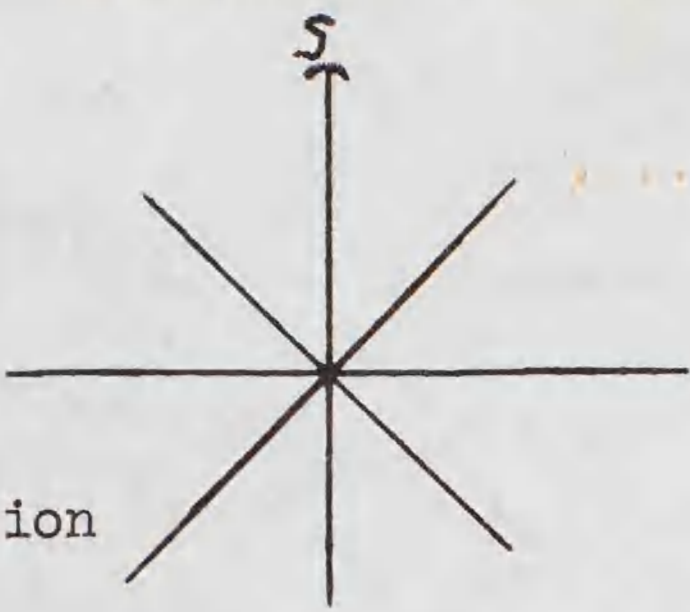
OBSERVERS:
H. F. F. + Khan
Delong

Date 34 July
Pg. # 1

SPECIMEN
or

TIME SPECIES # DIR. BAND NO. REMARKS

TIME	SPECIES	#	DIR.	BAND NO.	REMARKS
0515	BFA	(4)			open obs.
0515	BFA				following ship
0720	DRSP	1	ce		
0750	BFA	(5)	ce		
0905	JAEGER SP.	2	ce		flushed (ad parasitic??)
0913	WRSP	1	ce		
0911	WRSP	1	ce		
0922	PHAL SP	1	ce		white? below
0942	SKUA/gaige	1			on water - white in wings - light overall appearance.
0952	WRSP	1	ce		
0955	Mammals				<u>Murre</u> 2 - one animal long by white on dorsal surfaces. Highly recurved dorsal seen on both animals. One blow seen, very short and stumpy.
0958	Storm Pet	1			over Murre
1030	WRSP				
1118	WRSP	1	ce		
1140	BFA	8	ce		3 ad sp., 5 WT. sp.
1350	Storm Pet	1			Not well seen.
1410	Bird sp.	1			
1700	Storm Pet	1	ce		Feeding
1704	"	1	ce		Feeding
1745	Shear/pet	1	ce		
1830	Storm pet.	1	ce		distant
1923					swart



Ship
Direction

SMITHSONIAN INSTITUTION
DIVISION OF BIRDS
AT SEA DAILY LOG - E

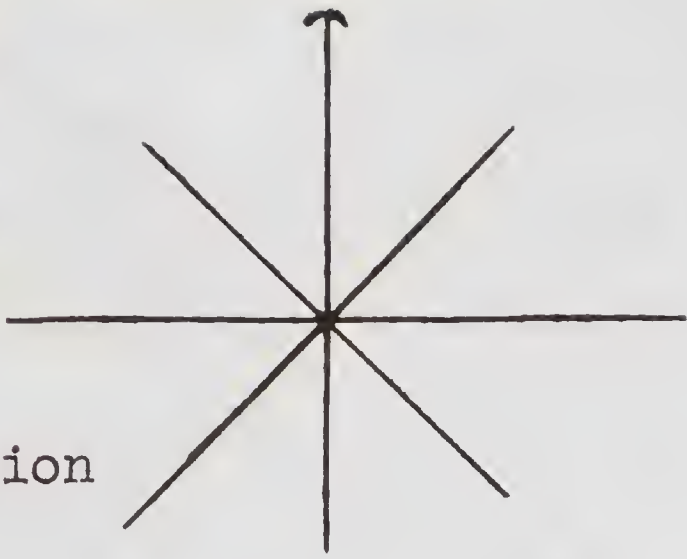
OBSERVERS:

CHAN, DELONG, HOFF

Date 25 July 1967
Pg.# 1

SPECIMEN
or

TIME	SPECIES	#	DIR.	BAND NO.	REMARKS
0600					BEGIN OBS SR 0532
0615	BFA	3	ce		2 dk., 1 mottled
0735	SM. PTERODR.	1	N		distant
0745	RED PHAL.	3	ce		breed plum. flying and on H ₂ O
0758	WRSP	1	ce		adult
0800	BFA	6	ce		1 lt, 1 mott, 2 dark, 1 ?
0810	Cook's Pet	1	ce		dk. back
0815	WRSP	1			Leach's type
0834	Jaeger sp.	1			CG - 80-90° (SE → E) harrassing BFA behind ship
0845	Storm pet.	1	ce		
1000	BFA	2			1 lt. sp.
1000-1045					close obs for yg and D.C.
1045					Drifts. way in.
1315	SOOTY SHEAR	2	ce		
1500	BFA	5	ce		
1735	BIRD SP	2	ce		"medium size, whitish" - JOHANSEN - "PTERODROMA"? CHAN.
1745	BFA	8	ce		
1921					SS



Ship
Direction

SMITHSONIAN INSTITUTION
DIVISION OF BIRDS
AT SEA DAILY LOG - E

OBSERVERS:

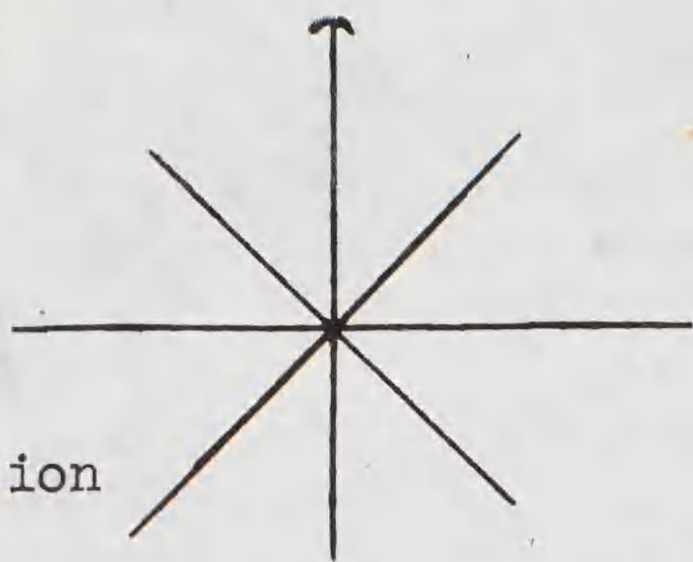
Pelroy, Hoff, Uner

Date 26 July 67
Pg.# 10

SPECIMEN
or

TIME SPECIES # DIR. BAND NO. REMARKS

TIME	SPECIES	#	DIR.	BAND NO.	REMARKS
0519					SR
0525					begin obs.
0530	BFA	1			following ship
0630	BFA	2			" "
1000	BFA	3			2 db up, 1 wtag
1010	WRSP	1	ce		
1022	JAEGER SP. LTJ	1 1	cece cece		POM OR PAR. no central tail feathers - longer darker than LTJ
1023	STORM PET	1	ce		small much white in wing - white neck imm. SAT ON H ₂ O w/ BFA'S
1035	WRSP	1	ce		dh? rep.
	STORM PET	2	ce		WRSP?? } DISTANT
1042	WRSP	1	ce		
1046	JAEGER SP	1	ce		LEACH'S DIV. RUMP. dh. breast band - POM.? IMM?
1048	DRSP	1	ce		
1049	WRSP	1	ce		
1100	BFA DRSP	6 2	ce ce		5 db } 1 lt. FOLLOWING ASTERN
1107	WRSP	1	ce		
1110	"	1	ce		DIF FROM 1107
1111	"	2	ce		SITTING ON H ₂ O 1108 BIRD IN SIGHT
1118	"	1	ce		
1125	"	1	ce		
1127	"	2	ce		1125 IN SIGHT
1130	DRSP	1	ce		1 on H ₂ O
1136	STORM PET	1	ce		dist
1142	WRSP	1	ce		
1152	shorebird	1	sw		Definite Leach's Petrel!
1158	WRSP	1	sw		Small - possible phalarope - E 1/2 by ce 50
1220	Jaege	2	sw sw		beck above water. 2 1st, 2nd, 3rd white cere - forked tail - all feathers overall light appearance - greyish - wings tail f. Rump band (1 band and white) probably possible



Ship
Direction

SMITHSONIAN INSTITUTION
DIVISION OF BIRDS
AT SEA DAILY LOG - E

OBSERVERS:
DeLong, Chom
Paul Hoff

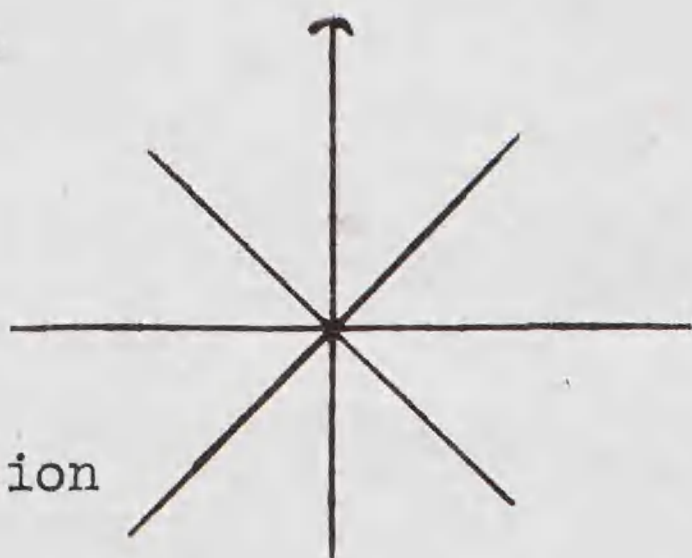
Date 26 July 67
Pg.# 2

SPECIMEN
or

TIME SPECIES # DIR. BAND NO. REMARKS

TIME	SPECIES	#	DIR.	BAND NO.	REMARKS
1225	WRSP	2	SW		Leucis
1227	Phalacrocorax ^{sp}	1	Z		identified by voice only - (code 9)
1235					white sp - fulmar type - high columnar spouts ca 25 feet. Birds never seen. 2 miles off.
1241	WRSP	2	E		
1304	WRSP	1	SW		
1307	WRSP	1	SW		
1310	"	1	SW		
1315	"	4	SW		one feeding
1330	Storm Pet	2	SW		Rump color not seen
1330	Sterna esul	1	SW		ad. } associated
1336	Tern	1	SW		ad. } associated
1334	Shearwater	4	Flashed - S		black cap - mottled breast gray, white tail & Rump.
1337	Phalacrocorax ^{sp}	10	SW		
1340	Storm Pet	1	SW		Rump dark - traces of white on sides of flanks. (<u>Chrysomus</u> or <u>socius</u>)
1347	N. Phalarope	4			not associated by tone. Have lines of marginal plumage around head & neck, bill long and slender, & dark dark.
1345	Gull sp	2	SW		
1348	WRSP	1	SW		
1352	WRSP	2	SW		
	Storm Pet	1	SW		Feather (light???) - slight white on sides of flanks.
1413	BEA				Total of 8 following

OBSERVERS:



Ship
Direction

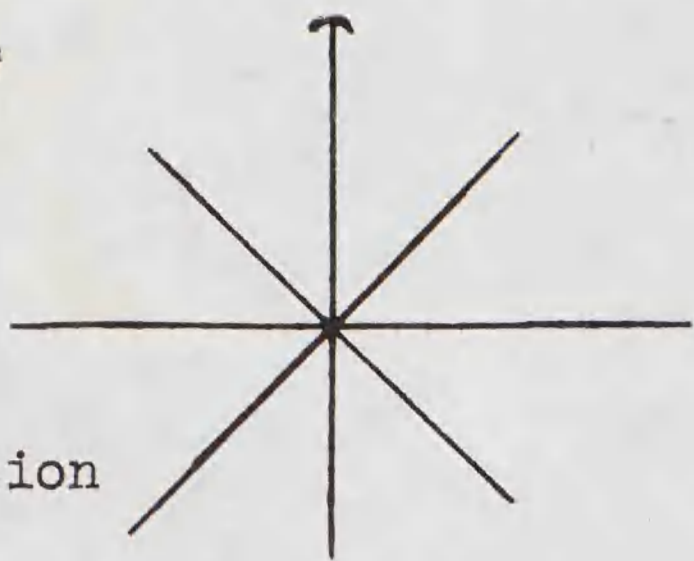
SMITHSONIAN INSTITUTION
 DIVISION OF BIRDS
 AT SEA DAILY LOG - E

Date 26 July
 Pg.# 130

SPECIMEN
or

TIME SPECIES # DIR. BAND NO. REMARKS

TIME	SPECIES	#	DIR.	BAND NO.	REMARKS
1415	WRSP	1	SW		
1425	"	1	SW		
1430	"	1	SW		
1505	BFA	8	SW		calm water - exact count
1510	WRSP	1	SW		distant
1530	WRSP	1	SW		"
1533	WRSP	1	SW		"
1540	"	1	SW		
1545	Alcidæ	1			small white flushed light on bottom flew
1550	BFA	16	SW		low & directly away.
1610	JAE. SP	1	SW		
1611	WRSP	3	SW		} INDIVIDUALS
	STORM PET	2	SW		
1617	STORM PET	1	SW		
1619	WRSP	1	SW		
1619	STORM PET.	1	SW		
1628	" "	1	SW		
1633	" "	1	SW		
1634	WRSP	1	SW		
1635	WRSP WHIMBREL	3	S		WHIMBRELS (I THINK), SAW NO RUMP OR BACK SHORT BILL PATTERN 150'
1644	DRSP	1	SW		PROM. WING BARS, UNDERWINGS LIGHTISH?
1655	STORM PET	1	SW		
1705	" "	1	SW		
1706	" "	1	SW		
1716	DRSP	1	SW		
1714	WRSP	2	SW		
1715	"	1	SW		
1716	STORM PET	2	SW		
1725	BFA	19	SW		} SMALL EASTERN
	PTEROSP.	1	SW		
	STORM PET	3	SW		
1734	" "	1	SW		
1738	" "	2	SW		
1739	SM. PTERO	1	SW		PROB COSKI
1740	STORM PET	2	SW		
1745					CC to 270°



Ship
Direction

SMITHSONIAN INSTITUTION
DIVISION OF BIRDS
AT SEA DAILY LOG - E

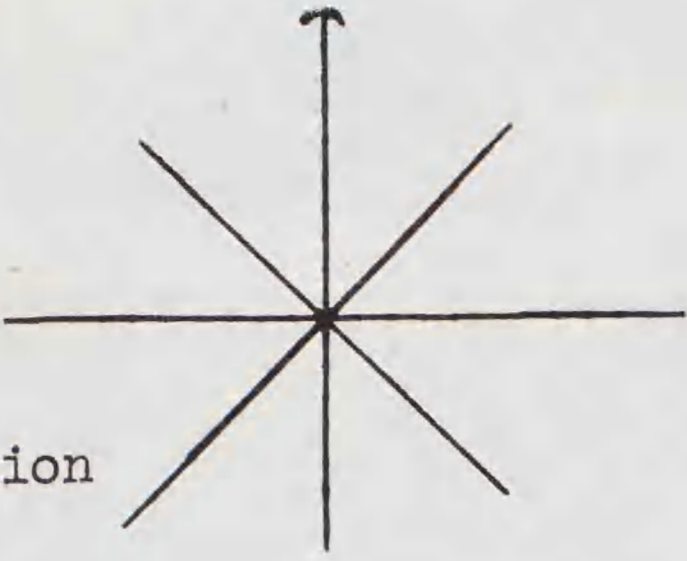
OBSERVERS:

Date 26 Sept
Pg.# 4

SPECIMEN
or

551707

TIME	SPECIES	#	DIR.	BAND NO.	REMARKS
1747	Storm Pet	2	SW		1 feeding
1750	Phalarope	3	SE		
1750	BFA				feeding?
1758	WRSP	1	SW		
1800	Phalarope	1	SW		
1804	WRSP	2	SW		feeding
1810	WRSP	1	WS		
1813	Endomyzura hypoleuca	2	N		Subspecies ic xanthus, Coriis etc unc.
1823	Phalarope	3	SE		
1825	Storm Pet	1	SW		All dark
1828	ORSP	2	SW		
1830	REDPHAL	1	SW		calling
1831	WRSP	1	SW		
1833	STORM PET	2	SW		
1837	ORSP	2	W		
1845	(STORM PET)	1	SW		
1849	STORM PET	1	SW		
1854	STORM PET	1	SW		
1858	" "	1	SW		
1903	WRSP	1	SW		
1907					SS CLOSE BY.



Ship
Direction

SMITHSONIAN INSTITUTION
DIVISION OF BIRDS
AT SEA DAILY LOG - E

OBSERVERS:

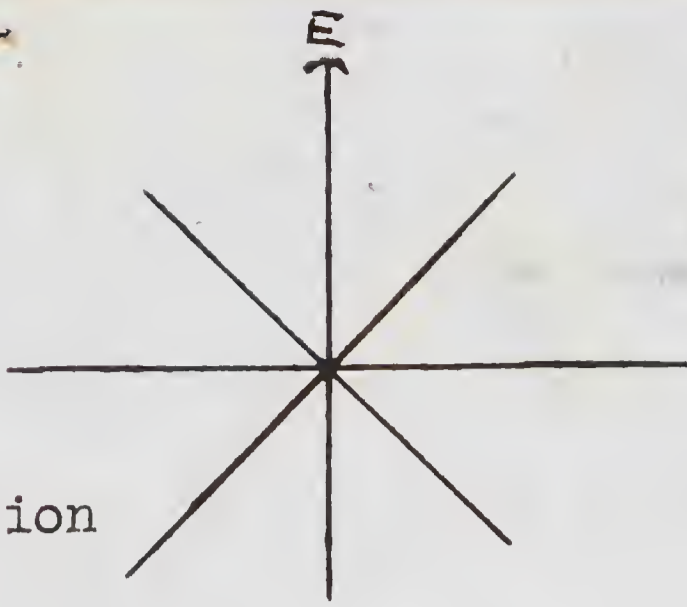
Chou Hoff DeLong

Date 27 July
Pg.# 1

SPECIMEN
or

TIME SPECIES # DIR. BAND NO. REMARKS

TIME	SPECIES	#	DIR.	BAND NO.	REMARKS
0216					
0216	PHAL SP	6	e		50'
0220	"	6	e		24m?
0240	BIRD	1	ce		
0245	ST. PET	1	ce		
0246	PHAL SP	25±	ce		flying light flock 2
0250	"	8±	e		
0310	"	1+	e		
0315					calling
0524					CLOSE SR
0600	BFA	7	P		
0630	WRSP	1	X		
0807	WRSP	1	SR		
0914	Jaeger Parasitic	1	SE		Reli }
0937	WRSP	1	SR		
1024	STORM PET	1	ce		
1120	SM. PTERO.	1	ce		3 BFA @ 11:15
1128	STORM PET	1	ce		appeared cook-size and habit
1200	Bird-tailed Pigeon	1	-		collected Hoff - flew on board Ca 0930. Posit? 5-6 feet in length.
1300	WRSP	1	e		
1740	Shear/Pet	1	NW		Small all black. Flight pattern short, steep arch. Occasional flapping at the top of the arch. CI Shearwater sized - ???
1742	SOOTY SHEAR		NW		SOOTY SHEAR MAYBE
1924					SS CLOSE OBS.



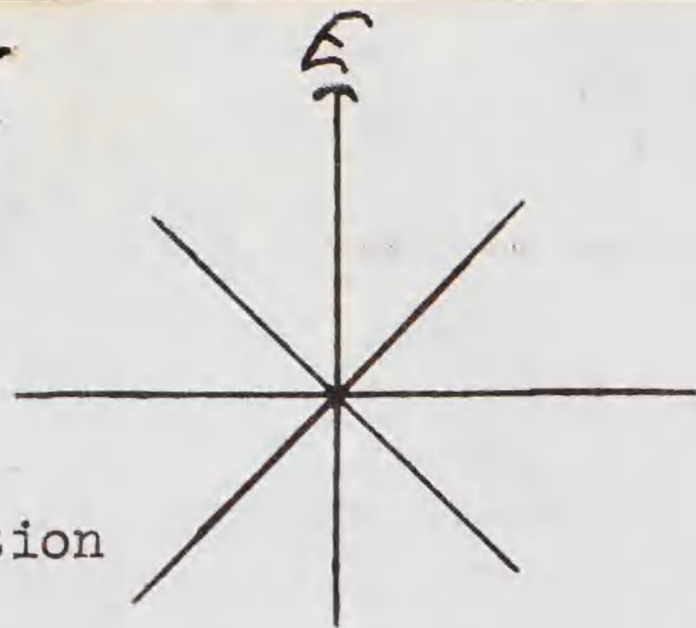
SMITHSONIAN INSTITUTION
DIVISION OF BIRDS
AT SEA DAILY LOG - E

OBSERVERS:
CHAN HOFF DELONG

Date 28 JULY 1967
Pg.# 1

SPECIMEN
or
DIR. BAND NO. REMARKS

TIME	SPECIES	#	DIR.	BAND NO.	REMARKS
0536					SUNRISE
0540	BFA	3			all dark.
0645	"	5			0600-0630 5 MILES OF OIL SLICK NOT NATURAL FUEL OIL PROBABLY
0655	SM. PTERO.	2	N		COOKI PROB.
0658	RED PHAL.	4	ca		DOWN 20 BREED. PLUM.
0700	"	1	ca		" " "
0712	SM. PTERO	2	NW		COOK-TYPE
0715	BFA	6	ca		ALL DK.
0718	SM. PTERO	3	NW		diff from above.
0735	"	1	N		COOK-TYPE
0737	"	1	N		"
0738	"	1	N		"
0743	"	1	NW		"
0805	BFA	5	ca		2 lt 3 dk.
0838	SM. PTERO	1	ca		COOKS?
0914	"	1	N		"
0920	"	1	N		FLUSHED FROM H ₂ O
0925	"	2	N		COOK-TYPE
1015	"	1	S		also Whaler in the water (1015)
1030	"	2	S		dark small petrels
1035	"	1	S		} noted by skiff
1035	Red Phalarope	1	S		
C 1035	Pterodroma	1	S		Pterodroma cooki?
1038	PT cooki?	2			coll: Chan
1055	PT.	1			
C 1105	Long-eared owl	1	ca		coll. Chan in skiff
1107	WASP	1	S/S		
C 1125	Leach's STPET	1			coll. skiff Chan.
CC 1145	PT. Cooki	2	ca		2 collected Chan.
C 1150	PT. Cooki	1	C		1 collected Chan.
C 1155	SOOTY SHEAR	1	ca		coll skiff Chan.
C 1225	Cook's Pet	1			C - Chan skiff



Ship
Direction

SMITHSONIAN INSTITUTION
DIVISION OF BIRDS
AT SEA DAILY LOG - E

OBSERVERS:

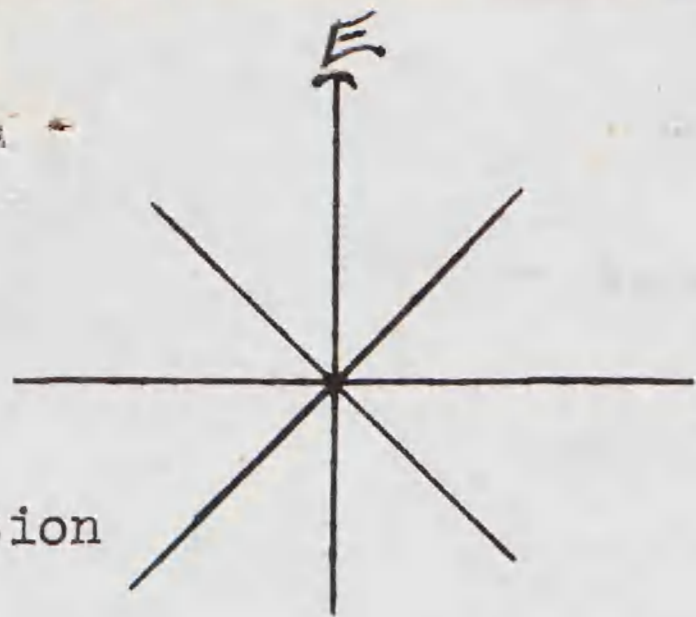
Date 28 July
Pg.# 2

TIME	SPECIES	#	DIR.	SPECIMEN or BAND NO.	REMARKS
C 1330	Phalarope sp.	1			special code # 9 coll. Chan. Red-Phalarope
1330	Pt. Cooki	1			sighted by the skiff
C 1334	Pt. Cooki	1			collected Chan.
CC 1339	"	2			collected Chan.
1343	"	5	N		
C 1345	"	1			coll. Chan
1345	"	2			
1352	St. Petrel	1			
C 1407	P. Cooki	1			coll: Chan
C 1413	P. Cooki	0			coll Cooki; Chan
C 1426	Red Phalarope	1		88	coll: Chan
1430	"	1		88	
1431	Cook's Pet	1			
1438	"	1		88	
1510					SKIFF out
1615					
1630	WASP	1			
1700	WASP	1			
1705	WASP	1			
1725	Cook's Petrel	1			
1744	" "	2	N		porpoise H seen
1745					
1807	ST. PET.	1	N		
1815	Cook's Pet.	2	N		
1820	WASP	1	S		
1845	Cook's Petrel	1	N		
1850	WASP	1	N		
1911					SS

1500-55
WASP - 5
COOKS - 6
ST PET - 1

120





Ship
Direction

SMITHSONIAN INSTITUTION
DIVISION OF BIRDS
AT SEA DAILY LOG - E

OBSERVERS:

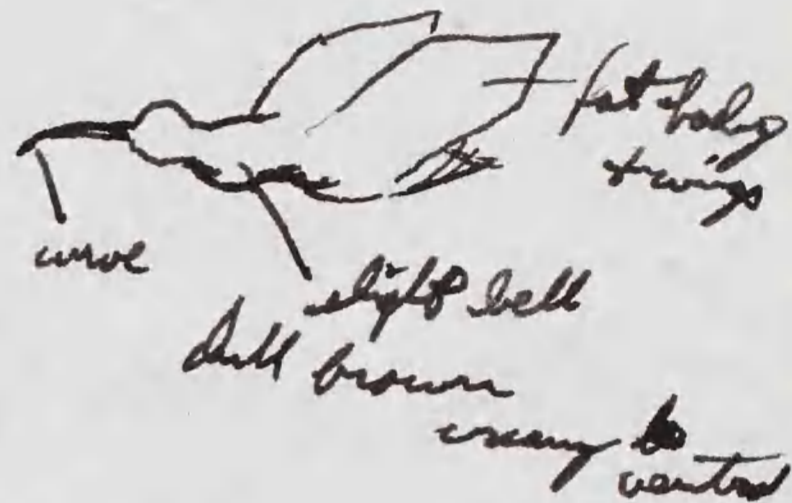
Haff

Date 29 July
Pg. # 1

SPECIMEN
or
DIR. BAND NO. REMARKS

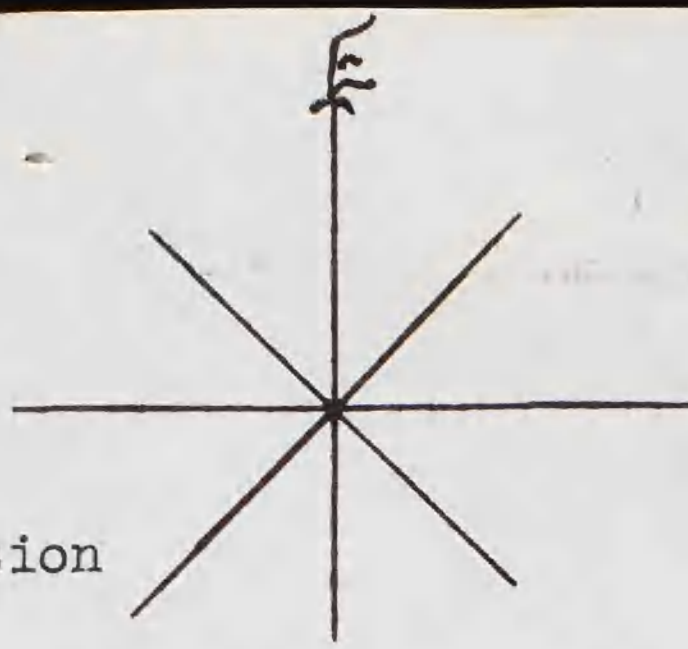
TIME SPECIES #

TIME	SPECIES	#	DIR.	BAND NO.	REMARKS
0618					SR * old time 0620 daylight savings time
0620	BFA	1			sitting in H ₂ O
0640	St. petrel	1	N		
0654	eastern? w. murrelet	1	E		circled the ship
0710	BFA	2			sitting in H ₂ O
0810	STORM PET	1	cel		
0828	RED PHAL	1	S		
0829	WRSP	1	ce		
0843	COOK PET	2	ce		
0846	" "	1	ce		ON H ₂ O
0858	WRSP	1	ce		
0908	STORM PET	1	ce		
0909	WRSP	1	ce		
0915	STORM PET	1	ce		
0917	WRSP	1	ce		
0942	COOK PET	1	ce		
0949	" "	1	ce		ON H ₂ O
1011	JAEGER SP	1	N		
1012	STORM PET	1	ce		
1015	WRSP	1	ce		
1035	Storm Pet	1	SW		Dark Rump.
1040	"	1	SE		
1048	"	1	SE		
1110	"	1	SW		
1120	"	1	SW		
1125	"	1	SW		all black
1128	"	2	SW		all black & flight pattern is not as in the manual for <u>leucos</u> . About 4-6 <u>feathers</u> of the wing and a <u>downward</u> of side - covering a good linear distance - Flying down wind. Look too small for <u>housularia</u> .
1129	Storm Pet	1	SW		all black - <u>definit</u> <u>o.l.?</u>
1138	"	1	SW		



0830
COOK - 5
WRSP - 4
STORM - 13
JP - 1

235



OBSERVERS:

H. F. F.

SMITHSONIAN INSTITUTION
DIVISION OF BIRDS
AT SEA DAILY LOG - E

Ship
Direction

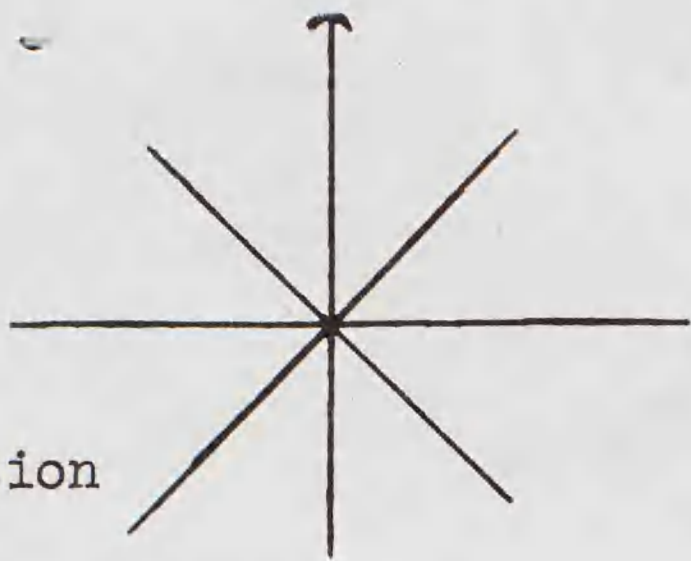
Date 29 July
Pg. # 2

SPECIMEN
or
DIR. BAND NO. REMARKS

TIME	SPECIES	#	DIR.	BAND NO.	REMARKS
1200	WRSP	1	S		
1215	WRSP	1	~		
1255	"	2	S		
1300	"	1	S		
1330	"	1	S		
1345	"	1	S		
1420	"	1	all		
1432	WRSP	1	all		
1435	"	1	all		
1436	"	1	all		
1442	"	1	all		
1443	"	1	all		
1452	STORM PET	1	all		rumor?
1456	WRSP	1	all		
1507	"	1	all		
1525	STORM PET	1	all		"
1529	WRSP	1	all		
1532	ST. PET.	3	all		
1534	STORM PET.	2	all		
1542	" "	1	all		
1555	SOOTY SHEAR	1	N		
1557	Storm Pet	1	SH		
1604	Puffin	1	SH		Brown mouth - Dark chin, dark throat & neck, white underwings. Looked to be larger than P.P. species though but was too fast for Creators (probably colored wrong also). Could it be Townsend's? - checked.
1606	Storm Pet	1	SH		
1615	Shear/pet	1	N		probable Sooty Shear - no hazing
1620	Storm Pet	1	SH		
1621	WRSP	1	N		
1628	"	1	S		
1628	WRSP	1	SH		
1629	Phalarope	1	E		Flying 50 ft above surface. Vocalizing

WRSP - 18
STORM - 11
SS - 1
PUP - 1
S/P - 1
PASP - 1

33 ✓



Ship
Direction

SMITHSONIAN INSTITUTION
DIVISION OF BIRDS
AT SEA DAILY LOG - E

OBSERVERS:

Date 29 July
Pg.# 3

SPECIMEN
or

TIME SPECIES # DIR. BAND NO. REMARKS

TIME	SPECIES	#	DIR.	BAND NO.	REMARKS
1635					Fresh <u>Macrogystis</u> one streak with fronds. ³
1638	Storm pet	1	SW		Dark lump
1652	Sooty Shear	1	N		Rel. 1 ²
1700	WRSP	1	SW		
1703	"	1	N		
1704	"	1	SW		
1705	BFA	1			total of 8 following
1708	WRSP	1	S		
1710	S.P.	1	S		
1717	WRSP	1			Following ship
1717	Sooty Shear	1			"
1727					Floating patch of <u>Macrogystis</u> ³
1730	WRSP	1	SW		white patch very small - divided by blue ²
1732					Floating <u>Macrogystis</u> with fronds - fresh!
1810	WRSP	2	SW		
1815	Sooty Shear.	1	S		
1815					one <u>oderid</u> (eared-seal)
1820	BFA	8			following ship
1822	Sooty Shear	1	SE		
1830	WRSP	2	E		
1845	S. Shear	1	SE		
1850	WRSP	1	SE		
1900	WRSP	1	SE		
1910	Jaeger sp.	1	N		
1915	Sooty Shear.	1	SE		
1925	S. Shear.	1	SE		
1936					close sea

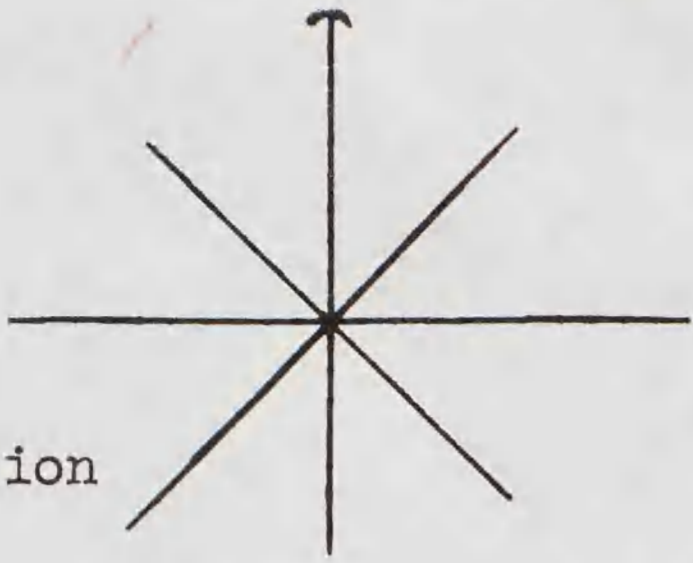
STORM - 2
SS - 7
WRSP - 4
JSP - 1

21 ✓

Subspecific identifying

Albriceptula in accordance to
Schaffer & Rice 1963. Please name as is

PLD



Ship
Direction

SMITHSONIAN INSTITUTION
DIVISION OF BIRDS
AT SEA DAILY LOG - E

OBSERVERS:

Date 30 July
Pg.# 1

SPECIMEN
or

TIME SPECIES # DIR. BAND NO. REMARKS

0630					begin obs - between Santa Catalina and Long beach
0635	Western gull	1	W		
0640					mole mole
0641	Western gull	1	W		
0647	Sooty Shear	1			
0650 0700	0710				<u>Albatrosses</u> 10 in one pod - 4 large animals feeding, two cows with calves. 5 in another pod - Albatrosses.
0715	Sooty Shear	3	W		
0730	"	4	8888		
0732	Pink footed Shear	1			Rel 2
0732	Western gull	8			3 ad 5 imm.
0736					CLOSE OBS

$$14.75 \overline{) 130}$$

$$8 \overline{) 7.8}$$

$$8 \overline{) 60.}$$

$$6 \overline{) 13} \\ 6 \\ \underline{20}$$

E.A.C. CRUISE DATA

SHIP YAG-40DATE 7/25/67

	TIME	LAT.	LONG.
SUNRISE	0502	33-06N	126-25W
SUNSET	1921	32°28N	124°20W

TOTAL MILES TRAVELED SUNRISE TO SUNSET 130

POSITION

54
36

0700 32 45

0900-3235

1100-3234

1300 32 32

1500 32 30

1700-32 29

2100 32 27

2300 32 27

TIME	LAT.	LONG.
0400	33-17N	126-09W
0600	32-54N	126-20W
0800	32-36N	126-16W
1000	32-33N	125-59W
1200	32-34N	125-36W
1400	32° 30.0 N	125° 16.2 W
1600	32° 30.0 N	124° 54.2 W
1800	32° 28.0 N	124° 35.0 W
2000	32° 26.5 N	124° 14.2 W
2400	32° 27.0 N	123° 33.0 W

COURSE OR SPEED CHANGE

FROM	TO	(AT)	LAT.	LONG.
269°T	180°T		33-18N	126-14W
180°T	090°T		32-33N	126-15W

123
24
127

	TIME	LAT.	LONG.
SUNRISE	0519	32°30'N	122°39'W
SUNSET	1947	31°40'N	122°11'W

TOTAL MILES TRAVELED SUNRISE TO SUNSET 124

POSITION

TIME	LAT.	LONG.
0400	32°28.5'N	122°48.5'W
0600	32°30'W	122°26'W
0800	32°30.5'W	122°04.8'W
1000	32°29.8'N	121°42.7'W
1200	32°29.5'N	121°20'W
1400	32°22.0'N	121°04'W
1600	32°02.3'N	121°05.5'W
¹⁷⁴⁶ 1800	31°47.0'N	121°07.0'W
2000	31-42.8'N	121-39.7'W
2400	31-45'N	122-17'W

29
20
3
37

COURSE OR SPEED CHANGE

FROM	TO	(AT)	LAT.	LONG.
¹⁷⁴⁶ 185	270		31°47.0'N	121°07.0'W

E.A.C. CRUISE DATA

SHIP YAG-40DATE 7/27/67

	TIME	LAT.	LONG.
SUNRISE	0524	31-45N	123-10W
SUNSET	1924	31-45N	125-50W

TOTAL MILES TRAVELED SUNRISE TO SUNSET 139

POSITION

TIME	LAT.	LONG.
0400	31-46N	123-02W
0600	31-45N	123-24W
0800	31-44N	123-46W
1000	31-43N	124-07W
1200	31-42 N	124-27.7W
1400	31-37.7N	124°54.2W
1600	31-37.0N	125°16.0W
1800	31-37.0N	125°39.0W
2000	31-34.6 N	126-02.8W
2400	31-05.2N	126-15W

COURSE OR SPEED CHANGE

FROM	TO	(AT)	LAT.	LONG.
278	268		31-45N	123-10W
268	277		31-34N	126-19W

E.A.C. CRUISE DATA

SHIP YAG-40DATE 7/28/67

	TIME	LAT.	LONG.
SUNRISE	0536	30°57N	125°35W
SUNSET	1911	30°50W	123°01W

TOTAL MILES TRAVELED SUNRISE TO SUNSET 126

POSITION

TIME	LAT.	LONG.
0400	30°58 N	125-42 W
0600	30°54.5N	125-21.5W
0800	30°54.0N	125-00.2W
1000	30°57 N	124°35W
1200	30°58 N	124°16 W
1400	30°56 N	123°55.5W
1600	30° 54.2N	123°34 W
1800	30°515N	123°13.2W
2000	30°50 N	122°53W
2400	30°50 N	122°16.8W

COURSE OR SPEED CHANGE

FROM	TO	(AT)	LAT.	LONG.
177	090		31-57N	126-17W

file

PRELIMINARY REPORT

EASTERN AREA CRUISE NO. 17

July 10-30, 1967

including

EASTERN GRID SURVEY NO. 10

Prepared by

Richard D. Chandler

Preliminary Report
Eastern Area Cruise No. 17
Eastern Grid Survey No. 10
prepared by
Richard D. Chandler

Cruise Itinerary: 10 July 0815 Chandler, Hoff depart Honolulu
19 July 1226 Arrive Eastern Grid area
21 July 0514 Begin nominate Grid Cruise Track
23 July 0900 Depart Grid area for helicopter
rendezvous
23 July 1700 DeLong arrives via helicopter
24 July 0515 Resume regular Grid observations
29 July 0830 Depart Grid area
30 July 1000 Arrive Long Beach

Personnel : Robert DeLong (Biologist-in-Charge 23-31 July)
Richard Chandler (Biologist-in-Charge 10-23 July)
David Hoff

Methods : Diurnal observations were made from the helicopter deck
when weather conditions permitted. During high seas
the watch was held from the lee wing of the bridge.
Nocturnal watches were held on the lee side of the
quarterdeck. Other methods and procedures followed
those established on previous cruises on this type of
vessel. Birds were collected from the skiff on
28 July. No BT casts were made.

NON-GRID SECTIONS:

The non-Grid areas have been broken down into four sections as follows:

Section "A" Hawaiian Area 10-11 July

The observations during the first two days out of Honolulu (10-11 July) were strongly influenced by land-based populations from the main Hawaiian islands. Area "A" (see Figure #1) is best discussed separately from the next section.

Section "B" Deep Pelagic Area 12-19 July

Beyond 300 miles from the main Hawaiians the number of birds dropped sharply to a very low level and remained low to the western side of the Grid area (126°30' W, see Figure #1).

Section "C" Pt. Arguello 23 July

During the rendezvous with the helicopter, observations were taken from 11 to 20 miles off the California coast near Pt. Arguello/Pt. Conception (see Figure #2).

Section "D" Grid to Long Beach 29-30 July

Departed Grid area at 0830 hours 29 July. Eleven hours of observation 0-100 miles east of the Grid on 29 July, and 1.1 hours between Santa Catalina and Long Beach on 30 July constitute this section (see Figure #2).

Section "A" Hawaiian Area:

During 12.4 hours (100 miles) of diurnal observations on 10 and 11 July, 620 birds of 10 species were observed. Sooty Terns, Wedge-tailed Shearwaters, and Common Noddies were the dominant species accounting for 97 percent of the birds in this section. Several large feeding flocks were seen on the 11th, 100-200 miles from land. (See non-Grid Table #2 for summary.)

SPECIES ACCOUNTS

Wedge-tailed Shearwater (<u>Puffinus pacificus</u>)	# Obs.	= 83
	% Section total	= 13.4

Wedge-tails were abundant on 10 July when passing 10-30 miles north of Molokai, and were regular in the Sooty Tern flocks on 11 July. All birds observed were light-phase.

Newell's Shearwater (<u>Puffinus puffinus newelli</u>)	# Obs.	= 2
--	--------	-----

Two Newell's were seen alone on 10 July.

Black-winged Petrel	# Obs.	= 2
Small <u>Pterodroma</u> sp.	# Obs.	= 5
<u>Pterodroma externa</u>	# Obs.	= 1
<u>Pterodroma</u> sp.	# Obs.	= 2

The above sightings were all made on the second day out. One small Pterodroma was thought to be a White-winged Petrel, but probably most of the small birds were P. hypoleuca. No Bonin-type birds were observed. The P. externa was probably a Juan Fernandez.

Dark-rumped Petrel (<u>Pterodroma phaeopygia</u>)	# Obs.	= 1
---	--------	-----

A bird tentatively assigned to this species was seen north of Molokai on 10 July.

Bulwer (?) Petrel (<u>Bulweria bulweriae</u>)	# Obs.	= 1
---	--------	-----

A single large all-dark petrel seen in a Sooty Tern flock on 11 June was probably this species. It was not observed well enough to rule out the possibility of Sooty Storm Petrel.

Red-tailed Tropicbird (Phaethon rubricauda) # Obs. = 1

The single bird seen had no visible central tail feathers.

Red-footed Booby (Sula sula) # Obs. = 2

Two adult light-phase birds were recorded north of Molokai.

Sooty Tern (Sterna fuscata) # Obs. = 476
% Section total = 76.8

Only a few scattered sooties were seen the first day. Feeding flocks of up to 150 birds were observed over 150 miles from land on the second day. The land base of these birds is uncertain. Except for a single immature, all birds appeared to be adults.

Common Noddy (Anous stolidus) # Obs. = 43
% Section total = 10.2

All noddies were recorded within sight of Molokai where they were associating with Wedge-tailed Shearwaters in loose feeding flocks.

Section "B" - Deep Pelagic Area 12-19 July

After leaving the area of typical Hawaiian breeding birds some 300 miles northeast of Hawaii, a barren area about 1600 miles in extent was traversed. Aside from the Black-footed Albatrosses following the ship, 14 birds were sprinkled over the 552 miles of diurnal observations in eight days. This averages out to one non-albatross bird in every 4-1/2 hours, or about one bird every 40 miles. Black-footed Albatrosses accounted for 18 of the 32 birds recorded (56%). Of significant note was the absence of this species during the first four days of the cruise.

Constant northeast trades averaging 17.5 knots accompanied most of this leg, shifting slightly to the north during the last 2-3 days. Relative gusting up to 50 m.p.h. made for generally poor observing conditions. Watch was held from the ship's bridge during most of this section.

Effects of colder north Pacific waters were felt around 26-28° N; 138-145° W, when surface temperatures dropped from 74° to 65° F. Winds increased and cloud cover obscured the sky (see Non-Grid Table #3). These changes only slightly affected bird observations.

SPECIES ACCOUNTS

Black-footed Albatross (Diomedea nigripes) # Obs. = 18

No albatrosses were seen from 10 July through 13 July. A bird was reported by the bridge at sunset on 14 July (27°20' N; 135°20' W). One bird was seen briefly on 15 July but birds were not regularly following the ship until 16 July (29° N; 138° W) when three were present most of the

day. Three to six birds were present for the last three days. The increase of albatrosses came at the same time a notable drop of surface temperature was recorded. Of the 14 birds for which rump color was noted six (42%) were white-rumped. This is about the same as the overall percentage of white-rumped birds in the present Grid survey (15 out of 42; 82%).

Sooty Shearwater (Puffinus griseus) # Obs. = 2

Two Sooty/Slender-bill Shearwaters were seen on 14 July. One had "light" underwings, the other was not seen well, but both were probably this species. Both birds were traveling in a west-southwest direction.

Pterodroma sp. # Obs. = 2

Both sightings were on 12 July. One may have been a P. externa.

Shearwater/Petrel # Obs. = 3

Three shearwater/petrels were observed on 16 July in the area of the most rapid surface temperature drop. Two of the birds were tentatively identified as Kermadec Petrels, one light- and one dark-phase.

Red-tailed Tropicbird (Phaethon rubricauda) # Obs. = 1

A short-tailed bird (subadult ?) on 17 July (ca. 30° N; 134° W) was closer to the North American coast than the Hawaiian Islands.

White-tailed Tropicbird (Phaethon lepturus) # Obs. = 1

This was the only bird seen on 13 July.

Tropicbird sp. # Obs. = 1

Seen on 14 July, this bird was noted as follows: "Sitting on water, large, pinkish hue, dark bill, long-light tail."

Jaeger sp. # Obs. = 2

Two birds were seen together on 12 July.

Section "C" Pt. Arguello

23 July

One hour of observation was run from the helicopter rendezvous 11 miles off Pt. Arguello to A Point 20 miles southwest of Pt. Arguello. One-hundred-sixteen birds of six species were observed. This area is well outside of "pelagic" areas (see Figure #2). Albatrosses were present but low in numbers; no storm petrels were seen. Sooty Shearwater was the dominant species. (See non-Grid Table #4 for summary of observations.)

SPECIES ACCOUNTS

Black-footed Albatross (Diomedea nigripes) # Obs. = 3

At point "Dogwood" during the morning of 23 July, at least 19 albatross were present around the ship. Twenty miles from point Dogwood, 11-20 miles from Pt. Arguello, only three were present.

Pink-footed Shearwater (Puffinus creatopus) # Obs. = 9

Pink-foots were found associated with Sooty Shearwater flocks at a ratio of approximately 1:10.

Sooty Shearwater (Puffinus griseus) # Obs. = 97

Sooty Shearwaters were scattered about in loose groups of 4-35. No obvious feeding concentrations were noticed.

Jaeger sp. # Obs. = 3

Three immature Jaegers were observed harassing a seal.

Western Gull (Larus occidentalis) # Obs. = 2

Two adults followed the ship's wake briefly.

Gull sp. # Obs. = 2

Two small gulls were seen at a distance. They were possibly Bonapartes.

Section "D" Grid to Long Beach 29-30 July

Eleven hours of observations on the eastern side of the Grid area on 29 July were much like the southeast section of the Grid with storm petrels the dominant form (70% total). During an hour's observation between Santa Catalina and Long Beach, Western Gulls and Sooty Shearwaters were seen. (See Non-Grid Table #5 for summary of observations.)

SPECIES ACCOUNTS

Black-footed Albatross (Diomedea nigripes) # Obs. = 8

The high numbers of albatross noted in conjunction with storm petrels during the Grid survey were not noticeable over this section.

Pink-footed Shearwater (Puffinus creatopus) # Obs. = 1

One bird was seen inside Santa Catalina.

NON-GRID TABLE #1. Summary of Observations, All Non-Grid Section
 EAC 17, 10-30 July 1967

Species	Hawaiian "A"	Pelagic "B"	Pt. Arguello "C"	Grid-L.Beach "D"	Total
Black-footed Albatross		18	3	8	29
Pink-footed Shearwater			9	1	10
Wedge-tailed Shearwater	83				83
Sooty Shearwater		2	97	16	115
Newell's Shearwater	2				2
<u>Puffinus</u> sp.				1	1
Shearwater sp.	1				1
Cook Petrel				5	5
Black-winged Petrel	2				2
Small <u>Pterodroma</u>	5				5
<u>Pterodroma</u> Externa	1				1
Dark-rumped Petrel	1				1
<u>Pterodroma</u> sp.	2	2			4
Shearwater/Petrel		3		1	4
Bulwer Petrel	1				1
White-rumped Storm Petrel				33	33
Storm Petrel sp.				26	26
White-tailed Tropicbird		1			1
Red-tailed Tropicbird	1	1			2
Tropicbird sp.		1			1
Red-footed Booby	2				2
Phalarope sp.				1	1
Jaeger sp.		4	3	2	9
Western Gull			2	10	12
Gull sp.			2		2
Sooty Tern	476				476
Common Noddy	43				43
<hr/>					
Total Birds	620	32	116	104	872
# Hrs. Obs.	12.4	63.5	1.0	12.1	89.0
# Miles Obs.	100	552	9	111	772
# Species	10	5	6	9	20
Linear Pens	6.200	.058	12.9		1.13

NON-GRID TABLE #2. Summary of Observations, Non-Grid Section "A" -
 Hawaiian Area, 10-11 July 1967
 EAC 17, 10-30 July 1967

Species	10 July	11 July	Total	%	Lin. Dens.
Wedge-tailed Shearwater	56	27	83	13.4	.830
Newell's Shearwater	2		2	0.3	.020
Shearwater sp.		1	1	0.2	.010
Total Shearwater			86	13.9	.860
Black-winged Petrel		2	2	0.3	.020
Small <u>Pterodroma</u>		5	5	0.8	.050
<u>Pterodroma externa</u>		1	1	0.2	.010
Dark-rumped? Petrel	1		1	0.2	.010
<u>Pterodroma</u> sp.		2	2	0.3	.020
Total <u>Pterodroma</u>			11	1.8	.110
Bulwer? Petrel		1	1	0.2	.010
Red-tailed Tropicbird	1		1	0.2	.010
Red-footed Booby	2		2	0.3	.020
Sooty Tern	10	466	476	76.8	4.760
Common Noddy	43		43	10.2	.430
 Total	 115	 505	 620	 100.0	 6.200
# Hrs. Obs	2.4	10.0	12.4		
# Miles Obs.	20	80	100		
# Species	7	5	10		
Linear Dens.	5.750	6.320	6.200		

NON-GRID TABLE #3. Summary of Observations, Non-Grid Section "B" - Deep Pelagic Area, 12-19 July
EAC #17 10-30 July 1967

Species	12	13	14	15	16	17	18	19	Total	Percent	Linear Density
Black-footed Albatross			(1)	1	3	3	6	4	18	56.3	.033
Sooty/Slender B. Sh.			2						2	6.2	.003
Pterodroma sp.	2								2	6.2	.003
Shearwater/Petrel					3				3	9.4	.005
White-tailed Tropicbird		1							1	3.1	
Red-tailed Tropicbird						1			1	3.1	.001
Tropicbird sp.			1						1	3.1	.003
Jaeger sp.	2					2			4	12.6	.007
Total	4	1	4	1	6	6	6	4	32	100.0	.058
# Hrs. Obs.	10.0	10.0	8.0	9.0	6.5	7.5	7.5	5.0	63.5		
# Miles Obs.	80	90	66	79	59	65	68	45	552		
# Species	2	1	3	1	2	3	1	1	5		
Linear Dens.	.050	.011	.061	.013	.101	.092	.088	.089	.058		
Aug. Sea T in °F	76.0	74.5	74.5	74.0	71.5	67.3	64.8	64.0			
Aug. Cloud Cover (10ths.)	3	7	8	9	10	10	8	1			
Aug. Wind Vel. (kts.)	16	17	22	22	14	13	15	21	17.5		

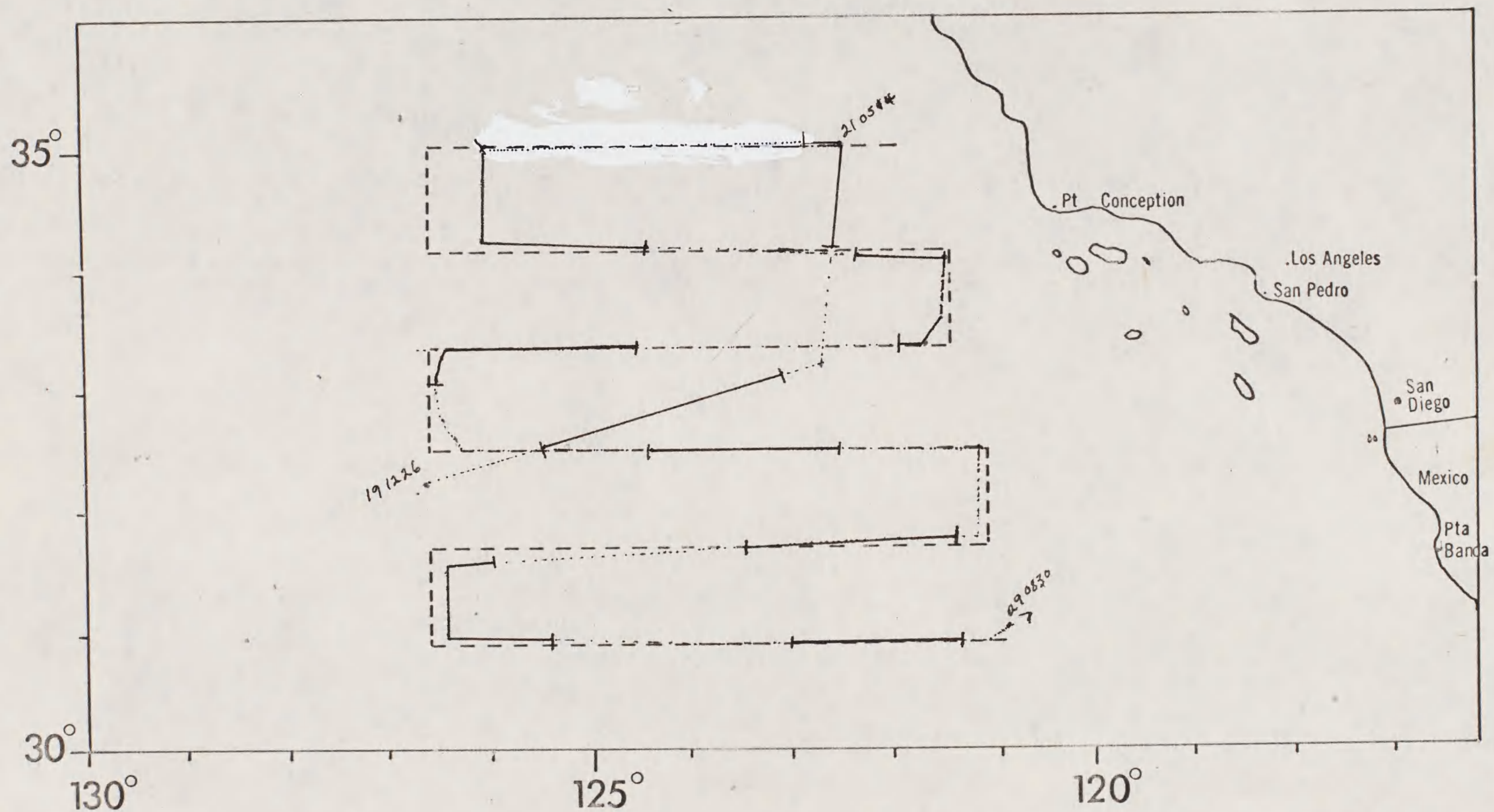
NON-GRID TABLE #4. Summary of Observations, Non-Grid Section "C"
 Pt. Arguello Area 23 July, EAC 17, 10-30 July 1967

Species	23 July	%	Linear Dens.
Black-footed Albatross	3	2.6	.333
Pink-footed Shearwater	9	7.7	1.000
Sooty Shearwater	97	83.7	10.7
Jaeger sp.	3	2.6	.333
Western Gull	2	1.7	.222
Gull sp.	2	1.7	.222
<hr/>			
Total	116	100.0	12.900
# Hrs. Obs.	1.0		
# Miles Obs.	9		
# Species	6		

NON-GRID TABLE #5. Summary of Observations, Non-Grid Section "D"
 Eastern Grid to Long Beach, 29-30 July, 1967,
 EAC 17, 10-30 July 1967

Species	#	29 July		30 July			Total		
		% Day Tot.	Lin. Dens	#	% Day	Lin. Dens.	#	T %	Dens.
Black-footed Albatross	8	9.4	.075	8	42.1	2.0	16	15.4	.144
Pink-footed Shearwater				1	5.3	.25	1	1.0	.009
Sooty Shearwater	8	9.4	.075	8	42.1	2.0	16	15.4	.144
<u>Puffinus</u> sp.	1	1.2	.010				1	1.0	.009
Cooks Petrel	5	5.9	.047				5	4.8	.045
Shear/Pet.	1	1.2	.010				1	1.0	.009
White-rumped Storm Petrel	33	38.9	.308				33	31.6	.298
Storm Petrel sp.	26	30.5	.243				26	25.0	.234
Phalarope sp.	1	1.2	.010				1	1.0	.009
Jaeger sp.	2	2.3	.019				2	1.9	.018
Western Gull				10	52.6	2.5	10	9.6	.090
Total	85	100.0	.795	19	100.0	4.75	104	100.0	.937
# Hrs. Obs.		11.0			1.1			12.1	
# Miles Obs.		107			4			111	
# Species		7			3			9	
Linear Density		.795			4.75			.937	

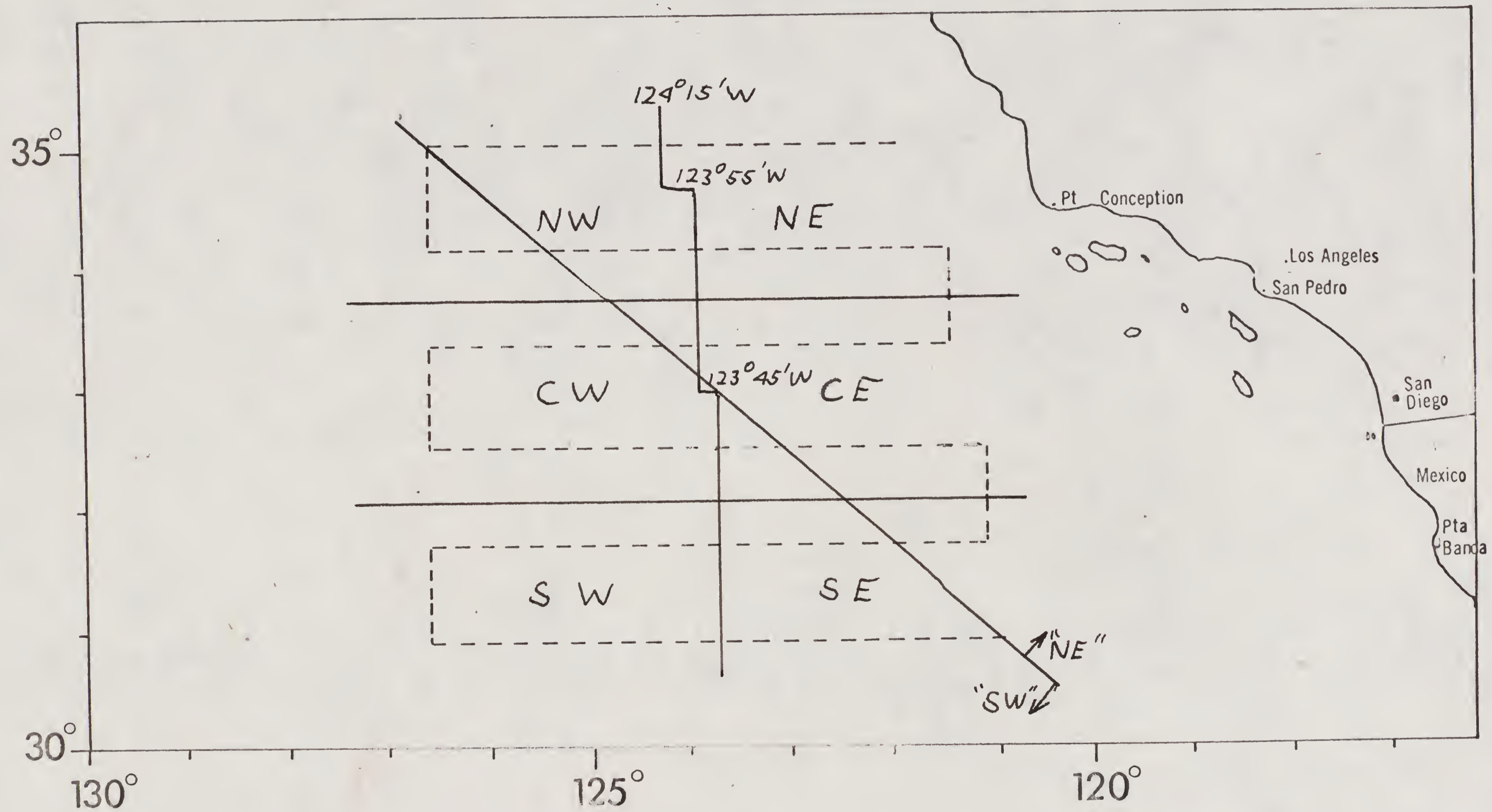
FIG. #1 EASTERN GRID CRUISE TRACK



EASTERN AREA CRUISE NO. 17
 EASTERN GRID SURVEY NO. 10
 DATES 19 - 29 July 1967

----- NORMAL GRID TRACK
 ACTUAL CRUISE TRACK
 (diurnal)
 _____ ACTUAL CRUISE TRACK
 (nocturnal)

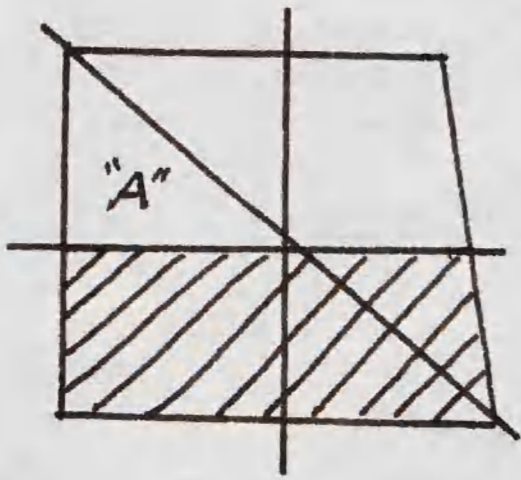
FIG #2
EASTERN GRID CRUISE TRACK
 SUBDIVISIONS USED; EASTERN GRID #10, 19-29 JULY 1967.



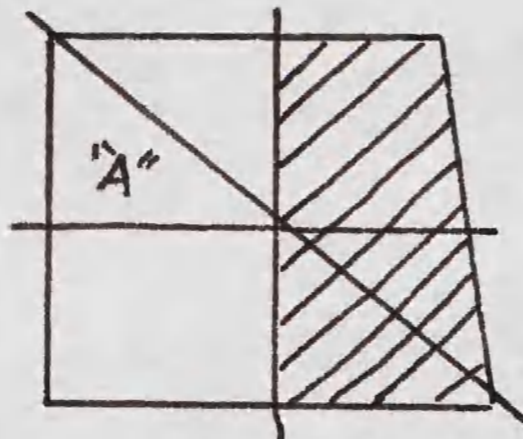
EASTERN AREA CRUISE NO. _____
 EASTERN GRID SURVEY NO. _____
 DATES _____

----- NORMAL GRID TRACK
 ACTUAL CRUISE TRACK (diurnal)
 _____ ACTUAL CRUISE TRACK (nocturnal)

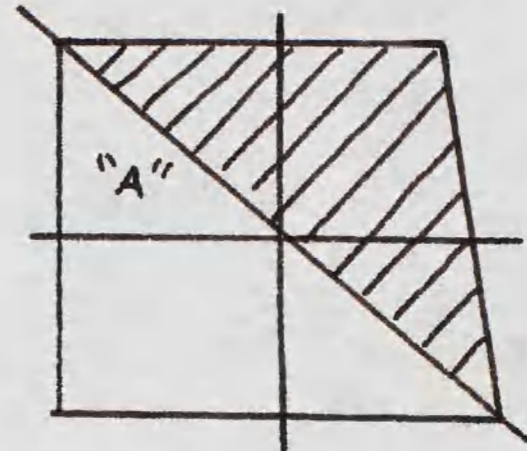
FIG. #3 DENSITY GAMES - SEE TEXT



1



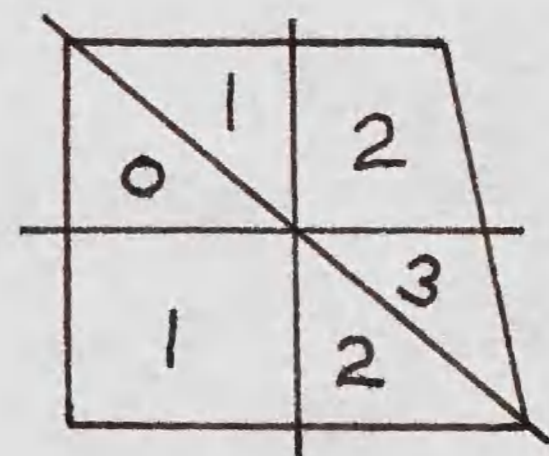
2



3

- LINEAR DENSITY -

	HATCHED	BLANK
1	.450	.203
2	.460	.234
3	.456	.195



SOL. "A" No. OF TIMES A SECTION IS IN "DENSE HALF"

-7	-13
-26	+8
-8	+57

SOL. "C"
OVERALL
LIN. DENS.: .471

.402	.346
.210	.554
.396	1.043

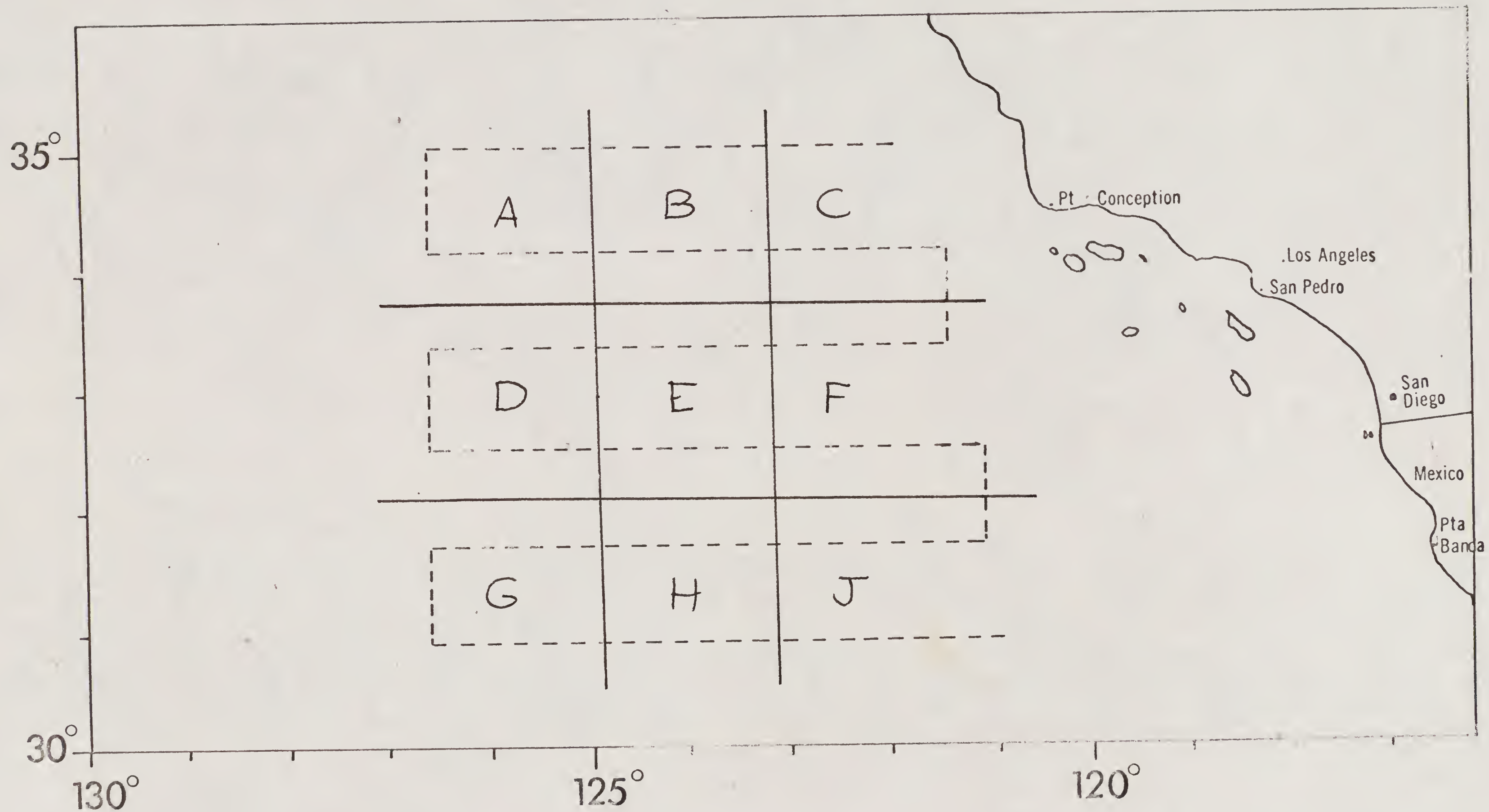
SOL. "B"

LINEAR DENSITIES

1	-
-	1
1	+

SOL. "D"

FIG #4 PROPOSED REDIVISION
OF
EASTERN GRID CRUISE TRACK



EASTERN AREA CRUISE NO. _____
 EASTERN GRID SURVEY NO. _____
 DATES _____

----- NORMAL GRID TRACK
 ACTUAL CRUISE TRACK
 (diurnal)
 _____ ACTUAL CRUISE TRACK
 (nocturnal)

Sooty Shearwater (Puffinus griseus) # Obs. = 16

Birds began to appear regularly some 50 miles east of the Grid area.

Puffinus sp. # Obs. = 1

The log reads "[29 July] Brown mantle - dark crissum, dark throat & neck, white underwings. Looked larger than P. p. opisthomelas but was too fast for [P.] creatopus (probably colored wrong also) could it be Townsends (?) - check" - DeLong.

Cook Petrel (Pterodroma cooki) # Obs. = 5

These birds appeared shortly after leaving the Grid. The bulk of the population appears to be centered around 125° W at this latitude and probably does not come much further east than 120° W.

White-rumped Storm Petrel # Obs. = 33
Storm Petrel sp. # Obs. = 26

Storm Petrel populations remained fairly high for all July 29, but were absent inside the Channel Islands.

Phalarope sp. # Obs. = 1
Jaeger sp. # Obs. = 2

Western Gull (Larus occidentalis) # Obs. = 10

All 10 birds were seen between Santa Catalina and Long Beach.

EASTERN GRID SURVEY #10

The Grid area was entered from the west side just south of Point Ginko on 19 July at 1226 hours. Observations on 19 and 20 July, before beginning the nominal cruise track, have not been included in the regular summary statistics but are discussed in the species accounts. (See Table #1 for summary of this section.) The extreme northwest portion of the first leg was not covered due to allowances made for the helicopter rendezvous. On the morning of 23 July the ship was making maneuvers 4-8 miles south and southeast of Point Dogwood awaiting the helicopter transfer. Two hours of observations in this area are not included in the statistical Grid summary but are clearly an important part of the Grid area and are considered in the text. (See Table #1 for a summary of these observations.) [See Figure #1 - Cruise Track.]

Over the 891 diurnal miles of nominal Grid track, 378 birds of 15 species were observed. Sixteen specimens of six species were collected. An additional 143 birds over 150 diurnal miles were logged in the non-track areas. Forty-eight birds were recorded during 7.3 hours of nocturnal watch. (See Table #2). [See Table #1 for observation summaries for all areas.]

Moderately strong (18-20 knot) north winds in the north section gave way to light (5-10 knot) northwest winds in the southern sections. Only 28 July was favorable for skiff work.

Synoptic Highlights

1.) Six new species recorded for Grid area:

Band-tailed Pigeon	- 1 collected 27 July
Long-eared Owl	- 1 collected 28 July
Whimbrel	- 4 observed (26 July [3]; 29 July)
Northern Phalarope	- 16 observed (21, 23, 26 July)
Heerman's Gull	- 3 observed on 23 July
Nighthawk sp.	- 1 observed, 23 July

2.) High concentrations of Storm Petrels around Points "D," "H," and "J."

3.) High concentrations of Cook Petrels in southern section.

4.) Overall preponderance of birds in eastern and southern sections.

5.) Occurrence of all dark (Leach's) Storm Petrels in regular numbers.

Table 6 was prepared to test the hypothesis that the east-to-west abundance of birds on the Grid is dependent in part on the distance to land. Grid track observations were divided in half along the oblique line connecting points "Birch" and Oak. Notice that this diagonal very nearly parallels the coastline (see Figure #2). It was hoped that this data would give more interpretable results than the east-west division in respect to distance from land. The results were somewhat surprising. Instead of showing great changes from the standard east-west split, inspection of Table 6 shows few discrepancies; the Jaeger data being the most notable. As a 45° rotation of the central dividing axis produced no marked changes in the density of the two halves, a further rotation of 45° was calculated. The overall densities are figured in Figure 3. Notice that by proper selection of bisectors, all areas except the 1/8 Grid section labeled "A" can be found to lie in that half which is consistently two times more dense than the opposing half. All is not entirely lost in this confusion if all three bisections are superimposed on one another and tabulated as indicated in "Solution 'A'" giving relative densities in six portions of the Grid. "Solution 'B'" shows the densities computed for the routine six subsections (see Figure #2). Where numbers are high enough, this approach to variation of bird densities within the Grid is fairly satisfactory. Even more graphically simple is "Solution 'C'" where the sections are assigned plus and minus values relative to the overall density. Any additive unit that will serve to give a quick summary of direction and degree of non-randomness, is applicable, as the measure is only relative. [In this case the formula is: the difference between the overall density and the subsection density X 100 roundoff, and attach appropriate sign.] When bird numbers are too low to be of statistical validity "Solution 'D'" may be most meaningful.

In this simplification only four symbols are used to describe the distribution:

0 = No bird(s) i.e., linear density 0.000

- = Bird(s) present but at low density as compared to the overall

1 = Bird(s) present in "about the same"* density as the overall

+ = Bird(s) present at high relative density.

*(Solution "D" interprets "about the same" as being a single digit in Solution "C".)

Perhaps the best lesson learned from this exercise is the relatively inconsistent results obtained by not having the "correct" number of comparable subdivisions. Clearly, a single bisector has limited value on this particular Grid. The three north-to-south sections are better, but when compared alone are not nearly as effective as when divided by the north-to-south bisector and compared as six equal subdivisions. While six divisions is a fairly good number for the size of this Grid area, I feel that nine subdivisions would yield somewhat more useful information (see Figure #4). In the species accounts that follow the distribution patterns are indicated by six characters arranged according to Solution "D." These representations apply only to track data.

SPECIES ACCOUNTS

		Track	Nontrack	Total
Black-footed Albatross (<u>Diomedea nigripes</u>)	# Obs.	66	27	93
	+ 1			
	1 1			
	- 1			

Albatross numbers are reported as the maximum seen during the day. From 3-19 birds were seen during the survey (mean 8.5/day, median = 7). Of 41 birds with rump color recorded, 15 (32%) were white-rumped. Nineteen birds were seen on 23 and 26 July in similarly high concentrations of Storm Petrels. At Point Dogwood, 42 miles from shore, 19 birds were seen, but later the same day, 11-20 miles from land (Pt. Conception), only three were present; Storm Petrels were absent at that distance from land (see Non-Grid Section "C"). About two-thirds of the albatrosses were seen in the eastern half.

		Track	Nontrack	Total
Sooty Shearwater (<u>Puffinus Griseus</u>)	# Obs.	6	2	8
	# collected = 1			
	+ 1			
	+ 0			
	1 0			

Five of the six sooties were seen in the western sections (unusual). Densities have dropped since April.

Cooks Petrel (<u>Pterodroma cooki</u>)		Track	Nontrack	Total
	# Obs.	56	0	56
	# Collected	11		
	- 0			
	- 0			
	+ +			

Ninety-four percent of the cooks were in the south section, predominantly in the western half. Since the southern sections have not been fully covered since early April it is possible that this species has been in the Grid for some time, but I think not. The birds were all flying in a north or northwest direction and appeared regularly crossing the ship's bow. This may be part of the populations observed off Southern Baja on EAC 13 in early June, just now reaching this latitude. The direction of travel could bring many birds off to the west of the Grid area before reaching 35° N. Birds were observed as singles and pairs, occasionally on the water.

		Track	Nontrack	Total
White-rumped Storm Petrel	# Obs.	80	1	81
Dark-rumped Storm Petrel	# Obs.	17	4	21
Storm Petrel sp.	# Obs.	58	81	139
	Total	155	86	241
	- 1			
	- + (All Storm Petrel track)			
	- +			

Over 46 percent of all Grid birds were Storm Petrels. While only some 9 percent of the total were recorded as dark-rumped, or all dark, the proportion was probably at least two times that; the lack of a white-rump being more difficult to ascertain than its presence. Distant or dubious birds were logged as "Storm Petrel sp." and doubtless include more dark birds than light. Unfavorable weather limited collecting and the subspecies present are not known. In addition to the dark form (5), 2 white-rumped forms may be present. Several large-appearing birds with broad white rumps were seen in contrast to smaller birds with more restricted white. Birds were very abundant around Point Dogwood (linear density ca. 10.0 birds/mile) and common in the southeast section (linear density ca. 1.2 birds/mile). Ninety percent of the Storm Petrels were seen in the eastern section. On 23 July a dark-rumped bird with an object (Food?) in its bill was noted being harassed by a white-rumped bird 125-150 feet above the water. They fluttered together for several seconds at that height, then returned to the surface and disappeared, the dark-rumped bird still possessing the object. I have not observed any phase of this sequence (except mutual fluttering) before. The height was exceptional; the wind speed was ca. 5 knots.

Whimbrel (Numenius phaeopus) # Obs. = 4

0 0
0 0
0 +

Three immatures were seen flying east on 26 July. A single bird was seen near Point Oak.

	# Obs.	Track	Nontrack	Total
Red Phalarope	# Obs.	16	0	16
Northern Phalarope	# Obs.	12	4	16
Phalarope sp.	# Obs.	20	3	23 (+ 46 Noct.)
Shorebird sp.	# Obs.	5	0	6
	Total	53	7	60

<u>Red</u>	<u>Northern</u>	<u>Total</u>
1 -	0 +	- 1
1 0	0 1	- +
+ 1	0 0	(-) +

Phalarope numbers have dropped markedly since the high counts in April and May. Birds present in the Grid during July are likely non-breeding birds and late stragglers. Birds returning from the north are probably present by this time as well. As in past cruises, there seems to be little pattern or consistency to distribution within the Grid. Heavy concentrations were noted at night west of Point Juniper in the southeast section (46 birds/hour). The presence of Northern Phalaropes in the northeast area was unexpected. The five "shorebirds" were thought to be phalaropes. Two Red Phalaropes were collected on 28 July; neither bird was in full breeding plumage.

Jaeger sp.	# Obs.	Track	Nontrack	Total
		23	9	32
+ 1				
- +				
- -				

Nearly all Jaegers were nonadult birds. One adult long-tailed was seen around Point Dogwood. One adult parasitic was also recorded, but the remainder were immatures and subadults. It is felt that a good many (ca. one-half), were parasitic and one-fourth each, pomarine and long-tailed. A "flock" of nine birds was seen in the northwest section.

Skua (Catharacta skua) # Obs. = 2

0 +
0 +
0 0

Heerman Gull (<u>Larus Heermanni</u>)	Track	Nontrack	Total
# Obs.	0	3	3
0 +			
0 +			
0 0			

Two adults and an immature followed behind the ship briefly at Point Dogwood, 42 miles from land.

Sabines Gull (<u>Xema sabini</u>)	Track	Nontrack	Total
# Obs.	3	0	3
0 0			
0 +			
0 0			

The fourth and fifth sightings of Common - Arctic - Forster's type on the Grid. The bird on 20 July did not appear to be Forsters and I believe Forsters is the least likely possibility for all four sightings. My feeling is that these are all probably Arctics.

Xantus Murrelet (<u>Endomychura hypoleuca</u>)	Track	Nontrack	Total
# Obs.	2	0	2
Alcid sp. # Obs.	$\frac{1}{3}$	$\frac{0}{0}$	$\frac{1}{3}$
0 0			
0 0			
0 +			

The one "Alcid sp." was probably a Xantus Murrelet. All three birds were seen in the southeast section.

Band-tailed Pigeon (<u>Columba fasciata</u>)	Track	Nontrack	Total
# Obs.	1 (Col.)	0	1
Columbid sp. # Obs.	0	1	$\frac{1}{2}$
0 0			
0 +			
+ 0			

The band-tail, a new species for the Grid area, was collected off the top of the after mast on 27 July. The unidentified Columbid seen on 20 July was possibly of this species, and not inconceivably the same individual that was collected.

Long-eared Owl (<u>Asio otus</u>)	# Obs. = 1	Collected
0 0		
0 0		
+ 0		

The bird was collected from the skiff as it investigated the ship on 28 July. It was a thin specimen.

Nighthawk sp. # Obs. = 1

0 +
0 0
0 0

A nonadult bird fluttered about and occasionally landed on the ship while maneuvering at Point Dogwood. I am not able to identify the bird to species. The lesser would be the most probable as it ranged onto the Pt. Conception area, 42 miles from "Dogwood."

Passeriform sp. # Obs. = 1

0 +
0 0
0 0

A small landbird flitted briefly about the ship at Pt. Dogwood, 23 July. It was about the size of a House Finch/Sparrow, and probably was one or the other.

Marine Mammals. EAC 17 10-30 July

Non-Grid Areas

<u>Date</u>	<u>Time</u>	<u>Lat.</u>	<u>Long.</u>	<u>Species</u>	<u>#</u>	<u>Remarks</u>
23 July	1834	34-23	120-47	Otarid sp.	1	Floating back down, being harassed by 3 Jaegers
23 July	1823			Otarid sp.	1	
29 July	1815			"	1	
30 July	0710	33-368N	118-26.9W	Globicephala	10	In one pod 4 large animals; 2 cows w/calves; 5 in another pod.

Grid

21 July	0815	34-58	123-26	"Whales"	-2	Light olive brown, small straight dorsal 20-25' possibly <u>B. acutorostrata</u>
24 July	0955	32-20	122-56	Grampus	2	One animal largely white on dorsal surfaces. Highly re-curved dorsal seen in both animals - one blow seen, very short and stumpy.

<u>Date</u>	<u>Time</u>	<u>Lat.</u>	<u>Long.</u>	<u>Species</u>	<u>#</u>	<u>Remarks</u>
27 July	1129	31-42	124-27	Delphinus	5	All with some degree of white in dorsal 5-6 feet
28 July	1745	30°51'N	123°16'W	Porpoise	4	Drawing resembles Delphinus

TABLE #1. Summary of Diurnal Observations, All Grid Areas,
Eastern Grid #10, 19-29 July 1967

Species	Nominal Track 21,22,24-29	Non-Track 19 & 20	"D"	Total	% Total	# Coll.	# Blood Samples
Black-footed Albatross	66	8	19	93	17.9		
Sooty Shearwater	6		2	8	1.5	1	
Cooks Petrel	56			56	10.8	11	5
Shearwater/Petrel	1	2		3	0.6		
White-rumped Storm Petrel	80		1	81	15.6	1	
Dark-rumped Storm Petrel	17	1	3	21	4.0		
Storm Petrel sp.	58	3	78	139	26.7		
Whimbrel	4			4	0.8		
Red Phalarope	16			16	3.1	2	
Northern Phalarope	12		4	16	3.1		
Phalarope sp.	20		3	23	4.4		
Shorebird sp.	5			5	1.0		
Parasitic Jaeger	1			1	0.2		
Long-tailed Jaeger	1		1	2	0.4		
Jaeger sp.	21		8	29	5.6		
Skua	2			2	0.4		
Heerman Gull			3	3	0.6		
Sabine's Gull	3			3	0.6		
Gull sp.			3	3	0.6		
<u>Sterna</u> sp.	1	1		2	0.4		
Xantus Murrelet	2			2	0.4		
Alcid sp.	1			1	0.2		
Band-tailed Pigeon	1			1	0.2	1	
Columbid sp.		1		1	0.2		
Long-eared owl	1			1	0.2	1	
Nighthawk sp.			1	1	0.2		
Passeriforme sp.			1	1	0.2		
Bird sp.	3			3	0.6		
<hr/>							
Total Birds	378	16	127	521	100	17	5
# Miles	891	140	10	1041			
# Hours	98.0	17.8	2.0	117.8			
# Species	15	5	9	19			

TABLE #2. Summary of Nocturnal Observations, Eastern Grid #10,
19-29 July 1967

	20-21	21-22	23-24	24-25	25-26	26-27	28-29	Total
Storm Petrel sp.						1		1
Phalarope sp.						46		46
Bird sp.						1		1
Total	0	0	0	0	0	48	0	48
# Miles	5	9	9	9	9	9	17	67
# Hours	0.5	1.0	1.0	1.0	1.0	1.0	1.8	7.3

TABLE #3. Daily Summary of Observations, Diurnal, Eastern Grid #10,
19-29 July 1967

Date	# Birds	# Miles	# Hours	Linear Density	# Species
19	4	42	5.0	.096	1
20	12	98	12.8	.122	5
21	36	119	14.5	.303	9
22	35	111	13.1	.316	4
23	127	10	2.0	12.7	8
24	25	130	14.2	.193	5
25	21	119	12.6	.176	6
26	160	123	13.8	1.30	10
27	17	139	14.0	.122	6
28	76	126	13.6	.603	6
29	8	24	2.2	.333	4
Total	521	1041	117.8	.500	19
	47/Day	95/Day	10.7/Day		5.8/Day

TABLE #4. Sectional Breakdown, Norinal Track Only, Eastern Grid #10, Diurnal, 21-29 July 1967

Species	#	NORTH			CENTRAL			SOUTH				
		Species %	% Section	Birds/Sq.Mi.	#	Species %	% Section	Birds/Sq.Mi.	#	Species %	% Section	Birds/Sq.Mi.
Black-footed Albatross	15	20	21.0	.016	24	32	18.6	.017	35	48	18.8	.028
Sooty Shearwater	2	33	2.8	.004	2	33	1.5	.003	2	34	1.1	.003
Cooks Petrel	1	2	1.4	.002	2	4	1.5	.003	53	94	28.6	.084
White-rumped Storm Pet	12	15	16.9	.052	41	51	31.8	.119	27	34	14.5	.085
Dark-rumped Storm Pet	5	30	7.0	.022	5	30	3.9	.015	7	40	3.8	.022
Storm Pet. sp.	11	19	15.6	.048	14	24	10.8	.041	33	65	17.7	.105
Whimbrel									4	100	2.2	.005
Red Phalarope	2	12	2.8	.018	3	8	2.3	.018	11	80	5.9	.070
Northern Phalarope	8	67	11.3	.070	4	33	3.2	.022				
Jaeger	11	48	15.6	.024	10	43	7.8	.014	2	9	1.1	.003
Skua	1	50	1.4	.002	1	50	0.8	.001				
Sabine's Gull	2	67	2.8	.005	1	33	0.8	.001				
Xantus Murrelet									2	100	1.1	.003
Band-tailed Pigeon									1	100	0.5	.001
Long-eared Owl									1	100	0.5	.001
Shear/Pet					1	100	0.8	.001				
Shorebird sp.					5	100	3.9	.030				
Phalarope sp.	1	5	1.4	.008	12	60	9.3	.070	7	35	3.8	.044
Sterna sp.					1	100	0.8	.001				
Alcid sp.									1	100	0.5	.006
Bird sp.					3	100	2.3	.004				
Total	71	18	100	.271	129	33	100	.358	186	49	100	.468
Storm Pet.	28	18	39.5	.122	60	39	46.5	.175	67	43	36.0	.212
Phalaropes	11	23	15.5	.096	19	40	14.8	.110	18	37	9.7	.114
Miles	230				345				316			

TABLE #5. Sectional Breakdown, Nominal Grid Track Only, Eastern Grid #10, Diurnal, 21-29 July 1967

Species	#	EAST			WEST			
		% Species	% Section	Birds/Sq.Mi.	#	% Species	% Section	Birds/Sq.Mi.
Black-footed Albatross	66	55	24.0	.036	42	45	29.2	.024
Sooty Shearwater	1	17	0.4	.001	5	83	3.5	.005
Cooks Petrel	8	14	2.9	.008	48	86	33.3	.056
White-rumped Storm Petrel	69	86	25.0	.304	11	14	7.4	.050
Dark-rumped Storm Petrel	16	94	5.8	.070	1	6	0.7	.004
Storm Petrel sp.	51	88	18.5	.224	7	12	4.9	.032
Whimbrel	4	100	1.5	.005				
Red Phalarope	3	19	1.1	.014	13	81	9.0	.060
Northern Phalarope	12	100	4.4	.052				
Jaeger	12	52	4.4	.013	11	48	7.7	.013
Skua	2	100	0.7	.002				
Sabines Gull	3	100	1.1	.004				
Xantus Murrelet	2	100	0.7	.008				
Band-tailed Pigeon					1	100	0.7	.001
Long-eared Owl					1	100	0.7	.001
Shearwater/Petrel					1	100	0.7	.001
Shorebird sp.	5	100	1.8	.022				
Phalarope sp.	19	95	6.9	.082	1	5	0.7	.004
Sterna sp.	1	100	0.4	.001				
Alcid sp.	1	100	0.4	.004				
Bird sp.	1	33	0.4	.001	2	67	1.4	.002
Total	276	66	100	.849	144	34	100	.253
Storm Petrels	136	88	49.3	.598	19	12	13.0	.086
Phalaropes	34	71	12.4	.148	14	29	9.7	.064
Miles	455				436			

TABLE #6. Comparison of E-W Division vs. NW-SE Diagonal Division,
Nominal Diurnal Track, Eastern Grid #10, 21-29 July 1967

Species	Lin. Density East	Lin. Density " E"	Lin. Density West	Lin. Density "SW"
Black-footed Albatross	.146*	.090*	.096*	.062*
Sooty Shearwater #	.002	.004	.011	.008
Cooks Petrel #	.017	.006	.103	.103
White-rumped Storm Petrel	.152	.142	.025	.027
Dark-rumped Storm Petrel	.035	.037	.002	
Storm Petrel sp.	.112	.107	.016	.016
Whimbrel	.009	.006		.002
Red Phalarope #	.007	.006	.030	.025
Northern Phalarope	.026	.026		
Jaeger #	.026	.045	.025	.004
Skua	.004	.004		
Sabines Gull	.007	.006		
Xantus' Murrelet	.004	.004		
Band-tailed Pigeon			.002	.002
Long-eared Owl			.002	.002
Shearwater/Petrel			.002	.002
Shorebird sp.	.011	.011		
Phalarope sp.	.041	.043	.002	
<u>Sterna</u> sp.	.002	.002		
Alcid sp.	.002	.002		
Bird sp.	.002	.002	.005	.004
Total	.606(.460)	.546(.456)	.330(.234)	.257(.195)
Storm Petrels	.299	.286	.043	.043
Phalaropes #	.074	.075	.032	.025
# Miles	455	465	436	515

* Albatross densities not comparable.

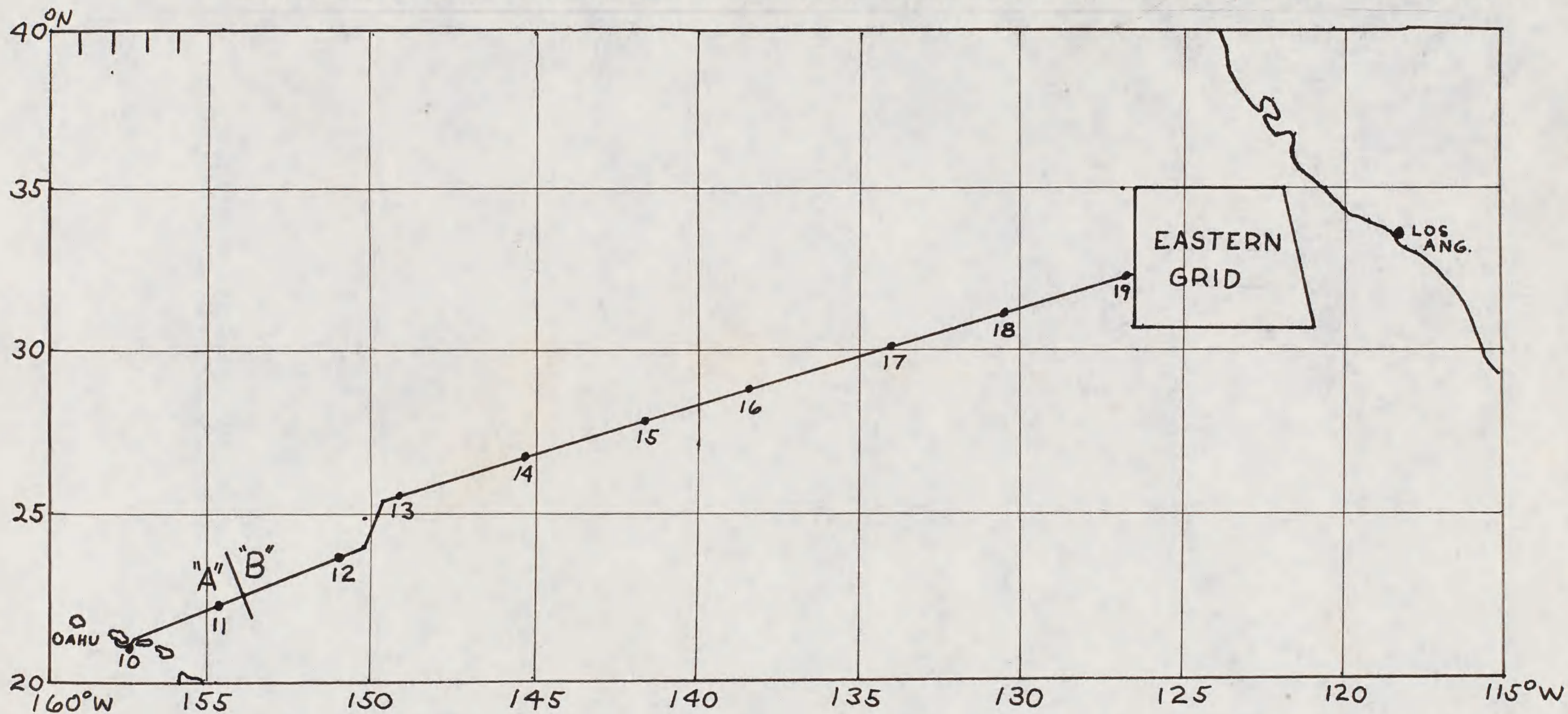
#-Notable discrepancies.

() -Albatross lin. dens.

TABLE #7. Diurnal Density of Species Groups, Eastern Grid, 19-21 July 1967

Group	#		Linear Density		Square Mile Density		%	
	Track	Total	Track	Total	Track	Total	Track	Total
Albatross	66	93	.074	.089	.018	.022	17.5	17.9
Shearwater/Petrel	63	67	.071	.064	.035	.032	16.7	12.9
Storm Petrel	155	241	.174	.231	.174	.231	41.0	46.2
Phalarope	48	55	.054	.053	.108	.106	12.7	10.5
Skua Jaeger	25	34	.028	.033	.014	.016	6.6	6.5
Gull	3	9	.003	.009	.001	.004	0.8	1.7
Tern	1	2	.001	.002	.001	.001	0.3	0.4
Alcid	3	3	.003	.003	.006	.006	0.8	0.6
Misc.	14	17	.016	.016	.018	.018	3.6	3.3
Total	378	521	.424	.500	.375	.436	100.0	100.0

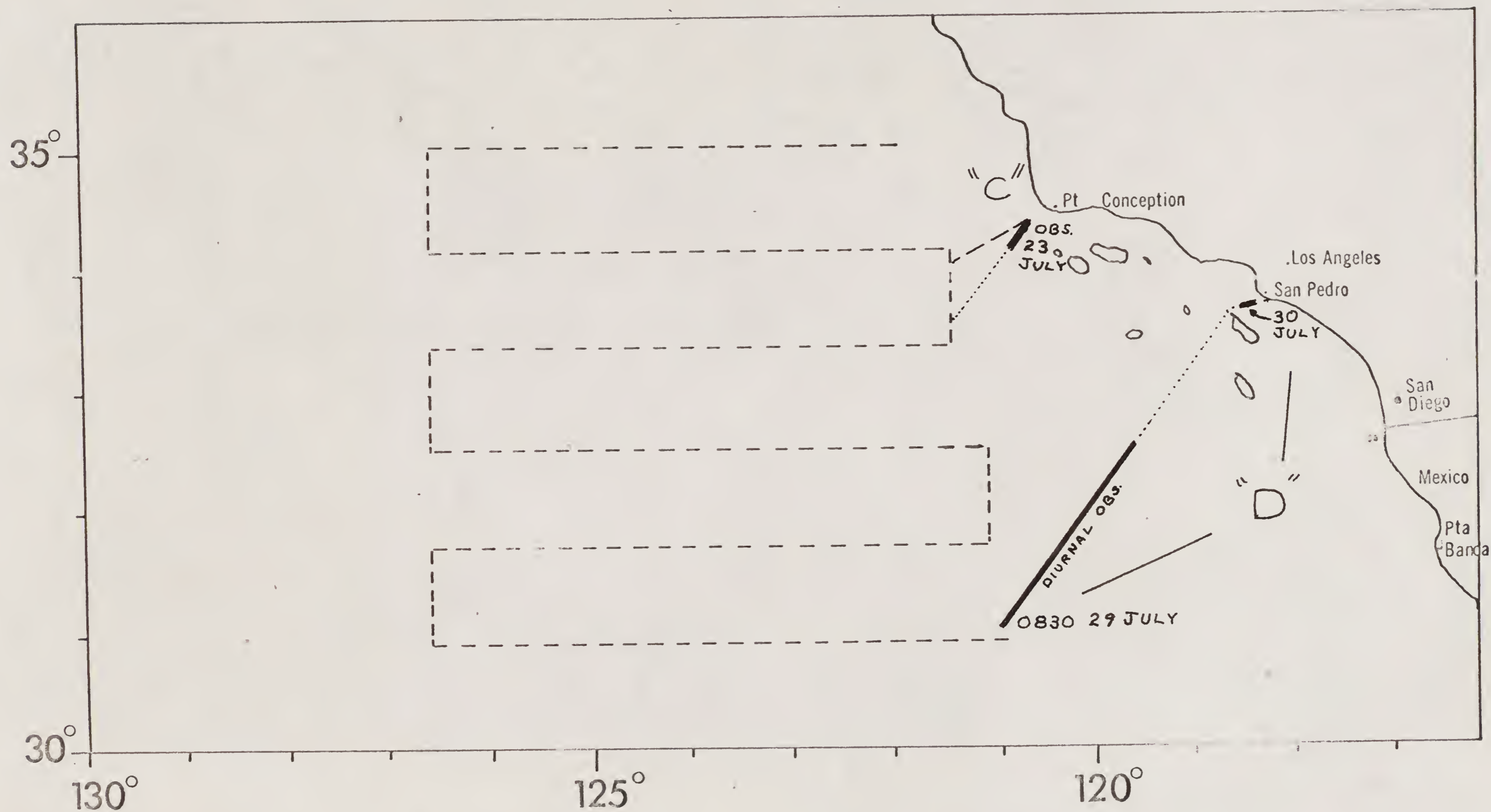
FIG. #1. CRUISE TRACK, NON-GRID SECTIONS "A" & "B", EAC 17, 10-19 JULY 1967.



NOON POSITIONS INDICATED

NON-GRID FIG[#]2 CRUISE TRACK, SECTIONS "C" & "D"

EASTERN GRID CRUISE TRACK



EASTERN AREA CRUISE NO. 17
EASTERN GRID SURVEY NO. _____
DATES 23, 29, 30 JULY

----- NORMAL GRID TRACK
..... ACTUAL CRUISE TRACK
(diurnal)
———— ACTUAL CRUISE TRACK
(nocturnal)