

MIDWAY FILE 1977-1978  
TAGGING AND SIGHTING DATA  
G.H. BALAZS

Note tags -  
forwarding addresses -  
patches

July 9 1978  
Koral Kings

Dear Mr. Balaga

I am writing you to inform  
you of the following turtles being  
tagged here on Midway:

TAG	NO.	C. CARAPACE		S. CARAPACE		TAIL LENGTH			PREP.	CAUGHT BY
		L	W	L	W	PURPOSE	WT.			
2556	2557	18 $\frac{3}{4}$	16	17 $\frac{3}{4}$	14	13 $\frac{3}{4}$	3	30 lbs		R. TREDWELL
2558	2559	18	16 $\frac{1}{4}$	17	14	17 $\frac{1}{2}$	4	29 lbs		B. HIXS
2560	2561	17 $\frac{3}{4}$	16	16 $\frac{3}{4}$	13 $\frac{1}{4}$	13 $\frac{3}{4}$	3	28 lbs	EASTERN SIDE OF CAVE	M. BAKARICH
2562	2563	16 $\frac{1}{8}$	14 $\frac{1}{2}$	15 $\frac{1}{4}$	12 $\frac{1}{4}$	12 $\frac{1}{2}$	2 $\frac{1}{2}$	22		T. NASTON
2564	2565	19 $\frac{1}{4}$	17 $\frac{1}{2}$	18 $\frac{1}{4}$	<del>15<math>\frac{1}{2}</math></del> 14 $\frac{3}{4}$	15 $\frac{1}{4}$	4 $\frac{1}{4}$	33		M. SPERLING
2566	2567	24 $\frac{3}{4}$	24 $\frac{3}{4}$	25 $\frac{3}{8}$	19 $\frac{3}{8}$	19 $\frac{1}{4}$	5 $\frac{3}{8}$	75		M. SPERLING
2568	2569	18 $\frac{1}{4}$	16 $\frac{1}{4}$	17	14	14	3 $\frac{3}{8}$	30		M. SPERLING

ALL TURTLES WERE COUGHT ON 18 JUNE '78 → OLD TAGS 2163 2164

Koral Kings would very much appreciate  
it if you would send more turtle tags  
and the fix turtle patches for the  
above people.

Very Respectfully

David W. McKinnon  
Koral Kings Conservation  
Officer, Midway

David W. McKinnon  
U.S. Naval Facility  
Box 100  
APO San Francisco Calif  
96614

MOONLIGHT ON LAKE TAHOE  
California-Nevada

A night for romance on the blue-blue "Lake-in-the-Sky"

May 1978



Dear George,

Just a report on the night  
dive. Caught 3 turtles.

2198-2199 14 X 15<sup>1</sup>/<sub>4</sub>, 20 lbs

2200-2551 17<sup>1</sup>/<sub>2</sub> X 19<sup>1</sup>/<sub>4</sub> 36 lbs

Chris Torrence caught above behing  
Eastern.

I caught one also,

2552-2553 19<sup>1</sup>/<sub>8</sub> X 15<sup>3</sup>/<sub>4</sub>

45 lbs. all curved measurements

You now owe Linda & I both a

Patch.

We saw 6 turtles altogether.  
Very low tide so spent most of  
time crawling instead of swimming.

post card

George Balazs  
Hawaii Institute of  
Marine Biology  
Box 1346 Coconut Is.  
Kaneohe, Hawaii

96744

Gary.

dp

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DEXTER PRESS  
WEST HAVEN, CONN. 06490

By Ross Tahoe Specialty Inc., P.O. Box 100, Tahoe City, Calif. 95730



*Moonlight on Lake Tahoe*

## MIDWAY ISLANDS TURTLE TAGGING INFORMATION

G. H. Balazs

Hawaii Institute of Marine Biology

TAG NOS. 1	2	CURVED CARAPACE		STRAIGHT CARAPACE <sup>3</sup>		Plastron length	Tail length <sup>4</sup>	weight <sup>3</sup>	Area	Remarks
		length	width	length	width					
2188	2189	18 1/2"	16 3/4"	17 1/2"	14 1/2"	14 1/4"	3"	29 1/2 lbs	A long vent at Eastern	23 Mar 78
2190	2191	19 1/4"	16 7/8"	18"	14 3/4"	14 1/4"	3 3/8"	30 lbs	Wells Harbor	25 Mar 78 DR. KHAN
2192	2193	17 7/8"	16 5/4"	17 1/2"	14 3/4"	13 1/2"	3"	21 lbs	Eastern	23 April 78 Behind Eastern Gloria O. McCreesh
2194	2195	16 1/2"	15 1/8"	15 1/2"	12 3/4"	12 1/2"	2 1/2"	24 lbs	Flagroom Tanker Area	6 May 78 Losech
2196	2197	20"	18 1/2"	19 1/2"	15 1/4"	15 1/4"	3 3/4"	40 lbs	Behind Spits	19 May Jumped on from Boat - LENGA + GARY MEANS
2198	2199	15 1/4"	14	14 3/4"	12	12	2 3/4"	20 #	Behind Eastern	21 May CHAS PONNENLE
2200	2201	19 1/4"	17 1/2"	18 1/2"	15 1/4"	15	3	36 #	Behind Eastern	21 May CHAS TUNNENCE
2252	2253	20	18 1/2"	19 1/8"	15 3/4"	16 1/2"	3	45 #	Behind Eastern	21 May G. MEANS
2254	2255	15 1/2"	14 1/8"	14 3/4"	12 1/4"	12	3	19 #	Garnibus 40 by Adel	28 May S. Losech
2256	2257	18 1/4"	16	17 3/4"	14	13 3/4"	3	30 #	Eastern Backside	18 June 78 R. Trevino Jumped on from Boat
2258	2259	18	16 1/4"	17	14	13 1/2"	4	29 #	Eastern Backside	18 June 78 G. HIXS.
250	2501	17 7/8"	16	16 3/4"	13 3/4"	13 3/4"	3	28 #	Eastern Backside	18 June 78 Mark Bakarich
2562	2563	16 1/8"	14 1/2"	15 1/4"	12 1/4"	12 1/2"	2 1/2"	22 #	Back Eastern	18 June 78 Tim Naston
2564	2565	19 1/4"	17 1/2"	18 1/4"	14 3/4"	15 1/2"	3 1/4"	33 #	Eastern Backside	18 June 78 Mark Spirling
2566	2567	24 3/4"	24 3/4"	23 3/8"	19 7/8"	19 1/4"	5 7/8"	75 #	Eastern Backside	18 June 78 Mark Spirling
2568	2569	18 1/4"	16 1/4"	17	14	14	3 1/8"	30 #	Eastern Backside	18 June 78 Old tags 2163 22164 18 June 78 Mark Spirling

attach to left front flipper close to body and turn end for end (see photo)-allow room for growth  
 attach to right front flipper at central location and turn end for end (see photo)-allow room for growth  
 to be taken only if calipers and scale are readily available  
 measure from end of plastron to end of tail  
 coloration, injuries, previously tagged turtle, etc.

SEA TURTLE SIGHTING REPORT

(Please return to: George H. Balazs  
Hawaii Institute of Marine Biology;  
P.O. Box 1346; Kaneohe, HI 96744;  
Tel. 247-6631)

Observation made by: LISA & TAMMY Hockett

Address & Tel. No. (optional): A-15 PH 509

Date: 18 Aug 77 Time: 1100 Location (indicate

on chart): \_\_\_\_\_

Observation made from:  shore;

\_\_\_\_\_ boat; or while \_\_\_\_\_ skin \_\_\_\_\_ SCUBA diving.

Estimated size (shell length) 22"

Turtle seen on:  surface; or at depth of \_\_\_\_\_

approx. \_\_\_\_\_ ft. Distinguishing

characteristics (species I.D. if known, long

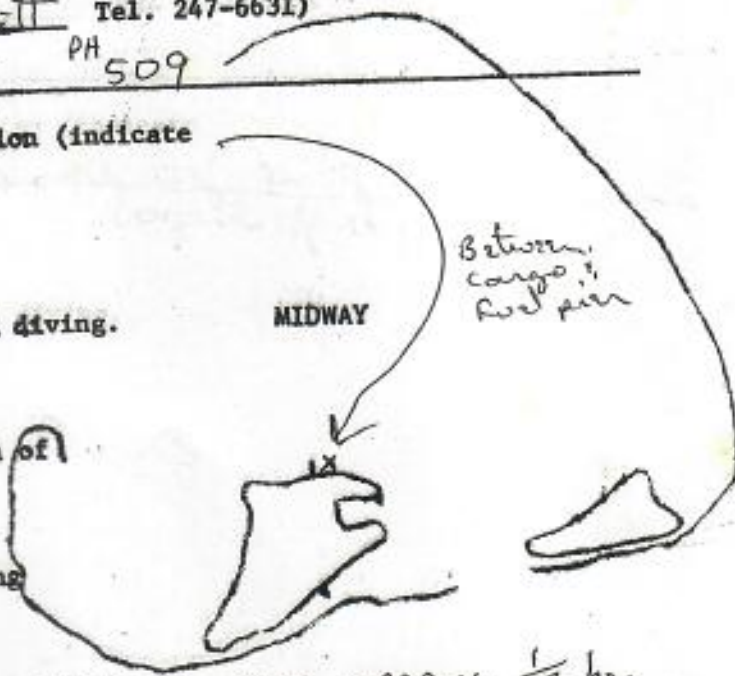
tail, shell color, tags, injuries, etc.):

GREEN TURTLE TAGGED OBSERVED FOR APPROX. 1/2 hr.

Other comments: \_\_\_\_\_

THANK YOU FOR YOUR COOPERATION

COOPERATION



MOONLIGHT ON LAKE TAHOE  
California-Nevada

A night for romance on the blue-blue "Lake-in-the-Sky"

May 1978

Dear George,

Just a report on the night  
dive. Caught 3 turtles.

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2200-2551 17 1/2 X 19 1/4 36 lbs

Chris Torrence caught above behing  
Eastern.

I caught one also,

2552-2553 19 1/8 X 15 3/4

45 lbs. all curved measurements

You now owe Linda & I both a

Patch.

We saw 6 turtles altogether.

Very low tide so spent most of  
time crawling instead of swimming.

Gary.

dp

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NEW YORK, N.Y. 10013



post card

George Balazs  
Hawaii Institute of  
Marine Biology  
Box 1346 Coconut Is.  
Kaneohe, Hawaii

96744

SEA TURTLE SIGHTING REPORT

(Please return to: George H. Balazs  
Hawaii Institute of Marine Biology;  
P.O. Box 1346; Kaneohe, HI 96744;  
Tel. 247-6631)

Observation made by: Ed Gays

Address & Tel. No. (optional): 623

Date: 15 JAN 78 Time: 2030 Location (indicate

on chart): 5 yds off inner harbor JETTY

Observation made from: yes shore;

       boat; or while        skin        SCUBA diving.

MIDWAY

Estimated size (shell length) 3 FT.

Turtle seen on: YES surface; or at depth of

approx.        ft. Distinguishing

characteristics (species I.D. if known, long

tail, shell color, tags, injuries, etc.):

Seen at night with spot light. Total Length  
4 1/2 ft. Seen at distance of 15 ft. ~~could~~ couldn't

Other comments: distinguish color or any I.D. marks.

THANK YOU FOR YOUR COOPERATION

SEA TURTLE SIGHTING REPORT

(Please return to: George H. Balazs  
Hawaii Institute of Marine Biology;  
P.O. Box 1346; Kaneohe, HI 96744;  
Tel. 247-6631)

Observation made by: HOOPER, PIERCE

Address & Tel. No. (optional): DT 0-51 2419

Date: 24 JAN 78 Time: 1530 Location (indicate  
on chart): \_\_\_\_\_

Observation made from: shore shore;

\_\_\_\_\_ boat; or while \_\_\_\_\_ skin  SCUBA diving.

MIDWAY

Estimated size (shell length) 2'

X  
ALICE  
MARKER

Turtle seen on: 25' surface; or at depth of \_\_\_\_\_

approx. \_\_\_\_\_ ft. Distinguishing  
characteristics (species I.D. if known, long  
tail, shell color, tags, injuries, etc.):



Other comments: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

THANK YOU FOR YOUR COOPERATION



SEA TURTLE SIGHTING REPORT

(Please return to: George H. Balazs,  
Hawaii Institute of Marine Biology;  
P.O. Box 1346; Kaneohe, HI 96744;  
Tel. 247-6631

Observation made by: Monser

Address & Tel. No. (optional) 2125

Date: 26 Jan 78 Time: 1800 Location (indicate  
on chart): Nav Fac Beach

Observation made from: X shore;  
     boat; or while      skin      SCUBA diving.

Estimated size (shell length): 15"

Turtle seen on: X surface; or at depth of  
approx.      ft. Distinguishing  
characteristics (species I.D. if known, long  
tail, shell color, tags, injuries, etc.):

MIDWAY

Other comments: Just saw it come up for air  
and swim away

THANK YOU FOR YOUR COOPERATION

SEA TURTLE SIGHTING REPORT

(Please return to: George H. Balazs  
Hawaii Institute of Marine Biology;  
P.O. Box 1346; Kaneohe, HI 96744;  
Tel. 247-6631)

Observation made by: Schmeltz R.

Address & Tel. No. (optional): B D-38

Date: 5 Feb 78 Time: 1000 Location (indicate  
on chart): \_\_\_\_\_

Observation made from: \_\_\_\_\_ shore;

boat; or while \_\_\_\_\_ skin  SCUBA diving.

MIDWAY

Estimated size (shell length) 22"

Turtle seen on:  surface; <sup>and</sup> ~~at~~ depth of \_\_\_\_\_

approx. 20 ft. Distinguishing

characteristics (species I.D. if known, long

tail, shell color, tags, injuries, etc.):

Green - couldn't see a tag from about  
8 ft. away

Other comments: \_\_\_\_\_

THANK YOU FOR YOUR COOPERATION

SEA TURTLE SIGHTING REPORT

(Please return to: George H. Balazs,  
Hawaii Institute of Marine Biology;  
P.O. Box 1346; Kaneohe, HI 96744;  
Tel. 247-6631

Observation made by: MEANS, wedding

Address & Tel. No. (optional) \_\_\_\_\_

Date: 2/11 Time: 10:00 AM Location (indicate  
on chart): \_\_\_\_\_

Observation made from: \_\_\_\_\_ shore;  
 boat; or while \_\_\_\_\_ skin \_\_\_\_\_ SCUBA diving.

Estimated size (shell length): 28"

Turtle seen on:  surface; or at depth of  
approx. 10 ft. Distinguishing

characteristics (species I.D. if known, long  
tail, shell color, tags, injuries, etc.):

Long tail - MALE FOR SURE

MIDWAY

Other comments: \_\_\_\_\_

THANK YOU FOR YOUR COOPERATION

SEA TURTLE SIGHTING REPORT

(Please return to: George H. Balazs,  
Hawaii Institute of Marine Biology;  
P.O. Box 1346; Kaneohe, HI 96744;  
Tel. 247-6631

Observation made by: HAYES

Address & Tel. No. (optional) 623

Date: 2/11/78 Time: 1400 Location (indicate

on chart): \_\_\_\_\_

Observation made from: \_\_\_\_\_ shore;

\_\_\_\_\_ boat; or while  skin  SCUBA diving.

Estimated size (shell length): 18"

Turtle seen on: \_\_\_\_\_ surface; or at depth of

approx. 6 ft. Distinguishing

characteristics (species I.D. if known, long

tail, shell color, tags, injuries, etc.):

under water at distance of 25 ft. No I.D.  
marks.

Other comments: \_\_\_\_\_

THANK YOU FOR YOUR COOPERATION

SEA TURTLE SIGHTING REPORT

(Please return to: George H. Balazs  
Hawaii Institute of Marine Biology;  
P.O. Box 1346; Kaneohe, HI 96744;  
Tel. 247-6631)

Observation made by: Trevino / Uerrachi

Address & Tel. No. (optional): \_\_\_\_\_

Date: 20 Nov 77 Time: 1200 Location (indicate

on chart): 150yd from beach by contours

Observation made from: \_\_\_\_\_ shore;

boat; or while \_\_\_\_\_ skin \_\_\_\_\_ SCUBA diving.

MIDWAY

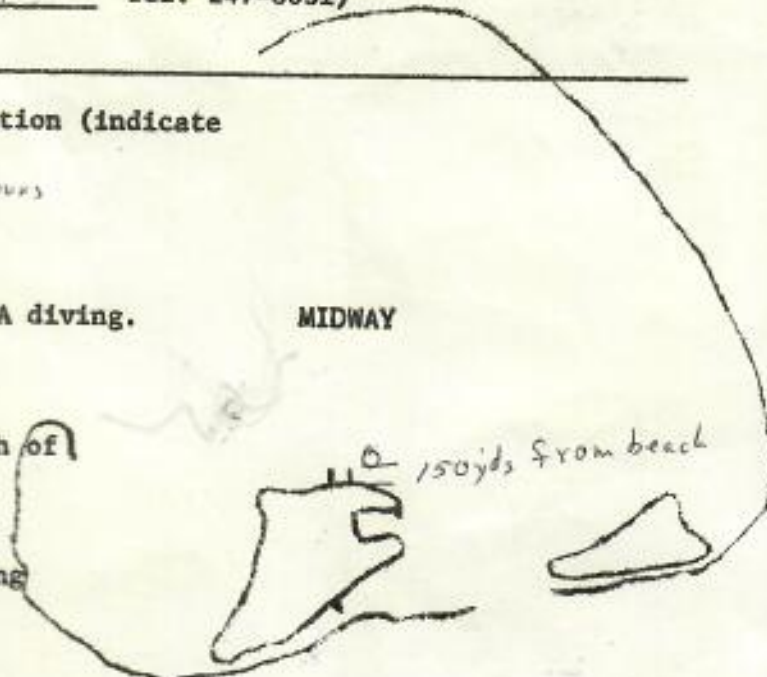
Estimated size (shell length) 36"

Turtle seen on:  surface; or at depth of \_\_\_\_\_

approx. \_\_\_\_\_ ft. Distinguishing

characteristics (species I.D. if known, long

tail, shell color, tags, injuries, etc.):



Other comments: \_\_\_\_\_

THANK YOU FOR YOUR COOPERATION

SEA TURTLE SIGHTING REPORT

(Please return to: George H. Balazs  
Hawaii Institute of Marine Biology;  
P.O. Box 1346; Kaneohe, HI 96744;  
Tel. 247-6631)

Observation made by: R. Schultz & J. Ryan

Address & Tel. No. (optional): 2442

Date: 24 Dec 77 Time: 1300 Location (indicate  
on chart): \_\_\_\_\_

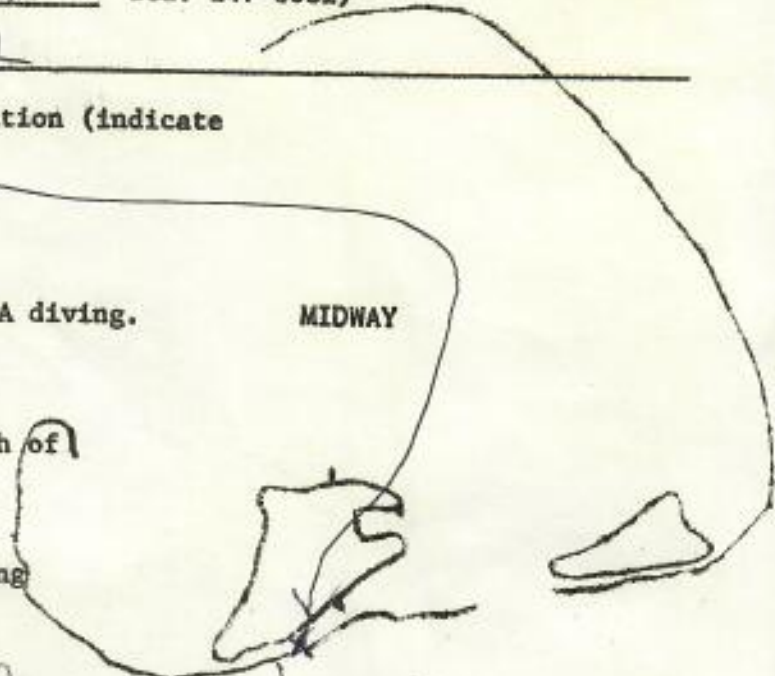
Observation made from: \_\_\_\_\_ shore;  
\_\_\_\_\_ boat; or while  skin \_\_\_\_\_ SCUBA diving.

Estimated size (shell length) 25"

Turtle seen on: \_\_\_\_\_ surface; or at depth of  
approx. 8 ft. Distinguishing

characteristics (species I.D. if known, long  
tail, shell color, tags, injuries, etc.):

Green - no tag for swimmer



Other comments: \_\_\_\_\_

THANK YOU FOR YOUR COOPERATION

SEA TURTLE SIGHTING REPORT

(Please return to: George H. Balazs,  
Hawaii Institute of Marine Biology;  
P.O. Box 1346; Kaneohe, HI 96744;  
Tel. 247-6631

Observation made by: HANEY

Address & Tel. No. (optional) \_\_\_\_\_

Date: 10/15 Time: 10<sup>00</sup>-30<sup>PM</sup> Location (indicate  
on chart): \_\_\_\_\_

Observation made from: SWAN<sup>H/E</sup> shore;  
\_\_\_\_\_ boat; or while Xskin \_\_\_\_\_ SCUBA diving.

MIDWAY

Estimated size (shell length): 40"

Turtle seen on: ☐ surface; or at depth of  
approx. 30' ft. Distinguishing  
characteristics (species I.D. if known, long  
tail, shell color, tags, injuries, etc.):

Female - Short TAIL.

Other comments: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

THANK YOU FOR YOUR COOPERATION

SEA TURTLE SIGHTING REPORT

(Please return to: George H. Balazs  
Hawaii Institute of Marine Biology;  
P.O. Box 1346; Kaneohe, HI 96744;  
Tel. 247-6631)

Observation made by: WANEY

Address & Tel. No. (optional): \_\_\_\_\_

Date: 12/27 Time: 1400 Location (indicate  
on chart): \_\_\_\_\_

Observation made from: \_\_\_\_\_ shore;

X boat; or while \_\_\_\_\_ skin X SCUBA diving.

MIDWAY

Estimated size (shell length) 20" + 38"

Turtle seen on: \_\_\_\_\_ surface; or at depth of

approx. 10 ft. Distinguishing

characteristics (species I.D. if known, long

tail, shell color, tags, injuries, etc.):

Big one look like one we tagged  
Headed for Inner Harbor

Other comments: \_\_\_\_\_  
\_\_\_\_\_

THANK YOU FOR YOUR COOPERATION



SEA TURTLE SIGHTING REPORT

(Please return to: George H. Balazs  
Hawaii Institute of Marine Biology;  
P.O. Box 1346; Kaneohe, HI 96744;  
Tel. 247-6631)

Observation made by: Howey, Marc

Address & Tel. No. (optional): \_\_\_\_\_

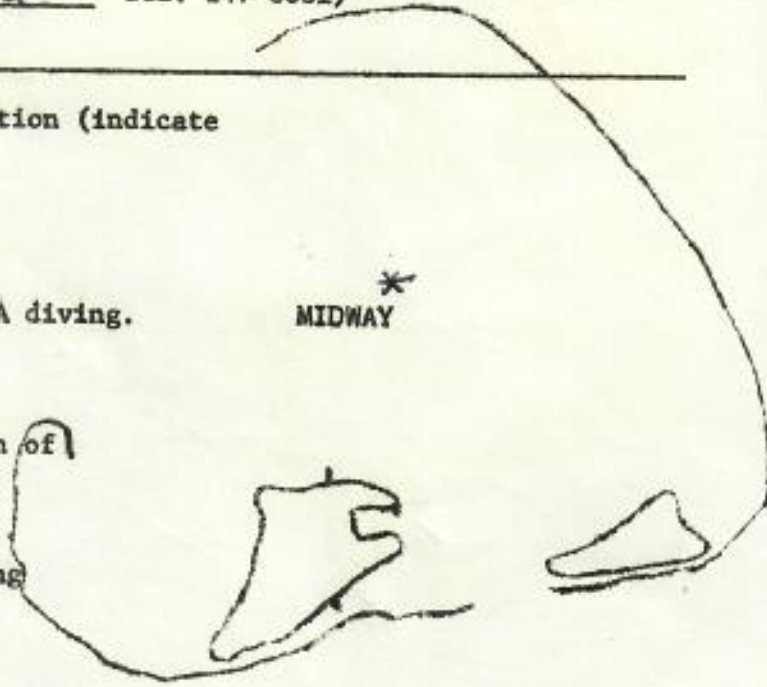
Date: 12/28 Time: 1230 Location (indicate  
on chart): \_\_\_\_\_

Observation made from: \_\_\_\_\_ shore;  
X boat; or while \_\_\_\_\_ skin \_\_\_\_\_ SCUBA diving.

\*  
MIDWAY

Estimated size (shell length) 14"

Turtle seen on: X surface; or at depth of  
approx. \_\_\_\_\_ ft. Distinguishing  
characteristics (species I.D. if known, long  
tail, shell color, tags, injuries, etc.):



\_\_\_\_\_  
\_\_\_\_\_

Other comments:  
\_\_\_\_\_  
\_\_\_\_\_

THANK YOU FOR YOUR COOPERATION

FORM CD-14 12-761 Prescr. by DAO 214-2	U.S. DEPT. OF COMM.	DATE 6/23/78
<b>TRANSMITTAL SLIP</b>		
<b>TO:</b> George Balass, HMB	REF. NO. OR ROOM, BLDG.	
<b>FROM:</b> Bob Iversen, MFS	REF. NO. OR ROOM, BLDG.	
<b>ACTION</b>		
<input type="checkbox"/> NOTE AND FILE	<input type="checkbox"/> PER OUR CONVERSATION	
<input type="checkbox"/> NOTE AND RETURN TO ME	<input type="checkbox"/> PER YOUR REQUEST	
<input type="checkbox"/> RETURN WITH MORE DETAILS	<input type="checkbox"/> FOR YOUR APPROVAL	
<input type="checkbox"/> NOTE AND SEE ME ABOUT THIS	<input checked="" type="checkbox"/> FOR YOUR INFORMATION	
<input type="checkbox"/> PLEASE ANSWER	<input type="checkbox"/> FOR YOUR COMMENTS	
<input type="checkbox"/> PREPARE REPLY FOR MY SIGNATURE	<input type="checkbox"/> SIGNATURE	
<input type="checkbox"/> TAKE APPROPRIATE ACTION	<input type="checkbox"/> INVESTIGATE AND REPORT	

COMMENTS:

George: The first thing I saw when the Koral Kings door opened was that that was the location of the George Balass field station. The next thing I noted were your info sheets stapled on the wall and the sighting reports. So here's one from me.

Keep up the good work. Is it true you are going to be the next C.O. of Midway?

Aloha, *Bob Iversen*

SEA TURTLE SIGHTING REPORT

(Please return to: George H. Balazs,  
Hawaii Institute of Marine Biology;  
P.O. Box 1346; Kaneohe, HI 96744;  
Tel. 247-6631

Observation made by: R. IVERSEN + PARTY

Address & Tel. No. (optional) 946-2681

Date: 6/24/88 Time: 1500 Location (indicate  
on chart): \_\_\_\_\_

Observation made from: \_\_\_\_\_ shore;  
\_\_\_\_\_ boat; or while X skin \_\_\_\_\_ SCUBA diving.

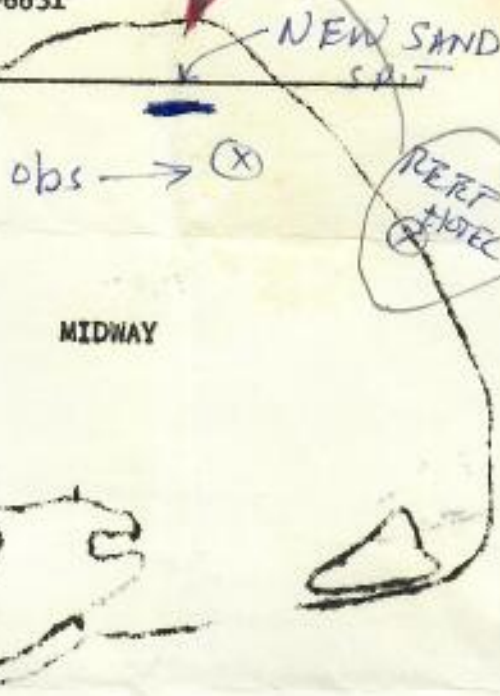
Estimated size (shell length): ? "BIG"

Turtle seen on: \_\_\_\_\_ surface; or at depth of  
approx. 10 ft. Distinguishing  
characteristics (species I.D. if known, long  
tail, shell color, tags, injuries, etc.):

Other comments:

Iversen did not see - seen by  
another member of his group, LT Kerry Palmerman, M.D.

THANK YOU FOR YOUR COOPERATION



SEA TURTLE SIGHTING REPORT

(Please return to: George H. Balazs,  
Hawaii Institute of Marine Biology;  
P.O. Box 1346; Kaneohe, HI 96744;  
Tel. 247-6631

Observation made by: BOBBIE CARLETON

Address & Tel. No. (optional): Box 40, U.S. NAVAL STATION

Date: 12 July 77 Time: 1600 <sup>ABOUT</sup> Location (indicate

on chart): INBOUND, INSIDE HARBOR ENTRANCE

Observation made from: \_\_\_\_\_ shores;

X boat; or while \_\_\_\_\_ skin \_\_\_\_\_ SCUBA diving.

Estimated size (shell length): 2 FT

Turtle seen on: X surface; or at depth of

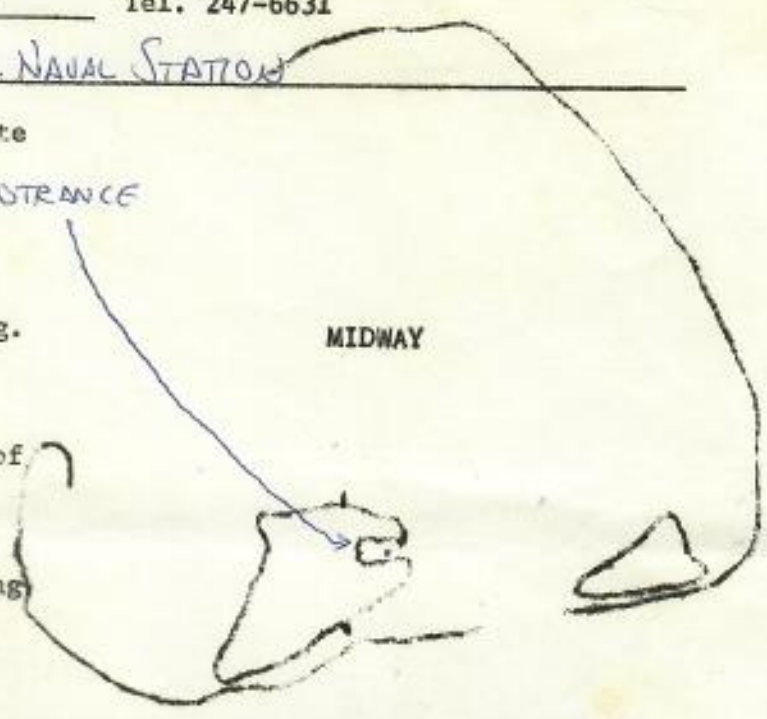
approx. \_\_\_\_\_ ft. Distinguishing

characteristics (species I.D. if known, long

tail, shell color, tags, injuries, etc.):

NO TAG, GREEN SEA TYPE

Other comments: SWIMMING ON SURFACE TOWARD CHANNEL



THANK YOU FOR YOUR COOPERATION

SEA TURTLE SIGHTING REPORT

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Hawaii Institute of Marine Biology;  
P.O. Box 1346; Kaneohe, HI 96744;  
Tel. 247-6631

Observation made by: ROGER & ELAINE SCHMELTZ

Address & Tel. No. (optional): Box 14 USNS FPO SFCA

96614

PH 2442

Date: 10 July 77 Time: 9:30 AM Location (indicate  
on chart): \_\_\_\_\_

Observation made from: \_\_\_\_\_ shore;

boat; or while \_\_\_\_\_ skin \_\_\_\_\_ SCUBA diving.

Estimated size (shell length): 20"

Turtle seen on:  surface; or at depth of  
approx. \_\_\_\_\_ ft. Distinguishing  
characteristics (species I.D. if known, long  
tail, shell color, tags, injuries, etc.):

GREEN TURTLE NO TAG NO INJURIES

MIDWAY

+

Other comments: SNORKLED AFTER IT FOR 5 MINUTES TO  
NO AVAIL AREA 6 to 8 ft Deep SANDY BOTTOM with  
SCATTERED CORAL HEADS THANK YOU FOR YOUR COOPERATION

SEA TURTLE SIGHTING REPORT

(Please return to: George H. Balazs  
Hawaii Institute of Marine Biology;  
P.O. Box 1346; Kaneohe, HI 96744;  
Tel. 247-6631)

Observation made by: W R HOCKETT

Address & Tel. No. (optional): A-15 509

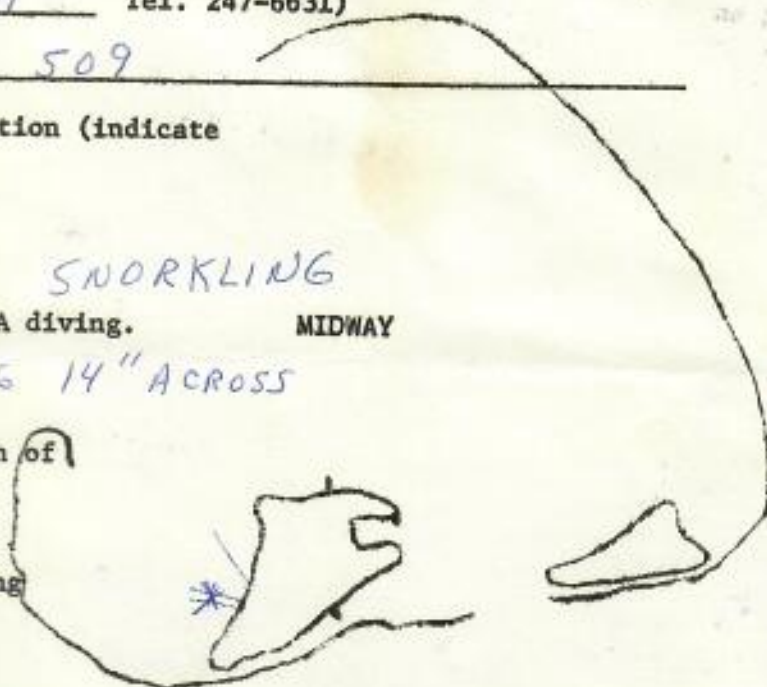
Date: 7/24/77 Time: 1230 Location (indicate  
on chart): \_\_\_\_\_

Observation made from: \_\_\_\_\_ shore; SNORKLING  
\_\_\_\_\_ boat; or while \_\_\_\_\_ skin \_\_\_\_\_ SCUBA diving. MIDWAY

Estimated size (shell length) 2 1/2' LONG 14" ACROSS

Turtle seen on: \_\_\_\_\_ surface; <sup>AND</sup> ~~or~~ at depth of \_\_\_\_\_

approx. 3 ft. Distinguishing  
characteristics (species I.D. if known, long  
tail, shell color, tags, injuries, etc.):  
BROWN GREEN



Other comments: HEAD SHAPED SOMETHING LIKE DIAMOND  
BACK RATTLESNAKE. NO TAG TURT PLAYING

WATCHED FOR  
ABOUT 45 MIN.

THANK YOU FOR YOUR COOPERATION

LOOKED YOUNG

SEA TURTLE SIGHTING REPORT

(Please return to: George H. Balazs  
Hawaii Institute of Marine Biology;  
P.O. Box 1346; Kaneohe, HI 96744;  
Tel. 247-6631)

Observation made by: LISA & TAMMY Hockett

Address & Tel. No. (optional): A-15 PH 509

Date: 18 Aug 77 Time: 1100 Location (indicate  
on chart): \_\_\_\_\_

Observation made from:  shore;

\_\_\_\_\_ boat; or while \_\_\_\_\_ skin \_\_\_\_\_ SCUBA diving.

Estimated size (shell length) 22"

Turtle seen on:  surface; or at depth of \_\_\_\_\_

approx. \_\_\_\_\_ ft. Distinguishing

characteristics (species I.D. if known, long

tail, shell color, tags, injuries, etc.):

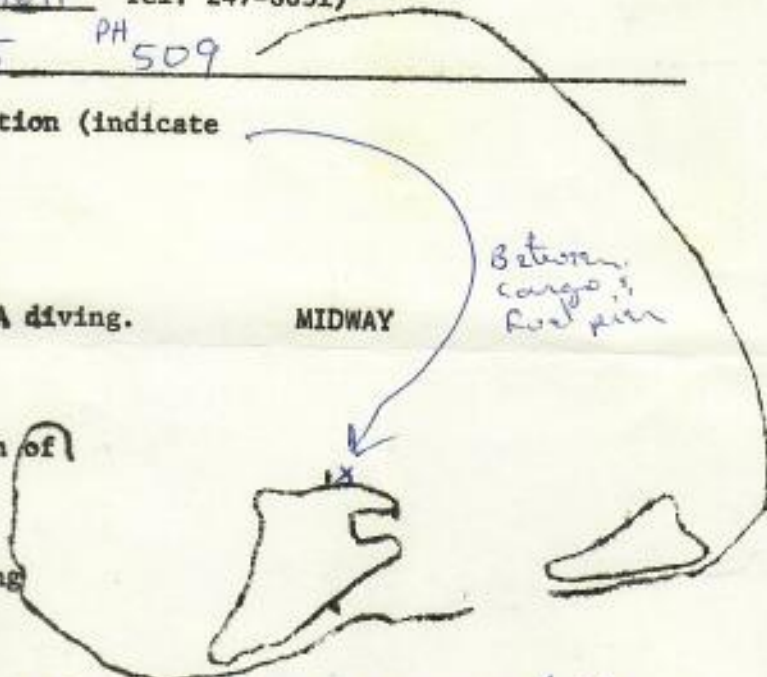
GREEN TURTLE TAGGED OBSERVED FOR APPROX. 1/2 hr.

Other comments: \_\_\_\_\_  
\_\_\_\_\_

THANK YOU FOR YOUR COOPERATION

MIDWAY

Between  
Cargo &  
Fuel pier



SEA TURTLE SIGHTING REPORT

(Please return to: George H. Balazs  
Hawaii Institute of Marine Biology;  
P.O. Box 1346; Kaneohe, HI 96744;  
Tel. 247-6631)

Observation made by: Roger Schmitt

Address & Tel. No. (optional): Box 14 USDS

Date: 10 Sept 77 Time: 9:30 AM Location (indicate

on chart): outside reef - east of eastern 100 yard off reef.

Observation made from: \_\_\_\_\_ shore;

\_\_\_\_\_ boat; or while \_\_\_\_\_ skin  SCUBA diving.

MIDWAY

Estimated size (shell length) 26"

Turtle seen on: \_\_\_\_\_ surface; or at depth of \_\_\_\_\_

approx. 60 ft. Distinguishing

characteristics (species I.D. if known, long

tail, shell color, tags, injuries, etc.):

Green turtle no tag - resting on bottom -  
couldn't catch - looked healthy - got within 6 ft of

Other comments: it.

THANK YOU FOR YOUR COOPERATION



SEA TURTLE SIGHTING REPORT

(Please return to: George H. Balazs  
Hawaii Institute of Marine Biology;  
P.O. Box 1346; Kaneohe, HI 96744;  
Tel. 247-6631)

Observation made by: Roger Schwartz

Address & Tel. No. (optional): Box 14 USNS

Date: 10 Sept 77 Time: 12:15 PM Location (indicate

on chart): \_\_\_\_\_

Observation made from: \_\_\_\_\_ shore;

boat; or while \_\_\_\_\_ skin \_\_\_\_\_ SCUBA diving.

Estimated size (shell length) Not close enough to tell

Turtle seen on:  surface; or at depth of

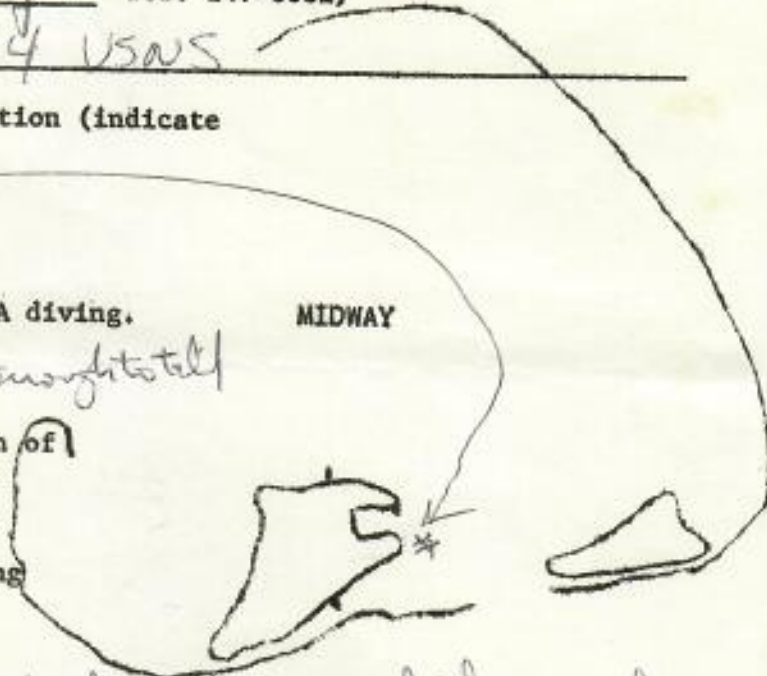
approx. \_\_\_\_\_ ft. Distinguishing

characteristics (species I.D. if known, long

tail, shell color, tags, injuries, etc.):

Just saw the heads of 2 turtles from a distance of  
30 yards while heading out the channels. Quite

Other comments: a few turtles have been sighted in this  
area in the past.



THANK YOU FOR YOUR COOPERATION

UNITED STATES NAVY



**HISTORY**

**U. S. NAVAL AIR FACILITY  
MIDWAY ISLAND**

1969



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**PACIFIC DIVISION  
NAVAL FACILITIES ENGINEERING COMMAND  
PEARL HARBOR, HAWAII**

UNITED STATES NAVY



# HISTORY

U. S. NAVAL AIR FACILITY  
MIDWAY ISLAND

~~1969~~ 1979



PACIFIC DIVISION  
NAVAL FACILITIES ENGINEERING COMMAND  
PEARL HARBOR, HAWAII

HISTORY OF THE MIDWAY ISLANDS

Prepared for

Commanding Officer  
Naval Air Facility, Midway Island

by

Russell A. Apple  
Pacific Historian  
National Park Service  
U.S. Department of the Interior

and

Gerald Swedberg  
Natural Resources Specialist  
U.S. Navy

March 1979

## HISTORY OF THE MIDWAY ISLANDS

The Guano Act of 1856 claimed United States possession of all keys, islands, and rocks provided no objectionable parties or territorial disputes would be incurred. Under the terms of the Guano Act:

"Whenever any citizen of the United States discovers a deposit of guano on any island, rock, or key, not within the lawful jurisdiction of any other government, and takes peaceable possession thereof, and occupies the same, such island, rock, or key may at the discretion of the President, be considered as appertaining to the United States."

A later term of the Guano Act said that the United States had no obligation to retain possession of the island, rock, or key after the guano had been removed (Johnson n.d. 268).

On July 5, 1859, Captain N. C. Brooks, Master of the commercial bark "Gambia" under Hawaiian registry, discovered the Midway Islands. He immediately went ashore and took possession of the land under the Guano Act of 1856, and named the islands "Middlebrook". The first portion of the name "Middle..." because the islands were midway on the steamer runs from San Francisco to Japan, and "...brook" in honor of himself. The islands are also coincident with the 180° meridian originating from Greenwich, England.

One condition not met by Brooks was occupancy. No guano was ever known to have been removed from Midway. Brooks saw Midway as a potential coaling station on a trans-pacific steamship route, and he forwarded his charts and observations to the Pacific Mail and Steamship Company, an American corporation. That company eventually sent an advance party to Midway to occupy it early in 1867 aboard the company steamship "Colorado". The company also convinced the United States Government to send the U.S.S. LACKAWANNA to the Midway Islands since they presented a great potential as a stopover point for vessels destined for the orient. (Any subsequent use of Midway as a merchant marine coaling station was minor, if it occurred at all.)

On August 28, 1867, Captain William Reynolds, USN, Master of the U.S.S. LACKAWANNA, acting on naval orders, took formal possession of the islands for the United States. This act made the islands the first land annexed by the United States outside her continental shores. Captain Reynolds named the harbor port after the Secretary of the Navy Gideon Wells, and the roadstead after the Secretary of State William B. Seward.

Possession was affirmed in 1868 by the United States Congress through Executive Document 79, 40 Cong. 2 Sess. (U. S. 1868; Johnson n.d.: 210).

In 1869, Congress voted \$50,000.00 for dredging to improve the channel and port. The U.S.S. SAGINAW worked seven months on the project in 1870, but was hampered by bad weather and high seas. The Navy exhausted the appropriation with little progress. After leaving Midway, THE SAGINAW was wrecked on Kure Island. Congress rejected a subsequent estimate of \$187,000.00 further as too expensive for the gain to be expected. Midway was then abandoned to the sea birds and occasional visiting fishermen and bird plume poachers. (Johnson n.d.:210; Bryan 1942:201).

It was during this period of abandonment that Midway's most famous shipwrecks occurred. In 1886, the schooner, General Seigel, shark hunting, was wrecked on Midway on November 16. Some of the crew died ashore. Others were there through 1888 when they were joined by the crew of the Wandering Minstrel, which attempted rescue. Five crewmen sailed off on salvaged boats and disappeared. One man ashore was murdered; three others sailed successfully to Jaluit in the Marshall Islands, 1,540 miles away. Survivors on Midway were rescued by the schooner Norma on March 16, 1889, and arrived in Honolulu April 7, 1889 (Bryan 1942: Walker 1909; 55-56).

Until the beginning of the 20th century, Midway's two islands Sand and Eastern, were described as desolate, of shifting barren sands with a few hardy shrubs and some grassy areas. Water drunk by the castaways was found on Eastern Island by digging about eight or nine feet, was green in appearance, "but not pleasant to drink". Water on Sand Island was found at five or six foot depth, "very good, but charged with lime". It cleared on standing (Walker 1909: 57; W. A. Bryan 1906; Cook 1905; 5, 6).

In 1894, the Pacific Phosphate and Fertilizer Company, a Hawaii corporation, requested a guano lease on Midway from Hawaii's Provisional Government, apparently without response (Jan. 6, 1894, Archives of Hawaii).

On January 20, 1903, due to the increasing wave of bird poachers and squatters invading the islands, President Theodore Roosevelt issued Executive Order 199-A, which stated: "Such public lands as may exist on Midway Islands, Hawaiian Group, are hereby placed under the jurisdiction and control of the Navy Department". Common use by merchant sailors making the halfway stop between east and west had changed the name from "Middlebrook" to "Midway".

In the decades before satellite relay color television provided communication across the Pacific basin, there was radio. Before radio, there was the telegraph. Before the telegraph, the speed of transoceanic information depended on its carrying surface vessel. Mail aboard steamers traveled faster than mail aboard sloops; sloops were faster than the square riggers they made obsolete. Before Western hull designs entered the Pacific Ocean, information traveled in the minds of the islanders as they sailed, sometimes two thousand miles or more, interisland in outrigger canoes.

Submarine telegraph cables to connect stations separated for long distances by water became feasible in the mid-19th century. After four attempts to permanently link Europe and North America in the years 1857 through 1865, American financier Cyrus West Field, chartering the Cable Ship Great Eastern, in 1866 laid the first successful Atlantic cable. This intercontinental cable received heavy use for quick, confidential traffic between North America and Europe. The Atlantic cable connected two existing and extensive telegraph networks on land.

Continued financial success and obvious advantages of the Atlantic cable raised hopes in the Western World (and among some westerners on Pacific islands) for similar facilities across the Pacific Ocean. The technology was available, but distances were vastly greater in the Pacific basin. Installation and operating costs were correspondingly greater. The amassment of sufficient investment funds to lay a Pacific cable was attempted several times in the last half of the 19th century by businessmen of several governments. National governments were willing to subsidize a Pacific cable, but held that the cable was a matter of private enterprise. Businessmen of several major Western nations eventually laid Pacific cable networks.

Pacific island businessmen and their continental partners, suppliers and agents lobbied in their home countries for a Pacific cable to serve their islands. These special interest groups were joined by British imperialists and American expansionists who viewed the control of selected Pacific islands as essential to their respective nations' growth and national securities. Their pressures, arguments, and public cries of alarm took the headlines.

Business and profits awaited the first trans-Pacific cable, regardless of which island groups it served enroute. The Pacific islands themselves could not generate sufficient traffic to support a cable. It was trans-Pacific traffic

that would return the profits, not traffic to, or among Pacific islands. However, it was also recognized by western business interests that a cable with certain islands would stimulate trade in them and widen investment opportunities.

The existing commercial interests, and the governments to be immediately benefited by a cable across the Pacific were in the urban centers of North America and Europe. Connected cable stations were needed on the eastern and western fringes of the world's widest ocean. A submarine cable across the Pacific would complete a global circle composed of connections among numerous national and private telegraph companies. A trans-Pacific cable would make it possible to send a message completely around the world in either direction. A completed worldwide telegraph network would permit traffic to travel faster over shorter (and thus less expensive distances) to and from the major western urban centers. Alternate routings would be available during periods of heavy traffic, or when certain lines were temporarily out of service. The gap in the telegraph round-the-world circle was a watery one-third of the earth's circumference.

Commercial advantages would accrue to any nation which first connected cable stations on the eastern and western fringes of the Pacific Ocean. The cable should connect with those Pacific islands with which that nation had commercial or strategic interests. There were also technical reasons for including islands. In times of international crisis, a national cable could prove of military and naval value. International rivalries among the major Western powers were such that cooperation in building a Pacific cable was not considered. National pride--to be the first major power to assemble the necessary financial resources--was also a factor. Once built, its cable would also take the trans-Pacific traffic and the profit.

The scattered islands in the Pacific were considered potential relay points for a trans-Pacific cable--places which would permit the cable to be laid in sections. Any failure would then require only replacement of a section, not the entire trans-Pacific length. But more important, such way-stations would permit the essential reintroduction of transmitting energy. The line loss was great over long distances, and it was not technically feasible at the time to transmit a message with one power source over one-third of the earth's circumference.



Relay stations on some Pacific islands might produce revenue to help support cable operations. For instance, if Fiji or Hawaii (both insular business and governmental centers, both major growers of sugarcane) could be fitted into national trans-Pacific cables, traffic to and from these stations would help operations and foster insular economies. In Fiji, a relay station would aid colonial government and provide a needed mid-Pacific message center for the British fleet. A cable connection to Hawaii, and independent Polynesian kingdom, could promote the growing national interests of any of the several Western powers in those islands. The first Western power to connect a cable to Hawaii could probably capture that kingdom peaceably by blanketing Hawaii within its trade and cultural spheres.

Other Pacific islands, such as the copra centers of Yap in Micronesia and Samoa in the South Pacific, were believed to have commercial potential if included in a cable network. Some islands, such as uninhabited Midway, were necessary solely as relay stations to eliminate too lengthy stretches of cable with the resultant line losses. At each relay station, locally produced electricity supplied transmitting energy. There were thus included in operating costs the ships which supplied some island relay stations with coal for fuel, as well as supplies for the isolated crews.

This general background of communications technology and the international climate of the last half of the 19th century lead to national and international events which preceeded the laying of the first trans-Pacific cable.

Nations directly involved with the first trans-Pacific cable preliminaries were the major Western powers of Germany, England, and the United States; and indirectly involved up to its overthrow in 1893, the insular monarchy of Hawaii--thereafter, its provisional, republic, and territorial governments.

Submarine cables were the only feasible way during the last two decades of the 1800's for the businessmen of Honolulu to have reliable and quick daily communication with overseas business centers. A cable was not laid, however, until after the Kingdom of Hawaii, the Provisional Government, and the Republic of Hawaii had passed into history by 1898. All three island governments tried to help Honolulu businessmen establish cable connections with North America. It should be noted that the need and pleas from Hawaii were for connection with America, but it was America's national pride and its business interests in a first worldwide cable network that finally resulted (1903) in Hawaii's desired cable connection. Honolulu's cable connection to North America was an incidental fringe benefit of worldwide affairs not of Hawaii's making.

Celso Caesar Moreno, an Italian adventurer and naturalized American citizen, with 25 others, held the right to land and maintain a cable on the Pacific coast of the United States; a right granted by an act of Congress of August 15, 1876. The American act required that cable laying begin within three years. Moreno had unsuccessfully sought financing in America and China. In China, however, he became associated with a Chinese steamship company that exported coolies to Hawaii and the United States. He arrived in Honolulu in November of 1879 on the company's steamer Hochung in charge of a boatload of coolies. For nine months in 1880, Moreno was the palace confidant of King Kalakaua.

Moreno first tried to promote a Hawaii-China cable. Later, he unsuccessfully promoted a trans-Pacific cable, even though his American franchise had expired. Kalakaua introduced a cable bill into his legislature, one section of which gave a bonus of \$1,000,000 to be paid to Moreno and associates as soon as a cable was laid and operating. The bill was defeated by a parliamentary maneuver in a legislature largely controlled by the King. Moreno later almost successfully promoted the making of Honolulu into the legal and licensed opium processing and distributing center of the Pacific; a concept which shocked even those non-Hawaiian Honolulu residents who were not of Christian ministry ancestry. Moreno's reputation in the business community sank continuously during his nine-month sojourn in Honolulu, but remained high in Iolani Palace. Moreno was one of a series of "rascals" who influenced Hawaiian monarchs in the last decade of the monarchy and whose influence on the throne contributed to what the business community felt was instability in that form of government. The instability created an unreliable business climate. Moreno was one of the factors which led to the overthrow of the monarchy. Finally, Moreno was naturalized by the King and appointed Minister of Foreign Affairs, both on one day. This led to mass protests by the Honolulu businessmen. Moreno resigned from the King's cabinet and departed forever from the islands (Kuykendall 1967: 207-223).

In 1881, Kalakaua, on a world tour, talked of a Hawaii-Japan cable in Tokyo. But Japan was committed to the Cyrus W. Field network and to its expansion plans. After his return to Honolulu, Kalakaua was forced, perhaps at bayonet point, to sign a new constitution (1887) which made the monarch a ceremonial head of state. The 1887 constitution granted more influence in public affairs to the businessmen. In 1889, the Hawaii legislature wishfully authorized interisland cables (Kuykendall 1965: 421), but interisland communication

through electrical means was two decades away, and only proved economically feasible when radio reached a certain point in its technical development (Simonds 1958: Ernestine 1965). Also, in 1889, General A. S. Hartwell, president of the newly formed Pacific Cable Co., of California, received from Honolulu business interests a \$750,000 stock subscription commitment. Some California financial interests joined in 1890, but plans did not materialize. In 1890, the business-controlled Hawaii legislature authorized a \$25,000 a year subsidy for the first 15 years of operation of any cable which connected Hawaii with the United States (Alexander 1910: 53).

King Kalakaua died in 1891, to be succeeded on the throne by his sister Liliuokalani. Liliuokalani ran the kingdom and controlled her legislature. This was in spite of strong opposition by America-oriented business interest who now found the monarchy less and less tenable. Annexation of Hawaii to America became a more popular local alternative to the monarchy. Secret overtures were made on the mainland United States, while annexation was street talk in Hawaii, and the subject of public debates, magazine and newspaper comment in America.

San Francisco's Examiner editorialized in 1892 that annexationists were of three persuasions. There were Americans who saw Hawaii's strategic location. In Hawaii, there were land owners near Pearl Harbor and part owners of cable franchises who would benefit from increased business; and foreigners and native-born capitalists who feared for their investments under a monarchy growing stronger. These included the sugar planters, the sheep raisers who exported wool, businessmen who wanted loans from the United States, as well as the Hawaii missionary elements of American heritage who opposed royalty on principle (Tate 1965: 143).

Three acts of Queen Liliuokalani precipitated her overthrow, one of which involved Hawaii-United States cable financing. The objection was to the proposed method of financing. One of the Queen's acts was the imminent promulgation of a new constitution which would have restored the throne to almost absolute power. She was about to proclaim her will in this matter when the revolution occurred. A few days earlier, her legislature had passed two of her bills. One was for the licensing for a high fee of the opium trade, and the other was for a lottery which anticipated a half-a-million-dollar-a-year income to the kingdom to be used for railroad development, public works, promotion of tourism, industry and immigration, and for a cable to America (Kuykendall 1967: 551).

The overthrow occurred on January 17, 1893. Hawaii's Provisional Government, run by Honolulu businessmen, called for an immediate cable study and said it would financially join others in laying one (Kuykendall 1967: 578, 610). The Provisional Government quickly repealed the opium and lottery laws.

In its annexation proposal to the Congress of the United States, Hawaii's Provisional Government in 1893 included the proviso that the United States Government lay and maintain a cable to Hawaii. Secretary of State Foster rejected this proviso on the grounds that cables were private enterprise and not a governmental function (Tate 1965: 199). In the United States, Cleveland and the Democrats had been elected and were about to assume office. Consideration of annexing Hawaii was deferred. The incoming Cleveland administration not only opposed annexation, but urged, fruitlessly, that the Provisional Government restore the monarchy.

In Hawaii, U.S. Minister John L. Stevens had deployed armed sailors ashore from an American warship during the takeover of the kingdom. He had established a U.S. protectorate and urged his superiors in Washington to lay the cable and make Pearl Harbor into a naval station (Kuykendall 1967: 568). Stevens was relieved of duties by Cleveland and returned to the United States.

Meanwhile an all-British cable system was in the news, and in the days of the Provisional Government reached negotiation stage. As early as 1888, Canadian Pacific Railway officials had wanted to use the Big Island of Hawaii, with a cable tie to Honolulu, for a cable relay station of an all-British cable between Australia and Canada (Alexander 1910: 51-52, 53; Tate 1965: 105; Kuykendall 1967: 452). In reaction to these proposals, G. W. Merrill, U.S. Minister in Hawaii, had written in 1888 to the State Department in Washington that there was danger to the United States in a Hawaii tie to a British cable system. A British cable would bring:

A gradual peaceful conquest of the political control of Hawaiian affairs and the diversion of trade and commerce to other channels and the sympathies of the people to other governments than that of the United States, where it legitimately belongs.

Merrill's 1888 warning noted that an English company had acquired exclusive rights to operate trolley cars in Honolulu and suburbs, that British capitalists were seeking Hawaiian investments and were looking for agricultural land on Kauai and Hawaii islands (Tate 1965: 105-106). By 1893, the first year of the Provisional Government, a London company was operating tramcars in Honolulu and there were heavy British investments in Hawaii. England had control of Johnston Island, south of Hawaii, and had a protectorate over the Gilbert Islands, west of Hawaii in Micronesia (Kuykendall 1967: 96-97, 568), in addition to control of Fiji and Tonga in the south Pacific. The British Pacific empire was growing. By 1893, British cable engineers had selected Necker Island, one of the northwest Hawaiian islands, as a likely location for a relay station. One political factor in the selection was that the ownership of uninhabited Necker was legally cloudy. It could probably still be claimed by any government.

Captain John Paty, aboard the schooner Manuokawai, had claimed Necker Island in 1857 for the Kingdom of Hawaii. Or had he? Paty had sailed ten times around the rocky islet, some 400 miles northwest of Honolulu, looking for a place to land and deposit his official notice of taking. High surf beating against the steep sides of Necker during the two days he sailed circles around Necker discouraged even an attempt at landing. Paty sailed on to complete his mission and laid uncontested claims to other northwest Hawaiian islands (Paty 1857). International law in those days required that a notice be placed ashore on any Pacific island claimed by a government, but such claim was usually validated by colonization. Hawaii had always considered it owned Necker through the intention of Paty and through ownership of adjacent islands. These were Nihoa, closer to Honolulu, and French Frigate Shoals, on the other side of Necker. Paty's ten circumnavigations of Necker had given Hawaii's throne a claim to Necker. Whatever claim there was, it transferred at the overthrow of Queen Liliuokalani in 1893 to the Provisional Government.

Evidently, Hawaii's Provisional Government wanted to remove all doubt as to ownership, and perhaps use Necker in a political ploy. On May 27, 1894, agents of the Provisional Government landed on Necker, left a capsule which contained "taking" papers and raised the Hawaii flag.

Necker's confirming annexation to Hawaii was performed in May of 1894. By September of that year the British ship Hyacinth was making soundings in the waters near Nihoa and Necker islands. On September 24, the crew of the HBMS Champion, making soundings between Necker and Honolulu, landed on Necker and inspected the annexation papers left on May 24 (Bryan 1942: 170, 172; Emory 1928: 58). The crew also removed several ancient Hawaiian carved stone images (two now in the British Museum, London). Some inferior images taken that day were given to a Honolulu family (Emory 1928: 100).

Apparently, the British considered Necker island suitable for a cable relay station; for late in 1894, Hawaii's Provisional Government proposed to lease Necker to the British for a relay station on its planned submarine cable between Canada and Australia. As part of the lease arrangement, Honolulu was to be tied into the planned, all-British, Pacific cable network. At face value, this proposed electrical communication tie of Hawaii with the growing British empire in the Pacific had little to offer the American-oriented businessmen in Honolulu. If it had occurred, Hawaii's future would have been tied to British fortunes, not American. It is believed that the British were sincere in the proposal, but that the Provisional Government was not and depended on an expected American veto. Among other disadvantages to British trade ties for Hawaii was that wool brought about twice as much per pound in American markets than in London. The threat of a British cable to Hawaii might result in an American financed cable, or perhaps might even generate annexation to forestall the resurging British interests in Hawaii.

Hawaii and the United States had been linked since 1875 by a reciprocity treaty which among other terms included one that stated that the Hawaiian monarch would "not lease or otherwise dispose of or create any lien upon any port, harbor, or other territory . . . to any other power, state or government" than the United States. The Provisional Government had assumed the treaty for its advantages of free export of sugar to the United States and was legally bound not to lease Necker (Johnson n.d.: 245). On July 4, 1894, the Provisional Government had turned itself into the Republic of Hawaii to await a climate in America favorable to annexation. Late in 1894, President Sanford B. Dole, of the Republic of Hawaii, asked President Grover Cleveland, of the United States of America, for permission under the reciprocity treaty to lease Necker Island to the British so that Hawaii could have its long-needed cable service (Tate 1965: 260-261). It was an innocent appearing and reasonable sounding

request. However, the treaty terms were clearly prohibitory to leases to foreign interest other than the United States. The United States had no authority under the treaty to give permission. Apparently, the only legal way to lease Necker to the British was to change at least one of the treaty's terms. Cleveland referred the matter to the Senate early in 1895.

Back in Hawaii in 1895, the legislature passed a new "cable act" which canceled all former ones and offered a \$40,000 subsidy to Colonel Z. S. Spalding, a Hawaii-sugar planter, to help him finance a cable from San Francisco to Honolulu. Apparently, at the same time, J. A. Schymser, a New York financier, was in Hawaii also seeking investment money for a cable (Alexander 1910: 61). A year later, a John W. Foster, representing the Pacific Cable Co. which had been around since at least 1889, was in Honolulu seeking subsidies and further investment capital (Tate 1965: 264, 274).

America's Congress was "shocked" at Hawaii's proposal to lease Necker to England, cited the reciprocity treaty, and refused to consider any changes, any cable, or annexation. Congress saw the Necker island plan as part of the "conquering and aggressive policy of England" (Tate 1965: 261). Congress in 1895 was not yet ready to allay the suspicion "that the Provisional Government in Hawaii represented a small, self-interested minority and not the people in general" (Johnson n.d.: 249). American cane and beet sugar interests, as well as official Japan and a number of American isolationists, were on record as opposed to American annexation of Hawaii.

It took the Spanish-American War in 1898 to accomplish annexation of Hawaii. "During the war the Hawaiian Republic, with a keen eye on the possibilities of annexation, had offered its facilities to the United States war vessels, despite the unneutral character of such an act" (Johnson n.d.: 310). American annexationists then argued that Hawaii must be taken into at least protective custody to avoid Spanish retaliation. By that time Hawaii had proved its military usefulness. But the Hawaii-United States annexation treaty and acts of 1898 did not result in the long sought cable link. From 1898 on, Hawaii was a part of the United States of America. In 1900, Hawaii became an incorporated territory of the United States. The Spanish-American War suddenly gave the United States a Pacific empire--the Philippines, Guam, and Hawaii. Hawaii was essential as a way point to America's military base in the Philippines for coaling of ships---and within a short time, for communication to the parts of the empire which permitted an American communication bridge across the Pacific to Asia.

The first cable which joined the extensive telegraph networks in North America and Asia--stations were in San Francisco and Manila--began commercial operation in 1903. It was an American financed, commercial venture. Rates were a dollar a work between San Francisco and Honolulu, for instance (Simons 1958: 31). The trans-Pacific cable gave the American eagle an opportunity to tweak the tail of the British lion in retaliation for a British coup. There was an international cable race underway.

The British lion had roared at the eagle earlier that year. England had linked, on January 1, 1903, her Pacific empire by cable. It ran from Vancouver island in Canada to New Zealand and Australia and included Fiji and Tonga (Alexander 1910: 61). This was six months before America linked her Pacific empire as America got the first trans-Pacific cable in operation.

Once John W. Cackay, founder and president of the Commercial Cable Company whose lines crossed the Atlantic and founder-president of America's Postal Telegraph Company, incorporated and financed the Commercial Pacific Cable Company in 1901, there was little delay in laying America's trans-Pacific cable. The world's first submarine cable across the Pacific Ocean had the dual purpose of linking America's new Pacific empire and joining the existing telegraph networks of North America and Asia.

Manufacture of cable for the distance equal to one-third of the earth's circumference was started in 1901 in London. Laying commenced late in 1902. The first link completed was from San Francisco to Honolulu.

The British cable ship Silverton, under contract, started laying cable at San Francisco on December 15, 1902, and laid the Honolulu end on December 25. Splicing and testing were completed in time for the congratulatory messages on January 1, 1903. This was the same day the all-British Pacific cable between Canada and Australia, and which linked key British islands enroute, went into operation. On January 2, 1903, commercial use of the San Francisco-Honolulu cable began (Alexander 1910: 61; Colley 1907). The Honolulu Evening Bulletin began publishing news received by cable on July 2 (Bulletin 1903, July 2: 1,2). Honolulu businessmen finally had a cable to America.

In 1903, two other British cable ships laid the cable in three sections, from west to east, toward Honolulu where it could join the link to America. The middle section, from Guam to Midway, was laid by the Colonia, which put the end of a 2,600 mile cable ashore on Midway at 4 P.M., June 27 and left for London immediately via Singapore. The Analia, which earlier had laid the Manila to Guam section laid the Midway to Honolulu section (Bulletin 1903: July 3:1). On



July 1, at noon, the Anglia, was reported between Nihoa and Kauai islands, about 150 miles northwest of Honolulu, and keeping up its record of laying 200 nautical miles of cable a day (Bulletin 1903, July 2: 1). On July 3, the shore end of the armored cable (used near islands) was hauled ashore at Waikiki's San Souci beach at 1 P.M., and the evening newspaper reported that the Anglia would splice the armored shore cable to the sea cable about 17 miles offshore. More than 1,224 miles had been laid between Midway and Honolulu (Bulletin 1903, July 3: 1). The cables stretching east and west from Honolulu, Midway, Guam, and Manila were spliced, at least temporarily, to effect a round-the-world hookup in time for President-Roosevelt to send the first round-the-world message on July 4, 1903. The Sunday Advertiser, July 5, 1903, reported on page one:

PACIFIC CABLE COMPLETED TO  
THE FAR EAST

Last Link in the All-American Line  
Completed in Honolulu Yesterday

Messages leaving New York Made the Trip  
Around the Globe in Just Nine Minutes

AT just eight minutes past five o'clock last evening communication was opened with Midway Island from the Honolulu end of the cable and the last link in the great American cable was complete. Half an hour afterwards the cable was flashing back and forth messages between Oyster Bay and Manila, via San Francisco, Honolulu, Midway and Guam, and President Roosevelt's desire to use the cable on the Fourth of July has been gratified.

A companion, page one story noted that Roosevelt, from his home in Oyster Bay, Long Island, New York, had sent the first round-the-world message to Clarence H. Mackay, son and then president of his late father's companies, 70 miles away in New York City. The message took 12 minutes, the reply nine. The British had not yet laid the final cable links which would have also crossed the Pacific Ocean between North America and Asia by a different route.

After the congratulatory messages (included some from the British consul in Honolulu), which followed several from the President that morning, had been transmitted, America's trans-Pacific cable was closed for about two weeks. This closure permitted the final splicing of shore cables and the burying of shore cables at Guam and Manila (Advertiser, July 6, 1903: 1). Sections of the original cable, laid in 1902 and 1903, served through the 1950's (Bush 1973).

With the all-American, trans-Pacific cable in use, Honolulu's Evening Bulletin editorially noted that the United States was behind the times in cable expansion and was slow compared with its European competition. The editorial said that both the United Kingdom and the Germans had extensive Pacific cable systems and planned further expansions. According to the newspaper, since 1896 Germany had laid 7,375 miles of submarine cable at a cost of more than \$7 million. The German (and Dutch) network planned to interconnect Menando in the Northern Celebes with Shanghai, Guam, Yap, and Palau (Bulletin 1903, July 4: 4; New York Times 1902, April 3: 9).

Obviously, cable company employees were ashore on Midway when the Colonia landed armored shore cable at 4 P.M., June 27, 1903, and the employees probably hooked up and tested its link with Guam. It is not recorded in Honolulu when the cable ship Anglia left Midway for its run to Honolulu, but at the rate of 200 nautical miles a day it probably was the same day the Colonia reached Midway, or early the next morning. The two British ships undoubtedly held a rendezvous before the Colonia left for London. There were probably sacks of Navy coal, but no naval personnel, on Midway in 1903. Some naval personnel arrived in 1904.

Ben W. Colley was the Midway cable stations' first superintendent. By August 25, 1903, the cable settlement included quarters for the operators and their support personnel built of rough, unpainted lumber; a cable house, mess room, kitchen, and storeroom; all temporary buildings (Advertiser 1903, Aug. 25: t; Colley 1907). In October of that year, the schooner Julia E. Whalen, hold loaded with supplies for the cable station, wrecked on the Midway reef (Bryan 1942: 202). The chartered steamer Hanalei landed 15 construction men, and presumably the prefabricated parts and supplies for the permanent quarters, on April 29, 1904. The assembly crew lived in tents (Cook 1905).

What are now labeled Navy Buildings 619, 623, 628, and 643 were completed and occupied for cable quarters by February 3, 1905. The first occupants were Messrs. Butler, McMichael, Fraser, and probably Colley (Colley 1907; Cook 1905). It is believed the four buildings were bachelor quarters, with detached mess facilities. The construction men probably also built a permanent cable building with office. Midway was bachelor country until Midway's first woman resident came in 1935--a Mrs. George Perry, with two children (Bulletin 1935, Sept 14: 1).

When Pacific cables were finally laid, each island relay station for these technical reasons had to receive and then resend all through messages. Trans-Pacific messages were thus relayed in steps across the Pacific Ocean, island by island. Human telegraphers at each station copied all incoming traffic, and then retransmitted by telegraph key in Morse code the through messages. There were similar retransmissions by human hands over the land telegraph lines in America, Europe and Asia, and other submarine cables, during the first quarter of the 20th century. Backlogs of through messages sometimes accumulated and delayed onward transmissions.

At extremely long-line stations, such as were along the trans-Pacific cable in 1903, there were unusual steps taken to receive the signal. At Midway, the signals were so weak that recording galvanometers were used to trace the incoming variations in electricity--in effect, to separate the dots from the dashes. At Midway, telegraphers first wrote, later typed, their translations of the wavy line on a narrow tape. Top speed was 37 words per minute. Messages could be sent only in one direction over the cable at any one time (Bush 1973).

Elaborate private and governmental codes evolved to shorten messages and insure confidentiality, since messages were exposed at each relay point enroute. Later, newly invented devices sent through messages directly onward, and stopped messages which had that relay station as their final destination. Speed and accuracy of telegraphic traffic improved during the second quarter of the 20th century, as western inventors experimented with circuitry and evolved new techniques for telegraphy. By that time, radio, telephone, and radiotelephone were competitors in the business of long-distance communication.

In April 1903, the Pacific Cable Company's first large contingent arrived with Mr. B. W. Colley of the company titled as "Naval Custodian of the Midway Islands". He was instructed by the President to prevent "the wanton destruction of birds (Laysan Albatross) that breed at Midway, and not let them be disturbed or killed except for the purpose of food supply".

With occupancy by cable company employees, and apparently a budget for landscaping, exotic vegetation was deliberately introduced. In 1902 the cable company planted the first ironwood trees (Mauldin 1960: 96), now a dominant cover on parts of both Sand and Eastern islands. In 1903, Ben W. Colley, the first cable station superintendent, acknowledged receipt of a collection of plants sent by the Territory of Hawaii and selected by C. J. Austin, which Austin "deems will be suitable for cultivation at Midway island" (Colley 1903). This was probably the start of Midway's floriculture.

In 1906, the original group of Pacific Cable Company personnel left Midway after planting the thousands of imported Australian ironwood trees that shade portions of the island.

During the years following the completion of the Trans-Pacific Cable, and preceding World War II, life on the islands was mostly uneventful. The United States Navy kept only enough men on duty to refuel ships crossing the Pacific.

As the importance of seapower became known to the United States in the years following World War I, thoughts were given to fortifying Midway. The Washington Naval Treaty of 1921 - 22 prohibited the fortification of these islands but permitted the build-up of commercial enterprises. Although mainly used as a cable station, some supplies for vessels were stocked.

In 1923, the USS TANAGER took a scientific expedition to the northwest Hawaiian islands. Its report on the cable station quarters on Midway partly explains why the buildings were still in use in 1972. Their original, reinforced concrete walls and steel "I" beams have been continuously maintained in a corrosive atmosphere since 1905 by the Commercial Pacific Cable Company, Pan American World Airways, and the United States Navy. The report of the expedition includes this 1923 inventory of Midway structures:

Houses. 4, 2-story, 25' x 80' reinforced concrete on steel "I" beams, porches all around cor. iron roof, 20 rooms ea. Ice plant, wood, 15' x 15', ½ ton capacity, Bunk house, wood, for help, 1 story, 1 wooden bungalow, 12 outhouses, barns and sheds, small, wood.

The Tanager expedition reported that in 1923 it found Eastern island unchanged from earlier descriptions, but that Sand island was covered with shrub *scaevola*. The cable station vicinity was planted in Bermuda grass; there were plants common to Honolulu gardens, a truck garden (perhaps in soil imported from Honolulu), and a grove of ironwood trees. Scientists found the well water brackish, noted an annual rainfall of about 14 inches, and said that rainwater was collected from roof catchment (Tanager 1924).

Direct ownership by the United States of America was acknowledged by the Attorney General of the Territory of Hawaii in his Opinion 1098 of October 31, 1923, which noted there had never been a claim to Midway by the Kingdom of Hawaii or any of its successors (Taylor 1931).

In 1934, Japan renounced the Washington Treaty and began militarization of bases in Micronesia, some 1,500 miles away. Apparently realizing the importance of Midway and the Aleutian Islands as key defense points in the Pacific, Japan planned

for possession of these islands. In that year, U. S. fleet maneuvers conducted off Midway demonstrated the need for a deep water channel through the reef to Welles Harbor.

At times there may have been minor jurisdictional disputes between and among the long-term occupants--the cable company and the Navy, especially during the years 1935 through 1947 when a major U. S. airline joined them to use Midway as a seaplane base on its trans-Pacific route.

Pan American World Airways, an American carrier, occupied Midway with the Navy and the cable company from 1935 through 1947. Navy seaplanes were reported to have beaten PanAm's first flying clipper trial run to Midway on June 17, 1935 (Bulletin 1935, June 17: 1). PanAm's commercial operations began with an inaugural flight on October 21, 1936 (Bulletin 1936, Oct 22:1). The trans-Pacific route was from San Francisco to Honolulu, Midway, Wake, Guam, and Manila. Honolulu's Interisland Steam Navigation Company ("phone 4941") advertised tickets for sale. The airline's last flight was September 24, 1947 (Bulletin 1947, Sept 24, pp. 2, 4), when the Civil Aeronautics Administration was scheduled to take over Midway's airport operations.

Perhaps the strangest and most expensive introduction to Midway came as PanAm beautified its Flying Clipper base. It caused a dispute between PanAm and the Navy which was covered in the Honolulu press. In 1935, PanAm bought 100 tons of topsoil on Guam and loaded it in sacks aboard the chartered steamer North Haven. Each sack weighed 400 pounds. The topsoil was worth \$8.00 a ton dug, sacked, and loaded aboard the ship at Guam. At \$2,000 a day charter cost, the ship proceeded to Midway, where the North Haven stood by after the Navy refused to let the topsoil be landed until a "certificate of purity" was produced. PanAm's Midway station manager, J. Parker VanZandt, finally satisfied the Navy by flying in a certificate from Guam that said Guam's plant and animal inspector had examined the topsoil. It contained no "parasites, animal or vegetable" (Advertiser 1935, July 11: 1; Bulletin 1935, July 11: 1; July 12:8). On Midway, non-Pacific plants once introduced to Hawaii now bloom on Guam soil.

In 1936, fumigation of commercial aircraft departing Midway for Hawaii was initiated to forestall potential introduction of insects which might harm Hawaii's agriculture. The Hawaiian Sugar Planters Association sponsored the fumigation (Bryan 1942: 203).

On May 19, 1938 the USS OGLALA and the USS BEAVER arrived at Midway with men and material from the Hawaii Dredging Company.

In March 1940, the USS SIRUS used the new channel to deliver men and material necessary for the construction of a naval air station on Eastern Island. On March 1940 the USS SWAN, a mine sweeper type aircraft tender entered Midway lagoon by the new channel in the south reef. On the same date LT D. B. Ventries, in charge of construction, officially relieved the Pacific Cable Company as custodian of Midway Island, but the cable personnel and facilities continued in operation.

On July 18, 1940 part of the U.S. Fleet paid a visit to Midway. Attention was called to the planting program of trees and grasses which had been carried out by the Pacific Cable Company.

On August 1, 1941, the U. S. Naval Air Station Midway Islands was commissioned under the command of Commander Cyril T. Simard, U. S. Navy.

At 0630 on the 7th of December, 1941, Midway received notice that the Japanese had attacked Pearl Harbor.

Later that night, at 2130, Midway's Naval Air Station was attacked by Japanese naval forces returning from the Pearl Harbor attack. The base was shelled by a raiding force estimated to be two cruisers and two destroyers. Return fire from defense batteries struck the Japanese ships and forced them to retire under a smoke screen.

The following personnel were killed by the Japanese bombardment:

1st Lt. George H. Cannon, USMC  
Ens. Donald J. Kraker, USNR  
Pfc. Elmer R. Morrell, USMC  
F 2/C Ralph E. Tuttle, USN

The seaplane hangar and the hospital were hit and burned by the bombardment. 1st Lt. George H. Cannon, USMC, was the first Marine of World War II to be awarded the Congressional Medal of Honor. Lt. Cannon was commanding a gun battery when a Japanese salvo crashed into his command post, breaking both of his legs and crushing his pelvis. Although bleeding profusely, he refused to leave his command post, where he died from loss of blood. His battery did not stop firing.

U. S. Combat Intelligence had partially broken the Japanese Naval Code and knew that a target call AF was to be attacked by a carrier strike force followed by invasion troops. The U. S. did not know where AF was, but believed it to be Midway. To test this, Midway ignored its cable and secrecy and radioed a message to Pearl Harbor that drinking water was scarce. Shortly afterward, the Japanese reported that AF was short of water.

Japanese Admiral Isoroku Yamamoto, the naval strategist who had planned the Pearl Harbor attack, dispatched 86 warships, 43 support vessels and 333 carrier-based aircraft to Midway. Japanese combat intelligence wanted to be sure the U. S. Fleet was not near Midway for the invasion, but a Japanese intelligence flight over Pearl Harbor was aborted.

U. S. Admiral Chester W. Nimitz had only 27 warships, 23 small support vessels, and 348 overage aircraft that were slower than those of the Japanese. These were dispatched to meet the invasion force.

Japanese submarines set up watch for the U. S. ships, but this was after they had already passed.

Probing U. S. aircraft discovered the Japanese fleet and Japan lost the offensive of the battle and of the war. The battle of Midway, June 4 - 6, 1942, was complex. On June 4, Midway's Marine fighter planes intercepted the Japanese bombers and inflicted heavy damage, cutting down much of the Japanese bombing attack. In turn, they took heavy losses from the supporting Japanese Zero fighter planes. By count of kills, the scale of victory was on the Marine side. The Japanese bombing attack severely damaged almost all the above ground facilities at Midway. While the Marine fighters defended Midway, Midway's Army B-26 and B-17 bombers, the Midway Navy's TBF's and the Midway Marines SBD's dive bombing produced hits on an enemy carrier, but lost half their force to enemy fighters.

Navy carrier squadrons replaced the lost Midway aircraft and as a result, sank most of the Japanese carriers. With the U. S. in complete control of the air, the planned Japanese invasion of Midway did not take place.

The Japanese fleet returned to Japan to reorganize its surviving units. Midway, although heavily bombed, was not invaded and continued to play an important support role for the U. S. in the three years of war that followed.

The value of Midway as a strategic base in the Pacific was brought to world attention as a result of the battle. Post war analysis of Japanese war records and interrogations of High Command officers following the battle of Midway, showed the engagements of the two carrier fleets as the turning point of the Pacific War in favor of the United States.

By January 1, 1943, a larger landing facility and a submarine base had been completed on Sand Island. By early 1945, all aviation activities had been shifted to the greatly expanded site of the present Henderson Field on Sand Island.

On August 14, 1945, the Japanese surrendered. Within 12 months, demobilization left Midway, with its airfield and submarine base, in a caretaker status. Only 250 men and officers under the command of CDR Fred J. Morgan, remained to maintain facilities and equipment and to operate a sea and air rescue service. Midway began its slow progress toward a stable peacetime Naval Air Station.

A small plaque on Midway's memorial corner on Sand Island is the only existing public memorial on the islands. As naval historian Gordon W. Prange noted:

Thirty years ago, the United States and Japan ; clashed at mid-Pacific in one of the most crucial sea battles in the annals of war. Exhilarated by an unbroken string of victories after Pearl Harbor, and aiming, via capture of Midway Island, to achieve mastery of the entire Pacific Ocean, the attacking Japanese put together the biggest and most powerful armada ever assembled. Racing out to defend was a U. S. fleet far inferior in both numbers and material, and sailing under the shadow of a succession of defeats. The epic encounter that resulted proved to be the most decisive naval victory since Trafalgar. For Midway marked a turning point in World War II: when the smoke had cleared, the Rising Sun of Japan had passed high noon. (Prange 1972: 255)

On August 13, 1946, the first male child in recorded Midway history was born. On September 17, 1946, the first female child was born.

On May 29, 1947, the first graduation of Midway's elementary school took place.

On July 21, 1947, Marine Fighter Squadron THREE TWENTY-TWO, the last formal defensive unit, commanded by Major H. G. Hutchinson, was detached from Midway. The next several years were busy ones as Midway's strategic location was utilized for the heavy Korean War airlift.

The CAA ceased airport operations on Midway about May 1, 1950 (Bulletin 1950, Mar 17: 1; Mar 18: 2).

In September 1956, Midway's dependent school was named George C. Cannon School in honor of Midway's war hero, 1st Lt. George Cannon, USMC. The high school held its first graduation on June 3, 1959.

The year 1957 was the beginning of a \$40,000,000 building program as Midway became a home for the Pacific Airborne



Early Warning portion of the DEW Line. Although this 3-squad organization was home-based on Oahu, Hawaii at Barbers Point Naval Air Station, Midway was used beginning in July 1958 as a jumping off point for around the clock 3,000-miles patrols.

To support this Naval Patrol effort Navy Construction Units (Seabees), some 1,200 men, completed an 8,000-foot runway to take the heavier type aircraft landing on Midway and built an aircraft hangar large enough to hold six aircraft. During this construction, the Hawaiian Dredging Company completed new housing, reconditioned the station theatre and built a new chapel in a modern "A" frame design.

In 1959, the Territory of Hawaii became a State. Meanwhile, there was a growing awareness of conservation problems and requirements by the military as reflected by various high level directives at first requiring study of soils for construction and later for erosion control; later for aesthetics and the proper maintenance of plants and grounds.

On February 29, 1958, Section 4, Chapter 159 of Title 10 of the U. S. Code was revised to require hunting, fishing and trapping on military reservations be in accordance with applicable State regulations.

On July 11, 1960, a memorandum of understanding between the Department of Defense and the Department of the Interior for "Conservation of Fish and Wildlife Resources on Military Installations" was signed calling for progressive fish and wildlife conservation programs on military lands.

On September 15, 1960, Public Law 86-797 (86th Congress) required that a Fish and Wildlife Management Plan be prepared for each military installation. Plans are prepared jointly by activity, the U. S. Fish and Wildlife Service and the respective State Fish and Game organization.

Up until this time, the Hawaiian Islands National Wildlife Refuge had been administered by the State of Hawaii - Division of Fish and Game through a contract with the U. S. Fish and Wildlife Service.

In 1962, the U. S. Department of the Interior Fish and Wildlife Service sent personnel to take over the administration of the refuge from the State.

About the same time the State of Hawaii Board of Agriculture and Forestry was split. The Forestry and Fish and Game Divisions were transferred to the newly-formed Board (Department) of Land and Natural Resources.

On March 27, 1963, a memorandum of understanding was signed by the Department of Defense and the U. S. Department of Agriculture (which includes the U. S. Forest Service, the U. S. Soil Conservation Service and others) for the

"Conservation of Forests, Vegetative Cover, Soil and Water on Lands Administered by the Department of Defense."

On October 15, 1966, Public Law 89-669, an act popularly called "The Endangered Species Act", became law. This Act required the Departments of Interior, Agriculture and Defense to preserve rare species of wildlife and required the Department of the Interior to compile a list of species of fish and wildlife which were rare or in danger of becoming extinct within the U. S.

The National Historic Preservation Act of 1966 (Public Law 98-655, 16 USC 470), which resulted in the Advisory Council Procedures for the Protection of Historic and Cultural Properties (36 CFR part 800), has placed four buildings on Midway in a special category. These are Navy Buildings 619, 623, 628 and 643. They are the quarters for cable employees built in 1905. They are considered to be eligible for listing as historic structures in the National Register of Historic Places. Historic preservation laws and executive order 11593 have placed the Navy in the historic preservation business.

The National Environmental Policy Act of 1969 (Public Law 91-190) declares that "it is the continuing policy of the Federal Government in cooperation with State and local governments and other concerned public and private organizations to use all practicable means and measures, including financial and technical assistance, in a manner calculated to foster and promote the general welfare, to create and maintain conditions under which man and nature can exist in productive harmony and fulfil the social, economic and other requirements of present and future generations of Americans".

On July 1, 1972, in accordance with Public Law 86-797, a cooperative agreement for the conservation and development of fish and wildlife was entered by the Department of the Navy and the Department of the Interior, through their authorized representatives. The U. S. Naval Station, Midway Island, is not legally a part of the State of Hawaii. It was, therefore, a two-party agreement which called for the preparation of a management plan.

On April 10, 1973, the Midway Island Navy Wildlife Refuge Management Plan was prepared and published as SOPA MIDWAY INSTRUCTION 11015.1.

On December 28, 1973, Public Law 93-205 was passed. This law, called the "Endangered Species Act of 1973" expanded the provisions of the previous endangered species act, and specifically included plans within the scope of protection.

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