

USS SHARK

Florida Keys Sea Heritage Journal

\$2

VOL. 13, NO. 3

SPRING 2003

OFFICIAL QUARTERLY PUBLICATION OF THE KEY WEST MARITIME HISTORICAL SOCIETY

Key West's First Marine Biologist

By Alan C. Pierce
Copyright 2003

Raised in the house his grandfather built in the 1880s, on the street a family story says was named after his grandmother, E. Lowe Pierce was Key West's first marine biologist. Born on May 1, 1913, in Key West, E. Lowe was the first grandchild of Key West pioneer, Charles Richardson Pierce.

Charles Richardson Pierce's parents migrated to Key West from the Bahamas in the 1840s, and he was born in Key West on July 22, 1855. Charles Richardson married another local Key Wester, Miss Anne Elizabeth Lowe, in 1881, and produced several children, including Emory Lowe Pierce, the father of E. Lowe Pierce.

The house that Charles Richardson built, and E. Lowe grew up in, still stands at 417 Elizabeth Street. The house sits on some of the higher island ground, being just below the crest of Solaris Hill. Though the house is in the center of the island, E. Lowe could see his future world from the widow's walk which used to grace the top of the house.

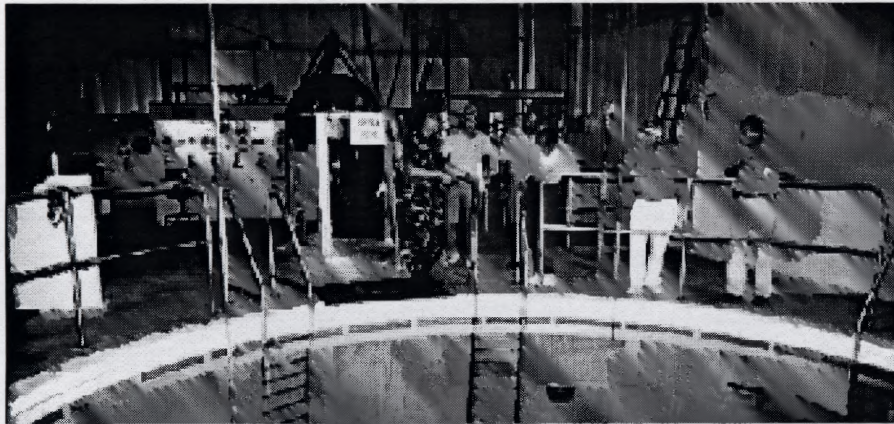
It is not known when E. Lowe got his first boat, but he did say one of his first adventures was throwing a



(Continued on page 14)

Dr. E. Lowe Pierce with tuna caught in 1962. Photo credit: The Author.

SOCIETY NEWS
BY ED LITTLE, PRESIDENT, KWMHS



KWMHS members visit Army Special Forces Underwater Operations School. Photo credit: Ray Blazevic.

As you read this, we will be into the spring and summer of 2003. December 2002 marked my most recent update on the Society. Here's what we've been happening since then.

Once again, through the good offices of John Viele (and others on the Board) we've been treated to several informative lectures by our guest speakers. For example, in February, we were "transported" to the wilds of the Antarctic during a "power-point" slide show presented by Mr John Lohr. He gave us a glimpse into the world of high-seas adventures. Then, in April, we went on a field trip to explore Fleming Key, and the U.S. Army's "Special Forces Underwater Operations School." Also in April, at our annual membership meeting, Tom Hambright (Monroe County Historian) provided a "power point" graphic presentation that gave us a valuable overview into the history of Key West and the Florida Keys. In June, we learned "The Story of the Reef Lights" (the venerable "guardians of the reef") via a "power-point" presentation by Mr. Tom Taylor.

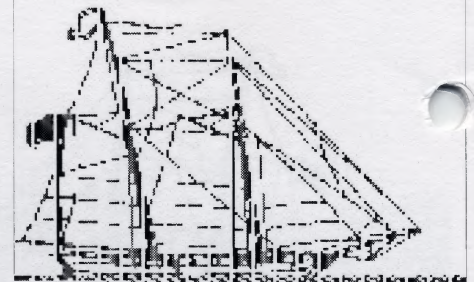
Then there is the continued success of the Society's quarterly, the *Florida Keys Sea Heritage Journal*. Through the dedicated efforts of the Journal's editors, Lynda and Tom Hambright, we've been able to bring to our readers articles that cover the gamut of historical subjects that pertain to Key West and the Florida Keys. These articles give us a window into "days gone by" that would not be available otherwise. Once again, Well Done Lynda & Tom!!

That brings me to the future of the Society. In coming months we've lined up additional guest speakers, field trips, and Journal articles. But, we are also a Society that needs the support of the members that belong to it. There is still plenty of room for suggestions to be offered on prospective lectures, articles, and activities that the Society might offer. Actually, although such suggestions would be most appreciated, what we really need is additional helping hands to make those suggestions "happen". So, for those of you that have time, ideas, or expertise to volunteer, we await your call. Just dial us at 292-7903.

New Members

Don Carbonell, Key West; Bill and Sybil Moses, Ramrod Key; Randy

Richardson, West Palm Beach; Johnnie and Lisa Yongue, Key West.



The Florida Keys Sea Heritage Journal is published quarterly. Subscription is available through membership. Copyright 2003 by the Key West Maritime Historical Society of the Florida Keys, Inc. The art on the masthead, the USS **Shark**, was drawn by Bill Muir.

Editor: Lynda Hambright
Production: Tom Hambright

Letters and articles are welcome. Please write to: Editor, Florida Keys Sea Heritage Journal, KWMHS, P.O. Box 695, Key West, FL 33041 (305) 292-7903.

KEY WEST MARITIME HISTORICAL SOCIETY BOARD OF DIRECTORS

President: Edward J. Little, Jr.
Vice President: Winifred Fryzel
Secretary: Corey Malcom
Treasurer: Lynda Hambright

Shauna Cameron
Pauline Guzek
Tom Hambright
Mary Haffenreffer
Nancy Jameson
John Jones
Jack King
Sheri Lohr
Don Lowe
Diane Silvia
John Viele

War Off The Keys June 1942

By Tom & Lynda Hambright

In the Summer 1992 issue of the *Florida Keys Sea Heritage Journal* we wrote an article about the submarine warfare off South Florida during World War II. During research for the article we looked for the records of the Commander Gulf Sea Frontier, who was in command of the military forces fighting the U-Boat war in South Florida. We only found information from secondary sources.

During a recent visit to the National Archives Southeast Branch searching the military records we found one folder filed in the war diary of the Seventh Naval District (the administrative command) one file from the Gulf Sea Frontier (the operational command). Rear Admiral Kauffman was in charge of both commands. The Gulf Sea Frontier file had drafts for message reports for part of June 1942 that were filed every four hours probably to Commander Atlantic Fleet. Who every saved the file choose the right one as May and June 1942 was the height of the U-Boat assault on South Florida and the only U-Boat sinking in South Florida waters by the U.S. was on June 13, 1942 when the United States Coast Guard Cutter **Thetis** (WPC-115) sank **U-157** about 22 miles south of the Marqueasa Keys. On page 8 is a copy of the Seventh Naval District Minesweeping Operation Plan which was found in the same file and was related to anti-submarine war being fought by the Navy and Coast Guard. The minefield northwest of Key West was established to provide a secure anchorage for convoys

Following are the Seventh Naval District War Diary for April 10,



*The Coast Guard Cutter **Thetis** (WPC-115) sank the only U-Boat off South Florida during World War II. Photo credit: U.S. Naval Institute.*

1942 and the Gulf Sea Frontier Operations reports for June 13, 1942.

Headquarters Seventh Naval District Key West, Florida War Diary

Unit: Seventh Naval District Local Defense Force. Composition: Aircraft and Surface Vessels as shown in the Seventh Naval District Operation Plan No. 1-42 and attached Diary dated April 1, 1942.

Attached: Gulf Sea Frontier Force.

Senior Operation Plan: Gulf Sea Frontier Operation Plan No. 2-42, dated March 31, 1942.

Tasks: Same as shown in Senior Operation Plan and given in detail in Seventh Naval District Operation Plan No. 1-42, dated April 2, 1942.

Summary of Days Operations

The USGC **Nike**, **Nemesis** and **Carnelian** (PY-19) on patrol and submarine search duty with Gulf

Sea Frontier Force.

The **YP-232** patrolling sea lanes from Biscayne Bay to Port Everglades Area.

The **YP-271** and the **YP-272** patrolling sea lanes from Lake Worth to Fort Pierce.

The **YP-21** on station as examination boat, Main Ship Channel, Key West.

The **F.W. Meade** on station as examination boat, Northwest Channel, Key West at night.

The **CGC-145** and the **CGC-659** on station as guard ships at Egmont Key.

The USCG Tender **Vigilant** enroute Port Everglades to Cape Canaveral for duty patrolling sea lanes.

At 1750 EWT, [Eastern War Time] the SS **Atenas** was located and identified by plane of Squadron

(Continued on page 4)

(War from page 3)

VS-1D7 at Lat. 26.05 N., Long. 80 W., proceeding South; escorted until dark. Other aircraft made routine patrol flights as shown in schedule given in Diary dated April 1, 1942.

No enemy contacts were made this date.

Other Items of Importance or Interest

At 1720 EWT, the SS **Benwood**, aground at Molasses Reef, was abandoned by the ship's crew and the Salvage Ship **Willett**. The **Benwood** broke in center. Machine guns and breech block from larger gun removed by **PC-476**.

At 1900 EWT, the USS **Clemson** arrived at Key West from the Yucatan Channel.

R.S. Crenshaw,
Captain, U.S. Navy.

Gulf Sea Frontier Operations as of 0400 EWT, June 13, 1942.

A.--Convoys

(1) The KN-109 was at position Lat. 28.38 N., Long. 79.06 W.

(2) The KS-508 was at position Lat. 24.30 N., Long. 81.00 W.

(3) The **PC-551** and **PC-517** Convoy was at position Lat. 26.00 N., Long. 80.59 W.

B.--Single Ship Escorts
(none)

C.--Surface Operations

(1) The **Woodbury** on west patrol of Ship Shoal.

(2) The **Boutwell** on east patrol Ship Shoal.

(3) The **PC-525** out for anti-submarine patrol was off Miami.

(4) The **Vigilant** off West Palm Beach enroute to Port Everglades.

D.-- Routine Surface Operations

(1) The **PC-628** arrived PC Training Center, Miami.

(2) The **Coral** (PY-15) doing Harbor Guard at Key West.

(3) The **Nemesis** was at Key West Sound School.

(4) The **PC-498** was 30 miles northeast of Dry Tortugas enroute to New Orleans.

E. Air Operations other than Convoy Coverage

(Same as at 2400 EWT)

F.--Rescue

(1) The **Nike** was at position Lat. 23.10 N., Long. 83.42 W.

G.--Submarine Situation

(1) The **Dahlgren**, **PE-27**, **Noa**, **PC-484** at 0242 EWT were advised submarine sighted at 0040 Q at Lat. 23.37 N., Long. 81.28 W., and that the **Dahlgren** and San Nicolas Channel group would proceed at best speed and form search line 30 miles southeast of that position, sweep northwestward over sea. At 0300 EWT the Santaren Channel group ordered to advance line to southeastern point Cay Sal Bank and adjust interval to include northern half of Nicholas Channel. **Noa** to cover southern half.

(2) At 0150 Roger Cities Service's SS **Toledo American** tanker, June 12, 1942, attacked and left burning, confidential and secret publications left aboard approximately Lat. 29.00 N., Long. 92.50 W., Seventeen survivors all Americans.

(3) At 0245 Army transport **Henry Gibbons** reported sighting submarine, but no location given.

Gulf Sea Frontier Operations as of 0800 EWT, 13 June, 1942.

A.--Convoys

(1) The KN-109 Convoy passed out of the Gulf Sea Frontier at approximately 0600 EWT at Lat. 29.03 N., Long. 79.02 W., on the Yale route.

(2) The KS-508 Convoy was at position Lat. 24.16 N., Long. 81.22 W. Air coverage - 1 OSU-3 from the Key West Patrol escorting daylight until arrival at convoy anchorage.

(3) The KS-509 convoy entered

the Gulf Sea Frontier approximately 0500 EWT. This convoy consists of 9 MV's and 7 escorts. The escorts are **Broome**, **St. Augustine**, **Restless**, **PC-474**, **PC-465**, **PE-55**, **HMS Wellerd**. Speed is 10 knots and convoy on Bard route. Air coverage - 1 PBM-1 escorting from 0600 until darkness. Plane is from Banana River.

(4) **PC-551** and **PC-517** Convoy arrived Port Everglades.

B.--Single Ship Escorts

(1) None.

C.--Surface Operations

(1) The **Woodbury** on west patrol of Ship Shoal.

(2) The **Boutwell** on east patrol of Ship Shoal.

(3) **Vigilant** arrived Port Everglades. Obtaining fuel and provisions. When ready she is to report to C.G.S.F.

(4) **PE-27**, **Dahlgren**, **PC's 518**, **519**, **540**, **Thetis** and **Triton** were ordered at 0748 EWT to advance line to the vicinity of latest sub sighting (Lat. 23.56 N., Long. 81.58 W.) and sweep to west and northwest. Planes are holding sub down.

(5) **PC's 484**, **492**, **550**, **508**, **540**, **513**, patrolling area across the mouth of Santaren Channel and half way across mouth of Nicholas Channel. The **Noa** will patrol the other half from the Cuban coast to middle of Nicholas Channel.

(6) **Eagle-56** returning to Key West for fuel and water was diverted and ordered to investigate submarine sighted at Lat. 23.56 N., Long. 81.58 W., at 0732 EWT.

(7) **Nemesis** and **PC-497** departed 0800 EWT at best speed possible to locate and destroy submarine sighted at Lat. 23.56 N., Long. 81.58 W.

(8) The **PC-498** enroute to New Orleans from Key West was at position Lat. 25.31 N., Long. 84.10



The Naval Headquarters at Key West in 1943. Photo credit: Monroe County Library.

- W.
- D.--Routine Surface Operations
- (1) The **Coral**, Harbor Guard at Key West.
 - (2) The **PC-499** patrolling the Convoy Anchorage.
- E.--Air Operations other than Convoy Coverage
- (1) 1 A-29 from Tampa will meet the U.S. Army Freighter **T. William Clark** off Cape San Blas at 0800 EWT and provide escort until dark. This ship has valuable cargo bound for Trinidad.
 - (2) 1 PBV from VP-81 will repeat yesterday's patrol of Old Bahama channel and be on station at 0600 EWT.
 - (3) 1 PBV from Key West will be on regular daylight patrol - Yucatan Channel - Grand Cayman.
 - (4) 1 A-29 sent out from Miami to search Santaren Channel daylight to noon was diverted to investigate sub sighting at Lat. 23.56 N., Long 81.58 W.
- (5) 1 A-29 sent out from Miami to search Nicholas daylight to noon.
- (6) 2 PBV's from Key West took off at 0740 EWT to patrol between Long. 82.00 W. and 83.00 W. from the Keys to the coast of Cuba.
- F.--Rescue
- (1) The **Nike** returning to Key West with survivors was at position Lat. 23.39 N., Long. 82.57 W.
- G.--Submarine Situation
- (1) Submarine sighted by Army plane at 0502 EWT at position Lat. 23.56 N., Long. 81.58 W. For action taken see part C--Surface Operations.
- Gulf Sea Frontier Operations as of 1200 EWT, 13 June, 1942.
- A.--Convoys
- (1) The **KS-508** was off Sand Key. At 1100 EWT the **USS Borie** relieved Escort Group A as escort of this convoy with orders to escort it to vicinity of Rebecca Shoals Light where the convoy would disperse. The **Borie** would then form convoy of 5 Caribbean bound ships and escort them to point dispersal in Caribbean thence to Canal Zone.
 - (2) The **KS-509** Convoy was off Hetzel Shoal at Lat. 28.37 N., Long. 80.05 W. Air coverage - 1 OS2U-3 relieved the PBM-1 at approximately 1030 EWT and will provide escort until dark.
- B.-- Single Ship Escorts
- (1) None.
- C.--Surface Operations
- (1) The **PC-498** enroute to New Orleans from Key West was at position Lat. 25.58 N., Long. 84.52 W.
 - (2) The Com Carib. Sea Frontier

(Continued on page 6)

(War from page 5)

was informed at 1054 EWT that the **Greer** was no longer needed for it was estimated that the submarine had moved into the Florida Straits.

(3) The PC's **484, 492, 508, 513, 550** were ordered to return to Miami at 1100 EWT.

(4) **Noa** ordered at 1132 EWT to proceed so as to arrive at Lat. 23.50 N., Long. 82.22 W., by 2030 EWT.

(5) Others same as at 0800 EWT.

D.--Routine Surface Operations

(1) Same as at 0800 EWT.

E.--Air Operations other than Convoy Coverage

(1) 1 A-29 escorting the U.S. Army Freighter bound for Trinidad. Ship was at Lat. 29.22 N., Long. 85.08 W.

(2) 1 PBY from VP-81 was ordered to discontinue Bahama Channel Patrol at approximately 1100 EWT and to take up the search of the area from Long. 81.00 W. to 81.30 W., from the Keys to the Cuban coast.

(3) 1 PBY from Key West patrolling Yucatan Channel - Grand Cayman.

(4) 1 of 2 PBY's from Key West patrolling between Long. 82.00 W. and 83.00 W., from the Keys to the coast of Cuba recalled at approximately 1100 EWT. The other one was still performing the patrol.

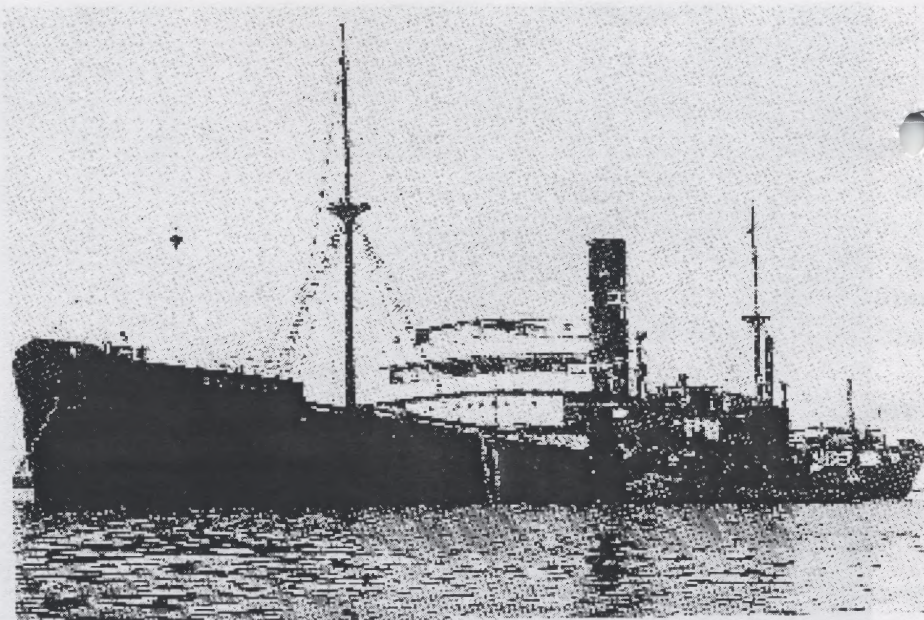
(5) 1 B-25 departed from Miami at 1045 EWT and another departed at 1145 EWT to search Lat. 24.00 N., Long. 82.00 W., then make a circle 30 mile radius from this point.

F.--Rescue

(1) The **Nike** returning to Key West with survivors was at position Lat. 24.15 N., Long. 82.17 W.

G.--Submarine Situation

(1) No new sighting during the past four hours.



SS Benwood grounded on Molasses Reef after a collision with the tanker **Robert C. Tuttle**. Photo credit: Monroe County Library.

Gulf Sea Frontier Operations as of 1600 EWT 13 Queen June 1942.

A.--Convoys

(1) The **KS-509** was off Melbourne Lat. 28.07 N., Long. 80.00 W. with one (OS2U-3) from Sqd VS1D7 Banana River as air coverage until dark.

(2) **KS-508** Convoy, now escorted by **USS Borie**, was at Lat. 24.24 N., Long. 82.13 W. with orders to proceed to vicinity of Rebecca Shoal Light before dispersing and formation of the **Borie** Convoy of five merchant vessels for Caribbean ports. Air coverage was one (OS2U-3) plane from Coast Guard Key West Patrol.

B.--Single Ship Escorts

(1) None.

C.--Surface Operations

(1) The Hunting Group of five PC Boats from the PC Training Center Miami enroute from anti-submarine operations in lower Santaren Channel to Miami were near upper end of Santaren channel.

(2) The Key West Hunting Group **Dahlgren, PE-27, Thetis, Triton, PC-518, PC-519, PC-540**

plus PC-497, Nemesis and **PE-56** now conducting aggressive anti-submarine hunt in the area of sighting of submarine south of Sand Key at Lat. 23.56 N., Long. 81 W.

(3) The **USS Noa** enroute from Nicholas Channel to area of submarine hunt.

(4) **PC-499** A/S and W patrol Convoy Anchorage.

(5) **PC-498** enroute from Key West to Burnwood.

D.--Routine Surface Operations

(1) None. All vessels assigned to submarine hunt.

E.--Air Operations other than Convoy Coverage.

(1) One PBT plane from Sqd VP-81 Key West searching area between Long. 81.00 W and 81.30 W., and from Florida Keys to Cuban coast.

(2) One PBY plane from Sqd VP-81 Key West making daylight patrol of the Yucatan-Grand Cayman Area to return to Base at dark.

(3) One Army B-18 Bomber from Key West conducting visual and radar search in vicinity of last

sighting of submarine south of Sand Key to remain on mission all night.

(4) Two Army B-25 Bombers from Key West conducting search in vicinity of last sighting of submarine south of Sand Key to return to base at dark.

F.--Rescue

(1) At 1530 EWT the USCG **Nike** arrived from the Yucatan Channel Area with fifty-three survivors on board one of which was a stretcher case.

G.--Submarine Situation

(1) At 1350 EWT an Army plane sighted a submarine at Lat. 24.08 N., Long. 81.48 W.

(2) At 1430 EWT an Army plane sighted the same submarine again at Lat. 24.07 N., Long. 81.52 W.

Gulf Sea Frontier Operations as of 2000 EWT 13 Queen June 1942.

A.--Convoys

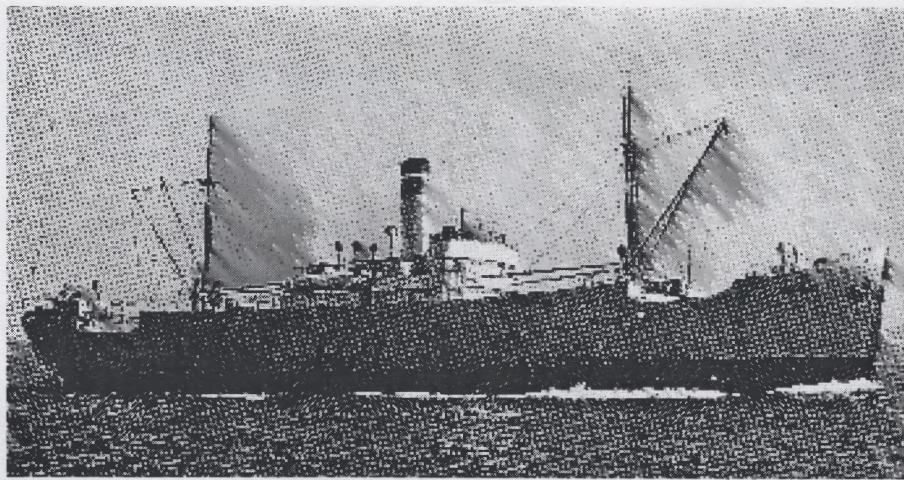
(1) The KS-509 Convoy was between Bethel and St. Lucie Shoals at Lat. 27.30 N., Long. 79.55 W. No air coverage.

(2) The KS-508, escorted by the **Borie**, dispersing in Rebecca Straits near Rebecca Shoal Light. The **Borie** forming a five vessel convoy for Caribbean ports via the Yucatan Channel.

B.--Surface Operations

(1) The Miami Hunting Group five PC's, **508, 513, 484, 492** and **550** enroute to Miami now at Lat. 20.40 N., Long. 79.45 W.

(2) Key West Hunting Group-same vessels as at 1600-continuing aggressive submarine hunt in the area twenty miles south of Sand Key. The USS **Noa** nearing area to join hunt. At 1950 EWT the **PE-27** reported that the **Thetis** fired charges at 1556 Queen on sub tract at Lat. 24.07 N., Long. 81.58 W. bringing oily bubbles to the surface. The **Eagle 27** then attacked spending all



The Norwegian steamer **Gunvor** was sunk on June 15, 1942 when she strayed into the minefield. Photo credit: Monroe County Library.

depth charges causing large oil and air bubbles to come to the surface.

(3) The **PC-499** A/S and W patrol convoy anchorage.

(4) The **PC-498** enroute from Key West to Burwood was at Lat. 25.59 N., Long. 86.29 W.

C.--Routine Surface Operations
None.

D.--Air Operations other than Air Coverage

(1) One PBV plane from Sqd VP-81 Key West departed at 2005Q for night search and patrol of the Yucatan-Grand Cayman Area to return at 0800/14.

(2) One Army B-18 Bomber from Key West conducting visual and Radar search in the area where aggressive anti-submarine hunt is going on south of Sand Key.

(3) At 1940 Q one B-18 Bomber from Key West departed with orders to search area near American Shoals at Lat. 24.28 N, Long. 81.21 W., where at 1930 Q a submarine was located by RD/F fix.

(4) Following the search at American Shoals the B-18 Bomber was directed to return to base where the pilot was given immediate orders to proceed to Lat. 23.53 N., Long. 84.12 W., and investigate a reported submarine sighting by the SS **Atlantida**.

E.-- Submarine Situation

(1) At 1930Q the Army reported that RD/F fix located a submarine near American shoals at Lat. 24.28 N., Long. 81.21 W.

(2) At 2000 Q the SS **Atlantida** reported sighting what is believed to be a submarine at Lat. 23.53 N., Long. 84.24 W.

Gulf Sea Frontier Operations as of 2400 EWT, June 13, 1942.

A.--Convoys

(1) The KS-509 Convoy was at position Lat. 26.39 N., Long. 79.49 W.

(2) The **Borie** Southbound Convoy was at position Lat. 24.04 N., Long. 83.23 W.

B.--Surface Operations

(1) The Miami Hunting Group-five PC's, **508, 513, 484, 492** and **550**, were off Miami.

(2) The Key West Hunting Group--**Dahlgren, PE-27, Thetis, Triton, USS Noa, PC-518, PC-519, PC-540, PC-497, Nemesis**, and **PE-56** were continuing submarine hunt 20 miles south of Sand Key.

(3) **PC-499** anti submarine and warning patrol convoy anchorage.

(4) The **PC-498** enroute from Key West to Burwood was at position Lat. 26.36 N., Long. 87.20 W.

Mine Warfare off Key West

During World War II the Navy created a large minefield to the northwest of Key West. The field provided a anchorage safe from enemy submarines for merchant vessels waiting to sail with a convey. The minefield was to claim three merchants ships, **Luckenback**, **Bosilijka** and **Gunvor**, and one Navy destroyer, **USS Sturtevant**, all by accident. Following is the Seventh Naval District plan for maintaining the field and protecting the area from enemy mines.

Minesweeping Plans

Annex "A" to

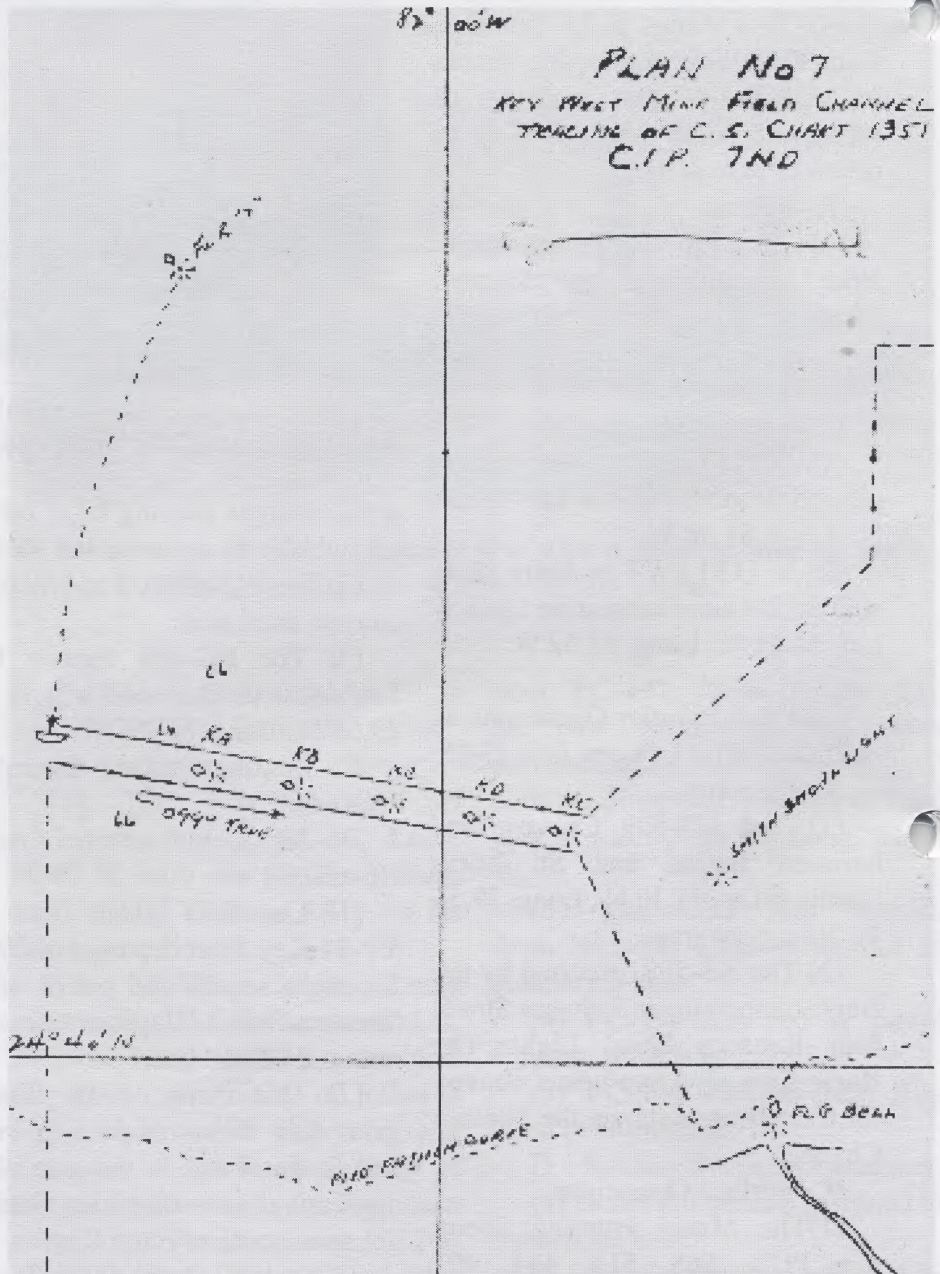
Commander Inshore Patrol
Operation Plan No. 1-43

Preface to Minesweeping Plans
Covering Specific Area in Seventh
Naval District

1. The following plans have been formulated in order to standardize and simplify minesweeping procedure in the Seventh Naval District.

2. These plans contain sufficient information to enable Section Commanders to initiate sweeping operations by reference to a specific plan number. As technical minesweeping data are constantly being revised to keep abreast of new developments, information concerning current, field strength, intervals, distance, formation, etc., is not listed in these plans. General instructions to mine sweepers will be issued from time to time by Commander Inshore Patrol to disseminate general policies of procedure and information for upkeep aid care of minesweeping vessels and gear.

3. The senior officer in tactical

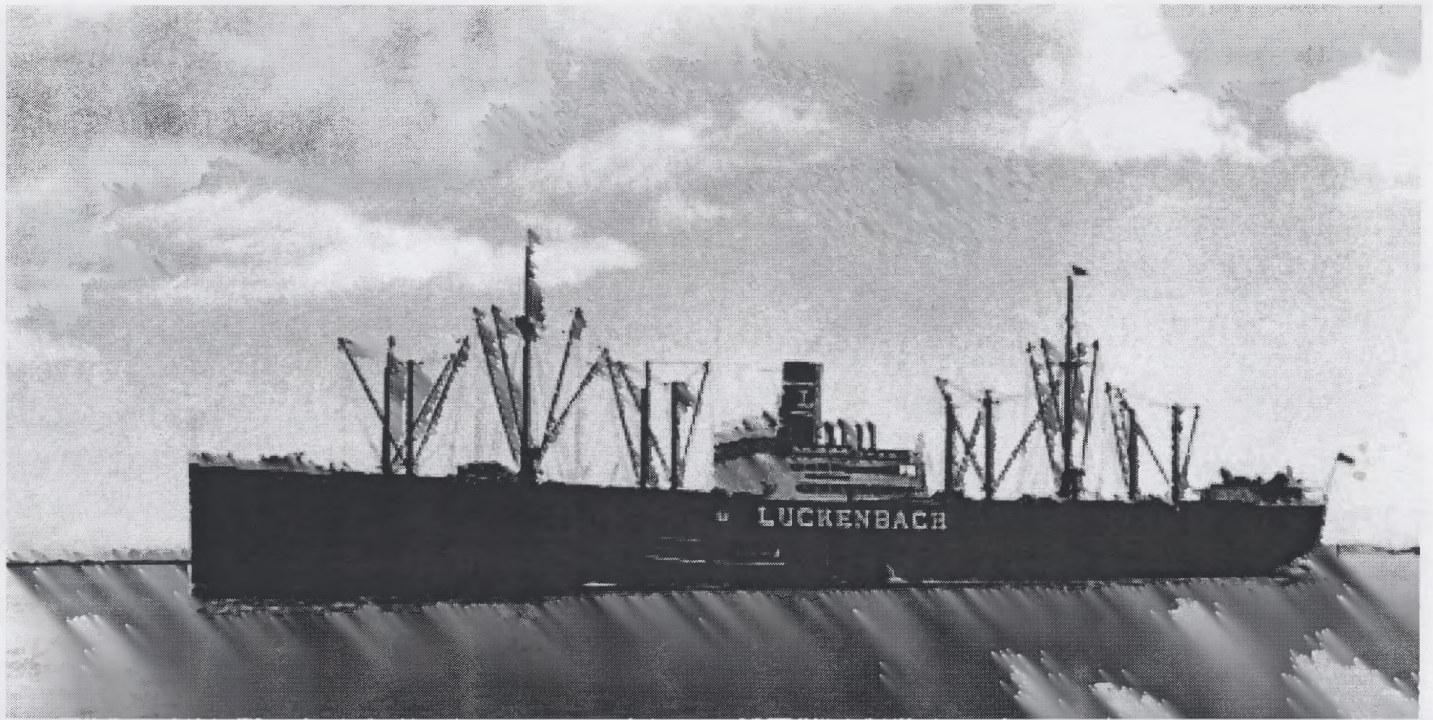


The clear channel to the anchorage inside the minefield. Photo credit: National Archives.

command will supervise and direct the actual minesweeping and carry out the provisions of the operation order in accordance with the latest instructions contained in Ships 6, Ships 7, F.T.P. 204, Mine Warfare Notes, and various Bureau letters.

4. Channel sweeps shall be clearance sweeps while sweeping in approaches and sea lanes shall be exploratory.

5. Although combination magnetic-acoustic mines have not been mentioned in these plans, all magnetic sweeping operations will be conducted so that effective countermeasures are employed against such mines. Ships will keep their acoustic gear in operation at all times while magnetic sweeping is in progress, i.e., the acoustic



SS Edward Luckenbach was sunk when it strayed into the minefield on July 2, 1942 with the loss of one crewman. The cargo was 10,000 tons of tungsten, one-sixth of supply of the ore then available. Photo credit: Monroe County Library.

hammer will be operating forward while pipes are being towed over the stern. As degaussing protects a minesweeper against magnetic mines, so does acoustic sweeping gear protect the minesweeper against sonic mines. Hence, minesweepers should not enter a suspected area without acoustic minesweeping gear in operation.

6. Although these plans do not mention the possibility of mining by enemy aircraft, it cannot be ignored. Past experience has demonstrated such mining attacks are most efficient and effective. Mining by aircraft affords an opportunity for influence ground mines to be planted in channels and harbors inaccessible to enemy surface craft and submarines. Inshore Patrol vessels and Harbor Entrance Signal Stations shall at all times be on the alert to observe any suspicious objects dropped from unidentified planes.

Plan No. 6

(a) GENERAL AREA: Key West

Section.

(b) SPECIFIC AREA: Key West Main Ship Channel and Approaches.

(1) Main Ship Channel: From point "AFFIRM" Latitude 24° 25'48" N., Longitude 81° 47' 54" W., thence along Main Ship Channel Range Line to Eastern Triangle Light, thence on course 335° true to Lighted Buoy No. 6. The swept channel is 600 yards in width except where channel is narrowed for navigational purposes.

(2) Approaches: All probable shipping approaches to the above channel from Lighted Whistle Sea Buoy seaward to the forty fathom curve.

(c) A chart plot or overlay showing above area is attached hereto.

(d) Minesweepers based at Section Base, Key West, will sweep this area.

(e) Probable types of mines to be encountered

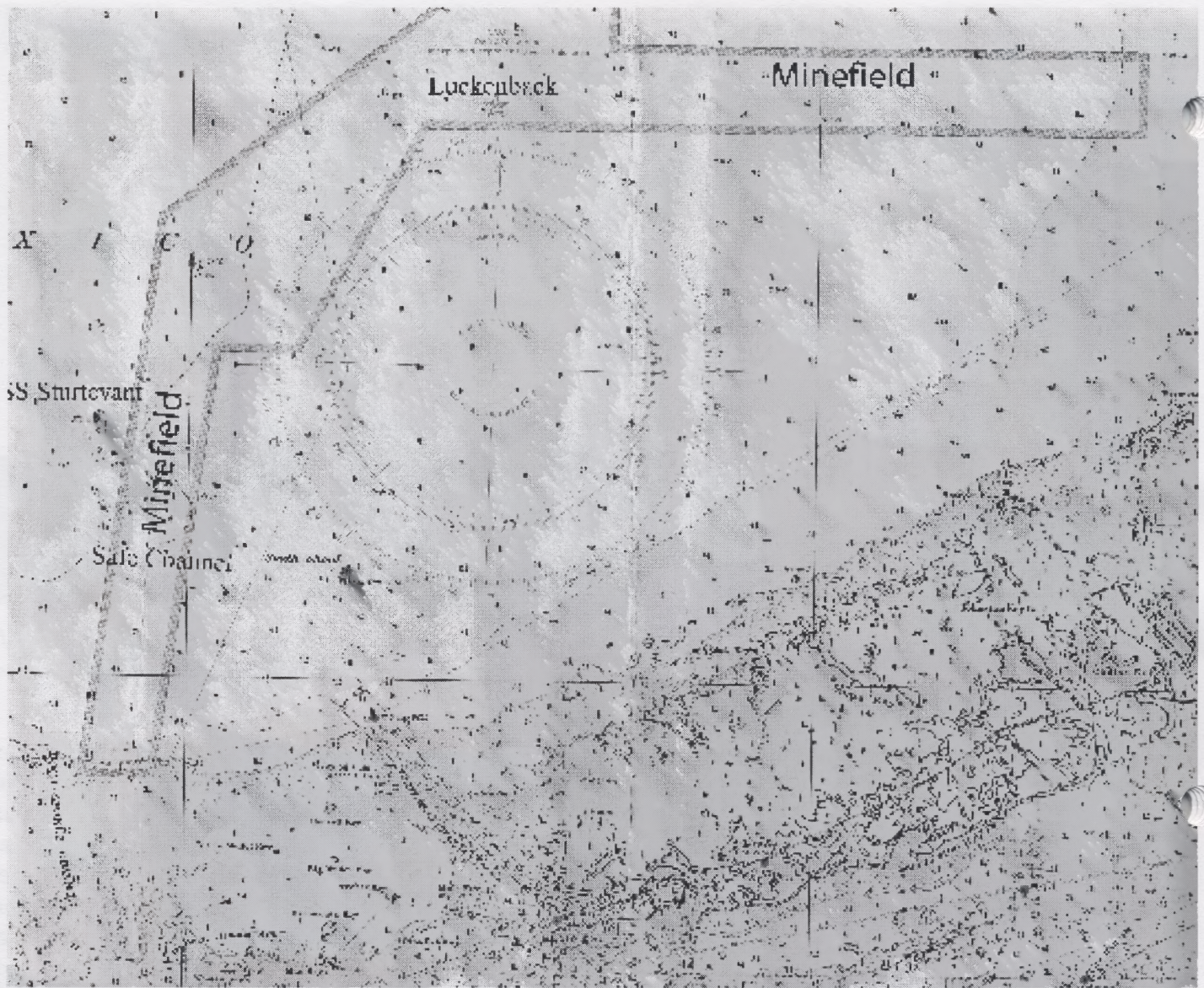
The area from Lighted Buoy

No. 6 to the Sea Buoy is situated on a "shelf" which has a controlling channel depth of approximately thirty feet. No minelaying submarine would submerge in such depths, and it is extremely doubtful if an attempt will be made to enter this channel surfaced for influence minelaying operations. The possibility of such mines as far in the Channel as Lighted Buoy No. 6 cannot be ignored, however. The shallow depths and rocky bottom here virtually prohibit the use of moored mines.

Seaward from the Sea Buoy the depth of water increases very rapidly. This fact coupled with strong currents would hamper attempts at successful moored minelaying operations in this area. An influence ground mine is the type of mine most likely to be laid in the approaches to the Main Ship Channel.

(f) Single ship magnetic,

(Continued on page 10)



The U.S. Navy minefield to the north of Key West. The SS **Edward Luckenback**, **USS Sturtevant** and the safe channel were to added to the chart. Photo credit: Monroe County Library.

(Minefield from page 9)

acoustic, and "O" type sweeps will normally be employed to locate mines in the above area. When it has been ascertained that enemy mines have been laid in the area, multiple ship sweeps will be employed.

(g) Streaming of the magnetic and acoustic sweep gear will be conducted inside the harbor, while recovery may be carried out in the most advantageous location depending upon circumstances. "O" type sweeping operations will be conducted in the approaches only.

(h) As ocean-going merchant

vessels and numerous U. S. Navy vessels frequent Key West Main Ship Channel and approaches daily, magnetic and acoustic minesweeping operations will be conducted in this area each day during the earlier hours of the morning. An occasional sweep for moored mines in the approaches will be made.

Plan No, 7

(a) GENERAL AREA: Key West Section.

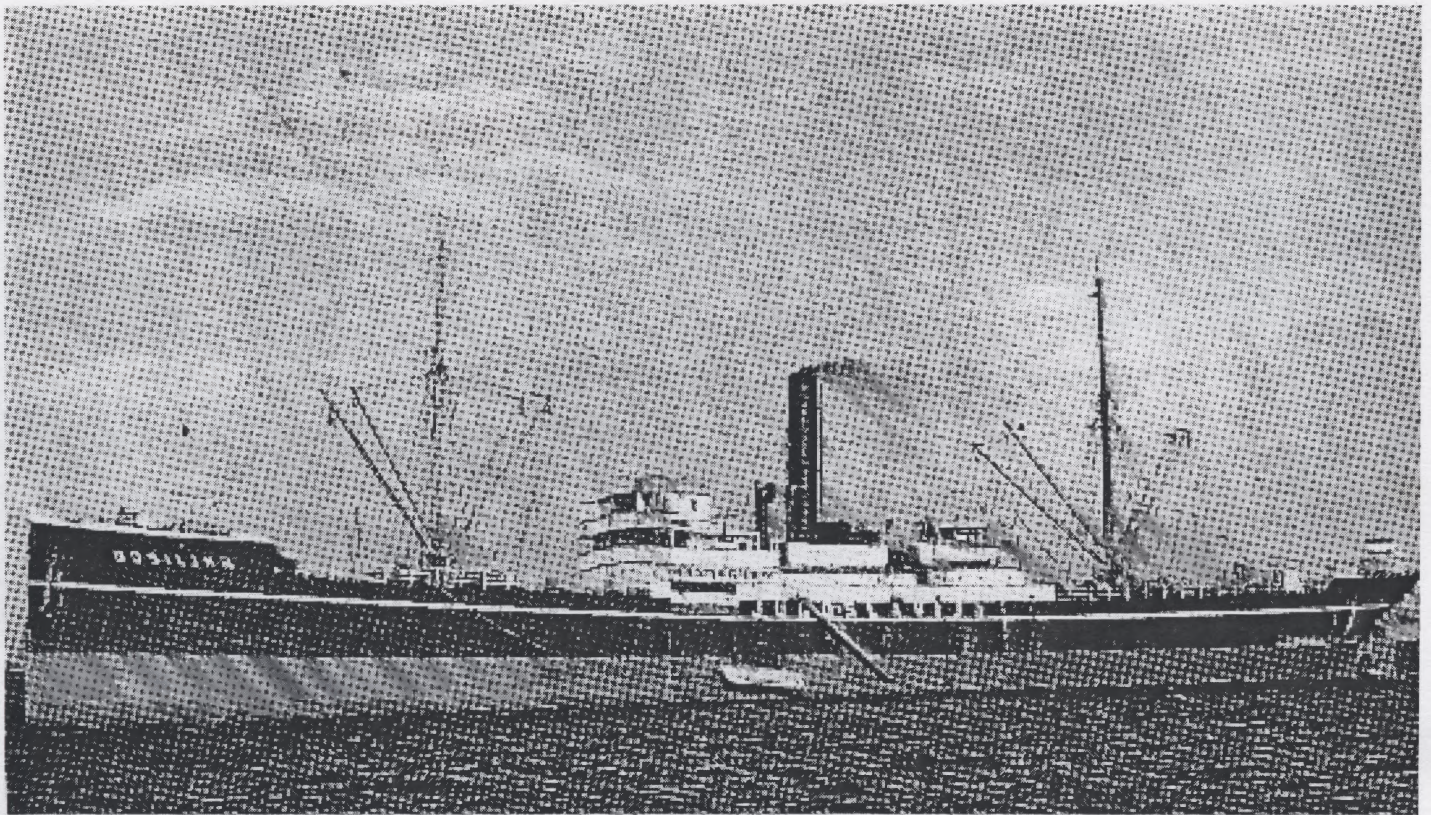
(b) SPECIFIC AREA: Key West Minefield Channel and Approaches.

(1) Minefield Channel: From

Key West Lightship in Latitude 24° 45'12" N., Longitude 82°07'21" W. on a line 099° true marked by five vertically striped mid-channel buoys situated approximately 1.5 miles apart. These buoys beginning from seaward are lettered KA, KB, KC, KD, and KE respectively; Buoy KE marking the inner end of the channel. The swept channel is approximately 1000 yards in width.

(2) Approaches: All probable shipping approaches to the channel within an area of four miles from the Lightship.

(c) A chart plot or overlay showing above area is attached.



The steamer **Bosilijka** was sunk in the minefield on June 19, 1942 on a voyage from New Orleans to Key West.
Photo credit: Monroe County Library.

(d) Minesweepers based at Section Base, Key West, will sweep this area.

(e) Probable types of mines to be encountered:

(1) U. S. Navy moored-contact mines: These mines, which have been laid on either side of the channel, may be encountered in this area as "creepers"; i.e. mines which have not broken loose from their moorings, but which, due to adverse weather conditions or currents, have crept along the bottom intact. Such mines may also be encountered as "drifters"; i.e. mines which, as a result of adverse weather conditions and currents or inherent defects, have broken loose from their moorings, risen to the surface, and remain afloat due to their positive buoyancy.

(2) Enemy mines: The depth of water, currents, and bottom in this area are favorable for any type of mines which the enemy might desire to plant. The hazards and difficulties involving a minelaying

operation by surface or sub-surface craft in the Minefield Channel itself is apparent. No enemy mines are likely to be encountered there. It is entirely possible that all types of enemy mines may be encountered in the approaches.

(f) "O" type single or two-ship sweeps may be employed to locate "creeping" U. S. Navy mines and enemy moored mines. If necessary, motor launch "O" type gear (No. 5) may be used against U. S. mines. Single ship or two-ship synchronized magnetic and acoustic sweeping operations will be employed to counter enemy influence mines.

(g) Streaming of all sweep gear shall be done in the vicinity of Smith Shoals Light unless specific operations require otherwise. Upon conclusion of operations, the sweep gear may be recovered at any point where most practical.

(h) Although the Key West Convoy Anchorage at present is

not being used as extensively as in the past, its importance should not be underestimated. The Minefield Channel and its approaches shall be kept free of all types of mines. Daily sweeps for magnetic, acoustic and contact mines shall be conducted; sweeps for enemy and U. S. Navy type moored mines shall be conducted simultaneously. Clearance sweeps shall be performed in the channel, while those in the approaches will be exploratory in nature.

(I) In addition to the sweeping of "creepers" and spotting of "floaters" in the channel and approaches, it is necessary to insure that these mines do not penetrate the Convoy Anchorage or drift to seaward. Hence, after heavy weather or violent storms, a sweep shall be conducted for such mines around the inner and outer edges of the minefield. (See Confidential Chart of Key West Convoy Anchorage on page 10.)

The Maitland Restoration Area of Carysfort Reef

A graveyard containing the remains of a number of ships

By Denis B. Trelewicz
Copyright 2003

Approximately 1 & 1/2 nautical miles southwest of Carysfort Light Tower is a large concrete slab which was installed in 1994 on a section of reef where the MV **Owen Maitland** grounded on October 25th, 1989. The slab is in water about 6 to 7 feet below the surface. Although the MV **Owen Maitland** was the last vessel known to whack the reef in this general location, it was not the only one to strike it over the last several hundred years. Within a radius of approximately 250 yards around the slab one can find evidence of the remains of a number of ships. The remains, namely ballast, are scattered about and several ballast trails merge. There are also numerous iron members strewn about.

I have detected what appears to be 7 distinct sites. Several of these particular sites, the remnants remaining have been sufficient enough to enable the vessels to be identified. The ships that have been identified are:

Vessel	Date Wrecked
HMS Winchester	Sept. 24, 1695
Menemon Sanford	Dec. 10, 1862
Brig Correrro	April 2, 1829

Endeavors to identify the remains of the others has not been very successful. Unfortunately, not enough of the wrecks exist to be able to make some guess of the identity of the ship. The current in the Maitland Restoration area can be somewhat strong. A speed of 1 ft/sec, about 0.6 knots, was observed during a field survey conducted by Olsen Associates, Inc. in July 1993.¹ The limerock bottom is often times



A cannon in the Maitland restoration area of Carysfort Reef. Photo credit: The Author.

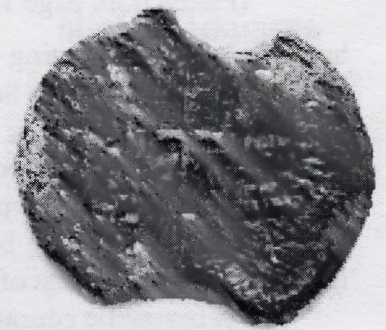
swept clean of sand and coral rubble and loose artifacts on the bottom are tumbled about, especially during times of high winds. On a number of occasions I have seen exposed ship's fittings and fragments of dark black/green glass, remnants of wine bottles, only to note that they were covered over and obscured from view when next I visited the site. Within this area, over the last few

years, I have found seven Enfield rifles. (Caliber .577, pattern 1853, manufactured by the Birmingham Small Arms Company.) These guns were jettisoned by soldiers of the 156th New York Volunteers when the sidewheel steamer **Menemon Sanford** grounded and subsequently bilged on the reef on the morning of December 10th, 1862. The 800 troops that were on board the

Sanford were destined to join up with the forces of Union Major General Nathaniel P. Banks that were garrisoned in New Orleans. All the troops and the crew of the **Sanford** were rescued and taken to Key West. The rifles that were found on the bottom are all in extremely poor condition. After being in sea water for over 140 years, mother nature has taken her toll on the guns. The wooden stocks are almost completely gone and the steel barrels are nearly corroded through. It is worth noting that under a NOAA recovery permit, one gun was recovered several years ago and conserved by the State of Florida Conservation Laboratory located in Tallahassee. The rifle is now on display at the offices of the upper region of the Florida Keys National Marine Sanctuary, Mile Marker 95.

Just south of the Maitland concrete slab, some 20 yards away in about 7 feet of water, is an iron cannon, measuring 51/2 feet long. The gun appears to be of British manufacture and of the Armstrong-Frederick pattern of 1760. In the immediate vicinity of the cannon is a trail of ballast stones, some angular in shape and a few rather large in size. I have estimated that these large stones weigh in the vicinity of 250 to 300 lbs. The ballast trails off in a westerly direction to a grassy area.

Some 35 years ago, before the establishment of John Pennecamp State Park and the Florida Keys National Marine Sanctuary, several salvors searched this area of the reef. [Jim Longendyke, Len Cecil, Bobby Kline to name a few who have passed away several years ago. With their passing, so too did the information they amassed on sites they searched have also passed away and unfortunately, very little



The back and front of the Papal Bull. Photo credit: The Author.

of what they have found has been documented.] Notwithstanding, one old salvor who canvassed the site of the wreck of the Spanish mail brig **Currerro**, Roger Hoke, shared with me one of his finds. This artifact I feel is extremely interesting and deserves to be documented and reported upon. Shown in the photographs are each side of the lead seal, generally referred to as a "Papal Bull."

The facial imprints on one side are those of the Apostles Peter and Paul. On the reverse side, in block letters, is the embossed inscription:

BENE:
DICTVS
PAPA
XIV

This seal was probably issued sometime during the reign of Pope Benedict XIV (1740-1758) was found by Roger on the site which is believed to contain the scattered remnants of the **Correrro**.² The Vatican Prefect, F. Sergio Pagano, B., in a letter to me dated July 23rd, 2002, informed that it was his opinion that the Pontiff, Pope Benedict XIV, possibly issued hundreds of these seals. They were attached to papal "patents" and "the clausae" letters and some "formulae iuramenti."

On the **Correrro** site are found quantities of ballast stones and segments of iron ship's members

along with bronze spikes and copper sheathing nails. Also are found are numerous fragments of lead sheathing. For some time I have suspected that in this scatter are also remains of an earlier wreck dating to the 18th century. The finding of the Papal Bull seems to lend some support to this theory.

1 Kevin R. Bodge, Ph D & Christopher G. Creed "Conceptual Engineering Alternatives For Structural Restoration of the Maitland and Elpis Grounding Sites, Florida Keys National Marine Sanctuary" Olsen Associates, Inc. Jacksonville, FL August 25, 1993, Pg. 8.

2 In the FLORIDA HISTORICAL QUARTERLY of January 1963, pages 239-273, E.A. Hammond describes the circumstances of the wreck of the **Correrro** in his article, "Wreckers and Wrecking on the Florida Keys". According to what Hammond stated and what was uncovered from Key West Admiralty Court records, the crew and cargo of treasure were saved.

Denis B. Trelewicz is a resident of Key Largo and for more than ten years has worked with Chuck Hayes documenting wreck sites in the Upper Keys for the Florida Keys National Marine Sanctuary. He was named an "Environmental Hero" by former Vice President Al Gore. Denis is a retired Major, USAF Reserve.

(Pierce from page 1)

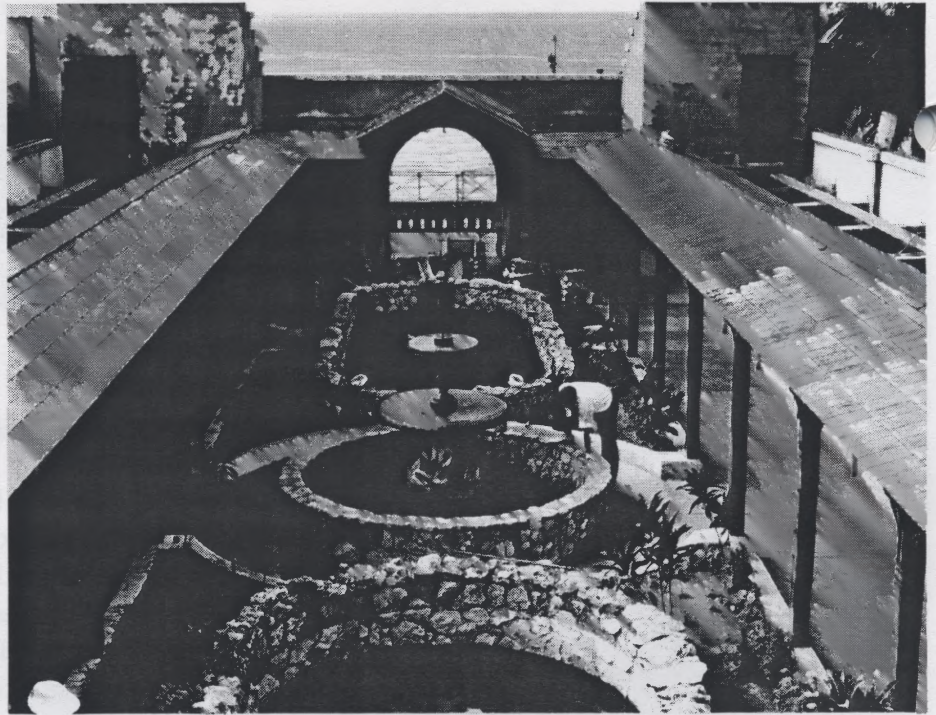
harpoon into a large sting ray and being pulled almost out to Sand Key before the unfortunate ray expired and he could get the harpoon out. It was a long row back, probably explaining why E. Lowe built and loved motorboats the rest of his life.

All of his public education was in Key West, except for one year at a military academy that his parents thought he needed. He never said what it was that he was lacking in, but he returned to Key West the next year and graduated from high school in the building now known as Glenn Archer Elementary School on White Street. The next year he began college at the University of Florida.

While the Overseas Railroad was in operation during his early adulthood, he recalled most of his trips to Gainesville involved changing from ferries to buses to ferries as he moved his way from one island group to the next and making it to Miami the same day if everything went well.

He majored in biology at the University, after first attempting chemistry at the urging of his father, who at the time was the Key West city engineer and saw chemistry as a burgeoning field in the 1930s. An early "D" in one of his classes convinced E. Lowe that chemistry was not for him.

After graduating he returned to Key West and entered island life. Presumably he lived at home, but he took a job at the Key West Aquarium where he met Ernest Hemingway. According to Pierce, Hemingway was preparing for an African safari and was trying to raise money. Hemingway had placed an ad in the paper selling an outboard motor. E. Lowe responded to the ad, looked at the motor, and told Hemingway he would pay him five dollars



Key West Aquarium as it looked when E. Lowe Pierce was working there. Photo credit: Monroe County Library.

for it. Hemingway agreed, and the next day Hemingway brought the motor to the Aquarium and E. Lowe gave him the money. E. Lowe also asked for a signed receipt, as Hemingway was even then a famous author. Ernest Hemingway wrote out a receipt to Lowe Pierce for the purchase of one outboard motor and left for Africa.

Perhaps Pierce was star struck but he never tried out motor before Hemingway left the island. At some point later he realized the motor was frozen from lack of maintenance and was no good. Pierce waited until Hemingway returned from Africa and went back to him and asked for his money back. They exchanged motor and money, but E. Lowe kept the receipt for the next forty years, showing it to people periodically. Eventually his eldest son ended up with the receipt, who gave it to Rear Admiral "Buck" Lee, a long time island resident when the Pierce family moved off the island in 1977.

Following the stint at the Aquarium, Pierce left for England

where he received a Master's from the University of Liverpool and then returned to the University of Florida and earned a Ph.D. in marine biology, specializing in a marine invertebrate known as the lancelet, the first animal to develop a backbone, although its backbone is made out of cartilage, not bone as humans have.

By now World War II was building and Pierce, because of his specialized training, remained a

EDUCATION PROGRAM
SPONSORS
\$100 OR MORE

RALPH & MARY BATES
BENJAMIN "DINK" BRUCE
BETTY L. DESBIENS
BUD DRETTMANN
JOHN & BEATRICE DUKE
MARY HAFFENREFFER
TOM & LYNDA HAMBRIGHT
DR. & MRS. RICHARD F. HNAT
CLYDE W. HENSLEY
JOHN H. JONES
EDWARD B. KNIGHT
ANTHONY & EMILY LANG
MR. & MRS. W.S. MACGRATH, JR.
RADM J.H. MAURER
ROSS & ANN MCKEE
DEAN & JOAN MCCLURE
BILL MUIR
HARRY J. PIERCE
JOHN & KAY PLIMPTON
LARRY & GRETCHEN RACHLIN
MRS. WILLIAM SHALLOW
ED SWIFT



The Pierce home at 417 Fleming Street. Photo credit: Tom Hambright.

civilian but was assigned work at the Boston shipyard, where he worked on a project to develop anti-fouling paint. He remained in Boston three years, and met his future wife there, Margaret Louise Haskell, while, he was playing a game of checkers with fellow apartment dweller Richard Eberhardt, a future Pulitzer prize-winning poet. Margaret was visiting Eberhardt's wife. Margaret had a room on the top floor of the apartment building, E. Lowe had a room in the basement and the Eberhardts were somewhere in between.

E. Lowe and Margaret were married in Boston in June 1944. After the war they left Boston, moving to Gainesville, where E. Lowe became and remained a professor of marine biology at the university for the next twenty-five years. During that time he developed an association with Archie Carr and traveled with on some of the early turtle expeditions, where they searched Caribbean for large breeding grounds of the green turtle. In spite of this scientific interest in green turtles, E. Lowe's mother, Kathleen Williams Fierce, could not resist providing one of her

favorite meals when he would visit home periodically, green turtle steak

E. Lowe retired in 1970 and the family moved back to Elizabeth Street to take care of his elderly parents. Pierce became employed as the resident biologist for Sea Farms, an experimental shrimp farming company based in Key West, until the company folded in 1974. His youngest son, Alan Fierce, graduated from Key West High School in 1973. E. Lowe loved Key West, and loved the everything associated with the water. He died at 417 Elizabeth St. on August 28, 1977, leaving behind his wife, and four children, Emory, Joan, Helen, and Alan.

E. Lowe Pierce's genealogy includes Cousin Eugene Otto (Key West artist), and Uncle L. E. Pierce (whose two houses for two daughters still stand on Fleming Street). Relatives still living in Key West include Cousin "Dent" Pierce, Monroe County Public Works Director, and his family.

Alan C. Pierce is the son of E. Lowe Pierce. He is employed as county planner for Franklin County in Northwest Florida and serves as mayor of Apalachicola.

BUSINESS MEMBERS

COASTAL SAILING ADVENTURE, INC.
28555 JOLLY ROGER DRIVE
LITTLE TORCH KEY, FL 33042-0839 295-8844

CONCH COIN COMPANY
P.O. BOX 4075
KEY WEST, FL 33041 296-5366

CONCH TOUR TRAINS, INC.
601 DUVAL ST.
KEY WEST, FL 33040 294-4142

FLORIDA KEYS DISCOVERY
P.O. BOX 430137
BIG PINE KEY, FL 33042 872-3725

FRIENDS OF ISLAMORADA AREA STATE PARKS
P.O. BOX 236
ISLAMORADA, FL 33036

HERITAGE HARBOR TOURS
201 FRONT STREET
KEY WEST, FL 33040 305-295-8687

HISTORICAL ASSOCIATION OF SOUTHERN FLORIDA
101 W. FLAGLER STREET
MIAMI, FL 33130 305-375-1492

HISTORICAL PRESERVATION
SOCIETY OF THE UPPER KEYS, INC.
P.O. BOX 2200
KEY LARGO, FL 33037

KEY WEST AQUARIUM
#1 WHITEHEAD STREET
KEY WEST, FL 33040 296-2051

KEY WEST BAR PILOTS ASSOCIATION
P.O. BOX 848
KEY WEST, FL 33041 296-5512

KEY WEST CONCH HARBOR
951 CAROLINE STREET
KEY WEST, FL 33040 294-2833

KEY WEST ENGINE SERVICE, INC.
P.O. BOX 2521
KEY WEST, FL 33045

THE LANGLEY PRESS, INC.
821 GEORGIA STREET
KEY WEST, FL 33040 294-3156

MEL FISHER MARITIME HERITAGE SOCIETY
200 GREENE ST.
KEY WEST, FL 33040 294-2633

MYSTIC SEAPORT
P.O. BOX 6000
MYSTIC, CT 06355-0990

OLD TOWN TROLLEY
6631 MALONEY AVENUE
KEY WEST, FL 33040 296-6688

PIGEON KEY FOUNDATION
P.O. BOX 500130
MARATHON, FL 33050

A.R. SAVAGE & SONS, INC.
1803 EASTPORT DR.
TAMPA, FL 33605 813-247-4550

SEACAMP ASSOC.
RT. 3, BOX 170
BIG PINE KEY, FL 33043 872-2331

SEA STORE
614 GREENE ST.
KEY WEST, FL 33040 294-3438

SOUTHERNMOST HOTEL IN THE USA
1319 DUVAL STREET
KEY WEST, FL 33040 296-6577

ST. LOUIS AUTOMATIC SPRINKLER CO.
3928 CLAYTON AVE.
ST. LOUIS, MO 63110 314-533-7710

WOODEN BOAT BUILDER
THOMAS A NOEKER
101 MARGARET STREET
KEY WEST, FL 33040 292-7984



Key West Bight about 1900. The building to the left is at the corner of Elizabeth and Greene Streets. Photo credit: Monroe County Library.

KEY WEST MARITIME HISTORICAL SOCIETY
P.O. BOX 695
KEY WEST, FL 33041

NONPROFIT ORG.
U.S. POSTAGE
PAID
KEY WEST, FL
PERMIT NO. 30