

The following article appeared in the April 2002 edition of Sea Classics magazine, and is reprinted with the permission of Bruce Bailey. Bruce Bailey served as QM3 on the USS Scanner, AGR-5, from 1959-61. He retired from the navy as Chief in 1979, and currently lives in California.

THE DEW LINE PATROL: OCEAN RADAR STATION SHIPS

A nostalgic look at the lonely vessels of the Distant Early Warning (DEW) network which were our first line of defense in the early days of the Cold War.

BY BRUCE BAILEY

USS INTERDICTOR (AGR-13) was one of 16 war-built "Liberty" ships specially converted for the Distant Early Warning (DEW) network fleet of radar pickets in the mid-'50s. They served nearly a decade as America's first line of radar defense against enemy attack. They were armed with two 3-inch/50 DP guns in open mounts on the bow and stern. Note the addition of heavy masts to support the radar antennas.

ASSUME THE WATCH

Shortly after World War II, the United States, with agreement from Canada, created a line of radar stations running east and west across the continent just north of Canada. This line, designated the Distant Early Warning Line (DEW Line), was to serve as an early warning against missiles from Russia.

In the early 1950s, the U.S. Air Force extended the DEW Line seaward into the Pacific and Atlantic Oceans. To augment the airborne radar planes (EC-121 Super Constellations) and the system of fixed radar platforms called Texas Towers, the U.S. Navy bought sixteen Liberty hull cargo ships (ES2-S-C1) and converted them into Ocean Radar Station ships.

These ships, displacing about 10,000 gross tons each, averaged 441 feet in length with a beam of 57 feet and a draft of from 24 to 27 feet. Top speeds averaged 11 to 12.5 knots.

All were originally launched between March and September 1945, and were converted at the Charleston, Philadelphia, or Portsmouth Naval shipyards.

The conversions, costing about \$3.5-million each, included



communications equipment, advanced air- and surface-search radars, two 3-inch/50-caliber guns, one on the bow, one on the stern, and enhanced habitability.

The first Ocean Radar Station ship, the USS *GUARDIAN* (YAGR-1) was recommissioned 1 February 1955. Three more followed that year. Six more YAGRs joined the Navy's roster in 1956, followed by two more in 1957, three in 1958 and one in 1959.

Designated Miscellaneous Auxiliary General Radar (YAGR), these ships marked a new concept in Naval shipbuilding and were the first, and last, ships specifically designed to provide extended radar coverage of the seaward approaches to the United States.

Each picket ship's complement averaged 138 enlisted men and thirteen officers. Commanding officers were usually lieutenant commanders and executive officers were lieutenants.

After commissioning, the sixteen pickets were assigned to the Continental Air Defense Command (CONAD). Then they were split into two squadrons of eight ships each.

The Continental Air Defense Command was established in 1954 and discontinued in 1975. While many picket ships were originally assigned to this command, others, especially those on the West Coast, operated with the North American Air Defense Command (NORAD), which was headquartered in Cheyenne Mountain, near Colorado Springs, Colorado.

While records are unclear whether both commands operated concurrently or if one handled the East Coast and the other the West Coast, records



First identified as YAGRs, the designation was shortened to AGR in 1958. USS *LOCATOR* (AGR-6) recommissioned in January 1956 and retired in August 1965. *LOCATOR*, like most of her sister-AGRs, was scrapped in the early 1970s. Space satellites replaced the AGRs, rendering them totally obsolete by the mid-'60s.

do show that some pickets served both commands.

Radar Picket Squadron One operated out of Treasure Island, San Francisco, California, and covered the West Coast. Radar Picket Squadron Two covered the East Coast and was homeported at Newport and Davisville, Rhode Island.

YAGRs on the West Coast covered an offshore area from the Washington/Canadian border south to Mexico. Their five, fifty-mile diameter patrol stations, numbered 1, 3, 5, 7 and 9, were about 500 miles off Washington, Oregon, San Francisco, San Diego, and Mexico, respectively.

In September 1958, the YAGRs were reclassified Radar Picket Ships. And the embarrassing symbol "Y," Miscellaneous, was removed from their designations.

DUTY

While duty at sea and in port was, by many Navy standards, luxurious, the expression "Join the Navy and See the World," did not apply to YAGR sailors.

Other than one, two-week period of training in San Diego, California, and a one-week visit to Vancouver, British Columbia, the author's two-year tour aboard the USS *SCANNER* (AGR-5) consisted of blank sea and sky and San Francisco.

Officially attached to the U.S. Navy for administration, much of the daily operations was directed by the U.S. Air Force. More often than not it was an officer from the Air Force — not the Navy — who would be piped aboard for an official visit or inspection.

Operating independently gave the captain freedom to conduct as many drills and maneuvers as he wanted. Or

to conduct as few, as was more the case. Each patrol (on the *SCANNER*) usually included one General Quarters drill and one man overboard drill. Target practice off the fantail included firing pistols, rifles and shotguns. The two 3-inch/50-caliber guns were rarely fired except in training.

The *SCANNER* also carried an aerography (weather forecasting) unit. While the ship's quartermasters were responsible for completing comprehensive hourly weather reports, including sea temperatures and soundings, the aerographers conducted daily weather balloon launches and recorded upper air temperatures and wind direction and velocity.

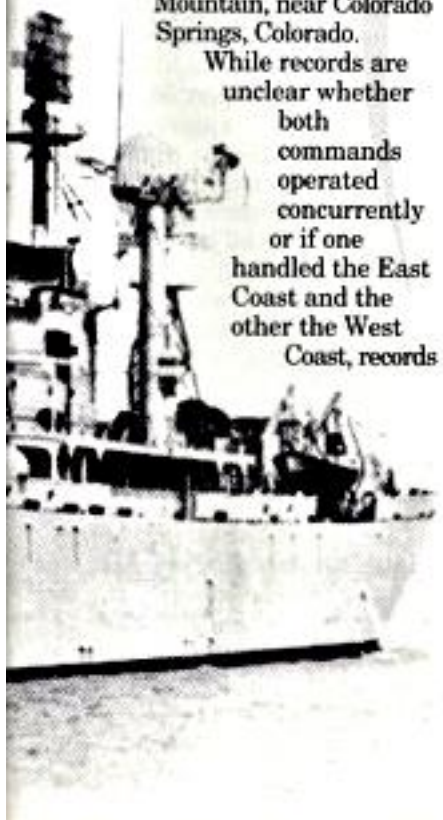
An inspection of all spaces, called a zone inspection, was conducted once each patrol. And a personnel inspection was held just before arriving in port.

Although all ships had a good ten years of sea travel under their keels before becoming picket ships, few on the West Coast ever failed to meet a patrol assignment. Indeed, the USS *SCANNER* never failed to make or complete a patrol during the author's two-year tour.

Averaging seven thirty-five-day patrols a year it was easy to see why the yearly record holder in the Navy's "most-continuous-days-at-sea-on-operations" category was a radar picket ship. Indeed, for several years from 1959 to 1965, the only ships with more time at sea per patrol were U.S. Coast Guard lightships.

HABITABILITY

Because prolonged patrols at sea were required, a large percentage of the conversion costs went into habitability. For example, officers enjoyed individual paneled staterooms,



Chief Petty Officers lived one or two to a room, First Class Petty Officers slept in four-man rooms and all others enjoyed roomy, three-quarter-sized bunk beds, real mattresses, individual reading lights and spacious lockers.

The mess hall included four-place dining tables with foam-rubber cushions, a TV, plenty of ashtrays and all the coffee a sailor wanted.

Duty was divided into four sections of four hours each and the evening (4-8 p.m.) watch was dogged, split into two, two-hour watches, to enable the crew ample time to eat dinner.

While most of the pickets enjoyed spacious berthing and lounging quarters, each was free to "customize" its unused cargo holds. On the *SCANNER*, for example, the crew enjoyed a large lounge complete with tables, chairs, lamps and a piano in one hold. Other spaces housed a library/lounge, wood shop, leather shop and exercise hold, which included mats, ping-pong tables, weights and a volleyball court.

Another picket ship, the *USS WATCHMAN* (AGR-16), installed a basketball half-court in its forward hold, complete with a regulation hardwood floor and backboard.

When the Treasure Island Theater burned in 1959/60, the *SCANNER*'s recreation officer got several rows of movie seats which were welded in front of the ship's 20-by-20-foot screen. With plenty of hot popcorn and soda from the ship's store nightly movies on the *SCANNER* were nearly as grand as any on a luxury liner.

The fully stocked store and soda fountain opened twice a day at sea and once a day in port. Wednesday and Saturday afternoons were designated "rope yarn Sundays," time to mend or clean clothes. Actually it was time for letter writing, playing cards or fishing off the fantail. And with a patrol speed of around two knots, the fishing was easy.

Every Sunday was designated "holiday routine," no work except for watches. And while perhaps not as well furnished as the fancy hotel brunches, the *SCANNER*'s Sunday brunch pleased her crew and made the morning watches a bit brighter.

Letter writing consumed many off-duty hours, though of course no mail ever left the ship on patrol. But once per patrol picket ships would get a "mail drop" from one of the Air Force's radar planes as it flew out to her patrol station farther off the coast.

On the West Coast the Air Force



A stern view of *USS WATCHMAN* (AGR-16) shows the aft radar array to good advantage. They carried crews of 151, including 13 officers, who would rotate on 35-day patrols to predesignated sectors approximately 500 miles off the coast. *WATCHMAN* had the unique distinction of having a basketball half-court installed in her forward hold. Because of the length of their patrols the AGRs were fitted with excellent habitability for officers and enlisted men.

based its radar planes, EC-121 Super Constellations, at McClellan Air Force Base, California, while those on the East Coast flew from Otis Air Force Base, Massachusetts. Usually word of a mail drop came from Combat Information Center where radar operators sat in front of large radar screens scanning the skies. And from that moment, nearly every crewman off duty would venture topside to scan for the radar plane popping over the horizon.

While the plane flew about fifty feet off the water, one of its crewmembers tossed a large mail pouch out a hatch as the plane zoomed off. Painted international orange and encased in a rubberized pouch, the mail bag was usually netted in minutes of hitting the water.

"Mail Call" was the most eagerly awaited announcement after "Liberty Call." Although only one pouch was dropped per patrol each sailor received an average of five letters. Any news of an emergency nature could of course be sent via radio from Treasure Island.

Although picket ships carried corpsman, medical assistants, none carried a doctor so serious injuries would require medical evacuation. But this was costly and the injuries had to be nearly life threatening before a rescue helo would be dispatched.

Duty in port was arranged to maximize family and social time. Liberty began at noon daily and expired at 8 a.m. the following day. Weekend liberty was scheduled to allow three 72s, three-day periods of liberty, Thursday through Saturday, Friday through Sunday,

and Saturday through Monday. This schedule allowed each duty section at least one three-day weekend each inport period, which averaged three weeks.

TABLE III: SQUADRON ORGANIZATION

Radar Picket Squadron One Homeport: Treasure Island, San Francisco, California

USS Scanner (AGR-5)
USS Locator (AGR-6)
USS Picket (AGR-7)
USS Interceptor (AGR-8)
USS Interdictor (AGR-13)
USS Interpreter (AGR-14)
USS Tracer (AGR-15)
USS Watchman (AGR-16)

Radar Picket Squadron Two Homeport: Newport/Davisville, Rhode Island

USS Guardian (AGR-1)
USS Lookout (AGR-2)
USS Skywatcher (AGR-3)
USS Searcher (AGR-4)
USS Investigator (AGR-9)
USS Outpost (AGR-10)
USS Protector (AGR-11)
USS Vigil (AGR-12)

SHIPS

USS GUARDIAN (AGR-1)

The USS GUARDIAN, ex-JAMES SQUIRES, became the first Ocean Radar Station ship. Recommissioned 1 February 1955, at the Norfolk Naval Shipyard, Guardian reported to her homeport, Newport, Rhode Island, and served as part of Radar Picket Squadron Two, covering the East Coast.

The guardian also participated in antisubmarine warfare operations, a rare experience for radar pickets as none carried any sonar or antisubmarine weapons.

USS LOOKOUT (AGR-2)

The LOOKOUT, ex-CLAUDE B. KITCHEN, was recommissioned 5 March 1955, at the Charleston Naval Shipyard, South Carolina. After serving with Radar Picket Squadron Two, the Lookout was decommissioned 12 July 1965, at Bayonne, New Jersey.

USS SKYWATCHER (AGR-3)

The USS SKYWATCHER, ex-RAFAEL R. RIVERA, was recommissioned 29 March 1955, and assumed duties guarding the East Coast with Radar Picket Squadron Two.

SKYWATCHER was decommissioned in March 1965.

USS SEARCHER (AGR-4)

The USS SEARCHER, ex-JAMES W. WHEELER, was recommissioned 2 April 1955, and reported to Newport, Rhode Island, for duty with Radar Picket Squadron Two.

On 13 November 1955, SEARCHER suffered an explosion in her engine room which killed two crewmembers and injured six others. This was the only accident resulting in fatalities on any picket ship during their nearly ten years of service.

During the Cuban missile crisis of 1965, the SEARCHER operated at sea for sixty of the crisis' sixty-seven days.

SEARCHER was decommissioned 1 July 1965.

USS SCANNER (AGR-5)

The USS SCANNER, ex-EDWIN D. HOWARD, was recommissioned 30 January 1956, at the Norfolk Naval Shipyard.

SCANNER was assigned to cover the West Coast and operated out of Treasure Island until her decommissioning on 21 July 1965.

USS LOCATOR (AGR-6)

The USS LOCATOR, ex-FRANK

TABLE I:
COMMISSION/DECOMMISSION
DATES

AGR	Name	Commissioned	Decommissioned
1	Guardian*	1 Feb. '55	* '65
2	Lookout	5 March '55	12 July '65
3	Skywatcher	29 March '55	March '65
4	Searcher	2 April '55	1 July '65
(6) 5	Scanner**	30 Jan. '56	21 July '65
(5) 6	Locator**	21 Jan. '56	9 Aug. '65
7	Picket	8 Feb. '56	* '65
8	Interceptor	15 Feb. '56	* '65
(11) 9	Investigator**	16 Jan. '57	29 March '65
(9) 10	Outpost**	22 May '56	* '65
(12) 11	Protector**	20 Feb. '57	28 July '65
(10) 12	Vigil**	7 Aug. '56	3 March '65
13	Interdictor	7 April '58	5 Aug. '65
14	Interpreter	29 Sept. '58	* '65
15	Tracer**	4 Sept. '59	* '65
16	Watchman**	5 Jan. '58	* '65

* All subsequent AGRs were Guardian-class picket ships
* Information not available
** Hull numbers not in sequence with date of commissioning

O. PETERSON, was recommissioned 21 January 1956, at the Charleston Naval Shipyard.

LOCATOR served with Radar Picket Squadron One and was decommissioned 9 August 1965.

USS PICKET (AGR-7)

The USS PICKET, ex-JAMES F. HARRELL, was decommissioned 8 February 1958. She operated on the West Coast and was decommissioned 1 September 1965.

USS INTERCEPTOR (AGR-8)

The USS INTERCEPTOR, ex-EDWARD W. BURTON, was recommissioned 15 February 1956, at the Charleston Naval Shipyard.

After serving with Radar Picket Squadron Two off the West Coast, the INTERCEPTOR was decommissioned 1 September 1965.

USS INVESTIGATOR (AGR-9)

The USS INVESTIGATOR, ex-CHARLES A. DRAPER, was recommissioned 16 January 1957, and assumed her duties with Radar Picket Squadron Two off the East Coast.

INVESTIGATOR was decommissioned 29 March 1965.

USS OUTPOST (AGR-10)

The USS OUTPOST, ex-FRANCIS J. O'GARA, was recommissioned 22 May 1956.

USS PROTECTOR (AGR-11)

The USS PROTECTOR, ex-WARREN P. MARKS, was recommissioned 20 February 1957. Operating out of Newport, Rhode Island, she guarded the East Coast

TABLE II: SHIP STATISTICS

AGR	Name	Displ	Length	Width	Draft	Speed
1	Guardian	10,160	442	57	24	11
2	Lookout	8,760	441	57	27	12.5
3	Skywatcher	7,360	441	57	27	11
4	Searcher	7,360	442	57	27	11
5	Scanner	8,760	442	57	27	11
6	Locator	8,760	441	**47	27	12.5
7	Picket	10,590	442	57	27	11
8	Interdictor	10,760	442	57	24	11
9	Investigator	10,760	442	57	24	11
10	Outpost	11,365	441	59	22	11
11	Protector	10,760	442	57	24	11
12	Vigil	10,760	442	57	24	12.5
13	Interdictor	10,760	442	57	24	11
14	Interpreter	*	*	*	*	*
15	Tracer	*	*	*	*	*
16	Watchman	*	*	*	*	*

* Information not available

** Width according to documentation

Displacement is in tons, speed in knots

Dimensions are rounded off to the nearest foot

until her decommissioning on 28 July 1965.

USS VIGIL (AGR-12)

The VIGIL, ex-RAYMOND VAN BROGAN, was recommissioned 5 March 1957, and operated with Radar Picket Squadron Two off the East Coast.

VIGIL was decommissioned 3 March 1965.

USS INTERDICTION (AGR-13)

The USS INTERDICTION, ex-EDWIN H. DUFF, was recommissioned 7 April 1958, and operated with Radar Picket Squadron One off the West Coast.

INTERDICTION was decommissioned 5 August 1965.

SECURE THE WATCH

In 1965, the Distant Early Warning Lines and their seaward extensions were discontinued.

After nearly a decade of diligent guard duty off the East and West Coasts, the Radar Picket Ships once again became excess hulls. Between March and December 1965 all sixteen ships were decommissioned, transferred to a reserve fleet, and dropped from the Navy Registry. They were then sold to American and foreign companies for scrap.

SC