

# USCG Group Monterey 1972-1976

## Electronics Tech Duties and Life

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### Outline

#### 1 ET Duty

- A 3 ETs assigned to the Group
- B 1st class ET as leader and one second class ET and one 3rd class ET
- C 24 hr on call two ETs one night on and one night off.
- D 1st Class has 24 hr support role as needed
- E ET on a trouble call departed immediately to effect repairs.
  - 1 ET would drive alone if there were CG personnel at the remote site.
  - 2 ET would have an assistant/safety man if no CG personnel at remote site.
  - 3 At night a Duty Seaman would accompany as assistant/safety if needed

#### 2. Responsibilities

- A Keep everything electronic 100% operational
- B Any failures of any equipment triggered an immed dispatch of the duty ET to repair.
- C Report of the equipment failure (CASREPT) was immediately sent to 12th District HQ by Teletype with estimated time of repair.
- D Support radio communications (RMs) as needed.
  - 1 Possible temporary radio watch assignments.
- E Work with Group Electricians and Damage Controlmen to maintain the properties.
- F. Be ready to assist in the event of any emergency manpower need.

#### 3. Equipment

- A Five major Lighthouses
  - 1 [Pigeon Point](#) (watchstander, later automated and xferred to SF)
    - a [Fog Detector](#), LF Radio Beacon, Shortwave Receiver
  - 2 [Pt Pinos](#) (watchstander, later automated)
    - a Fog Detector (atmospheric moisture light refraction measurement)
  - 3 [Pt Sur](#) (watchstander, later automated, remote controlled from monterey)
    - a Fog Detector, LF Radio Beacon, Shortwave Receiver
  - 4 [Point San Luis](#) (watchstander, later automated)
    - a Fog Detector, LF Radio Beacon, Shortwave Receiver
  - 5 [Point Piedras Blancas](#) (watchstander, later automated)
    - a Fog Detector
- B Two 95 ft Patrol Boats
  - 1 [Cape Wash](#) in Monterey
    - a HF, VHF, ADF, Radar, Loran, Depth Sounder
  - 2 [Cape Hedge](#) in Morro Bay
    - a HF, VHF, ADF, Radar, Loran, Depth Sounder
- C Three 100 Watt 12 channel HF Radio Transceivers AN/URC-51
  - 1 [Monterey](#) (in radio room) Fiberglass Marine Whip

- 2 [Pt Sur](#) (remote controlled over telco lines) 40' tower
- 3 [Cambria AF Station](#) (remote controlled over telco lines) Fiberglass Marine Whip
- D Two Small Boats
  - 1 [40' Utility boat 40576](#)
    - a VHF radio, Depth Sounder
  - 2 [44' MLB surf boat 44346](#)
    - a VHF radio, Depth Sounder, Radar, DF
- E [Morro Bay Breakwater](#) LF Beacon
- F [Santa Cruz Breakwater](#) Fog Detector
- G CO's Vehicle VHF Radio AN/VRC-58
- H Radio room equipment and support
  - 1 24/7 radio watch on 2182 Khz and 156.8 (ch 16) VHF

#### 4. Troubleshooting and Spares

- A The ET Shop had a good set of discrete repair parts and technical manuals.
- B Some minimal spare equipment was available for immediate swap-out.
- C Most of the radio equipment was tube with some hybrid tube/transistor.
- D An RCA "[Tube Caddy](#)" stocked with every possible tube was always with the ETs.
- E Portable test equipment was updated, current and adequate.

#### 5. Transportation

- A One designated GSA Vehicle 9 passenger Dodge van
  - 1 No seats except driver and passenger
  - 2 VHF Radio: walkie talkie and VHF Whip Antenna. Callsign: "Golf-381"
  - 3 No AM/FM Radio or A/C
  - 4 Biggest decision was what route to take to fix trouble in S. half of the Group
    - a Highway 1 (3+ hours down the winding coast road in summer)
    - b Highway 101 (2 hours but 100 degree F temps and no AC or radio)

#### 6. Command Structure

- A Group Monterey CO: Lieutenant
- B Group Monterey XO: Warrant W-4
  - 1. About 25 enlisted, both station and group responsibilities
- D CG Station Monterey OIC: Chief Bosun E-9
  - 1. About 30 enlisted
- C 95 Ft Patrol Boat CO: LTJG

#### 7. Life at Station Monterey 72-76

- A Being an ET on call most of the time limited what you could do or how far you could go
- B Lots of fun things to do on the central calif coast with friends
  - 1 Explore the area, most everyone had a motorcycle or car
  - 2 Parties nightly at certain off-base apts or houses
  - 3 Trips to popular sunny places such as [Arroyo Seco](#)
  - 4 Trips to [Point Sur](#) (40 min) to BBQ/picnic and explore the mile-long beach
  - 5 Inner Tubing down the [Carmel River](#)
  - 6 Visits to San Francisco (1.5 hour drive)
  - 7 Exploring sights along the central coast [Jade Cove](#)

- 8 Visit [Hearst Castle](#). All CG monterey personnel could get in free.
  - a. Hearst had an agreement with CG due to land agreements
- C The Army's "EM Club" just up the hill from the CG station on weekends
  - 1 US Army had a [defense-language institute](#) at the [Monterey Presidio](#)
  - 2 Hundreds of military men and *women* learned a variety of foreign languages.
  - 3 The EM club hosted live bands and there were usually lots of people

#### 8. Biggest Challenges to ETs at Monterey 1976

- A Worn out WWII vintage radio equipment had been in operation since the 1940s.
- B Damp, cold, drafty lighthouse buildings caused additional failures of equipment.
- C ETs suffered fatigue from constant driving and overwork.
  - 1. "Port and Starboard" duty schedule.
  - 2. Some ETs carried a pager at own expense for additional freedom.
- D Power line spikes on remote coastal highway power lines caused additional failures.
- E Fog Detectors
  - 1 This was the last step in eliminating the human element: watchstanders
  - 2 Someone invented a device using "[atmospheric moisture light refraction](#)"
  - 3 Device had a flashtube focused through a 4" lens to a point 50-100' away.
  - 4 A phototransistor read the amount of back reflected light.
  - 5 Microprocessor calculated the "visibility" in miles and triggered fog signal.
  - 6 The design was flawed, the first models in service did not work well.
  - 7 The units would go into "fault mode" and run the fog signal continuously.
  - 8 ET would be dispatched to push the reset button and hope for luck.
  - 9 At [Santa Cruz Breakwater](#) someone began [shooting at the fog signal](#)
- F LF Radio Beacon Timing Clocks
  - 1 Lightstations on the central Calif coast all shared one frequency.
  - 2 Each station transmitted its own morse letter during its one minute out of five.
  - 3 Timing was controlled by selecting one of three US Govt "[Grandfather](#)" clocks.
  - 4 These clocks were of high quality but didn't achieve the accuracy needed.
  - 5 Many frustrating hours were spent trying to synchronize the clocks to [WWV](#).
  - 6 The USCG began updating the clocks in 1975.
- G The worst problem was the LF Radio Beacon on the [breakwater at Morro Bay](#)
  - 1 Located in a two story 5' diameter vertical metal tube on the breakwater end.
    - a Had a watertight door leading to a ladder inside.
    - b It was monitored 24/7 by the duty watchstander on the Cap Hedge.
  - 2 Accessible only by jumping from a small boat onto large, uneven and slippery breakwater rocks while holding onto a toolbox.
  - 3 ET had to 'time his jump' to coincide with pacific ocean swells.
  - 4 It was exceedingly dangerous but downplayed with humor.
  - 5 Dampness and moisture caused several failures/month.
  - 6 It was a tube transmitter using 300 Volts B+, transmitted a morse code letter.
    - a Some years later it was moved to the base of Morro Rock.