FILD RVOC 1986



UNIVERSITY-NATIONAL OCEANOGRAPHIC LABORATORY SYSTEM



RESEARCH VESSEL OPERATOR'S COUNCIL

* * NEWSLETTER * *

No. 4

30 May 1986

Editor's Note

This is the second of a planned three ROVC newsletters for 1986. It includes a report from the Gulf submitted by Steve Rabalais and some excerpts from RTCM Newsletters sent from Ken Palfrey. I am still looking for more input. The third newsletter for this year should hit the street prior to our meeting now tenatively scheduled for 8-10 October. Articles, comments or sea stories are solicited for that edition.

RVOC Meeting

It appears that our annual meeting will be held in Veracruz, Mecixo on 8-9-10 October. Dolly is working on the details. We still need recommend agenda input for the meeting. It seems that a marine insurance workshop will be the largest issue to be addressed.

SSB Antennas

URI has purchased, in coordination with John McMillan, five RHE700A Active Antennas from Communications Concepts International, Inc. They are receiving antennas for the single side band (SSB) radio. One has been operating on ENDEAVOR for over six months and two were sent to the University of Alaska for Dolly's operation. We have found the ancenna to be very effective. The two remaining antennas are available for distribution on a first come first served basis. The only strings would be a request for a report to John McMillan as to the antennas' effectiveness. Come and get 'em.



Reporting SUBSURFACE AND SURFACE OBSTACLES

The telephone number for the Defense Mapping Agency Hydrographic/Topographic Center (DHAHTC) for reporting subsurface and surface obstacles has been changed to (301) 227-3146. Steve Hall is still the contact point.

WEAX and OTSR

Below are addresses of the Naval Oceanography Command activities which provide support for Route Weather Forcasts (WEAX) and Optimum Track Ship Reporting (OTSR). The Naval Oceanography Command Instruction (NAVOCEANCOMINST) 3140.16 will allow RVOC affiliated vessels to use the WEAX and OTSR services. Directions on how to use this service are also transcribed below.

Naval Eastern Oceanography Center McAdie Building (U-117) Naval Air Station Norfolk, VA 23511-5399 Message Address: NAVEASTOCEANCEN NORFOLK VA

Naval Western Oceanography Center
Box 113
Pearl Harbor, HI 96860-5050
Message Address: NAVWESTOCEANCEN PEARL HARBOR HI

U.S. Naval Oceanography Command Center Box 12, COMNAVMARIANAS FPO San Francisco 96630-2926 Message Address: NAVOCEANCOMCEN GO

DIRECTIONS FOR RVOC USE OF WEAX/OTSR SERVICES

- 1. U.S. research vessels affiliated with the Research Vessel Operators' Council (RVOC) may receive weather support (WEAX and OTSR only) from the Naval Oceanography Command when all three of the following conditions are met:
 - a. The ship is prosecuting projects funded by Federal grants;
 - b. The ship is operating outside the range of NWS marine broadcasts; and
 - c. The requester follows the instructions provided below.

- 2. Those vessels which have access to the Automatic Digital Network (Autodin) system should make requests in accordance with NAVOCEANCOMINST 3140.1 (series). Submission of ship's weather observations in accordance with NAVOCEANCOMINST 3144.1 (series) is also required during periods that WEAX and OTSR services are provided. Adjustments in tracklines, estimated departure times (ETDs) and estimated arrival times (ETAs) are also required.
- 3. Those ships not capable of using the Autodin communications system will submit their initial requests by mail to the servicing Naval Oceanography Command activity as determined from Figure of NAVOCEANCOMINST 3140.1 (series). The requests should arrive at least on week prior to departure and provide the following:
 - a. Ship's name, call sign, owner, and operator;
 - b. The means for twice-daily two-way communications with the ship for providing the requested services and for obtaining the ship's synoptic weather observations. This may be via MARISAT at the ship's expense, in which case, the MARISAT phone number and a credit card number for MARISAT billing is required. Land-line telephone communications with the ship's operations base for relay to the ship is also acceptable, but will require furnishing telephone numbers for round-the -clock contact and instructions for either collect calling or charging calls to an appropriate long distance charge account.
 - c. The ETD and trackline to be followed are also required, to include speed and ETA to way points (within 4 hours), ETA and ETD to operational areas (defined as circles of 50 NM radius about specified points), and ETA to port. Times are stated in GMT.
 - d. The services requested (limited to WEAX and OTSR) with forecast parameters desired and any other special requirements (consult NAVOCEANCOMINST 3140.1 (series)).
 - A brief description of the ship's project and its funding sources.
 - f. The point of contact at the ship's operating base who has authority over the vessel and that person's work and home phone numbers.

4. Within 24 house of the ship's ETD, the appropriate Navy servicing activity will provide the ship the initial forecast and recommendations through the communications process identified in paragraph 3b above. The servicing activity will then continue to provide twice-daily updates after sailing. If the ship is not already transmitting synoptic surface observations to the National Meteorological Center in Suitland, MD, through the Ship Report Collection Program, it is required to do so or to provide the weather observations directly to the servicing activity. In the case of the land-line relay setup, the observations should be provided to the ship's operating base so as to allow them to be passed to the servicing activity during the next updating phone call. Weather observations will include the standard observations as provided in the NWS Observing Handbook #1, entitled "Marine Surface Observations" or NAVOCEANCOMINST 3144.1 (series). The observations will be made at 0000, 0600, 1200 and 1800 GMT. In addition to synoptic weather reports, the ship is required to provide changes in tracks and adjustments in ETAs and ETDs when such times differ by more then four hours from the original submissions.

RTCM Newsletter Items

Below are Radio Technical Commission Maritime Services (RTMC) articles sent by Ken Palfrey considered of interest to RVOC members.

125.5 MHZ EPIRB Users Beware

Emergency Position Indicating Radiobeacons (EPIRBs) currently in use on 121.5 MHz were designed for reception by overflying aircraft using VHF radios. Their operational use as a part of the SARSAT satellite system has been highly successful in providing an early alert as well as position location of those in distress. Users should be aware, however, that standards established for the current EPIRBs were not developed to optimize use with a satellite based system. As a result there may be substantial variations in operational SARSAT system results when dealing with various models of existing EPIRBs.

In addressing this issue for the aeronautical emergency locator transmitters, the Radio Technical Commission for Aeronautics (RTCM) Minimum Operational Performance Standards include the following information:

"To aid SAR satellite detection the signal spectrum may be improved to provide a clearly defined carrier which is distinct from the sideband components. If this option is exercised, the

following power distributions should be used. On 121.5 MHz, at least 30% of the power distribution should be contained within 30 Hz of the fixed reference frequency corresponding to the carrier component over the audio/sweep modulation cycle."

RTCM Special Committee 105 (SC 105) on Performance Standards has incorporated this information in its current draft standard for existing 121.5 MHz EPIRBs and has further included a recommendation that when the option is exercised the equipment label should so indicate.

The user should be aware, however, that there is at present no established standard and no labeling requirement to indicate compatability of 121.5 MHz EPIRBs with the SARSAT system detection and location capabilities. This matter will be further pursued in SC 105.

FCC Rules Amended to Allocate 18168-18780 KHz Band On Secondary Basis To Mobile Service

Completing an action initiated with a Notice of Proposed Rule Making (MPRM) in August 1985 (see September RTCM Newsletter), the Federal Communications Commission (FCC) has issued a Report and Order allocating the 18168-18780 KHz band on a secondary basis to the mobile service for both government and nongovernment use and making consequential changes in Part 2 of the rules.

The action is in accordance with RTCM comments filed on the NPRM (see October RTCM Newsletter) in which RTCM noted that the proposed rule change would help meet future requirements for mobile communications in the high frequency spectrum. Copies of the Report and Order are available to RTCM members from the RTCM Office at (202) 639-4006.

FCC Approves New Part 80 For Maritime Rules

The Federal Communications Commission (FCC) has approved a new Part 80 of the FCC Rules which will replace the present parts 81 and 83 dealing with maritime telecommunications.

This approval completes action initiated with a Notice of Proposed Rulemaking (NPRM) in 1985 (See May 1985 RTCM Newsletter). RTCM files comments on the NPRM.

The rule changes are primarily editorial and, except in limited instances, are not intended to alter the substantive requirements applicable to the various maritime services. Substantive changes include eliminating the requirement that coast stations using telegraphy report the establishment of new transmitter dispatch points, and substituting type-acceptance for type-approval for certain radio equipment required on large, ocean-going ships.

It is expected that the new Part 80 will be published in the Federal Register in October 1986 and will become effective thirty days after publication. RTCM will obtain copies of the new Part 80 and advise of availability through the RTCM Newsletter.

FCC Stops Performing Accounting Settlement Functions

The Federal Communications Commission (FCC) has announced that effective December 31, 1986 it will not longer serve as an accounting authority for settlement of maritime mobile service and maritime mobile satellite service accounts with foreign administrations, accounting authorities, and recognized private operating agencies (RPOAs).

This action was taken as a result of reduced resources and governmental funding constraints which made it impossible for the FCC to continue performing accounting functions and still meet proposed new international requirements which include settlement of accounts within six weeks.

The FCC action will result in discontinuance of accounting authority identification code USO1, effective for communications transmitted through foreign coastal stations after December 31, 1986.

A copy of the discontinuance notice, including a list of interim accounting authorities authorized by the FCC, is available to RTCM members from the RTCM Office at (202) 639-4006. For further information contact Mrs. Elizabeth L. Nickey, FCC, (717) 334-7059.

FCC Reduces Information Available in Federal Register

The Federal Communications Commission (FCC) has announced that full texts of FCC Notices of Proposed Rulemaking, rulemaking decisions and policy statements will no longer be published in the Federal Register. In lieu thereof the Federal Register will contain summaries intended to be in sufficient detail to inform the public of actions concerned.

RTCM will continue to make available to RTCM members texts of documents of concern to the maritime community.

Gulf Report From Steve Rabalais

Gulf of Mexico

Well, things could be worse (but Tex says it's going to get better). Budget cuts at the state and federal levels and the decline in the oil industry has left Gulf Coast ship operations flat. One ray of light, the depressed shipping industry in the Gulf of Mexico has provided a buyers market for some much needed ship construction and repairs; there seems to be a lot of stretching going on down here.

The Longhorn from the University of Texas Marine Lab at Port Aransas is in the yard having 20 feet added (105LOA). She will come out in mid-May with a completely new wheel house and added lab and deck space. According to John Thompson at U.T. there are no firm commitments for the use of the Horn when she comes out of the yard but he expects some work from N.M.F.S. later this summer.

Further up the coast, in Galveston, the Gyre (Texas A&M) will be out of the Gulf operating off the New England and South American coast until December when she will return to work in the northwestern Gulf of Mexico. The rest of the A&M fleet, the Deborah Susan (a 40 footer) and the Roman will be operating closer to home. The Deborah Susan will be occupied with benthic biology work out of Port Aransas and the Roman will be conducting student cruises out of Galveston.

Plans to move the University of Texas at Galveston and Texas A&M Galveston to new facilities on Pelican Island Mitchell Campus have been put on hold as the result of lower oil prices. When completed the new facilities will include a 550' dock, 6,000 sq. ft. administration building and 20,000 sq. ft. of repair facilities. This joint effort between U.T. and A&M will be funded by the Board of Regents.

The Fred H. Moore (U.T.) is being outfitted with a GUS seismic acquisition system and a multiple array for air guns. Earlier this year a 15" "A" frame and a Hiab 1165 crane were installed on the vessel.

Louisiana (LUMCON) was blessed with 2 new boats in 1985, the 105' Pelican and 57' Acadiana. The Acadiana, an all aluminum, twin screw, shallow draft (3.5') research vessel was completed in November 1985 at a cost of \$377,000. The vessel is performing well after the contractor cleared up some problems with trash in the keel coolers (be very careful how shipyards treat keel coolers on after cooled engines).

The Pelican had a relatively active year in 1985 operating in the north, central and western Gulf of Mexico. By far, the highlight of her season was the 4 days she spent in the central Gulf bucking 45-50' seas and 100 mph wind from Hurricane Juan. The 20 people on board will vouch to the fact that men and vessel were put to the test and all performed well. Beyond the one crewmember that had to be evacuated by U.S.C.G. helicopter, the ship and crew survived without a scratch.

The Suncoaster at FIO will log 156 days at sea this calendar year. Most of this time will be spent in the Eastern Gulf conducting current meter, midwater trawling and

student cruises. The Bellows was in the yard this winter being stretched to 70 ft. and adding scientific storage space. All went well with the work done at Astor Marine Shipyard.

The A.E. Verrill from MBL Woods Hole is another new face in the research vessel crowd in the Gulf of Mexico. She was bought by Dauphin Island Marine Lab, on Dauphin Island Alabama, and is presently being outfitted for service some time next year.

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