

shut down. The unit restarts normal position transmission automatically when the vessel goes to sea.

Satamatics provides a one-stop shop for easy purchase and commissioning of transceiver and satellite airtime. A vessel owner wishing to purchase the model number SAT 101- NMFS/PCG can purchase a bundled package of transceiver and satellite airtime directly from Satamatics using a self-serve web site or by contacting Satamatics as listed in the VMS Provider Addresses.

Satellite commissioning service is instantaneous via a self-service web page or through Satamatics Support anytime after the receipt of the transceiver. This eliminates delays and paperwork. Satamatics will forward the transceiver identifying information to OLE. Although the VMS package has been designed for an easy, low cost self-install, Satamatics provides a support web site and contact line for fishermen.

### C. ORBCOMM Transceivers

The ORBCOMM satellite communications VMS transmitting units that meet the minimum technical requirements for the Pacific Coast groundfish fishery is the Stellar ST2500G (part number ST2500G-NMFS). The address for ORBCOMM and Stellar Value Added Resellers (VAR) and their regional sales outlets around the country are provided under the heading VMS Provider Addresses.

Stellar ST2500G-NMFS Features: The transceiver consists of an integrated GPS/ORBCOMM Satellite Communicator mounted in the wheelhouse and antennas mounted atop the vessel. The unit is pre-configured and tested for NMFS VMS operations (with an emergency alarm switch (non-GMDSS)). Satellite commissioning services are provided by several VMS providers.

Automatic GPS position reporting starts after transceiver installation and power activation onboard the vessel. The unit is a 4 in x 8 in x 2 in transceiver powered by any 12 to 32 VDC power supply. It is factory configured for automatic reduced position transmissions when the vessel is stationary (i.e., in port) which allows for port stays without power drain or unit shut down. The unit restarts normal position transmission automatically when the vessel goes to sea.

The ST2500G has an omni-directional VHF antenna, providing operation from +/-5 degrees above the horizon anywhere on earth.

A configuration option is available to automatically send position reports to a private e-mail address or to a secure web site where the data is provided on

a map and in tabular form. Another available option is the ability to send and receive private e-mail from a PC or Laptop personal computer or from specific hand held devices. A complete list of devices, supported operating systems and available software solutions are described by each VMS provider.

A vessel owner wishing to purchase the Stellar ST2500G transceiver will be required to complete an ORBCOMM "Provisioning" form via the web. If assistance is required, the owner may consult with the VAR or one of the entities identified under the heading VMS Provider Addresses for the ST2500G-NMFS when completing this form. The unit purchased by the vessel owner will be configured specifically for the Pacific Coast groundfish fishery.

The ORBCOMM VMS VAR will perform the following before shipment: (a) configure the transceiver according to OLE specifications for the Pacific Coast groundfish fishery; (b) download the predetermined NMFS position reporting applications into the unit; (c) test the unit to ensure proper operation prior to shipping; (d) forward the service provider and the transceiver identifying information to OLE and test the unit when the installation has been completed on the vessel.

## II. Communications Service Providers

OLE has approved the below-listed communications service providers: Orbcomm, Satamatics, Telenor, and Xantic satellite communications services for the Pacific Coast groundfish fishery.

### A. Orbcomm

It is recommended that the vessel owner keep for his or her records and that the VAR have on record the following identifying information: (a) signed and dated receipts and contracts; (b) satellite communicator identification number; (c) VAR customer number, (Identification number/unit surname name combination); (d) e-mail address of satellite communicator (*surname@ORBCOMM.net*); (e) owner name; (f) vessel name; and (g) vessel documentation or registration number.

Pursuant to 50 CFR 635.69(d), OLE will provide an installation and activation checklist which the vessel owner must follow. The vessel owner must sign a statement on the checklist certifying compliance with the installation procedures and return the checklist to OLE. Installation can be performed by experienced crew, a VAR or by an electronics specialist. All installation costs are paid by the owner.

The owner may confirm the Stellar ST2500G-NMFS operation and

communications service to ensure that position reports are automatically sent to and received by OLE before leaving on a fishing trip under VMS. OLE does not regard the fishing vessel as meeting the requirements of 50 CFR 635.69 until position reports are automatically received. For confirmation purposes, contact the NOAA Enforcement, 7600 Sand Point Way NE; Seattle, WA 98115, at (206) 526-6133.

### ESL Sat-Ex Satellite Services/ ORBCOMM

ORBCOMM is a store-and-forward data messaging service allowing users to send and receive information virtually anywhere in the world, on land, at sea, and in the air. ORBCOMM supports a wide variety of applications including Plain Text Internet e-mail, position and weather reporting, and remote equipment monitoring and control. Mariners can use ORBCOMM free of charge to send critical safety at sea messages as part of the U.S. Coast Guard's Automated Mutual-Assistance Vessel Rescue system. VMS Services are being sold through specific ORBCOMM VARS.

Features offered: Customer Service supports the security and privacy of vessel accounts and messages with the following: (a) password authentication for vessel owners or agents and for OLE to prevent unauthorized changes or inquiries; and (b) separation of private messages from OLE messages. (OLE requires VMS-related position reports, only.)

Billing is separated between accounts for the vessel owner and OLE. VMS position reports and vessel-initiated messaging are paid for by the vessel owner. Messaging initiated from OLE operations center is paid for by OLE.

ORBCOMM provides customer service through its VARS to establish and support two-way transmission of transceiver unit configuration commands between the transceiver and land-based control center. This supports OLE's message needs and, optionally, fishermen's private e-mail needs.

The owner should refer to and follow the configuration, installation, and service activation procedures for the Stellar ST2500G-NMFS satellite communicator.

### B. Satamatics/INMARSAT-D+

Satamatics provides tracking and monitoring solutions globally using Inmarsat-D+. Satamatics is able to provide end to end bundled services using a combination of its satellite gateways that it designed, built, owns and maintains and its own D+ transceiver line that it designed and