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***SATELLITE TELEPHONE COMMUNICATIONS FOR VOLUNTARY OBSERVING SHIP PROGRAM***

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Signed 11/3/05  
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Regional Director

## Satellite Telephone Communications for Voluntary Observing Ship Program

<u>Table of Contents:</u>	<u>Page</u>
1. Introduction.....	2
2. Purpose of Satellite Telephone Service .....	2
3. Centralized Observation Collection.....	2
4. Observation Quality Control (OQC).....	3
5. Observation Dissemination.....	3

1. Introduction. In September 2004, the National Weather Service (NWS) Alaska Region (AR) launched a project to increase marine services through the use of commercial satellite telephone communications. Although the NWS AR operates both HF and VHF marine radios at our Weather Service Offices (WSO), our customers have expressed a reluctance to participate in the Voluntary Observing Ship (VOS) program because of privacy concerns. Use of either of these systems requires the customer to broadcast their position over the open public airwaves. In the competitive world of commercial fishing, broadcasting their position can have adverse financial impacts to their fishing activities. The use of satellite telephone communications addresses this concern by providing direct, one-on-one communications with NWS staff.

The purpose of this supplement is to define the NWS AR philosophy and responsibilities for using satellite telephone communications to collect marine observations in support of the VOS program in Alaska.

2. Purpose of Satellite Telephone Service. The primary purpose of the new satellite telephone service is the collection of weather observations from customers participating in the VOS program. AR selected one of the most widely used, customer-preferred commercial providers in an effort to provide as much coverage as possible. Use of the satellite telephone communications to obtain a standard marine weather briefing, without providing an observation, should be discouraged. The satellite telephone service can only support one call at a time. Overloading the system with marine weather briefing requests will prevent others from submitting voluntary ship observations. The NWS encourages our customers to use our existing HF or VHF communications for obtaining normal weather briefings.

3. Centralized Observation Collection. WSO Valdez is the centralized collection point for the satellite telephone system. The use of a centralized collection point follows the same model of operations used by the Federal Aviation Administration to support pilot weather briefings via a 1-800 telephone service. Use of a centralized collection point provides a better method of balancing the workload between WSOs.

4. Observation Quality Control (OQC). Ship observations need an initial data quality check prior to transmission. The old adage “Garbage In – Garbage Out” is especially true when it comes to the National Data Buoy Center’s and National Centers for Environmental Prediction’s scrutiny of pressure data provided by ship observations. While the pressure report is the most critical element, wind, air, sea water temperatures, and sea/swell data are also important and need to be checked prior to data transmission. Other nearby surface or ship observations, as well as isobaric analysis of the latest surface chart, can be used for initial data QC. An allowable working error for pressure is +/- 4 millibars. If the pressure data is in doubt, omit it from the transmitted observation.

5. Observation Dissemination. The WSO staff will transmit the VOS observations and Marine Reports (MAREP) using the BBXX Program after completing an initial data quality check. The BBXX program automatically transmits the observation in two separate formats. The first format is a ship synoptic format, commonly referred to as “BBXX”, for direct ingestion into “plot” files. The second format is “Plain Language” for direct operational uses. The WSO staff should immediately bring any ship observation, which reflects a significant difference with existing forecast conditions, to the attention of the Weather Forecast Office for that particular area of responsibility.