ACS communications capabilities consists of the Deadhorse telecommunications center and transportable remote-area communications systems. The following describes these systems, their coverage, how they are used, and how they are deployed.

**DEADHORSE TELECOMMUNICATIONS CENTER**

*Alaska Clean Seas Internal Radio and Telephone Communication*

The telecommunication center houses equipment that supports day-to-day ACS operations and spill response management. A PABX telephone switch supports 90 internal extensions in the ACS offices, telecommunications center, and warehouse; nine local telephone utility trunks; and six trunks directly connected to ARCO, BPXA and Alyeska Pipeline extensions via the private digital microwave system. A VHF repeater system at the center provides ACS with a wide-area radio system for day-to-day operations, as well as for Slope-wide logistical support. A radio dispatch center is located in the administrative office. Additional dispatchers can be located elsewhere in the ACS facility. The radio dispatchers can access 17 oil spill radios located in the production and pipeline corridor and operated by ACS and its member companies. A logging recorder makes a permanent record of radio and telephone traffic. Antennas for those radios located at the center are mounted on a 120-foot tower. Uninterruptible power supplies in the communication center power all critical equipment for up to one hour during AC power failures. A manual-start backup generator then takes over from the UPS for extended utility power failures.

**Common Remote Control System for Permanent VHF Oil Spill Repeaters**

A remote radio control system is installed in the telecommunications center. Remote control circuits for 14 permanent VHF repeaters and marine coast stations, installed at strategic locations in the production and pipeline corridor, are routed via private microwave circuits into the system. Additional HF, VHF and UHF radios located at the center are also wired into the system. Additional dispatch consoles are installed at Alyeska Pump Station 1, ARCO Kuparuk, BPXA BOC, and ARCO PBOC, giving these companies access to the existing permanently installed Slope-wide systems. Other connections to specific radios in this network can be made using individual remote control stations. This network is the only wide area emergency communication system shared by operating companies on the North Slope.

**Storage and Maintenance Facility**

The telecommunication center serves as a storage and maintenance facility for all fixed and transportable communication assets owned by ACS. Test equipment, maintenance tools, documentation, and spare installation and maintenance parts are maintained at the center.

**TRANSPORTABLE REMOTE AREA COMMUNICATION SYSTEMS**

ACS maintains the following transportable communication systems at the Deadhorse Spill Response Center. These systems can be used to increase communication channel capacity in the production and pipeline corridor, or to extend communication links to remote areas of the North Slope extending between the Canadian Border and Barrow.

**Portable Radios, Dial Radiotelephone Links, and Satellite Telephone Links**

ACS owns approximately 200 VHF and UHF handheld radios, 10 base and mobile stations, 13 VHF and UHF portable repeaters, and seven portable UHF dial-radiotelephone links. Two portable towers and two winterized communication shelters with integral DC power and AC generators are available when deploying repeaters to remote sites. Two single-phone-line INMARSAT systems are available for offshore installation on vessels.

**Mobile Response Center (MRC)**

ACS has constructed an MRC consisting of two shelters (20 ft x 8 ft). Shelter One contains a variety of phone and radio communication links, and Shelter Two contains an office work area. The shelters can be deployed together or independently anywhere in Alaska to be used as a forward command center at the site of a remote emergency. The communication systems consist of two INMARSAT-based phone lines, two dial-radiotelephone phone lines, and a variety of HF, VHF, and UHF two-way radios and repeaters. It also contains a small PABX and a logging recorder to make a permanent record of all radio and telephone traffic.

**C-Band Transportable Earth Station (CTES)**

The CTES is a remote-area, six-line, satellite-based emergency telephone system. It consists of a 6,000-pound 2.5-meter-by-5 meter C-band satellite antenna mounted on a skid, and two small transit cases that house all of the necessary electronics. Not including transit time, it can be mobilized anywhere in Alaska, set up and made operational in three hours, and provides Anchorage dialtone on each six telephone trunks (expandable to 16).

**Basic Exchange Telephone Radio System (BETRS)**

The BETRS radio system provides a simple wireless telephone distribution service between the earth station and subscribers located up to 25 miles a way. The system is equipped for 12 subscribers, but can be expanded to a maximum of 48 by purchasing additional equipment. It can also be used independently of the C-Band earth station, anywhere that two to six telephone trunks are available at a central location.

**DEPLOYMENT CONSIDERATIONS AND LIMITATIONS**

- The existing permanently installed Slope-wide systems should be all that is needed to respond to smaller spills. When a spill of a magnitude requiring the activation of the IMT occurs, the Communications Unit Leader will determine the most effective portable systems to be deployed and will develop a communications plan to suit the response.
- Proper communications procedures will optimize communications and must be maintained.
- Due to deployment/transit times, less effective but quickly deployed systems should be considered until more functional systems arrive on scene and are operational.
- Communications equipment operators must be properly trained if communications are going to be successful.
- Member company communications personnel should be fully utilized to speed deployment of portable systems.