# ALASKA CLEAN SEAS 2020 ANNUAL REPORT



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# About

Alaska Clean Seas (ACS) is a not-for-profit oil spill response cooperative whose current membership includes oil and pipeline companies that engage in or intend to undertake oil and gas exploration, development, production, or pipeline transport activities on the North Slope of Alaska. Originally formed in 1979, ACS was restructured in 1990 from an equipment cooperative into a full-response organization. As a not-for-profit and organized for the public good, ACS' highly trained, experienced, and well-equipped cadre of personnel are frequently called upon to safely assist member companies with a wide range of skills including incident management, unmanned aircraft operations, unique maritime logistic challenges, search and rescue cases, and wildlife issues. ACS provides personnel for full-time Fire Technician positions, as well as volunteers for the Fire, Medical and Hazmat Teams across the Member Company operating areas.

#### Purpose

The purpose and mission of ACS is to provide personnel, material, equipment and training to its members for responding to oil spills on the North Slope. When authorized by the Board of Directors, ACS may also respond to non-member spills.

#### Areas of Operation

ACS's area of operation includes Alaska's North Slope, the Outer Continental Shelf off the coast of the State of Alaska, and the lands beneath navigable waters of the State of Alaska as defined in 43 U.S.C. § 1301, together with adjacent beaches, harbors, inland waterways, natural and artificial islands, shorelines and onshore facilities directly or indirectly supporting offshore explorations, development, producing and transport operations, and the TransAlaska Pipeline from Pump Station 1 to Pump Station 5.



# Foreword



**"That was unique."** – A simple yet massive understatement I will likely someday use to tell my grandchildren to describe the 41st year of Alaska Clean Seas. The ACS team met significant challenges to accomplish the routine while adapting to the unforeseen and completing complex, high-value capital projects.



The year of the pandemic the changed way we lived. traveled, worked, ate, exercised, and about thought other countless facets of life. The knowledge of what was right, required. and/or rumored changed continuously resulting in severe economic challenges to the

industry. The impact of COVID-19 continued throughout 2020 as ACS focused on business continuity while adapting to frequently changing member and even camp/lodging requirements. As the year progressed, we also kept our focus on the critical importance and need to take care of ourselves and those around us by reducing risk, promoting wellness, and adapting as we learned. It's not quite over yet though there remains a shared hope throughout ACS that all what we now consider normal will quickly become memories of how we adapted to succeed in 'that one year'.

Succeed we did. After decades of evaluating needs, alternatives, and costs, vision became reality as our Member Companies continued never-before seen commitment to modernize and ensure safety in our marine operations. Two major projects were completed on schedule and under budget with critical support from the business department in contracting, processing payments, and responding to countless related issues. First, the completion of the marine infrastructure project - building a multi-location Arctic 'marina' to ensure the safety of our people and the ability to respond from as well as maintain the ACS fleet. Second, ACS took a leap forward with the delivery of the first new ACS spill response vessel in 20 years. While maintaining the full functionality and skimmer capability of the Bay Boats, the Pt. McIntyre (with a landing craft hull and jet propulsion) allows for increased access to shallow waters.

In the field, our Lead Techs, Mechanics, Support Techs, along with support from ACS Base, continued to deliver the consistent world-class performance and innovation our ACS membership relies upon. In addition to preventing, training, exercising, and responding to spills, ACS personnel provided extensive support using a fleet of drones to reduce risk and save money in countless non-spill related activities including flare and communication tower inspections, providing aerial imagery for operations, and more. In order to exceed expectations despite pandemic related restrictions, ACS quickly adapted to a socially distant environment through the shifting of countless training classes to MS Teams, delivering high quality training in a virtual environment from Point Thomson to Alpine and Deadhorse to Valdez. Additionally, the ACS team (supported by our three very patient IT personnel) stretched our foundational approach to successfully complete our first virtual regulatory equipment audit involving a member company and regulators from Bureau of Safety and Environmental Enforcement (BSEE), Alaska Department of Environmental Conservation (ADEC), and the United States Coast Guard (USCG). In the end, dozens of people accomplished in 30 minutes what would have taken days of travel to multiple locations eliminating risk through the use of technology to get the job successfully done. Despite the challenges of COVID-19, transitions were flawlessly managed (though often with less hugs & handshakes). ACS managed retirements, departures, and on-boarding of new personnel, moving our analog radio system to digital, and shifted to a modern HR management system.

As you will read ahead, there are details, pictures, and even more on what is mentioned above as well as other changes implemented, and innovations delivered by the safety-focused ACS Team of 2020.

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# Membership

Membership is available to entities that drill, explore, produce or transport oil or gas within the area of interest. Below is general membership information.

#### Producing Membership

Production Operator Members are members that produce or transport oil or gas within the area of interest. These members have Board representation and voting privileges as well as bear the responsibility of funding the annual operating costs.

#### Fees

- New Member Initiation Fee is \$500,000 and the annual fee is \$50,000.
- Annual operating costs are funded through an allocation model based on production and risk categories, such as road accessibility, proximity to water, and pipeline location (off-road or off-shore).
- Daily Development Fee of \$1,250 applies during the periods of transition from Inactive Member status to Producing.

#### Non-Producing Membership

Non-Production Operator Members are generally members that conduct exploratory drilling. These members are actively involved in the Operations Review Team Committee and have Board representation, but do not have voting rights and do not fund the annual allocated operating costs.

#### Fees

- New Member Initiation Fee is \$100,000 and the annual fee is \$20,000.
- Daily Fees: Rig Day Fee of \$2,500 applies to drilling days; General Activity Fee of \$625 applies to activity that poses the risk of a spill greater than one barrel (bbl) of liquid and relies on ACS response.
- Daily Development Fee of \$1,250 applies during the periods of transition from Non-Producing status to Producing.

#### Current Membership



- Alyeska Pipeline Service Company
- ConocoPhillips Alaska, Inc.
- Eni U.S. Operating Company, Inc.
- ExxonMobil Alaska Production Inc.
- Great Bear Petroleum Operating, LLC
- Hilcorp Alaska, LLC
- Oil Search Alaska, LLC
- Savant Alaska, LLC

### **Board of Directors**

Martin Parsons Chairman Alyeska Pipeline Service Company





Larry Burgess Vice-Chairman Eni U.S. Operating Company, Inc.

### No Picture



Matt Brown Hilcorp Alaska, LLC Dean Walker ConocoPhillips, Alaska Inc.



Dave Pascal Glacier Oil & Gas for Savant Alaska



Erin Sage ExxonMobil Upstream Oil & Gas Company



Patrick Galvin Great Bear Petroleum Operating LLC\*



Michael Rowe Oil Search (Alaska) LLC\*

\*Non-producing Operator Member

# ACS Committees

Four committees staffed by member company representatives have been established to assist ACS. ACS appreciates the support and expertise these individuals contribute towards all aspects of our business operations.

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Operations Review	Jeanie Shifflett, Chair	ConocoPhillips Alaska, Inc.
	Brian Webb, Vice Chair	Savant Alaska, LLC
	Mike Day	Alyeska Pipeline Service Company
	Jane Thomas	Eni Petroleum
	Kenley Scarlett	ExxonMobil Alaska Production, Inc.
	Patrick Galvin	Great Bear Petroleum Operating, LLC
	Diane Dunham	Hilcorp Alaska, LLC
	John Hellén	Oil Search (Alaska), LLC
Accounting	Irina Millwood, Chair	ConocoPhillips Alaska, Inc.
	Teresa Fair	Alyeska Pipeline Service Company
	Kim March	Eni Petroleum
	Alex Plantenga	ExxonMobil Alaska Production Inc
	Su Wang	Glacier Oil & Gas For Savant Alaska
Trust & Retirement	Tim Adamczak, Chair	Alyeska Pipeline Service Company
	Diane Colley	Oil Search (Alaska) LLC
Legal	Steve Mahoney	Alaska Clean Seas
	Andrew Sorenson	Alyeska Pipeline Service Company
	Jon Goltz	ConocoPhillips Alaska, Inc.
	Daniel Walker	ExxonMobil Alaska Production, Inc.
	Patrick Galvin	Great Bear Petroleum Operating LLC
	Marc Bond	Hilcorp Alaska, LLC



### **Response Services**

#### Mutual Aid Emergency Response Levels

Tier I - A spill incident in which the area resources can effectively respond to the spill without assistance.

Tier II - A spill incident in which resources outside the immediate area, but still available on the North Slope, are required. A phone call to ACS can put into effect the Mutual Aid Agreement which makes available the spill response personnel and spill response equipment slope-wide.

Tier III - An extremely large incident or an incident lasting several months may require resources from off the slope. This would be considered a Tier III event. Resources are available through Master Service Agreements.

#### Mutual Aid Agreement

Each member of Alaska Clean Seas has the option to enter into a Mutual Aid Agreement. This agreement provides members with efficiencies and cost savings by sharing resources among all members in the event of an oil spill. It outlines the terms and conditions under which each member company can make available their employees, contractors, equipment, materials and supplies to one another in the event of an oil spill. ACS facilitates the agreement among members.

#### Equipment

Response equipment totaling over \$75,000,000 is owned by ACS and member companies. All equipment is maintained by ACS and Member Companies. Member Company owned equipment is available through the Mutual Aid Agreement. The inventory includes nearly 320,000 feet of oil containment boom (including approximately 20,000 feet of fire boom), 229 skimmers, six helitorch aerial ignition systems, two helitorch batch fuel mixers, 93 vessels, two 125 barrel mini-barges, twelve 249 barrel mini-barges, one 650 barrel barge, and more than 260 storage tanks and bladders of various sizes. 2020 saw the addition of the first of a new class of Type D response vessel, the Pt. McIntyre, a 48' landing craft, which will add to our extensive marine nearshore response capability.

#### Facilities

Emergency Operations Centers located in Alpine, Kuparuk, Milne Point, and Prudhoe Bay are available through the Ballot Agreements.

Mobile facilities that are available through mutual aid include the Bird Stabilization Center, Staging Area Manager Trailer, Mechanics' Shops, Decontamination and Warm-up Trailers and Mobile Command Centers.

2020 saw the addition of a new mooring facility at West Dock, which greatly enhances the safety and efficiency of our marine response operations.

#### ACS Technical Manual

The ACS Technical Manual is the primary guidance document for oil spill response on the North Slope. It was developed in 1999 to provide descriptions of spill response tactics for use during contingency plan development and spill response activities. The manual is a living document and is revised as new tactics or equipment are identified.

Volume I list spill response tactics in a variety of conditions and seasonal variations. Tactics are updated and added regularly and form the basis of most of the training and exercises conducted by response teams. 2020 saw the complete rewrite of the Wildlife Tactics to align with the approved Wildlife Protection Guidelines for Oil Spill Response in Alaska. Volume 1 also provides summary lists of equipment, services, resources and contractors that are available.

Some services that may be needed during a major spill response event may not be available on the North Slope. ACS maintains agreements with over 40 providers of a variety of services for member company access or use during a response.

Volume II provides an atlas of the North Slope. These maps show priority protection sites, general environmental sensitivities, air and vessel access, countermeasure considerations, and pre-staged spill response equipment.





#### Response Personnel

Trained and qualified spill response personnel are required in any spill response event. Through the North Slope Spill Response Teams (NSSRT) and Auxiliary Contract Response Teams (ACRT), ACS members have rapid access to hundreds of responders. These responders fall into five labor categories: General Laborer, Skilled Technician, Team Leader, Vessel Operator (Nearshore) and Vessel Operator (Offshore). Each category has training and readiness requirements for achieving and maintaining qualification.



(NSSRT)

Over 500 volunteers are trained and qualified on the North Slope to make up the NSSRT. Combined with Alaska Clean Seas personnel, a minimum of 115 spill response personnel are available on the North Slope each day.



North Slope Spill Response Team Auxiliary Contract Response Team (ACRT)

ACS maintains contracts with off-slope companies to provide additional spill response personnel if needed. Presently, the companies are CCI Industrial Services, PENCO Environmental Services and National Response Corporation Alaska. Over 600 qualified spill responders are available through these contracts.

# **Response Services**

#### Permits Maintained by ACS

ACS maintains permits for oil spill training events and emergency oil spill response activities for the North Slope.

Alaska Department of Natural Resources Land Use Permits

Alaska Department of Natural Resources Fish Habitat Permits

Alaska Department of Fish and Game Bird Hazing Permit

Alaska Department of Fish and Game Mammal Hazing Permit

Alaska Department of Fish and Game Mammal Stabilization, Transport & Disposal Permit

Bureau of Land Management Oil Spill Response Training in the NPRA Permit

North Slope Borough Development Oil Spill Emergency Use Permit

U.S. Fish and Wildlife Service Capture, Salvage and Rehabilitation of Migratory Birds & Raptors Permit

Alaska Department of Environmental Conservation Open Burn Approval for In-Situ Burn Training Permit

ACS continues to sponsor meetings with the natural resource agencies, member company representatives, and response contractors to improve working relationships and capabilities for wildlife response on the North Slope. Contracts for professional assistance are maintained with the Alaska SeaLife Center, Alaska Zoo, Pet Stop, and International Bird Rescue. ACS maintains small mammal transport cages and procedures have been developed to help agency personnel with hazing, capture and stabilization activities. The recently approved Wildlife Protection Guidelines for Oil Spill Response in Alaska have been included in the ACS Technical Manual update to showcase the most recently developed tactics and procedures for wildlife response. The Wildlife Protection Guidelines have also formed the basis for the Protected Species Observer Training update introduced at the end of 2020.

#### Unmanned Aerial Vehicle (UAV) Operations ACS currently maintains a fleet of 4 UAVs available to our member companies for use

ACS currently maintains a fleet of 4 UAVs available to our member companies for use in training, drills, responses, and infrastructure inspection. Currently 14 ACS employees have obtained a FAA Part 107 Remote Pilot Certificate required to fly these aircraft. In the coming year ACS will begin operating a fixed wing UAV that will allow for greater range and longer duration missions.



#### Communications

ACS's telecommunication center houses equipment that supports day-to-day operations and emergency spill response communications. Using a VHF repeater system, ACS is able to communicate throughout its key operational areas. ACS also owns 13 VHF and UHF portable repeaters to extend its area of coverage.

Alaska Clean Seas partners with Marine Exchange Alaska in support of the maritime Automatic Identification System (AIS), a fully automatic marine vessel identification system. Vessels operating off the coast of the North Slope outfitted with an AIS transceiver receive and transmit data that includes: vessel name, position, direction of travel, course over ground, and speed. AIS provides more situational awareness than radar, horns, and plotters and is not affected by sea state or weather. During a response, AIS can assist member companies by contributing critical data to a common operating picture, AIS can easily be displayed to an Incident Command Post providing leadership with a real-time response picture previously unavailable on the North Slope.

ACS owns 430 VHF and UHF radios and utilizes an Iridium Satellite Telephone System. All of these systems combined with a Mobile Response Center provide exceptional communications capability during any spill event on the North Slope.

#### Mobile Command Centers

Excellent communications capability is the cornerstone of any successful spill response. ACS and member companies maintain three separate mobile command centers which provide full on-site radio, phone and fax capabilities.



ACS provides contingency communications response support for exploration drilling. During exploration ACS employs several technologies to meet Contingency Plans. All exploration projects receive a "Drilling Kit", containing a minimum of three Motorola XPR 6550 hand held radios, three charging stations and extra batteries. Kits also have a more powerful Motorola XPR 4550 mobile radio with a power supply and antenna. The kits may also include cellular and/or satellite communication equipment as needed.



### **Business Department**

The year 2020 brought a variety of business challenges as well as an increased focus for the Business Department in supporting ACS and member company operations in response to the ever-changing limitations and restrictions brought by COVID-19. Despite these challenges, the Business Team rose to the occasion providing first class response services to ACS, member companies, and agencies. The Team accelerated the implementation of several programs and applications to ensure uninterrupted service while navigating frequently changing State of Alaska and Municipality of Anchorage mandates and restrictions.

In February, ACS, member companies, and industry partners joined Business Manager Lindy Theis in celebration of her retirement after 16 years of service with ACS. Lindy's dedicated leadership and countless contributions to improving ACS's business practices will ensure ACS's success for years to come. ACS wishes Lindy the best in her upcoming adventures in what will no doubt be a very active retirement.



ACS also said farewell to Rhonda Hill after 20 years of steadfast service as a Payroll Specialist. Rhonda's responsibility of ensuring timely and accurate pay for employees is unquestionably the most important ACS Business function - payroll. Additionally, Rhonda's exemplary and creative party planning skills will also be missed (along with her carrot cake). Tammy Potter, the ACS Accounting Supervisor, led the selection committee in screening, interviewing, and selecting an individual to fill the open payroll position - all while navigating social distancing and other COVID-19 restrictions. Fortunately, the effort was well-rewarded with Sheena Draine joining Tammy and Courtney Rigdon, Accounting Specialist, in mid-summer 2020. Welcome aboard Sheena! Although always a critical element of business success, Human Resources played a key role this year in preparing and ensuring ACS' readiness this year. Roger Heath effectively led the ACS Human Resources Program in 2020 ensuring that personnel were qualified and eligible to support the ACS mission. The ever-changing COVID-19 response required business acumen and flexibility to ensure not only personnel readiness, but that communication and updates flowed regularly to ACS employees and their families. Roger also led the implementation of a new Human Resource Information System for ACS. The implementation of this system in early 2020 significantly enhanced ACS' ability to provide HR support to employees regardless of closures, quarantines, or other restrictions.

Given the near constant changes with flights, schedules, lodging, and tracking related impacts, without our Admin Specialists – Leah Romines and Grace Jensen, our success in 2020 would likely have been unachievable. They met the challenges of 2020 head-on taking on new responsibilities and playing an even more integral role in supporting ACS. In addition to managing all aspects of the rapidly changing travel logistics, they also carefully tracked and reported ACS and NSSRT readiness ensuring our ability to respond.

ACS implemented a number of network and program enhancements in 2020 requiring the extremely capable ACS IT Team to work the occasional magic to ensure success and continuity of business operations. Mark Barrett, Sheri Elg, and Jake Kelley worked day and night to ensure that legacy systems ran smoothy and effectively, while implementing new software and applications. The roll out of video capability and instant collaboration tools to nearly every ACS desk, conference room, and space required significant coordination, expertise, and hours of valuable training. Through a combination of programs, education, and response operations, the IT Team continued to successfully protect the ACS network from repeated phishing attacks and viruses that have brought other organizations to a standstill. IT rose to the occasion and significantly improved or supported the improvement of nearly every element of ACS Business Department's enhancements in 2020.

This year was significant in terms of capital purchases and improvements. Dan Engelby successfully led ACS contracting and procurement efforts in 2020 culminating the completion of the West Dock Moorage Facility, implementation of a subsidence mitigation system at the ACS Prudhoe Bay facility, and the build and delivery of the Pt. McIntyre, the newest addition to the ACS northern fleet. All three of these capital items significantly contribute to ACS' ability to provide response services to our members.

With a strong Team in place, ACS Business Department stands ready to support ACS and Member Companies in 2021 and the years to come.

### **Operations Department**

#### **Operations Department Overview**

What a crazy and unpredictable year it was in 2020. We definitely overcame numerous obstacles this year and forged ahead completing project deadlines and meeting our members' expectations. Fortunately, we have our foundational seasoned operations team members along with a strong bench of new comers and help from the Planning Department to cover the gaps we experienced because of COVID-19.

As we navigated through the COVID-19 State of Alaska (SOA) mandates, our member company guidance and developing our own COVID-19 requirements, we were able to continue to meet our operational readiness requirements. This was a daily challenge as things were changing rapidly for months and continue to this point. This meant our Supervisors had to stay diligent on filling the openings in work schedule and ensuring everyone stayed in compliance to the best of their abilities. It also meant our Spill Response Technicians had to stay flexible with their work schedules – including several sacrifices made for the good of the group.

Through the challenges of the pandemic we were able to accomplish our new vessel build (Pt. McIntyre) as it was mostly complete in March. Sea Trials occurred in late July and we had it transported to the slope in late September. We completed installation of our new mooring docks that now provide safe moorage and personnel transition areas on both sides of the West Dock causeway. We worked through and supported ACS' role in the transition of the Hilcorp purchase of BP assets, and started succession planning to ensure successful transitions as employees start to retire in the next couple of years. These successful projects were a huge accomplishment given the COVID-19 restrictions and logistical constraints. More to come on these projects in the next couple of pages.

As a result of low oil prices and uncertainty in the economy ACS delayed the vessel build on hull #2. However we did receive the approval from our Board of Directors to continue our vessel replacement program and will complete specifications on the next vessel hull in 2021 for delivery in the spring of 2022. Our marine crew is already discussing some minor modifications to improve the operational function of the new vessel.

ACS Operations stands ready and healthy to respond to our members' potential incidents. Our focus is to keep our staff safe, in compliance, ensure our response equipment is in high state of readiness, and continue to train and stay fresh on our response tactics.



### Communications

#### Comprehensive Slope-Wide Data Network

With the assistance of all the member companies' telecom and IT departments, Alaska Clean Seas has upgraded our analog radio network to a state-of-the-art digital radio network that unites all of the Oil Spill radios and repeaters into a single system, allowing virtually seamless mobile coverage across the slope. Each repeater maintains the local response coverage it used to, but now allows for simultaneous slope-wide logistical communications.

The goal of this comprehensive digital system, is to be certain that each responder is able to effectively contact every level of the response organization with ease. Some of the new capabilities of our digital radio network are

- Group calls or private/direct calls, across the slope.
- **Radio checks** that can tell whether a responder's radio is on the network and functional.
- Texting of information to/from individual radios or groups of radios.
- Tracking of Vessels including airboats as well as individual response assets.
- Data reports that can provide information on radio locations, radio call logs, and many other data points.
- **Telemetry** from any provisioned radio or dispatch console, devices can be controlled (switches, lights, sensors, etc.) or monitored remotely.
- **Common Operating Picture** can be maintained by tracking our assets, inmproving safety and situational awareness. GPS positions are available real-time to coordinate efforts, and archive where those efforts are taking place.

The digital network also allows real-time monitoring of repeater and antenna system health. If a repeater fails, or connectivity is lost to the repeater, a report will be received at ACS Base. It also has the ability to connect to other member companies North Slope radio systems if needed. This helps guarantees effective communications between our North Slope members.

The new system improvements have been accomplished at a very low cost. Most of the radio system equipment that we already possessed was of a nature that allowed upgrading to digital formats. "Going digital" allowed us to utilize the new capabilities and features, without significant expenditures. All of this upgraded radio equipment could then be "networked" together in order to create a simple, yet ubiquitous communications system.

Creating the digital network across the slope was the result of engineering and work done in-house, and also with the tremendous support from member company telecom departments. The cost of the IP network equipment was negligible, and some of it was sourced surplus from members.

#### EQUIPMENT





#### Dispatch Console

This portable, laptop based console system can be moved to any command center and utilized in response situations. Those operating the console are able to contact individual radios, groups of radios, or all of the radios across the slope. Important radio calls are recorded and can be immediately replayed to verify the information.

This system also hosts GPS asset tracking. Tracked assets are displayed on a screen in real-time, allowing situational awareness and coordination of vessel efforts when responding to various situations.

Text messaging, radio alerts, and individual radios calls are possible using the console, as well as from other radio subscribers.



#### Portable Microwave Communications

Data links can be set up to extend networks to where they are needed most. VOIP phones and computer networks can be given connectivity to the benefit of mobile command centers.

Our portable towers and mobile shelters can be fitted as needed with microwave radios and antennas.

A test deployment this summer supplied in-house internet to the marine department for the whole season. This resulted in greatly increased communication and internet capabilities while simultaneously giving a significant cost savings.

#### MARINE

#### Infastracture Renewal

The much needed completion and installation of the ACS marine dock systems was accomplished in the summer of 2020. The Flexi Float dock sections that make up the floating dock system were erected and modified on shore to address installation of spec items. The additional installation included dock cleats, fold down light towers, dock ladders, access ramp landings and power pedestals. Two ramps were built to accommodate foot traffic from the dock to the shore on the east lagoon as well as the southernmost dock on the west side of the West Dock causeway.





A ramp large enough to accommodate a loader and a fuel truck was built and installed on the northern most dock on the west side of the West Dock causeway. The docks are anchored in place by six steel pilings driven into the subsea surface during the winter through the ice. The dock sections were placed in position onto the ice during the late winter and the keepers were installed around the pilings.

The electrical installation for lights and pedestal outlets was completed in late spring of 2020 and we were able to get power installed prior to the ice melting from under the docks. As we awaited the ice to melt prior to putting boats in the water, we deployed pumps to circulate water

under the docks and an air bubbler system to expedite the melting process. The ice had receded enough to put boats in the water as the ice under the docks was absent. This allowed the docks to float and moor our boats dockside. A few minor adjustments needed to be made to the docks. Gravel and sand bags needed to be added to the ramp approaches to prevent erosion and some reworking of the electrical feed was required but all in all the docks were functional immediately.

Installation of the new dock system was a great improvement for ACS Marine operations and response readiness. The docks will allow for safer and more efficient marine response operations for many years to come.



#### MARINE

#### The Pt. McIntyre

Vessel replacement was a large undertaking influenced by many ACS employees. The marine committee formed in 2012 and began determining vessel specifications for the future response needs of a growing arctic oil field. Funding for a new vessel was confirmed by the ORT in 2018 and the William E. Munson Company was awarded the contract to build a new vessel. 48' Twin 800hp Jet 33 knots 12000 lb. Seats 9 Crucial and Lori Skimmers



The Pt. McIntyre is a 48' mono-hull landing craft powered with twin 800hp jets. Bow and stern push knees incorporated into the hull make all towing configurations of barges possible. The hydraulic system on the Pt. McIntyre was one of the more complex that Munson had ever installed, each engine is outfitted with an independent hydraulic pump for redundancy and dual skimmer functionality with a single engine running.

The Pt. McIntyre sea trials were conducted on Puget Sound in July. The vessel travels through rough sea conditions with comfort and exhibits excellent stability. The landing craft platform offers extreme utility for spill response use; beaching, transporting equipment, and working from the vessel with ease will increase functionality for our unique application.

All the outfitting, components, and handling characteristics of the Pt. McIntyre make it a world-class spill response vessel for operating in the shallow waters of Prudhoe Bay.

#### WILDLIFE

#### Caribou Rescue

On September 21, personnel from ACS Base and member company personnel responded to a caribou in distress along the roadway. The caribou had been entangled in a guy wire of a weather station and become immobile. ACS personnel secured the caribou with line and obscured its sight with a blanket to calm the caribou down and allow personnel to work around it in a safer manner. Once this was complete personnel used various cutting instruments to remove the guy wire from around the caribou's antlers. Once free from the guy wire, the blanket and line were removed, and the caribou ran free and returned to its nearby herd.



#### Musk Ox Rescue

On October 13, a sub-adult musk ox was discovered to have plastic material wrapped around it's right front leg. The animal was located adjacent to an access road and was observed for several minutes to ensure it was calm enough to attempt removal of the plastic material. Three ACS and one PENCO technician gathered to discuss the operation and associated hazards. The technicians were able to use a 100' length of nylon rope to wrap the legs of the musk ox to prevent it from running or kicking while the attempt was being made to remove the plastic. Once immobilized, a blanket was placed over the animal's eyes in an effort to keep it calm which worked very well. After cutting the plastic material away, the rope securing the musk ox and the blanket covering its eyes were removed. The technicians were able to safely back away from the animal which immediately got up and began walking away.

#### DRILLING



#### 2019-2020 Winter Drilling

This Winter Drilling season was once again a large and challenging one with ConocoPhillips and Oil Search both conducting very active winter operations. Even with all the challenges that go along with winter exploration in the arctic, some amazing and exciting activities took place.

The ConocoPhillips exploration season was the largest ice road and ice pad construction ever completed on the North Slope with

313 acres of ice pads and 150 miles of ice roads. The Tinmiaq 20 well was the earliest spud date for a well in the NPR-A. 21 Technicians supported 7 exploration and support locations. An additional 6 Technicians supported ConocoPhillips WNS Capital Projects consisting of the Alpine resupply ice road and GMT2 construction.

Oil Search winter exploration season had eight Technicians supporting two exploration drillsites, four ice support pads, and approximately 36 miles of ice roads. Oil Search also moved forward





with the construction and development of the Pikka oil field. Ten Technicians supported gravel road and pad construction from two different gravel mine sites, along with the ice roads and ice pads to support the gravel haul.

If trying to complete a large amount of activity during a short winter season was not challenging enough, we also had a high number of cold weather shutdown days, followed mid-season by the global COVID-19 pandemic. While these challenges did shorten some of the planned winter activities, ACS support for these projects continued through mid-May.



### **BSEE Audit - Northstar**

Northstar's Spill Response Team (SRT) responded to a request from BSEE to perform an audited Offshore Deployment Exercise on August 24 2020. This response equipment exercise included deploying ACS recovery tactics referenced in the Hilcorp C-Plan (Response Strategy 3 Crude Oil Transmission Rupture at Northstar during Typical Summer Conditions).

The Northstar SRT completed Tactic R-30. During a subsea pipeline break a diamond-patterned boom can be deployed on the water surface above the pipeline break. A collection point inside the diamond patterned boom can be used to deploy skimmers and recover the oil. The boom will form its own pattern based on wind and current direction. This allows for the vessel operator to deploy the skimmer in the most effective location inside the boom.

Northstar's SRT used ACS Vessels to pull and set anchors to create the diamond boom containment, deploy a skimmer into the diamond collection point, and to transfer a mini barge to our collection point where a fluid transfer was conducted.



This Exercise was supported by ACS Operations, Training staff, and the Marine crew assigned to West Dock. The training was documented via drone video footage in order to satisfy the BSEE audit requirements. BSEE personnel were unable to travel due to COVID-19 travel restriction. In addition, BSEE also audited some of Northstar response equipment using Microsoft Teams platform. This Audit included live stream video and discussion while an ACS Tech performed live response equipment checks. Two Northstar vessels, the Kiwi and Irene, were operated for BSEE to witness via live streaming.

### Summer Exercise

On August 1, 2020 a Spill Response Team summer exercise was held on the Kuparuk River. The WOA SRT gathered together to perform the R-16 Hook Boom to Skimmer and Storage tactic as described in the Alaska Clean Seas Technical Manual.

Using an Airboat, the team deployed 100ft of river boom just downstream of the Site 1 collection area to set up a J-hook connecting to an anchor and the shore. A 12-K disc was placed in the J-hook powered by Vikoma spate pump and power-pac which also pumped fluids recovered by the skimmer to a 600-gallon portable tank. The Pump/ power-pac was left secured to a small portable ATV trailer that made it easier to move around and reduced potential injury from rolling and carrying over uneven terrain. The team completed its objective by deploying a recovery system for the Site 1 collection point in a timely manner. In addition to performing the R-16 tactic, the team also demonstrated the C-6 tactic by deploying a MegaSecur® dam just



downstream of the area. The tactic allows you to adjust the depth and flow of the water for using a skimmer to collect in either deep, or shallow fast-moving braids and channels. The team members set-up the dam using lessons learned from previous exercises by placing tennis balls over painted stakes to eliminate trip hazards. With ongoing transition on the team, and a large number of new members, we used this opportunity to give some basic booming tactics training, and to allow the Team Leaders share their experience and lessons learned. This enabled the team to learn how to safely deploy these critical river tactics.



### Planning Department

#### Planning Department Overview

The Planning Department began the year with a schedule of projects aimed at increasing ACS' reach and operational readiness, including a growing video library of Tactics training, video Priority Site aerial reconnaissance overflights, and an extended range UAV. In early 2020, we received FAA Authorization to fly our UAVs at night, greatly improving our ability to support spill responses and training through the winter months. A renewal of our FAA Airspace Waiver allowed us to continue to fly at ACS Base, enabling roof and antenna inspections to occur. At the outset of the pandemic, it was uncertain which projects would be permitted to move forward, although it was clear there were going to be changes. Many of the innovations underlying the stories in this report came through a collaborative effort between Planning and the other departments and showcases the creativity and adaptability of our people.

With adversity came opportunity and, like all of ACS, the Planning Department rapidly adapted by introducing some well-conceived modifications and enhancements into our core functions of safety, training, and prevention. While heavily involved in developing the COVID-19 mitigation plans and procedures, our personnel continued to provide support in all areas of the company's operations. The health and safety of our people and maintaining response readiness remained paramount through every action and decision. With limitations on access, the Safety Specialists stayed in contact with the field areas and assisted them whenever they could. When in-person training events were suspended, courses were quickly reworked into meaningful virtual modules. Ingenious ideas like using separate phone cameras on 3D printed mounts for close views, coordinating hands-on activities with area Lead Techs, and mixing livestreamed and prerecorded material would result in innovative and engaging classroom instruction. With the resumption of in-person training, careful attention was paid to maintaining social distancing and using facial coverings, minimizing sharing of tools and other objects, and maintaining heightened precautions throughout the activities.

We approach 2021 with a renewed outlook, stronger and more agile than a year ago, with the vision enhanced by knowing that what we can do is limited only by our imaginations. We have resumed the plans for an extended range UAV and developing procedures around that capability. With the tactics and Priority Site video libraries continuing to grow and many new training enhancements under our belts, the Planning Department is poised for an outstanding year ahead.



# Health, Safety & Environmental

#### HSE Programs

ACS has a number of essential safety programs it relies on for consistency, compliance and providing the tools to its employees to do the job safely. These programs are reviewed annually to reflect any regulatory change, as well as changes in the working environment, and to maintain a safe and healthy workplace.

#### Our Commitment

Our HSE goals provide the foundation for all activities, from jobs on the slope to play at home. In order to achieve our organizational goals, we strive to keep all members of our team focused on maintaining the highest levels of commitment to safety.

ACS works to engage each employee and contractor to participate in ACS HSE programs by incorporating the use of safety tools. Employees are also encouraged to attend safety seminars and safety conferences to enhance knowledge and awareness.

#### Safety Innovations

ACS employees take ownership in company safety culture. They are encouraged to find innovative ways to improve safety, and to share those innovations within the company and with our members.



#### **Fit Check Solo**

Purchased a device that will allow us to test the effectiveness of the hearing protection we provide. With the information from this we can ensure that our people are going to be kept safe from hearing loss.



#### **Fume Extractor**

Our marine mechanics perform a lot of welding during the winter months on ACS vessels. In the past bay doors had to be opened, exposing the inside to arctic conditions. This allows pinpoint fume removal.

# Health, Safety & Environmental

#### Green Star Business Program

ACS continues to be a leader in environmental stewardship, reducing or eliminating the volume or toxicity of materials, pollutants, or wastes at the source so that they never become waste in the first place. We are proud to be in the ranks of over 100 companies and organizations in Alaska that are working toward cleaner air and water, fewer greenhouse gas emissions, less toxic waste to manage, less solid waste going to landfills, greater workplace safety, and better stewardship of natural resources.

#### VPP

ACS is recognized as one of seven companies in Alaska to have facilities that hold VPP Star site status.

The Voluntary Protection Programs (VPP) promote effective worksite-based safety and health. In the VPP, management, labor, and OSHA establish cooperative relationships with workplaces that have implemented a comprehensive safety and health management system. Approval into VPP is OSHA's official recognition of the outstanding efforts of employers and employees who have achieved exemplary occupational safety and health.

#### 2020 HSE In Review: COVID-19 and Beyond

2020 was a busy year for our small HSE team. The successes we had could not have been accomplished without a workforce dedicated to being proactive, remaining vigilant and turning lessons learned into opportunities for improvement. COVID-19 introduced a new way of thinking and doing business, it added complexity to even the simplest of events. The ability of the whole organization to be flexible and adapt to an ever-changing landscape of information and requirements from health organizations, governments, and member companies was impressive.

The early adoption of preventative measures, implementation of a Community/ Workforce Protective Plan, and continuous output of employee guidance allowed us to have an exemplary record when it came to COVID-19. We also had a very successful year going through high-tempo operations and many transitions. The team navigated training, equipment deployments, regulatory audits, and a great deal of live animal interactions. All of this done while completing new infrastructure projects like the thermosiphons at ACS base and construction of the new mooring facility, in a year with significant personnel changes.

# Health, Safety & Environmental

#### ACS HSE Committee

The mission of the Alaska Clean Seas HSE Committee is to develop and promote a healthy and safe environment for all employees and visitors to our facilities through the involvement of all individuals with regards to education, communication, and safe work practices.



Entering their second year with the committee, members include Mac Wilson, Tammy Potter, Chuck Bartlett, Adam Kayser, and Mike Lord. This employee-driven committee is advised by ACS Safety, Human Resources, and ACS Management.

Many of the committee's plans were put on hold for the 2020 year. One area that remained a priority was the growth and improvement of our wellness program. The committee surveyed their fellow employees and developed a program to provide coworkers with the knowledge and support they needed to positively improve their well-being in 2020.

The 2020 wellness program was based upon the following:

- Recognizing wellness as a state of complete physical, mental, and social wellbeing, and not merely the absence of disease or infirmity.
- That people need support in different areas of wellness, and they should be empowered to choose what areas those are.

What ended up being developed was a point-based program that could be completed through various routes:

- A screening that includes a physical, blood draw, and doctor consultation.
- Measurable physical activity
- Courses that addressed the topics employees identified as needed.
- Topics included stress management, soft tissue injury, nutrition, ergonomics, financial management, fatigue management, and nicotine cessation.

The HSE Committee would like to thank all the employees of ACS for their submissions. These are critical to the continual improvement of our company and work environment.



# Tactics and Priority Sites

#### ACS Tactics Video Library

ACS took the opportunity to capture tactical equipment deployment exercises that occurred throughout this year. Through coordinated efforts of the ACS videographer and the area Lead Technician, each tactic was turned in to a short video depicting the corresponding tactic found within the ACS Tactics Manual. These ACS Tactics videos have been uploaded to a video library which provides a realistic perspective of the tactic in operation which can be used to support SRT training, field deployment exercise, drills, and even actual events.





#### ACS Map Atlas Videos

Currently the ACS Map Atlas provides a depiction of North Slope in a topographic map format. To augment the Map Atlas and provide responders and IMT personnel with a better understanding of the area of response, ACS personnel utilized drones to fly Priority Protection Sites to capture still images and videos of the site and surrounding area. Once a Priority Protection Site had been captured, the data was converted to a short video along with the flight telemetry from the drone and compiled into an ACS Google Map Atlas of Priority Protection Sites along the North Slope of Alaska. The Google Map Atlas provides a link to the specific Priority Protection Site found the ACS Map Atlas along with a still picture of the area and the video of site itself. In this format, with the click of a mouse, the end user has all of the necessary information regarding a Priority Protection Site.





### Research & Development

While events in 2020 made things more difficult, ACS was still able to bring the advancements made in last year to a reality on the slope, as well as collaborate on efforts for the future, and use new tools to improve upon existing ones.





#### **Steam Collar**

One example of a successful implementation from R&D to a field-deployed system was the deployment and training of a dry steam collar to enhance the effectiveness of rope mop skimmers in Arctic environments. This was a direct result of an R&D project that moved from a prototype demonstration at CRREL to a deployed system being trained to spill responders across the North Slope in one year.



Projects such as The OSRI JIP for oil herding and burning is postponed until 2021 and a very promising BSEE solicitation for development of a system to recover oil under ice was awarded to another group. For every snag we encountered there were twice as many successes to celebrate.

Planning for future projects continued later in 2020 as organizations resumed meetings and seminars remotely, offering some exciting opportunities ahead in 2021. ACS provided end user data for a BSEE-sponsored project to continue development of an in-line sensor that would allow for real time data of recovery efficiency to be transmitted to an Incident Management Team. We are also currently coordinating with the Arctic Maritime Spill Response Modeling working group sponsored by the Arctic Domain Awareness Center to conduct an exercise testing oil spill and ice growth modeling capability and provide input for developing future models oil spills in ice.

Despite challenges this past year, the dedication of the hard-working individuals at ACS made it a success, and 2021 holds a great deal of promise!



#### **Deep Trekker**

Discussions with Deep Trekker led to a North Slope demonstration of an underwater ROV. The utility of this system both for spill response remote sensing combined with the major cost saving for use in vessel hull inspections (instead of a crane) lead to the approval to purchase an ROV in 2021. Blending the old (but still very relevant) and the new.



#### Wildlife Guidelines

ACS is pursuing a grant program with the US Fish & Wildlife Service for enhancements to training programs and response capabilities for oiled polar bear responses. Given the timing of the recently released Wildlife Protection Guidelines and Protected Species Observer Training, potential growth of industry on the North Slope, and the continued sensitivity of issues involving polar bears, this opportunity presents some exciting possibilities for ACS.

## Training

The training staff provides continuous oil spill training support to the member companies. This support includes classroom presentations, field practical training, tabletop exercises, and deployment drills. With over 3,000 instructor hours per year, hundreds of training development hours, and extensive oil spill response experience, their experience and presentation abilities make for realistic, dynamic and effective training activities.

#### SRT Training

Spill response training is provided weekly in 2-4 hour sessions to each of the North Slope Spill Response Teams. ACS instructors provide the spill response training at the Valdez Marine Terminal for Alyeska Pipeline Service Company. Specialized training is also provided by both ACS instructors and professionals from outside the organization.

#### **ICS** Training

ACS follows the National Incident Management System (NIMS). Through a partnership with Emergency Management Services International (EMSI) ACS presents EMSI training classes including Intermediate ICS 300, ICS-339, ICS-220, Planning Section Workshop, Situation Unit Workshop, and Resource Unit Workshop. ICS training is provided to member company Incident Management Teams both on and off the North Slope.

#### Specialized Training

Alaska Clean Seas has developed several specialized courses for the North Slope Spill Response Teams. Advanced Oil Spill Responder courses have been held at Ohmsett in New Jersey, at the Cold Regions Research and Engineering Laboratory in New Hampshire, and in collaboration with other OSROs and Global Response Network partners. These courses provide students the opportunity to operate different types of skimmers in different types of wave conditions and in oil on water. The scope and lessons from these courses will be used to develop enhanced advanced responder training on the North Slope.

#### Oiled Wildlife Response Workshop

ACS sponsors the Oiled Wildlife Response Workshop at the Alaska Sealife Center in Seward, Alaska. This three-day course provides students a basic understanding of animal care and treatment to assist professionals in oiled pinniped response activities.

#### **Bird Hazing Training**

Bird Hazing Training, taught by an instructor from the U.S. Department of Agriculture (USDA) teaches students how to identify different species, which deterrent tools to use and how to develop a hazing strategy based on an oil spill scenario. Students also learn firearm safety and how to operate different pyrotechnics used in bird hazing.

#### Polar Bear Hazing

Polar Bear Hazing is an eight-hour course instructed by ACS trainers authorized by the US Fish & Wildlife Service. This course provides trained responders knowledge of the regulations protecting this unique species of bear outlined by the Endangered Species Act and the Marine Mammal Protection Act. Students are taught to understand polar bear biology, behavior, and techniques to limit interaction between humans and bears through attractants management, passive hazing, and active hazing. Instruction of proper techniques and equipment enables effective hazing while providing the safest environment for bears and responders alike.

#### 24 Hour HAZWOPER

24 Hour Hazwoper is a 3-Day course that was developed in-house with the intent of merging OSHA requirements with the unique environment of the North Slope. Designed to be mostly hands-on with minimal time in the classroom, the 24-Hour HAZWOPER course takes new SRT members through the procedures to stay safe and effectively respond to a hazardous materials incident.

#### Bird Capture and Stablization Course

Bird Capture and Stabilization Course is instructed by International Bird Rescue (IBR) and hosted by ACS. This training allows SRT members to learn the fundamentals of safely capturing birds and transporting them to our stabilization center on the North Slope. Students learn techniques to care for oiled avian species until the arrival of wildlife experts. Special training ducks are flown up with bird experts who lead the group through intensive hands-on training.

#### Protected Species Observer

Protective Species Observer (PSO) training was developed to train SRT members and member company personnel as PSOs. During a spill, responders may be required to have trained PSOs on vessels to search for any protected species in the response area. The PSOs would then advise operations of any sightings, to help minimize the impact to protected species. This course was revised late in 2020 to incorporate the tactics and recommendations found in the 2020 Wildlife Protection Guidelines.

#### Hazardous Waste Transportation

Hazardous Waste Transportation training is offered to all ACS employees, member companies and their contractors. This is a multi-day course for anyone who regularly handles, transports, and ships hazardous material.

#### **Drills and Exercises**

ACS assists in both tabletop and field deployment exercises. Tabletop walkthrough exercises provide an excellent training atmosphere in which students work through a scenario with instructor guidance. 2020 saw the Member Companies modifying the familiar Incident Command Post Tabletop Exercise format to a virtual format, leveraging the ever-widening use of Microsoft Teams while maintaining regulatory compliance.

Field deployment exercises are conducted year-round in a variety of weather conditions. As leaders in cold weather spill response, ACS personnel are able to provide realistic conditions and activities to the field response training exercises.

# Training

#### Training With Social Distancing

One of the things we pride ourselves on at ACS is the amount of high-quality hands-on training that we do. Lectures and classroom style training serve an important purpose, and we take pride in the modules we provide in that format. As often as possible and practical we work to ensure training takes place in conditions that we anticipate responders will encounter in a real spill response. We attribute much of our success on exercises and actual spill responses to the elevated level of skill and professionalism cultivated by this style of training. A consequence of this is that personnel typically find themselves near one another. Unfortunately, in 2020 we found ourselves unable to be next to one another, unable to travel freely about the slope or the country. That did not however, change the mission; we still needed to provide training that produces some of the best spill responders in the world.

Preventative measures for COVID-19 sped up the implementation of virtual business tools like Microsoft Teams and Zoom. Creative restructuring of many of our courses and use of these platforms opened a new training environment that allowed us to maintain readiness for our own people and our member NSSRTs across the North Slope and sometimes further. Not all training courses were able to be successfully delivered without in-person instruction. We tip our hats to all the Trainers, Lead Techs, Support Techs, and the Marine crew that supported safe and effective training to many small groups over the course of the year. We did deliver many remote training NSSRT sessions over the course of the year with remarkable success. Virtual delivery added benefits such as bringing together teams that normally would not train with each other due to geographic challenges.

Team members working in areas with minimal staffing could attend training virtually and not have to leave a facility. Communications and Knot Tying/Rescue Rigging are two examples of courses delivered by having ACS Lead techs coordinate the delivery of equipment to team members who would go through a mix of video, presentation, and virtual classroom to familiarize them with the equipment and procedures for effective use during an oil spill. Cameras delivered multiple video angles including the instructor's point of view to ensure a quality learning experience.





#### Alyeska OSCP

The challenge that jump started our virtual training model was a request to help Alyeska Pipeline responders maintain compliance training while physically separated. ACS went to work re-envisioning the OSCP training program. Alyeska requires in-class training as well as hands-on (practical) training with the equipment to be compliant. We looked at this challenge as an opportunity, not just to solve the remote training issue, but to make the whole course better than what we had before. This meant a complete rebuild of the course. The most difficult challenge was how to accomplish hands-on when the trainer's hands are 860 miles away from the classroom. Hands-on practical training is accomplished with the support of key Alyeska employees and the prestaging of equipment at various Alyeska locations and at ACS base. Trainers have created what amounts to a TV studio in the ACS Base training room. Three cameras are available to provide varying views of equipment and demonstrations. Between this and cameras in Valdez with the students, a meaningful exchange can occur. Instructors can lead students using items such as atmospheric testing equipment, communication equipment, and valve actuators. They can then observe the students demonstrating proficiency via video and provide feedback.





#### 24 Hour HAZWOPER

Hazwoper Regulations and available technology have always placed Hazwoper instruction in the category of in-person only. As we reimagined our other training programs, we took a hard look at how we could make a (mostly) virtual Hazwoper. This is far different from online Hazwoper, and we insisted that the course we designed maintained the key components that make ACS and NSSRT Hazwoper certification stand out. The curriculum needed to remain comprehensive and cover all the regulatory required components, the entire course needed to be instructor lead and allow for engagement and interaction between student and instructors, and the course needed to still include handson training to allow for evaluation of student knowledge and core competencies. By conducting daily classroom activities in our virtual training environment, we were able to satisfy our first two needs. The component is directed at their location by a qualified ACS spill tech who works with the trainers to develop a safe and comprehensive plan for exercising the donning and doffing of PPE and respiratory protection and effective application of decontamination. All of this is done while maintaining distance, using sanitized gear and equipment, and wearing masks.

ENI and Kuparuk Joint Exercise



# Pages 42-61 Removed from website version

### ACS Owned Equipment

Description	Quantity
Skimmers	77
Barges	13
Tanks and Bladders	61
Vessels	44
Boom	137,994 feet
Semi Truck	1
Boom Truck	1
Mechanics Trailer	1
Passenger/Work Trucks	11
Front End Loaders (w/ attachments)	2
Bobcat/Skid Steer Loaders	6
Warehouse Fork Lifts	3
Kubota ATV's (w/tracks)	5
Snowmachines	8
Light Plants & Stands	26
Diesel Generators	39
Indirect Fired Heaters	6
Lowboy Trailers	2
Utility Trailers (10'-28' in length)	23
Cargo Trailers (8'-53' in length)	11
Dump Trailers (7 Ton)	2

DescriptionQuantity20'x 40' Connexes199Portable Communication Towers1Portable Communication Shelters2Handheld & Mobile Radios418Hydraulic Power Units74Flat Bed (w/ Container Lugs)114 Passenger Bus1Gasoline Generators11Direct Fired Heater1Heli-Torch (55 gallon)6Heli-Torch Batch Cel Mixers2Mobile Command Center1Envirovacs2Quantity24Bird Stabilization Center1Portable Huarns153Oil Spill Tacking Buoys4		
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UAV's / Drones 4	Oil Spill Tacking Buoys	6
	UAV's / Drones	4

The ACS Equipment Manual can be viewed online at www.alaskacleanseas.org under Documents.

# **Contact Information**

### 24 HOUR EMERGENCY NUMBER (907) 659-2405

www.alaskacleanseas.org