Southeast Alaska Marine Firefighting Contingency Plan

U.S. Coast Guard
Sector Juneau
Juneau, AK

Promulgated August 26, 2013

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Record of Changes

The Southeast Alaska (SEAK) Marine Firefighting Committee (MFC) will exercise and review the Plan no less than triennially for adequacy, consistency, and completeness.

The SEAK MFC will recommend changes to the Coast Guard COTP for review and approval. Approved changes will be made by the COTP and recorded in the table below.

Change	Section	Initials/ Date
Promulgation	All	LM/26AUG2013

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1000 Introduction

1100 Purpose and Objectives

The Southeast Alaska (SEAK) Marine Firefighting Contingency Plan (MFCP) outlines policies and procedures specific to fighting marine fires in SEAK and provides an organizational structure to coordinate the essential functions required to combat marine fires. A coordinated response to a marine fire in SEAK will require participation and deployment of resources from federal, state, local, and tribal entities, in addition to industry and other stakeholders.

While the Coast Guard has traditionally provided firefighting equipment and training to protect its property and personnel, the agency has been called upon to provide assistance with fires on board vessels and at waterfront facilities. The Coast Guard will continue to render assistance as available but local firefighters maintain principle jurisdiction for fighting marine fires at facilities and in ports (shoreside). The ultimate responsibility for preventing marine fires lies with the vessel and/or facility operator, including providing adequate firefighting protection. This plan is *not* intended to relieve any entity of their authority or regulatory mandates. *This plan is also not intended to be a marine firefighting technical handbook.*

Contingency planning for marine fire incidents in SEAK is essential due to the unique and remote geography of the region. With the exception of the northernmost cities of Haines and Skagway, most of the region is only accessible via air or water; therefore, emergency response to a major marine fire may be significantly delayed if resources beyond those locally available are needed. Deploying marine firefighting resources through Haines and/or Skagway would require a significant effort due to distance and geography, despite the available roadways.

Response resources relevant to this plan include:

- Public Safety Agencies, including land based fire departments;
- Vessel Owner/Operators;
- Facility Owner/Operators;
- Federal, State, Local, and tribal governments;
- Private Industry; and
- Other stakeholders.

1200 Scope

This Plan applies to the Sector Juneau Captain of the Port (COTP) and Officer in Charge Marine Inspections (OCMI) Zones in accordance with the Coast Guard's responsibility to ensure vessels and facilities comply with applicable laws, regulations, marine environmental protection and rules relating to vessel safety, security, and seaworthiness.

1300 Authority and Jurisdiction

1310 Authority

The Coast Guard derives its authority to fight fires from Title 14, Section 88 (b) of the United States Code (14 U.S.C. 88 (b)), the Ports and Waterways Safety Act of 1972 (PWSA) and the Oil Pollution Act of 1990 (OPA 90). 14 U.S.C. 88 codifies the Coast Guard's traditional functions and powers to render aid and save property. The PWSA acknowledges that increased supervision of port operations is necessary to prevent damage to structures in, on, or adjacent to the navigable waters of the United States and to reduce the possibility of vessel or cargo loss, or damage to life, property, and the marine environment. Finally, OPA 90 mandates that the Coast Guard maintain Area Contingency Plans of pollution response equipment, including firefighting equipment[1].

The Intervention on the High Seas Act (33 U.S.C. 1471, et seq.) extends the Coast Guard's authority to take similar preemptive or corrective action upon the high seas (i.e. beyond the three mile territorial seas). Specifically, it *authorizes the Commandant* of the Coast Guard to take such measures on the high seas as necessary to prevent or mitigate a casualty which may reasonably be expected to result in major harmful consequences. Sector Juneau COTP should relay any recommendation to take such action through the District Commander to the Commandant.

42 U.S.C. 1856-1856(d) allows an agency charged with providing fire protection for any property of the United States to enter into reciprocal agreements with state and local firefighting organizations to provide for mutual aid. This statute further provides that emergency assistance may be rendered in the absence of a reciprocal agreement when it is determined by the head of an agency to be in the best interest of the United States.

1320 Jurisdiction

The Coast Guard Sector Juneau Commander is responsible for all Coast Guard missions within the sector's area of responsibility.

Sector Juneau's office is located in Juneau, AK. The boundaries of Sector Juneau's Southeast Alaska Marine Inspection and Captain of the Port Zones start at latitude 60°01′18″ N, longitude 142°00′00″ W, proceeding northeast to the EEZ near the Canadian border at latitude 60°18′24″ N, longitude 141°00′00″ W; thence south and east along the EEZ on the United States-Canadian shore side boundary to the intersection of the Canadian coast and the Coast Guard District Seventeen southern border at latitude 54°40′00″ N, longitude 131°15′06″ W; thence west along the southern border of Coast Guard District Seventeen to the intersection with the outermost extent of the EEZ at latitude 54°38′11″ N, longitude

[1] Marine Safety Manual, Volume VI, Chapter 8, Change 4

140°01′26″ W; thence north along the outermost extent of the EEZ to latitude 56°14′50″ N, longitude 142°00′00″ W; thence north to the point of origin[2].

The Sector Juneau COTP and OCMI Zone also includes the U.S. territorial seas, contiguous zone, and exclusive economic zone adjacent to the above described Zone for the purpose of enforcing or acting pursuant to a statute effective in these areas[3].

[2] 33 CFR §3.85-10
[3] 33 CFR §3.01-1

2000 Command

2100 Policy and Responsibility

2110 Federal Policy

The Coast Guard exercises primary federal responsibility for the safety and security of the ports and waterways of the United States. The role of the Captain of the Port (COTP) in a marine fire event is to ensure firefighting efforts are carried out in a manner which does not threaten the safety of life, the environment, or property.

The Coast Guard will render assistance as available, commensurate with each unit's level of training and the adequacy of equipment. In general, Coast Guard personnel shall not directly engage in firefighting activities on other than Coast Guard units *except* when necessary to save a life or when possible to avert a significant threat with minimal risk to Coast Guard personnel. The Commandant recognizes the significance of the cautious approach which the Coast Guard has adopted for marine firefighting operations. The extensive training, equipment, and staffing thresholds will limit the response capability of many Coast Guard units and in some areas support will simply not be available. This circumstance is preferred to attempting a complex and potentially hazardous job without the necessary training, staffing, and equipment.

The Commandant intends to maintain an "assistance as available"[4] posture without conveying the impression that the Coast Guard is prepared to relieve local fire departments of their responsibilities. While the Coast Guard clearly has an interest in marine firefighting, local fire departments are principally responsible for maintaining the necessary firefighting capabilities within U.S. ports. The COTP *shall not assume overall control* of firefighting efforts when appropriately qualified fire officers are present and able to take control.

All requests for federal resources or equipment should be made to the Coast Guard COTP Sector Juneau (See Table 2-1).

Agency Contact Information	
Sector Juneau Command Center	907-463-2980
D17 Command Center	907-463-2000
Alaska Department of Environmental Conservation (ADEC)	907-465-5340
Alaska State Troopers (AST)	907-465-4000
Alaska Department of Public Safety (ADPS)	907-465-4322

Table -2-1-Agency Contact Information

[4] Marine Safety Manual, Volume VI, Chapter 8, Change 4

2120 COTP Responsibility

The COTP exercises primary federal responsibility for the safety and security of the port. This responsibility is discharged by enforcing dangerous cargo regulations, marine terminal safety regulations, port security, and pollution prevention regulations. In emergencies, the COTP may control the movement of ships and boats, establish safety zones, and provide on scene personnel for on-site assessment. Responsibilities of the COTP in a major fire aboard a vessel or at a waterfront facility may include (but are not limited to):

- Conducting notifications;
- Assuming Incident Commander (IC) for a burning vessel underway or at anchor when: the responsible party does not take appropriate action; the fire department with jurisdiction is unable to respond; and/or no fire department has jurisdiction;
- Participating in the Unified Command (UC);
- Assuming operational control of all Coast Guard resources on-scene;
- Coordinating information flow or processing of technical data from a vessel for the benefit of the local responders;
- Establishing safety or security zones;
- Providing information on involved waterfront facilities;
- Providing information on the location and amount of oil and hazardous materials on a vessel, or at a facility, if available;
- Providing technical data on ship's construction, stability, and marine firefighting techniques;
- Responding to oil or hazardous materials discharges;
- Obtaining tugs to assist in relocating moored or anchored vessels;
- Alerting owners/operators of terminals or vessels at risk; and
- Notifying and consulting with appropriate natural resource trustees when the incident results in a pollution threat or may otherwise affect resources under a trustee's management authority.

2130 State Policy

If state assistance is required, the Department of Public Safety (ADPS) State Fire Marshal's Office will coordinate the firefighting response on the behalf of the state as the State On-Scene Coordinator (SOSC). There are four general criteria which will dictate a response by the State with regard to potential marine fire incidents. These criteria are:

- Search and Rescue (SAR) and/or Evacuation (Alaska State Troopers (AST));
- Firefighting Operations (Local Fire Departments);
- Local Emergency Declaration (through Alaska Department of Homeland Security & Emergency Management (ADHSEM) by a local representative, such as the mayor); and
- Oil or Hazardous Substance Release (Alaska Department of Environmental Conservation (ADEC)).

In all instances, lifesaving efforts will take precedence over all other emergency operations and a representative from the ADPS (the Fire Marshal's Office for marine firefighting and the AST for SAR operations) will serve as the SOSC.

After hours requests for State Resources should be routed to the ADPS through the AST's 24-hour dispatcher[5].

2140 State Responsibility

The State will carry out the following general responsibilities:

- Participating in the UC;
- Providing portable communications equipment to response personnel, as needed;
- Assuming operational control of all on-scene State resources;
- Responding to oil or hazardous materials discharges[6];
- Providing a qualified marine shipboard firefighting individual to coordinate State firefighting response operations.

State and local lifesaving and search and rescue efforts on board the ship during and immediately after the fire shall be considered as part of the fire operation and thus under direction of the local fire department.

Search and rescue activities shall continue to be under the direction of the local fire department as long as the atmosphere on board the vessel is unsafe and requires entry by trained personnel in full protective clothing. The Alaska State

[5] See Table 2-1

[6] Mitigation, removal and cleanup efforts may be delayed until the firefighting operations are terminated.

Troopers will be involved if there is the possibility that the casualty is due to criminal activity.

ADEC is the lead State agency with jurisdiction for responding to releases of hazardous material (hazmat) releases and oil spills. During a fire affecting the marine environment, there is a high potential that an oil spill or hazmat release will occur. ADEC will work with the Coast Guard to direct and coordinate a response to actual or potential environmental response incidents. ADEC may be notified through the Alaska State Trooper 24-hour dispatcher[7].

Local Emergency/Disaster Support is provided by ADHSEM, who coordinates support to local communities in the event of an emergency or disaster declaration (e.g., as a result of the marine fire and the local resources are overwhelmed).

[7] See Table 2-1.

2150 Local Response Agency/Organization Policy and Responsibility

2151 Fire Departments

Southeast fire departments are responsible for fire protection within their jurisdictions. Typical responsibilities of the local fire departments may include (but are not limited to):

- Assuming the position of IC[8];
- Participating in the UC;
- Establishing and staffing a Command Post when acting as IC;
- Requesting necessary personnel and equipment, including boats and appropriate medical aid from the UC members;
- Determining the need for and request mutual aid;
- Making all requests for Coast Guard/Federal personnel, equipment, and waterside security through the COTP; and
- Establishing liaison with police departments for land-side traffic and crowd control, scene security, and evacuation.

2152 Port Authorities and Harbor Departments

Generally, Port Authorities and Harbor Departments have a responsibility to provide a viable infrastructure for tenants and customers and work closely with the local municipal government to ensure access is maintained for emergency response resources. This infrastructure may include a security, fire protection, pilotage, and anchorage/mooring areas.

Port Authorities and Harbor Departments should be notified immediately whenever a fire occurs within their boundaries, or in close proximity, to help coordination of response efforts.

2153 Volunteer Organizations

During a disaster, the local American Red Cross and Salvation Army can meet such immediate needs as food, clothing, shelter/temporary housing, and prescription medication replacement and other essential health supplies. These organizations can also meet such recovery needs as bedding, housing/rent, disaster health services, mental health counseling referrals, etc. The Juneau Red Cross is the regional provider for Southeast Alaskan communities and should be contacted immediately following notification of a marine fire.

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[8] This responsibility may be held by the Village Public Safety Officer (VPSO) in smaller communities or villages.

2160 Responsible Party Responsibility

2161 Vessel Owners

The vessel owner/operator is ultimately responsible for the overall safety of the vessel, including firefighting protection; therefore, the vessel master is responsible for planning and directing firefighting efforts aboard the vessel as well as for the safety of the vessel and crew. **The presence of local firefighters and/or the Coast Guard does not relieve the master of his or her command responsibilities.** The master should work closely with the on-scene commander to coordinate firefighting efforts. This includes providing information regarding actions taken by the crew, the vessel's layout, firefighting capabilities, and the location and types of cargo aboard.

If it has been determined that the fire cannot be controlled by the crew, the Fire Chief or designee should take tactical control of the firefighting operations. The master should assist the Fire Chief in the performance of firefighting operations. Any action taken or plan which threatens the safety of the vessel or crew should immediately be brought to the attention of the Fire Chief, the IC and the COTP by the Master.

In accordance with 46 CFR 4.05, a vessel owner, agent, master, operator, or person in charge, shall also immediately notify the nearest U.S. Coast Guard Sector or Marine Inspection Office whenever a commercial vessel is involved in a **marine casualty** (See Section 3500) after addressing the resultant safety concerns. Marine casualties consist of:

- A loss of life, fall overboard, or any injury that requires professional medical treatment;
- A grounding, stranding, floundering, collision or allusion;
- **Fire**, explosion or flooding;
- A loss of main propulsion or primary steering;
- Failure of or damage to fixed firefighting systems, life saving equipment, and bilge pumping equipment;
- Any other circumstance that might affect or impair a vessel's seaworthiness; and
- Any incident involving significant harm to the environment including the discharge of oil or release of hazardous substances into navigable waters.

2162 Waterfront Facility Owners

Most waterfront facilities within the Southeast AK COTP Zone have limited firefighting resources and rely on local fire departments for fire protection. Therefore, in the event of a marine fire, facility operators are responsible for ensuring the safety of facility personnel as well as for providing the IC with information regarding the facility's layout and the location of dangerous materials. In the event of a fire onboard a vessel moored to the facility, the facility operator shall provide assistance to the vessel's Master, Fire Chief, and the COTP to the maximum extent possible.

2170 Mutual Aid Agreements

Southeast Alaska spans over 25,000 miles of coastline, with great distances between most cities. There are no connecting road systems with the exception of Haines and Skagway. Most fire departments do not have formal mutual aid agreements due to the logistical remoteness of each city. Organizational and individual liability is also a concern and will require coordination through the State of Alaska. During large or long-term emergencies, fire departments may be able to provide assistance to each other on a case-by-case basis; however, due to the aforementioned logistical challenges, municipalities must not plan on receiving aid or firefighting resources from other Southeast Alaska municipal fire departments.

Local fire departments, port facilities, and the Coast Guard strive to implement a system which ensures fast, well-coordinated, and effective land-based response to vessel fires in Southeast Alaska. Organizational policy and assumed responsibilities for both the Coast Guard and local response agencies and organizations are general policies used for planning purposes. It is essential, however, that each organization agrees in advance to a minimal level of coordination and mutual aid. Therefore, in the event of a major marine fire requiring a multi-agency response, the Coast Guard Captain of the Port, the local fire department covering the area in which the marine fire occurs, and the affected industrial port facility or vessel agree to:

- Within one hour after the initial notification, establish initial contact and consultation with each other, and begin to establish, direct, and manage a Unified Command System (if warranted);
- Use the National Incident Management System (NIMS) Incident Command System (ICS) in accordance with the Department of Homeland Security's Presidential Directive-5;
- Evacuation/ treatment of injured;
- Scene preservation; and
- Convey cause immediately if not terrorism related.

Forward planning is paramount in these situations. It is recommended to immediately establish a Planning Section under the Unified Command[9].

[9] See Section 4000

3000 Operations

3100 Marine Firefighting Pre-Plan

According to the National Fire Protection Association:

Experience has shown that in incidents where shoreside firefighters fight a vessel fire, one of the most valuable assets on the ship is the fire control plan[10]*. Most of the information an IC needs to fight a fire on a ship, such as general layout and dimensions, fire-fighting systems, and other systems that have a direct impact on firefighting, is included in the fire control plan. Its primary purpose is to assist shoreside fire-fighting personnel. It is ideal for firefighters to use as a guide when taking tours of ships, since it contains the location of most of the items they will be looking for, and it also allows them to become familiar with fire control plans.*[11]*"*

Of similar importance, marine firefighting pre-plans[12] are required of vessels required to have a vessel response plan (VRP). Most of the vessels calling on SEAK ports are not required to have VRPs obligating them to have a bolstered marine firefighting capability—so it should not be assumed that these vessel owners can adequately combat an onboard fire (VRP applicability can be found in 33 CFR 155.1015).

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[10] Fire control Plan- A set of general arrangement plans that illustrate, for each deck, the fire control stations, fire-resisting bulkheads, and fire-retarding bulkheads, together with particulars of the fire-detecting, manual alarm, and fire-extinguishing systems, fire doors, means of access to different compartments, and ventilating systems, including locations of dampers and fan controls.

[11] NFPA 1405, 2011.

[12] Marine Firefighting Pre-Plan - A plan that outlines the responsibilities and actions during a marine fire incident. The principle purpose is to explain the resource provider's role, and the support which can be provided, during marine firefighting incidents. Policies, responsibilities and procedures for coordination of on-scene forces are provided in the plan. It should be designed for use in conjunction with other state, regional and local contingency and resource mobilization plans. See 33 CFR 155.4025.

3200 Vessel Firefighting Strategies

3210 Size-Up

Upon notification, emergency response personnel are dispatched to the scene. The senior fire official will consult with the owner/operator of the vessel/facility and be briefed on the fire control plan. The first firefighters on-scene will immediately conduct a size-up of the incident. The size-up phase "involves gathering facts, data, and information on events…forecasting future events, and developing a plan of action. This size up process continues throughout the incident and is subject to constant revision[13]". Some size up considerations include but are not limited to:

- Type of vessel (ferry, cruise ship, fishing vessel, etc…)
- Location, status, and condition of the vessel;
- Location of the fire;
- Fire & Smoke Conditions;
- Exposures;
- Collection of the ship's documents and plans;
- Location of pre-fire plans;
- Identification of special equipment needed;
- Level of fire-fighting experience of the crew;
- Vessel construction;
- Location of master, mates, engineer, crew/personnel;
- Status of fuel and ballast tanks; and
- Flooding and stability problems.

3220 Evacuation and Accountability

The vessel crew should account for all personnel and passengers on board to determine if an evacuation should take place. Depending on the size of the incident, a safety zone may be established and enforced by the Coast Guard in order to safely remove passengers and crew. This decision should be considered early by the initial incident commander. Triage locations should be pre-identified and the local hospital and Red Cross should be immediately notified[14].

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[13] NFPA 1405, 2011.

[14] While all communities do not have a Red Cross, the Juneau Red Cross can coordinate assistance for all of Southeast.

3230 Offensive and Defensive Strategies

The incident commander should choose between an offensive or defensive strategy to fight a marine fire. Due to the rapidly changing environment, this strategy may change in the course of an incident. No matter what the strategy, desired outcomes should be identified ahead of time using objectives as a guide. See Table 3-1 below for a list of marine firefighting related objectives.

An offensive fire attack is to make a direct attack on the seat of the fire with firefighting personnel. An offensive strategy may be appropriate when "resources are adequate and the vessel's environment is tenable.[15]"A defensive attack is mitigating the situation by indirect methods (isolation and area/boundary cooling) to prevent the incident from spreading beyond the involved area or vessel/facility. When resources are insufficient and there is a danger to personnel or the environment, a defensive strategy may be more appropriate[16]. In the case of moving the vessel, the COTP should be immediately notified if a Unified Command[17] has not been established.

Example Incident Objectives (DHS/USCG, 2006)
1. Conduct Operational Risk Assessment and ensure controls are in place to protect responders and the public.
2. Commence size up and determine firefighting strategy.
3. Locate and evacuate all passengers and crew.
4. Commence firefighting operations and contain, extinguish and overhaul fire.
5. Conduct Damage/Stability assessment; develop and implement a salvage plan.
6. Implement salvage and tow plan.
7. Implement scene integrity and evidence preservation procedures[18].
8. Establish (continue enforcement) of safety or security zones.
9. Initiate actions to control the source and minimize the volume of oil released.

Table 3-1-Example Incident Objectives

[15] NFPA 1405, 2011
[16] NFPA 1405, 2011
[17] See Section 4000.
[18] See Section 3500, *Investigations.*

3300 Scenarios

3310 Small Boat Fire in a Marina (the most likely scenario in Southeast)

3:12 am: A 60-ft wooden fishing vessel was reported on fire in the marina. An initial size-up was conducted and one pumper and eight firefighters responded. The fire chief directed the emergency call center/EOC to notify the Coast Guard. The Coast Guard commenced completion of the quick response card (QRC) for a marine fire. Upon arrival to the marina, the responders observed heavy black smoke coming from the wheelhouse. Concerned that the occupants may still be onboard, the first arriving fire company officer directed two firefighters to don turn-out gear and self contained breathing apparatus (SCBA) in order to search the vessel.

3:22 am: The remaining crew, with assistance from the harbormaster, established a water supply using hose lines from the pumper and the harbor standpipe. Searchers determined that no one was onboard and water was directed into the pilot house through a partially open window. Two additional hose lines were charged and placed on standby to protect the surrounding vessels. To prevent firewater from sinking or capsizing the vessel, the chief directed four members of the fire party to secure the fish-hold hatch forward and the lazarette aft of the pilothouse.

4:15 am: The Coast Guard contacted the OSRO and made preparations to open the Oil Spill Liability Trust Fund (OSLTF). The Oil Spill Removal Organization (OSRO) was directed to prepare to deploy protective boom. In the meantime, the harbormaster, Coast Guard and State responders deployed initial boom to capture contaminated debris and oily water run-off. Firefighting water was increased and the fire was extinguished.

4:30: The OSRO arrived to take over boom deployment and environmental protection tactics. The protective boom was fully in place by 6:25 am.

8:00 am: The owner of the vessel could still not be located or identified.

Five days later: The OSRO cleaned up the oil/fuel/water mix. The clean-up was completed quickly and efficiently because the fire chief took action to ensure that the firefighting efforts didn't sink the vessel. Three months later the harbormaster obtained permits from EPA and other agencies to have the vessel towed and properly disposed of after being unable to locate the owner.

Note: If this vessel was adrift with no owner/operator or crew onboard, the COTP would assume control of the vessel[19].

[19] The Intervention on the High Seas Act extends the Coast Guard's authority to take measures on the high seas as necessary to prevent or mitigate a casualty which may reasonably be expected to result in major harmful consequences of which includes contracting to fight fires. Furthermore 42 U.S.C. 1856-1856d provides that an agency charged with providing fire protection for any property of the United States may enter into reciprocal agreements with state and local firefighting organizations to provide for mutual aid. This statute further provides that emergency assistance may be rendered in the absence of a reciprocal agreement, when it is determined by the head of that agency to be in the best interest of the United States.

3320 Fire at a Waterfront Facility

11:53 pm: The local fire department received a 911 call reporting smoke and fire at the marina building at Silver Salmon fuel facility. The 911 operator reported that the Silver Salmon fuel facility is a tank farm and the reporting party indicated seeing smoke and fire emanating from the building office by the dock. The police and fire departments were dispatched and the owner/operator notified. Upon arrival, the fire department confirmed the office building as being fully engulfed with an adjoining dock on fire and requested that the Coast Guard be notified.

12:08 am: The duty fire chief assumed incident commander and set up a staging area on the street for reporting fire personnel and arriving fire apparatus/equipment. The owner/manager was not on scene so the police department cut the gate lock to access the facility and the fire department began applying a water stream onto the dock and building area. Additional pump trucks were ordered for cooling off adjoining tanks as a precaution to prevent the fire from spreading closer to the tank farm. The Captain of the Port established a 100 yard waterfront safety zone around the facility with the small boat present for waterside enforcement.

12:27 am: After the facility security officer arrived and confirmed that the manifold system to the tanks had been secured from the dock, he alerted the fire department to the presence of waste oil drums in the building and the location of a 50-gallon gas tank at the dock area. The fuel tanks were reported to be at 76% capacity as they received a barge transfer earlier in the day. Two fuel trucks were parked in a designated parking area away from the tank farm and fire area.

12:34: Upon arrival, ADEC and Coast Guard duty personnel were briefed by the incident commander on the status of the fire. Fire tactics included extinguishment of the building and dock fire by municipal fire personnel and assets and cooling of the fuel storage tanks.

2:34 am: The fire chief reported the fire extinguished. The facility owner deployed precautionary boom around the waterfront of the facility to contain any pollution that may have occurred from water runoff. The Captain of the Port lifted the safety zone restrictions and ordered Coast Guard personnel to return to the unit following an on scene debrief with the fire department Incident Commander. The Coast Guard public affairs officer issued a press release to the media.

Three days later: A hotwash was held at the fire department where the Southeast Alaska Marine Firefighting Contingency Plan scenario section on facility fires was reviewed and revised according to lessons learned.

3340 Topside Fuel Barge Fire

9:25 am: A large wake broke the transfer couplings on a moored fuel barge offloading gasoline and kerosene at the King Crab transfer facility and tank farm. The spilled products pooled and ignited on the barge tank top. Product draining from the transfer hose fed the fire. The City, because of the immediate threat to public safety, assumed command and control of the incident. Personnel from the Coast Guard and the manager of the marine transfer facility assisted the Fire Chief (overall incident commander) in size-up.

10:15 am: The barge owner, in agreement with the Fire Chief, ordered a tug to stand-by to tow the barge from the facility and away from the downtown area. Prior to towing the barge and after consultation with the Coast Guard and the facility manager, the incident commander decides to try one last attempt to extinguish the fire while the vessel was moored at the facility. Valves and cargo pumps were secured. The integrity of the barge tank tops, piping, mooring lines and other exposures were protected with water streams. A crash truck with 200 gallons of foam was ordered from the airport fire station.

11:15 am: The incident commander determined there was enough foam on scene to extinguish the fuel fire burning on the barge tank top. Backed by water fog monitors, two teams attacked the fire from up-wind with firefighting foam. Once the fire was extinguished, a foam blanket was maintained over the pooled fuel to prevent re-ignition. The facility owner ordered deployment of oil containment boom and sorbent pads around the barge to remove the gasoline.

Five days later: the municipal Fire Chief held a hot wash in which lessons learned were captured and this portion of the Marine Firefighting Plan was updated.

Note: Had this fuel barge caught fire while underway, the Coast Guard would coordinate fire-fighting efforts with the owner/operator. Consultation with appropriate stakeholders, natural resource trustees, ADEC, and the closest municipality fire department would also have taken place.

3350 Container Barge Fire

1:32 am: The fire department received a call from the Coast Guard Command Center reporting several containers on fire aboard the Barge *George*. The barge was approximately 20 miles from Ketchikan and reported three containers at the bottom of a stack of five appeared to be on fire with smoke billowing from them. The on-scene weather was snow showers with winds from the south at 15-20 mph, and seas at 6-9 feet. The tug changed course to keep smoke away from the tug area.

2:27 am: A Coast Guard patrol boat arrived on-scene to assess the situation, stand by for possible rescue of personnel, relay critical information, safety zone enforcement, and afford on-scene coordination. The CG Cutter also established a 100-yard safety zone around the barge. The patrol boat directed a water stream onto the containers upwind of the fire.

3:53 am: The Captain of the Port established a Unified Command with the company owner, Alaska Department Environmental Conservation, and the municipality Fire Chief for Ketchikan. Coast Guard and company personnel filled critical staffing positions in the Operations and Planning Section and a 12-hour operational period was established.

4:42 am: The barge owner hired another tug with appropriate firefighting capabilities to the scene and provided the cargo manifest. After reviewing the Shipping Papers, the Master reported that the affected containers contained municipal garbage destined for proper disposal, and that household goods and a myriad of other merchandise were stored in containers in neighboring stacks.

4:42 am-cont'd- The Unified Command decided to extinguish the fire onboard the barge while underway before allowing it into a port due to excessive smoke concerns. The Planning Section began developing a transit plan in consultation with the Department of Interior and other natural resource trustees. The ICS 201 form was updated. The Operations Section Chief worked with current fire suppression efforts in an acceptable area of refuge protected from the elements.

8:51 am: The Coast Guard patrol boat reported 4 additional containers on fire or emanating smoke. A joint press release was released and a press briefing with the unified command was scheduled.

6:15 pm: The Coast Guard patrol boat on scene reported the fire appears to be extinguished. No smoke was emanating from the affected containers. The Unified Command authorized the transit plan under the escort of the Coast Guard patrol boat. The local fire department staged apparatus and personnel at a nearby facility to conduct a reflash watch once the barge arrived in port.

Four days later: The Captain of the Port held a formal hot wash with the agencies within the Unified Command to discuss the response and review the incident action planning. Lessons learned and best practices were captured and this portion of the plan was updated.

Note: Had this fire occurred while the barge was moored to a municipal dock or pier, the municipal fire department would be the Incident Commander. Depending on the complexity of the situation, the municipality may have opted to establish a Unified Command to afford the best possible interagency response.

3360 Large Passenger Vessel Fire

7:00 am: While underway enroute Skagway from Juneau, the 800 foot foreign flag cruise ship Sugarland experienced a fire in the #1 engine room that the crew was unable to extinguish. The crew evacuated the spaces, shut down the machinery space ventilation system, closed the engine room dampers, and closed the fire screen and watertight doors and implemented the emergency plan to contain the fire in the engine room. The fixed fire fighting system was manually activated. The Cruise Director informed the passengers of the situation via the Public Address System.

7:30 am: All lifeboats were readied and the master requested that the vessel be allowed to tie up in Haines after assessing its stability. The Cruise Director ordered all crewmembers to their general emergency stations, and ordered all passengers to the open decks. There were 2800 passengers and crew onboard. The AMHS M/V Malaspina was getting underway from Haines to Skagway at 8:30 am.

8:00 am: The Captain of the Port initiated the establishment of the Unified Command (UC) composed of the Haines City/Borough manager, USCG, Alaska Department of Environmental Conservation, and Sugar Cruises, the responsible party.

8:30 am: Critical command post positions were assigned and a 12 hour operational period was established. After consultation with the Coast Guard Captain of the Port (COTP), the C/S Sugarland assured the UC that the engine room fire was isolated with primary and secondary fire boundaries set.

8:40 am: The UC declined the C/S Sugarland's request to enter the port of Haines due to the uncertainty of the fire and the cruise ship berth was currently in use by another cruise ship. C/S Sugarland Captain made the decision to evacuate all passengers and transport them to Haines via ship's tenders. The M/V Malaspina contacted the C/S Sugarland and offered to ferry 350 passengers to Haines. The C/S Thatendus was transiting from Skagway and offered to embark the remaining passengers and transport them back to Juneau.

The communities of Skagway and Juneau were notified of the incoming passengers and Sugar Cruises began arranging travel for passengers from each location back to Seattle.

9:45 am: The Master and Chief Engineer indicated that the fire had been extinguished after thermal imaging equipment could no longer detect interior hot spots. The vessel did not lose power during the fire. The COTP sent two marine inspectors and an investigator to the ship and ordered the C/S Sugarland to Juneau for further investigation.

Two days later a hotwash was held and lessons learned and best practices were integrated into this plan.

Note: Had a fire occurred while the cruise ship was moored to a pier, the municipal fire department would be a support to onboard fire suppression teams. The municipal fire department would stage their fire pumps and lay hoses so they could provide water, foam, cool the hull, extinguish pier side fires, and preserve mooring lines. They would also provide any shore side emergency medical services. The municipal police department and harbormasters office would establish shore side security boundaries. A Unified Command would still be established composed of the municipal government representative (City/Borough manager or mayor), Captain of the Port, Alaska Department of Environmental Conservation, and Responsible Party.

3400 Post Incident Response

When a fire is declared "extinguished," a reflash watch is generally established until all cooling and overhaul functions are completed. A complete overhaul can take "many hours or even days" (NFPA, 2011) and Incident Commanders/Unified Commands are cautioned to avoid quick decision making when it comes to this certification. Normally marine chemists certify all spaces safe to enter after a fire is extinguished. In the SEAK region, the nearest marine chemists are in Anchorage and Seattle; consequently, local fire departments have been trained to evaluate for basic hazards. Hazmat teams with expanded air monitoring exist in some of the region's fire departments. If necessary, this could be an area of mutual aid.

3500 Investigations

3510 Federal

The Coast Guard derives its authority to conduct marine casualty investigations from 46 U.S.C. 6301. These investigations are intended to promote the safety of life and property not to fix civil or criminal penalties. The Coast Guard will investigate all marine casualties and accidents concerning vessels (except public vessels) on the navigable waterways of the United States[20]. A marine fire, whether the vessel is underway or moored, is considered a marine casualty and will be investigated by the Coast Guard.

3520 State/Local

Alaska Administrative Code 13AAC52.030 (b) (4) requires all registered fire departments within the state to investigate all fires within their service area for origin and cause and report this information to the State Fire Marshal's Office. Fires that will normally be investigated by the Division of Fire and Life Safety include the following:

- Fires that result in a fatality or serious injuries;
- Fires that involve a substantial loss of property ($500,000 or more);
- Fires which appear to be intentionally caused as part of an insurance fraud or other criminal activity;
- Fires which will have a significant public impact;
- Fires which indicate trends or a serious consumer safety problem; and
- Any fire that involves Department of Public Safety facilities or equipment.

[20] 46 CFR 4.03

4000 Planning

4100 National Incident Management System (NIMS) Incident Command System (ICS)

The NIMS ICS is a standardized, on-scene, all-hazards incident management approach that allows for the integration of resources, procedures, and communications. The system enables a coordinated response among various public and private jurisdictions and agencies. Most importantly, NIMS ICS establishes a common process for planning and managing resources. It is flexible and may be used for any type, size, or complexity of incident. A fully complemented NIMS ICS organization normally includes Command and General Staff.

Command Staff consists of the Public Information Officer (PIO), the Safety Officer (SOFR), the Liaison Officer (LOFR) and possibly an Intelligence Officer. The General Staff includes the Operations Section Chief (OSC), Planning Section Chief (PSC), Logistics Section Chief (LSC), and the Finance/Administration Section Chief (FSC). General and Command staff report directly to the Incident Commander (IC) or Unified Command (UC).

4200 Organizational Structure

4210 Unified Command

A marine fire will bring together a variety of entities depending upon the aforementioned variables. Although the Coast Guard does not directly conduct firefighting, it does have a major role in coordination and support of a marine fire event; therefore, a UC is a likely scenario for a marine fire incident. Some complexities that would escalate a scenario and warrant a UC are (but not limited to):

- Search and rescue and other lifesaving operations;
- Potential or actual oil spill. If there is a threat of an oil spill due to a marine incident, the Oil Pollution Act of 1990 and the National Contingency Plan requires the Coast Guard to respond and form a Unified Command.;
- Potential or actual hazmat release. If there is a threat of a hazardous materials release due to a marine incident, the Oil Pollution Act of 1990 and National Contingency Plan requires the Coast Guard to respond and form a Unified Command.; and/or
- Terrorism.

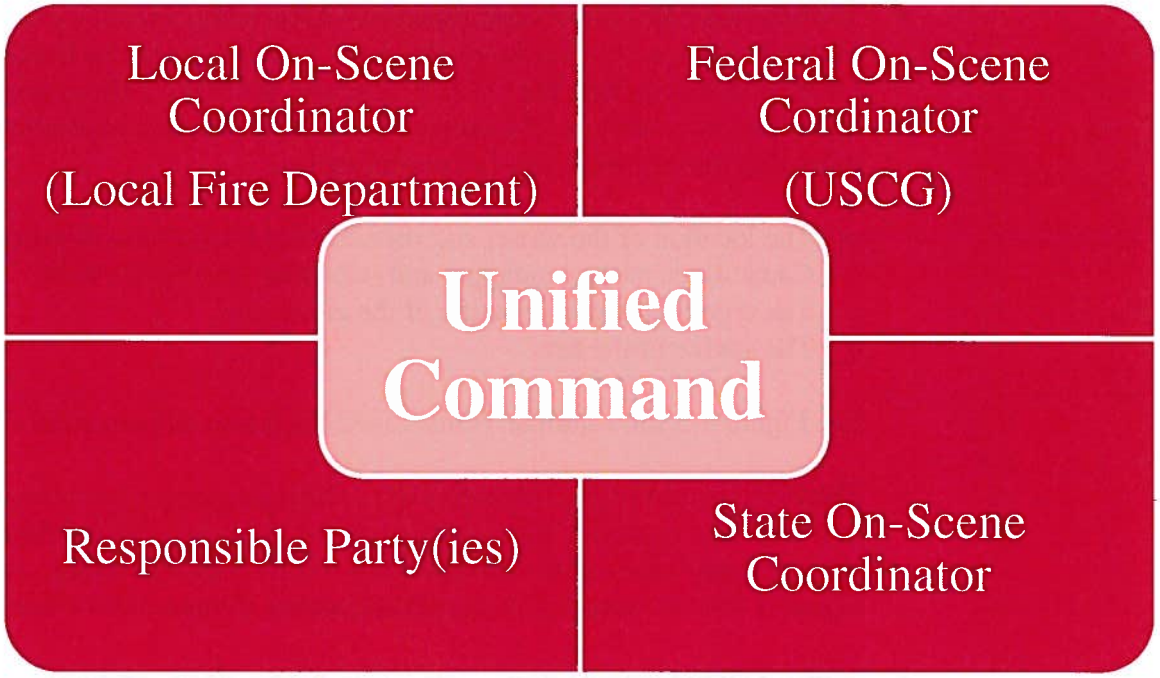

Figure 4-1 Unified Command

4220 Incident Organization

Four organization charts are shown in Figures 4-2 through 4-5 (Note: Only those ICS Positions and tasks specific and unique to Marine Firefighting missions are depicted.) Remember that ICS is flexible and scalable. These organization charts are meant as a starting point to set up an Incident/Unified Command structure during the following phases of an incident:

- **Initial Response Organization** - The first responder to a marine fire in a harbor in SEAK will likely be the vessel owner or harbor personnel. The first Fire Department Company Officer to arrive on-scene will assume command of the incident as the IC. The IC will assume all Command and General Staff functions and responsibilities, including management of initial resources, until a transfer of command occurs. The initial IC *may* complete ICS Form 201, including size-up information and current actions, to ensure a smooth transfer of command. See Figure 4-2 for a sample Initial Response Organization Chart.

- **Transitioned Response Organization** – Depending upon the complexity of the incident, a UC may be established. At a minimum, the Unified Command will include the COTP/FOSC and the SOSC. The response and organizational structure of a marine fire will vary widely depending on the following factors, including but not limited to:

  - The location of the vessel and proximity to firefighting resources;
  - Capabilities of the municipal and industrial fire departments;
  - The type of vessel and nature of the cargo; and
  - The source of the fire.

  See Figure 4-3 for a sample Transitioned Response Organization Chart.

- **Multi-Division/Group Organization** – After a response has transitioned to a Unified Command, most Command and General Staff positions will be established along with a combination of divisions and groups. See Figure 4-4 for a sample Transitioned Response Organization Chart.

- **Multi-Alarm Organization** - The UC will activate all appropriate Command and General Staff positions and establish multiple divisions, if necessary. Branches should be created if span of control issues warrant. A Coast Guard Officer may serve as Deputy OSC. See Figure 4-5 for a sample Transitioned Response Organization Chart.

ICS positions and tasks specific and unique to Marine Firefighting missions are described in Section 4420.

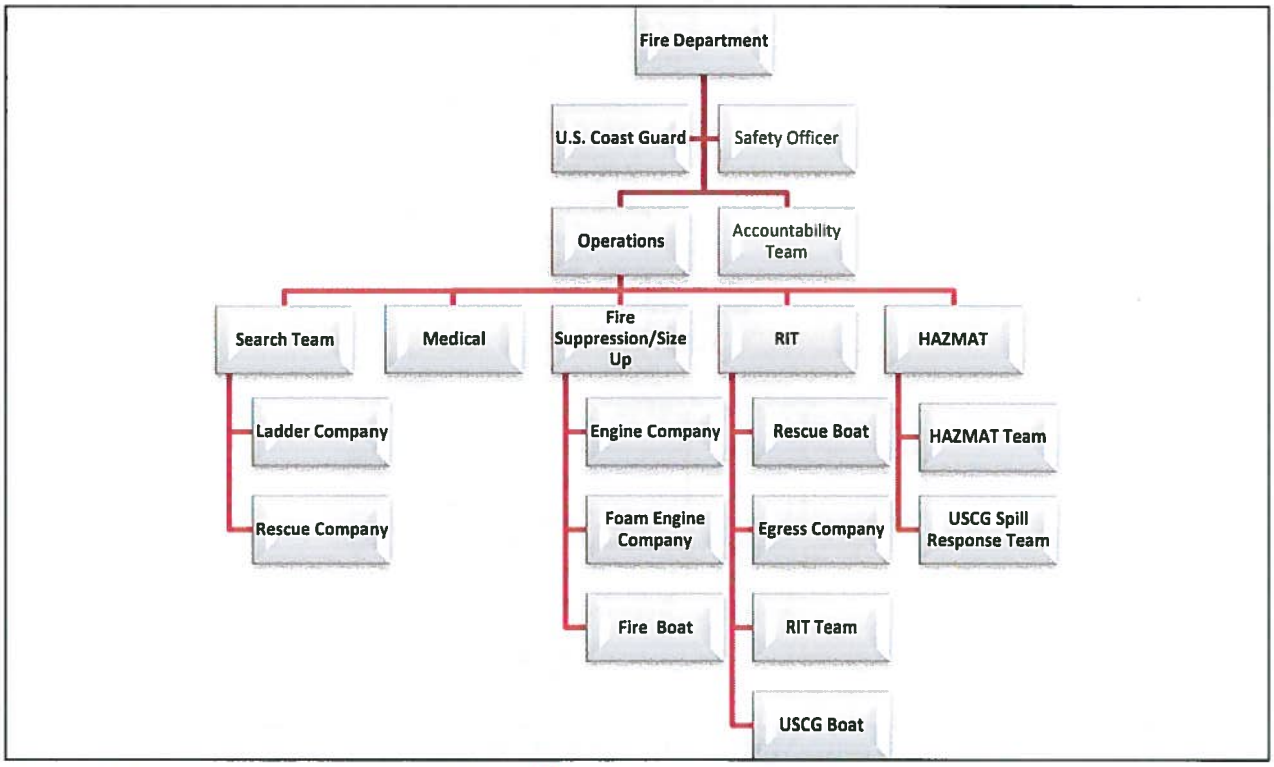

Figure 4-2 Initial Marine Firefighting Response

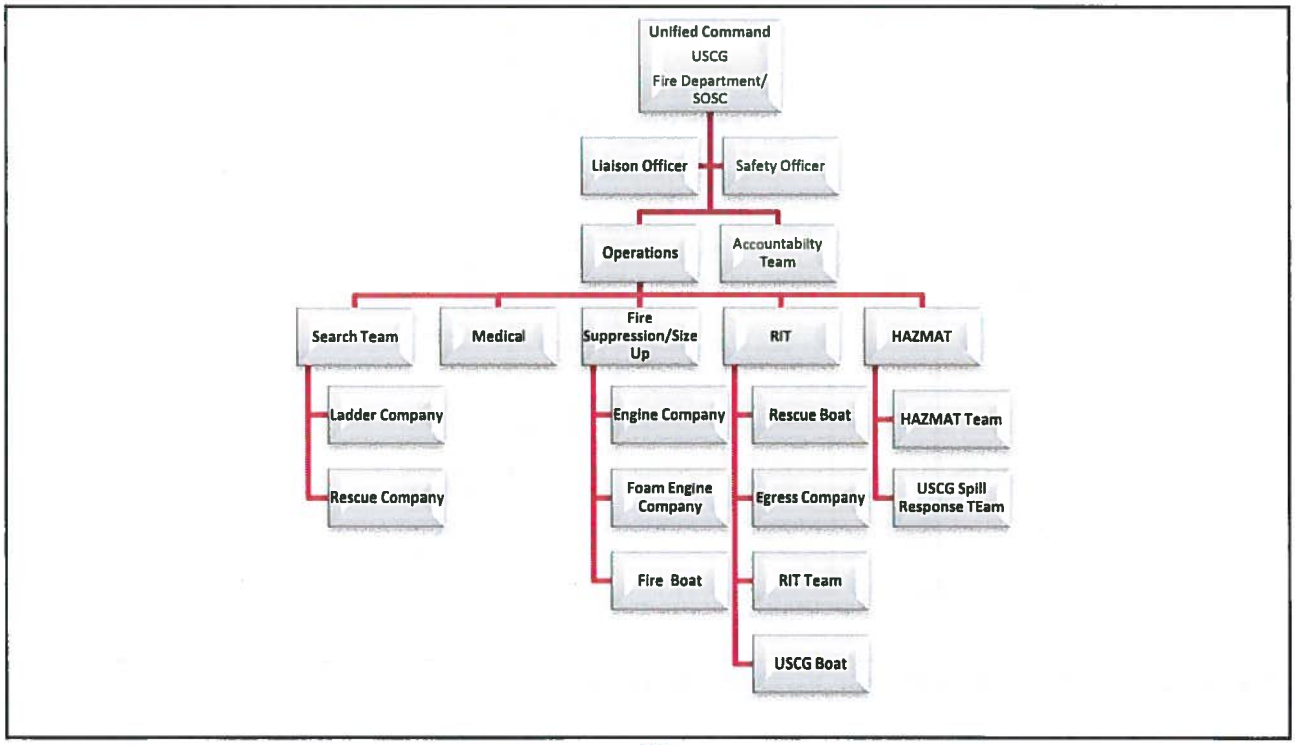

Figure 4-3-Transitioned Marine Firefighting Response

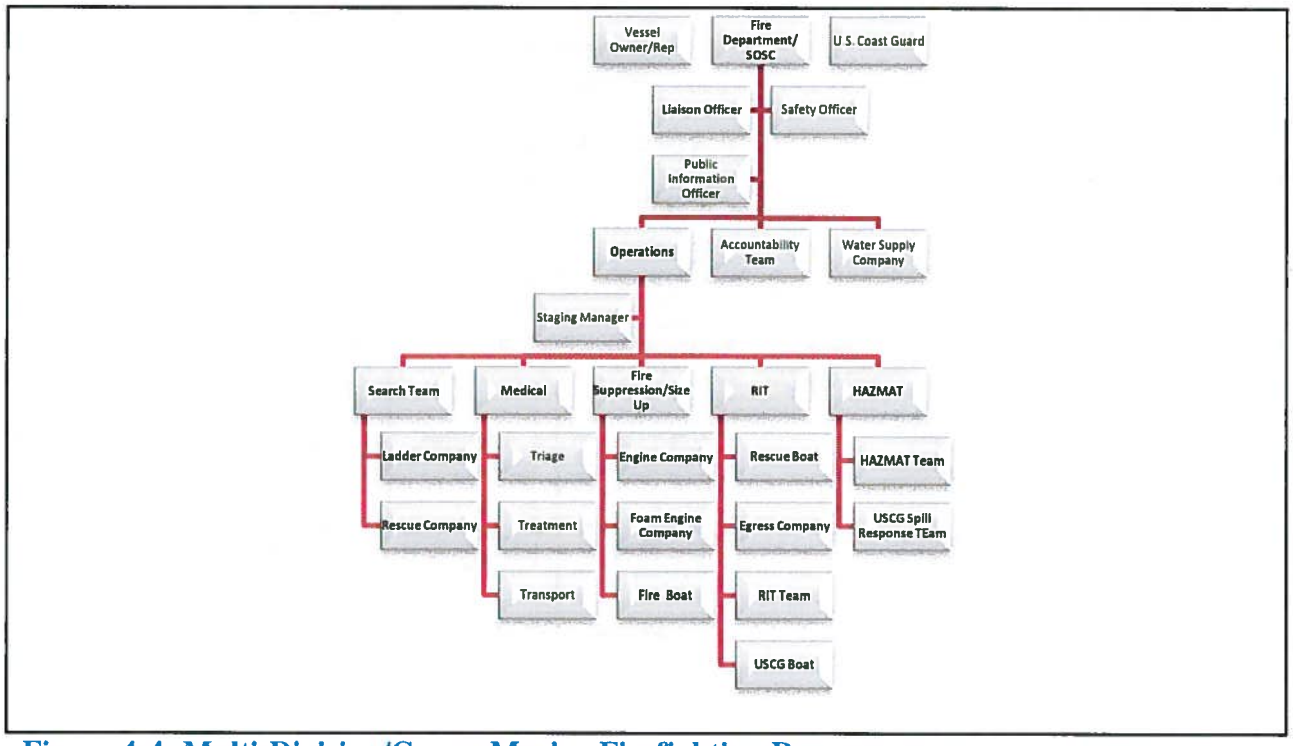

Figure 4-4- Multi-Division/Group Marine Firefighting Response

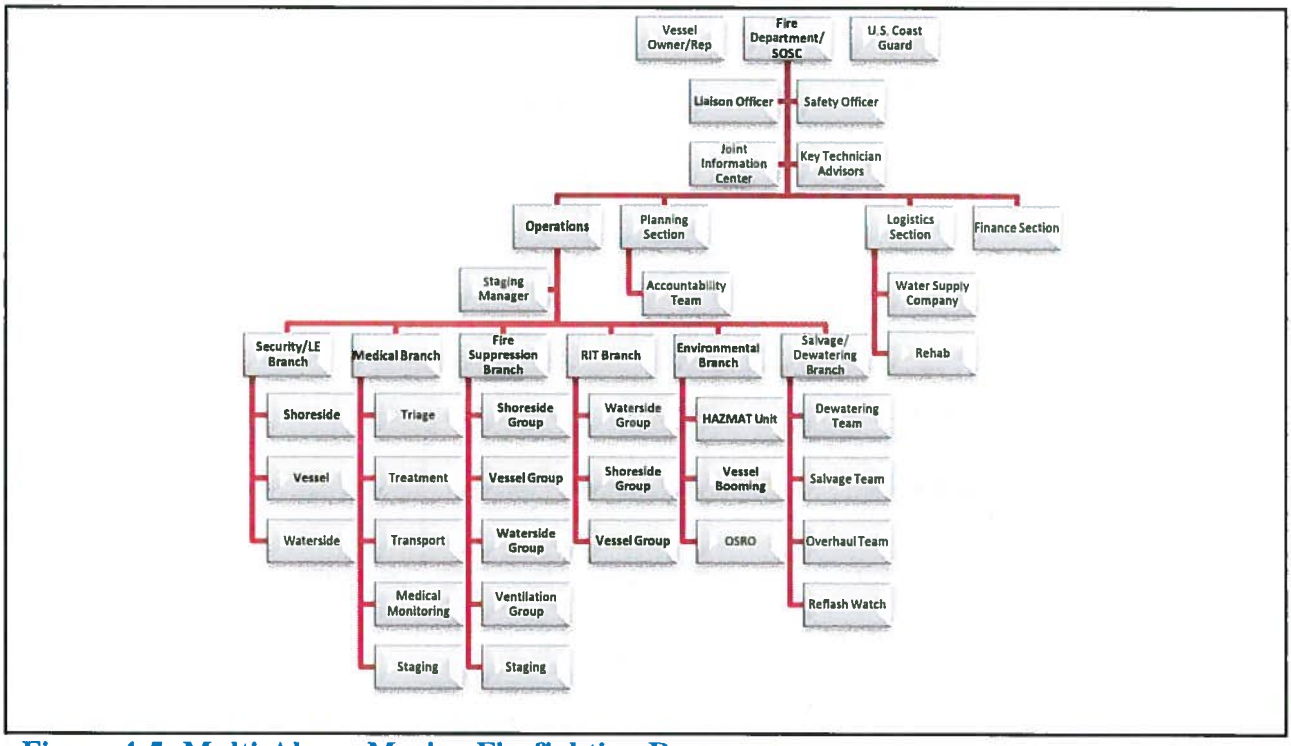

Figure 4-5- Multi-Alarm Marine Firefighting Response

4230 Role Explanation (specific to Marine Fires)

Only those ICS positions and tasks specific and unique to Marine Firefighting missions are described in this section. Persons assigned the common positions consistent with the NIMS organization should refer to the position job aids and the U.S. Coast Guard Incident Management Handbook (IMH) for their position/task descriptions and helpful checklists.

- **Accountability Team** - The Accountability Team is responsible for signing in and out all personnel that board a vessel. There must be team members at each entry point to log the entry and exit of all personnel that board the vessel during an incident. Accountability for all resources is the responsibility of the IC/UC and is typically delegated to the Planning Section.

- **Fire Suppression Branch** - The Fire Suppression Branch Director, when activated, is under the direction of the OSC. The Fire Department's initial Operations Section Chief at a maritime fire is often re-designated the Fire Suppression Branch Director under a UC. The Director is responsible for the assigned portion of the Incident Action Plan (IAP) that deals with fire suppression activities, assignment of resources within the branch, and reporting progress of control activities, and status of resources within the branch.

- **Shoreside Division -** The Shoreside Division Supervisor is responsible for all shoreside fire suppression activities under the Fire Suppression Branch. The supervisor is responsible for the assigned portion of the IAP that deals with fire suppression activities and exposure protection on shore, assignment of resources within the division, and reporting progress of control of activities, and status of resources within the division.

- **Vessel Division** - The Vessel Division Supervisor is responsible for all vessel fire suppression activities under the Fire Suppression Branch. The supervisor is responsible for the assigned portion of the IAP that deals with fire suppression activities and exposure protection on a vessel, assignment of resources within the division, and reporting progress of control of activities, and status of resources within the division.

- **Waterside Division** - The Waterside Division Supervisor is responsible for all waterside fire suppression activities under the Fire Suppression Branch. The supervisor is responsible for the assigned portion of the IAP that deals with fire suppression activities and exposure protection on the water, assignment of resources within the division, and/or group, and reporting progress of control of activities and status of resources within the division and/or group. This includes all fireboat activities.

- **Ventilation Group** - The Ventilation Group Supervisor is responsible for coordination of vessel CO2 suppression systems, coordinating the securing of ventilation, use of positive and/or negative pressure ventilation strategies in coordination with the vessel's crew, as required by the Fire Suppression Branch Director reference in the IAP.

- **Rapid Intervention Team** - The Rapid Intervention Team (RIT) is a contingency team responsible for performing search and rescue of trapped or injured firefighters. An RIT will normally be assigned in each area where fire activities are taking place, including Shoreside, Vessel and Waterside Branches. On a vessel, an RIT will be assigned at each separate entry point where below deck activities are being conducted. The RIT leader is responsible for the assigned portion of the IAP that deals with firefighter rescue activities.

- **Salvage/Dewatering Branch** – The Salvage/Dewatering Branch Director, when activated, is under the supervision of the OSC. This branch is responsible for development of a plan to stabilize the vessel, identify equipment/resources needed, and remove water that is being used in suppression activities. The Salvage/Dewatering Branch should be established as soon as firefighting activities are initiated to ensure control of vessel stability. The Salvage/Dewatering Branch Director is responsible for the assigned portion of the IAP that deals with salvage and dewatering activities, the status of assigned resources within the Branch, and reporting progress to the OSC.

- **Dewatering Task Force** - The Dewatering Task Force is responsible for implementing the dewatering plan developed for the incident. This may include pumping water using portable pumps, draining of water through scuppers made in the vessel, or transferring water to other areas of the vessel.

4240 Emergency Operations Centers (EOC)

In addition to the incident command and unified command, other coordinating centers may be used depending on the severity of the incident. EOCs exist to support the incident commander or unified command, not to manage the response. Incidents will typically be handled at the lowest jurisdictional level. Within Southeast Alaska, the Captain of the Port may opt to co-locate the unified command with the community EOC in an effort to eliminate duplication and personnel shortages during a large-scale incident response.

4231 Coast Guard Command Center

The Coast Guard in Southeast Alaska has two available command centers for coordination of maritime emergencies, Seventeenth Coast Guard District and Sector Juneau. Sector Juneau is the coordination center within the Captain of the Port Zone of Southeast Alaska. The Seventeenth District has oversight over the State of Alaska 200 miles seaward. Both command centers are co-located in Juneau and function as the 24-hour contact for coordinating Coast Guard operations. The goal of both command centers is the facilitation of real-time information between the Coast Guard District and Sector leadership and subordinate commands executing Coast Guard missions.

4232 State Emergency Coordination Center (SECC)

The Alaska SECC is located in Anchorage, AK. During an incident response, the incident commander or the unified command can contact the SECC for additional State or Federal resources, support, and facilitation of emergency declarations.

4233 Municipal/Local Emergency Operation Center (EOC)

This is a vital facility from which local representatives of government and private sector entities come together to coordinate and control a response to an incident, such as a fire at a waterfront facility or vessel in their port waters. The Emergency Operations Plan will delineate where the primary and potential alternate EOC's are located in their individual community, and what local governmental and private entities will assist in a response. Several Southeast Alaska municipalities have established EOC's for the purpose of establishing incident command structures for disasters and other significant emergencies.

4234 Cruise Line Agency (CLA) Operations Center in SEAK

This facility is located in Ketchikan, AK, and serves as the Southeast Alaska operations center for all large-scale events involving cruise ships and other vessels under CLA's management. It serves as the primary communication link between vessels and their corporate headquarters offices.

The vessel agent uses this office to coordinate cruise line agency resources in support of a response—crew boats, tugs, helicopters, barges, and float planes—as well as instant access to computer stores, supplies and connections. Cruise Line Agency also has a contract with Alaska Steamship Response, a network of individuals with assets, experience and expertise in marine casualty response and management.

EOC Locations		
Community	**Primary**	**Secondary**
Skagway	City Hall	Fire Hall
Haines	Library	Fire Hall
Juneau	Police Department	Glacier Fire Station (Airport)
Sitka	Fire Department	Keet Gooshi Heen (Elementary School)
Petersburg	Fire Department	Community Hall
Ketchikan	Ted Ferry Civic Center	Fire Department

Table 4-1-EOC Locations

4300 Major Ports

4310 Skagway

Photo Credit: Alaska DCRA, 1998 a

Skagway is located 90 miles northeast of Juneau at the northernmost end of Lynn Canal, at the head of Taiya Inlet. It lies 108 road miles south of Whitehorse and is just west of the Canadian border with British Columbia. The area encompasses 452.4 sq. miles of land and 11.9 sq. miles of water and there is one fire station in Skagway.

The Klondike and Alaska Highways provide a connection through British Columbia and the Yukon Territory, Canada, to the lower 48 states or north to Interior Alaska. Skagway is accessed by air, road, and water services. The state owns the paved runway and a seaplane base at the boat harbor, with scheduled air taxis. Skagway receives regular state ferry and barge services. A breakwater, ferry terminal, cruise ship dock, small boat harbor, boat launch, and boat haul-out are available. The White Pass and Yukon Route Company owns two deep draft docks for cargo loading and storage. Freight arrives by barge, ferry, and truck.

The tourist industry flourishes in Skagway, as a port of call for cruise ships and a transfer site for rail and interior bus tours. Road travelers also visit the community. The Klondike Gold Rush Historical Park and White Pass and Yukon Railroad are major attractions. Trans-shipment of lead/zinc ore, fuel, and freight occurs via the Port and Klondike Highway to and from Canada.

4320 Haines

Haines Borough is located on the shores of the Lynn Canal between the Chilkoot and Chilkat Rivers, 80 air miles northwest of Juneau. It is just south of the Canadian border at British Columbia and 600 air miles southeast of Anchorage and Fairbanks. By road, it is 775 miles from Anchorage and there is one fire station.

Haines is a major trans-shipment point because of its ice-free, deep water port and dock and year-round road access to Canada and Interior Alaska. It is a northern terminus of the Alaska State Ferry System and a hub for transportation to and from southeast Alaska. Haines has a 4,000' long airport runway.

Photo Credit: Alaska DCRA, 1999 a

The borough school district, retail trade, business and transportation services, and fishing provide the majority of employment in the borough a nd many jobs are seasonal. Haines' road connection, the state ferry, and cruise ship passenger traffic make it an important visitor stop.

4330 Juneau

Located on the mainland of Southeast Alaska, opposite Douglas Island, Juneau was built at the heart of the Inside Passage along the Gastineau Channel. It lies 900 air miles northwest of Seattle and 577 air miles southeast of Anchorage. The area encompasses 2,716.7 sq. miles of land and 538.3 sq. miles of water. There are five fire stations and a Regional Fire Training Center located in the Juneau area.

Photo Credit: Alaska DCRA, 1999 b

Juneau is accessible only by air and sea. Scheduled jet flights and air taxis are available at the municipally-owned Juneau International Airport. The airport has a paved 8,457' long by 150' wide runway and a seaplane landing area. Marine facilities include a seaplane landing area at Juneau Harbor, two deep draft docks, five small boat harbors, and a state ferry terminal. The Alaska Marine Highway System and cargo barges provide year-round services.

State, local, and federal agencies provide most of the local jobs. Juneau is home to state legislators and their staff during the legislative session between January and April. In 2011, 259 Coast Guard personnel were stationed in Juneau. Tourism is a significant contributor to the private sector economy during the summer months. Most cruise ships make it a port of call due to the varied regional and local attractions. Support services for fish processing contribute to the Juneau economy. DIPAC, a private non-profit organization, operates a fish hatchery that increases the local salmon population. The close-by Kennecott Green's Creek Mine produces gold, silver, lead, and zinc and is the largest silver mine in North America.

4340 Sitka

Sitka is located on the west coast of Baranof Island fronting the Pacific Ocean, on Sitka Sound. An extinct volcano, Mount Edgecumbe, rises 3,200 feet above the community. It is 95 air miles southwest of Juneau and 185 miles northwest of Ketchikan. Seattle, Washington, lies 862 air miles to the south. The area encompasses 2,874.0 sq. miles of land and 1,937.5 sq. miles of water. There is one fire department in Sitka.

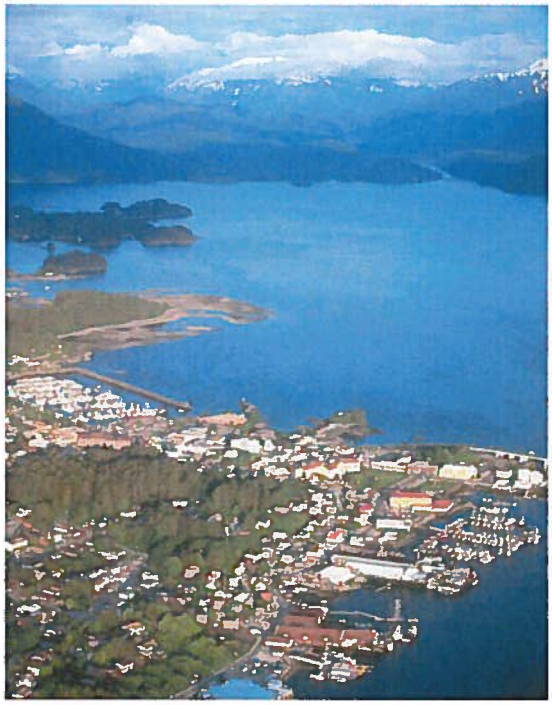

Photo Credit: Alaska DCRA, 1998 b

The state-owned Rocky Gutierrez Airport on Japonski Island has a 6,500' long by 150' wide paved and lighted runway. In addition to daily jet service, several scheduled air taxis, air charters, and helicopters are available. The city and borough operates five small boat harbors with 1,350 stalls and a seaplane base on Sitka Sound at Baranof Warm Spring Bay. There is a breakwater at Thompson Harbor but no deep draft dock. A boat launch, haul-out, boat repairs, and other services exist. Cruise ships anchor in the harbor and lighter visitors to shore. The Alaska Marine Highway System (state ferry) has a docking facility. The ferry serves Sitka several times a week with a six hour run to Juneau. Freight arrives by barge and cargo plane.

The economy is diversified with fishing, fish processing, tourism, government, transportation, retail, and healthcare services. Cruise ships stimulate tourism industries. The seafood industry is a major employer. Regional healthcare services, the U.S. Forest Service, and the U.S. Coast Guard also employ residents.

4350 Petersburg

Photo Credit: Alaska DCRA, 1995 b

Petersburg is located on the northwest end of Mitkof Island, where the Wrangell Narrows meet Frederick Sound. It lies midway between Juneau and Ketchikan, about 120 miles from either community. The area encompasses 43.9 sq. miles of land and 2.2 sq. miles of water. There is one fire department in Petersburg.

Petersburg's economy is based on commercial fishing and timber harvests. Petersburg is currently one of the top-ranking ports in the U.S. for the quality and value of fish landed. Several processors operate cold storage, canneries, and custom packing services. The state runs the Crystal Lake Hatchery, which contributes to the local salmon resource. Residents include salmon, halibut, shrimp, and crab in their diet. Petersburg is the supply and service center for smaller communities. Independent sportsmen and tourists utilize the local charter boats and lodges, but there is no deep water dock suitable for cruise ships.

Petersburg is accessed by air and water. It is on the mainline state ferry route. The state-owned James A. Johnson Airport has a 6000' long and 150' wide runway for scheduled jet service. Lloyd R. Roundtree Seaplane Base (on the Wrangell Narrows) allows for float plane services. Harbor facilities include a petroleum wharf, barge terminals, three boat harbors with moorage for 700 boats, a boat launch, and a boat haul-out. Freight arrives by barge, ferry, or cargo plane. There is no deep-water dock for large ships (such as cruise ships); passengers are lightered to shore.

4360 Ketchikan

Photo Credit: Alaska DCRA, 1998 c

Ketchikan is located on the southwestern coast of Revillagigedo Island, opposite Gravina Island, near the southern boundary of Alaska. It is 679 miles north of Seattle and 235 miles south of Juneau. The 2.2 million acre Misty Fiords National Monument lies 22 air miles east of Ketchikan. It is the first Alaska port of call for northbound cruise ships and state ferries. There are 3 fire departments in the Ketchikan area.

Regularly-scheduled jet services offer air service. The state-owned Ketchikan International Airport has a paved, lighted 7,500' long by 150' wide asphalt runway. The airport lies on Gravina Island, a 10-minute ferry ride from Ketchikan's waterfront. Ketchikan is a regional transportation hub, with numerous air taxi services to surrounding communities. There are four major float plane landing facilities: Tongass Narrows, Peninsula Point, Ketchikan Harbor, and Murphy's. Ketchikan is the first port of call in Alaska for cruise ships and Alaska Marine Highway vessels. Harbor and docking facilities include a breakwater, a deep draft dock, five small boat harbors, a dry dock and ship repair yard, boat launch, and a state ferry terminal. The shipyard is privately owned. The Inter-Island Ferry Authority operates a once-daily, year-round ferry service between Ketchikan and Hollis.

Ketchikan has a diverse economy and is a service center. It is a major port of entry into Southeast Alaska. Ketchikan is supported by a large fishing fleet, fish processing, tourism, and timber. Several processing and cold storage facilities support the fishing industry. The state operates the Deer Mountain Hatchery. Independent travelers and cruise ship passengers visit Ketchikan.

4400 Types of Vessels in Southeast Alaska

Common vessels transiting Southeast Alaska include (but are not limited to):

- roll-on/roll-off ferries (Alaska Marine Highway System);
- Cruise ships;
- Tugs;
- Barges (bulk fuel and containerized cargo);
- Fishing vessels/trampers;
- Recreational vessels;
- Military vessels; and
- Log/ore carriers.

4500 Types of Waterfront Facilities in Southeast Alaska

Common waterfront facilities include (but are not limited to):

- Passenger receiving facilities (ferry and cruise ship);
- Containerized packaged cargo receiving facilities;
- Bulk fuel facilities with associated tank farms;
- Container storage;
- General facilities (including fish processing plants);
- Marine repair and dry-dock facilities; and
- Marinas and small boat harbors.

4600 Firefighting Areas

The Southeast Alaska region is full of sensitive shoreline habitats and a number of sensitive biological resources. The area contains national parks, state critical habitat areas and state parks, and is managed for a variety of uses including timber harvesting and commercial and sport fishing. Southeast Alaska's waterways are widely used for maritime commerce.

Log transport ships, fuel barges, freighters, oil industry work boats, and cruise ships make routine stops at Southeast ports. Additionally, commercial fishing boats, sport fishing charter boats, and privately-owned vessels regularly use local harbors and docks. Anchoring or mooring large vessels generally requires water greater than 10 fathoms, but problems can also occur if the water is too deep. Labor and necessary equipment must be available to make repairs or to lighter product.

A ship on fire may present immediate risks to adjacent life, property, and/or the environment. Fighting marine fires requires substantial logistical coordination. Ships may be moved to or from piers, to anchor, or possibly in extreme cases to grounding or sinking sites. When moving a stricken vessel, primary consideration shall always be given to actions necessary to save lives. There is not one perfect mooring or anchoring site for all vessels and all situations.

Larger vessels, such as oil tankers and freighters, cannot enter sites that have shallow approaches or have small-sized bays, though smaller vessels, such as fishing vessels and charter vessels, may be able to utilize those potential sites. A deep-water site that can accommodate a larger ship with a deep draft may present depths far too large to be suitable to for anchoring a smaller vessel.

4610 Potential Firefighting Piers

Although piers are not the only sites that can, or should be considered for locating a burning ship, they may offer the greatest potential to maximize the use of shore-based firefighting resources. The following factors should be considered when selecting a pier:

- The severity of the fire
- The proximity of the pier to populated areas
- Environmentally sensitive areas
- Availability of the pier for an extended period
- Availability of water and electricity
- Construction of the pier, noncombustible materials
- Prevailing winds
- Availability of firefighting staging areas
- Presence of hazardous materials at the pier and on the vessel
- Availability of special equipment

The selection of a pier for firefighting activity does not require the Coast Guard or other agency to direct a burning vessel to the selected pier. Any decision to bring a burning vessel into port should be discussed with representatives of the Unified Command if one has been established.

4620 Potential Anchorages

If a fire is deemed to pose a significant threat to a facility, pier, or the port, or if smoke poses a threat to nearby communities, a decision may be made to move the vessel to a temporary anchorage. For planning purposes, the following criteria must be considered when selecting potential anchorages for firefighting within Southeast Alaska:

- Shelter from wind
- Type of bottom
- Depth of water at mean low tide
- Adequate swing room for the largest vessels
- Facilities for passengers and crew
- Proximity to staging areas
- Whether the site can be boomed off to limit environmental impact in the event of a spill

The Unified Command will have to consider seasonal sensitivities per site prior to making their decision. The U.S. Coast Pilot for Southeast Alaska is an additional aid in identifying protected harbor areas for anchorages. Vessel anchorage areas used in past responses include[21]:

- Ketchikan-Vallenar Bay (north end of Gravina Island).
- Sitka-
  - Eastern Anchorage (1 ½ nm from downtown Sitka);
  - Sawmill Cove/Silver Bay (4 nm from Crescent Harbor & 5 nm by road from old pulp mill docks to airport);
  - Starrogavan Bay (7 nm by road to airport with Ferry and barge docks; boat ramp nearby)
- Juneau-
  - Auke Bay (3 mi by road to airport with harbor floats nearby);
  - Fritz Cove (4 nm to Auke Bay floats; 1 ½ nm to Douglas boat ramp and 3 mi by road to airport from Auke Bay).
- Icy Strait-Entrance to Bartlett Cove, Glacier Bay (1 ½ nm to floating dock & 10 mi road to daylight only airport).

4630 Potential Grounding Sites

At some point, it may become necessary to ground a vessel. Grounding should only be considered if it is determined the vessel may sink, or in other ways become derelict. In choosing grounding sites, several factors must be considered:

- Bottom material--soft enough that the ship's hull will not rupture;
- Water depth--shallow enough that the vessel will not sink below the main deck, yet deep enough that fire boats, salvage barges and tugs can approach. Consider depth of water at mean low tide.
- Shelter from wind; and
- Weather--areas not known to have strong winds or currents that could hamper firefighting or salvage efforts.

For firefighting purposes, additional criteria must be considered:

- Proximity to staging areas;
- Whether the site can be boomed off to limit environmental impact in the event of a spill; and
- Seasonal biological sensitivities.

[21] This list is limited and based on past responses. Other safe harbors/anchorages should be identified on a case by case basis.

4640 Offshore Locations for Intentional Vessel Sinking

When a large vessel and its cargo are deemed a total constructive loss and intentional sinking of the vessel is being considered, the Captain of the Port will consult with the potentially affected natural resource trustees, appropriate tribes, the Environmental Protection Agency, and other appropriate stakeholders in addition to obtaining all necessary permits (see Subarea Contingency plan for required permits). This consultation could be accomplished through an incident-specific activation of the Alaska Regional Response Team (RRT). Smaller wrecks and sunken vessels along municipal piers and harbors are usually destroyed in accordance with local municipal waste handling regulations and guidelines.

4650 Potential Places of Refuge

Force majeure is the concept that a vessel in distress may approach or beach on any coast to assist saving lives and property aboard. Under international law, a vessel in danger due to a force majeure cannot be denied refuge. The Coast Guard Captain of the Port (under 33CFR6.04-8) is the controlling authority for permitting or directing the movement of a vessel within the territorial waters of the United States. Movement of a burning vessel towards any port or population area must be evaluated to ascertain the potential hazard to the port prior to entry.

(Excerpt from the Southeast Alaska Subarea Contingency Plan) The Alaska RRT approved in 2004, the *Guidelines for Places of Refuge Decision-Making*. These guidelines provide the Captain of the Port with a process that will help (1) expedite place of refuge decision-making, and (2) ensure stakeholders and other technical experts are consulted as appropriate. This in turn, helps ensure that the Captain of the Port/Unified Command has appropriate input, and the best available information, prior to making a place of refuge decision. Refer to Annex O of the Unified Plan for statewide guidance on potential places of refuge decision-making.

4660 Tender Landing Sites

The advance identification of potential embarkation points and tender landing sites near major Southeast Alaska ports is necessary so that in the event of an offshore fire, responding municipal fire departments can quickly stage and transfer personnel and equipment to combat the disaster and receive evacuees and injured. Such sites are critical in the accountability of evacuating passengers and crew against vessel crew and passenger manifests. Responders should coordinate with the medical community to determine appropriate landing sites on a case by case basis.

4700 Resources

4710 Southeast Alaska Marine Chemists

Organization	Point of Contact	Telephone Number	Alternate Telephone	Fax	Email Address
Marine Chemists Consulting (Anchorage, AK)	Joseph E. Graham	866-627-2436	None	907-274-6455	Marinechemist695@yahoo.com
AMEC Earth & Environmental, Inc. (Portland, OR)	Troy Corbin	503-639-3400	503-757-5519	503-620-7892	troydcorbin@msn.com
AMEC Earth & Environmental, Inc.	Scott Hernandez	503-639-3400	503-704-5412	503-620-7892	Scott.hernandez@amec.com
Belay, Inc. (Portland, OR)	Leslie Blaize	503-286-2206	503-819-9865	503-286-2206	lblaize@q.com
Oregon Marine Testing (Portland, OR)	John G. Flynn	503-939-6116			jgflynn@frontier.com
Oregon Marine Testing	Greg M. Gadbois	971-235-5386			gmg200@yahoo.com
Sound Testing, Inc. (Seattle, WA)	Amy Sly	206-932-0206	206-228-0166	206-937-3848	amy.sly@hotmail.com
Sound Testing, Inc.	Kevin Korver	206-932-0206	360-220-1115	206-937-3848	korverk@gmail.com
Sound Testing, Inc.	Craig L. Trettevik	206-932-0206	206-313-6933	206-937-3848	ctretvik@yahoo.com
Northwest Marine Chemist, Inc. (Tacoma, WA)	George D. Blair	253-752-0149		253-759-3523	gblair637@harbornet.com
Pacific Marine Testing, CO (Bellevue, WA)	Tagay Kang	206-715-4932	425-641-2187		Tagaykang562@yahoo.com
(Seattle, WA)	Bradford K. Holman, JR	206-439-8217			safetyfirst7672@msn.com

Table 4-2-Marine Chemist Contact List (updated 01/2013)

4720 Southeast Alaska Marine Firefighting Consultants and Advisors

Organization	Point of Contact	Telephone Number	Alternate Telephone	Fax	Email Address
Maritime Fire & Safety Association (Portland, OR)	Marisa Chilafoe	503-220-2099	503-220-2055	503-295-3660	chilafoe@pdxmex.com
Marine Fire & Safety Association	Elaine Truitt	503-220-2084	503-220-2055	503-295-3660	truitt@pdxmex.com
Prism Fire Training Center (Kenai, AK)		907-283-3054			prism@alaska.net
Marine Hazard Response	Scott Powell	832-590-6500	281-744-7632	281-528-6400	scott.powell@superiorenergy.com
Marine Hazard Response	Scott Vickers	832-590-6500	281-380-9110	281-528-6400	scott.vickers@superiorenergy.com
Southern Fire Training Center (Juneau, AK)	Todd Kollar	907-465 -3117		907-465-4055	Todd.kollar@alaska.gov
Marine Firefighting Institute	Tom Guldner	914-329-8341			Marinefires@aol.com
USCG Marine Safety Center	Duty Officer (24/7)	202-327-3985	202-4753402		SERT.Duty@uscg.mil

Table 4-3-Marine Firefighting Consultants/Advisors (updated 01/2013)

4730 Southeast Alaska Fire Departments

Fire Department Name	24/7 Phone*	Primary Contact Phone*
Angoon Volunteer Fire Dept.	788-3126	788-3126
Gustavus Volunteer Fire Dept.	697-2290	697-2230
Coffman Cove Volunteer Fire Dept.	329-2295	329-2295
Cold Bay Volunteer Fire Dept.	532-5000	532-5000
Craig Volunteer Fire Dept.	826-3275	826-3275
Douglas District Fire Dept.	364-3366	
Elfin Cove Fire Dept.	239-2244	239-2244
Haines Volunteer Fire Dept.	766-2121	766-2115
Hoonah Volunteer Fire Dept.	945-3344	945-3344
Hydaburg Volunteer Fire Dept.	285-3321	285-3321
Hyder Volunteer Fire Dept.	250-636-9148	250-636-9148
Capital City Fire/Rescue	586-7554	586-5322
Kake Volunteer Fire Dept.	785-3222	
Ketchikan Fire Dept.	225-6631	
Ketchikan Gateway Borough North Tongass Fire Dept.	225-9616	228-6625
Klawock Volunteer Fire Dept.	755-2777	209-6178
Pelican Volunteer Fire & EMS	735-2245	735-2243
Petersburg Volunteer Fire Dept.	772-3838	772-3355
Sitka Fire Dept.	911	747-3233
Skagway Volunteer Fire Dept.	983-2450	
Yakutat Volunteer Fire Dept.	784-3206	784-3206

Table 4-4- Southeast Alaska Fire Departments (updated 01/2013)

*Contact Information was primarily retrieved from Alaska Comms.

4740 Southeast Alaska Salvage and Diving Resources

Organization	Capabilities	Telephone Number	Alternate Telephone	Fax
Alaska Commercial Diving (Ketchikan)	Salvage and Diving	907-247-0771		907-225-8676
Boat R B (Ketchikan)	Salvage (landing craft)	907-772-4571		
Commercial Diving Services (Juneau)	Salvage and Diving	907-586-4136		
Cook's Marine Salvage (Juneau)	Salvage and Diving	907-789-3871	907-723-3871	
Diversified Diving Service (Ketchikan)	Salvage and Diving	907-247-3483	503-724-5796	
Global Diving & Salvage, Inc. (Anchorage, AK)	Salvage and Diving	800-441-3483	907-563-9060	907-563-9061
Marine Pollution Control (Equipment cache in Ketchikan, AK-SEAPRO)	Salvage	313-849-2333	313-849-2333	
SMIT Salvage (Prince Rupert, Canada)	Salvage	31-10-4549-911	31-78-6969-000	31-78-6969-555
Southeast Alaska Literage (Juneau)	Salvage and Diving	907-789-4210	907-723-4210	907-789-7325
The Scuba Tank (Juneau)	Salvage and Diving	907-789-5115	907-2098378	907-789-9433
Titan/Crowley (Seattle)	Salvage, Diving and Towing	206-332-8000	954-929-5200	206-332-8300/954-929-0102

Table 4-5- Southeast Alaska Salvage and Diving Resources (updated 01/2013)

4750 Southeast Alaska Tugs

Organization	Tug Description	Telephone Number	Alternate Telephone	Fax
AMAK Towing	ARDIE-900 hp-Skagway	907-789-4020 (Juneau)	907-225-2200 or 586-3307	907-225-8809 or 586-2692
	KODIAK KING-3000 hp- Juneau	907-789-4020 (Juneau)	907-225-2200 or 586-3307	907-225-8809 or 586-2692
	MUZON-2000 hp-Ketchikan	907-789-4020 (Juneau)	907-225-2200 or 586-3307	907-225-8809 or 586-2692
	CAPE ARAGO-900 hp- Prince of Wales	907-789-4020 (Juneau)	907-225-2200 or 586-3307	907-225-8809 or 586-2692
	LE CHEVAL ROUGE-3600 hp-Skagway (fire monitor)	907-789-4020 (Juneau)	907-225-2200 or 586-3307	907-225-8809 or 586-2692
	BANNER- 900 hp- Prince of Wales	907-789-4020 (Juneau)	907-225-2200 or 586-3307	907-225-8809 or 586-2692
Boyer Towing	AIR SNIPE-450 hp- Ketchikan	907 225-2090 (Ketchikan)	206-763-8696 (Seattle)	907-225-4468
	ALISON H-900 hp-Ketchikan	907 225-2090 (Ketchikan)	206-763-8696 (Seattle)	907-225-4468
	BILLIE H- 3000 hp- Ketchikan	907 225-2090 (Ketchikan)	206-763-8696 (Seattle)	907-225-4468
	BRENDA H- 1600 hp- Ketchikan	907 225-2090 (Ketchikan)	206-763-8696 (Seattle)	907-225-4468
	DIANE H- 1600 hp- Ketchikan	907 225-2090 (Ketchikan)	206-763-8696 (Seattle)	907-225-4468
	EDITH OLSON-350 hp- Ketchikan	907 225-2090 (Ketchikan)	206-763-8696 (Seattle)	907-225-4468
	GRETCHEN H-2000 hp-Ketchikan	907 225-2090 (Ketchikan)	206-763-8696 (Seattle)	907-225-4468
	HALLE H- 650 hp- Ketchikan	907 225-2090 (Ketchikan)	206-763-8696 (Seattle)	907-225-4468
	JENNIFER H- 800 hp- Ketchikan	907 225-2090 (Ketchikan)	206-763-8696 (Seattle)	907-225-4468
	KIRSTEN H-1550 hp-Ketchikan	907 225-2090 (Ketchikan)	206-763-8696 (Seattle)	907-225-4468
	LOIS H- 1800 hp-Ketchikan	907 225-2090 (Ketchikan)	206-763-8696 (Seattle)	907-225-4468

--Continued-- Organization	Tug Description	Telephone Number	Alternate Telephone	Fax
Boyer Towing	MAIA H-3000 hp-Ketchikan	907 225-2090 (Ketchikan)	206-763-8696 (Seattle)	907-225-4468
	NORMA H- 1600 hp- Ketchikan	907 225-2090 (Ketchikan)	206-763-8696 (Seattle)	907-225-4468
	SONJA H- 900 hp- Ketchikan	907 225-2090 (Ketchikan)	206-763-8696 (Seattle)	907-225-4468
Channel Construction	MARAUDER-1500 hp- Juneau	907-789-0200 (Juneau)		907-789-5248
Dunlap Towing Company	Varies-Seattle	360-466-3114		
FOSS Maritime	Varies-Seattle	800-426-2885	206-281-3800	206-281-3809
Olson Marine, Inc.	WENDY O- 2300 hp-Ketchikan	907-247-1417		907-247-1418
	HARRIET O-1300 hp-Ketchikan	907-247-1417		907-247-1418
	NORMAN O-1500 hp-Ketchikan	907-247-1417		907-247-1418
	AVERY O- 850 hp- Ketchikan	907-247-1417		907-247-1418
	GENERAL- 675 hp- Ketchikan	907-247-1417		907-247-1418
Revilla Tug Company	ETHAN B.- 2200 hp- Ketchikan	907-225-2730 (Ketchikan)	907-617-7748	907-225-8254/8809
	JENNIE B.- 2200 hp- Ketchikan	907-225-2730 (Ketchikan)	907-617-7748	907-225-8254/8809

Table 4-6- Southeast Alaska Tugs (updated 01/2013)

4760 Fire Boats

Agency/Company	Gallons per Minute	Telephone Number
Ketchikan Fire Department	5000	225-6631

Table 4-7-Fire Boats

4800 Training and Exercises

Shipboard fires are encountered infrequently by land based firefighters in the SEAK region. Joint exercises and training that include local fire departments, vessels, facilities and other agencies provide immeasurable value and will enhance working relationships and contribute to a more effective response, as well as demonstrate the capabilities of the various organizations involved. These exercises also point out possible conflicts or weaknesses in the marine firefighting plan.

4810 Exercises

Periodic exercises with fire departments, port facilities, and government agencies will be conducted. The COTP recommends each fire department or response organization coordinate with port facilities and marine units in their respective jurisdictions to establish a training and exercise schedule. It is recommended that local fire departments include the Coast Guard in their exercises in order to ensure familiarity of authority, jurisdiction, and unit operations and capabilities. The COTP will assist in coordinating with other organizations if a larger exercise is required. For assistance in arranging an exercise, contact the COTP.

This plan shall be exercised triennially.

4820 Training

Training is the cornerstone of effective response. Paramount in preparing for vessel or waterfront facility fires is the need to integrate Coast Guard planning and training efforts with those of other responsible agencies, particularly local fire departments and port authorities.

Local fire departments, port facilities, and government agencies will establish their own training programs. The contents of this plan, the resources available to SEAK, firefighting systems installed on the various vessels, and basic vessel construction should be incorporated into training programs. Each fire department, which is responsible for fighting shipboard fires, should establish a training program within their unit. To the extent possible, familiarization training and exercises should be conducted on vessels that call on the port for fire departments that conduct marine firefighting. Sector Juneau should coordinate familiarization training in conjunction with routine vessel inspections to allow fire department crews to tour vessels and become familiar with various vessel layouts.

Formal marine firefighting training may also be acquired at the following training locations (note this list is not exhaustive):

- Texas A&M University Engineering Extension Service, -Collage Station, TX- http://teexweb.tamu.edu/index.cfm;

- Louisiana State University Fire and Emergency Training Institute-Baton Rouge, LA- http://feti.lsu.edu/;
- Delgado Community College Fire School-New Orleans, LA- http://www.dcc.edu/divisions/workforce/fire_school/;
- Maritime Institute of Technology & Graduate Studies (MITAGS)-Linthicum Heights, MD- http://mitags-pmi.org/;
- Maritime Administration (MARAD) Maritime Fire Training Center-Swanton, OH- http://www.marad.dot.gov/about_us_landing_page/gateway_offices/fire_training_center/fire_training_center.htm;
- AVTEC-Alaska's Institute of Technology- http://www.avtec.edu/
- Washington State Patrol Fire Training Academy- http://www.wsp.wa.gov/fire/fireacad.htm; and
- Local fire departments

5000 Logistics/Finance

5100 Communications

An effective, well-coordinated communications plan must cover the areas of designated frequency, usage, responder compatibilities, outside communications support and logistics. When dealing with multiple agencies at a marine incident, a Communications Unit Leader should be assigned as soon as possible. This person should be identified in the Watch Quarter Station Bill prior to an event.

In Southeast Alaska, commercial vessels, Coast Guard and municipal fire departments use very high frequency (VHF) radio systems. Thus, primary communications frequencies will be VHF. Incident command will establish tactical channels or frequencies based on the capabilities of all involved parties. "It should not be presumed that because a fire department's radio procedures and systems meet its routine needs that they automatically meet its needs during a shipboard fire. However, as with any major incident/disaster, a department's operations should be an extension, by degree, of its day-to-day operations"[22] (NFPA, 2011). Connecting interagency radio frequencies may require an exchange of radio equipment. Agencies should coordinate this prior to an incident.

If the on-scene fire department does not have VHF radio capability, handheld VHF radios shall be provided to the fire department. Additional handheld VHF radios can be obtained from the Coast Guard, vessel, facility, vessel agent, harbormaster or commercial contractor. The initial communications frequencies will quickly become saturated and thus the Incident Command should move towards establishing a comprehensive communications plan and designating additional working (tactical) frequencies. This should be done prior to an incident. Table 5-1 illustrates the FCC Fire Mutual Aid VHF frequencies.

[22] NFPA 11.1.2

Description	National Public Safety Telecommunications Council (NPSTC) ID	Channel (MHz) Transmit (TX)/Receive (RX)	Continuous Tone-Coded Squelch System (CTCCS) Tone
Call	VCALL10	155.7525	156.7
Tactical	VTAC11	151.1375	156.7
Tactical	VTAC12	154.4525	156.7
Tactical	VTAC13	158.7375	156.7
Tactical	VTAC14	159.4725	156.7
Fire mutual aid	VFIRE21	154.28	
Fire mutual aid	VFIRE22	154.265 mobile	
Fire mutual aid	VFIRE23	154.265 mobile	
Fire mutual aid	VFIRE24	154.2725	
Fire mutual aid	VFIRE25	154.2875	
Fire mutual aid	VFIRE26	154.3025	

Table 5-1- FCC Fire Mutual Aid Frequencies

A considerable communications capability is also available through various State agencies. The Alaska Department of Natural Resources Forestry and the Department of Emergency Services are both equipped with impressive communications assets. The Department of Environmental Conservation also maintains an extensive arsenal of communications equipment.

Despite the varied resources available in SEAK to acquire communications equipment the NFPA[23] recommends the following logistics be considered:

- Provide provision for battery replacement and recharging on-scene;
- Provide for the acquisition of extra portable radios; and
- Provide for methods to dry, replace and repair radios on-scene.

Additional systems include:

5110 The Alaska Land Mobile Radio (ALMR) System

The State of Alaska, Alaska Municipal League, Department of Defense, and Federal Non-Department of Defense agencies have partnered to address the requirement for communications security and interoperability, identify a solution and to establish a migration path to that solution. The objectives of the cooperative are to promote a system development by sharing existing resources, burden sharing system costs for implementation and operation that maximizes economies of scale, and initiates consolidated procurement and maintenance activities. The result is an ALMR system that provides the needed communications capability for State, local and federal first responders and public

[23] NFPA 11.7.2; 11.9.3

safety entities in Alaska, through an integrated wireless network, that is secure and interoperable, that is cost effective and technologically sound.

For more information on ALMR, see http://www.ak-prepared.com/almr/.

5120 Emergency Radio Frequencies

Primary Coast Guard Radio Frequencies include:

- Marine Band Channel 81A operates at 157.075 MHz and is the primary Marine Safety operating frequency. Channel 81A is also the national marine pollution response coordination channel. 81A is the primary means of radio communication between marine safety field teams and contractor teams during emergency responses. Channel 81A is the preferred channel to establish initial radio communications between vessel crew, shore responders and Coast Guard personnel.

- Marine Band Channel 83A operates at 157.175 MHz and is the USCG Auxiliary primary operating channel. The Captain of the Port may preempt the use of this channel in emergencies. 83A is used as an overflow channel for 81A during emergency case prosecution.

- Marine Band Channel 22A operates at 157.100 MHz and is the primary USCG-public liaison channel. Urgent marine broadcasts are announced on 16 and are broadcast on 22A. During emergency responses, 22A may be used by USCG to inform mariners of hazardous conditions or restrictions on the use of waterways.

- Marine Band Channel 16 operates at 156.800 MHz and is the international hailing and distress frequency. In an emergency, channel 16 may be used to alert mariners of urgent Captain of the Port information broadcast on 22A. **FCC regulations prohibit the use of Channel 16 by land mobile stations and non-SAR land fixed stations.**

- Marine Band Channel 12 Southeast Alaska Harbormaster working frequency.

Most fire departments have portable radios that can communicate on marine frequencies. The Coast Guard has also installed a Communications suite in the EOC in Sitka, AK.

5130 Landline and Cellular Communications

Landline and mobile communications units should be assigned where available. Cellular telephones, both mobile and portable, should be utilized as part of an effective communications plan.[24]

[24] NFPA 11.9.1

5140 SSB/Satellite

Single Side Band radios and the global satellite network is available for short and long-range communications.

Circuit Discipline is critical to any response and must be adhered to. The following guidelines must be adhered to during a major crisis to keep communications problems to a minimum:

- Do not deviate from assigned working frequencies unless it is for the purpose of re-establishing communications.
- Limit radio traffic to essential communications only.
- Limit length of transmissions in keeping the frequency clear for emergency traffic only. Information containing lengthy operational details should be passed by alternate means whenever possible.

Secure communications systems available to other Coast Guard units include STE (Secure Telephone Equipment), and data encrypted security VHF-FM radios. Use of these systems to communicate information will be at the discretion of the Captain of the Port.

Effective communications are always difficult to achieve during mutli-agency response efforts. As such, communications procedures should be rehearsed during all marine firefighting drills. Lessons learned from exercises and actual events shall be incorporated into this plan.

5200 Claims

Generally, responsible parties are liable for damage claims and removal costs resulting from discharges or substantial threats of discharges of oil into or upon the navigable waters of the U.S. For cases where the responsible party is unknown, unable or unwilling to meet this obligation, the Oil Spill Liability Trust Fund will pay for removal costs and claims. The Oil Spill Liability Trust Fund is administered by the Coast Guard's National Pollution Funds Center in Arlington, VA. Its concurrent missions are to provide OSCs with the financial resources to ensure timely and effective response, to ensure legitimate damage claims are liquidated expeditiously, and to ensure proper documentation of expenditures to facilitate cost recovery from responsible parties.

Government expenses must be properly documented to recover costs. This will provide the responsible party with accurate accounting, and if litigation is necessary, will provide concise, accurate, and admissible evidence. To assist On-Scene Coordinators, the National Pollution Fund Center maintains a Technical Operating Procedures for Resource Documentation manual, which contains all required forms and reports.

Persons and government agencies which incur damages as a result of discharges or substantial threats of discharges of oil are entitled to compensation and Oil Pollution Act 1990 provides for a mechanism to expedite this process. The Affected Party is

primarily liable for satisfying legitimate claims expeditiously. If the Affected Party is either unknown, or is unable or unwilling to meet this obligation, or the claim is denied or remains unpaid for 90 days the NPFC is authorized to evaluate and pay the claim from the Oil Spill Liability Trust Fund. This applies to both uncompensated removal costs and uncompensated damages resulting from the discharge.

Companies with private or corporate insurance can submit claims as outlined in individual policies for damages or losses as a result of fire. Insurance companies make the determination of payment based on cause. It is the vessel or facility owner or operator who is responsible for submitting insurance claims.

Acronyms

AK Department of Environmental Conservation ..... ADEC
AK Department of Homeland Security Emergency Management ..... ADHSEM
AK Department of Public Safety ..... ADPS
AK State Troopers ..... AST
Code of Federal Regulations ..... CFR
Captain of the Port ..... COTP
Carbon Dioxide ..... CO_2
Cruise Line Agency ..... CLA
Department of Homeland Security ..... DHS
Emergency Operations Center ..... EOC
Environmental Protection Agency ..... EPA
Federal Communications Commission ..... FCC
Federal On-Scene Coordinator ..... FOSC
Finance Section Chief ..... FSC
Hazardous Materials ..... hazmat
Incident Action Plan ..... IAP
Incident Command/er IC
Incident Command System ..... ICS
Liaison Officer ..... LOFR
Logistics Section Chief ..... LSC
National Fire Protection Association ..... NFPA
National Incident Management System ..... NIMS
Officer in Charge, Marine Inspections ..... OCMI
Oil Pollution Act ..... OPA
Operations Section Chief ..... OSC
Planning Section Chief ..... PSC
Port Waterway Security Act ..... PWSA
Public Information Officer ..... PIO
Qualified Individual ..... QI
Rapid Intervention Team ..... RIT
Safety Officer ..... SOFR
Search and Rescue ..... SAR
Single Side Band ..... SSB
Southeast Alaska ..... SEAK
Sensitive Security Information ..... SSI
State Emergency Coordination Center ..... SECC
State On-Scene Coordinator ..... SOSC
Unified Command/er ..... UC
United States Code ..... USC
Very High Frequency ..... VHF
Village Public Safety Officer ..... VPSO

Definitions

Anchorage – Designated areas, identified on navigational charts, where ships may safely anchor.

Captain of the Port (COTP) – U.S. Coast Guard person who has broad authority over all vessels and port operations in a port area of the United States. The Sector Commander for U.S. Coast Guard Sector Juneau, located in Juneau, AK, has COTP authority for the Southeast Alaska Marine Inspection and Captain of the Port Zones as defined in 33 CFR Part 3.85-10 (*See also* **Sector Commander**).

Cargo Manifest – Document that lists all cargo carried on a specific vessel voyage. *See also* Dangerous Cargo Manifest.

Cargo Plan – View of a vessel showing all the storage space available for cargo; shows the amount and type of cargo carried, its destination and how it will be stowed.

Coast Guard Sector Juneau – U.S. Coast Guard field level organization responsible for carrying out the Coast Guard's Maritime Safety, Security, and Stewardship missions in a specified geographical area. The Sector is headed by a Commanding Officer who is also designated Captain of the Port (COTP), Officer in Charge, Marine Inspections (OCMI), Federal On-Scene Coordinator (FOSC), Federal Maritime Security Coordinator (FMSC), and Search and Rescue Mission Coordinator (SMC).

Dangerous Cargo Manifest – Listing of all hazardous cargoes carried on a vessel; format is specified by the International Maritime Organization.

Federal On Scene Coordinator (FOSC) – The Federal official pre-designated by the EPA or the USCG to coordinate responses under Subpart D of the National Contingency Plan (NCP)(40 CFR Part 300) or the government official designated to coordinate and direct removal actions under Subpart E of the NCP. A FOSC can also be designated as the Incident Commander.

Fire Control Plan – Set of general arrangement plans for each deck that illustrate fire stations, fire resisting bulkheads, and fire-retarding bulkheads together with particulars of fire detecting systems, manual alarm systems, fire extinguishing systems, fire doors, means of access to different compartments, and ventilating systems (including locations of dampers and fan controls). Plans are stored in a prominently marked weather-tight enclosure outside the house for the assistance of land-based fire-fighting personnel.

Hazardous Material – As defined in 49 CFR 171.8, a hazardous material is a substance or material that the Secretary of Transportation has determined is capable of posing an unreasonable risk to health, safety, and property when transported in commerce, and has been designated as hazardous under section 5103 of *Federal Hazardous Material Transportation Law*. The term includes hazardous substances, hazardous wastes, marine pollutants, elevated temperature materials, materials designated as hazardous in the Hazardous Materials Table (49 CFR 172.101), and materials that meet the defining criteria for hazard classes and divisions in 49 CFR 173 for flammability, reactivity, toxicity, and corrosive properties.

Incident Commander – The individual responsible for all incident activities, including the development of strategies and tactics and the ordering and release of resources. The IC has overall authority and responsibility for conducting incident operations and is responsible for the management of all incident operations at the incident site. (*See also* **Unified Command**).

Marine Casualty – As defined in 46 CFR Part 4, the term marine casualty or accident applies to events caused by or involving a vessel and includes:

- Any fall overboard, injury, or loss of life of any person
- Any occurrence involving a vessel that results in grounding, stranding, floundering, flooding, collision, allision, explosion, fire, reduction or loss of a vessel's electrical power, propulsion, or steering capabilities, or any other circumstances that might affect or impair a vessel's seaworthiness, efficiency, or fitness for service or route. (*See also* **Serious Marine Incident**)

Marine Firefighting – Any firefighting related act undertaken to assist a vessel, oil platform, waterfront facility or other structure located in or next to marine waters.

On-Scene Coordinator – Person responsible for on scene execution of Coast Guard responsibilities through operational control of assigned Coast Guard assets. Normally, this is a commander of a vessel or aircraft as designated by the Search and Rescue Mission Coordinator (SMC). (*See also* **Search and Rescue Mission Coordinator**)

Responsible Party (RP) – The RP is the person directly responsible and potentially liable for an overall fire response. The responsible party is defined as the owner, operator, or party financially responsible for mitigation of the incident. Determined as follows:

- Vessel fires: Master of vessel or vessel owner/operator.
- Facility fires: Facility owner/operator.
- The Coast Guard has the authority under the Federal Water Pollution Control Act (33 U.S.C. 1251 et seq.) to assume the role of the responsible party if the owner/operator/person in charge of the vessel is not known, not acting responsibly, or when the effort is insufficient.

Rapid Intervention Team – The Rapid Intervention Team (RIT) is responsible for performing search and rescue of trapped or injured fire fighters. A RIT will normally be assigned in each area the fire activities are taking place, including shore-side, vessel and waterside branches. On a vessel, a RIT will be assigned at each separate entry point where below deck activities are being conducted.

Regional Response Team – The RRT is an interagency advisory group that has extensive expertise related to oil and hazardous materials spills; develops plans and contributes to preparedness activities (such as training and exercises) before incidents occur; and may assist and advise the Federal On-Scene Commander (FOSC) during an incident, upon request. Further information about the RRT can be found in 40 CFR 300.115.

Safety Zone – A water area, shore area, or water and shore area to which, for safety and environmental purposes, access is limited to persons, vehicles, or vessels authorized by the U.S. Coast Guard COTP, District Commander, or Commandant, pursuant to 33 CFR Part 165.20.

Search and Rescue Mission Coordinator (SMC) – Each Coast Guard Search and Rescue (SAR) operation is carried out under the guidance of a Search and Rescue Mission Coordinator (SMC). The Sector Commander is designated as the SMC with the Sector Command Center performing the primary duties and responsibilities of the role including:

- Obtaining and evaluating all data on the emergency.
- Dispatching search and rescue units (SRUs) based on this information.
- Developing search plans which include determining limits for the search area, selecting the search pattern, and designating the on-scene coordinator (OSC).
- Controlling the SAR communication network for the assigned mission.
- Monitoring progress of the SAR mission and request additional SAR resources as necessary.

Sector Commander – The Sector Commander is responsible for all Coast Guard missions within the Sector's Area of Responsibility (AOR). The Sector Commander's authorities include Search and Rescue Mission Coordinator (SMC), Federal Maritime Security Coordinator (FMSC), Federal On-Scene Coordinator (FOSC), and, in most Sectors, Officer in Charge Marine Inspection (OCMI) and Captain of the Port (COTP). In his or her capacities as OCMI and COTP, the Sector Commander is responsible for a Marine Inspection Zone and COTP Zone.

Serious Marine Incident – A **Marine Casualty** that includes:

- One or more deaths
- Any injury to a crewmember, passenger, or other person which requires professional medical treatment beyond first aid
- Damage to property in excess of $100,000
- Action or constructive total loss of any vessel subject to USCG inspections or over 100 gross tons
- A discharge of 10,000 gallons or more of oil, or a release of a hazardous substance in a reportable quantity (40 CFR Part 302), into the navigable waterways of the United States

Unified Command – An application of ICS used when there is more than one agency with incident jurisdiction or when incidents cross political boundaries. Agencies work together through the designated members of the Unified Command to establish their designated Incident Commanders at a single ICP; establish a common set of objectives and strategies and a single Incident Action Plan; and a unified media message. This is accomplished without losing or abdicating authority, responsibility, or accountability.

Waterfront Facility – Waterfront facility means all piers, wharves, and similar structures to which a vessel may be secured; areas of land, water, or land and water under and in the immediate proximity to these structures; buildings on or contiguous to these structures; and the equipment and materials on or in these structures or buildings.

Vessel Master – As a matter of customary maritime law and practice, a vessel master is presumed in charge of, and capable of, all onboard ship operations including shipboard firefighting. Merchant vessels are inspected, and their crews trained, to provide an onboard firefighting capability. It is only at the specific request of the master or when it becomes obvious that the vessel's condition threatens the port's safety or environment that relieving the vessel master of his responsibility as Incident Commander should be considered.

Vessel Response Plan – A contingency plan required by the U.S. Coast Guard for each vessel operating in the U.S. that carries oil as cargo, including oil cargo residue. The plan must cover all geographic areas of the United States in which the vessel intends to handle, store, or transport oil, including port areas and offshore transit areas. The plan includes:

- Notification procedures
- Shipboard spill mitigation procedures
- Shore-based response activities
- List of contacts
- Training procedures
- Exercise procedures
- Plan review and update procedures
- On board notification checklist and emergency procedures (unmanned tank barges only)
- Geographic-specific appendix for each COTP zone in which the vessel or vessels operate
- An appendix for vessel-specific information for the vessel or vessels covered by the plan