

Kodiak Marine Firefighting Work Group Marine Fire Scenarios for Consideration

The following scenarios describe possible actions of land-based responders from Kodiak City and Borough. Under the community emergency response structure the Police Chief is the initial Incident Commander for all emergencies. The Fire Chief will relieve the Police Chief for all fires and environmental emergencies. (Is this correct?)

These scenarios are provided to generate discussion and review of community capability. They should not be viewed as the “textbook” response for marine fires. However, the reviewers should examine their own response organizations capacity, authority and policies in light of the actions described in the following scenarios. Ask the following questions:

- Do I have enough available trained personnel to mount a similar response?
- Do I have the equipment?
- Do existing policies prohibit the types of response described below?
- Is mutual aid needed?
- Is communication between the various response organizations adequate to get the type of inter-agency coordination described here?

Scenario 1: Fishing vessel fire in St. Herman Bay marina (Offensive Tactics)

A 60-ft wooden fishing vessel was reported burning in the marina at 3:00 a.m. One pumper and eight firefighters responded. Upon arrival, the responders observed heavy black smoke coming from the wheelhouse. Concerned that the occupants may still be aboard, the Fire Chief directed two firefighters to don turn-out gear and SCBA and to search the vessel. The remaining crew, with assistance from the Harbormaster, established a water supply using hoselines from the pumper and harbor standpipe. Water was directed into the pilot house through a partially open window. The searchers did not find any occupants. Two additional hoselines 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. Once all openings and hatches were secured, firefighting water was increased and the fire was extinguished within 20 minutes. The responders from the local Coast Guard Marine Safety Detachment arranged for containment boom from the local marine fuel transfer facility to be placed around the vessel to capture contaminated debris and oily water run-off. The occupants of the vessel arrived at 4:00 a.m. The owner of the vessel could not be located or immediately identified. At 8:00 a.m. the Fire Chief requested the Coast Guard COTP to ensure the vessel was cleaned of oil and hazmat. During the next 5 days, a contractor hired by the Coast Guard pumped the firewater off the vessel, removed three propane tanks and 200 gallons of fuel and lube oil. The clean up was completed quickly and relatively inexpensively because the fire chief had taken action to ensure that the fire fighting efforts did not sink the vessel. Three months later, when efforts to get the owner to take

responsibility for the vessel were unsuccessful, the vessel was towed out of the marina by the harbormaster, beached and burned.

Scenario 2: Deck fire on fuel barge
(Offensive Tactics)

A large wake broke the transfer couplings on a fuel barge offloading gasoline and kerosene at a transfer facility and tank farm on the City waterfront. The spilled products pooled and ignited on the barge tank top. Product draining from 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 Marine Safety Detachment and the manager of the marine transfer facility assisted the Fire Chief (overall incident commander) in size-up. The Fire Chief ordered a tug to stand-by to tow the barge from the facility and away from the Kodiak downtown area. All four area fire departments (City, Woman's Bay, Bayside, USCG ISC) responded with equipment and personnel under their respective mutual aid agreements.

After consultation with the Coast Guard, the transfer facility manager and other fire chiefs, the incident commander decided to make one 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. Within one hour of initial response 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 AFFF. Once the fire was extinguished, a foam blanket was maintained over the pooled fuel to prevent re-ignition. Incident command decided not to deploy oil containment boom around the barge, preferring that the gasoline spread and dissipate. However, the fire monitor on the M/V Wolstad was used to break up petroleum residue and sheen and keep flammable/combustible liquids from pooling under docks and wharves.

Scenario 3: Engine room fire on a large cruise ship
(Defensive Tactics and Support Services)

While underway 30 miles from Kodiak, the cruise ship Sugarland (600' LOA, 1200 passengers and crew) experienced an engine room fire that the crew was unable to extinguish. The master requested that the vessel be allowed to tie up in Kodiak. After extensive consultation with the Coast Guard Away Team on board the C/S Sugarland, where she received assurances that the engine had been isolated with primary and secondary fire boundaries, the City Manager, with backing from the Mayor and Fire Chief, agreed to allow the cruise ship to tie up to the east end of Pier #2. Using its bow thrusters and one assist tug, the cruise ship was able to make fast to the pier. All 850 passengers and non-essential crew were removed from the vessel. Prior to passenger and crew evacuation, the unified command insisted on a strict accountability system using manifests and disembarkation check-off lists. The passengers and crew were temporarily

sheltered in the available hotels, restaurants, churches and community centers until they could be flown out of Kodiak. Using the international shore connection, the cruise ship fire mains were re-charged through the city water supply. The fire department provided a continuous supply of charged air bottles for the ship's crew who concentrated on cooling and monitoring the fire boundaries around the isolated engine room. Fire department aerial trucks were used to cool the main deck above the engine room. Ship stability was constantly monitored and cooling water was pumped off and discharged overboard into the boom that now surrounded the vessel. The engine room was re-entered when thermal imaging equipment could no longer detect interior hot spots. The C/S Sugarland was towed from Kodiak nine days after the master originally requested permission to enter.