Implementation of Alaska Tanker and Nontank Vessel APC’s in Alaska

The Alaska Maritime Prevention and Response Network is a non-profit organization established to implement alternative spill response and prevention measures that most cost effectively meet the environmental protection objectives of state and federal regulations.

ALASKA

OIL SPILL TECHNOLOGY SYMPOSIUM

UNIVERSITY OF ALASKA FAIRBANKS

March 6-7, 2014
Implementation Tanker and Nontank Vessel Alternative Planning Criteria in Alaska

- Federal oil spill requirements in Alaska
- How have “APC’s” been used in Alaska
- The “why” and “what” of an APC
- Elements and implementation of APC’s
- Questions
Federal Oil Spill Requirements in Alaska

• 33 CFR part 155 \textit{[vessel related]}
  – Subpart D (Tank vessels, Barges, Secondary cargo carriers)
  – Subpart E (Special TAPS tanker provisions)
  – Subpart J (Nontank vessels)

• Response Capability
  – Resources (equipment, people, support)
  – Time on scene
Where 33 CFR 155 Can be Met

[Map showing geographic area with a 100 NM radius and 22 hubs marked on it.]
Alternative Planning Criteria

“In remote areas, where response resources are not available, or the available commercial resources do not meet the national planning criteria, the owner or operator may request acceptance of alternative planning criteria by the Coast Guard.”
Alternative Planning Criteria (APC) Plans in Alaska

• APC for Tankers Operating in the Gulf of Alaska
• APC for ANS tankers sailing to the Far East
• APC for oil barges operating in Alaska
• APC for tankers operating in Western Alaska
• APC for nontank vessels operating in Western Alaska
33 CFR § 155.5067
Alternative Planning Criteria
“minimum requirements of a request”

1. Reason(s) and supporting information
2. Identification of regulations necessitating the alternative planning criteria request
3. Proposals for alternative procedures, methods, or equipment standards,
4. Prevention and mitigation strategies that ensure low risk of spills
5. Environmental and economic impact assessments of the effects
CG Regulations

Environmental Protection = Oil Spill Recovery Equipment

Regulatory Approach towards Providing Environmental Protection

APC
Incorporates Prevention Measures and Capabilities

Environmental Protection

Oil Spill Prevention Capabilities
- Tugs and ETS

Oil Spill Prevention Measures
- Offshore Routing and Monitoring

Oil Spill Recovery and Mitigation
- SMFF and Oil Spill Recovery Equipment

APC Approach for Oil Pollution Prevention
Oil Spill Response Equipment Would Exceed Entire U.S. Capabilities

Size

Size Matters!
Application

NTV > 400 GT operating in Alaska waters or transiting to and from U.S. ports within the 200 mile Exclusive Economic Zone (EEZ) of the Coast Guard Captain of the Port Zones
Long Distances
Arrival of oil spill recovery equipment in 24 hrs not feasible
Limited Infrastructure
Where are the ships?

Arctic Maritime Activity in 2013
Extreme Weather Conditions
Ability to deploy and effectively use spill response challenged by weather
Effectiveness of Response Resources

Southwest Bering Sea - Green Conditions

Aerial Dispersants - 12%
Vessel Dispersants - 34%

Mechanical Recovery - 21%
Fixed-Wing Observation - 77%

Note: Percentages intentionally vary from official report due to the index calculation used.
Cost of Full Compliance

Unintended Consequences

Elevated Risk of Environmental Harm and Impact to Economy

Prince Rupert Container Terminal
Lessons Learned

- Selendang Ayu
- Golden Seas
- Steering Casualty – Morning Star
- Milos Reefer
PREVENTION
Time and Capabilities
M/V Golden Seas

Adrift 20 hours
45 miles offshore

Tug Rendezvous 40 Hours after disabled
Three Core Components of Network APC

Information
Vessel Compliance Monitoring and Response System

Time
Offshore Routing of Vessels

Capabilities
Oil Spill Response Equipment, Tugs, Vessels of Opportunity, Prevention Equipment
Network APC for Tankers and Secondary oil cargo carriers

- Implemented in May 2012
- Second submission in May 2013
- Core components:
  - Risk Reduction Measures
  - Enhanced Response
  - Effective in enhancing environmental protection but a Loss Leader
2013 Prevention Enhancements

- Initiated and Maintained OPA-90/APC Watch
  - Active Vessel Monitoring Averted High Risk Transits
  - Investigated vessels “Not Under Command”
  - Notified USCG of disabled vessels (Bangkok Bridge)
- Built and Operated AIS Station in Aleutians (Atka)
- Incorporated satellite AIS feeds into “Vessel Compliance Monitoring and Response System”
- Affixed satellite transponders on 10 tugs operating in Western Alaska to help locating them when needed to assist in a response
MXAK Alaska AIS Network

MXAK AIS Receivers (As of July 2012)
Oil Spill Response Resources Enhancements
Oil Spill Response Resources
“Cascade System”
Tanker Singapore Trader
OPA-90 non compliant
Diverted Tanker – Stealth Chios
Coast Guard Nontank Vessel Pollution Prevention Regulations

- Final rules published 30 Sept 2013
- Network APC submitted 25 October 2013
- Regulations effective 30 Oct 2013
- Submission of Nontank Vessel Response Plans (NTVRPs) and contracts to ensure capabilities to respond to a worst case discharge in 24 hours required by 30 Jan 2014
"Once the oil is spilled, the environment will be affected no matter how well the response is orchestrated. Simply put, prevention is still the best response"
Compliance with the nontank vessel oil spill response requirements not feasible in Western Alaska due to:

- Size and remoteness of the region
- Existing oil spill response equipment falls short of requirements
- Cost of full compliance, deployment of spill response equipment to scene of oil spills offshore in 24 hours, estimated at over $100M - $200M annually ([$100k per vsl/yr])
Vetting of APC by Maritime Industry

- US Chamber of Shipping
- Pacific Northwest Shipping Assoc.
- World Shipping Council
- Maersk
- APL
- American Waterway Operators (Pacific)
- Trident Seafoods (Fishing)
- Princess Cruise Lines
- Northwest Cruise Ship Association
- Crowley Maritime
- Alaska Marine Highway System
- ECM Maritime Services
- Compliance Systems
Briefings of APC Agencies & NGOs

- Sector Anchorage
- MSU Valdez
- D17 Staff
- Alaska Governor’s Office
- Commissioner ADEC

- NGOS
  - WWF
  - IUCN
  - Oceana
  - Pew

- AK RRT Briefed on Tanker APC
Operators electing to participate in AK-APC-NTV enroll in Alaska Maritime Prevention and Response Network (Network) over web at www.ak-mprn.org

- Annual fee per vessel required to fund Network ranges from $2,500 to $6,500 based on oil capacity
- Vessel operators are required to comply with the “Operating Procedures” that are posted on the Network web site (vessel routing, early notification of incidents, proper programming of AIS)
- Vessel owner/operators provided access to OSRO’s and vessel tracking system to assess compliance and to manage responses to incidents
Risk Reduction Routing

Authorized NTV Routes
(Aleutian Region)

- Northern "Great Circle" Route
- Unimak Pass
- Attu Island
- Adak Island
- 12nm Zone
- 50nm Minimum

1:8,000,000
Detected Disabled Vessels
Failure to Notify of Marine Casualty

880’ Container Ship Bangkok Bridge
Disabled Unimak Pass – Feb 2013
Vessel Not Under Command

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<th>SHIP INFORMATION</th>
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Detected Vessels Not in Compliance with OPA-90
Bulk Cargo Vessel Red Jasmine
Operating Procedures Compliance
24 / 7 Ship Monitoring
Sector Anchorage -
Please be advised that the following tank vessel is currently operating in the WAK COTP zone and is not a participant in the WAK-APC-T. Current position is approximately 150nm S of Amchitka Island (see attached screenshot).

**PACIFIC GALAXY**, IMO# 9397793, LPOC Nakhoda, Russia; NPOC (according to Lloyds and the vessel’s AIS transmissions) Cherry Point, WA.

Note: This vessel’s VRP authorizes it to carry Group 1-4 oils, but the VRP website shows it is not authorized for transit/operation within the WAK COTP Zone.
Oil Spill Response Resources
“Cascade System”
Allocation of Revenues

• Enhanced Spill Response Equipment

• Enhanced Prevention Capabilities:
  Tug Tracking – ETS – Ship Arrestors -VMS

• OSRO Funding

• Administration
## "Network" 5 Year NTV Work Plan

<table>
<thead>
<tr>
<th>Milestone</th>
<th>YR 1 2014</th>
<th>YR 2 2015</th>
<th>YR 3 2016</th>
<th>YR 4 2017</th>
<th>YR 5 2018</th>
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<tr>
<td><strong>Network Administration</strong></td>
<td>Administer Programs</td>
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<td><strong>Enhanced Prevention</strong></td>
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<td>24 hour AIS watch</td>
<td>Annual Operations</td>
<td>Annual Operations</td>
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<tr>
<td>AIS Expansion</td>
<td>Fund expanding terrestrial AIS coverage of APC areas by 5,000 square miles</td>
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<tr>
<td>Storm Refuge Project</td>
<td>Begin study of storm refuge options</td>
<td>Propose and begin to implement storm refuge program</td>
<td>Buildout AIS to support storm refuge program</td>
<td>Maintain and monitor storm refuge program</td>
<td>Continue program</td>
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<tr>
<td>Vessels of Opportunity</td>
<td>Add 5 new vessels in program</td>
<td>Add 5 new vessels in program</td>
<td>Add 5 new vessels in program</td>
<td>Add 5 new vessels in program</td>
<td>Maintain VOO tracking system</td>
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<tr>
<td>Ship Assist Program</td>
<td>Provide for enhanced emergency towing capability</td>
<td>Allocate funds for additional ETS [Emergency Towing System]</td>
<td>Allocate funds for procuring and staging sea arrester</td>
<td>Exercise ship assist system</td>
<td>Establish capital account to acquire additional system[s]</td>
</tr>
<tr>
<td>Enhance Spill Response Capability</td>
<td>Work with OSRO[s] to evaluate response capability build out options</td>
<td>Allocate capital to procure and stage increased response capability in strategic areas</td>
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<tr>
<td><strong>Annual Progress Reports</strong></td>
<td>Annual progress report to USCG COTP W-AK</td>
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<td>Annual progress report to USCG COTP W-AK</td>
<td>Begin new 5 year planning initiative</td>
<td>Complete new 5 year plan</td>
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</tbody>
</table>
NTV APC – WAK/PWS Implementation

- APC development and industry vetting
- APC Submission to USCG
- Web site – distribute info, coord enrollments
- Enrollment: 20 person team – 7 day week admin and finances.....Rapid Enrollment Program
- 7 x 24 APC watch - educating operators / USCG
- 600 enrollments in 4 weeks
APC Vessels Enhance Maritime Safety by....

1. Sailing on reduced risk routes on all voyages
2. Providing early notification of incidents
3. Funding of Network’s “Safety Net” comprised of:
   • Expansion and operation of 24/7 vessel tracking system
   • Monitoring availability of emergency assist vessels
   • Implement shore side emergency vessel assist tools (ETS & drogues)
4. Funding strategic enhancement of oil spill response resources
Thanks you for keeping oil off the water!

Kenai Salmon Company
Salamatof Beach, Kenai 2013