

PLACE OF REFUGE

Or, how to avoid a converting a tank ship to an ATB



IMO Resolutions

Erika, Dec 1999



Castor, Dec 2000



Prestige, Nov 2002



A.949(23) Guidelines on
Places of Refuge
for Ships In Need
of Assistance

A.950(23) Maritime
Assistance
Services (MAS)

Maritime "911 System"

Related Issues

- SAR
- Intervention on the High Seas
 - Requires consultation with flag state
 - Requires COMDT approval
- Force Majeure
 - Does not preclude restrictions & requirements

Related Issues

- Security (intel, HIV matrix, etc)
- Safety Concerns (inspection team)
 - Site Safety Plan REQUIRED
- Financial Responsibility
 - COFR satisfies most concerns

Pre-Survey

- U.S. approach is to pre-survey possible Places of Refuge, NOT pre-determine them.
- Pre-determination could trigger NEPA
- Use NVIC as part of normal planning process, TTX/scenario based planning

COTP 1

port



COTP 2

tourist resort

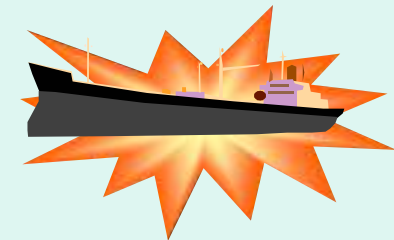


marine sanctuary

turtles



- Coordination among COTPs / FOSCs
- Coordination with RRT



NVIC APPROACH

- Policy discussion
- Incident Checklist
- Marine Safety Center Checklist
- Risk Assessment job aid

Checklist

- Purpose is to gather information needed to make decision on POR.
- Links to MSC/SERT, NPFC, ASA, etc
- Notifications to trustees
- Run spill trajectories for current location and for any POR's under consideration

Risk Based Decision Aid

- ◆ Risk based decision matrix
- ◆ Risk = Probability x Consequences
- ◆ Relies on Subject Matter experts and stakeholders to do evaluation

Probability

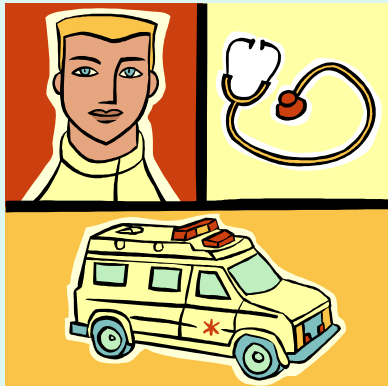
- How likely, (%) are additional injuries, vessel damage, grounding, collision, or other bad things will happen if the vessel is taken to a given POR, left in place, or continues its voyage
- Evaluation should be made by pilots, professional mariners, salvage masters, etc.

Consequences

- What will be the impact if the situation DOES worsen?
 - Human Health and Safety
 - Natural Resources
 - Economic Impact
- Evaluation done by trustees and public safety officials

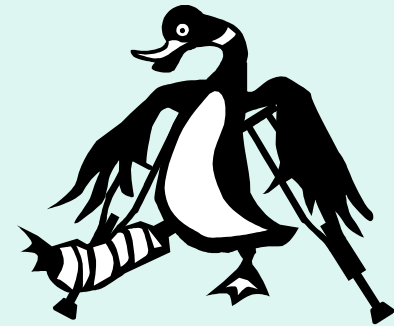
Human Health and Safety

- Considers threat to:
 - Vessel crew
 - Salvage and response personnel
 - General Public



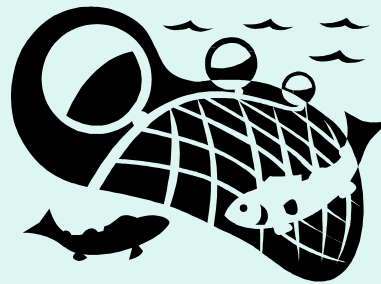
Natural Resources

- Threatened and Endangered Species
- Subsistence use species
- Sensitive (but not TAE) species
- Commercial species
- Recreational use species
- Habitat
- Historic/cultural resources



Economic Impacts

- Maritime commerce and shipping
- Commercial fishing/aquaculture
- Marine tourism/recreational activities
- Non-marine related activities



Place of Refuge

- Includes Excel table to “do the math”
- Individual scores for each POR option, and each consequence type
- Choose the lowest combined risk score, unless common sense dictates otherwise

	Risk by Consequence Type				
	Probability Score	Health and Safety	Natural Resources	Economic Impacts	Total Risk
Place of Refuge A	0.25	14	13	7	34
Place of Refuge B	0.05	6	5	3	14
Continue Voyage	0.75	168	156	84	408
Repair in Place	0.75	336	312	168	816
Scuttle	0.9	806	749	403	1958
Ground	0.6	77	38	38	154

Questions

CDR Drew Tucci
U.S. Coast Guard
Headquarters
(202) 372-2234