#### **MEMORANDUM**

#### M/V SELENDANG AYU – CHOICE OF SALVOR

05 January 2005

Three salvors joined forces in an attempt to salvage M/T SELENDANG AYU when the vessel reported it was adrift. Efforts to tow the vessel succeeded in slowing its drift however the tow wire failed and the ship went aground between Skan Bay and Spray Cape at approximately 6 p.m. on December 8 and subsequently broke apart.

The vessel was laden with a full cargo of soybeans, 424,000 gallons of Intermediate Fuel Oil (IFO 380) and 18,000 gallons of marine diesel oil. An assessment of the wreck was necessary to develop salvage plans for removal of the fuel and determining the possibility of re-floating the vessel sections. A combined team of salvage experts representing the three salvors was put on the wreck from a Coast Guard Jay Hawk helicopter to make such an assessment. The three man team was chosen after it was determined by the UC that the combined effort of the three salvage companies, working as one team, would provide the most comprehensive report possible to be shared with all interested parties.

The information obtained by the survey team was submitted to the Unified Command as one report from the participating salvors and was used to determine the scope of salvage services to be engaged. Three separate proposals for removing accessible oil from the wreck were then submitted by salvage companies from a combined group of six ASA member companies. On December 15, a contract was awarded to SMIT Americas, Inc. to perform fuel removal from the stern section and that work is presently underway.

After careful review of the fuel oil removal proposals submitted by the three salvage entities, the UC selected the proposal by SMIT Americas for the following reasons:

SMIT Americas, an American subsidiary of the Netherlands-based parent company, has a tradition of more than 160 years of service in the maritime sector. As a most experienced and leading marine salvor, the company maintains round-the-clock readiness for operations anywhere in the world.

The strategies of two of the three proposals submitted to the UC were based on conventional vessel-to-vessel lightering of the accessible fuel oil while the third, the proposal from SMIT Americas, relied upon the support pumping and removal of pumped fuel oil from the wreck solely by air using heavy-lift helicopter transport.

The reasoning behind the strategy selected and now being employed by SMIT Americas was as follows:

The principal objectives of their efforts were to remove accessible fuel oil from the vessel in the safest and most expeditious manner possible. The most obvious strategic options for doing this were 1.) Bring necessary lightering resources alongside and lighter vesselto-vessel in the conventional manner or 2.) Employ helicopter air to bring necessary lightering resources aboard the wreck, support the actual pumping operation to remove the accessible fuel from ship's tanks and to transport that fuel ashore via air lift in suitable containers.

The second option was elected by SMIT Americas for the following reasons:

From the standpoint of both expeditious and safe removal of the fuel from the wreck, the location of the wreck with full exposure to adverse seas produced by westerly and northwesterly gales prevalent in the area during this time of year<sup>1</sup> promised minimal weather windows for working the operation from a vessel alongside the wreck. The referenced tables indicate wave height frequencies of 20 feet or more between 30 and 40 percent of the time driven by gales of 34 kts or more 8 to 9 percent of the time or storms of 48 kts or more 4 percent of the time during the months of January and February in the Southeast Bering Sea.

## Option 1: Vessel-to Vessel Lightering

In addition to the demonstrated frequency of adverse weather conditions impeding vessel-to-vessel lightering operations, the time required for a lightering vessel to transit from places of refuge that would be necessarily sought by her during storms combined with the delays necessary for the seas to abate following each storm will significantly shrink the size of the weather available between each storm.

With respect to safety, the requisite positioning of a lightering vessel alongside the sunken wreck under the anticipated adverse weather and sea environments poses a significant danger of producing two wrecks instead of one. Furthermore the minimal remaining freeboard of the wreck poses unacceptable dangers to personnel attempting to engage in conventional vessel-to-vessel lightering operations in even moderate seas.

### **Option 2**: Helicopter Air Support of Pumping and Transfer of Fuel

Although the frequency of adverse weather conditions will also impede air-supported lightering operations, since minimal effect of the time required for seas to abate following storms as well as the much more rapid transit times by air for repositioning resources to restart those operations will maximize the size of the window available for working the wreck between storms.

<sup>&</sup>lt;sup>1</sup> Attachments 1 & 2: Percent Frequency of Extreme Wave Heights and Wind Speeds for the Southeast Bering Sea

Unified Command

CAPT R. Morris, FOSC

B. Mattson, SOSC

Date

Date

J. Gallagher, RPIC

Date

Attachment 1.

# PERCENT FREQUENCY OF EXTREME WAVE HEIGHTS FOR THE SOUTHEAST BERING SEA



Attachment 2.

## PERCENT FREQUENCY OF EXTREME WIND SPEEDS FOR THE SOUTHEAST BERING SEA

