



NOTE FOR EDITORS

The Bahamian tanker *Prestige* suffered structural damage in heavy weather off the coast of Spain in November 2002. The ship eventually sank spilling most of her cargo of 77,000 tonnes of fuel oil, causing considerable pollution of the adjacent coast.

The subsequent report by the Bahamas Maritime Authority made a number of recommendations. Some related to the control of a ship in an emergency and the need for guidance on places of refuge, but the largest number related to the survey, inspection and repair of tankers. An extract from the recommendations is copied below:

The trigger for the initial structural failure was the ship being struck by a large wave which revealed that there was a source, or sources, of weakness in the structure of 3 Starboard wing tank. It appears that these were not such as to be readily detectable or predictable using present industry survey, inspection and repair practices. It is important that those practices be re-examined to see where improvements can be made. In particular the following points are seen as worth further examination:

- *Consequences on structural reliability of new steel to old, especially when large repairs are carried out on older ships.*
- *Means of minimising the influence of residual stresses in areas where large repairs are carried out.*
- *Means of detecting fatigue cracks and recording presence of fatigue cracks prior to repairs or renewals.*
- *Means of predicting and monitoring rates of corrosion particularly in spaces adjacent to heated cargo tanks.*
- *The importance of close-up inspections during surveys and inspections by crew has to be emphasised.*
- *The requirement for the annual close up examination of a tank that is able to carry ballast water where the tank is uncoated or where the tank coating is in poor condition.*
- *The effect of contact damage on the strength of a ship side structure and guidance on identifying and reporting such damage.*

- *The use of non-destructive testing of welds on ship side steelwork in ship repairs.*
- *The retention of records of all calculations made to determine strength during a survey.*
- *The retention of records of condition of structure including thickness gaugings both prior to renewals and following renewals. This will provide for a more complete historic record of corrosion rates in spaces.*

5.2.3 *As a consequence of the initial failure of the side structure of 3 starboard wing tank there was an initial list to starboard with loss of oil through openings in the main deck and a subsequent progression in the extent of damage culminating in a total loss. This leads to the necessity for evaluation of:*

- *The adequacy of current requirements relating to the strength and securing arrangements for openings in the main deck of tankers.*
- *The adequacy of current requirements relating to the design strength of double hull tankers with respect to their survivability, particularly in adverse weather, following accidental damage of the outer skin.*

The new project will examine most of the areas mentioned in the extract. The European Commission will provide 600,000 Euros to fund the study which started 1st. November 2006 and is scheduled to finish 31st. October 2008.

The partners conducting the work are:

Newcastle University – Coordinator

University of Strathclyde – Technical Coordinator

Bahamas Maritime Authority – Exploitation Coordinator

Bureau Veritas - France

Materiaal Metingen Europe – Netherlands

INTERTANKO – Norway

Alpha Marine Services Ltd. – Greece

Hamburg University of Technology (TUHH) – Germany

Lisnave Estaleiros Navais SA – Portugal

The work is divided into five discrete work packages with one of the partners leading the work in each package and other partners contributing as appropriate.

Progress in the project will be reported at regular intervals.