

Wrecks

Two famous ship wrecks play an important role in this issue of Hydro International: the Titanic and the Costa Concordia. The maiden voyage of the brand new White Star Line ship Titanic ended 5 days after departure on 10 April, on its way from Southampton to New York on the bottom of the ocean, after colliding with an iceberg. Fifteen hundred passengers drowned in the cold waters of the North Atlantic. Exactly one hundred years later, luxury cruise liner Costa Concordia ran aground off the Italian Isola del Giglio's coast in the Mediterranean. Luckily, the majority of the four thousand people on board could be saved, casualties still lie at around 32, while as of today there are still bodies being found in the wreck. Albert 'Skip' Theberge, Hydro International's matchless history narrator writes - together with maritime archaeologist James Delgado - a must-read story on the Titanic and how the 1912 disaster was an onset of acceleration in the field of hydrography with major developments like acoustics with side-scan sonar and multi-beam echo sounding as applications, only really coming to maturity after World War II, but certainly originating in the wish to 'virtually raise' the wreck of the Titanic to understand what happened on that dreadful day in 1912. One of the last major efforts is the 'archeological GIS', that will be ready any moment now, that describes the site of the Titanic and all the artifacts found there.

Concerning the second major ship wreck described in this issue, the one with the Costa Concordia off the Tuscan coast, earlier this year: the wreck was visible and therefore didn't need to be 'virtually raised', but still measuring and mapping techniques, multi-beam echo sounding and laser scanning played an important role in the search and rescue operations. The virtual model of the actual wreck, delivered by the survey team of Codevintec, made it possible for teams to operate and plan their efforts to rescue and later find the bodies of those who were not able to make it out in time. The monitoring of the ship with actual bathymetry and GPS, made it possible to record the smallest possible movements of the wreck, in order to create and anticipate on the safest conditions for rescue workers of the fire brigade and crisis unit. Another must-read story in this issue of Hydro International.

In between both tragedies lies a world of development in hydrography and oceanography of over a hundred years, with lead line to acoustic soundings, simple underwater cameras and laser scanning models of a wreck to GPS and nanometric seismic stations. In both cases, from the Titanic as well as the Costa Concordia, the harm had already been done before the hydrographer became involved. But there is no doubt that from the Titanic onwards, many developed techniques have made navigation safer and search and rescue more effective. The most recent disaster with the Costa Concordia shows that we are still not there and more and ongoing research & development is needed to make life at sea even safer.

P.S. For those of you attending Oceanology International, from 13-15 March, there's an amazing array of manufacturers showing their products in ExCel, London. Please use our extensive preview to plan your route through the aisles. For those of you not able to come to London, read up on all those new products and developments in this issue of Hydro International and on our website www.hydro-international.com which will have ample coverage of the event. We will be at booth A325 so please come and visit us!