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OILMAP/ARCVIEW[®] Delivered To The Netherlands' Government

The Rijkswaterstaat North Sea Directorate (RNSD) recently took delivery of ASA's latest version of OILMAP/ArcView. Based in Rijswijk, The Hague, RNSD is part of the Netherlands' Ministry of Transport, Public Works and Water Management; and has a national responsibility (under the flag of the Dutch Coast Guard) to coordinate all response activities in the event of a hazardous spill incident on the Dutch Continental Shelf. The 'Rijkswaterstaat' organization is over 200 years old, and is a unique government organization set up in the 17th century dedicated to oversee the country's water management.

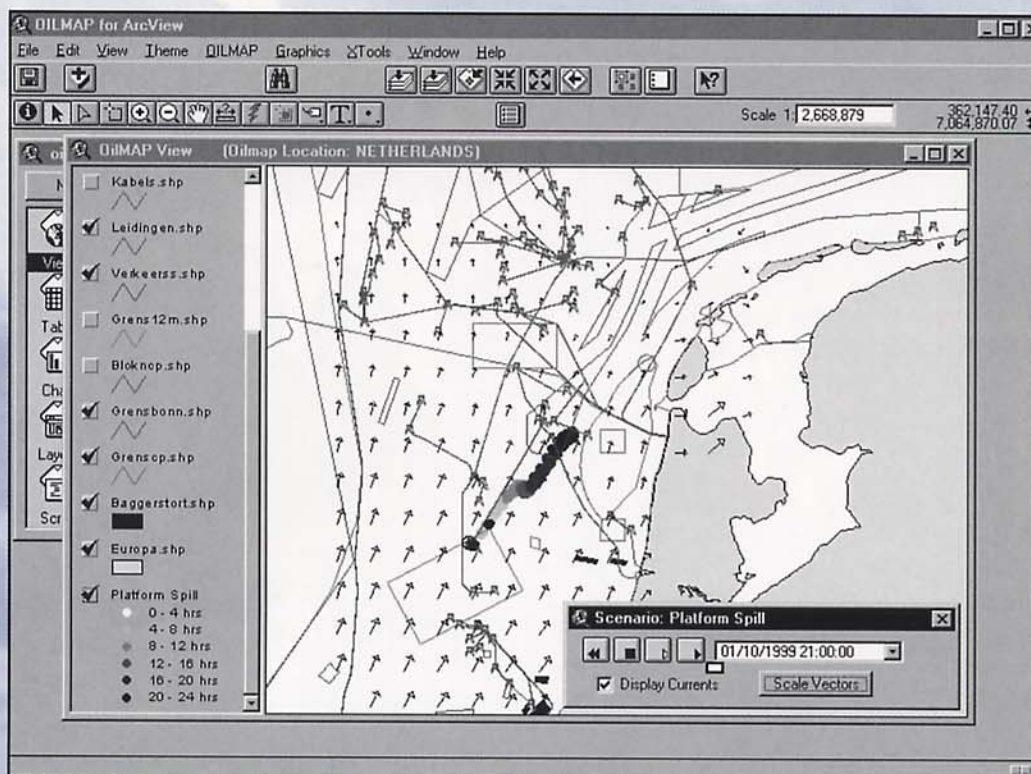
Both network and stand-alone versions of OILMAP/ArcView provide RNSD users with accurate trajectory and weathering predictions of oil spills and a range of objects accidentally lost at sea. The software is linked to spatially varying

real time wind forecast data provided by the Hydro Meteo Centre Rijmond (HMR), enhancing the accuracy of the model. RNSD also intends to view a wide range of their existing metadata while operating the model. Some examples of the model output data are show in the figure below.

The system was delivered as an ArcView 3.1 extension and works as a stand-alone model component within RNSD's existing GIS framework. The advantage of this approach is that RNSD can simply drop the oil spill or missing object model right on top of their existing marine databases without any data conversion or duplication. The marine database includes information on pipelines, cables, platforms, shipwrecks and a variety of other data. The extension is available to any ArcView user and is ap-

licable anywhere in the world. OILMAP/ArcView incorporates the power of the ArcView GIS with an interactive ability to generate and visualize time-varying environmental data and numerical model results.

Eoin Howlett and Roddy Thomas recently completed a series of training courses in the use and application of OILMAP/ArcView at RNSD's operational emergency response center.



AUSTRALIA/ASIA NEWS

Hong Kong

ASA's OILMAP was used for a national oil spill exercise in Hong Kong in October. This joint industry/government drill including Exxon, Mobil and the Hong Kong government exercised response strategies for spills in Hong Kong waters. OILMAP was successfully used with local hydrodynamics and wind forecasts to develop realistic oil spill and spill response scenarios.

Taiwan

Daniel Mendelsohn was invited to the National Center for High Performance Computing (NCHC) in Hsinchu, Taiwan to give a short course entitled "Integrated Modeling for Surface Water Quality Management" and train attendees in the use of ASA's hydrodynamics and water quality model system, WQMAP. WQMAP is being used by local scientists to evaluate circulation and water quality in the Tamshui River, which runs through Taipei. The training took place at the NCHC offices in Hsinchu on 18-19 October.

ISCEM 99 Conference, Kuala Lumpur, Malaysia

Daniel Mendelsohn and **Roddy Thomas** attended the International Symposium and Exposition on "Coastal Environment and Management - Challenge in the New Millennium" (ISCEM 99) in Kuala Lumpur 13-15 October 1999. Hosted by the Universiti Teknologi Malaysia, ASA presented two technical papers; Application of an Integrated Model System to Thermal Effluent Problems, and Development and Application of an Oil Spill Model Offshore the Malaysian Peninsula.

Petronas Carigali, Kirteh, Malaysia

Eoin Howlett and **Roddy Thomas** recently visited the offices of Petronas Carigali in Kirteh, Malaysia, to upgrade their OILMAP system and review their future Metoc data needs including historical wind time series and hydrodynamic circulation data. See example of hydrodynamic model data coverage for the region at right.

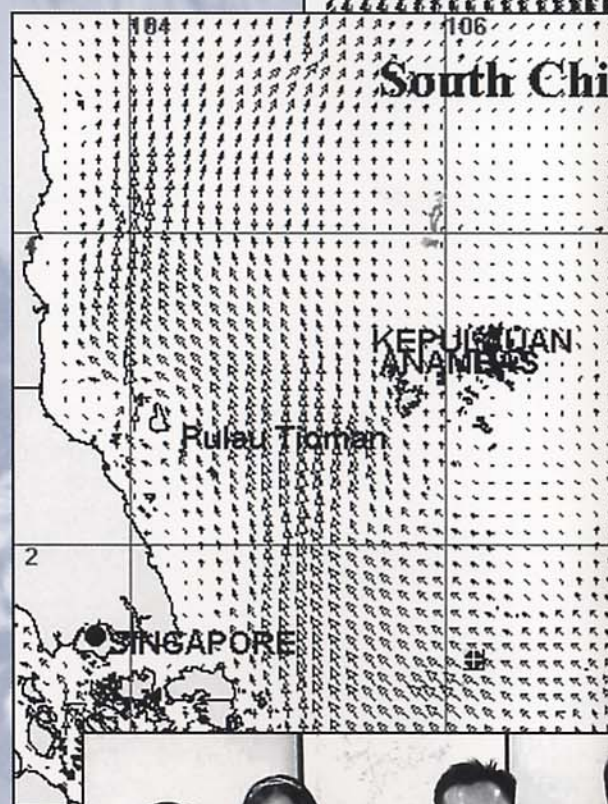
Australia

Eoin Howlett traveled to Australia in October to visit the Asia Pacific ASA (APASA) office in the Gold Coast. APASA's director, **Brian King**, and Eoin finalized the details of the hydrodynamic and water quality modelling project that ASA are performing for the local city council.

South Korea

October 16-22 **Eric Anderson** traveled to Pusan, Korea, for OILMAP/SARMAP training at Korea Maritime University. Dr. Jong-Hwui Yun (front right), a Master Mariner and physical oceanographer is the driving force behind the modeling effort at the training institute, and was joined by Dr. Dong-Sun Kim of the Pukyong National University and his staff, who are responsible for the hydrodynamic model inputs for the oil spill and search and rescue applications. Jang Woo Lee (front left) of SkyRadio is ASA's commercial contact. He hosted Eric to a delightful day at national shrines dating from early in the first century and treated him to a series of delicious local feasts.

Example of oilspill trajectory/simulation during a training exercise in Hong Kong.



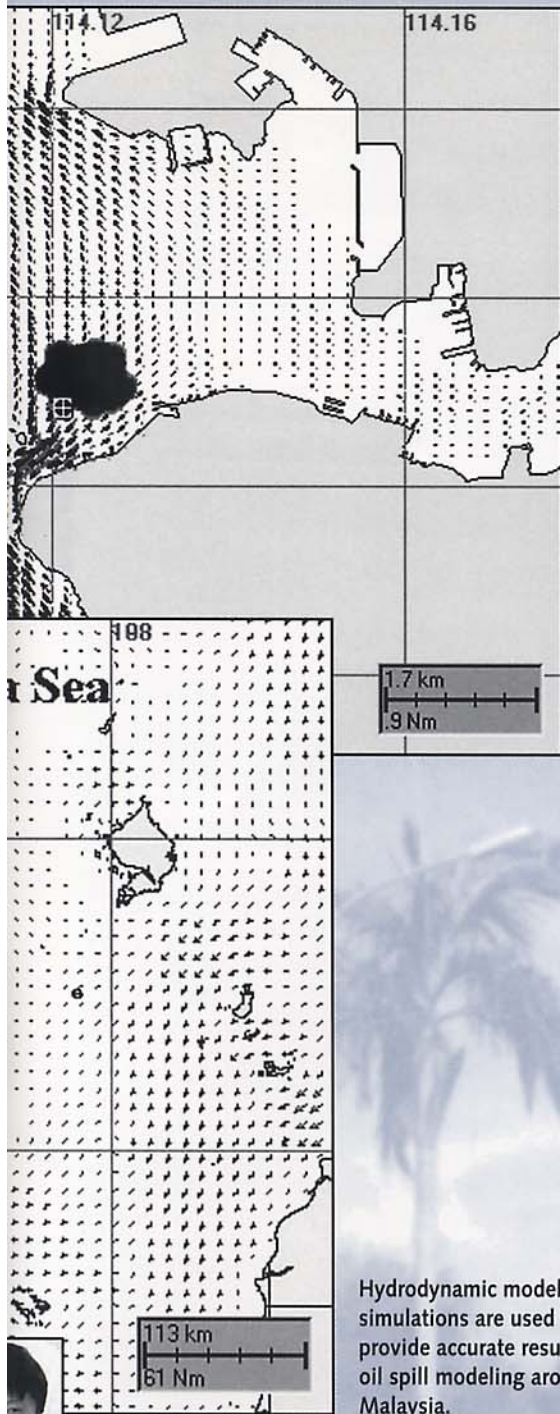
personnel

On 28 September 1999, **Deborah French** and **Roderick Thomas** met with the Environmental Affairs (DGXI) Committee of the European Commission, which is charged with evaluating Natural Resource Damage Assessment procedures for the European Union. Deborah French made a presentation entitled "Development of and Lessons Learned from Natural Resource Damage Assessment Regulations and Practices in the USA". Dr. French drew on her extensive experience in the USA with development of models for NRDA regulations and assistance of federal and state Trustees in NRDA cases. The discussion included the use of modeling in science, for injury quantification, as well as the preferred use of restoration scaling and costs for damage assessment.

Eric Anderson and **Matthew Ward** assisted in the Exxon PREP drill held September 20-22 in Everett, Washington. Matthew worked with the control group defining the 'truth' for the exercise, and Eric worked with the planning section to help plan the response strategy. Tidal simulations for the Puget Sound area of interest were generated by Matthew using ASA's WQMAP software and tidal boundary conditions from the Tides&Currents™ program.

On October 12-14 **Eric Anderson** traveled to Mexico City to work with Rascal Survey, Mexico Navy, and Centro de Investigacion Cientifica y de Educacion Superior de Ensenada personnel to refine the COASTMAP tidal data application. Dr. Modesto Ortiz, of the Ensenada university staff was instrumental in defining the historical inputs of tidal harmonics for the application.

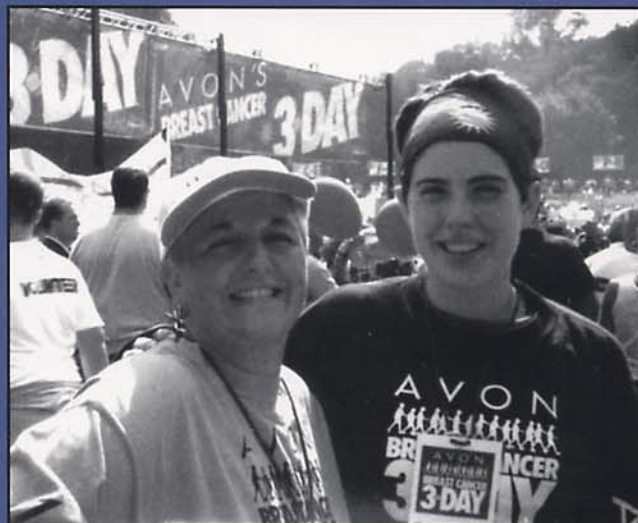
Linda Nolan, ASA's accounting guru, with her daughter Alexis by her side, recently participated in the Avon Breast Cancer 3-day, 60-mile walk that took them from Bear Mountain State Park (near West Point, New York) to Central Park in Manhattan. Linda and Alexis, along with over 2,000 other walkers raised a total of 3 million dollars for breast cancer research and awareness. On August 29 Linda and Alexis proudly crossed the finish line in Central Park, New York. For Linda, a two-time breast cancer survivor, the support of all those who contributed was greatly appreciated. Proceeds of the walk are awarded in the form of grants to non-profit university-based programs offering treatment, education and support for women with breast cancer.



Hydrodynamic model simulations are used to provide accurate results for oil spill modeling around Malaysia.



OILMAP class participants, Korea Maritime Institute, Pusan



Linda Nolan and her daughter Alexis at the finish line!

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Estuarine & Coastal Modeling 6 Conference A Success

The 6th International Conference on Estuarine and Coastal Modeling (ECM6) was held 3-5 November, 1999 at the Doubletree Hotel, New Orleans, LA. A total of 130 papers were presented in 15 sessions during the conference. They covered the development, testing, application, calibration, and verification of hydrodynamic, sediment transport, water quality and wave models for estuarine and coastal waters. Joint sessions were held with the American Meteorological Society, Third Conference on Coastal and Atmospheric and Oceanic Prediction and Processes, Committee on Meteorology and Oceanography of the Coastal Zone on the development and operation of coastal forecast systems.

The ECM6 meeting had an attendance of 175, including 20 participants from 10 foreign countries. The conference was co-chaired by ASA founder Malcolm L. Spaulding, Ocean Engineering, University of Rhode Island, Narragansett, RI and Lee Butler, Veri-Tech Inc, Vicksburg, MS and was coordinated by the University of Rhode Island Conference Office. Conference papers are currently in peer review. The post conference proceedings will be distributed to conference participants in late spring 2000. It will also be available for purchase from the American Society of Civil Engineers. Planning is currently in progress for ECM7, which will be held in October 2001.

ASA Well Represented

ASA was well represented at the Conference. Malcolm Spaulding continued to serve as conference co-chair (as he has since its inception in 1989). He also was session moderator on Simulating Shelf-Scale Processes. **Craig Swanson** served as moderator on Simulating Thermal Processes and presented Application of Quantitative Model - Data Calibration Measures to Assess Model Performance, co-authored by **Daniel Mendelsohn** and **Malcolm Spaulding**. Daniel Mendelsohn served as session moderator on Two-Dimensional Water Quality Model Applications and presented A Hydrodynamic Model Calibration Study of the Savannah River Estuary with an Examination of Factors Affecting Salinity Intrusion co-authored with Steven Peene, Eduardo Yassuda and Steven Davie of Applied Technology and Management. **Matthew Ward** presented two papers, Unsteady Vertically Averaged Finite Control Volume Circulation Model and Improving Coastal Model Predictions through Data Assimilation, the second co-authored with

Craig Swanson. **Eric Anderson** also made two presentations, Comparison of Sources of Uncertainty for Oil Spill Trajectory Simulations and Marine Environmental Modeling via the Internet, the second authored by **Eoin Howlett** and **Chris Galagan**. **Tatsu Isaji** was a co-author on Development of a Waste Load Allocation Model for the Charleston Harbor Estuary. Phase III: Project Application with Eduardo Yassuda and Steven Davie of Applied Technology and Management. These papers will become part of the conference proceedings to be published by the American Society of Civil Engineers next year.

Please contact **Leslie Smith** at ASA for draft versions.

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