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R/V FAY SLOVER IS HERE!!

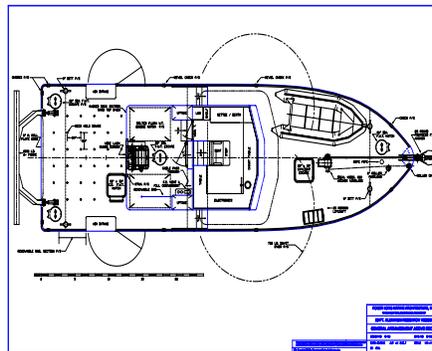
By Dr. Thomas Royer, Acting Chair - Dept. of Ocean Earth & Atmospheric Sciences

After more than a decade of planning, the *R/V FAY SLOVER*, Old Dominion University's new research vessel, arrived on 24 September 2002. The vessel, a 55' aluminum semi-planing hull, arrived from the Gladding-Hearn Shipyard in Somerset, Massachusetts. It was christened on 1 October and placed into service. The vessel cruises at 20 knots and has excellent sea keeping capabilities. It replaces the *R/V Linwood Holton* that served the Department of Oceanography at Old Dominion University for more than 30 years.

The *R/V FAY SLOVER* is based on the design for the University of New Hampshire's *R/V Gulf Challenger* by Roger Long. After the events of 9/11, the berthing of the *SLOVER* changed from the Navy base at Little Creek to the marine center in downtown Norfolk, owned by the National Oceanic and Atmospheric Administration (NOAA). We are excited about extending the Old Dominion University/NOAA partnership to include an office and other amenities at NOAA's Atlantic Marine Center.

The *R/V SLOVER* is slightly smaller than the *R/V Holton*, but is able to carry up to 5 scientists overnight and additional personnel on day trips. The *R/V SLOVER* has an endurance of 3 days and a range of about 600 nautical miles. The instrument configuration is considerably different from the *R/V Holton*. With support of the Commonwealth of Virginia's Equipment Trust Fund and funding from the National Science Foundation, with matching from the Department of Ocean, Earth & Atmospheric Sciences, College of Sciences and Old Dominion University, a broad range of equipment has been purchased and installed.

The equipment available to the vessel users includes a hydrographic winch with 600 meters of 7-channel conducting wire, a conductivity-temperature-depth (CTD) profiler, a rosette with Niskin bottles, a precision depth sounder, an acoustic Doppler current profiler, a flow-through sea water system with a thermosalinograph (TSG) and fluorometer for



continuous underway measurements, and a standard suite of meteorological sampling instruments. These instruments are connected to a shipboard computer network that logs time and position along with the incoming data.

I expect that the *R/V FAY SLOVER* will help usher in a new era for marine studies at Old Dominion University. It has extended the geographical range of our marine sampling to now include the shelf out to the Gulf Stream and will open sampling periods during inclement

"This new vessel will generate excitement among our students and others for ocean studies and will enhance our knowledge of marine conditions"

weather and high sea states that limited the *R/V Holton*. It allows us to gather interdisciplinary marine data simultaneously on the same time and space scales for the first time. It has already served as a catalyst for the generating of new proposals from the department.

It was a strange, though welcome feeling, to stand on the deck of the *R/V FAY SLOVER* for the first time last spring. I spent nearly a decade planning a research vessel for Arctic work without getting it beyond (DELETE "to") to the conceptual design stage. A difference with the *R/V FAY SLOVER* is that the money for the construction proceeded the planning. I hope that the *R/V FAY SLOVER* will serve the Hampton Roads science community for as many years as the *R/V Linwood Holton*. I also hope that this new vessel will generate excitement among our students and others for ocean studies and will enhance our knowledge of marine conditions and processes in lower Chesapeake Bay and adjacent coastal waters.

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R/V FAY SLOVER SPECIFICATIONS

Physical Characteristics

LOA	55'
Beam	17'
Draft	5'
Speed	20kts
Berthing	up to 6 (4 scientific)

Powerplant

Engines	Twin 700hp 3406E Caterpillar Diesels
Generator	32kW Northern Lights GenSet

Navigation/Communications

GPS 1	Furuno BB DGPS (Integrated into Furuno Navnet)
Fathometer	Furuno BB FFI Sounder 600W 50/200kHz (Integrated into Furuno Navnet)
Compass	Furuno PG-1000 Fluxgate Compass
Autopilot	Simrad/Robertson AP20 with remote
Radar	Furuno 6kW (Integrated into Furuno Navnet)
Electronic Charts	Navionics charts
VHF Radio	2 Standard Spectrum Marine VHF's
SSB Radio	1 Icom IC-M700
Software	C-Map NT Planner w/C-Map NT card Rdr/Wrtr

Deck Gear

A-Frame	8000 lb A-Frame
Winch	6000lb Markey winch w/4 channel slip ring assembly, free wheeling, interchangeable drums. Includes 600M of 1/4" conductor cable

Science Space

Lab Space	200 sq feet of dry/wet lab and electronics station w/UPS backed power
Computing	2 Dell Optiplex Pentium III's w/ 100MbEthernet Network. Labnet based data acquisition
CTD	SBE 25 CTD with Fluorometer, Transmissometer, PH, DO
Rosette	SBE Mini Rosette with 12 5l bottles and SBE 33 Deck Unit
Seawater System	Flow through seawater system w/SBE 45 Thermosalinograph and Wetlabs Fluorometer
ADCP	A 600kHz RDI ADCP mounted in a well
GPS	Dedicated Furuno GP-36 DGPS
Bathymetry	Knudsen 320B 200kHz Precision Depth Recorder
Weather Station	RM Young Anemometer and Temp/RH and Biospherical PAR sensor logging to a Campbell Scientific CR-10X Datalogger
Acoustic Release	Benthos 866A Continental Shelf Acoustic Release w/DS-8000 Deck Box



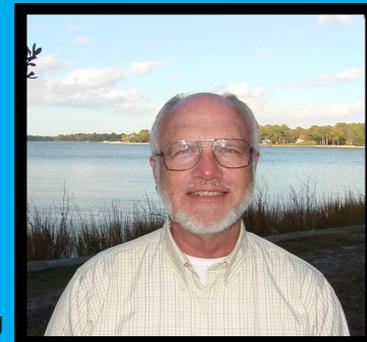
NOTES from the Director.....

The arrival of the R/V Fay Slover is a great event for the University and the region. We finally have a very capable research vessel that complements the larger UNOLS vessels we use in regional research.

The evolution of these very capable yet small size vessels may change the way we do coastal and estuarine oceanography. The *Fay Slover's* main attribute is its speed that when combined with a relatively large laboratory area combined with over-the-side machinery yields a very capable machine.

This type of small research vessel has been likened to a 'mosquito fleet' coming out of every port and harbor around our coastline.

Who was Fay Slover? She was the aunt of Frank Batten, Sr. Her will was the original source of funds for the Slover Endowment for the Department of Oceanography at Old Dominion University. She was well known as a very forceful person who, among other things, was an open ocean sailor and had a love of the ocean. Mr. Batten's extended family provided the ca. \$1.3M required to build and outfit the boat. NSF also is providing support for on board equipment and support.



The *R/V Fay Slover* is already changing the way we think about local and regional research and has instigated new proposed research. I personally look forward to fast trips to the Norfolk Canyon for studies of cross-isobath flow in the canyon...and maybe some fishing.

Larry Atkinson
Director, Center for Coastal Physical Oceanography

R/V FAY SLOVER

WELCOME ABOARD... BY DICK MOODY

Six months have passed since *R/V FAY SLOVER* was launched in Somerset, Massachusetts and a lot of water has already passed under her bridge. A seventeenth of the way around the globe is a lot, considering a year ago *FAY SLOVER* was a pile of shipyard aluminum and unmounted Caterpillar engines sitting in a warehouse. In addition to making our way to Virginia in the middle of hurricane season, (fortunately between storms) we have accomplished several first-time science cruises in the middle of winter all the while learning how the vessel responds to weather.

Over the ensuing years *FAY SLOVER* will evolve as a university scientific platform, but it isn't alone. We have benefited from *FAY SLOVER's* sister ship, the University of New Hampshire's *GULF CHALLENGER*, which has been in operation for over ten years. Likewise, Woods Hole Oceanographic Institution is building a slightly longer sister ship, and has already tapped into our experience with the *FAY SLOVER*.

In between scientific cruises and class outings, our Operations Group, Stan Douglas, Richard Cox, Donnie Padgett, R.C. Kidd, Chris Powell, Laura Ilife (soon to be Gibson), and myself continue to work on current and future outfitting, including the underway digital continuous sampling system. Then there is the occasional repair, maintenance, and bolt-tightening expected for a new vessel. As we try each water and sediment sampling method, we learn what gear or procedure works and what doesn't. I've had to exercise my scuba equipment on a couple of occasions to untangle gear from around a shaft due to the vortex from the propellers turning at a rate faster than 5 revolutions a second at idle. On the other side of the coin, our 20 knot speed, allows us to conduct our Chesapeake Bay Water Quality project in 32 hours. This is a 13 hour cut from the standard 45 hours that was in place for this monthly trip when conducted by Old Dominion University's former vessel, *R/V LINWOOD HOLTON*. The *LINWOOD HOLTON* was recently sold and is now resting in the yard of a Portsmouth marina.

As we enter into the meaty portion of our first operational field season, Spring through Autumn, we anticipate much more cruise activity as we work on additional capabilities. I am encouraged by our progress to date. I'm convinced those of us in Operations, as well as faculty and students, will have fun striving towards fulfilling the *R/V FAY SLOVER's* full potential.

THOMAS JEFFERSON HIGH SCHOOL OF SCIENCE AND TECHNOLOGY PINCHES COMPETITION IN BLUE CRAB BOWL 2003

Battling claw-to-claw in the final moments of a cliffhanger race, the competitors from Thomas Jefferson High School of Alexandria, VA overcame a strong team from Chesapeake Bay Governor's School, Warsaw, VA in the annual Blue Crab Bowl held at the Virginia Institute of Marine Science in Gloucester on Feb. 22. The team from Thomas Jefferson High School, which has competed in the Blue Crab Bowl for four years, captured an all-expenses-paid trip to the Scripps Institute of Oceanography in La Jolla, CA, where they will represent Virginia in the finals of the National Ocean Sciences Bowl (NOSB) competition in April. First time NOSB Coach, Lisa Wu, was elated with her team's performance. In addition to the trip to the NOSB finals, Wu's team will participate in a research cruise aboard ODU's new research vessel, the *R/V Fay Slover*. Placing third and fourth were Catholic High School from Virginia Beach (coachs Collier Webb and John McConaugha) and Rustburg High School (coach Diana Duckworth), respectively. Norfolk's Maury High School (coach Mike Bates) placed fifth this year. All 16 teams from the Commonwealth are frontrunners in their demonstrated interest in and enthusiasm for Oceanography!

The Blue Crab Bowl is the Virginia Regional Competition of the National Ocean Sciences Bowl (NOSB). Sponsored by the Consortium for Oceanographic Research and Education (CORE), in partnership with the National Marine Educators Association (NMEA), NOSB is a national competition for high school students on topics related to the study of the oceans. More than fifteen hundred stellar students from around the country matched wits in 24 regional bowls like the Blue Crab Bowl during February and March 2003. In La Jolla, the Thomas Jefferson High School team will go up against the other 23 championship teams from as far away as Hawaii and Alaska. The NOSB format consists of "timed competition" (defined as the use of "lock-out"- type buzzer systems and clocks) between two teams of four players, as well as written, short-answer questions. The subject matter encompasses all disciplines of oceanography, including topics on ocean-related national and international economics, history, and culture.

The Virginia Institute of Marine Science (VIMS), Virginia Sea Grant, and Old Dominion University's Department of Ocean, Earth and Atmospheric Sciences and Center for Coastal Physical Oceanography are co-hosts for the Blue Crab Bowl. Liz Smith directs the Blue Crab Bowl for ODU, together with colleagues from VIMS. They rely heavily on volunteers to make the Bowl a success. More than fifty ODU and VIMS faculty, students and staff donated their time and talents this year. The significant resources contributed to the Blue Crab Bowl by ODU's College of Sciences, OEAS, CCPO and VIMS faculty, students and staff are a testimony to the caliber of this outstanding outreach program. Blue Crab Bowl 2004 will take place on the campus of ODU in early 2004.

NEW STAFF PROFILE

Stan Douglas came to the Department in August, 2001 to assist with budgeting in the main office. Under the expert tutelage of **Dana Oblak**, Stan learned the intricacies of departmental budgeting and procurement leading to the eventual development of a new database system. Stan designed the new budget database to accommodate daily posting as well as to allow monthly and annual reconciliation and tracking parallel to the University's Banner accounting system. This new Access-based system eliminates hours of bookkeeping each month and provides greater reporting detail than the previous spreadsheet format. **Toni Mason**, the department's current budget manager, is using and enhancing the database as budgeting needs change.



In February 2002, Stan moved to an office at Crittenton Hall, (CCPO) and began serving as the department's Operations Manager. With the final construction of *R/V Fay Slover*, and the vessel's delivery in September 2002, everyone involved with the ship had a busy year. In addition to receiving, delivering and outfitting *R/V Fay Slover*, the Operations Section also refurbished and upgraded the department's 23' Sea Ox, the ODU-2. A small-boat operator training and credentialing program is currently in the works and will be offered to interested faculty and students.

As Operations Manager, Stan had the opportunity to design and build a reservation and billing database system to automate monthly billings for vessel, vehicle and small boat usage. He also designed and now updates the *R/V Fay Slover* web site, which includes links to the ship's calendar, ship specifications, and an array of operational photos from recent cruises. The reservation/billing database will eventually be linked to an interactive page on the *R/V Slover* web site to accommodate online ordering and to further automate monthly billings. The *R/V Slover* operations manual is under construction as well a number of new forms, instruction manuals and other helpful documentation.

Stan received his BBA from the University of Oklahoma in 1984 and his JD/MBA from O.U. in 1987. As a private-practice attorney, with experience as an Army JAG officer, Airborne Ranger, Medical Administrator and Non-Profit Operations Officer, Stan brings a strong administrative background together with an interest in "hands-on" operations. Stan's wife, Desiree, and three of their children Bonnie (18), Caleb (10), and Caroline (7) love Virginia Beach weather. Their oldest son, Seth (21), serves the US Army as an interrogator.

STUDENT PROFILE

BARIS SALIHOGLU is a CCPO graduate student who grew up on the sunny coast of the Mediterranean, where his father, Ilkay Salihoglu, worked as an oceanographer. Inspired by his father and many other oceanographers around him, oceanography became Baris's childhood dream job. Towards the end of high school, Baris developed an interest in physics and engineering and pursued these interests at the Middle East Technical University in Turkey, where he graduated as a petroleum and natural gas engineer in 1996. After graduation, he made the "lethal" decision of switching to oceanography and declined many "highly profitable" offers from various petroleum companies.

In 1996, he joined the physical oceanography program at the Institute of Marine Sciences (IMS), located on the eastern Mediterranean coast of Turkey. His advisor, Temel Oguz, introduced him to the world of modeling where Baris hoped he would combine physics and oceanography. The modeling world was quite different from what Baris had imagined, since it involved modeling creatures that can only be seen under a microscope. At the IMS, he worked on modeling the phytoplankton productivity in the Black Sea. During this research period, he went on several cruises in the Black and Mediterranean Seas and developed skills in computer programming.

Baris began working at CCPO with **EILEEN HOFMANN**, CCPO professor, in 1998. His work includes developing a complex ecosystem model for the equatorial Pacific with colleagues at the University of Maryland and the SeaWiFS Project Office. In addition to this, Baris decided to work on creatures that he can see without using a microscope—penguins (not that he had seen one until he published on the topic). In order to actually see penguins, Baris participated in two Antarctic cruises during Fall 2001 and Winter 2002 as part of the U.S. Southern Ocean GLOBEC program on the icebreaker, *RVIB Nathaniel B. Palmer*. It was during these cruises that he developed a fair amount of knowledge on water properties of the western Antarctic Peninsula and contributed to a publication on the topic.

In his free time, Baris enjoys playing soccer, keeping current with political activities, drumming, reading, and diving (when he goes home for summer). He recently added "knotting" to his list of hobbies, which was taught to him by his advisor, Eileen Hofmann, during endless CTD stations on the Antarctic cruises.

Baris plans to complete his Ph.D. next summer, and would like to continue modeling in a postdoctoral research capacity.



QUOTES FROM THE FIELD

"These years were really valuable because they brought me in the closest possible contact with nature, a circumstance which to one who works in geophysics cannot be overestimated"

H. Sverdrup, on his years on the R/V Maud

Submitted by Jay Austin

Please send your favorite quote to julie@ccpo.odu.edu.

CONGRATULATIONS

to Hae-Cheol Kim and Eun Kyong on their new arrival! Hanni was born on Sept. 20, 2002 at 8:45am. She tipped the scales at 6lbs 14oz

to **David Salas** for successfully defending his masters thesis titled: "Sea Level Slopes and Volume Fluxes Produced by Atmospheric Forcing in Chesapeake Bay" on November 25, 2002- Major Advisor: **Arnoldo Valle-Levinson**

to **Rosario Sanay** who wed her longtime love Hector Perales on December 28th 2002 during a beautiful ceremony held in Baja California, Mexico

to **Bettina Fach** for the successful defense of her doctoral dissertation titled: "Modeling Studies of Antarctic Krill (*Euphausia superba*) Survival During Transport Across the Scotia Sea and Environs" on February 7, 2003 - Major Advisor: **Eileen Hofmann**

PRESENTATIONS

DINNIMAN, M.S., J.M. KLINCK, E.E. HOFMANN, "Circulation and Biogeochemical Processes in a Numerical Model of the West Antarctic Peninsula", International GLOBEC Second Open Science Meeting, Qingdao, P.R. China, October 15-18, 2002.

GARGETT, A., "Vertical mixing processes in the ocean: measurement and interpretation". Virginia Polytechnic and State University, Department of Air and Ocean Engineering, Blacksburg, VA, December 9, 2002.

GARGETT, A., "Oceanographers, Kool-Aid and salt fingers", Center for Talented Youth Family Academic Conference on "Explorations in the Ocean Sciences", Old Dominion University, Norfolk, VA, November 2, 2002.

GARGETT, A., "Ocean turbulence", Invited plenary lecture CAIMS (Canadian Applied and Industrial Mathematics) 2002 Annual Meeting, Calgary, Alberta

GARGETT, A., "The optimal stability window and marine ecosystem variability in the Strait of Georgia, British Columbia", Duke University Center on Global Change, April 3, 2003.

GARGETT, A., Inaugural "Henry Stommel Visiting Scholar" at the Woods Hole Oceanographic Institution, February 10-13, 2003.

GARGETT, A., "Physical roots of high primary productivity in Saanich Inlet, British Columbia", University of Georgia, Department of Marine Sciences, January 13, 2003.

HOFMANN, E.E., "Larval transport", The National Academies Committee on Non-native Oysters in the Chesapeake Bay Workshop, Fredricksburg, VA, October 7, 2002.

HOFMANN, E.E., "The Southern Ocean Global Ocean Ecosystems Dynamics Program", poster presentation, International GLOBEC Second Open Science Meeting, Qingdao, P.R. China, October 15-18, 2002.

HOFMANN, E.E., J.M. KLINCK, R.C. Beardsley, "Seasonal and interannual variations in hydrographic distributions in Marguerite Bay and environs", poster presentation, International GLOBEC Second Open Science Meeting, Qingdao, P.R. China, October 15-18, 2002.

HOFMANN, E.E., J.M. KLINCK, E.N. POWELL, S.E. Ford, S. Jordan, E. Burreson, "Modeling Studies of Climate Variability and Disease Interactions in Eastern Oyster Populations", oral presentation, Sixth International Conference on Shellfish Restoration, Charleston, SC, November 20-24, 2002.

Kraeuter, J.N., E.N Powell, **E.E. HOFMANN, J.M. KLINCK, R. Grizzle, V.M. Bricelj, S. Buckner**, "A Physiologically-based simulation model that relates hard clam (*Mercenaria mercenaria*) population dynamics to environmental conditions, poster presentation", Sixth International Conference on Shellfish Restoration, Charleston, SC, November 20-24, 2002.

Prézelin, B.B., **E.E. HOFMANN, J.M. KLINCK**, "Physical forcing of phytoplankton community structure in continental shelf waters of the western Antarctic Peninsula", poster presentation, International GLOBEC Second Open Science Meeting, Qingdao, P.R. China, October 15-18, 2002.

SANAY, R., A. VALLE-LEVINSON, "Observations of bathymetric and curvature effects on the transverse variability of the flow in a coastal plain estuary", Eleventh International Biennial Conference on Physics of Estuaries and Coastal Seas, Hamburg, Germany, September 17, 2002.

SEPULVEDA, H.H., A. VALLE-LEVINSON, "Inner shelf circulation in coastal Virginia", PECS 2002 Conference, Hamburg, Germany, September 17, 2002.

SEPULVEDA, H.H., A. VALLE-LEVINSON "Inner shelf dynamics in coastal Virginia", Eleventh International Biennial Conference on Physics of Estuaries and Coastal Seas, Hamburg, Germany, September 17, 2002.

Smith, W.O., **M.S. DINNIMAN, J.M. KLINCK, E.E. HOFMANN**, "Biogeochemical Climatologies of the Ross Sea, Antarctica: Modeling the Temporal Patterns of Primary Production", JGOFS Synthesis and Modeling Project Principal Investigator's Workshop, July 22-26, 2002.

VALLE-LEVINSON, A., "Reversing circulation patterns in tropical and subtropical systems", Centro Interdisciplinario de Ciencias Marinas, La Paz, Baja California Sur, Mexico, November 19, 2002.

VALLE-LEVINSON, A., C. Brown, "Subtidal variability of transverse flow off a cape", Eleventh International Biennial Conference on Physics of Estuaries and Coastal Seas, Hamburg, Germany, September 17, 2002.

VALLE-LEVINSON, A., A. Trasviña, G. Gutierrez, R. Gonzalez, "Diurnal vertical motions over Bajo Espiritu Santo", Centro Interdisciplinario de Ciencias Marinas, La Paz, Baja California Sur, Mexico, November 6, 2002.

PUBLICATIONS

- Allen, S.E., **M.S. DINNIMAN**, **J.M. KLINCK**, D.D. Gorby, A.J. Hewett, B.M. Hickey, On vertical advection truncation errors in terrain-following numerical models: Comparison to a laboratory model for upwelling over submarine canyons, *Journal of Geophysical Research*, 108: 10.1029/2001JC000978, 2003.
- ATKINSON**, **L.P.**, **A. VALLE-LEVINSON**, D.Figueroa, R. De Pol-Holz, V. A. Gallardo, W. Schneider, **J.L. BLANCO**, and M. Schmidt, Oceanographic observations in Chilean coastal waters between Valdivia and Concepción, *Journal of Geophysical Research*, 107(C7), 10.1029/2001JC000991, 2002.
- AUSTIN**, **J.**, Estimating the Mean ocean-bay exchange rate of the Chesapeake Bay, *Journal of Geophysical Research*, 107(C11), 2002.
- AUSTIN**, **J.**, J. Barth, Drifter behavior on the Oregon-Washington Shelf during downwelling favorable winds, *Journal of Geophysical Research*, 32: 3132-3144, 2002.
- AUSTIN**, **J.**, J. Barth, Variation in the Position of the upwelling front on the Oregon Shelf, *Journal of Geophysical Research*, 107:(C11), 2002.
- AUSTIN**, **J.**, S. Lentz, The Inner Shelf Response to Wind-Driven Upwelling and Downwelling, *Journal of Physical Oceanography*, 2171-2193, July 2002.
- Caceres, M., **A. VALLE-LEVINSON**, **H.H. SEPULVEDA**, K. Holderied, Transverse variability of flow and density in a Chilean fjord, *Continental Shelf Research*, 22: 1683-1698, 2002.
- DINNIMAN**, **M.S.**, **J.M. KLINCK**, The influence of open versus periodic alongshore boundaries on circulation near submarine canyons, *Journal of Atmospheric and Oceanic Technology*, 19: 1722-1737, 2002.
- Friedrichs, C.T., **A. VALLE-LEVINSON**, Preface to Special Issue: Physics of Estuaries and Coastal Seas, Volume II, *Continental Shelf Research*, 22 (18-19), 2611-2614, 2002.
- KLINCK**, **J.M.**, E.N. Powell, **E.E. HOFMANN**, M.M. Deksheniaks, Impact of shannelization on oyster production: A hydrodynamic-oyster population model for Galveston Bay, Texas. *Environmental Modeling and Assessment*, 7: 273-289, 2002.
- Oke, P.R., J.S. Allen, R.N. Miller, G.D. Egbert, J. Barth, **J.A. AUSTIN**, P.M. KOSRO, M. LEVINE, A Modeling Study of the Three-Dimensional Continental Shelf Circulation off Oregon. Part I: Model-Data Comparisons, *Journal of Physical Oceanography* 32(5): 1360-1382, 2002.
- Powell, E.N., **J.M. KLINCK**, **E.E. HOFMANN**, M.A. McManus, The Influence of Water Allocation and Freshwater Inflow on Oyster Populations: A Hydrodynamic-Oyster Population Model for Galveston Bay, Texas. *Environmental Management*, 31: 100-121, 2003.
- Schwarz, J.N, P. Kowalczuk, S. Kaczmarek, **G.F COTA**, B.G. Mitchell, M. Kahru, F.P. Chavez, A. Cunningham, D. Mckee, P. Gege, M. Kishino, D.A. Phinney, R. Raine, Two models for absorption by coloured, dissolved organic matter (CDOM). *Oceanologia* 44: 209-241, 2002.
- VALLE-LEVINSON**, **A.**, C.T. Friedrichs, Preface to Special Issue: Physics of Estuaries and Coastal Seas, *Continental Shelf Research*, 22 (11-13), 1561-1564, 2002.
- VALLE-LEVINSON**, **A.**, K. Wong, **K. BOSLEY**, Effects of Hurricane Floyd on the exchange at the Chesapeake Bay Entrance, *Continental Shelf Research*, 22: 1715-1730, 2002.
- VALLE-LEVINSON**, **A.**, M. Caceres, **H.H. SEPULVEDA**, K. Holderied, Flow patterns in the channels related to the mouth of Aysen Sound, *Ciencia y Tecnologia del Mar*, 25(2), 2002.
- Wong, K., **A. VALLE-LEVINSON**, On the relative importance of the remote and local wind effects on the subtidal exchange at the entrance to the Chesapeake Bay, *Journal of Marine Research*, 60: 477-498, 2002.

APPOINTMENTS, SERVICE AND NEWS

- COTA**, G.F., SAIC, Science in support of NASA Langley's CERES project \$5,000 - Marine bio-optical measurement at Chesapeake Light Tower. 7/31/02-12/31/03
- GARGETT**, **A.**, Doppler turbulence techniques for ocean observatories, Rutgers (NOAA) 3/1/02 - 2/28/04 \$195,408
- GARGETT**, **A.**, Collaborative Research: Interactive effects of UV and vertical mixing on phytoplankton and bacterioplankton in the Ross Sea, NSF OPP 9/1/02 - 8/31/05 \$248,429
- GARGETT**, **A.**, Collaborative Research: A two-body system for swath-mapping ocean turbulence, NSF OTIC 8/15/02 - 7/31/05 \$160,167
- GARGETT**, **A.**, Member of the Science Steering Committee for the NSF Committee on "Scientific Cabled Observatories for Time Series (SCOTS)"
- GARGETT**, **A.**, Member of the NRC Committee on "Implementation of a Seafloor Observatory Network for Oceanographic Research"
- GARGETT**, **A.**, Associate Member SCOR Working Group 121 on "Deep-Ocean Mixing"
- GARGETT**, **A.**, Board of Editors, *Journal of Marine Research*. 2003.