

## **Thomas O. Herrington**

*Associate Professor, Department of Civil, Environmental and Ocean Engineering,  
Stevens Institute of Technology*

*Assistant Director for Ocean Observations and Prediction, Center for Maritime Systems  
Director, NJ Coastal Protection Technical Assistance Service  
Director, Stevens-New Jersey Sea Grant Cooperative Extension in Coastal Processes Specialist*

### **Profile**

Dr. Herrington is an associate professor of ocean engineering in the Department of Civil, Environmental and Ocean Engineering and is the Assistant Director of the Center for Maritime Systems at Stevens Institute of Technology in Hoboken, New Jersey. He is the Director of the Stevens - NOAA New Jersey Sea Grant Cooperative Extension in Coastal Processes and the Director of New Jersey Coastal Protection Technical Assistance Service. His teaching and research interests include coastal hydrodynamics, sediment transport, wave-structure interaction, coastal meteorology, coastal hazard mitigation and the development of coastal observing systems.

Dr. Herrington serves as Secretary of the Northeast Chapter of the American Shore and Beach Preservation Association, Chair of the Harbor Education Subcommittee of the USCG NY Harbor Operations Committee and a member of the Stevens Web Campus Board of Directors. Dr. Herrington is the chief architect of the NJ Coastal Monitoring Network and the NJ Coastal Storm Surge Warning System, one of the first completely Internet-based, real-time coastal ocean observing and warning systems in the United States and is an active member of the Mid-Atlantic Coastal Ocean Observing Regional Association. He is a member of the New Jersey State Hazard Mitigation Planning Team, the NJ Hydromet Warning Council, the Flood Load Task Committee of ASCE, and the NJ National Weather Service StormReady Advisory Board.

Dr. Herrington is author or coauthored on over 75 journal, outreach and technical publications in the field of coastal and ocean engineering, including the NJ Sea Grant Manual for Coastal Hazard Mitigation. He is a contributing author of the NJ State Hazard Mitigation Plan. Dr. Herrington holds a Bachelor of Engineering Degree in Civil Engineering and a MS and Ph. D. in Ocean Engineering from Stevens Institute of Technology.

**THOMAS O. HERRINGTON**

Associate Professor  
 Department of Civil, Environmental and Ocean Engineering  
 Stevens Institute of Technology  
 Castle Point on Hudson  
 Hoboken, NJ 07030

(201) 216-5320 (Phone)  
 (201) 216-8214 (fax)  
[therring@stevens.edu](mailto:therring@stevens.edu)

**PROFESSIONAL PREPARATION**

Stevens Institute of Technology (Civil Engineering)	B.E. 1989
Stevens Institute of Technology (Ocean Engineering)	M.E. 1992
Stevens Institute of Technology (Ocean Engineering)	Ph.D. 1996

**APPOINTMENTS:**

<b>Associate Professor</b> , Department of Civil Environmental and Ocean Engineering Stevens Institute of Technology, Hoboken, NJ	2005-present
<b>Director</b> , NJ Coastal Protection Technical Assistance Service New Jersey Department of Environmental Protection	2002-present
<b>Director</b> , Stevens - New Jersey Sea Cooperative Extension NOAA Sea Grant College Program	2000-present
<b>Graduate Professor</b> , Department of Civil Environmental and Ocean Engineering Stevens Institute of Technology, Hoboken, NJ	2002 -2005
<b>Research Assistant Professor</b> , Department of Civil Environmental and Ocean Engineering Stevens Institute of Technology, Hoboken, NJ	1996 -2000
<b>Assistant Director</b> , NJ Coastal Protection Technical Assistance Service New Jersey Department of Environmental Protection	1996-2000
<b>Research Engineer</b> , Davidson Laboratory Stevens Institute of Technology, Hoboken, NJ	1993 -1996
<b>Coastal Engineer</b> , T&M Associates, Middletown, NJ	1992-1993

**AFFILIATIONS AND CERTIFICATIONS**

American Academy of Underwater Scientist  
 American Geophysical Union  
 American Meteorological Society  
 American Shore & Beach Preservation Association  
 Member, Coast, Oceans, Ports and Rivers Institute of ASCE  
 Member, Sigma Xi  
 Member, Marine Technology Society  
 President, Stevens Chapter of Sigma Xi  
 Secretary, Northeast Shore & Beach Preservation Association (NSBPA)  
 Certified Engineer in Training  
 Divemaster in Training

## **PROFESSIONAL ACTIVITIES**

Chair, Harbor Education Subcommittee of the USCG NY Harbor OPS Committee, 2006-  
Chair, NSBPA NJ Coastal Sustainability Conference Committee, 2005  
Chair, ASCE Urban Coasts Conference Committee, 2001

Member, NJ State Hazard Mitigation Planning Team, 2004-  
Member of the NJ Hydromet Warning Council, 2004-  
Member, National Weather Service, NJ Storm Ready Advisory Committee, 2002-  
Member, WebCampus Board of Directors, 2002 –  
Member, ASCE Flood Loads Task Committee, 1999-  
Member, Planning Committee, 1<sup>st</sup>, 2<sup>nd</sup>, and 3<sup>rd</sup> Annual Conferences of the NSBPA  
Delegate, 1998 Sigma Xi Annual Meeting

Reviewer, NSF Arctic System Science Program, 2004  
Reviewer, NSF Sensor and Sensor Networks Proposals, 2003  
Reviewer, Journal of Marine Environmental Engineering  
Reviewer, FEMA Residential Coastal Construction Manual

Invited participant, Alliance for Coastal Technologies, Mobile Sensor Platforms:  
Management Applications for AUVs and Gliders in the Nearshore Environment  
Workshop, April 28-30, 2004, Portland, ME.

Invited participant, NSF Ocean Research Interactive Observatory Networks (ORION)  
Workshop, January 4 –8, 2004, San Juan Puerto Rico.

Invited Participant, Alliance for Coastal Technologies, Data Telemetry Technologies for  
Coastal Ocean Observation Workshop, April 30-May 2, 2003, University of South  
Florida, St. Petersburg, FL.

## **PROFESSIONAL AWARDS AND ACHIEVEMENTS**

2006/2007 Denny Medal recipient with M.S. Bruno and A.F. Blumberg for best journal  
article to appear in the Journal of Marine Science and Environment published by the  
Institute of Marine Engineering, Science and Technology.

Research Recognition Award, Stevens Institute of Technology, Hoboken, NJ, February,  
2004.

Certificate of Achievement, Residential Coastal Construction, FEMA Emergency  
Management Institute, Emmitsburg, MD. February, 2000.

Certificate of Achievement, Multihazard Building Design Summer Institute: Flood,  
FEMA Emergency Management Institute, Emmitsburg, MD. July 30, 1999.

John P. Breslin Award for Outstanding Research Accomplishments in Ocean  
Engineering, Stevens institute of Technology, Hoboken, NJ, May, 1996.

## REFEREED JOURNAL PUBLICATIONS

1. Friebel, H.C., T.O. Herrington and A.Y. Benilov. Measurement of surf zone air-sea momentum exchange, (*in preparation*).
2. Friebel, H.C., T.O. Herrington and A.Y. Benilov. Evaluation of the accuracy of a Campbell CSAT3 sonic anemometer for use in long-term coastal ocean observations, *J. Atmos. and Oceanic Tech.*, (*in revision*).
3. Georgas N., A. F. Blumberg, and T. O. Herrington (2007). An Operational Coastal Wave Forecasting Model for New Jersey and Long Island Waters, *Shore & Beach*, Vol. 75, No.2.
4. Bruno, M.S., A.F. Blumberg, and T.O. Herrington (2006). The urban ocean observatory – coastal ocean observations and forecasting in the New York Bight, *J. Marine Sci and Envirn.*, No. C4, 31-39.
5. Rankin, K.L., M.S. Bruno and T.O. Herrington (2004). Nearshore Currents and Sediment Transport Measured at Notched Groins. *J. Coastal Res.*, SI No. 33, 237-254, West Palm Beach, FL, Winter 2004.
6. Rankin, K.L., T.O. Herrington, M.S. Bruno, P.B. Burke and A.M. Pence (2004). Cross-shore Distribution of Alongshore Currents and Sediment Fluxes in the Vicinity of Notched Groins. *J. Coastal Res.*, SI No. 33, 255-268, West Palm Beach, FL, Winter 2004.
7. Herrington, T.O., M.S. Bruno and K.L. Rankin (2000). The New Jersey Coastal Monitoring Network: A Real-Time Coastal Observation System, *J. Marine Env. Engg.* Vol. 6, pp. 69-82, 2000.
8. Bruno, M.S., M. Yavary and T.O. Herrington (1998). The Influence of a Stabilized Inlet on Adjacent Shorelines: Manasquan, New Jersey, *Shore and Beach*, 66(2), 19-25, 1998.

## REFEREED CONFERENCE PROCEEDINGS

1. Herrington, T.O., A. Mahon, R. Hires, and J.K. Miller (2008). A comparison of methods used to calculate extreme water levels, Solutions to Coastal Disasters 2008, Oahu, Hi, April 13-16, 2008 (*accepted*).
2. Friebel, H.C., T.O. Herrington and A.Y. Benilov (2006). Measurement of surf zone air-sea momentum exchange, 30<sup>th</sup> International Conference on Coastal Engineering, San Diego, CA, Sept. 2-8, 2006.
3. Herrington, T.O., J.K. Miller and R.G. Dean (2006). Characteristic shoreline change patterns identified using EOF analysis, 30<sup>th</sup> International Conference on Coastal Engineering, San Diego, CA, Sept. 2-8, 2006.
4. Herrington, T.O., R.I. Hires, R.J. Miskewitz, J. Turner, M.S. Bruno and G.A. Boehm (2006). Attenuation and flushing characteristics of low porosity wake screens, In Proceedings of The Eighth International Conference on Protection and Restoration of the Environment, Chania, Greece July 3-7, 2006, 220-227.
5. Miskewitz, R.J., T.O. Herrington, C. Obropta, S. Thomas and R.I. Hires (2006). Modeling intermittent discharges to coastal waters, In Proceedings of The Eighth International Conference on Protection and Restoration of the Environment, Chania, Greece July 3-7, 2006, 200-207.

6. Bruno, M.S., A.F. Blumberg, T.O. Herrington and B.J. Fullerton (2006). Sensors and Models: The core of an urban ocean observatory, In Proceedings of The Eighth International Conference on Protection and Restoration of the Environment, Chania, Greece July 3-7, 2006, 194-201.
7. Bruno, M.S., A.F. Blumberg and T.O. Herrington (2006). The urban ocean observatory – coastal ocean observations and forecasting in the New York Bight, World Maritime Technology Conference, March 6-10, 2006, London, UK.
8. Blumberg, A., S. Fan, T.O. Herrington, M. Bruno, A.M. Cope, Q. Ahsan, and H. Li, (2005). A coastal wave forecasting system for New Jersey and Long Island waters. Sixth Conference on Coastal Atmospheric and Oceanic Prediction and Processes, 85<sup>th</sup> AMS Annual Meeting, 9-13 January 2005, San Diego, CA.
9. Herrington, T.O., K.L. Rankin, M.S. Bruno. (2002) Frequency of sediment suspension events in Newark Bay. Proceedings of the International Conference, Protection and Restoration of the Environment VI, Skiathos, Greece July 1-5, 2002, p. 371-378.
10. Bruno, M.S., O.G. Nwogu, K.L. Rankin and T.O. Herrington (2000). A Real-time Nearshore Wave Measurement and Forecast System: Preliminary Results. Proceedings of the 27th International Conference on Coastal Engineering, Vol.1. p.283-296, July 16-21, Sydney, Australia, 2000.
11. Bruno, M.S., K.L. Rankin and T.O. Herrington (1999). Coastal Wave Measurement and Forecast System: Preliminary Results and Model Selection. Proceedings of the 6th International Conference on Estuarine and Coastal Modeling, ASCE, Reston, Va., 1999, pp. 899-914.
12. Herrington, T.O., K. L. Rankin and M.S. Bruno (1999). Design and Implementation of a Real Time Coastal Monitoring Network. Proceedings of the 12th Annual National Conference on Beach Preservation Technology, pp. 95-111, Fl. Shore & Beach Preservation Assoc., Tallahassee, Fl., 1999.
13. Herrington, T.O., M.S. Bruno, K.L. Rankin and M. Yavary (1998). Nearshore Coastal Processes Adjacent to a Tidal Inlet. Proceedings of the 26th International Conference on Coastal Engineering, pp. 3331-3344, ASCE, Reston, Va., 1998.
14. Herrington, T.O. and M.S. Bruno (1998). Observation of Structure Induced Scour Adjacent to Submerged Narrow-crested Breakwaters, Proceedings of Coastlines, Structures and Breakwaters '98, pp. 106-118, Thomas Telford, London, UK, 1998.
15. Herrington T.O. and M.S. Bruno (1997). Empirical Techniques for A Priori Parameter Estimation. Proceedings of the 5th International Conference on Estuarine and Coastal Modeling, pp. 232-337, ASCE, Reston, Va., 1997.
16. Bruno, M. S., T. O. Herrington, K. L. Rankin and K.E Ketteridge (1997). Artificial Reefs and other Emerging Technologies, Charting the Future of Coastal Zone Management, Proceedings of Coastal Zone 97, pp. 414-416, 1997.
17. Bruno, M. S., T. O. Herrington, and K. L. Rankin (1996). The Use of Artificial Reefs in Erosion Control: Results of the New Jersey Pilot Reef Project. Proceedings of the 1996 National Conference on Beach Preservation Technology, pp. 239-254, Fl. Shore & Beach Preservation Assoc., Tallahassee, Fl., 1996.

## OTHER SCHOLARLY PUBLICATIONS

1. Herrington, T.O., "Tsunamis: Facts and Impacts." In *the Jersey Shoreline*, Vol. 24, No.2, NJSJG-06-653, pp. 12-13, Winter 2007.
2. Miller, J.K. and T.O. Herrington, "Building Beaches in New Jersey." In *the Jersey Shoreline*, Vol. 23, No.4, NJSJG-06-630, pp. 5-6, Summer 2006.
3. Herrington, T.O., R. Kull and S. Halsey, Township of Wayne Local Hazard Mitigation Plan, August 31, 2005.
4. Coastal Erosion in New Jersey, in Building a Safer New Jersey, The State of New Jersey Hazard Mitigation Plan, April 2005.
5. New Jersey Shoreline Change Analysis, , in Building a Safer New Jersey, The State of New Jersey Hazard Mitigation Plan, April 2005.
6. Tsunami Hazard in New Jersey, in Building a Safer New Jersey, The State of New Jersey Hazard Mitigation Plan, April 2005.
7. Urban Beaches: Balancing Public Rights and Private Development, edited by Lesley Ewing, Thomas Herrington and Orville Magoon, *Proceedings of the NSBPA 4<sup>th</sup> Annual Conference*, October 24-26, Stevens Institute of Technology, Hoboken, NJ. ASCE, Reston Va., 91 pp., 2003.
8. Herrington, T.O. and M.S. Bruno, "Ocean Engineering Research and Education at Stevens Institute of Technology," *the Jersey Shoreline*, Vol. 21, No.2, NJSJG-02-496, pp. 12-14, Fall 2002.
9. Herrington, T.O., K.L. Rankin and M.S. Bruno, "Making Waves in Coastal Processes Management," *the Jersey Shoreline*, Vol. 21, No.2, NJSJG-02-496, p. 15, Fall 2002.
10. Herrington, T.O., K.L. Rankin and M.S. Bruno "The New Jersey Coastal Monitoring Network," *New Jersey Sea Grant extension Program Bulletin No. 15*, NJSJG-02-492, Sept. 2002.
11. Herrington, T.O. Manual for Coastal Hazard Mitigation, New Jersey Sea Grant College Program, NJSJG-03-0511, March 2003.
12. Herrington, T.O., M.P. Weinstein, and S.D. Halsey, New Jersey, The Coastal State, New Jersey Sea Grant College Program, NJSJG-02-0497, Dec. 2002.

## RESEARCH AND TECHNICAL PUBLICATIONS

1. Miller, J.K. and T.O. Herrington, "Existing Conditions and Bayshore Stabilization Alternatives, Seaside Park, New Jersey", Coastal Protection Technical Assistance Service, Davidson Laboratory Technical Report SIT-04-09-2862, December, 2007.
2. Herrington, T.O. and J.K. Miller, "A Comparison of the Present Day Vulnerability of Sea Bright Considering Nourished and Non-Nourished Scenarios", Coastal Protection Technical Assistance Service, Davidson Laboratory Technical Report SIT-04-09-2860, December, 2007
3. Herrington, T.O. and J.K. Miller, "The Establishment, Growth and Evolution of Coastal Dunes in New Jersey and its relation to the Present Storm Protection Level Provided by the Dune Field in Ocean City, NJ", Coastal Protection Technical Assistance Service, Davidson Laboratory Technical Report SIT-04-09-2851, January, 2007.
4. Herrington, T.O., R.I. Hires, and J.K. Miller, "Analysis of the Present Vulnerability of Long Beach Island, New Jersey to Catastrophic Coastal Storm Surge and Damage", Coastal Protection Technical Assistance Service, Davidson Laboratory Technical Report SIT-04-09-2849, July 26, 2006.
5. Miller, J.K. and T.O. Herrington, "Analysis of Present Protection Level Afforded by the Beach Fronting Long Beach Island", Coastal Protection Technical Assistance Service, Davidson Laboratory Technical Report SIT-04-09-2850, July 26, 2006.
6. Herrington, T.O., R.I. Hires, R.J. Miskewitz, "Impacts of the Proposed Extension of the Wreck Pond Outfall on Nearshore Water Quality and Littoral Drift of Sand" Coastal Protection Technical Assistance Service, Davidson Laboratory Technical Report SIT-04-09-2848, November 2005.
7. Herrington, T.O., R. Datla and R. Royce, " Alternative Shoreline Stabilization Structures: Physical Model Tests", Davidson Laboratory Technical Report SIT-04-9-2842, September, 2005.
8. Herrington, T.O., R. Prime and E. Zagrai, "Wave Climate Analysis of New Jersey Coastal Waters", New Jersey Coastal Protection Technical Assistance Service, Stevens Institute of Technology, Davidson Laboratory Technical Report SIT-04-9-2841, August, 2005.
9. Miller, J.K. and T.O. Herrington, "Analysis of Bayshore Erosion in the Vicinity of Roberts Avenue, South Seaside Park, NJ. Coastal Protection Technical Assistance Service, Davidson Laboratory Technical Report SIT-04-09-2839, July, 2005
10. Herrington, T.O. and M. F. DeLorme, " Evaluation of Wave Attenuation Characteristics of Three Vertical Slat Breakwaters", New Jersey Coastal Protection Technical Assistance Service, Stevens Institute of Technology, Davidson Laboratory Technical Report SIT-04-9-2820, June, 2004.
11. Herrington, T.O. "Dune and Beach Management Plan for Dover Township Federations of Beaches", New Jersey Coastal Protection Technical Assistance Service, Stevens Institute of Technology, Davidson Laboratory Technical Report SIT-04-9-2819, March, 2004.
12. Styles, R., R. Chant, S. Glenn, K. Rankin, A. Pence, P. Burke, T.O. Herrington, M. Bruno and C. Haldeman. "Particle Concentrations and Size Distributions; Implications for Contaminant Transport in New York/New Jersey Harbor New York Bight." Proceedings, SETAC Conference, Baltimore, MA, 2001

13. Rankin, K., R. Chant, S. Glenn, M. Bruno, R. Styles, B. Fullerton, T.O. Herrington and R. Hires. "Integrated Collection of Hydrodynamics and Sediment/Water Quality Data in NY/NJ Harbor." Proceedings, SETAC Conference, Baltimore, MA., 2001
14. Herrington, T.O., "Hudson County Waterfront Walkway: Analysis of Morris Canal Crossing Alternatives" Prepared for the Morris Canal Crossing Committee. September, 2001.
15. Herrington, T.O., K.L. Rankin and M.S. Bruno, "Impact of Hurricane Floyd on the New Jersey Coast" 3rd Annual Conference of the Northeast Chapter of the American Shore and Beach Preservation Association. Spring Lake, NJ, May, 2000.
16. Herrington, T.O., K. L. Rankin and M.S. Bruno "Design and Implementation of the New Jersey Coastal Monitoring Network " 2nd Annual Conference of the Northeast Chapter of the American Shore and Beach Preservation Association. Atlantic City, NJ, May, 1999.
17. Herrington, T.O., "Evaluation of the Sea Block Erosion Control System", Stevens Institute of Technology, Davidson Laboratory Technical Report SIT-9-97-2770, July, 1998.
18. Herrington, T.O., M.S. Bruno and K.L.Rankin, 'Innovative Shore Protection Technologies ' 1st Annual Conference of the Northeast Chapter of the American Shore and Beach Preservation Association. Ocean City, NJ, May, 1998.
19. Herrington, T.O., "Development of a Prototype Rotating Brush for Shellfish Predator Screen Cleaning", Stevens Institute of Technology, Davidson Laboratory Technical Report SIT-DL-9-97-2761, December, 1997.
20. Herrington, T.O. and K.E. Ketteridge, "Performance Characteristics of the WHISPRWAVETM Floating Breakwater", Stevens Institute of Technology, Davidson Laboratory Technical Report SIT-DL-9-97-2757, September, 1997.
21. Herrington, T. O. and W. T. McKenna, "Assessment of the General Physical Condition and Load Capabilities of the Open-Pile Platform Located East of the Griffith Building at Stevens Institute of Technology", Stevens Institute of Technology, Davidson Laboratory Technical Report SIT-DL-97-9-2754, August, 1997.
22. Herrington, T. O., M. S. Bruno and K. E. Ketteridge, "Monitoring Study of the Beachsaver Reef at Cape May Point, New Jersey", Stevens Institute of Technology, Davidson Laboratory Technical Report SIT-DL-96-9-2751, January, 1997.
23. Yavary, M. and T. O. Herrington, "Marina Design and Flushing: A Review of the State-of-the-Art", Stevens Institute of Technology, Davidson Laboratory Technical Report SIT-DL-94-9-2750, December, 1996.
24. Herrington, T. O. and W. T. McKenna, "Inspection and Condition Survey of Sinatra Drive Parking Lot B at Stevens Institute of Technology", Stevens Institute of Technology, Davidson Laboratory Technical Report SIT-DL-96-9-2743, August, 1996.
25. Bruno, M. S., T. O. Herrington, K. L. Rankin and K. E. Ketteridge, "Monitoring Study of the Beachsaver Reef at Avalon, New Jersey", Stevens Institute of Technology, Davidson Laboratory Technical Report SIT-DL-96-9-2739, June, 1996.
26. Herrington, T. O., "Determination of Dominate Nearshore Hydrodynamic Forcing Adjacent to a Tidal Inlet and Submerged Artificial Reef", Ph.D Dissertation, Civil, Environmental, and Ocean Engineering Department, Stevens Institute of Technology, Hoboken, New Jersey, 1996

27. Herrington, T. O., "Monitoring Study of the STABLER Disc Erosion Prevention System at Spring Lake, New Jersey". Stevens Institute of Technology, Davidson Laboratory Technical Report SIT-DL-95-9-2724, October, 1995.
28. Herrington, T. O., "Monitoring Study Of The STABLER Erosion Control Disk System at Spring Lake, New Jersey. One-Year Volume Changes, January, 1994 - January, 1995". Stevens Institute Of Technology, Davidson Laboratory Technical Report SIT-DL-95-9-2724, March, 1995
29. Bruno, M. S., T. O. Herrington, K. E. Ketteridge and R. Kakarlapudi, "Monitoring Study of the Beachsaver Reef at Cape May Point, New Jersey: Results after 8 months", Stevens Institute of Technology, Davidson Laboratory Technical Report, March, 1995.
30. Herrington, T. O., "Laboratory Investigation Of A Viscous Drag Mat System, Beach Erosion Mitigation Device". Stevens Institute of Technology, Davidson Laboratory Technical Report SIT-DL-95-9-2716, February, 1995.
31. Herrington, T. O., "A Laboratory Investigation of Beach Scraping Techniques". Stevens Institute of Technology, Davidson Laboratory Technical Report SIT-DL-94-9-2712, October, 1994.
32. Herrington, T. O., "Monitoring Performance of the Concrete Disk Chain at Spring Lake, New Jersey". Stevens Institute of Technology, Davidson Laboratory Interim Technical Report SIT-DL-9-94-2708, July, 1994.
33. Bruno, M. S. and T. O. Herrington , "Monitoring Study of the Beachsaver Reef at Avalon, New Jersey". Stevens Institute of Technology, Davidson Laboratory Technical Report SIT-DL-94-9-2709, June, 1994.
34. Herrington, T. O., "Laboratory Study of an Artificial Seaweed Erosion Control Mat". Stevens Institute of Technology, Davidson Laboratory Technical Report SIT-DL-94-9-2696, June, 1994.
35. Herrington, T. O., "An Analysis of the Sedimentation Problem at Monmouth Cove Marina, Monmouth County, New Jersey". Stevens Institute of Technology, Davidson Laboratory Technical Report SIT-DL-94-9-2683, February, 1994.
36. Herrington, T. O., "Laboratory Study of the STABEACH Erosion Control System". Stevens Institute of Technology, Davidson Laboratory Technical Report SIT-DL-93-9-2694, August, 1993.
37. Waters, J. K., M. S. Bruno, T. O. Herrington, and K. L. Rankin, "A Laboratory Investigation of Sea Ice Dynamics in a Stratified Waterbody, Preliminary Results". Stevens Institute of Technology, Davidson Laboratory Technical Report SIT-DL-93-9-2695, June, 1993.
38. Herrington, T. O., "Flow Visualization of the Hydrodynamics Characteristics of a Cubical Artificial Reef Module", Master's Thesis, Civil, Environmental, and Ocean Engineering Department, Stevens Institute of Technology, Hoboken, New Jersey, May, 1992.
39. Herrington, T. O., and M. S. Bruno, "Concrete Artificial Reefs and the Potential for Coal Fly Ash Utilization". Stevens Institute of Technology, Davidson Laboratory Technical Report SIT-DL-90-9-2652, November, 1990.
40. Hires, R. I., T. Manewattana, S. Thomas, T. O. Herrington "Outfall Siting Study in Northern New Jersey Coastal Waters", Stevens Institute of Technology, CECE Technical Report for the NJ DEP, March, 1990.

## CONFERENCE and TECHNICAL PRESENTATIONS

1. Livermont, E A, T.O. Herrington, J.K. Miller. “Non-parametric estimation of wave data as a means of analyzing the unexplained variation created by the NYHOPS forecast system for the New Jersey coastline,” 2008 AGU Ocean Sciences Meeting, Orlando, FL., March 2-7, 2008. (*accepted poster presentation*)
2. Herrington, T.O., A.F. Blumberg and H. Raveché, “A Systems Approach to Flood Prevention”, Conferencia Centro América y el Caribe de Innovación Tecnológica y Desarrollo, Santo Domingo, Dominican Republic, 9-10 January 2008.
3. Herrington, T.O, A. F. Blumberg, and M.S. Bruno (2007). The urban ocean observatory – Urban ocean observations and forecasting in the New York Harbor, Joint Session of the American Meteorology Society: 7th Symposium on the Urban Environment; 7th Conference on Coastal Atmospheric & Oceanic Prediction and Processes, September 10-13, San Diego, Ca. (**Invited Planary Talk**)
4. Boehm-Clifton, G., and T.O. Herrington. “2007 Boating Projects & Programs,” NJ Marine Trades Association Annual Conference, March 8, 2007, Lakewood, NJ (**Invited**).
5. Herrington, T.O., L. Imas, R. Datla, and T. Yem, “Progress in small Model Testing for Multiple Applications”, presented at the Davidson Laboratory Technical Symposium: The Experimental Method in Naval Architecture and Ocean Engineering, Stevens Institute of Technology, Hoboken, NJ, December 12-13, 2006 (**Invited**).
6. Herrington, T.O., “Managing our submerged lands under the increasing threat of natural disasters”, 25<sup>th</sup> Annual Submerged Lands Management Conference, Red Bank, NJ Oct. 16-20, 2006 (**Invited**).
7. Herrington, T.O. “Beaches 101”, American Shore & Beach Preservation Association, National Conference, Long Branch, NJ, October 9-11, 2006 (**Invited**).
8. Herrington, T.O., J.K. Miller and R.G. Dean (2006). Characteristic shoreline change patterns identified using EOF analysis, 30<sup>th</sup> International Conference on Coastal Engineering, San Diego, CA, Sept. 2-8, 2006.
9. Friebel, H.C., T.O. Herrington and A.Y. Benilov. “Measurement of surf zone air-sea momentum exchange”, 30<sup>th</sup> International Conference on Coastal Engineering, San Diego, CA, Sept. 2-8, 2006 (Poster Presentation).
10. Herrington, T.O. Developing a safe wake agenda: The wake issue in New York Harbor, presented at Economy + Environment = Community, The Waterfront Conference, Metropolitan Waterfront Alliance, New York, NY, May 23, 2006. (**Invited**)
11. “Development of an automated coastal storm surge warning system”, presented at the 2005 Conference of Flood Warning System Technologies and Preparedness, 6<sup>TH</sup> National Conference and Exposition of the National Hydrologic Warning Council, May 16-20, 2005, Sacramento, CA (with M. Mossler (presenter), E. Zagrai, B.J. Fullerton, A.F. Blumberg and M.S. Bruno).
12. “A Coastal Wave Forecasting System for New Jersey and Long Island Waters” presented at the 6<sup>th</sup> Conference on Coastal Atmospheric and Oceanic Prediction and Processes, 85<sup>th</sup> Meteorological Society Annual Meeting, 9-13 January 2005, San Diego, CA. (Presenter) (with A.F. Blumberg, S. Fan, M.S. Bruno, A. Cope, Q. Ahsan and H. Li).

13. "In-Situ Contaminant Sediment Transport Measurement in the Newark Bay", presented to Secretary Jerry M. Hultin, Under Secretary of the Navy, Stevens Institute of Technology, Hoboken, NJ, July 14, 1999,
14. "Design and Implementation of a Real-Time Coastal Monitoring Network", presented at the 12th Annual National Conference on Beach Preservation Technology, Jan. 27-29, St. Petersburg, FL., 1999.
15. "Natural and Anthropogenic Factors Influencing Shoreline Change", presented at Annual Conference of the Marine Technology Society, Baltimore, MD, Nov. 16-19, 1998 (with M. Bruno and K.L. Rankin).
16. "Nearshore Coastal Processes Adjacent to a Tidal Inlet", presented at the 26th International Conference on Coastal Engineering, Copenhagen, June 25, 1998.
17. "Observation of Structure Induced Scour Adjacent to Submerged Narrow-crested Breakwaters", presented at the Institute of Civil Engineers conference in London, March 17, 1998.
18. "Innovative Shore Protection Technologies", presented at the 1st Annual Conference of the Northeast Chapter of the American Shore and Beach Preservation Association, Ocean City, NJ, May 8, 1998.
19. "Empirical Techniques for A Priori Parameter Estimation", presented at the 5th International Conference on Estuarine and Coastal Modeling, Alexandria, Va., Oct. 22, 1997.
20. "The Influence of a Stabilized Inlet on Adjacent Shorelines", presented at the National Conference of the American Shore and Beach Preservation Association, Long Island, October 14, 1997. (with M. Bruno).
21. "Determination of Dominant Nearshore Hydrodynamic Forcing Adjacent to a Tidal Inlet", presented at the American Geophysical Union Spring Meeting, May 20 - 24, 1996, Baltimore, MD.
22. "Wave Transmission Over a Submerged Reef; Results from Model and Field experiments", Presented at the American Geophysical Union Fall Meeting, December 11 - 15, 1995, San Francisco, Ca. (with K.L. Rankin and M. Bruno)
23. "Performance of a Nourished Beach Protected by a Nearshore Submerged Concrete Reef", Presented at the American Geophysical Union Fall Meeting, December 6 - 10, 1993, San Francisco, Ca.
24. "An Analysis of Wave Transformation at Model and Full Scale Over a Submerged Artificial Reef", Presented at the American Geophysical Union Fall Meeting, December 6 - 10, 1993, San Francisco, Ca. (with K.L. Rankin and M. Bruno)

#### **INVITED TESTIMONY**

1. "Ocean City, NJ v. NJDEP", Testimony for the Attorney General's Office in the Administrative Law Hearing, January 8 and 9, 2007, Atlantic City, NJ.
2. "Coastal Protection Issues in New Jersey." Testimony to the New Jersey State Senate Environmental Committee, August 4, 2006. (**Invited**).
3. "Comments on Proposed Harlem River Wake Safety Legislation." Testimony to the New York City Council Committee on Transportation, December 6, 2005. (**Invited**)

4. “Comments on Proposed Vessel Regulation Zones within the Harlem River.” Testimony to the New York City Council Committee on Transportation and Committee on Waterfronts, June 9, 2005. **(Invited)**

## **INVITED TALKS AND LECTURES**

1. “A Systems Approach to Flood Prevention,” presented at Stemming the Tide – Helping New Jersey Cope with Past and Future Floods Conference *convened by Senator Robert Menendez*, New Brunswick, NJ, August 8, 2007.
2. “Advances in Physical Modeling for Engineering Applications,” presented at McLaren Engineering Group, West Nyack, NY, July 25, 2007.
3. “Beach Nourishment: The New Jersey Experience,” presented at The Future of Massachusetts Beaches: Relocate, Nourish or Lose Them, Massachusetts Sea Grant Workshop, Woods Hole, MA, May 4, 2007.
4. “Protective Capacity of Dunes in New Jersey.” presented at the USDA Plant Sciences for Frontal Dunes and Beach Replenishment Projects Meeting, Avalon, NJ, March 7, 2007, co-author J.K. Miller.
5. “Coastal Sustainability in New Jersey,” opening address given to the New Jersey Sea Grant Stakeholder Workshop on Sustainable Coastal Communities, Monmouth University, January 25, 2007.
6. “Applying Technology to Sustain the Jersey Shore”, presented to the New Jersey Shore Club, Stevens Alumni Association, November 7, 2006.
7. “Stabilizing the New Jersey Shore” Lecture for ARCH 331/662 Landscape Architecture, New Jersey Institute of Technology, School of Architecture, Newark, NJ, October 13, 2006. (Invited)
8. “What Does Sea Level Rise Mean to Me?” Presented at the Urban Coast Institute, Global Warming, Sea Level Rise and Impact on Coastal Communities: A Forum for Coastal Mayors, Preparing for Seas Level Rise, Monmouth University, June 1, 2006 (Invited, with Jon Miller).
9. Herrington, T.O. (2006). Rip currents and rip current forecasting in New Jersey, presented at the Atlantic County Municipal Joint Insurance Fund Lifeguard Symposium: Better Beaches, Ocean City, NJ, July 12, 2006. (Invited).
10. “What are Coastal Hazards” Continuing education course delivered for the Jacques Cousteau National Estuarine Research Reserve, Coastal Training Program, April 18, 2006. (Invited)
11. “Hazard Mitigation Techniques” Continuing education course delivered for the Jacques Cousteau National Estuarine Research Reserve, Coastal Training Program, April 18, 2006. (Invited)
12. “Stabilizing the New Jersey Shore” Lecture for ARCH 331/662 Landscape Architecture, New Jersey Institute of Technology, School of Architecture, Newark, NJ, October 25, 2005. (Invited)
13. “Bay and Estuarine Shoreline Stabilization Alternatives” to be presented at Shoreline Stabilization for Bays and Rivers, Coastal Training Program, Jacques Cousteau National Estuarine Research Reserve, Sandy Hook, NJ, May 6, 2005. (Invited)

14. "Floating Wave Attenuators for Estuarine Shoreline Stabilization", presented to the Coastal Engineering Division Supervisor, Louisiana Department of Natural Resources, Baton Rouge, LA, February 21, 2005. (Invited)
15. "Stabilizing the New Jersey Shore" Lecture for ARCH 331/662 Landscape Architecture, New Jersey Institute of Technology, School of Architecture, Newark, NJ, October 15, 2004. (Invited)
16. "Difficulties in Rip Current Forecasting", presented at Rip Current Science: Coordinating Coastal Engineering Research and Forecast Methodologies to Improve Public Safety, National Weather Service – Sea Grant Technical Workshop, Jacksonville, FL, April 6-7, 2004. (Invited)
17. "Stabilizing the New Jersey Shore" Lecture for ARCH 331/662 Landscape Architecture, New Jersey Institute of Technology, School of Architecture, Newark, NJ, October 10, 2003. (Invited)
18. "Response and Engineering Options for Shoreline Problems" presented at Shoreline Stabilization for Bays and Rivers, Coastal Training Program, Jacques Cousteau National Estuarine Research Reserve, Avalon and Brick, NJ, June 23 -24, 2003. (Invited)
19. "Rip Currents Near Coastal Structures", presented at the Delaware Sea Grant Rip Current Workshop, University of Delaware, Lewes, DE, April 24, 2003. (Invited)
20. "Cellular Data Telemetry Options", presented at the Data Telemetry Technologies for Coastal Ocean Observations Workshop, Alliance for Coastal Technologies, St. Petersburg, FL, April 30-May 2, 2003. (Invited)
21. "Stabilizing the New Jersey Shore" Lecture for ARCH 331/662 Landscape Architecture, New Jersey Institute of Technology, School of Architecture, Newark, NJ, October 11, 2002. (Invited)
22. "Stabilizing the New Jersey Shore" Lecture for ARCH 331/662 Landscape Architecture, New Jersey Institute of Technology, School of Architecture, Newark, NJ, October, 2001. (Invited)
23. "Stabilizing the New Jersey Shore" Lecture for ARCH 331/662 Landscape Architecture, New Jersey Institute of Technology, School of Architecture, Newark, NJ, October, 2000. (Invited)
24. "Coastal Monitoring Notes", presented at the Ground-based Mobile Instrument Workshop, National Center for Atmospheric Research, Boulder, CO., February 23-24, 2000. (Invited)
25. "Stabilizing the New Jersey Shore" Lecture for ARCH 331/662 Landscape Architecture, New Jersey Institute of Technology, School of Architecture, Newark, NJ, October, 1999. (Invited)
26. "Innovative Solutions in Coastal Protection", presented at Coastal Storms in New England – Impact and Protection Seminar, Boston Society of Civil Engineers Waterways, Ports, Coastal & Ocean Technology Group, Spring Technical Seminar, April 23, 1999. (Invited)
27. "Remote Sensing of Ocean Properties" presented at Stuyvesant High School, New York City, NY, April 16, 1999. (Invited)
28. "Hurricane Landfall Measurement System", presented at the Workshop on Hurricane Landfall Measurements, National Hurricane Center, Miami, FL, January 20, 1999. (Invited)
29. "The Dynamic Coastal Landscape of the New Jersey Shore" Lecture for ARCH 331/662 Landscape Architecture, New Jersey Institute of Technology, School of Architecture, Newark, NJ, October, 1998. (Invited)
30. "Mobile Coastal Monitoring System", presented at the annual meeting of the Insurance Friends of the National Hurricane Center, National Hurricane Center, Miami, FL, May 5, 1998. (Invited)

31. "Innovative Coastal Protection Technologies", presented to the Employer Legislative Committee of Ocean County, NJ, November, 1997. (Invited)
32. "The Dynamic Coastal Landscape of the New Jersey Shore" Lecture for ARCH 331/662 Landscape Architecture, New Jersey Institute of Technology, School of Architecture, Newark, NJ, October, 1997. (Invited)
33. "An Overview of the Coastal Protection Technical Assistance Service at the Davidson Laboratory of Stevens Institute of Technology" presented at the 81st New Jersey League of Municipalities Conference, Atlantic City, NJ, November 19 - 21, 1996
34. "The Dynamic Coastal Landscape of the New Jersey Shore" Lecture for ARCH 331/662 Landscape Architecture, New Jersey Institute of Technology, School of Architecture, Newark, NJ, October, 1996. (Invited)
35. "Impact of Beach Restoration Projects on Beach Diving", New Jersey Aquanauts, Old Bridge, NJ, August 6, 1996. (Invited)

## **PATENTS**

Mechanical Rotating Brush Device for Removing Biofouling form Juvenile Clam Screens. US Patent No. 6,279,187 B1, August, 2001 (with J. Nazalewicz and G. Flimlin).

## TEACHING ACTIVITIES

### Undergraduate Courses

CE 342L          Fluid Mechanics Laboratory  
OE 527          Laboratory in Naval Architecture (for Undergraduate Naval Engineers)

### Courses Taught in the Ocean Engineering Graduate Program

CE 578          Coastal and Flood Plain Engineering  
CE/OE 591WS    Introduction to Dynamic Meteorology (Online Course through WebCT platform)  
CE/OE 591      Introduction to Dynamic Meteorology  
OE 501          Oceanography  
OE 503          Seminar in Ocean Engineering – Ocean Instrumentation and Measurements  
OE 535          Ocean Measurements and Analysis  
OE 689          Coastal Engineering  
OE 647          Advanced Hydrodynamics Laboratory

### Graduate Certificate Courses Developed

Graduate Certificate in Multi-Hazard Engineering, 2006  
Graduate Certificate in Applied Coastal Oceanography, 2006

### Graduate Courses Developed

CE 576          Multi-Hazard Engineering  
CE 578          Coastal and Floodplain Engineering  
OE 535          Oceanographic Measurements and Data Analysis

### Short Courses Developed

Beaches 101, Coastal engineering for shoreline restoration at the American Shore and Beach Preservation Association's Annual Conference, October 9-11, 2006 Long Branch, NJ.

Design of Coastal Revetments, Continuing Education Short Course for Civil Engineers, Burns and Roe Corporation, Oradell, NJ, November, 2000.

Principles of Sediment Transport, Continuing Education Short Course for Civil Engineers, Burns and Roe Corporation, Oradell, NJ, November, 1999.

Exploration Research Project in Ocean Engineering, Exploring Career Options in Engineering and Science, Summer Program, July, 1998.

Basic Design Principles Utilized in Marine Construction, Continuing Education Short Course for Civil engineers, Burns and Roe Corporation, Oradell, NJ, May 12, 1998.

Exploration Research Project in Ocean Engineering, Exploring Career Options in Engineering and Science, Summer Program, July 28- Aug. 8, 1997.

Coastal Processes and Shore Protection Strategies: Coastal Weather, Coastal Protection Technical Assistance Service Short Course, Stevens Institute of Technology, Hoboken, NJ, Dec. 14, 1994.

## ADVISING

### **PhD Advisor**

Mr. Harry Friebel, “Wind stress on wave form in the surf zone”, Ph.D. Advisor, May 2005.

### **PhD Committee Member**

Mr. Richard Scheryll, “Development of a deep sea benthic high-pressure sampling apparatus.” Expected May 2009.

Mr. Ganesh Gopalakrishnan, “Assessment of dynamic data assimilation into the NYHOPS ocean forecast model.” Expected May 2008.

Mr. Christopher Obropta, “Initial dilution modeling of treated sewage effluent discharges in the coastal zone”, Member, Ph.D. Committee, May, 2002.

Mr. Roy Messaros, “Ripple Dynamics Under Waves”, Member, Ph.D. Committee, May, 2003.

### **Masters Thesis Advisor**

Ms. Elizabeth Livermont, “Development of a non-parametric statistical wave model for nearshore wave prediction.” Expected, December 2008.

Mr. Ryan Prime, “New Jersey Wave Climate Assessment.” May 2005.

Mr. Sigmund Rutkowski, “Wave tank Simulation of Waves Generated by Hurricane Camile” Masters Thesis, Co-advisor with M. Bruno, May, 1998.

### **Masters Advisor without Thesis**

Jeremy Turner (expected 2008), Cigdem Dumiz (2006), Eric Miller (2005), Gabe Bolin (2004)

## MENTORING

Ms. Alicia Mahon, Junior, Stevens Institute of Technology, “Comparison of methods used to calculate extreme water levels.” Summer 2006.

Ms. Elizabeth Livermont, Senior, Stevens Institute of Technology Technogenesis Scholar, “Non-parametric estimation of wave data.” Summer 2005.

Ms. Gita Rewari, Freshman Stevens Institute of Technology Scholar Student, “Analysis and Applications of Real-Time Coastal Data- Automated Coastal Change Analysis.” Summer 2005.

Ms. Alison Cozzubbo, Junior, Stevens Institute of Technology, “Analysis of the Validity of NASA Satellite-Derived Wind and Wave Data in the Prediction of Nearshore Wind and Wave Fields” Sponsored by the New Jersey Space Grant Consortium-1999 Summer Fellowship.

Mr. Guang Wang, Junior, Stuyvesant High School, “Analysis of Nearshore Wave Characteristics Predicted by a Linear Refraction Model with Measured Nearshore Wave Data”, Stuyvesant High School Summer Scholar’s Program, Summer, 1999.

Ms. Jennifer Lee, Junior, Stuyvesant High School, “A Quantitative Model of Estuarine Mixing Processes of Effluents”, Stuyvesant High School Summer Scholar’s Program, Summer, 1998.

Ms. Meriam Carlos, Junior, Union City High School, “Modeling the Dispersion of Rhodamine WT Dye Discharged from Ocean Outfalls”, Union City Summer Scholar’s Program, Summer, 1995.

## FUNDED RESEARCH

Jet Propulsion Laboratory – the CARD Sensor Web Control System, January 2007.  
\$72,500 over 1-year. Principal Investigator

NOAA IOOS – Phased Development and Operation of the Mid-Atlantic Regional Coastal Ocean Observing System, April 2007. \$704, 177 over 3-years. Principal Investigator with A. Blumberg.

New Jersey Department of Transportation – Shallow Water Wake Mitigation Study, May 2006.  
\$87,776 over 1-year. Principal Investigator.

New Jersey Sea Grant – Coastal Processes Specialist, NOAA Sea Grant Extension Program, March, 2006. \$99,000 over 2 years. Principal Investigator.

New Jersey Sea Grant – Coastal Communities, NOAA Sea Grant Extension Program, March, 2006. \$25,000 over 2 years. Principal Investigator.

NJ Office of Emergency Management – Automated Storm Surge Warning System, March 2004.  
\$28,000 over 1 year. Principal Investigator

National Weather Service - COMET Cooperative Research Program, April 2004. \$79,461 over 2-years. Co-PI with A. Blumberg

New Jersey Sea Grant – Coastal Processes Specialist, NOAA Sea Grant Extension Program, March, 2004. \$99,000 over 2 years. Principal Investigator.

New Jersey Sea Grant – Coastal Communities, NOAA Sea Grant Extension Program, March, 2004. \$25,000 over 2 years. Principal Investigator.

NJ Department of Transportation Office of Maritime Resources – New York New Jersey Harbor Operations Support System, February 2004, \$265,000 over 1-year. Co-PI with A. Blumberg.

New Jersey Sea Grant – Analysis of Rip Current Formation on Stabilized Coasts, June 2003.  
\$8,000 Development Grant over 1 year. Co-PI with Dr. M. Bruno.

Office of Naval Research – The Stevens Integrated Maritime Surveillance and Forecast System, March 2003. \$1.4 million over 1 year. Co-PI with Drs. M. Bruno and A. Blumberg.

New Jersey Office of Emergency Management – FFY 03 Pre-disaster Mitigation Grant Planning Support for County-based, Multi-jurisdictional Hazard Mitigation Planning, January 2003.  
\$440,762 over 18 months. Principal Investigator with Dr. S. Halsey.

New Jersey Office of Emergency Management – Installation of a NJ Coastal Monitoring Station at Sea Girt, NJ, October 2002. \$30,000 over 1 year. Principal Investigator.

New Jersey Sea Grant – Coastal Processes Specialist, NOAA Sea Grant Extension Program, March, 2002. \$100,000 over 2 years. Principal Investigator.

New Jersey Sea Grant – Coastal Processes Specialist, NOAA Sea Grant Extension Program, March, 2000. \$76,000 over 2 years. Principal Investigator.

Stevens Institute of Technology. - Technogenesis Proposal: Development of Autonomous Environmental Monitoring Systems. May 2001 – July 2001. \$15,000. (PI, K. Stamnes & M. Sidhoum Co-PIs)

US Army Corps of Engineers. – BAA: Long-term Monitoring of a Small Jettied Inlet with Special Reference to Channel Infilling: Shark River Inlet, New Jersey. June 2001 – October 2001. \$25,000. (PI, B. Fullerton Co-PI)

Stevens Institute of Technology. - Technogenesis Proposal: Intelligent Marine Infrastructure. August 2001 – December 2002. \$52,000. (Co-PI).

New Jersey State Police Office of Emergency Management - Development of a Rapidly-Deployed, Real-time Observation System for High-Impact Coastal Weather, February, 2000. \$8,000. Principal Investigator.

New Jersey Department of Environmental Protection- Monitoring of PCB and Other semivolatile Organic Compound Air Emissions in Sites Receiving Stabilized Harbor Sediment, Sept., 1999. \$450,727. Co-PI with G. Korfiatis, P.I., C. Christodoulatos, and R. Hires

U.S. Army Corps of Engineers –Field Investigation into the Hydrodynamics and Sediment Transport at Constant Elevation and Notched Groins – July 1999. \$60,000. Co.-P.I. with K. Rankin, P.I. and M. Bruno.

New Jersey Department of Environmental Protection –The Coastal Protection and Technological Assistance Service – July 1999. \$500,000. Co-PI with M. Bruno, P.I. and K. Rankin.

State of New Jersey - New Jersey Toxics Reduction Study, July, 1999. \$300,000. Co-PI with M. Bruno, P.I. and K. Rankin.

Borough of Cape May Point - Beach Profile and structural elevation survey of the Beachsaver Reef, October, 1998, \$2,000. Principal Investigator.

COGEN Technologies - Characterization of the receiving waters and modeling study of the proposed COGEN outfall in the Arthur Kill, September, 1997. \$9,500. Co-P.I. with R. Hires.

Coastal Reclamation Solutions - Laboratory Study of the Sea Block Erosion Control Device. August, 1997 - August, 1998. \$25,500. Principal Investigator.

State of New Jersey - Coastal Monitoring Network. July, 1997 - July, 1998. \$175,000. Co-PI with M. Bruno, P.I. and K. Rankin.

Wave Dispersion Technologies - Laboratory Study of the Performance Characteristics of the WHISPRWAVETM Floating Breakwater. January, 1997 - September, 1997. \$20,768. Principal Investigator.

Rutgers Cooperative Extension, Sea Grant Advisory Service - Development of a Predator Screen Cleaning Device. January, 1997 - August, 1997. \$5,000. Principal Investigator.

Stevens Institute of Technology - Detailed Level II Inspection of Waterfront Facilities. October, 1996 - April, 1997. \$16,078. Principal Investigator.

Stevens Institute of Technology - Visual Inspection of Waterfront Facilities. June, 1996 - September, 1996. \$ 2,130. Principal Investigator.

## CONSULTING

Analysis of Delaware River Hydrodynamic Conditions at Eddystone, PA on January 24, 2004 for Hollstein Keating Cattell Johnson & Goldstein, PC, Philadelphia, PA, 2007.

Ferry Wake Impact Analysis for Proposed Speedway Located in Staten Island, New York for The International Speedway Corporation, Development LLC, 1801 W. International Speedway Blvd., Daytona Beach, Florida 32114-1234, 2005.

Stability Analysis of Prince's Bay Revetment for AKRF Engineering, 440 Park Avenue South, New York, NY 10016, August 2006.

Analysis of sediment transport processes at Stump Pass, Florida. NEXUS Engineering, April, 2004.

Review of tidal analysis presented in "Report on the Effects of the Rehabilitated Pier at 1340 Flagler Drive, Mamaroneck, NY 10543" prepared by Malcolm Pirnie, Inc., November 2001. Letter report for The VSA Group, New York, NY, September 2003. (Expert Testimony)

Analysis of Shoreline impacts of an Elevated Groin at 1340 Flagler Drive, Mamaroneck, NY, letter review for The VSA Group, New York, NY, February 2003. (Expert Testimony)

Analysis of a Coastal Erosion Hotspot at Ocean Beach, Fire Island, Long Island, NY. NEXUS Engineering, May, 1999.

Analysis of the Effectiveness of Diamondback Terrapin Excluders for Crab Pots, letter review for the New Jersey Marine Fisheries Council, September, 1997.

Newport Marine Terminal Project, Hydrodynamic and Sedimentation Analysis of Long Wharf, prepared for Louis Berger and Associates, Inc., Needham, MA, Herrington, T.O., M.S. Bruno and R.I. Hires, October, 1997.

Newport Marine Terminal Project, Hydrodynamic and Sedimentation Analysis of Candidate Sites, prepared for Louis Berger and Associates, Inc., Needham, MA, Herrington, T.O. and J.A. Nickels, December 20, 1996.

Sand Transport Analysis - Steeplechase Pier, Atlantic City, N.J., prepared for Paulus, Sokolowski and Sator, Inc., Warren, N.J., Bruno, M.S. and T.O. Herrington, September 15, 1995.

Coastal Resource Impact Analysis. Reconstruction of Hampton Beach Club East Quoge, Town of Southampton, New York, prepared for Land Use Environmental Corp., Baiting Hollow, New York., Bruno, M.S. and T.O. Herrington, October 17, 1994.

Developed and Prioritized marine physics educational program objectives, developed and evaluated related outdoor and indoor learning activities as part of the Great Kills Education and Visitors Center: Program and design development for the National Park Service, National Recreation Area on Staten Island, New York, January 9, 1994.