

Curriculum Vitae: Professor Lynn K. (Nick) Shay
RSMAS/MPO, University of Miami, 4600 Rickenbacker Causeway, Miami, FL 33149, USA
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a) Professional Preparation

Naval Postgraduate School (NPS)	Phys. Ocean./Applied Mathematics	Ph.D., 1987
NPS	Physical Oceanography	M.S., 1983
Florida Institute of Technology	Physical Oceanography	B.S., 1976

b) Appointments/Research Interests

University of Miami	Professor	1989 – Present
NPS	Adjunct Research Professor	1988 – 1989
NPS	Research Oceanographer	1982 – 1988
Naval Oceanographic Office	Oceanographer	1977 -- 1982

c) Peer-Reviewed Publications (Since PhD: 104)

Archer, M., L. K. Shay, B. Jaimes and J. Martinez, 2015: Observations of an ocean front using High Frequency Radar: anticyclonic shear zone instability of the Florida Current In : *Coastal Ocean Observing Systems: Advances and Synthesis*, Elsevier Press, 179-209.

Halliwel, G. R., V. Kourafalou, M. Le Hénaff, L. K. Shay, and R. Atlas. 2014: OSSE impact analysis of airborne ocean surveys for improving upper-ocean dynamical and thermodynamical forecasts in the Gulf of Mexico. *Progress in Oceanogr.*, DOI:10.1016/j.pocean.2014.09.004.

Jaimes, B., L. K. Shay and E. W. Uhlhorn, 2015: Observed enthalpy fluxes during the rapid intensity change of hurricane Earl relative to underlying ocean features. *Mon. Wea. Rev.*, **131**, 111-131.

Jaimes, B., L. K. Shay and J. K. Brewster, 2016: Observed Air-Sea Interactions in tropical cyclone Isaac over Loop Current mesoscale eddy features. *Dyn. Atmos. Ocean.*, **76**, 306-324.

Martinez-Pedraja, J., L. K. Shay, B. K. Haus and C. Whelan, 2013: Interoperability of Sea-sonde and Wellen Radars in mapping surface currents. *J. Atmos. Oceanogr. Tech.*, **30**, 2662-2675.

Meyers, P. C., L. K. Shay, and J. K. Brewster, 2014: The development of the systematically merged Atlantic regional temperature and salinity climatology for hurricane intensity forecasting. *J. Atmos. Oceanogr. Tech.*, **31**, 131-149.

Meyers, P. C., L. K. Shay, J. K. Brewster, and B. Jaimes, 2015: thermal ocean structure response during hurricanes Gustav and Ike, *J. Geophys. Res.*, **120**, DOI 10.1002/2015JC010912, 1-18 pp.

Rudzin, J., L. K. Shay, B. Jaimes, and J. K. Brewster, Upper ocean observations in the eastern Caribbean Sea reveal barrier layer within a warm core eddy. 2017: *J. Geophys. Res. Oceans*, doi:10.1002/2016JC012339 (In Press)

Shay, L. K., 2010: Air-sea interactions in tropical cyclones (Chapter 3). In *Global Perspectives of Tropical Cyclones: 2nd Edition*, World Scientific Publishing Company: Earth System Science Publication Series, London, UK, Edited by J. C. Chan, J. Kepert and C. P. Chang, 93-131.

Shay, L. K., B. Jaimes, J. K. Brewster, P. Meyers, C. McCaskill, E. W. Uhlhorn, F. D. Marks, G. R. Halliwell, O. M. Smedsted and P. Hogan. 2011: Airborne surveys of the Loop Current complex from NOAA WP-3D during the Deep Water Horizon oil spill. AGU Geophysical Monograph Series, *Monitoring and Modeling the Deep Water Horizon Oil Spill: A Record Breaking Enterprise*, eds Y. Liu, D. Streets and R. W. Weisberg, **195**, 131-151.

d) Synergistic Activities:

- Airborne ocean and atmosphere profiling during NSF/NOAA Coupled Ocean-Atmosphere Hurricane Experiment during Isaac (2012) and Edouard (2014);
- Airborne ocean and atmosphere profiling during NOAA/BOEMRE Deep Water Horizon Loop Current Flights on NOAA P-3;
- Rapporteur for Oceanic Impacts and Air-Sea Interactions for the World Meteorological Organization (WMO) sponsored International Workshop Tropical Cyclones (IWTC) in 2002, 2006, 2010, and 2014;
- Panel member for the WMO-IWTC Landfall processes (II and III);
- Served on the SECOORA Board of Directors from 2011-2016;
- **Developed and implemented oceanic heat content product suite for TPC/NHC operational forecasting from altimetry for the North Atlantic and Pacific Ocean basins at NOAA NESDIS;**
- Deployed Wellen Radars as part of ONR/NOAA sponsored SEA-COOS experiment on the West Florida Shelf (03) and now NOAA-IOOS East Florida Shelf (04-); and,
- **Developed and deploying State-of-the-art profiling floats using APEX-EM platform (with Teledyne-Webb) in the Gulf of Mexico (May 2017).**

External Collaborators, Awards & Other Affiliations, Students : E. Chassignet (FSU), J. Cione (NOAA), M. DeMaria (NHC), K-W. Gurgel (Univ of Hamburg), G. Halliwell (NOAA), P. Hamilton (SAIC), P. Hogan (NRL), R. Lumpkin (NOAA), F. Marks (NOAA), E. Maturi (NESDIS), M. Powell (NOAA/FSU), L. Wyatt (Univ. of Sheffield), D. Savidge (SKIO), H. Seim (UNC), O. M. Smedsted (NRL), E. Uhlhorn (NOAA), G. Voulgaris (USC), J. Zhang (CIMAS), R. Weisberg (USF), C. Whelan (CODAR), R. He (NCSSU); K. Fennel (Dalhousie), P. Furze (Teledyne-Webb).

Elected Fellow of the American Meteorological Society (2012); NASA GRIP Group Achievement Award (2011); NOAA Office of the Federal Coordinator of Meteorology Richard H. Hagemeyer Award (2016); Editorial Board(s): Elsevier Dynamics of Atmospheres and Oceans (Editor In Chief) and International Journal of Oceanography (Editor); Associate Editor AMS Journal of Atmospheric and Oceanic Technology; AMS Tropical Meteorology and Hurricane Committee; World Meteorological Organization International Workshops on Tropical Cyclone Landfall Processes Panel Member, IOOS Steering Committee on Surface Current Mapping Initiative, GCOOS-RA Observing Committee, SECOORA Science and Policy Committees; UNOLS Scientific Committee on Airborne Oceanographic Research, Florida Institute of Oceanography RSMAS Panel Member; RSMAS Representative for GCOOS-RA and SECOORA; NASA Hurricane Science Team. **Advised/Served on 35 student committees. Current Students: J. Rudzin (PhD), Joshua Wadler (PhD), Luna Hiron (PhD);** Post Doctoral Fellows: *Samuelraj D. Jacob, Benjamin Jaimes*