

Hank Statscewich

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Education:

2014 M.S. Physical Oceanography, Rutgers University, New Brunswick, NJ, USA
1996 B.S. Environmental Science, Rutgers University, New Brunswick, NJ, USA

Employment:

2001 - Present Research Engineer, University of Alaska, Fairbanks, AK
1998 - 2001 Graduate Assistant, Rutgers University, New Brunswick, NJ
1994 - 1997 Field Technician, Institute of Marine Science, New Brunswick, NJ

Appointments:

1999-2001 Graduate Student, Physical Oceanography Rutgers University, New Brunswick, NJ

Professional Affiliations:

1998 - Present American Geophysical Union
2002 - Present Marine Technology Society
2004 - Present Radiowave Oceanography Working Group (Founding Member)
2005 - Present Solar Energy International

Awards

2014 Alaska Innovators Hall of Fame – Hank Statscewich, “The Power Supplier”

Research Activities:

My current research activities focus on developing autonomous and remotely deployable sensor networks including high frequency radars, underwater autonomous vehicles, drifting buoys, meteorological sensors and moored oceanographic instrumentation. My specialties include the collection, analysis, visualization and interpretation of remote sensing and in situ datasets for use in building and validating models of current movements, temperature fluctuations and optical variability in the Arctic, Sub-Arctic and Antarctic waters of the Northern Gulf of Alaska, Cook Inlet, Prince William Sound, the Beaufort Sea, Chukchi Sea and the Southern Ocean. I collect and analyze data acquired through subsurface oceanographic instrumentation, survey vessels, satellite sensors, coastal meteorological and High Frequency RADAR stations. I oversee many aspects of oceanographic research including project management, field logistics, data analysis, permit applications, report preparation and manuscript development. I currently manage a small laboratory, fabrication facility and analyst team with five full time employees and between five to ten graduate students. I have also been involved with many educational outreach programs, which include teaching K-12, community college and university students about the earth’s climate and oceanography.

Publications:

Eicken, H., A. Mahoney, J. Jones, T. Heinrichs, H. Bader, D. Broderson, **H. Statscewich**, T. Weingartner, T. Ravens, and M. Ivey, M. (2017), Sustained observations of changing Arctic coastal and marine environments and their potential contribution to Arctic maritime domain awareness: A case study in northern Alaska, *ARCTIC Journal*, (*in press*).

Bernard, K., M. Cimino, W. Fraser, J. Kohut, M. Oliver, D. Patterson-Fraser, O. Schofield, **H. Statscewich**, D. Steinberg, P. Winsor (2017), Factors that affect the nearshore aggregations of

- Antarctic krill in a biological hotspot, Deep-Sea Research Part I, doi: 10.1016/j.dsr.2017.05.008 (in press).
- Weingartner, T. J., R. A. Potter, C. A. Stoudt, E. L. Dobbins, **H. Statscewich**, P. R. Winsor, T. D. Mudge, and K. Borg (2017), Transport and thermohaline variability in Barrow Canyon on the Northeastern Chukchi Sea Shelf, *J. Geophys. Res. Oceans*, 122, doi:10.1002/2016JC012636.
- Fang, Y, T. Weingartner, R. Potter, P. Winsor, and **H. Statscewich**, 2015, Quality Assessment of HF Radar-Derived Surface Currents Using Optimal Interpolation, *Journal of Atmospheric and Oceanic Technology*, 32, 2, 282-296.
- Lu, K, T. Weingartner, S. Danielson, P. Winsor, E. Dobbins, K. Martini, and **H. Statscewich**, 2015: Lateral mixing across ice meltwater fronts of the Chukchi Sea shelf, *Geophysical Research Letters*, 42, 16, 6754-6761, 201.
- Statscewich, H.**, H. Roarty, M. Smith, E. Page, S. Glenn, T. Weingartner, 2014, Enhancing Arctic Maritime Domain Awareness Through an Off-Grid Multi-sensor Instrument Platform, *Marine Technology Society Journal*, 48(5), 97-109, Marine Technology Society.
- Kohut, J., K. Bernard, W. Fraser, M. Oliver, **H. Statscewich**, and P. Winsor, 2014: Studying the Impacts of Local Oceanographic Processes on Adélie Penguin Foraging Ecology. *Marine Technology Society Journal*, 48(5), 25-34, Marine Technology Society.
- Baumgartner, M., K. M. Stafford, P. Winsor, **H. Statscewich**, & D. M. Fratantoni, 2014: Glider-Based Passive Acoustic Monitoring in the Arctic. *Marine Technology Society Journal*, 48(5), 40-51, Marine Technology Society.
- Brugler, E.T., R. Pickart, G.W.K. Moore, S. Roberts, T.J. Weingartner and **H. Statscewich**, 2013: Seasonal to Interannual variability of the Pacific Water Boundary current in the Beaufort Sea, *Progress in Oceanography*, Progress in Oceanography, Available online 17 May 2014, ISSN 0079-6611, <http://dx.doi.org/10.1016/j.pocean.2014.05.002>.
- Weingartner, T. J., E. Dobbins, S. Danielson, P. Winsor, R. Potter and **H. Statscewich**, 2013: Hydrographic variability over the northeastern Chukchi Sea shelf in summer-fall 2008-2010, *Continental Shelf Research*, Volume 67, 15 September 2013, Pages 5-22, ISSN 0278-4343, <http://dx.doi.org/10.1016/j.csr.2013.03.012>.
- Evans, W., J. Mathis, P. Winsor, **H. Statscewich**, and T. E. Whiteledge, 2013. A Regression Modeling Approach for Studying Carbonate System Variability in the Northern Gulf of Alaska. *Journal of Geophysical Research*, 118, 476-489.
- Statscewich, H.**, T. Weingartner, S. Danielsen, B. Grunau, G. Egan, and J. Timm, 2011. A High-Latitude Modular Autonomous Power, Control, and Communications System for Application to High-Frequency Surface Current Mapping Radars. *Marine Technology Society Journal*, Vol. 45, No. 3. May/June 2011, pp. 59-68.
- Musgrave, D, and **H. Statscewich**. 2006. CODAR in Alaska. Final Report. OCS Study MMS 2006-032, University of Alaska Coastal Marine Institute, University of Alaska Fairbanks and USDOJ, MMS, Alaska OCS Region, 23 p.
- Musgrave, David and **Hank Statscewich**. 2005. Environmental monitoring of oceanographic conditions near Chiswell Island Steller sea lion rookery, pp. 337-344 In: Thomas R. Loughlin, Donald G. Calkins and Shannon Atkinson, editors, Synopsis of Research on Steller Sea Lions: 2001-2005. Alaska SeaLife Center's Steller Sea Lion Research Program. Seward, AK.

Published Abstracts:

- Statscewich, H.**, T.J. Weingartner, P. Winsor, R. Potter, and S. Danielson, “The Circulation and Hydrographic Structure of Barrow Canyon in the North East Chukchi Sea”, 2014. Ocean Sci. Meet. Suppl.
- Winsor, P.; Weingartner, T. J.; Kasper, J. L., **Statscewich, H.**; Potter, R. A., “High Resolution Hydrography of the North Eastern Chukchi Sea from AUV Gliders and Towed CTD Surveys” 2014. Ocean Sci. Meet. Suppl.

- Potter, R. A.; Weingartner, T. J.; Dobbins, E. L.; **Statscewich, H.**; Winsor, P., "Surface Circulation patterns in the North Eastern Chukchi Sea", 2014. Ocean Sci. Meet. Suppl.
- Fang, Y.; Weingartner, T.; Potter, R.; **Statscewich, H.**; Winsor, P., "Mapping the North Eastern Chukchi Sea surface currents and their dynamical response under different environmental conditions", 2014. Ocean Sci. Meet. Suppl.
- Roarty, H.J., M. Smith, S. M. Glenn, D. E. Barrick, C. Whelan, E. Page, **H. Statscewich**, and T. Weingartner, "Expanding maritime domain awareness capabilities in the arctic: High Frequency radar vessel-tracking," in *Radar Conference (RADAR), 2013 IEEE*, 2013, pp. 1-5.
- H. Roarty, M. Smith, S. Glenn, D. E. Barrick, C. Whelan, E. Page, **H. Statscewich**, and T. Weingartner, 2013: "Expanding Maritime Domain Awareness Capabilities in the Arctic: High Frequency Radar Vessel Tracking," in *Radar Conference, 2013. RADARCON 13. Proceedings of the 2013 IEEE*, 2013.
- Roarty, Smith, Glenn, Barrick, Whelan, **Statscewich**, Weingartner, 2013: "Multi-Use HF Radar for Arctic Maritime Domain Awareness", OCEANS'13 MTS/IEEE Conference, Bergen Norway, June 10-13, 2013
- Statscewich, H.** 2004. Analysis of Tidal Currents in Cook Inlet, Alaska. EOS Trans. AGU, 84(52), Ocean Sci. Meet. Suppl., Abstract OS42A-09, 2004
- Potter, R.A., D. Musgrave, **H. Statscewich**, T.E. Whitledge, W.S. Pegau. 2004. Observations of a Deep-Water Eddy in the Gulf of Alaska, EOS Trans. AGU, 84(52), Ocean Sci. Meet. Suppl., Abstract OS41J-09
- Whitledge, T. E., D. Musgrave, W.S. Pegau, R.A. Potter, **H. Statscewich**. 2004. Coastal Shelf Features and Nitrate-Salinity Relationships Observed Along the Southcentral Alaskan Shelf, EOS Trans. AGU, 84(52), Ocean Sci. Meet. Suppl., Abstract OS32C-05
- Musgrave, D.L., **H. Statscewich**, T. Whitledge, W.S. Pegau. 2004. Mesoscale Surveys of the Southcentral Alaskan Shelf. EOS Trans. AGU, 84(52), Ocean Sci. Meet. Suppl., Abstract OS41J-06
- Statscewich, H.**, D. L. Musgrave. 2002. Analysis of Hydrographic Data Collected by the Pollock Conservation Cooperative Research Center in the Bering Sea. EOS Trans. AGU, 83(4), Ocean Sci. Meet. Suppl., Abstract OS12K-02, 2002.
- Musgrave, D.L., **H. Statscewich**, T. Whitledge, T. Weingartner. 2002. Observations of a New Circulation Feature on the Gulf of Alaska Shelf: The Seward Eddy. EOS Trans. AGU, 83(4), Ocean Sci. Meet. Suppl., Abstract OS22L-04, 2002.

At-Sea Experience:

- RV Caleta: 1994 – 1996, 100+ day trips from Tuckerton Research Station, Tuckerton, NJ
- RV Cape Henlopen: 1996, 1999, (2) month-long cruises in the Middle Atlantic Bight
- CCG W.E. Ricker: 1996, One month round trip from Victoria, BC, Ocean Station Papa to Kodiak, AK
- RV Alpha Helix: 2001 - 2005, Bi-Monthly cruises in the Gulf of Alaska to support US GLOBEC
- RV Wecoma: 2004, (2) month-long mesoscale survey cruises in the Gulf of Alaska
- FV Whisky Shackle: 2001 – 2006, Supported bimonthly field station maintenance trips to multiple autonomous research stations in Prince William Sound, AK
- MV Auklet: 2002-2006, Multiple research cruises of 1 week duration in Prince William Sound, AK
- RV Norseman II: 2010 – 2015, Annual month-long research cruises in the Chukchi and Beaufort Seas
- RV L.M. Gould: 2014 – 2017, (4) month-long research cruises to the Western Antarctic Peninsula
- RV N.B. Palmer: 2016, One 6-week research cruise to the Western Antarctic Peninsula