

Clifford R. Merz, PhD, PE

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PROFESSIONAL QUALIFICATIONS

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| Florida Atlantic University | Ocean Engineering | BS, 1984 |
| University of Connecticut, Avery Point | Ocean Engineering | MS, 1986 |
| Florida Atlantic University | Civil/Water Resource Engineering | MS, 1995 |
| University of South Florida | Desalination Technology and Engineering | GC, 2003 |
| University of South Florida | Engineering Science/Electrical Engineering | PhD, 2008 |

APPOINTMENTS

- **1998 – Present. Senior Research Faculty Ocean Engineer**, University of South Florida/College of Marine Science, St. Petersburg, FL. Coastal Ocean Monitoring and Prediction System (COMPS) Program <http://comps.marine.usf.edu> and High Frequency Radar (HFR) Operations Director.
- **2012 – Present. Elected 4-term City Commissioner (Vice-Mayor)**, City of Safety Harbor, FL. Elected 2012 - 2021. Policy and budget decisions for 17,000+ residents and ~ \$84 million budget.
- **2003 – Present. Founder and President of Diallytics, Inc.**, Safety Harbor, FL. A small business technology company focused on water/food/energy nexus solutions. Website: www.diallytics.com.
- **1988 – 1998. Assistant Technical Director**, ManTech Advanced Systems International, Incorporated/Applied Measurement Systems International (AMSI); Hollywood, FL. Underwater acoustic analysis and at-sea testing of Naval towed array active and passive sonar systems.
- **1986 - 1988. Senior Analytical Engineer, Pratt Whitney (PW), Mature Engines Group**; West Palm Beach, FL. Structural analysis of rotational and static aircraft engine hardware.
- **1984 - 1986 General Dynamics Corporation/Electric Boat Division, Naval Architecture Group**; Ocean Engineer – Groton, Ct. Submarine hydrodynamics, hydrostatics, and hydro-acoustics.

RESEARCH ACTIVITIES

- **Author and investigator (Principal [PI] and Co-PI) of competitive research grants and fundraising events conducted during academia and the private sector totaling \$4.1M (\$2.34M as Lead PI):**
 - ✓ [1] PI - National Science Foundation (NSF) Innovation Corps (I-CORPS) 2022 USF Site sub-grant - \$3,000
 - ✓ [1] PI - National Academy of Science, Engineering, and Medicine (NASEM) - \$1,371,027
 - ✓ [1] Co-PI – ONR Defense University Research Instrumentation (DURIP) Program - \$150,000
 - ✓ [4] PI - Florida’s Emergency Management & Preparedness Trust Fund [EMPATF] Grants - \$664,826
 - ✓ [12] PI and Co-PI - NOAA/SECOORA IOOS Grants for COMPS HF Radar Stations - \$1,342,076
 - ✓ [9] PI and Co-PI NOAA/SECOORA IOOS Grant for COMPS Coastal Tidal Weather Stations - \$430,701
 - ✓ [4] PI - COMPS O&M contributions from various agencies/stakeholder groups - \$13,000 total
 - ✓ [2] PI - Small Business Innovation Research (SBIR) Phase I - \$149,026 (DARPA [1994], NAVSEA [1989])

SYNERGESTIC ACTIVITIES

- **Fellow Member (2022): NSF I-Corps Fall Cohort PI lead for team #3: Chitosan based antimicrobial and antiviral hemostatic wound dressings for emergency wound biomedical needs.** Competitively selected public-private partnership boot camp program providing university entrepreneurs a targeted curriculum identifying valuable emerging product opportunities from academic research and provide entrepreneurship training.
- **Senior Member (2020): National Academy of Inventors (NAI) recognition of contributions pertaining to marine-based renewable energy technologies and related inventions.**

- **Presenter (2019):** 25th North American Diatom Symposium (**NADS**) held at the University of Georgia's Rock Eagle 4-H center in Eatonton, Georgia from July 31 – August 4, 2019. Presentation entitled: **Bubble Farming: Scalable Microcosms for Diatom Biofuel Production.**
- **Invited Speaker (2017):** Pinellas County Economic Leadership Symposium. Workforce panel: Preparing for the future.
- **Large-Scale Algal Cultivation, Harvesting and Downstream Processing 5-day Workshop (2017).** ATP³ Arizona Center for Algae Technology and Innovation (AzCATI).
- **Aquaponics Technology and Design 5-day Workshop (2016), and Recirculating Aquaculture Systems (RAS) Technology 3-day Workshop.** Pentair Aquatic Eco-Systems, Apopka, FL.
- **Chairman (2016-Present): Marine Renewable Energy Committee, Marine Technology Society.**
- **President (2015): National Academy of Inventors (NAI) USF Chapter (2011-Present).** Coordination with university and community personnel responsible for technology transfer, workforce development, entrepreneurship, business incubation and community outreach.
- **Certificate in Algae Production (2015),** National Algae Association training program.
- **Business Mentor (Fall 2014): National Science Foundation (NSF) I-CORPS Austin Cohort 1.** Team Title: Software Suite for Quality Control of Patterned Nanostructures.
- **MTS OCEANS 14' (2014) Conference Sustainable Aquaculture Technologies STJ.6.2 Session Chair.**
- **Florida League of Cities (2014) Home Rule Hero Award recipient** – Awarded to “legislators who have showed strong and consistent support of municipal home rule issues”.
- **2-Term Board of Director Member and Treasurer (2007-2013):** Southeast Coastal Ocean Observing Regional Association (**SECOORA**), part of the federal **NOAA U.S. IOOS.**
- **Certificate in Renewable Energy Technology (2010), NSF's Consortium for Education in Renewable Energy Technology (CERET) Program.**
- **Wind Turbine Design, Construction and Maintenance Workshops with Mick Sagrillo (2008),** Midwest Renewable Energy Association (MREA), Stevens Point, WI.
- **Biodiesel & Veggie Oil Fuels Workshop (2006),** MREA, Madison, WI.
- **Utility Grid-tied 10KW Wind Turbine Hands-on Installation Workshop (2005),** MREA, Merrill, WI.
- **3.6KW Photovoltaic Grid-tied System Hands-on Installation Workshop (2004),** MREA, Evanston, IL.
- **Desalination Technology and Engineering Graduate Certificate (2003),** USF, Tampa, FL – Dr. Robert P. Carnahan, Program Coordinator. Selected courses include: Membrane Theory and Practice; Pilot Plant Design and Operation; Design of Membrane Desalination Systems.

RELATED PRODUCTS (Publications and Patents) - Google Scholar 7-yr Average = 41.

- Merz, C.R., Arora, N., Welch, M., Lo, E., and Philippidis, G. P., 2023. 'Microalgal cultivation characteristics using commercially available air-cushion packaging material as a photobioreactor'. *Scientific Reports*, **13**, 3792. <https://doi.org/10.1038/s41598-023-30080-6>.
- Merz C.R., Liu Y., Weisberg R.H., 2021. 'Sea surface current mapping with HF radar – A primer'. Chapter 4 in *Ocean Remote Sensing Technologies: High Frequency, Marine and GNSS- Based Radar*, IET, E. Gill and W. Huang (eds.), pp. 95-116. https://doi.org/10.1049/SBRA537E_ch4.
- Liu Y., Merz C.R., Weisberg R.H., Shay, L.K., Glenn, S., and Smith, M., 2021. 'An initial evaluation of high- frequency radar radial currents in the Straits of Florida in comparison with altimetry and model products'. Chapter 5 in *Ocean Remote Sensing Technologies: High Frequency, Marine and GNSS- Based Radar*, IET, E. Gill and W. Huang (eds.), pp. 117-144. https://doi.org/10.1049/SBRA537E_ch5.
- Smith, M; Glenn, S; Merz, C.R.; Liu, Y; Weisberg, R; Shay, L; Howden, S; Knap, A., 2021. 'A Unified Approach to HF Radar Radial Quality Control for Understanding Gulf Ocean Systems'. MTS/IEEE OCEANS 2021 - San Diego, CA, <https://doi.org/10.23919/OCEANS44145.2021.9705910>.
- Merz, C.R., 2019 – **Patent Application.** Chitosan Based Membrane and Associated Method of Use.
- Merz, C.R., 2019: Physicochemical and Colligative Investigation of Alpha (Shrimp Shell) and Beta (Squid Pen) Chitosan Membranes: Concentration Gradient Driven Water Flux and Ion Transport for Salinity Gradient Power and Separation Process Operations. *ACS Omega*, **4**, pp. 21027-21040, doi: 10.1021/acsomega.9b02357.

- Gordon, R., Merz, C.R., Gurke, S. and Schoefs, B., 2019. Bubble farming: Scalable microcosms for diatom biofuel and the next Green Revolution. Chapter 22 of *Diatoms: Fundamentals & Applications* [DIFA, Volume 1 in the series: Diatoms: Biology & Applications, series editors: Richard Gordon & Joseph Seckbach]. J. Seckbach and R. Gordon, Wiley-Scrivener, Beverly, MA, USA: 583-654, doi:10.1002/9781119370741.ch22.
- Liu, Y., Merz, C.R., Weisberg, R.H., O'Loughlin, B.K. and Subramanian, V., 2018. "Data return aspects of CODAR and WERA high frequency radars in mapping currents." *Observing the Oceans in Real Time*, edited by Venkatesan et al., Springer, pp. 227-241.
- Merz, C.R., Main, K.L., 2017. Microalgae Bioproduction – Feeds, Foods, Nutraceuticals, and Polymers. Chapter 5 of *Fuels, Chemicals and Materials from the Oceans and Aquatic Sources*, pp. 84-112. Eds. Kerton, F.M., Yan, N., John Wiley & Sons Ltd., doi: 10.1002/9781119117193.ch5.
- Liu, Y., Merz, C.R., Weisberg, R.H., O'Loughlin, B.K. and Subramanian, V., 2017, Data return aspects of CODAR and WERA HFRs in mapping currents, in *Observing the Oceans in Real Time*, edited by Venkatesan et al., Springer, 227-241, http://dx.doi.org/10.1007/978-3-319-66493-4_11.
- Merz, C.R., Liu, Y., Gurgel, K.-W., Petersen, L., Weisberg, R.H., 2015. Effect of Radio Frequency Interference Noise Energy on WERA HF Radar Performance Using the 'Listen Before Talk' Adaptive Noise Procedure on the West Florida Shelf. *Coastal Ocean Observing Systems: Advances and Syntheses*. Elsevier, doi:10.1016/B978-0-12-802022-7.00013-4.
- Merz, C.R., Main, K.L. (2014) Microalgae (diatom) Production - The aquaculture and biofuel nexus. Oceans'14 MTS/IEEE Conference proceedings - IEEE Xplore, St. Johns, Newfoundland, Canada, doi: 10.1109/OCEANS.2014.7003242.
- Dzvonkovskaya, A., Merz, C.R., Liu, Y., Weisberg, R.H., Helzel, T., Petersen, L., 2014: Initial surface current measurements on the West Florida shelf using WERA HF ocean radar with multiple input multiple output (MIMO) synthetic aperture. *Oceans'14 MTS/IEEE Conference proceedings - Xplore*, St. Johns, Newfoundland, Canada, doi:10.1109/OCEANS.2014.7003235.
- Dzvonkovskaya, A., Merz, C.R., Helzel, T., Liu, Y., Weisberg, R.H., 2014: Initial results of ship detection and tracking using WERA HF ocean radar with MIMO configuration. *Radar Symposium (IRS), 15th International - Xplore*, Gdansk, Poland, doi:10.1109/IRS.2014.6869265.
- Gomez, R., Merz, C.R., Helzel, T., Liu, Y., Petersen, L., Weisberg, R.H., Kniephoff, M., 2014. Real-time quality control of current velocity data on individual grid cells in WERA HF radar. *Oceans'14 MTS/IEEE Conference proceedings - Xplore*, Taiwan, doi:10.1109/OCEANS-TAIPEI.2014.6964502.
- Liu, Y., Weisberg, R. H., and Merz, C.R., 2014: Assessment of CODAR Seasonde and WERA HF Radars in Mapping Surface Currents on the West Florida Shelf. *J. Atmos. Oceanic Technol.*, **31**, pp. 1363–1382, doi:10.1175/JTECH-D-13-00107.1.
- Merz, C.R., 2013. Consideration of a Variable Frequency Energy Conversion System for Marine and Onshore Wind Energy Extraction. *Marine Technology Society Journal*, Volume 47, Number 4, pp. 218-225, doi: <http://dx.doi.org/10.4031/MTSJ.47.4.11>.
- Merz, C.R., Weisberg, R.H., Liu, Y., 2012. Evolution of the USF/CMS CODAR and WERA HF Radar Network. *Oceans'12 MTS/IEEE Conference proceedings - Xplore*, Hampton Roads, VA, doi:10.1109/OCEANS.2012.6404947.
- Weisberg, R. H., Liu, Y., Merz, C.R., Virmani, J., Zheng, L. 2012: A Critique of Alternative Power Generation for Florida by Mechanical and Solar Means. *Marine Technology Society Journal*, Volume 46, Number 5, pp. 12-23, doi: <http://dx.doi.org/10.4031/MTSJ.46.5.1>.
- Merz, C.R., Moreno, W., Barger, M., Lipka, S. M., 2010. Salinity Gradient Power (SGP): A Developmental Roadmap Covering Existing Generation Technologies and Recent Investigative Results into The Feasibility of Bipolar Membrane-Based Salinity Gradient Power Generation. *Cognizant Communication Corporation - Technology and Innovation*, 14(3/4), pp. 249-275, doi: 10.3727/194982412X13500042168857.
- Merz, C.R., 2010: **US Patent 7,736,791 B1**, Diallytic Power Generation Using Diffusion Gradients.

- Liu, Y., Weisberg, R.H., Merz, C.R., Lichtenwalner, S., Kirkpatrick, G.J., 2010: HF Radar Performance in a Low-Energy Environment: CODAR Seasoned Experience on the West Florida Shelf. *J. Atmos. Oceanic Technol.*, **27**, pp. 1689–1710, doi:10.1175/2010JTECHO720.1.
- Merz, C.R., 2008. Investigation and Evaluation of a Membrane Based Seawater Concentration Cell and Its Suitability as a Low Power Energy Source for Energy Harvesting/MEMS Devices, University of South Florida PhD Manuscript, Copyright December 2008.
- Hudon, A.L., Moulton, E.L., Luther, M.E., Gilbert, S., Scudder, J., Merz, C.R., 2008. The Watershed Watchers Program: A Collaborative Effort to Integrate Ocean Observing Data into a K-5 Marine Science Curriculum. *Ocean Sciences*.
- Merz, C.R., Weisberg, R.H., Smith, P., Law, J., Cole, R.D., Donovan, J., Tilbury, G., Lembke, C., Myhre, D., 2007. Development of a Self-Contained, Satellite Based, Moored Surface Buoy Position Tracking Device. MTS/IEEE Oceans 2007 Conference Proceedings, doi: 10.1109/OCEANS.2007.4449363.
- Luther, M., Merz, C.R., Scudder, J., Baig, S.R., Pralgo, J., Thompson, D., Gill, S., Hovis, G., 2007. Water Level Observations for Storm Surge. *Journal of the Marine Technology Society*, **41(1)**, pp. 35-43, doi: 10.4031/002533207787442277.
- Kelly, F.J., Bonner, J.S., Perez, J. C., Adams, J.S., Prouty, D., Trujillo, D., Weisberg, R.H., Luther, M.E., R He, R., Cole, R., Donovan, J., Merz, C.R., 2002: An HF-radar test deployment amidst an ADCP array on the West Florida Shelf. *Oceans'02 MTS/IEEE Conference proceedings - IEEE Xplore*, **2**, pp. 692 - 698, doi:10.1109/OCEANS.2002.1192053.
- Merz, C.R. (2001). An Overview of the Coastal Ocean Monitoring and Prediction System (COMPS). *Oceans'01 MTS/IEEE Conference proceedings - IEEE Xplore*, Honolulu, HI, **2**, pp. 1183-1187, doi:10.1109/OCEANS.2001.968281.
- Merz, C.R., August 27, 1998. TOTA 96, 97, and June 98 Low Frequency Tonal Analysis Summary Report, AMSI, Hollywood, FL, TM-989.
- Merz, C.R., August 12, 1998. BAR 51 Channel Low Frequency Array Factory Acceptance Test and NUWC/LEFAC Calibration Summary Test Report, AMSI, Hollywood, FL, TM-985.
- Deus, A. L., Ames, G., Dandridge, A., Kirkendall, C., Tveten, A., Hauptman, R. O., Merz, C.R., Brooks, L., April 1998. Thin Optical Towed Array (TOTA96) LPO Test Report (U), NUWC-NPT TR 10908, New London, CT, (Confidential).
- Merz, C.R., March 1998. TB-16/BQ Le Dip: Off-Line Processing of TB-16/BQ Array Data Recorded Onboard the USS BUFFALO in September 1996, AMSI, Hollywood, FL, TMS-984, (Secret).
- Merz, C.R., March 1998. BAR 51 Channel Low Frequency Array (LFA) NUWC/LEFAC Calibration Test Plan, AMSI, Hollywood, FL, TP-982.
- Monjo, C. L., Schapley, R. F., Merz, C.R., January 1998. TB-16 UHF ADM Interim Technical Report, AMSI, Hollywood, FL, TM-980.
- Zimmerman, W. C., and Merz, C.R., December 1997. TB-16 UHF ADM System/Segment Specification - Topic N95-054 Item Specification, AMSI, Hollywood, FL, TM-978.
- Merz, C.R., November 1997. R/V CHINOOK Masker Acoustic Performance, Letter 613:41: CRM to Mr. Steve Finley dated 20 November 1997, (Confidential).
- Merz, C.R., and Douglass, B. L., October 1997. Transfer Function Measurement Results for TB-16/23 Array Module Test Set [AMTS] (U), AMSI, Hollywood, FL, TMC-977 (Confidential).
- Merz, C.R., and Douglass, B. L., October 1997. Lightweight Tow Cable and TB-23/BQ Array Evaluation Aboard USS Topeka (SSN 754) (U), AMSI, Hollywood, FL, TMS-976, (Secret).
- Rubin, F. A., Merz, C.R., and Douglass, B. L., August 1997. Quick Look Report of TB-23/BQ Towed Line Array Acoustic Evaluations at Lake Pend Oreille (LPO), ID (U), NUWC, Newport, RI, TM No. 972133, (Confidential).
- Galvin, L. and Merz, C.R., August 1997. TB-16E/F Telemetry Compatibility Test Results (U), NSWCCD-SIG-97/C97/236-7320, NSWC, West Bethesda, MD, (Confidential).
- Merz, C.R., August 1997. DBAR LFA Preliminary Design Review Trip Report, AMSI, TR-974.
- Merz, C.R., May 1997. Requirement for Proposal Beamforming Acoustic Recording System (BARS) Low Frequency Array (LFA), AMSI, Hollywood, FL, AMSI-970.

- Merz, C.R., May 1997. Nautronix 23 Channel Vertical Line Array - Factory Acceptance Test and NUWC/LEFAC Calibration Summary Test Report, AMSI, Hollywood, FL, TM-969.
- Hepp, J. S. and Merz, C.R., March 1997. Nautronix 23 Channel Measurement Array Factory Acceptance Test Plan, AMSI, Hollywood, FL, TP-963.
- Merz, C.R., March 1997. TB-23/BQ Long HF November 96 LPO Test Result Summary - Follow-on Investigation, Letter 597:15: CRM to Mr. Frank Rubin dated 18 March 1997, (Confidential).
- Merz, C.R., January 1997. High Frequency Array 2 Channel Test Module NUWC/LEFAC Calibration Quick Look Test Report, AMSI, Hollywood, FL, TM-959.
- Merz, C.R., January 1997. High Frequency Array 2 Channel Test Module Calibration Test Plan, AMSI, Hollywood, FL, TP-955.
- Merz, C.R., January 1997. TB-23/BQ Long HF November 96 LPO Test Result Summary, Letter 597:01: CRM to Mr. Frank Rubin dated 13 January 1997, (Confidential).
- Safford, R. E, Hauptman, R. O., Merz, C.R., Greenberg, S., August 1996. TB-16F/BQ (SN 003) LPO Tow Test Report, October 1995 (U), NUWC, New London, CT, TM No 951129 (Confidential).
- Merz, C.R. and Scarlatos, P. D., June 1996. Sedimentation Dynamics of Tidal Inlets, *Paper presented on June 28, 1996 at The American Society of Engineers, North American Water and Environment Congress 96'*, Anaheim, CA, pp-4377-4382. ASCE, 978-0-7844-0166-8 or 0-7844-0166-7.
- Guarrasi, J. R., Merz, C.R., and Douglass, B. L., May 1996. Summary Report of the TB-29/BQ S/N 01 Electronic and Coherent Noise Test (U), NUWC, New London, CT, TM No. 961045 (Confidential).
- Douglass, B. L. and Merz, C.R., February 1996. Submarine Low Cost Littoral Water Sonar Passive Localization System, Phase I Final Technical Report (U). AMSI, Hollywood, FL, TRC-865 (Confidential).
- Merz, C.R., December 1995. Sediment Exchange in Tidal Inlets. Civil Engineering Department Master's Thesis, Florida Atlantic University, Boca Raton, FL. <http://purl.flvc.org/fcla/dt/15206>.
- Merz, C.R., November 1995, S/N 533 October 1995 LPO Self-Noise Test Results, Letter 558:25: CRM to Mr. Frank Figdore dated 08 November 1995, (Confidential).
- Merz, C.R., May 1995. Quick Look Report TB-29/BQ LEFAC MET Acoustic Module Calibration (U), NUWC, New London, CT, TM No. 951035 (Confidential).
- Merz, C.R. and Cichock, J. A., April 1995. TB-29/BQ MET Acoustic Module Calibration Trip Report, AMSI, Hollywood, FL, TR-837 (Confidential).
- Merz, C.R., *et al.*, March 1995. LCAC Radiated Noise Sea Trial Operations Report, AMSI, TR-832.
- Merz, C.R. and Zimmerman, W. C., September, 1994. Dolphin Sonar Transducer and Array Final Technical Report, AMSI, Hollywood, FL, TM-808.
- Briggs, D.A., Douglass, B. L., and Merz, C.R., August, 1994. Engineering Review of a Two Element Acoustic Array, in Support of Nautronix Contract Amendment Proposal (CAP) to the Commonwealth of Australia", AMSI, Hollywood, FL, TM-812.
- Merz, C.R., February 1994. TB-23/BQ Pendant Cable Adapter Titanium/Polyurethane Peel Test Plan, AMSI, Hollywood, FL, TM-753.
- Merz, C.R., *et al.*, February 1994. ATAMS Acoustic Calibration Test Plan, AMSI, TM-694.
- Merz, C.R. and Cichock, J. A., February 1993. LSV Preliminary Thermal Analysis, AMSI, TM-681.
- Merz, C.R., January 1993. Prototype VLF Hydrophone Factory Acceptance and Acoustic Calibration Test Results, AMSI, Hollywood, FL, TM-668.
- Bockstege, J. A., Merz, C.R. and Kordes, P.H.H., January 1993. ATAMS Factory Acceptance Testing Procedural Document, AMSI, Hollywood, FL, TM-655.
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- Merz, C.R., October 1992. ATAMS Array Directionality Performance Vs Allowable Hydrophone Spacing Tolerances, AMSI, Hollywood, FL, TM-629.
- Merz, C.R., September 1992. AMFIP Towed Array Measurement System Array Directionality Performance Verses Buoyancy Induced Depth Variations, AMSI, Hollywood, FL, TM-614.
- Merz, C.R., March 1992. AMFIP Towed Array Measurement System (ATAMS) Light/Heavy Towcable Specification, AMSI, Hollywood, FL, TM-572.

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- Merz, C.R., February 1992. AMFIP Towed Array Measurement System (ATAMS) Lake Pend Oreille Test Module Towing Profile, AMSI, Hollywood, FL, TM-578.
- Merz, C.R., November 1991. LSV Analytical Study of a Precipitate Found on an Insulated Accelerometer Mounting Stud, AMSI, Hollywood, FL, TM-555.
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- Merz, C.R., July 1991. AMFIP Towed Array Measurement System (ATAMS) Beacon/WQC Conceptual Design, AMSI, Hollywood, FL, TM-533.
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- Merz, C.R., April 1991. ATAMS Electro/Optical Tow Cable Functional Design Report, AMSI, TM-511.
- Merz, C.R., March 1991. ATAMS Electro/Optical Tow Cable Trip Report #2 - Meetings Held at Consolidated Products Corporation /Tension Member Technology, AMSI, Hollywood, FL, TM-500.
- Merz, C.R., February 1991. ATAMS Electro/Optical Tow Cable Trip Report - Meetings Held at Rochester Cable Company /the Naval Coastal Systems Center", AMSI, Hollywood, FL, TM-491.
- Cichock, J. A., Merz, C.R. and Douglass, B. L., December 1990. Stern Aspect Radiated-Noise Evaluation of DTRC/ARD 36-Foot LCP (U), AMSI, Hollywood, FL, TMC-494 (Confidential).
- Merz, C.R. and Cichock, J. A., December 1990. SEAFAC IHDA Beamformer PVC Pressure Vessel Preliminary Thermal and Stress Analysis, AMSI, Hollywood, FL, TM-479.
- Merz, C.R., September 1990. Hull Potential Measurement System SBIR Phase I Feasibility Study, AMSI, Hollywood, FL, TM-448.
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- Dewsnap, R. C., Merz, C.R., April 1990. IHDA-Upgrade Feasibility Study, AMSI, TM-423.
- Zimmerman, W. C., Merz, C.R., March 1990. Variable Pressure Water Tunnel Evaluation Test Plan, AMSI, Hollywood, FL, TM-417.
- Merz, C.R. and Hayman, D.P., November 1989. TB-23/BQ SN 036 Electronic Noise Floor and Acoustical Calibration Testing, NRL/USRD, LEFAC (U), AMSI, Hollywood, FL, TM-389 (Confidential).
- Bullwinkel, P.E. and Merz, C.R., October 1989. BHAR Towed Array Hose Transfer Function: A Re-Evaluation (U), AMSI, Hollywood, FL, TM-381 (Confidential).
- Merz, C.R. and Cichock, J.A., October 1989. SN5 Modified AMTS Qualification Test (U), AMSI, Hollywood, FL, TMC-361 (Confidential).
- Merz, C.R. and Douglass, B.L., September 1989. TB-23A/BQ Experimental IR&D Thinline Module (Gould-OSD-SN XN9) and Vibration Isolation Module (VIM) Evaluation (U), NUWC, New London, CT, TM 89-1196 (Confidential).
- Merz, C.R. and Douglass, B.L., June 1989. Quick Look Report TB-23/BQ Vibration Isolation Module and STAR 200 Hose Cold Water Evaluation (U), NUWC, New London, CT, TM 89-1109 (Confidential).
- Merz, C.R. and Douglass, B.L., May 1989. TB-23/BQ SN 026 Background Noise and Acoustical Calibration Testing at NRL/USRD, LEFAC (U), AMSI, Hollywood, FL, TM 340 (Confidential).
- Cichock, J. A., Merz, C.R. and Douglass, B. L., January 1989. TB-23/BQ Block Upgrade VIM Tests Onboard R/V ATHENA Sea Trial 88-15 (U), AMSI, Hollywood, FL, TMC-318 (Confidential).
- Merz, C.R. and Davis, A. F., September 1987. J52 #4 Rear Hub Low Cycle Fatigue Life Analysis, Pratt and Whitney, West Palm Beach, FL, FTDM 2715.
- Merz, C.R. and Davis, A. F., June 1987. J52-P6 Redesign 12th Stage HPC Disk Low Cycle Fatigue Analysis of Snap Fillets, Pratt and Whitney, West Palm Beach, FL, FTDM 2500 Rev A.