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Education

National Research Council Postdoctoral Fellow, United States Air Force School of Aerospace Medicine, 1983-1985

Doctor of Philosophy (Ph.D.), Behavioral Science, The University of Texas, School of Public Health, Houston, TX, 1982; Chairman: George Kerr, M.D. Dissertation research funded by The Ford Foundation. Title: Lewis, N.L., "Arousal, Fatigue, and Mental Performance: The Effects of Fasting on Cognition", The University of Texas, School of Public Health, Health Science Center at Houston, Houston, TX, 1982. Advisor: Ernesto Pollitt, Ph.D.

U.S. Public Health Service Trainee, The University of Texas, School of Public Health, 1978-1980

Master of Education (M.Ed.), Stephen F. Austin State University, Nacogdoches, TX, 1977

Bachelor of Science (B.S.), Biology and English majors; Stephen F. Austin State University, Nacogdoches, TX, 1975

Work Experience

Present Position: Professor, Naval Postgraduate School

May 2006 to April 2017: Associate Professor, Naval Postgraduate School (NPS)

Director of the Human Systems Integration Laboratory (HSIL). Human Factors Option Advisor for the Operations Research curriculum. Course coordinator for OA3401, OA3402, OA3413 and OA4401; teach courses in human factors engineering, individual and team performance, and human systems integration. Supervise NPS student thesis projects. Served as Co-Director of the Human Systems Integration program. Joint faculty appointments in Systems Engineering and MOVES Institute. Advisor to the Chief of Naval Operations Strategic Studies Group for 2005, 2006, 2007, 2008, 2009, 2011, 2013. Member of the Transportation Research Board of the National Academies Committee on Marine Safety and Human Factors (appointment 4-2011 to 4-2014).

2000--2005: Research Assistant Professor, Naval Postgraduate School (NPS)

Developed curriculum and course material for graduate courses in human factors and human systems integration. Supervised student thesis research. Director of the Human Systems Integration Laboratory (HSIL). Human Factors Option Advisor for the Operations Research curriculum. In 2003, founded the resident Masters Degree program in Human Systems

Integration and served as Academic Associate for the Resident Masters Degree program in Human Systems Integration at NPS.

1995 to 1997: Principal Staff Member/Human Factors Scientist, Veda, Inc.

Principal investigator of US Navy project to evaluate in-flight fires and wiring discrepancies in the E-2C Hawkeye aircraft. Worked with Navy engineers and the SAS Institute to finalize recommendations based on reported failure rates. Study coordinator and human factors lead for F-14D Theater Ballistic Missile Boost Phase Intercept Project. Responsible for measuring aircrew mental workload and aircrew performance in flight and in human-in-the-loop simulations.

1987 to 1989: Engineering Psychologist, Aircrew Systems Department, Systems Engineering Test Directorate, Naval Air Test Center, Patuxent River, MD

Developed techniques for in-flight physiological monitoring of aircrew. Designed study to assess the effect of thermal stress on Gz tolerance. Consultant to the Israeli Air Force on +Gz-induced Loss of Consciousness (G-LOC) monitoring systems for in-flight applications.

1985 to 1987: Research Psychologist, Crew Technology Division, United States Air Force School of Aerospace Medicine, Brooks AFB, TX

Principal investigator in studies of human performance during exposure to acceleration, hypoxia and spatial disorientation using electrophysiological measures (e.g., EEG, EOG, EMG) as indicators of state of consciousness. Directed contractual efforts to obtain centrifuge and in-flight recording and analysis capability of electrophysiological signals from aircrew. Measured human cognitive performance and electrophysiological changes during exposure to lower body negative pressure (ischemic hypoxia). Participated in fatigue countermeasures program that assessed EEG and performance changes associated with pharmacological sleep intervention (temazepam).

1983 to 1985: Postdoctoral Research Fellow, National Research Council, assigned to United States Air Force School of Aerospace Medicine, Neurosciences Function, Clinical Sciences Division, Brooks AFB, TX

As a neuroscience research fellow and as part of the USAF Pilot Attributes Program, designed and implemented a study of visual target acquisition and tracking. Study included quantitative measures of human eye movements, including saccadic velocities. Analyzed data from manual tracking task collected in zero-G environment from astronauts during NASA Shuttle missions.

Research Interests

- Fatigue, sleep, and circadian rhythms
- Human performance (individual and team)
- Human systems integration (to include the domains of manpower, personnel, training, human factors, habitability, safety, survivability and occupational health)
- Situation awareness and situated cognition
- Decision making and mental workload

Honors and Awards

- Received the Distinguished Civilian Service award, June 2018. The [citation](#) reads in part: "She is a nationally recognized and highly respected expert in the fields of sleep, fatigue, and crew endurance." ([medal](#))
- My research contributions were recognized by ADM John Richardson as Chief of Naval Operations during his NPS Summer 2016 Graduation Commencement address.
- Recipient of the 2013 Surface Navy Association Literary Award, which recognizes the best professional article in any publication addressing Surface Navy or Surface Warfare issues
- Recipient of the 2007 'Jimmie' Hamilton Award from the American Society of Naval Engineers (ASNE) for Best Paper for 2007
- Recipient of the Roland Calori Award for Best Paper for the years 2006-2007 in the Organizational Studies Journal
- Recipient of the 2006 Gary F. Wheatley Award for Best Paper from the International Command and Control Research and Technology
- Interviewed and quoted multiple times by various news outlets (e.g., Navy Times Huffington Post) for various articles on alternative watchbills for US Navy Sailors.
- Outstanding Civilian Performance Award, U.S. Air Force, 1987.
- National Research Council Postdoctoral Fellow, 1983-1985.
- Vice President, Board of Directors, Houston Area Women's Center, Inc., 1978-1979.
- U.S. Public Health Service Trainee, The University of Texas, School of Public Health, 1978-1980.
- Outstanding Student Award, Stephen F. Austin State University, 1976-1977.
- Lovenia Perry Scholarship, Stephen F. Austin State University, 1975-1976.

Professional Organizations

Aerospace Medical Association
 American Society of Naval Engineers
 Department of Defense Human Factors Engineering Technical Advisory Group
 Human Factors and Ergonomics Society
 Sleep Research Society
 Surface Navy Association
 Working Time Society

Publications

Chapters in Books

Shattuck, N.L., Matsangas, P., Mysliwiec, V., and Creamer, J.L. (2019). "The Role of sleep in human performance and well-being" in Schnyer, D. & Matthews, M.D. (Eds.), *Human Performance Optimization: The Science and Ethics of Enhancing Human Capabilities*. Oxford University Press, New York.

Shattuck, N.L., and Matsangas, P. (2018). "Sleep and fatigue issues in military operations" in Vermetten, E., Germain, D. & Neylan, T. (Eds.), *Sleep and combat related PTSD*. Springer.

Drillings, M., Knapp, B., and Shattuck, N.L., (2015). "[Human Systems Integration in the military](#)," in D. Boehm-Davis, Durso, Lee, (Eds) *The APA Handbook of Human Systems Integration*. Washington, DC: American Psychological Association. 37-52.

Miller, N.L., Matsangas, P. and Kenney, A. (2012). "[The role of sleep in the military: Implications for training and operational effectiveness](#)," in M. Matthews and J. Laurence (Eds.) *Oxford Handbook of Military Psychology*. New York: Oxford University Press. 262-281.

Miller, N.L., Matsangas, P. and Shattuck, L.G. (2007). "[Fatigue and its effect on performance in military environments](#)," in P.A. Hancock and J.L. Szalma (Eds.), *Performance Under Stress*. Mahwah, NJ: Ashgate Publications. 231-250.

Miller, N.L., Crowson, J.J., and Narkevicius, J.M. (2003). "[Human characteristics and measures in systems design](#)," in H.R. Booher (Ed.), *Handbook of Human Systems Integration*. New York: John Wiley and Sons. 699-742.

Refereed Journal Papers

Shattuck, N.L. and Matsangas, P. (2017). [Sunlight exposure, work hours, caffeine consumption, and sleep duration in an operational naval environment](#). *Aerospace Medicine and Human Performance*, 88(6), 579-585. Doi: 10.3357/AMHP.4721.2017.

Matsangas, P., Shattuck, N.L., and Brown, S. (2017). [Preliminary validation study of the 3-minute wrist-worn psychomotor vigilance test](#). *Behavioral Research Methods*, 49(5), 1792-1801. Doi:10.3758/s13428-016-0821-2.

Matsangas, P. and Shattuck, N.L. (2016). [Differentiating between fatigue and sleepiness in the naval operational environment](#). *Behavioral Sleep Medicine*.

Shattuck, N.L., Matsangas, P., Moore, J., and Wegemann, L. (2016). "[Prevalence of musculoskeletal symptoms, excessive daytime sleepiness and fatigue in the crewmembers of a U.S. Navy ship](#)." *Military Medicine*, 181(7), 655-62.

Shattuck, N.L., and Matsangas, P. (2015). "[Psychomotor Vigilance Performance Predicted by Epworth Sleepiness Scale Scores in an Operational Setting with the United States Navy](#)." *Journal of Sleep Research*, 24(2), 174-180.

Skornyakov, E., Shattuck, N.L., Winser, M.A., Matsangas, P., Sparrow, A.R., Layton, M.E., Gabehart, R.J., Van Dongen, H.P.A. (2015). "[Sleep and performance in simulated Navy watch schedules](#)," *Accident Analysis & Prevention*. doi: 10.1016/j.aap.2015.11.021.

Shattuck, N.L., and Matsangas, P. (2015). "[A 6-month assessment of sleep during naval deployment: A case study of a Commanding Officer](#)," *Aerospace Medicine and Human Performance*. 86(5): 481-485.

Mysliwiec, V., Matsangas, P., Baxter, T. and Shattuck, N.L. (2015). "[An unusual circadian rhythm in an active duty service member](#)," *Sleep and Biological Rhythms*, 14(1), 113-115.

Shattuck, N.L., Matsangas, P., Eriksen, E. and Kulubis, S. (2015). "[Comparison of two watch schedules for personnel at the White House Military Office President's Emergency Operations Center](#)," *Human Factors*, 57(5): 864-878.

Shattuck, N.L. and Matsangas, P. (2015). "[Operational assessment of the 5-h on/10-h off watchstanding schedule on a US Navy ship: Sleep patterns, mood, and psychomotor vigilance performance of crewmembers in the nuclear reactor department](#)," *Ergonomics*. doi: 10.1080/00140139.2015.1073794.

Shattuck, N.L., and Matsangas, P. (2015). "[Psychomotor vigilance performance predicted by Epworth Sleepiness Scale scores in an operational setting with the United States Navy](#)," Journal of Sleep Research, 24(2): 174-180.

Matsangas, P., Shattuck, N.L. and McCauley, M.E. (2015). "[Sleep duration in rough sea conditions](#)." Aerospace Medicine and Human Performance, 86(10), 901-906.

Cordle, J. and Shattuck, N.L.(2013). "[A Sea Change in Standing Watch](#)", United States Naval Institute Proceedings, January 2013:139 (1): 34-39. This article won the Surface Navy Association Literary Award for 2013. The SNA Literary Award recognizes the best professional article in any publication addressing Surface Navy or surface warfare issues.

Shattuck N.L.; Brown SAT. (2013). "[Wounded in action: what the sleep community can learn from sleep disorders of US military service members](#)," SLEEP 36(2):159–160.

Miller, N.L., Shattuck, L.G., and Tvaryanas, A.P., (2012). "[Accommodating adolescent sleep-wake patterns: The effects of shifting the timing of sleep on training effectiveness](#)," SLEEP 35(8):1123-1136.

Miller N.L., Shattuck, L.G., and Matsangas, P. (2011). "[Sleep and fatigue issues in continuous operations: A survey of US Army officers](#)," Behavioral Sleep Medicine: 9(1):53-65.

Miller N.L., Shattuck, L.G. Matsangas, P. (2010). "[Longitudinal study of sleep patterns of United States Military Academy cadets](#)," SLEEP: 33(12):1623-1631.

Tvaryanas, A.P., Brown, L., and Miller, N.L. (2009). "[Managing the Human Weapon System: A Vision for an Air Force Human-Performance Doctrine](#)", Air & Space Power Journal, pp. 34-41, Summer 2009.

Miller, N.L., Shattuck, L.G., Matsagas, P. and Dyche, J. (2008). "[Sleep and academic performance in U.S. military training and education programs](#)." International Mind, Brain and Education Society. 2(1): 29-33.

Miller, N.L. and Firehammer, R. (2007) "[Avoiding a Second Hollow Force: The Case for Including Crew Endurance Factors in the Afloat Staffing Policies of the U.S. Navy](#)", Naval Engineers Journal, Vol 119:1 pp 83-96, 2007." This paper won the 'Jimmie' Hamilton Award for Best Paper of 2007 from The American Society of Naval Engineers.

Shattuck, L.G. and Miller, N.L. (2006). "[Naturalistic decision making in complex systems: A dynamic model of situated cognition combining technological and human agents](#)," Organizational Behavior: Special Issue on Naturalistic Decision Making in Organizations. 27(7): 989-1009.

Miller, N.L. and Shattuck, L.G. (2005). "[Sleep Patterns of Young Men and Women Enrolled at the United States Military Academy: Results from Year One of a Four Year Longitudinal Study](#)", SLEEP July 2005.

Pollitt, E. and Lewis, N.L., (1980). "Nutrition and educational achievement: I. Malnutrition and behavioral test indicators," Food and Nutrition Bulletin. 2(3):32-35.

Pollitt, E. and Lewis, N.L., (1980). "Nutrition and educational achievement: II. Correlations between nutritional and behavioral test indicators within populations where malnutrition is not a major public health problem," Food and Nutrition Bulletin. 2(3):33-37.

Refereed Conference Papers

Shattuck, N.L., Matsangas, P., and Saitzyk, A. (2018). [Improving Work and Rest Patterns of Military Personnel in Operational Settings with Frequent Unplanned Events](#). Proceedings of the Human Factors and Ergonomics Society Annual Meeting, 62(1), 772-776.

Matsangas, P., and Shattuck, N.L. (2018). [Agreement between the 3-minute Psychomotor Vigilance Task \(PVT\) Embedded in a Wrist-worn Device and the Laptop-based PVT](#). Proceedings of the Human Factors and Ergonomics Society Annual Meeting, 62(1), 666-670.

Sjörs Dahlman, A., Matsangas, P., and Shattuck, N.L. (2017). [The Effect of Habitual Exercise on Daytime Sleepiness and Mood of US Navy Sailors](#). Proceedings of the Human Factors and Ergonomics Society Annual Meeting, 61(1), 522-526.

Ryan, A., Matsangas, P., Anglemyer, A., and Shattuck, N.L. (2017). [Improving Sleep Attributes of Military Personnel in Operational Settings by Controlling Exposure to Blue Light](#). Proceedings of the Human Factors and Ergonomics Society Annual Meeting, 61(1), 906-910.

Matsangas, P., and Shattuck, N.L. (2017). [Exploring Sleep-related Habitability Issues in Berthing Spaces on U.S. Navy Ships](#). Proceedings of the Human Factors and Ergonomics Society Annual Meeting, 61(1), 450-454.

Matsangas, P., Shattuck, N.L., Heinicke, C., and Dunn, J. (2017). [Sleep Patterns in Mission IV of the Hawaii Space Exploration Analog and Simulation \(HI-SEAS\): A Pilot Study](#). Proceedings of the Human Factors and Ergonomics Society Annual Meeting, 61(1), 73-77.

Shattuck, N.L., Shattuck, L.G. & Matsangas, P. (2016). [Combat effectiveness and sleep patterns in US Marines](#). Proceedings of the Human Factors and Ergonomics Society (HFES) 60th Annual Meeting. Washington, D.C.

Shattuck, N.L & Matsangas, P. (2016). [Comparison of the 3/9 and 6/6 watchstanding schedules for crewmembers of a US Navy destroyer](#). Proceedings of the Human Factors and Ergonomics Society (HFES) 60th Annual Meeting. Washington, D.C.

Shattuck, N.L & Matsangas, P. (2015). [Caffeinated beverage consumption rates and reported sleep in a U.S. Navy ship](#). Proceedings of the Human Factors and Ergonomics Society (HFES) 59th Annual Meeting. Los Angeles, CA.

Matsangas, P. & Shattuck, N.L (2015). [The effect of ship department on crew sleep patterns and psychomotor vigilance performance](#). Proceedings of the Human Factors and Ergonomics Society (HFES) 59th Annual Meeting. Los Angeles, CA.

Brown, S., Matsangas, P. & Shattuck, N.L. (2015). [Improved sleep hygiene and psychomotor vigilance performance following crew shift to a circadian-based watch schedule.](#) Proceedings of the Human Factors and Ergonomics Society (HFES) 59th Annual Meeting. Los Angeles, CA. October, 2015.

Shattuck, N.L., Waggoner, L.B., Young, R.L., Smith, C.S., and Matsangas, P. (2014). ["Shiftwork practices in the United States Navy: A study of sleep and performance in watchstanders aboard the USS Jason Dunham."](#) SLEEP 06/2014; 37(Supplement):A78.

Shattuck, N.L., Matsangas, P. and Waggoner L. (2014). ["Assessment of a novel watchstanding schedule on an operational US Navy vessel."](#) Proceedings of the Human Factors and Ergonomics Society (HFES) 58th Annual Meeting. Chicago, IL.

Shattuck, N.L., Shattuck, L.G., Smith, C.S., and Matsangas, P.M. (2013). ["Changes in Reaction Times and Executive Decision-Making following Exposure to Waterborne Motion"](#), Proceedings of the 2013 Annual Human Factors and Ergonomics Society, September-October 2013, San Diego, CA.

Shattuck, N.L., Waggoner, L.B., Young, R.L., Smith, C.S., Brown, S.A.T, and Matsangas, P. (2013). ["Shiftwork Practices in the United States Navy: A Study of Sleep and Performance in Watchstanders aboard the USS JASON DUNHAM"](#) 21st International Symposium on Shiftwork and Working Time, Costa do Sauipe, Brazil, 4 - 8 November 2013.

Shattuck, N.L., Shattuck, L.G., Smith, C.S., and Matsangas, P.M. (2013). ["Changes in reaction times and executive decision-making following exposure to waterborne motion,"](#) Proceedings of the Human Factors and Ergonomics Society (HFES) 57th Annual Meeting. San Diego, CA.

Shattuck, N.L. (2011). "Human systems integration tradeoff analyses: Lessons learned in support of Naval surface acquisitions," Proceedings of the Human Factors and Ergonomics Society (HFES) 55th Annual Meeting. Las Vegas, NV.

Miller, G.A., Miller, N.L., and Shattuck, L.G. (2007). ["Red force interaction in situated cognition,"](#) Proceedings of the 2007 Command and Control Research and Technology Symposium. Newport, RI, June 2007.

Miller, N.L. and Firehammer, R. (2007). ["Avoiding a second hollow force: The case for including crew endurance factors in the afloat staffing policies of the U.S. Navy,"](#) Proceedings of the 2007 Human Systems Integrations Symposium. Annapolis, MD.

Shattuck, L.G., Miller, N.L., and Miller, G.A. (2007). ["Using the dynamic model of situated cognition to assess network centric warfare in field settings,"](#) Proceedings of the 2007 Command and Control Research and Technology Symposium. Newport, RI.

Solberg, B.J., Miller, N.L. and Corriere, M.A. (2007). ["Sleep patterns of Naval aviation personnel conducting mine hunting operations,"](#) Proceedings of the 2007 Human Systems Integrations Symposium. Annapolis, MD.

Miller, N.L. and Shattuck, L.G. (2006). ["A dynamic process model for the design and assessment of network systems,"](#) Proceedings of the 2006 Command and Control Research and Technology Symposium. San Diego, CA.

Miller, N.L. and Shattuck, L.G. (2005). ["Applying a dynamic model of situated cognition to the investigation of mishaps,"](#) Proceedings of the Human Factors and Ergonomics Society's 49th Annual Meeting. Orlando, Florida.

Miller, N.L., Shobe, K., and Shattuck, L.G. (2005). ["Extending the model of situated cognition to submarine command and control,"](#) Proceedings of the 2005 Human Systems Integrations Symposium. Arlington, VA.

Shattuck, L.G. and Miller, N.L. (2004). ["A process tracing approach to the investigation of situated cognition,"](#) Proceedings of the Human Factors and Ergonomics Society's 48th Annual Meeting. New Orleans, LA.

Miller, N.L. and Shattuck, L.G. (2004). ["A process model of situated cognition in military command and control,"](#) Proceedings of the 2004 Command and Control Research and Technology Symposium. San Diego, CA.

Miller, N.L. and Shattuck, L.G. (2004). ["Sleep patterns and the impact on performance: A study of men and women enrolled at the United States Military Academy,"](#) Proceedings of the Human Factors and Ergonomics Society's 48th Annual Meeting, New Orleans, LA, September 2004.

Shattuck, L.G. and Miller, N.L. (2004). ["A process tracing approach to the investigation of situated cognition,"](#) Proceedings of the Human Factors and Ergonomics Society's 48th Annual Meeting. New Orleans, LA, September 2004.

Miller, N.L., Dyche, J., Andrews, C. and Lucas, T. (2004). ["Navy Boot Camp: Test Score Changes After Two Hour Increase in Sleep Time,"](#) Proceedings of the Association of Professional Sleep Societies, Philadelphia, PA, June 2004. Abstract.

Miller, N.L., Shattuck, L.G., Clark, J., Miller, D.B. and Neverosky, D. (2004). ["Sleep Patterns of Incoming Cadets at the United States Military Academy,"](#) Proceedings of the Association of Professional Sleep Societies, Philadelphia, PA, June 2004.

Miller, N.L., Baldus, B.R., Coard, H.F., Sanchez, S., and Redmond, D.R. (2003). ["Timing of the Major Sleep Period as a Fatigue Countermeasure in U.S. Navy Recruits,"](#) Proceedings of the Aerospace Medical Association, May 2003.

Miller, N.L., and Nguyen, J.L. (2003). ["Working the nightshift on the USS STENNIS: Implications for enhancing warfighter effectiveness,"](#) Proceedings of the Human Systems Integration Symposium.

Lewis, N.L., McGovern, J.B., Miller, J.C., Eddy, D.R., and Forster, E.M. (1987). "EEG indices of G-induced loss of consciousness," AGARD-NATO Proceedings. Trondheim, Norway.

Invited Conference Papers

Alfred, P., Caldwell, L., Rice, V., Miller, N., Matsangas, P., Liebermann, H. & Wesensten, N. (2010). ["Sleep across military environments,"](#) *Proceedings of the Human Factors and Ergonomics Society's 54th Annual Meeting*. San Francisco, CA.

Miller, N.L. and Shattuck, L.G. (2005). "Extending the dynamic model of situated cognition to network centric systems," Network Centric Defense Conference 2005: A Challenge for the Hellenic Armed Forces in the 21st Century. Athens, Greece.

Vroulis, G., Smith, R., Largent, J., Loring, D., Wolff, J., and Lewis, N.L., (1982). "Plasma cholinesterase and neuropsychological correlates in dementia of the Alzheimer's type," *Proceedings of the International Neuropsychological Society Meeting*. Pittsburgh, PA.

Refereed Conference and Symposia Presentations

Shattuck, N.L., Matsangas, P. (2019). [Culture change in the US Navy: From data collection to mandated policies.](#) *Sleep Science*, 12(Supplement 3), 63-64.

Shattuck, N.L., Shattuck, L.G., and Matsangas, P. (2019). [Sleepiness and fatigue in Cadets at the U.S. Military Academy: Preliminary results from a 10-year follow-on study.](#) *Sleep*, 42(Abtract Supplement), A93-A94.

Cox, B.D., Matsangas, P., Shattuck, L.G., and Shattuck, N.L. (2019). [Explaining the increase in reported physiological episodes: Perceptions among naval jet aviators.](#) *Aerospace Medicine and Human Performance*, 90(3), 199.

Shattuck, N.L., and Matsangas, P. (2018). [The Effect of Sleep on Mood of U.S. Navy Sailors.](#) *Sleep*, 41(Abtract Supplement), A68.

Shattuck, N.L., and Matsangas, P. (2018). [Personality traits and sleep-related problems in crewmembers of the Hawaii Space Exploration Analog and Simulation \(HI-SEAS\).](#) *Aerospace Medicine and Human Performance*, 89(3), 254-255.

Matsangas, P., and Shattuck, N.L. (2017). [Prevalence of Insomnia and Excessive Daytime Sleepiness in US Navy Sailors.](#) *Sleep*, 40 (Abstract Supplement), A64.

Shattuck, N.L., and Matsangas, P. (2017). [Work and sleep patterns in military shift workers: Promoting health and wellness through informed shift schedules.](#) *Sleep*, 40(Abtract Supplement), A63-A64.

Shattuck, N.L., and Matsangas, P. (2017). [Prevalence of excessive daytime sleepiness, psychomotor vigilance performance and sleep habits of active duty naval personnel during shipboard operations.](#) Abstract presented in the 88th Scientific Meeting of the Aerospace Medical Association (ASMA), Denver, CO.

Shattuck, N.L. & Matsangas, P. (2017). [Comparing the work and rest hours of United States Navy Sailors with existing maritime regulations.](#) Abstract presented at the Tenth International Conference on Managing Fatigue, San Diego, CA.

Matsangas, P. and Shattuck, N.L. (2016). ["Sleep quality in crewmembers of US Navy ships while underway."](#) *Sleep*, 39(Abtract Supplement), A98-A99.

Shattuck, N.L., Matsangas, P., Saitzyk, A. and Aldridge, E. (2016). ["Reported sleep problems and practices in active duty military members during deployment,"](#) *Sleep*, 39(Abtract Supplement), A71-A72.

Shattuck N.L. and Matsangas P. (2015). ["A comparison of sleep and performance of U.S. Navy Sailors on four different shiftwork schedules,"](#) *Sleep*, 38(Abtract Supplement), A130.

Gabehart, R. J., Skornyakov, E., Shattuck, N. L., Sparrow, A. R., Matsangas, P., Riedy, S., and Van Dongen, H. P. A. (2015). ["Sleep duration in two different Navy watchstanding schedules,"](#) *Sleep*, 38(Abtract Supplement), A87.

Shattuck, N.L. and Matsangas, P. (2015). ["Comparison of the 3/9 and 6/6 watchstanding schedules for crewmembers of a US Navy destroyer,"](#) *Proceedings of the 6th Annual Applied Human Factors Society*, Las Vegas, NV.

- Skornyakov, E. Shattuck, N.L., Winser, M.A., Matsangas, P., Sparrow, A.R., Layton, M.E. and VanDongen, H.P.A. (2015). ["Heart rate variability measures of watchstanding in simulated Naval watch schedules,"](#) Sleep, 38(Abstract Supplement), A65.
- Brown, S. Matsangas, P. and Shattuck N.L. (2015). ["Is a Sailor's life for you? Aches and pains of U.S. Navy Sailors,"](#) Sleep, 38 (Abstract Supplement), A89.
- Shattuck N.L., Waggoner L.B., Young R.L., Smith C.S. and Matsangas P. (2014). ["Shiftwork practices in the United States Navy: A study of sleep and performance in watchstanders aboard the USS Jason Dunham,"](#) Sleep, 37(Abstract Supplement), A78.
- Matsangas, P. and Miller, N.L. (2006). ["The effects of ship motion on the sleeping patterns of crewmembers aboard a high speed Naval vessel,"](#) Sleep, 29(Abstract Supplement), A126.
- Miller, N.L., Shattuck, L.G. and Smith, D.R. (2006). ["Sleep Patterns of Cadets at the United States Military Academy: Interim Findings of a Four-year Longitudinal Study"](#), Proceedings of the Association of Professional Sleep Societies, Salt Lake City, UT, June 2006.
- Martinez, S.G., Matthews, M.D. and Miller, N.L. (2005). "The effects of sleep deprivation on objective and subjective measures of cognitive performance: A pilot study," Proceedings of the American Psychological Association Division 19/21 Midyear Symposium.
- Miller, N.L., Dyche J., Andrews C. and Lucas, T., (2004). ["Navy boot camp: Test score changes after two-hour increase in sleep time,"](#) Proceedings of the 18th Annual Association of Professional Sleep Societies, Philadelphia, PA.
- Miller, N.L., Nguyen, J.L., Sanchez, S., and Miller, J.C. (2003). "Sleep patterns and fatigue among U.S. Navy Sailors: Working the night shift during combat operations aboard the USS STENNIS during Operation Enduring Freedom," Proceedings of the 2003 Aerospace Medical Association. San Antonio, TX.
- Miller, N.L. and Dyche, J., (2004). "Behavioral changes at Navy boot camp after two-hour increase in sleep time," Proceedings of the American Psychological Association Division 19/21 Midyear Symposium. Philadelphia, PA.
- Miller, N.L., Baldus, B.R., Coard, H.F., Sanchez, S., and Redmond, D.R. (2003). ["Timing of the major sleep period as a fatigue countermeasure in U.S. Navy recruits,"](#) Proceedings of the 2003 Aerospace Medical Association. San Antonio, TX.
- Miller, N.L. and Crowson, J.J., (2003). "Analysis of sailor fatigue and sleep patterns on the HSV joint venture," Proceedings of the 6th Annual Systems Engineering Conference. National Defense Industrial Association. San Diego, CA.
- Miller, N.L., Narkevicius, J.M. and Shattuck, L.G. (2003). "Human Behavior 101: Theories and models," Proceedings of the 2003 MORS Conference: How Cognitive and Behavioral Factors Influence Command and Control. Alexandria, VA.
- Coard, H.F., Dyche, J., Carr, W., and Miller, N.L. (2002). "Sleep changes for basic military training in the Navy," Proceedings of the 2002 Recruit and Trainee Healthcare Symposium. Baltimore, MD.

Ruth, J. and Miller, N.L. (1996). "Boost phase intercept of theater ballistic missiles using F-14D," Proceedings of the 1996 U.S. Naval Test Pilot School Symposium.

Lewis, N.L. (1988). "The EEG as an indicator of G-induced loss of consciousness (GLOC)," Proceedings of the 1988 Aerospace Medical Association.

Tripp, L.D., Albery, W.B., and Lewis, N.L. (1988). "Development of a reliable, non-intrusive, G-induced loss of consciousness monitoring device," Proceedings of the Aerospace Medical Association.

Glaister, D.H. and Lewis, N.L. (1988). "Effect of lower body negative pressure cerebral tissue oxygen status in man," Proceedings of the Aerospace Medical Association.

Lewis, N.L. and Saltzberg, B. (1987). "The EEG as an index of consciousness in high-G environments," Proceedings of the Aerospace Medical Association. May 1987.

[\(Additional presentations\)](#)

Refereed Technical Reports

Gillingham, K.K., Plentzas, S., and Lewis, N.L., "G environments of F4, F-5, F-15, and F-16 aircraft during F-15 tactics development and evaluation," *USAFSAM-TR 85-51*. July 1985.

Non-Refereed Technical Reports

Shattuck, L.G., Matsangas, P., Cox, B., Shattuck, N.L., Fletcher, C., Combs, E., Fosha, R., and Anglemyer, A. (2018). Physiological episodes in F/A-18 and T-45 aircrews: Report of survey results. (Technical Report No. NPS-OR-18-003R). Monterey, CA: Naval Postgraduate School.

Matsangas, P. and Shattuck, N.L. (2018). Assessment of a novel 3-section fixed watchstanding schedule on the USS DETROIT (LCS-7). (Technical Report No. NPS-OR-18-002R). Monterey, CA: Naval Postgraduate School.

Shattuck, N.L., and Matsangas, P. (2018). [Assessment of the Sailor Evaluation Tool \(SET\)](#). (Technical Report No. NPS-OR-18-004). Monterey, CA: Naval Postgraduate School.

Matsangas, P. and Shattuck, N.L. (2018). [Assessment of a novel 3hrs-on/3hrs-off/3hrs on/15hrs-off watchstanding schedule on the USS STOCKDALE \(DDG-106\)](#). (Technical Report No. NPS-OR-18-002). Monterey, CA: Naval Postgraduate School.

Matsangas, P., Shattuck, N.L., and Saitzyk, A. (2017). The Marine Corps Embassy Security Guard 2016 sleep survey: Analysis and comparison with 2012-2015 data. (Technical Report No. NPS-OR-17-002R). Monterey, CA: Naval Postgraduate School.

Shattuck, N.L., Matsangas, P., Seagren, C., and Meredith I. (2017). LCS case study: The effect of shipboard manning levels on operational effectiveness and an analysis to improve unplanned loss management. (Technical Report No. NPS-OR-17-001R). Monterey, CA: Naval Postgraduate School.

Shattuck, N.L., Matsangas, P., and Saitzyk, A. (2016). Work and rest patterns in Marine Corps Embassy Security Group: Promoting health and wellness through informed work schedules. (Technical Report No. NPS-OR-16-001R). Monterey, CA: Naval Postgraduate School.

Shattuck, N.L., Matsangas, P. and Brown, S. (2015). ["A comparison between the 5hrs-on/10hrs-off and 3hrs-on/9hrs-off watch standing schedules,"](#) (Technical Report No. NPS-OR-15-006). Monterey, CA: Naval Postgraduate School.

Shattuck, N.L. and Matsangas, P. (2015). ["Optimization of shipboard manning levels using IMPRINT Pro Forces module,"](#) (Technical Report No. NPS-OR-15-008). Monterey, CA: Naval Postgraduate School.

Shattuck, N.L., Matsangas, P., Moore, J. and Wegemann, L. (2015). "Prevalence of excessive daytime sleepiness, fatigue and musculoskeletal symptoms in the crew of a US Navy ship," (Technical Report No. NPS-OR-15-005). Monterey, CA: Naval Postgraduate School.

Shattuck, N.L., Matsangas, P., and Powley, E.H. (2015). ["Sleep patterns, mood, psychomotor vigilance performance, and command resilience of watchstanders on the 'Five and Dime' watchbill,"](#) (Technical Report No. NPS-OR-15-003). Monterey, CA: Naval Postgraduate School.

Shattuck, N.L. and Matsangas, P. (2014). ["Work and rest patterns and psychomotor vigilance performance of crewmembers of the USS Jason Dunham: a comparison of the 3/9 and 6/6 watchstanding schedule,"](#) (Technical Report No. NPS-OR-14-004). Monterey, CA: Naval Postgraduate School.

Miller, N.L., Shattuck, L.G., Tvaryanas, A.P., Matsangas, P. (2010). ["Effects of sleep on training effectiveness in soldiers at Fort Leonard Wood, Missouri,"](#) (Technical Report No. NPS-OR-10-011). Monterey, CA: Naval Postgraduate School.

Tvaryanas, A.P. and Shattuck, N.L. (2010). ["Human systems integration domain trade-offs in optimized manning: The task effectiveness scheduling tool,"](#) (Technical Report No. NPS-OR-10-006). Monterey, CA: Naval Postgraduate School.

Tvaryanas, AP, Colebank, J., Platte, W., Swigart, C., and Miller, N.L. (2008). ["A resurvey of shift work related fatigue in MQ-1 Predator unmanned aircraft system crewmembers,"](#) (Technical Report No. NPS-OR-008-01). Monterey, CA: Naval Postgraduate School.

Miller, N.L. and Matsangas, P. (2007). ["Fatigue in military operational environments: an annotated bibliography,"](#) (Technical Report No. NPA-OR-07-001). Monterey, CA: Naval Postgraduate School.