

James G. Casler, Ph.D., P.E.

Professor and Chair

Space Studies Department, University of North Dakota

Education:

B.S., 1970, Engineering Physics, South Dakota State University

M.S., 1970, Aeronautical Systems, University of West Florida

M.B.A., 2006, Florida Institute of Technology

Ph.D., 2000, Engineering, North Dakota State University

James (Jim) Casler has been on the Space Studies faculty since 2007. Prior to the University of North Dakota, he accumulated over 25 years of practical experience in contributing to and leading large technical support organizations, as well as engineering development organizations. Dr. Casler is an engineer by profession and training. He is also an experienced manager and practitioner with an interdisciplinary background, combining engineering and business.

In a 23-year career as a Marine Corps officer and aviator, he is a graduate of the Navy's Test Pilot School and spent over 10 years directly involved in flight testing new aircraft and systems for the Marine Corps. For 11 years he held various engineering and management positions with Wyle Laboratories and was actively engaged in strategic planning and business development efforts oriented to new markets in aeronautical and aerospace research and development, primarily in the NASA engineering and technical services arena.

Dr. Casler did his doctoral research in human performance in space-based manufacturing settings and he continues to investigate future industrial, e.g., mining and manufacturing, operations on the surfaces of the Moon and Mars, as well as crew performance in isolated, confined, and extreme environments.

Selected Publications:

Komus, A. & Casler, J. G. (2017). Effective public administration for a mid-sized space power: Comparison of Canada and the United States. *Public Organization Review*, 17. 139-156.

Perrin, T. M. & Casler, J. G. (2017). Compensating for cryogenic propellant boiloff for a cargo mission to Mars. (AIAA 2017-5274). *Proceedings of AIAA Space and Astronautics Forum and Exposition*. Orlando, FL.

Perrin, T. M. & Casler, J. G. (2016). Architecture study for a fuel depot supplied from lunar assets. (AIAA 2016-5306). *Proceedings of AIAA Space and Astronautics Forum and Exposition*. Long Beach, CA.

Casler, J. (2014). Revisiting NASA as a high reliability organization. *Public Organization Review*, 14(2), 229-244.

- Casler, J. G. (2012). Organization of a notional lunar mining site. *Journal of Space Operations*, 9(3).
- Casler, J. G. & Cook, J. R. (2003). Work design and analysis for space-based manufacturing: a case analysis of initial design issues. *Ergonomics* 46(1-3), 141-152.
- Casler, J. G. (1999). *An exploratory study of human diagnostic performance measurement: Implications for tasks performed in space-based manufacturing*. Doctoral dissertation. North Dakota State University, Fargo, ND.
- Casler, J. G. & Cook, J. R. (1999). Cognitive performance in space and analogous environments. *International Journal of Cognitive Ergonomics* 3(4), 351-372.
- Casler, J. G. (1997). Management of research and development projects in small technical services companies. *Project management journal*, 28(1), 19-24.