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EDUCATION

University of Kansas	Lawrence, KS	Aerospace Engineering	B.S., 2009
University of Kansas	Lawrence, KS	Aerospace Engineering	Ph.D., 2013

APPOINTMENTS

2015-Present	University of Kansas, Assistant Professor, Aerospace Engineering
2013-2014	The MITRE Corporation, Senior Mechanical Engineer
2009-2013	Center for Remote Sensing of Ice Sheets, Graduate Research Assistant
2007-2009	Center for Remote Sensing of Ice Sheets, Undergraduate Research Assistant

TEACHING AND RESEARCH FOCUS

- Multifunctional and advanced aerospace
- Antenna array performance and electromagnetics
- Airborne remotes sensing

RESEARCH PUBLICATIONS

Journals

E. Arnold, J.B. Yan, R. Hale, F. Rodriguez-Morales, and P. Gogineni, "Identifying and Compensating for Phase Center Errors in Wing-Mounted Phased Arrays for Ice Sheet Sounding," *IEEE Transaction on Antennas and Propagation*, Vol. 60, No. 6, June 2014.

F. Rodriguez-Morales, P. Gogineni, C. Leuschen, J. Paden, J. Li, C. Lewis, B. Panzer, D. Gomez-Garcia, A. Patel, K. Byers, R. Crowe, K. Player, R. Hale, E. Arnold, L. Smith, C. Gifford, D. Braaten, and C. Panton, "An Advanced Multi-Frequency Radar Instrumentation Suite for Polar Research," *IEEE Transactions on Geoscience and Remote Sensing*, Vol. 52, No. 5, May 2014.

J. Li, J. Paden, C. Leuschen, F. Rodriguez-Morales, R. Hale, E. Arnold, R. Crowe, D. Gomez-Garcia, P. Gogineni, "High-Altitude Radar Measurements of Ice Thickness over the Antarctic and Greenland Ice Sheets as a part of Operation Ice Bridge," *IEEE Transactions on Geoscience and Remote Sensing*, Vol. 51, No. 2, February 2013.

J.B. Yan, J. Li, F. Rodriguez-Morales, R. Crowe, D. Gomez-Garcia, E. Arnold, J. Paden, C. Leuschen, S. Gogineni, "Measurements of In-Flight Cross-Track Antenna Patterns of Radar Depth Sounder/Imager," *IEEE Transaction on Antennas and Propagation*, No. 99, August 2012.

K. Byers, A.R. Harish, S. Seguin, C. Leuschen, F. Rodriguez-Morales, J. Paden, E. Arnold, R. Hale, "A Modified Wideband Dipole Antenna for an Airborne VHF Ice Penetrating Radar," *IEEE Transactions on Instrumentation and Measurement*, February 2012.

Magazines

C. Allen, L. Shi, R. Hale, C. Leuschen, J. Paden, B. Panzer, E. Arnold, W. Blake, F. Rodriguez-Morales, J. Ledford, S. Seguin, "Antarctic Ice Depth Sounding Radar Instrumentation for the NASA DC-8," *IEEE Aerospace and Electronic Systems Magazine*, Vol. 27, No. 3, March 2012.

E. Arnold, J. B. Yan, R. Hale, F. Rodriguez-Morales, P. Gogineni, J. Li, M. Ewing, "Effects of Vibration on a Wing-Mounted Ice Sounding Antenna-array," *IEEE Antennas and Propagation Magazine*, Accepted for publication.

Conference Proceedings

S. Gogineni, J.B. Yan, D. Gomez-Garcia, F. Rodriguez-Morales, C. Leuschen, Z. Wang, J. Paden, R. Hale, E. Arnold, D. Braaten, "Ultra-wideband Radars for Measurements over Snow and Ice," *Proceeding from 2015 IEEE International Geoscience and Remote Sensing Symposium*, Milan, Italy, July 2015.

E. Arnold, R. Hale, and J.B. Yan, "Challenges and Limitations in Designing and Integrating Airborne Radar Antenna Arrays Used for Remote Sensing," *International Glaciological Society International Symposium on Radioglaciology*, Lawrence, KS, September 2013.

F. Rodriguez-Morales, S. Gogineni, C. Leuschen, J. Paden, B. Panzer, C. Lewis, D. Gomez, R. Crowe, A. Patel, R. Hale, E. Arnold, J. Li, S. Yan, and D. Braaten, "Airborne Radar Sensor Package of Coincidental Multi-Frequency Measurements over the Cryosphere," *European Geosciences Union General Assembly 2013*, Vienna, Austria, April 2013.

S. Gogineni, D. Braaten, F. Rodriguez-Morales, J. Li, C. Leuschen, J. Paden, R. Hale, E. Arnold, B. Panzer, D. Gomez-Garcia, R. Crowe, A. Patel, and J. B. Yan, "Multi-Frequency Airborne Radar Measurements of Outlet Glaciers and Ice Streams," *American Geophysical Union*, San Francisco, CA, December 2012.

E. Arnold, J.B. Yan, J. Li, R. Hale, F. Rodriguez-Morales, and P. Gogineni, "Identification and Compensation of Aircraft Integration Effects in Wing-Mounted Phased Array for Ice Sheet Sounding," *Antenna Application Symposium*, Monticello, IL, September 2012.

P. Gogineni, D. Braaten, F. Rodriguez-Morales, J. Li, C. Leuschen, J. Paden, R. Hale, E. Arnold, B. Panzer, D. Gomez-Garcia, R. Crowe, A. Patel, and J. B. Yan, "Multi-Frequency Airborne Radar Measurements of Outlet Glaciers and Ice Streams," *XXXII Scientific Committee on Antarctic Research Science Week*, Portland, OR, July, 2012.

S. Gogineni, J. Li, J. Paden, L. Smith, R. Crowe, A. Hoch, C. Lewis, E. Arnold, F. Rodriguez-Morales, C. Leuschen, R. Hale, A.R. Harish, and D. Braaten, "Sounding and Imaging of Fast Flowing Glaciers and Ice-Sheet Margins," *9th European Conference on Synthetic Aperture Radar*, Nuremberg, Germany, April 2012.

R. Hale, E. Arnold, M. Ewing, and W. Lui, "Method for Design and Analysis of Externally Mounted Antenna Fairings in Support of Cryospheric Surveying," *AIAA Structures, Structural Dynamics and Materials Conference*, Denver, CO, April 2011.

Dissertation

E. Arnold, "Development and Improvement of Airborne Remote Sensing Radar Platforms," Ph.D. Dissertation, University of Kansas, Department of Aerospace Engineering, June 2013.

GRANTS AND FUNDED PROJECTS

External

1. Project/Proposal Title: Airborne Radar Surveys of Land and Sea Ice and Data Processing Using CReSIS Instrumentation to Support IceBridge Observations
Role: Co-I
PI: Carlton Leuschen
Agency: NASA
Amount: \$ 6,111,162.00
Performance Period: 08/01/2016 – 07/31/2019
2. Project/Proposal Title: Real-Time Correction of Wing-Integrated Antenna Array Beamforming
Role: PI
Agency: NASA EPSCoR
Amount: \$ 11,195.00
Performance Period: 10/02/2015 – 05/20/2016

Internal

1. Project/Proposal Title: Re-design and Testing of the Meridian UAS Wing with Embedded Antenna Array Beamforming
Role: PI
Agency: KU
Amount: \$ 8,000.00
Performance Period: 10/02/2015 – 05/20/2016

HONORS AND AWARDS FOR RESEARCH

- NASA Earth and Space Science Fellow, Amelia Earhart Fellow
- NASA Group Achievement Award, 2011

TEACHING RECORD

AE 725 Numerical Optimization and Structural Design (Fall 2015)
AE 592 Special Projects for Aerospace Engineering Undergraduate Students (Fall 2015)
AE 421 Aerospace computer Graphics (Spring 2016)

STUDENTS ADVISED

MS Thesis Advisor

Patil, Ankur

SERVICE RECORD

Department

- Graduate Committee (2015-Present)

University

- GUIDE Program Mentor (2015-Present)
- Women's Basketball Faculty Mentor (2015-Present)

Professional

- Proposal reviewer for NASA (2015, 2016)
- Proposal reviewer for NSF
- Reviewer for IEEE Transactions on Geoscience and Remote Sensing
- Reviewer for International Journal of Aerospace Engineering
- AIAA Member, IEEE Member

Community

- Keynote speaker for Union Station's Science Pioneers' Expanding Your Horizons (2013, 2016)
- Project Discovery Volunteer
- Kansas STARBASE, Inc. Board of Directors

HONORS AND AWARDS FOR SERVICE

- Recipient of the NSF's Antarctic Service Medal of the United States (2012)

COLLABORATORS AND OTHER AFFILIATIONS

Collaborators & Co-Editors: David Braaten, University of Kansas; Mark Ewing, University of Kansas; Richard Hale, University of Kansas; Sivaprasad Gogineni, University of Kansas; Carl Leuschen, University of Kansas; Jilu Li, University of Kansas; Wanbo Lui, DarCorporation; John Paden, University of Kansas; Fernando Rodriguez-Morales, University of Kansas; Jie-Ban Yan, University of Kansas;

Graduate Advisors: Richard D. Hale, University of Kansas