

Bernd H. Strassner II, Ph.D.
Senior Member of Technical Staff
Synthetic Aperture Radar II
Sandia National Laboratories

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|--------|-------------------------------------|-----------------|
| BSEE | Rose-Hulman Institute of Technology | September, 1995 |
| MSEE | Texas A&M University | December, 1998 |
| PhD EE | Texas A&M University | August, 2002 |

Sandia, July, 2002 - present

Principal designer for wideband phased array antennas with low cross-polarization and low side-lobe levels

Designed an assortment of microwave circuit devices like branchline couplers, power splitters, and phase shifters

Texas A&M, 1995 - 2002

Designed rectifying antenna arrays for Jet Propulsion Laboratory's microwave power transmission,

Designed reflecting antenna arrays for Jet Propulsion Laboratory's deep space probes

Designed various phased array antennas

Designed RFID tags for oil drill pipe inventories

Sandia, January 1997 - September 1997

Harmonic load pull analysis for power amplifiers

Sandia, June 1996 - August 1996

Deciphering c-code for demodulator

Johnson Space Center (JSC), Summers of 1992, 1993, and 1995

Worked in JSC's shuttle navigation group

Worked in JSC's shuttle power laboratory

Worked in JSC's shuttle communication laboratory

Technische Universitat Hamburg-Harburg (TUHH)

Helped to developed Matlab code simulating a demebdding process

Topic: Wideband Planar Antennas used for Synthetic Aperture Radar Imaging

Abstract: This talk covers ongoing antenna research at Sandia National Laboratory. The talk addresses, in particular, wideband planar antennas because of their lightweight, low-profiles and inexpensive fabrication. These antennas are used presently in several of Sandia's synthetic aperture radar (SAR) imaging systems. Sandia is focused on creating lightweight SAR systems for high resolution imaging.