



BIOGRAPHY

UNITED STATES SPACE FORCE

SCOTT R. MAETHNER

Mr. Scott R. Maethner is the Deputy Director of the Space Vehicles Directorate, Air Force Research Laboratory (AFRL), Kirtland Air Force Base, New Mexico. He supports a team of more than 800 military, civilian, and contractor personnel at the nation's center of excellence for military space science and technology, research and development, and advanced technology integration and demonstration. The directorate manages an annual budget of more than \$300 million and conducts research in support of enduring U.S. Air Force space missions, including communications, position, navigation and timing; intelligence, surveillance and reconnaissance; missile warning; space domain awareness; and space control.

Mr. Maethner entered the Air Force in 1990 as a distinguished graduate of the Reserve Officer Training Corps at North Dakota State University. He has served in a variety of technical, operational, command, and staff positions, with assignments at Phillips Laboratory, the 50th Space Wing, the 90th Space Wing, 14th Air Force, Headquarters Air Force Space Command, Air Force Recruiting Service, and AFRL.

His roles have included physicist, program manager, section chief, branch chief, crew commander, flight commander (MILSTAR and Peacekeeper), squadron commander (AFRS), and deputy director (AFRL). His areas of expertise include space science and technology, research and development, program management, space and nuclear operations, space strategy and policy, strategic planning, studies and analysis, organizational development, leadership development, process improvement, and corporate communications.

In industry, Mr. Maethner served as a program manager and division chief (Universal Technology Corporation/ARCTOS) where he oversaw senior advisory and assistance contractor support to AFRL's Space Vehicles and Directed Energy Directorates and led contractor efforts in support of establishing the organizational development and health program for each directorate. Prior to his current position, he was Senior Vice President and Co-Founder of NewSpace New Mexico (dba NewSpace Nexus), Albuquerque, New Mexico, a nonprofit startup that supports small and early growth space technology companies.

EDUCATION

1990 Bachelor of Arts, Physics and Mathematics, *Summa Cum Laude*, Concordia College, Moorhead, Minn.

1996 Squadron Officer School Correspondence Program, Wright-Patterson AFB, Ohio.

1996 Master of Science, Space Operations, Air Force Institute of Technology, Wright-Patterson AFB, Ohio.

1997 Squadron Officer School in residence, Maxwell AFB, Ala.

2002 Air Command and Staff College Distance Learning Program, F.E. Warren AFB, Wyo.

2005 Master of Military Operational Art and Science, Air Command and Staff College, Maxwell AFB, Ala.

2006 Master of Airpower Art and Science, School of Advanced Air and Space Studies, Maxwell AFB, Ala.

2008 Air War College Distance Learning Program, Peterson AFB, Colo.

2011 Senior Development Education, Air Force Fellow (Space), RAND corporation, Santa Monica, Calif.





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CAREER CHRONOLOGY

1. January 1991–April 1993, Hypervelocity Impact Physicist, Advanced Weapons and Survivability Directorate, Phillips Laboratory, Kirtland AFB, N.M.
2. May 1993–June 1994, Deputy Space Debris Program Manager, Advanced Weapons and Survivability Directorate, Phillips Laboratory, Kirtland AFB, N.M.
3. June 1994–May 1995, Space Debris Program Manager, Advanced Weapons and Survivability Directorate, Phillips Laboratory, Kirtland AFB, N.M.
4. June 1994–December 1996, Graduate Student, Air Force Institute of Technology, Wright Patterson AFB, Ohio
5. January 1997–February 1997, Student, Squadron Officer School, Maxwell AFB, Ala.
6. February 1997–July 1997, Milstar Orbital Analyst, 4th Space Operations Squadron, Schriever AFB, Colo.
7. July 1997–March 1999, Chief, Orbital Operations, 4th Space Operations Squadron, Schriever AFB, Colo.
8. September 1998–January 1999, Satellite Mission Control Subsystem Initial Qualification Training, Vandenberg AFB, Calif.
9. March 1999–December 1999, Crew Commander, 4th Space Operations Squadron, Schriever AFB, Colo.
10. December 1999–May 2000, Operations Support Flight Commander, 4th Space Operations Squadron, Schriever AFB, Colo.
11. April 2000–July 2000, Intercontinental Ballistic Missile Operations Training, Vandenberg AFB, Calif.
12. September 2000–April 2001, Missile Combat Crew Deputy Commander, Peacekeeper ICBM, 400th Missile Squadron, F.E. Warren AFB, Wyo.
13. April 2001–September 2001, Missile Combat Crew Commander, Peacekeeper ICBM, 400th Missile Squadron, F.E. Warren AFB, Wyo.
14. September 2001–February 2004, ICBM Combat Crew Flight Commander, 400th Missile Squadron, F.E. Warren AFB, Wyo.
15. February 2003–February 2004, Chief, Commander's Action Group, 14th Air Force, Vandenberg AFB, Calif.
16. February 2004–June 2005, Graduate Student, Air Command and Staff College, Maxwell AFB, Ala.
17. June 2005–June 2006, Graduate Student, School of Advanced Air and Space Studies, Maxwell AFB, Ala.
18. June 2006–June 2007, Chief, Strategy, Doctrine and Policy Branch, HQ Air Force Space Command, Peterson AFB, Colo.
19. June 2007–May 2008, Director, Commander's Action Group, HQ Air Force Space Command, Peterson AFB, Colo.
20. May 2008–April 2010, Commander, 367th Air Force Recruiting Squadron, Colorado Springs, Colo.
21. April 2010–May 2011, Air Force Fellow, RAND Corporation, Santa Monica, Calif.
22. June 2011–Jun 2015, Deputy Director, Directed Energy Directorate, Air Force Research Laboratory, Kirtland AFB, N.M.
23. July 2015–June 2019, Director and Program Manager, Space and Directed Energy Division, Universal Technology Corporation, Albuquerque, N.M.
24. June 2019–July 2022, Director, Space and Directed Energy Division, Universal Technology Company/ARCTOS, Albuquerque, N.M.
25. July 2022–December 2024, Senior Vice President and Co-Founder, NewSpace Nexus, Albuquerque, N.M.
26. January 2025–Present, Deputy Director, Space Vehicles Directorate, Air Force Research Laboratory, Kirtland AFB, N.M.

MAJOR AWARDS AND DECORATIONS

Legion of Merit
Meritorious Service Medal (5th Award)
Air Force Commendation Medal
Air Force Achievement Medal (3rd Award)

OTHER ACHIEVEMENTS

1990 Distinguished Graduate, Air Force Reserve Officer Training Corps, Detachment 610, North Dakota State University
1990 Omicron Delta Kappa (National Leadership Honor Society)
1996 Tau Beta Pi (National Engineering Honor Society)
2005 Exceptional Graduate, Air Command and Staff College
2007 Excellent Graduate, Air War College Distance Learning Program





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2007 2nd Prize Winner, General Bernard A. Schriever Memorial Essay Contest

2008 USAF Recruiting Service Top Squadron Award

OCCUPATIONAL BADGES

Master Space Operations

Basic Missile Operator

Basic Acquisition and Financial Management

Air Force Basic Recruiter

PUBLICATIONS

"Correlation of an Empirical Spacecraft Breakup Model's Predictions with Data from Hypervelocity Impact Experiments," SPIE Space Debris Detection and Mitigation Conference Proceedings, Vol. 1951, 15-16 April 1993

"Phillips Laboratory Phase One Space Debris Research Program: Abstracts from Published Papers (1990-1993)," Phillips Laboratory Technical Report PL-TR--94-1005, June 1994

"Report on USAF Space Debris Phase One Study," Phillips Laboratory Technical Report PL-TR--94-1042, June 1994

"The Air Force Space Debris Research Program," 5th AAS/AIAA Spaceflight Mechanics Meeting, AAS 95-198, 13-15 Feb 1995

"Worldwide Information Control System (WICS)," White Paper, Air Force 2025 Study, April 1996.

"Deconvolution from Wavefront Sensing Using Optimal Wavefront Estimators", Masters Thesis, Air Force Institute of Technology, December 1996

"Deconvolution from Wavefront Sensing with Optimal Wave Front Estimation Techniques", SPIE, July 1997

"Design for a Generic Spacecraft Bus", World Aviation Congress, Oct 1997

"Space Power- The Next 50 Years: Using Scenario Planning to Develop Military Space Superiority Strategies," Research Report, Air Command and Staff College, April 2005

"A Naval Pedigree for Space Power Theory: The Utility of a Transfer of Ideas from Sea to Space," School of Advanced Air and Space Studies, Thesis, June 2006

Achilles' Heel: Space and Information Power in the 21st Century," High Frontier Journal, Volume 3, Number 4, 2007

"Tracking space congestion: a historical and operational overview of the U.S. Space Surveillance Network," Project Air Force (U.S.), issuing body.; United States. Air Force, sponsor.; Rand Corporation, publisher, 2014

(Current as of April 2025)

