**PROFESSIONAL BIOGRAPHY: Matthew Fladeland**

Matt Fladeland is a Research Scientist and manages a Program Office for the NASA HQ SMD Airborne Science Program – see <https://airbornescience.nasa.gov> Aircraft are a critical element to satellite mission development from instrument development, onorbit calibration & validation activities, and associated Research & Analysis projects. Matt’s office leads Advanced Planning, New Technology assessments and development, and provides engineering expertise to NASA Airborne flight projects. Matt also serves as Program Subject Matter Expert (SME) for uncrewed systems for the Program, having been involved in the application of UAS to NASA science for 15+ years.

Mr. Fladeland started his career with NASA as a Presidential Management Fellow in 2001 at NASA Headquartes in the Earth Science Enterrpise where he worked as a program analyst and assisted with budget and program formulation. He was detailed to NASA Ames in 2002 to work on carbon cycle modeling with Chris Potter (link) resulting in the CQUEST tool. (https://www.climatehubs.usda.gov/hubs/northern-plains/tools/nasa-casa-global-cquest-carbon-query-and-evaluation-support-tools). Matt was given a permanent appointment in the Ames Earth Science Division and supported formulation and early implementation of the Wildfire Research and Applications Partnership that flew a NASA Altair and Ikhana over the western US in support of wildfire reconnaissance. Following a NASA-sponsored study on the future use of UAS, Mr. Fladeland worked with Randy Berthold, Jim Brass, Rick Kolyer and Center leadership in partnership with the Naval Research Laboratory, to bring the NASA SIERRA UAS (<https://airbornescience.nasa.gov/aircraft/SIERRA_-_ARC> to Ames in 2006 where the SIERRA-B variant continues to operate. Matt was a NASA lead for the Vanilla UAS SBIR development now operated by Platform. In partnership with JPL, NASA Goddard and the University of Costa Rica, Matt and team have pioneered the use of UAS for volcano measurements, leading to the acquisition of the NASA Dragon Eyes, and the SBIR development and acquisition of the BlackSwift S2 now operating at NASA Ames and NASA LARC. Matt is currently supporting several efforts to demonstrate new observations from the stratosphere through partnerships and as Small Business Innovative Research SubTopic Lead for High Altitude Long Endurance systems. He is NASA monitor for the Swift Engineering Long Endurance UAS and the Electra Stratospheric Atmospheric Carbon Observing System (SACOS).

Matt currently serves as Chair of the Interagency Coordinating Committee on Airborne Geophyiscal Research and Applications (ICCAGRA) consisting of agencies across the federal government that operate and or use aircraft for earth science research.

Matt also serves on the NASA Standing Review Board for the Dragonfly Mission, and on the DOE UAS Advisory Board.

Matt is a member of the American Geophysical Union