WENDY M. MORGENSTERN

Senior Systems Engineer
Space Systems | TS/SCI
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EXECUTIVE PROFILE

Distinguished leader with 35+ years at NASA Goddard Space Flight Center (GSFC, retired), specializing in Mission Systems Engineering (MSE), Chief Engineer, and Guidance, Navigation, and Control (GNC). Directed full life cycles for Solar, Earth, Astrophysics, and Technology Development missions from concept to on-orbit operations. Senior technical authority | Chair | Subject Matter Expert for anomaly investigations, independent assessments, and Agency-level Standing Review Boards (SRBs).

AREAS OF EXPERTISE

- ❖ Multi-Discipline Team Leadership
- ❖ Conflict Resolution & Communication
- ❖ Mission Systems Engineering
- ❖ Guidance, Navigation & Control
- ❖ Technical Authority | Chief Engineer
- ❖ Programmatic and Risk Leadership
- ❖ Independent Review | Anomaly Resolution
- ❖ Mentor | Workforce Development
- ❖ Spacecraft Concept, Design, Integration, Launch & Operations

SELECT AWARDS

- 3× NASA Outstanding Leadership Medal
- 1x NASA Exceptional Service Medal
- 3x Robert H. Goddard Awards: Mentoring, Leadership, Engineering Excellence

EDUCATION

M.S., Aerospace Engineering | UMD
B.S., Aerospace Engineering | Virginia Tech

CAREER HIGHLIGHTS

Systems Engineering (SE) Technical Discipline Deputy, **NASA Engineering and Safety Center (NESC)** (2024-2025). Collaborate with Leadership to optimize systems engineering across NASA and commercial partners. Lead technical deep-dives on complex engineering challenges.

Division Chief Engineer, **Instrument Systems and Technology** (2023 – 2024)
Oversaw a $300M+ portfolio spanning optics, cryogenics, detectors, electro-optical systems, radar, lasers, microwave, and quantum technologies.

Mission Systems Engineer | Deputy MSE | OSAM-1 (2019 – 2023)
Directed 40+ SEs and over 400 engineers for NASA's flagship ($2B) servicing and assembly mission. Oversaw development through assembly, integration, launch, and operations for robotic servicing and in-space manufacturing demonstration.

Mission Systems Engineer | **HELIX** | **PRAXyS** (2015 – 2017)
Architected mission design MIDEX Heliophysics and SMEX Astrophysics proposals.

Mission Systems Engineering | GNC SE, **MMS** (2010 – 2015)
Led GNC systems (Attitude Control, Propulsion, Flight Dynamics, Navigation) thru spacecraft build, test, launch, and commissioning. Served as MMS Test Director, Launch Director, Commissioning Lead, and Maneuver Lead for NASA's first four-observatory formation mission.

GNC Systems Engineer | ACS Lead, **SDO** (2002 – 2010)
Spearheaded orbital maneuver strategy, jitter mitigation, and system-wide GNC verification for SDO, delivering sub-arcsec science pointing. Directed multi-discipline teams through architecture trades, hardware development, and launch for NASA's flagship solar observatory.

Early career roles include: dual lead for **Triana ACS Analysis & ACS Flight Software**; **GNC development roles for TRMM**), **XTE**, and **James Webb Space Telescope**; **Systems Engineer** for GSFC's first in-house CubeSat, **Dellingr**

REVIEW BOARD & AGENCY SERVICE

- **Standing Review Board (SRB) Chair, HelioSwarm** (2024 – 2025)
- **Deputy SRB Chair**, **PACE** (2018 – 2023)
- **SRB Member**, **ICESat-2** (2011 – 2018)
- **Anomaly Investigation Lead**, Roman Space Telescope (RST),
- **NASA-wide Systems Engineering Workforce Development** & **Cross-Agency Mentor**

REFERENCES & PUBLICATIONS – Available on request