

David Swanson
CAREER PROFILE

Professional Experience

US Navy, Naval War College, War Gaming Department

2021 – Present: **Associate Professor, War Gaming**

Company Name: **Northrop Grumman Corporation**, Dulles, VA

2020 – 2021 **Senior Manager, Corporate Scaled Agile Improvement**

Certified SAFe Leader, servant leader at all levels of SAFe projects. Current Projects include NGTSS Operational Efficiency Transformation (NOET) Agile Release Train (ART), NGSS Common Supplier Management (CSM) and NG Revamp Our Command Media and Knowledge (ROCK) solution train.

- NOET ART will transform a problematic satellite manufacturing facility culture into a high performing production environment. The train consists of four cross functional product teams spanning engineering, manufacturing, I&T and mission assurance & quality. This site is seeing explosive growth and currently produces space systems for Commercial (Iridium), DoD (ESPASat/Star) and NASA (JPSS/L-9) customers.
- CSM is a small scrum of supplier quality leaders across NG's space sector. The aim of the team is to greatly improve supplier onboarding driven by cross divisional communication, data sharing, and the collective supplier engagement.
- ROCK is the most ambitious re-engineering of our command media system in years. The team is chartered to push authority, responsibility, and accountability down to those who are most effective in delivering products and meeting customer needs. The result will be a more agile company whose products span vastly different markets and will better meet the needs of customers across the commercial, military, civil, and intelligence community landscape.

2011 - 2020 **Senior Director, Safety and Mission Assurance**

Oversees the functional area of Mission Assurance and Quality (MA&Q) as well as Environmental, Health and Safety (EHS).

- Consistently tagged to intercede when customer dissatisfaction was contractually transmitted. Conducts deep dive into system problems, define solutions, face to the customer in periodic reporting.
- Defines and manages to an annual functional overhead budget of \$2.5*M
- Defines practices for risk management, engineering change, configuration change, and continuous improvement processes.
- Manages staffing levels to operational needs—compressed and grown the organization as needed. Currently in a growth period taking 110 employees to 190 in 15 months.
- Given the overall responsibility to manage the division's training function. Leads an Agile project to improve workforce competency and add professional training staff.
- Certified Agilist leading high visibility projects to improve a manufacturing site culture, our vendor management across the sector, and command media across the corporation.
- Conducted special projects to include Program Management of the Asteroid Retrieval Robotic Mission study and proposal.
- Flight Assurance Lead on the Antares Mishap Investigation Board (MIB)

- Co-Chaired Mission Assurance Improvement Workshop (MAIW)
- Chair, Google Lunar X Prize (GLXP) Judging Panel

1986 – 2011 United States Air Force, Regular Commission, Officer

Retired in the rank of Colonel after 24 years 7 Months of Active Duty Service

2008 – 2011 **Director of Engineering & Chief Systems Engineer**, Space and Missile Systems Center, **El Segundo, CA**, Led a 175-member directorate with a \$40+M budget as the technical authority in a system development Center. Sets policy, judged conformance, assesses risk of products. Center spends ~\$9.5B annually developing and acquiring cutting edge space, ground, and launch systems. Human Capital Manager for 600+ scientists/engineers.

- Crafted the program to on-board and develop all engineers within the center in response to Air Force-wide mandate to improve technical competency. The program brought on over 100 new engineers and placed them within the System Program Offices.
- Managed technical partnerships with major Fortune 500 equivalent agencies: NRO, NASA, MDA, JPL, etc.
- Government rep to Space Supplier Council/Space Quality Improvement Council.
- Reviews and approves FFRDC Mission Oriented Research and Development (IRAD-like) program.

2007 - 2008 **Managing Dir, Institute for Information Technology Applications, US AF Academy, CO**, Directed the daily operations of the Institute in performance of state-of-the-art information technology research. Developed organizational plans. Leveraged an annual \$200K budget into multimillion-dollar investment. Oversaw spend rates, contracts, and acquisitions. Coordinated multidisciplinary research that promoted net-centric warfare capabilities.

2003 - 2007 **Assistant Professor of Astronautics, US AF Academy, CO**, Instructed Air Force Academy cadets in Astronautics and senior level capstone design course.

Officer-In-Charge (OIC) of Space Operations Degree. Developed curriculum and set standards for capstone classes. Built operational laboratory wherein cadets developed, trained, and managed the operations of a small satellite – FalconSat.

Architect of USAFA Summer Space Program. Developed a vision for a summer program wherein cadets could explore Space Operations concepts such as PN&T concepts, Launch theory and Operations, and overhead Communications. Program that was designed for 13 cadets each summer period was pushed to the forefront when the glider program was grounded for the summer. In its first summer, over 200 cadets completed the program.

As Chairman of USAFA's Space Working Group, advised senior leadership and coordinated space training and education across all areas of cadet life. Principle author of Satellite Tool Kit Laboratory manual.

Negotiated with NASA to transfer full control of \$500M scientific Gravity Probe B satellite to the US Air Force Academy. Procured \$305K research funds and diverted 7 cadets/2 faculty members into a concept exploration study. Created a strategic direction toward a new cadet space operations squadron. Cadets learned more about Space by performing Space Operations on a world-class Space-based research platform.

2002 – 2003 **Deputy Special Technical Operations (STO) Chief, US Space Command, PAFB, CO**, Provided operational space support, integrated missile defense, global C4ISR, specialized planning expertise to the joint warfighter. Supervised three NCOs.

Architect and Project Manager for \$1M renovation of a specialized underground facility. Analyzed operational needs, established requirements, identified candidate location, developed facility design that meet user needs, obtained resources and authority to consolidate multiple office spaces, directed the demolition and reconstruction of a secure, hardened, underground command center.

2002 - 2002 **Speech Writer, CINC-s Action Group, US Space Command, Peterson AFB, CO**

2001 - 2002 **Deputy Chief, Space Operations Division, Cheyenne Mountain Air Station, CO** - Assisted in directing the daily operations and support of the Space Control Center. Provided space subject-matter-expert information to senior USSPACECOM and NORAD Commanders and staffs on all space issues.

2001 - 2001 **Chief, Special Operations Branch, Cheyenne Mountain Air Station, CO** - Directed employment of worldwide, joint space control resources to provide surveillance and protection to multibillion-dollar national satellite programs and to special technical operations.

2000 - 2001 **Deputy Chief, Special Operations Branch, Cheyenne Mountain Air Station, CO** - Led Special Technical Operations (STO) in a selectively manned unit responsible for classified C3I operations. Employed joint space control resources to provide space surveillance and protection to national and STO space programs. Developed and executed procedures to process launch, on-orbit, and end-of-life operations for national space assets. Oversaw USSPACECOM's Laser Clearinghouse program to protect 1,000 active satellites. Certified Orbital Analyst.

1999 - 2000 **Student, Air Command and Staff College, Montgomery, AL**

1998 - 1999 **Action Officer, Office of the National Security Space Architect, Alexandria, VA** - Led a multi-agency team of over 50 government and contractor personnel to define and establish the National Security Space Road Map. Led an internal team to support the Executive Secretariat responsibilities for the NSS Senior Steering Group, attended by 50+ SES/GO level leaders from the DoD and Intelligence Community. Editor for the bi-weekly organizational newsletter disseminated to over 150 senior leaders in the DoD and the Intelligence Community.

1997 - 1998 **Executive Officer, Principal Deputy Assistant Secretary of the Air Force (Space), Chantilly, VA** - Provided daily, executive support to the dual-hatted Principal Deputy Director, NRO. Managed daily appointments, prepared military personnel evaluations/promotion recommendations for Deputy's signature/selection, interfaced with senior intelligence community staff, planned/executed VIP visits, executive secretary to the Defense Science Board's Task Force on Satellite Reconnaissance.

1996 - 1997 **Action Officer, Office of Plans and Analysis, National Reconnaissance Office, Chantilly, VA** - Conducted congressionally directed studies directly impacting the future of national reconnaissance capabilities. Orchestrated the National Correlation Working Group Conference; 150+ government and industry senior leaders studied the hurdles to realizing in-theater information integration to support our warfighters and sought solutions.

1994 - 1996 **Project Manager, Spacecraft Mission, Space Test Program, KAFB, NM** - Formulated/executed a cutting-edge source selection leading to a 2-year acquisition program for the \$84M, Tri-Service Experiments Mission 5. Bedded-down the 530-member Test and Evaluation Office at Kirtland AFB from three geographically separated locations. Managed the \$7.8M program to install mission communications for future C2 of satellite demonstrations. Managed/accounted for the \$33.2M, 3-year budget for the relocation.

- 1993 - 1994 **Chief, Signature and Image Simulation Branch & Program Manager, Active Survivability Program, PL/WSAI, Kirtland AFB, NM** – Managed a 4-person branch. Evaluated spacecraft signatures and imaging using high-fidelity modeling techniques. Project manager for the Sure-Safe program. Analyzed optical response of on-orbit sensors to lasers. Program Manager for Condor Nest SAP.
- 1991 - 1993 **Student**, Air Force Institute of Technology and Squadron Officers School, Dayton, OH
- 1990 - 1991 **Chief, Milstar/DSCS III Training Systems, AFSPC, 2 SWG/DOT, FAFB, CO** - Managed the \$3.2M installation of the Generic Telemetry Simulator to train/evaluate mission operations personnel on GPS spacecraft.
- 1989 - 1990 **Crew Commander**, 3rd Satellite Control Squadron (2 SWG/3 SCS), FAFB, CO -
- 1988 - 1989 **Planner Analyst**, 2 SWG/3 SCS, Falcon AFB, CO - Responsible for mission Commanded the real-time, mission control team responsible for maintaining the health and status of seven, joint Air Force/Navy FLTSATCOM satellites. Senior team member directing spacecraft analyst, ground controller, resource controller, and remote tracking station personnel during satellite contacts to determine system state of health and perform anomaly resolution. Responsible for mission planning, trend analysis, communications and real-time engineering evaluation of the health and status of the FLTSATCOM vehicles. Certified Crew Commander Instructor and Planner Analyst Instructor.

Professional Military Education:

- 05/05 – Air War College, Seminar
- 06/00 – Air Command and Staff College, Residence
- 07/99 – Air Command and Staff College, Seminar
- 03/93 – Squadron Officers School

Acquisition Professional Development Program:

- 02/11 – Program Management: Level III
- 05/09 – Systems Planning, Research, Development and Engineering (SPRDE): Level III
- 01/96 – Test and Evaluation: Level I

Tech. Training:

- 12/89 – Upgrade Training to FLTSATCOM Crew Commander
- 05/88 – Completed Lockheed Satellite Operations Training

Awards and Decorations

- Legion of Merit
- Defense Meritorious Service Medal (x2)
- Air Force Meritorious Service Medal (x2)
- Air Force Commendation Medal
- Joint Service Achievement Medal
- Air Force Achievement Medal
- Joint Meritorious Unit Award (x3)
- Air Force Outstanding Unit Award
- Air Force Organizational Excellence Award (x2)
- Combat Readiness Medal
- National Defense Service Medal (x2)
- Global War on Terrorism Service Medal
- Military Outstanding Volunteer Service Medal
- AF Longevity Service (x6)

2018 Safety Professional of the Year, 2nd Place Winner, JJ Keller and Associates

Formal Educational:

2019 (Start) - Doctor of Philosophy – Computational Sciences and Informatics
George Mason University, VA

2000 - Master of Arts - Military Arts & Sciences, Air Force Air University, AL

1993 - Master of Science - Electrical Engineering, University of Colorado, CO

1992 - Master of Science - Operations Research, Space Ops, AF Institute of Technology, OH

1986 - Bachelor of Science - Electrical Engineering, Southern Illinois University, IL

Professional Associations

Member of American Society for Quality (ASQ)