Resume of
Gregory L. Stensaas

Summary: **_Program management catalyst for multi-disciplined teams using and enhancing state-of-the-art system technologies/capabilities. Focused on integrated process team management to build people and accomplish program goals and visions._**

Work Experience:

Physical Scientist GS-1301-14   **7/28/03 - Present**
United States Geological Survey (USGS), Earth Resources Observation and Science (EROS) Center, Sioux Falls, SD

- **Project Chief for USGS Commercial Remote Sensing (CRS) and Remote Sensing Technologies (RST) Projects.**
    - Provided complete technical and project management support for projects.
    - Provide the management and planning as the USGS technical lead for System Characterization/Calibration and Product Validation. This includes working with multiple US agencies and organizations as well as multiple international agencies and organizations.
    - USGS Landsat Data Gap Technical Team Leader and Data Characterization Working Group Lead responsible for the technical/operational/science assessment of medium resolution satellites.
    - Chair of the Joint Agency Commercial Evaluation (JACIE) team which is responsible for Government quality assurance of satellite and aerial remote sensing data.
    - Lead for multi-mission system assessments for US and International satellite systems.
    - USGS representative to CEOS Working Group on Calibration Validation and ASPRS Assistant Primary Data Acquisition Division Director. CEOS WGCV member co-chairing GEO Data Quality Workshops.
    - Responsible of film camera and digital sensor calibration within North America. Manage liaison activities with other USGS Centers and Federal agencies. Primary contact with the USDA, EPA, DOD, NOAA, DOT, NASA, academic, commercial, international organizations for Commercial Remote Sensing.
    - Chair of the Inter-Agency Digital Imagery Working Group (Chair of 15 Federal Agency group). Developed the USGS Quality Assurance Plan for Aerial Digital Imagery. Lead of the USGS Manufacturer Certification Team which is evaluating all digital aerial mapping systems to be used on Government contracts.
    - Established and lead of the USGS manufacturer certification process/team to assess capabilities of digital aerial systems to be used on Government contracts.
    - USGS lead for the EROS cal/val instrument farm including support for over 7 different large data networks both nationally and internationally.
    - International collaboration and creation digital imagery guidelines and standards. Discussed collaboration the heads of the Indian, Brazil, China, European Space Agency, and others. Participated and worked with the GEO and US GEO task groups up to White House OSTP levels and worked on a USGS detail in support of the GEO ministerial summit including briefings for Secretary of Interior Kempthorne.

- **Systems Engineering and Project Management Support**
    - Interim Acting Manager and System Engineering support for Remote Sensing Systems Team and Land Processes Distributed Active Archive Center Project. System level understanding of remote sensing systems and USGS requirements. Strong understanding of NASA LP DAAC management, engineering, and computer areas.
    - USGS EROS Landsat and LDCM Tiger Team member providing for programmatic and system engineering knowledge.
    - Leader of EROS annual and strategic planning workshops.
    - USGS EROS Land Monitoring Tiger Team Member, USGS EROS Enterprise Architecture Team Member, USGS IT Advisory Board member.

Principal Engineer   **11/1/02 – 7/28/03**
Science Applications International Corporation (SAIC), USGS EROS Data Center (EDC), Sioux Falls, SD

- **Chief Engineer for the Landsat Data Continuity Mission.**
    - Lead the LDCM team from a development perspective.
    - Responsible for LDCM team development of requirements and operational concept.
    - Developed LDCM system trade study and associated methodology.
- **Program-wide System engineering support for Land Processes Distributed Active Archive Center (LP DAAC).**
- **Provided Development, Sustaining, and Operational support for LP DAAC.**

Information Technology Program Manager II (Principal Engineer w/honors)   **07/09/01 – 10/31/02**
Raytheon Systems Company, USGS EDC, Sioux Falls, SD

- **Provided Program Management for DAAC Earth Observing System Core System (ECS) staff.**
    - Provided LP DAAC ECS program management focus as ECS System Engineering team lead.
    - Provided direct management support for LP DAAC, ESDIS, and ECS managers.
    - Leadership and mentoring related to LP DAAC scheduling, project management, and CM processes.
    - Fostered appreciation and awareness of Total Quality Processes at EDC (Raytheon 6 Sigma specialist).
    - Specialize in mentoring and managing other people's needs. Chosen by my peers for the Raytheon Honors Award for two years running as Senior Systems Engineer II and again as Principal Engineer.
- **Provided program-wide System Engineering perspective for LP DAAC and ECS.**
    - Functioned as Acting LP DAAC System Engineering Lead.
    - Provided LP DAAC ECS Technical Program Management guidance and support to the ECS staff.
    - Provided ECS System Design and software requirements analysis.
    - Worked with the ECS internal architecture/interfaces and complete knowledge of external requirements.
    - Development and support for LP DAAC and ECS system level interfaces & operational requirements.
    - Developed and supported the Product Distribution (PDS) program transition to the Government.
    - LP DAAC ECS Lead for Client Interfaces including functionality and development of ASTER Faster, MODIS Lite, EOS Clearing house (ECHO), and future client proposals.
    - EDC Traffic Cop (ODL controller) Team member working to support future client and B&A designs.
    - LP DAAC ECS technology and capabilities lead for Data Pool, BMGT, and SYNERGY III.
    - Program lead for the development and integration on the External Services System (Huntsville and EOS Subsetters) into LP DAAC.
    - Responsible for ASTER and MODIS Production Module requirements into ASTER Billing & Accounting.
    - Pioneered pathfinder process currently being used for ECS software deployment via coordination w/ NASA, ECS, and DAAC management.
- **Provided Development, Sustaining, and Operational input for LP DAAC and ECS.**
    - Provide engineering support for LP DAAC V0 and ECS CCB meetings.
    - Provided ECS process/policy support and helped establish DAAC policies for Operational requirements.
    - Worked Instrument Team related Ops Agreements and ECS ICDs for appropriate interface criteria.
    - Developed LP DAAC ORR inputs for AQUA MODIS including Ops Scenarios, Agreements, and Test plans.
    - Provided ECS system configuration control management support.
    - Developed CCRs and DAAC Unique Extensions (DUEs) as necessary to support LP DAAC requirements.
    - Provided detailed Ops Readiness planning, training, and OPS exercises for new functionality.
    - Wrote the Data Pool OPS concept and provided staff training on Data Pool.
    - Update/maintain LP DAAC External Services web pages.

Sr. Systems Engineer II w/ honors   **06/29/99 – 07/09/01**
Raytheon Systems Company, USGS EDC, Sioux Falls, SD

- **Provided EDC DAAC (EDAAC) ECS Program Management guidance and support to the ECS staff.**

  - Provide ECS Project Management and Systems Engineering focus via performing ECS Team Lead role.

  - Provided complete support for full up EDAAC ECS operations as ECS transitions from development support to operations support in support for Landsat-7 ETM+, and continue engineering development movement towards a full-up operational system for ASTER, and MODIS at EDAAC.

  - Developed EDAAC Integrated long-term schedule/plan.
  - EDAAC program and issue/problem prioritization lead.
  - Utilized the Independent Product Team (IPT) concept to establish a strong ECS management structure.
  - Developed EDAAC Specific Launch Critical/Launch Essential (LC/LE) tracking matrix.
  - EDAAC lead for the ESDIS EDAAC ECS telecon providing direct support to EDAAC and ESDIS managers.
  - Member EDAAC ECS Systems Engineering Team directly responsible for customer requests.
  - Developed EDAAC ECS Program Management and Schedule Policies and Instructions.
  - Applied ISO-9001 in writing Policy and Project Instructions.

  - Developed an EDAAC Management Policy Document.

  - Established Policies and Project instructions for system change, test processes, and training insight.

  - Complete understanding of EDAAC ECS system level interfaces and operational requirements.

  - Lead engineer for external system test requirements and interfaces.

  - Provided ECS system configuration control management support.

Sr. Systems Engineer I   **11/21/98 – 06/29/99**
Systems Engineer   **06/24/97 – 11/28/98**
Raytheon Systems Company, (Hughes Integrated Technology Systems Company), USGS EDC, Sioux Falls, SD

- **Provided EDAAC ECS Program Management guidance and support to approximately 50 people.**
  - Provided Systems Engineering support for the ECS System at EDAAC.
  - Provided Configuration Management (CM) for ECS System at EDAAC.
  - Worked with various Customized Off the Shelf (COTS) products, e.g., Sybase, HP Openview, etc.
  - EDAAC focal point for review and assignment of Local EDAAC Trouble Tickets.
  - EDAAC focal point for ECS Non Conformance Reports Review Boards and ECS Development Configuration Control Board (CCB).
  - Provide direct support for EDAAC and Earth Orbiting Satellite Distributed Information System (ESDIS) management.
  - Provide ECS software analysis and design requirements.
  - System Lead relative to the Configuration Management Independent Product Team (IPT) and Test Lead for the Test Coordination Group IPT. Reviewed and provided test leadership for EDAAC ECS.
  - Applied ISO-9001 theory in writing Project Instructions in support of EDC ECS Support Group.
  - EDAAC representative on the Version 2.0 ECS Patch IPT.
  - Member of the EDAAC Ops Working Group and Ops Readiness Review Team, and provided Ops Readiness metrics for EDAAC ECS.
  - Refined EDAAC LC/LE Ops Rehearsal Scenarios and tied them together with Test Procedures.
  - Reviewed and commented on Mission Operation Procedures (611) and Operations Tools Manual (609), and support the direct integration of these products into EDAAC procedures.
  - Reviewed Instrument Team related Ops Agreements for interface issues.
  - Developed EDAAC Integrated long term schedule/plan, and provided focus into the EDAAC ECS detailed schedule. Developed several schedule and task updates for the ECS program.
  - Developed EDAAC Specific Launch Critical/Launch Essential tracking matrix.
  - EDAAC ECS System Triage Lead.
  - Supported system readiness, and worked on ECS system installs, and system troubleshooting.
  - Worked on the ECS architecture/interface and understanding of the external test requirements.
  - Member EDAAC ECS Systems Engineering Team directly responsible for customer requests.

- Worked with ESDIS Test Lead to organize integrated ECS SVAT and ECS ETE testing.
- Provided support, guidance, and leadership as EDAAC ECS Test Lead during interface and ETE test and defined a program to combine Cert. /Ops Readiness Tests.
- Lead for Drop 3 and Drop 4 Systems Testing @ EDAAC.
- Developed EDAAC ORR inputs from updated Ops Scenarios, Agreements, and Test plans.
- Worked with CM, Test, Ops, and SE to update/maintain Web pages for EDAAC ECS.

Electronics Engineer GS-855-13   **12/01/91 - 6/24/97**
U.S. Army Aviation Program Executive Office, Aviation Electronic Combat Project Manager's Office, St. Louis, MO

- **Chairperson and subject matter expert for threat exploitation, simulation, and testing on the high visibility tri-service DOD Advanced Threat Infrared Countermeasures/Common Missile Warning System (Acquisition Category 1, multi-million dollar program).**
    - Developed system level requirements via modeling, testing, and analysis at the component level.
    - Used component level understanding to develop operational mission level requirements.
    - Performed technology surveys and feasibility studies to confirm system requirements.
    - Established program cost and schedule, and obtained/managed program funding.
    - Evaluated system via sub-system component design through simulation and test.
    - Reviewed and established systems algorithm data to obtain the proper process effects.
    - Simulated and tested at the integrated system level to insure correct operation.
    - Established a program documentation bulletin board and a data archive system/methodology.

- **Systems engineer for electronic systems in all aspects of the acquisition life cycle including:**
    - Ultraviolet and Infrared missile warning systems.
    - Infrared Focal Plane Array analysis.
    - High-speed data processing hardware/software and embedded processing.
    - IR Jammers including high speed, precision, stabilized, gimbal design.
    - Laser and crystal development and testing.
    - Performed electronic systems integration and test.
    - Developed paints/coatings and countermeasure expendables using simulation and test.
    - Performed system analyses on UNIX network of DEC Alphas and power PCs.
    - Use of numerous commercial off the shelf software products.

- **Supervised numerous personnel and functional activities in the Government and private industry.**
    - Managed a networked UNIX environment development/simulation Beta site team of over 25 people.
    - Provided technical management and direction for over 20 agencies (100+ people).

- **Government tech lead in the development, verification, validation, and correlation of high fidelity constructive engineering level hybrid and digital simulations of aircraft, missiles, countermeasures, and atmospheric/environment models.**
    - Set-up and completed numerous aircraft/missile/countermeasures tests.
    - Established test telemetry downlink data requirements for missiles and systems hardware to support systems analysis and model verification.
    - Measured and analyzed spectral/radiometric/imagery data of aircraft, missiles, countermeasures, backgrounds, and atmospherics.
    - Used test data and measured data to develop, verify, and validate FORTRAN/C/C++/ADA first principles physics models.
    - Understanding of software development process standards.

- **Technical advisor to the Office Under the Secretary of Defense for Acquisition for development of electronic warfare techniques export guidance policy.**
    - Provided a technology assessment of US and Foreign capabilities in the EO/IR arena.

Operations Research Analyst GS-1515-13   **12/16/89 - 12/01/91**
U.S. Air Force Headquarters Strategic Air Command, Studies and Analysis, Offutt AFB, NE

- **Technical advisor to the Director of Science and Research via various scientific analyses.**
  - Member of independent analysis team for special Air Force projects.

- **Developed system requirements for strategic aircraft systems on B-2, B-1B, and B-52.**
  - Analyzed weapon systems capabilities at the physics level and developed force-on-force and campaign level model inputs to support effectiveness analysis.

- **Performed probability and effectiveness analysis of aircraft and missile systems.**
  - Set-up and ran simulations on a classified VAX and PC network.
  - Completed the CINCSAC Far Forward Defense Study.
  - Performed of systems effectiveness analysis for nuclear weapons lay down.
  - Statistical analysis of weapons effects.

- **Completed re-locatable target testing and capabilities analysis.**
  - Used satellite information and simulations to locate vehicles and determine probability of detection.
  - Analyzed and tested aircraft targeting systems for target detection.
  - Developed/used visibility detection and probability models to complete the study.
  - Used multi-spectral data to train neural net and analyze targets.

- **Completed radar systems testing and analysis.**
  - Wrote test plans and reports.

- **Completed exploitation analysis of threat aircraft and weapons systems.**
  - Completed lab and field test analysis of aircraft acquisition and weapon systems, and performed system and mission level effectiveness studies.

- **Member of analysis team on the specially directed lethal self-defense program.**
  - Analyzed numerous weapons systems technologies and capabilities for bombers.

Systems Engineer GS-855-9/12   **11/10/85 - 12/16/89**
U.S. Army Aviation Systems Command, Aircraft Survivability Equipment Project Manager's Office, St. Louis, MO

- **Technical systems engineer for laser optical augmentation/detection system, Radio Frequency and IR expendable decoys, EO/IR warning and jammer, laser warning/jammers, and paint/coatings.**
  - Physics level understanding of the above technologies.
  - Developed system operational requirements through component and mission modeling, and testing.
  - Performed technologies surveys and feasibility studies to confirm system requirements.
  - Technical program manager responsible for program engineering, cost, and schedule.
  - Evaluated system via sub-system component design through simulation and test.
  - Reviewed and established systems algorithm data to obtain the proper process effects.
  - Simulated and tested at the integrated system level to insure proper operation.
  - First hand experience with production and operational deployment of systems.

- **Subject matter expert to aircraft program managers on establishment of survivability requirements.**
  - Performed aircraft survivability analysis using emulative and dynamic level models written in FORTRAN and C.
  - Used engineering expertise of the threat/aircraft to provide quick reaction analysis.

- **Army point of contact for aviation threat systems exploitation.**
  - Responsible for the purchase and systems exploitation requirements of foreign weapons systems to include engineering exploitation requirements at the electronics level.
  - Performed weapon systems analyses and capabilities studies and tests.
  - Involved in development and established a working knowledge of RF and IR missile simulators and simulations.

- **Independent Research and Development point of contact for numerous defense contractors.**
  - Provide electronic systems technology guidance to contractors to support Government requirements.

- **Measured and analysis of Radar Cross Section and EO/IR signatures of Army aircraft.**
  - RCS of aircraft and aircraft components in a chamber and in the field.
  - EO/IR signature of all Army aircraft and backgrounds.

- **Worked on aircraft system integration and low observable technology research and application.**
  - Installed and tested radar absorption material and coatings, IR signature reduction hardware and materials, and IR jammers and expendable systems on aircraft.
  - Installed test associated electronics on aircraft.
  - Repaired and tested electronics countermeasures systems in the field.

Engineer GS-801-5/7   **9/26/84 - 11/10/85**
U.S. Army Troop Support Command, Engineering Division, Technical Operations Branch, St. Louis, MO

- **Reviewed/updated technical data packages for systems procurement of Army end items.**
  - Worked with systems developers and Government team to perform requirements analyses.
  - Analysis and development of specifications, drawings, and engineering change proposals.
  - Working knowledge of Army Streamlined Acquisition process, specifically in the area of procurement and production at the system and sub-systems level.
  - Developed system reliability, availability, maintainability analysis skills, quality control experience, and cost estimating knowledge.

- **Project leader for the Army Secure Lighting program.**
  - Installed and measured spectral intensity of Army equipment lighting with respect to the EO/IR bands.

- **Project Engineer for the Army's Petroleum/Oils/Lubricants program.**
  - Performed analysis of the lubrication requirements of Army ground vehicles.

Education:

9/99 - 5/00	Dakota State University, Madison, SD	Information Systems Masters Classes
1/90 - 5/91	University of Nebraska-Lincoln, Lincoln, NE	Engineering Masters Classes
9/78-12/82	South Dakota State University, Brookings, SD	BSME

- Certified US Army Acquisition Executive, USGS Leadership 101 and 201, project management classes, and many other training classes.
- Active Security Clearance

*Awards***:**
USGS STAR Award for Contract evaluation team - 2008;USGS STAR Award - 2007 (US GEO support); NASA Team Award of Earth Observation Data Quality – 2006; USGS STAR Award – 2005; Raytheon C3I Technical Honors Award – 2001, Raytheon C3I Technical Honors Award – 2000, NASA Goddard Technology Commercialization Program Recognition Award – 2001, NASA Team Award for PDS development - 2001, EDC Process & Quality Improvement Award – 2001, RSC Achievement Award for PDS development – 2001, NASA L-7 Government Industry Team Award – 2000, RSC Incentive Award for TERRA Readiness – 2000, Landsat –7 Government Industry Team Award – 1999, RSC Achievement Award for Landsat Readiness - 1999, RSC Achievement Award for EDAAC Test Program Coordination – 1999, RSC ECS Incentive Award for ECS Testbed Support – 1998, EROS DATA Center Peer Award - 1998, Commendation for work on EW Techniques Release Guidance - 1996, Achievement medal for Civilian Service - 1995, Commendation for EO/IR systems article - 1992, Commendation for Re-locatable Target Study - 1991, Achievement medal for Civilian Service - 1989, Award for Military Operations support in Asia - 1985.