Melanie McCalmont

Education
Master of Science – Life Science Communication, Univ of Wisconsin-Madison, May 2008
Master of Science – Geography, Univ of Wisconsin-Madison, May 2006
Bachelor of Arts – Political Geography, Baylor University, May 2004
Associates Degree – Computer Science Education, McLennan Community College, June 2002

Clearance
Top Secret (inactive)

Certifications
Certified Agile Development Product Owner, 2013
Certified Agile UX Developer, 2015
UXC International Nielsen-Norman Group Usability Experience Certified (#1005412), 2014

Work Experience

2021-Present   L3Harris Technologies, Space and Airborne Systems   Colorado Springs, Colorado

SR SPECIALIST DATA MANAGEMENT
- Technical editor and documentation manager on Space and Airborne Systems programs. Develop and implement data management review cycle plans. Conduct reviews, establish schedules and work within a classified environment.

2020-2021   UNITED ROTORCRAFT   Englewood, Colorado

SR TECHNICAL WRITER
- Create flight, maintenance, troubleshooting, repair, and Part 27 product support manuals for public use Firehawk HH-60L firefighting/rescue mission system with a new Garmin glass cockpit. Write acceptance, return-to-service, and troubleshooting tests. Create illustrations.
- Test Director for first article experimental acceptance test program with a multi-disciplinary team including test pilots, engineering, production, QA, certification, and system analysts. Develop new tracking methods for earned value and program status.
- Trainer for Ventura County FPD Firehawk ground school, including flight manual overview, mission operations, and maintenance program

2018-2020   GOGO, LLC   Chicago, Illinois

SR TECHNICAL WRITER.
- Write and ensure quality of airline technical manuals for Part 21 in-flight Ku-band SATCOM system for EASA and FAA. Write all corporate Fault Isolation, Standard Practices, Maintenance, and Return to Service test procedures, including two system diagnostic tools. Create Service Letters and Technical Bulletins. All work performed on FrameMaker 2017, both structured and unstructured. Work within Jira, Jama, Slack, Oracle Agile configuration management, and custom database tools for daily work processes. Apply ATA iSpec2200 and industry best practices.

2017-2018   CUNA MUTUAL FINANCIAL GROUP   Madison, Wisconsin

AGILE TEAM LEAD, TECHNICAL BUSINESS ANALYST
- Team lead for a $2.2m enterprise data project to develop business models, procedures, and analytics for a cloud data analytics platform with Microsoft Azure, Hadoop, and Spark. Develop methods to ingest new data sources such as Census data and legacy flat data. Create company procedures for the platform hardware, data flow, procedures, interaction models, and risk points. Provide leadership to data science and management teams. Trained and supported summer IT interns.
- Developed a custom SharePoint website for end user customer support, including self-service information, tickets, and workflows. Developed a data dictionary system for data governance. Developed a standard business requirements template for all teams. Trained teams to manage website and content.

2016-2017   WISCONSIN SUPREME COURT-CCAP   Madison, Wisconsin

BUSINESS PROCESS ANALYST
- Tested, documented, and trained on launch of statewide eFiling system. Remote support of all Wisconsin counties, judges, and their hardware/software. Use case analyses, defect and failure mode identification, user testing and call center court system support. Tested and documented other software for Board of Bar Examiners, eFiling, appellate court, and judicial eBench platforms.
- Produced over 250 knowledge base articles in Zendesk (web) for the new and existing case management software. Documented legacy IT projects to decrease project risk.

2012-2016   WISCONSIN DEPT OF PUBLIC INSTRUCTION   Madison, Wisconsin

BUSINESS ANALYST – FEDERAL DATA
- Agency-certified product owner for federal data reporting on State of Wisconsin schools. Managed agile workflows and agile UX. Using state and federal specifications, analyzed, cleaned, and reported federal data from 440 school districts and private schools. Created procedures, handbooks, video tutorials, wikis, web-based resources, and intranet content.
- Agency representative to state geospatial council SAGIC. Led the deployment of ESRI statewide GIS software site license to school districts. Initiated and organized a project with Legislative Technology Bureau to collect, validate, and publish school district boundaries. Project estimated to save over $691K per year among state and county land managers.
- Developed the user interface and support documentation for a new statewide educational data portal, WISEdash. Created user test program using Agile UX methods. Trained groups on the new data portal, including internal staff, public school teachers, and external groups such as the Wisconsin Indian Education Association.

2009-2012   ALLIANT ENERGY CORP.   Madison, Wisconsin

DATA ANALYST (contractor)
- Analyzed and interpreted over 6 million records per day. Resolved automated metering infrastructure (smart grid) data discrepancies. Identified hardware deployment issues. Wrote reports, presentations, and briefings on results for different audiences.
- Created SQL queries in a real-time data cube to detect manufacturing problems, deployment errors, and failure trends. Selected test sites, deployed tests, coordinated with field personnel, and analyzed resulting test data.

2009-2009   JETAIRE AEROSPACE SYSTEMS   Atlanta, Georgia

PRODUCT ENGINEER: Created SFAR 88 program framework, including STC application, ICA drafts, white papers, analyses, STC application, tech manual supplements for a proposed fuel cell inerting system (reticulated foam) on MD-90. Wrote ICA and STC documentation.

2005-2009   U.S. GEOLOGICAL SURVEY   Middleton, Wisconsin

INFORMATION TECHNOLOGY SPECIALIST: Member of the Science Support Unit for the Wisconsin Water Science Center. Developed new website for the Wisconsin Water Science Center and the Mercury Research Laboratory. Created online science and technical articles, graphics, and edited internal publications. Member of the Publications Warehouse team, the national database for all USGS and Biological Resources Division publications. Managed the acquisition of nationwide Biology databases, cleansed legacy data, normalized formats and bibliographies. Converted databases and wrote technical materials related to project.

2006-2006   5-D SYSTEMS   Austin, Texas

PUBLICATIONS TECHNICAL WRITER: Contracted with Texas-based aerospace logistics firm to research and build technical manuals for BAE and Northrop Grumman for a head-of-state B747SP chaff and flare countermeasure system. Built complete parts database, generated supplemental TOs to ATA-100 spec. Used application of failure modes effect analysis (FMEA) and human factors (HF) in system analysis, coordinated engineering changes.

2004-2013   UNDERLINE[UNIVERSITY OF WISCONSIN-MADISON   Madison, Wisconsin]

PROJECT ASSISTANT, WEB DESIGNER, SCIENCE WRITER
- Designed new websites with significant amounts of new content for University of Wisconsin-Madison academic units or science-based projects including Governor Gaylord Nelson and Earth Day, Dept of Geography, Dept of Women's Studies, Lakeshore Nature Preserve, Wolves in Wisconsin, and professional websites for faculty.
- Research on historic relief models, restoration project, public information and tours.
- Photography, research and writing for department articles and public relations releases.
- Transitioned legacy paper course packets to Desire2Learn web-based course software.

1998-2001   JETAIRE AEROSPACE AND TECHNOLOGY   Atlanta, Georgia

PRODUCT SUPPORT MANAGER: Responsible for engineering product support and Part 21 supplemental and provisional type certificate documentation on all company aircraft modification projects. Wrote major proposal responses, white papers, and technical manual supplements. Hired, fired, and managed small team of technical employees. Worked closely with the FAA to obtain conformity inspections and production approvals for all of Delta Airlines' cargo fire suppression systems. Wrote technical manual supplements for MD-80, MD-88, MD-90, L-1011 aircraft. Received corporate award from Delta Airlines as "Minority-owned Supplier of the Year." Occasional contractor through 2004.

1986-1998   L-3 COM (RAYTHEON)   Waco, Texas

DEPARTMENT HEAD, TECHNICAL PUBLICATIONS/TRAINING: Manager of corporate technical publications, training, and graphics design department with more than 100 staff and a $1.6M overhead budget and publications contracts worth $48.9M on both military and commercial programs. Established performance goals, set rates, developed project strategies, and controlled budgets. Implemented executive-level Malcolm Baldrige TQM goals.

PROJECT TEAM LEADER: As project team lead, directed technical publications efforts and product reviews on aircraft modification programs for OC-135, C-141C, C-130( ), C-20( ), C-27A, C-5, E-3B/C, EC-135( ), US Army Blackhawk, and US Customs Service aircraft. Managed complex off-site logistics for ALC and commercial customer IPT, IPR, Val/Ver, and Pre-Pub reviews. Responsible for the technical quality and cost performance of project publications. Established self-directed work teams and subcontract labor teams. Evaluated new authoring platform software.

TECHNICAL WRITER: Wrote, researched, edited, and managed technical manual/technical order (TM/TO) supplements, support equipment guides, time compliance technical orders (TCTO), and commercial maintenance supplements. Assigned to line maintenance procedures, flight manuals, checklists, illustrated parts catalogs, wiring diagrams, schematics, charts, user guides, training guides, seatback placards, and more. Worked in mechanical, electrical, and software-intensive systems. Used application of failure modes effect analysis (FMEA) and human factors (HF) in system analysis for procedure development. Military project platforms included existing and new MDS for OC-135, C-141C, C-130J, E-6B, C-20B, C-27A, E-3B/C, E-4B, C-5A, and US Customs Service aircraft. Commercial projects included Japanese 'Air Force One' B747-SP, Brunei A340, A320, A310, Saudi and US wide-body aircraft. Received commendations from USAF and Boeing for quality.

DATABASE APPLICATIONS DEVELOPER: Using Microsoft Access and Excel, created a major relational database application for technical publications. Application used inputs from CAD drawings, engineering parts lists, change orders, and legacy data and would output MIL-STD parts catalogs, wiring lists, and repair parts lists. Trained staff on software, application maintenance and reporting. Also created department program tracking and earned value Access database application used by teams to standardize and highlight performance on military and commercial programs.

PROPOSAL COORDINATOR: Assigned to four critical Navy, Air Force, and FMS proposals. Responsible for effective coordination of proposal authors, illustrators, cost estimators, and managers. Directed costing inputs, graphics support, technical edit, RFP compliance, quality control, review events, printing and shipping under extremely aggressive schedules.

1985-1986 ASSOCIATED AIR CENTER   Love Field, Dallas, Texas

JR. ELECTRICAL ENGINEER: Designed electrical assemblies and interfaces for custom B727 Brunei head-of-state modification. Created cable assemblies, mechanical sketches, harness installation drawings, specify parts, and create change orders. Researched serial number history, wrote technical order changes, drafted sections of aircraft operating manual and passenger briefing cards.

1985-1985 AEROTRON INC. Meacham Field, Dallas, Texas

ELECTRICAL TEAM LEAD: Design cables and wire assemblies for Saudi head-of-state Boeing Jetfoil. Assigned to electrical team onsite in Seattle. Hired local electrical team, supervised, trained, and performed preliminary quality assurance on electrical installation. Checked drawings and change orders. Purchased parts.

1980-1985 DUNCAN AVIATION, INC. Lincoln, Nebraska

ELECTRICAL INSTALLER: Fabricated and installed cable assemblies for Gulfstream, Swearingen, Lear, Falcon, De Havilland, Beech, Cessna, Piper, Sikorsky, Bell, and many other aircraft and rotorcraft models. Fabricated instrument panels, racks, equipment panels, enclosures, and brackets. Installed flight control avionics, in-flight entertainment, antennas, interiors, and system interfaces. Designed printed circuit boards and relay assemblies. Compliance with FAA Part 145 Repair Station regulations and forms. Assigned to Flight Safety engineering team doing orange-wire instrumentation with strain gauges, cameras, and other equipment. Flew test flights. Checked drawings and documentation.

Technical manuals written:

Commercial Manuals:
    Japanese Air Force One Boeing 747SP
    Sultan of Brunei Royal Fleet Airbus A340, A320, and A310
    Delta Air Lines MD-90, MD-88, B727, B737, B767, L-1011
    Air Jamaica B727, MD-80
    Aloha Air Lines MD-80/88
    Air France MD-88, B767
    U.S. Immigration and Customs Enforcement (ICE) Border/Transportation Security (BTS) C-12C
    Several Part 25 airlines operating nearly all Airbus and Boeing platforms

Military Manuals:
    United States of America Open Skies OC-135B Treaty Observation Aircraft
    United States of America C-20B (airlift mission for high-ranking government and Department of Defense officials)
    U. S. Navy TACAMO E-6B Mercury (the survivable communications link between President of the United States and the Secretary of Defense)
    U.S. Air Force Reserve Command C-141C Glass Cockpit
    U.S. Air Force and NATO Joint Mission E-3B/C AWACS
    U.S. Air Force National Airborne Operations Center E-4B
    U.S. Air Force Southern Command C-27A (Latin American operations)
    U.S. Air Force Reserve Command C-141C, C-130( ), WC-130
    U.S. Department of Defense Air Mobility Command C-5 (strategic intertheater support)

Technical Skills and Software

Geographic Software	Authoring and Support
ArcGIS 10.3	Adobe Framemaker 2017
ArcGIS Spatial Analyst	Adobe Acrobat (advanced)
ArcGIS Online (cloud mapping)	Microsoft Word (advanced), Access, Project
Google KML and KMZ	Zendesk (customer support and help articles)
Web and Design	Blackboard Collaborate
Microsoft SharePoint, SP Designer	Microsoft Team Foundation Server
Corel Draw	Jira Agile project tool
Dreamweaver, Fireworks, Illustrator	VersionOne Agile project tool
Visio	Adobe Forms
HTML, CSS, database integration into web	Microsoft Visual Studio