



CHANGE ORDER

#020

Change Order No. 020

Date: 9/14/2023

Project Name: MERA Next Generation Radio System

Customer Name: Marin County

Customer Project Mgr: Dave Jeffries

The purpose of this Change Order is to:

In accordance with Sections 9 and 11 of the contract, Motorola is requesting approval for a change in Key Personnel, namely the Project Engineer from Steve Gonzales to Dennis Foss and Micah Shirmer.

Move out Final Acceptance to February 28, 2025

Contract # 31701399

Contract Date: 03/07/17

In accordance with the terms and conditions of the contract identified above between Marin County and Motorola Solutions, Inc., the following changes are approved:

Contract Price Adjustments

Original Contract Value:	\$ 34,337,451.06
Previous Change Order amounts for Change Order numbers <input type="text" value="1"/> through <input type="text" value="19"/>	\$12,109,262.73
This Change Order:	\$ 0.00
Existing Contract Credit:	\$ 0.00
Net Contract Impact of this Change Order:	\$ 0.00
New Contract Value:	\$ 46,446,713.79

Completion Date Adjustments

Original Completion Date:	3/27/2019
Current Completion Date prior to this Change Order:	10/08/2024
New Completion Date:	02/28/2025

Changes in Equipment: <i>(additions, deletions or modifications)</i> Include attachments if needed
N/A

Changes in Services: <i>(additions, deletions or modifications)</i> Include attachments if needed
Personnel change for Project Engineer from Steve Gonzales to Dennis Foss and Micah Shirmer. The qualifications are included in the attached resumes.

Schedule Changes: <i>(describe change or N/A)</i>
Move out Final Acceptance to February 28, 2025

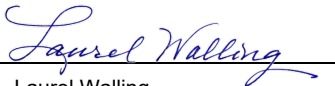
Pricing Changes: <i>(describe change or N/A)</i>
N/A

Customer Responsibilities: <i>(describe change or N/A)</i>
N/A

Payment Schedule for this Change Order: <i>(describe new payment terms applicable to this change order)</i>
N/A

Unless amended above, all other terms and conditions of the Contract shall remain in full force. If there are any inconsistencies between the provisions of this Change Order and the provisions of the Contract, the provisions of this Change Order will prevail.

IN WITNESS WHEREOF the parties have executed this Change Order as of the last date signed below.

Motorola Solutions, Inc.	Customer
By: <u></u>	By: _____
Printed Name: <u>Laurel Walling</u>	Printed Name: _____
Title: <u>Regional Services Manager</u>	Title: _____
Date: <u>9/20/203</u>	Date: _____

Reviewed by: Rebecca Burbrink
Motorola Solutions Project Manager

Date: September 14, 2023

DENNIS J. FOSS
SAN DIEGO, CA 92116
858-442-2805

PROFESSIONAL SUMMARY

Engineering professional with 33 years' experience in communication systems design, product development, project management, integration, test, and deployment of commercial and military networks.

Leadership Experience:

Recruitment of qualified staff, mission and vision casting, professional development mentoring, personnel performance management, project management (schedules/budgets).

Technical Experience:

Wireless voice and data communications engineering experience includes business development, pre-sales technical support, system requirements development, product trade studies, hardware and software design, system integration, field deployment, validation testing, and user training.

PROFESSIONAL EXPERIENCE

MOTOROLA SOLUTIONS - Los Angeles, CA

2012 - PRESENT

Principal Staff Engineer – Microwave SME

- Lead microwave network architect providing engineering design support for wireless projects throughout the western US region.
- Responsible for the development and construction of a wide-area mesh network transport solution for the LA Regional Interoperable Communication System (LARICS) project. The project resulted in the development of two independent wireless communications systems; one 4G (LTE) and one Land Mobile Radio (LMR) used by LA County Sheriff, Fire and other law enforcement agencies to facilitate the delivery of mission critical emergency services to the residents of Los Angeles County.
- The mesh transport network uses microwave links from 6 to 23 GHz, and private fiber circuits from local exchange carriers. Network routing and resiliency is enabled via Multi-Protocol Label Switching (MPLS) services.
- Other significant support roles throughout the LARICS project include:
 - Significant engagement with LARICS and internal leadership to review project status, schedule compression opportunities, risk analysis, construction progress/status, and training development.
 - Site design support including architectural and engineering analysis, civil planning, permitting, electrical and mechanical designs (DC, AC, battery, generators, HVAC sizing, etc).
 - Engineering design of an off-grid power solution for a remote radio facility in remote forest lands.
 - Development and maintenance of complex schedule tool to accurately predict when network connectivity is functional at each network nodes. The tool delivered accurate system status that enabled resource planners to manage schedules, field resources, and budgets with more precision throughout the multi-year construction and testing phases.

2009 - 2012

DENNIS J. FOSS

SEMPRA ENERGY - San Diego, CA

Infrastructure Technology Manager – Grid Communication Services

- Role includes functional leadership, strategic planning, budgeting, technical guidance and mentoring of SDG&E employees and contractors with a focus on supporting existing, and developing new wireless communication networks for internal business users.
- Provided technical leadership for SDG&E's wide area wireless networks, which includes:
 - New wide-area WiMax radio network systems engineering, design and construction,
 - Expansion of a wide area Motorola 900 MHz Smartzone radio network,
 - Development of a custom GPS location solution leveraging the Smartzone network,
 - Operations support for a multi-band voice radio network in Los Angeles regions,
 - Operations support for a 10-site Motorola 800 MHz RD-LAP packet data network,
 - Operations support for a 40-site Data Radio 900 MHz packet data network.
- Evaluated several LTE and WiMax product offerings and developed requirements for a multi-layer RF communications system for SDG&E's Smart-Grid communications core infrastructure.
- Assisted in the development of backhaul requirements and examined product offerings from Motorola's PTP products, Harris microwave, Redline WiMax, wired MPLS based carrier services, Metro Ethernet.
- Led the engineering design for a 9-site expansion of the Motorola Smartzone voice radio network to support the Sunrise Powerlink construction project.
- Provided RF design support, data network security and capacity analysis, and systems integration support for SDG&E's Smart Meter project using Itron's Openway 900 MHz proprietary mesh network with Verizon EVDO and ATT GPRS backhaul MPLS services.

NORTHROP GRUMMAN - San Diego, CA

2002 - 2009

Test Systems Architect / Sr. Systems Engineering Lead

- Developed the system architecture and managed the engineering development of several complex communications system simulator products used to evaluate multi-waveform radio performance for the Joint Strike Fighter (F-35's) Communication, Navigation, and Identification radio, and the military's next generation JTRS radios.
- Directed product development activities of RF and software engineering design teams.
- Developed and maintained subcontract relationships with external suppliers for manufacturing of custom RF hardware and software products.
- Participated in product integration and deployment of systems to internal and external customer lab facilities.
- Created and delivered hands-on training and demonstrations for end-users.

Project / Cost Accounting Manager

- Defined tasks, scope of work, and managed engineering design team's ongoing development activities.
- Efficiently managed \$35M fiscal resources, with consistent goal to minimize costs without sacrificing product quality while meeting design objectives.

DENNIS J. FOSS

ENSEMBLE COMMUNICATIONS - San Diego, CA

2000 - 2002

Field Engineering Team Manager

- Managed personnel for testing, integration, and field deployment of wireless ATM Local Multipoint Distribution System (LMDS) Base Station and CPE products from 24 to 42 GHz.
- Managed installation teams and worked closely with clients in field installation environments throughout the US market.
- Worked with sales and marketing teams to develop and deliver product demonstrations to customers.
- Conducted validation testing for T1 (Structured / Unstructured), and 802.3 (Ethernet) networks utilizing Cisco routers and Marconi ATM switches, Smart-Bits, Fluke, SunSet and other test equipment.
- Worked closely with system test laboratory and R&D groups to validate product performance, assist with GUI designs, and improve product quality.

MOTOROLA - Commercial, Government, Industrial Solutions Sector - San Diego, CA 1998 - 2000

Lead Customer Engineer

- Responsible design engineer (RDE) for the design and implementation of wide-area trunked wireless voice and data communication networks for utility and public safety markets.
- Pre-sale responsibilities included customer needs analysis, system architecture development, spectrum planning, proposal generation, sales presentations, and contract negotiations.
- Post-sale activities included field deployment, system testing, RF network optimization, and system capacity optimization.
- Worked closely with clients to evaluate and remedy Y2K system deficiencies in state-wide 900 MHz wireless utility dispatching network.

VIASAT - Carlsbad, CA

1996 - 1998

Technical Staff, Software Engineering Department

- Developed Relay Bus Controller application software in C to control MIL-STD-1553 serial bus.
- Tasks included 1553 protocol designs, bus traffic loading analysis, software development, and integration testing.
- Developed 5 kHz Demand Assigned Multiple Access (DAMA) satcom multimedia training application.
- Extensive international travel to provide formal classroom instruction to end-users in the operation and maintenance of DAMA satellite communication network equipment and protocols.
- Developed high performance UHF (240-273 MHz) receiver. Tasks included analog circuit design, PWB layout, software development, and lab integration and performance testing.

MOTOROLA - Land Mobile Products Sector - San Diego, CA

1991 - 1996

Senior Systems Engineer

- Designed and implemented Motorola's packet-switched RD-LAP (Radio Data-Link Access Procedure) wireless data networking product for public safety clients. Responsibilities included needs analysis, system architecture development, RF propagation analysis, system capacity analysis, system integration lab testing and field deployment at customer locations throughout the US.
- Developed product performance test plans and procedures for Motorola's RD-LAP wireless data protocols and managed lab testing of 500 MHz Base Station and RF modems.

DENNIS J. FOSS

TRW - Military Electronics and Avionics Division - San Diego, CA

1988 - 1991

Technical Staff, Systems Engineering Department

- Developed direction-finding receiving system that measured and evaluated pulsed RF signal properties for electronic warfare applications. Tasks included simulation, software development, modulation optimization, data-link network protocol design, RF performance analysis, acceptance test procedure development, and integration testing.
- Developed signal processing algorithms for the narrow-band DQPSK FDM Link 11 digital radio for the Navy. Tasks included development and validation of FFT / DFT signal processing algorithms through software simulation.

EDUCATION / OTHER

B.S. Electrical Engineering - CSU, Fresno.

Post-graduate work in communication theory, networking, DSP, software development – San Diego State University (SDSU).

Have held U.S. Dept. of Defense (DoD) and other advanced security clearances.

MICAH SCHIRMER

25326 Wild View Rd
Menifee, CA 92584
(858) 242-2761

WORK EXPERIENCE

- Motorola Solution INC**, Southern California, CA (8/12– Present)
Principal Systems Engineer and Engineering Manager
- Lead Network Engineer/Architect (2014-Present)
 - Manages ENG team, sets project team strategic goals, priorities, and assigns daily work assignments
 - High Level Design, Low Level Design, Verification, Security Hardening, and Implementation of IP/MPLS network
 - Knowledgeable and experienced in various protocols/network topologies: QoS, BGP, ISIS, OSPF, VPRN, VPLS, VLL, RSVP, TLDP, Segment routing, etc.
 - Experience in multi-vendor environments (Juniper, Cisco, Nokia, Fortinet, etc.)
 - Firewall security policy design and testing
 - Main interface with customer representatives
 - Networking and backhaul subject matter expert specializing in Microwave based MPLS backhaul design
- Coverage and Network Engineer (2012-2014)
- RF coverage design engineer
 - Coverage Test Lead engineer

- BAE Systems**, San Diego, CA 8/06– 2/2012
Network Analyst
- Held Top Secret clearance
 - Designed and implemented TCP/IP networks and systems
 - Designed, installed, programed, tuned and/or maintained various telecom, IT, and wireless communication systems

Customs and Border Protection, Office of Information Technology 2/00 – 8/06
Telecommunications Officer

- Similar to above work experience

U.S. Navy, San Diego, CA 1/94 – 1/00
Electronic Technician 2cnd Class

- Held Secret clearance
- Maintained and repaired radar, GPS, RF communications

CERTIFICATIONS

Nokia Service Router Architect (SRA # 331) 11/25/2017-2023
COMP/TIA Network+ Expired
COMP/TIA Security+ Expired

EDUCATION

San Diego State University 9/06 - 12/10
B.S. in Electrical Engineering

U.S. Navy Electronic School and Training 3/94 - 11/95