

National Aeronautics and Space Administration

Communications Service Office (CSO) Mission Operations Status

Scott Douglas
CSO Deputy Mission Operations Manager

Agenda

- Communications Service Office Overview
- NASA Integrated Communications Services (NICS) Contract overview
- Mission Outage Notification System (MONS) Filter training initiative
- RAD power supply replacement initiative
- Shuttle Retirement Status
- Nortel Router Replacement Project Status

Agency Service Delivery Strategy

- Through the IT Infrastructure Integration Program (I3P), the Agency OCIO has determined to take responsibility for enterprise-wide (Agency) delivery of IT services and sponsored a set of Agency-wide service delivery contracts to support this strategy
 - Agency Consolidated End-user Services (ACES)
 - Enterprise Applications Services Technologies (EAST)
 - NASA Enterprise Data Center (NEDC)
 - NASA Integrated Communications Services (NICS)
 - Web Services Technologies (WEST)
- The Agency is in the process of establishing governance structures and service offices for each major service area
 - Example – Agency Communications Service Office which will utilize NICS as one of its primary contract vehicles
- For each service area, one or more Host Centers are identified as principally responsible for the service office
 - Example – ARC, GSFC and MSFC are identified as the Host Centers for the Agency CSO

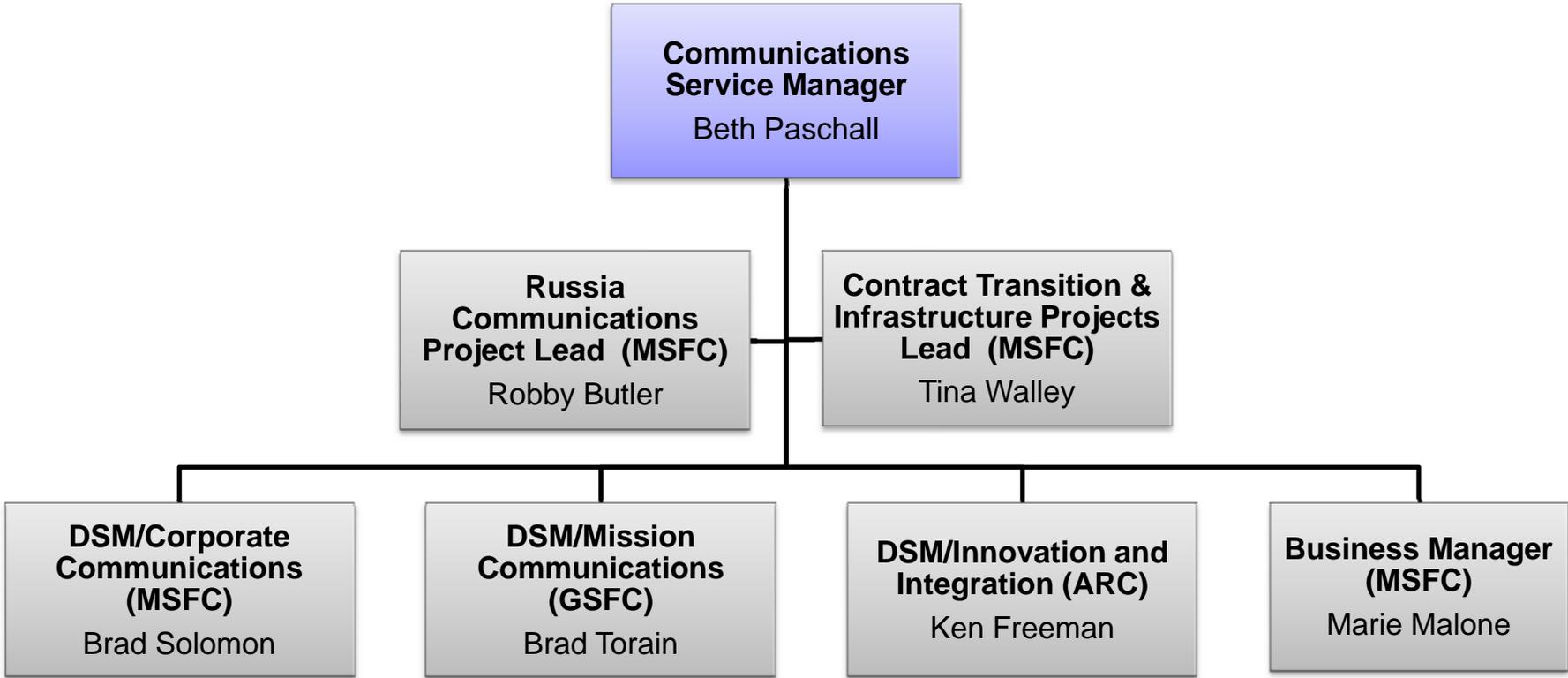
CSO Organization Notes

- CSO has responsibility for enterprise-wide delivery of communication services
 - Includes all current services provided under the NISN Project, as well as additional local Center services
- CSO staffing is primarily drawn from the three Host Centers – ARC, GSFC and MSFC
 - MSFC provides leadership for the overall program management, administrative and financial management, and management of the corporate communications services
 - ARC provides cross-cutting integration and leadership in the areas of IT security, research networking, emerging network technology and innovation, enterprise architecture, and project management governance
 - GSFC provides leadership for the overall management of the mission communications services

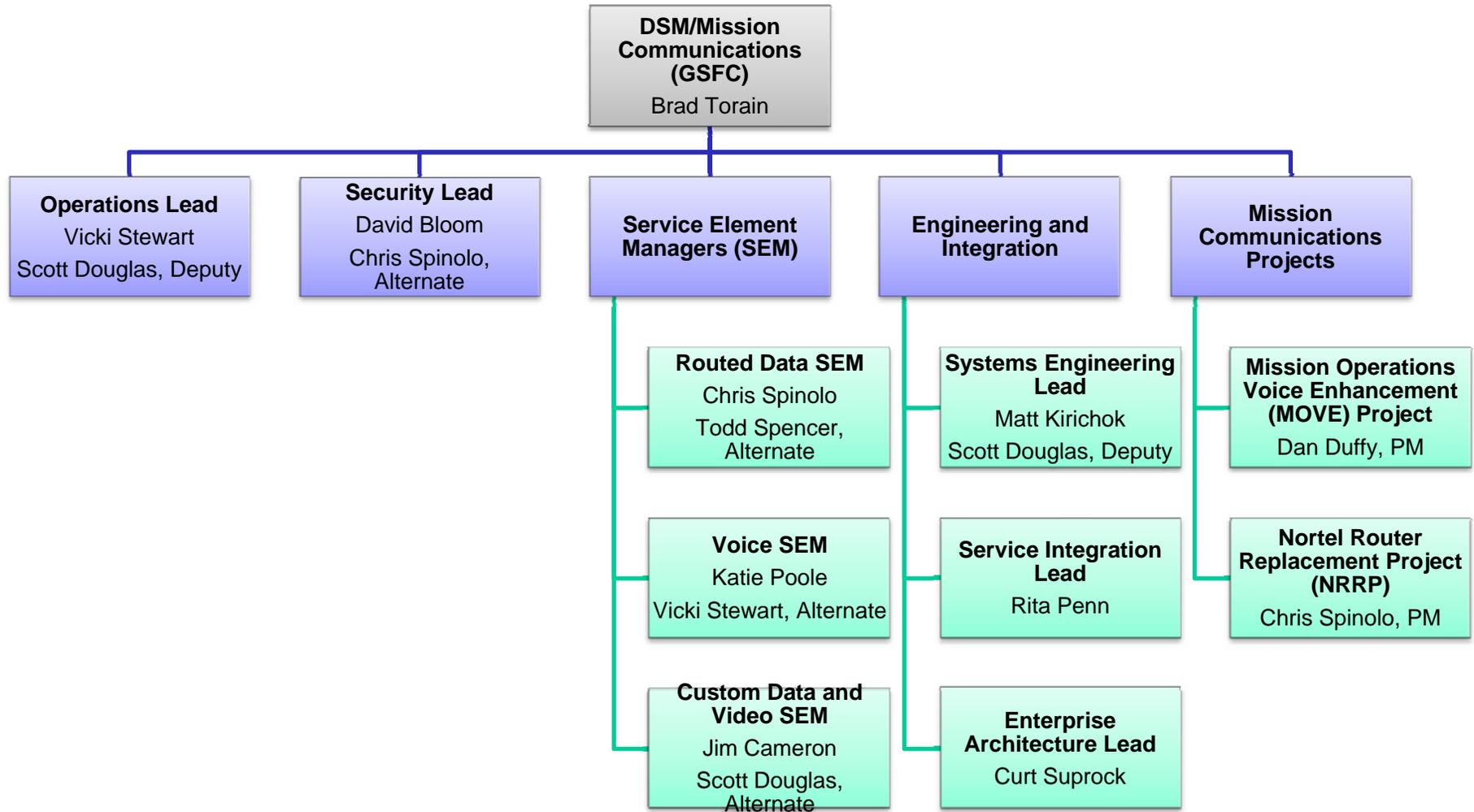
Scope of Responsibility

- Deputy Service Manager (DSM)/Corporate Communications
 - Wide-area, local area, and center-unique services.
 - Corporate Communications Projects
- DSM/Mission Communications
 - Wide area and GSFC local mission network services.
 - Mission local services at other centers are not included in the initial scope.
 - Mission Communications Projects
- DSM/Innovation and Integration
 - Innovation and integration across mission and corporate services.
 - Enterprise Architecture and Project Management across mission and corporate services.
 - Communications Projects that cut across both mission and corporate services.
- Business Manager
 - Business support for all corporate and mission services
 - Business functions related to: innovation and integration, Russia services, and projects.
 - Customer outreach and requirement management
- Russia Communications Project Lead
 - Includes all services provided in-country (both mission and corporate services).

Communications Service Office Structure



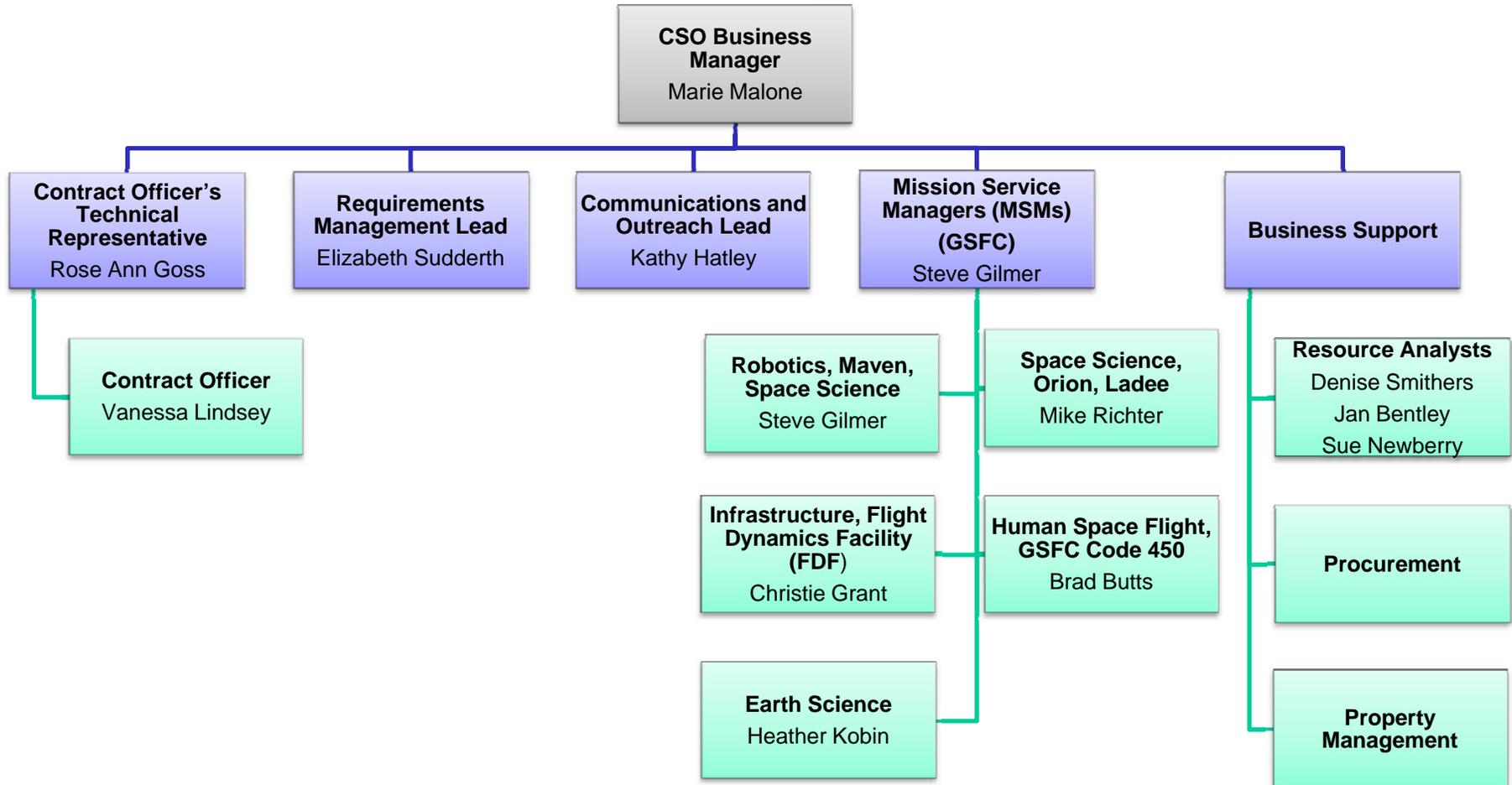
CSO Mission Communications



CSO Mission Service Element Managers

CSO Mission Service Responsibilities					
Service Element	PWS	NASA Communications Service Office (CSO)		NASA Integrated Communications Services (NICS)	
		Primary	Alternate	Primary	Alternate
Mission Voice Services	3.7.1	Katie Poole 301-286-5636 katie.poole@nasa.gov	Vicki Stewart 301-286-6205 victoria.l.stewart@nasa.gov	Montserrat Salop 301-902-6023 montserrat.r.salop@nasa.gov	Gary Schlueter 301-286-0787 gary.d.schlueter@nasa.gov
Mission Video Services	3.7.2	Jim Cameron 301-286-6287 james.cameron@nasa.gov	Scott Douglas 301-286-9550 scott.c.douglas@nasa.gov	Joe Damiano 301 286-6503 joseph.a.damiano@nasa.gov	Mike Burroughs 301-286-6146 michael.a.burroughs@nasa.gov
Mission Routed Data Services	3.7.3	Chris Spinolo 301-286-7552 chris.spinolo@nasa.gov	Todd Spencer 301-286-0745 todd.a.spencer@nasa.gov	Joseph Anokye 301-286-0188 joseph.k.anokye@nasa.gov	Tim Clark 301-286-2688 timothy.t.clark@nasa.gov
Mission Integration Services	3.7.4	Rita Penn 301-286-7535 margarita.penn@nasa.gov	TBD	Paul Hill 301-286-2726 paul.d.hill@nasa.gov	Randy Honeycutt 301-286-00771 randy.honeycutt@nasa.gov
Mission Dedicated Data and Custom Services	3.7.5	Jim Cameron 301-286-6287 james.cameron@nasa.gov	Scott Douglas 301-286-9550 scott.c.douglas@nasa.gov	Montserrat Salop 301-902-6023 montserrat.r.salop@nasa.gov	Tim Clark 301-286-2688 timothy.t.clark@nasa.gov
Center-Specific Mission Services	3.7.6				
Mission IT Security	3.7.7	David Bloom 301-286-4676 david.d.bloom@nasa.gov	Chris Spinolo 301-286-7552 chris.spinolo@nasa.gov	Mike Leahy 301-286-8468 michael.a.leahy@nasa.gov	Scott Barbier 301-286-0770 scott.a.barbier@nasa.gov
Operations Management (All Services)	3.8	Vicki Stewart 301-286-6205 victoria.l.stewart@nasa.gov	Scott Douglas 301-286-9550 scott.c.douglas@nasa.gov	Paul Hill 301-286-2726 paul.d.hill@nasa.gov	Shawn Belton 301-286-2726 shawn.belton@nasa.gov
Systems Engineering Lead (All Services)	3.11	Matt Kirichok 301-286-3435 matthew.d.kirichok@nasa.gov	Scott Douglas 301-286-9550 scott.c.douglas@nasa.gov	N/A	N/A
		Denotes a CSO service			
		Denotes infrastructure			
		Denotes operational responsibility			

CSO Business Management



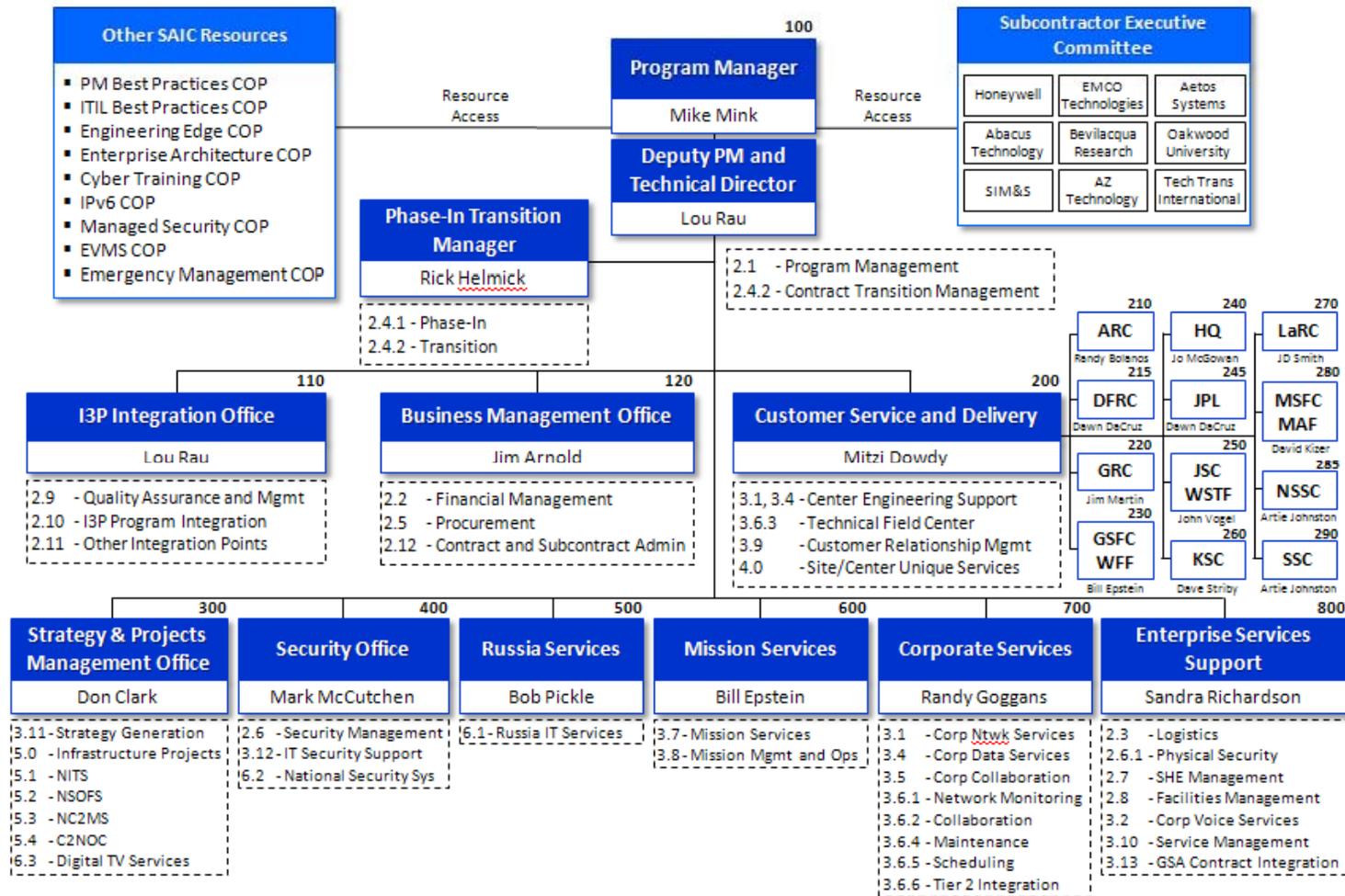
NASA Integrated Communications Services (NICS) Contract

- NICS is an Agency wide Contract that is part of the Office of the CIO's IT Infrastructure Improvement Program (I3P)
- NICS will be responsible for providing NASA's Wide Area Network, Local Networks, and Center Services at NASA Centers
- NICS contract will be administered by NSSC as part of the Integrated Information Infrastructure Program (I3P) Business Office; program and technical management of the contract will be performed by the CSO.
- GSFC/NISN/CSO initial implementation utilization of NICS:
 - Corporate Services
 - Data Service – Center Network Environment (CNE)
 - The CSO is now responsible for Center LAN and center-unique services, in addition to the Corporate WAN services that NISN historically provided.
 - Voice and Video Services - WAN
 - Mission Communications Services – both WAN and LAN at GSFC
 - Missions Communications Services will continue to be managed by CSO staff at GSFC.

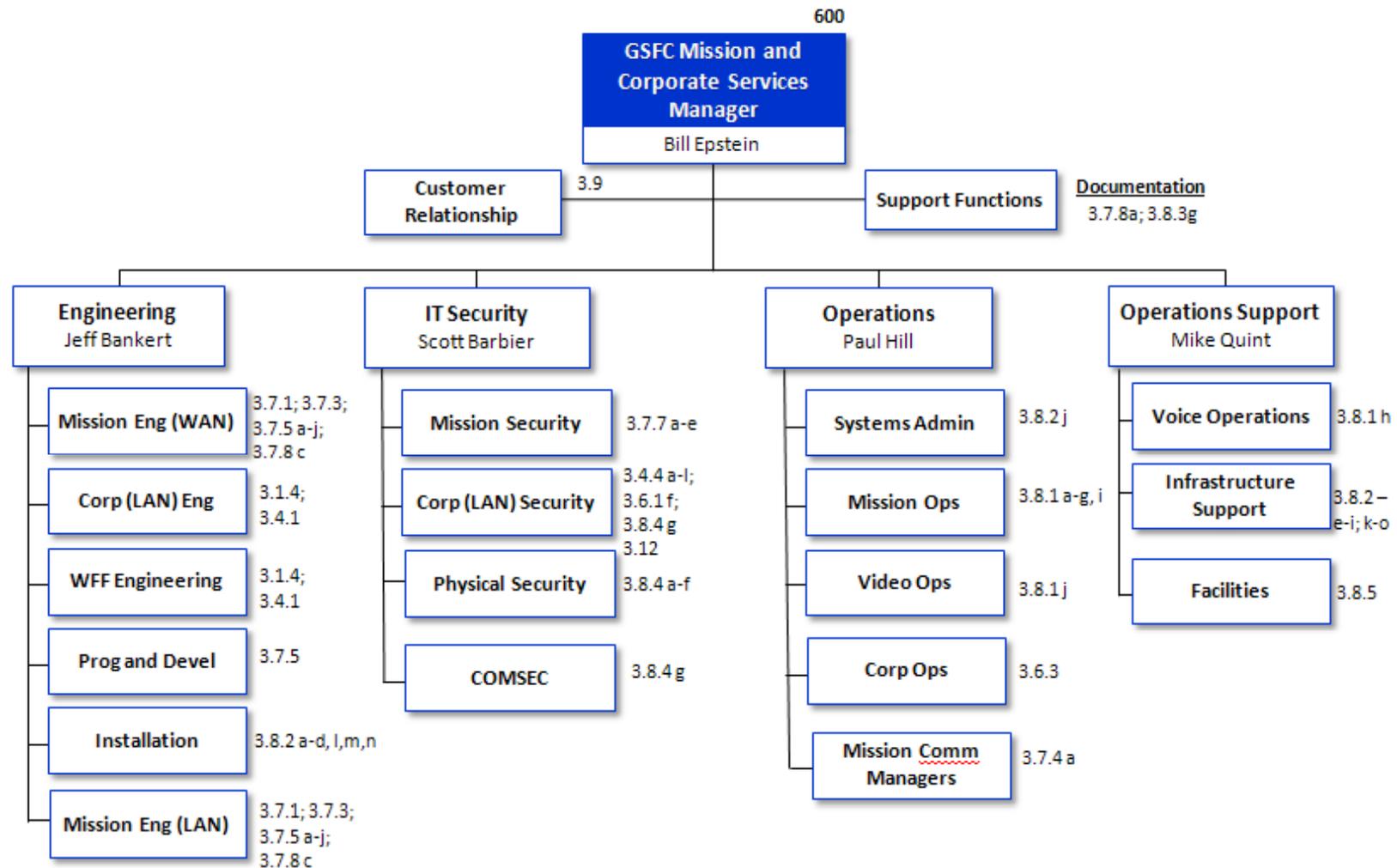
SAIC Management Approach

- Provide an organizational structure that balances the goals of increased efficiencies through centralized service management while also maintaining responsiveness and flexibility of NASA Center needs
- Standardization of network service offerings, establishment of end-to-end service management and streamlined service delivery methods through the application of ITIL
- Center responsiveness by delegating authority to local Center Customer Service and Delivery Manager
- Internal lines of authority clearly define areas of responsibility in the various elements of NICS Services
- Phase-In/Transition framework to consolidate and manage the contracts
- Effective use of SAIC “Communities of Practice”

NICS Program Organization



GSFC Mission and Corporate Services



Mission Outage Notification System Training Initiative

- Many Customers have complained that Mission Outage Notifications are not useful because they receive too many that have nothing to do with their Sites or Projects.
- The Mission Outage Notification System has always had filter capability similar to AOPNS.
- Operations is standardizing the wording of the MONS messages and providing training to the Mission Communications Managers (MCMs) on using the MONS Filters so they can train customers.
- MONS Training
 - MCMs will be providing training in the near future on how to apply for a MONS account, set up a MONS account, and provide specifics on how to selectively filter and receive only those MONS which impact the customer specifically.

Mission Outage Notification System

- MONS Filtering (three ways)
 - Filter by Exact Phrase
 - Any Outage Notification that contains the EXACT submitted Phrase in any field will be sent to you
 - Filter by Key Words
 - Any Outage Notice that contains any one of the submitted word(s) in any field will be sent to you
 - Filter by Words to Exclude
 - Any Outage Notice that contains any one of the submitted word(s) will NOT be sent to you
- Training will be available starting in July. Contact your Mission Communications Manager or Mission Service Manager to schedule training.

RAD-2100 Channel Bank Power Supply Replacement Project

- RAD is replacing power supplies that have been identified as having defective capacitors within a range of serial numbers made in 2005.
- CSO and AT&T have
 - Determined the extent of the problem by contacting the sites with RAD-2100 channel banks to obtain S/N of power supplies to cross reference with the vendor list.
 - Begun shipping replacement Power Supplies to sites and returning the defective Power Supplies to RAD for Refurbishment.

RAD-2100 Channel Bank Power Supply Replacement Project

- To date three batches of replacement power supplies have been shipped from the vendor for our deployment throughout the network. Vendor repair is expected to take 2-3 weeks to upgrade each power supply. Turn around time has averaged 4-6 weeks.

18 power supplies on 15 December 2011

20 power supplies on 22 February 2012

12 power supplies on 28 March 2012

RAD-2100 Channel Bank Power Supply Replacement Project

- 126 power supplies require replacement network wide.

GSFC: 36 power supplies

JPL: 16 power supplies

JSC: 15 power supplies

MSFC: 10 power supplies

White Sands: 7 power supplies

APL: 4 power supplies

WLPS: 4 power supplies

NASA HQ: 4 power supplies

Suitland: 4 power supplies

VAFB: 4 power supplies

Hanger AE: 3 power supplies

Capitol College: 2 power supplies

Glenn Research: 2 power supplies

Goldstone: 2 power supplies

Schreiver AFB: 2 power supplies

Lockheed Martin: 2 power supplies

Penn State: 2 power supplies

Poker Flat: 2 power supplies

Palestine: 2 power supplies

Berkley: 2 power supplies

Sioux Falls: 1 power supply

RAD-2100 Channel Bank Power Supply Replacement Project

- 36 Power supplies have been replaced throughout the network to date.

GSFC: 18 power supplies

JSC: 6 power supplies

MSFC: 5 power supplies

White Sands: 2 power supplies

VAFB: 2 power supplies

Glenn Research: 1 power supply

Palestine: 1 power supply

Capitol College: 1 power supply

RAD-2100 Channel Bank Power Supply Replacement Project

- 13 Power supplies are at various sites pending replacement coordination.

WLPS: 2 power supplies

NASA HQ: 2 power supplies

APL: 2 power supplies

Suitland: 2 power supplies

Penn State: 1 power supply

Goldstone: 1 power supply

White Sands: 1 power supply

Berkley: 1 power supply

Lockheed Martin: 1 power supply

Shuttle Turndown of CSO services

- CSO Requirements and Ops, NOIT, SCIO, and NIMO as well as Center and Project representatives coordinated disposition of STS services
- As of February 2012, all input received, no additional changes
- Shuttle Flight, Launch and Landing PRDs archived
- Remaining actions for CSO:
 - Assign a requirement owner for the CORE funded multiuse services (i.e. countdown timing, tracking data)
 - Submit a NSR for unassigned bandwidth/voice to determine if agency benefits or should be disconnected

Nortel Router Replacement Project Status

- Implementation complete
- Transition Readiness Review held on April 4 2012
- Nortel Vendor maintenance extended using contingency funds
- Transition Completion scheduled for Jan 2013

NRRP Goals and Objectives for this Transition

- NRRP (Primary) Objective:
 - The primary objective for the NRRP is the successful migration from Multicast Open Shortest Path First (MOSPF) to another Multicast routing protocol allowing the replacement of the legacy Nortel Routers, 3Com hubs and Fiber Distributed Data Interface (FDDI) devices resident in the multicast portion of the NISN Closed IONet

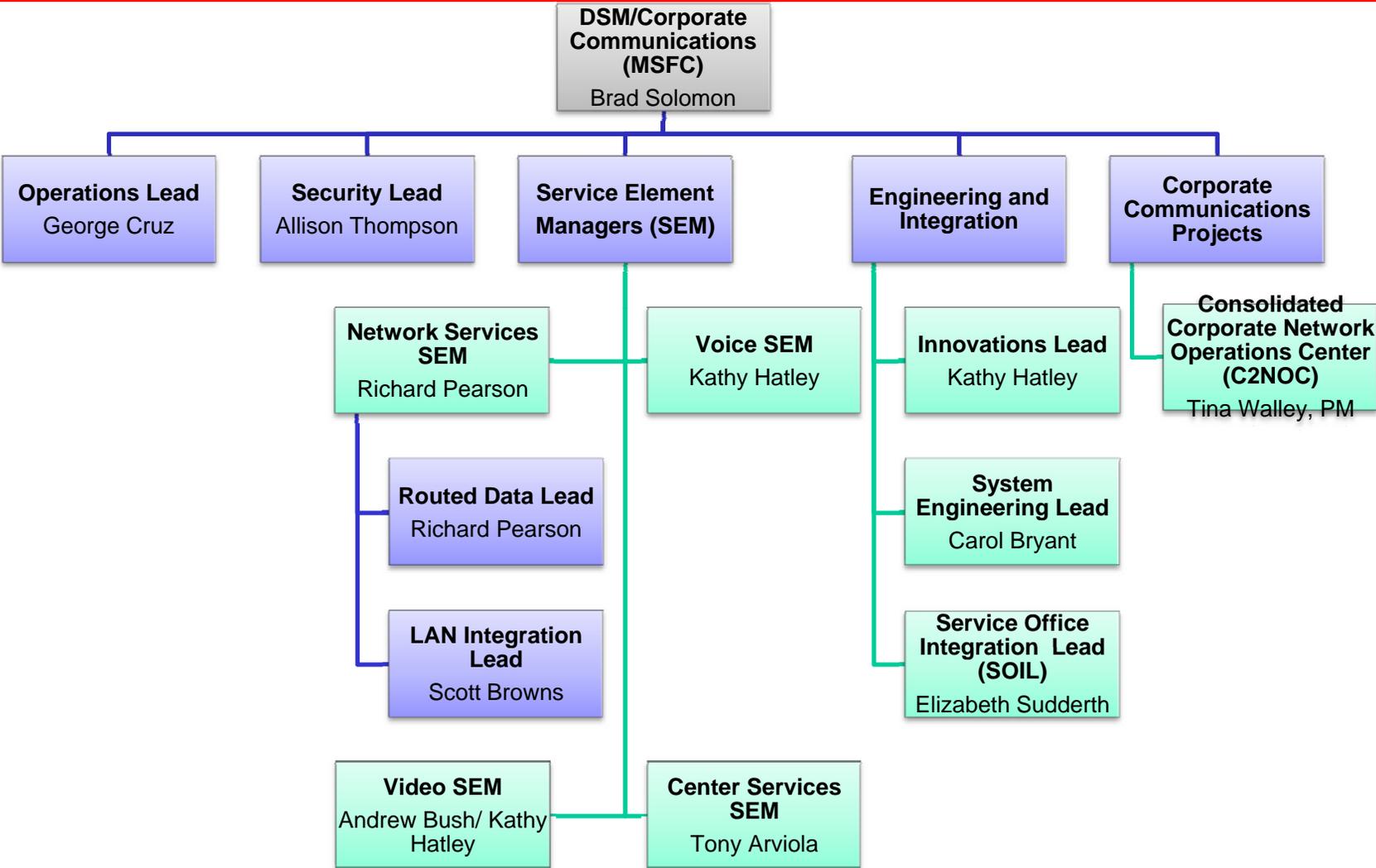
- Transition Goals and Objectives:
 1. Move from MOSPF to a current, industry standard IP multicast protocol
 2. Replace all existing (legacy) Nortel equipment, 3Com hubs, and FDDI devices on the multicast portion of the Mission Network Closed IONet
 3. The SLAs attributable to the architectural solution defined for this project will meet the Mission Network Critical and “Real-Time” Mission requirements as stated in the NSD
 4. The Project will address three (3) all POA&Ms related to the use of end-of-support equipment and the elimination of the use of telnet on the mission network
 5. The project will meet all applicable NASA and Federal Information Security Management Act (FISMA) policies and guidelines

NRRP Transition Contingency Planning

- The NRRP approach to transition contingency planning is based on a parallel infrastructure implementation providing constant fallback capability to mitigate contingencies during Transition
- The fallback capability is inherent in each step at the subnet level
- The parallel network will be decommissioned after ORR

Backup Slides

CSO Corporate Communications



CSO Innovation and Integration

