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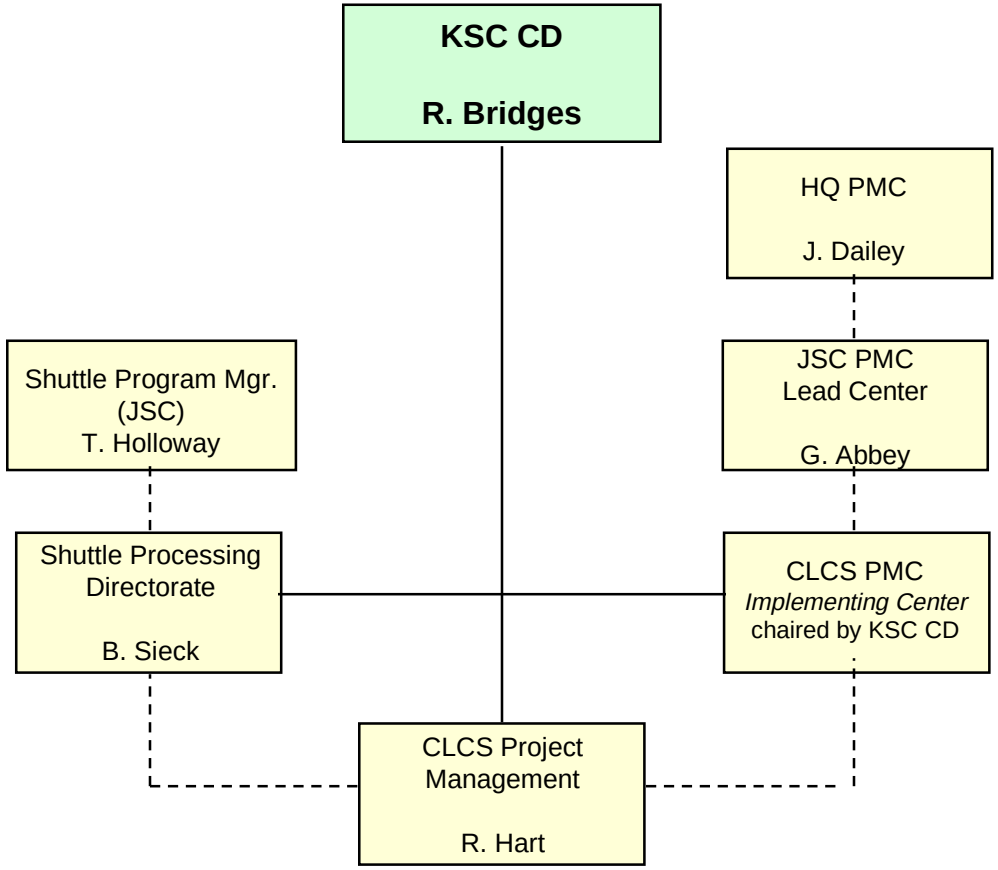

Note: Refer to sheet 28 for Supervisor and lead responsibilities

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Project Management

Responsibilities:

•Deliver CLCS on Schedule within Budget, Assuring Technical Requirements are Met
•Establish Project Goals and Objectives
•Challenge and Motivate the Team to Achieve Goals
•Ensure User Involvement in Acceptance of CLCS
•Acquire Resources (Manpower, Space, Development Tools)
•Ensure Roles and Responsibilities are Clearly Defined
•Build a Cohesive NASA/Contractor Team
•Represent Project to External Interfaces
•Coordinate Non-Shuttle and Shuttle Upgrade Requirements
•Prepare Proposals for New Initiatives
•Represent CLCS to KSC, JSC, and HQ Program Management Councils
•Support Independent, External Assessments
•Communicate Decisions
•Review and Approve Program and Project Level Documentation
•Review and Approve Contract Directives
•Coordinate IV & V Effort
•Review and Respond to IV & V Assessment
•Coordinate Logistics Effort
•Chair Change Control Board
•Approve Purchase Requests
•Approve Travel, Training Expenditures
•Personnel Actions
•Coordinate Training

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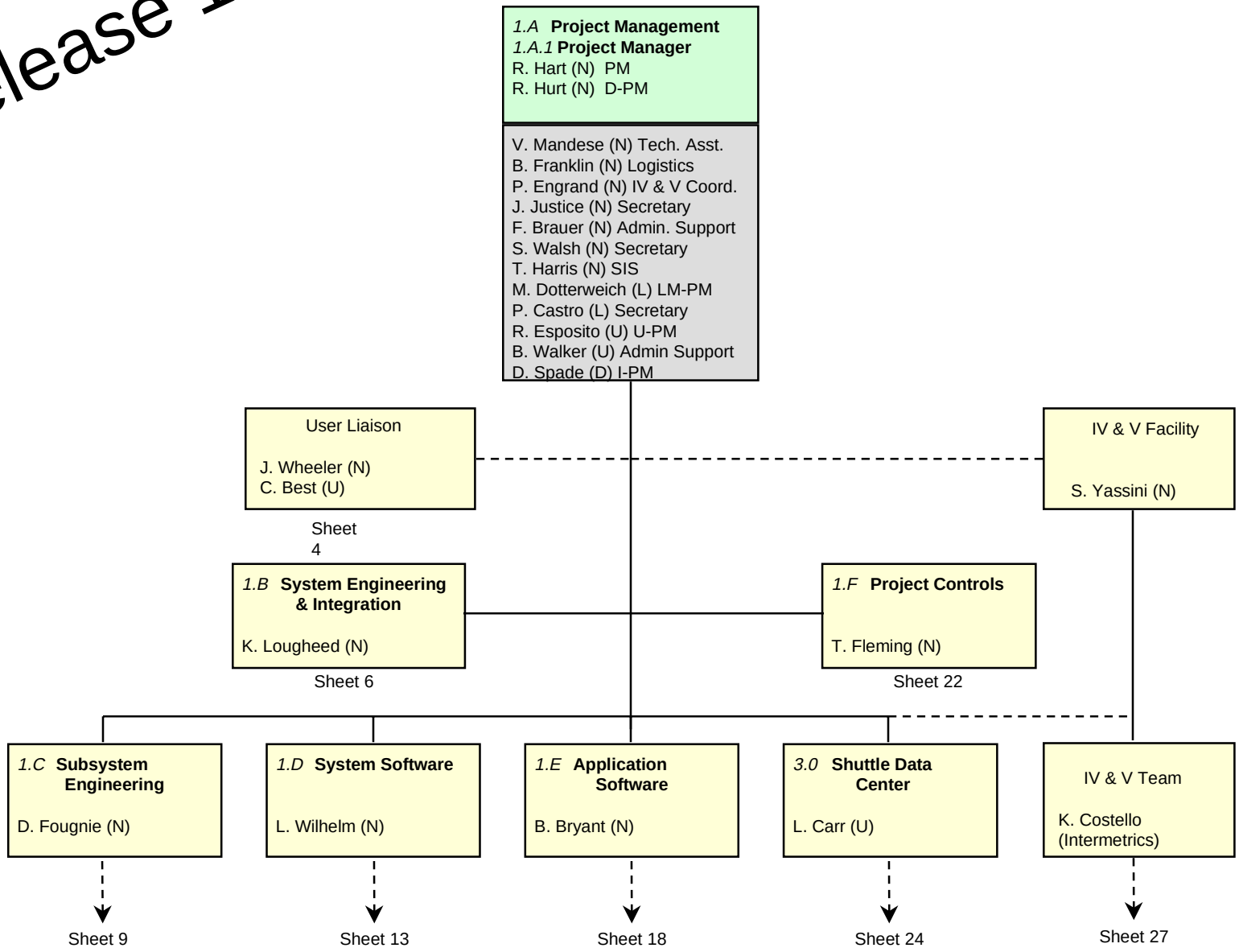

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CLCS User Liaison Team

Functions and Responsibilities

- Define and Collect User's Functional Requirements for CLCS
  - OTC and NTD
  - Shuttle System Engineering
  - Operations and Maintenance Engineering
  - Shuttle and Mission Management
  - CCS Engineering
  - Payload Engineering
  - Other Centers
- Translate Functional Requirements into Technical Requirements with CLCS System Engineering
- Perform Initial Evaluation of CLCS H/W and S/W Products to Provide Feedback to CLCS System Engineering Group
- Define Human Computer Interfaces
  - User Interfaces and Control
  - Define User Interface Requirements to SDC (Data Retrieval and Analysis Tools)
  - Define User Interface Requirements to Simulation Math Models
  - Define User Interface Requirements to Other Computer Systems (CM, Business, Internet, SPDMS, SCAN, Etc.
  - Define User Interface Requirements to Existing Expert and Advisory Systems (I.E. KATE, DLES, PSA, PCGOAL)
  - Define User Requirements for CLCS Workstation Display Layouts
  - Define User Requirements for Standards (Color, Audio, Visual, Etc.)
- Define and Collect Users' Console Enclosure and Layout Requirements
  - PFP's
  - OTV
  - OIS
  - Hardwire Safing
  - Keyboard and Mouse
  - Telephone
  - Printers, Scanners Fax, Etc.
- Support Design Panels for Each CLCS Delivery
- Identify Personnel to Support Shuttle, GSE, CCS, and Payload System's Application Software Development IPT's
- Integrate Users Inputs into Delivery and Facility Schedules & Define User's Requirements for Transition
- User Test Plans
  - Define Plans
  - Perform User Acceptance Testing
- Identify Impacts to OMI's and Ensure Proper Update
- Identify and Coordinate Users' Training Requirement
- Responsible for Concept of Operations Document
- Serve as Focal Point for CLCS with User Community

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CLCS User Liaison Team
J. Wheeler (N)
- - - - - - - - - - - - - - - - -
C. Best (U)

Process Engineering Representatives

Fluids
- Mark Dezendorf (U)
- Scott Holcomb (U)
- Robert Johnson (N)
- Frank Norris (U)
- Pam Zeitler (N)

Electrical
- Bill Fuerman (N)
- Hung Nguyen (N)
- Todd Gracom (U)
- Norm Peters (U)

Mechanical
- Brad Davis (N)
- Dan Shafer (N)

Guidance & Control
- Ron Clements (N)
- Sue Foraker (N)
- Eric Demmer (U)

Software
- Robert Pierce (U)
- Gene Styles (N)
- Hal Turner (N)
- Avis Upton (N)

Project Engineering
- Debbie Awtonomow (N)
- Eric Baker (U)
- Warren Lackie (N)

Process Integration, O & M Representatives

Ground Engineering
- Chuck Jenkins (N)
- Eric Wolf (U)

LPS
- Tommy Corbett (N)
- Dick Hartung (U)
- Terry Mayfield (U)
- Arnold Postell (N)

Test Conductors
- Chuck Klein (N)
- Roberta Wyrick (U)

Payload & Advanced Projects Representatives

CITE/Station
- Karen Corne (N)
- Steve Kovacs (B)
- Paul Owens (B)

SR & QA
- Lori Cernell (N)

Facility Operations
- Jodi Levesque (N)

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Engineering Review Panel

System Engineering And Integration

Design Panel

System Design

- System Level Rqmts Capture
- System Level Design
  - -H/W & S/W Arch. Coord.
  - -Data Flow Diagrams
  - -CSCI Allocation
- SLS Responsibility
- SDD Responsibility
- Facility Des. Req
- System Level H/W & S/W Arch. Design
- System Level H/W & S/W Issue Resolution
- System Level Network Arch.
- System Design Postion Papers
- Maintenance Cost Model

Integration & Test

- System Integration
- CSCI Integration Test
- (CIT) Coordination
- Transition Planning
- System Test and Reqmts. Verification
- Validation
- Delivery Management

Specialty Engineering

- Reliability and Maint. Engineering
- Human Factors
- Quality Assurance
- Security Engineering
- Safety Engineering
- Logistics Engineering
- Performance Engineering

Strategic Engineering

- Delivery Definitions
- CLCS Development
- Transition/Operational Support Milestones

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Engineering Review Panel

Chair - K. Lougheed
Rotational Support Staff

1.B **System Engineering & Integration**
1.B.1 **System Engineering Management**
K. Lougheed (N)
R. Dawson (N) Tech Asst.
S. Walsh (N)

J. Lee (U)
A. Morales (L)
S. Altemus (N)

Design Panel

K. Lougheed (N)
L. Wilhelm (N)
D. Fougnie (N)
B. Bryant (N)
K. Clark (D)
P. Holbrook (U)

System Design

S. Quinn (N)
K. Clark (D)

Strategic Engineering

J. Lee (U)

J. Wilkinson (U)
D. Jenkins (U)
C. Best (U)
M. Taraboletti (U)
W. Lackie (N)

Performance Modeling

T. Ross (N)

E. Valencia (N)
T. Jamieson (D)
TBD
TBD

Hardware Architecture

G. Seaton (N)

B. Bateman (U)
R. Stanley (D)
E. Foster (U)
J. Blackledge (D)
T. Jamieson (D)
E. Valencia (N)
F. Kapr (N)

System Software Architecture

P. Simons (I)

J. Wilkinson U)
J. Blackledge (D)
R. Davis (D)
B. Bateman (U)
R. Frame (L)

Application Software Architecture

R. Ikerd (APT)

J. Copella (D)
D. Lee (L)

System & Application S/W Design & Development

•System S/W CSCI Leads
•Application IPTs

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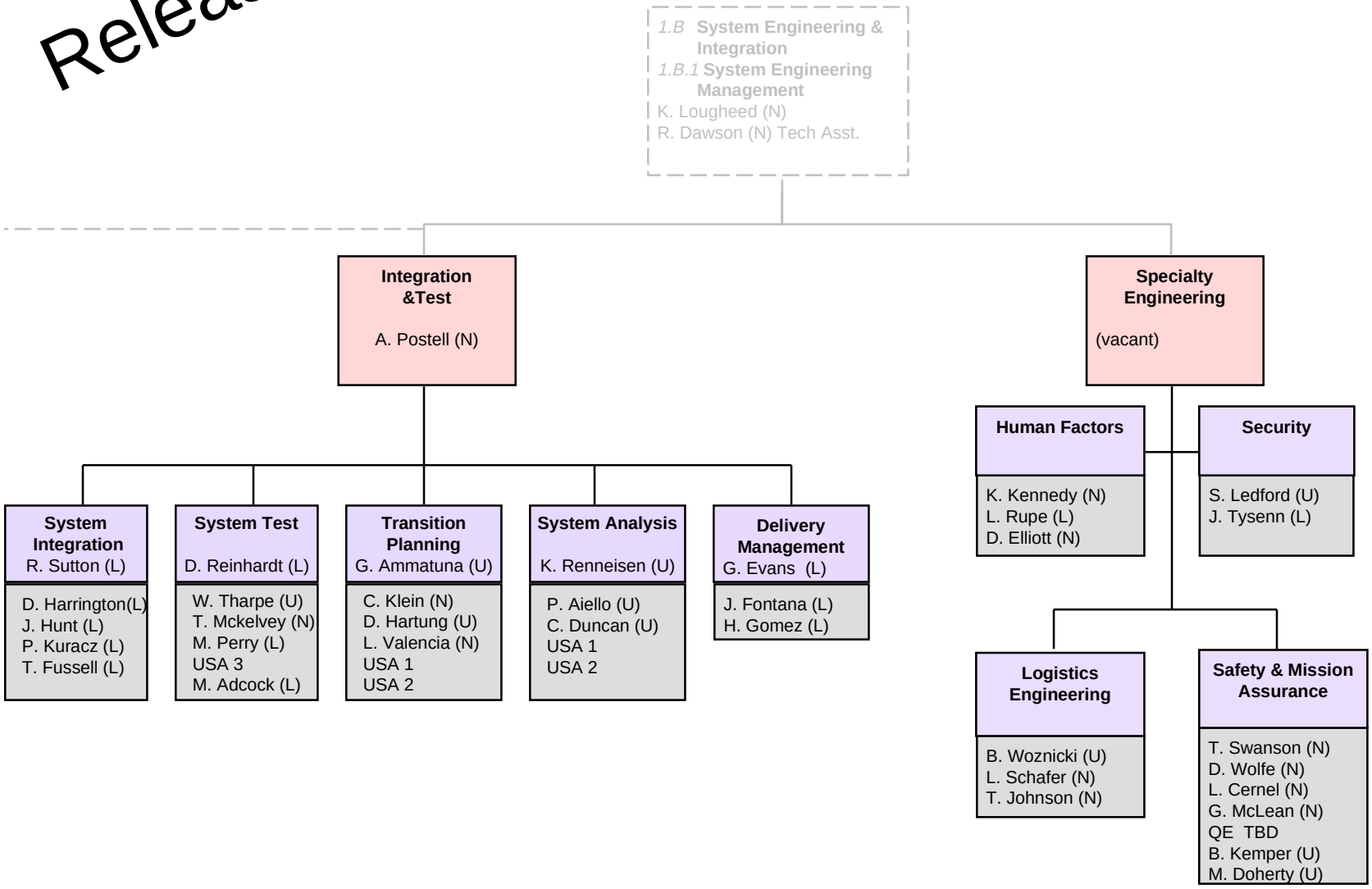

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Subsystem Engineering

Gateway Group

Responsibilities:
- Procure &/or develop H/W & S/W
- Develop Plans/Proced.
- Develop Tests/Test Plans
- Develop Drawings
- Installation Support
- Subsystem Performance Specs
- Testing Support
- Validation Inputs
- System Support
- Hardware Buy Review
- Integration Support

Products:
- Gateway H/W & S/W
- Signal Conditioning Equip.
- H/W Drawings
- S/W Documentation
- H/W Specs
- Test Specs
- Acceptance Tests(Vendor)
- Acceptance Tests (build to print)
- Manufacturing Plan
- O & M Documentation
- Installation Engineering
- Logistic/Reliability Support

RTPS Network Group

Responsibilities:
- Procure &/or develop H/W & S/W
- Develop Plans/Proced.
- Develop Tests/Test Plans
- Develop Drawings
- Installation Support
- Subsystem Performance Specs
- Testing Support
- Validation Inputs
- System Support
- Hardware Buy Review
- Integration Support

Products:
- RTCN/DCN H/W & S/W
- H/W Drawings
- S/W Documentation
- H/W Specs
- Test Specs
- Acceptance Tests(Vendor)
- Acceptance Tests (build to print)
- O & M Documentation
- Installation Engineering
- Logistic/Reliability Support

CLCS Support Network Group

Responsibilities:
- Network Security Oversite
- Network Management
- Procure H/W & S/W
- Develop Plans/Proced.
- Develop Tests/Test Plans
- Develop Drawings
- Installation Support
- Subsystem Performance Specs
- Testing Support
- Validation Inputs
- System Support
- Hardware Buy Review
- Integration Support
- Network External I/F
- BIN
- LON Connectivity
- Administrative Network Support

Products:
- Support Network H/W
- H/W Drawings
- H/W Specs
- Test Specs
- Acceptance Tests (Vendor)
- Acceptance Tests (build to print)
- O & M Documentation
- Installation Engineering
- Logistic/Reliability Support

Consoles & Platforms Group

Responsibilities:
- Procure &/or develop H/W & /SW
- Develop Plans/Proced.
- Develop Tests/Test Plans
- Develop Drawings
- Installation Support
- Subsystem Performance Specs
- Testing Support
- Validation Inputs
- System Support
- Hardware Buy Review
- Integration Support
- OIS/OTV/Phone Integration
- Legacy Systems Integration

Products:
- Console H/W
- Support Module H/W
- Safing H/W & S/W
- DDP/CCP/HCI/BIN H/W
- PFP (CP) H/W
- PDC H/W
- H/W Drawings
- H/W Specs
- Test Specs
- Acceptance Tests(Vendor)
- Acceptance Tests (build to print)
- Manufacturing Plan
- O & M Documentation
- Installation Engineering
- Logistic/Reliability Support

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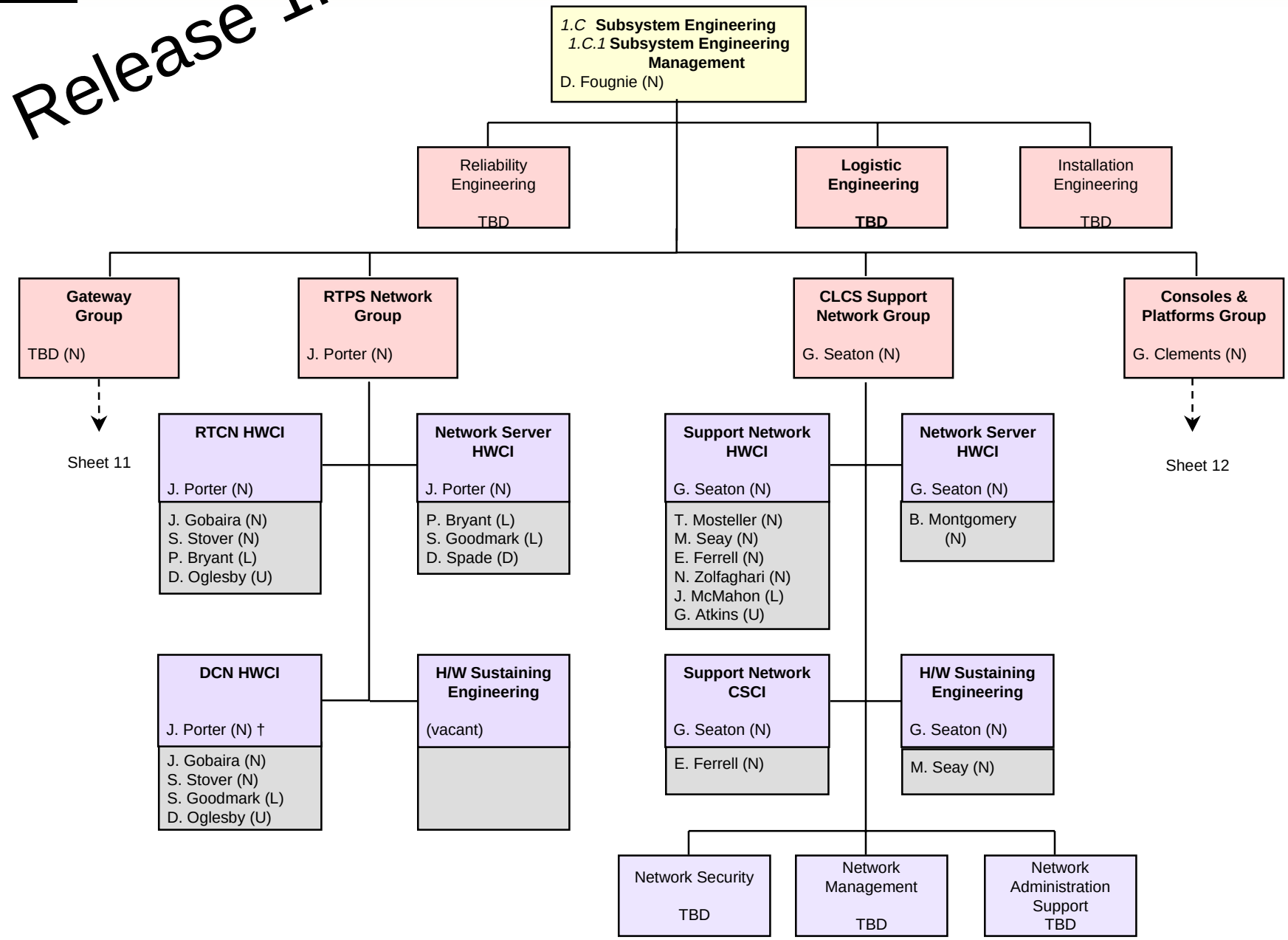

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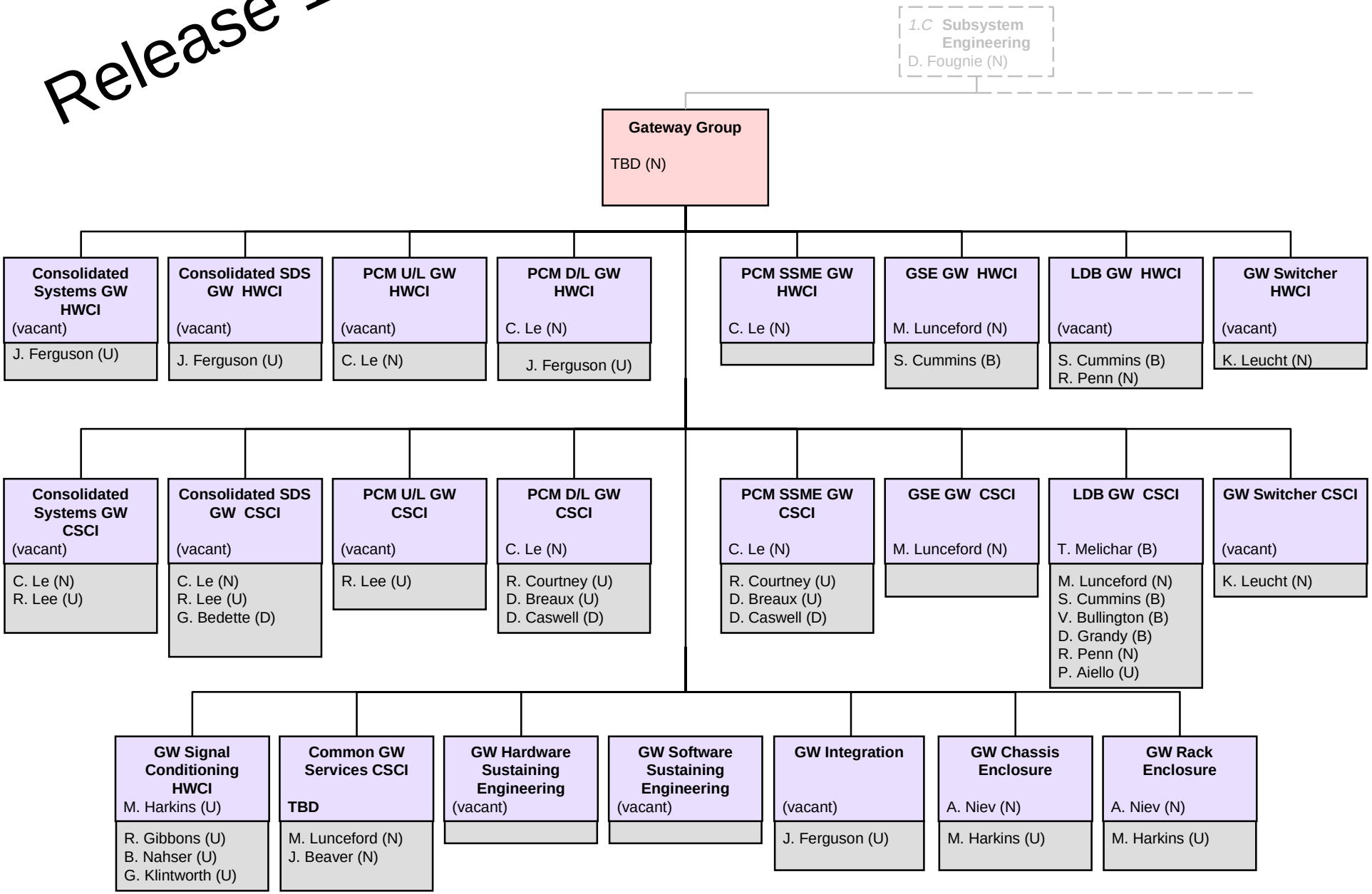

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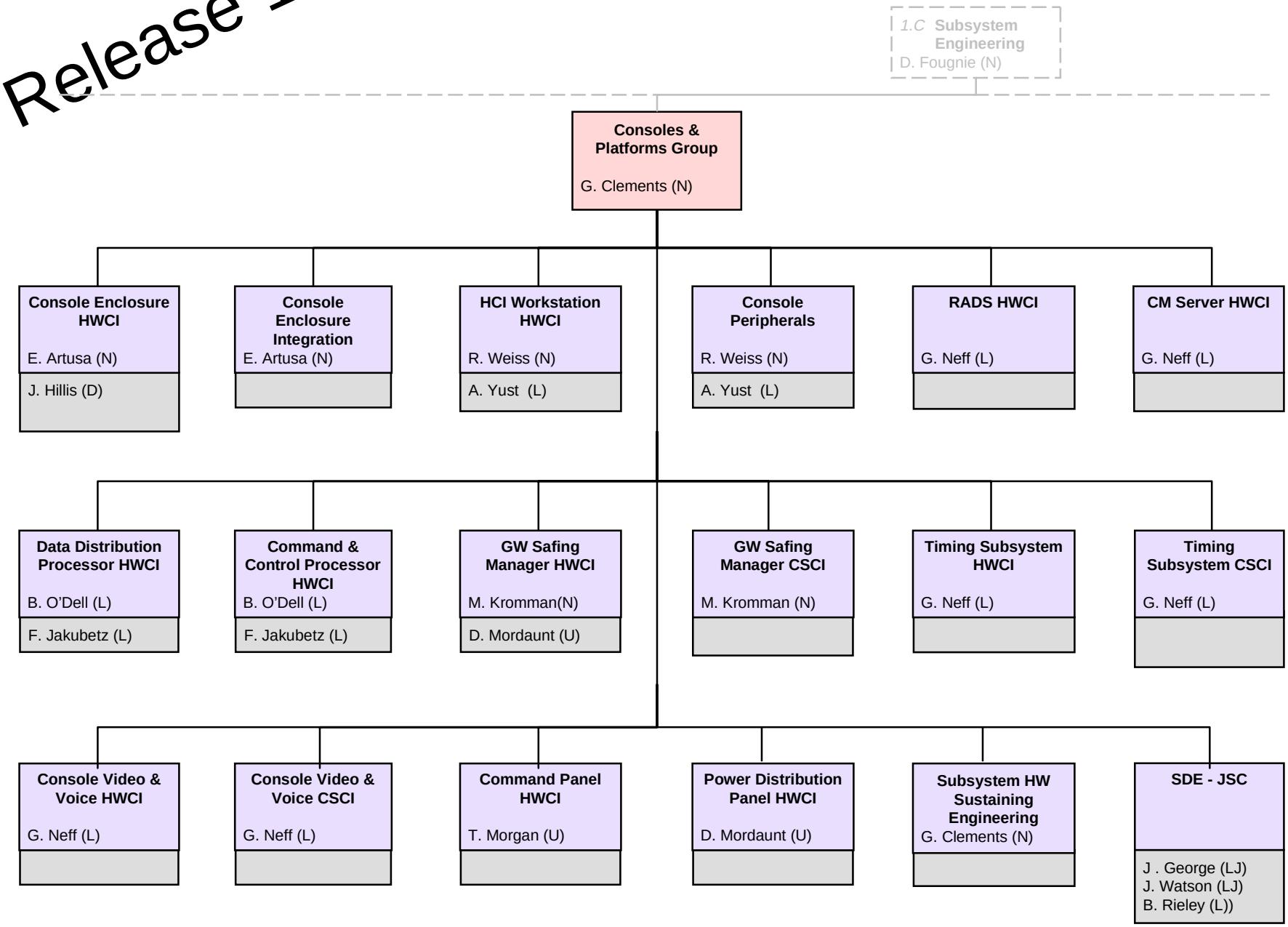

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Release 1.1

System S/W

System S/W Coordination

CSCI Interfaces, Issues
Manpower, Skills
Technical Additions
Cost, Schedule, Technical Performance

System Services

CSCIs/Products:
Application Services
- FD Services
- FD Support Viewers
- User Display Services
- Subsystem Services
- Desktop Debug Environment

Institutional Services
- Data Logging
- Data Retrieval
- System Message Services
- System Message Viewer
- Timer Services
- Utility Services
- Initialization/Term Services

Network Services
- Reliable Messages
- Inter-Process Communications
- Network Registration Services

BIN Software Services

Operating System & Diagnostics

CSCIs/Products:
System Diagnostics
- On-Line Readiness Test
- Subsystem Diagnostics
- Performance/Capacity Monitor

Ops Configuration Manager
- Platform Load
- System S/W Load
- Test Load
- Load Verification
- System Status Viewer

RTPS OS Support:
- Access Control
- Operating System I/F
- System Administration

BIN Software OS Support

Data Distribution & Processing

CSCIs/Products:
Data Distribution
- Data Distribution
- Time Re-ordering

Data Health & Editor
Data Fusion & Editor
Constraint Management
- Constraint Manager
- Constraint Mgt Services
- Constraint Viewer

BIN Data Dist. Support
Redundancy Management
- System Integrity
- Subsystem Integrity
- Advisory / AI Services

Command andControl

CSCIs/Products:
Command Support
- Command Management
- Command Processor
- Command Scriptor
- Cursor Control
- Authentication Service

End Item Management
- End Item Manager/Tool
- EIM Services

Prerequisite Control Logic
Test Application Script
- TAS Processing / Tool
- TAS Viewer / Editor
- TAS Services

Orbiter Computation Facility I/F

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System Software

- **System Software Products:**
  - S/W Dev. Plan (joint with App S/W, for now)
  - S/W Design and Requirements Document
  - Code
  - CSCI "Make" Files and Related Items
  - User's Guides (including ops notes and procedures)
  - I/F Specifications and Interface Definition Document (IDD)
  - CIT Test Specs (plan, procedures; plan exists also in SWDR doc.)
  - S/W Design Notes and Trades (contained under Razor)
  - "Man" (Manual) Pages

- **System Software Coordination Functions:**
  - Coordinate Subsystem CSCI level Interfaces (and with SAT also)
  - Provide Coordination To Interfacing Systems Such As SDC
  - Provide Implementation Issue Resolution
  - Provide Forum to Resolve Technical or Personnel Issues that Cross Employer Boundaries
  - Recommend New Products and Thread Requirements To Strategic Engineering (SEI)
  - Create and Meet Product Schedules
  - Coordinate Manpower Requirements, Skills, Placement, Hiring
  - Track Cost, Schedule and Technical Performance for the System Software Area

- **System Software Services and Responsibilities:**
  - Define S/W Development Processes
  - Perform CSCI, CSC Subsystem Design
  - Produce Mid-level S/W Design Specs (S/W design and requirements spec, SWDR).
  - Produce Delivered, Tested, Configuration Managed and Documented System Code
    - Provide User Focus/Interaction/Demonstrations
    - Process Detailed User Input (Design Panels, HCI etc.)
    - Refine Product Requirements
    - Perform CM on Delivered Products
    - Integrate S/W On To the H/W Platforms and OS
    - Perform Unit Tests, CIT Testing, Requirements Verification, Integration Testing and Support System Testing
    - Prepare and Build Software Deliveries
  - Support the SAT definition of the Mid-level Software Architecture
  - Provide Detailed S/W Production Schedule
    - Provide S/W Estimation
    - Provide S/W Metrics tracking
  - Participate in Development Of major CLCS Documents (SLS, SDD, etc.)
  - Perform Strategic Planning for Each CSCI
  - Maintain Configuration Control of S/W Reqmts. and Design Doc.
  - Perform and Support Performance Testing
  - Correct S/W Errors, Track SPR's and Solutions
  - Perform S/W Walkthroughs
  - Perform S/W COTS Buys
  - Support SE in Change Request Impact Assessments
  - Provide User Training (in part)
  - Provide on-site troubleshooting and Sustaining Engineering

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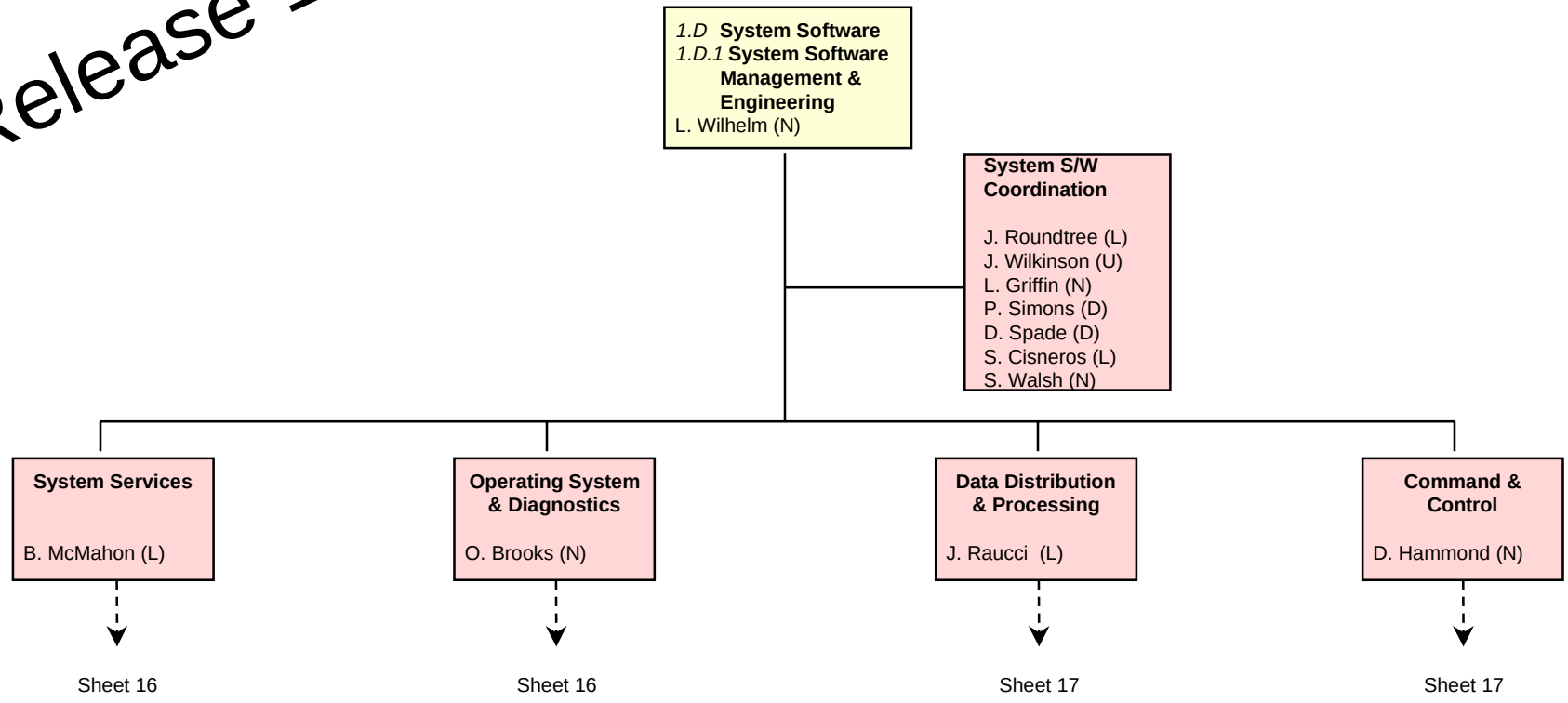

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1.D **System Software**

L. Wilhelm (N)

System Services

B. McMahon (L)

P. DiTrapani (LJ Manager)

Application Services
J. Samson (L)

P. Shields (L)
J. Leondike (L)
L. Vega (L)
S. Bernhardt (L)
F. Geisler (L)
B. Lopez (L)
G. Wright (L)
R. Uhl (L)
S. Roosa (L)

Institutional Services
S. Reeves (LJ)

R. Entralgo (LJ)
R. Phillips (LJ)
S. Lansdowne (LJ)
J. Castaneda (LJ)
B. Murphy (LJ)
H. Wong (LJ)
J. Wildgen (L)
L. Higgins (L)
S. Jones (L)
M. Vogt (L)

Displays, Viewers & Navigation
G. Hrezo (L)

S. Siemienski (N)
S. Bryan (N)
B. Anderson (N)
W. Weiner (D)
M. Diblanda (D)
P.Daniel-Gregory(D)
P. Sinha (LJ)
C. Natschke (L)
K. Byrd (L)
J. Audia (L)
A. Fling (N. Co-op)

Network Services

J. Porter

S. Davis (N)

Operating System & Diagnostics

O. Brooks (N)

OS Admin & Access Control
T. Nguyen (N) †

E. Cody (N)
D. Hirchert (D)
S. Carstens (L)
R. Penn (L)
D. Sheets (L)
W. Dourough (L)
H. Ansley (LJ)
M. McClean (LJ)
P. Tran (LJ)
B. Robison (L)
A. McKay (co-op)

Ops Config Manager
S. Moore (L)

M. King (LJ Mgr)
S. Vo (L)
B. Greenwood (LJ)
A. Chambliss (LJ)
M Cavanaugh (LJ)
M. Dunaway (LJ)
M. Corbin (LJ)
E. Rose (L)
R. Duff (L)

Redundancy Management
K. Castner (L)

R. Wirthlin (L)
M. Symes (L)
H. Tu (L)
N. Godfrey (L)

System Diagnostics
TBD

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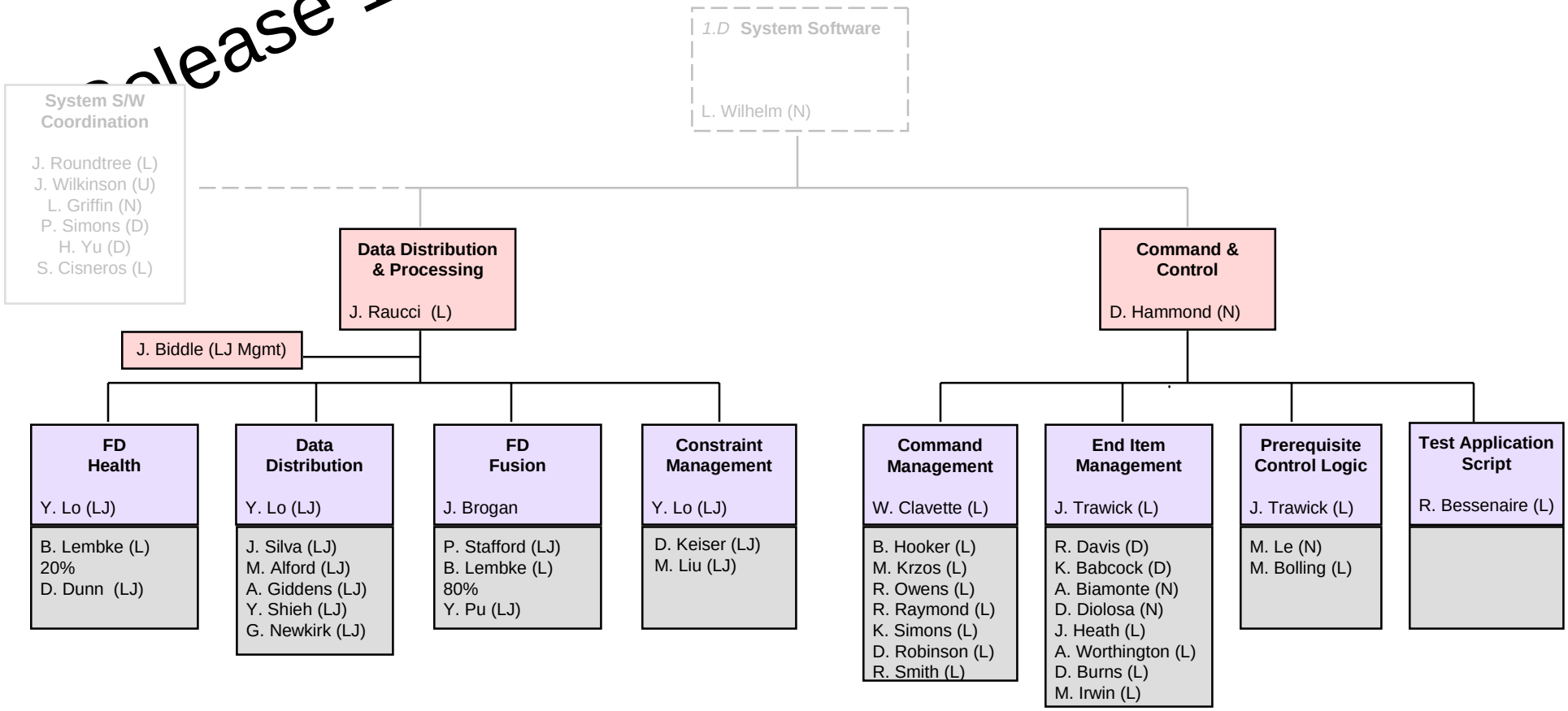

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CLCS Application Software

Real Time Control Application Product Team

Responsibilities
- Reengineering of Goal applications
  - Define IPT Goals and products
  - Real Time Control applications input to Master Delivery Schedule
  - Charter IPTs
  - Identify IPT Core Team Members
  - Present IPT Concept to Concept Design Panel
  - Ensure Consistency Across All IPTs (Common Development Process, Architecture Design, Languages, Tools, Standards, Reuse)
  - Coordinate and Resolve Issues with IPT Members
  - Coordinate Issues between App SW, Application Services, System Software
  - Support SAT on Software Architecture Definition
  - Chair IPT Software Design Panels
  - Coordinate Sustaining Effort
  - Recommend Changes to Baseline to Strategic Engineering
  - Track Cost, Schedule and Technical Performance for RTC Applications

Products:
- Application Software SDP Input
- IPT Charters
- Application Software Schedule
- Architecture Design
- IPT Concept Design Panel Presentation

Integrated Product Teams

Responsibilities:
- Produce Delivered, Tested, Configuration Managed and Documented Application Set
  - Requirements Analysis
  - Development of Detailed Consolidated Production Schedule
  - Identifies Tasks Necessary to Accomplish Objectives
  - Identifies Required Resources
  - Develops on Schedule
  - Coordinates with the APT on Issues
  - Adheres to Established Architecture, design, and Standards
  - Maximize Code Reuse
  - Perform Unit Tests, CIT Testing, Requirements Verification, Integration Testing
  - Supports ORR
  - Supports Software Design Panels
  - Perform CM on Delivered Products
  - Define User Training Requirements
  - Provide Troubleshooting and Sustaining Engineering

Products:
- Application Set Software
- Documentation
  - Functional Requirements
  - User Guide
  - Software Specification
  - Requirements Traceability Matrix
- Metrics
- Test Plan
- Model Deltas

CommonSupport Libraries

Responsibilities:
- Provide Common Repository (Library)
- Administer Library
- Define Process for Entry of Objects into Library
- Define Library Structure
- Provide Library Content Browser
- Perform CM of Library

Products:
- Library
- Library Entry Process
- Library Content Browser

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CLCS Application Software

Data Analysis and Presentation

Responsibilities:

- SDC CAP program oversight (Rehost from CDS)
- Delivery of Near Real-time Advisory software
- Delivery of Support Advisory software
- Delivery of CLCS Data Retrievals
- Generation of Applicable Documentation
- User Interface/Support
- Input into CDS to SDC Transition Plan
- Monitor Industry for Technological Advancements and Opportunities for introduction into CLCS to better meet User needs
- Develop Implementation Plan (How)
- Provide User Focus/Interaction/Demonstrations
- Process Detailed User Input (Design Panels)
- Refine Product Requirements
- Perform CM on Delivered Products
- Integrate Software Onto the Hardware Platform and Operating System
- Perform Unit Tests, CIT Testing, Requirements Verification, Integration Testing
- Provide Troubleshooting and Sustaining Engineering
- Provide User Training
- Perform and Support Performance Testing
- Support SE in Change Request Impact Assessments
- Track Cost, Schedule and Technical Performance

Products:

- Near Real-time Advisory Tools
- Support Advisory
  - Robust Web Interface to CAP Programs
  - Advanced Data Analysis Tool
  - Interfaces to COTS Packages
- Documentation
  - Requirements
  - Specifications
  - User Guides
- Production Schedule

Simulation

Responsibilities:

- Simulation System Software rehost from CDS to new platform
- Video Simulation Interface (VSI) Rehost
- Simulation Gateway development
- Generation of applicable documentation
- User Interface/Support
- Provide input to CDS to SDC Transition Plan
- Perform CM on Delivered Products
- Integrate Software onto Hardware Platforms and Operating System
- Perform Unit Tests, ICT Testing, Requirements Verification, Integration Testing and Support System Testing
- System Administration of Software and Hardware Platforms
- Prepare and Build Software Deliveries
- Maintain Detailed Production Schedule
- Perform and Support Performance Testing
- Correct Software Errors
- Perform Software/Hardware COTS Buys
- Provide User Training
- Provide On-site Troubleshooting and Sustaining Engineering
- Track Cost, Schedule and Technical Performance for Simulation
- Logistics Support

Products:

- Model Translator
- Procedure Translator
- Model Build
- Model Databank
- Simulation Engine for Model and Procedure Execution
- User Interface for Control of Model and Procedure Execution
- Simulation/VSI Servers
- VSI Rehost Hardware/Software
- Documentation
  - Requirements
  - Specifications (S/W, H/W Test)
  - User Guides
  - Hardware Drawings
  - O & M
- Simulation Gateway Hardware/Software
- Release Schedule

Special Projects
3D Visualization
Expert Systems

Responsibilities:

- Development of 3D Visualization and Virtual Reality Software
  - System Administrator of development hardware/software
- High Level Requirements Generation
- Expert Systems development
- Works to Schedule
- Testing of delivered software
- User Interface/Support

Products:

- 3D Visualization Software
- Virtual Reality Software
- Expert Systems
- Production Schedule

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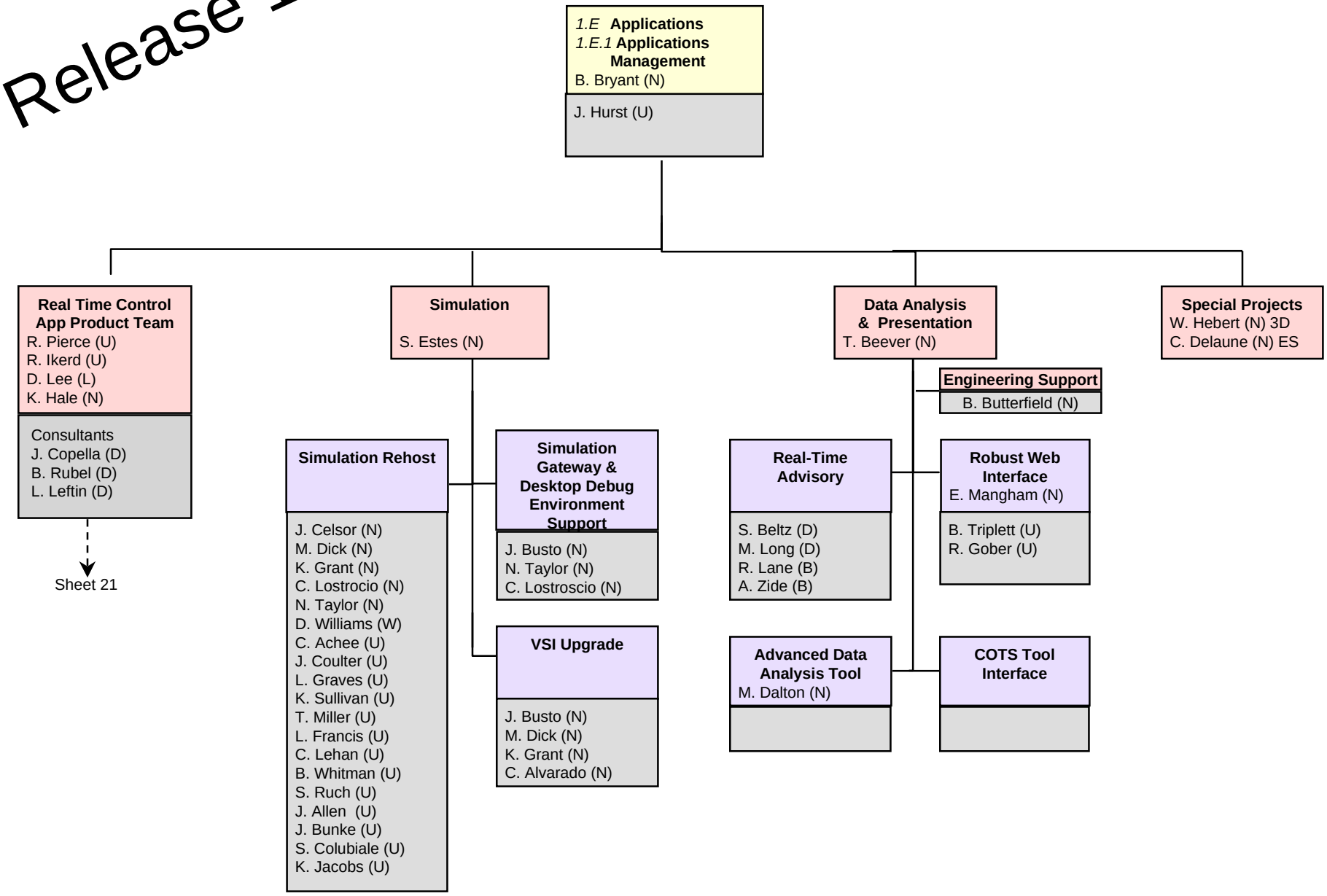
WBS LABOR TREE

Release 1.1



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Printed: 3/3/98 2:22 PM

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1.E **Applications**
1.E.1 **Applications Management**
B. Bryant (N)

J. Hurst (U)

Real Time Control App Product Team
R. Pierce (U)
R. Ikerd (U)
K. Hale (N)

Consultants
J. Copella (D)
B. Rubel (D)
L. Leftin (D)

Common Support Libraries
B. Kerschner (U)

J. Stahl (N)
G. Lee (U)
Kay Heck (N)
Frank Martin (N)
William Merrill (N)
Samori Ball (N)
Dung Trang (N)
Carlos Rodriquez (N)
Gloria Draus (N)
Sharon Hauss (N)
Bob Stubbe (N)

SLWT IPT
R. Johnson (N)

T. Del Hagen (U) SW Lead
M. Baldini (U)
M. Dezendorf (U)
S. Holcomb (U)
N. Peters (U)
M. Susaneck (U)

HMF IPT
F. Norris (U)

R. Fain (U) SW Lead
S. Foraker (N) GNC
T. Wix (D)
B. Craig (U)
M. Lovisa (U)
C. Novak (U)
C. Dugger (N)
G. Semmel (N)

Power Up/Down IPT
R. Pierce (U) - Temp

Core Team
E. Baker (U) TPE
N. Lavinka (U) ECL
D. Hartung (U) LPS
L. Schweickart (N) DPS
J. Apfelbaum (N) EPD
M. Squire (N) ECL
D. Awtonomow (N) OPE
P. Johnson (N) INS
R. Howard (U) INS
C. Klein (N) LPS
A. Walker (U) SW Lead
K.Yakubowski (U) SW
L. Randall (U) SW
J. Bunke (U) Sim Lead

K. Smith (N) SW
B. Waterman (N) SW
C. Dugger (N) SW
J. Allen (U) Sim
S. Ruch (U) Sim
L. Francis (U) Sim

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Project Controls Office

•Project Controls Management

Change Control Management

•Mgmt of Change Control Plans, Processes & Procedures
•CCB
•Process ESRs

Facility Management

LPS Set Deactivation

•Remove CCMS Equipment
•Disposal &/or Storage
•Deactivate

CLCS Set Facility Modification

•Facility Modification
- Communications support installation
•Facility Preparation
•Mgmt & Coordination of CLCS Facility Preps & Modifiications
•Facility Design
•Transfer of Facilities
•Facility Proposal Evaluation

H/W Install & Activation

•CLCS H/W Installation
•CLCS Set Support
•Set Activation & Facility transition plans
•CLCS Maintenance Plan
•Initial O & M Plan/Philosophy

Implementation of CLCS Office Support

•Floor Space
•Telephone
•Comm
•Mods

Project Compliance & Process Definition

•Definition & Documentation of Project Level Processes
•ISO 9000 Policies & Compliance
•Compliance with NHB 7120.5 or NPD 7120.5A
•Project Level Documents
•Compliance with KSC's Strategic Management Deployment Plan

Planning & Analysis

•Project Level Planning & Tracking
-Budget Control
-Schedule (List)
-Metrics
-Work Breakdown Structure
•Performance Measurement
•Contract Administration Supt.
•Monthly Status Report
•Cost Accounting

Project Support

•Support to all CLCS elements
•Administrative Communications
-Web Master (Administration)
-Press Releases
-Admin. PC Support
•Procurements
•Property Management
•Training Plan
•H/W, S/W Maintenance Agreement Database
•S/W License Database
•Training

CLCS Processes:

1. Configuration Control Board
2. Performance Measurement
3. Award Fee
4. Internal Project Issue Resolution
5. Program Operating Plan
6. Schedule Tracking
7. Application Software Development
8. Credit Card (CC) Reconciliation
9. Acquisition of Supplies or Services
10. Acquisition - Credit Card (CC)
11. System Design Issue Resolution
12. Property Management Internal Audit
13. Delivery
14. System Software Development
15. Integration & Test
16. Design Panel
17. Build
18. Hardware Development & Specification
19. Property Mgmt. - Repair and Maintain
20. Property Mgmt - Addition of Newly Identified Items
21. Property Mgmt - Lost Equipment Reporting
22. Property Mgmt - Processing of Excess Items

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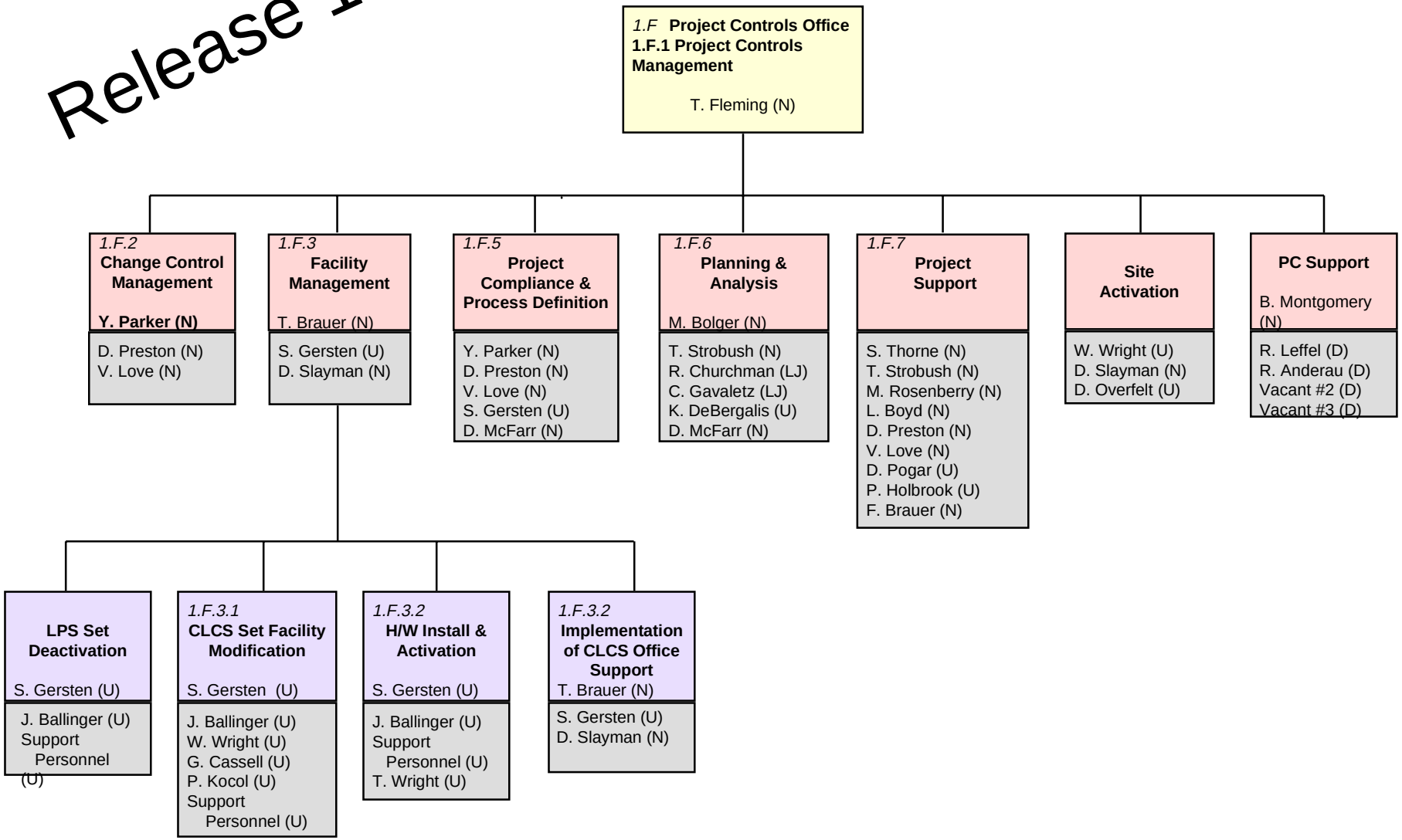

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Shuttle Data Center

Build Products & Services

CSCIs/Products:
DBSafe
Test Build and Control
- Table Build
- On-Line Data Bank Build
- Build Utilities

System Build
- CLCS System Build
- CCMS System Build
- S/W Problem tracking

Support Activities
- Databank Load & Maint.
- TCID Builds to Support Development & Testing
- APLM (CCMS)
- CLCS Build Tools

User Documentation
Requirement Documents

Data Recording Services

CSCIs/Products:
Data Recording
Data Retrieval
Data Archival
Retrieval API's
User Documentation
Requirement Documents

Software Management Services

CSCIs/Products:
Development Tools (SDC)
SDC Operating Systems
CM (SDC/CLCS)
- Razor COTS Tool
- Promotion Release
- Promotion Acceptance
- Repository
- S/W Problem tracking
- Distribution
  - > OPServer (CLCS)
  - > Desktop
  - > SDC

User Documentation
Requirement Documents

Information Support Services

CSCIs/Products:
BASIS
Doc Viewing Services
Data Distribution (SDS)
Inter/IntraNet Communications
Resource Manager
User Documentation
Requirement Documents

Central Operations Facility

CSCIs/Products:
Enterprise Management
Help Desk
Centralized Support:
- DBA Services
- System Admin
- Network Management
- SMS

System Monitoring:
- Performance Monitoring
- Process Monitoring
- File System Monitoring
- File Monitoring
- Event-Log Monitoring
- Memory Monitoring

System Scheduling
Printer Services
SDC Hardware
User Documentation
Requirement Documents

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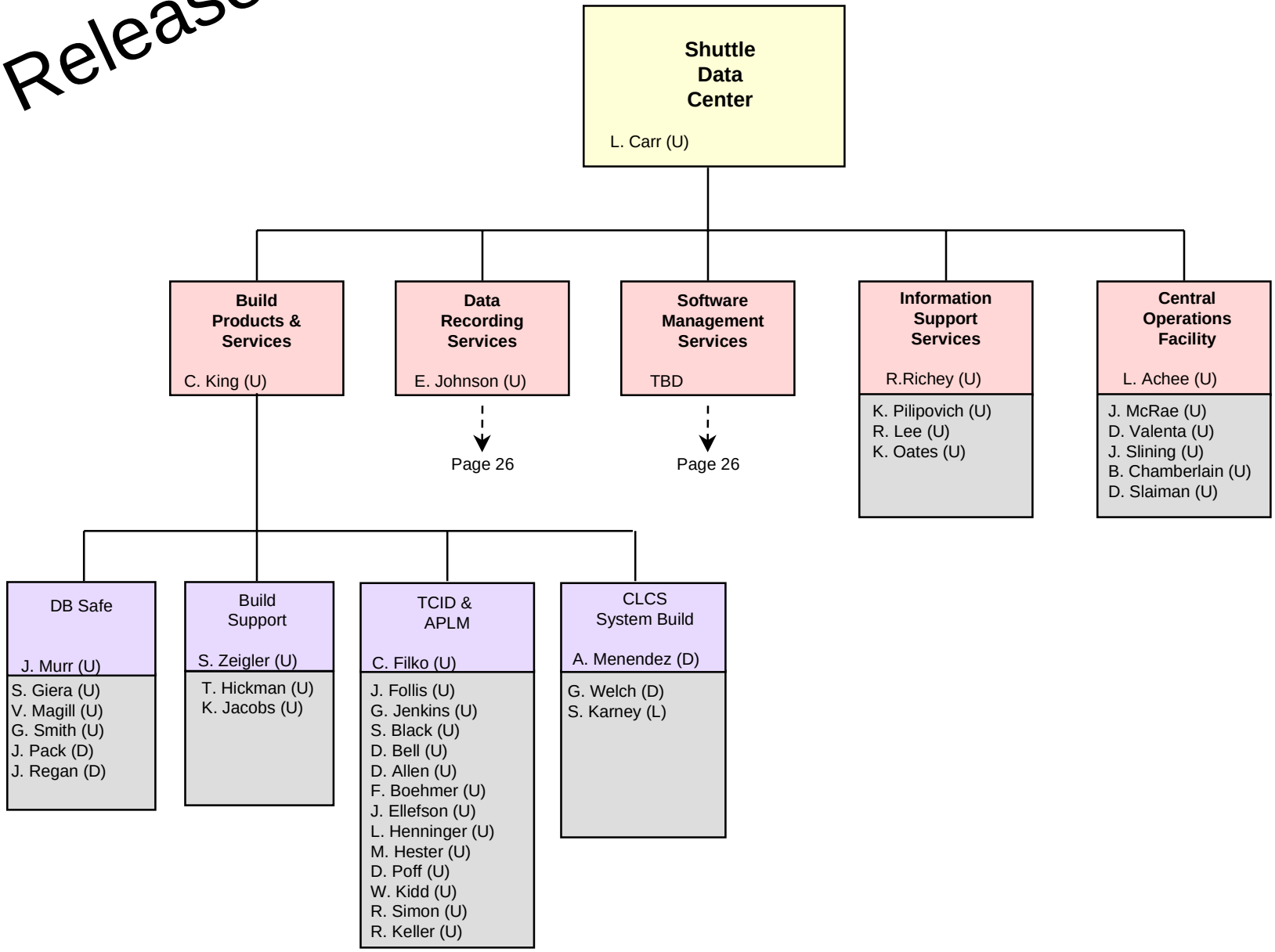

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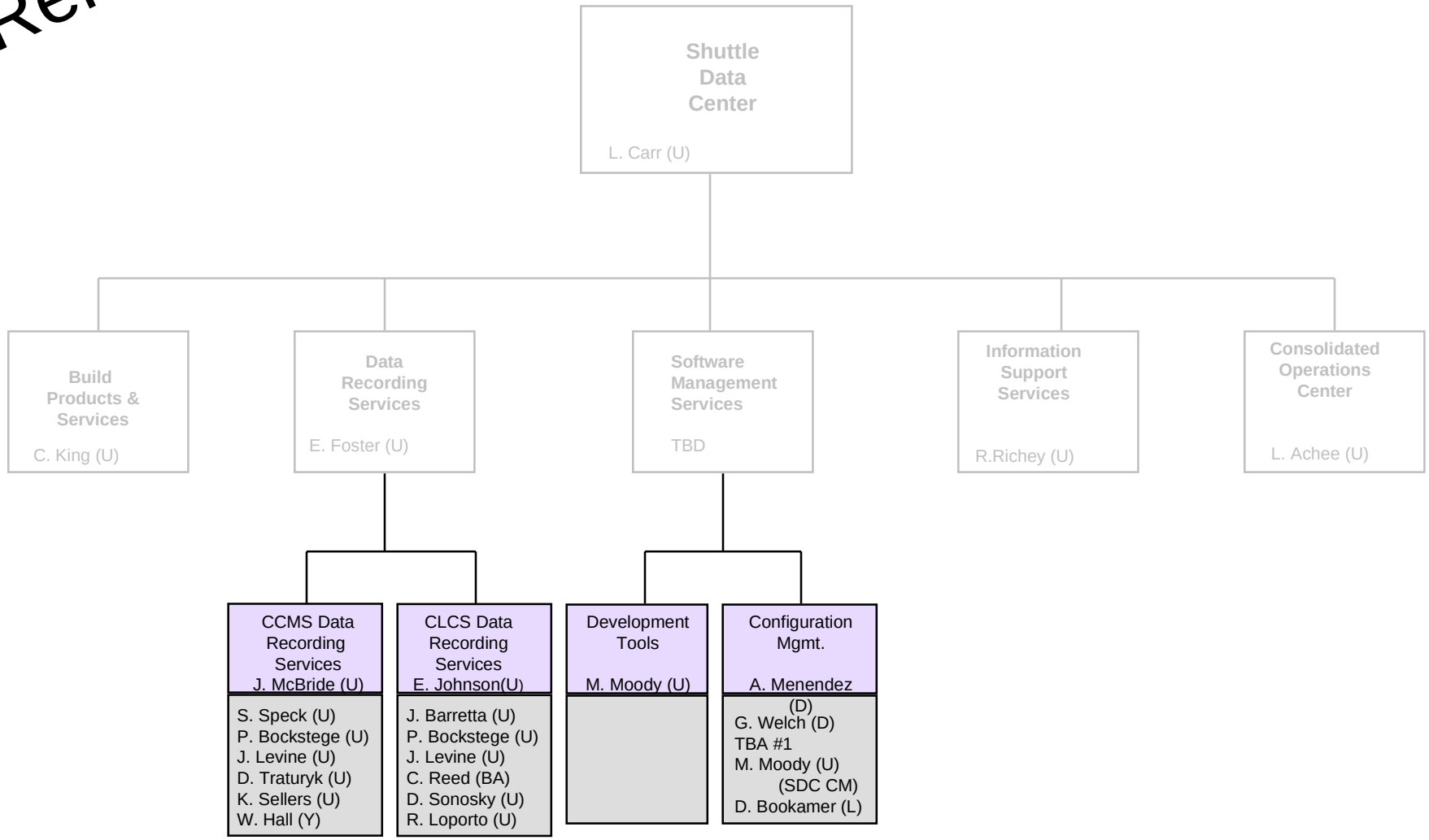

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IV & V Team

K. Costello (Intermetrics)

K. Orihuela (Cimarron)
P. Ruddell (Cimarron)
P. Garnett (Mountain State Information Sys)

Responsibilities & Products

- Document Analysis SEMP, CM Plan, SDP (delivery + 30 days), etc.
- Process Analysis
- Criticality and Risk Assessment Thor Delivery
- Special Studies

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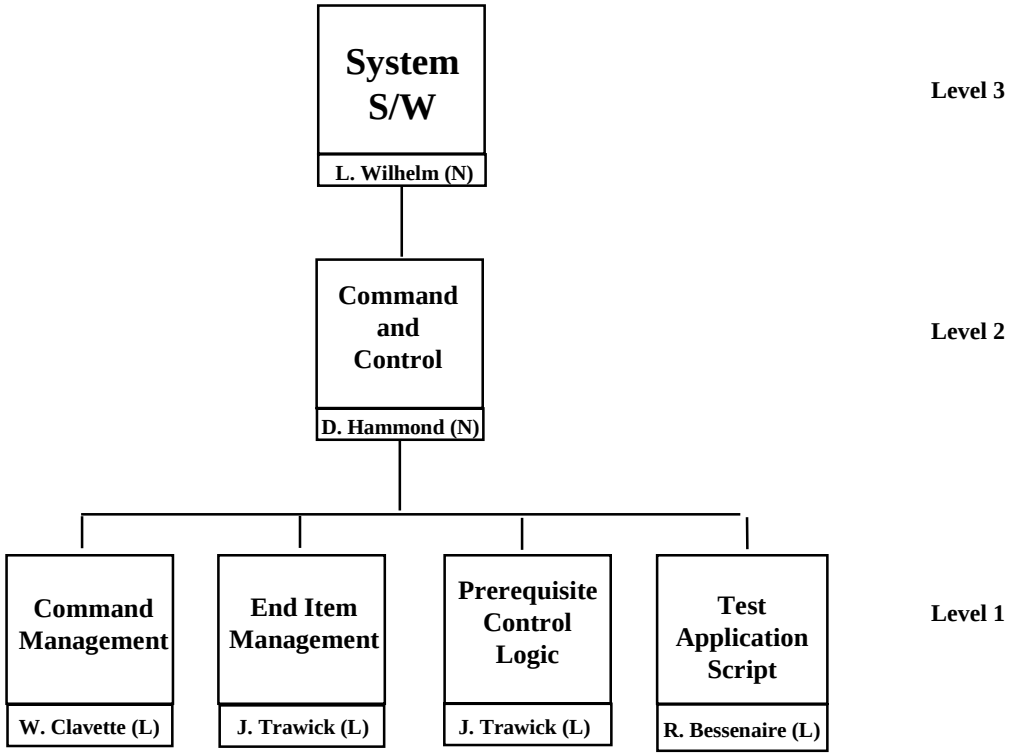
"Boxed" Position Roles and Responsibilities

- The following describes the Roles and Responsibilities for the personnel assigned in the "boxed" positions on the CLCS Project Structure Chart. These descriptions are being provided in order to clarify within the "vertical line" relationships, who does what job and who is responsible for what task or product.
- For the purposes of discussion, the positions will be labeled as Levels 1, 2, or 3 as follows.

SAMPLE



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- **"Boxed" Position Roles and Responsibilities (continued)**
  - **Level 1:**
    - **Individual who has the primarily responsibility for providing the products or services assigned within their area (e.g. Hardware products, software products, system administration, Lab administration, etc.).**
      - **Tasks the individuals in their area to perform the functions required to produce the necessary products and services**
      - **Leads their team in the requirements analysis, develops the Hardware or Software Requirements and Design Specification, and presents at the Requirements Panel**
      - **Leads their team in the hardware/software design, updates the Requirements and Design Specification, and presents the Detailed Design Panel**
      - **Leads the implementation activities (e.g. hardware installation and checkout, code inspections, and unit and unit integration tests, etc.)**
      - **Develops test procedures for the hardware/software within their area**
      - **Executes the test procedures during the HIT/CIT dry run and formal testing**
    - **Responds to Problem Reports (Issues) for the hardware/software in their area**
    - **Supports the Level 2 manager in the:**
      - **Development and status of detailed schedules for the products under their control (identifies staffing and/or schedule concerns)**
      - **Assessment of Thread Impacts to the products under their control**
      - **Production of status on accomplishments, plans, and issues within their assigned area**
      - **Attendance at the Delivery Manager status meetings, when requested**

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- **"Boxed" Position Roles and Responsibilities (continued)**
- **Level 2:**
  - **Individual who has overall responsibility for all of the hardware or software products within their area. This individual may have multiple Level 1 managers reporting to them.**
    - **Provides impact assessment to the thread leads for the Concept Panels which affect hardware or software within their area**
      - **Assesses the overall work and staffing requirements within their area and makes resource requirements known to the Level 3 manager**
    - **Supports the Level 1 managers in reviewing requirements, design, and test plans and ensures the technical content and quality of all products being provided**
    - **Reviews and statuses the schedules for all activities within their area (Level 1 managers create the detailed schedules)**
      - **Ensures that all of the dependencies for the products within their area have been coordinated, agreed to, and included in the detailed schedules**
    - **Conducts weekly status meetings with the leads (Level 1 managers) in their area and provides the status to the Level 3 manager and the Delivery Manager for all product development activities within their area**
    - **Ensures that all formal testing activities for the products within their area have been planned and coordinated. (i.e. test plans are developed, procedures available for review, all necessary resources (personnel and equipment) have been scheduled, etc.)**

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