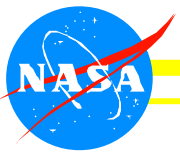
# *Headquarters ODIN Contractor Briefing*




**March 22 – 23, 2004**

# Briefing Objective & Contents

- **Objective is to provide prospective ODIN contractors with an in-depth understanding of the NASA Headquarters (HQ) Information Technology (IT) environment and ODIN requirements:**
  - **Description of the organization, customer base and IT environment**
  - **ODIN schedule**
  - **Detailed description of the IT architecture, services and operations**
  - **Description of the Delivery Order Selection Process (DOSP)**
  - **Overview of the upcoming Due Diligence process**
  - **Questions and answers**

# Briefing Approach

- The briefing will be conducted in the PRC on both Monday and Tuesday, March 22-23, 2004
- Monday, March 22 will consist of one morning and one afternoon session and Tuesday, March 23 will consist of one morning session during which several topics will be presented
- Handouts will be provided to all attendees
- Each presentation will be followed by a question and answer period
- The entire briefing will be video taped for later distribution - copies provided upon request
- Briefing is posted on the ODIN Web site
  - http://www.hq.nasa.gov/odin2/briefing.html

# Logistics

- **Restaurant and sandwich shop available at east end of building on 1st floor, and across the hall at the Columbia Cafe**
- **Soda and ice machines are located near midpoint on each floor**
- **Restrooms available outside this conference room**

# Agenda – March 22, 2004

- 08:00 - 08:30 Registration
- 08:30 - 08:45 Briefing Objective, Approach and Logistics
- 08:45 - 09:45 General Overview
- 09:45 - 10:00 Break
- 10:00 – 11:30 Customer Service Part 1
- 11:30 - 12:30 Lunch
- 12:30 - 02:00 Customer Service Part 2
- 02:00 - 02:15 Break
- 02:15 – 03:45 ODIN DO SOW Details
- 03:45 - 04:15 ODIN DO Proposal Guidelines
- 04:15 - 04:30 Break
- 04:30 - 05:00 Discussion

# Agenda – March 23, 2004

- 08:00 - 09:00 Contract Descriptions
- 09:00 - 09:15 IT Security Program
- 09:15 - 09:30 Break
- 09:30 - 10:45 IT Architecture
- 10:45 – 11:00 Telecommunications
- 11:00 – 11:30 Due Diligence
- 11:30 - 12:30 Discussion

# *General Overview*

**Sandra Daniels-Gibson**

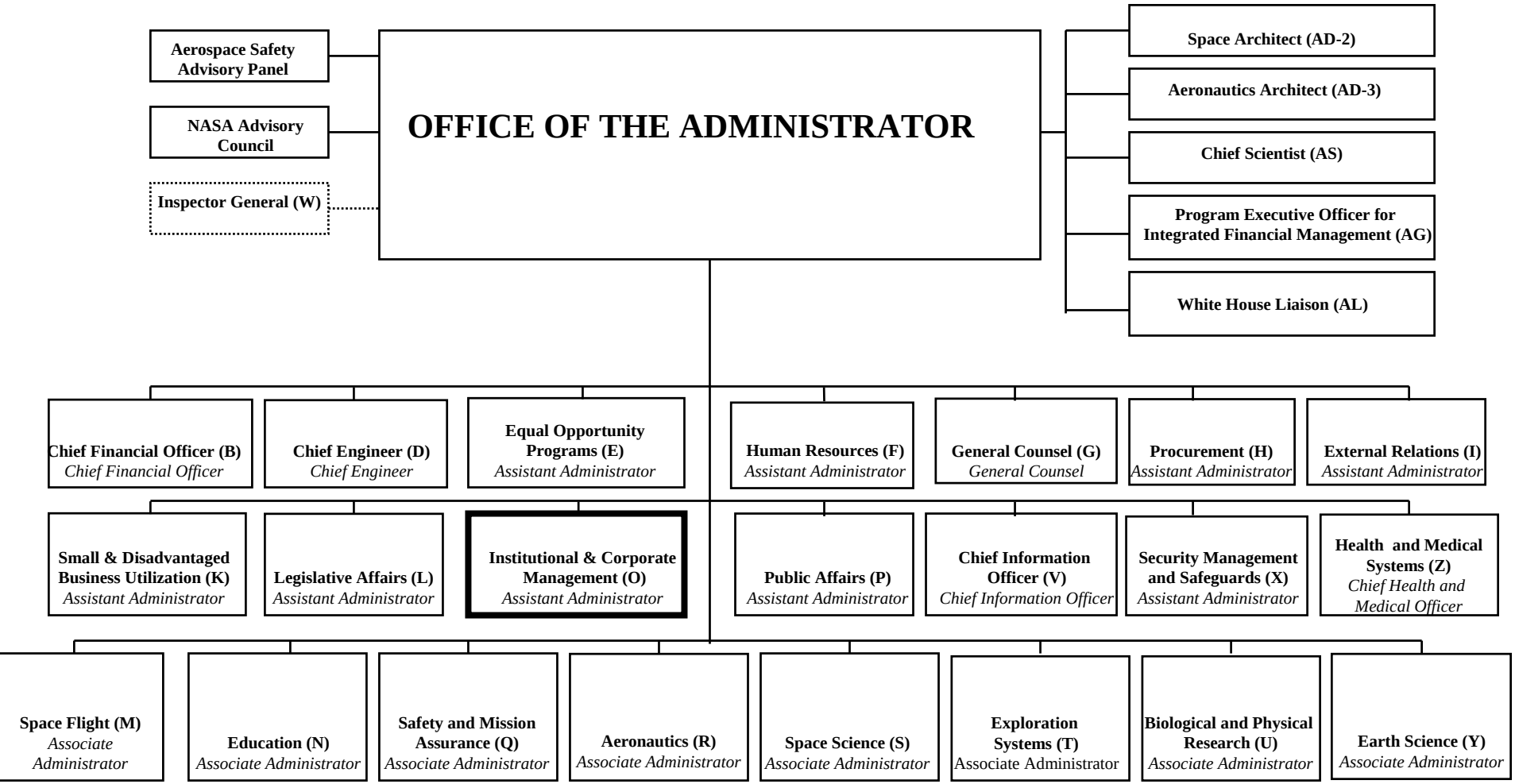
# Topics

- HQ General Description
- HQ Organizations
- Chief Information Officer function
- HQ IT Environment
- HQ IT Governance
- HQ IT Initiatives
- HQ IT Challenges
- HQ Expectations for ODIN Performance

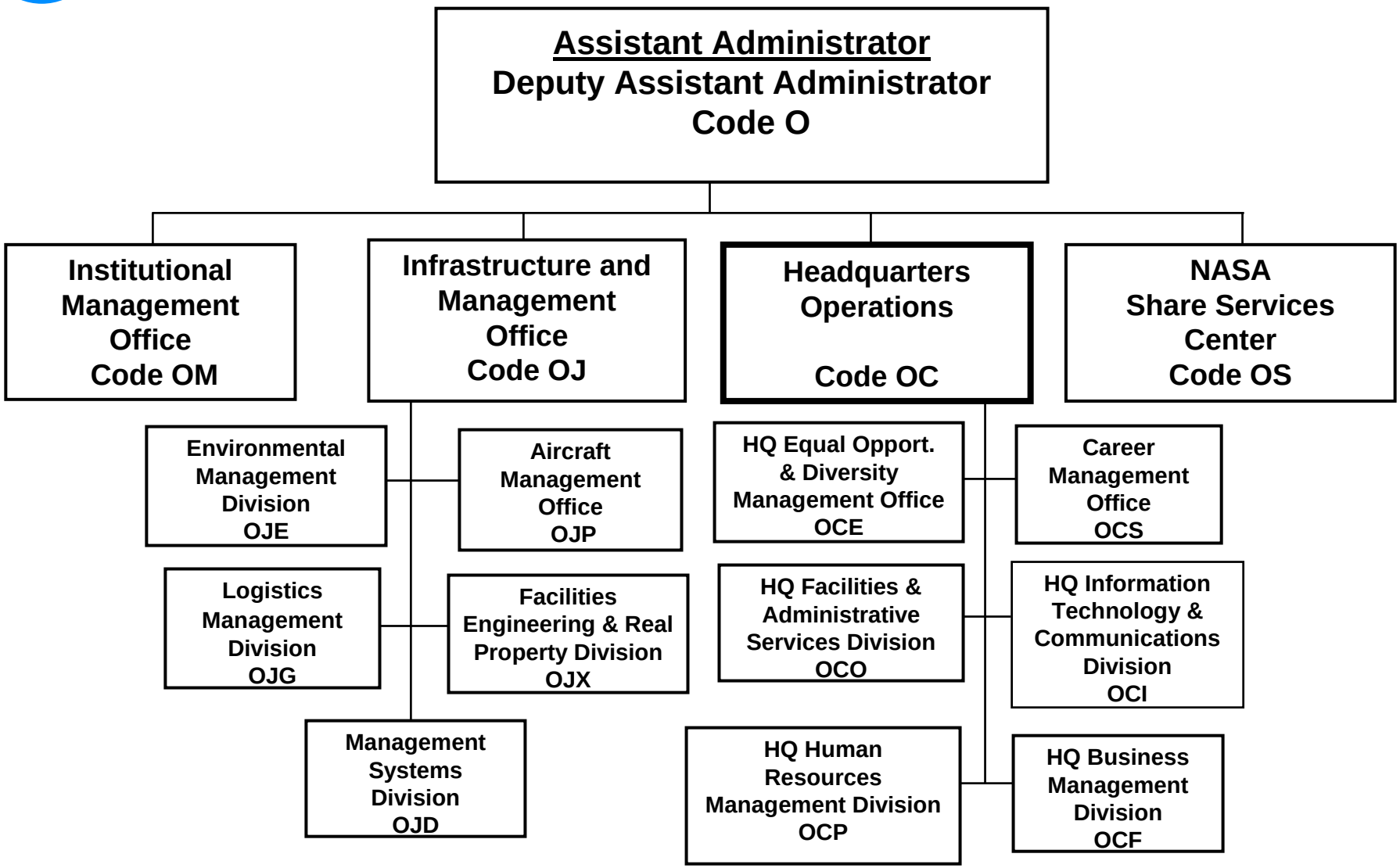
# HQ General Description

- Provides planning, advocacy, budgeting, direction, external liaison and coordination in support of NASA's mission
- HQ is comprised of 24 mission and staff support Offices
  - Mission Offices have distinct technical and program responsibilities (e.g. Office of Space Flight)
  - Staff Offices support NASA at large (e.g. Office of Public Affairs)
- Each HQ Office is referred to by a single letter code (e.g. Office of the General Counsel is Code G)
- Total Civil Servants ~ 1262
- Total Contractors ~ 500 (358 in main building)
- 75 contracts and service providers support the HQ environment
  - Utilities, facilities, security, health, IT services, IFMS, etc.

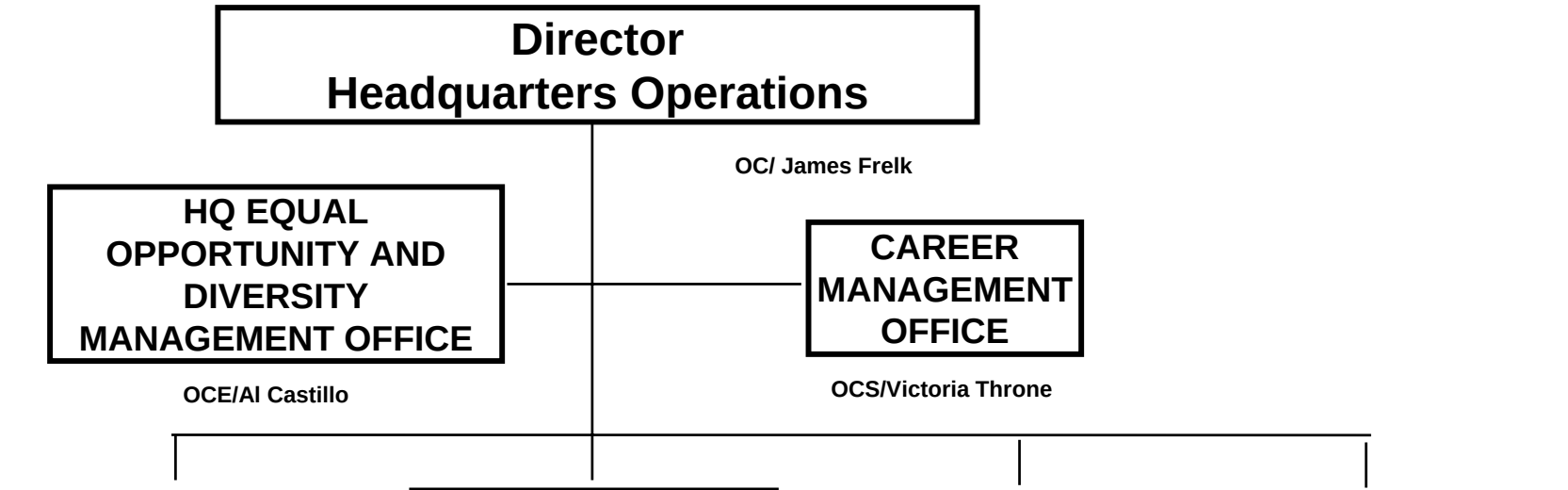
# NASA Headquarters Organization



# Office of Institutional and Corporate Management - Code O



# Office of HQ Operations - Code OC




**OCP/Chris Jedrey**

Staffing/Classification
Labor Relations
Awards Program
Health Unit
Physical Fitness Facility
Employee Assistance Program
Fare Subsidy

**OCI/Sandra Daniels-Gibson**

HQ Correspondence Office
HQ Mail Program
Information Technology
(Hardware/Software/Services)
Communications
(Telephone/Pagers/ViTS/Facilities)

**OCF/Dennis Bridge**

Budget Formulation and Execution
Financial Analysis
Facilities
Security
Administrative Services
Transportation (partial)
Graphics/Printing/Duplication
GSFC Liaison
-Accounting
-Procurement
-Transportation (partial)
-Logistics

**OCO/Annie O'Donoghue**

# Information Technology and Communications Division - Code OCI

**DIRECTOR/HEADQUARTERS CIO**
-IRM Program
-CIO Representatives Board
-Board of Directors Liaison
-Customer Advisory Committee (CAC) Chair
Sandra Daniels-Gibson

**Program and Administrative Support**

## CHIEF, ADP/T SERVICES BRANCH
**Dale Stigberg**

**COMPUTER CENTER OPERATIONS**
-Servers (PC, Mac, UNIX) and Mid-Range Computers
-Internet Services
-Front end processors and local mainframe peripherals
-Interface to NACC for Mainframe Operations

**DATA COMMUNICATIONS OPERATIONS**
-Network Operations Center
-Headquarters Communications Network
-Building-Wide Communication Network

**TELECOMMUNICATIONS OPERATIONS**
-Telephones, Pages, and Voice Mail
-ViTS
-VOTS
-Satellite/Cable TV
-Wide Area Network coordination
-NISN coordination

**IT ENGINEERING SERVICES**
-Systems Engineering Facility
-Turnkey Systems
-Engineering Analyses
-Agency and Special Projects
-Email Postmaster

**PRINTING & DESIGN**
Graphics support
Copying and GPO riders

**ISEM CONTRACT**
-Contract Administration/Tasks Order Mgmt.

## CHIEF, INFORMATION SYSTEMS & SUPPORT SERVICES BRANCH
Roger Bullock

**SOFTWARE APPLICATIONS SERVICES**
-Custom Software
-GOTS/COTS
-Data Base Administration
-Internet Publishing
-Headquarters Webmaster
-Interface to NACC for Mainframe Applications

**IT PLANS & POLICY**
-IT Plans, Policy & Regulatory Reviews

**IT SECURITY**
-IT Security Program
-IT Security Manager-Policy / Technical
-Risk Assessments and Security Plans
-Contingency Plan
-IT Security Training

**CORRESPONDENCE MANAGEMENT OFFICE**
-Administrator's Correspondence Control
-Public Inquiries
-Mail Management
-Directives Review

## CHIEF, USER SERVICES BRANCH
**Noah Nason**

**USER SERVICES**
-Service Managers
-Desktop HW & SW Management
-Accessible Technology
-URC
-Help Desk
-Laptop Loaner Pool
-Desktop Management
--Training

**IT EQUIPMENT MANAGEMENT & MAINTENANCE**
-Inventory Control
-Maintenance Management
-Property & Life Cycle Management
-Equipment Relocations

**ODIN Delivery Order**
-Contracting Officer's Technical Representative

**FINANCIAL ANALYSIS**
-Institutional IT Budget & Funding
-IRM Budget Preparation & Execution
-Contract Financial Management

# Chief Information Officer Function

- **NASA CIO – Ms. Pat Dunnington**
  - Provides Agency wide IT policy, direction and oversight
  - Establishes Agency IT standards and architecture
  - Responsible for Agency wide IT Initiatives
  - Serves as liaison with federal oversight agencies
  - Chairs the NASA CIO Representatives Board
- **HQ CIO – Ms. Sandra Daniels-Gibson**
  - Works in close coordination with NASA & Center CIOs to assist in establishing Agency wide IT policy, standards and architecture
  - Works in close coordination with NASA & Center CIOs to assist in planning and carrying out Agency wide IT initiatives
  - Responsible for implementation of NASA CIO IT policy and standards at the HQ site
  - Establishes the HQ-level Architecture in accordance with Agency-level architecture
  - Responsible for implementation of NASA CIO IT initiatives at the HQ level
  - Serves on the NASA CIO Representatives Board

# Profile of IT Environment

- Total Desktop / Laptop Computers - 2215
  - Customer Base – 1915+
    - Includes civil servants and contractors
  - Go-To seats – 300
    - For SEF, training, conference rooms, etc.
  - Percentage distribution by operating system:
    - 78% PC
    - 21% Macintosh
    - 1% Unix
- Central Help Desk
- Walk-In Service Center (User Resource Center)
- Mainframe processing services provided by the NASA ADP Consolidation Center (NACC) at MSFC
- Network Operations Center (NOC)
- Server Operations Center (SOC)
- Systems Engineering Facility (SEF)
- Information Technology Systems, Engineering and Management (ISEM) support services contract

# ISEM

- **Purpose:** Provides comprehensive IT services across HQ
- **Type:** Cost Plus Award Fee
- **Term:** June 1, 2000 – May 31, 2005
- **Vendor:** Science Applications International Corporation - SAIC
- **Total FTE:** 252
- **Major Contract Elements**
  - Core tasks supporting the operation of the overall institution. Work supports many or all Codes
  - Optional Subtasks supporting a specific project, program or Code
- **Contract Management**
  - Contracting Officer (CO) – Chris Whyte
  - CO's Technical Representative (COTR) – Dale Stigberg
  - Task Managers for Core and optional subtasks
- **Contract interfaces with many other HQ services contracts**

# IT Environment - Past & Present

| | 1999 | 2004 |
|---|---|---|
| • Annual IT costs | $29.5 M | $42.0 M |
| • IT contractor support personnel | 296 | 252 |
| • IT support civil servants in Code OCI | 21 | 22 |
| • Servers | < 87 | ~150 |
| • Aging network infrastructure | No | Yes |
| • Customer base | 1400 | 1915 |
| • Number of Codes | 20 | 24 |

**1994 – 1998**

IT Consolidation Initiative
Explosive growth in use of IT
High levels of technology infusion

**1999-2004**

Extensive collaboration across NASA
Integrated Financial Management Program
eGov – unified Federal IT strategies

# 2004 State of IT Environment

- Centralized management of IT under one organization
- Experiencing a sharp growth
  - Moving 150 individuals to an offsite location
- Supporting high-visibility teams (e.g. CAIB, President's Commission on Space Exploration, Return-To-Flight)
- New NASA goals, OneNASA vision, new office Organizations
- IT architecture is in transition and evolving:
  - Migrating to XP and OSX
  - Migrating servers to achieve load-balancing & fail-over
  - Migrating NT file storage architecture
  - Migrating from 100MB to gigE
  - Building more capability into PDAs
  - Building redundancy and High Availability into Network Perimeter
  - Building more "always available" services
  - Enhancing variety of services available for nomadic access via SSL
  - Enhancing ITS reporting at Agency levels
  - Pursuing greater integration of email, calendars, IM, directories

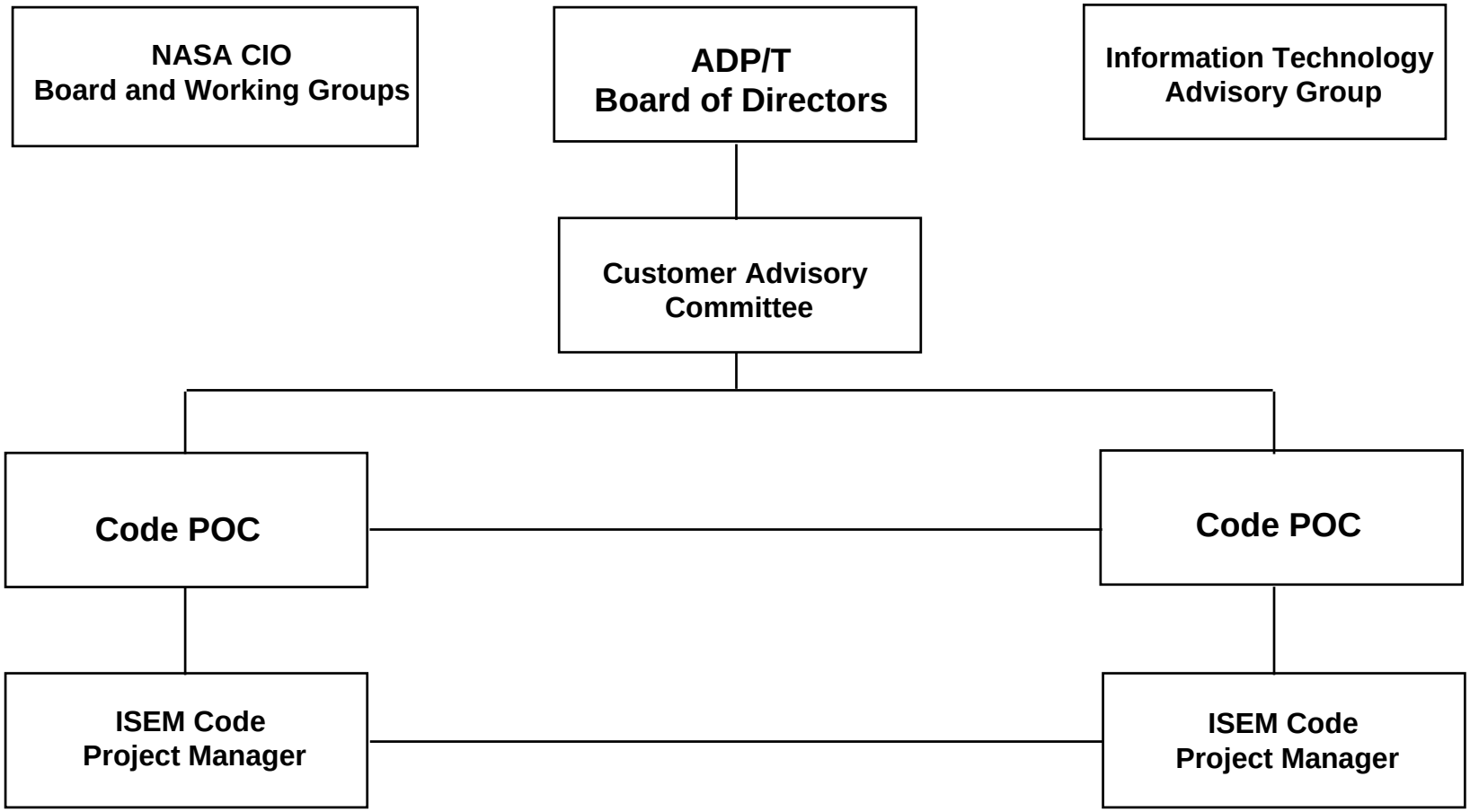
# 2004 State of IT Desktop Environment

- **HQ desktop operating environment on September 1st:**
  - **PC computers:**
    - **Most PCs will have Windows 2000 with SP3 and Office 2000**
    - **A few hundred will have XP with SP1 and Office 2003**
  - **Macintosh computers**
    - **All OS10.3.2**
  - **Email/calendaring environment is being upgraded. Currently using:**
    - **Eudora 6**
    - **Meeting Maker 7.5**
  - **PDAs. Support for:**
    - **Blackberrys**
    - **Palm**
    - **Pocket PC**

# HQ IT Governance

- **ADP/T Board of Directors**
  - **Provides strategic and executive guidance to Code OCI, in its role of meeting the IT requirements of HQ program and staff offices**
  - **http://www.hq.nasa.gov/office/codec/codeci/activiti/bdirs.html**
- **Customer Advisory Committee**
  - **Identifies common and unique HQ IT requirements, influences solutions in support of the overall HQ mission, and provides inputs and recommendations to Code OCI and the ADP/T Board of Directors**
  - **http://www.hq.nasa.gov/office/codec/codeci/activiti/cac.html**
- **Information Technology Technical Advisory Group**
  - **Provides input from a very technical group of individuals who give a programmatic perspective on the IT capabilities needed at Headquarters to facilitate their work efforts on behalf of NASA**

# IT Governance



# IT Coordination Mechanism

| NASA HQ IT Coordination Mechanism as of March 17, 2004 | | | | | | |
|---|---|---|---|---|---|---|
| | | | ISEM Code Project Managers | | | |
| Code | Name | Code FTE | Primary | Secondary | Code POC | Board of Directors Member |
| A | Administrator | 67 | Jeff Fesler | Paul Rollins | Josie Soper<br>Jill Hoover | Vicki Pendergrass |
| B | Chief Financial Officer | 58 | Robert Smith | Tom Shubert | Marlana Hunter<br>C.Diana Cermak | Gwendolyn Brown |
| D | Chief Engineer | 21 | Jeff Fesler | Paul Rollins | Maureen Moore | Christyl Johnson |
| E | Equal Opportunity Programs | 24 | Tanya Hamlet | Tom Shubert | Omega Jones<br>AnnAllen | Dorothy Hayden-Watkins |
| F | Human Resources | 59 | Paul Rollins | Sean D'Souza | Craig Conlin<br>Tuesday Dodson | Tim Sullivan |
| G | General Counsel | 41 | Tanya Hamlet | Paul Rollins | Rita Moore<br>Bob Stephens | Bob Stephens |
| H | Procurement | 50 | Robert Smith | Tom Shubert | Ken Stepka<br>Susie Marucci | Tom Luedtke |
| I | External Relations | 47 | Paul Rollins | Sean D'Souza | Marla King | Michael F. O'Brien |
| K | Small & Disadvantaged Business | 9 | Tanya Hamlet | Tom Shubert | Lamont Hames | Lamont Hames |
| L | Legislative Affairs | 22 | Paul Rollins | Tanya Hamlet | Anne Tracy<br>LaDonna Ghee | Mary Kerwin |
| M | Space Flight | 82 | Kathy McGuire | Charlene Duncan | Chris Burroughs<br>Joyce Haywood | Steve Miley |
| N | Office of Education | 36 | Sean D'Souza | Paul Rollins | Jason Freeman<br>Diane Bray | Shelly Canright |

# IT Coordination Mechanism (cont.)

| NASA HQ IT Coordination Mechanism as of March 17, 2004 | | | | | | |
|---|---|---|---|---|---|---|
| | | | ISEM Code Project Managers | | | |
| Code | Name | Code FTE | Primary | Secondary | Code POC | Board of Directors Member |
| O | Institutional & Corporate Management | 191 | Sean D'Souza | Tom Shubert | Brenda Williams<br>Elaine Bowman | Olga Dominguez |
| P | Public Affairs | 50 | Paul Rollins | Sean D'Souza | Patrice Williams<br>Brian Dunbar | Bob Jacobs |
| Q | Safety and Mission Assurance | 37 | Tom Shubert | Sean D'Souza | Bill Loewy<br>Dale Moore | James D. Lloyd |
| R | Aeronautics | 64 | Sheldon Norman | Ken'yon West | Joan Brooks<br>H. Crockett | Jay Henn |
| S | Space Science | 111 | Sharyn Horowirtz | Larry Helm | Mark Hill<br>Ramona Thomas | Joseph Bredekamp |
| T | Exploration Systems | 55 | Sheldon Norman | | Angela Michael | Brian Kremer |
| U | Biological and Physical Research | 50 | Bruce Altner | Larry Helm | Gloria Camp<br>Alex Pline | Mike Wargo |
| V | Chief Information Officer | 27 | Jeff Fesler | Paul Rollins | Judy Wissinger | Vicki Pendergrass |
| W | Inspector General | 57 | Tom Shubert | Sean D'Souza | Mike Campbell | Stephen J. Spratt |
| X | Security Management and Safeguards | 32 | Tom Shubert | Tanya Hamlet | Lena Moore<br>Pat Ellis | Frank Martin |
| Y | Earth Science | 65 | Larry Helm | Jim Consalvi<br>Joanne McGowan | Sharron Sample<br>Janice Wiley | Sharron Sample |
| Z | Health & Medical Systems | 7 | Jeff Fesler | Paul Rollins | Pam Barnes | Catherine Angotti |
| | Total Code FTE | 1262 | | | | |

# IT Strategic & Tactical Planning

- **5-Year Strategic Plan, dovetails with Agency Strategic Plan**
  - **Safety & Security**
  - **Cost Effective Common Infrastructure & Services**
  - **Innovative Technology & Practices**
  - **Support Emerging IT Areas**

http://www.hq.nasa.gov/office/codec/codeci/activiti/tactical.htm

- **2-Year Tactical Plan that establishes HQ IT goals & objectives**
  - **General narrative of overall direction**
  - **Activity Descriptions**
    - **What/ Why / Benefits / How / When / Cost**

http://www.hq.nasa.gov/office/codec/codeci/activiti/tactical.htm

- **Basis for customer expectations**
- **Approval and Status worked with ADP/T Board of Directors**

# Tactical Plan Report Card FY02/03

| Tactical Plan Project | Scheduled Completion Date | Actual Completion Date | Status |
|---|---|---|---|
| IT New Employee Orientation | Dec-02 | Dec-02 | 100% Complete |
| NISSU Integration | Sep-02 | Oct-02 | 100% Complete |
| WWW.NASA.GOV Migration | Feb-03 | Feb-03 | 100% Complete |
| Dial-In Replacement | May-03 | Jul-03 | 100% Complete |
| Guest Network Deployment | Dec-03 | Dec-03 | 100% Complete |
| ACE Server Upgrades | Feb-03 | Feb-03 | 100% Complete |
| Secure Nomadic Access (SNA) | Aug-03 | Aug-03 | 100% Complete |
| Columbia Support (HCAT) | - | Aug-03 | 100% Complete |
| Transitioned from ODIN | Jun-03 | Jun-03 | 100% Complete |
| Columbia Support (CAIB) | Dec-03 | Dec-03 | 100% Complete |
| IFM Core Financial Integration | Aug-03 | Aug-03 | 100% Complete |
| Blackberry Support | Jun-03 | Jun-03 | 100% Complete |
| Web-based HATS & CATS | Mar-03 | Mar-03 | 100% Complete |

# Tactical Plan Report Card - FY 04/05

| Tactical Plan Project | Scheduled Completion Date | Actual Completion Date | Status |
|---|---|---|---|
| Meeting Maker Upgrade | Apr-04 | | 85% |
| SPAM & Virus Filters | Apr-04 | | 40% |
| Eudora Upgrade | Apr-04 | | 90% |
| Patchlink | May-04 | | 25% |
| Emergency Operations Center | May-05 | | 35% |
| OSX roll out Phase I | May-04 | | 70% |
| gigE Phase I | May-05 | | 5% |
| Blackberry & PDA Enhancements | May-04 | | 40% |
| Migrate to New Email Servers | Jun-04 | | 80% |
| XP roll out Phase I | Jul-04 | | 25% |
| Server 2003 | Jul-04 | | 5% |
| Secure /ip printing | Jul-04 | | 50% |
| /ip Printing | Jul-04 | | 10% |
| Migrate Servers to Blades Phase I | Aug-04 | | 10% |
| ePayroll | Aug-04 | | 15% |
| ODIN Award / Transition | Sep-04 | | 50% |
| Secure Wireless | Dec-04 | | 5% |
| **XP roll out Phase II** | **Dec-04** | | **5%** |
| **OSX roll out Phase II** | **Dec-04** | | **5%** |
| Fail-Over Site Phase I | Dec-04 | | 35% |

# Tactical Plan Report Card - FY 04/05

| Tactical Plan Project | Scheduled Completion Date | Actual Completion Date | Status |
|---|---|---|---|
| Enterprise Storage | Jan-05 | | 5% |
| Expand Guest Network | Feb-05 | | 5% |
| Implement PBX Phase I | Mar-05 | | 5% |
| Enterprise File Storage | Mar-05 | | 5% |
| Migrate Web Architecture | Mar-05 | | 5% |
| **"Pull" for SW Distribution Pilot** | **May-05** | | **10%** |
| Reduced Sign -On | May-05 | | 5% |
| **Fully Integrated PDAs** | **Jun-05** | | **5%** |
| **Integrated Email, Calendar, IM** | **Jul-05** | | **5%** |
| KM Interface to Files Pilot | Jul-05 | | 5% |
| ISEM Award / Transition | Apr-May-05 | | 5% |
| Fail-Over Phase II | Sep-05 | | 10% |
| Migrate Servers to Blades Phase II | Aug-05 | | 5% |
| VO/ip | Oct-05 | | 5% |
| **Pull vs. Push for SW Distribution** | **Dec-05** | | **10%** |
| Migrate Public Web Pages | Dec-05 | | 5% |
| PBX Implementation Phase II | Dec-05 | | 5% |
| **Desktop Backup Service** | **Dec-05** | | **5%** |

# Current Agency CIO IT Initiatives

- Wide area network re-design
- Agency network CCB
- Integrated email & calendaring Agency wide
- “Inside NASA” portal
- Agency wide account management
- Badge and smart card integration
- New knowledge management capability
- Enterprise Architecture
- Uniform ITS mitigation and reporting
- Web “branding” and consolidation
- … and others

# Future Agency CIO IT Initiatives

**OneNASA drives the vision:**

- **Better support for mobile workforce**
- **Sophisticated collaborative environments**
- **Better support for public information**
- **Improved IT infrastructure and management**
- **Better knowledge management capability**
- **Single Sign-On**

# Current HQ IT Initiatives

- Get to everything from anywhere -
  - /ip printing, DHCP
  - Robust, highly available email - 1 gig of storage per customer
  - Expanded “guest” services - Internet & printing in conference areas, offices
- Staying current
  - Deploy new releases of PC and MAC operating systems
  - Upgrade server infrastructure - Jump start, load balanced
- Safe work environment
  - SPAM and Virus filters - levels of filters from edge to desktop
  - ITS monitoring and controls - Patchlink, penetration tests, IDMS
- Emergency Preparedness -
  - Fail-overs and hot sites
- Customer Tools
  - Integrated Email, Calendaring - aggressively pursuing at local and Agency levels
  - Reduce Passwords – Tokens
  - Blackberry & PDA enhancements - attachments, office integration
  - Secure wireless - high-speed building-wide

**High Availability and Responsive Service are our goals**

# Future HQ IT Initiatives

- Tool integration - email, calendar, IM, files
- Fully integrated PDAs
- Active-Active alternate site for Email, then more
- Single / Reduced Sign-On
- Automatic desktop backups and searchable storage
- gigE to the desktop
- Complete building-wide roaming
  - DHCP, Port Security & Wireless
- “Pull” refresh instead of “Push”
- Robust Take-Home software
  - Personal firewalls (laptop loaners also)
- Better Customer outreach / input

# IT Challenges

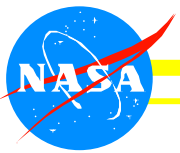
- Continue to improve customer satisfaction
- Accomplish IT initiatives within budget constraints
- Achieve success in light of the following customer environment:
  - Highly dynamic (new programs and initiatives) [OneNASA, CIO actions, Return-to-Flight, Moon/Mars exploration]
  - Very heavy HQs reliance on IT support
  - High expectations of customer base
  - Very senior and knowledgeable staff
  - Highly complex desktop hardware and software environment
- Keep pace with constantly expanding IT technology and requirements:
  - PDAs
  - Wireless
  - Group collaboration

# IT Challenges

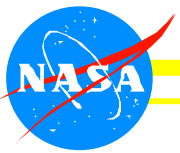
- **Mitigate ever increasing IT security threats**
- **Minimize customer disruption due to the transition and avoid perception of service fragmentation in light of contract split**
- **Proactively anticipate and support HQ programmatic needs**
- **Minimize need for user to initiate follow-up actions once Help Desk has been called. "One call does it all"**
- **Conduct effective customer outreach and training within multiple time constraints**

# What is Required of ODIN Contractor:

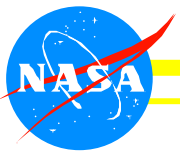
- Very strong customer service orientation
- Strong technical skills
- Ability to deliver high quality service:
  - Responsive
  - Flexible
  - On time
  - Seamless support
  - Close coordination - no surprises
- Ability to deliver in a highly dynamic environment
- Adherence to HQ and NASA IT Policy and Procedures
- Comprehensive compliance with all NASA security policies and prompt mitigation of security threats
- Forward thinking, quick learners:
  - Knowledgeable of environment
  - Anticipate technology beneficial to HQ customer base
- “One Stop” Help Desk for all NASA HQs IT services
- Deliver as promised




# *Questions & Answers*




# *Break*




# *Customer Service - Part I*

**Noah Nason**

# Topics

- Customer Services (Code OCI) Overview
- Customer Services Functional Structure
- End User Support
  - Service Requests (SRs)
  - Help Desk (Tickets)
  - Desktop
- Special and Other Services
- Account Administration
- Work Control & Asset Management
- Standard Meetings & Customer Outreach
- Standard Meetings
- Continual Improvement
- Summary

# Customer Services Overview

***The Code OCI Customer Services branch is at the heart of how we deliver comprehensive IT services to our customers. As such, we:***

- **Assist HQ organizations and individual customers in all aspects of desktop computing, including:**
  - **Requirements analysis and acquisition support**
  - **Computer training and consultation services**
  - **Customer outreach**
  - **Desktop, laptop, printer, and PDA planning and deployment**
  - **Desktop commercial off the shelf (COTS) product planning and selection**
  - **Processing and resolution of trouble tickets and service requests**
  - **Service Manager program**

# Customer Services Overview (cont.)

- Manages work station hardware and software assets
- Manages and tracks all desktop services work via a work control system
- Performs contract surveillance for ODIN
- Provides ODIN DOCOTR and alternate
- Serves as the customer's "Last Resort" for problem resolution

# Customer Services Functional Structure

# Service Manager Program

- **Service Manager Program ensures customer care across all Code OCI IT services and is comprised of two major components:**
  - **Code OCI Customer Service Managers plan, direct and perform customer liaison and advocacy activities**
  - **ISEM Code Project Managers:**
    - **Serve as customer advocate and liaison**
    - **Serve as focal point for cross-functional Code support activities**
    - **Gather and document code requirements and coordinate with Code POC and appropriate manager(s)**
    - **Track all Code procurements**
    - **Assist with tactical plan initiatives and deployments**
    - **Keep Code POC informed of HQ initiatives and schedules**
    - **Assist with Code coordination for all software deployments**

# Service Manager Program

- ISEM Code Project Managers also provide:
  - Ticket monitoring especially for “on hold” tickets
  - Review of negative customer survey comments with the effected customer
  - Floor walking during critical changes
  - Desktop change management
  - Customer outreach for desktop support
  - Desktop requirements development
  - Catalog procurement management
  - These activities will be transferred from the non-ODIN Contractor (ISEM) to the ODIN Contractor at the start of DO2
- ICPM assignments were shown on slides 22-23

# Service Ordering Vehicles

- **There are two methods to request IT services at NASA HQ :**
  - **Service Requests - Examples include:**
    - **Procurements**
    - **New initiatives**
    - **Web site creation and maintenance**
    - **Studies and White Papers**
    - **Applications development**
  - **Help Desk Tickets - User calls 358-HELP to request a service or report a problem. Examples include:**
    - **Problem reports**
    - **Consultations and questions**
    - **Service interruption**
    - **Phone support**
    - **AV support**
    - **Applications trouble shooting**
    - **COTS installation**
    - **Dial-in and broadband support**

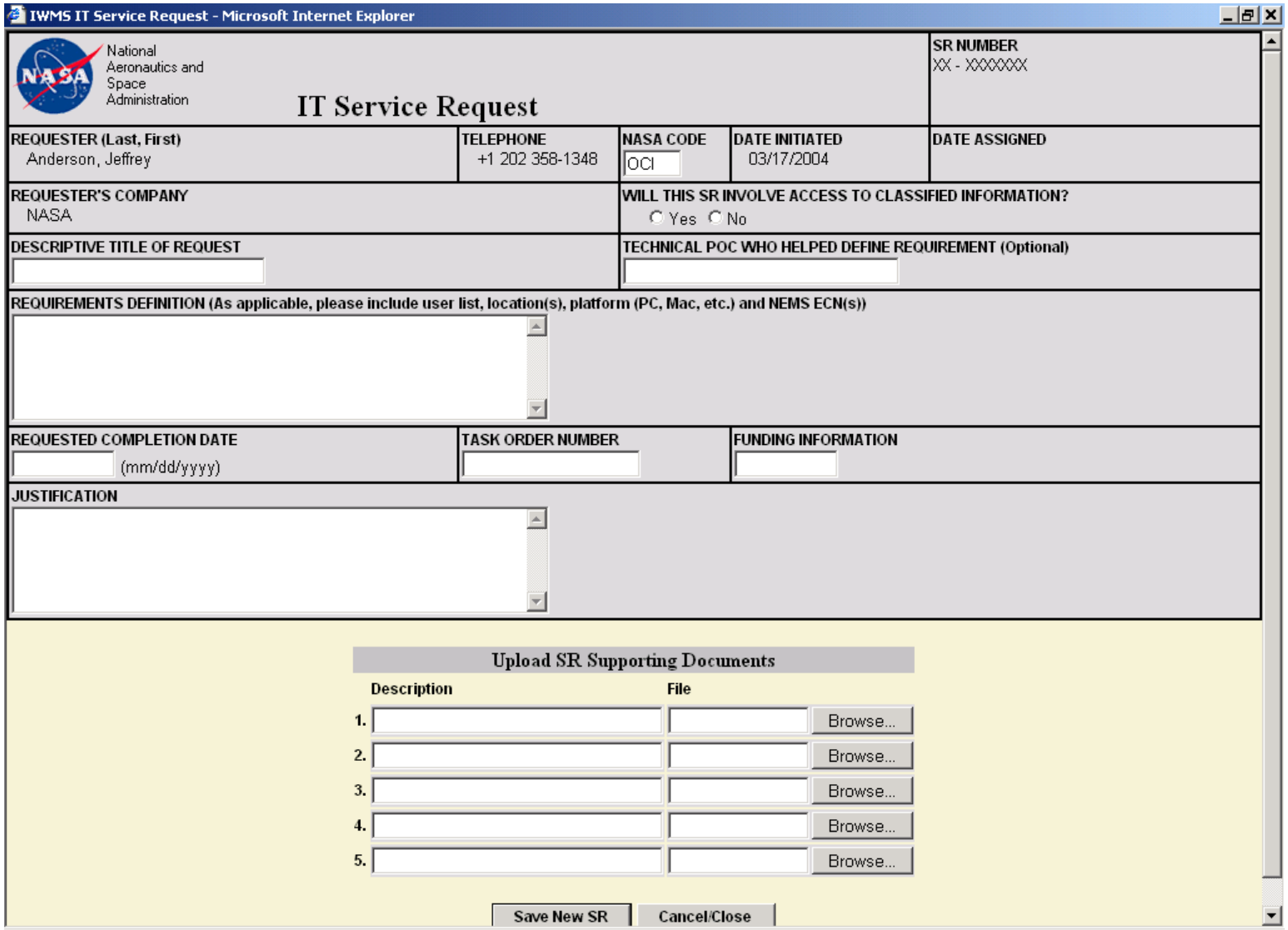
**Note: Help Desk details are covered later.**

# Service Requests

- **Service Requests**
  - **Class 1 - Processed through the CCB**
    - **Affects form, fit or function; procurements above IT infrastructure and product suite**
  - **Class 2**
    - **Standard service request not supported by a call-in service, e.g: new user requests, procurements within baseline**
  - **Created and tracked electronically via the ISEM Work Management System (IWMS)**
    - **http://intranet.hq.nasa.gov/iwms**
- **Service Request Volume** **(ref: BPM118 in Bidder's Library)**

| | *2000* | *2001* | *2002* | *2003* |
|---|---|---|---|---|
| ODIN | 16 | 25 | 33 | 7 |
| O/I | 14 | 23 | 16 | 2 |
| I/O | 200 | 265 | 338 | 77 |
| ISEM | 340 | 190 | 174 | 388 |
| **Total** | 570 | 503 | 561 | 474 |

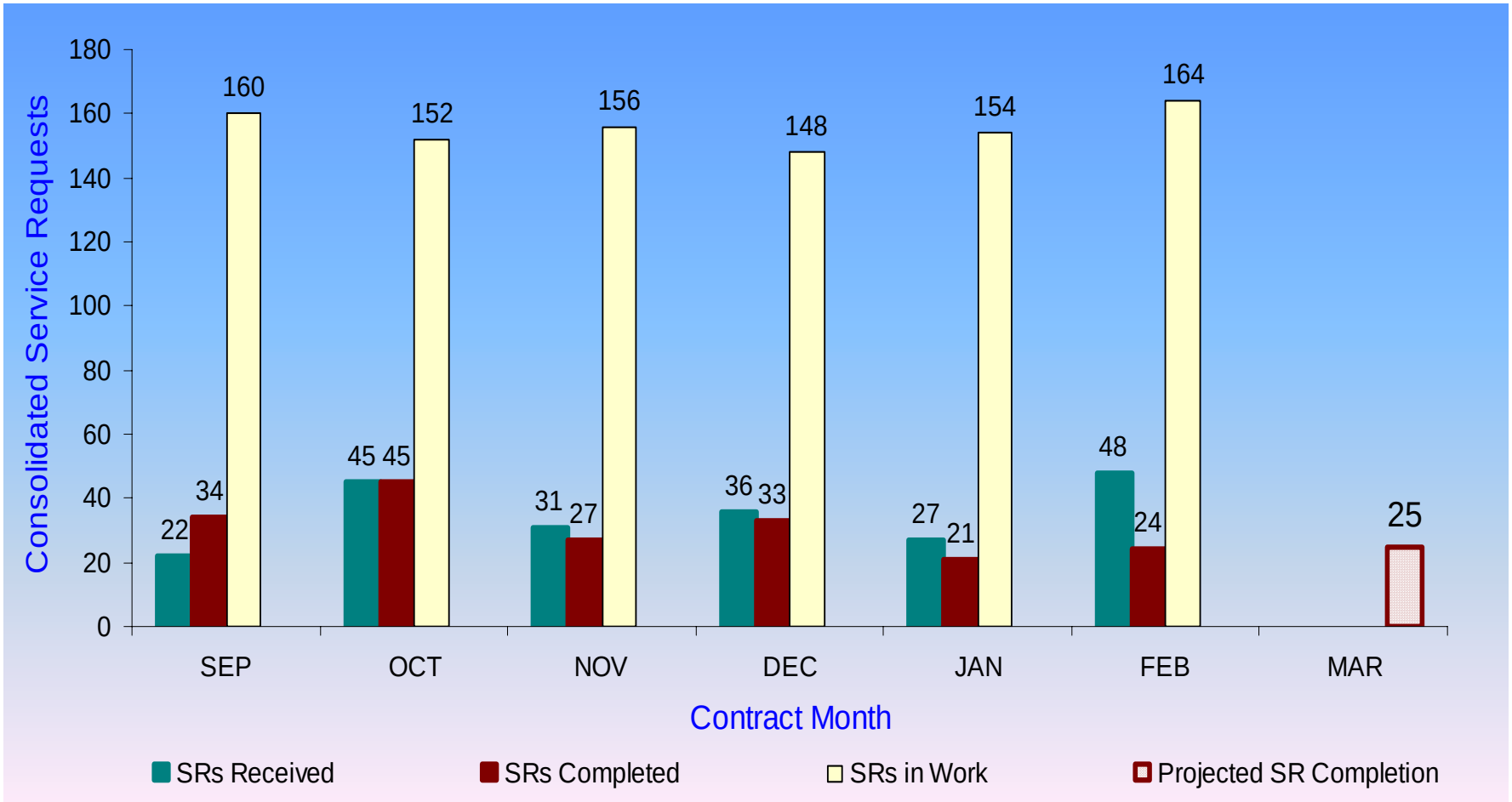
# Service Request Form



# SR Examples

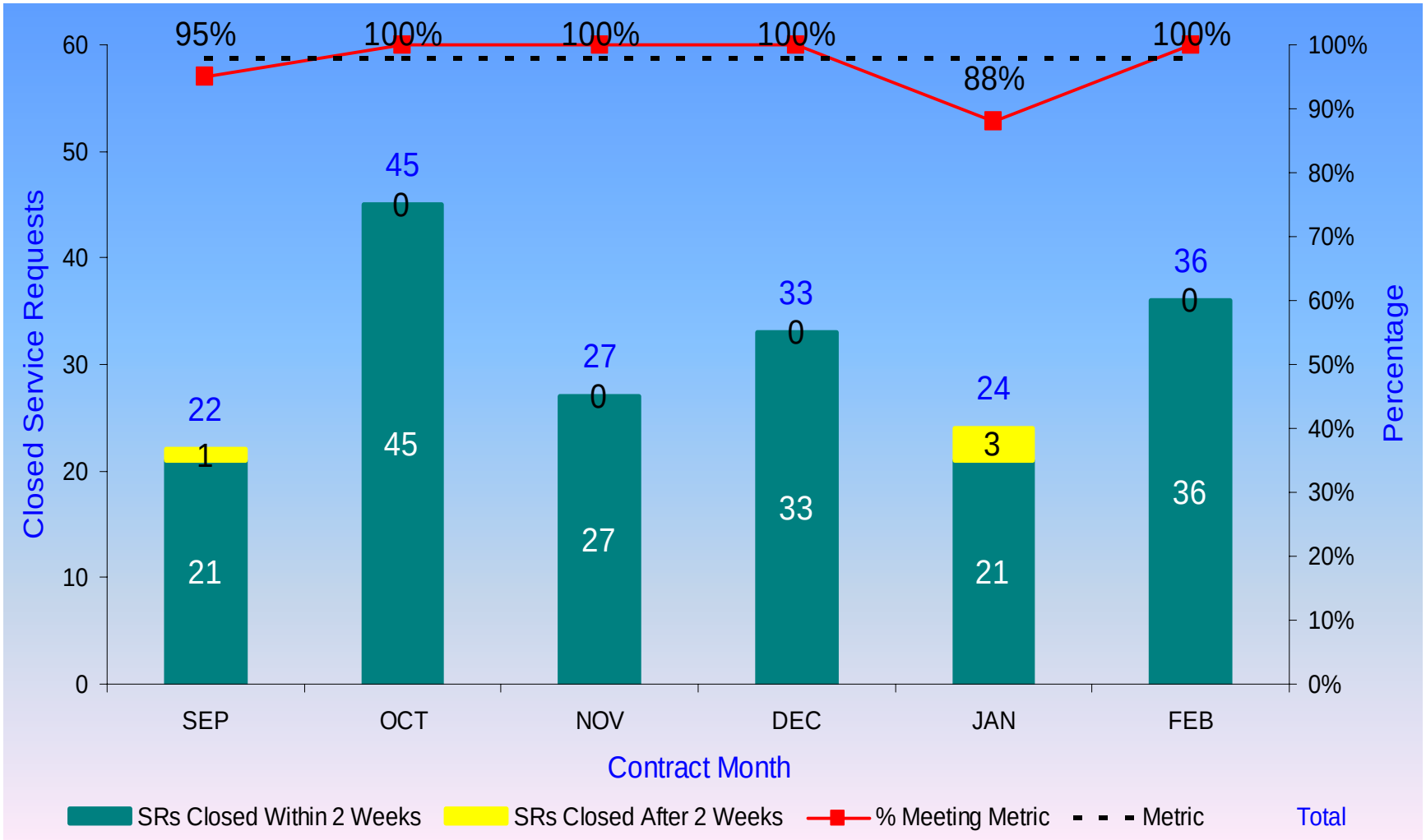
- **Engineering**
  - **Evaluation and baselining of new hardware or software at NASA HQ (such as the HP8000 printers)**
- **Operations**
  - **Audio/Visual support for a meeting, Voice mail setup (telecom), and installing/upgrading/ removing software from servers**
- **Service Management**
  - **Installation of a new software product across many computers**
- **Software Development**
  - **Custom applications and NASA web sites**

# Service Request Volume Consolidated View



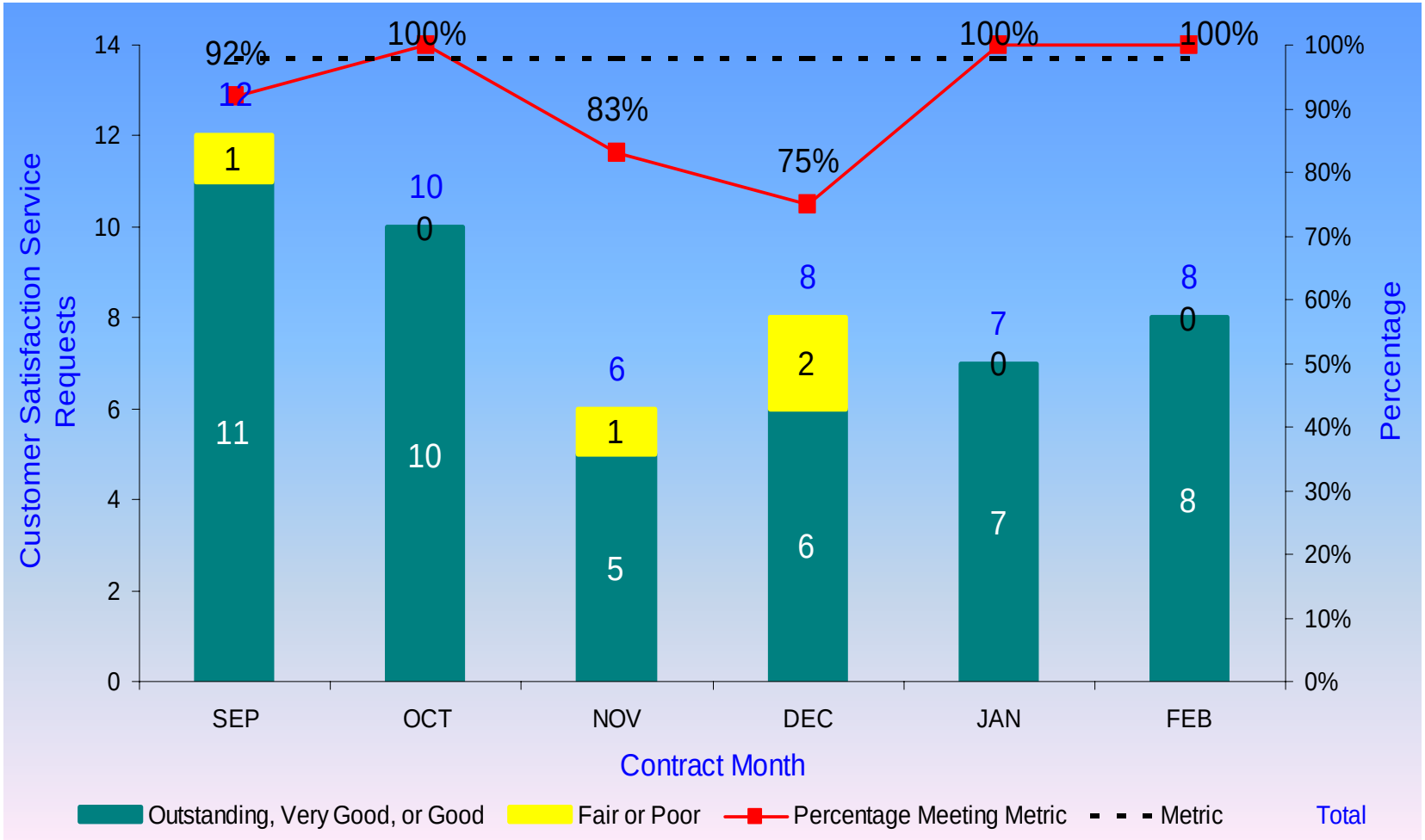
# Service Request Closure

## Target: Requests Closed Within 2 Weeks of Completion
## Includes all ISEM Service Requests

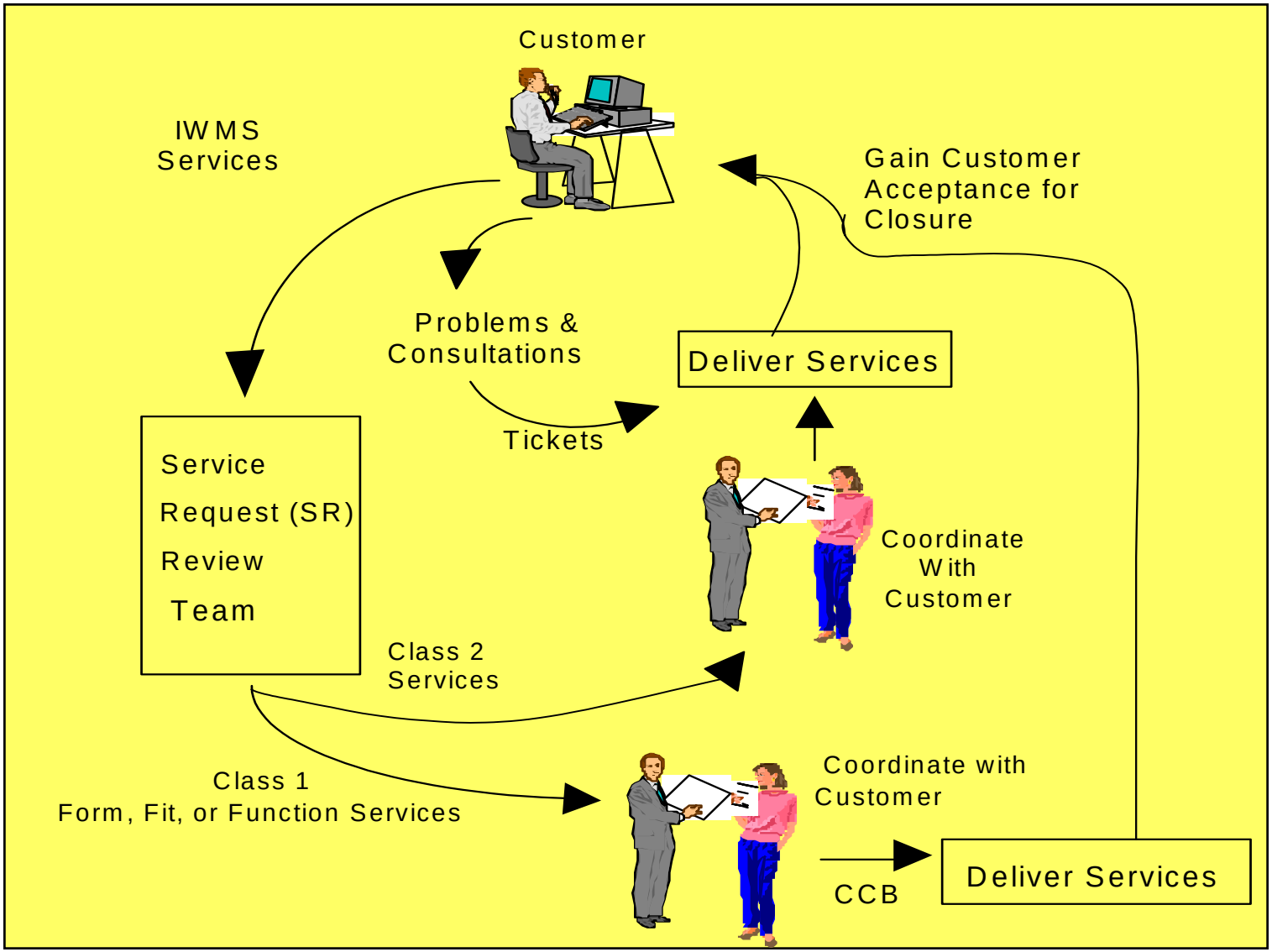


# Customer Satisfaction Survey Service Requests

## Target: 98% of all Customer Survey Good or Better Responses



# Service Delivery Process



# HELP Desk

- HELP Desk - 358-HELP (4357)
  - Hours of operation 6:00-6:00 (M-F)
  - Problem resolution, escalation, dispatch
  - Process “Call-in Services”
    - Password resets
    - Software for home
- Help desk ticket volume
  - February 04 = 2684
  - January 03 - February 04 monthly avg. = 2986
- Help desk call volume
  - February 04 = 6379
  - January 03 - January 04 monthly avg. = 3578

# HELP Desk

- **HELP Desk. A centralized service ordering and a problem resolution center for all HQ personnel:**
  - **Functions as the major point of entry into the service request and problem report (work control) system**
  - **Receives requests for service via phone, fax, voice mail, e-mail, web-mail**
  - **Documents all requests for service in the Remedy work control system as status/update as required**
  - **Monitors all requests including those for non-ODIN contractors and Government staff**
- **Help Desk staff administer and monitor the automated call distribution system (ACD)**
- **Maintain ~75 pager notification lists and send pager notifications**
  - **Priority lists, Code Specific, A/V, operations, etc.**
- **Perform password/print queue resets**

# Problem Resolution/Escalation

- **The HELP Desk Analyst:**
  - **Resolves ~25% of the service requests on the initial call**
  - **Documents the customer request and priority category:**
    - **Super Priority**
    - **Critical Uplift**
    - **Priority Service**
  - **Dispatches to the appropriate team/organization, as required**
  - **Tracks status and provides timely updates to the customer, the support team, other contractors, and the DOCOTR**
- **Dispatched team responds to request within established metrics**

# Problem Resolution/Escalation

- If the team is unable to provide corrective measures or workaround within 8 hours, the request is escalated to the DOCOTR or his designated representative
- Cross functional teams may be established, as required, to include:
  - Service Managers, technical support staff, Desktop Response Team, Vendor contacts
- Critical, Super Priority, and Non-Prime requests require approval before implementation. Pager notification for approvals must include:
  - Ticket Number
  - Name of Requestor
  - Telephone Number of Requestor
  - Summary of problem and why it is a work stoppage

# Priority Service Level Descriptions and Historical Volumes

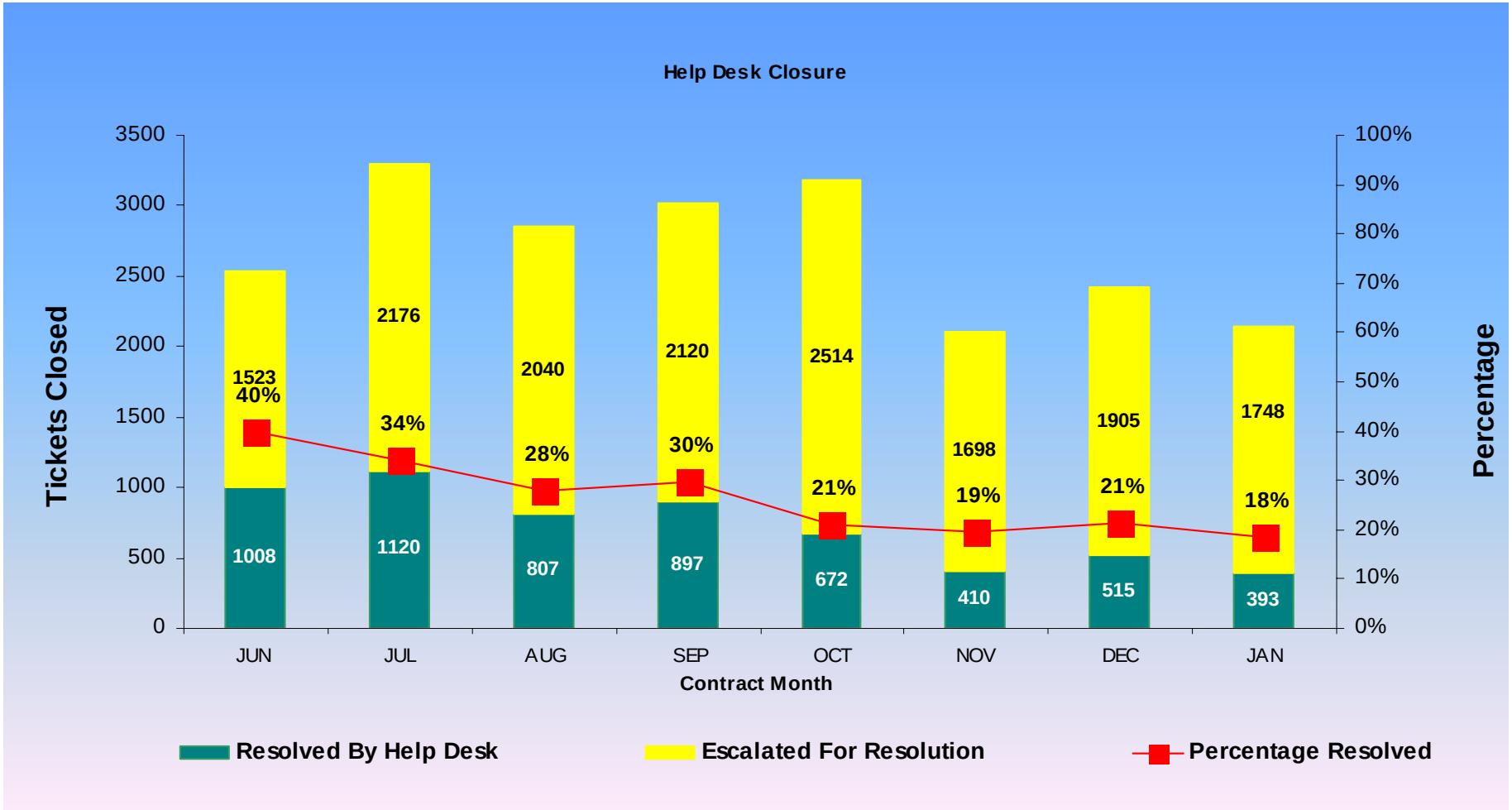
- From 6 am to 6 pm Monday through Friday excluding Federal holidays (Prime Time) in order of priority, the priority service levels are:
  - Super Priority Service. (1 per month)
    - Available to any HQ employee per Government approval by Code OCI
    - A technician is dispatched and arrives at the problem location as soon as possible.
    - A continuous effort is applied until a return to service or a workaround is achieved.
    - The DOCOTR is notified upon problem resolution
  - Critical Uplift Service. (125 to 150 per month)
    - Available to any HQ employee per Government approval by Code OCI or Enterprise Code IT POCs
    - Response time no greater than 30 minutes
    - A continuous effort is applied until a return to service or a workaround is achieved. DO2 will be 2 hours
  - Priority Service. (40 to 60 per month)
    - Automatically applied to a pre-designated DOCOTR approved list of individuals
    - Response time no greater than 30 minutes
    - A continuous effort is applied until a return to service or a workaround is achieved. DO2 will be 2 hours
- During non-prime time, NASA HQs has Non-Prime Time Service. (6 per year)
  - Available to any HQ employee per Government approval by the DOCOTR or designated list of alternates
  - Response time no greater than 4 hours
  - A continuous effort is applied until a return to service or a workaround is achieved.

# Sample Detailed Ticket Breakdown

| Type-Of-Service | Category | 2003-05 | 2003-06 | 2003-07 | 2003-08 | 2003-09 | 2003-10 | 2003-11 | 2003-12 | 2004-01 | 2004-02 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Asset Management | Platform | 163 | 168 | 93 | 198 | 160 | 158 | 114 | 81 | 103 | 107 |
| Catalog | Catalog | 4 | 28 | 114 | 154 | 158 | 199 | 105 | 96 | 74 | 61 |
| Customer Support | Account Administration | 220 | 262 | 174 | 182 | 225 | 514 | 242 | 286 | 216 | 400 |
| Customer Support | Auto SW Distribution - Complex | | 1 | | 1 | | 1 | | | | |
| Customer Support | Auto SW Distribution - Routine | | 1 | | 1 | 3 | | | | 2 | 6 |
| Customer Support | AV LAN Drops | 30 | 62 | 104 | 58 | 46 | 54 | 41 | 58 | 51 | 80 |
| Customer Support | Info/Request | 694 | 763 | 672 | 763 | 860 | 690 | 451 | 577 | 460 | 607 |
| Customer Support | Infrastructure Server Admin | | 6 | 1 | 2 | 3 | 1 | | 1 | 1 | 1 |
| Customer Support | LAN Services | 130 | 140 | 126 | 132 | 114 | 109 | 110 | 127 | 67 | 99 |
| Customer Support | Password Reset | 185 | 219 | 182 | 160 | 202 | 190 | 148 | 226 | 165 | 158 |
| Customer Support | Return to Service | 18 | 11 | 10 | 10 | 9 | 13 | 11 | 5 | 13 | 9 |
| Customer Support | System Administration - DT | 317 | 341 | 329 | 256 | 335 | 358 | 251 | 263 | 185 | 311 |
| Customer Support | Virus Response | 81 | 355 | 69 | 180 | 149 | 54 | 65 | 44 | 36 | 114 |
| Maintenance | Desktop System Software | 30 | 44 | 36 | 27 | 52 | 40 | 16 | 22 | 24 | 38 |
| Maintenance | Dial In Access | 11 | 2 | 3 | 2 | | 4 | 1 | 8 | 3 | 2 |
| Maintenance | Fax Services | | | | | | 10 | 7 | 9 | 13 | 15 |
| Maintenance | Hardware | 79 | 84 | 96 | 104 | 104 | 106 | 93 | 111 | 95 | 107 |
| Maintenance | Infrastructure | 12 | 4 | 7 | 5 | 6 | 3 | 1 | 2 | 4 | 5 |
| Maintenance | Local Video | | 1 | 1 | 1 | 3 | | 1 | 1 | 9 | 6 |
| Maintenance | ODIN Application Software | 5 | 8 | 7 | 10 | 12 | 14 | 10 | 7 | 5 | 32 |
| Maintenance | ODIN Core Load Software | 70 | 54 | 44 | 40 | 65 | 66 | 40 | 43 | 68 | 147 |
| Maintenance | Phone Services | 61 | 72 | 52 | 36 | 56 | 59 | 35 | 58 | 40 | 56 |
| Maintenance | Print Queue Availability | 3 | 3 | 23 | 4 | 16 | 1 | 3 | 1 | 7 | 5 |
| Maintenance | Remote Communication | | | | | | | | 2 | | |
| Maintenance | Restore Server Data | 1 | | | 1 | 1 | 2 | 3 | 1 | | 2 |
| Maintenance | Restore User Data | | | 1 | 1 | 2 | 4 | 3 | 3 | | 1 |
| Maintenance | Server Hardware | 1 | | 2 | 1 | | | | | | |
| Maintenance | Server Software | 1 | 2 | | 1 | | 1 | 1 | 2 | | |
| Maintenance | Weekly Reboots | | | 1 | 2 | | 1 | | 2 | | 1 |
| Service Delivery Order | Desktop Move/Add/Change | 249 | 271 | 238 | 276 | 270 | 333 | 258 | 220 | 196 | 219 |
| Service Delivery Order | Fax Move/Add/Change | 1 | 1 | | 2 | | 1 | | | | 2 |
| Service Delivery Order | Laptop Loaner Pool Management | 69 | 56 | 61 | 61 | 51 | 60 | 39 | 43 | 41 | 56 |
| Service Delivery Order | Local Video Move/Add/Change | 4 | 2 | 7 | 8 | 8 | 8 | 5 | 4 | 7 | 2 |
| Service Delivery Order | Phone Move/Add/Change | 120 | 115 | 110 | 152 | 112 | 131 | 66 | 72 | 108 | 99 |
| Service Delivery Order | Restore User Data | | 3 | 4 | | 1 | 1 | 2 | | 2 | 1 |
| Service Delivery Order | Software for Home Use | 21 | 31 | 19 | 57 | 31 | 27 | 13 | 29 | 24 | 38 |
| Service Delivery Order | System Administration - SVR | 10 | 5 | 2 | 6 | 4 | 3 | | 6 | 11 | 2 |

**18 months of much more detailed data will be on the odin2 web site**

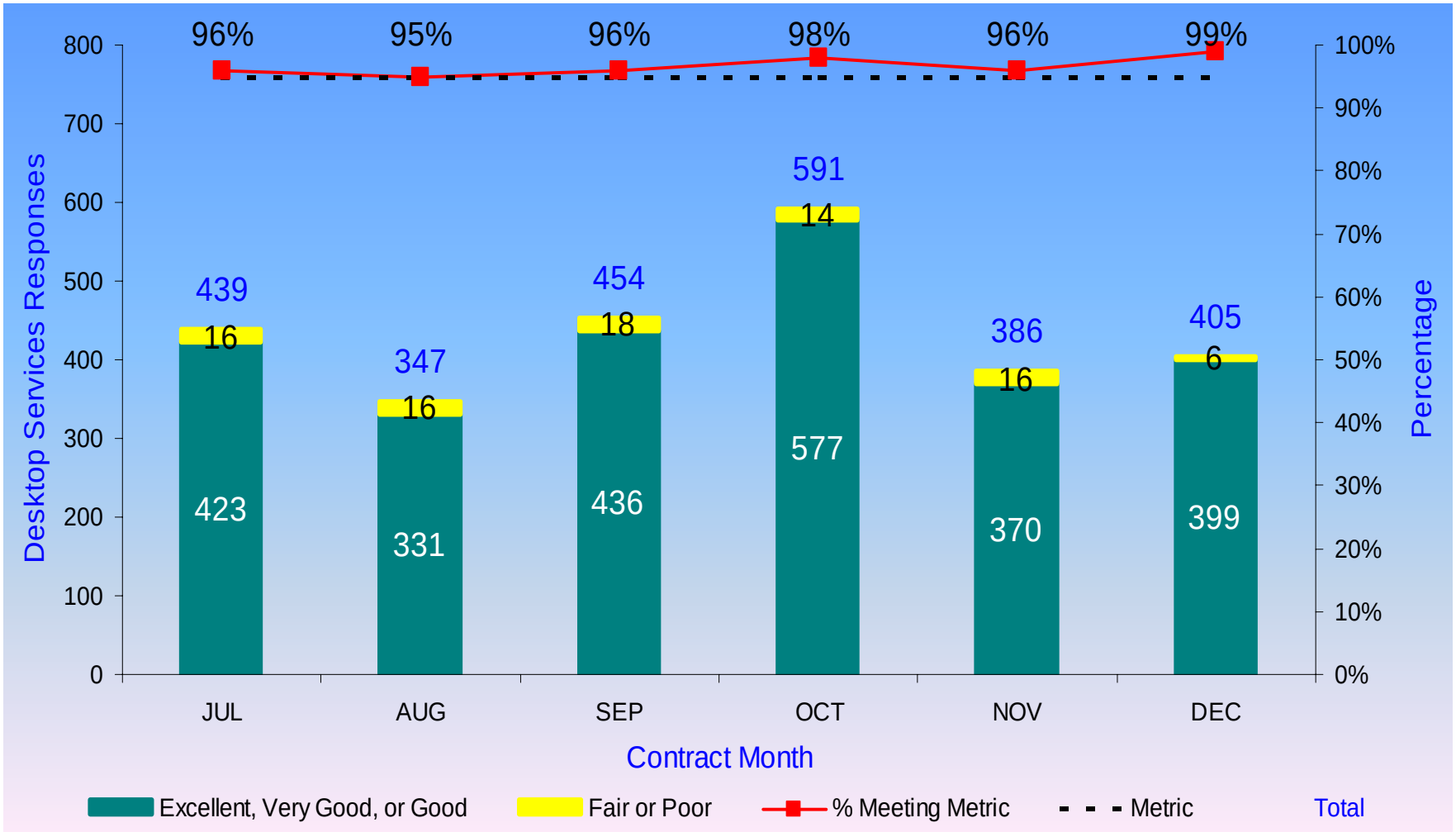
# Help Desk Ticket First Call Closure Rate




**Goal is 35%. Rate going down due to increased workload (seat increases & virus attacks) and customer desires (senior officials want desk-side support)**

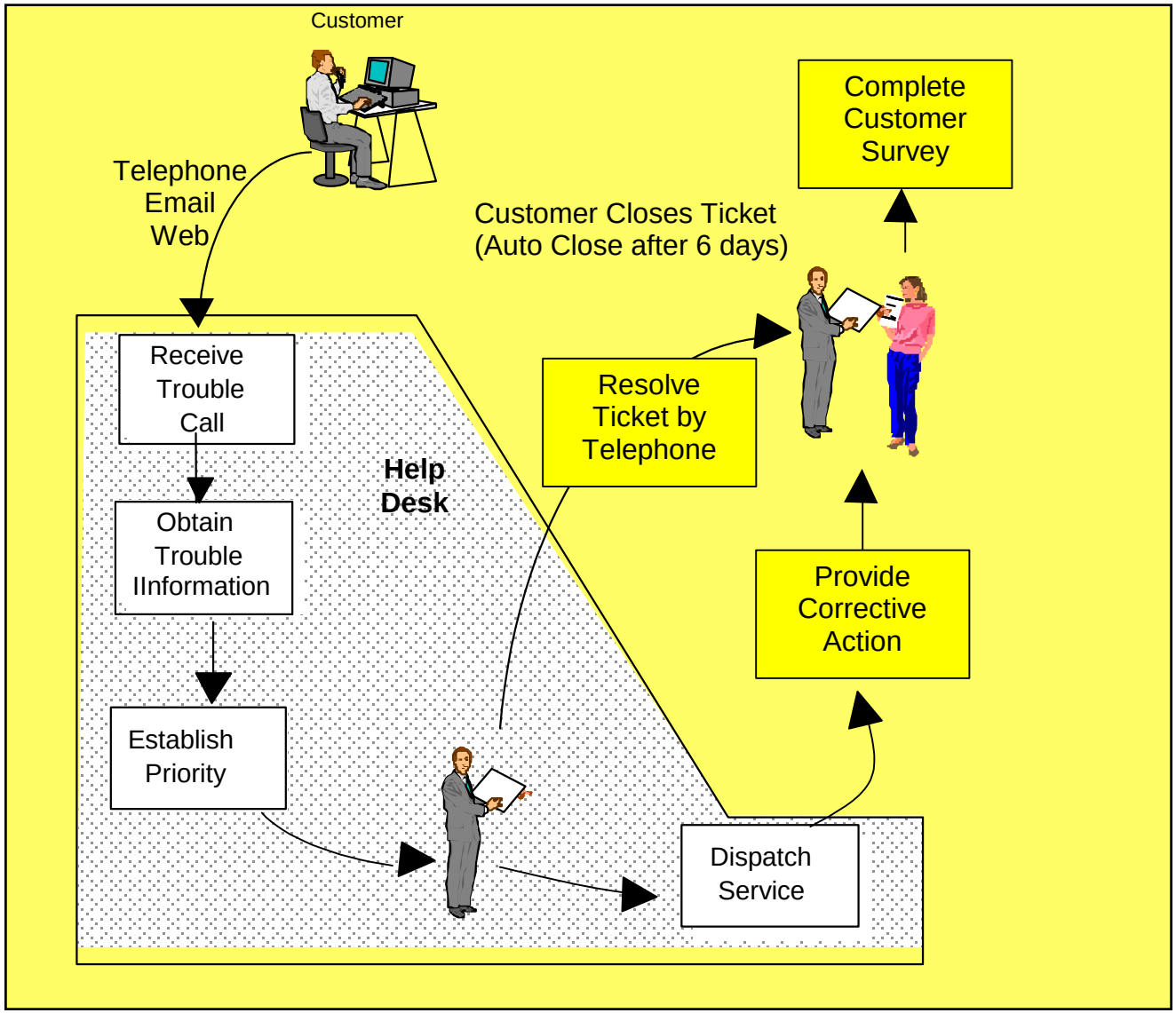
# QA Customer Satisfaction-HELP Desk

Target: 98% of Responses Received are “Outstanding” or “Very Good”




**Today 98% under ODIN 95%**

# Problem Report Process Flow



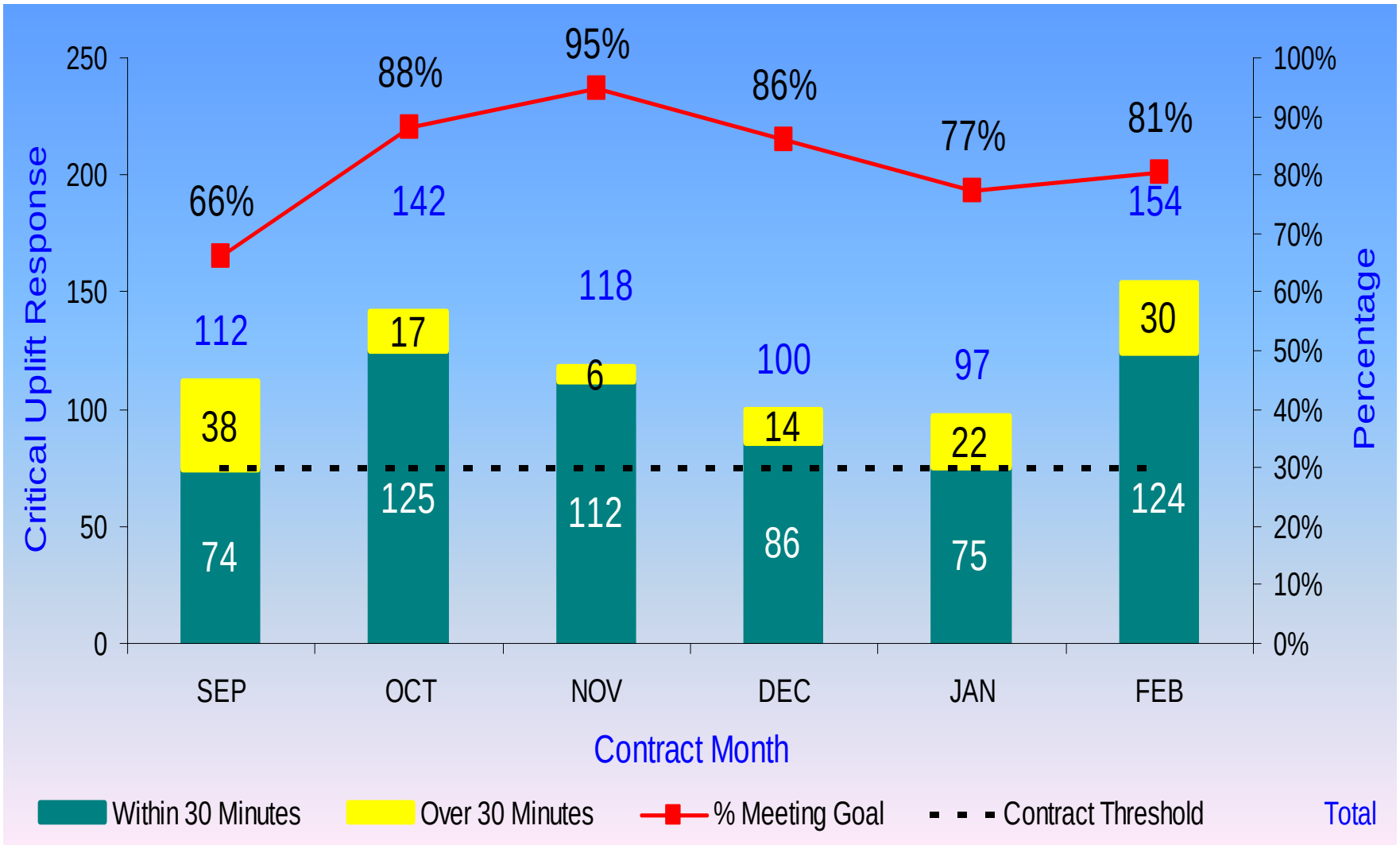
# Response Metrics

| Customer Ticket | Priority | Availability | Time to First Response | 95% Resolution Time |
|---|---|---|---|---|
| Cannot Continue Task (Problem) | Super Priority | 6AM to 6 PM | Immediate | 8 Hours |
| | Priority | 6AM to 6 PM | 30 Min | 8 Hours |
| | Critical Uplift | 6AM to 6 PM | 30 Min | 2 Hours |
| | Non-Prime Time | 6PM to 6 AM | After Approval | 8 Hours |
| Customer Can Still Work | Normal | 6AM to 6 PM | N/A | 8 Hours |

# Response Metrics (Cont)

| Customer Ticket | Priority | Availability | Time to First Response | 95% Resolution Time |
|---|---|---|---|---|
| M/A/C | Normal | 6AM to 6 PM | N/A | 3 Days |
| Catalog Order | Normal | 6AM to 6 PM | N/A | 10 Days |
| Laptop Loaner | Normal | 6AM to 6 PM | N/A | 8 Hours |

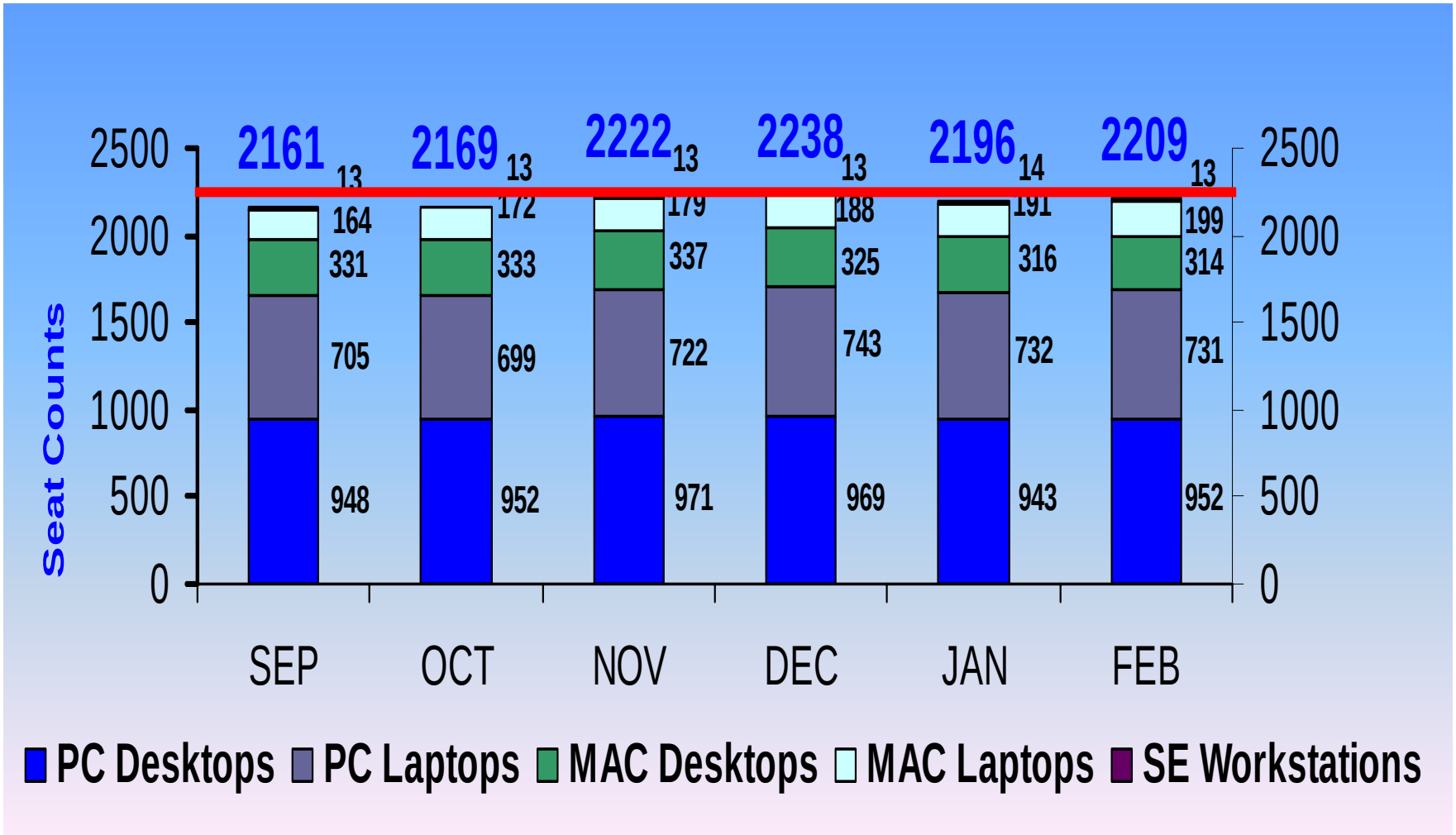
# Historical Critical Uplift Volume



# Desktop Response Team

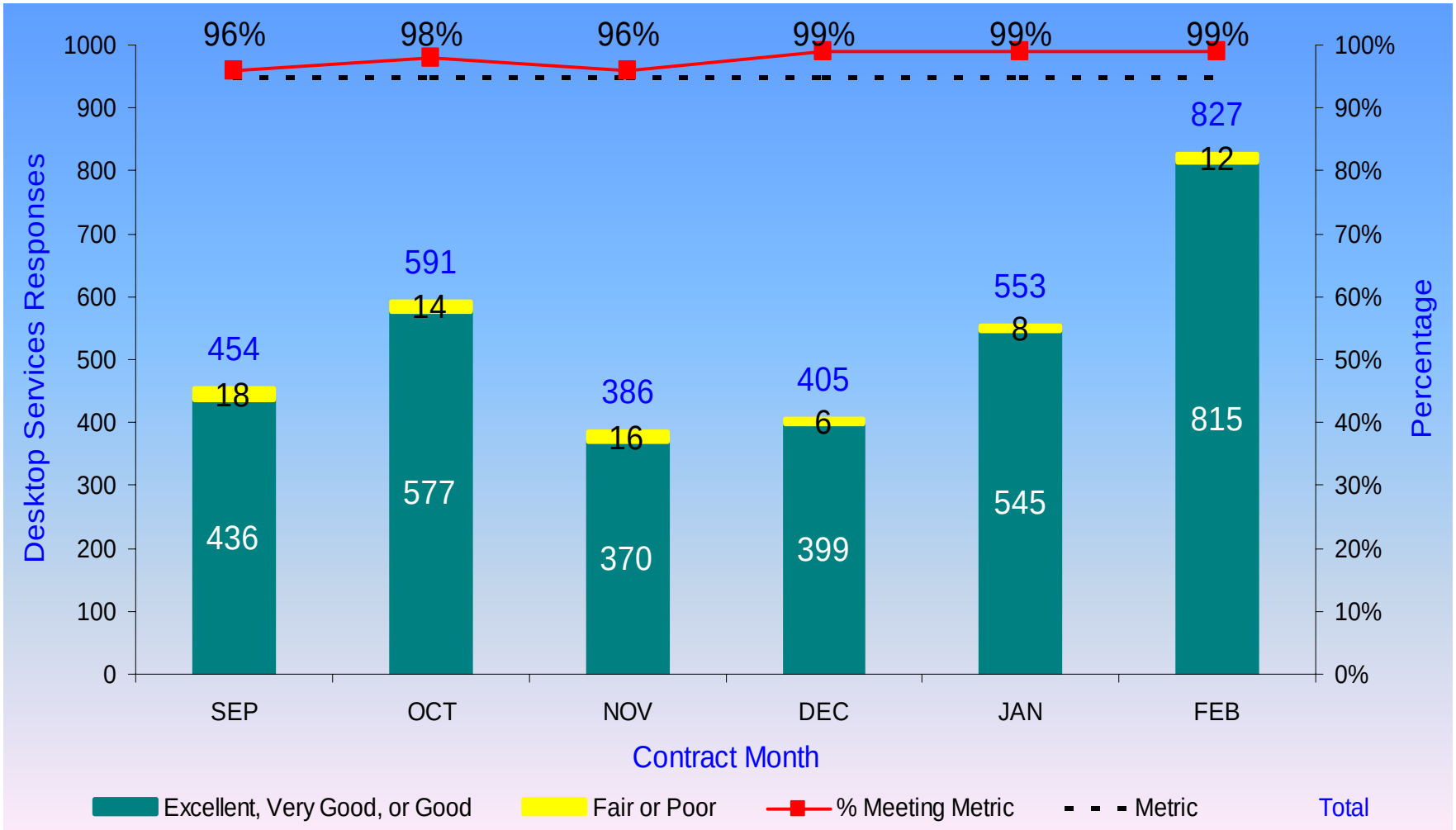
- **Team dispatched via the HELP desk and performs the following services:**
  - **Responds to HELP desk trouble tickets within established contract metrics and escalates as appropriate**
  - **Provides troubleshooting and implements corrective action measures, including Returns to Service**
  - **Contacts customer to provide status updates**
  - **Provides consultation services**
  - **Performs virus eradication services**
  - **Supports IT requirements for conference room and audio visual services**
  - **Supports Class 1 and Class 2 Service Requests**
  - **Installs Triage 1, 2, & 3 HW / SW**
  - **Performs Move/Add/Changes (M/A/C)**

# Historical Workstation Seat Counts

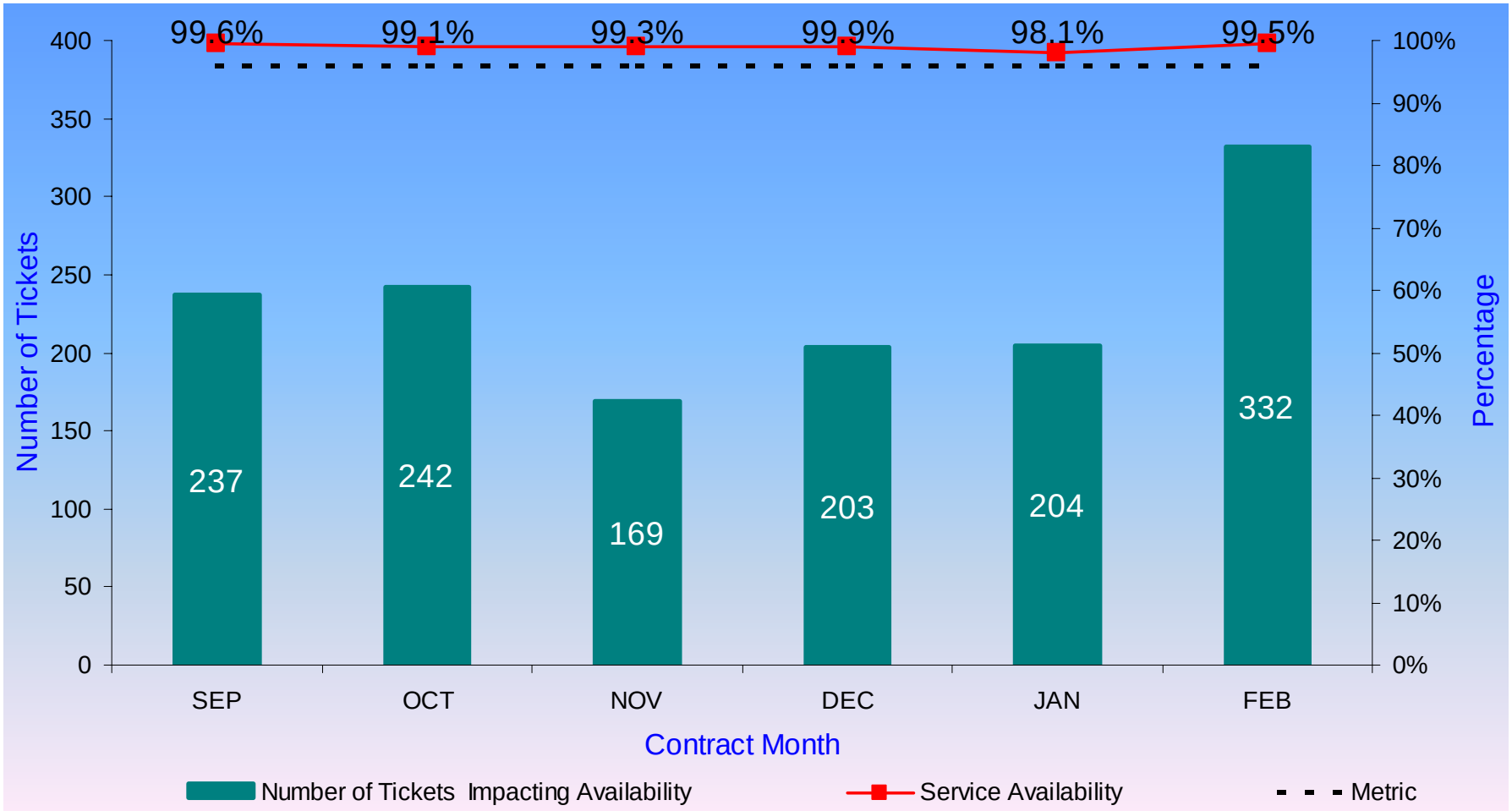


# Customer Satisfaction for Desktop Response Team

## 95% of all Customer Survey Responses Good or Better



# Desktop Availability

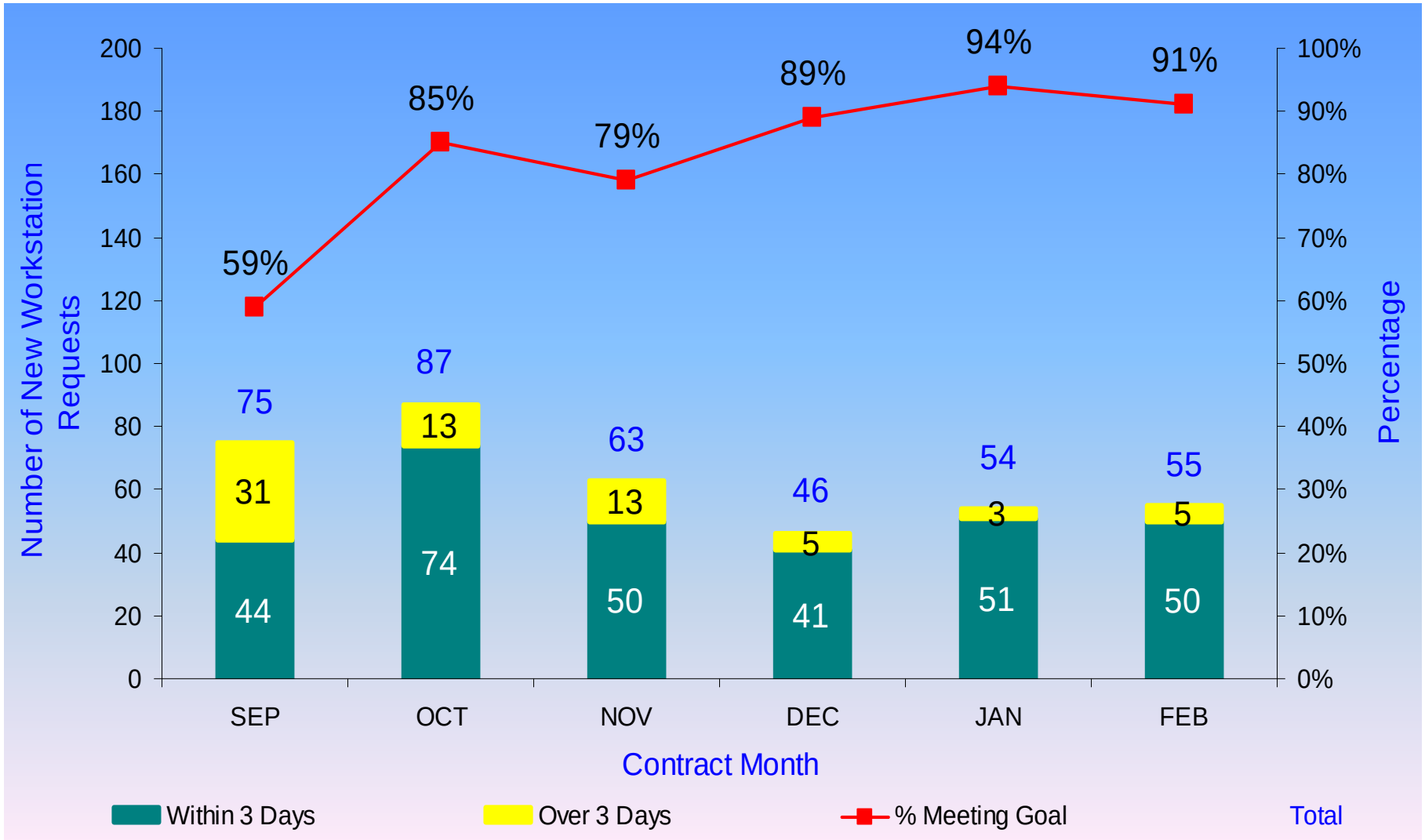


# New Users, Moves and Relocations

- **A Move/Add/Change (M/A/C):**
  - **Provides complete workstation set up, network activation, telecommunications support and account administration within 3 business days**
  - **Requires an HONURS request**
  - **Processed through the HELP desk**
  - **Provided for new users, moves and relocations for inter and intra code activity**
- **Historically HQ has 350 M/A/Cs per month**

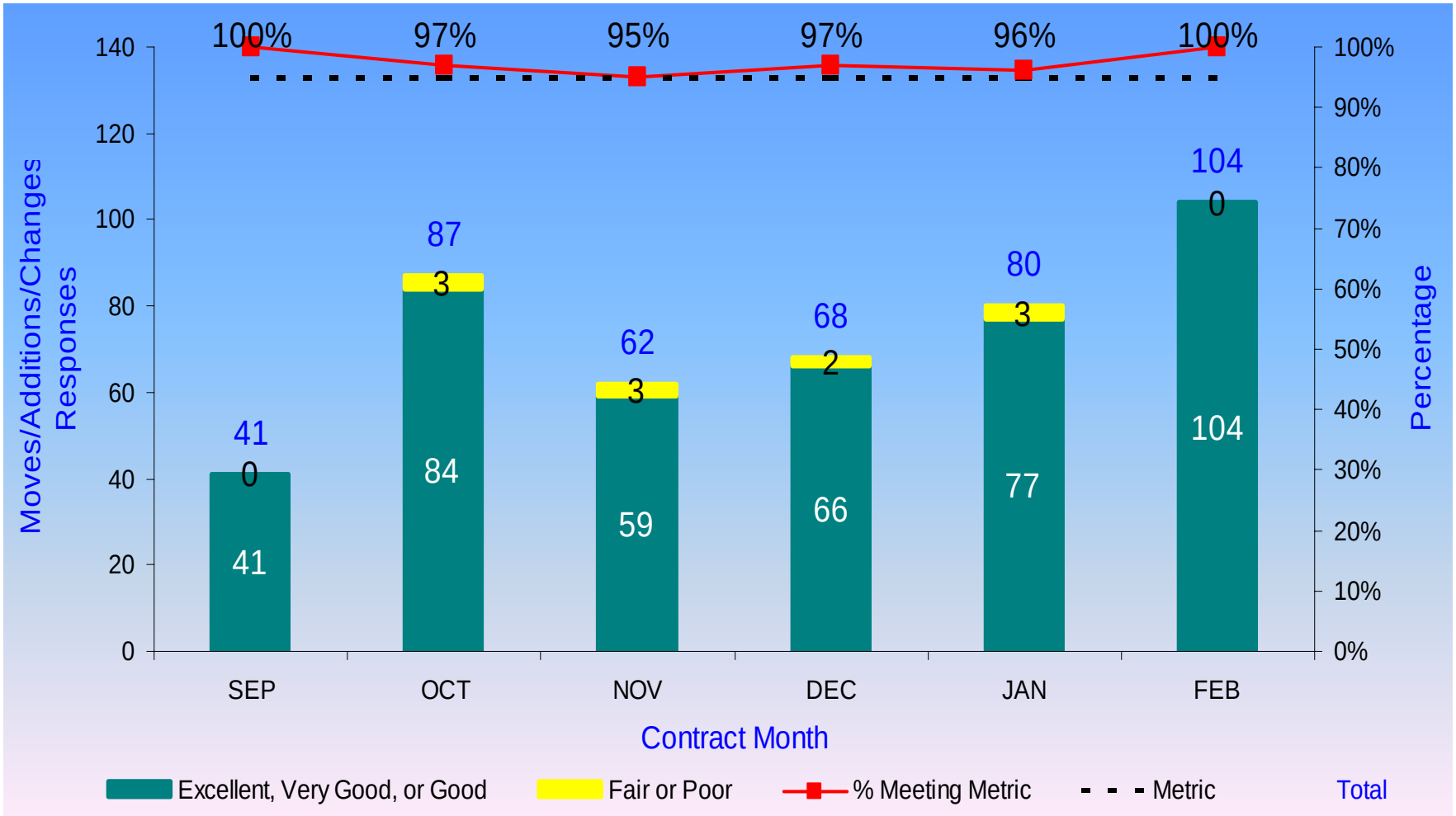
**Note: A M/A/C is not a restacking. Restacking is a process for moving a portion or all of a code to a new area. Code OCO provides a restacking list monthly**

# Historical New User Seat Requests



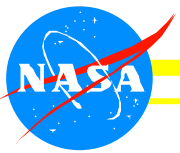
# Customer Satisfaction M/A/C

## 95% of all Customer Survey Responses Good or Better

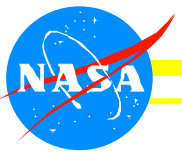


# Questions and Consultations

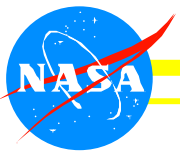
- **Available to all HQ Civil Service and contractor personnel**
- **Consultation services are initially obtained through a visit to the User Resource Center (URC) or a call to the HELP desk**
- **Consultation examples include: Core load and Triage 1 application support and questions, product research, scanning assistance, file conversion, file transfers, individualized special training or instruction for preparation of presentations using available tools**




# *Questions & Answers*




# *Lunch*




# *Customer Service - Part II*

**Noah Nason**

# Topics

- ✘ User Services Overview (Code OCI)
- ✘ User Services Functional Structure
- ✘ End User Support
  - Service Requests (SRs)
  - Help Desk (Tickets)
  - Desktop
- Special and Other Services
- Account Administration
- Work Control & Asset Management
- Standard Meetings & Customer Outreach
- Continual Improvement
- Summary

# Special and Other Services

- **Software Library and Home Use software program**
- **Laptop Loaner Library**
- **Anti-Virus**
- **Quality Assurance**

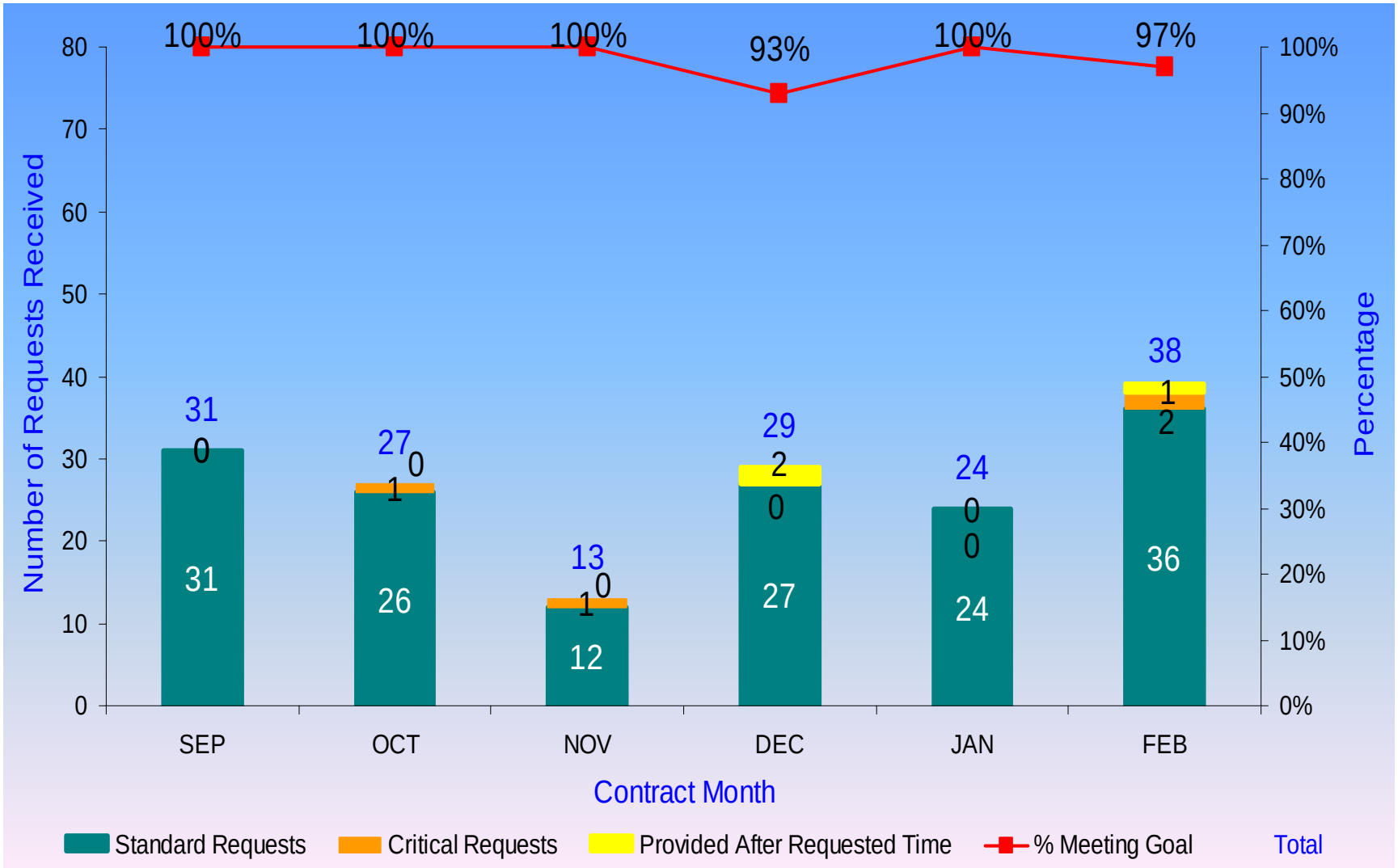
**ODIN**
**ISEM**

- ***The User Resource Center (URC)***
- ***Training Center and computer training***
- ***Electronic Forms***

# Home Use Software

- Software is available with the provision that "this software is required to conduct official business at home"
- Software loan program is limited to those software applications that are properly licensed
- Software available via:
  - Download from the software downloads web page
  - Media from the software library
- Provide very detailed user guides and installation instructions
- Attachment G of the SOW lists software currently approved for Home Use

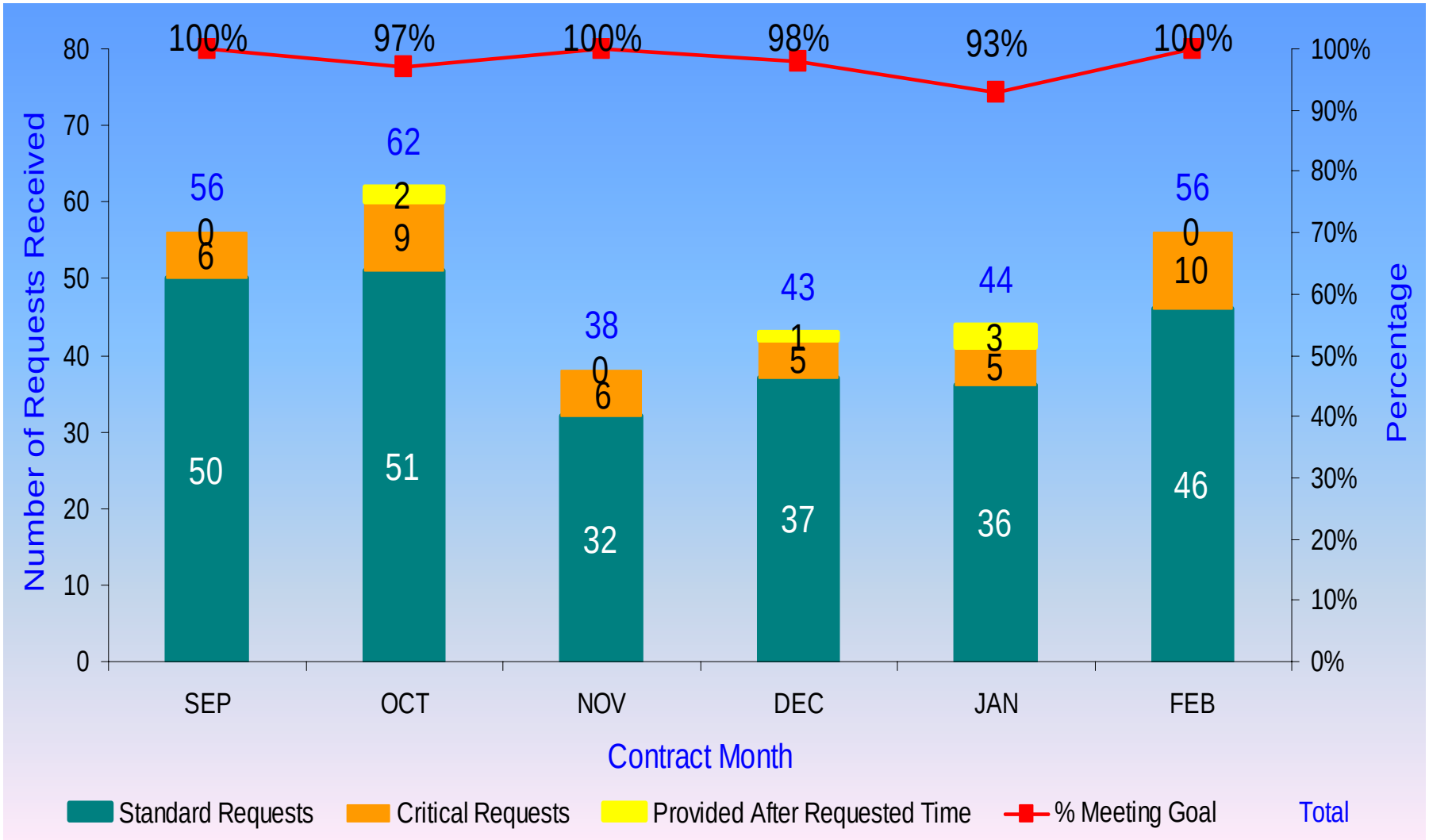
# Software For Home Use



# Laptop Loaner Pool

- Centralized management of the HQ laptop inventory for temporary loan
- Laptop loaner program accessed via a call to the HELP Desk
- Laptop Inventory
  - PC: 22  Macintosh: 20
  - Peripherals include: batteries, disk drives, zip drives, cables, printers, international adapters

# Laptop Loaner Requests



# Virus Detection & Eradication

- Antivirus software is provided for all desktop computers and is automatically updated as it becomes available from Symantec
- During a virus outbreak:
  - Notification of virus threats is made to the HQ users through a variety of available mechanisms:
    - Hardcopy
    - Electronic Information Bulletins
    - Direct Dialog with HQ IT Points-of-Contact
    - Elevator notifications
  - Help Desk monitors actions and advises customers
  - Desktop staff are dispatched to mitigate virus infections
  - Network connections to infected computers are closed
  - Create manual scripts for virus filtering on email servers until updated antivirus signatures have been distributed to the desktop
  - Emergency antivirus updates are pushed to the desktops when they become available
- Impacts of recent attacks will be covered in Due Diligence

# Quality Assurance

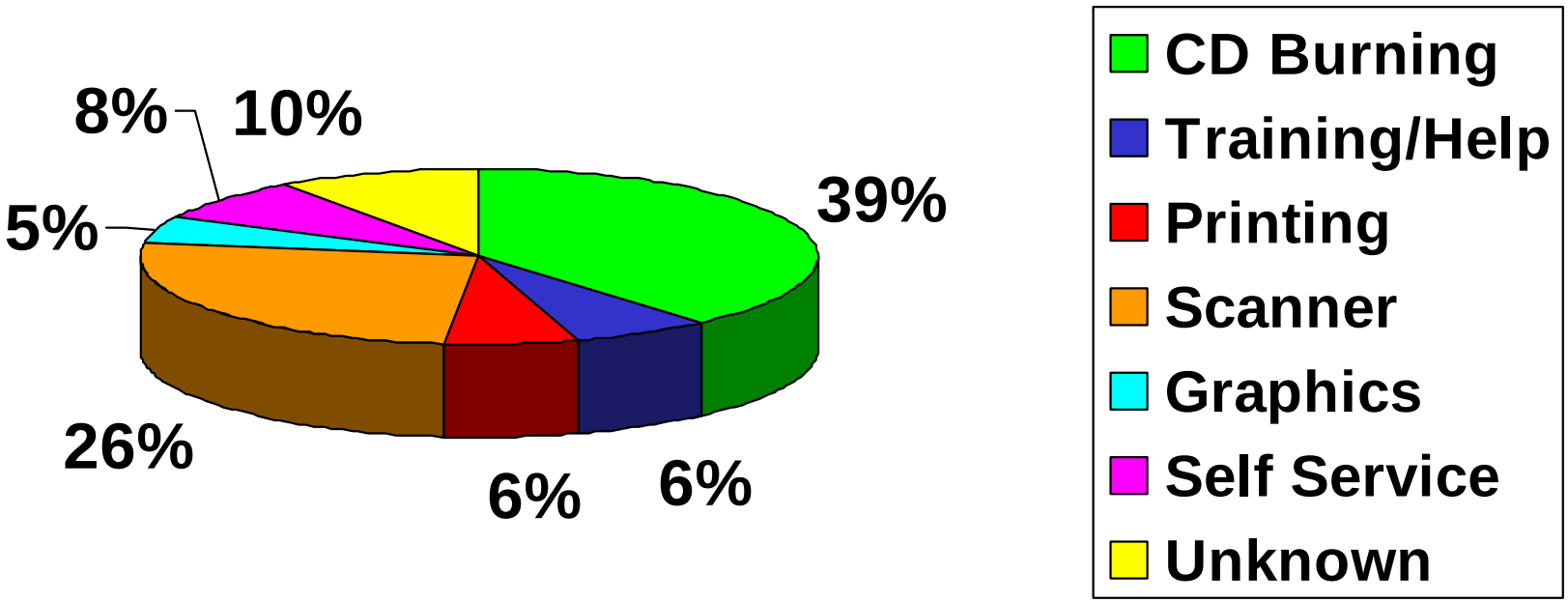
- Test core load masters and install/uninstall scripts received from desktop engineering
  - Provide feedback to the technical staff re: software testing results
- May 03 to Feb 04 desktop pushes:
  - 15,874 individual pushes
  - 45 push jobs
  - 5 push jobs/month average
  - 353 individual pushes/job average
- Produce user documentation and tip sheets
- Create and distribute software deployment notifications, outage notifications, and IT Notices
- Document installation instructions and procedures for home-use software available via the software library and web download

# User Resource Center (URC)

- **User Resource Center**
  - **Hours of Operation 7:30-5:00 (M-F)**
  - **Provides a walk-in technology lab available to all employees and contractors**
  - **Houses 5 PC's, 4 Macs, 1 high speed scanning station, 1 color printer, 1 guest network connection for laptop computers**
  - **Services available:**
    - **Consultations on hardware, software and IT HQ policies and procedures**
    - **Access to above core hardware and software to meet occasional requirements**
    - **Scanning, CD archive, graphics support and color printing services**
  - **Provide walk in support (Average 40 month)**

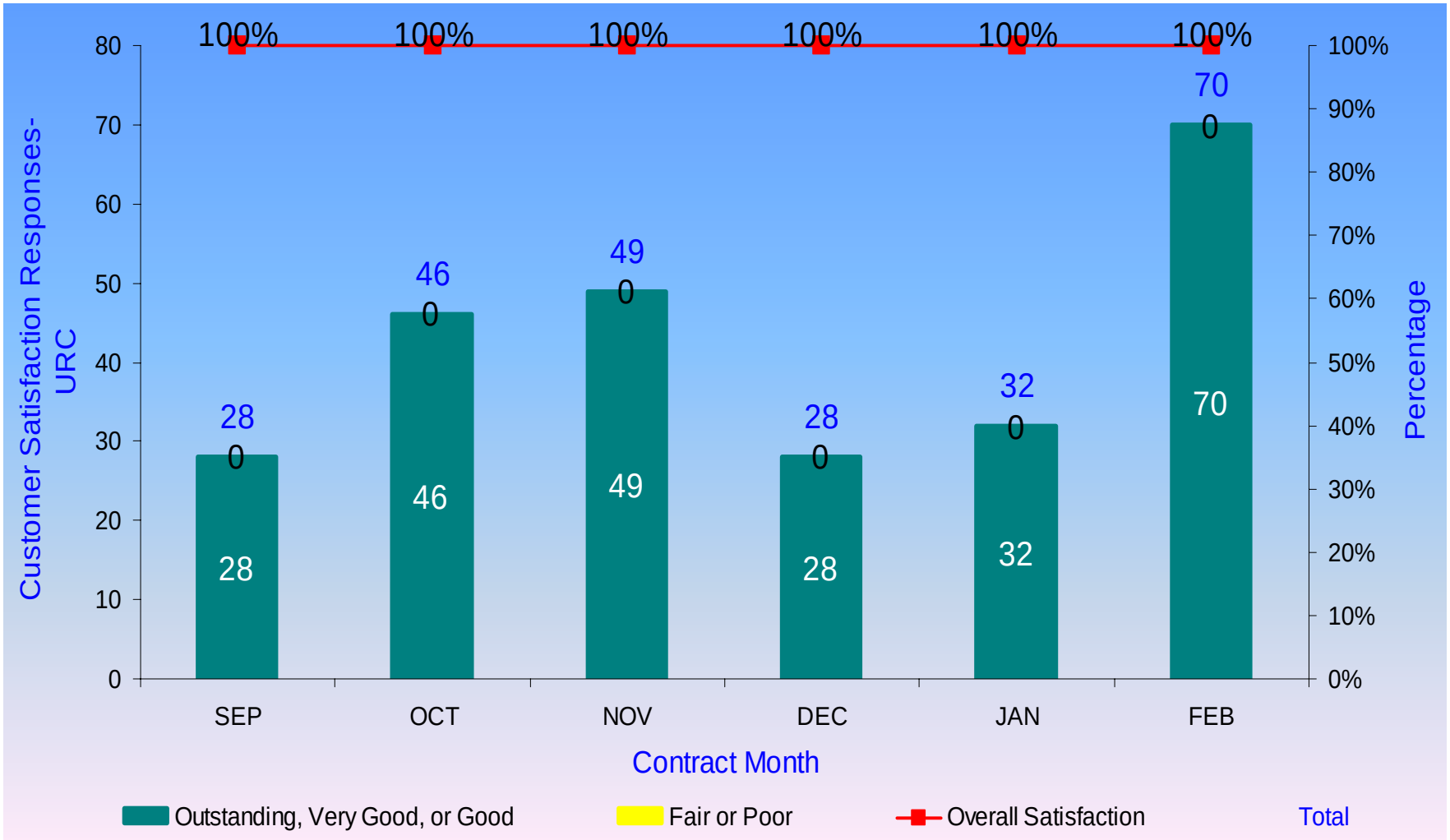
# URC Requests by Category

- **Breakdown of URC walk-in requests by category**




**For May to November 2003**

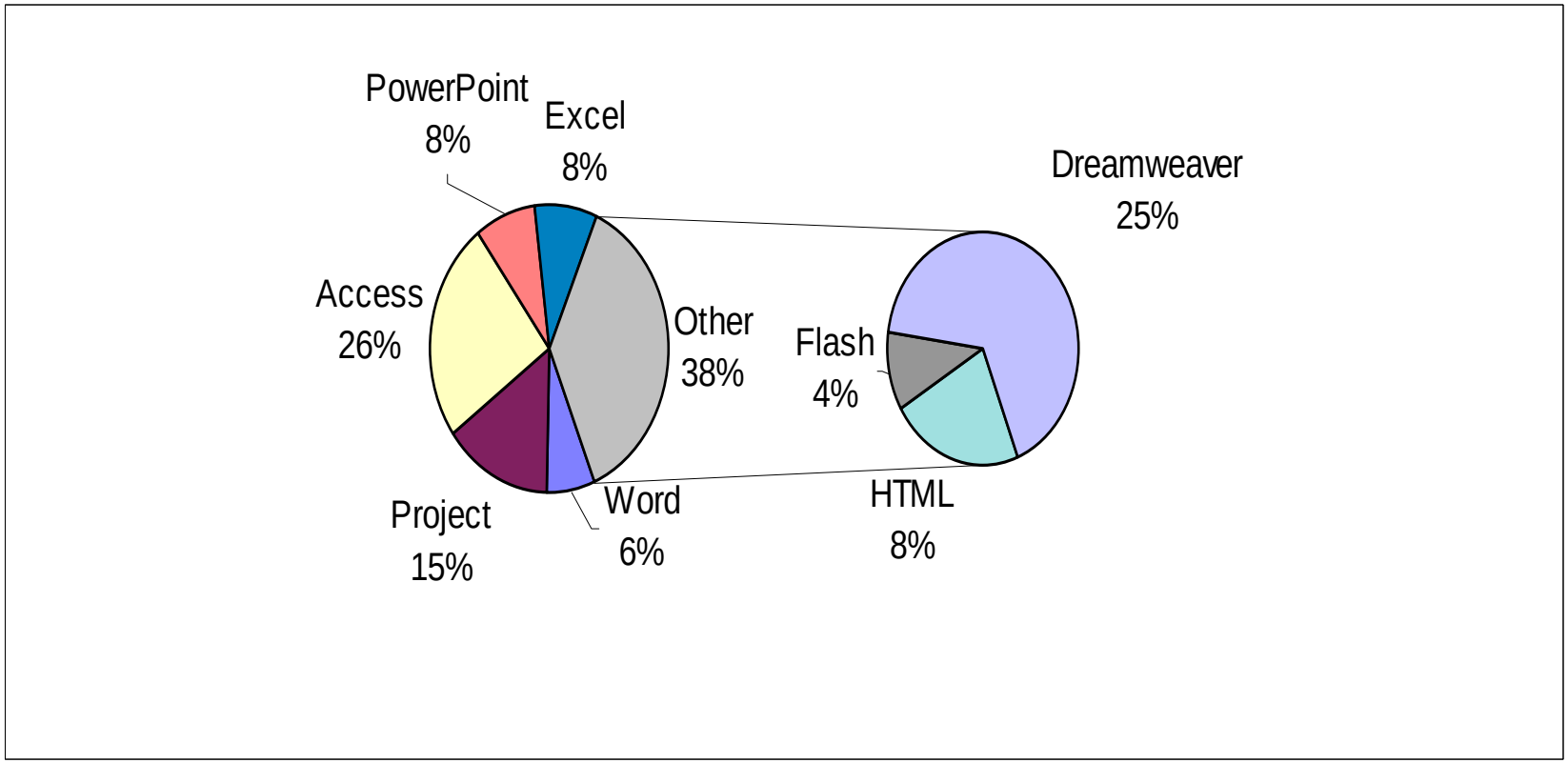
# Customer Satisfaction User Resource Center



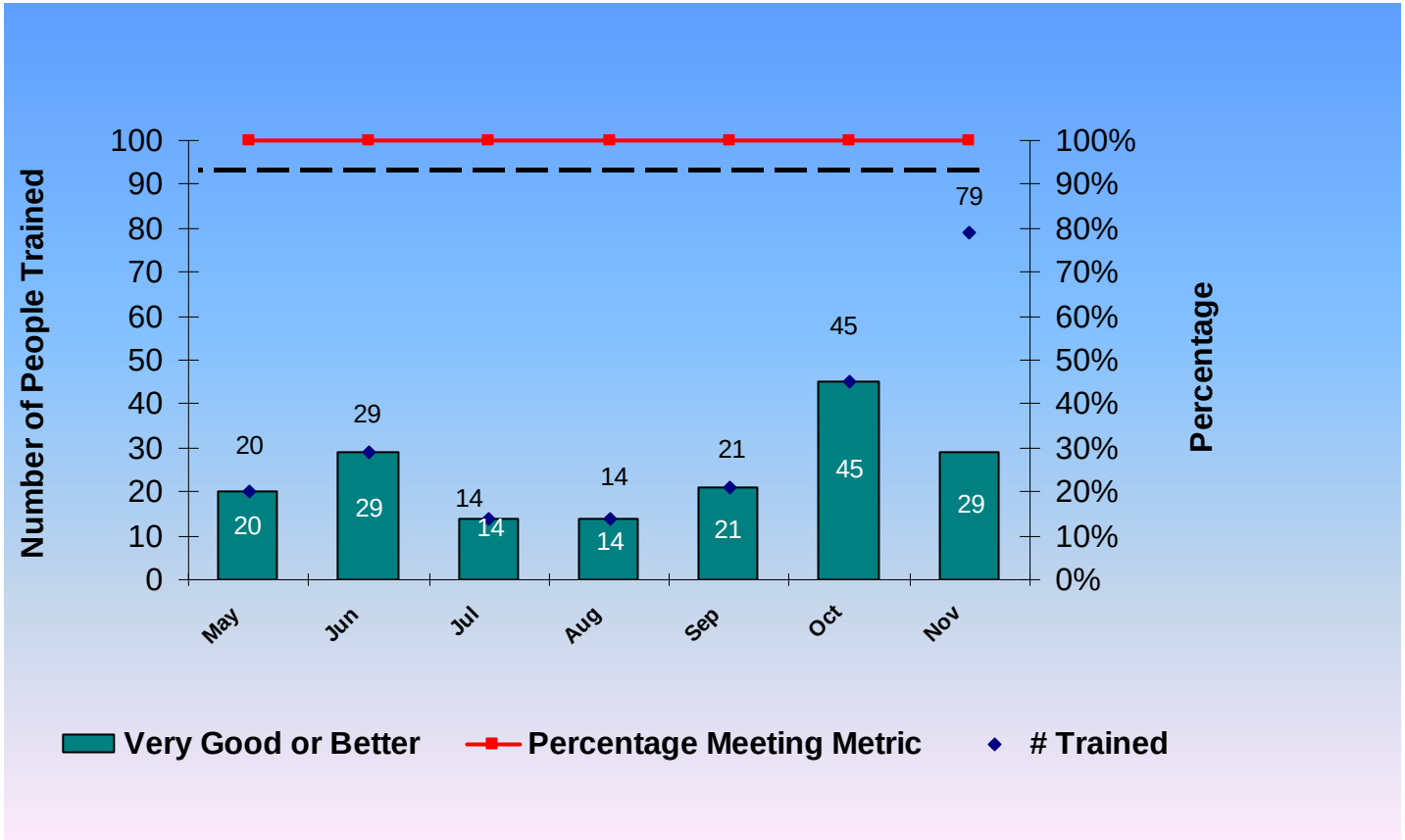
# Computer Training

- **Computer Training Center (CTC)**
  - **Provides desktop software training**
    - **HQ-wide training initiatives for major deployments**
    - **COTS training – classroom and 1-on-1**
    - **Custom Applications training**
  - **Maintain configuration management of 2 training rooms**
    - **3R55 – 10 PCs and 2 Macs**
    - **3R53 – 5 PCs and 1 Mac**
  - **Coordinating and facilitating other training initiatives, e.g. IFMP/SAP rollout**

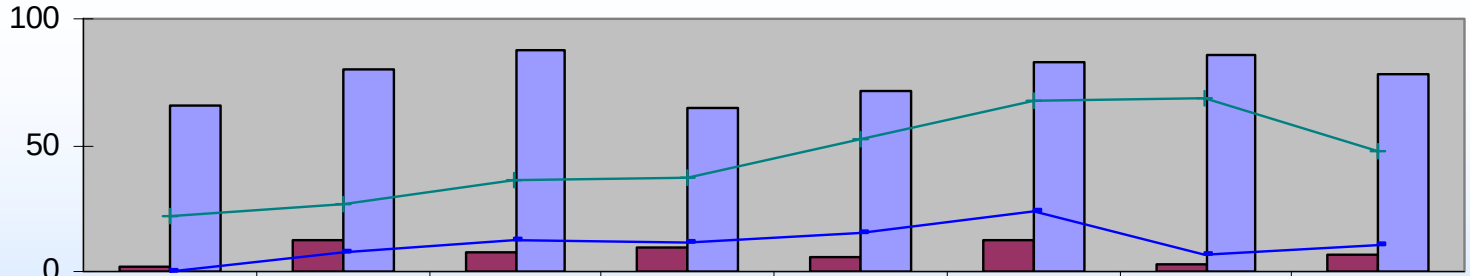
# June 2003 through November 2003
# Instructor Led Training Statistics



# Course/Instructor Evaluation
# May – November 2003



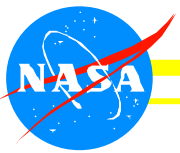
# Web Based Training Statistics May – November 2003




| | May | June | July | August | September | October | November | Average Totals |
|---|---|---|---|---|---|---|---|---|
| Enrollments | 2 | 12 | 8 | 10 | 6 | 12 | 3 | 7 |
| WBT Participants | 66 | 80 | 88 | 65 | 71 | 83 | 86 | 78.5 |
| Active Users | 22 | 27 | 36 | 37 | 52 | 68 | 69 | 48 |
| Deskside Sessions | 0 | 8 | 12 | 11 | 15 | 24 | 7 | 10 |

# Electronic Forms Library

- **All NASA forms and other Government forms required in electronic format and needed by HQ employees are available via the Code OCI web page http://www.hq.nasa.gov/office/codec/codeci/help/forms/forms.htm**
- **The non-ODIN contractor:**
  - **Designs new forms and update existing forms as required**
  - **Maintains, manages and provides access to 617 electronic forms**
  - **Keeps electronic forms up-to-date and available in both Informed Filler and PDF formats**
  - **Supports Agency access to HQ forms page**
  - **Generates Agency and HQ monthly reports**




# *Account Administration*

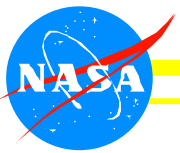
# Account Administration

- **All accounts are managed by ISEM:**
  - **Desktop services coordinates issuing of user IDs and passwords with ISEM account management**
  - **Note: ODIN will manage issuing local accounts to desktops and to their employees**
- **All accounts are created through the Headquarters ODIN New User Request System (HONURS)**
  - **Web-based approval mechanism that routes request through approval cycle**
  - **Initiate and update New User Requests, New Seat Requests, 224 Requests and Move User Requests.**
- **All user accounts are maintained in the Headquarters Account Management System (HAMS) a single database for the purposes of audit and effectiveness with standard and custom reports**
  - **The HAMS application has standard report templates. These templates give detail information about users and applications.**

# Account Administration

- **For all password resets customer contacts the Help Desk:**
  - **For NT Domain and other password accessible to the Help Desk**
    - **Help Desk opens ticket**
    - **IT Help Desk validates identity of user by asking questions provided on HQs form 252**
    - **IT Help Desk resets passwords**
  - **For passwords not accessible to the IT Help Desk**
    - **Help Desk opens ticket and assigns to Logistics Support**
    - **Logistics Support contacts user**
    - **Logistics Support validates identity of user by asking questions provided on HQs form 252**
    - **Logistics Support resets passwords**

# *Work Control & Asset Management*



# Workflow

- **Workflow Process**
  - **An integrated process used to record, track and maintain status on all customer work requests**
  - **Ensures accountability, accurate tracking and timely completion of work**
    - **Metrics are collected to perform trend analyses,determine customer satisfaction, and measure contractor performance**
- **Comprised of two systems**
  - **Remedy Action Request System (Tickets)**
    - **Seat Management Business System (SMBS)**
  - **ISEM Work Management System (IWMS) (Service Requests (SRs))**

**Note: IWMS details were covered earlier.**

# Remedy Action Tracking System

- **Allows the Service Center to deliver service and boost it's productivity.**
- **Functions include:**
  - **Customer interaction across multiple channels (telephone, fax, email and the web)**
  - **Customer interaction histories and enables support agents to deliver personalized and efficient service**
  - **Work order (tickets) tracking for both ad-hoc and predefined tasks**
  - **Interacts with Seat Management Business System (SMBS)**
    - **Order New Seats**
    - **Delete Seats**
    - **View Seat Configurations and Inventories**
    - **DOCOTR approval of actions**

# Remedy Action Tracking System (cont.)

- **Functions include (cont.):**
  - **Interacts with Headquarters ODIN New Users Request System (HONURS)**
    - **New Users Processing**
      - **Space Approvals**
      - **Initial Desktop Seat Ordering**
      - **Initial Account(s) creation (Form 224)**
      - **Initial Telephone Ordering**
    - **Move User Processing**
      - **Space Approvals**
    - **NASA Headquarters Automated Systems Standard Access Request (NASA HQ Form 224) Processing**
      - **Standard Account Approvals**
      - **Group/Code  Folder Approvals**
      - **Web Site Admin Approvals**
      - **Application Approvals**

# Remedy Architecture

- **The Remedy ARS configuration is comprised of 3 major components (all run NAV for virus protection):**
  - **Remedy ARS Server (Version 4.5.2) with Oracle 8i (Version 8.1.7) – Windows NT 4.0 Server Platform**
    - **28 fixed user licenses, 40 floating user licenses**
  - **Microsoft Exchange mail server – Windows NT 4.0 Server Platform**
  - **IIS Web server with ARWeb (Version 4) and Remedy Web (Version 4) – Windows NT 4.0 Server Platform**

# Asset/Baseline Management

- **Software Library**
  - **Software Library Database that tracks:**
    - **Software license inventory**
    - **Software licensing agreements (single, site and volume), maintenance renewals, subscription services**
    - **Receiving and Inspection for software items and small hardware items**
  - **Central repository and storage of COTS and GOTS software media and documentation**
  - **“Core Load” management and maintenance**
  - **CD ROM duplication**
  - **Distribution point for “home use” software**
  - **Technical Reference Library and software support tools for support teams**
  - **Software Reuse Pool**

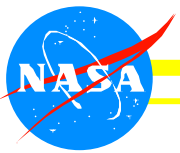
# Asset/Baseline Management

- **Software management**
  - **Automated software distribution and inventory (SMS)**
    - **Software installs/uninstalls**
    - **Hardware and software inventory collection and reporting**
  - **SMS Team:**
    - **Manage deployment schedules**
    - **Manage configuration of “inventory packages” and “scripts”**
    - **Perform follow-up activities**
  - **NetOctopus**
    - **Manages deployments for OSX**

# Asset/Baseline Management

- **Software deployment - New and upgrades:**
  - **Thorough evaluation, testing and scripting in the SEF by desktop engineering**
  - **Coordinate “Cross Code” pilots**
  - **Training and user information sheets including deltas from previous versions disseminated**
- **Baseline management:**
  - **Cross functional coordination**
  - **Monthly baseline document updates posted to web. This is DRD ODIN-HQ-16**
  - **Requires CCB process for change management**

# *Standard Meetings, Customer Outreach, & Continual Improvement*



# Standard Meetings

- **Tagup**
  - Daily meeting held every work day at 8:30am. Lasts from 15-30 minutes
  - Determine the status of the HQ systems and elevate any issues
  - Screen new service requests, open actions, calendar
- **Wednesday Configuration Control Board (CCB)**
  - Weekly meeting every Wednesday at 9:00am. Lasts from 30-90 minutes based on agenda
  - Act upon Service Requests and conduct Operational Readiness Reviews
  - Gain approval to change form, fit, or function
  - Gain approval to develop solutions per customer requirements

# Standard Meetings - CCB

- Open forum chaired by a Code OCI employee
- Permanent members of the CCB are comprised of Code OCI Civil Servants and IT contractors
- Other attendees to the CCB may include both NASA and contractor personnel
- Weekly CCB meetings:
  - Disposition SRs that request changes to the form, fit, or function of the configuration baseline
  - Conduct Operational Readiness Reviews (ORRs)
- Changes are submitted to the CCB for approval/ disapproval determination
- Out of board approvals can be obtained for
  - Emergency situations and critical tasks that cannot wait for the normal CCB approval cycle
  - Non-intrusive, standard procedures
- Detailed processes and documentation requirements are provided in the Vendor Library

# Standard Meetings - CCB Process

- Anyone may submit a Service Request (SR) through the normal work control process
- The SR will be reviewed by the SR Review Team (SRRT) and should there be changes proposed to production systems function, form, or fit, it is identified as an action for the CCB
- Once identified as an action for the CCB, the CCB development package is prepared and presented to the CCB
- Once approved, development will begin
- When ready for deployment, the ORR will be presented to the CCB for approval

# Standard ODIN Meetings

- **Twice a week informal action review:**
  - **30 minutes with DOCOTR**
- **Once a month In-depths Review:**
  - **Review all facets of the contract and associated metrics**
  - **Dates and time to be agreed. Usually mid-month**
- **Budget/Expenditure Review:**
  - **Review the status of contract expenditures vs. plan**
  - **One meeting a month, 30 minutes**
- **Other meeting requirements are covered in SOW paragraph IIIE5, Meetings, Data Calls, and Action Items**

# Customer Outreach

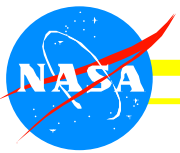
- **Focus on supplemental training methodologies to further educate the user community on IT initiatives through:**
  - **ADP/T Board of Directors**
  - **Customer Advisory Council (CAC)**
  - **Information Technology Exchanges**
  - **IT Notices**
  - **HQ Bulletin articles**
  - **Brown bag lunches**
  - **Town Hall meetings**
  - **HIT TV (HQ Internal Television)**
- **Manage and maintain a comprehensive Code OCI web site that encompasses HQ IT services at: http://www.hq.nasa.gov/office/codec/codeci/**

# Continual Improvement

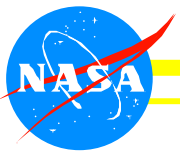
- **This is a requirement of successful customer support. For all NASA activities, NASA staff and contractors are expected to :**
  - **Evaluate existing processes and modify to improve service delivery and improve customer satisfaction**
  - **Seek customer feedback and incorporate suggestions into processes, where appropriate**
  - **Manage change so that it is expected and not disruptive**

# Summary

- **HQ customer expectations require:**
  - **Timeliness**
  - **Accuracy**
  - **Thoroughness**
  - **Dependability**
  - **Attention to detail**
  - **Effective customer outreach. Keep customers informed and involved**
  - **A mind set that:**
    - **Customer is always right**
    - **Customer should never have to play telephone tag**
    - **Service should delight the customer**




# *Questions & Answers*




# *Break*

# *HQ ODIN Delivery Order Details*

**Noah Nason &**
**Michele' Hull**

# DOSP Letter Organization

- **Headquarters SOW:**
  - **6 Sections**
    - **Part I Services and Prices**
    - **Part II Contract Administration Data**
    - **Part III Requirements:**
      - **Section A - Desktop Services Requirements**
      - **Section B - Help Desk Support Requirements**
      - **Section C - Catalog Services Requirements**
      - **Section D - Metrics Requirements**
      - **Section E - Server Services Requirements**
      - **Section F - Other Requirements**
    - **Part IV Security Requirements**
    - **Part V Property Management**
    - **Part VI Reporting**
    - **Part VII Contract Clauses**
  - **12 Attachments**
  - **14 Headquarters specific DRDs**
- **Proposal preparation and submission**
- **Selection process**
- **Other DOSP Letter items (e.g. Schedule, transition, ATV, etc.)**
- **Due Diligence (Covered at the end of day 2 and in more detail on Wednesday the 24th.)**

# DOSP Letter Organization

- **12 SOW Attachments. Key ones are:**
  - **Attachment B - Price List**
  - **Attachment G - HQ Desktop Hardware / Software Baseline Product Suite**
  - **Attachment H - Triage 1, 2, 3, and Call List HW/SW**
  - **Attachment M - NASA Headquarters Property**

# *Headquarters' SOW Overview*

**Note: DOSP letter and Price Model takes precedence over this presentation**

# HQ ODIN Services Summary

| ODIN Master Contract Services | HQs ODIN DO2 | HQs ISEM |
|---|---|---|
| Desktop Seats | X | |
| Fax Seats | X | |
| Catalog | X | |
| Servers | | X |
| Phones | | X |
| Local Video | | X |
| Admin Radio | | X |
| LAN | | X |
| Remote Comm | | X |
| Public Address | | X |
| Cable Plant | | X |
| | | |
| Printer Seats | X | |

**This table compares Master Contract Services provided by ODIN vs. ISEM**

**Printer seats are a new service not included in ODIN Master Contract**

# Seat Count Summary as of 3/18/04

| Desktop Seats | | | | FAX Seats | |
|---|---|---|---|---|---|
| *Seat Type* | *Platform* | *Seat Count* | | *Seat Type* | *Seat Count* |
| **PC** | GP1, Entry Level | 844 | | FAX1 | 0 |
| | GP1, High End | 117 | | FAX2 | 6 |
| | GP3, Entry Level | 391 | | FAX3 | 180 |
| | GP3, High End | 162 | | **FAX Total** | **186** |
| | GP3, Lightweight, Entry level | 116 | | | |
| | GP3, Lightweight, High End | 68 | | | |
| **PC Total** | | **1698** | | **Printer Seats** | |
| **Macintosh** | GP1, Entry Level | 0 | | *Seat Type* | *Seat Count* |
| | GP1, High End | 296 | | PRN BW1 - Low Capacity | 51 |
| | GP3, Entry Level | 78 | | PRN BW2 - Mid Capacity | 67 |
| | GP3, High End | 110 | | PRN BW3 - High Capacity | 97 |
| | GP3, Lightweight, Entry level | 1 | | PRN C1 - Low Capacity | 0 |
| | GP3, Lightweight, High End | 0 | | PRN C2 - Mid Capacity | 52 |
| **MAC Total** | | **485** | | PRN C3 - High Capacity | 0 |
| **Other** | MA1, Entry Level | | | **Total Printer Seats** | **267** |
| | MA1, High End | | | | |
| | ODIN Appl SW Licenses | | | | |
| **Other Total** | | **0** | | | |
| **Total Desktop Seats** | | **2183** | | | |

- **Seat count variations:**
  - **Best estimates at this time**
  - **Adjust quantities during finalization of Delivery Order (DO)**
  - **The HQS is currently growing. We expect total seat count at contract start to be near 2400.**

# Part I – Services and Prices

- **Contract administration information to be filled in at award**
- **Invoicing and billing**
- **Transition. Bonus up to $100k to the ODIN contractor for completing a smooth transition with present desktop contractor**
- **Due Diligence**
- **Return to Service (RTS)**
- **Standardization Incentives:**
  - **Contractor shall propose incentives to be applied when the HQs standardizes on a specific service**

# Part II – Contract Administration Data

- Contract administration information to be filled in at award
- Metric Performance Retainage pools:
  - Increased from 1% to 3% for PRP and MPRP
  - For all services and catalog
  - Calculation examples provided in the SOW
- Contractor is responsible for obtaining waivers for state and local taxes
- At delivery order termination the Contractor shall:
  - Return Government assets and asset documentation
  - Return Help Desk ticketing information
  - Provide requested information in machine readable form
- Move/Add/Change
  - Defined as requiring a physical touch
  - Automatic S/W distribution not considered a Move/Add/Change

# Part IIIA– Desktop Requirements

- **Contractor shall ensure computers are connected to the LAN and all networked resources are mapped and working**
- **Master Contract paragraph N, ODIN Performance Specifications, is applicable.**
  - **Contractors may offer upgrades to the Minimum Performance Table N.2.1**
  - **Once an item's specification, feature, or function has been provided the Contractor shall not diminish the capability**

# Part IIIA– Desktop Requirements

- Customers may change seat types as a M/A/C
- When Headquarters seat count increases new seats must comply with current quarter's certification
- Contractor shall not deploy seats more than three years old
- Seats shall be installed within 3 days of HONURS approval by the Government:
  - Process is to deploy them on alternate Mondays after new user training (even with less than 3-day notice)
  - Deployment at other times is required to meet three-day metric

# Part IIIA – Desktop Requirements

- **These are the planned seat types:**
  - **GP1 PC and Mac Desktop Seats, both entry level and high-end**
  - **GP3 PC and Mac Laptop Seats, both entry level and high-end**
  - **GP3 Lightweight PC and Mac Laptop Seats, both entry level and high-end**
  - **MA1 PC and Mac Desktop Seats, both entry level and high-end**
  - **Multiple Customer Computer Seats (Go-To)**
  - **ODIN Application Software License Seat**
  - **6 types of printer seats**
  - **3 types of fax seats**
  - **Temporary seats**
- **A few specially configured seats will have some or all core load support provided by the non-ODIN contractor. For example: Seats in the SEF may be provided by the Contractor who would also maintain the HW, but SW would be supported by the non-ODIN contractor**

# Part IIIA – Desktop Requirements

- **Contractor shall consult with the DOCOTR prior to submitting computers for quarterly performance certification. This provides Government the opportunity to make adjustments to specifications that are in the best interests to the Government**
  - **Example: Increasing memory above stated requirements with appropriate consideration**
- **New service levels:**
  - **Escorted**
  - **Escorted with top secret clearance**
  - **Isolated computer**
  - **Code W (IG) seat**

# Part IIIA – Desktop Requirements

- **Priority Service:**
  - **Priority Seats shall be 3.5% of total seats**
  - **Critical Uplifts shall be 6% of total tickets**
  - **Super Priority Service shall be priced separately**
  - **All three services are mutually exclusive**
- **Non-Prime Time service:**
  - **Service provided at night and on weekends. Requires a "touch"**
  - **Must be approved by the Government**

# Part IIIA – Desktop Requirements

- **Technology Refreshment:**
  - **For all refreshes, the Contractor shall comply with NASA-STDs-2804/2805 as well as the NASA Headquarters Desktop Hardware / Software Baseline Product Suite (Attachment G) and the currently certified performance specifications in accordance with Master Contract Attachment N**
  - **The Contractor shall provide customers with access to all user documentation**
  - **A detailed plan shall be created and followed for hardware refreshes**
  - **A detailed quarterly plan, updated monthly, shall be created and followed for software refreshes**

# Part IIIA – Desktop Requirements

- **HW refresh schedule:**
  - **60 days after contract start all MACs equal to or greater than 3 years old shall be refreshed. HQs plans to refresh all HQs MACs before contract start so we expect this quantity to be zero**
  - **90 days after contract start all PC GP3s equal to or greater than 3 years old shall be refreshed. We expect approximately 450 computers to be refreshed**
  - **120 days after contract start all PC GP1s more than 3 years old shall be refreshed. We expect approximately 800 computers to be refreshed**
  - **Due to the tight schedule the Government expects planning to be completed and approved during transition**
  - **"No Refresh":**
    - **The plan is not to refresh GP1 MACs less than 6 months old at the start of the Delivery Order. Note: Government will confirm our plan during the Due Diligence period.**
    - **All printer and fax seats**
  - **Refresh specifics will be provided by the Government during due diligence and updated during transition**

# Part IIIA – Desktop Requirements

- **The Government has defined two types of Triage 1 software. Triage 1 with refresh and Triage 1 without refresh.**
  - **Triage 1 SW with refresh shall be refreshed within a year after a major release is made publicly available, just like core load software**
  - **Triage 1 without refresh like triage 3 software shall be refreshed with a catalog order for major commercial releases**

# Part IIIA – Desktop Requirements

- **The Contractor shall provide SW for home use in accordance with Attachment G. Easy to use installation instructions shall be provided. The SW shall be downloadable from a Contractor developed web page**
- **Triage 3 SW shall be supported based on the limitations on the SOW. The Help Desk shall diagnose problems and assist users with operator functions. If a Triage 3 item causes a computer malfunction, the computer shall be "Returned to Service" after consultation with the customer and the DOCOTR**

# Part IIIA – Desktop Requirements

- **Support for visitors shall be provided by the Help Desk. This includes:**
  - **Level 1 Help Desk diagnostics**
  - **Assistance in connecting to network printers, the Internet, local applications, and other shared resources**
  - **Establishing a "Guest" network connection**
- **The Contractor shall provide all ODIN services to HQs customers located in the Washington DC metropolitan area (10 miles) with the same metrics. This is currently expected to be in a building on "M" Street, NW for approximately 170 staff**

# Part IIIA – Desktop Requirements

- **NASA Headquarters has permanent staff located at NASA centers, several other US locations, France, Japan, and other foreign locations**
  - **The Contractor shall provide help desk phone support for these customers**
  - **Other seat support shall be provided via mail-in of the affected computer. The Contractor shall provide the shipping services for delivery of the equipment to the customer. The Government will pay for the shipping to and from HQ**

# Part IIIB – Help Desk Support Requirements

- **The Contractor's Help Desk provides Level 1 support for all HQ IT activities, regardless of location. Examples are:**
  - **Building located at 300 E Street, SW**
  - **Future DC Metro area ("M" Street)**
  - **Paris, Rome and Tokyo**
  - **AMES Research Center**
  - **Langley Research Center**
  - **NASA and other Government staff and contractors visiting Headquarters**

# Part IIIB – Help Desk Support Requirements

- **The Help Desk shall support all HQs IT HW and SW. Examples are:**
  - **All desktop and laptop hardware and associated core software per the ordered seats, and other supported seats, such as printers, etc.**
  - **All Triage 1, 2, and 3 items, and Call List. HW/SW listed in Attachment H (>6000 items)**
  - **All phones (>2200 items)**
  - **All fax machines (>190 items)**
  - **All network attached printers (>230 items)**
  - **All servers (>150 items)**
  - **All telecommunications devices such as switches, hubs, routers, and firewalls**
  - **All remote, secure access (SecurID) tokens. Note: The issuance, maintenance, and tracking of SecurID tokens is the responsibility of the non-ODIN contractor**
  - **All other non-ODIN IT equipment**
  - **All catalog items**
  - **Software for home use**

# Part IIIB – Help Desk Support Requirements

- **Answering "how-to" IT questions. Examples are:**
  - **The Core Load operating system**
  - **Core Load applications**
  - **Triage 1 applications**
  - **Triage 2 applications are passed to the appropriate Level 2 Help Desk**
  - **Triage 3 applications are not supported beyond basic Level 1 determination of what IT component is at fault. (e.g, Is it the HW, the OS, or the Triage 3 item?). However, such questions will be ticketed and referred to Code OCI**
  - **Shared resources, such as printers and data storage**
  - **Answering remote connectivity questions**
  - **Answering software for home use questions such as software firewall configuration issues**

# Part IIIB – Help Desk Support Requirements

- **Help Desk dispatches and manages tickets for all HQs IT support activities. Examples of where tickets may be dispatched:**
  - **Level 2 Help Desks (Time and Labor Support, Travel Management Support, Security, Badging, Locksmith, Facilities Safety Hotline & Safety Hazards, Move Services, Audiovisual Support & Conference Scheduling, Mail Services, Receiving & Inspection, ViTS Scheduling, HQ Library, CI Travel, Passports, Parking Permits, Nations Bank Government Card, Garage/Government Vehicles, Printing and Design Services, IFMP Core Financial Help Desk, SAIC Level 2 applications support, Marshall SFC, etc.)**
  - **Code OCI staff**
  - **Code IT POCs**
  - **SAIC ICPMs**
  - **SAIC Level 2 and Level 3 support staff**
  - **Contractor's staff**
  - **HW and SW Contractors Level 3 support staff**
- **On-line and periodic ticket summaries are required**

# Part IIIB – Help Desk Support Requirements

- **"One call does it all":**
  - **As the first point-of-contract for HQs customers, it is essential that the Help Desk be "user friendly."**
  - **Once the customer makes an initial request to the Help Desk, the Contractor shall initiate all further customer contact**
  - **If a customer has to call back to complete service on an existing ticket then the Help Desk is probably not being pro-active enough**
  - **Customers should not have to make repeated calls to resolve a problem once they have called the Help Desk. The Help Desk should place the call/open a ticket with the appropriate Contractor, Code OCI staff member, or non-ODIN IT support contractor**

# Part IIIC - Catalog Services Requirements

- **Must be available for ordering the day of DO start**
- **Catalog entries shall state in precise and understandable terms what coverage is included in catalog prices, this includes the Category/Triage 3 disclaimer**
- **Contractor must be prepared to demonstrate catalog capabilities at their oral presentation**
- **Code OCI will manage catalog ordering and all changes that affect pricing**

# Part IIIC - Catalog Services Requirements

- **Additions to Catalog – Customer Identifies need, Contractor refines requirements and works details, DOCOTR approves**
- **Delivery Times for Purchases – Within 10 business days. Can have exceptions**
- **Period of Performance – Services provided from date of delivery of item through the remainder of the delivery order period**
- **Category 3 (Triage 3) Disclaimer – Contractor shall be responsible only for delivery and installation of the product**

# Part IIIC - Catalog Services Requirements

- **The current catalog is outsourced and includes thousands of items. Code OCI limits some items and requires other items to be added to the vendor's catalog (about 200 items including PDAs, computers, printers, monitors) based on Headquarters requirements**
- **Contractor shall provide algorithms on how catalog prices will be determined as a part of their proposal**
- **Volume discounts shall be provided**

# Part IIIC - Catalog Services Notes

- **Under DO1 there were approximately 800 catalog orders per year. Over the last year we have averaged:**
  - **80 to 120 total orders per month**
  - **10 new Category 1 orders per month**
  - **15 new Category 3 orders per month**
  - **Total purchases average ~ $1M per year**
- **Hardware Items include:**
  - **LCD screens, Local and Network Printers, DVD drives, USB/Firewire hard drives, USB Memory drives, PDAs, etc.**
- **Software Items include:**
  - **Microsoft Project, Adobe Suite, Dreamweaver, etc.**

# Part IIID – Metrics Requirements

- **Level 1 Metrics shall be met at the completion of the first month of the delivery order**

| Functional Area | Service Delivery | Availability | Customer Satisfaction |
|---|---|---|---|
| Desktop Services | 98% | 98% | 95% |
| Catalog Services | 98% | N/A | 95% |
| Fax Services | 98% | 99.5% | 95% |
| Printer Services | 98% | 98% | 95% |

# Part IIID – Metrics Requirements

- **For availability: A seat is considered fully functional if the following is true:**
  - **The operating system, the core software, category 1 items, and triage 1 and 2 items are fully functional**
  - **All CCB and NASIRC approved security patches are installed**
  - **All CCB approved virus signatures are installed**

**Metric reporting requirements are further defined in DRD ODIN-HQ-2**

# Part IIIE – Server Services Requirements

- **HQs does not plan to acquire any server services via ODIN**
- **HQs plans to offer certain server services to the Contractor. (See slide 167)**
- **Servers that the Contractor operates and maintains to perform its duties shall meet all HQ security standards**

# Part IIIF – Other Requirements

- The Contractor shall comply with current NASA HQs IT processes and procedures. These are provided at www.hq.nasa.gov/odin2
- The Contractor shall develop and keep current an approved MOU with each DOCOTR designated non-ODIN vendor(s). Current vendors are listed in Attachment P - List of non-ODIN contractors. This list is in constant flux and will be updated during transition
- Customers shall be provided with adequate (e.g. 3 days) warning of scheduled outages and changes to their computer. These notices require Code OCI approval
- The Contractor shall participate in all meetings, data calls, and action items relevant to HQ's IT customer support
- Actions shall be tracked in accordance with DRD ODIN-HQ-15

# Part IIIF – Other Requirements

- **Contractor shall maintain a Reuse Pool where Government owned items will be stored for future issue. An accurate inventory shall be kept**
- **Contractor shall provide a Laptop Loaner Pool**
  - **The facility shall be open from 6 am to 6 pm**
  - **Standard laptops shall be available within 4 hours of request**
- **Systems Engineering Facility (SEF)**
  - **The SEF or Development Network shall be used for all non-production work**
  - **SEF is available for ODIN Contractor use through scheduling**
  - **ODIN Contractor is not responsible for operating SEF**

# Part IIIF – Other Requirements

- Except for Help Desk and HW (seats), special event support is provided by the non-ODIN contractor
- UNIX and other specially configured computers will be supported by the non-ODIN contractor. There are currently thirteen (13) computers of this type. Level I Help Desk support shall be provided for these computers
- The Contractor shall support special initiatives, including:
  - ePresence (Electronic Mailing and Communications Support)
  - IFM (Integrated Financial Management)
  - CAP (Computer/Electronic Accommodations Program)

# Part IV – Security Requirements

## Contractor shall:

- Configure all systems to HQ Security Configuration Baseline Documents prior to deployment into production
- Mitigate Security Vulnerabilities
- Provide Virus and Trojan prevention and response
- Provide input to Security Plans
- Ensure all hardware and software has a security review (provided by the Government) prior to deployment into production
- Sanitize equipment per defined HQ procedures

# Part IV – Security Requirements

## Contractor shall:

- Report IT Security Incidents
- Report Unexplained Anomalies
- Report Deviations from Appropriate Use Policy
- Obtain proper screening for System Administrator Privileges, if required
- Obtain Certification for System Administrators
- Ensure that all of its personnel complete annual HQ IT security awareness training, as required
- Support Contingency and Disaster Recovery planning, testing, and execution
- Support audits by third parties
- Provide “Ghost” copies of ODIN-supported systems upon request

# Part V - Property Management Requirements

- **Contractor provides:**
  - **Property management for all desktop/laptop HW and SW. This includes:**
    - **ODIN provided and Government owned**
    - **Non-ODIN contractor supported**
    - **Off-site HW and SW**
- **Property shall be tracked and accounted for in accordance with the ODIN Master Contract and relevant Government regulations**
- **ATV reporting shall be accomplished in accordance with DRD ODIN-HQ-13**
- **Up to date records of HW and SW shall be maintained and reported in accordance with DRD ODIN-HQ-1**
  - **Detailed, accurate, and timely property records are required for all hardware items and software licenses**

# Part V - Property Management Requirements

- **Logistics and Property Management Support Notes:**
  - **Interface with GSFC Property Disposal Officer**
  - **Ensure user data is dispositioned properly during M/A/Cs (e.g. Data preserved or erased as directed)**
  - **Sanitize disks in accordance with HQs' procedures**
  - **Install baseline operating system prior to excessing the equipment**

# Part VI - Reporting Requirements

- **In addition to complying with Master Contract reporting requirements:**
  - **Contractor shall submit 14 Headquarters specific DRDs**

# Part VII – Contract Clauses

- **Additional contract clauses are incorporated into the contract in this section**

# *Attachments*

# Attachment B

- **Attachment B, HQ Price List For Years 1, 2, 3, provides:**
  - **Price lists to be completed by each bidder:**
    - **Seats**
      - **Computer**
      - **Fax**
      - **Printer**
    - **DOCAT HW/SW**
    - **Special services (Return to Service (RTS), critical uplifts, etc.)**
  - **Estimated quantities**

# Attachment G

- **Attachment G, HQ Desktop Hardware / Software Baseline Product Suite, along with the Desktop Software Release Plan (DRD ODIN-HQ-16) form the basis for managing desktop/laptop software within the Headquarters**
- **Contractor shall update HQ Desktop Hardware / Software Baseline Product Suite based on DRD ODIN-HQ-12**
- **These documents are approved by the Headquarters Configuration Control Board (CCB)**

# Attachment H

- **Attachment H, Triage 1, 2, & 3 and Call List, lists:**
  - **A summary of Headquarters:**
    - **Triage 1 and 3 HW and SW**
    - **Triage 2 SW**
    - **Call list SW**
  - **SW Licenses and maintenance agreements that will be transferred to the Contractor**
- **H/W warranties and maintenance agreements:**
  - **Software library facility will be turned over to the ODIN Contractor**
  - **Warranty information will be posted to the ODIN2 web site**
- **Available desktop spares will be:**
  - **Transferred to the ODIN Contractor at contract start**

**Proper consideration should be given for these transfers**

# Attachment M

- **Attachment M, NASA Headquarters Property, lists:**
  - **All Government property to be transferred to the Contractor for management**
  - **All non-ODIN contractor property and its ATV value**

# *Proposal Guidelines*

**Michele' Hull**

# Guidelines for Proposal Submittal

- **Proposal structure**
  - **If the following structure is not followed, proposal will be considered non-responsive**
  - **Two Volumes: Technical and Price**
    - **Volume 1 - Technical Proposal**
      - **Shall be physically divided into specific sections delineated by distinct tabbed pages or commonly colored, i.e., other than white, separator pages, labeled as follows:**
        - **Tab A: Transmittal Letter**
        - **Tab 1: Customer Focus**
        - **Tab 2: Transition Issues**
        - **Tab 3: Service Delivery**
        - **Tab 4: Mission Focus**
        - **Tab 5: ODIN Past Performance**
        - **Tab 6: Traceability Matrix**
        - **Tab 7: DRD submission for DRDs HQ-7, HQ-13, HQ-14**
        - **Tab 8: Transition Plan**
        - **Tab 9: Safety and Health Plan, DRD HQ-8**
      - **Tab A content shall be one page maximum. The content for Tabs 1 - 5, inclusive, shall not exceed 40 pages total**
      - **Tabs 1-5 shall be organized, structured and labeled according to the categories and sub-categories as shown in the example shown on the following page**

# Sample of DOSC

## Customer Focus –

**The Government will evaluate the Contractor's commitment to garnering and maintaining excellent customer satisfaction; the practicality, effectiveness and efficiency of its approach to achieving this; and the Contractor's understanding of the NASA Headquarters environment, and the general and specific requirements of its end users.**

**The Contractor shall describe how it intends to provide effective customer support at NASA Headquarters. Specifically, the Contractor shall describe in detail how it will:**

**(A) Provide integrated customer support/help.**

**(B) Provide face-to-face support with individual customers, customer IT POCs, customer groups, and Code OCI.**

**(C) Conduct customer outreach.**

**The Contractor shall also include:**

**(D) Its step-by-step procedure from the point at which a customer originates a call to the point of resolution. This shall be clearly identified in the response to A, B or C above, or can be included as a separate item D.**

**(E) A description of information it will make available to customers. Examples of such information include, but are not limited to, availability of catalog items, and order tracking and trouble call status. The Contractor shall describe the systems it intends to use to make customer information available.**

**(F) A detailed description of any gaps between the level of information proposed to be available and that, which is currently available through existing Contractor systems.**

**(G) As part of the DOSP, a set of goal metrics, which will be evaluated and agreed to by the Government and included in the delivery order in Master Contract Table F.1.1, level 1 Metrics.** ***The Government will evaluate the proposed metrics against the baselined Level I metrics included in the DOSP letter, specifically the updated Table F.1.1., to assess the degree to which these metrics maintain and improve the delivery of desktop and communications services to Headquarters and the end users throughout the life of the delivery order.***

**(H) In addition to the required Level 1 metrics, a set of customer satisfaction and Help Desk metrics, which it intends to meet over the term of the delivery order.**

**(I) A description of how it will incorporate continuous improvement activities throughout the term of the Delivery Order.**

# Guidelines for Proposal Submittal

- **Two Volumes: Technical and Price**
  - **Volume 2 - Pricing Proposal**
    - Contractors shall provide a standard price for each seat and service
    - Options shall be priced as incremental changes to standard prices
    - A price shall be provided for all items, even if quantity is 0 (zero)
    - Monthly prices for years 1, 2 and 3 shall be provided
    - In addition the following shall be provided:
      - (A) The cost algorithms used by the Contractor to determine the price during DO2 for the addition, maintenance, and deletion of the following:
        - 1. Triage 1 with refresh
        - 2. Triage 1 without refresh
        - 3. Triage 2
        - 4. Triage 3
        - 5. Call List
        - 6. Category 1 with refresh
        - 7. Category 1 without refresh
        - 8. Category 2
        - 9. Category 3
      - (B) The ATV calculation methodology to be used by the Contractor.
      - (C) An estimate of the ATV remaining at the end of DO2.
      - (D) A description of how any refresh seat pricing affects the final ATV costs.
      - (E) The cost per seat for each software license included in any seat type that includes software. This applies to the operating system software and to Core Load software as defined in Attachment G of the Enclosure 4, SOW. All such software licenses shall be transferable to the Government without penalty upon request by the Government.

# Price Model

- **Government price model is the baseline**
  - **Designed to automatically complete calculations**
  - **Government reserves right to change quantities prior to issuance of the delivery order**
  - **Additional information is found at the beginning of the Excel worksheet of the model, e.g. color legends, etc.**
  - **Contractors shall notify the DOCO immediately if an error is suspected in the price model or they have questions regarding the model**
  - **Proposals shall include, for the life of the DO, all costs for all H/W and S/W not in the desktop seat cost**
  - **Triage 1 and 3 items shall be priced in the price proposal**
  - **Any deviations from standard price model are noted**

# Delivery Order Selection Criteria

- **The Delivery Order Selection Criteria in A.1.2.2 (d) will be used for the DOSP. The criteria are as follows:**
  - **Customer Focus**
  - **Service Delivery**
  - **Pricing**
  - **Transition Issues**
  - **ODIN Past Performance**
  - **Mission Focus**
- **Customer Focus and Service Delivery are each more important than Pricing, Transition Issues and ODIN Past Performance. Each of these is more important than Mission Focus**

# Down Select/Orals

- **Down-select of contractors**
  - **Following the evaluation of the proposals, NASA HQ plans to perform a down select of the ODIN contractors**
  - **The contractors remaining after the down select will be those who have a reasonable chance of being awarded a delivery order**
  - **The remaining contractors will be required to present at orals**
- **Oral presentations**
  - **Oral presentations by the contractors shall be given in accordance with A.1.2.2 (b)(4)**
  - **The presentation shall be confined to emphasizing the key elements that make the contractor's submission unique, as well as covering the DOSC elements**
  - **The oral presentation shall be limited to 3.5 hours. This time includes questions and answers, a required catalog demonstration, and breaks. It will be recorded**
  - **One easy to reproduce hard copy of each presentation chart and handout shall be submitted two business days prior to the oral presentation**
  - **The oral presentations will be conducted between May 25 to May 27 inclusive**

# Proposal Items of Interest

- **Proposal due date and location**
  - **April 30, 2004 4:00 p.m. EDT**
  - **Deliver to Michele' Hull, NASA HQ, Room 4S34**
- **Copies, media, format**
  - **Volume 1: Technical Proposal**
    - **12 hard copies**
    - **5 electronic copies, i.e. compact disc (CD)**
    - **Microsoft Office 2000/Microsoft Word**
  - **Volume 2: Price Proposal**
    - **4 hard copies**
    - **4 electronic copies, i.e. compact disc (CD)**
    - **Microsoft Office 2000/Microsoft Excel**
    - **Government Price Model is the baseline (Section E Master Contract)**
  - **Page definition: 8.5 x 11, 1" margins, >11 point font for text, etc.**
- **All documents are on-line at:**
  - **http://www.hq.nasa.gov/odin2**

# *Other DOSP Letter Items*

# DOSP Letter

- Contractor's proposal may become part of the delivery order. DO takes precedence
- All Contractor's deliverables, processes, and procedures to become Government property at contract completion
- Asset transition and management:
  - Contractor shall manage all desktop property both Government and contractor IAW applicable Government regulations
  - There is approximately $300,000 in ATV to be directly transferred from the current contractor to the selected ODIN Contractor. This property is listed in Attachment M to the SOW. It will be reviewed during due diligence and finalized during transition

# DOSP Letter

- **Joint use GFE:**
  - **The Government will own, operate, and maintain the anti-virus server. The Government will own the client anti-virus SW. The Contractor shall be responsible for the installation and operation of the client SW**
  - **The Government will own, operate, and maintain the Patchlink server. The Government will own the Patchlink client SW. The Contractor shall be responsible for the installation and operation of the client SW**
  - **The Government will own, operate, and maintain all the web servers. The Contractor, following HQs standards and with DOCOTR approval, shall post ODIN related content**
  - **The Government will own, operate, and maintain SMS and NetOctopus servers. The Contractor may either use the Government's servers or propose their own software update capability**
  - **The Contractor shall provide their own Help Desk and asset management solution. The Government may negotiate with the Contractor a consolidation of the Government and Contractor Help Desks and asset management solutions**

# DOSP Notes

- **Onsite Government space and equipment available to ODIN personnel for their use:**
  - **~ 4,500 square feet available at no charge**
  - **Phone service at no-charge**
  - **Office furniture at no-charge for existing space**
  - **Existing Desktop support seats are the property of the Government ~50**
- **Seats for ODIN personnel are not paid for by the Government**

# DOSP Notes

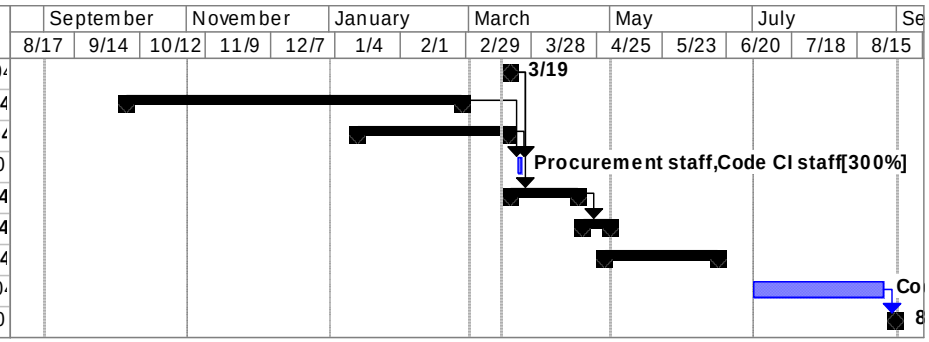
- **SB/SDB Goals:**
  - **Contractor shall meet the goals established in the Master Contract**
- **Safety. Contractor shall:**
  - **Provide safety plan in accordance with DRD ODIN-HQ-8**
  - **Participate in safety training and exercises**
  - **Provide monitors for concourse area**

# DOSP Notes

- **Government Premises:**
  - **Normal HQ badging process followed**
  - **ODIN will be escorted in secure or sensitive areas**
- **Liability:**
  - **Adhere to terms in Master Contract A.1.20**
  - **Investigate losses. If theft suspected, involve HQ security and DOCOTR**
  - **Lost value determined by lease cost and depreciation**
  - **Keep accurate records**
  - **Deliver loss information monthly**
- **Historically the HQ losses average ~ $20K / year.**

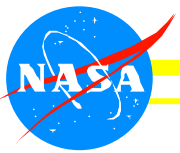
# Delivery Order Schedule

| ID | Task Name | Duration | Start | Finish |
|---|---|---|---|---|
| 28 | Publish DOSP | 0 days | Fri 3/19/0 | Fri 3/19/0 |
| 29 | **Complete Support Tasks** | **91 days** | **Mon 10/6/0** | **Thu 2/26/0** |
| 38 | **Develop Vendor Briefing** | **45 days** | **Tue 1/13/0** | **Wed 3/17/0** |
| 47 | Conduct ODIN Vendor Briefing | 2 days | Mon 3/22/0 | Tue 3/23/0 |
| 48 | **Conduct Due Diligence with Vendors** | **21 days** | **Fri 3/19/0** | **Fri 4/16/0** |
| 52 | **Create Vendor Proposal** | **10 days** | **Mon 4/19/0** | **Fri 4/30/0** |
| 55 | **Conduct Proposal Evaluations** | **34 days** | **Wed 4/28/0** | **Tue 6/15/0** |
| 65 | Conduct HQs Transition | 40 days | Thu 7/1/0 | Wed 8/25/0 |
| 66 | Complete Transition and Start HQs DO | 0 days | Tue 8/31/0 | Tue 8/31/0 |

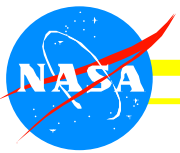


# HQ ODIN Contacts

| | | |
|---|---|---|
| • DOCO | Michele' Hull | 202-358-0546 |
| • Alt. DOCO | Sue Gonser | 301-286-3294 |
| • DOCOTR | Noah Nason | 202-358-1334 |
| • Alt. DOCOTR | Ray Johnston | 202-358-1378 |
| • ISEM COTR | Dale Stigberg | 202-358-4601 |
| • Alt. ISEM COTR | Roger Bullock | 202-358-1332 |
| • ISEM CO | Chris Whyte | 301-286-6717 |




# *Questions & Answers*

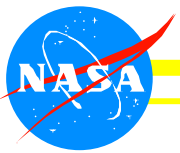



# *Break*

# *Discussions*

# Agenda – March 23, 2004

- 08:00 - 09:00 Contract Descriptions
- 09:00 - 09:15 IT Security Program
- 09:15 - 09:30 Break
- 09:30 - 10:45 IT Architecture
- 10:45 – 11:00 Telecommunications
- 11:00 – 11:30 Due Diligence
- 11:30 - 12:30 Discussion




# *Contracts Descriptions*

**Dale Stigberg**

# HQs Contracts

- **ODIN (Described earlier)**
- **ISEM:**
  - **The ISEM contract is divided into two main support areas:**
    - **“Common Core tasks” are performed for all of the offices at NASA HQ**
    - **“Optional tasks” are performed for specific offices having unique requirements**
- **75 other non-IT contracts in support of HQs mission and operational services**

# *ISEM Contract Description*

# Common ISEM Core Tasks

- **Program Management:**
  - Configuration Control
  - Safety, reliability, maintainability and quality control
  - Information technology tactical planning
  - Operating procedures development
  - Standards compliance
  - Acquisition support
- **Computer Center Operations:**
  - Maintain hardware and software systems
  - Operate printers
  - Capacity planning and monitoring
  - Provides interface with the NASA ADP Consolidation Center

# Common ISEM Core Tasks

- **Systems Engineering, Communications Systems and Services:**
  - Systems Engineering
  - Network & Server Operations Center (NOC / SOC)
  - Systems Engineering Facility (SEF)
  - Dial in capability
  - Electronic mail
  - Telephones
  - Local area network
  - Cell phones, pagers, and Blackberry devices
  - Video conferencing
  - Studies and analyses
- **Software Applications Development and Maintenance:**
  - Gather requirements
  - Code, test and install
  - Control releases
  - Manage data bases

# Common ISEM Core Tasks

- **Customer Services:**
  - **Consultation and problem resolution**
  - **Ordering of services**
  - **Level 2 Help Desk operation**
  - **Training**
  - **Software library**
  - **User Resource Center (URC) operation**
  - **Equipment maintenance**
  - **Customer Training**
  - **Logistics**

# Common ISEM Core Tasks

- **Information Technology Security:**
  - Virus protection
  - Intrusion monitoring
  - Security plan development
  - Public key cryptography
  - Firewall policy maintenance
  - Security plans for general support systems and major applications
  - Awareness and administrator training
  - Penetration testing
  - Information technology infrastructure assurance
- **Special Tasks. Examples:**
  - Demonstrations and exhibits
  - Technology assessments
  - Prototypes

# Optional ISEM Tasks

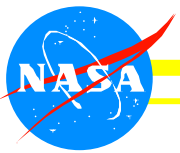
- **Optional tasks span the full spectrum of information technology expertise:**
  - **Web site development and maintenance**
  - **Integrated financial management program implementation**
  - **Architecture and engineering analyses for the agency CIO**
  - **Information technology strategic and tactical planning**
  - **Software applications development and maintenance**
  - **Environmental compliance assurance**
  - **Information technology technical support to program offices**
  - **Office of Inspector General Nationwide Information System**
  - **Corrective action tracking system support**
  - **ISO 9000 systems support**
  - **Consolidated peer review project office support**

# *Other HQs non-IT Contracts*

# Sample Contractor Descriptions

| Contractor Name | Contract Function/Description | Number of Personnel on Contract, including Subs, that need training | COTR Code & Location | COTR Name | Contractor On-site |
|---|---|---|---|---|---|
| CCI | Maintain, search and retrieve photos stored in photo files. Provides photographers for NASA. | 6 | P 8N73 | Deborah Rivera 202-358-1743 | Yes |
| Cortez | Warehouse/mass mailing, equipment excess, supplices, procurement screening, records management (NEMS- NASA Equipment Management System. Receiving/inspection. | 3 | GSFC | Annie O'Donoghue 358-1293 Marilyn Tolliver 301-286-8899 | Yes |
| Eagle Technologies, Inc | Security Services (I.e. guards, locksmith, badging supoort and alarm response) | 14 | X 1D51 | Steve Peyton 358-0191 | Yes |
| Einstein Fellows | Educational Grants | 0 | FE 4C76 | Lynn Marra 358-1529 | Yes |
| Federal Occupational Health | Contract w-10237 Exp 9/30/2004 | 1 | CP | Cherie Zieschang 358-1569 | Yes |
| GST | Education Research (Peer Review Support Services) | 131 | CF 4S10 | Brent Bennett 358-0837 | No |

**See Attachment P of ODIN DO2 SOW for current descriptions**




# *Information Technology Security*

# TOPICS

- ITS Objective
- ITS Roles & Responsibilities
- Information Sensitivity
- HQ ITS Program Components

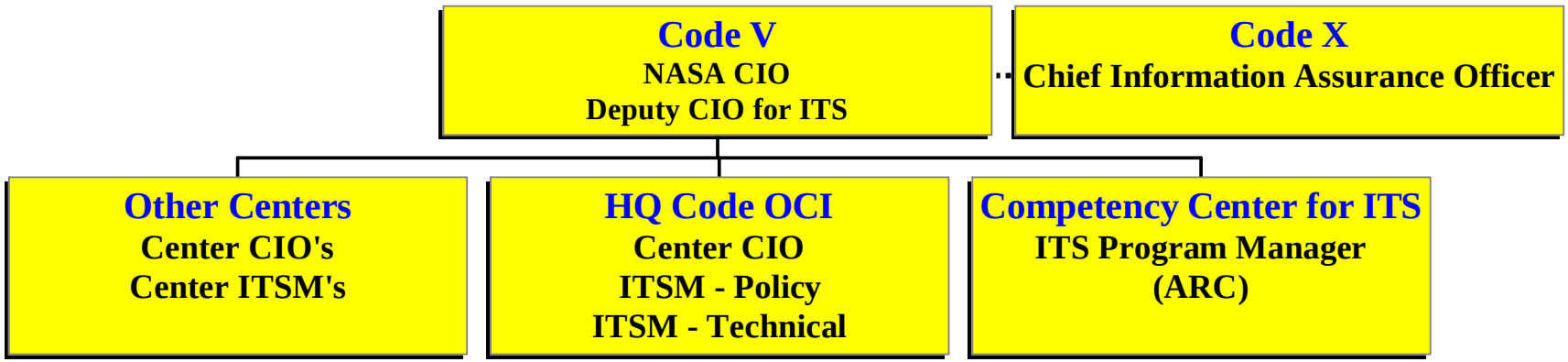
# ITS Objectives

- **Ensure ITS safeguards are integrated into all activities supporting NASA's missions & objectives**
- **Ensure the ITS Program covers ALL IT resources, data, and information**
- **Ensure IT resources are not exposed to undue risks**
- **Ensure each NASA employee understands NASA's information is a valuable resource which must be protected**

# ITS Roles & Responsibilities

- **Agency Management – Establishes policy & provides resources commensurate with importance of ITS**
- **Center Management – Create an environment that encourages & enables ITS**
- **Customers – Implement ITS practices while performing daily work assignments**
- **Center Support – Perform unique functions in support of ITS**

# NASA ITS Organization



# Center CIO ITS Responsibilities

- Ensures ITS is appropriately integrated into all IT decisions
- Ensures IT architectures, standards, best practices, policies, & guidance contribute to secure system operation & protection of data
- Ensures sufficient resources are budgeted & available for ITS
- Approves Authorization to Process for SMA systems
- Reports Center ITS information, metrics, and status to Agency CIO

# Center ITSM Responsibilities

- Holds day-to-day responsibility for Center ITS program
- Develops Center ITS policies & guidance
- Maintains incident response capability
- Prepares reviews & reports on the status of the Center ITS program

# Individual ITS Responsibilities

**The entire NASA Civil Servant & Contractor population has responsibilities that collectively provide an effective barrier against efforts to compromise systems and information**

- **Customers – Protect IT resources assigned & the information to which given access**
- **Managers – Assigning IT resources to employees & ensuring resources meet security requirements**
- **Systems Administrators – Maintaining technical security configuration of systems**

# Information Sensitivity

- **ALL NASA Information is *SENSITIVE* to some degree & must be protected**
- **Different categories of information require differing protection means, stringency levels, & controls in proportion to the risk and impact of loss/damage**
- **Some information needs to be protected as mandated by law or regulation**

# Components of HQ ITS Program

- Personnel screening
- System access control
- ITS awareness training
- Risk management
- ITS plans
- Contingency planning, testing and execution
- Virus detection & eradication (covered earlier)
- Security monitoring
- Penetration testing
- Incident response
- Remote access
- Secure communications

**Both ISEM & ODIN will have varying levels of involvement in each component**

# Personnel Screening

- **Federal Employees**
  - National Agency Check for public trust positions
  - Complete background investigation for National Security Clearance
  - Annual financial disclosure for designated positions
- **Contractor**
  - National Agency Check for non-privileged access
  - National & Local Agency Checks & Credit Check for privileged and limited privileged access
- **Foreign nationals must be escorted at all times in the NASA HQ building**
  - Access is restricted to Mon – Fri, 7AM – 7PM
- **No foreign nationals allowed on the ODIN DO**

# System Access Control

- System Access is granted only after submission and approval of Access Request Form
  - HQ Form 224 identifies the systems and access required by the user
  - Signed by the user and approved by the user's supervisor
  - Reviewed by ITS for completeness
- Passwords are valid for 90 days and must comply with NPR 2810.1 Guidelines
- Password resets are strictly controlled
  - Completed by the HELP Desk only after personal information has been verified

# ITS Awareness Training

- All new civil servants and contractor employees are required to receive ITS Awareness Newcomers Orientation Briefing or complete Annual ITS Training within 30 days of reporting for work
- All Federal and Contractor personnel with access to NASA information are required to complete ITS Awareness Training annually
- ITS Awareness Training is delivered through classroom and computer based training
- Lead Systems Administrators are required to pass certification tests

# Risk Management

- Formal risk assessments are required and conducted for all systems and applications
- Security reviews are conducted by the ITS staff as part of the SR review process
- Agency host vulnerability scans are conducted quarterly for targeted vulnerabilities
- Center host vulnerability scans are conducted periodically for all known vulnerabilities
- Additional ad-hoc vulnerability scans may be conducted for critical vulnerabilities
- All IT storage media is sanitized prior to disposal

# ITS Plans

- **ITS Plans are required by federal law for all systems and networks**
- **ITS Plans must be approved by ITSM and Line Manager**
- **ITS Plans for Special Management Attention systems also require CIO approval**
- **Approved ITS Plans are valid for 3 years or until a major change impacting on security**
- **All ITS Plans are reviewed annually to ensure they are current**

# Contingency Planning

- **ITS Team has developed a Contingency Plan that outlines steps to be taken to continue and restore IT operations in the event of a disaster**
- **Contingency Plan provides for orderly execution of emergency response, interim operations, and recovery actions**
- **Contingency Plan is tested and updated annually**
- **Participation is required for both Government and ODIN and ISEM Contractors**

# Security Monitoring

- Monitoring is used to effectively manage network traffic & ensure security of systems
- Monitoring is conducted real-time through the use of automated rule sets
- NISN monitors & analyzes border traffic 24/7
- Internal monitoring data is collected 24/7 and analyzed by HQ NOC staff during normal working hour
- During incidents and periods of heightened security, NOC staff provides additional analysis and investigation of logs

# Penetration Testing

- **A penetration test is an effort to gain unauthorized or unintended access to network and system resources and information**
- **Penetration testing is conducted annually on the internal HQ network systems to determine how well security measures and controls work**
- **Third party penetration testing is conducted periodically to validate internal testing effectiveness**

# Incident Response

- NOC/NISN monitor systems & networks for intrusion attempts, unauthorized access, system compromises, and denial of service attacks
- Customers are trained and encouraged to report all anomalies and unexpected behavior to Help Desk
- Customers should forward abusive, threatening, or offensive material to abuse@hq.nasa.gov
- Help Desk/NOC/NISN will conduct preliminary assessments and notify HQ CERT
- HQ CERT will notify NASIRC, conduct investigation and involve IG & Counterintelligence as required by law

# Remote Access

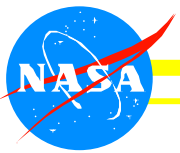
- **Remote Access to the private network is allowed via the Internet and institutional dial-in service**
  - **Requires prior approval from management and ITS**
  - **RSA SecurID token is issued for 2 factor user authentication**
- **Analog line dial-in is prohibited for networked personal computers**
- **Analog line dial-out permitted on an exception basis**
  - **Documented specific requirement**
  - **Under strict control**

# Secure Communications

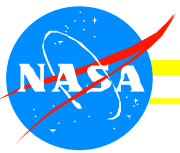
- **Entrust (PKI) or Pretty Good Privacy (PGP) encryption required for e-mail transmission of sensitive information**
- **Secure Shell (SSH) use required for remote administration**
- **Secure Socket Layer (SSL) encryption utilized for client communications with non-Public web applications**
- **Remote access sessions via the Internet are SSL encrypted**

# Conclusion

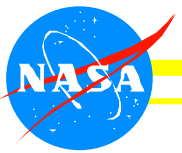
- **Expect the NASA HQ ITS staff to independently audit and monitor the entire IT environment on a scheduled and unscheduled basis**
- **Expect to be aggressively audited by the Office of the Inspector General (OIG)**
- **ODIN Contractor participation is required for all inspections**
- **Expect strong external oversight by Congress and the Executive Branch**




# *Questions & Answers*




# *Break*




# *IT Architecture*

**Andrew Schain**

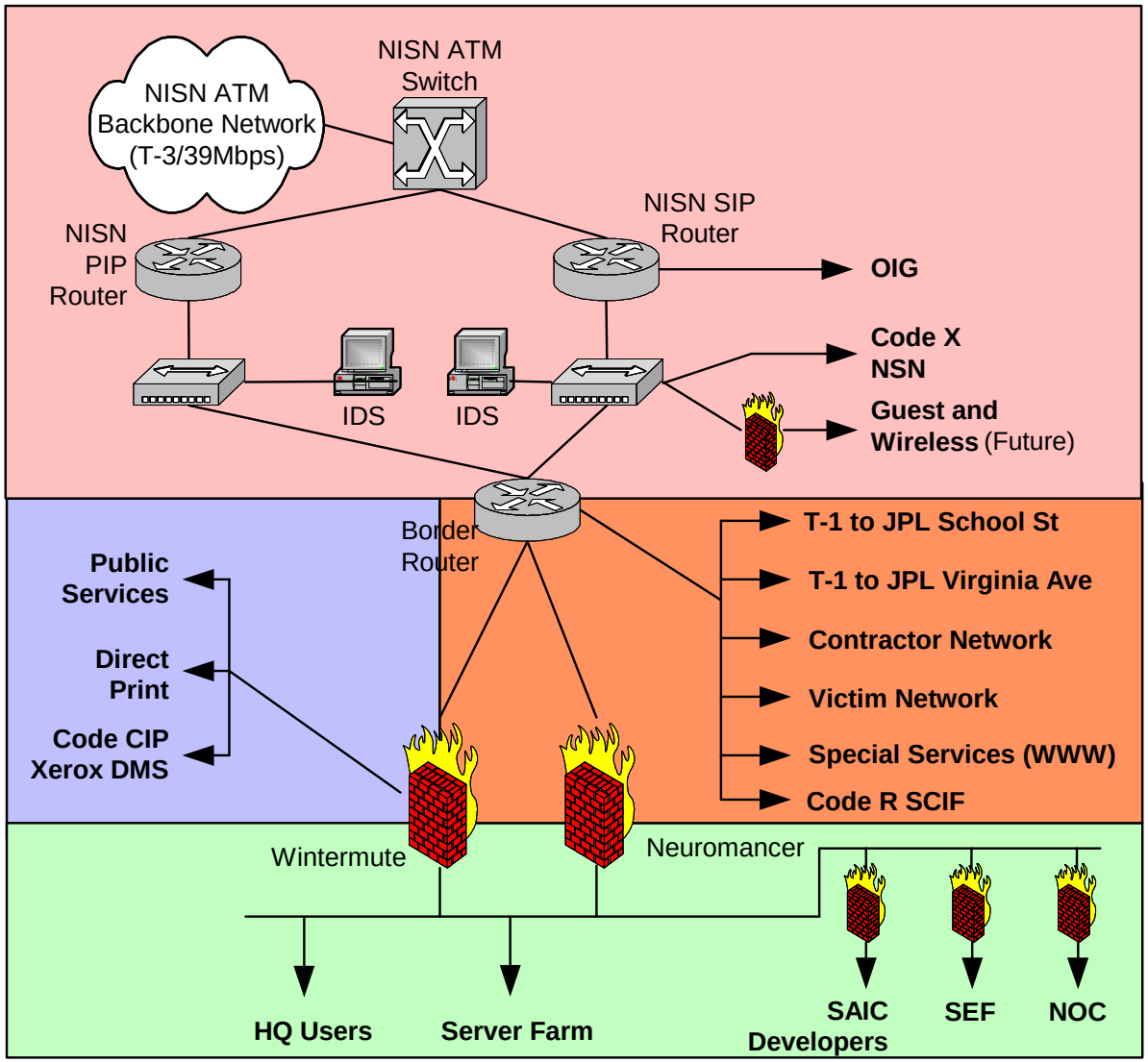
# Architecture & Design Philosophy

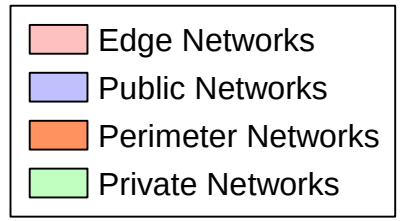
- Staying Agile to Adapt and Adopt to New Requirements
  - Largely Open Standards based
    - Reduces costs, easy to scale, simple integration, easy maintenance and multiple security options
  - Simplified design and detailed management
- Our service expectation is <u>Highly Availability</u>
  - Routers and DNS should ALWAYS be up
  - Remote access (dial-in/SSL), email, and Web services should ALWAYS be available
    - Plans underway to extend this philosophy to data and databases
- Two thirds of our servers are Unix based
    - Better security, management, performance, flexibility
    - Using Sun "jump start"
    - Migrating to standard Blades and enterprise NAS and SAN
- One third of our servers are Microsoft based
    - Migrating to Server 2003 and *limited* Active Directory
- Desktop configurations should also be as generic as possible
  - Simple configurations are easier to test = Faster "core" rollouts
  - Customers have local administrator privileges

# SOPs, Policies, Practices

- Everything is under Change Control
  - Configuration Control Board
  - As needed; PDR, CDR, TRR, ORR
  - Change packages, Version Description Documents
  - NOC manages /ip address database
- No clear text reusable passwords for system administrators
  - Hardware tokens are required to administer switches and routers
    - Must log on as themselves before acquiring root
  - Must use Secure Shell (SSH) for remote administration of Unix hosts
  - Remote admin access is NOT allowed for Microsoft-based servers
- Firewalls and Perimeter:
  - Default “allow” outbound and default “deny” inbound
    - Firewall blocks all /IP services which originate from the outside
    - Telnet & FTP - when originating from outside, DNS updates, outside remote control software, etc.
  - Blocks AppleTalk, NetBios, DecNet, SNMP, ICMP (Ping, Traceroute), insane addresses, etc.
- Networks are compartmentalized according to requirement and security

# Architecture Overview



# Architecture Overview

- **Edge networks**
  - **Networks located outside the HQ security perimeter**
  - **Typically managed by and/or support non-HQ organizations:**
    - **Some visibility and coordination with HQ NOC**
  - **Includes**
    - **NASA Integrated Services Network (NISN)**
    - **The OIG**
    - **Code X connection to the NASA Secure Network (NSN)**
    - **Guest network**

# Architecture Overview

- **Perimeter networks**
  - **Located between the border router and the firewalls**
  - **Provides support for**
    - **Services that require public access but do not work well behind firewalls (e.g. Real Audio servers and servers that require dynamic ranges of TCP/UDP ports)**
    - **Servers that are not managed by HQ personnel and are thus not trusted**
    - **Desktop workstations that are not managed under HQ CM control (e.g. Code R conferencing systems)**
    - **Off-site contractor networks**
  - **Provides limited "first line of defense" protections**
    - **Blocks weakly protected services such as file sharing**
    - **Blocks known attacks such as Ping of Death and address spoofing**

# Architecture Overview

- **Private Services Network**
  - **Services protected by master firewall**
  - **“Deny” for all outside sources wanting to get in**
  - **Default is “allow” for all inside sources wanting to get out**
  - **Provides protected services to desktop workstations and services that are not available to other Centers or the general public**
  - **Unlimited outbound access (soon to change for HTTP)**
  - **No inbound access except for MSFC printing**

# Architecture Overview

- **Public Services Network**
  - **Provides tightly controlled access to service provided to the public**
  - **Default is “deny” for outside sources wanting to get in**
  - **Default is “allow” for inside services connecting out**
  - **Default is “deny” from Public to Private**
    - **HQ WWW servers**
    - **FTP server**
    - **Database applications servers**
    - **E-mail and calendaring**
    - **Public DNS**
    - **Direct Print and production printing networks**
  - **Provide secure location for services for NASA Centers and/or the general public**
    - **CCB Approved and HQ monitored and maintained**

# Architecture Overview

- **Network & Services Operations Center (NOC / SOC)**
  - **NOC manages firewalls and security perimeter**
    - **Responsible for /ip management**
  - **SOC manages servers**
    - **has visibility into service performance, availability and accounts**
  - **Serves as a resource for trouble-shooting and analysis**
  - **Sends alerts, alarms and pages when anomalies are detected**
  - **Fully integrated tools**
  - **Provide visibility into each device and down to each node**
  - **Monitors infrastructure, nodes, servers, CPU usage, I/O utilization, broadcast traffic, switches/RSMs and configuration changes**

## Snap Paging

- **Pages from the HELP desk are human driven**
  - **Currently there are arrangements with MobileComm. Airsource Pro (Silver Lakes). Hosted on an NT workstation with an analog line to MobileComm. Almost all pagers are alphanumeric.**
  - **Database is on the workstation**
  - **Lists are generated from the database**
  - **Currently there are 74 paging groups (43 for Code support)**
- **Web site for use by IT staff to do their own single or group snap page**
- **ODIN Contractor can be added to our SNAP Page service and website**

# Architecture Overview

## Network Infrastructure

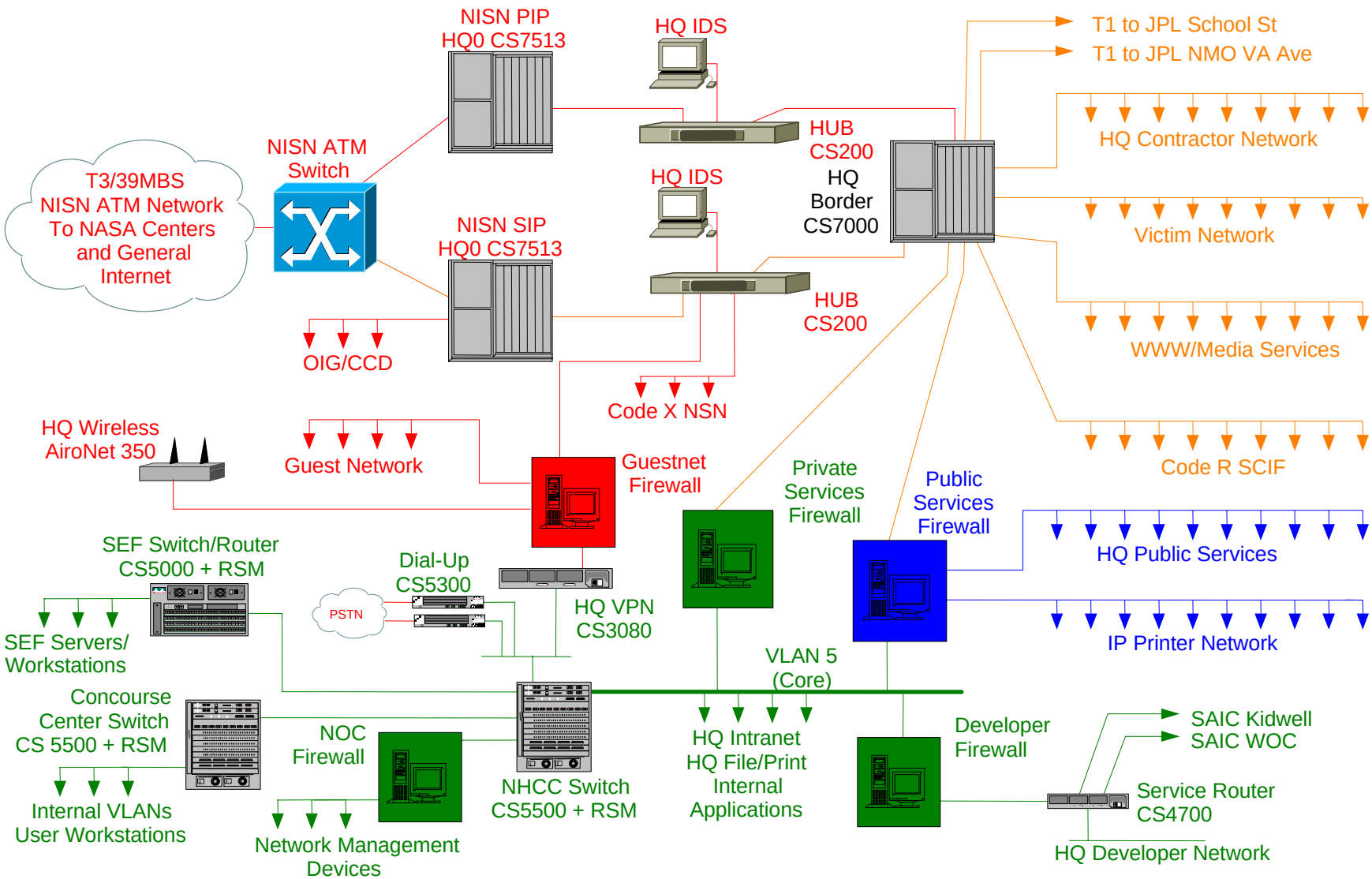
- **Three communication closets on each floor with Cisco 5000/5500**
  - **Each Catalyst switch has two, 1 Gbit, multi-mode fiber runs that take separate, redundant paths to alternating center closet switches and then to the Concourse and NHCC switches**
    - **Each center closet floor switch has 2 one GB multi mode fiber trunks. The primary is attached to the NHCC switch (root bridge) and the backup is connected to Concourse Center**
    - **Each wing closet (East and West) has 2 one GB multi mode fiber trunks. The primary is attached to the Center closet switch for that floor. The backup is attached to the wing switch in the floor above and below**
  - **Cable is Cat 5+ and 100MB NICs are installed in all desktop computers**

# Architecture Overview

## Workstation Interface Outlet (WIO) boxes

- **WIO distribution boxes are embedded in the raised floors to provide network and phone connections to customer workstations**
  - **Each WIO box general contain at least six outlet positions.**
    - **2 data @ 100 Mb - RJ45**
    - **1 voice - RJ45, 1 modem/fax - RJ11**
    - **CATV- coax, 1 spare**
  - **Additional analog data lines are issued on an exception basis for faxing "outbound only"**
  - **Electric power has separate floor boxes**

# Architecture Overview



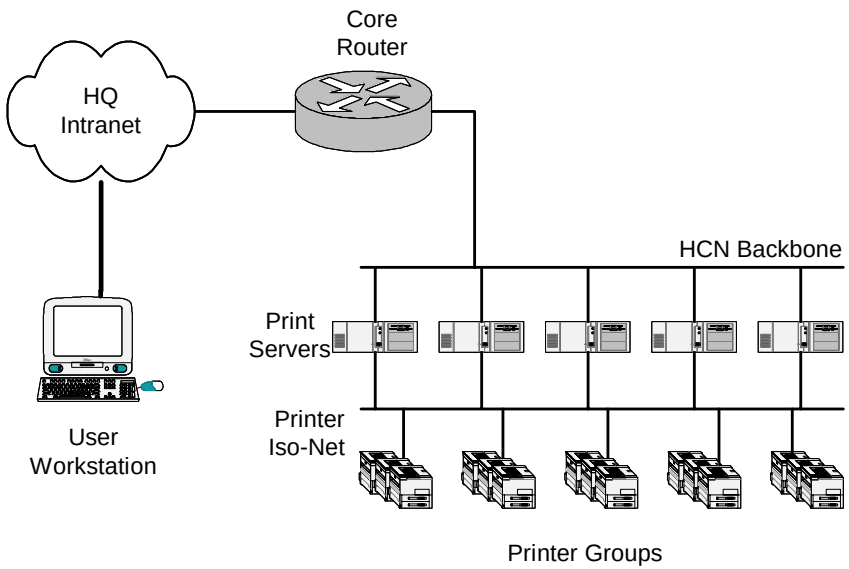
# File Service Today

- **Centralized Windows NT-based file and print architecture:**
  - **Promotes easier sharing of data**
  - **SMS "pushes" for PCs**
  - **NetOctopus for MacIntoshes**
- **Server architecture:**
  - **File Services - Hosted on 3 Dell 6350s attached to a Dell SAN**
    - **777 gig**
    - **Data #4 Dell 6400 - array = 887 gig**
    - **Data #5 Dell 6600 - array = 1.3 TB**
  - **5 Print Servers - Hosted on 2 Compaq 166, Dell 2450, 2 Dell 4400s**
    - **CD Tower PC based**
    - **FAX Senior hosted on a Compaq 4500**
  - **SMS - Dell 6300**
  - **Target Metric: 99% -5% variance**
- **User workstations are in transition to new OS and Admin privileges**

# File Service Tomorrow

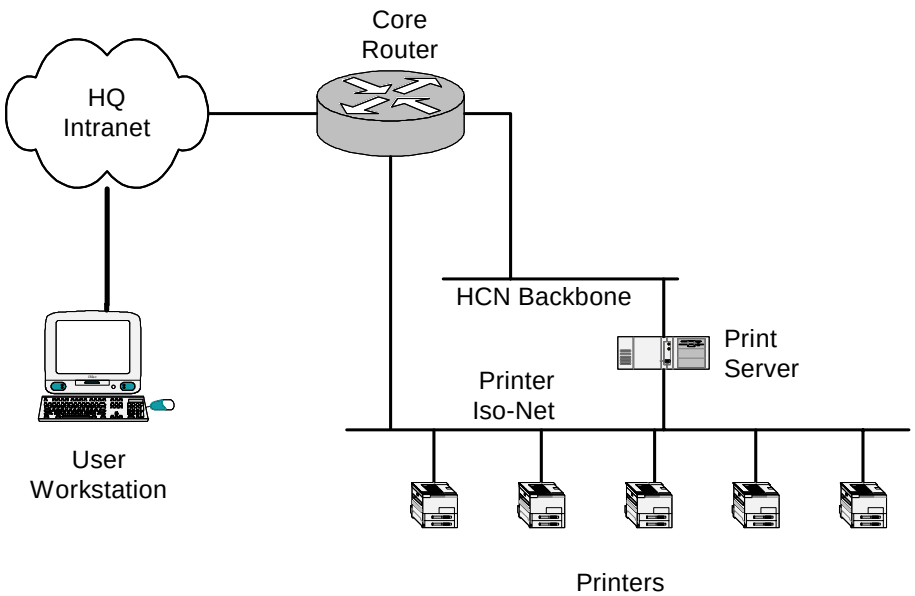
- **Microsoft 2003 server:**
  - **Limited Active Directory**
  - **Flexible SAN**
  - **Upgraded Backup**
- **Interim step while evaluating:**
  - **Integrated desktop tools**
  - **Enterprise storage**
  - **“Active-Active” hot-site**

# Printing Today




- **How it works:**
  - Users submit print jobs using SMB/CIFS, AppleTalk, IP
  - Jobs arrive at designated print server and are spooled
  - Jobs are forwarded to the proper printer
- **Problems:**
  - Each printer is logically connected to a single server; lose the server and you've lost all the printers connected to it
  - Servers do not interoperate well with modern multi-function printers (e.g. Laniers)
  - Servers do not provide real benefit to modern Operating Systems that include spooling services
  - Servers slow printing by forcing intermediate spooling
  - Users lose control of print jobs once the server has them (you can't stop a print job yourself)
  - User view of printer (e.g. paper levels, operating status, accessories) limited

# Printing Tomorrow

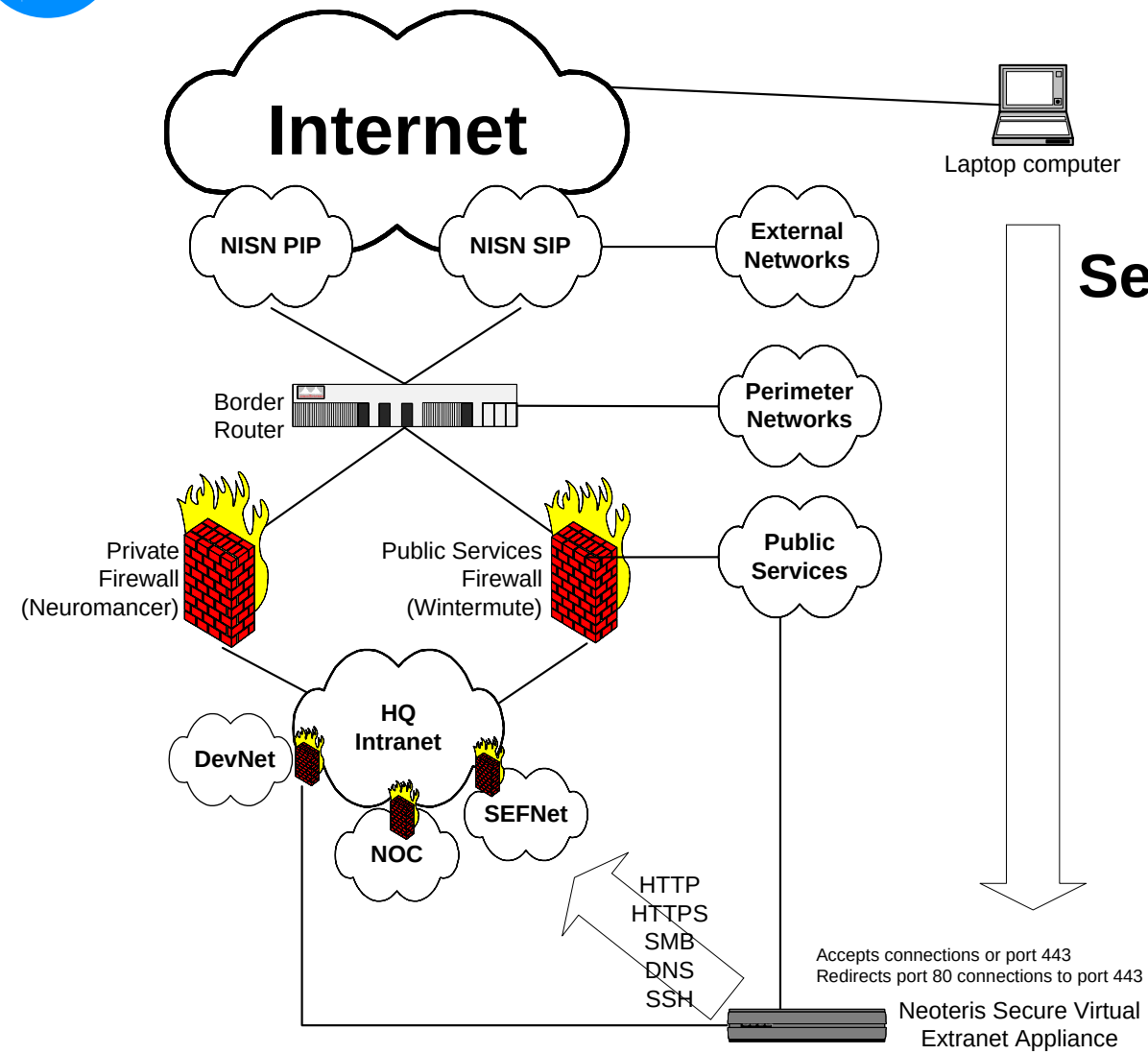



- **How it works:**
  - Users submit print jobs using JetDirect, IPP, or Appletalk directly to the printers
  - Printers print what they are told
  - Printers accept concurrent connections, print on first-come, first-served basis
  - Legacy print server for special case printers or printers with specific access requirements (e.g. only specific users can print to it, job size limits)
- **Benefits:**
  - No single points of failure between users and most printers
  - Users can access full functionality of the printers (e.g. scanners on Laniers)
  - Printing is much faster without intermediate spooling
  - Users retain control of jobs until they are completely printed
  - Users have direct visibility into printer state
  - Much less hardware to maintain and manage

# Remote Services

- Around the clock service
- Supports personnel on travel and telecommuters
  - Peer-to-peer access to desktop systems is not allowed
  - Neither is PPTP
- Dial-in and Kiosks (SSL) both use SecurID hardware tokens
- Services like email and calendaring are available over the general Internet and do not require HQ addresses
- Dial-in Service:
  - Cisco AS5300 dial-in servers were installed less than a year ago
  - There are 4 T1s, each T1 will support 23 concurrent connections for a total of 92 possible connections.
  - 1-800 and local numbers - pre-setup on laptops

# Remote Services




## Secure Remote Access (Neoteris)

- Enables Kiosk style access via SSL
- Can support up to 100 concurrent customers
- Accesses web applications, and SAMBA to files
- "Profiles" set up for customers

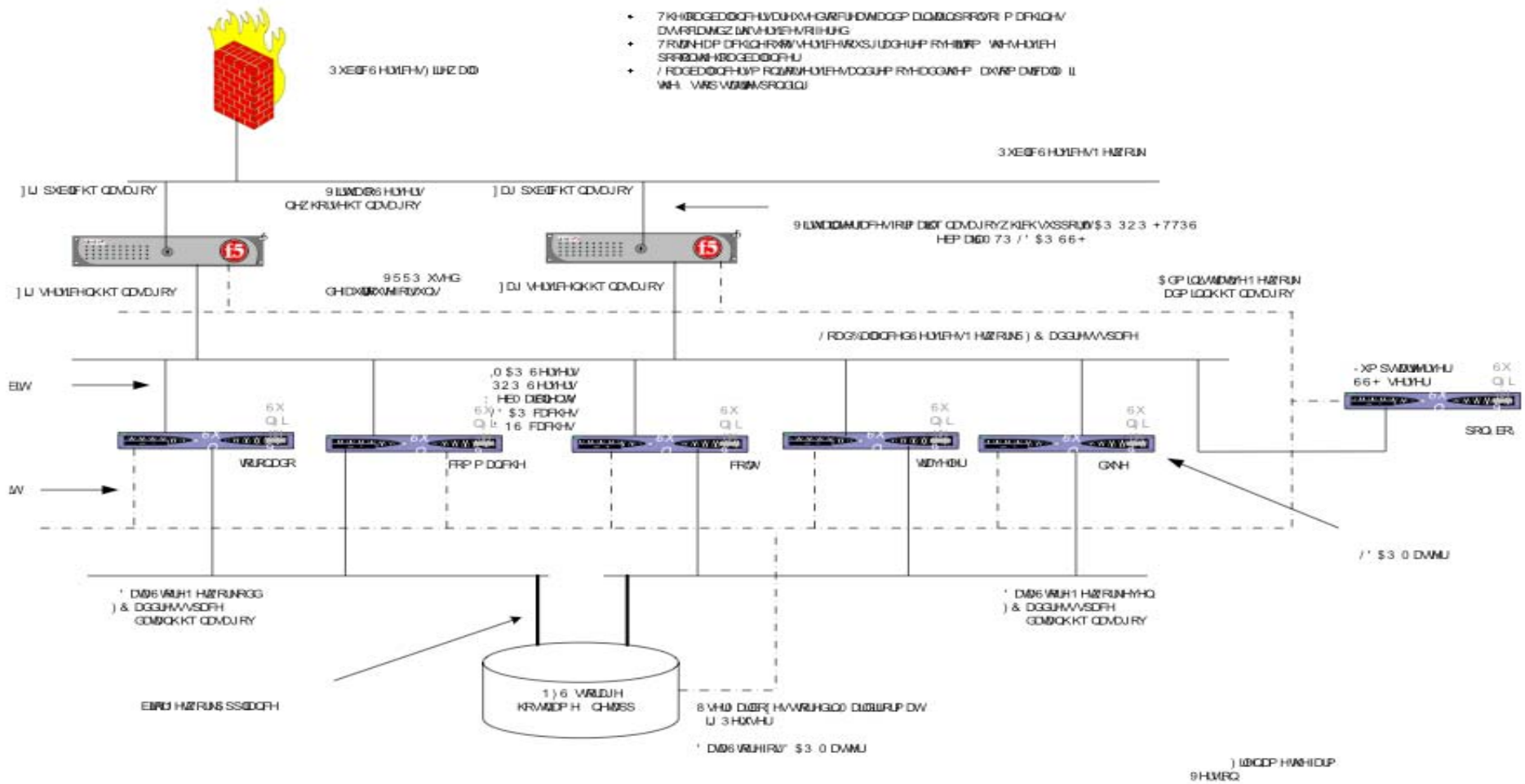
# Email Service Today

- 4 machines, mail, list, smtp, X500:
  - Sun Ultras, Solaris 7, Sendmail, majordomo, qpopper, ldap, Syntegra
- Separate Domino/BES server for Blackberry support
- 2200 accounts
- 800 mailing lists
- ~100,000 messages a day
- Client is Eudora v6:
  - Entrust plug-in support
  - Uses APOP to encrypt passwords
- Update@x500.hq.nasa.gov for new common names
- first.last@nasa.gov goes though JSC
- www.hq.nasa.gov/onenasa/email:
  - For new nasa.gov addresses
  - Over 250 special “by hand” requests a year

# Email Service Tomorrow

- **Fully Redundant:**
  - **Load balanced, failover for servers**
  - **Small directory links with legacy and hooks to new agency efforts**
- **Supports POP/S, IMAP/S, SMTP/S:**
  - **Lots of client support**
  - **Up to 1 gb of storage per customer**
- **World class Virus and SPAM filters:**
  - **Agile and flexible enough to support new initiatives or reuse for other services**
- **Fail-over site targeted for Fall:**
  - **Active-Passive this year**
  - **Active-Active next year**

# Email Service Architecture



# Blackberry Service

## Today

- 300 units deployed
  - 957, 6510, 6710, 6750,  6210
  - Verizon, Cingular and AT&T
  - No cradle support
  - Email and Attachments
  - Mostly senior management

## Tomorrow

- Reduce devices
  - Focus on Wireless updates
- Pursue better integrated solutions

# Web Requirements

- **Contractor shall provide web-based customer support contents that follow all NASA HQ web hosting architectures, processes and policies**
- **Architecture:**
  - **SunOne Web Server, J2EE Application Server, Cold Fusion MX, Oracle 9i**
  - **Several browsers supported – IE 6 for PCs, IE 5 for Macs, Netscape 4.7 for both, and Safari (OSx) for Macs**
- **Process:**
  - **Full life-cycle milestone review via HQ Configuration Control Board**
- **Policies:**
  - **All federal web publishing guidelines (Section 508, COPPA, etc.)**
  - **NASA specific publishing guidelines**
    - **See http://webwork.nasa.gov/policy for more details**

# System Engineering Facility

- **The Systems Engineering Facility (SEF)**
  - Self-contained facility
  - Simulates production environment for safe testing
  - Provides expertise to assist with testing efforts in the field of computing and data communications
  - Contains a wide array of computer and network technology for testing production scenarios outside the production environment
- **Includes capability to:**
  - Test on all production desktop computing platforms
  - Test with current and planned operating system distributions
  - Test with all current NASAHQ software
  - Test on the NASAHQ network, or on one or more private networks
  - Isolate network monitoring and analysis

# Systems Engineering Facility

- **Tools are also available**
  - **Workstations and server-class computers**
  - **NASA HQ "core" desktop software configurations**
  - **Microsoft and Apple network-attached printers**
  - **Personal digital assistants**
  - **Cisco routers, switches, firewalls**
  - **Ascend MAX digital 56K dial-in access server**
  - **HQGost1 and HQghost2 Servers were ALL the Core loads are kept, and can download any core-load created and configure it in under 20 Minutes**
  - **Lots of printers**
  - **ISDN modems and lines, analog modems and lines**
  - **Electronics workbenches, tools, oscilloscope**
  - **Electric Power Meter that monitors spikes and changes in power outlets - This has been used several times to troubleshoot problems!**

# *Telecommunications Architecture*

**These services, except for FAX, are not provided under ODIN**

**Dale Stigberg**

# Telephone Service Overview

- Telephone service at HQ is via a CENTREX system provided by Bell Atlantic through the Washington Integrated Telephone System (WITS) contract with General Services Administration (GSA)
- There are also in use about 250 pagers and 450 cell phones and 300 Blackberries
- Voice mail service is provided by an Octel Overture 250 voice mail system, which is completely integrated via a 3A Translator with the ISDN desktop telephone service
- An ‘800’ telephone number is used for accessing the voice mail system when users are on travel
- NASA will provide phone service to the ODIN Contractor
- The current Help Desk has a PBX that may or may not be transferred to the ODIN Contractor

# Television Service Overview

- The HQ building is wired for distribution of cable television
- Each floor has a single CATV leg with 10 tap boxes placed along the length of the building. Each tap box has a capacity of 20 cable drops
- Where CATV service is desired (e.g. in conference areas) a coaxial cable is run from the WIO box to the nearest available tap
- A local vendor (Washington Cable) provides Cable TV service via microwave
- It is distributed to the NASA television production area
- Local programming is mixed with the CATV service and re-broadcast throughout the HQ wiring plant

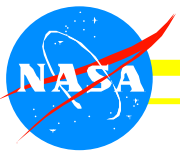
# FAX Machines

- **All non-secure FAX machines shall be supported by ODIN. NASA HQ has:**
  - **186 Pitney Bowes fax machines**
  - **5 portable fax machines**

- **There are 6 fax machines on secure circuits supported by the NISN contract**

# Video Teleconferencing System

- NASA HQ has two formal video conferencing rooms and equipment supported by the NISN contract
- Several conference rooms are capable of supporting ViTS via portable equipment
- Several Offices have small tcp/ip based Tandberg units
  - Scheduling is customer driven though MSFC
- The video conferencing service is provided by MCI
- Set-up, scheduling, coordination, conference monitoring, troubleshooting, user support, etc., provided by ISEM contract




# *Questions & Answers*

# *Due Diligence Plan*

**Tom Walthall**

# Topics

- Objective
- Contractor badging procedure
- Contractor schedule
- Scheduled activities
- Rules
- Contractor tours
- HQs facilities
- Exit session

# Objective

- **Due Diligence provides the opportunity for potential bidders to visit and observe the ODIN service-related activities as currently provided in the HQ facility**
  - **To validate the HQ inventory and environment**
  - **Provides an information gathering and sharing process between the potential bidders and the HQ Codes**
- **Code OCI will facilitate the Due Diligence activities**

# Contractor Badging Procedure

- Each Contractor must submit a complete list of all employees that will participate in the Due Diligence processes
- For each person include: person's name, social security number, name of ODIN prime contractor, prime contractor company address, name of subcontractor (if applicable)
- Lists should be submitted, by Email, to Tom Walthall (Tom.Walthall@hq.nasa.gov) by March 22, 2004
- All Due Diligence participants must be US citizens
- Upon initial entry, each day, to NASA HQ (West Lobby Security Station) each contractor employee must show a picture ID, indicate by checking a box on a form that he/she is a US citizen, and sign the form
- If the person is on the Contractor submitted list, a temporary badge will be issued. The badge must be worn above the waist and must be visible at all times
- The first entry, each day, into the NASA HQ building, and the last exit, each day, must be at the west lobby security station
- During the day, each time a person exits past the security station the badge must be surrendered to security personnel. Upon re-entry, that same day, the same badge can be returned if the person remembers the badge number and shows his picture ID. If not, then the initial entry procedure must be repeated

# Contractor Schedule

- Contractors will be allowed in the building 8:00am - 4:00pm
- Make Contractors aware of other NASA contractors
  - Accomplished during tours and at initial Code briefings
- 1 week of tours and presentations
- Weekly tag-ups with Code OCI
  - Check on progress
  - Discuss any problems, issues, or concerns
- Contractors are invited to attend some Code OCI morning tag-ups, CCB, and the in-depth reviews

# Scheduled Activities

- Activities Scheduled for Due Diligence
- Contact is Tom Walthall, Code OCI, (202) 358-1304

| | |
|---|---|
| • Submit list of Due Diligence Participants | 03/22/04 |
| • ODIN Contractor Briefing | 03/22/04 – 03/23/04 |
| • Contractor Due Diligence Orientation | 03/24/04 |
| • Area Tours for ODIN Contractors | 03/25/04 |
| • Code Briefings to Contractors | 03/29/04 – 03/30/04 |
| • Tag-ups/SR Screening & CCB (Wednesdays) | 03/31/04 – 04/14/04 |
| • Tag-ups/SR Screening (Mon, Tue, Thu, Fri) | 04/01/04 – 04/20/04 |
| • In-Depth Review (Thursday) | 04/08/04 |
| • Contractor Tag-up with Code OCI (Thursdays) | 03/26/04 – 04/16/04 |
| • Exit Session | 04/20/04 |

# Due Diligence Rules

- **DOCO letter, Subject: NASA Headquarters (HQ) ODIN Activities, Dated March 1, 2004, Stated the following Due Diligence Guidance:**
  - **Orientation: 03/24/04, 9:00 - 11:00 a.m., Room PRC**
  - **No more than 3 people per Contractor at orientation**
  - **Space not provided for the Contractors at NASA HQ**
  - **Participation by foreign nationals is not permitted**
- **Additionally**
  - **No more than 2 people per Contractor at all other scheduled activities**

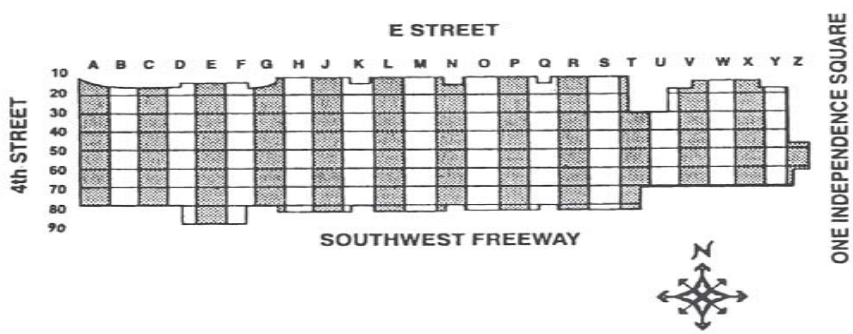
# Rules: Contractor Tours and Initial Code Briefings

- Vendors escorted on tours by Code OCI civil servants
- Please, do not touch any equipment
- Direct all questions to NASA personnel, do not question the ISEM contractor team
- Contractors must sign-up for tours and initial Code briefings at orientation (March 24, 2004)
- After the tours and the initial Code briefings any additional meetings will be scheduled by the Contractor with the designated POC
  - Code OCI must be notified of all Contractor arranged meetings at least 24 hours in advance of their occurrence

# *HQs Facilities*

# Floor Plan Description

| Floor | Functional Description |
|---|---|
| C | Codes I, O, W, X, SAIC, NHCC, health facility, stress lab, Video Teleconferencing Service, TV studio, and printing & design |
| 1 | Code O, SAIC, lobbies, receiving and inspection, security, library, travel office, auditorium, mail center, exchange store, credit union, post office, and food establishments |
| 2 | Codes D, N, T, and U |
| 3 | Codes H, O, S, and T |
| 4 | Codes E, F, O, and Z |
| 5 | Codes P, Q, and Y |
| 6 | Codes O, R, and V |
| 7 | Codes I and M |
| 8 | Codes B, D, and W |
| 9 | Codes A, G, K, L, P, X, and Columbia Cafe |

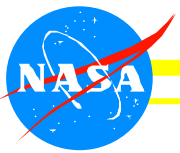


# Concourse Space

# First Floor Space

# Exit Session

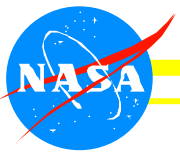
- **Scheduled for Apr 20, 2004, 1:00pm - 2:00pm in room MIC 6A (6H46A)**
- **Code OCI and Contractor exit session**
  - **Contractors ask any final questions**
  - **Code OCI review remainder of ODIN schedule**
- **Upon exiting building, turn-in all badges issued to vendors at the west lobby security station**




# *Questions & Answers*

**And**

**Discussions**




# *Acronyms*

# Acronyms

- ACD Automated Call Distribution
- ADP/T Automated Data Processing / Telecommunication
- BDC Backup Domain Controller
- CAC Customer Advisory Council
- CATV Cable Television
- CCB Configuration Control Board
- CDR Critical Design Review
- CIO Chief Information Officer
- COOP Continuity Of Operations Plan
- COTR Contracting Officer Technical Representative
- COTS Commercial Off-the-Shelf
- CSCC Catalog of Services and Commercial Components
- CTC Computer Training Center
- DBMS Database Management System
- DNS Domain Name Server
- DO Delivery Order
- DOCO Delivery Order Contracting Officer

# Acronyms

- DOCOTR Delivery Order COTR
- DOSP Delivery Order Selection Process
- ENAC Entrance National Agency Check
- FTP File Transfer Protocol
- FY Fiscal Year
- GOTS Government Off-the-shelf Software
- GSA General Services Administration
- GSFC Goddard Space Flight Center
- HCN HQ Communications Network
- HISP HQ Information Security Perimeter
- HQ (NASA) HQ
- H/W Hardware
- ICMP Internet Control Message Protocol
- IETF Internet Engineering Task Force
- IFMS Integrated Financial Management System
- IMAP Internet Message Access Protocol
- ISDN Integrated Services Digital Network
- ISEM IT Systems, Engineering and Management

# Acronyms

- ISO International Standards Organization, greek for "equal“
- IWMS ISEM Work Management System
- HONURS HQ New User Request System
- HAMS Headquarters Account Management System
- IT Information Technology
- ITS Information Technology Security
- ITSM IT Security Manager
- JPL Jet Propulsion Laboratory
- LAN Local Area Network
- LANOC LAN Operation Center
- LOE Level Of Effort
- MAC Macintosh
- M/A/C Move/Add/Change
- MAN Metropolitan Area Network
- MIC Management Information Center
- MSFC Marshall Space Flight Center
- NACC NASA Administration Computing Center

# Acronyms

- **NHCC** NASA HQ Computer Center
- **NISN** NASA Integrated Services Network
- **NOC** Network Operations Center
- **NPR** NASA Policy Requirement
- **NSN** NASA Secure Network
- **NTE** Not to exceed
- **ODIN** Outsourcing Desktop Initiative (for NASA)
- **OIG** Office of the Inspector General
- **ORR** Operational Readiness Review
- **OS** Operating System
- **PC** Personal Computer
- **PDA** Personal Digital Assistant
- **PDC** Primary Domain Controller
- **PDR** Preliminary Design Review
- **PGP** Pretty Good Privacy
- **PKI** Public Key Infrastructure
- **POC** Point of Contact

# Acronyms

- **POP** Post Office Protocol
- **PRC** Program Review Center (9H40)
- **PSCN** Program Support Communication Network
- **RTS** Return to Service
- **SAIC** Science Application International Corporation
- **SCIF** Sensitive Compartmented Information Facility
- **SEF** Systems Engineering Facility
- **SMBS** Seat Management Business System
- **SMS** Systems Management Server
- **SMTP** Simple Mail Transport Protocol
- **SNMP** Simple Network Management Protocol
- **SRRT** Service Request Review Team
- **SSH** Secure Shell
- **SSL** Secure Socket Layer
- **S/W** Software

# Acronyms

- **VLAN Virtual LAN**
- **WANOC Wide Area Network Operation Center**
- **WIO Workstation Interface Outlets**
- **WITS Washington Integrated Telephone System**
- **WOC Washington Office Center (SAIC Office Space)**
- **WWW World Wide Web**

# Revision History

- **Revision A updated slides 9, 12, 13, 23, 27, 34, 43, 62, 92, 100, 142, 158, 160, 162, 163, 164, 166, 167, 172, 181, 197, 214, 237, 248**