

**Human Resources Department  
and  
Preparation for ISO 9000 Surveillance Audit  
(August 23-25, 1999)**

**Draft**

**Tom Dollman/SD40/4-6568**

# Agenda

- **Background/Status**
  - **Scope Broadening Drives System Evolution**
  - **Points to Ponder**
- **Focus of (External) Surveillance Audit**
- **General Questions & Key Answers**
- **Contractors and ISO 9001 at MSFC**
- **Auditee Etiquette & Philosophy; Audit No-No's**
- **“Homework” in Lieu of a “Stand-down”**
- **Bottom Line**
- **Addenda**

# Scope Broadening Drives System Evolution

- **New Marshall Mgmt System (MMS) has 4-levels of doc (Marshall Management Directives System - MMDS\*):**
  - 1 \*Marshall Management Manual (Top Level)**
    - \*Other Marshall Policy Documents (MPDs)
    - NASA Directives Marshall follows “as is” - e.g., NPD 7120.4
  - 2 \*Marshall Procedures and Guidelines (MPGs)**
    - Includes all ex-Marshall Standard Procedures (from old QMS)
    - Includes existing and to-be new MPGs (e.g, translated MMIs & MMs)
  - 3 \*Marshall Work Instructions (MWIs) (How to - multiple orgs)**
    - All prior Centerwide Work Instructions (CWIs)
  - 4 Organizational Work Instructions (How to - one/two orgs)**
    - What does Organization do to respond to requirements laid out in upper tiers
    - What additional info. needs to be documented to describe how we do our business
- **Marshall Integrated Document Library (MIDL)**
  - **Access MMDS documents and other documents/lists for Reference (plus Review, Concurrence, and Approval)**

## **Some Points to Ponder**

- **It's not just about audits, it's about how to work better**
  - **We're using ISO to improve the way we do business (DA01)**
- **Accurate documentation is crucial**
  - **“Say what you do, do what you say”**
    - **Be able to prove what you did - MSAD's next internal audit (11/15/99)**
    - **Identify your office's processes and records to keep**
    - **Organizational Work Instructions (OWIs)**
    - **Other Organizational Issuances (OIs) (e.g., Standard Operating Procedures - SOPs)**
    - **Project Documentation**
  - **“Document a little, Train a lot - Document a lot, Train a little”**
    - **Deploy written procedure at with more detail for process participants to follow**
      - **Minimal training needed**
    - **Otherwise write/deploy a high-level procedure (requires reading between the lines)**
      - **Them train those who aren't knowledgeable of process/procedure**
- **Our Management System makes uses of ISO**
  - **If there's something wrong with it, let us know**

## **Focus of This Audit**

- **Old Scope: “...flight hardware, software, and GSE interfacing with flight hardware and software.”**
- **Focus on 7 elements:**
  - **4.1 - Management Responsibility**
  - **4.2 - Quality System - [Program/project Documentation]**
  - **4.3 - Contract (Customer Agreement) Review**
  - **4.4 - Design Control**
  - \* **4.5 - Document and Data Control**
  - **4.10 - Inspection & Testing**
  - \* **4.14 - Corrective & Preventative Action (incl. “old” NCRs)**
  - **4.17 - Internal Quality Audits**
- **Challenge: New MMS Implementation (many docs not auditable)**
- \* **Note: Elements applicable to CD10 (including Quality Records)**

## **Gen. Questions for (\*all) In-Scope CD10 People**

- \* What is the Quality Policy?**
- \* Who is the Management Representative?**
- \* What is the Marshall Management Directives System (MMDS) hierarchy - how are the documents accessed?**
- \* (Show Me!)**
- What other documentation do you use to do your job?**
- (Show Me!)**
- What objective evidence (Quality Records/proof) do you have that you did <whatever> according to the documents you've shown me?**
- (Show Me!)**

## **Key Answers - Ref. MPD 1280.1, “Marshall Management Manual”**

- \* The policy, “... to provide quality products and services to our customers...” (7.1.1) can also be found on the ISO 9001 badge card. A personal interpretation of the policy is often the subject of a follow-up question.**
- \* The ISO Management Representative, Sid Saucier, Associate Director for Management, is responsible for managing the overall, day-to-day ISO 9001 implementation at MSFC (7.1.2.3).**
- \* The four-level MMDS consists of MSFC Directives (i.e., MPDs, MPGs, and MWIs) and OIs, including OWIs (7.2.1. (a)).**

## Other Key Answers

- \* **MSFC Directives - go to the MIDL:**
  - **“<http://inside.msfc.nasa.gov/MIDL/>”**
  - **Existing MMIs and MMs are also part of MIDL until 9/1/99**
  
- **Approved CD10 OWIs are found at:**
  - \_\_\_\_\_
  
- **Quality Records are Controlled by (Located at)**
  - \_\_\_\_\_ (4200/\_\_\_\_\_)

## **Contractors & ISO 9000 at MSFC**

- **On-site MSFC contractors who perform in-scope work and use MSFC documents to perform their work will be audited just like an MSFC civil servant**
- **On-site MSFC contractors who are contracted to perform an in-scope service to MSFC and who use their own procedures, will not be subject to ISO 9000 audits. Civil servant personnel who manage such contracts or participated in the selection of the contractor will be audited per Element 4.6**
- **Not audited are the following:**
  - **Contractors who perform only out-of-scope work**
  - **On-site contractors who are MSFC's customers**
  - **Off-site contractors**

# **Auditee Etiquette & Philosophy**

- **Convey with enthusiasm that what you do makes a difference**
- **Know what the (complete) quality policy means to you**
- **Know how you help MSFC meet its goals**
- **Know where to locate applicable directives (Levels 1-3) & Organizational Work Instructions (OWIs) (Level 4)**
- **Know what procedures govern the work you are doing**
- **Convince the auditor that you follow procedures and work instructions where required**
- **Be professional, friendly and courteous**
- **Think before answering questions**
- **Answer truthfully and directly**
- **If you do not know the answer, direct the auditor to your supervisor**

## **Some Audit No-No's!**

- **Don't think that your answers don't count**
- **Don't be afraid to say, "I don't know, but I'll find out"**
- **Don't volunteer information not asked for**
- **Don't act like the auditor is wasting your time**
- **Don't guess or bluff your answers**
- **Don't criticize coworkers/colleagues**
- **Don't argue with the auditor**
- **Don't say you don't follow procedures because ... you don't have time, or it can't be done that way**

## **“Homework” - All Employees**

- **Understand “General Questions-Key Answers”**
- **Practice navigating the Marshall Integrated Document Library (MIDL) and look up procedures specified by number, subject, and ISO element which apply to you:**
  - **“<http://inside.msfc.nasa.gov/MIDL/>”**
- **Find/review CaER Work Instructions that apply to you”**
  - **Bookmark is “[http://\\_\\_\\_\\_\\_](http://_____)”**
  - **Redline/report issues of concern**
- **Know location of Quality Records for each project you work on or function for which you are responsible**
- **Support your Management and other colleagues for ISO-related activities**

# More “Homework” - All Employees

- **Demonstrate that you can call up and use the following (e.g., via. Inside Marshall’s rotating bar):**
  - **MSFC Corrective Action System (CAS)**
  - **Innovative Dynamic Employee’s Active Solutions (IDEAS)**
  - **Quality System Deficiency Notice System (QSDN)**
  - **Safety Concerns Reporting System (SCRS)**
- **Review, for instance, at the MSFC ISO Homepage...:**
  - **“<http://iso9000.msfc.nasa.gov:9001/index.html>”**
  - **Internal Audits - Helpful Hints - Audit Preparation Q&A**
  - **Issues of Special Emphasis - Corrective Action Trifold**
  - **Introductions - Descriptions of the 20 system elements**
  - **Clarification**
    - **MSFC ISO Scope Information**
    - **Listing of MSFC In-Scope Projects (to be updated)**
    - **Comments to MSFC Documents**

## **“Homework” - Supervisors**

- **Per MPG 1441.1, “Control of Quality Records”**
  - **Identify Quality Record Custodian(s) for your org. (2.1)**
- **Per MPG 3410.1, “Training”**
  - **Supervisor determines whether specific training and/or certification is required for each employee (3)**
  - **Utilize MSFC Form 4333 to document (3.2)**
  - **Determine if certification is required (3.3)**
  - **Maintain a list of operations that require certification or special training (3.4)**
  - **Contact E&ODD to schedule required training (3.6)**
  - **Records of specific OJT required are maintained by the supervisor for as long s the employee fills that position (4.1.5)**

## **Bottom Line**

- **Marshall's ISO Registration is critically important to MSFC and to NASA**
  - **We should continue to lead the way**
- **Maintaining Marshall's ISO Registration demands the active commitment and participation of all employees**
  - **Get involved and Stay informed**
  - **“If we're all regularly working to our procedures, audits should be easy”**
- **ISO is a tool to help us “do business” well and enable structured, effective improvements**

# **Addenda**

- **“ISO-Speak”**
- **Scope Change**
- **MMDS Directives subject to August audit**
  - **Go to MIDL**
  - **Click on MSFC Directives**
  - **Click on ISO Element to sort list by element**
  - **Directives corresponding to Audit-focus elements are targets**

## **“ISO-Speak”**

- **MMS - Marshall Management System for “new” scope**
  - **Replaced Quality Management System - QMS)**
- **MMM - Marshall Management Manual implements ANSI requirements**
  - **Level 1 document which replaced Marshall Quality Manual - MQM)**
- **MPD - Marshall Policy Directive (MMM is an MPD)**
- **MPG - Marshall Procedure and Guideline -**
  - **QMS’s Marshall Standard Procedures (MSP) were translated into MPGs (Level 2)**
- **MWI - Marshall Work Instruction (Level 3)**
  - **QMS’s Centerwide Work Instruction (CWI) were translated into MWIs (Level 3)**

## **More “ISO-Speak”**

- **MMI/MM - MSFC Management Instruction and MSFC Manual (usable until 9/1/99).**
- **OI - Organizational Issuance (Level 4)**
- **OWI - Organizational Work Instruction**
  - **An OI which provides specific instructions**
- **Scope - the breadth of applicability of the system developed to manage quality and the registration from the 3rd party assessor - old-scope “.. flight hardware, flight software, ground support equipment...”**
- **Elements - ISO/QMS term to describe main aspects of the qual. system - matches with clauses - see badge card**

# Scope Change

- **Ref. MPD 1280.1, “Marshall Management Manual”**
- **“Old” Scope - (Our current ISO registration scope)**
  - **The Quality Management System is established “to ensure consistent quality of all processes for procurement, design, development, and onsite production of flight hardware, flight software, and associated ground support equipment interfacing with flight hardware and flight software, for which MSFC has responsibility.”**
- **“New” Scope - (The way MSFC is now doing business)**
  - **The MSFC Management System is established “to ensure consistent quality of all NASA MSFC products and services.”**
  - **All MSFC processes affect the quality of MSFC products/services, therefore are included in the system.**

# Attachments

- **Background Charts**
  - **ISO History**
  - **ISO Infrastructure**
  - **Challenges**
  - **Information Resources**
- **Directives Subject to Audit**
- **QMS-to-MMS Cross Reference List**

# ISO History

- **International Organization for Standardization - developed quality standards/requirements (Series 9000)**
- **ANSI/ASQC Q9001-1994 American Nat'l Standard**
  - requirements as 130+ “ shalls” - in 20 clauses/elements
- **AA01/Goldin - all Centers to be registered to ISO 9000-series at own schedule (NPD 8730.3)**
- **DA01/ Littles - MSFC registered to ISO-9001 by 4/97**
- **MSFC registered 2/97 to ISO-9001 with limited scope**
- **Center Director & MQC approved migration to new scope 12/98**
- **CaER/etc.: implement new scope - “... shall apply to all products and services provided by MSFC.” (MMM)**

# MSFC's ISO Infrastructure

- **Marshall Quality Council (MQC) - Chartered**
  - **Governing Body meets > 2x/year (Minutes Posted on web)**
  - **Chair: DA/Art Stevenson**
  - **Participants: \*DD, \*DE, \*ED, \*QS, CD, SD, TD, AA, RS,...**
  
- **ISO Implementation Team (IIT)**
  - **Implementation Leadership (Minutes emailed to Org Reps)**
  - **[Focus Team - Agenda setting, strategy]**
  - **Chair: DE/Sid Saucier**
  - **Members: Primary/Alternate Organization Representatives from each "01" organization**
    - **CD30/Caroline Wang (Primary "Org. Rep." for CaER)**
    - **CD20/Pat Schultz (Alternate "Org. Rep." for CaER)**
  - **Other participants as needed**

## **MSFC's ISO Infrastructure (Cont'd)**

- **Directives Control Board (DCB)**
  - **ISO Document Review & Approval**
  - **Chair: DE/Sid Saucier**
  - **Members: Primary/Alternate DCB Members from each “01” organization**
    - **CD30/Caroline Wang (Primary member. for CaER)**
    - **CO20/Pat Schultz (Alternate member for CaER)**
  - **Other participants as needed**
- **Internal Audit Pool plus CR/Audit Manager**
  - **Lead Auditors from MSFC Orgs**
  - **Internal Auditors from MSFC Orgs**
  - **Don't audit your own organization**
  - **Train, then serve several weeks/year**

# Challenges

- Integration of the ISO and MSFC Center Directives
- Expanded scope of ISO within the Center
- Modifications to all documents resulting from our reorg
- Readiness for our next Surveillance Audit (8/99) and Full Registration (5/00).
- Consideration of changes to our documentation due to the proposals under consideration for ISO/CD2 9001:2000.  
[Process Improvement and Customer Feedback ]
- The bottom line is that “We will do it”.

## **Information Resources**

- **ISO HP“<http://iso9000.msfc.nasa.gov:9001/index.html>”**
  - **Presentations**
  - **Data Bases**
  - **Other Web Links**
  - **ISO Document Library [MIDL]**
  - **Meeting Minutes**
- **Green Book & Requirements: ANSI/ASQC 9001**
- **Other Organizations’ OWIs**
- **Training (TBA)**
  - **For Newly in-scope personnel**
  - **For Previously in-scope personnel**
- **Each Other**