National Aeronautics and
Space Administration

George C. Marshall Space Flight Center
Marshall Space Flight Center, AL 35812

Reply to Attn of: DA01

April 7, 1999

TO: Distribution

FROM: DA01/A. G. Stephenson

SUBJECT: Minutes of the MSFC Quality Council Meeting

The MSFC Quality Council (MQC) met on Thursday, April 1, 1999. The meeting began at 1:00 p.m., in Building 4200, Conference Room P1 10. The roster of attendees for the meeting is attached as Enclosure 1. The presentation charts for the meeting are included as Enclosure 2. The agenda for the meeting page 2 of Enclosure 2.

OPENING REMARKS (S. Saucier/DE0 1)
This was the first MQC Meeting held since the NQA Surveillance Audit in February. The Management Representative thanked everyone for their support and cooperation during the audit. A lot of work went into the preparation for the audit, but everything went very smoothly. The results of the audit will be reported later in the program.

NQA SURVEILLANCE AUDIT REPORT (M. CHAMBLEE/RSSC)
The National Quality Assurance (NQA) Surveillance Audit was conducted at the Center February 22-24,1999. During the visit, the NQA auditor documented a total of nine findings. Five of the findings were observations and four were minor nonconformances. The corrective action response was due to NQA before March 24, 1999, and was sent a couple of days before the deadline. As of this date, no response has been received from NQA, so it is assumed that the Corrective Action Response was acceptable.

Each of the nine findings was presented and the specifics of the findings were discussed for the MQC. Four of the findings have been closed to date. The presentation charts, which have the finding, cause, and corrective action, are pages 4 – 12 of Enclosure 2.

MQC ACTION ITEMS STATUS (S.SAUCIER/DE01)

The six open actions from previous MQC meetings were presented and discussed. The actions were:

MQC-0014

At the last MQC meeting, a total of six responses had been received from Customers. To date, a total of thirteen have been received. The QUALCOMM will be used to enhance Customer Feedback. Efforts will be made to close the loop with the customer to get an "up-front" agreement that planned fixes will address their concerns and complaints. This action will be considered closed but additional work will continue in the Implementation Team to assure that customers' feedback is adequately captured.

MQC-0015

A system has been developed to recognize Lead Auditors/Auditors for their efforts to perform the IS0 9000 Internal Audits. Special Service Awards, time-off awards, paper awards of some kind, etc. will be used. It is not clear at the present time, where to get the money for the cash awards. This action will be closed but work will continue in the Implementation Team to define the details.

MQC-0017

Additional information was provided to explain the existing "mechanisms" in place for process improvement. Some of them are the IDEAS, MSFC Suggestion Program, QSDN, and QUALCOMM. Process improvement will continue to be worked in the "Cross-Cutting Teams" activity.

MQC-0018

The open actions are statused in each of the weekly IS0 Implementation Team status meetings. The turnaround on the closure process has been greatly improved. At the present time a "hard target date" to close open NCR's is not recommended. This action is closed.

MOC-0019

All MSFC projects were verified to have Project Plans before the NQA Surveillance audit in February 1999. Some of the plans did not comply with the requirements of NPG 7150.5A. This action will be closed, but work will continue in the "cross cutting" teams and the Implementation Team to assure that adequate Project Plans are in place for all in house tasks.

MQC-0020

The Internal Task Agreement process at the Center was reviewed. The Center Resources Management Team is working this process.

The presentation charts for the action items are included as pages 14-20 of Enclosure 2.

PLAN TO IMPLEMENT THE "NEW SCOPE' (M. CHAMBLEE/RSSC)

The new scope for the Center will be expanded to include all of MSFC. Initially, IS0 implementation was to include approximately 85% of the Center operations. The expanded scope will "apply to all products and services provided by MSFC." A gant chart has been developed to show the timeline for implementing the expanded scope. Significant activities for the implementation were discussed. Included were the MSFC Management Documentation System, Documentation Support Teams, IS0 9000 Training, Internal Audits, and Management Reviews. The new scope application and contract change will be coordinated with the Registrar. The Registrar has scheduled surveillance of the current scope in August 1999. A surveillance audit of the current scope and a Pre-Assessment of the New Scope is set for February 2000, with the Registration Audit to the New Scope in May 2000. The presentation charts for the New Scope discussion are pages 21-26 of Enclosure 2. A copy of the IS0 9001 Implementation Plan for Expansion of Scope Gant Chart is included as Enclosure 3.

The document OPR's have been reviewing their documentation to determine how much, if any, change will be required. New documents, which have been released by September, will be in effect for the internal audits. Documentation should be in place for at least three months prior to a Registrar's surveillance audit.

ACTION:

Develop a plan that clearly defines how the Center will have documentation in place to address the new organization.
(MQC-0021, S. Saucier/DE01, Due: 05-05-99)

INTERNAL OUALITY AUDIT REPORT (W. WOODS/CR10)

There have been no Internal Audits at MSFC since the last MQC meeting. The new audit schedule has been developed and all scheduled audits have been staffed. Starting in mid-April, one audit is scheduled about every two weeks. Beginning the first of September, audits will occur one per week. The entire Center will be audited before the NQA Surveillance audit in February 2000. The presentation charts are included as pages 27-28 of Enclosure 2. The 1999 Internal Quality Audit Schedule is included as Enclosure 4. The audit schedule has been revised to reflect the new Center Organization Chart.

CORRECTIVE ACTION PROGRAM (W. WOODS/CR10)

The status of the open NCR's and RCAR's was presented and discussed with the Council. Currently, there are 5 open Non-conformance Reports (NCR's). None of the NCR's are late. There are 21 open RCAR's. The presentation charts are included as pages 29-30 of Enclosure 2.

OTHER (S. SAUCIER/DE0 1)

All in-flight hardware, for Class E Re-flight Projects, which had been previously grandfathered (i.e. exempted from IS0 audits) for IS0 registration and surveillance audits will be considered to be in-scope if and when it is reflown. Allowances will be made per the existing system for deviations or waivers on a case-by-case basis.

CLOSING REMARKS (S. SAUCIER/DE01)

There are several IS0 challenges ahead for the Center. Some major issues are:

- More timely responsiveness to the closure of actions.
- Integration of the IS0 and MSFC Center Directives
- Expanded scope of IS0 within the Center
- Modifications to current MSP's, CWI's, and OWI's resulting from our reorganization
- Potential loss of current organizational representation to the IS0 organizational teams (Auditors, Implementation Team) resulting from the Center's reorganization
- Consideration of changes to our documentation due to the proposals under consideration for ISO/CD2 9001:2000. (This isn't all bad since there is more emphasis being directed toward Process Improvement and Customer Feedback – two areas we have been asked to improve upon)
- Readiness for our next surveillance audit in August of 1999 and Full Registration in May 2000.

The bottom line is "We will do it".

No other items for record were discussed at the meeting.

A. G. Stephenson
Chairman
MSFC Quality Council

Enclosures

Distribution:
Council Members
Meeting Attendees

IS0 9000 MSFC QUALITY COUNCIL MEETING

April 1, 1999, Building 4200, Conference Room P110

MEETING ATTENDEES

NAME	ORGANIZATION	PHONE	FAX
Jack Beasley	CR10	544-0630	544-8470
Jack Bullman	PA01	544-9009	544-6669
Byron Butler	GP20	544-0368	544-4400
Mary Chamblee	RSSC	544-1342	544-4470
Sheila Cloud*	AA01	544-0120	544-5893
Sandy Coleman	BC01	544-0795	544-3536
Dawn Cross	EH42	544-1835	544-5877
Tom Dollman	co30	544-6568	544-8500
Dan Dumbacker	EP01	544-0171	544-3960
Amanda Goodson**	CR01	544-2353	544-2053
Carolyn Griner**	DD01	544-1914	544-7580
Bill Hicks	cc01	544-0010	544-0258
Roslin Hicks	ES92	544-7795	544-7128
John Howell	BC01	544-5219	544-5867
Uwe Hueter	RA10	5448492	544-3214
Joel Kearns*	MG01	544-5506	544-8369
Jim Kennedy**	EA01	544-2656	544-4100
Marena McClure	GP10	544-0407	544-9344
John McPherson	HE1	544-7479	544-9527
Don Miller	CR10	544-8361	544-4857
Ron Mize	CR20	544-2485	544-8101
Paul Munafo	EH21	544-2566	544-5877
Marc Osborne	TA11	544-2300	544-5858
John Pea	SA71	544-8437	544-5799
Axel Roth*	PA01	544-045 1	544-7580
Sid Saucier**	DE01	544-0171	544-3 560
A. G. Stephenson**	DA01	544-1912	544-5228
Annette Tingle	AT01	544-4522	544-8752
G. R. Wallace	EL01	544-4359	544-4131
Caroline Wang	AI3 1	544-3887	544-6030
Walt Whitacre	EP61	544-0047	544-8259
Fred Wojtalik*	TAO1	544-0647	544-5858
Warren Woods	EL3 1	544-3293	544-0242
R. G. Zagrodzky	EL02	544-3293	544-0242

* MSFC QUALITY COUNCIL MEMBER

** MQC MEMBER REQUIRED TO ATTEND THE COUNCIL MEETING

Marshall Quality Council

April 1, 1999

Enclosure 2

Agenda

- Opening Remarks
- Results/Status from NQA Surveillance
- MQC Action Items Status
- Overall Plan to Implement the “New Scope”
- Internal Quality Audit Report
- Corrective Action Program
- Other
- Closing Remarks - Challenges Ahead

National Quality Assurance (NQA)

Results/Status - Mary Chamblee

NQA Surveillance Audit February 22-24, 1999

- NQA Surveillance Audit Findings

Observations	5
Minor Nonconformances	4
Total Findings	9

- Corrective Action Response Submitted to NQA Before Due Date (3/24/99)
- Four (4) Findings Have Been Closed To Date

NQA Results/Status

NCR # 1 (Observation) - Mary Chamblee

- Feedback from IS0 Implementation Meetings and Focus Team Meetings not included in Management Review Meeting minutes. Also, the agenda and required attendees not formalized for these meetings.

Cause: The IS0 Implementation and Focus teams were established to facilitate and support development and implementation of the IS0 compliant MSFC quality system. The Focus Team is a subset of the Implementation Team, which is comprised of a core group of regular attendees, but with an open membership which has changed over time based on issues being addressed. These teams also specifically support the IS0 Management Representative. Team membership is appointed and documented, minutes are kept, and agendas are established based on immediate need. No further documentation was believed to be necessary.

Corrective Action: Minutes of the Implementation Team meetings will be distributed to all members of the MSFC Quality Council, in addition to the current team membership. It should also be noted that the Focus Team minutes set the agenda for the Management Review Meetings.

Corrective Action Completed and Verified

NQA Results/Status

NCR # 2 (Minor Nonconformance) - Mary Chamblee

- Original drawings for VCD project, and several others, are rolled up and placed on top of the filing cabinets in room 2433, Bldg. # 4203 (Minor Nonconformance)

  Cause: Project baseline drawings must not be folded since they are the original drawings. There is inadequate storage for these drawings in an unfolded configuration.

  Corrective Action: Locate or procure drawing flat file cabinet and transfer drawing rolls to that cabinet.

Corrective Action Completed and Verified

NQA Results/Status
NCR # 3 - (Observation) - Mary Chamblee

- Historical drawings are reviewed as part of VCD design review and identified with a Validation Label to identify its status. This requirement is not identified in any procedure.

  Cause: Contractor provided drawings must be "'validated" prior to their baseline for use by MSFC in house projects. This procedure was not formally documented in project documentation.

  Corrective Action: The label validation process will be documented in the Station Life Support Data Management Plan, SLS-JA2 1-00 1 .

Corrective Action Completed and Verified

NQA Results/Status

NCR # 4 - (Minor Nonconformance) - Mary Chamblee

- There is no copy of TDR #2 included with Run #1 for MTCP-FC-MPEVESA-302 (6/23/98) as required in procedure MSFC-P 13.1 R/D, para. 4.3 .e.

Cause: Run #1 and Run #2 of MTCP-FC-MPEV-302 were run concurrently with Test Discrepancy Record (TDR) 002 applying to both procedures and, therefore, was referenced on both TDR Log Sheets for Runs 1 and 2. Both procedures were completed and turned in to the Quality Records Center (QRC) as one bulky package but the two procedures were separated and stapled for filing. This caused the original of the TDR to be physically filed with only one procedure. Both procedures refer to each other and are filed together in one folder in the QRC. The only omission is a copy of TDR 002 being added to Run #1 while leaving the original with Run #2. This was an oversight.

Corrective Action: A copy of TDR 002 has been made and file with Run #1. The original TDR 002 remains with Run #2.

Corrective Action Completed and Verified

NQA Results/Status

NCR # 5 - (Minor Nonconformance) - Mary Chamblee

- Internal Audit checklist not available for review for Internal Audit dated 1 1/16/98 for element 4.2, 4.5, 4.6, and 4.16.

Cause: The Lead Auditor did not collect notes and checklists used during performance of the audit from audit team members. This was a failure to follow procedure.

Corrective Action: The audit files have been reviewed and verified to be complete, with the exception of two audits led by the same Lead Auditor. Auditors have been contacted to obtain copies of any notes/checklists that they may have kept. Some notes/checklists have been recovered. The Audit Manager will review the procedure with the Lead Auditor.

Corrective Action Has Been Taken and Partially Verified

NQA Results/Status

NCR # 6 - (Observation) - Mary Chamblee

- Definition for required Internal Audit objective evidence is vague in procedure MSFC-P 17.1 R/F.

  Cause: The definition of "objective evidence" is consistent with the auditor training conducted by Stat-a-Matrix, the definition provided in ANSI/ISO/ASQC A8402: 1994, and the proposed IS0 9000:2000.

  Corrective Action: The procedure, MSFC-P 17.1, rev. F, paragraph 4.16, will be revised to add examples of objective evidence that should be recorded on audit checklists/interview notes.

MSFC-Pl7.1 is out for DCB review

NQA Results/Status

NCR # 7 - (Observation) - Mary Chamblee

- Internal Audits reviewed exhibit inconsistent recording of objective evidence.

Cause: Auditors receive training on "objective evidence" in the auditor training classes; however, keeping a clear understanding of the definition and how to document objective evidence is difficult for part-time auditors.

Corrective Action: The procedure, MSFC-P 17.1 , rev. F, paragraph 4.16, will be revised to add examples of objective evidence that should be recorded on audit checklists/interview notes. Paragraph 4.10 will also be revised to require review of MSFC-P 17.1 during pre-audit team meetings. (This is in addition to the current requirement to review general auditing techniques.)

MSFC-P17.1 is out for DCB review

NQA Results/Status

NCR # 8 - (Minor Nonconformance) - Mary Chamblee

- No clear plan procedurally as to who, when, or how MSFC will audit the element 4.17 to satisfy the issue of independent/no conflict.

  Cause: There is no differentiation at MSFC between an audit of element 4.17 and any other element of the quality system.

  Corrective Action: MSFC-P 17.1, rev. F, is the procedure for conducting internal quality audits. This procedure defines internal audits to be independent examinations and requires an audit schedule that will cover the entire quality system annually. No differentiation is necessary for auditing element 4.17. MSFC-P17.1, rev. F, paragraph 4.5 will be revised to clarify the selection of auditors who are not responsible for the activities being audited. This practice is currently being followed for all audits. The current audit schedule provides for an audit of element 4.17, as part of an organization audit, twice during the upcoming year.

  MSFC-P17.1 is out for DCB review

  Considering utilizing audit teams from other NASA Centers to evaluate MSFC's audit program

NQA Results/Status

NCR # 9 - (Observation) - Mary Chamblee

- The requirement for Management Kep. to approve Internal Audit schedule is not clearly specified in procedure MSFC-P 17.1 R./F.

Cause: The Management Representative was approving the internal audit schedule during the implementation of IS0 900 1 in order to increase the visibility of management support of the internal audit activity. This practice was not required in any procedure, but was continued as an established practice.

Corrective Action: MSFC-P 17. 1, rev. F, will be revised to reflect approval of the audit schedule by the Audit Manager, with concurrence by the IS0 Management Representative.

MSFC-P17.1 is out for DCB review

MQC Action Items Status

Sidney Saucier

MQC Action Items Status

MQC-0014 - Sid Saucier/Tom Dollman

- MQC-0014 - Review the IS0 9000 process for Technical Task Agreements (TTA's) at MSFC and JSC and decide on the best way to address this issue utilizing the Customer Feedback Program
  - JSC dropped feedback requirement from TTA/process
  - Recommend using QUALCOMM to enhance Customer Feedback
    - Promote use to capture customers' verbal & written feedback (Inside Marshall, Marshall Star, employee training)
    - Request feedback more frequently (annually or better)

MQC Action Items Status

MQC-0014 (cont) - Sid Saucier/Tom Dollman

- MQC-0014 - Review the IS0 9000 process for TTA's at MSFC and JSC and decide on the best way to address this issue utilizing the Customer Feedback Program
  - Recommend documenting common-sense rules for feedback (plus improvement)
    - Get performance-based feedback - ask the customer who knows your results (not just an organizational entry point)
    - Link request to activities - make part of pertinent milestones (TTA package sign-off, major reviews) or during routine ops
    - Close loop with customer - seek up-front agreement that your planned fixes will address their recorded concerns/complaints

MQC Action Items Status (cont)

MQC-0015 - Sid Saucier/Warren K. Woods

- MQC-00 15 - Establish a system to recognize Lead Auditors/Auditors for their efforts to perform the IS0 9000 Internal Audits. Also, consider the possibility of including IS0 audit training in the Individual Career Development Program

  Special Service Award (SSA) - based on level of Participation in the Audit program

  - Time-off Award

    Paper Award of some kind (i.e., Director's Commendation, Cert of Appreciation, Group Achievement, etc.)

  - Recognition at Center Director's Staff Meeting
  - Team Building Activities

    Further looking into Career Path development - passing this information on to the dual career path cross-cutting team

MQC Action Items Status

MQC-0017 - Sid Saucier/Jeff Spencer

- MQC-0017 - Provide additional information to the Center Director on the system which is in place at MSFC for process improvements
  - Existing "Mechanisms" for process improvement consist of:
    - IDEAS (Informal, non-monetary awards)
    - MSFC Suggestion Program (formal, monetary awards)
    - QSDN - Quality System Deficiency Notice
    - QualComm - Quality Comment System
  - Recommend:
    - Continuation of the '"Cross-Cutting Teams" for working Process Improvement and formalize/document the process to allow access by employees
    - IS0 9001 rev 2000 - Focuses on Process Improvements - consider IS0 9001 rev 2000 for all future revisions to our procedures involving Process Improvements

MQC Action Items Status (cont)

MQC-0018 - Sid Saucier/Warren K. Woods

- Establish a reasonable target date for closing open NCR's

Step in Audit Process	Time allotted (Days)	Average Time Taken (Days)
Audit Manager Approves Draft	Clock Starts	Clock Starts
Auditee enters Cause and Proposed Corrective Actions	14	38
Lead Auditor approves Cause and Proposed Corrective Actions	14	14
Auditee should meet the proposed target date	Target-date Average length = 11	Target-date + 36 days
Auditor verifies corrective actions	14	35
Lead approves verification/Closes NCR	14	2

As a result of the monthly status to the Implementation Team, the turnaround on the closure process has been greatly improved. Do not recommend imposing a hard target date at this time.,

MQC Action Items Status (cont)

MQC-0019 - Sid Saucier/Warren K. Woods

- Verify that all projects have a Project Plan before the upcoming NQA Surveillance Audit February 22-24, 1999, or provide an e-mail message to the Center Director explaining why it cannot be accomplished
  - Action item was completed as stated
  - An additional internal assessment will be conducted to verify all Project Plans meet the requirements of 7120.5A

MQC Action Items Status (cont)

MQC-0020 - Sid Saucier

- Review the Internal Task Agreernent process at the Center
  - Recommend this action be reassigned to the Center Resources Management Team and closed from the MQC Action Item list

Overall Plan to implement the "New Scope" Key Activities

Mary Chamblee

Overall Plan to implement the "New Scope"
New Scope Statement - Mary Chamblee

The Marshall Management System shall apply to all products and services provided by the Marshall Space Flight Center.

Overall Plan toimplement the "New Scope" Key Activities - Mary Chamblee

- MSFC Management Document System (4/26/99)
  - Nearing completion
  - Timely release will be critical for expansion of scope
    - Single management system
    - Timely review and approval of documents
- Documentation Support Teams (4/9/99)
  - Teams being formed as necessary
- New Scope Documentation (6/4/99 - 12/3/99)
  - Various Documents at all levels will require revision

Overall Plan to implement the "New Scope" Key Activities (cont) - Mary Chamblee

- ISO **9000** Training (9/16/98 - ongoing)
  - Auditor and Lead Auditor
    - Periodic classes already set up and ongoing
  - General Employee - Refresher/New Scope Impact
    - Needs to be developed
    - Will include QSDN's, QualComm's, Calibration Database and the New Directives System
  - Procedures/ Instructions
    - Some training has been done in the past
    - Further training needs to be developed

Overall Plan to implement the "New Scope" Key Activities (cont) - Mary Chamblee

- Internal Audits of New Scope (9/6/99 - ongoing)
  - Continue Audits of Current Scope for Registration
  - Audits Will Include New Scope Documents as they are Approved and Released
- Management Reviews (2/year minimum)
- Coordination with Registrar (4/2/99- 1 l/l 9/99)
  - New Scope Application
  - Contract Change
  - Schedule Document Review, Pre-assessment, and Registration Assessment

Overall Plan to implement the "New Scope"
Key Activities (cont) - Mary Chamblee

- Registrar Audits (2/26/98 - ongoing)
  - Surveillance of Current Scope (8/99)
  - Surveillance of Current Scope and Pre-Assessment of New Scope (2/00)
  - Registration Audit to New Scope (5/00)

Internal Quality Audit Report

Audit Status - Warren Woods

- No additional Internal Audits since the last MQC
- All <u>scheduled Audits</u> have been staffed
- Starting April 12, Audits are scheduled about one every two weeks
- Sep. 6th, schedule reflects about one Audit per week
- Full round of Internal Audits scheduled before 2/00
- Revised Audit Schedule to reflect new Organization Chart

MSFC 1999 Internal Audit Schedule

(Enlargement of this chart on last page of Handout)

Organization	Feb	Mar	Apr	May	June	July	Aug	Sep	Oct	Nov	Dec	Jan	Feb
Office of the Director	8						9						14
Office of Chief Financial Officer				31								17	
Systems Management Office											13		
Space Shuttle Projects Office						12							7
CHANDRA	8								18				
Procurement Office										1			
Chief Counsel	8							6					
Equal Opportunity Office								6					
Safety and Mission Assurance Office			26					13					
Customer and Employee Relations Directorate									4				
Center Operations Directorate						26							14
Science Directorate													7
Science Offices													7
Microgravity Science and Applications Department							2			15			
Space Science Department					28							31	
Earth Science Department					28							31	
Space Optics Manufacturing Technology Center					28							31	
Engineering Directorate	8								25				
Engineering Offices									25				
Avionics Department									4				
Structures, Mechanics, & Thermal Department					14							24	
Materials, Processes, & Manufacturing Department				3				27					
Engineering Systems Department									25				
Space Transportation Directorate										29			
Space Transportation Offices										29			
Advanced Concepts Department										29			
Propulsion Research Center			12							8			
Vehicle & System Development Department			12							8			
Subsystems & Component Development Department			12							8			
Technology Evaluation Department			12							8			
Flight Projects Directorate										15			
Flight Projects Offices										15			
Flight Systems Department										15			
Payload Operations & Integration Department					14				11				
Ground Systems Department					14				11				

Corrective Action Program

NCR & RCAR Status - Warren Woods

- **Status** of Open NCR's
  - 5 Open Non-Conformance Reports (NCR's)
  - -None have a late Status
  - One remains open from pre-NQA last round of audits
- Status of open Recurrence Control Action Request (RCAR's)
  - 2 1 open RCAR's
  - 3 where Point of Contact (POC) Response is late
  - 1 where Problem Assessment Center (PAC) Processing is late

Other

- Grandfathering - Class E Re-flight projects
  - All in-flight hardware previously grandfathered (i.e., exempted) for IS0 registration and surveillance audits, when re-flown, will be in-scope for IS0 requirements
  - Allowances will be made per the existing system for deviations/waivers on a case-by-case basis

Closing Remarks

Challenges Ahead - Sidney Saucier

- Continued improvement for timely responsiveness to the closure for actions
- Integration of the IS0 and MSFC Center Directives
- Expanded scope of IS0 within the Center
- Modifications to current MSP's, CWI's, and OWI's resulting from our reorganization
- Potential loss of current organizational representatives to the IS0 organizational teams (Auditors, Implementation Team) resulting from the Center's reorganization

Closing Remarks (cont)

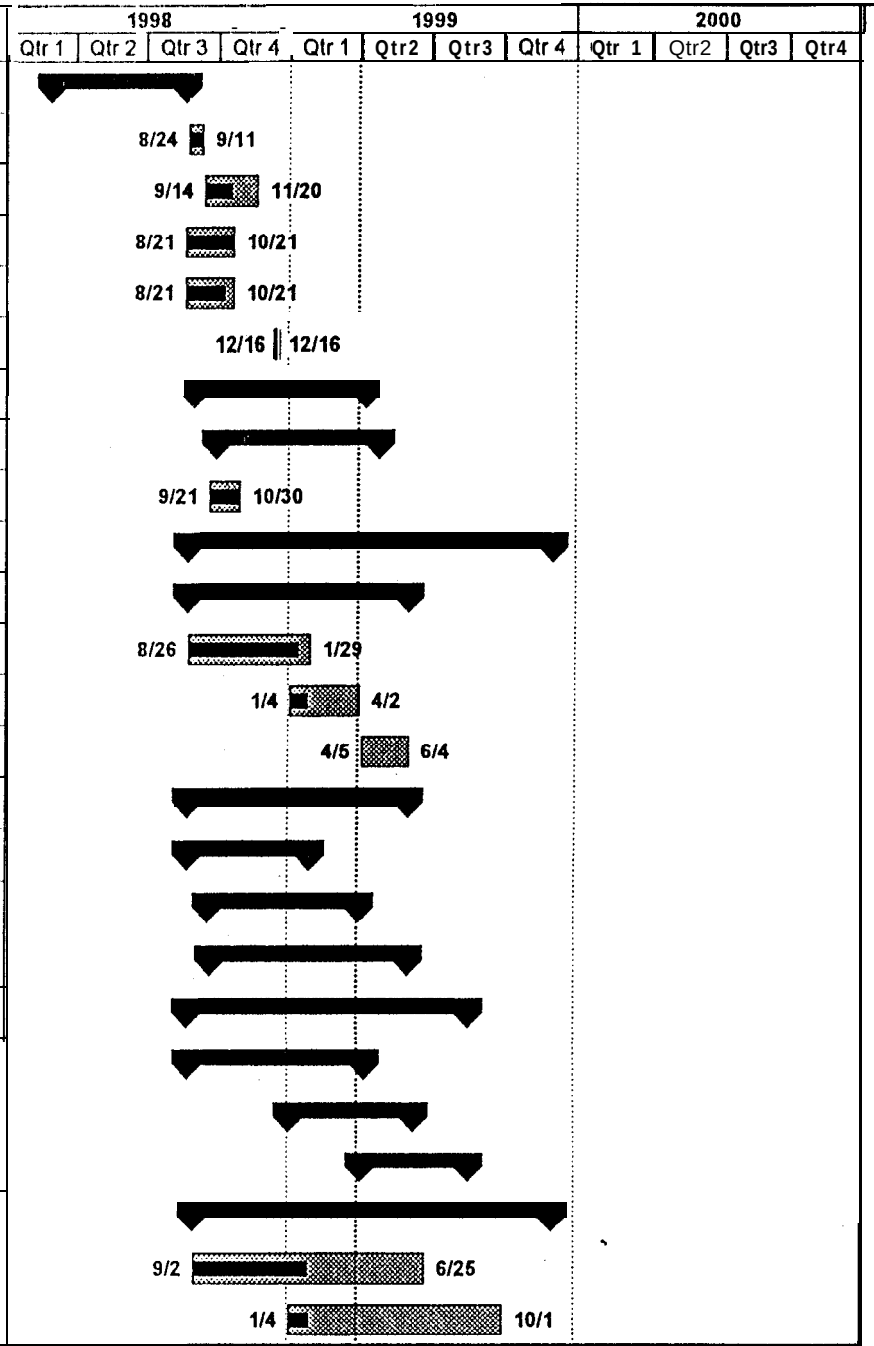
Challenges Ahead (cont) - Sidney Saucier

- Consideration of changes to our documentation due to the proposals under consideration for IS0 9001 rev 2000. (This isn't all bad since there is more emphasis being directed toward Process Improvement and Customer Feedback - two areas we have been asked to improve on)
- Readiness for our next surveillance audit in August of 1999 and Full Registration in May 2000

Bottom Line: We will do it

MSFC ISO 9001 Implementation Plan for Expansion of Scope

ID	Task Name	Start	Finish
1	Develop New Scope of ISO 9001	Mon 3/2/98	Fri 8/21/98
4	Expand Implementation Team as Required	Mon 8/24/98	Fri 9/11/98
5	Train New Team Members	Mon Q/l 4/98	Fri 11/20/98
6	Develop New Scope Statement	Fri 8/21/98	Wed 10/21/98
7	Develop Architecture for New Scope	Fri 8/21/98	Wed 10/21/98
8	MQC Approval - Scope Statement 8 Architecture	Wed 12/16/98	Wed 12/16/98
9	Select Documentation Support Teams	Wed 9/2/98	Fri 4/9/99
19	MSFC Management Document System (MMDS)	Thu 1011198	Mon 4/26/99
60	Revise DCB Charter - Add Members	Mon 9/21/98	Fri 10/30/98
61	New Scope Documentation	Wed 8/26/98	Fri 12/3/99
62	MQM	Wed 8/26/98	Fri 6/4/99
63	Review for Impact	Wed 8/26/98	Fri 1/29/99
64	Revise	Mon 1/4/99	Fri 4/2/99
65	DCB Review and Approval	Mon 4/5/99	Fri 6/4/99
66	MSP's (and MPG's)	Wed 8126198	Fri 6/4/99
67	Review for Impact	Wed 8/26/98	Fri 1/29/99
04	Revise/Write New as required (Incl. Directives)	Mon 9/21/98	Fri 4/2/99
101	DCB Review and Approval	Thu 9/24/98	Fri 6/4/99
118	CWI's (and MWI's)	Wed 8/26/98	Fri 8/20/99
119	Review for Impact	Wed 8/26/98	Fri 4/9/99
141	Revise/Write New as required (Incl. Directives)	Mon 1/4/99	Fri 6/11/99
163	DCB Review and Approval	Mon 4/5/99	Fri 8/20/99
185	OWI's	Wed 9/2/98	Fri 12/3/99
186	Review for Impact	Wed 9/2/98	Fri 6/25/99
187	Revise/Write New as required	Mon 1/4/99	Fri 1 Oil /99



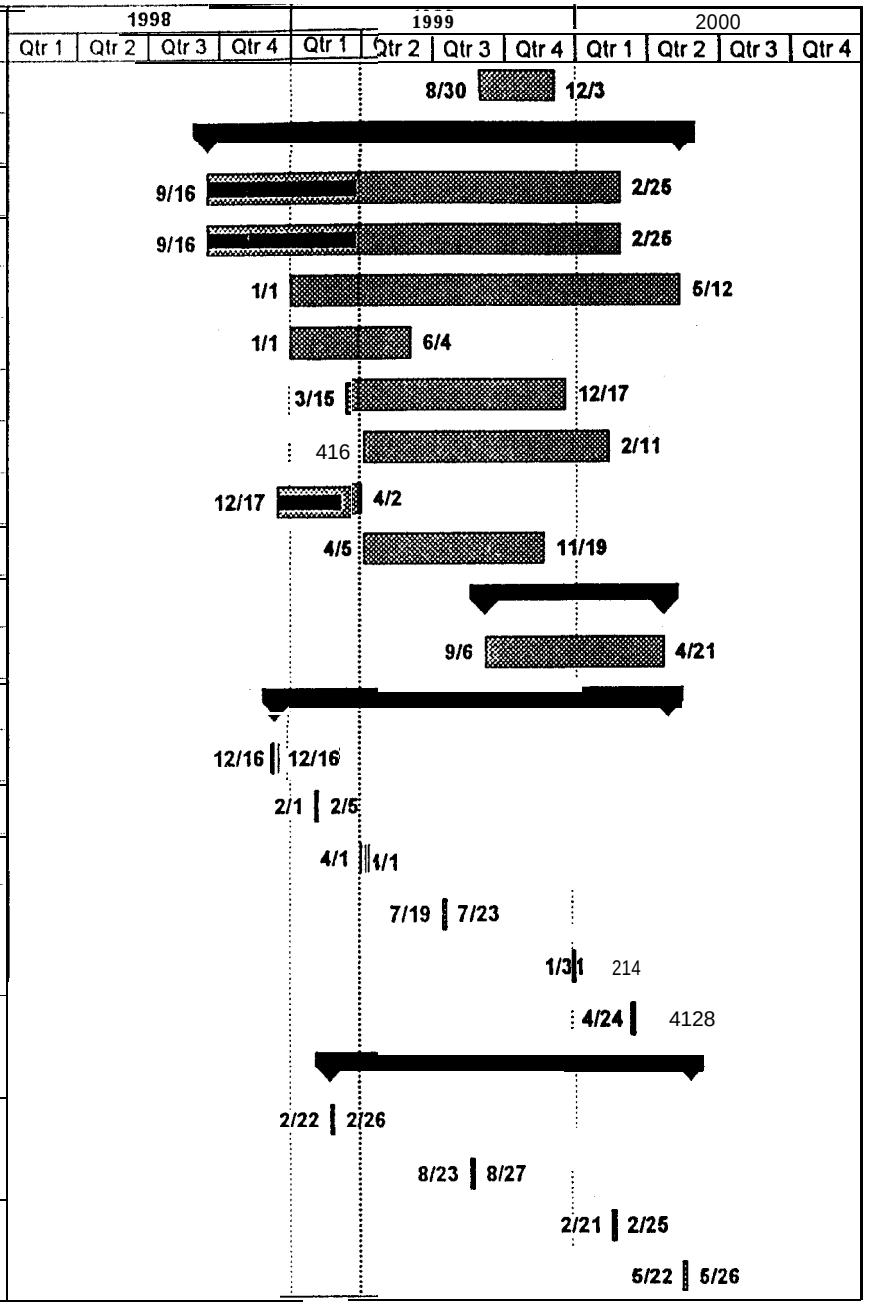
Project: Mar2599
Date: Tue 3/30/99

Task Progress Milestone Summary

Enclosure 3

MSFC ISO 9001 Implementation Plan for Expansion of Scope

ID	Task Name	Start	Finish
188	Organization Review and Approval	Mon 8/30/99	Fri 12/3/99
189	Conduct ISO 9000 Training	Wed 9/16/98	Fri 5/12/00
190	internal Auditor	Wed 9/16/98	Fri 2/25/00
191	Lead Auditor	Wed 9/16/98	Fri 2/25/00
192	Preparing for an Audit (Auditees)	Fri 1/1/99	Fri 5/12/00
193	General Employee -Refresher/ New Scope Impact	Fri 1/1/99	Fri 6/4/99
194	Procedures	Mon 3/15/99	Fri 12/17/99
195	Instructions	Mon 4/5/99	Fri 2/11/00
196	Submit New Scope and Application to NQA	Thu 12/17/98	Fri 4/2/99
197	New Quote/Contract Change with NQA	Mon 4/5/99	Fri 11/19/99
198	Internal Audits	Mon 9/6/99	Fri 4/21/00
199	Conduct Internal Audits	Mon 9/6/99	Fri 4/21/00
200	MQC - Management Reviews (2 per year minimum)	Wed 12/16/98	Fri 4/28/00
201	Management Review	Wed 12/16/98	Wed 12/16/98
202	Management Review	Mon 2/1/99	Fri 2/5/99
203	Management Review	Thu 4/1/99	Thu 4/1/99
204	Management Review	Mon 7/19/99	Fri 7/23/99
205	Management Review	Mon 1/31/00	Fri 2/4/00
206	Management Review	Mon 4/24/00	Fri 4/28/00
207	Registration Audits by NQA	Mon 2/22/99	Fri 5/26/00
208	Surveillance	Mon 2/22/99	Fri 2/26/99
209	Surveillance	Mon 8/23/99	Fri 8/27/99
210	Surveillance & Pre-Assessment to New Scope	Mon 2/21/00	Fri 2/25/00
211	Registration Audit to New Scope	Mon 5/22/00	Fri 5/26/00



Project: Mar2599
Date: Tue 3/30/99

Task | Progress | Milestone | Summary

1999 Internal Quality Audit Schedule

Organization	Feb	Mar	Apr	May	June	July	u	A g	S e p	Oct	Nov	Dec	Jan	Feb
Office of the Director	8						9							14
Off ice of Chief Financial Officer				31									17	
Systems Management Off ice												13		
Space Shuttle Projects Off ice						12								7
CHANDRA	8									18				
Procurement Off ice											1			
Chief Counsel	8							6						
Equal Opportunity Office								6						
Safety and Mission Assurance Off ice			26					13						
Customer and Employee Relations Directorate										4				
Center Operations Directorate						26								14
Science Directorate														7'
Science Off ices														7
Microgravity Science and Applications Department							2				15			
Space Science Department					28								31	
Earth Science Department					28								31	
Space Optics Manufacturing Technology Center					28								31	
Engineering Directorate	8									25				
Engineering Offices										25				
Avionics Department										4				
Structures, Mechanics, & Thermal Department					14								24	
Materials, Processes, & Manufacturing Department				3				27						
Engineering Systems Department										25				
Space Transportation Directorate											'29			
Space Transportation Off ices											29			
Advanced Concepts Department											29			
Propulsion Research Center			12								8			
Vehicle & System Development Department			12								8			
Subsystems & Component Development Department			12								8			
Technology Evaluation Department			12								8			
Flight Projects Directorate											'15			
Flight Projects Offices											15			
Flight Systems Department											15			
Payload Operations & Integration Department					14					11				
Ground Systems Department					14					11				

Prepared by Warren Woods 3/30/99

Enclosure 5