

National Aeronautics and
Space Administration

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



Reply to Attn of: DA01

TO: Distribution

FROM: DA01/A. G. Stephenson

SUBJECT: Minutes of the MSFC Quality Council Meeting

The MSFC Quality Council (MQC) met on Friday, June 23, 2000. The meeting began at 8:30 a.m., in Building 4200, Conference Room P110. 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 is on page 2 of Enclosure 2.

OPENING REMARKS (S. SAUCIER/DE01)

A status was provided for each of the challenges identified during the last MQC meeting.

There has not been much progress in recognition of the importance of ISO at the working and mid-management levels. Directorate and Office level are doing an outstanding job; however, word is not getting passed all the way down to the working level. This problem is not specific to just ISO.

The need for additional training was one of the reasons that we postponed the full scope registration. There has been a lack of feedback from organizations on training needs. There was a discussion about whether or not there has been some confusion regarding the request for identification of training needs. The Customer and Employee Relations (CaER) Directorate had requested information over two months ago. The request from the ISO team is related only to training on directives related to the expansion of scope.

There has also been a problem with lack of attendance at scheduled training. J. Kennedy/ED01 stated that he was not aware of this problem and that he has not received any notification when personnel do not attend scheduled training. T. Washington/CD01 stated that a notification is provided to employees' supervisors.

Organizations are encouraged to send people to the Lead Auditor training at Hagerstown. NASA Headquarters covers all costs except for transportation.

The presentation charts are included as pages 4-6 of Enclosure 2.

DOCUMENTATION STATUS (S. SAUCIER/DE01)

A status of the documentation changes that have been made in the past year was provided. A great deal of work has been done both for the expansion of scope and for continuous improvement of our processes. There were 85 directives identified for revision under the expanded scope, and 75 of these have been completed. Other changes have been made in 134 completed revisions. Twelve additional revisions for continuous improvement are currently in the DCB process. Organizations have also reported 97% completion of instructions required for implementation of the new scope.

The presentation chart is included as page 8 of Enclosure 2.

NQA SURVEILLANCE AUDIT REPORT STATUS (M. DEMURRAY/HEI)

During the National Quality Assurance (NQA) Surveillance Audit conducted at the Center on August 23-25, 1999, the NQA auditor documented a total of three findings. Two of the findings were observations and one of the findings was a minor nonconformance. One additional minor nonconformance was generated internally to address the potential for generic implications of one of the NQA findings. All of the NQA findings have been closed; however, the MSFC generic nonconformance remains open. Two organizations are still in the process of developing instructions for performing computer system backups.

The last NQA Surveillance Audit was conducted at the Center on March 6-8, 2000. During the visit, the NQA auditor documented a total of four findings. Two of the findings were observations and two were minor nonconformances. One additional minor nonconformance was generated internally to address the potential for generic implications of one of the NQA findings. All of these findings have been closed.

The presentation charts are included as pages 10-12 of Enclosure 2.

MOC ACTION ITEMS STATUS (S. SAUCIER/DE01)

The ten open actions from previous MOC meetings were presented and discussed. The actions were:

MOC-0020 – Review the Internal Task Agreement process at the Center.

Final content and format revisions of MPG 1230.1, "Center Resources Management Process," are being worked. The DCB submission date is expected in July. This action remains open.

MOC-0026 – Implement a system to provide an automatic notification specifically to affected document OPRs when applicable documents are changed/canceled.

The existing notification process was presented to the ISO Implementation team on April 4. The process includes four notifications of any document change, including one general

and one specific to any Directive OPR Designee who has cited an applicable document that has been canceled. The MSFC Management Representative directed that four notices are sufficient and that no further action should be taken. This action was closed.

MQC-0027 – Change the internal audit schedule to complete internal audits to the full scope prior to the pre-assessment in order to prevent a major nonconformance.

The internal audit schedule was updated and approved on March 22 to reflect a completion date for the year 2000 audits of July 31, 2000. Due to the postponement of the increased scope, a new schedule has since been prepared to reflect the present audit needs of the Center. This action was closed.

MQC-0028 – Identify/develop a method to address field use hardware problems instead of using the DR system.

This action was initiated based on the last report to the MQC that there had been thirty-seven (37) discrepancy records (DRs) written against the Mir Glovebox hardware to document nonconformances resulting from not only normal wear and tear, but also abnormal wear (i.e., filter contamination). MPG 8730.3, "Control of Nonconforming Product," defines the DR as the appropriate method for documenting these nonconformances. The current system is adequate for addressing in-flight and post-flight anomalies. Some of the specific Mir Glovebox items could have been returned to print, and should have been documented on a Squawk instead of a DR. This action was closed.

MQC-0029 – Put out a letter discussing the value of participating as an internal auditor to encourage increased auditor participation and commitment.

A memo was issued from the Center Director on May 22, emphasizing the value of participating in internal audits. This action was closed.

MQC-0030 – Ensure Individual Development Plans (IDPs) include auditor support.

This issue was addressed in the letter from the Center Director referenced in MQC-0029 above. "If appropriate," IDPs should be considered. This action was closed.

MQC-0031 – Provide outstanding requests for auditor support to each Organization Director.

After the last MQC, the audit schedule changed completely. A new schedule was developed, and when input to that schedule became late, a message was sent to each of the delinquent Directorate/Office heads. Appropriate action was taken after the notification. This will be an ongoing process when the Audit Manager does not get timely responses. This action was closed.

MQC-0032 – Provide a status report on auditor support to the Center Director in one month.

A status of the auditor support was provided during the March 20th Executive Staff meeting. This action was closed.

A. Roth/FD01 stated that his organization has some people who have been auditors for some time and have been used over and over again. He is working to get a larger pool of auditors to ensure that there are enough trained people to allow others to rotate off. A good turnover is good. A person can learn a lot from this activity about the Center. It is not “just another thing you have to do.”

MQC-0033 – Consolidate training records for “overhead” training, affecting 100% of the Center, into one central location.

The organizations were asked to assist in identification of mandatory training requirements. There were nine training courses that the organizations submitted that were mandatory for employees. All these records are being maintained by the CaER organization for civil service employees only. This action was closed.

MQC-0034 – Provide a status on the calibration system to the Center Director in one month.

The status of the calibration system had not been provided to the Center Director. The current status was presented to the MQC in this meeting. The number of delinquent category 1 items has decreased from over 5,500 in December 1999, to 749 on June 18, 2000. The numbers are still too high, and this continues to be an area of concern. There was extensive discussion about the high numbers, age of overdue items, causes, and potential risks. This action was closed based on the status provided, and a new action was issued.

MQC-0035 - Organizations are to review their delinquent category I equipment lists and either re-categorize equipment, get equipment to the calibration laboratory for calibration, or correct any errors on the list by July 28, 2000. A status will be provided in the Center Staff meeting in two weeks.

(All Affected Organizations, Due 07-28-00; S. Saucier/DE01, Due 07-10-00)

The presentation charts are included as pages 14-23 of Enclosure 2.

INTERNAL QUALITY AUDIT REPORT (D. MILLER/QS10)

Since the last MQC meeting, there have been four internal audits at the Center. Staffing for the audits has been less of a problem; however, participation in pre-audit planning meetings remains an issue. An auditor’s commitment to an audit must begin prior to the actual week of the audit in order to prepare properly.

Currently, there are 70 open nonconformance reports (NCRs) from the audits, with 59 of those in a late status. A little over half of these are due to missed target completion dates by the organizations. The majority of the rest are due to overdue verifications by auditors. An auditor's commitment to an audit does not end until the NCRs have been verified for closure. This activity can take place weeks or months after the actual audit has been performed.

A full round of internal audits will be completed by the second week of December. Audit schedules will be based on calendar years from now on.

The presentation chart is included as page 25 of Enclosure 2.

CORRECTIVE AND PREVENTIVE ACTION PROGRAM (D. MILLER/QS10)

New charts showing data for the corrective and preventive action system for the past year were provided. The trend shows a decrease in average age of Recurrence Control Action Requests (RCARs), with significant drops apparent around the time of the scheduled surveillance audits by NQA. The number of open RCARs for each month corresponds with this trend.

Currently, there are 21 open RCARs. Since the last MQC meeting, 16 Quality System Deficiency Notices (QSDNs) have been submitted. Eight of those were elevated to RCARs. Twenty-three (23) Discrepancy Reports (DRs) have been generated with 8 resulting in new RCARs. There have been 2 Customer Comments received, both compliments.

The presentation chart is included as page 27 of Enclosure 2.

ISSUES (S. SAUCIER/DE01)

The top four areas of audit findings were presented and discussed. These areas are document and data control, safety, the management system, and control of quality records. It was pointed out that while these are our top problem areas, none of these constitute a large number of findings. We feel that the management system is working and that we are not at any risk for our registration.

The presentation charts are included as pages 29-30 of Enclosure 2.

CLOSING REMARKS (S. SAUCIER/DE01)

For the NQA Surveillance Audit on August 29-30, the ISO team recommends that all flight projects be subject to audit. (**Note: The dates of the audit have been changed since the meeting to August 30-31.**) In the past we have selected projects that we expected to do well in the audits. This time everyone will be fair game.

The elements to be audited are:

- 4.1 Management Responsibility
- 4.2 Quality System

- 4.4 Design Control
- 4.8 Product Identification and Traceability
- 4.9 Process Control
- 4.14 Corrective and Preventive Action
- 4.17 Internal Quality Audits
- 4.20 Statistical Techniques
- Customer complaints
- Use of the NQA logo

Some of the challenges ahead include: continuing to develop a strong continuous improvement effort that is an integral part of our ISO 9000 process, recognition of the importance of ISO at the working and mid-management levels, training on the new/revised Directives, meeting commitments for training, readiness for the upcoming audits, continued commitment to planned audits, and maintaining our momentum.

The presentation charts are included as pages 32-33 of Enclosure 2.

OTHER (S. SAUCIER/DE01)

Based on the last round of internal audits, all organizations except TD and SD are ready for the full scope registration audit. We are not knocking TD and SD. We are only noting that we are close to being ready for the full scope.

The organizations were requested to provide benefits of ISO implementation within their own organizations. The feedback included some significant benefits/improvements.

These charts were not presented, but are included as pages 35-42 of Enclosure 2, as well as on two additional pages attached to the presentation.

J. Kennedy/DE01 noted that the requirement for training plans was mostly grand-fathered at the time of our initial registration. Now that the Center has new employees, the requirement must be addressed. As a part of processing in, the procedure requires supervisors perform an evaluation for each new employee. The requirement also applies to transferring employees. It is a good idea to have a training plan for all employees. There was some discussion about ensuring that supervisors are meeting the requirements for developing training plans.

MQC-0036 - Look into providing a method for notifying supervisors of the requirement to identify training requirements and develop a training plan for new employees.

(T. Washington/CD01, Due: TBD – A status will be provided at the next MQC meeting.)

No other items for record were discussed at the meeting.

Original signed by C. Griner

A. G. Stephenson
Chairman
MSFC Quality Council

Enclosures

Distribution:
Council Members
Meeting Attendees

ISO 9000 MSFC QUALITY COUNCIL MEETING

DATE: FRIDAY, June 23, 2000 LOCATION/ TIME: BLDG. 4200/P110, 8:30 A.M.

MEETING ATTENDANCE: [Please Check (X) Your Name to Record Meeting Attendance.]

<u>NAME</u>	<u>ORGANIZATION</u>	<u>PHONE</u>	<u>FAX</u>
Director's Office			
____ Art Stephenson	DA01	544-1912	544-5228
✓ James W. Bilbro	DA01	544-3467	544-8345
____ Bob L. Sackheim	DA01	544-1938	
____ Andrew Smith	DA01	544-4932	544-1401
✓ Carolyn Griner	DD01	544-1914	544-7580
✓ Sid Saucier	DE01	544-1919	544-7920
Center Operations Directorate			
____ Paul Allison	AD01	544-5697	544-7920
Jim Carter	AD01	544-6630	544-7920
____ Sheila Cloud	AD01	544-0120	544-5893
____ Linda Carpenter	AD02	544-8236	544-5867
DA Dan Adams	AD10	544-1614	544-8259
____ Clark Boaz	AD20	544-4923	544-4435
✓ Michael W. Haynes	AD23	544-7933	544-8890
____ Lana Cucarola	AD30	544-0096	544-8752
✓ Annette Tingle	AD30	544-4522	544-8752
____ Amanda Wilson	AD33	544-4511	544-8752
____ Lisa Adkins	AD40	544-7546	544-6570
____ Roy Malone	AD40	544-0506	544-9190
____ Polly Edwards	AD50	544-4536	544-2101
____ Brad Garland	AD50	544-4537	544-2101
Customer & Employee Relations Directorate			
____ Susan Cloud	CD01	544-5377	544-2610
✓ Tereasa Washington	CD01	544-7491	544-6420
____ Pat Shultz	CD20	544-7559	544-4809
____ Caroline Wang	CD30	544-3887	544-6030
Engineering Directorate			
✓ Jim Kennedy	ED01	544-1000	544-4100
____ Bill Kilpatrick	ED01	544-1001	544-5896
✓ Jim Blanche	ED16	544-3707	544-0900
____ Terry Roberts	ED16	544-3717	544-0900
✓ Rod Stallworth	ED23	544-7189	544-8838
____ Jim Lindsay	ED27	544-1301	544-0236
✓ Dawn Cross	ED36	544-1835	544-5877
____ Richard Lamb	ED37	544-1037	544-4307
✓ Toan Vu	ED43	544-6585	544-9614
____ Karen Iftikhar	ED44	544-3653	
Flight Projects Directorate			
✓ Axel Roth	FD01	544-0451	544-7580
____ Jan Davis	FD01	544-0455	544-7580
✓ Jackie Steadman	FD10	544-1940	544-5590
____ Jack Stokes	FD22	544-1764	544-5194
____ Michael Nelson	FD41	544-2059	544-9353

Enclosure 1

	Chief Counsel		
<input checked="" type="checkbox"/> Bill Hicks	LS01	544-0010	544-0258
<input type="checkbox"/> Jim Frees	LS01	544-0123	544-5867
<input type="checkbox"/> Abbie Johnson	LS01	544-0014	544-0258

	Space Shuttle Projects Office		
<input checked="" type="checkbox"/> Alex McCool (<i>J. Singel for</i>)	MP01	544-0718	544-2432
<input type="checkbox"/> Jeff Spencer	MP21	544-7498	544-7713
<input type="checkbox"/> John Pea	MP71	544-8437	544-5799

	Equal Opportunity Office		
<input checked="" type="checkbox"/> Charles Scales	OS01	544-4927	544-2411
<input type="checkbox"/> Billie Swinford	OS01	544-0087	544-2411

	Procurement Office		
<input checked="" type="checkbox"/> Steve Beale	PS01	544-0257	544-3214
<input type="checkbox"/> Byron Butler	PS01	544-0253	544-4400
<input checked="" type="checkbox"/> Ray Woods	PS10	544-0384	544-3223
<input checked="" type="checkbox"/> Jerry Williams	PS10	544-0295	544-4401

	Safety and Mission Assurance		
<input checked="" type="checkbox"/> Jim Ellis	QS01	544-0721	544-3893
<input checked="" type="checkbox"/> Amanda H. Goodson	QS01	544-2353	544-2053
<input type="checkbox"/> Ron Mize	QS01	544-2485	544-8101
<input type="checkbox"/> Terry Hamm	QS10	544-7402	544-3241
<input checked="" type="checkbox"/> Don Miller	QS10	544-8361	544-4857
<input checked="" type="checkbox"/> Mark Strickland	QS10	544-7432	544-4155
<input checked="" type="checkbox"/> Kerry Warner	QS10	544-7350	544-8585
<input type="checkbox"/> Warren Woods	QS10	544-2275	544-5685
<input checked="" type="checkbox"/> <i>Pat Moore-Hartley</i>	<i>QS10</i>		

	Office of Financial Officer		
<input type="checkbox"/> Dave Bates	RS01	544-0052	544-0635
<input type="checkbox"/> Sandy Coleman	RS01	544-0795	544-3536
<input type="checkbox"/> Frank D. Mayhall	RS01	544-7266	544-4479
<input type="checkbox"/> John Howell	RS30	544-5219	544-5867
<input checked="" type="checkbox"/> Sharal Huegele	RS30	544-7286	544-9055
<input type="checkbox"/> Sheila Jandebeur	RS30	544-3061	544-9055
<input checked="" type="checkbox"/> <i>Janie Locke</i>	<i>RS50</i>	<i>544-5413</i>	<i>544-9055</i>

	Science Directorate		
<input type="checkbox"/> Frank Rose	SD01	544-7721	544-9243
<input type="checkbox"/> Robin Henderson	SD10	544-1738	544-8639
<input type="checkbox"/> Lloyd Love	SD20	544-7702	544-2559
<input type="checkbox"/> Roger Chassay	SD30	544-1969	544-5975
<input type="checkbox"/> Rex Geveden	SD30	544-9335	544-5975
<input type="checkbox"/> Clark Darty	SD40	544-2728	544-5892
<input type="checkbox"/> Tom Dollman	SD40	544-6568	544-8500
<input type="checkbox"/> Mike McCollough	SD50	544-4368	544-5800
<input type="checkbox"/> Ed Reichmann	SD50	544-7603	544-5800
<input type="checkbox"/> Tim Miller	SD60	922-5882	922-5823
<input type="checkbox"/> Diane Samuelson	SD60	922-5832	922-5723
<input type="checkbox"/> Joe Stroud	SD70	544-3529	544-2659
<input type="checkbox"/> Roy Young	SD70	544-4965	544-2659
<input checked="" type="checkbox"/> Tom Fleming	SD80 SD01	544-3962	544-5975
<input checked="" type="checkbox"/> Don Thurman	SD80	544-1908	544-9243
<input type="checkbox"/> Wes Darbro	SD92	544-7742	544-2559

Marshall Quality Council

Enclosure 2

June 23, 2000



Agenda

- **Opening Remarks (Art Stephenson, Sid Saucier)**
- **Documentation Status (Sid Saucier)**
- **NQA Surveillance Status (Mary DeMurray)**
- **MQC Action Items Status (Sid Saucier)**
- **Internal Quality Audit Report (Warren Woods)**
- **Corrective and Preventive Action Program (Warren Woods)**
- **Issues (Sid Saucier)**
- **Closing Remarks (Sid Saucier)**
- **Other**

Opening Remarks

Art Stephenson – Sid Saucier



Opening Remarks

Status of Challenges from Last MQC – Sid Saucier

- **Recognize the importance of ISO at the working and mid-management levels**
 - Lost some momentum due to delay in full scope
 - Not much progress in this area

- **Training on new/revised Directives**
 - Lack of feedback on training requirements
 - Lack of attendance in scheduled training



Opening Remarks

Status of Challenges from Last MQC (cont) – Sid Saucier

- **Readiness for our next surveillance audit in Aug. 2000**
 - Continued Internal Audits to the scope of registration, with opportunity to be audited to full scope
 - Recommend Self Assessments prior to the August Surveillance
- **Implementation of ISO 9001 rev 2000**
 - HQ recommends that we initiate planning for implementation of the revised Standard (rev 2000)
 - We will have 3 years from the date of approval to implement the new version (expected approval by Dec 2000)
 - New version emphasizes Customer Satisfaction and Continuous Improvement



Opening Remarks

Status of Challenges from Last MQC (cont) – Sid Saucier

- **Auditor Support**
 - Improvements noted as a result of Directorate/ Office Management attention

- **Maintaining our momentum**
 - Full scope certification delay has had some impact
 - Have continued status of the completion of Directives as a part of the ISO team meetings

Documentation Status

Sid Saucier



Documentation Status

Sid Saucier

Documentation changes (6/4/99 - 6/22/00)

<p><u>Directives: (new scope)</u></p> <p>75 Complete 9 In DCB process nearing completion 1 Not yet submitted 85 Total</p>	<p><u>OI's:(new scope)</u></p> <p>531/545 complete for 97%</p>
<p><u>Other Changes (Continuous Improvement)</u></p> <p>134 Complete 12 in DCB process 146 Total</p>	

***Status of NQA Aug. 1999 and Mar. 2000
Surveillance Findings***

Mary DeMurray



Status of NQA Aug. 1999 Surveillance Findings

Mary DeMurray

- **NQA Surveillance Audit Findings**

Observations	2
Minor Nonconformances	1
Total Findings	3

- **One additional generic nonconformance issued by MSFC**
- **Three (3) NQA findings have been closed to date**
- **One (1) MSFC generic nonconformance remains open**
 - **Corrective action has been initiated; however, further follow-up will be required.**



Status of NQA March 2000 Surveillance Findings

Mary DeMurray

- **NQA Surveillance Audit Findings**

Observations	2
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Minor Nonconformances	2
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Total Findings	4
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- **One additional generic nonconformance issued by MSFC**
- **All findings have been closed**



NQA Surveillance Findings - August 1999 & March 2000

Mary DeMurray

- **Internal Audits reviewed exhibit inconsistent recording of objective evidence. (Closed)**
- **The system backup procedure is not a controlled document. (Generic issue - Open)**
- **The 3 year retention time for management review meeting minutes is not clearly defined. (Closed)**
- **The stamp audit records and frequency requirements are not clearly defined in any procedure. (Closed)**
- **The ASRI contract records are not consistently filed in a way so as to be readily retrievable. (Closed)**
- **The ASRI contract records are not consistently filed in a way so as to be readily retrievable. (Generic issue - Closed)**
- **The final internal audit reports do not always indicate that they audited all applicable elements as required on the audit plans. (Closed)**

MQC Action Items Status

Sid Saucier



MQC Action Items Status (cont)

MQC-0020 - Sid Saucier

MQC-0020 - Review the Internal Task Agreement process at the Center.

- **Status - The draft MPG 1230.1, “Center Resources Management Process” was presented to the Cross Cutting Team on January 24th. To reduce the volume of DCB cycle comments, the document was reviewed by the Business Management Council. Final content and format revisions are currently being made by the CFO Office, with planned DCB submission in July.**



MQC Action Items Status (cont)

MQC-0026 - Sid Saucier

MQC-0026 - Implement a system to provide an automatic notification specifically to affected document OPR's when applicable documents are changed/canceled.

- **Status - Existing notification process was presented at April 4, 2000, ISO Implementation Team. Process includes 4 notifications of any document change, including one general and one specific to any OPR Designee who has cited an applicable document that has been canceled. The MSFC Management Representative directed that 4 notices are sufficient and that no further action be taken.**



MQC Action Items Status (cont)

MQC-0027 - Sid Saucier

MQC-0027 - Change the internal audit schedule to complete internal audits to the full scope prior to the pre-assessment in order to prevent a major nonconformance.

- **Status – The Internal Audit Schedule for the year 2000 was updated and approved on March 22, 2000 to reflect a completion date of July 31, 2000.**
- **Due to the postponement of the increased scope, a new schedule has been prepared and was approved on June 12th to reflect the present Audit needs of the Center.**



MQC Action Items Status (cont)

MQC-0028 - Sid Saucier

MQC-0028 - Identify/develop a method to address field use hardware problems instead of using the DR system.

- **Status - Thirty-seven (37) discrepancy records (DR's) were written against the Mir Glovebox hardware to document nonconformances resulting from not only normal wear (i.e., dent, dings), but also abnormal wear (i.e., filter contamination).**
- **MPG 8730.3, Control of Nonconforming Product Paragraph 3.2 (a): "Use Discrepancy Record/Test Discrepancy Record (DR/TDR) (MSFC Form 460) to define all other nonconformances to applicable drawings, specs, tests, or other requirements. The DR is utilized for recording and dispositioning hardware/software nonconformances (see figure 2) for in-scope projects under the cognizance of the S&MA Office including in-flight and post-flight anomalies."**
- **Current system is adequate for addressing in-flight and post-flight anomalies. The items that could have been returned to print should have been documented on a Squawk instead of DR.**



MQC Action Items Status (cont)

MQC-0029 & -0030 - Sid Saucier

MQC-0029 - Put out a letter discussing the value of participating as an internal auditor to encourage increased auditor participation and commitment.

Status - A memo was issued from the Center Director on May 22, emphasizing the value of participating in internal audits.

MQC-0030 - Ensure Individual Development Plans include auditor support.

Status – This issue was addressed in the letter from the Center Director. “If appropriate,” IDP should be considered.



MQC Action Items Status (cont)

MQC-0031 - Sid Saucier

MQC-0031 - Provide outstanding requests for auditor support to each Organization Director.

- **Status - After the last MQC, the audit schedule changed completely. A new schedule was developed, and when input to that schedule became late, a message was sent to each of the delinquent Directorate/Office heads. Appropriate action was taken at that point. This will be an ongoing process when the Audit Manager does not get timely responses.**



MQC Action Items Status (cont)

MQC-0032 - Sid Saucier

MQC-0032 - Provide a status report on auditor support to the Center Director in one month.

- **Status - During the March 20th Executive Staff Meeting, a status of the auditor support was given. It reflected a schedule that was ready for the Audit Manager's signature. That schedule was signed on the 22nd of March and revised on June 12th.**



MQC Action Items Status (cont)

MQC-0033 - Sid Saucier

MQC-0033 - Consolidate training records for “overhead” training, affecting 100% of the Center, into one central location.

- **Status:** There were 9 training courses that the organizations submitted that were mandatory for employees.

- | | |
|---|--|
| 1. Property Management training (all) | 6. COTR (for certain employees) |
| 2. ISO9000 overview (all) | 7. IMPAC credit card training (for certain employees) |
| 3. IT security training (all) | 8. Building managers training (for certain employees) |
| 4. MSFC Safety and Health 2000 training (all) | 9. Records management training (for certain employees) |
| 5. Ethics (for certain employees) | |

- **All these records are being maintained by the CaER organization for civil service employees only. (MPG 3410.1 is being revised to require the Center Director’s approval for Centerwide mandatory training.)**



MQC Action Items Status (cont)

MQC-0034 - Sid Saucier

MQC-0034 - Provide a status on the calibration system to the Center Director in one month.

Org	12/17/99	5/17/00	5/30/00	6/13/00	6/18/00
AD	No data	144	51	55	33
QS	No data	0	0	0	0
ED	No data	828	591	494	277
FD	No data	1	0	0	0
MP	No data	No data	0	1	1
SD	No data	21	0	1	4
TD	No data	242	323	405	411
Misc	No data	27	23	23	23
Totals	5,500+	1263	988	979	749



MQC Action Items Status (cont)

MQC-0034 - Sid Saucier

MQC-0034 - Provide a status on the calibration system to the Center Director in one month (cont).

- **12/17/99**
 - 25,945 items listed as Category 1
 - 5,500 + Delinquent Items
- **6/15/00 – much improved; however, additional work still needed**
 - 19,473 items listed as Category 1 (a reduction of 6,472)

– Delinquent	<u>6/15/00</u>	<u>6/20/00</u>
• < 6 months overdue	310	391
• 6 - 12 months overdue	168	121
• 12 - 24 months overdue	136	77
• 24 - 36 months overdue	103	86
• 36 - 48 months overdue	77	66
• 48 - 60 months overdue	56	44
• > 60 months overdue	28	26
Total Overdue	<u>878</u>	<u>772</u>

Internal Quality Audit Report

Warren Woods



Internal Quality Audit Report

Audit Status - Warren Woods

- **Four Internal Audits since the last MQC.**
- **The next audit is 7/10/00.**
- **Staffing is much less of a problem. However, Audit planning meeting attendance remains an issue.**
- **Full round of Internal Audits will be completed during the week of December 4th.**
- **Future schedules will reflect a January to December window.**
- **Status of Open NCR's**
 - **70 Open Non-Conformance Reports (NCR's)**
 - **59 are late**
 - **Notices have been sent to those who have late items**
 - **The greatest number are due to missed target completion dates**
 - **Second greatest was due to Auditors verification for closure is overdue**

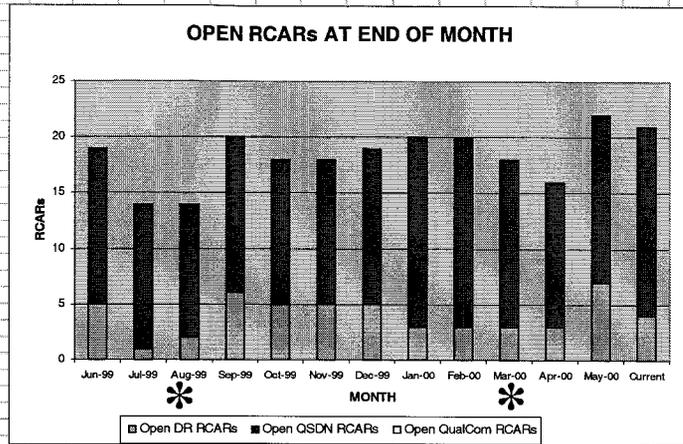
Corrective & Preventive Action Program

Warren Woods



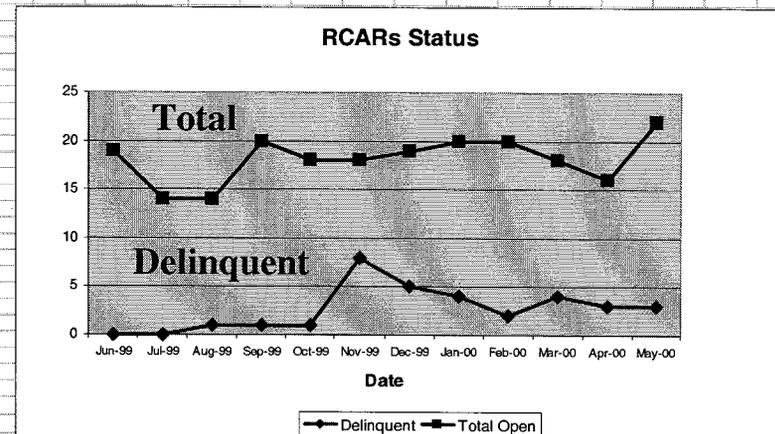
Corrective & Preventive Action Program

Status - Warren Woods



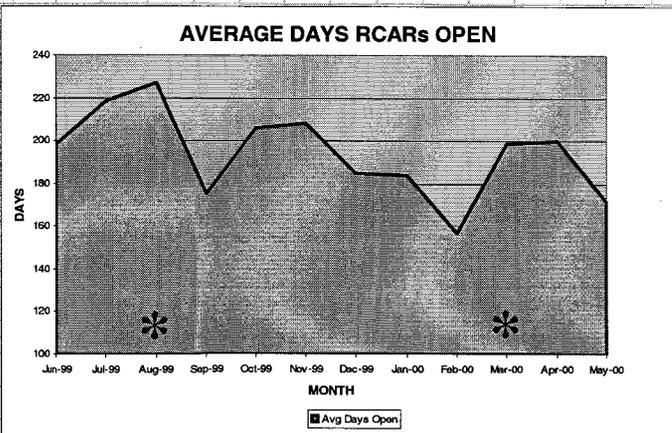
Open DR RCARs:	5	1	2	6	5	5	5	3	3	3	3	7	4
Open QSDN RCARs:	14	13	12	14	13	13	14	17	17	15	13	15	17
Open QualCom RCARs:	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Open RCARs:	19	14	14	20	18	18	19	20	20	18	16	22	21

HE/J. McPherson 6/20/00



Delinquent Responses:	0	0	1	1	1	8	5	4	2	4	3	3
Total Open RCARs:	19	14	14	20	18	26	20	20	18	22	16	22
Percent Delinquent:	0%	0%	7%	5%	6%	44%	26%	20%	10%	22%	19%	14%

HE/J. McPherson 06/20/00



Average Days Open	198.2	218.4	227.3	175.2	206.2	208.4	185	183.9	156.7	198.8	199.9	171.6
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HE/J. McPherson 6/20/00

	TOTAL Since 10/97	Made to RCARs	TOTAL Since 2/18/00	Made to RCARs
DR	158	28	23	3
QSDN	89	63	16	8
QualCom	15	0	2	0
TOTAL	262	91	41	11

ISSUES

Sid Saucier



Issues

Internal Audit Findings – Sid Saucier

- **4.5 Document and Data Control**
 - **Organizational Master List not kept up to date**
 - **General lack of awareness of document content**
 - **Aware of organizational Master List but not the MSFC Master List**
- **4.21 Safety**
 - **Generally unaware of Safety requirements**
 - **Lack of Records**



Issues

Internal Audit Findings – Sid Saucier

- **4.2 Management System**
 - **Lack of awareness of the MSFC Management System (Directives and Guidelines)**
 - **Numerous cases where activities being performed were not documented**
 - **People made improvements/modifications to their processes but had not updated respective documents**
- **4.16 Control of Quality Records**
 - **Quality records not being maintained as required**
 - **Quality records not identified as such**
 - **Lack of awareness of what constitutes a quality record**

CLOSING REMARKS

Sid Saucier



***Next Surveillance
August 29-30 — Sid Saucier***

- **All flight projects are subject to audit**
- **Elements to be Audited**
 - **4.1 Management Responsibility**
 - **4.2 Quality System**
 - **4.4 Design Control**
 - **4.8 Product Identification and Traceability**
 - **4.9 Process Control**
 - **4.14 Corrective and Preventive Action**
 - **4.17 Internal Quality Audits**
 - **4.20 Statistical Techniques**
 - **Customer complaints**
 - **Use of the NQA logo**



Challenges Ahead — Sid Saucier

- **Continue to develop a strong “Continuous Process Improvement” effort that is an integral part of our ISO 9000 process**
- **Recognize the importance of ISO at the working and mid-management levels**
- **Training on new/revised Directives**
- **Meeting commitments for training (Attendance)**
- **Readiness for our next surveillance audit in August 2000**
- **Continued Management/Employee commitment to planned audits**
- **Maintaining our momentum**

Benefits of ISO
(Feedback from the Organizations)



Benefits of ISO – Sid Saucier

- **ISO has provided a valuable hierarchical system for MSFC documents. It has forced definition, decision, and documentation of some management processes that had been uncertain or undetermined prior to implementation of ISO.**
- **The electronic review/concurrence system developed during implementation, gives virtually every MSFC employee the opportunity to provide inputs to these documents to make the MSFC more productive, more efficient, and more competitive. This has given the employees a sense of ownership in the process**
- **Implementation has brought focus to the need for employee training.**



Benefits of ISO – Sid Saucier

- **Implementation has put discipline into each project/program to systematically and regularly 'keep their (documentation) house in order'.**
- **Implementation has improved communication to employees of emphasis, priority, and commitment of Center Management to concepts of structured, disciplined approach to quality and an improved understanding of Center “global” processes for all employees. It has established the understanding with the employees that management places a priority on Quality and provides a mechanism through which to achieve it.**



Benefits of ISO — Sid Saucier

- **Expanded employees' knowledge of Center operations and policies through the accessibility of directives and participation in the internal audit program**
- **Afforded employees the opportunity for professional development through participation in the internal audit program**
- **Directive review process allows input from every working level at the Center**
- **Forced documentation of operating and test procedures has allowed quicker transition for new hires, transfers and cross-training**
- **Discipline instituted by ISO has led to the improvement of test equipment operating procedures**



Benefits of ISO – Sid Saucier

- **Discipline instituted by ISO is improving record filing**
- **Improved the quality and communication of MSFC's Microgravity Products and Services**
- **With the implementation of the new Program/Project Data System in Microgravity Research Program Office, which consolidates the responses from GRC, JPL, and JSC, the electronic document review and approval process will provide instant access to the comments provided by the Centers. This will improve the quality of the consolidated response MRPO prepares.**



Benefits of ISO – Sid Saucier

- **ISO system creates standardization, at least within a Project. Processes and procedures that are developed in accordance with ISO elements, but customized to a specific Project, provide that standardization and cuts across the various Project elements.**
- **Participation in the ISO implementation process has required each CaER organization to review, analyze and document the processes used to carry out the assigned missions of each organization. This effort has led to a clearer understanding of those processes.**
- **The implementation of ISO has also compelled us to update those Center-wide regulations for which we are responsible and to make organizational-level procedures and guidelines available to all employees through the MSFC intranet.**



Benefits of ISO – Sid Saucier

- **The Marshall Management System, which is a central feature of the ISO implementation effort, has proven to be a powerful tool for assuring the timely collection of feedback from our customers and other stakeholders and for assuring our timely response to that feedback.**
- **Helped iron out gray areas between different groups**
- **Written word finally being updated**
- **Level of accessibility of documents improved**
- **Provides buy-in for everyone for the documents (no longer getting actions within documents by other organizations without buy-in)**



Benefits of ISO – Sid Saucier

- **Places emphasis on continuous improvement through the continual review of processes and procedures**
- **Heightened awareness and added discipline to existing processes to ensure proper operation by existing procedures**
- **Led to the identification and documentation of processes not previously defined**
- **Internal office procedures are now better documented and more consistently observed. This is especially helpful when one of our personnel has to fill in for someone who is out, and will also be very helpful when new personnel join our staff**



Benefits of ISO

- **ISO has prompted other MSFC organizations to update their procedures and regulations. Because of the role of the Chief Counsel's Office, we frequently have to refer to and often interpret MSFC directives. It certainly helps when those directives are consistent with each other and consistent with actual practice.**
- **Renewed emphasis on quality being one of our top goals, and top-level management has recognized this goal.**
- **Increased awareness of records responsibilities.**



Benefits of ISO

- **When properly followed, the ISO system provides for more expeditious approval/issuance of new and revised documents.**
- **Cancellation of many outdated directives and procedures that were either duplicative or no longer needed. ISO documents are now up-to-date and usable and more accessible through the electronic network.**
- **Emphasis on the importance of completing work in accordance with the proper procedures.**
- **Renewed emphasis on employees being very knowledgeable of their job responsibilities and the specific directives/procedures that apply to their jobs.**



Benefits of ISO

- **Better identification of NASA's responsibilities versus the contractors' responsibilities and the interface requirements involved.**
- **Consistent format for procedures throughout the Center.**
- **Visibility of the various personnel who are responsible for writing and reviewing/approving the directives/issuances. This has contributed to more timely processing of directives/organizational issuances.**
- **Streamlined and defined our processes, especially for foreign national visits.**
- **Update of regulations.**



Benefits of ISO

- **Improvement of processes, i.e. foreign national unique badges and the backup system that we ensured was in place for SOMIS. ISO caused us to be able to sustain little damage and recover after the love bug hit.**
- **Training for new employees has been enhanced as a result of having well-defined security policies and procedures.**
- **Protective Services Department provides more consistent security guidance as a result of the streamlined policies and procedures.**
- **Strengthened external relationships with other organizations as a result of the increased coordination, e.g., Export Control.**



Benefits of ISO

- **Provided greater MSFC awareness of Protective Services Department (PSD) processes, policies and procedures which has resulted in an increase in the frequency of employee requests for PSD advice and assistance, particularly in the area of technology protection and international visitors.**
- **Improved file management system, thus increasing efficiency and effectiveness.**
- **Improved strategic planning process.**
- **Allows for better focus on customer interaction, response, and processes.**
- **Streamlined process for directive approval.**



Benefits of ISO

- **Update of the Property Management Group (PMG) processes.**
- **Documentation Library on the web provides for easy access to directives.**
- **Required adherence to directives.**
- **Regularly scheduled self assessment of directives.**
- **Regularly scheduled audits.**
- **ISO prompted the Equal Opportunity Office to document the processes used in day-to-day operations in the office. This is especially helpful when one of our personnel has to fill in for someone who is out.**



Benefits of ISO

- **The OWI's were used as a training tool during some in-house training recently conducted by CFO. The benefit from ISO was that we were required to update the procedures/process flows and they can now be used for training new employees and cross training of our experienced employees.**

OTHER

Sid Saucier