



Department of Energy
National Nuclear Security Administration
Washington, DC 20585
June 15, 2001

OFFICE OF THE ADMINISTRATOR

The Honorable John T. Conway
Chairman
Defense Nuclear Facilities Safety Board
625 Indiana Avenue, NW.
Suite 700
Washington, D.C. 20004-2901

Dear Mr. Chairman:

This letter is in response to the Defense Nuclear Facilities Safety Board (Board) letter of March 15, 2001, on concerns relative to the maintenance program at the Y-12 National Security Complex (Y-12). In a letter dated April 18, 2001, to the Board, Defense Programs committed to a briefing on the maintenance program and to delivery of the Y-12 Maintenance Improvement Plan (MIP) after May 1, 2001. As you are aware, the Board was briefed on the path forward for improvement of the Y-12 maintenance program during your visit to the site on May 31, 2001. A copy of the Y-12 MIP is enclosed.

If you have any questions concerning our approach for improving the maintenance program at the Y-12 Plant, please contact me or have your staff contact Mr. David E. Beck at 202-586-4879 or Mr. Phil Aiken at 301-903-4513.

Sincerely,

THOMAS F. GIOCONDA
Brigadier General, USAF
Acting Deputy Administrator
for Defense Programs

Enclosure

cc w/enclosure:
M. Whitaker, S-3.1



United States Government

Department of Energy

National Nuclear Security Administration

memorandum

DATE: May 15, 2001

REPLY TO NADP-67:lvey

ATTEN OF:

SUBJECT: **MAINTENANCE WORK CONTROL**

TO:

Xavier Ascanio, Director, Office of Operations and Readiness, DP-24, GTN

Attached is the Y-12 Maintenance Improvement Schedule developed by BWXT Y-12, L.L.C. to address and correct maintenance deficiencies at the Y-12 National Security Complex. My staff has worked with BWXT Y-12 in the development of this document and concur in its contents. Please provide a copy of the attached to the Defense Nuclear Facilities Safety Board (DNFSB). As stated in the National Nuclear Security Administration's interim response to the DNFSB's March 15, 2001, letter, we will make arrangements to brief the Board on maintenance improvements at Y-12.

Please address any questions on this matter to Ken Ivey at (865) 574-0277.


for William J. Brumley
Manager
Y-12 Area Office

Attachment

cc w/attachment:

J. R. Martin, NADP-6, YAO

D. K. Hoag, NADP-66, YAO

T. B. Olberding, NADP-68, YAO



Y/IA-387

**Y-12
NATIONAL
SECURITY
COMPLEX**

**BWXT Y-12 FY 01 Maintenance
Improvement Schedule**

November 1, 2000-September 30, 2001

Prepared By:

Y-12 Maintenance Organization

Y/IA-387

Rev. 0.1

04/17/01

BWXT Y-12

FY 01 MAINTENANCE IMPROVEMENT SCHEDULE

November 1, 2000 - September 30, 2001

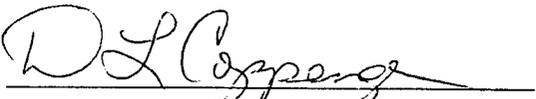
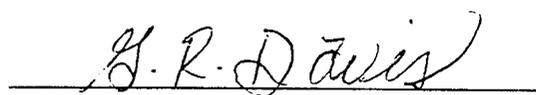
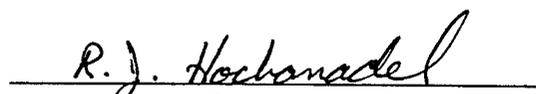
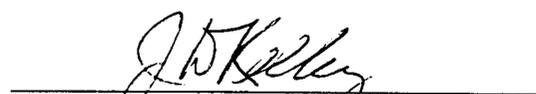
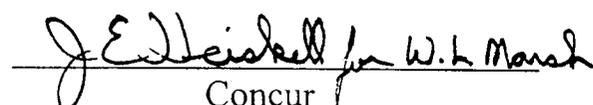
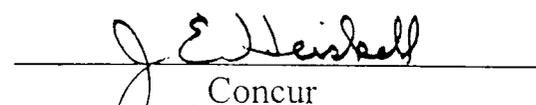
Prepared by: Y-12 Maintenance Organization

BWXT Y-12

FY 01 MAINTENANCE IMPROVEMENT SCHEDULE

November 1, 2000 - September 30, 2001

Approval and Concurrence

D. L. Coppenger	 Concur	<u>4/18/01</u>
G. D. Coppenger	 Concur	<u>4/18/01</u>
G. R. Davis	 Concur	<u>4/18/01</u>
R. J. Hochanadel	 Concur	<u>4/18/01</u>
J. D. Kelley	 Concur	<u>4/18/01</u>
W. L. Marsh	 Concur	<u>4/18/01</u>
P. W. Standifer	 Concur	<u>4/18/01</u>
J. E. Heiskell	 Concur	<u>4/18/01</u>

BWXT Y-12

MAINTENANCE IMPROVEMENT SCHEDULE

November 1, 2000 - September 20, 2001

Introduction

The purpose of this schedule is to bring continuing focus and direction to the task of accomplishing an on-going process to improve the cost effectiveness of providing maintenance services at the Y-12 National Security Complex, and the efficiency of meeting contractual maintenance requirements of the National Nuclear Security Administration (NNSA).

This schedule is intended to aid Y-12 Maintenance Organization in providing the direction and leadership necessary to accomplish defined actions, goals, and objectives that support continuous improvement in the maintenance function. As such, it should provide a reference document for managers in the overall management and performance improvement of the organization. It will be included, as appropriate, in the performance planning and review process for individual managers.

This schedule was initially developed by organizing and consolidating a large number of issues that had been identified over a period of several months as the result of a number of both internal and external reviews and assessments including Integrated Safety Management (ISM) Verification and Validation (V&V), Defense Nuclear Facility Safety Board (DNFSB) review, and BWXT Y-12 Corporate review of Enriched Uranium Operations (EUO). The Maintenance Organization has turned these issues into fifteen (15) specific Opportunities for Improvement (OFIs). It is intended that this schedule will serve not only as a means to organize responsive actions to previously identified issues, but an on-going means to manage continuous improvement of the maintenance function through coordination and integration of improvement initiatives. Thus, this schedule is seen as a "living document" that will receive continuing updates and revisions, and will serve to describe the current status of our continuous improvement efforts.

An Action Team process will pursue the specific OFIs listed below with a department-level maintenance manager responsible for each. Actions necessary to accomplish each OFI will be worked utilizing one or more Action Teams that will be defined with a formal Action Team Charter document that will include the overall purpose, action steps and due dates, progress reporting, and final deliverable expectations. The Charter will list team members and chairperson, and will be approved by the Maintenance Organization Manager. The Maintenance Organization Manager will hold a regularly scheduled monthly meeting with the department level managers to report and discuss progress on OFIs.

Opportunities for Improvement

OFI-1: Maintenance Training Program

Responsible
Manager: G. R. Davis

Objective: To establish a training program whereby baseline training requirements have been established for all Maintenance Organization personnel and a process exists that allows all personnel and their supervision to be knowledgeable of those requirements, the status of any deficiencies, and the actions necessary to remove those deficiencies.

Discussion: The Integrated Safety Management System (ISMS), Department of Energy (DOE) Verification and Validation, and the Lockheed Martin Energy Systems (LMES) self-assessment of ISMS in August 2000 stated that the lack of an effective training program for maintenance planners, maintenance supervisors, planning specialists, and line managers responsible for the execution of maintenance in their facilities and organizations contributed to the maintenance work control performance concerns. Specific observations stated that maintenance planners and supervisors were not familiar with the requirements of the Y18-35-008, *Maintenance Planner's Guide*; that a review of training requirements for maintenance planners, supervisors, and planning specialists indicated that training was not documented, updated, or executed to meet requirements of the Standards/Requirements Identification Documents (S/RIDs); and that a Maintenance Planner continuing training program was not documented.

This OFI is intended to respond not only to the specific concerns with respect to planners, supervisors, and planning specialists training program deficiencies, but to review the status of training for all positions in the Maintenance Organization in order to define requirements and identify deficiencies. Emphasis will be initially placed on those positions that directly impact the maintenance work control performance concerns. Finally, a Maintenance Program Description document will be developed for future use in managing the maintenance training program.

Action 1: For all maintenance planners and planning specialists positions:

	<u>Due Date</u>	<u>Status</u>
Review and evaluate current training status	11/15/00	Complete
Define baseline-training requirements	11/15/00	Complete
Remove work planning training deficiencies	01/31/01	Complete
Remove remaining training deficiencies	03/31/01	Complete

OFI-1: Maintenance Training Program Team Charter

3/19/01

Responsible Manager: Reggie Davis

Team Members: Terry Barnes, Shelia Duncan, Ed Duncan, Rob Jago, Frank Shanklin

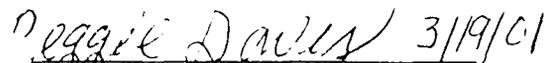
Objective: To establish a training program whereby baseline training requirements have been established for all Maintenance Organization personnel and a process exists that allows all personnel and their supervision to be knowledgeable of those requirements, the status of any deficiencies, and the actions necessary to remove those deficiencies.

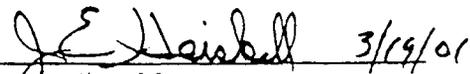
Action Plan:

- Establish and document the training requirements for Maintenance Planners, Planning Specialist, and Supervisors. (*Complete*) 10/20/00
- Conduct awareness training on access to baseline training in SAP and the requirements for monitoring an individual's training status. (*Complete*) 1/12/01
- Perform an evaluation of training effectiveness for Planners. (*Complete*) 1/30/01
- Solicit team membership (*Complete*) 3/15/01
- Provide support in the development and delivery of Practical Work Planning Improvement Training. (*Complete*) 3/31/01
- Remove any remaining work planning training deficiencies. (On-schedule) 3/31/01
- Approve team charter (On-schedule) 3/31/01
- Develop team responsibilities. (On-schedule) 4/15/01
- Evaluate adequacy of Maintenance Supervisor's baseline training program; (Consider EIS, Work Planning, Safety Leadership, and H.R. skills) 4/20/01
- Provide support in the development and implementation of training on the new work control document. 6/13/01
- Establish and document the baseline training requirements for Maintenance Gen. Supervisors and skilled craft positions. Remove any training deficiencies. 6/30/01
- Develop and publish a Maintenance Training Program Description Document Using Y90-027, *Conduct of Training*, as a guide. (On-schedule) 6/30/01
- Establish and document the baseline training requirements for Maintenance Dept. Managers, support functions, and remaining craft positions. Remove any training deficiencies 9/30/01
- Evaluate the adequacy of baseline training program requirements at least annually. Annually

Deliverable: Establish, document, and implement the baseline training requirements for all positions within the Maintenance Organization. Develop and publish a Maintenance Training Program Description Document.

Signatures/Dates:


Responsible Manager


Organization Manager

OFI-1: Maintenance Training Program (continued)

		<u>Due Date</u>	<u>Status</u>
Action 2:	Provide support in the development and delivery of the Practical Work Planning Improvement Training.	03/31/01	Complete
Action 3:	Provide support in the development and implementation of training on the new work control document.	06/13/01	On Schedule
Action 4:	Complete the same series of actions as listed in Action 1 for all maintenance supervisors, general supervisors, and skilled craft positions (supervisors should be first priority; consider Equipment Inspection Scheduler [EIS], work planning, and human resource skill needs).	06/30/01	On Schedule
Action 5:	Develop and publish a Maintenance Training Program Description Document using Y90-027, <i>Conduct of Training</i> , as a guide. Ensure that the guide describes the process and assigns specific responsibilities for the establishment of training requirements, the monitoring of status and deficiencies, and the actions necessary to schedule for removal of deficiencies.	06/30/01	On Schedule
Action 6:	Complete the same series of actions as listed in Action 1 for all maintenance managers, support functions, and remaining hourly positions.	09/30/01	On Schedule

Maintenance Improvement Plan Schedules

	March		April		May		June		July		August		September																			
	2	9	16	23	30	6	13	20	27	4	11	18	25	1	8	15	22	29	6	13	20	27	3	10	17	24	31	7	14	21	28	
-1 Maintenance Training Program																																
1.0 Establish baseline training for Planners, Specialists, and Supv.																																
2.0 Conduct Awareness Training																																
3.0 Evaluate Planning Training																																
4.0 Solicit Team Members																																
5.0 Provide support of Practical Work Planning Improvement Training																																
6.0 Remove work planning training deficiencies																																
7.0 Approve Team Charter																																
8.0 Develop team responsibilities																																
9.0 Evaluate Maint. Supv. Baseline Training program																																
10.0 Provide support in developing and implementing training on the work control document																																
11.0 Establish/document training requirements Gen. Supv. and Skilled Crafts and remove deficiencies																																
12.0 Develop/publish Maint. Training Program Description Document using Y90-027																																
13.0 Establish/document training requirements for Maint. Dept. Mgrs, Support Functions, & craft positions/remove deficiencies																																
14.0 Evaluate training annually																																

Opportunities for Improvement

OFI-2: Maintenance Planning and Execution

Responsible
Manager: R. J. Hochanadel

Objective: To define a path forward for the execution and closure of Standing Order SO-Y12-00-09.

Discussion: Following the ISMS V&V, the above referenced Standing Order was issued to provide specific actions to ensure that maintenance work packages were being planned in a manner that, when executed properly, would result in work being done safely. As a result of the actions of the Standing Order, documented evidence shows significant improvement in the quality of work packages. A plan is needed to facilitate the completion of the Standing Order requirements and its closure. Recommendation for closure should be from the Maintenance Organization Operational Safety Board (OSB) to the Maintenance Organization Manager.

	<u>Due Date</u>	<u>Status</u>
Action 1: Develop and implement a plan of the specific actions necessary to complete and close the maintenance actions of SO-Y12-00-09.		
Plan:	03/31/01	Complete
Closure:	05/01/01	On Schedule

OFI-2: Maintenance Planning and Execution Team Charter

3/26/01

Responsible Manager: Dick Hochanadel

Team Members: Ward Marsh, Paul Standifer, Dick Hochanadel, Darell Coppenger, Roy Stallions, Dor Taylor, Dave Neubauer, Al McLendon, Reggie Davis.

Objective: To define a path forward for the execution and closure of action items required by Standing Order SO-Y12-00-09.

Action Plan:

- Management provide overview training (Maintenance Planning and Execution module # 50154153) to maintenance planners, planning specialists, craft and supervisors who authorize work. 10/17/00
- Establish team members. 03/01/01
- Convene OSB to discuss actions required for closure of Standing Order SO-Y12-00-09. 03/01/01
- Issue a planning program directive to ensure all new planners are approved by the maintenance OSB and provide guidance for utilization of non-qualified planners. 03/05/01
- Develop and conduct practical training (Work Planning and Performance Improvement module # 50152693) for all maintenance planners, planning specialists, supervisors and managers who authorize work. 03/16/01
- Maintenance Operational Safety Board approve all maintenance planners for exemption from 100% review. 04/30/01
- Provide written recommendation from the Maintenance manager to the Director of Site Services to remove maintenance from the requirements of SO-Y12-00-09. 05/01/01

Deliverable: Implement a plan and provide documentation to complete and close the maintenance actions required by Standing Order SO-Y12-00-09.

Signatures/Dates:

Richard J. Hochanadel 4-17-01
Responsible Manager

J. E. Marshall 4/18/01
Organization Manager

Opportunities for Improvement

OFI-3: Maintenance Work Planning Guidance Document

Responsible

Manager: W. L. Marsh

Objective: To develop and issue a single document that describes how maintenance work is to be planned and executed at Y-12.

Discussion: For many years, the process for planning and executing maintenance work at the Y-12 Site was described in a number of Maintenance Work Control procedures including several revisions of Y18-35-008, *Maintenance Planner's Guide*. Over the past eighteen months an alternative approach to maintenance work control was developed and implemented on a pilot basis in EUO. The assumed need for this pilot process grew primarily from the inability to effectively schedule maintenance work in the EUO environment. The Y-12 Site is currently in the awkward position of attempting to conduct maintenance work under two somewhat different systems. It is time that the best attributes of both systems, as well as others across the DOE Complex and in private industry, be combined into a single set of guidance for accomplishing maintenance work at Y-12.

	<u>Due Date</u>	<u>Status</u>
Action 1: Merge the beneficial aspects of the current Y18-008 revision of Y18-35-008 (which includes merger of Y18-35-009, Y10-35-006, Y10-35-003, Y10-35-012, Y10-013) and the Y18-004INS documents into a single document that describes the Y-12 process for requesting, planning, executing, and completing maintenance work. The process must include a scheduling function for maintenance resources and the ability to interface with other production and support-related scheduling. Issues from the ISMS V&V such as Lessons Learned, feedback, and PMT must receive adequate treatment. The final document should include a flow chart of the process. Maintenance work control at other DOE sites (such as INEEL) and private industry should be considered. (A0083932)	04/18/01	On Schedule
Action 2: Develop and conduct training on new document. Effective date of new document (A0083933) Improvement Training.	06/13/01	On Schedule

OFI-3: Maintenance Work Planning Guidance Document (continued)

		<u>Due Date</u>	<u>Status</u>
Action 3:	Assess effectiveness of implementation of new work control document, and make recommendations for improvement (A0089934).	11/13/01	
Action 4:	Implement procedure revisions to Action 3 recommendations.	12/31/01	

OFI-3: Maintenance Work Planning Guidance Document

Team Charter

03/13/2001

Responsible Manager: W. L. Marsh

Team Members: R. J. Stallions, P. B. Leonetti, and M. M. Resnick

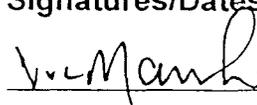
Objective: To develop and issue a single document that describes how maintenance work is to be planned and executed at Y-12. This will include merging the beneficial aspects of the current Y18-008 revision of Y18-35-008 (which includes merger of Y18-35-009, Y10-35-006, Y10-35-003, Y10-35-012, Y10-013) and the Y18-004INS documents into a single document that describes the Y-12 process for requesting, planning, executing, and completing maintenance work. The process will include a scheduling function for maintenance resources and the ability to interface with other production and support related schedules. Also, training will be developed and conducted to prepare employees for the issue and implementation of the new document. An assessment of the effectiveness of the procedure revisions based on findings and recommendations will be conducted

Action Plan:

Approve team charter	03/15/2001
New procedure (Y18-007) assigned	03/06/2000
Incorporate procedures, from the objective, and any additions to Y18-007	03/23/2001
Send Y18-007 out for expedited Complex review	03/24/2001
Meet periodically to address Y18-007 comments	As Needed
Answer comments and receive concurrence from Complex to Y18-007	04/02/2001 4/9/01
Submit Y18-007 for-USQD screening	04/03/2001 4/19/01
Ensure USQD screening complete for Y18-007	04/13/2001
Issue Y18-007, Maintenance Work Control Guide	04/19/2001
Start development of training for Y18-007	03/14/2001
Complete development of "pilot" training for Y18-007	05/04/2001
Conduct "pilot" training class	05/07/2001
Revise training from "pilot"	05/11/2001
Complete Y18-007 training for maintenance targeted audience	06/13/2001
Develop assessment plan to measure effectiveness of Y18-007	09/14/2001
Complete assessment/make recommendations of effectiveness of Y18-007	11/13/2001
Implement procedure revisions as appropriate to step above	12/31/2001

Deliverable: Issue a procedure, train appropriate personnel to procedure requirements, implement procedure for the Complex, assess the effectiveness of the procedure and implement procedure revisions, as appropriate, from the recommendations for improvement, from the assessment.

Signatures/Dates:

 3/15/01

Responsible Manager

 3/15/01

Organization Manager

Opportunities for Improvement

OFI-4: Work Package Format and Structure

Responsible
Manager:

W. L. Marsh

Objective: To revise the structure of maintenance work packages to limit the amount of paper issued to the workers to the minimum necessary to safely accomplish the job.

Discussion: Workers have continually expressed the view that they receive much more paper, in the form of a "work package," than is needed to accomplish the job. The DNFSB, in their maintenance review in January 2001, noted that although work packages generally seemed "about right" in their content, it was their view that much of the paper did not have to be given to the worker.

	<u>Due Date</u>	<u>Status</u>
Action 1: Establish a team to provide interim guidance, with eventual inclusion in the OFI-3 activity, to identify and separate only that paper from the work package that is needed by the worker.		
Appoint Team	03/15/01	Complete
Recommendations Complete	03/31/01	Complete

OFI-4: Work Package Format and Structure Team Charter

03/13/2001

Responsible Manager: W. L. Marsh

Team Members: R. J. Stallions, P. B. Leonetti, J. L. Peddicord, R. A. Jago, R. M. Brewster, R. J. Hochanadel, G. H. Simon, S. L. Bunch, R. E. Barnes, Jackie Williams, and M. L. Lewis

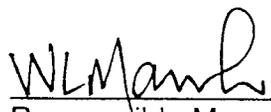
Objective: To revise the structure of maintenance work packages to limit the amount of paper issued to the workers to the minimum necessary to safely Accomplish the job.

Action Plan:

Appoint team	Complete
Team meeting to develop baseline recommendation	Complete
Solicit review and comments (Maintenance Planners, Supervisors, and General Supervisors)	03/16/2001
Resolve Comments	03/31/2001
Management approval of recommendations	04/02/2001
Issue interim guidance	04/13/2001
Incorporation of recommendations into Y18-007	04/18/2001

Deliverable: Provide interim guidance, with eventual inclusion in the OFI-3 activity, to identify and separate only that paper from the work package that is needed by the worker.

Signatures/Dates:

 3/16/01
Responsible Manager

 3/16/01
Organization Manager

Opportunities for Improvement

OFI-5: Maintenance Performance Measures

Responsible
Manager: D. L. Coppenger

Objective: To establish a set of performance measures to be used by maintenance managers in monitoring and improving the performance in key areas of their business.

Discussion: The Maintenance Organization, through the use of the EIS, collects and publishes a wide range of information regarding the performance of most aspects of its business. Unfortunately, there is no agreed upon set of this information that has been established as the key set of parameters to utilize in monitoring and improving the performance of the organization. Further, there is no guidance on how this data would be used.

		<u>Due Date</u>	<u>Status</u>
Action 1:	Recommend, and obtain approval, of a set of performance measures to be used by the Organizational Manager, department-level managers, general supervisors, and planning specialists in the monitoring and improvement of performance within their organizational units.	04/30/01	On Schedule
Action 2:	Implement reporting of the approved measures and publish guidelines for their use and review across the organization.	06/30/01	On Schedule

**OFI-5: Maintenance Performance Measures
Team Charter**
3/12/01

Responsible Manager: Dwain Coppenger

Team Members: Ward Marsh, Paul Standifer, Dick Hochanadel, Darell Coppenger, Doug Kelly, Bill Pickett

Objective: To establish a set of performance measures to be used by maintenance managers in monitoring and improving the performance in key areas of their business. These measures are to used by Organizational Manager, department managers, general supervisors, and planning specialists.

Action Plan:

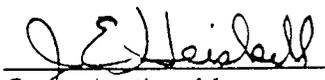
Establish team members	3/12/01
Review existing metrics being used and "brainstorm" new metrics	3/30/01
Recommend new set of performance measures	4/30/01
Develop draft reports	5/16/01
Approve metrics	5/30/01
Establish routine reports	6/05/01
Update EIS Reports to contain routine reports	7/30/01
Review effectiveness of reports	9/30/01
Adjust reports as required	11/1/01

Deliverable: Document to define each measure, describe the expectation of their use. After six months the measures will require expectations be established by the Organization Manager.

Signatures/Dates:


Responsible Manager

WMM


Organization Manager

Opportunities for Improvement

OFI-6: Maintenance Requirements Flow-down

Responsible
Manager: W. L. Marsh

Objective: To ensure that the Maintenance S/RID language appropriately reflects the intent of the DOE Order 4330.4B from which it was derived.

Discussion: One of the issues raised by the DNFSB in their January 2001 review of the Maintenance function at Y-12 was that the S/RID language and the implementing command media did not adequately reflect the intent of 4330.4B in the area of requirements for facility condition inspections. The following action is intended to correct the specific issues associated with facility condition inspections as well as to review the S/RIDs to ensure that there are no other areas of weakness between the language of 4330.4B and the S/RID.

		<u>Due Date</u>	<u>Status</u>
Action 1:	Conduct a review of the DOE Order 4330.4B language and the corresponding Maintenance S/RID language to ensure that the S/RID adequately reflects the intent of the Order. Revise the S/RID language where appropriate. Pay particular attention to the language associated with facility condition inspection.	05/31/01	On Schedule
Action 2:	As a result of any changes in S/RID language from Action 1, review any impacted procedures and revise as necessary.	08/31/01	
Action 3:	Review S/RID implementing procedure crosswalk for any changes resulting from S/RID and/or procedure changes/deletions, etc.	09/30/01	

**OFI-6: Maintenance Requirements Flow-down
Team Charter**
03/15/2001

Responsible Manager: W. L. Marsh

Team Members: Rob Jago, with review by maintenance department managers and DOE YAO
Maintenance Manager

Objective: To Insure that the Maintenance S/RID language appropriately reflects the intent of the DOE C 4330.4B from which it was derived.

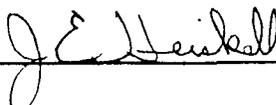
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|---------------------|--|--------------------|
| Action Plan: | 1. Compare the S/RID language with the corresponding 4330.4B language and identify areas for improvement . | 4/05/01 |
| | 2. Draft changes in S/RID language where appropriate. | 4/25/01 |
| | 3. Solicit comments from maintenance department managers and DOE Maintenance Manager. | 4/30/01 |
| | 4. Resolve comments and gain approval of revisions. | 5/15/01 |
| | 5. Eliminate MMRP document in S/RID flow-down | 5/21/01 |
| | 6. Submit revised/approved S/RID. | Due 5/31/01 |
| | 7. Review all implementing procedures and make necessary revisions resulting from S/RID revisions. | Due 8/31/01 |
| | 8. Review S/RID flow-down matrix (crosswalk) and revise as necessary to reflect revisions accomplished in steps 6 and 7. | Due 9/30/01 |

Deliverable: Revised S/RID with approval documentation (5/31/01), list of revised procedures with effective dates (8/31/01), revised flow-down matrix (9/30/01).

Signatures/Dates:

/s/ W. L. Marsh 3/15/01

Responsible Manager

 3/15/01

Organization Manager

Maintenance Improvement Plan Schedules

	March		April		May		June		July		August		September																			
	2	9	16	23	30	6	13	20	27	4	11	18	25	1	8	15	22	29	6	13	20	27	3	10	17	24	31	7	14	21	28	
	Maintenance Requirements Flow-down																															
1.0	Compare S/RID language with 43304B and identify areas of improvement																															
2.0	Draft changes																															
3.0	Comments form Maint. Dept. Managers/DOE Maint. Mgr.																															
4.0	Resolve comments/approval																															
5.0	Eliminate MMRP document in S/RID flow-down																															
6.0	Submit revised/approved S/RID																															
7.0	Review all implementing procedures and make revs. From S/RID revs.																															
8.0	Review S/RID flow-down matrix (crosswalk) & revise to reflect revisions from Steps 6 & 7																															

Opportunities for Improvement

OFI-7: Facility Condition Inspections

Responsible

Manager: D. L. Coppenger

Objective: To identify personnel resource requirements and request resource funding approval such that a facility condition inspection program can be implemented that is responsive to NNSA/DOE Order requirements.

Discussion: DOE Order 4330.4B requires that facility condition inspections be conducted and that a program for resolving problems that could potentially have significant impact on safety margins be documented and implemented. The annual reporting of Deferred Maintenance is a federal financial requirement with the stipulation that the Deferred Maintenance calculation be based on facility condition assessment data. A recent Inspector General assessment noted that Y-12 was unable to report Deferred Maintenance due to the lack of a facility condition assessment program. The DNFSB review of the Y-12 Maintenance function in January 2001 noted that Y-12 was not meeting the requirements for condition assessment surveys.

		<u>Due Date</u>	<u>Status</u>
Action 1:	Submit a Baseline Cost Proposal (BCP) to provide the necessary personnel resource requirements to develop a formal Facility Condition Inspection process for Y-12.	02/28/01	Complete
Action 2:	Prepare an action plan to develop a formal Facility Condition Inspection process including submission of a BCP for resource requirements.	08/15/01	On Schedule

**OFI-7: Facility Condition Inspections
Team Charter**
4/18/01

Responsible Manager: Dwain Coppenger

Team Members: Ward Marsh, Dwain Coppenger, Manager (TBD)

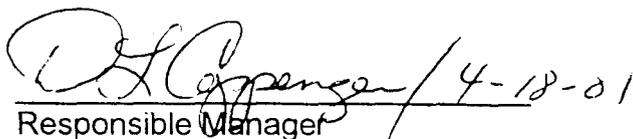
Objective: To identify personnel resource requirements and request resource funding approval such that a facility condition inspection program can be implemented that is responsive to NNSA/DOE order requirements.

Action Plan:

Submit BCP to provide necessary personnel to develop program	2/28/01
Develop job description for Manager	4/13/01
Bid/Hire Manager	5/18/01
Develop action plan to develop inspection process	6/15/01
Develop job description for Data Resource (DR) person	6/15/01
Bid/Hire Data Resource person	7/20/01
Document inspection process	7/20/01
Develop inspection database	8/17/01
Submit FY2002 BCP for Inspectors	7/20/01
Subcontract/Hire Inspectors	8/28/01
Train Inspectors to process	9/21/01
Begin Inspections	9/21/01

Deliverable: Upon approval of BCP, hire manager and data resource person and develop a facility inspection process that will be used to collect and consolidate information for deferred maintenance reporting, infrastructure backlog, and that meets DOE LCAM Order requirement.

Signatures/Dates:


Responsible Manager


Organization Manager

Opportunities for Improvement

OFI-8: Preventive Maintenance Program

Responsible
Manager: G. D. Coppenger

Objective: To support the requirements of Y-12 equipment and system owners in providing an effective process for conducting preventive maintenance.

Discussion: Traditionally, preventive maintenance (PM) has been looked upon as a Maintenance Organization responsibility. It is a maintenance program function; and as such, the Maintenance Organization has the responsibility for providing an effective process for conducting PM and the resources necessary for accomplishing PM in accordance with the expressed needs of the system and equipment owners. It is the Owner's responsibility, with technical support from the Design Authority, to determine what systems and equipment should be receiving PM, and to provide the financial resources necessary to accomplish the PM.

During recent ISMS V&V assessments and DNFSB maintenance reviews, the adequacy of the Y-12 PM Program has come under question with respect to whether or not all of the right systems and equipment are receiving PM, and the technical basis for allowing PMs to go overdue or not doing them at all. The DNFSB has stated that Y-12 conducts maintenance in what is fundamentally a corrective maintenance run-to-failure mode.

		<u>Due Date</u>	<u>Status</u>
Action 1:	Issue site-wide letter soliciting system and equipment owners to review their PM needs, and provide funding in FY 02.	01/31/01	Complete
Action 2:	Develop and implement process for review of PM job packages to provide confidence that PM job packages are adequate for safe execution of work.	05/31/01	On Schedule
Action 3:	Establish an Action Team to review the current PM procedure and recommend improvements.		
	Appoint Team	03/15/01	Complete
	Approve Charter	03/31/01	Complete
Action 4:	Action Team to recommend improvements to procedure.	06/08/01	On Schedule
Action 5:	Issue revised procedure.	07/31/01	

**OFI-8: Preventive Maintenance Program
Y18-194 Procedure Review
Team Charter**

April 16, 2001

Responsible Manager: Darell Coppenger

Team Members: John Gertsen and Lisa Loden

Objective: To review Y18-194, Preventive Maintenance (PM), procedure and make recommendations for improvements. Various assessments as well as individual observations have noted concern for the effectiveness of the Complex's PM program.

Action Plan:

Approve team charter	4/17/01
Review Y18-194	5/16/01
Team recommends improvements in Y18-194	6/08/01

Deliverable: Recommend improvements to be incorporated into the Y18-194 procedure.

Signatures/Dates:


Responsible Manager

 4/17/01
Organization Manager

Opportunities for Improvement

OFI-9: Work Planning Organization Structure

Responsible

Manager: W. L. Marsh

Objective: To recommend the optimum organizational structure for providing maintenance work planning support with consideration for effective balance between centralized and de-centralized arrangements.

Discussion: The present structure for providing maintenance job planning within the Maintenance Organization is a mixture of reporting arrangements. In some cases, the planners report directly to the line organization they support, either to the general supervisor or through a planning specialist. In other cases, the planners report to a "centralized" planning specialist with matrix responsibility to the line organization. This mixed arrangement has been in place for eighteen months or more, and has resulted in mixed effectiveness. Concerns have been expressed with regard to the flow down of information from a programmatic standpoint with resulting inconsistencies in field practices. The lack of adequate planning specialists resources has also been a factor in its success.

		<u>Due Date</u>	<u>Status</u>
Action 1:	Evaluate the current planning support organizational structure and make recommendations to achieve an optimum balance between centralization and de-centralization.	03/15/01	Complete
Action 2:	Implement organizational structure changes as approved.	03/20/01	Complete
Action 3:	Develop staffing resource requirements for the maintenance program development, oversight, and work package planning functions and submit appropriate BCP request.	03/30/01	Complete
Action 4:	Develop and implement specific actions to ensure consistent flow-down and dissemination of procedural guidance and interpretation, standards, policies, and expectations for maintenance work planning to the planning staff. Establish guidance and direction for the planner's program/line matrix relationships including policy on use of planner's for supervisor relief.	04/15/01	Will complete by 04/30/01

**OFI-9 Work Planning Organization Structure
Team Charter**
03/15/2001

Responsible Manager: W. L. Marsh

Team Members: W. L. Marsh to develop recommendation. J. E. Heiskell to review/approve

Objective: To recommend the optimum organizational structure for providing maintenance work planning support with consideration for an effective balance between centralized and de-centralized arrangements.

Action Plan:	1. Evaluate the current planning support organizational Structure and make recommendations to achieve an Optimum balance between centralization and De-centralization.	Due 3/15/01 Complete 3/7/01
	2. Implement organizational structure changes as approved.	Within 15 days after approval
	3. Develop staffing resource requirements for the maintenance program development, oversight, and work package planning functions and submit appropriate BCP requests	Within 15 days after approval
	4. Develop and implement specific actions to insure consistent flow-down and dissemination of procedural guidance and interpretation, standards, policies, and expectations for maintenance work planning to the planning staff. Establish guidance and direction for the planner's program/line matrix relationships including policy on use of planners for supervisory relief.	
	a. Appoint team to develop the above	Within 15 days after approval
	b. Complete development/recommendations	Ten days
	c. Seek comments, achieve resolution and approval	Five days
	d. Issue criteria/guidance and inform those impacted	15 days from start

Deliverable: White paper/recommendations on organizational structure (3/15/01), new organizational charts (15 days following approval), BCPs for staffing positions (15 days following approval), charter for Action 4 (15 days following new organization), written guidance document to meet intent of Action 4 (15 days from start).

Signatures/Dates:

W. Mark 3/15/01

Responsible Manager

J. E. Heiskell 3/15/01

Organization Manager

Maintenance Improvement Plan Schedules

	March		April		May		June		July		August		September																			
	2	9	16	23	30	6	13	20	27	4	11	18	25	1	8	15	22	29	6	13	20	27	3	10	17	24	31	7	14	21	28	
-9 Work Planning Organization Structure																																
1.0 Evaluated planning support org. structure/make recommendations to balance centralization vs. de-centralization																																
2.0 Implement org structure changes																																
3.0 Develop staffing resource requirements																																
4.0 Develop/implement spec. actions to insure consistent flow-down and dissemination of procedural guidance.																																
a. Appoint team to develop																																
b. Complete development/recommendations																																
c. Comments/resolve/approval																																
d. Issue criteria/guidance & inform those impacted																																

Opportunities for Improvement

OFI-10: Management Roles and Responsibilities

Responsible

Manager: W. L. Marsh

Objective: To develop guidance for the maintenance department-level managers, general supervisors, and planning specialists in exercising their responsibilities in the management and performance improvement of maintenance work planning and execution.

Discussion: The LMES ISM Independent Assessment cited the planning and performance of maintenance across the Site as a significant concern. Contributing to that concern was the lack of an effective training program. Additionally, line managers were cited as not establishing and executing an effective assessment program. All of this goes to say that successful management must make use of effective assessment programs providing the feedback that is measuring the results of formal training in order to conduct a process of coaching and counseling (mentoring) planners and supervisors in understanding and meeting the expectations associated with work planning and execution. As a root cause, this shortcoming seems to be the primary contributing factor to the current situation in maintenance work planning and execution.

		<u>Due Date</u>	<u>Status</u>
Action 1:	Develop guidance for maintenance department-level managers, general supervisors, and planning specialists to aid in making use of maintenance performance measure information (See OFI-5, Action 2), and management assessment information in a continuous process of coaching, counseling, and mentoring subordinates for success.	06/30/01	On Schedule

OFI-10 Management Roles and Responsibilities
Team Charter
03/15/2001

Responsible Manager: W. L. Marsh

Team Members: W. L. Marsh to develop draft. Maintenance department managers to review, comment, and provide input. J. E. Heiskell to approve

Objective: To develop guidance for the maintenance department level managers, general supervisors and planning specialists in exercising their responsibilities in the management and performance improvement of maintenance work planning and execution.

- Action Plan:**
1. Develop guidance for maintenance department level managers, general supervisors, and planning specialists to aid in making use of maintenance performance measure information (OFI-5, Action 2) and management assessment information (OFI-14) in a continuous process of coaching, counseling, and mentoring subordinates for success.
 - a. Brainstorm issues and opportunities with a representative cross-section of department managers, general supervisors, and planning specialists. 4/15/01
 - b. Develop initial draft guidance and solicit comments. 5/15/01
 - c. Resolve/incorporate comments and issue for final comments. 6/01/01
 - c. Resolve/incorporate final comments and submit for approval. 6/15/01
 - d. Issue 6/30/01

Deliverable: Written guidance document (6/30/01)

Signatures/Dates:

W. L. Marsh 3/15/01

Responsible Manager

J. E. Heiskell 3/15/01

Organization Manager

Maintenance Improvement Plan Schedules

			March					April				May				June					July				August					Septemb			
			2	9	16	23	30	6	13	20	27	4	11	18	25	1	8	15	22	29	6	13	20	27	3	10	17	24	31	7	14	21	28
OFI -10 Management Roles and Responsibilities																																	
	1.0	Develop guidance for Maint.																															
	a.	Brainstorm																															
	b.	Develop guidance/comments																															
	c.	Resolve/incorporate comments and issue for final comments																															
	d.	Resolve/incorporate final comments and submit for approval																															
	e.	Issue																															

Opportunities for Improvement

OFI-11: Maintenance Organization Staffing Process

Responsible
Manager: J. E. Heiskell/S. C. Bowman

Objective: To develop and document the process to be used by Maintenance Organization management and staff in planning, budgeting, and submitting requests for personnel resource requirements.

Discussion: Although processes currently exist, to varying degrees, they are not well understood and documented, which leads to confusion and inconsistencies over time.

	<u>Due Date</u>	<u>Status</u>
Action 1: Establish an Action Team to develop an appropriate process for planning, budgeting, and submitting requests for personnel resource requirements. Describe the process in an approved guidance document for use by Maintenance Organization management and staff. Provide for training as appropriate.		
Appoint Team	03/15/01	Complete
Approve Charter	03/31/01	Complete

**OFI-11: Staffing Process
Team Charter
March, 2001**

Responsible Manager: J. E. Heiskell/S. C. Bowman

Team Members: S. C. Bowman, D. L. Coppenger, G. D. Coppenger, J. E. Heiskell,
R. J. Hochanadel, J. D. Kelley, W. L. Marsh, P. W. Standifer

Objective:

To develop and document the process to be used by Maintenance Organization management and staff in planning, budgeting, and submitting requests for personnel resource requirements.

Action Plan:

Appoint team membership from Maintenance Organization	3/15/01
Approve Team Charter	3/31/01
Update Staffing Plan	4/30/01
Review Staffing Plan with Organization Managers	5/15/01
Obtain Consensus from Maintenance Organization Managers	5/30/01
Update Staffing Plan	Quarterly

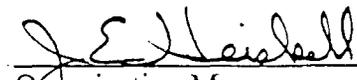
Deliverable:

Update and review the Maintenance Organization Staffing Plan on a quarterly basis to ensure accurate funding levels versus organization personnel resource requirements.

Signatures:



Responsible



Organization Manager

Opportunities for Improvement

OFI-12: EIS Enhancements

Responsible
Manager: D. L. Coppenger

Objective: To provide a process for identifying and recommending enhancements and improvements to the EIS system.

Discussion: As the EIS system becomes a multi-user, site-wide system for scheduling and tracking repetitive activities, the need for an organized approach to identifying and recommending system enhancements and improvements becomes important.

	<u>Due Date</u>	<u>Status</u>
Action 1: Establish an Action Team (EIS User's Group), consisting of a cross-section representation of users and EIS subject matter experts (SMEs), to comprise a forum and process for identifying, prioritizing, and recommending enhancements and improvements to the EIS system.		
Appoint Team	03/15/01	Complete
Approve Charter	03/31/01	Complete

OFI-12: EIS Enhancement (Plant EIS User Group)
Team Charter

3/12/01

Responsible Manager: Dwain Coppenger

Team Members: Bill Pickett, Jim Smith, John Gertsen, Pam Johnson, Tom Cady, Gary McFarland, Leor Lewis, Jerry Harris, Robert Jones, Robert May

Objective: To provide a process for identifying and recommending enhancements and improvements to EIS. EIS has become a multi-user site-wide system for scheduling and tracking repetitive activities. There is a need for an organized approach to maintaining system integrity and reliability. Establish a cross-sectional representation of users and EIS SME's to form the plant's EIS User Group.

Action Plan:

Solicit team membership from the user organizations	3/10/01
Approve team charter	3/31/01
Develop team responsibilities	4/30/01
Meet periodically to address EIS issues	As needed
Review/approve all EIS software releases	As needed
Bubble-up plant-wide issues for management action	As needed

Deliverable: Establish an active Plant EIS User group that oversees the EIS software system to ensure that it is meeting the needs of the complex.

Signatures/Dates:


Responsible Manager *WLM*


Organization Manager

Maintenance Improvement Plan Schedules

			March					April				May				June					July				August					Septemb			
			2	9	16	23	30	6	13	20	27	4	11	18	25	1	8	15	22	29	6	13	20	27	3	10	17	24	31	7	14	21	28
OFI -12 EIS Enhancement (Plant EIS User Group)																																	
	1.0	Solicit Team Membership																															
	2.0	Approve Team Charter																															
	3.0	Develop team responsibilities																															
	4.0	Meet Periodically to address EIS issues																															
	5.0	Review/approve all EIS software releases																															
	6.0	Bubble-up plant-wide issues for management action																															

Opportunities for Improvement

OFI-13: Calibration Program

Responsible

Manager: D. L. Coppenger

Objective: To review the current procedures and processes associated with the calibration program to identify opportunities and make recommendations for improvement.

Discussion: Various assessments, as well as individual observations, have noted concern for the effectiveness of several aspects of the calibration program. It is time to conduct an organized review for improvement.

	<u>Due Date</u>	<u>Status</u>
Action 1: Establish an Action Team to review the current procedures and processes associated with the calibration program to identify opportunities and make recommendations for improvement. Specific areas of concern include: procedures, records, training, and data entry.		
Appoint Team	03/15/01	Complete
Approve Charter	03/31/01	Complete

**OFI-13: Field Calibration Program
Team Charter**

3/12/01

Responsible Manager: Dwain Coppenger

Team Members: Bill Pickett, Phillip Leonetti, Gary McFarland, Bobby Wayne Parker, Bill McKeethan, Jerry Harris, Stan Bunch

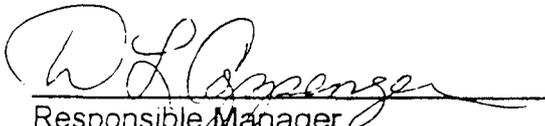
Objective: To review the current procedures and processes associated with the field calibration program to identify opportunities and make recommendations for improvements. Various assessments as well as individual observations have noted concern for the effectiveness of several aspects of the program.

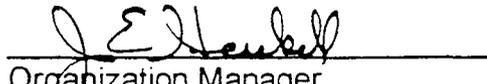
Action Plan:

Solicit team membership from the user organizations	3/10/01
Approve team charter	3/31/01
Develop team responsibilities	4/15/01
Review existing assessment deficiencies	5/16/01
Develop corrective action plan (CAP) to address deficiencies	6/16/01
Bubble-up plant-wide issues for management action	As needed
Assess program	Six months after CAP is complete

Deliverable: Develop and implement a field calibration corrective action plan to implement changes that will ensure identified deficiencies are corrected.

Signatures/Dates:


Responsible Manager
WCM


Organization Manager

Opportunities for Improvement

OFI-14: Management Assessment Program

Responsible

Manager: G. R. Davis

Objective: To enhance the Maintenance Organization's assessment program through an improved process of management involvement in using assessment findings and feedback to more effectively coach, counsel, and mentor subordinates for improvement in performance as well as to establish a process for identifying and recommending actions on problems that are systemic in nature.

Discussion: The ISM V&V of August 2000 noted that although in many cases we did an adequate job of assessing ourselves and our operations, we generally did a poor job of making effective use of our assessment information in improving our operations.

Due Date Status

Action 1: Establish an Action Team to develop a process for use by Maintenance Organization managers in evaluating and using the results of management assessments in improving organizational performance. Emphasis should be placed on management coaching, counseling, and mentoring; as well as, identification and pursuit of systemic problems. This effort should be coordinated with the actions of OFI-10.

Appoint Team 03/15/01 Complete

Approve Charter 03/31/01 Complete

Action 2: Review existing assessment program deficiencies and develop corrective plan as necessary 05/16/01 On Schedule

Action 3: Conduct assessment(s) of the required performance indicators and report results to managers to enhance any areas needing improvement Quarterly On Schedule

OFI-14: Management Assessment Program Team Charter

4/11/01

Responsible Manager: G. Reggie Davis

Team Members: Richard Goins, Chuck Haynes, Al McLendon, Gloria Mencer,
Ward Marsh, John Thompson

Objective: To enhance the Maintenance Organization's assessment program through an improved process of management involvement in using assessment findings and feedback to more effectively counsel, and mentor subordinates for improvement in performance as well as to establish a process for identifying and recommending actions on problems that are systemic in nature

Action Plan:

Solicit team membership.	3/15/01
Approve team charter.	3/31/01
Develop team responsibilities.	4/15/01
Review pertinent requirement documents (e.g. Y15-901PD, Y15-902, ISMS P.A. Scorecard) to evaluate performance based assessments.	5/04/01
Review existing assessment program deficiencies and develop corrective action plan as necessary.	5/16/01
Revise the Maintenance Org. Assessment Guidance Document (as necessary).	6/01/01
Promote awareness of the Maintenance Assessment Guidance Document by distributing copies and implementing an awareness session(s) within Maintenance.	6/15/01
Conduct Assessment(s) of the required Performance Indicators and report results to Dept. Managers to enhance any areas needing improvement.	Qrtly.

Deliverable: To develop a process and guidance for use by Maintenance Organization managers in evaluating and using the results of management assessments as feedback to improve organizational performance and to confirm issue resolution.

Signatures/Dates:

 4/16/01
Responsible Manager

 7/16/01
Organization Manager

Maintenance Improvement Plan Schedules

			March					April				May				June				July				August				Septemb											
			2	9	16	23	30	6	13	20	27	4	11	18	25	1	8	15	22	29	6	13	20	27	3	10	17	24	31	7	14	21	28						
OFI -14 Management Assessment Program																																							
	1.0	Solicit Team Membership																																					
	2.0	Approve team charter																																					
	3.0	Develop team responsibilities																																					
	4.0	Review documents																																					
	5.0	Review deficiencies/develop action plan if necessary																																					
	6.0	Revise document (as nec.)																																					
	7.0	Promote awareness of document by copies/session																																					
	8.0	Conduct assessment of performance indicators /report results to Dept. Mgrs																																					

Opportunities for Improvement

OFI-15 Accident Investigation

Responsible
Manager: P. W. Standifer

Objective: To enhance the overall Maintenance Organization safety performance through improvements in the accident investigation process.

		<u>Due Date</u>	<u>Status</u>
Action 1:	Appoint Team	03/09/01	Complete
Action 2:	Approve Charter	03/15/01	Complete
Action 3:	Create user-friendly forms, supervisor tools, and investigation teams.	04/25/01	On Schedule
Action 4:	Identify at-risk behaviors related to maintenance job activities.	05/01/01	On Schedule
Action 5:	Ensure investigations identify at-risk behaviors and reinforce employee accountability.	05/01/01	On Schedule
Action 6:	Improve information analysis to include trending by work craft, and expand feedback process to including communicating Lessons Learned and monthly trends.	05/01/01	On Schedule

OFI-15: Accident Investigation Team Charter

3/20/01

Responsible Manager: Paul Standifer

Team Members: Dave Neubauer, Clyde Kelly, Dick Hochanadel

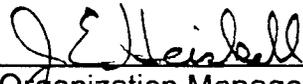
Objective: To enhance the overall Maintenance Organization safety performance through improvements in the accident investigation process.

	<u>Due By</u>
Action Plan:	
Appoint Team	03/09/01
Approve Charter	03/15/01
Create user-friendly forms, supervisor tools, and investigation teams.	04/25/01
Identify at-risk behaviors related to maintenance job activities.	05/01/01
Ensure investigations identify at-risk behaviors and re-enforce employee accountability.	05/01/01
Improve information analysis to include trending by work craft and expand feedback process to include Communicating lessons learned and monthly trends.	05/01/01

Deliverables: A form for recording investigation findings; List of at-risk behaviors; set of trending metrics.

Signatures/Dates:


Responsible Manager

 4/18/01
Organization Manager

