

National Aeronautics and  
Space Administration

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



OCT 18 2001

Reply to Attn of:

QS30 (01-58)

**TO:** Distribution

**FROM:** QS30/Dennis S. Davis

**SUBJECT:** Minutes of the MSFC Safety, Health, and Environmental Central  
Committee Meeting

The Safety, Health, and Environmental (SHE) Central Committee met at 8:30 a.m., on Monday, October 1, 2001, in Building 4200, Conference Room P110. The attendance list is attached as Enclosure 1. The agenda for the meeting is attached as Enclosure 2.

OPENING REMARKS (ART STEPHENSON/DAO1)

Art opened with comments regarding the heightened security measures at entry gates to Redstone Arsenal. A review from Headquarters revealed that more security and assistance are needed at the gates. He had spoken with the General and was told that non-consistent gate action is for the safety of all employees.

Additional comments were made in regards to balancing the workload and workforce at the Center. We are to balance the work within the Agency with existing people. The possibility exists that some programs may be cancelled in order to keep the workforce from being over-worked.

Two new SES positions have been filled. Sandy Coleman and Bob Goss are the recipients of these positions.

SPECIAL REPORTS

Back-Injury Prevention Exercises (Lana Hart/CD01)

Lana presented charts of several exercises that will strengthen the back to help prevent back injury. The charts presented are attached as Enclosure 3.

Safety Day (Ed Kiessling/ED01)

The charts presented are attached as Enclosure 4.

***Mission Success Starts with Safety***

### Voluntary Protection Program (VPP) Update (Keith Cornett/FD20)

Keith reported that self-assessment checklist have been established to examine the effectiveness of the MSFC safety and health program. The purpose of the checklists is to identify and resolve problems before the VPP assessment. The deadline for the checklists to be completed is November 2. The charts presented are attached as Enclosure 5.

### INDUSTRIAL SAFETY REPORTS (D. Davis/QS30)

The safety metrics charts are attached as Enclosure 6.

It was noted that if anyone is still having problems with the Supervisor Safety Web Page (SSWP) to call Dennis Davis. Axel commented that everyone should be using the SSWP to record safety visits and meetings. After stating that all of the numbers were not in and this was the best numbers available for SSWP information, Art commented that 50% is not good enough.

**ACTION C-0113: Counsel organizations to determine why safety meetings are not occurring; should meeting date be changed until all monthly data is entered. (Amanda Goodson/QS01; Due 11/5/01)**

### TEAM REPORTS

Jim Kennedy - Donnie George's wife died; keep him in your thoughts.

Dennis Smith - Irene Taylor's house burned. Her husband started the grill, went inside to check on their daughter, and went back outside to discover the house was on fire. He reentered the house to get his daughter and to call 911. Everything was lost. He later discovered that the 911 dispatcher contacted the fire department that was 30 miles away instead of the one that was 3 miles away.

Dr. Bill Dye - A decrease in injuries was noted at the Medical Center this month. Bee stings are the most prevalent. As the weather gets cooler, this too will decrease.

Phil Robbins - The Safety Bowl has been rescheduled. The first round will begin next week with the finals on Safety Day. Semi-finals and finals will be aired on Centerwide television.

Due to the illness and death of Mrs. George, there was no Contractor Safety Forum meeting.

Tereasa Washington – Student Launch Initiative will be held on October 6 at the Redstone Arsenal launch area. The public is not invited to this event. Activities have been scaled down, and no cell phones or pagers will be allowed.

Bill Kilpatrick – Challenged all building managers to have zero safety findings. The Engineering Directorate has had five buildings with zero findings. He commended the building managers and safety managers of those buildings.

Jan Davis – Reported on the September retreat at Doublehead. A group of 13 boarded a pontoon boat to travel across the body of water to a restaurant. During the trip, the front of the boat capsized, allowing about a foot of water to enter. Life jackets were dispersed, but there were not enough for all the passengers. The operator called for another boat to assist. Lessons Learned – Have life preservers for all passengers, do not overload the boat, assure weight load is evenly distributed, and always be aware. Mr. Stephenson added that he did not do what he knew should have been done. He thought the boat might be overloaded, but did not take any action. This was a bad situation and he did not do his part to prevent the near mishap.

Jim Ellis stated that they did return to the resort by land. Dennis Smith added that the driver of the boat could not swim, but passengers reacted and helped. Don't assume safety checks have been made on your mode of transportation.

Charles Scales – Pat Williams asked him to convey her experience with a gas grill with the group. Ms. Williams ignited the gas grill and went to the side of the house to get a pail of water to wash her car. She was not away from the grill for more than five or six minutes. She heard a loud noise and upon investigating, found that the window had blown out of the grill. Another meeting attendee stated that the same thing had happened to his grill. The manufacturers are no longer installing windows in gas grills.

Denny Kross – Smoking areas around Building 4203 are being moved because of the air intake. He also reported that a lady fell in the lobby of Building 4203 one day when it was raining. The tiled floor was wet and slick. He is working to get rubberized mats installed up to the elevators. Umbrella bags are in place; however, they are not much help with the tiled floors.

**ACTION C-0114: Determine if other buildings on Center have similar situations as the lobby of Building 4203. (Dennis Davis/QS30; Due 11/15/01)**

Jody Singer – Flight safety issues are being worked and should be resolved in approximately 30 days. This may impact the launch, and could be delayed until January.

Bill Hicks – Policy on cell phones and pagers is for the October 6 event only.

Steve Beale – New building manager for 4202 is Jerry Williams and assistant is Joe Hobson.

Dennis Davis – There has been some concern regarding the fire alarm system. In the event a single smoke detector is activated, an alarm signal is transmitted to the fire department, but the local audible evacuation alarm does not sound. Only when a second detector is activated, do the audible devices sound. This delay feature is for smoke detectors only. If someone sees an actual fire and pulls the alarm, the audible alarms will immediately sound.

OPEN ACTIONS (Dennis Davis/QS30)

Dennis discussed the status of open actions. The charts presented are attached as Enclosure 7.

Axel Roth stated that funding for ergonomic is not available. There are five qualified ergonomic examiners at the Center. Ms. Cloud is trying to get the ergonomic funding issue included into her budget.

Dennis Davis reported that the action to benchmark Thiokol's training program for contractors is "in work." Mr. Stephenson stated that he did not understand "in work." The Facilities Department added that they would report on this at the next meeting.

The next meeting of the Safety, Health, and Environmental Central Committee is scheduled for November 5, 2001, at 8:30 a.m., in Building 4200, Conference Room P110.



Dennis S. Davis  
Industrial Safety Department

7 Enclosures

Distribution:  
Central Committee Members

**SAFETY, HEALTH, AND ENVIRONMENTAL CENTRAL COMMITTEE  
MONDAY, OCTOBER 1, 2001  
BUILDING 4200, CONFERENCE ROOM P110, 8:30 A. M.**

**MEETING AGENDA**

1) **OPENING REMARKS (A. STEPHENSON/DA01)**

2) **SPECIAL REPORTS**

**Back-Injury Prevention Exercises (Lana Hart/CD01)**

**Safety Day (Ed Kiessling/ED01)**

**VPP Update (Keith Cornett/FD20)**

3) **INDUSTRIAL SAFETY REPORT (D. DAVIS/QS30)**

4) **TEAM MEMBERS REPORTS**

<b>J. Kennedy/DD01</b>	<b>D. George/CSF</b>	<b>D. Bates/RS01</b>
<b>A. Roth/DE01</b>	<b>A. Goodson/QS01</b>	<b>C. Scales/OS01</b>
<b>D. Smith/UP01</b>	<b>J. Hamaker/VS01</b>	<b>D. Kross/TD01</b>
<b>W. Dye/KE/SE</b>	<b>S. Cloud/AD01</b>	<b>A. McCool/MP01</b>
<b>A. Sams/AFGE</b>	<b>T. Washington/CD01</b>	<b>A. Whitaker/SD01</b>
<b>W. Darbro/MESA</b>	<b>B. Kilpatrick/ED01</b>	<b>W. Hicks/LS01</b>
<b>P. Robbins/MSAT</b>	<b>J. Davis/FD01</b>	<b>S. Beale/PS01</b>

5) **REVIEW OPEN ACTIONS (D. DAVIS/QS30)**

6) **CALENDAR OF ACTIVITIES: NEXT MEETINGS**

**AREA COMMITTEE  
October 31, 2001**

**CENTRAL COMMITTEE  
November 5, 2001**

### Pelvic Tilts

- Lie on back with knees bent, feet flat on floor, and arms at sides
- Flatten small of back against floor. (Hips will tilt upward.)
- Hold for 10 to 15 seconds and release. Gradually increase your holding time to 60 seconds.



### Alternate Arm/Leg Extension

- Face floor on hands and knees.
- Raise left arm and right leg. Do not arch neck.
- Hold for 10 seconds and release.
- Raise right arm and left leg.
- Hold for 10 seconds and release.



### Prone Lumbar Extension

- Lie on your stomach and place your hands on the floor near the sides of your head.
- Slowly push your upper body off the floor by straightening your arms, but keep your hips on the floor. Hold for 10 seconds



### Prone Leg Raises

- Lie on your stomach. Tighten the muscles in one leg and raise it from the floor.
- Hold your leg up for a count of 10 and return it to the floor.
- Do the same with the other leg. Repeat five times with each leg.



### Partial Sit up/ crunch

- Lie on your back with knees bent and feet flat on floor.
- Slowly raise your head and shoulders off the floor and reach with both hands toward your knees.
- Count to 10.
- Repeat five times.



### Oblique Crunch

- Start with the pelvic tilt position.
- Keep one elbow on the ground to support your upper back muscles and ensure full range of motion.
- Leading with the opposite shoulder, slowly curl your body up, rotating your trunk toward the opposite knee.
- Once your shoulder blade has cleared the floor, hold the position for 3-5 counts, then slowly lower.
- Do 10-20 repetitions.



# Basic Steps For Proper Lifting

*Introduction* The following are guidelines for conducting a proper lift of an object on the ground. To lift objects not on the ground, the same principles apply. Before lifting, examine the load for grease, sharp edges or other hazards. Plan your path and make sure that there are no obstructions or tripping hazards. Consider how you will set your load.

Your spinal column is a very sensitive mechanism. Over time, improper lifting can cause irreversible damage that can lead to permanent injury.

## *Proper Lifting Procedures*

1. Position your feet at shoulder width to provide the necessary balance for a smooth lift.
2. Tighten your stomach muscles by pulling in your stomach. Keep your back straight to keep the spine, back muscles and ligaments in correct alignment.
3. Bend at the hips and knees by using the sit down position. Draw the object close to the body.
4. Grasp the object by opposite corners and position the body so the weight is centered over your feet.
5. Start the lift with a thrust of your feet, lifting with your leg muscles. Use smooth movements.
6. Once you lift the load, keep it close to the body. Avoid twisting motions.
7. Squat down slowly and place the load down gently.

**MSFC SAFETY DAY 2001 - OCTOBER 17TH**

**MORNING PROGRAM - MORRIS AUDITORIUM**

**(10 AM TO NOON)**

**FEATURED SPEAKER - MR. DONALD THEUNE**

**CHANGING THE SAFETY MYTH: "IT CAN'T HAPPEN TO ME"**

**SAFETY AWARD PRESENTATIONS**

**AFTERNOON PROGRAM - MORRIS AUDITORIUM**

**(1 PM TO 2:40 PM)**

**VPP SAFETY CHECKLIST**

**SAFETY BOWL**

**CONCLUSION**

# VPP Status

# Agenda

- What is VPP?
- Methodology
  - Self Assessment
  - Independent Assessment
  - Certification of Readiness
- Schedule
- Challenges
- How You Can Help

# What is VPP?

- **Voluntary Protection Program** consists of OSHA requirements which will be assessed against the MSFC safety and health program
  - SHE
  - Contractor safety and health program
- If your organization's civil service/contractor employees adequately executes the safety and health program then you should be fine
- Systemic issues must not be present!

# Methodology

- Methodology to be used to assess MSFC readiness for VPP STAR certification
  - Self-assessments
  - Independent assessments
  - Certification of Readiness

# Self Assessment

- S&MA and the Center Operations organizations are developing 2 Basic Checklists and 160+ Specific Hazard Checklists
  - SHE Program
  - General/Office Safety
  - Confined Space
  - Lockout/Tagout
  - PPE
  - Etc.
- Simple YES/NO Questions
  - A “NO” answer indicates deficiency
  - Button provided to request help on any question
- Complete only those checklists which assess operations under supervisor’s authority

# Self Assessment

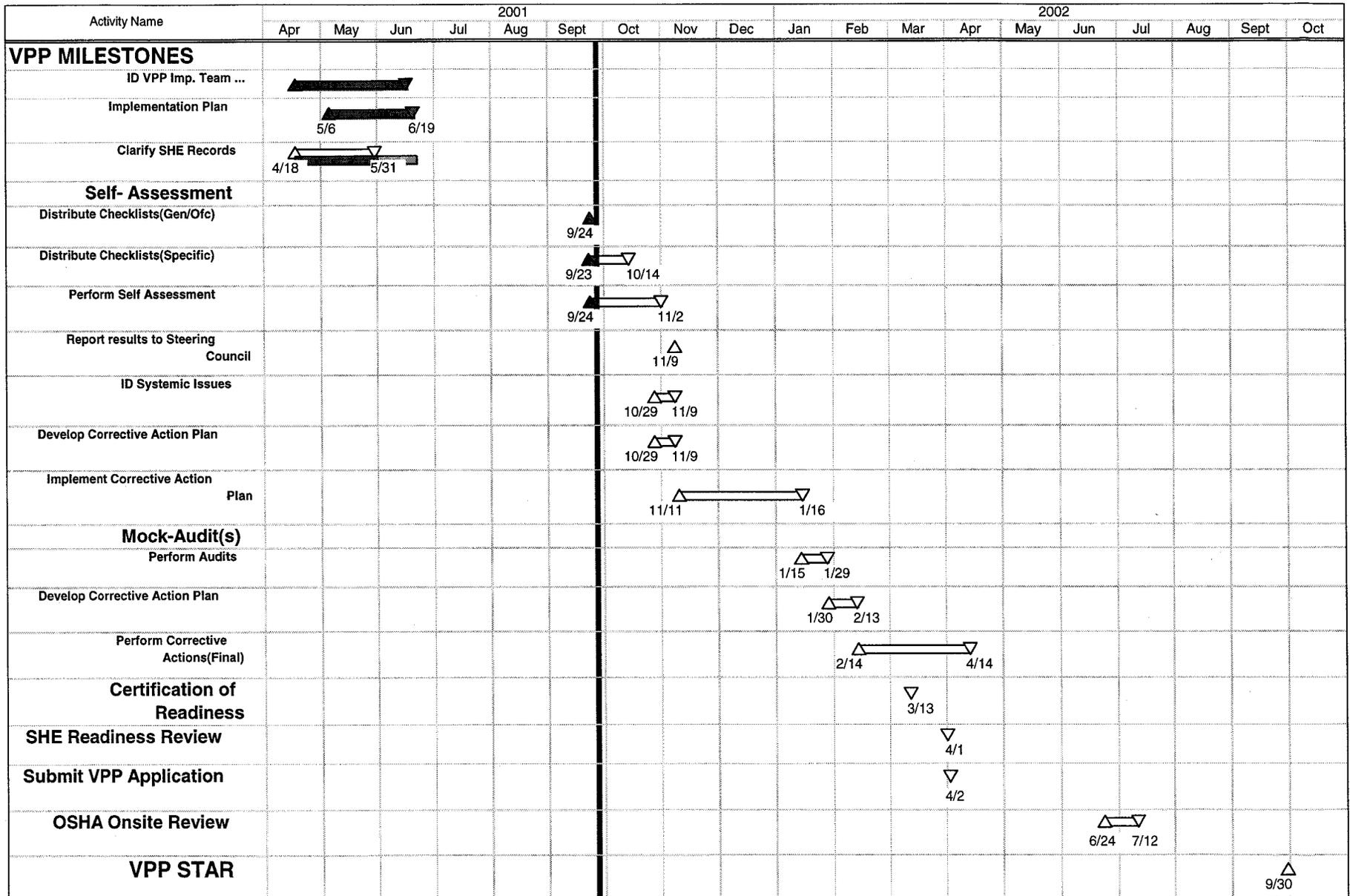
- Each NASA organization will be required to report the findings of the self assessment to the VPP Steering Council and to the SHE
  - Must also identify necessary corrective actions
- VPP Implementation Team will in parallel analyze the results to identify systemic issues
  - Must identify system-wide corrective actions

# Independent Assessments

- A combination of onsite and external Safety and Health professionals will perform
  - Personnel interviews
  - Facility visits
  - Record reviews
- Performed similar to OSHA On-site review methodology
  - Exception is that the independent assessments may be focused in specific operations areas
- Findings will be presented to organizations
  - Requires corrective actions to be defined and implemented
- VPP Implementation Team will analyze the results to identify systemic issues
  - Must identify system-wide corrective actions

# Certification of Readiness

- Prior to submission of the VPP application, Directorate heads will be required to sign a **Certification of Readiness** for organization's
  - Civil Service personnel
  - Prime Contracts personnel
- May have open corrective actions but must have acceptable closure plan



# Challenges

- Obtaining/sustaining commitment to VPP
  - Some problems with “spotty” attendance at mandatory VPP meetings
  - Untimely action item response
- Meeting the schedule
- Improving awareness of center personnel of the SHE program requirements/responsibilities
  - Execution of the SHE is dependent on effected personnel’s familiarity with the relevant SHE MPD’s/MWI’s/MPG’s
  - Do not believe personnel are adequately familiar.

# Challenges(cont.)

- Examples
  - Lockout/Tagout (MWI 8715.2) requires records of lockout/tagout events be kept
    - Spot survey of 3 contractors indicated that none of them were in compliance
  - Forklift operators are required to be certified (licensed) prior to operating a forklift (MWI 6430.1)
    - Unsafe operation stopped in mid-July; operator found not to be in list of certified operators; no seat belt on forklift(inspected 2 weeks prior and passed!)

# How You Can Help

- Follow up with your organization personnel that represent your VPP participation
- Review a SHE/Contractor procedure relevant to your organization in your staff meeting or in your safety meetings

# **MSFC Safety Data for Sept '01**

(Current as of September 28, 2001)

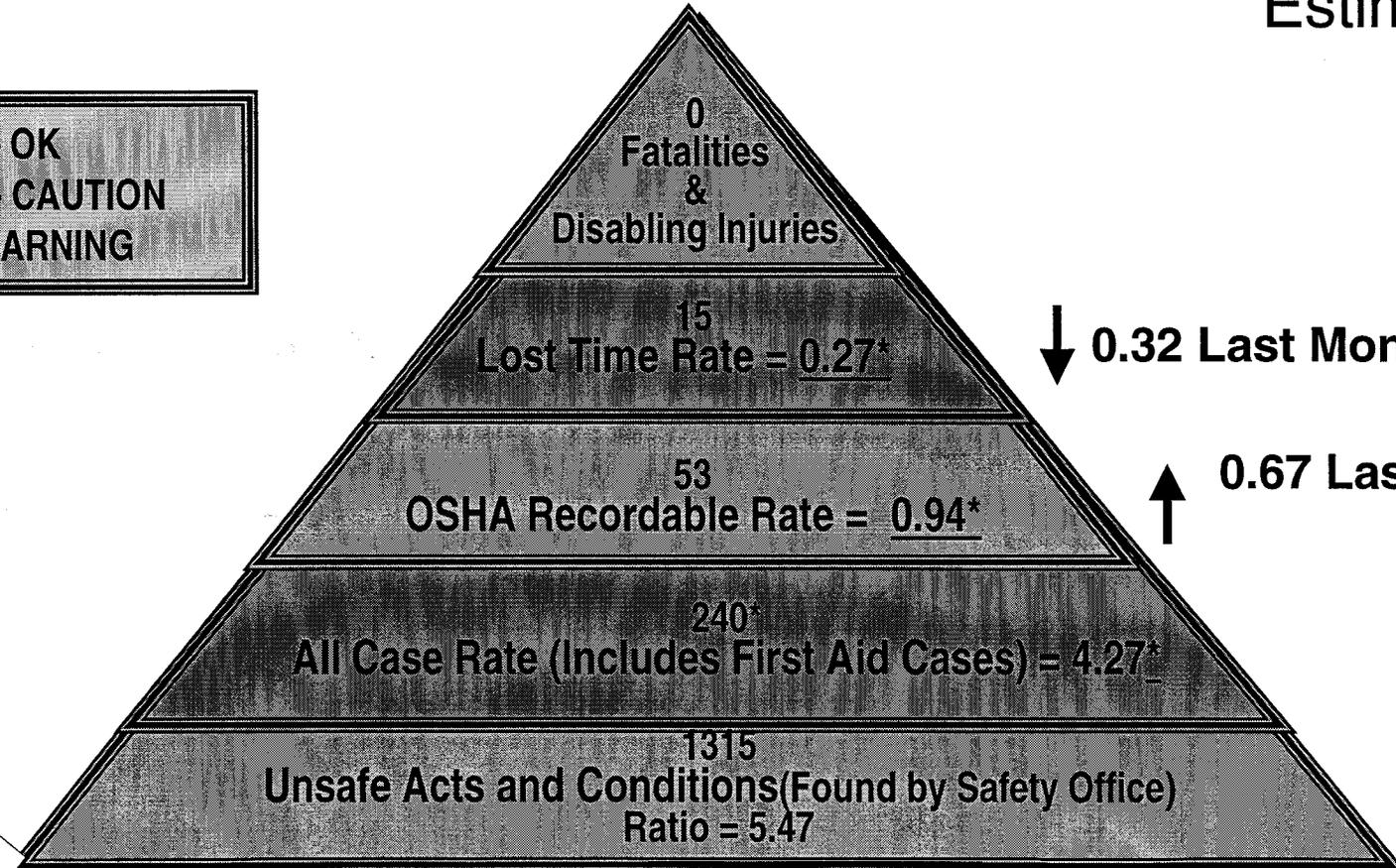
- 
- **Mishap Statistics**
  - **Trailing Indicators**
  - **Leading Indicators**
  - **Lost-times Since Last Meeting**
-

# MSFC Team Metric - Personnel Safety

Data for October 1, 2000 to September 28, 2001

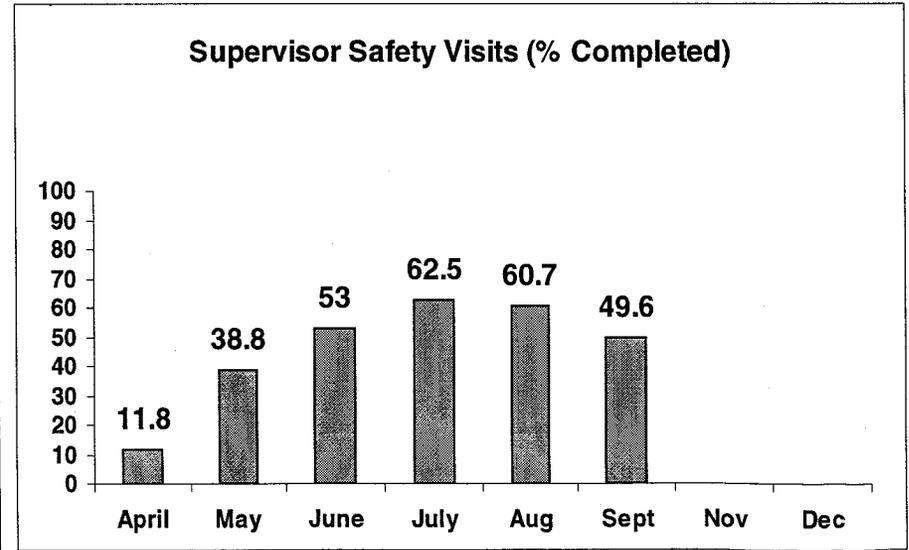
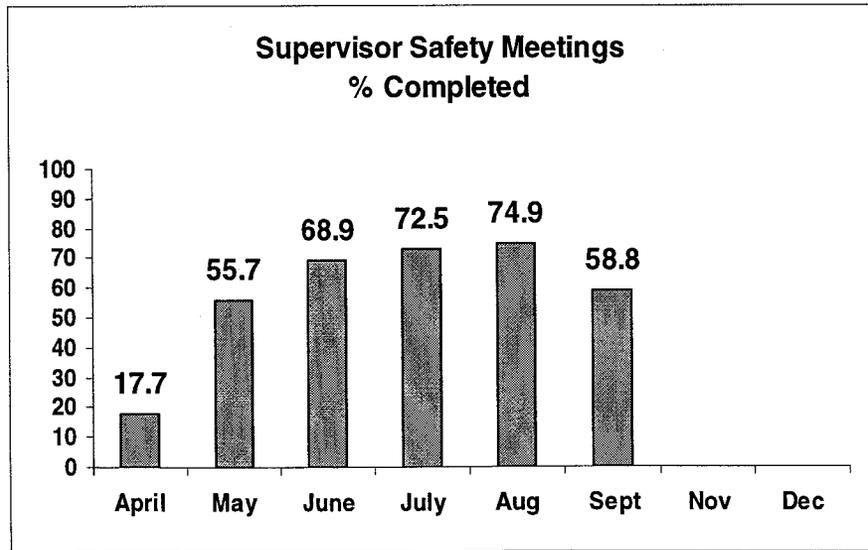
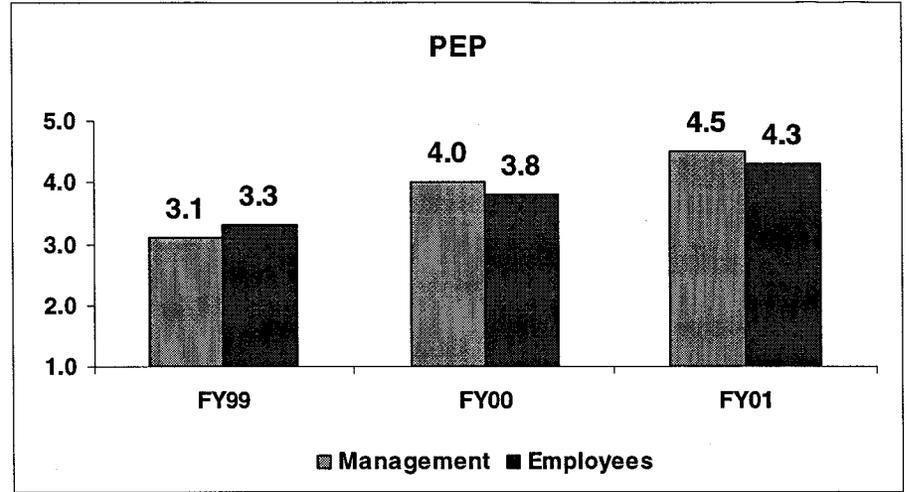
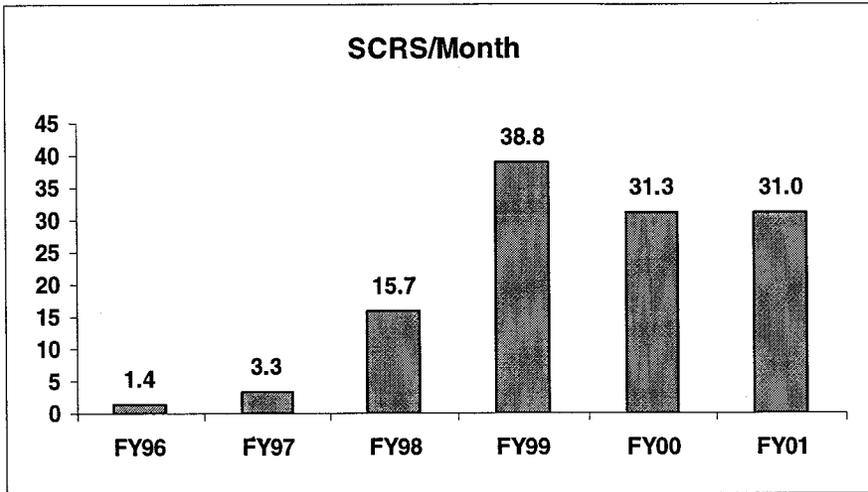
\* Estimated

Green - OK  
 Yellow - CAUTION  
 Red - WARNING

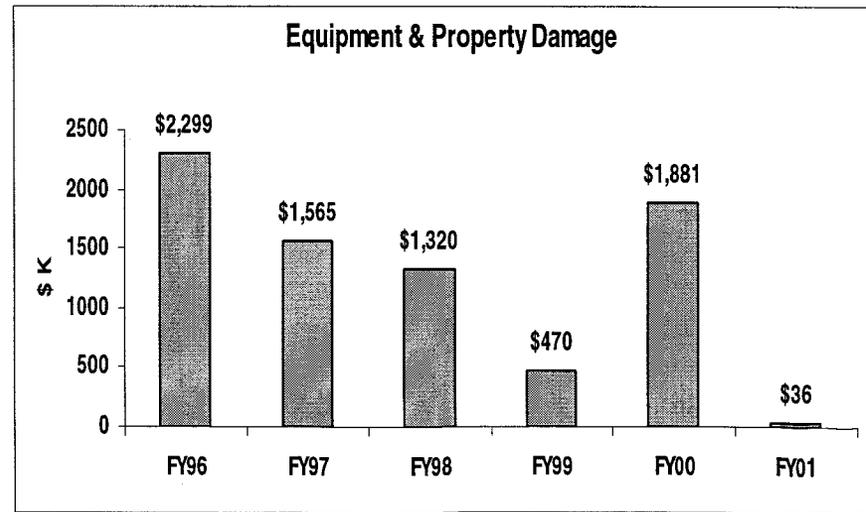
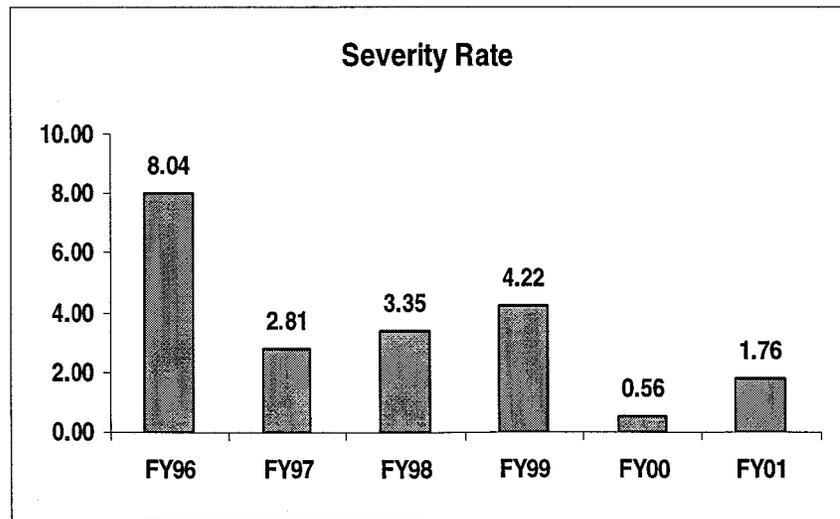
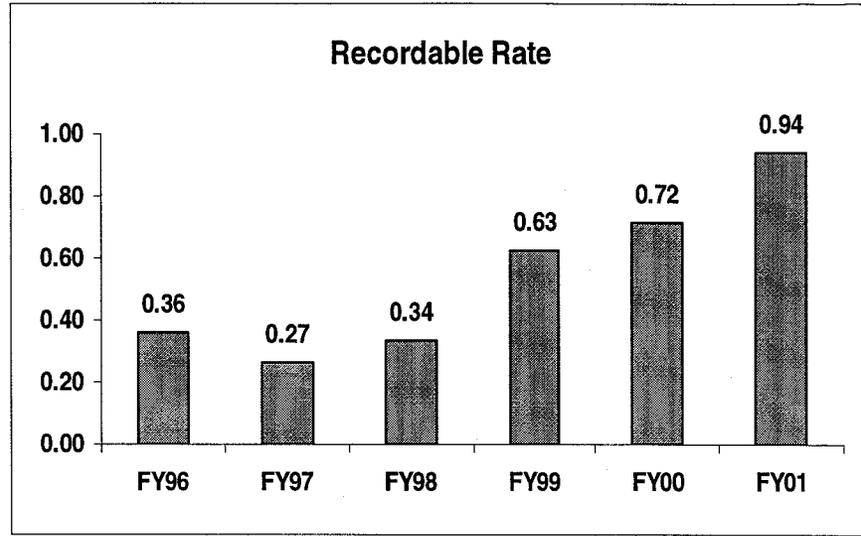
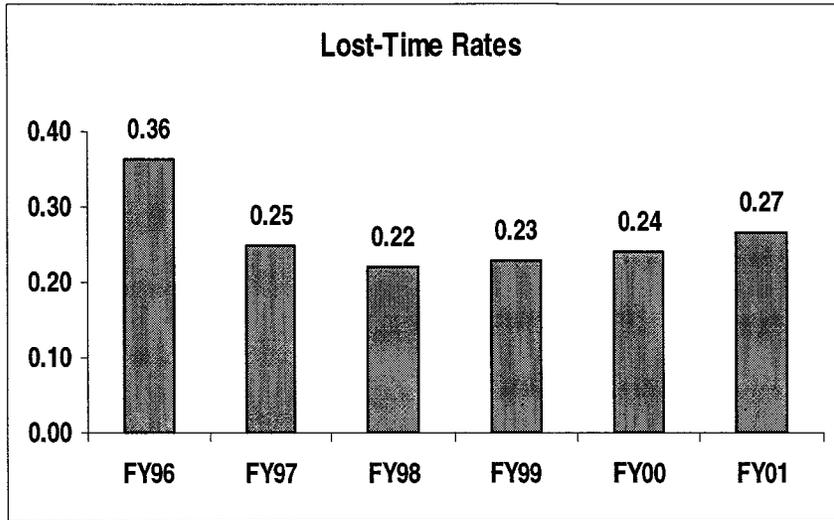


September Safety Meetings 58.8 % ↓	Sept. Safety Visits 49.6 % ↓	341 SCRS Reports Ratio = 1.42	Unsafe Acts/Conditions (Found by Supervisor) 864 for a Ratio = 3.60
------------------------------------	------------------------------	-------------------------------	---

# Team Metrics - Leading Indicators (9-28-01)



# Team Metrics - Trailing Indicators (9-28-01)



**Lost-Time Injuries Since The Last  
Central SH&E Committee Meeting (9/28/01)**

---

**NONE**

# BACKUP DATA

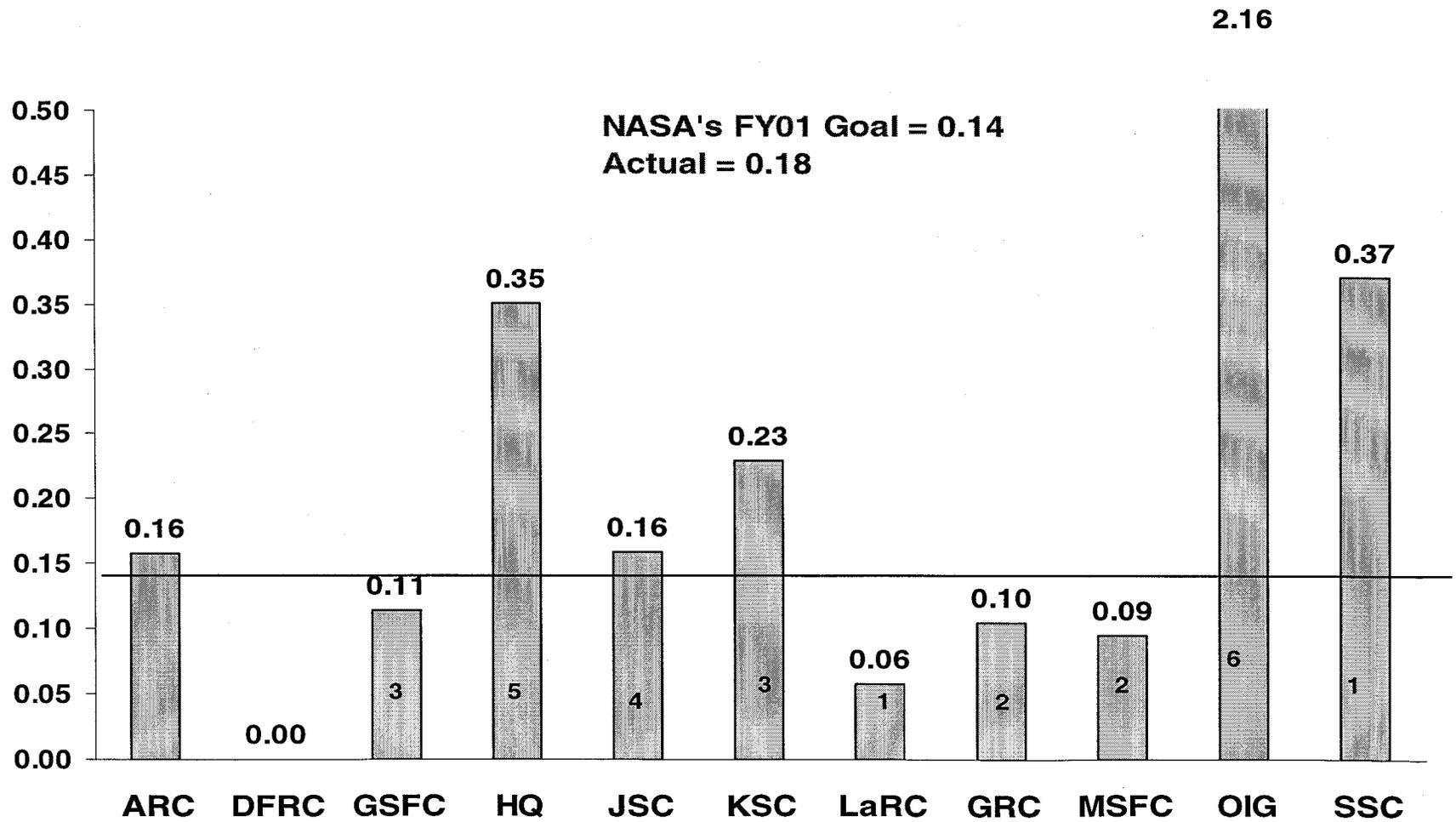
## MSFC Team Metric Key

Metric	Green	Yellow	Red
Type A & B	0 Cases	N/A	> 0
Lost Time Rate	0 to .10	.101 to .20	> .20
OSHA Recordable Rate	< 1.0	1.01 to 1.50	> 1.50
All Case Rate	< 2.0	2.01 to 3.00	> 3.00
Safety Off. Findings Ratio	>4	3-4	<3
Safety Meetings %	> 90%	80 to 90%	<80%
Safety Visits %	> 90%	80 to 90%	<80%
SCRS Ratio	>3.0	1.5-3.0	<1.5
Supervisor Findings Ratio	>10	5-10	<5

# FY2001 NASA Reportable Lost-Time Mishaps

(Civil Service as of September 26, 2001)

NOTE: Data is not current for all NASA Centers



## **Lost-Time Mishaps to date FY01 (Draft)**

---

- 07/17/01 - Employee injured back while handling flip charts at conference set-up
- 07/03/01 - Employee tripped on step of loading zone dock and injured knee
- 06/28/01 - Employee's right bicep separated from bone during office volleyball game.
- 06/19/01 - Employee tripped, twisting knee while crossing ditch.
- 06/06/01 - Employee injured elbow, requiring surgery, while emptying a mop bucket into sink.
- 05/16/01 - Employee was on TDY, lost balance on escalator and fell backwards, injuring leg.
- 05/03/01 - Employee slipped/tripped while walking down stairs with unknown injuries.
- 05/01/01 - Employee suffered severe back pain after standing from chair, requiring surgery on 07/18/01
- 05/01/01 - Employee was bitten by spider.
- 04/20/01 - Employee developed sudden back pain after 3 days of wet saw use.
- 03/14/01 - Employee was walking in office area, turned ankle. In course of day, ankle became stiff/swollen and she couldn't walk. Lost 1 day
- 02/20/01 - Employee fell while going down stairs resulting in shoulder and leg pain
- 12/14/00 - Employee fractured/lacerated fingers in heat sealing machine
- 11/15/00 - Employee sprained ankle while descending 2 steps (hurrying from one task to another)
- 10/03/00 - Employee missed/misjudged last step at bottom of stairs, tripping and breaking ankle

**SH&E "CENTRAL" COMMITTEE**  
**OPEN ACTIONS & ACTIONS CLOSED SINCE LAST MEETING**  
**October 1, 2001**

<b>ACTION NO.</b>	<b>ISSUE/CONCERN</b>	<b>POINT OF CONTACT</b>	<b>ACTIONEE</b>	<b>FINAL PRODUCT</b>	<b>DATE OPEN</b>	<b>ECD</b>	<b>STATUS</b>
C-0089	A close call incident involving the release of mercury cadmium telluride at Building 4481 was review.	A. Goodson/ QS01	F. Szofran/ SD47	Provide a final safety review to a senior manager board, to include S&MA Director, prior to restarting this operation.	11/06/00	Prior to restart	AD has initiated design work on a suitable enclosure system for furnaces.
C-0106	Carolyn Landry/AD41 reported that Center Operations did not have adequate funding for ergonomic furniture.	Art Stephenson/ AD01	Sid Saucier/DE01	Evaluate the ergonomic furniture funding issue and make recommendation to the Committee.	06/04/01	09/17/01	Needs to be reassigned.
C-0108	Dennis Davis reported that contractors' lost time rates are significantly higher than Civil Service.	Art Stephenson/ AD01	Donnie George/CSF	Evaluate contractor mishap records to determine why lost time rates are higher.	06/04/01	11/01/01	Plan presented at 7/2/01 meeting. Will present final report at the November SHE Central meeting.
C-0109	Alex McCool asked if we train our construction contractors before they're allowed to work on center. He said Thiokol had an excellent program.	Art Stephenson/ AD01	Sheila Cloud/AD01	Benchmark the Thiokol process for training contractors in safety before entering the site.	07/02/01	11/01/01	In work.
C-0111	Dr. Dye reported on a lost time incident in which an employee injured his back standing up from his desk.	Art Stephenson/ AD01	Sheila Cloud/ AD01	Present back injury prevention exercises at the next SHE Central Meeting.	08/06/01	09/04/01	CLOSED. Presented today.
C-0112	Dennis Davis reported the percentage of safety meetings and visits conducted by supervisors.	Art Stephenson/ AD01	SHE Area Committee	Establish goals for safety visits and safety meetings.	08/06/01	10/01/01	Recommendation: GREEN - > 90% YELLOW - 80% - 90% RED - < 80%