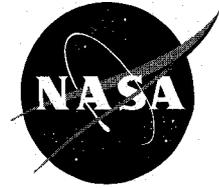


National Aeronautics and  
Space Administration

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



March 5, 2003

Reply to Attn of:

QS50 (03-13)

TO: Distribution

FROM: QS50/David J. Spacek

SUBJECT: Minutes of the MSFC Safety, Health, and Environmental Committee  
Meeting – February 26, 2003

The Safety, Health, and Environmental (SHE) Committee met at 2:00 p.m. on Wednesday, February 26, 2003, in Building 4200, Conference Room P110. The attendance list is maintained on file in the Industrial Safety Department (4202/307). The agenda for the meeting is attached as Enclosure 1.

**Opening Remarks (Nance Jo Ogozalek/ED33)**

Nance Jo welcomed everyone and addressed an informal old business item regarding the difficulty of finding parking at the 4200 complex. After discussion at the Working Group meeting on February 12, 2003, it was decided that the regular SHE meetings would continue to be held in the 4200 complex, usually 4200/P110. Nance Jo stated that last minute comments should be forwarded to her. Nance Jo also addressed the recent safety bulletin on the recall of power strip, Model PS-201-2. Nance Jo showed one of the defective power strips and described a quick way of identifying the strip – plugs are perpendicular to the long axis of the power strip.

**Safety Moment (Dennis Davis/QS50)**

Dennis spoke about a Pendant Sprinkler Head that had been painted. He gave a brief description of how the sprinkler head operates, and instructed the attendees that if they should see one painted to report it to their Building Manager. Dennis talked about the dangers of sprinkler heads being painted. He showed two different types and locations where paint could cause a malfunction resulting in loss or inadequate water coverage.

**Previous Meeting Minutes (Nance Jo Ogozalek/ED33)**

Nance Jo recommended that the Committee delay approving the February 12, 2003, SHE Working Group Minutes until hard copies were provided to all members for review. Formal approval would be delayed until the next SHE meeting.

***Mission Success Starts with Safety***

**Open Actions (Dennis Davis/QS50)**

Dennis reviewed the open actions. The due dates for several actions had been previously extended. Nance Jo requested that each affected member provide written status updates at the next meeting regarding the SHE Program Improvements actions. Nance Jo expressed the need to notify absent members, especially regarding the SHE Programs Improvements actions. An action item was added to this effect. The open action list is attached as Enclosure 2.

**ACTION SHE-03-004: Develop a method of contacting SHE Committee members not in attendance regarding SHE Program Improvement Actions.  
(Dennis Davis/QS50; Due 4/30/03)**

**Special Reports****Back Injury, Lost Time Injury (Dave Jones/CSC)**

Dave reported that a one-day lost time injury resulted when an employee strained his back while attempting to change batteries in the Emergency Warning System (EWS) cabinet located in building 4708. In the process, the employee discovered the bolts that hold the unit to the wall were loose. While attempting to repair the problem, the bolts gave way resulting in the employee holding up the cabinet to prevent the cabinet from falling on his feet. Using his cell phone, the employee managed to call his company for assistance. He was transported to the Medical Center and then to a local hospital. The attending physician advised one day of rest. Dave indicated that CSC would conduct a Centerwide survey of all EWS cabinets and additional support brackets would be installed if needed. The chart presentation is attached as Enclosure 3.

**SHE Program Improvement Status Reporting (Keith Cornett/UP01)**

Keith presented suggested templates for briefing Subcommittee and Directorate reports during the SHE Committee or Working Group Subcommittee meetings. Attendees were requested to e-mail comments to Keith. The chart presentation is attached as Enclosure 4.

**SHE Committee Reports****Industrial Safety Report (Dennis Davis/QS50)**

Dennis presented the safety metrics, and discussed a change in the metric pyramid chart in that Unsafe Acts and Unsafe Conditions identified by Supervisors, as a part of the Supervisor Safety Web Page, are now listed separately. Dennis answered several questions from attendees regarding the Inventory of Hazardous Operations, the Master HAZTRAK chart, and the Safety Concerns Reporting System (SCRS). Jim Carter/AD01 spoke on SCRS assigned to his group that are over 60 days and beyond Center control; e.g., problems concerning an Army contractor problem outside Gate 9. Dennis and others stated the revised MWI 8715.13 would address this issue. The chart presentation is attached as Enclosure 5.

Marshall Safety Action Team (MSAT) (Glenn Owens/LB&B)

Glenn reported that the "dirty" phone problem has been resolved. CSC service technicians were advised to clean the phones as part of their repair/servicing activities. He also noted that MSAT would support the 10<sup>th</sup> Annual Moon Buggy Race scheduled for April 11 and 12, the Health Day in April, and another Seat Belt Initiative to be conducted on April 2, 2003.

Communications Team (Judy Milburn/QS50)

Judy reported that the Communications Team is working on a Back Injury Prevention Campaign and that progress, including funding resources, is good. The SHE Communications Team is also working on the "Take Our Children to Work Day" workshop planned for April 24, 2003.

Training (Pat Shultz/CD20)

Pat reported that action item, SHE-02-014, developing a checklist for supervisors to assure that temporary employees receive adequate safety training, would be completed before the due date of March 19, 2003.

Emergency Preparedness (Cathy Miller/AD62)

- Cathy stated that the functional group members to the subcommittee were the Emergency Management Director (Jim Carter/AD01), Deputy Emergency Management Director (Acting) (Allen Elliott/AD10), Emergency Preparedness Officer (Cathy Miller/AD62), Protective Services, Environmental Engineering, Information Services Communications, Medical Services, Facilities Engineering, Industrial Safety, Media Relations, Human Resources, and others as needed. The subcommittee members are involved in lessons learned, continuous improvement, and planned tabletop exercises.
- In coordination with the Army, Jim Carter spoke on numerous table exercises to review contingency action plans associated with a possible terrorist attack, and available web sites to obtain threat level information; e. g., American Red Cross, FEMA, and Homeland Security. He also stated that MSFC has the capability of shutting down building air handlers. Of special interest is that if there is a war, it is very likely that the Threatcon Level at Redstone would be elevated to "Delta" for some brief period of time, 24-72 hours. One of the requirements at Delta is that each vehicle coming through the gates would be thoroughly inspected. Since it is not practical to search 10,000+ cars while entering the Center, it is expected that the majority of employees would be placed on excused leave for the duration of the Delta threatcon level. This information will be available for everyone at MSFC through 4-HELP and also links on the Marshall Web Site. Questions may be emailed to Cathy Miller or Jim Cater.
- Cathy spoke of the recent Annual State Wide Tornado Drill. The drill was a success with no plans to retest a specific building. Minor problems included a few EWS speakers need adjusting, and a few designated protective areas need to be reviewed. A recommendation was made to provide special instructions to construction and other outdoor workers, who are not aware of the MSFC EWS.

Energy & Water Conservation (Cedreck Davis/AD22)

Cedreck gave an overview of the first fiscal quarter 2003 of the Center's usage of energy. He encouraged energy conservation at all times. A future program of "Click It Off" will be announced at a later date. The first quarter's results show Marshall on track to meet target reduction. Ron Burns/AD40 asked if the solar powered parking lights at the new fitness center had realized any energy savings; Cedreck's reply was "yes." The chart presentation is attached as Enclosure 6.

Environmental Excellence (Sharon Scroggins/AD10)

Sharon spoke about Earth Day, scheduled for April 23, and the Logo contest. The Logo contest entry deadline has ended, voting day and locations will be announced, and color copies of submittals will be posted in the main cafeterias. She also gave a description of prizes. Other topics included new awards program, the need for environmental suggestions for Center employees, and an announcement that an article is planned for the Marshall Star.

New Business (Nance Jo Ogozalek)

Lost Time Injury (Dave Spacek/QS50)

Dave discussed a previously (last month) announced Lost Time injury at building 4708. A Boeing employee injured his leg; however, since there was no physical root cause (slip/trip/fall) identified and the employee might have had a preexisting condition. The decision was made by the Industrial Safety Department, with consultation with OSHA, that it would not be counted as a Center lost time injury.

Speed Limit in 4200 Complex Parking Lot

An attendee asked about the 10 mph speed limit signs painted on the south parking lot surfaces in the 4203 complex. It is obvious the "10" was painted over "15" and the new sign is not consistent in all 4200 parking lots. Numerous attendees spoke about the difficulty of maintaining 10 mph. Cathy Miller/AD62 took an action to look into the situation.

**ACTION SHE-03-005: Investigate why the speed limit was reduced from 15 to 10 mph in the 4203 south parking lot, when it is 15 mph in other 4200-complex parking lots. (Cathy Miller/AD62; Due 5/28/03)**

Review of Open Actions (Mary Walters/HEI)

Two new actions were initiated: (1) investigate the painted 10 mph sign on the surface of the south parking lot of 4203, and to why it was reduced from 15 mph to 10 mph; and (2) develop a method to notify SHE Committee members of the updates to the SHE Programs Improvement actions.

The next SHE Committee Meeting will be a working meeting scheduled for Wednesday, March 19, 2003, at 2:00 p.m. in Building 4202, Conference Room 326A.



David J. Spacek  
Manager  
Industrial Safety Department

6 Enclosures

Distribution:

SHE Committee Members  
Safety Web Page

cc:

CD20/P. Schultz  
CSC/P. Robbins  
DE01/A. Roth  
QS40/R. Mize  
QS50/D. Davis/J. Milburn  
UP10/K. Cornett  
HEI/R. Smith

**SHE COMMITTEE AGENDA  
Building 4200, Conference Room P110  
2:00 pm, Wednesday, February 26, 2003**

**Open Meeting (Nance Jo Ogozalek/ED33/Chairperson)**

- Location of Meetings
- Power-Strip Recall

**Safety Moment (Dennis Davis/QS50)**

**Management Mentor (Axel Roth/DE01)**

**Previous Meeting Minutes (Nance Jo Ogozalek)**

**Open Actions (Dennis Davis/QS50)**

**Special Report(s)**

- Back Injury Lost Time Mishap (Dave Jones/CSC)
- SHE Program Improvement Status Reporting (Keith Cornett/UP01)

**SHE Organization Reports**

- Industrial Safety Report (Dennis Davis)

**Non-Voting Sub-Committee/Team Reports:**

- MSAT (Irene Taylor/ED10)
- Communications (Norma Horton/QS50)
- Training (Pat Schultz/CD20)
- Emergency Preparedness (Cathy Miller/AD60)
- Energy & Water Conservation (Cedreck Davis/AD22)
- Environmental Excellence (Sharon Scroggins/AD10)

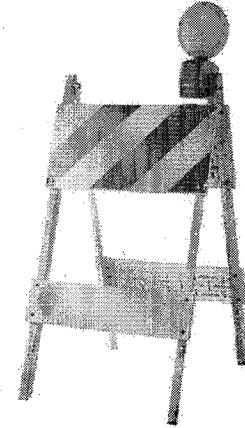
**New Business - Open Floor (Nance Jo Ogozalek)**

**Review New Open Actions (Recorder)**

**Plan Report to Marshall Team Meeting (Nance Jo Ogozalek)**

**SHE Committee Open Actions February 26, 2003**

<b>ACTION NO.</b>	<b>ISSUE/CONCERN</b>	<b>POINT OF CONTACT</b>	<b>ACTIONEE</b>	<b>FINAL PRODUCT</b>	<b>DATE OPEN</b>
SHE-02-007	Dennis Davis showed a sharp increase in the number of late HAZTRAK actions.	Axel Roth/DE01	Organizations with Late HAZTRAK Actions	Either close actions or provide new completion date with reason current date could not be met.	08-28-02
SHE-02-013	A question was raised concerning availability of fire extinguisher training. The Fire Department and Cortez III are providing training but not sure if it being properly recorded.	Nance Jo Ogozalek/ED33	Training Sub-committee	Assure that fire extinguisher training attendance is being document by the Training Department.	10-02-02
SHE-02-014	The Laboratory Operations Sub-committee proposed that a checklist be developed for supervisors to assure temporary employees receive adequate safety training.	Nance Jo Ogozalek/ED33	Training Sub-Committee	Review proposal for a supervisor's checklist for temporary and new employees and submit recommendation to the SHE Committee.	10-02-02
SHE-02-019	Jamie Miernik/ERC proposed that the Center make May 2003 Transportation Safety Focus month with emphasis on bicycle riding.	Nance Jo Ogozalek/ED33	Dave Spacek/QS50	Review proposal to make May 2003 Transportation Safety Focus month with emphasis on bicycle safety.	10-30-02
SHE-02-020	Phil Robbins presented the SHE Program Improvements Action Plan	Nance Jo Ogozalek/ED33	Actionees as Identified in Plan	Review the SHE Program Improvement Plan and provide an ECD for each assigned action.	11-13-02
SHE-02-023	Gaines Watts presented proposed restriction-guidelines for test area visitors. Some committee members felt this should be part of a Centerwide policy.	Nance Jo Ogozalek/ED33	Dave Spacek/QS50	Investigate the need for, and develop as required Centerwide guidelines for visitor access to hazardous areas.	11-26-02
SHE-03-002	At the last meeting, it was discussed that a process was needed for bringing items to the SHE Committee. It was not captured in the minutes.	Nance Jo Ogozalek/ED33	Tom Dollman/SD01	Develop a proposed process for subcommittees and organizations to submit ideas to the Committee.	01-08-03



# PrISMS - IS MISHAP REPORT

Mishap no. CSC-003/06



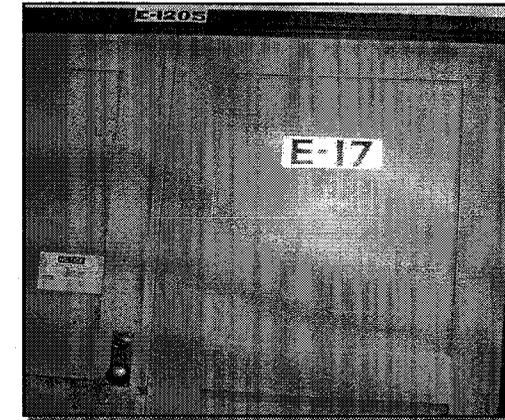


# PrISMS Mishap Report

Mishap no. CSC-003/06

## Mishap Location

On February 13<sup>th</sup>, 2003 a CSC/Arcata employee was performing routine maintenance on MSFC Emergency Warning System (EWS). The equipment is located in mechanical equipment room E-17 of building 4708

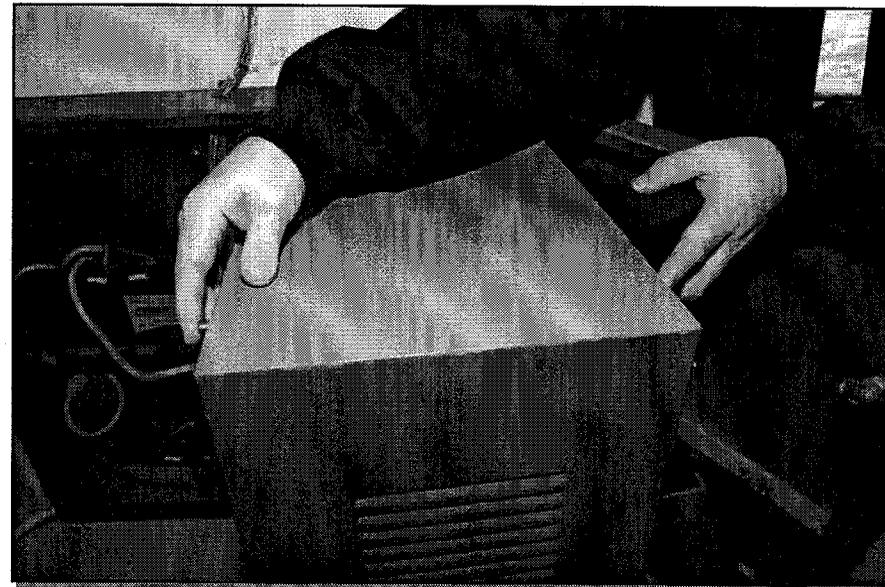




# PrISMS Mishap Report

Mishap no. CSC-003/06

Employee opens EWS cabinet

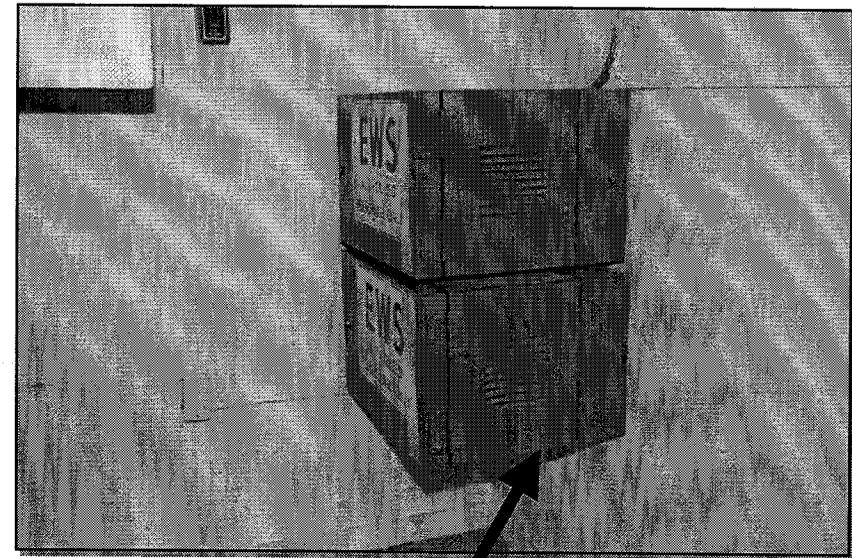
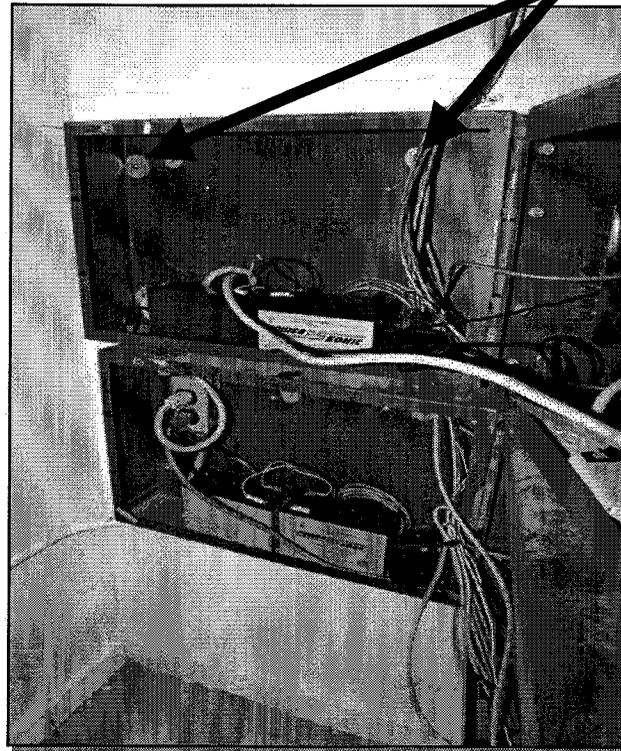




# PrISMS Mishap Report

Mishap no. CSC-003/06

Employee found loose mounting fasteners in top cabinet.



During remounting of the top unit, the bottom unit fell.



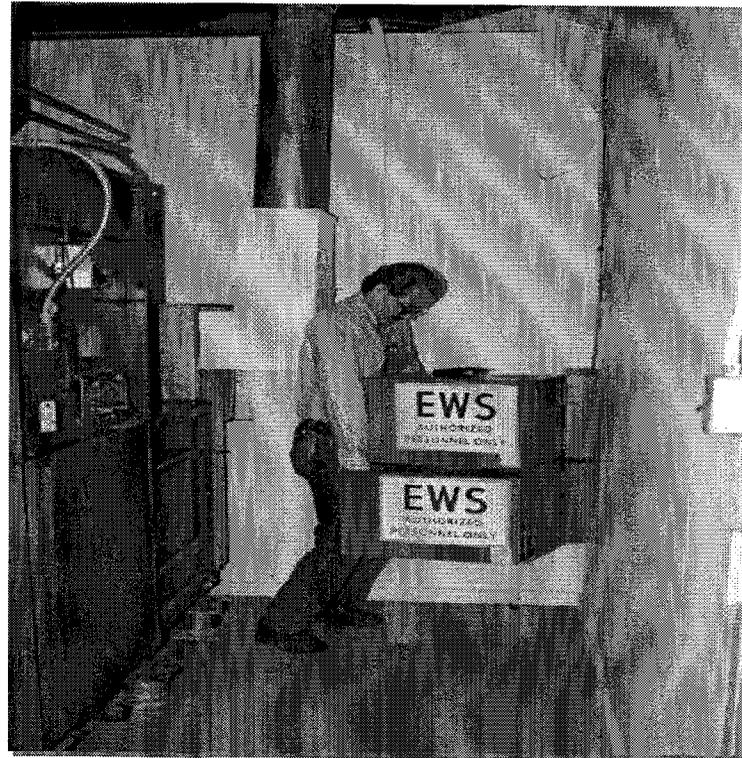
# PrISMS Mishap Report

Mishap no. CSC-003/06

Employee attempted to hold up cabinet

Which resulted in a back injury

here



Re-enactment



# PrISMS Mishap Report

Mishap no. CSC-003/06

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## **Medical Treatment required**

- Employee was transported to hospital
- Employee released from hospital same day
- Physician directed employee to take next day off
- Mishap resulted in one (1) day lost time



# PrISMS Mishap Report

Mishap no. CSC-003/06

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## Mishap Analysis

here Root cause of mishap was the original mounting of the EWS equipment cabinets and location. Equipment was installed approximately (10) years ago.



# PrISMS Mishap Report

Mishap no. CSC-003/06

## Remedial Action Plan

1. The employee has received safety awareness training for prevention of back injuries.

here

**Reference:** Oklahoma State University interactive back safety presentation.

2. A survey of EWS equipment installations is being conducted, to determine if any additional problems involving mounting and stability exist.



# PrISMS Mishap Report

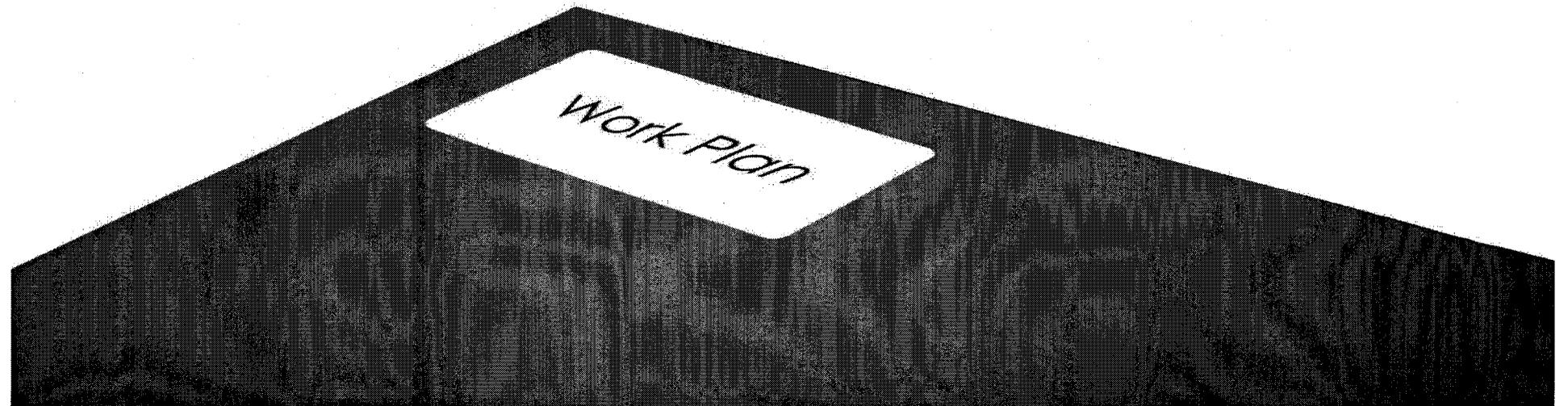
Mishap no. CSC-003/06

## Remedial Action Plan

3. A work plan is being prepared by PrISMS Safety Office to address the following aspects of EWS equipment installation and maintenance:

here

- a. The work plan will establish minimum requirements for fasteners and mounting surfaces





# PrISMS Mishap Report

Mishap no. CSC-003/06

## Remedial Action Plan

Work plan will have a provision to ensure that the appropriate clearances for working on the equipment are maintained.

here



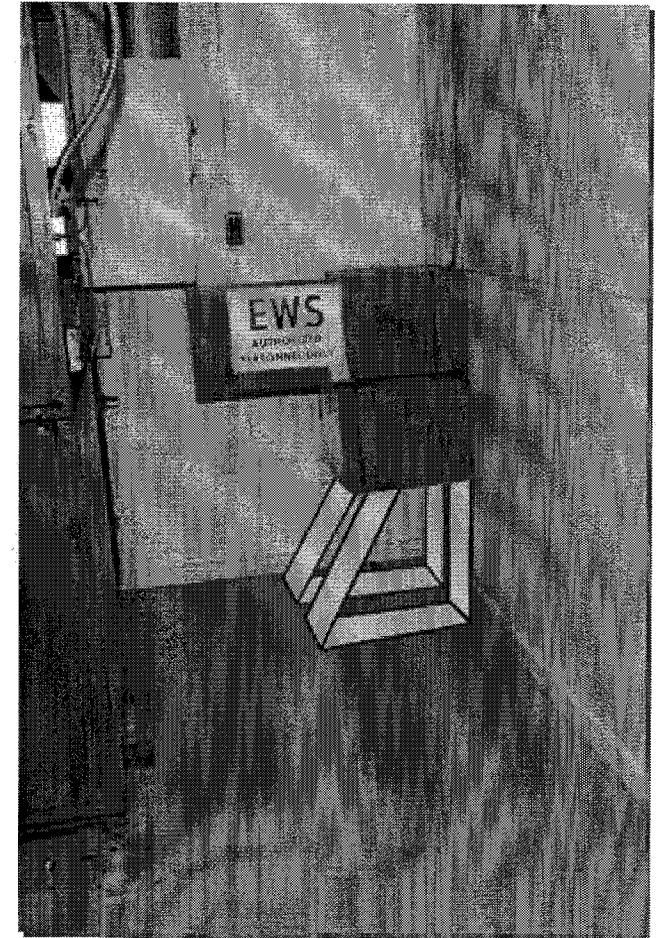


# PrISMS Mishap Report

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## Remedial Action Plan

The work plan will require that new installations of EWS equipment have here supports that will transfer a significant portion of the load to the floor, reducing the load on fasteners in walls and communications backboards.





# Summary

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- Employee has returned to work
- Mishap has been reported to the proper safety authorities
- Survey is being conducted to identify others areas that may need repair.
- Corrective action has been implemented to prevent future occurrence.

# Subcommittee Report Template

- Status of Current Initiative(s)
- SHE Actions Status
- Subcommittee Issues
- Proposed Initiative(s)
- Recommend no more than 3 minutes per report
  - Special topics will be given additional time if required
- The eleven voting subcommittees plus the Contractor Safety Forum will report at each SHE working meeting
- The 5 non-voting subcommittees and the MSAT will report at the monthly SHE meeting

# Directorate Report Template

- Discuss late open SCRS Metrics
- Discuss late open HAZTRAK corrective actions Metrics
- Discuss mishaps/close call late open corrective actions Metrics
- Discuss late open CY 2002 Self Evaluation Open Corrective Actions
- Recommend no more than 5 minutes per report
- Report occurs at Monthly SHE meeting



# **MSFC Safety Data for FY03**

(Current as of February 26, 2003)

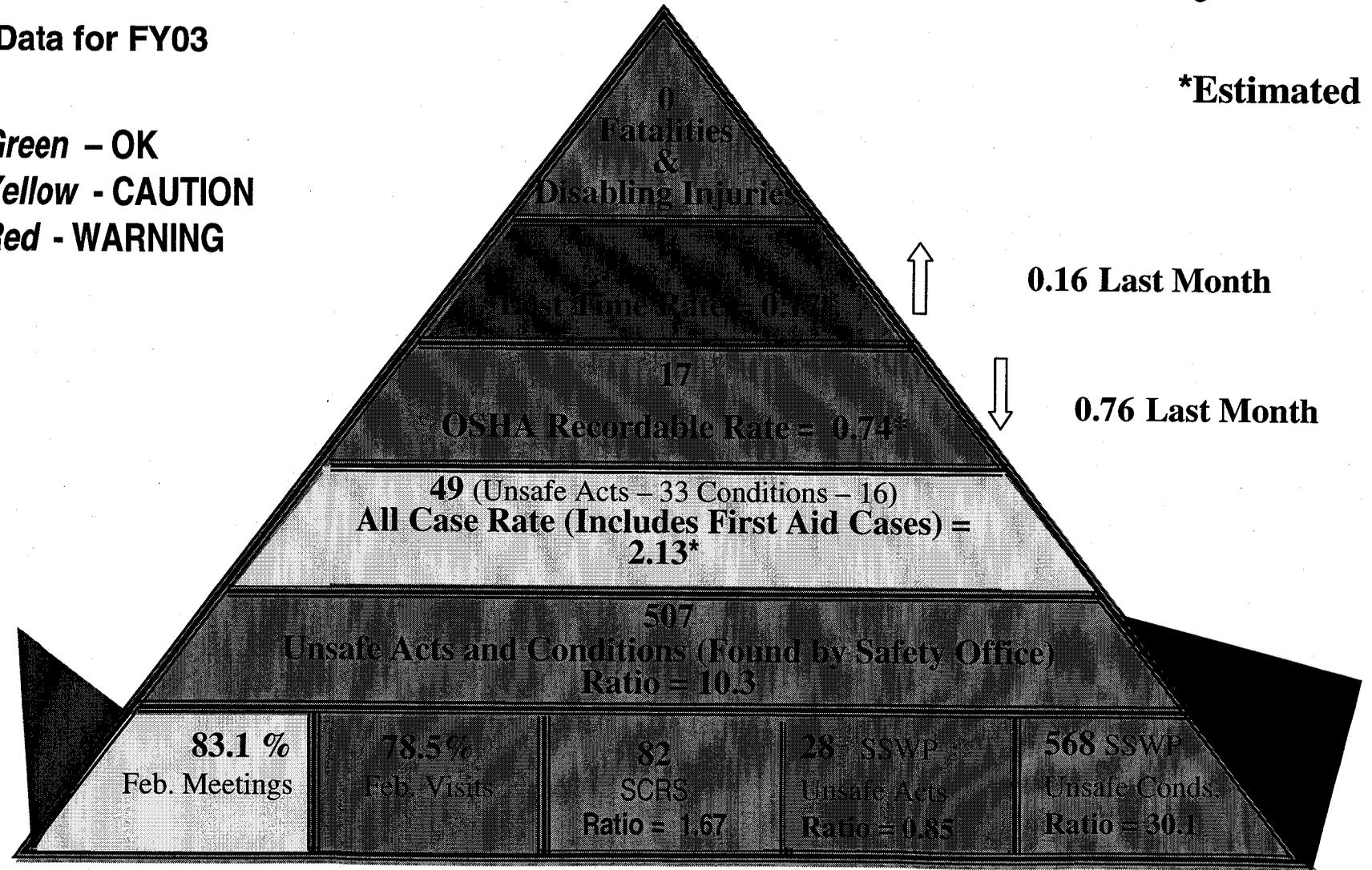
- 
- **Personnel Safety Pyramid**
  - **Leading Indicators**
  - **February Safety Meetings/Visits**
  - **SCRS Report**
  - **Trailing Indicators**
  - **OSHA Recordable Rates by Organization**
  - **FY03 Lost-Time Mishap**
- 

# MSFC Team Metric - Personnel Safety

Data for FY03

**Green - OK**  
**Yellow - CAUTION**  
**Red - WARNING**

**\*Estimated**





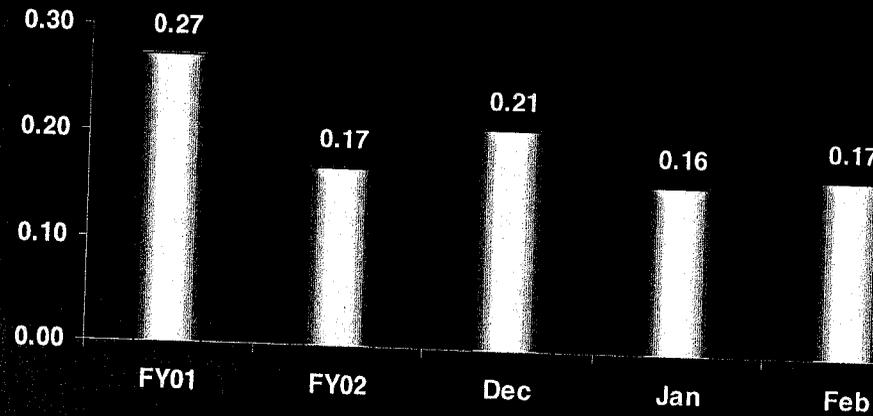
## **Corrective Actions for Red/Yellow Pyramid Metrics**

- **Lost Time Rate & All Case Rate**
  - “Back Injury” and “Safety Concerns Reporting” Campaigns being planned for early this Year.
  - Continuing Implementation of SHE Program Action Items identified in Last Year’s Assessments
  - If funding available, Star Consultants will update Assessment and provide Consultation on Program Direction
- **Supervisor Visits and Meetings**
  - None (Expected to be Green by Monday)
- **Ratio of “Unsafe Acts” Findings by Supervisors**
  - Promote Identification of Unsafe Acts

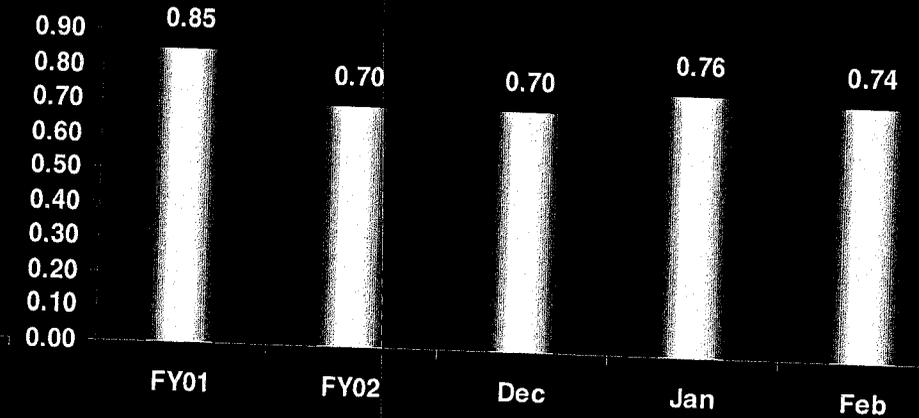
# Team Metrics - Trailing Indicators (02-26-03)

Lower is Better!

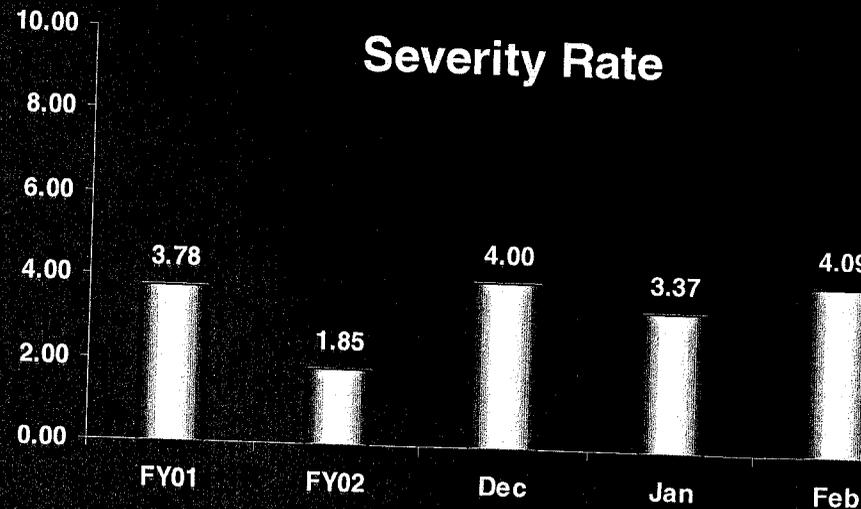
### Lost-Time Rate



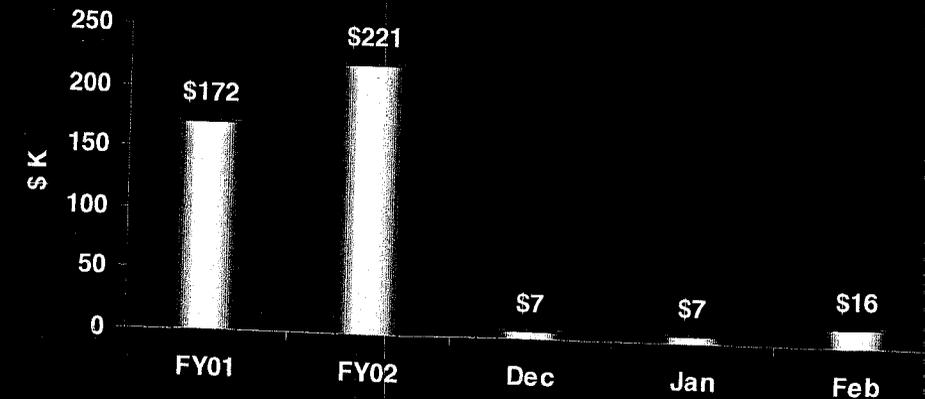
### Recordable Rate



### Severity Rate



### Equipment & Property Damage





**February Safety Meetings and Visits** (02-26-03)

**HONOR ROLL - 100% both Meetings & Visits**

**LS (15)**

**MP (15)**

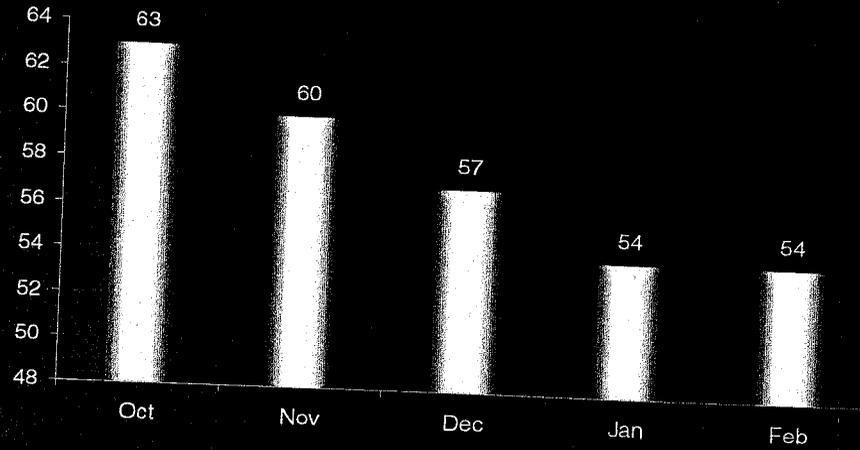
**SD (15)**

**VS (14)**

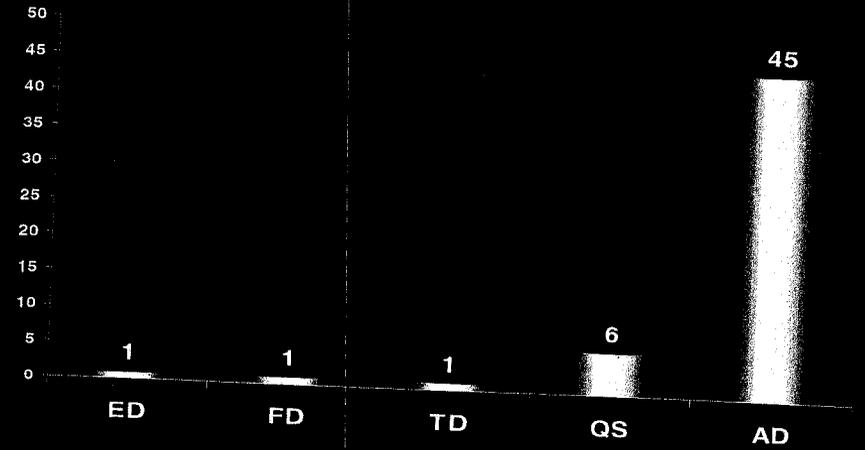
**(Consecutive Months on Honor Roll)**

# SCRS Metrics (02-26-03)

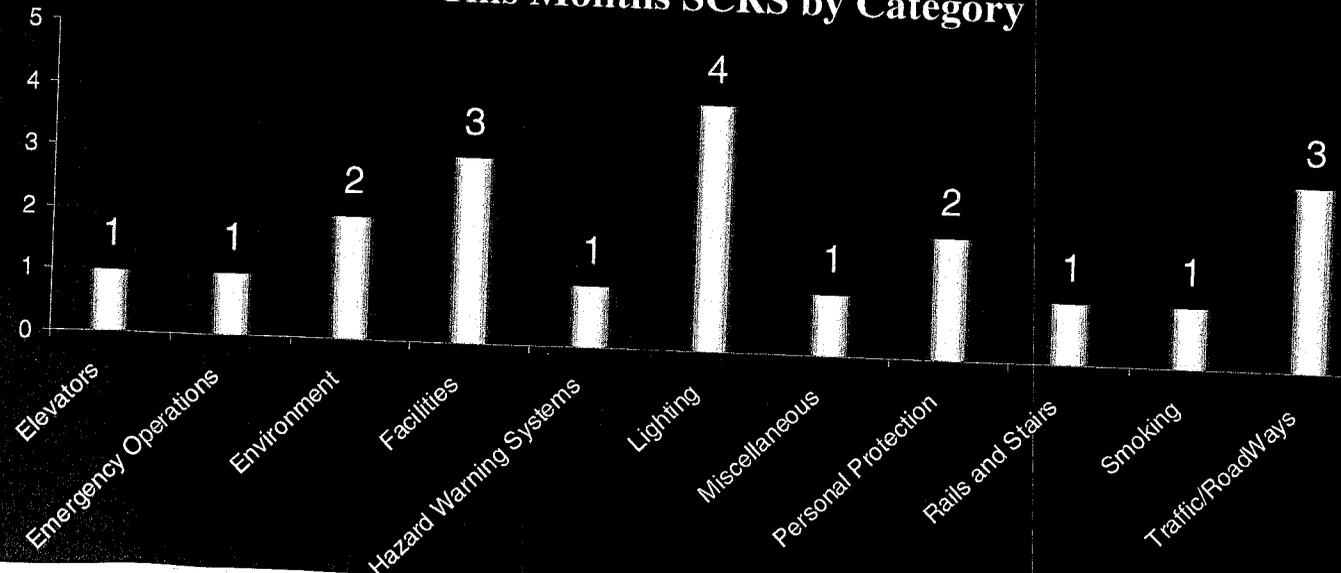
## SCRS Open Over 60 Days



## SCRS Open Over 60 Days by Organization

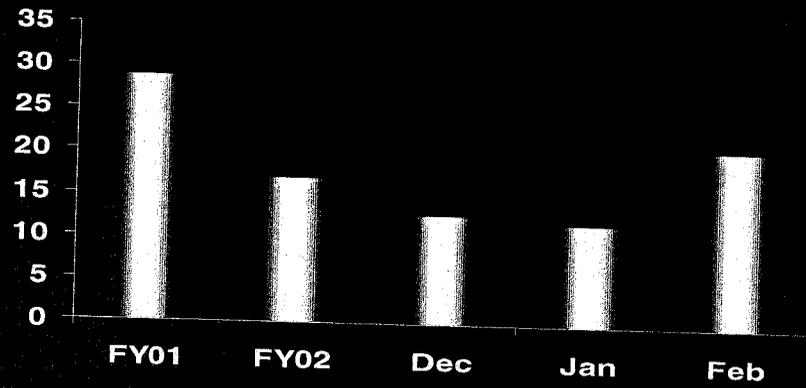


## This Months SCRS by Category

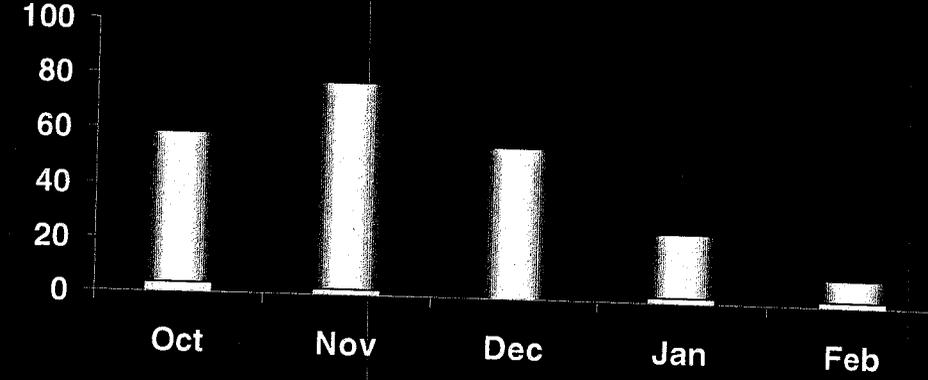


# Team Metrics - Leading Indicators (01-29-03)

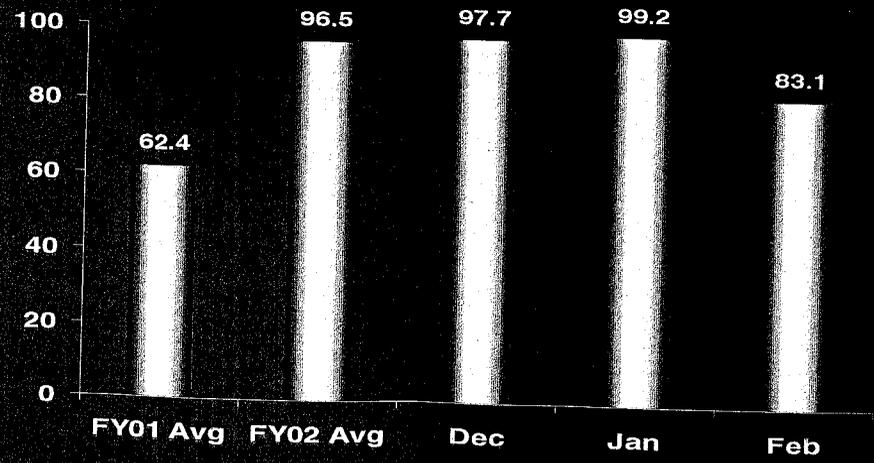
### Employee Identified Concerns



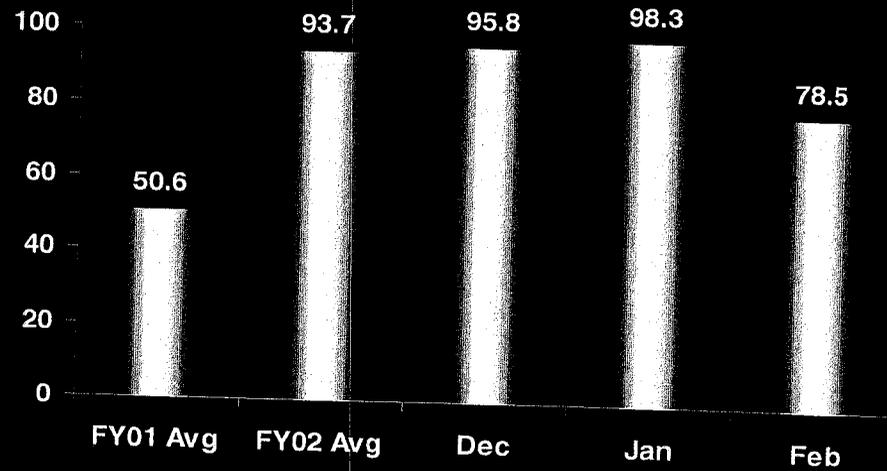
### Late Corrective Actions



### Supv. Safety Mtgs - % Compl.

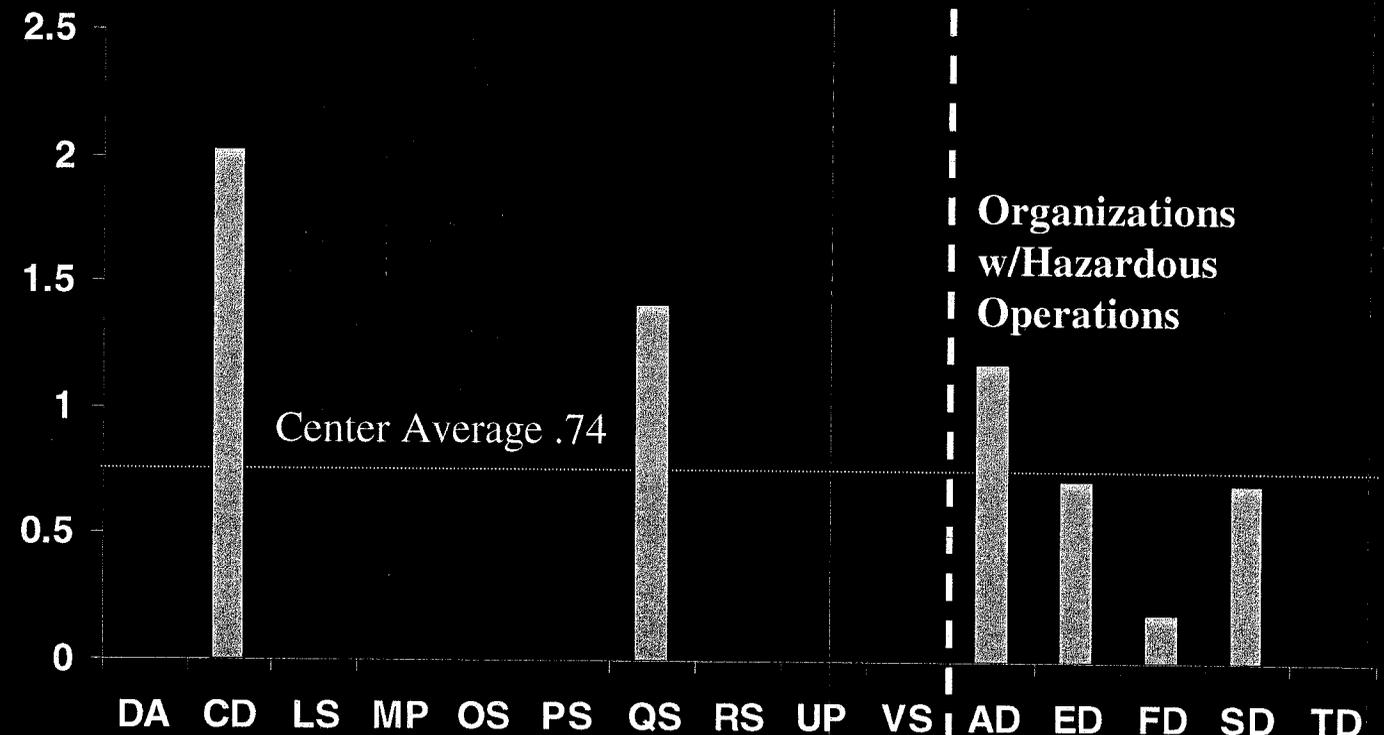


### Supv. Safety Visits - % Compl.



# FY03 OSHA Recordable Rates by Organization (Includes Contractors) (02-26-03)

DA	9,100
CD	196,599
LS	8,897
MP	124,227
OS	3,797
PS	87,740
QS	140,790
RS	100,106
UP	107,272
VS	18,566
AD	1,506,290
ED	822,272
FD	990,047
SD	277,211
TD	380,925



\*Hours for Current Month Estimated

# HAZTRAK Finding Status (02-26-03)

AREA	2003	Open Findings	Abatement Plans	Late Last Month	Late
AD01	0	0	0	0	0
AD10	0	0	0	0	0
AD20	235	187	3	3	0
AD30	5	3	0	0	0
AD40	24	24	4	0	0
AD50	1	0	0	0	0
CD	0	2	2	3	0
ED	69	54	6	12	4
FD	4	4	0	4	4
MP	0	0	0	0	0
NSSTC	111	110	0	0	0
RS	0	0	0	0	0
SD	48	49	8	2	0
TD	10	0	0	0	0
<b>Total</b>	<b>507</b>	<b>433</b>	<b>23</b>	<b>24</b>	<b>8</b>

## Terminology

**Open Findings** - Findings that have not been Closed.

**Abatement Plans** – Approved interim hazard controls in place until finding can be corrected

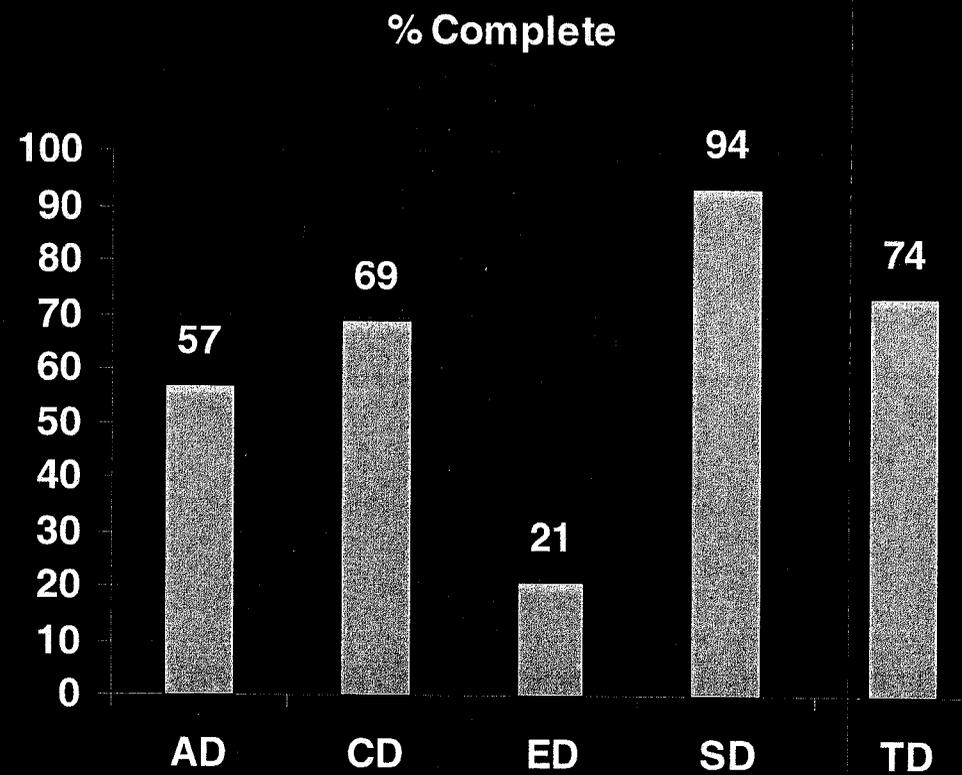
**Late** – Findings open > 45 days with no Abatement Plan submitted, or Abatement Plan ECD has passed.

# Mishaps - Corrective Action Closure (02-26-03)

Responsible Organization	Open Mishap Cases		Corrective Actions			
	Total	New	Total	New	Late last month	Late this month
AD01	7	1	7	1	0+	1
CD01						
ED01	4	0	10	0	0	0
FD01	1	1	3	3	0	0
LS01						
MP01						
OS01						
PS01						
QS01						
RS01						
SD01	1	0	1	0	0	0
TD01	1	0	4	4	2	0
VS01						
UP01						
Totals:	14	2	25	8	2	1

NOTE: Greater than 20% late goes Red

# IHOPS Update Status



Percentages based on Last Years Data

[REDACTED]

## **FY03 Lost-Time Mishaps** (02-26-03)

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### **New Lost-Time Cases Since Last Meeting**

**02/13/03 – Employee strained back when he tried to catch an electronic control panel that pulled loose from wall – Lost 1 day**

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**10/24/02 – Employee tore tendon while lifting sheet metal, required Surgery – Lost 90 days**

**10/28/02 – Employee slipped and fell off sidewalk, injuring right foot – Lost 2 days**

**11/01/02 – Employee strained lower back while lifting a box – Lost 1 day + 3 restricted days**

Slips/Trips/Falls

Back Injury

Other

# **MSFC Energy Overview – through First Quarter 2003**

**Acronyms:**

**BTU** – British Thermal Units

*(The heat required to raise the temp. of 1 lb. Of water 1° F)*

**BBTU** – Billion BTU

**GSF** – Gross Square Foot

**KBTU** – Kilo-BTU

**EI** – Energy Intensive Facility (laboratory)

**NMV** – Nonmission Variable Facility *(office building)*

# BASELINE/STATUS

YEAR	NMV (KBTU/GSF)	NMV (KBTU/GSF)	EI (KBTU/GSF)	EI (KBTU/GSF)
	GOAL	ACTUAL	GOAL	ACTUAL
1985	182	182	N/A	N/A
1990	173	222	312	312
2000	146	127	270	267
2001	142	147	267	276
2002	138	136	263	278
2010	118		234	

# Requirement to Meet 2010 Goal

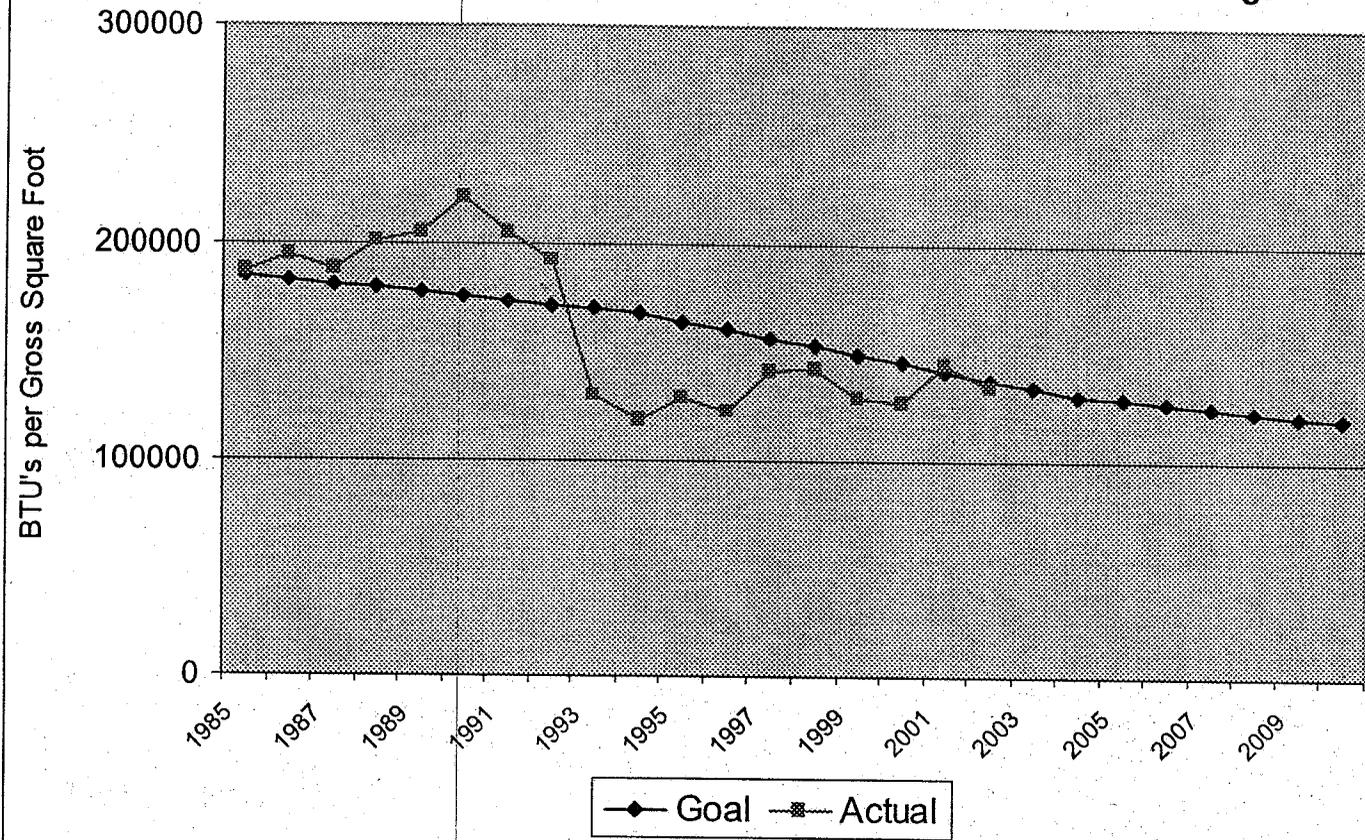
- MSFC's energy usage is measured in BTU's/Gross Square Foot (BTU/GSF)
- The 2010 usage goal for MSFC is 781 BBTU's based on the present square footage
- FY01 energy usage was 926 BBTU's
- FY02 energy usage was 906 BBTU's, an overall decrease of 2% from 2001
- MSFC must reduce **125 BBTU's** over the next 8 years to meet the 2010 goal, an average of **16 BBTU's/YR**
- MSFC reduced **4 BBTU's** during the 1<sup>st</sup> Qtr of FY03

# What is a BTU?

- A **BTU** is the heat required to raise the temperature of one pound of water by 1°F
- One kilowatt-hour (KWH) = 3,412 BTU  
(During FY02 MSFC consumed 521 BBTU's of electricity)
- One Therm (1,000 pounds of steam) = 100,000 BTU's  
(During FY02 MSFC consumed 223 BBTU's of steam)

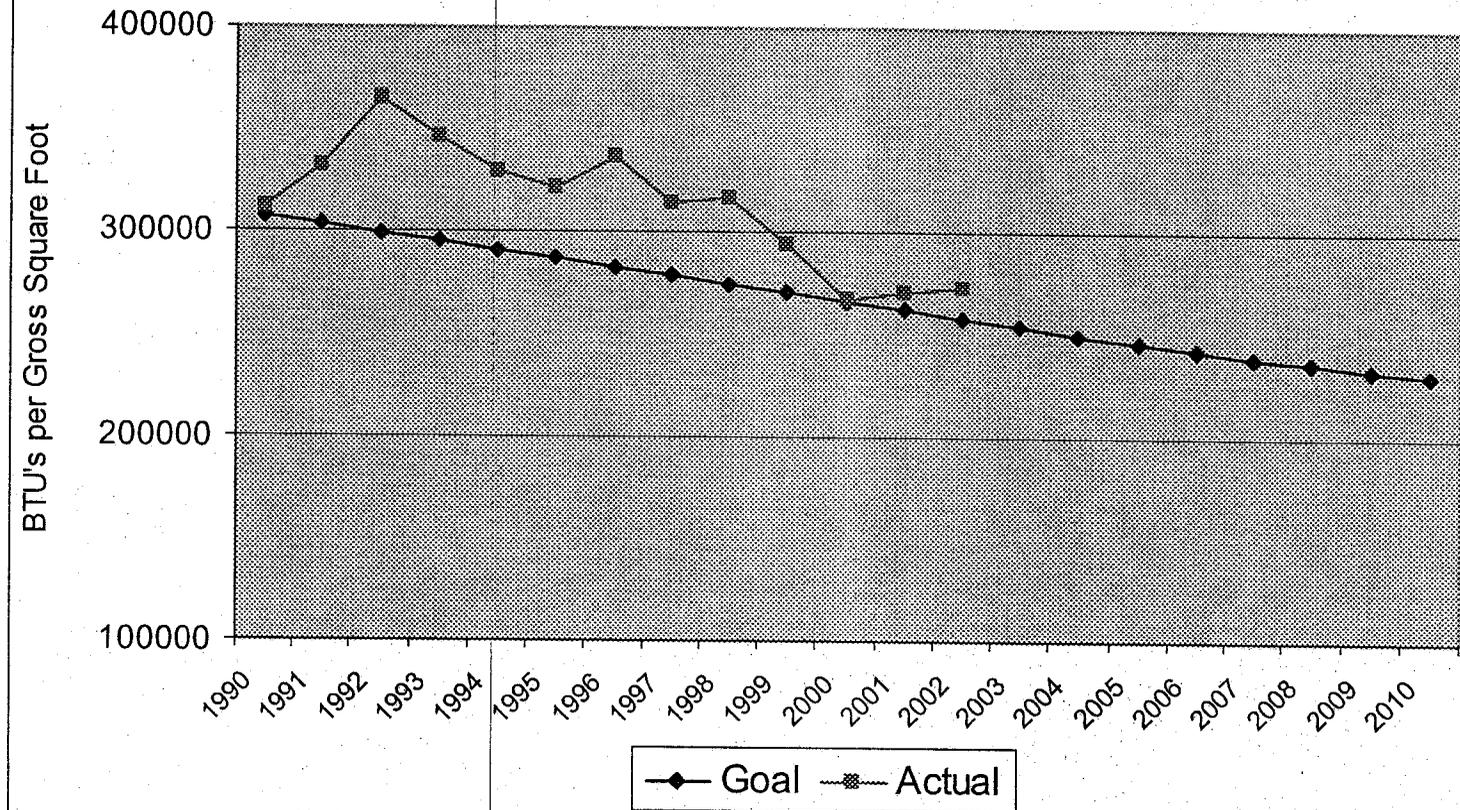
# **MSFC Energy Conservation Progress**

**Environmental Management Division  
Energy Reduction Progress in MSFC Non-Mission Variable Buildings**



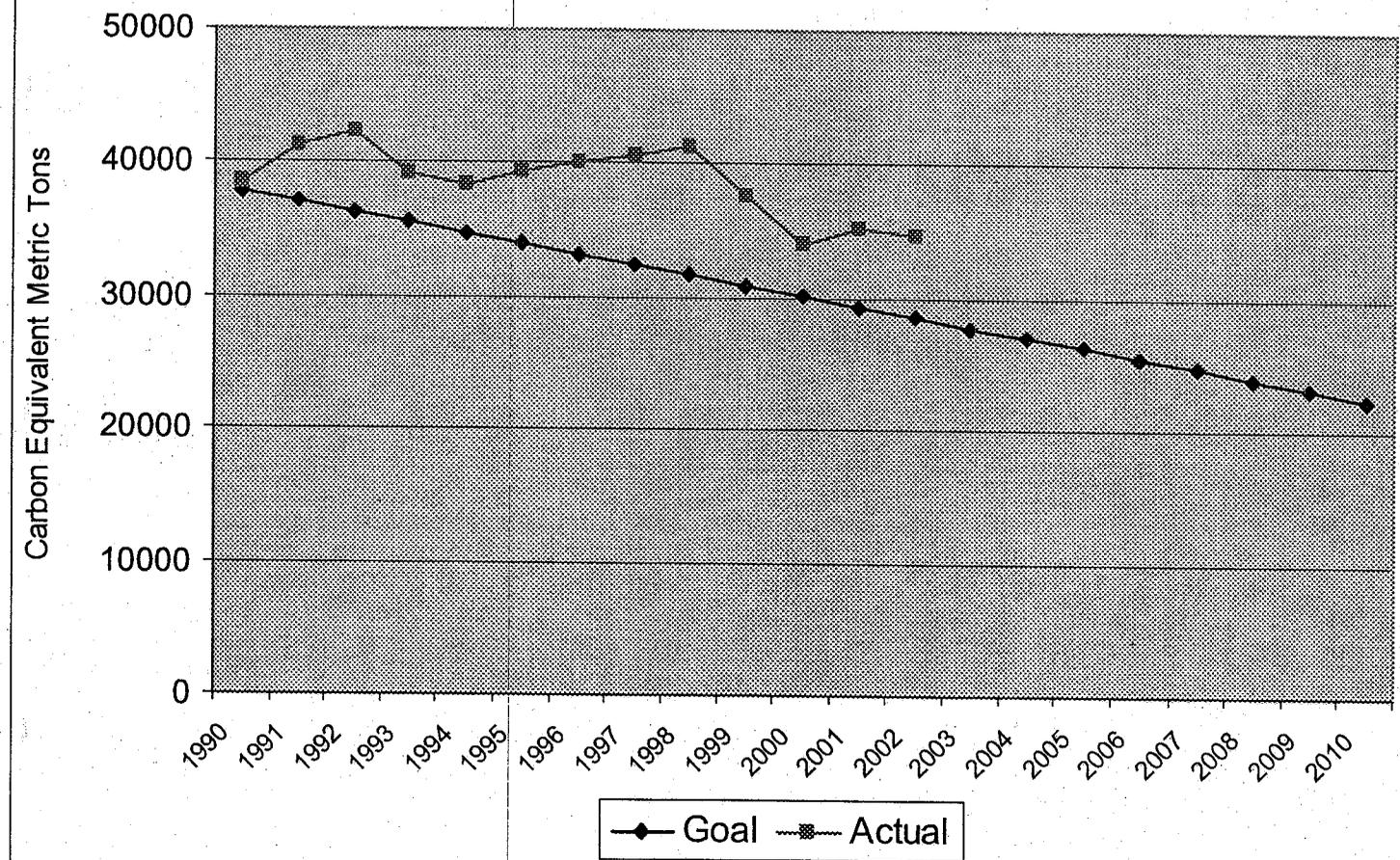
Energy reduction goals mandated by Executive Orders (EO) 12759/12902/13123 and the National Energy Conservation Policy Act (NECPA) are to reduce 10% by the end of 1995 from 1985 baseline, 20% by the end of 2000, and 35% by the end of 2010

### Environmental Management Division Energy Reduction Progress in MSFC Energy Intensive Facilities



Energy reduction goals mandated by Executive Orders (EO) 12759/12902/13123 and the National Energy Conservation Policy Act (NECPA) are to reduce 20% by the end of 2005 from 1990 baseline, and 25% by the end of 2010

### Environmental Management Division Greenhouse Gases Reduction



Greenhouse reduction goals mandated by Executive Orders (EO) 12759/12902/13123 and the National Energy Conservation Policy Act (NECPA) are to reduce 30% by the end of 2010 from 1990 baseline

# Energy Management Contacts

- **Cedreck Davis, 544-3221,  
[cedreck.davis@msfc.nasa.gov](mailto:cedreck.davis@msfc.nasa.gov)**
- **Juergen Haukohl, 544-4581,  
[juergen.haukohl@msfc.nasa.gov](mailto:juergen.haukohl@msfc.nasa.gov)**