

National Aeronautics and  
Space Administration

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



February 21, 2002

Reply to Attn of:

QS50 (02-15)

TO: Distribution  
FROM: QS50/David J. Spacek  
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, February 11, 2002, in Building 4200, Conference Room P110. The attendance list is on file in the Industrial Safety Department. The agenda for the meeting is attached as Enclosure 1.

#### **SAFETY MOMENT (JIM KENNEDY/DD01)**

Jim provided a safety moment. He read a poem entitled "I Chose to Look the Other Way." The poem is about taking the initiative to stop work if you see someone taking an unnecessary risk or breaking a safety rule. The poem is published on the back of the SHE Highlights dated February 11, 2002.

#### **OPENING REMARKS (ART STEPHENSON/ADO1)**

Art provided a brief review of the new NASA Administrator's visit to MSFC. He noted that Mr. O'Keefe seemed impressed with MSFC and the openness of its employees. Art said that he is very "results" oriented.

#### **SPECIAL AWARDS**

Art presented Tim Reynolds/CD10 a Directors Commendation for saving the life of another employee by performing CPR.

Art presented the Engineering Directorate/ED an award for achieving one million hours worked without a lost time mishap.

## **SPECIAL REPORTS**

### Trip and Fall Lost Time Mishap (Randy Reed/HEI)

Randy discussed a lost time mishap that occurred in the Test Area. An employee tripped over a parking stop and fell, injuring ligaments in his wrist. The primary causes were inadequate lighting and location of the stop in an apparent walking path. The chart presentation is attached as Enclosure 2.

### Health Training at MSFC (Joyce Eagan/AD02)

Joyce identified all the health-training opportunities available at MSFC. The chart presentation is attached as Enclosure 3.

### Water and Energy Conservation (Cedreck Davis/AD22)

Cedreck presented the goals and objectives of the NASA water and energy conservation program. He demonstrated that just turning off lights after work hours could save approximately \$500,000 per year. Many other opportunities exist for conserving energy and cost saving. The chart presentation is attached as Enclosure 4.

### Voluntary Protection Program (VPP) Status (Keith Cornett/TD20/VPP Project Manager)

Keith gave a brief status of the VPP effort. An action plan is being developed to work the issues identified in the recent STAR Consultants review. The plan will include a proposed restructure of the SHE Committee meetings. Proposal will be reviewed with Axel Roth's Steering Committee and the SHE Area Committee. The chart presentation is attached as Enclosure 5.

## **INDUSTRIAL SAFETY REPORT (DAVE SPACEK/QS50)**

Dave reported on the safety metrics for FY2002. The lost time mishap rate has increased since last month, but all other metrics have improved. Dave presented a summary report of the recently completed fire drills. A total of 62 drills have been conducted. Per the drill conductors, 3 buildings performed outstandingly, while 6 buildings required re-drills. The chart presentation is attached as Enclosure 6.

## **ROUNDTABLE REPORTS**

Jim Kennedy noted that all three of the buildings identified as performing outstanding fire drill belongs to the Engineering Directorate. He congratulated them for this and other improvements in their safety program.

Jim Kennedy reported that he had discussed safety with Sean O'Keefe. He said O'Keefe is a strong advocate of safety. Art Stephenson stated that even if he's not, I am. We are going to continue with our push to improve safety at MSFC.

Dr. Dye reported that the Medical Center is seeing numerous people with respiratory illnesses. He recommended that personnel with these illnesses be advised to stay at home to prevent spreading.

Dennis Smith noted that one of his employees suffered a compound fracture of his leg while snow skiing. He stated that it is important to plan for the emergency evacuation of persons like this with temporary disabilities. They have established a buddy system for this employee.

Donnie George noted that the next meeting of the Contractor Safety Forum would be on February 22, 2002. They will finalize their new strategic plan at that meeting.

Amanda Goodson mentioned several topics. Jim Kennedy will be speaking at the Quality Conference on March 4 and 5, 2002. Everyone is invited to attend. JSC is conducting a NASA oriented VPP workshop in March. It would be an excellent opportunity for MSFC employees to attend. Lastly, chairs should not be placed in the doorway and isles of conference rooms. They create a blockage and tripping hazard in the event of an emergency.

Bill Kilpatrick noted that Nancy Jo Ogozalek had played a key role in ED achieving the one million hours without a lost time. He stated that every organization needs someone like her to facilitate change.

Jan Davis reported a Close Call on Martin Road. She was coming over the bridge west bound in the left lane and encountered a truck head-on. Fortunately the driver in the right lane saw the problem and allowed her to move back in the right lane. The construction worker was apparently not aware of the one-way traffic.

Dave Bates noted that some of his employees had reported similar problems. Sheila Cloud said she would look into this problem.

**ACTION C-0116: Work with the Army to assure one-way traffic is adequately controlled on Martin Road. (Sheila Cloud/AD01; Due 4/1/02)**

Ann Whitaker reported that the work to mercury telluride facility is almost complete.

Steve Beale reported that one of his co-located personnel developed a severe allergic reaction to her new location. He noted that we must be aware that some people are very sensitive to air conditions.

Amanda Goodson noted that OSHA has established some new rules for mishap reporting. She requested that these changes be presented at the next SHE Committee Meeting.

**ACTION C-0117: Review the new OSHA mishap reporting rules at the next SHE Central Committee Meeting. (Dave Spacek/QS50; Due 3/4/02)**

**OPEN ACTIONS (DAVE SPACEK/QS50)**

Dave reviewed the open actions. A copy of the Open Action Log is attached as Enclosure 7.

Art Stephenson noted that the STAR Consultants said the SHE Committee meetings should be changed. Restructuring this meeting is being considered. It will still focus on safety, but may be expanded to include other appropriate subjects. Hopefully the new arrangement will be in place by next month. The meeting was dismissed.

The next meeting of the Safety, Health, and Environmental Central Committee is scheduled for March 4, 2002, at 8:30 a.m., in Building 4200, Conference Room P110.



David J. Spacek  
Manager  
Industrial Safety Department

7 Enclosures

Distribution:  
SHE Web Page

**SAFETY, HEALTH, AND ENVIRONMENTAL CENTRAL COMMITTEE  
MONDAY, FEBRUARY 11, 2002  
BUILDING 4200, CONFERENCE ROOM P110, 8:30 A. M.**

**MEETING AGENDA**

- 1) OPENING REMARKS (A. STEPHENSON/DA01)**
- 2) SPECIAL AWARDS**
  - Engineering Directorate (ED)      1 Million Hours without Lost Time
  - Tim Reynolds/CD10      Directors Commendation
- 3) SPECIAL REPORTS**
  - Trip and Fall Lost Time Mishap (Randy Reed/HEI)
  - Health Training at MSFC (Joyce Eagan/AD02)
  - Water and Energy Conservation (Cedreck Davis/AD22)
  - VPP Status (Keith Cornett/TD20/VPP Project Manager)
- 4) INDUSTRIAL SAFETY REPORT (DAVE SPACEK/QS30)**
- 5) 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>W. Dye/KE/SE</b>	<b>J. Hamaker/VS01</b>	<b>D. Kross/TD01</b>
<b>A. Sams/AFGE</b>	<b>S. Cloud/AD01</b>	<b>A. McCool/MP01</b>
<b>W. Darbro/MESA</b>	<b>T. Washington/CD01</b>	<b>A. Whitaker/SD01</b>
<b>P. Robbins/MSAT</b>	<b>B. Kilpatrick/ED01</b>	<b>W. Hicks/LS01</b>
<b>D. Smith/UP01</b>	<b>J. Davis/FD01</b>	<b>S. Beale/PS01</b>
- 6) OPEN ACTION REPORT (DAVE SPACEK/QS30)**
- 7) CALENDAR OF ACTIVITIES: NEXT MEETINGS**

**AREA COMMITTEE  
February 27, 2002**

**CENTRAL COMMITTEE  
March 4, 2002**



S&MA  
Mission Services Contract  
NAS8-00179

*Hernandez Engineering Inc.*

*Lost Time Injury*

---

## Agenda

---

- Lost Time Injury
- Investigation

## LOST Time Injury

- When: 6 P.M. on December 3, 2001
- Where: Near Building 4561 in East Test Area
- How: Employee tripped over a concrete parking curb while walking from building 4561 to trailer 4561A
- What: Employee sprained left wrist; referred to a specialist four weeks later after employee complained to family doctor of continued soreness.
- Status: On January 17, 2002, employee had surgery to repair three carpal ligaments in the left wrist. The surgeon directed three days off of work while taking pain medication, thus changing the status to a three-day lost time injury. Employee has retuned to duty.

## Investigation

**Activity:** Employee was performing authorized, normal duties

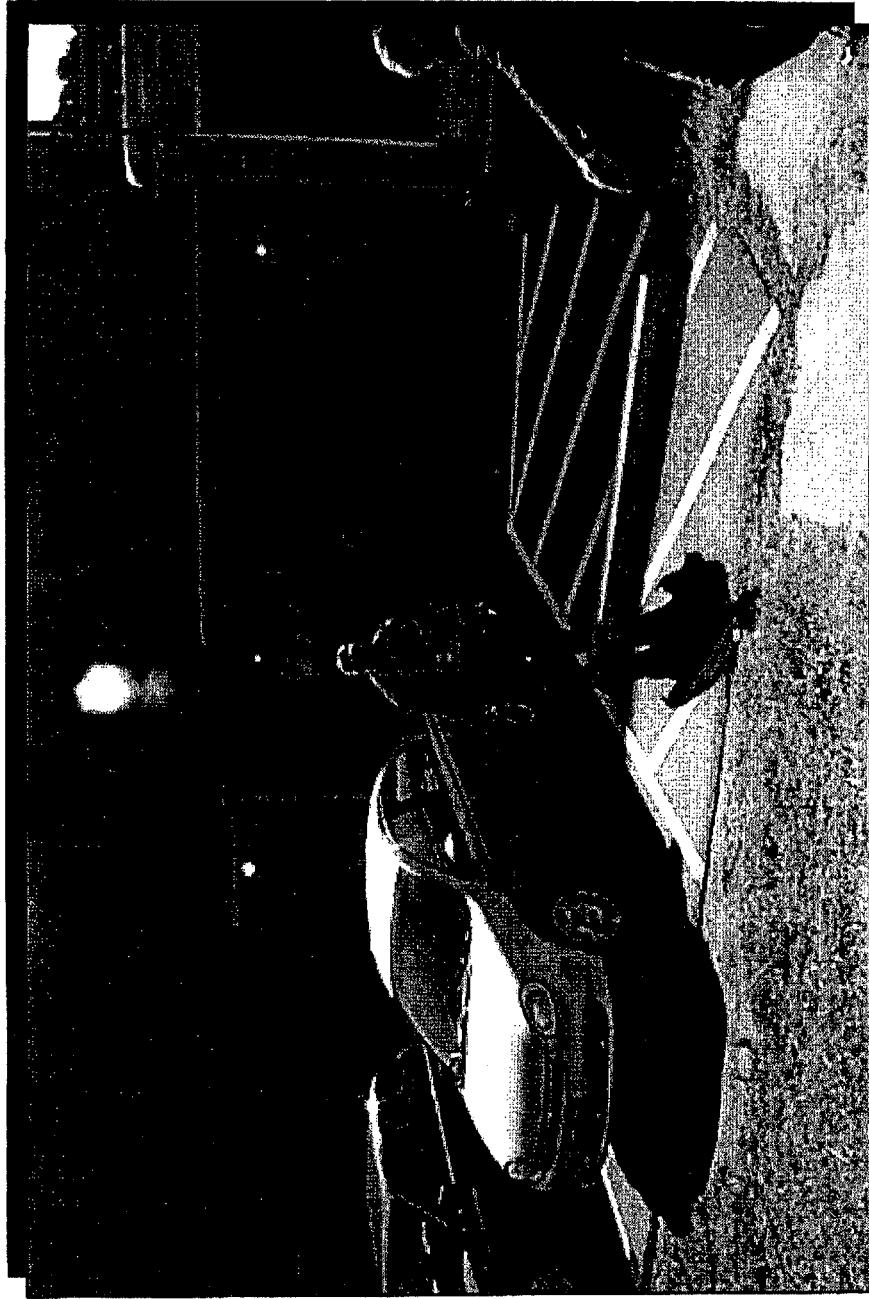
**Cause:** Inadequate lighting and parking curb in walking path

**Actions Taken:**

- Lighting repaired and concrete curb removed
- Mishap was reviewed at numerous HEI manager & supervisor safety meetings

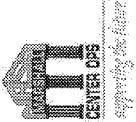
**NOTE:** First HEI lost time injury in 7 years

# Investigation





# HEALTH TRAINING AT MSFC



- Many training opportunities/topics are available to MSFC personnel
- Classes are provided by both the Fitness Center and the Medical Center



# HEALTH TRAINING AT MSFC

- NASA-MSFC Exchange provides training by Fitness Personnel
- Most of these classes can be accommodated during organizational times set-aside for weekly/monthly safety meetings
- Topics include:



# HEALTH TRAINING AT MSFC

- *Cholesterol Crunch*, learn to read and understand your blood profile, good cholesterol versus bad cholesterol, effects of triglycerides on the body, importance of blood sugar (glucose) and much more. Learn ways to take charge of your blood profile.
- *Heart Attacks Kill*, the number one sign of a heart attack is "Sudden Death." Learn the signs and symptoms of a heart attack. Know what you can and cannot control in decreasing the risk of developing a heart attack.
- *Back Injury Prevention*, learn techniques for proper lifting and other aspects of movement to avoid back injuries.



MSFC  
Mitsubishi Space Fundation



# HEALTH TRAINING AT MSFC

- ***Exercise and Aging***, learn to slow down the aging process through exercise. Study the effects of exercise through the stages of life.
- ***Fat Facts***, learn the up side and down side of body fat. Insightful lecture to learn to lose weight effectively and safely through life style changes. Learn of risk of being over fat.
- ***Exercising In Your Comfort Zone***, learn the importance of monitoring the climate you exercise under, when to avoid the humidity, how to stay warm but safe while exercising, and how to dress for all seasons.



# HEALTH TRAINING AT MSFC

- ***Understanding Diabetes***, designed to educate on the importance of monitoring blood sugar, what effects blood sugar levels, and how to use exercise to bring blood sugar levels to a steady-state.
- ***Five Minute Workouts***, in this class, participants are taught exercises that can be done in 1-5 minute increments that will enhance strength and flexibility and also tone up muscles.



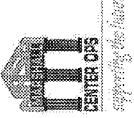


# HEALTH TRAINING AT MSFC

- *Stretching Your Limits*, class is designed to teach that stretching is one of the MOST IMPORTANT parts of one's program because it can prevent injuries, decrease muscle soreness, and ultimately improve one's joint range of motion and function.
- *The Importance of Protein*, designed to teach others the value of protein, and why too little or too much can be damaging.



# HEALTH TRAINING AT MSFC



- *Preventing Exercise Burnout*, discover ways to keep exercise lively and challenging. Learn effective tips to make working out enjoyable.
- *Wrestling Control of Your Eating*, learn skills to help you look at food differently, be in control of the foods you choose to eat, instead of feeling like food is controlling your life.



# HEALTH TRAINING AT MSFC

- **Stress Busters,** we are never "stress free" so learn how to employ skills ... both mentally and physically... to channel stress in a more positive and productive way.
- **Interpreting the Food Guide Pyramid,** learn about the Food Guide Pyramid, how and why it was developed and what it means to you to use as a guideline to find out what your individual body needs to achieve that healthy balance.
- **Classes that are Multiple Meetings:** Weight Loss (LEARN) and Smoking Cessation



# HEALTH TRAINING AT MSFC

- Personnel from the Environmental Health group provide training in a variety of topics, including:
  - Radiation Safety
  - Laser Safety
  - Hazard Communication
  - Hearing Conservation
  - Respiratory Protection
  - Ergonomics
  - Bloodborne Pathogens



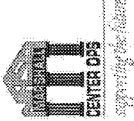
# HEALTH TRAINING AT MSFC

- Nurses, Paramedics, and Doctors are also available to provide training on various health topics. We will try to accommodate your choice of topics within our resource limitations.
- Examples:
  - Skin Cancer
  - Hepatitis
  - Tuberculosis



# HEALTH TRAINING AT MSFC

- Limitations:
  - All health personnel have full-time duties, but they want to provide health information to their co-workers as they can.
  - If you desire to have some of these classes taught to your organization gathering, please plan well ahead and coordinate your requests to provide the most effective utilization of time available for teaching.





# HEALTH TRAINING AT MSFC

Points of Contact:

Fitness Center:

Lana Hart, 4-3337 or Tim Reynolds, 4-7570

Environmental Health:

Eddie Phillips, 4-5737 or Greg Smith, 4-5739

Medical Center:

Ben Anderson, 4-5744 or Janet Kiessling, 4-2390

Overall Information:

Joyce Eagan, 4-3996 or David Thaxton, 4-8371

# **Energy and Water Conservation**

**Marshall Space Flight Center**

**Status as of**

**September 30, 2001**

# Why Energy and Water Conservation?

- Good Business Practice
- Preserves Natural Resources
- Required by Executive Order 13123

# **Requirements of EO 13123**

- Reduce energy in office and storage buildings by 35% by 2010 compared to 1985
- Reduce energy in laboratories by 25% by 2010 compared to 1990
- Reduce Greenhouse gases by 30% compared to 1990
- Reduce petroleum use in facilities
- Reduce water consumption by 15% compared to 1999
- Expand the use of renewable energy
- Reduce total energy usage and Greenhouse gases

# Goal vs. Actual – End of FY2001

Description	Baseline	Goal	Actual
Office Buildings	1985	22%	22.4%
Lab Facilities	1990	15%	13.2%
Potable Water	1999	3.75 %	5%
Greenhouse Gases	1990	16.5%	12.5%

# First Quarter FY02 energy and water usage compared to First Quarter FY01

Description	FY02 Usage	FY01 Usage	Comparison FY02/FY01
Electricity - Kilowatts	37,084,293	39,779,753	Down 6.8%
Steam - Pounds	58,680,058	72,515,977	Down 19.1%
Potable Water - Gals	39,632,013	55,186,460	Down 28.2%
Industrial Water - Gals	121,778,489	168,982,000	Down 27.9%
Natural Gas - Cubic Feet	7,626,000	15,529,821	Down 50.9%

# **What can each of us do to continue this progress and meet the 2010 goals?**

- Take responsibility
- Be a leader in energy and water conservation
- Communicate energy and water conservation to others
- Use the area Building Manager as an energy police

# A Golden Opportunity

- It cost \$0.18 to power the average fluorescent fixture one 24 hour day
- It cost \$0.08 to power the same fluorescent fixture for 11 hours
  - There are approximately 40,000 fluorescent fixtures at MSFC
- It is assumed that 10,000 are required to operate 24/7
- Therefore, 30,000 can be operated 11 hours per day and provide the required lighting
  - 30,000 lights, 365 days @ \$0.18/day = \$1,971,000 annually
  - 30,000 lights, 250 days @ \$0.08/day = \$600,000 annually
- If lights are allowed to continuously operate 50% of the time, there is an opportunity for over \$650,000 in savings annually
- There are other opportunities to save if we would all take responsibility (computers, monitors, portable heaters, fans, radio's, desk lamps, accent lighting, etc.)

**The Facilities Engineering Department  
of the Center Operations Directorate is  
dedicated to surpassing pre-established  
goals in energy and water conservation  
while delivering quality services to our  
customers**

- Contact Cedreck Davis at 544-3221, email:  
cedreck.davis@nasa.gov or Juergen Haukohl  
at 544-4581, email:  
juergen.haukohl@nasa.gov for energy and  
water conservation concerns and support

ENCLOSURE 5

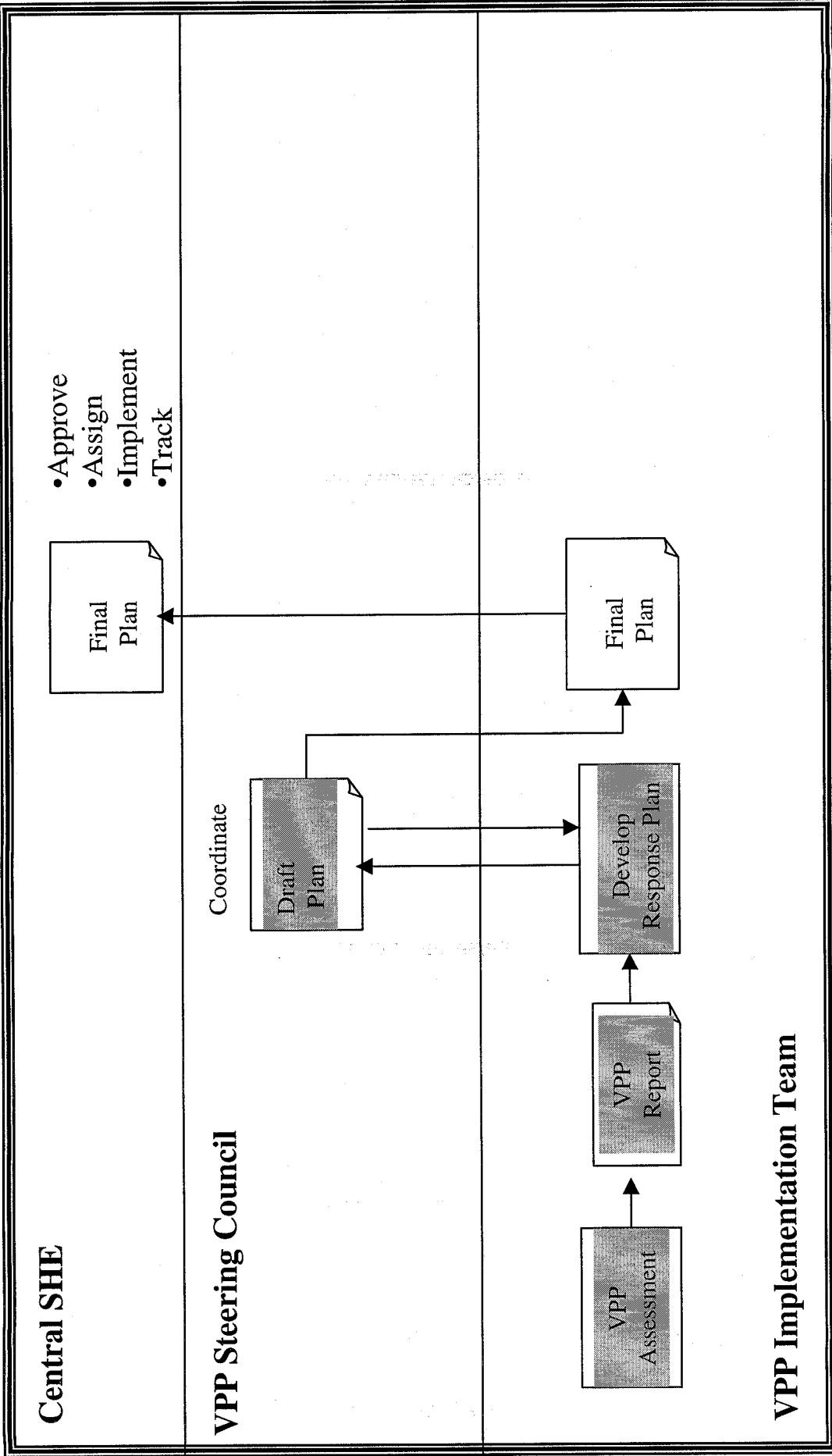
# VPPP Update

2/11/02

UP10/Keith Cornett

1

# VPP Assessment Response Plan Process



2/11/02

UP10/Keith Cornett

2

# Status

- VPP Implementation Team has developed a action plan to implement recommendations for needed improvement as a result of VPP assessment
  - Assignments to Directorates and existing/proposed SHE committees
  - Agreement with plan at VPP Steering Council level

# Status

- VPP Implementation Team TDY to Birmingham OSHA office on February 11 to talk with VPP State Officer
  - Review 1-year requirements to identify any flexibility in the requirements
  - In essence, will help us determine a new VPP schedule

# MSFC Safety Data for Jan. '02

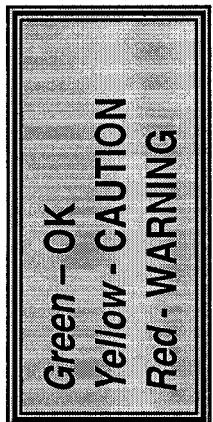
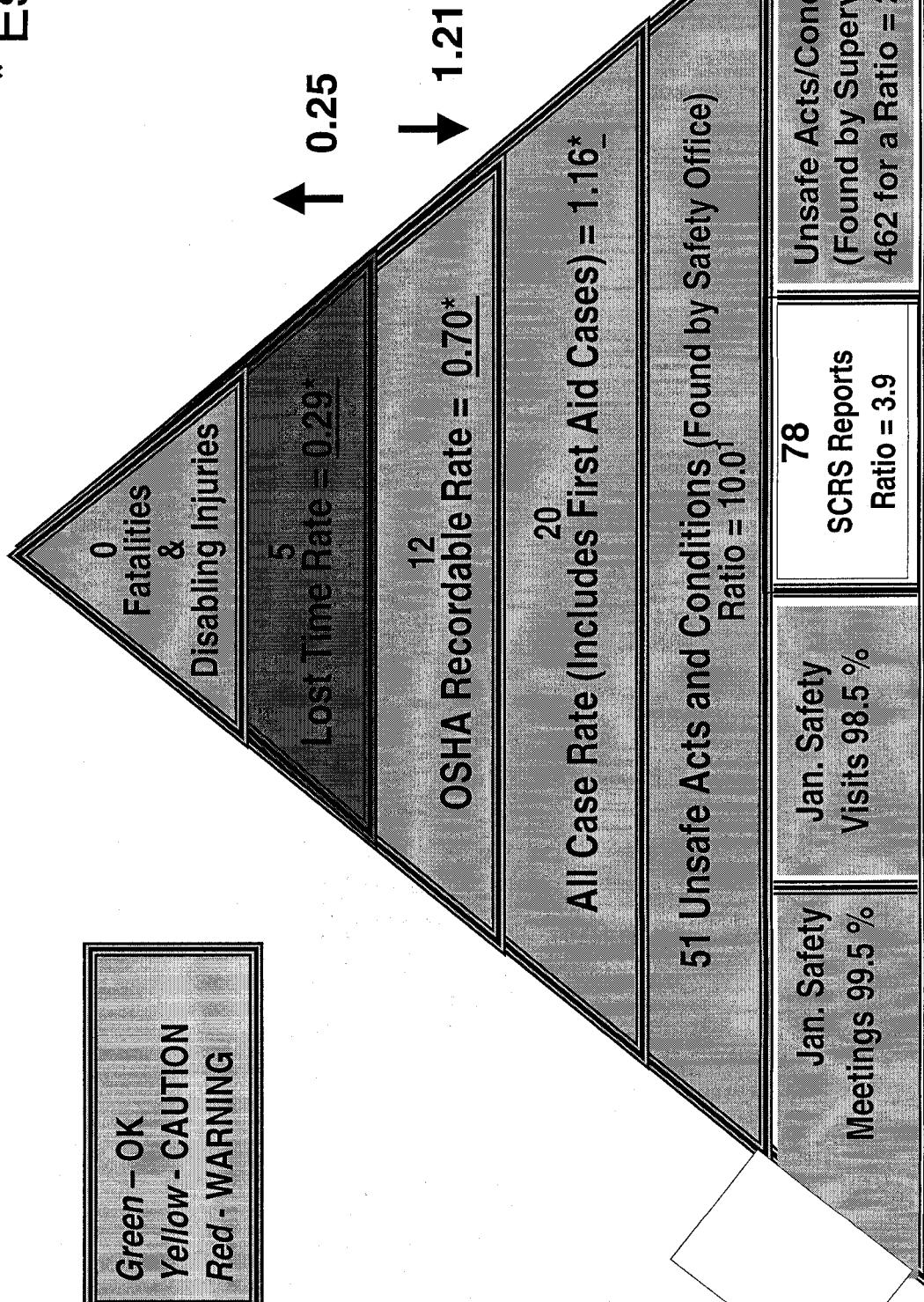
(Current as of February 1, 2002)

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

# MSFC Team Metric - Personnel Safety

Data for FY02

\* Estimated



<sup>1</sup> Based on Monthly Rate. The 51 findings were identified in 1 month period.

## MSFC Team Metric Key

Metric	Green	Yellow	Red
Type A & B Cases	0	N/A	> 0
Lost-Time Cases	0 to .10	.101 to .20	> .20
OSHA Recordable Cases	< 1.0	1.01 to 1.50	> 1.50
All Cases ( Includes First Aids)	< 2.0	2.01 to 3.00	> 3.00
Safety Office Finding Ratio*	>4	3-4	<3
% Of Required Safety Meetings	> 90 %	80 to 90 %	<80 %
% Of Required Safety Visits	> 90 %	80 to 90 %	<80 %
SCRS Ratio*	>3.0	1.5-3.0	<1.5
Supervisor Findings Ratio*	>10	5-10	<5

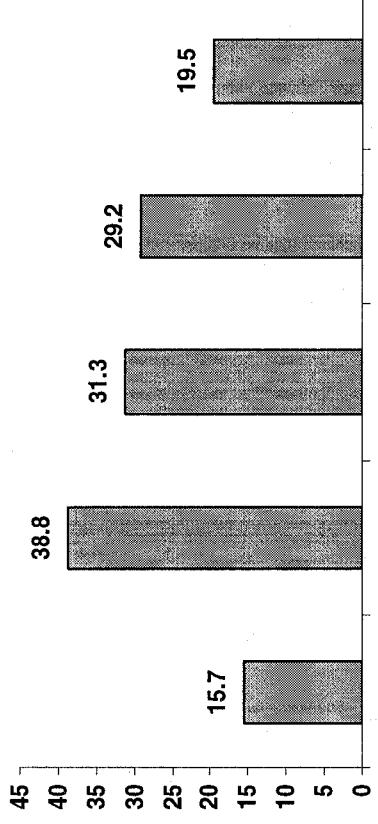
\* Ratio of number of findings or concerns to the number of all cases.

# Team Metrics - Leading Indicators

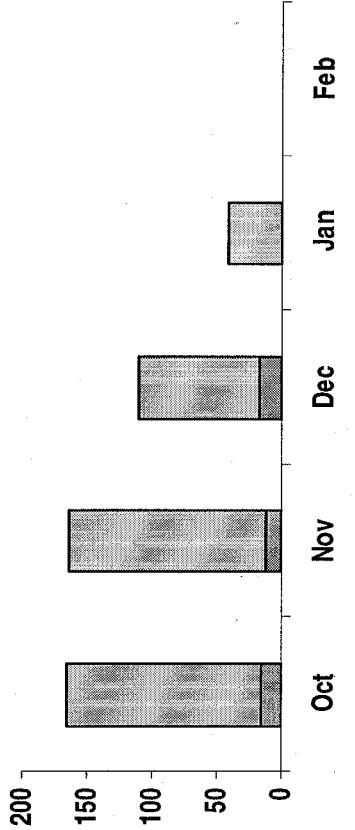
SII & D Communities

(1-31-02)

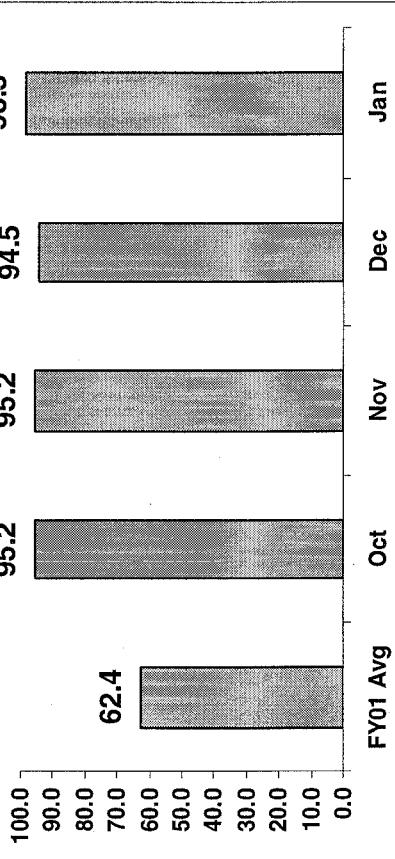
**SCRS/Month**



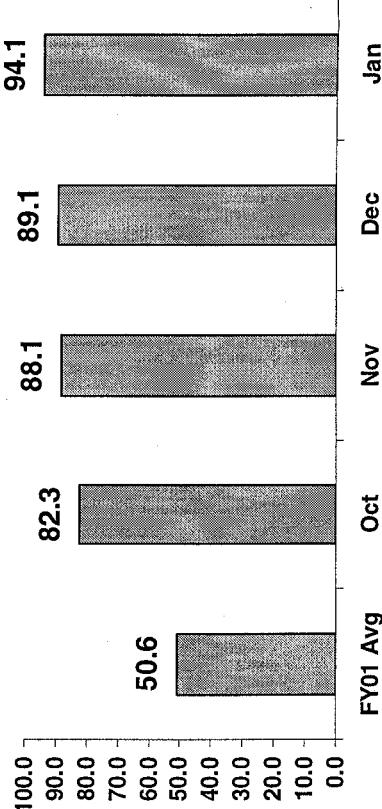
**Late Corrective Actions**



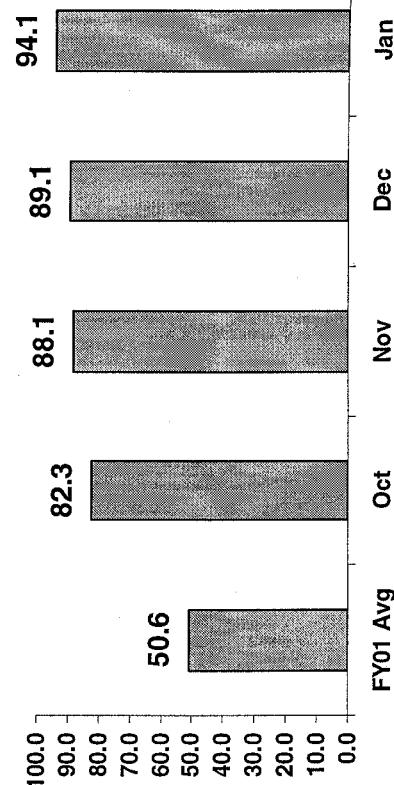
**Supervisor Safety Meetings  
% Completed**



**Supervisor Safety Visits (% Completed)**



■ Mishaps ■ HAZTRAK



## **December Safety Meetings and Visits** (1-31-02)

---

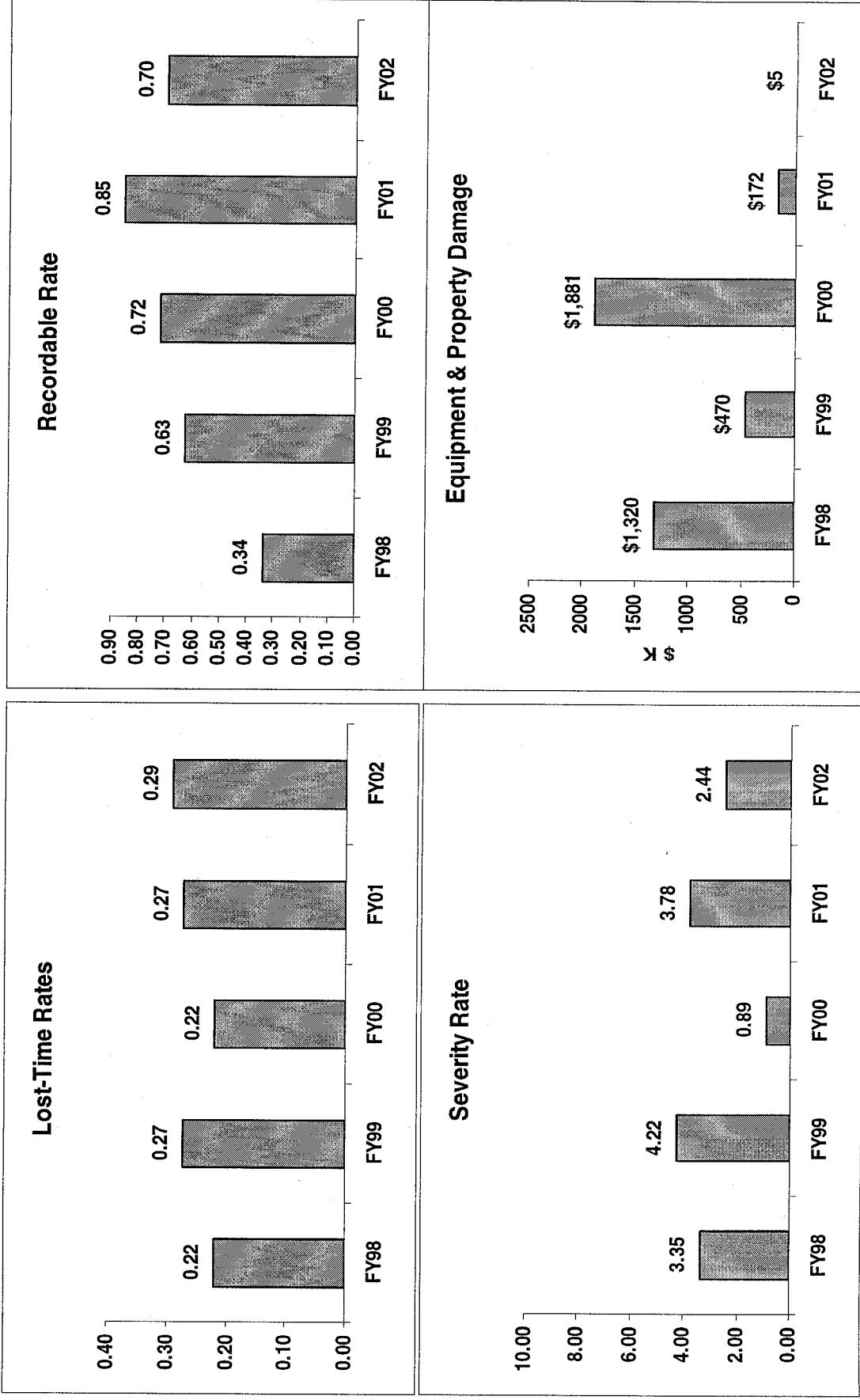
### **HONOR ROLL**

**EVERYONE DID GREAT!**

# Team Metrics - Trailing Indicators

(1-31-02)

**Lower is Better!**



## FY02 Lost-Time Mishaps (2-01-02)

- 10/3/01 Employee was riding a John Deer Gator and injured back. Lost 2 days**
- 11/04/01 Employee bent over to pick up a 3-foot piece of cable and felt pain in back. Lost 5 days, 10 restricted days**
  
- 11/20/01 Employee caught shoe in crack between floor tiles, slipped and fell, landing on right leg. Lost 1 day**
- 12/6/01 Employee lost footing and fell down last two steps, fractured right ankle – Lost 57 days and counting**

## New Lost-time Cases Since the Last SHE Meeting

- 12/3/01 Employee tripped over concrete parking curb, injuring left wrist. Became lost time on 1/17/02 because surgery was required – Lost 3 days**

■ Slips/Trips/Falls (1) ■ Back Injury (2) ■ Other (0)

## Fire Drill Summary Report 2001

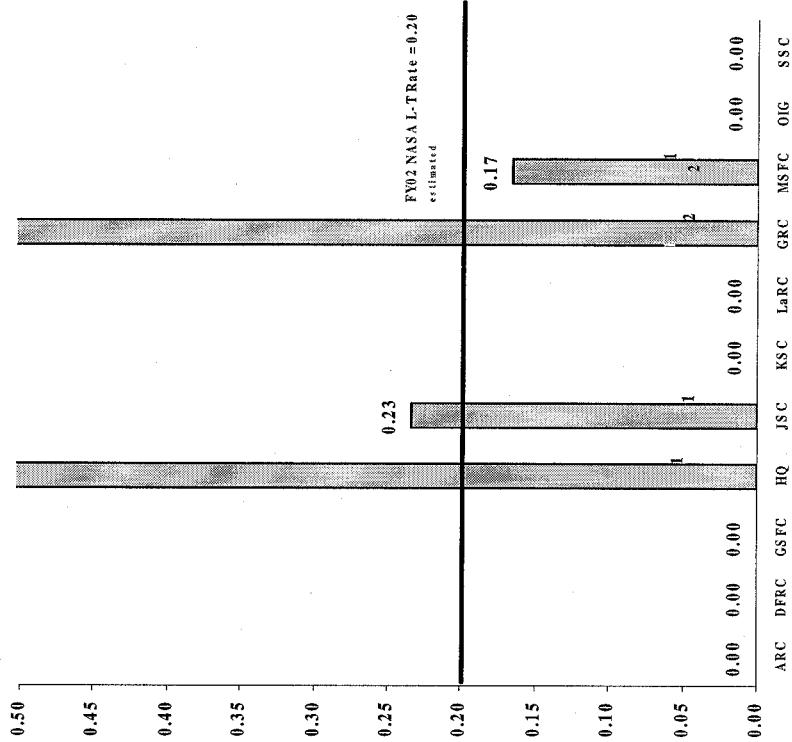
- Buildings Drilled – 62
  - Simulated Blocked-exits in Some Cases
  - Identified Few Minor Facility Issues – Corrective Action Initiated
- Outstanding – 3
  - 4605      Ralph Carruth/ED31
  - 4623      Eddie Davis/ED36
  - 4628      Chip Jones/ED33
- Requiring Re-drill - 6

# BACKUP DATA

# FY2002 NASA Reportable Lost-Time Mishaps

**NOTE: Data is not current  
for all NASA Centers**

(1-08-02)



## Terminology

### Findings

**In Work - Findings that are  $\leq$  45 days old and have not been Closed.**

**Late – Findings > 45 days old and no Abatement Plan or closure message associated with them**

### Abatement Plans

**In Work – Abatement Plan is in place and ECD in the future**

**Expired – Abatement Plan ECD has passed**

AREA	2002	Open Findings			Abatement Plans	
		In Work	Late	In Work	Expired	
AD01	0	0	2	1	0	
AD10	0	0	0	0	0	
AD20	8	6	0	1	0	
AD30	5	4	0	0	0	
AD40	30	25	0	8	1	
AD50	0	0	0	0	0	
CD	0	0	0	0	0	
ED	8	0	15	5	2	
FD	0	0	10	0	0	
MP	0	0	0	0	0	
SD	0	0	5	10	0	
TD	0	0	0	0	0	
RS	0	2	9	0	0	
NSSTC	0	0	1	0	0	
Total	51	37	42	25	3	

CY2001 = 1397

**NOTE: > 15 Late goes Red**

## Mishaps - Corrective Action Closure (2/01/02)

Responsible Organization	Open Mishap Cases		Corrective Actions		
	Total	New	Total	New	Late
AD01	3	1	2	1	40
CD01					
ED01	4	0	7	0	0
FD01	*1	0	0	0	0
LS01					
MP01					
OS01					
PS01					
QS01	*1	0	0	0	0
RS01					
SD01	2	0	11	**3	0
TD01					
VS01					
UP01					
<b>Totals:</b>	<b>11</b>	<b>1</b>	<b>20</b>	<b>4</b>	<b>0</b>

\* Awaiting total lost days

\*\* Received Corrective Action Plan

## Off-Site Mishaps - Corrective Action Closure

(2/01/02)

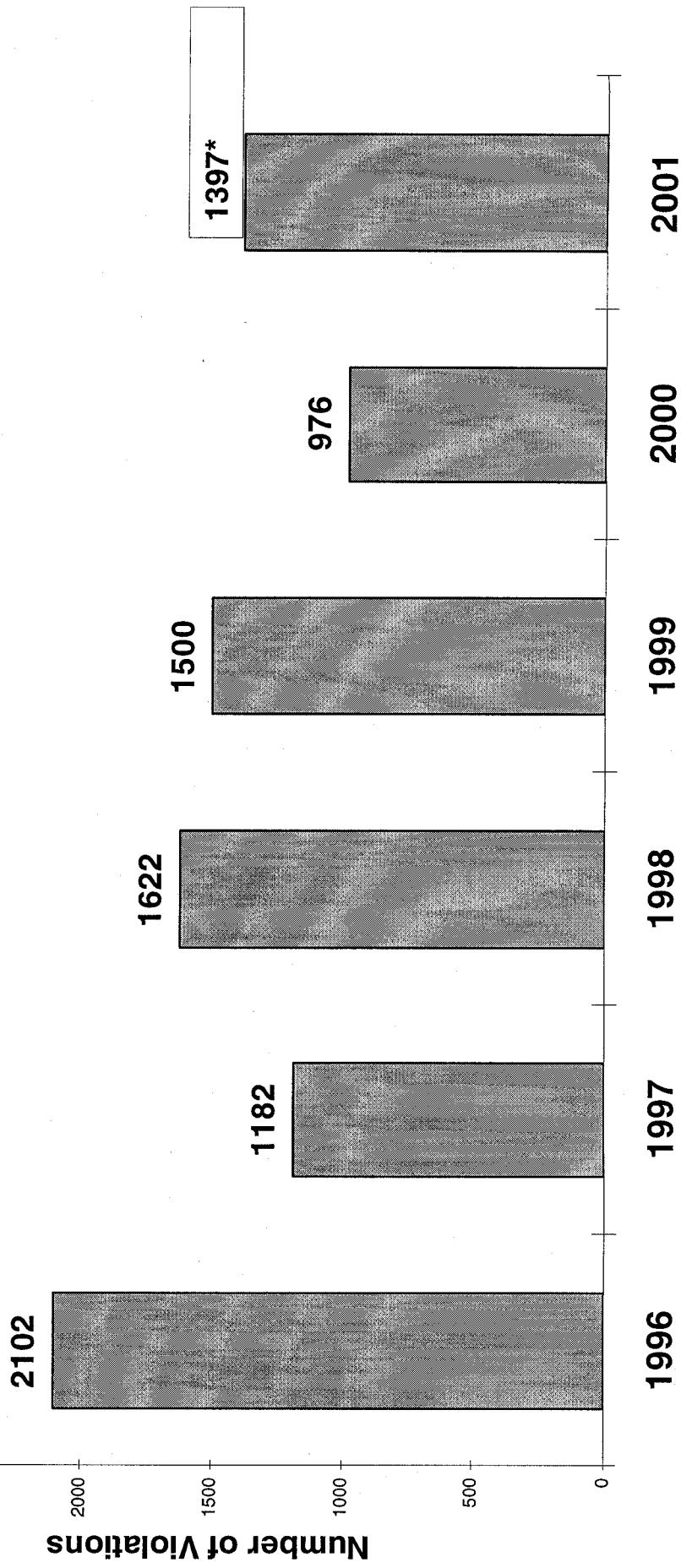
Responsible Organization	Open Mishap Cases		Corrective Actions		
	Total	New	Total	New	Late
MAF	*1	0	0	0	0
Pratt-Whitney	1	1	+	+	0
Rocketdyne-Canoga	12	2	+	+	?
Thiokol	2	0	13	0	9
USA/KSC	*1	0	0	0	0
<b>Totals:</b>	<b>17</b>	<b>3</b>	<b>13+</b>	<b>+</b>	<b>9</b>

+ Indicates Mishap Case requires Corrective Action(s)

\* Awaiting Number of Lost Days (Continuing)

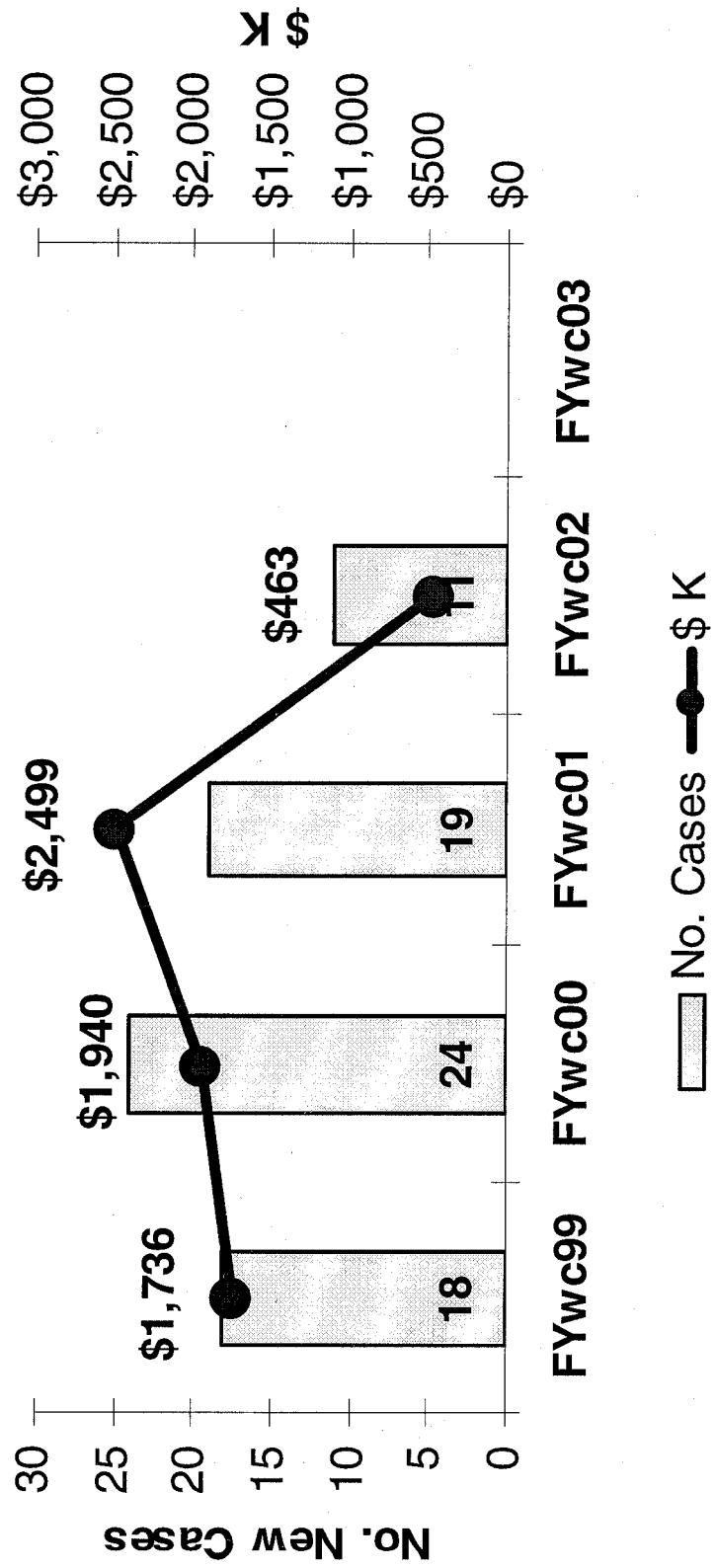
## Safety Inspection Trends (1-08-02)

\* Increased Inspections of Hazardous Operations



## Workers Compensation Trends (1-09-02)

### MSFC Workers' Comp

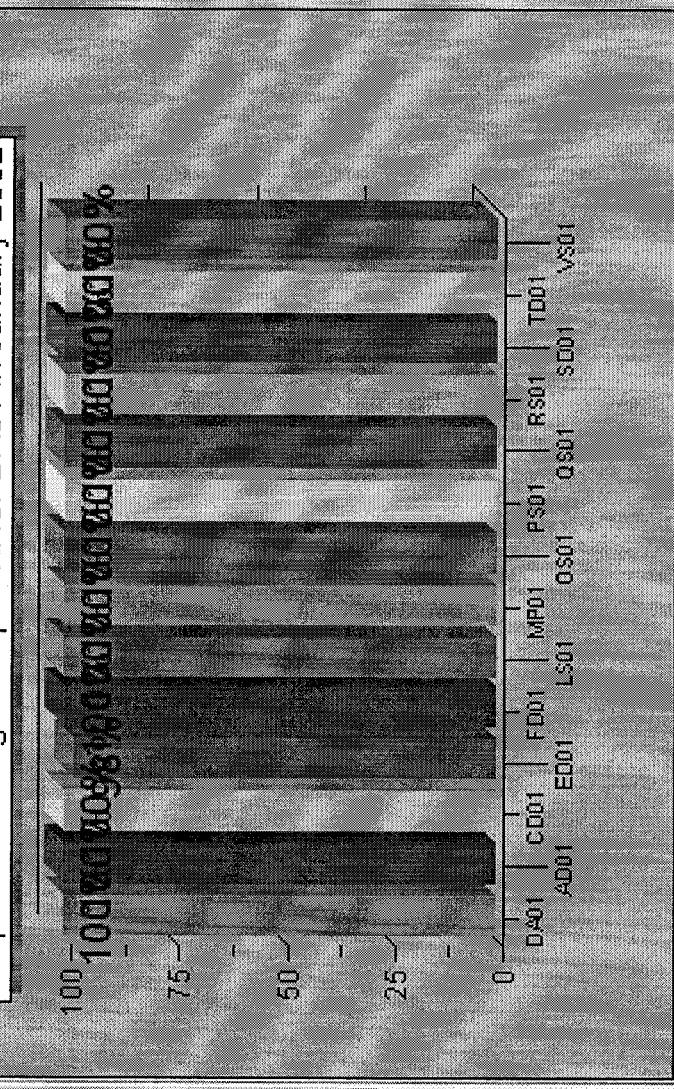


**Workers Comp Data is for MSFC Civil Service only.**  
**(Contractors keep their own data.)**

# Supervision Safety Web Page

## STEPHENSON, DA01 Required Meetings Completed for DA01 in January 2002

Required Meetings Completed for DA01 in January 2002



Click on a highlighted bar or an orgcode to drill down

**SH&E "CENTRAL" COMMITTEE  
OPEN ACTIONS & ACTIONS CLOSED SINCE LAST MEETING**  
**February 11, 2002**

ACTION NO.	ISSUE/CONCERN	POINT OF CONTACT	ACTIONEE	FINAL PRODUCT	DATE OPEN	ECD	STATUS
C-0089	A close call incident involving the release of mercury cadmium telluride at Building 448 I 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	Design is complete and construction is in work with ECD of 2/28/02. Board review will be scheduled as soon after that as possible.
C-0115	Dave Spacek presented results of a seatbelt and handrail usage survey. Seatbelt usage in service vehicles and handrail usage in certain areas was very low.	Art Stephenson/ DA01	Dave Spacek/ QS30	Conduct another seatbelt and handrail survey in several months to check if organizations have made improvement.	12/03/01	06/30/02	