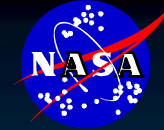




**Space Life Sciences Directorate
Safety & Mission Assurance Directorate**
NASA Johnson Space Center, Houston, Texas

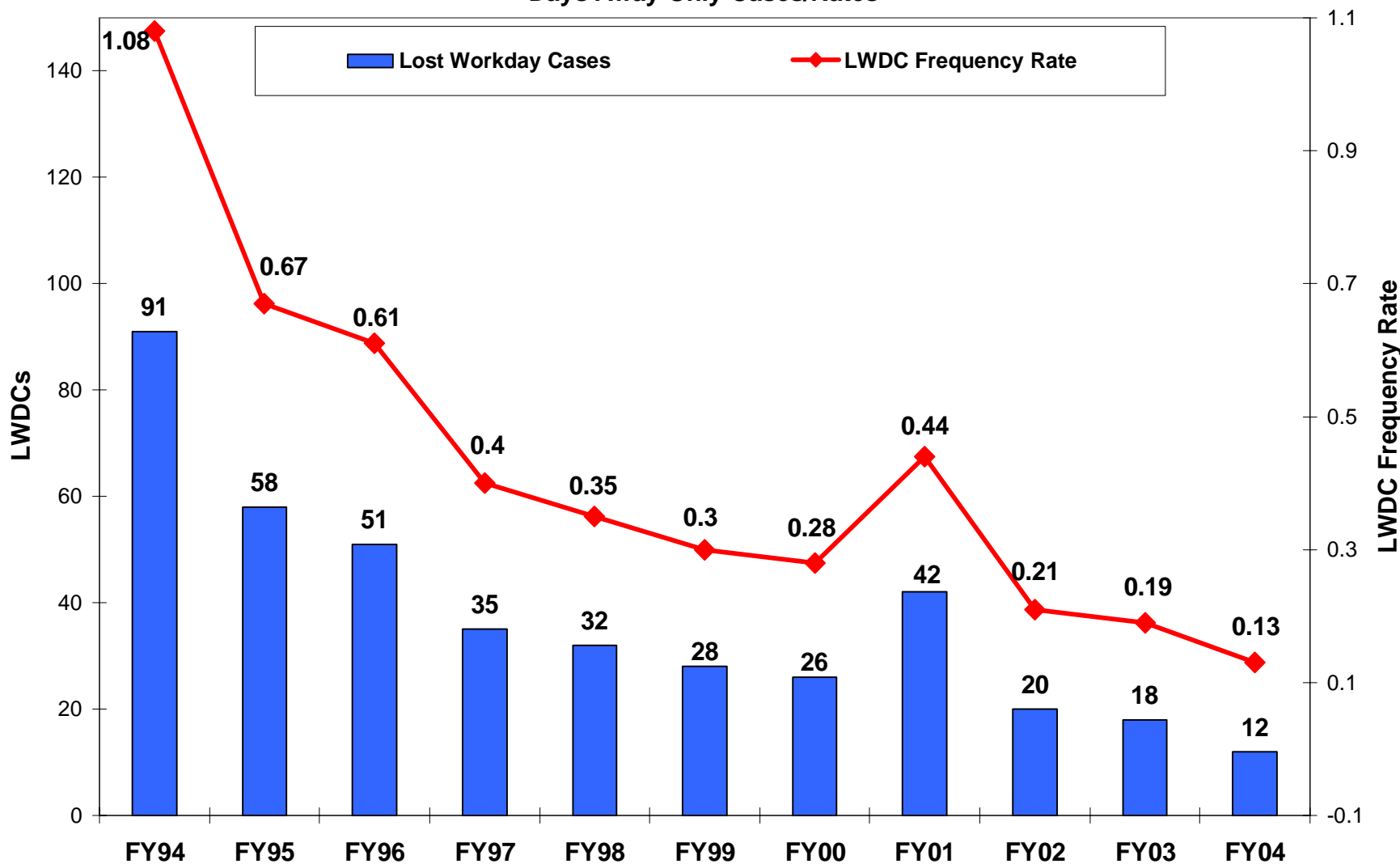


JSC & WSTF Safety & Health Program is in Excellent Condition



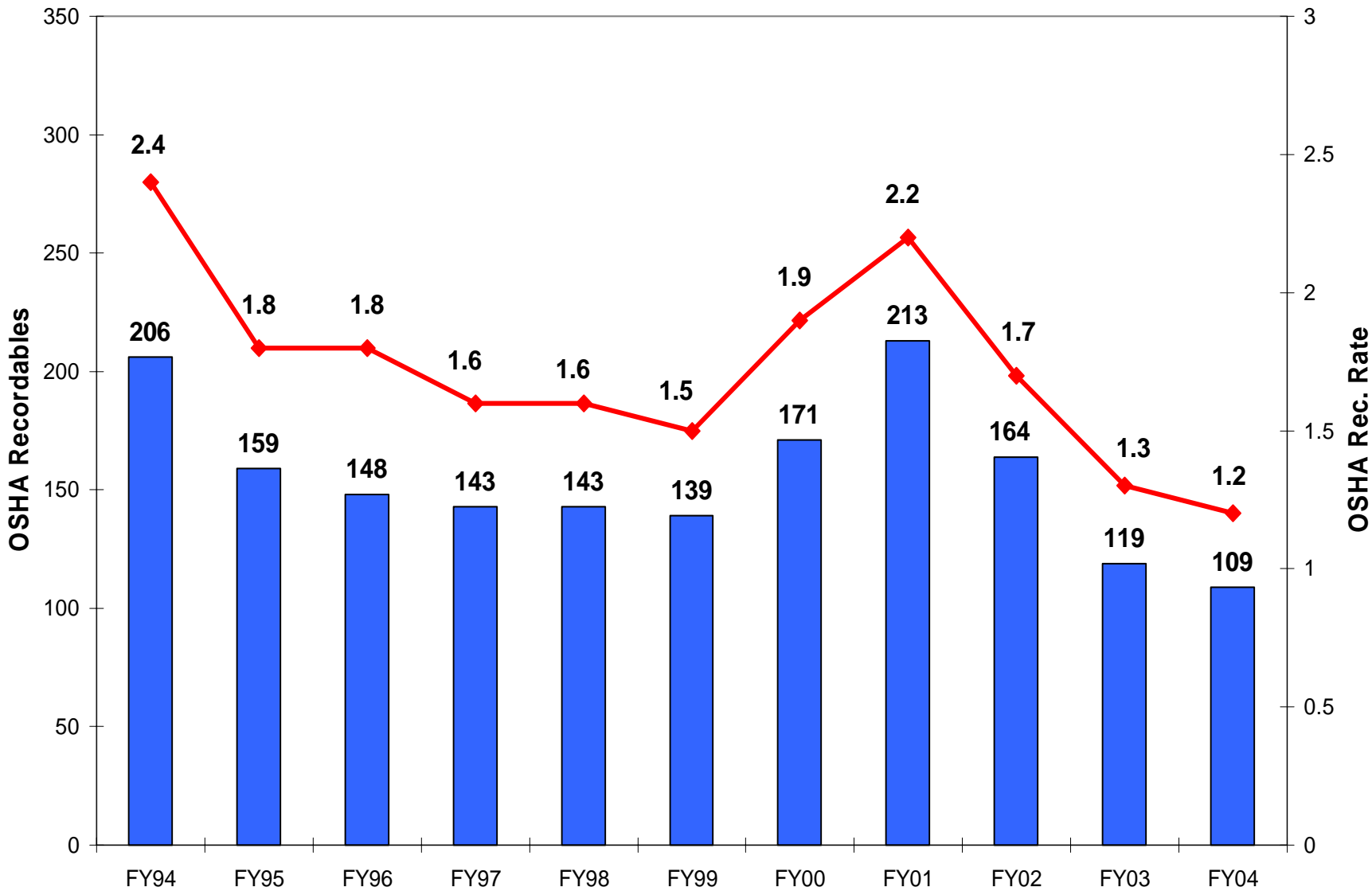
JSC Team Onsite Lost Workday Cases/Rates FY94-04

Days Away Only Cases/Rates



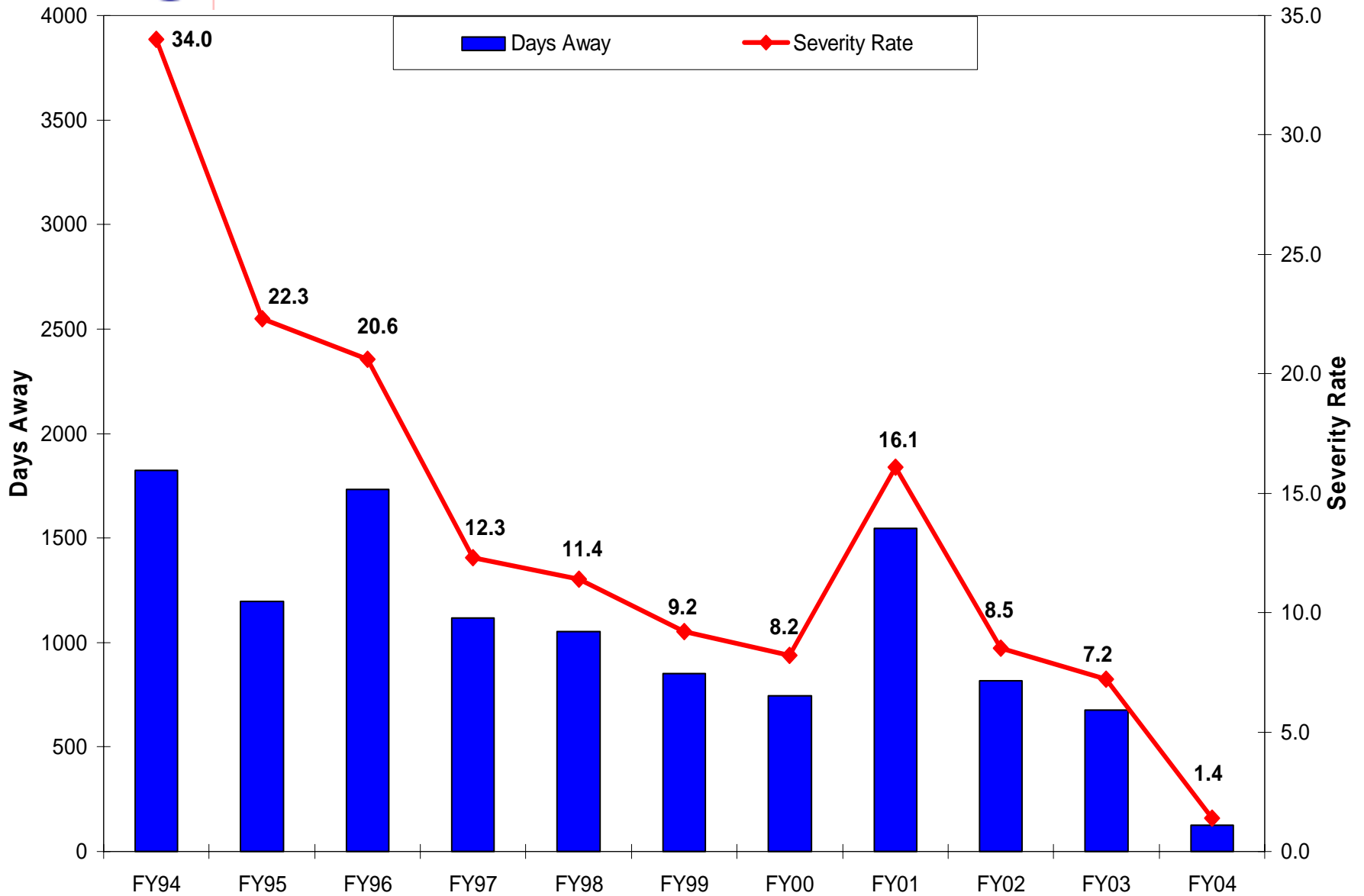


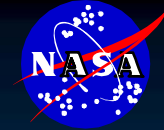
JSC Team Onsite OSHA Recordable Cases/Rates FY94-04





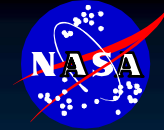
JSC Team Onsite Severity Rate FY 94-04





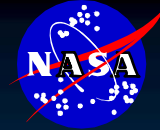
JSC Institutional Occupational Health

- **2004 Accomplishment Highlights**
- **2005 Initiative Highlights**
- **Lessons Learned / Issues**



JSC Occupational Health 2004 Accomplishment Highlights

- JSC Lifesaver Award
- Heat Alert Notification System
- Construction Contract S&H Continuous Improvement Team



NASA Johnson Space Center Lifesaver Award



An award to NASA Johnson Space Center government or contractor employees in recognition of their significant lifesaving action or lifesaving attempt.



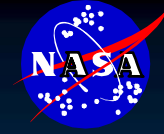
**If you would like to nominate someone
to the JSC Lifesaver Club,
contact your JSAT representative.**

*Get trained in CPR, basic lifesaving, and the use of an
AED, you do not know when you may be called upon to be a
Lifesaver*



*Safety & Total Health Day 2004
Balance is the Key to Success*



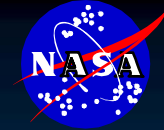


• Construction Safety Process Improvements

- Construction Contractor Site Orientation Training
- Houston Area Safety Council Teaming (Member of the Association of Reciprocal Safety Councils Inc.) for offsite S&H Training



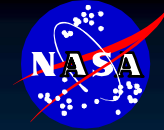
- Construction Safety and Health Program Master “SpecsIntact” project, done by the CUSS (clean up safety specs) Continuous Improvement Team



JSC Heat Alert Notification System

Notification/Information/Prevention

- For outdoor exercisers:
 - Flags/posters inside and outside of the Gilruth,
 - For Astronaut Gym users, post flag outside of the front door
- Post a link on the Safety and Health Website to the SMG homepage for current conditions
 - Outdoor workers
 - JSC community
- **Place water on the Gilruth jogging trail**



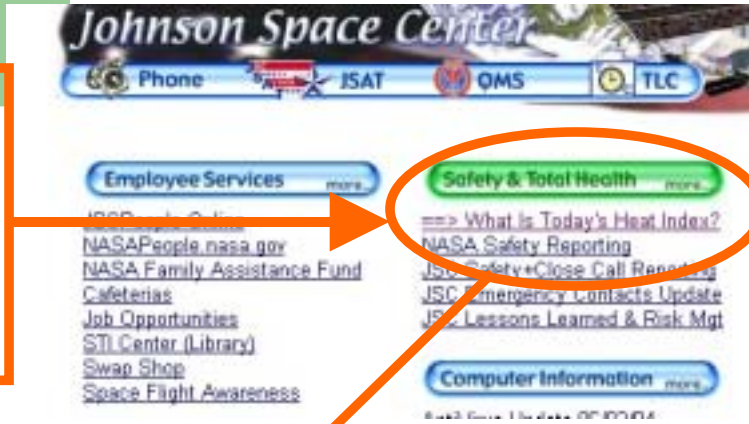
JSC will use the following system for Heat Index Notification

- Using a colored flag system:
 - Post the current heat index color to notify personnel of the heat risk from outdoor activities. Notify employees what the risk at each color means.
- Heat index color scheme is currently used by Space Flight Meteorology Group (SMG) for their current weather observation page, similar to others in the industry.

Heat Index	Possible Heat Disorder
80°F - 90°F	Fatigue possible with prolonged exposure and physical activity
91°F - 105°F	Sunstroke, heat cramps, and heat exhaustion possible.
106°F - 130°F	Sunstroke, heat cramps, and heat exhaustion likely.
131°F or greater	Heat stroke likely with continued exposure



**Find The
Latest Heat Index
From
The JSC Webpage !**



National Weather Service
Spaceflight Meteorology Group
NASA Lyndon B. Johnson Space Center

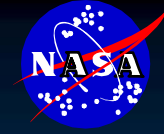
JSC Bldg. 30 Weather Observations

Day	Time	Temp (F)	Humidity (%)	Wind (mph)	Wind Dir	Wind Gust (mph)	Wind Speed (mph)	Wind Dir (deg)	Wind Gust (deg)	Pressure (in)	Relative Humidity (%)	Clouds (%)	Other
7 Jul	0818	84	75	10	184.0	8	11	28.06	8.00			100	Heat Index: 98
7 Jul	0818	84	75	10	230	8	11	28.06	8.00			100	Heat Index: 98
7 Jul	0819	85	80	10	187.0	12	15	28.06	8.00			100	Heat Index: 100
7 Jul	0812	85	80	10	187	13	15	28.06	8.00			100	Heat Index: 100
7 Jul	0810	85	80	10	186.0	8	11	28.06	8.00			100	Heat Index: 98

**You can use current readings
and forecast to plan your
outdoor activities**

Links:

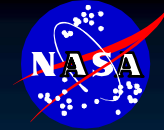
<http://www4.jsc.nasa.gov/org/totalhealth/Heatfile.htm>



JSC Heat Alert Notification System

- **Post Summer Review**

- Program was greatly appreciated by users (especially the water coolers on Jogging Trails)
- Daily Heat Index on Web Page was easily accessible, allowed real time decision making by outdoor trade contracts.
- Center Management had positive comments
- Lesson Learned- we stopped program too early, late summer (fall???) heat wave occurred in September.....



JSC Occupational Health 2005 Initiative Highlights

– Database Integration

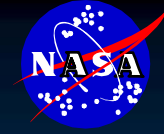
- Asbestos and other Hazardous Building Components linked to Center Operations Planning and Design Databases

– Wellness Program Teaming (Occupational Health and JSC Exchange)

- Wellness Coordinator (hired by JSC Exchange, shared by Exchange and Occupational Health)
- Enlarged Fitness facility and improved fitness offerings

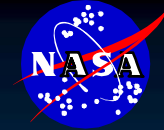
– Occupational Health Requirements Scrub

- Preventive Health Physicals
- NPG 1800.1 Support Revision and Match Up
- Ambulance Operations



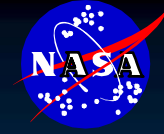
JSC Occupational Safety

- **2004 Accomplishment Highlights**
- **2005 Initiative Highlights**
- **Lessons Learned / Issues**

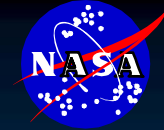


JSC Occupational Safety 2004 Accomplishment Highlights

- Improved Construction Safety Oversight
- Improved VPP Readiness Review (VRR) Process
- Continued Contractor Team VPP Participation
- Improved Contract Evaluation Process

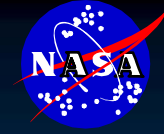


- **Improved Construction Safety Oversight**
 - 7 contractor WYE (work year equivalent) added for safety construction surveillance



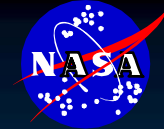
Improved VPP Readiness Review (VRR) Process

- Year-round assisted review of line organizations
- Maintains VPP momentum throughout the year and assists senior staff with annual VRR readiness declaration to Center Director

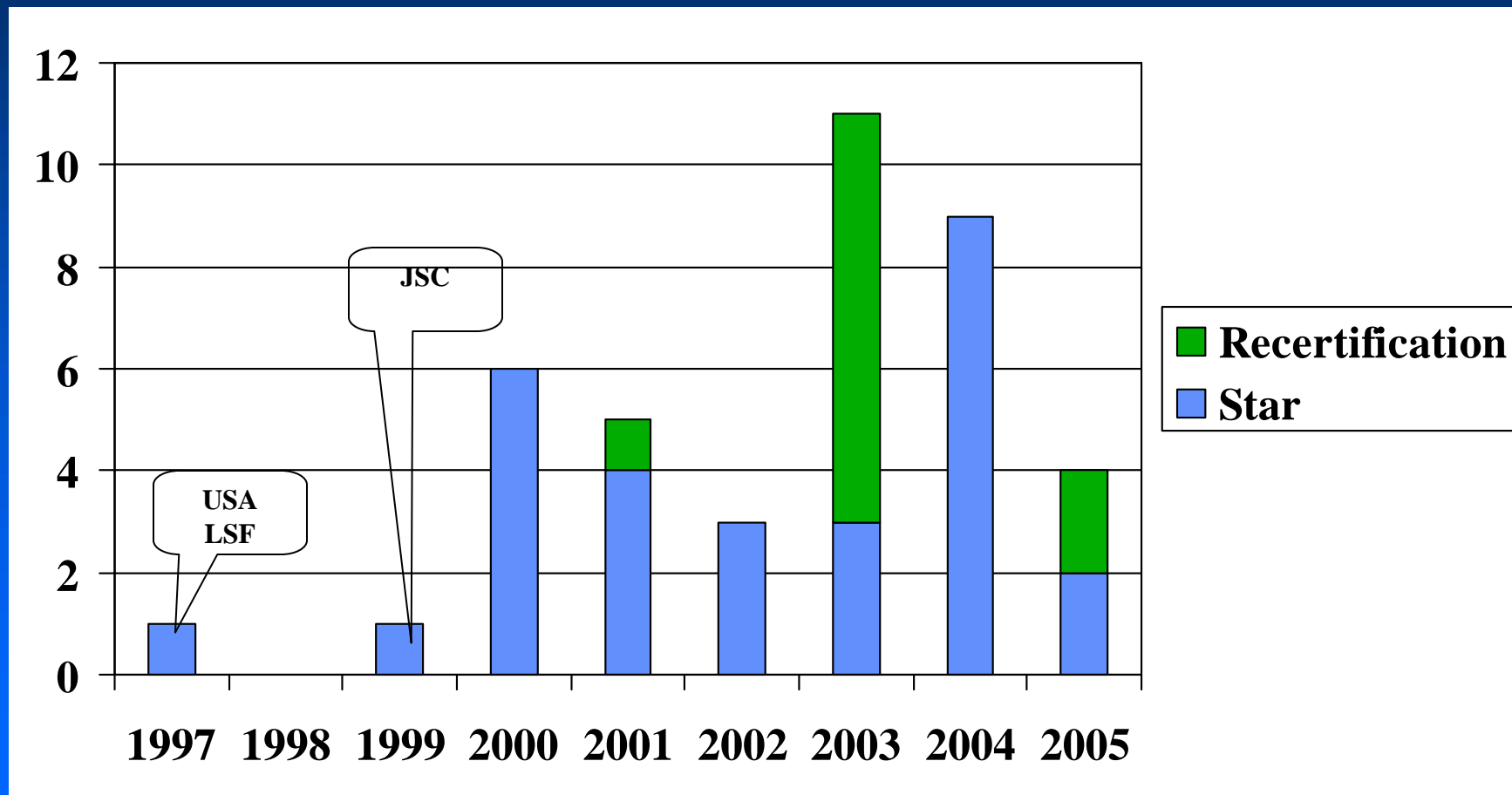


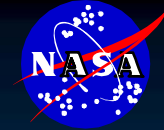
Continued Contractor Team VPP Participation

- 9 Contractor site evaluations in 2004
 - 7 STAR approvals
 - 2 STAR recommendations
 - Includes first VPP STAR transfer to a new company through a contract changeover (4 months after contract start)
 - OSHA developed this accelerated transfer process for JSC's dynamic contract environment
- Total JSC / WSTF = 23 STAR Sites



JSC & WSTF VPP Certifications By Year

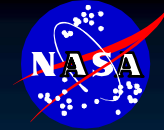




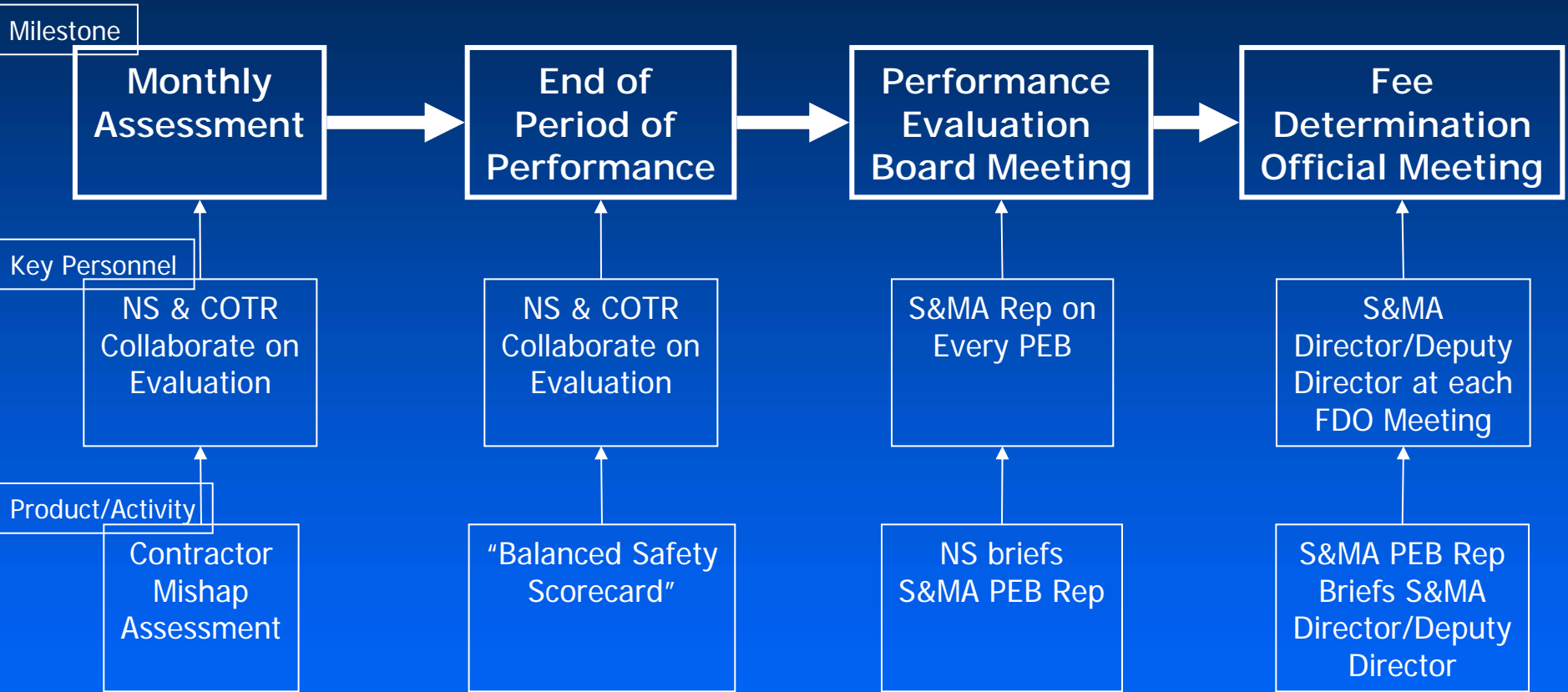
Improved S&H Contract Evaluation Process

<http://procurement.jsc.nasa.gov/procpub.htm>

- **New process balances “proactive” safety leadership achievements versus “trailing indicators”**
 - Safety & Health Leadership
 - Management Commitment & Employee Involvement
 - Safety & Health Preventative Activities
 - Leading Indicators: Training, Hazard Analysis, Inspections, etc.
 - Safety & Health Reactions
 - Trailing metrics, Close Call analysis
- **Assures that Center Management expectations for safety leadership are addressed**

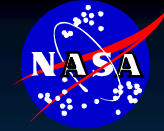


Ensure Consistent PEB Safety & Health Evaluations

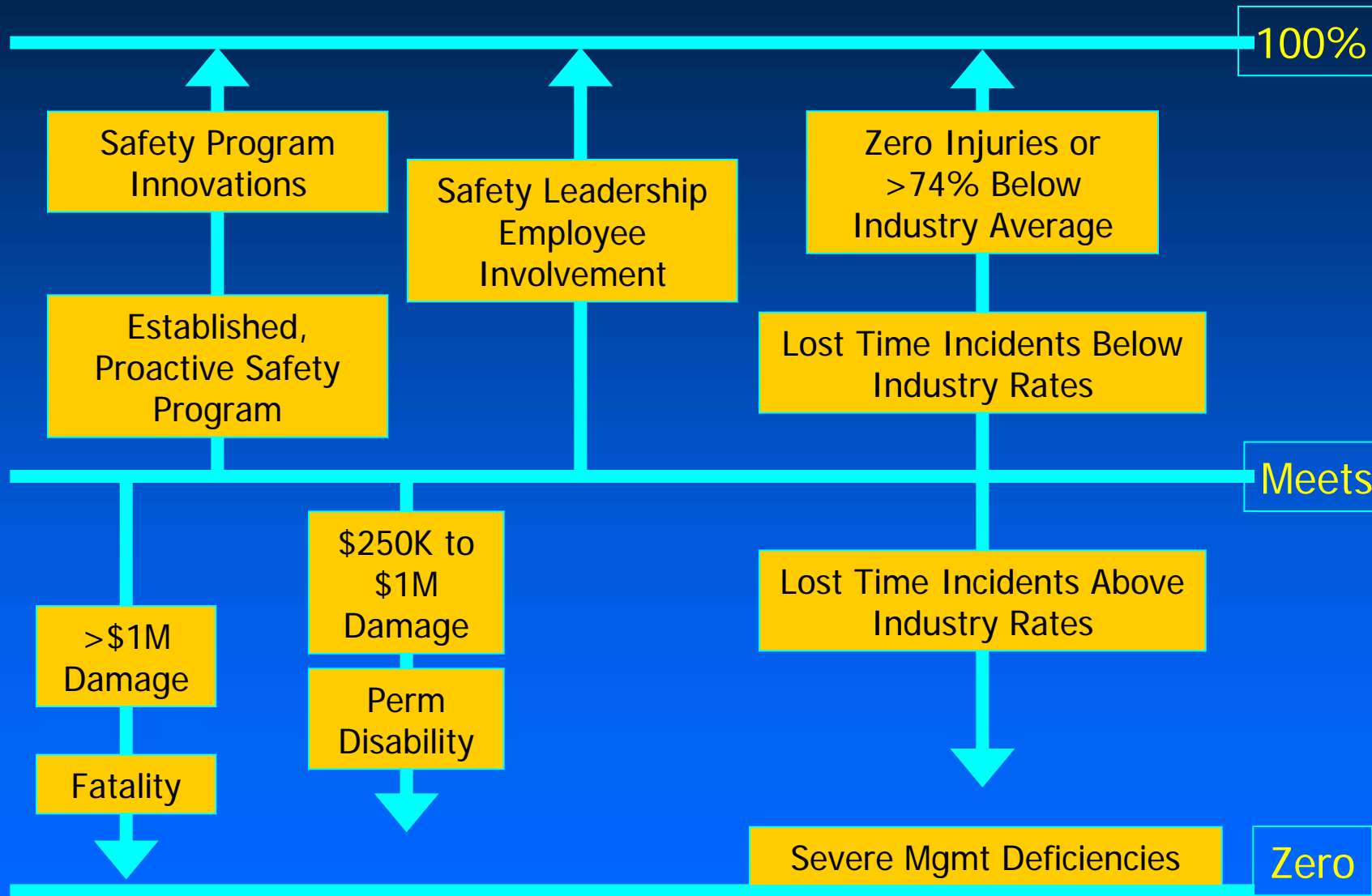
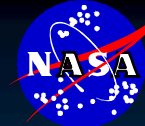


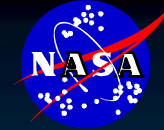


**Space Life Sciences Directorate
Safety & Mission Assurance Directorate**
NASA Johnson Space Center, Houston, Texas



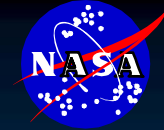
Category	Expectation	Contract Requirement	Metrics	Remarks
Leadership	"Safety" is an integral part of great leadership – "leadership" is an integral part of an effective safety & health program	Standard S&MA Occupational Safety & Health Contract Clause (DRD)	Active evidence of "safety leadership"	VPP recognition falls in this category, but not for "VPP Status", but rather for the leadership behaviors that VPP recognizes.
Prevention	You must have a S&H Program that meets the requirement of the JSC S&H Handbook (i.e. a pro-active, leadership and employee involvement based S&H Program)	Standard S&MA Occupational Safety & Health Contract Clause (DRD)	Leading Indicators: # of Safety Meetings % of safety training completed # of walkthrough inspections Etc. <ul style="list-style-type: none"> Sufficient preventive tasks of the type known to be key elements of an effective safety & health program Bonus recognition for achieving and maintaining VPP worksite status 	Close Calls submitted by contractor workforce indicates "preventive culture" VPP recognition falls in this category, but not for "VPP Status", but rather for the program elements that VPP recognizes.
Reaction (Trailing Indicators) NOTE: Zero injuries/illnesses may only mean that you are either lucky or under-reporting. Zero by itself has no meaning – it does have meaning, however, if there is a proactive S&H Program	You are expected to achieve injury/illness rates below the industry average and to keep trying to reduce them to zero	Standard S&MA Occupational Safety & Health Contract Clause (DRD)	Standard injury/illness/property damage metrics <ul style="list-style-type: none"> Rates below industry average Rates that are improving over time No incidents that are due to egregious management negligence Close Calls submitted by contractor workforce indicates "preventive culture" 	
Issues	Manage "issues" and implement appropriate risk mitigation/control and corrective action.	Have a Quality Mgt System: perform timely root cause and corrective action.		





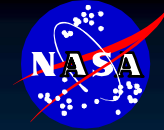
JSC Occupational Safety 2005 Initiative Highlights

- Develop a **leading metrics and trending program** that will provide management insight into the prevention of injuries and illnesses
- Establish a working group and conduct a feasibility study in **centralizing all JSC team training records** and track in central location
- Conduct an evaluation of the **JSC Close Call process** and make recommendations for improvement
 - Red Team / Blue Team



WSTF Safety & Health

- **2004 Accomplishment Highlights**
- **2005 Initiative Highlights**
- **Lessons Learned / Issues**



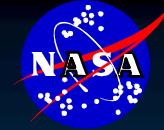
WSTF 2004 Accomplishment Highlights

- **VPP Activities**

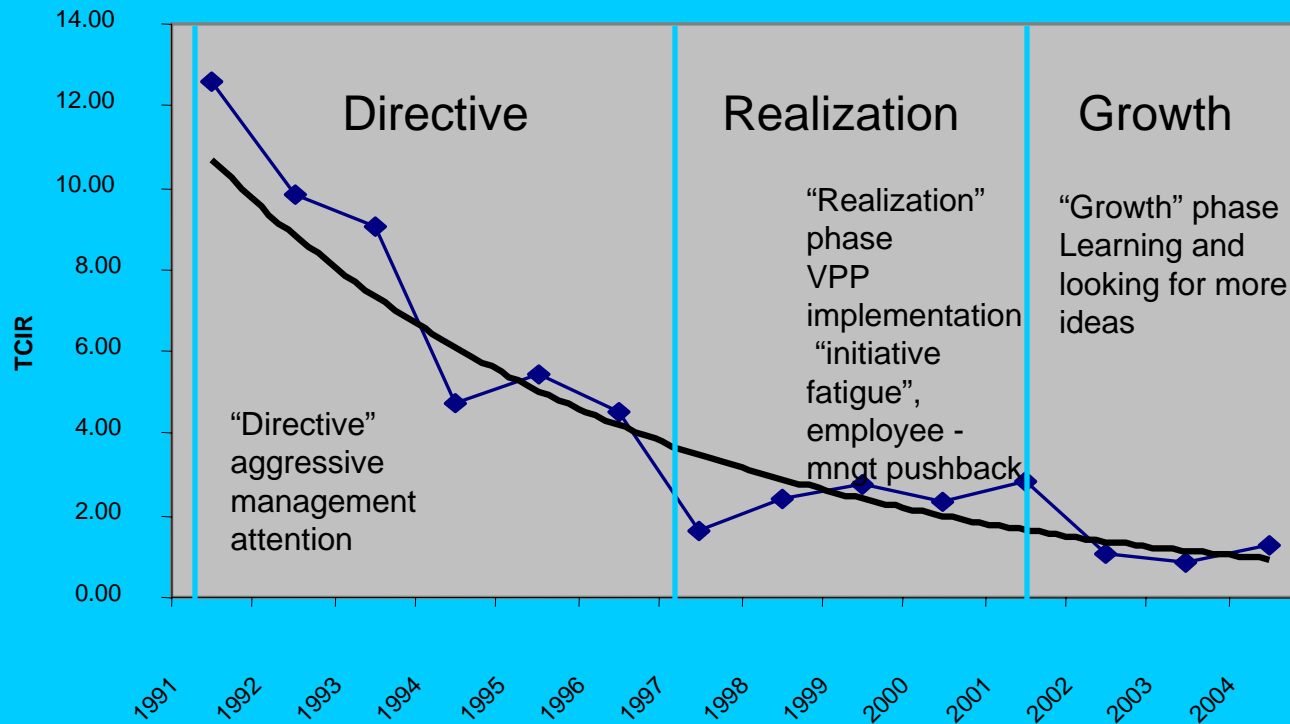
- VPP assessments – 2 new contractor approved Star sites
- 5 VPP Stars at WSTF – NASA/HTSI/Lynx/L&M/WGI
- WSTF involved in every VPP site in El Paso (5) either mentoring or part of assessment team
- WSTF consistently called by OSHA for mentoring

- **WSTF Injury Performance (next chart)**

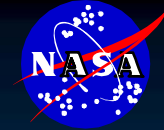
- 380+ days since last lost time injury!!!
- Rethinking injury reduction objectives



WSTF Total Case Incident Rate by Year



*WSTF Safety
Program Evolution*

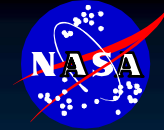


WSTF 2005 Initiative Highlights

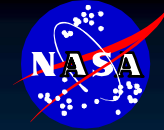
- **Consequence Thinking**
 - Reciprocating benefit from Phelps Dodge VPP mentoring
 - Just another training class – NOT!!!
 - Employees taking ownership of program
 - Great Expectations from employees & management
 - Provides intelligent approach to JHA improvements
 - Proven record of accomplishment
- **Think Safety for the next 15 seconds**
 - Structured approach for employees
- **“ZERO and Beyond”**



**Space Life Sciences Directorate
Safety & Mission Assurance Directorate**
NASA Johnson Space Center, Houston, Texas



BACKUP CHARTS



JSC Safety & Health Program Structure

Center Director: J. D. Howell, Jr.
Deputy Center Director: Robert D. Cabana
DASHO: Robert D. Cabana

**Office of Emergency Management
Center Operations Directorate**
William C. Roeh
Robert T. Gaffney

Safety & Health Forums

**Occupational Health Office
Space Medicine and Healthcare Systems
Space Life Sciences Directorate**
Dr. Carol S. Ramsey
Sean R. Keprta

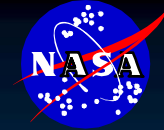
**Safety & Test Operations Division
Safety and Mission Assurance Directorate**
Stacey T. Nakamura

**Environmental Health Contractor
Kelsey-Seybold Inc.**

**Safety and Fire Protection Contractor
Muniz Engineering Inc.**

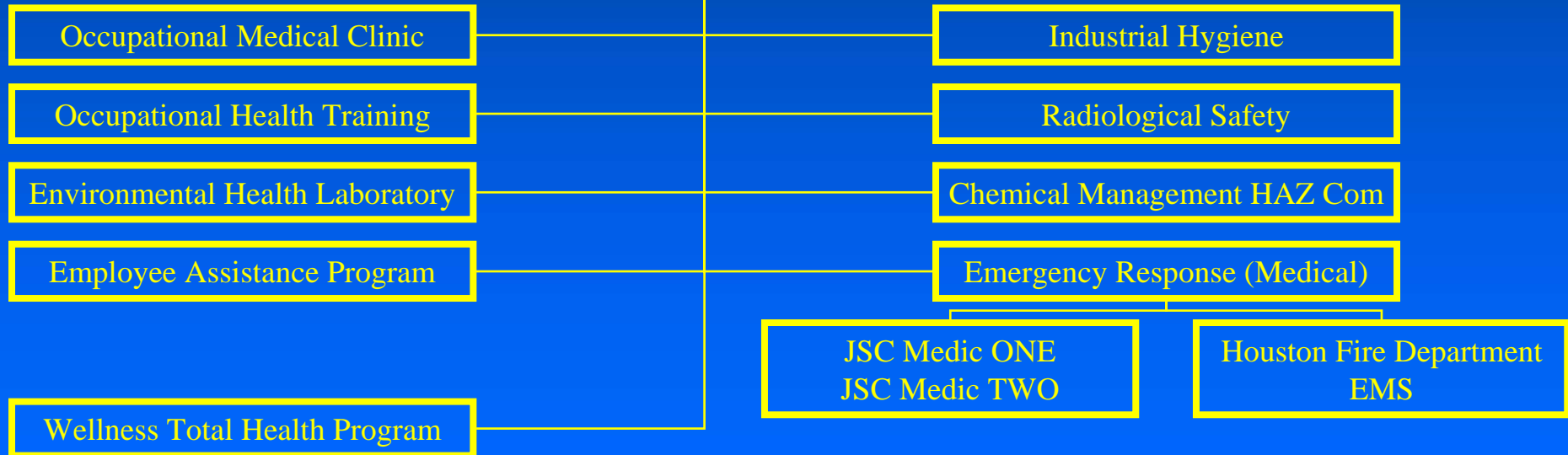
**Houston Fire Department
EMS**

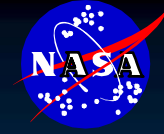
Houston Fire Department



JSC Occupational Health

Occupational Health Office
Space Medicine and Healthcare Systems
Space Life Sciences Directorate
Dr. Carol S. Ramsey
Sean R. Keprta





JSC Occupational Safety

Safety & Test Operations Division
Safety and Mission Assurance Directorate
Stacey T. Nakamura

Safety Engineering

Safety Awareness

Fire Detection & Suppression Systems
Maintenance & Operations

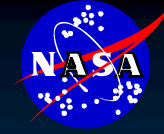
Safety Program Development

Safety Training

Emergency Response
(Fire & Safety)

JSC Fire Protection Specialists

Houston Fire Department



JSC Emergency Operations

Office of Emergency Management

Center Operations Directorate

William C. Roeh

Robert T. Gaffney

Emergency Operations Center

Emergency Preparedness Planning

Emergency Preparedness Drills

JSC Emergency Response Team

Security

Safety

Fire Protection

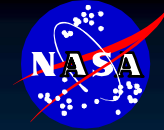
Health/Medical

Environmental

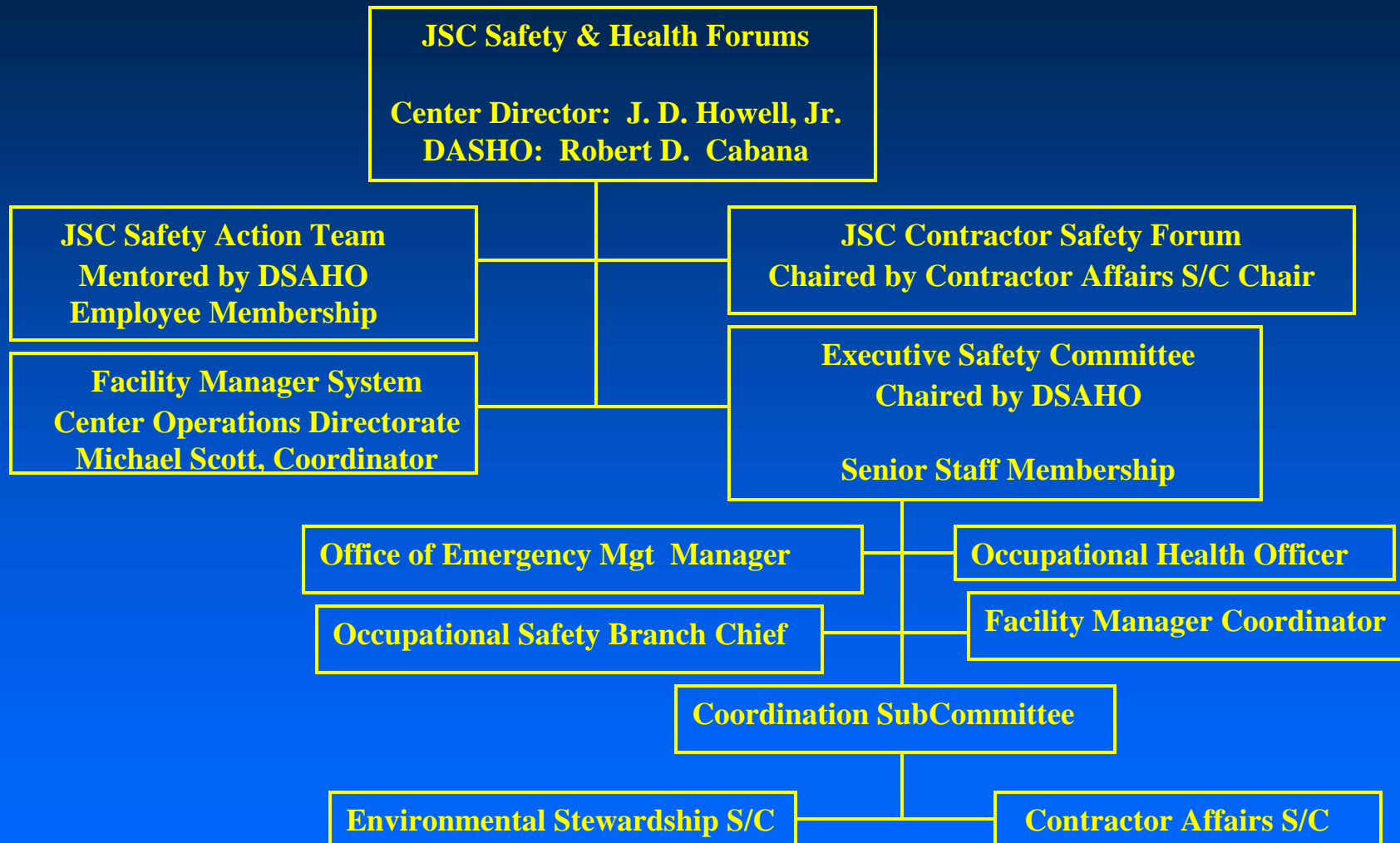
Public Affairs

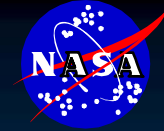
Facilities

Communications

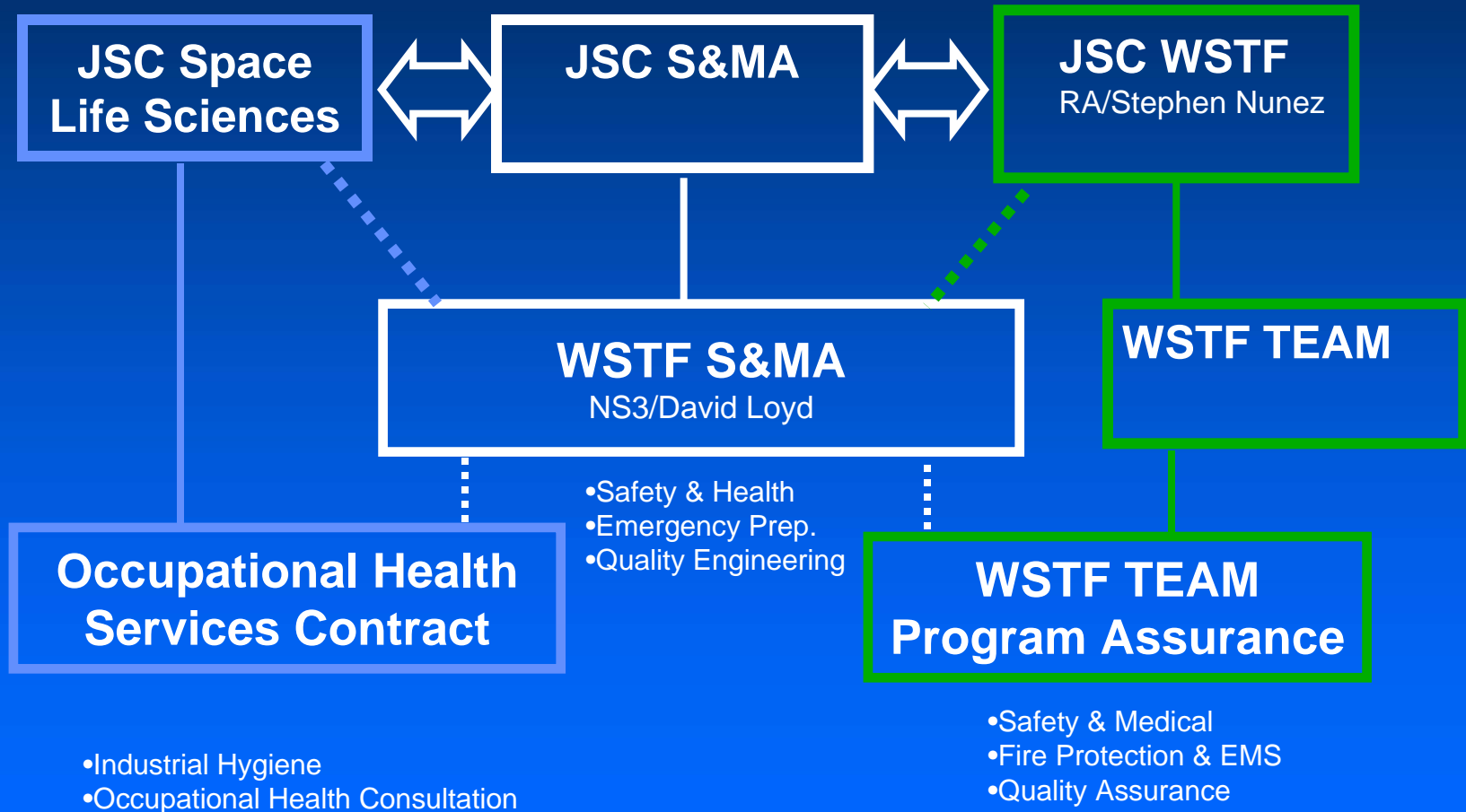


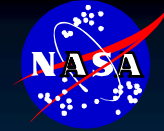
JSC Safety & Health Forums



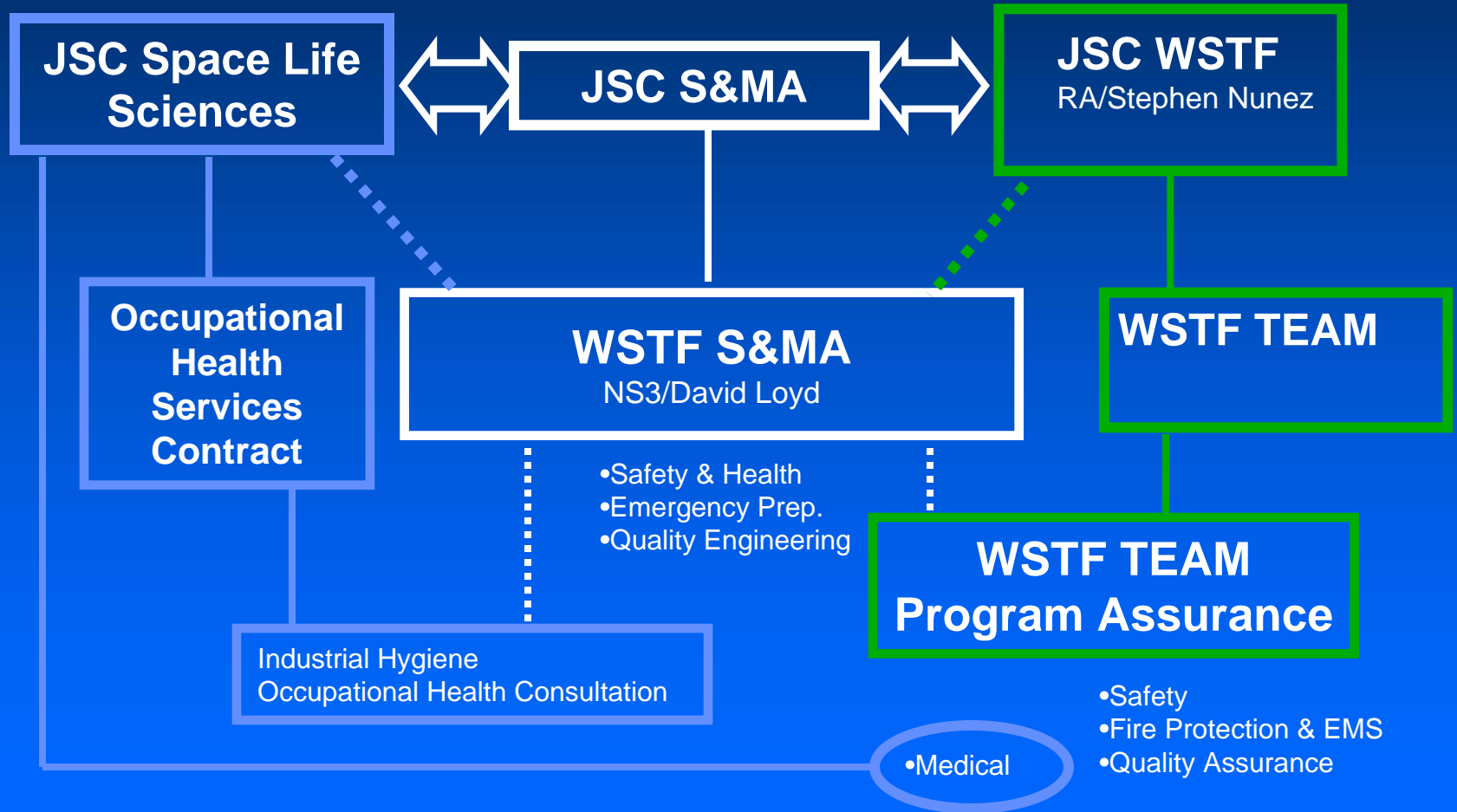


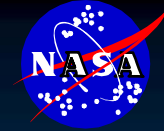
WSTF Safety & Health Functions - OLD





WSTF Safety & Health Functions - NEW





WSTF Safety & Health Functions - NEWER

