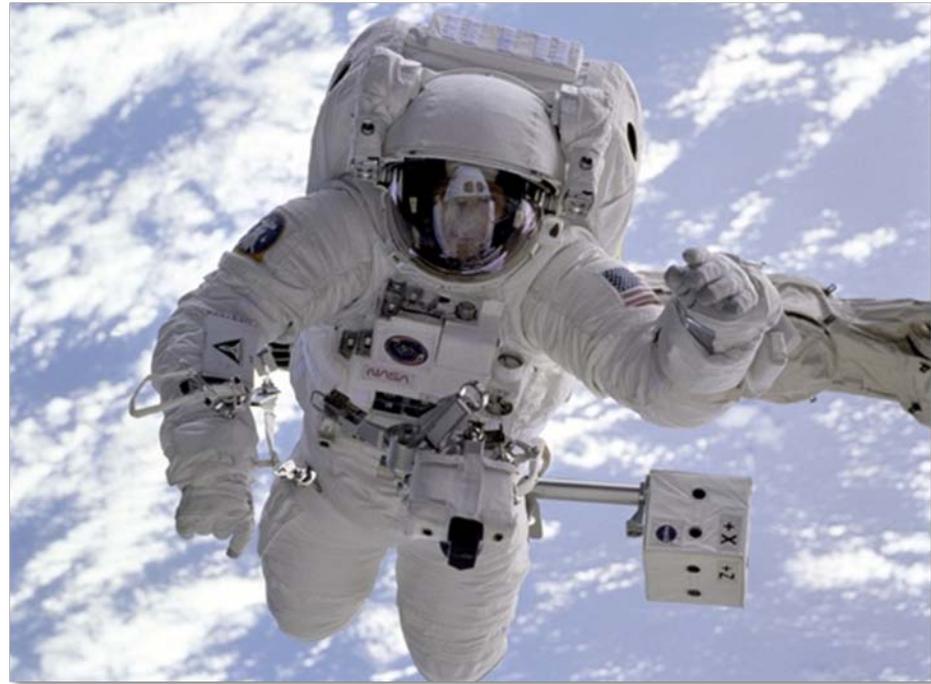




NASA Safety Center Briefing – 2009 NASA Occupational Health Meeting

TABLE OF CONTENTS

1. Introduction to the NASA Safety Center
2. The road to **Safety and Mission Assurance**: a look at each of the NSC's four functional offices
 - Office goals
 - Current initiatives



THE NASA SAFETY CENTER:

Develops SMA personnel, processes and tools needed for the safe achievement of NASA's strategic goals through:

Establishing a learning environment

Benchmarking from the best and bringing their best practices into our workplace

Learning from our mishaps

Ensuring that we are informed risk-takers

Managing the routine risks of the workplace effectively

Preserving our resources for the NASA mission

THE NASA SAFETY CENTER:

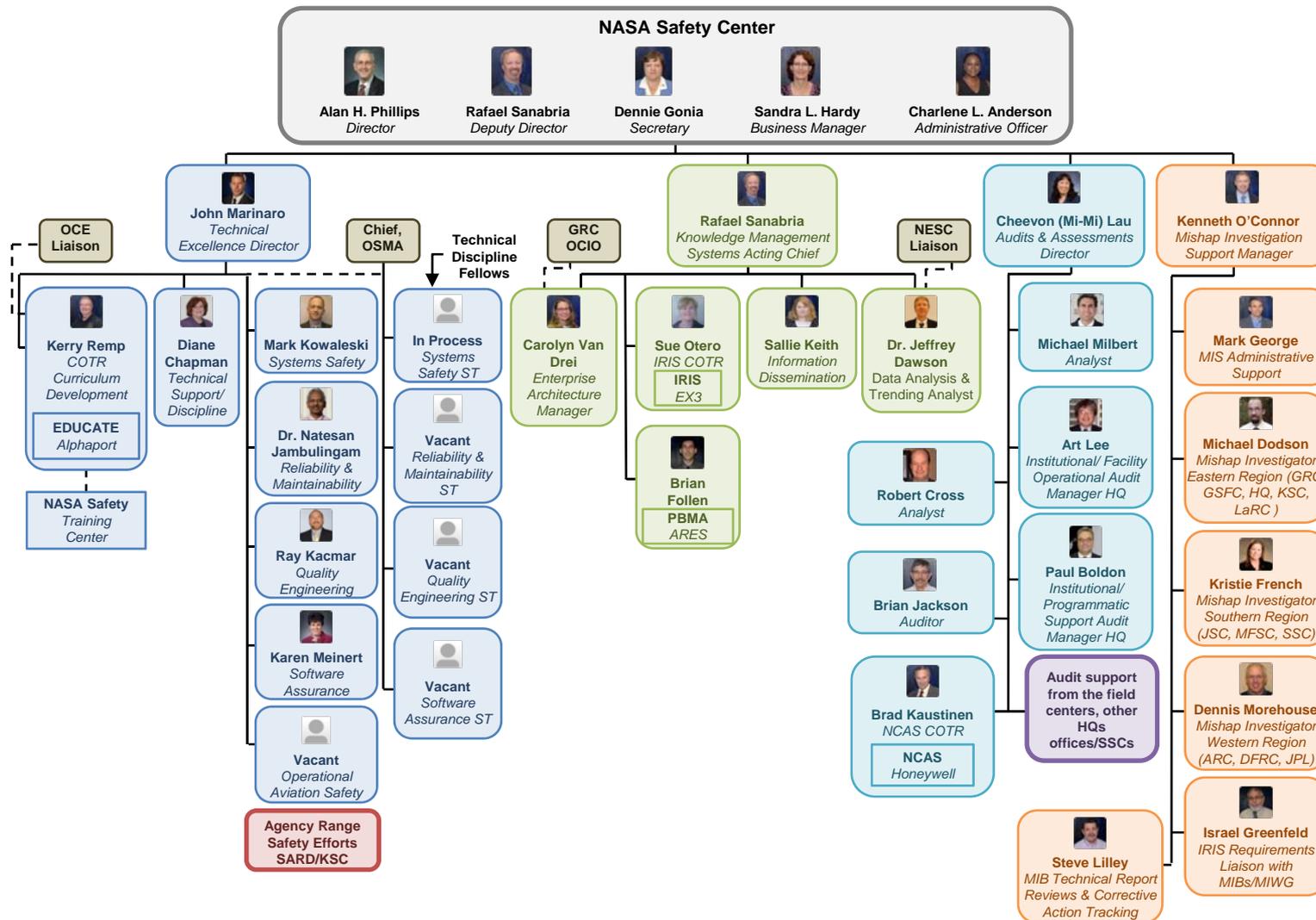
Provides SMA support for all NASA centers and facilities.



FOUR AREAS OF SUPPORT



THE PEOPLE OF THE NSC





Technical Excellence

TECHNICAL EXCELLENCE



SMA TECHNICAL EXCELLENCE PROGRAM

STEP Training Elements	STEP Levels			
	Level 1	Level 2	Level 3	Level 4
Core Training	Risk Management, Decision Making, Systems Engineering			
Discipline Training	SMA Overview			
Domain Training	Mission Directorate Overviews			
On-the-job Training	N/A	Discipline specific for Levels 2 - 4 (Curriculum escalates in difficulty and complexity through each Level)		
Enrichment Training				
Career Training				
Continuing Education Training				

TECHNICAL EXCELLENCE INITIATIVES

- **Technical Excellence Discipline Fellows**



Glenn



Johnson

- **STEP Pilot**

- **STEP Level 1 Agency Rollout Fall 2009**

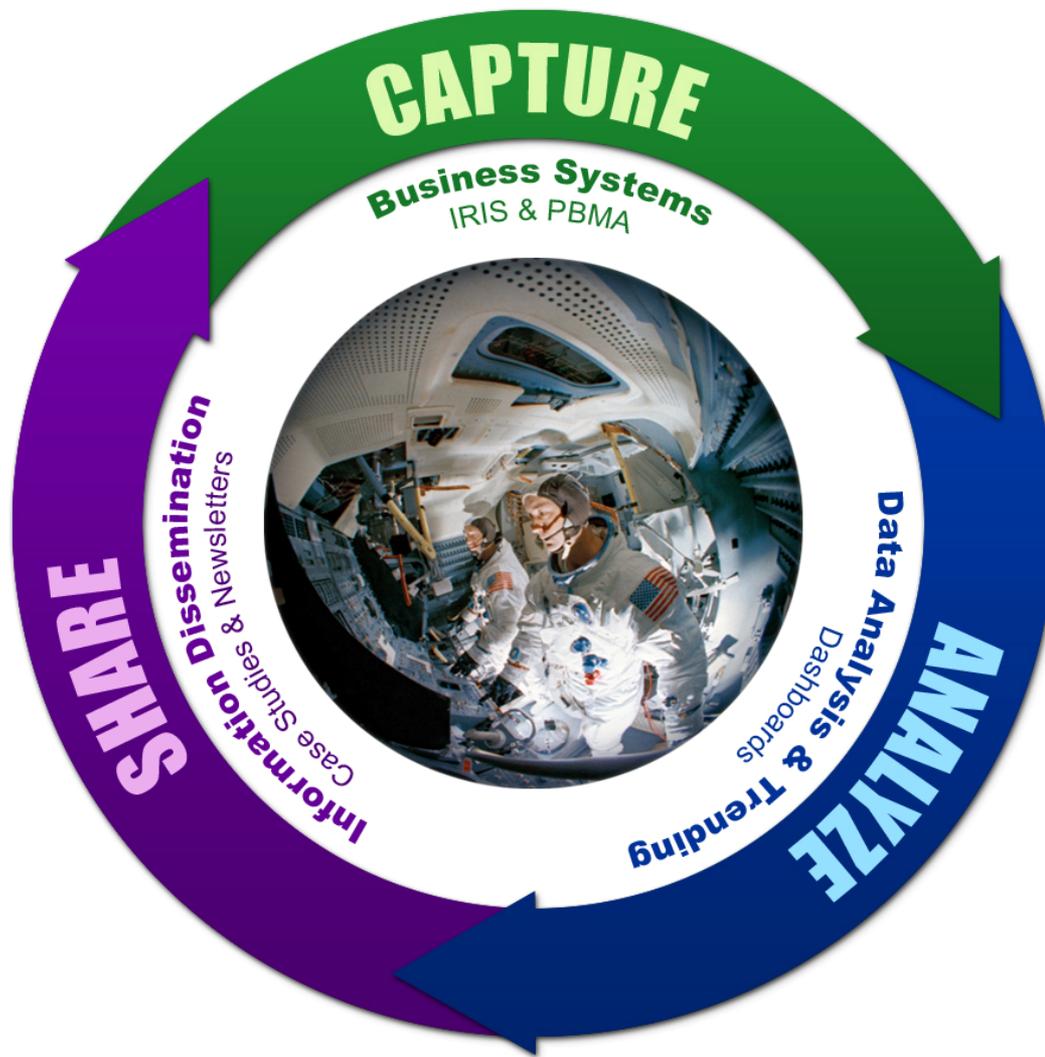


Knowledge Management

KNOWLEDGE MANAGEMENT SYSTEMS



KNOWLEDGE MANAGEMENT



KNOWLEDGE MANAGEMENT INITIATIVES

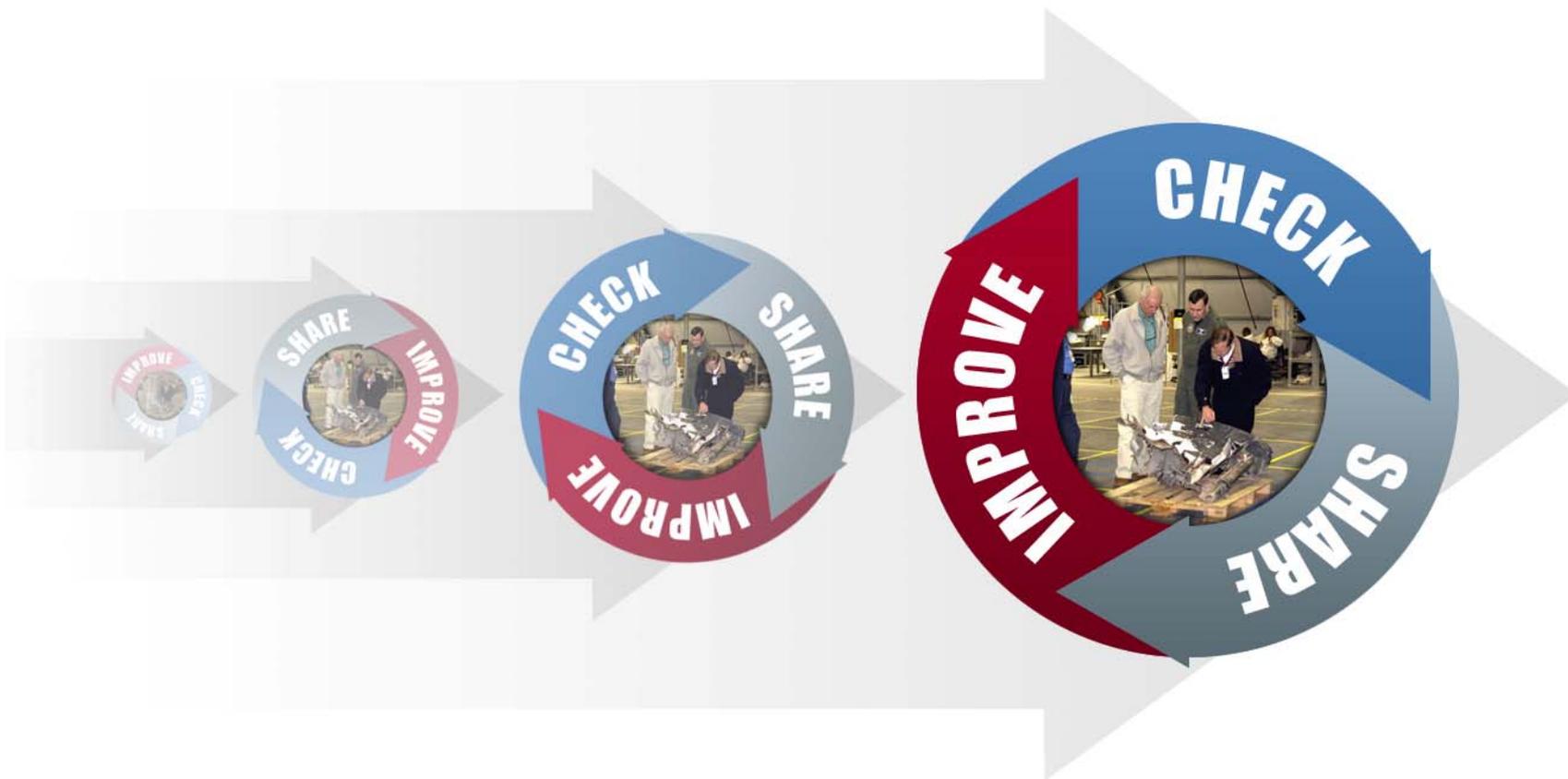
- NSC Web site
- Dashboards
- Case Studies
- Newsletters





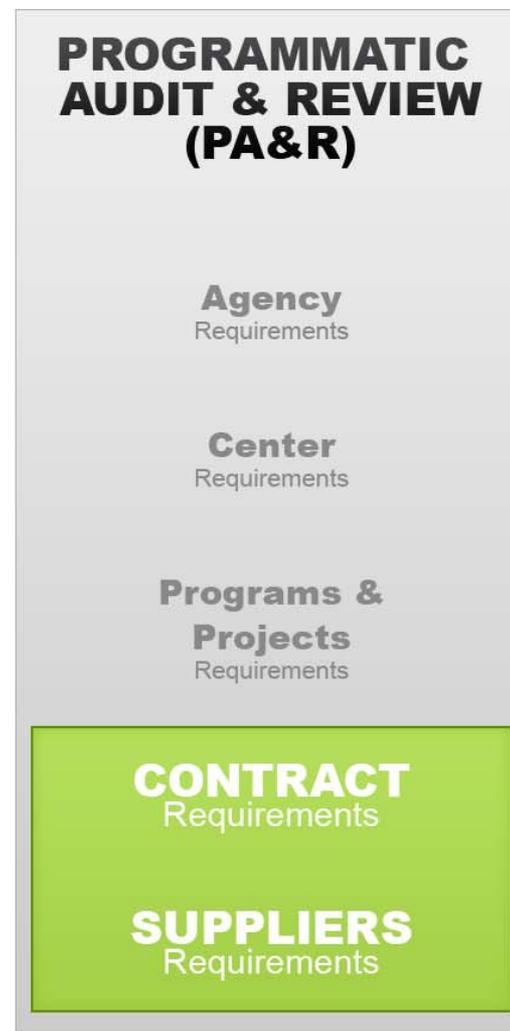
Audits & Assessments

AUDITS & ASSESSMENTS



Prevention of mishaps across the Agency

AUDIT TYPES



AUDITS & ASSESSMENTS INITIATIVES

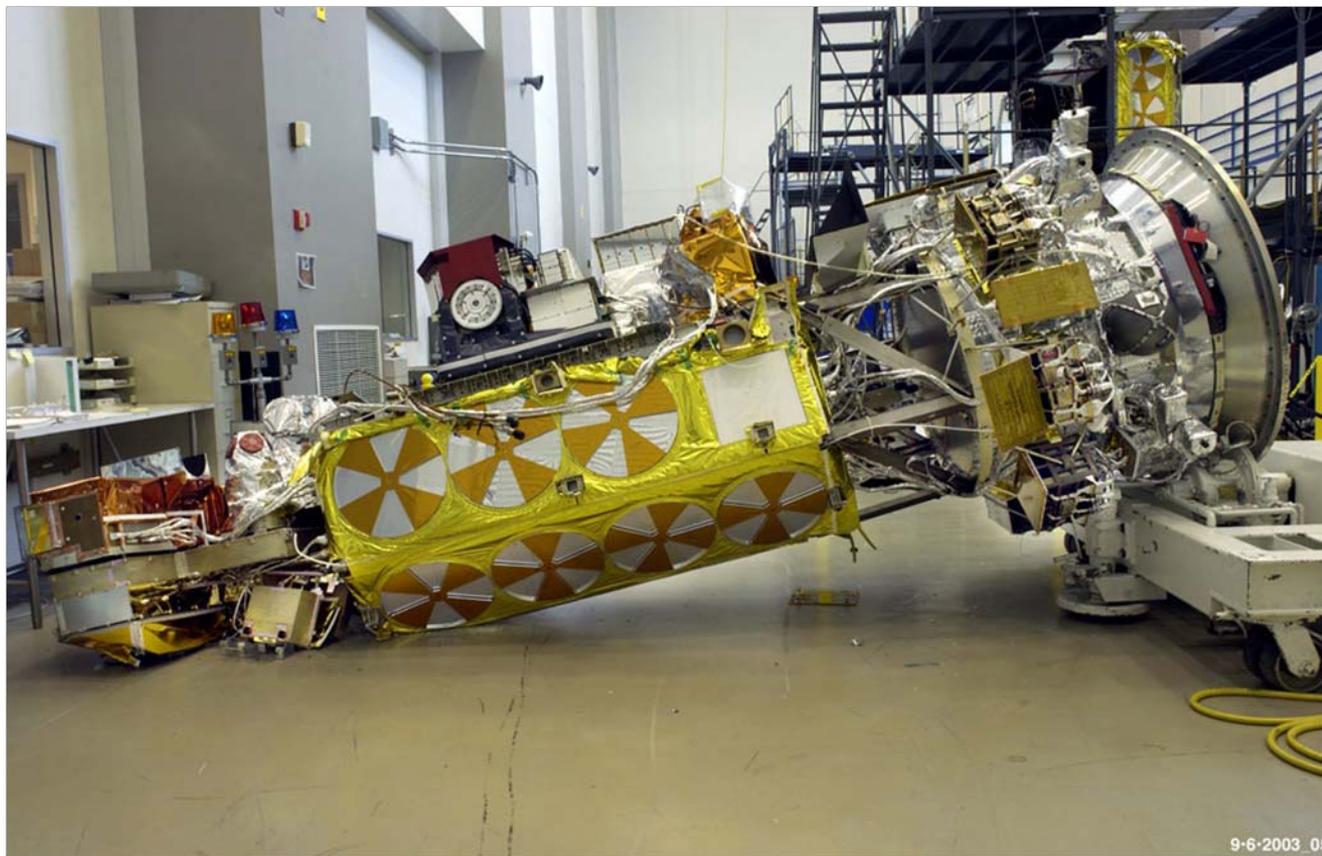
- Determine the “right-size” for the audit team
- Improve coordination of audits with the NASA Centers and Programs
 - Schedules of audits/reviews are kept current on the OSMA’s calendar and the Agency’s calendar initiative
- Conduct Agency workshops
 - Address trending, systemic issues, potential solutions and associated risks resulting from the Audit Findings





Mishap Investigation Support

MISHAP INVESTIGATION SUPPORT



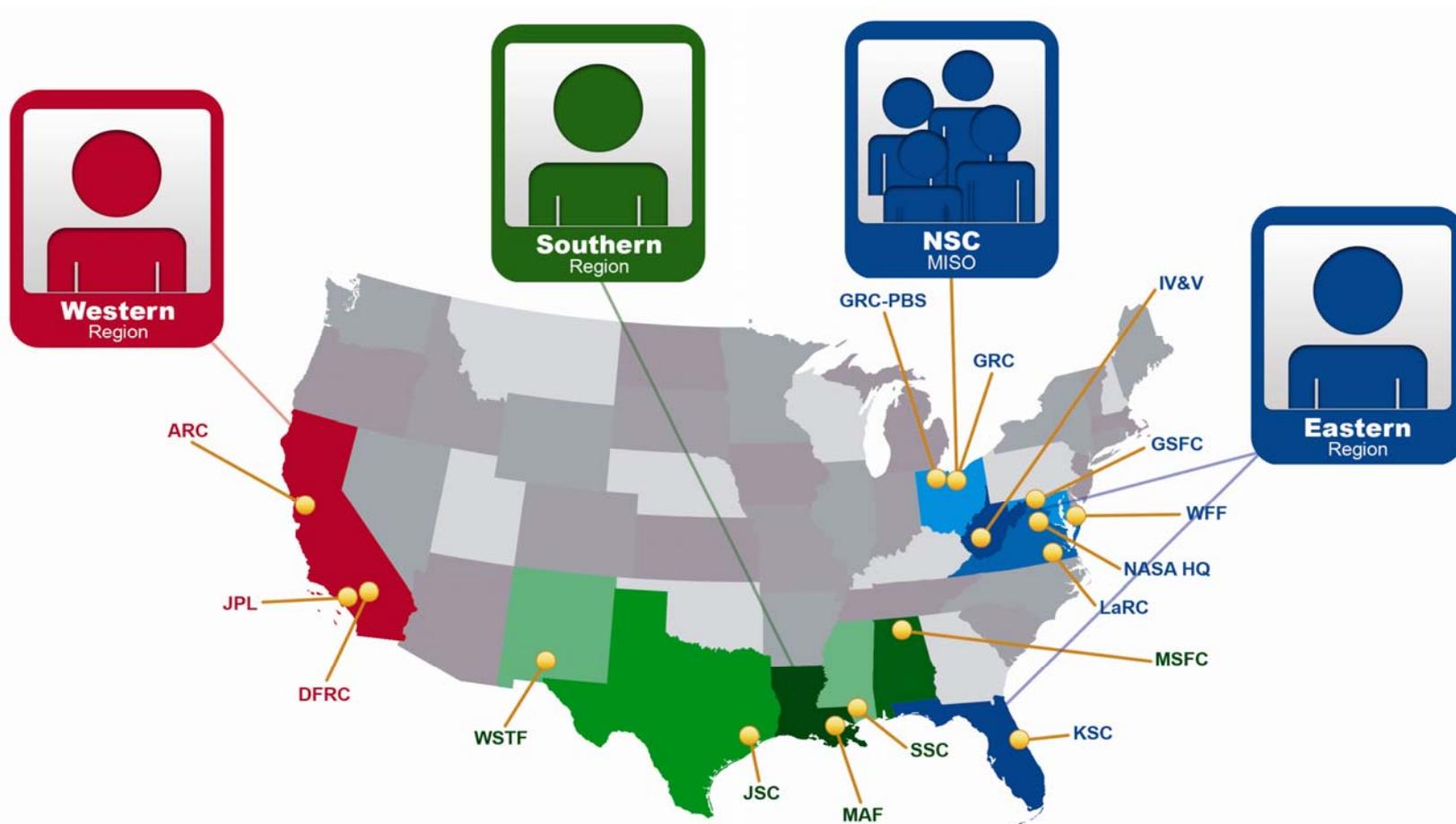
1. Provide Tools

2. Identify Trends

3. Prevent Recurrence

AGENCY-WIDE SUPPORT

For high severity mishaps and significant close calls



MISHAP INVESTIGATION INITIATIVES

- Tracking recommendations and corrective actions
- Developing Interim Response Team training course material
- Analyzing safety incidents and identifying trends
- Improving completeness, consistency and repeatability of safety data reporting
- Distributing mishap information and lessons learned

Mishap Warning-Action-Response

IRIS Case No: 2006-206-00011	Mishap Title: Altitude Combustion Stand Ladder Fall
NASA Advisory No.: NA-CRRC-2006-01	Date of Warning-Action-Response: 2006-04-28
Mishap Classification: Type B	Dollar Property Loss/Injury Severity: Overnight hospital stay for internal injuries
Date of Mishap: 2006-07-25	Location or Center of Mishap: Glenn Research Center

Brief Description of Mishap:
A contract employee at Glenn Research Center was injured when the ladder he was standing on lost its footing and slid away from the wall of the spray cooler pit where he was working. Emergency response personnel from local municipalities transported the worker to the hospital where he was admitted overnight for treatment of internal injuries.

Problem Description and Details:
Interim Response Team (IRT) personnel observed that egress from that spray cooler pit (casual or emergency) was not addressed before construction personnel were deployed in that area. Emergency response personnel encountered some difficulty removing the injured party from the pit area due to a lack of egress.



Figure A.4.—Route for access to and egress from the spray cooler pit.

Immediately after the mishap steps were installed for easier entry/egress.

Action Recommended:
All Centers are requested to review construction worksites for casual and emergency egress requirements as follows.

1. Allow sufficient egress for emergency responders to conduct operations.
2. Ensure employees have safe and sufficient means for entering or leaving worksites.
3. Add an evaluation of the plans and requirements for emergency and casual egress to construction safety checklists if such evaluation does not currently exist.

FOR MORE INFORMATION – Internal Site

- Contact nasa-nsc@nasa.gov
- Check out our Web site at <http://nsc.nasa.gov>

The screenshot shows the NASA Safety Center website interface. At the top, it displays the NASA logo and the text 'NATIONAL AERONAUTICS AND SPACE ADMINISTRATION'. Below this is the 'NSC NASA SAFETY CENTER' header. A navigation bar contains links for Home, Technical Excellence, Knowledge Management, Audits & Assessments, Mishap Investigation Support, and About Us. The main content area is titled 'Welcome to the NSC' and includes a 'WELCOME!' message, a 'SMA TECHNICAL EXCELLENCE PROGRAM' announcement, and sections for 'SYSTEM FAILURE CASE STUDY', 'CASE OF INTEREST', and 'MISHAP ALERTS'. A calendar for June 2009 is also present. The footer contains contact information and links to various NASA policies and documents.

FOR MORE INFORMATION – External Site

- Contact nasa-nsc@nasa.gov
- Check out our Web site at:

The screenshot shows the NASA Safety Center website. The top navigation bar includes links for HOME, NEWS, MISSIONS, MULTIMEDIA, ABOUT NASA, and COLLABORATE. Below the navigation bar is a search box and a "Log In To MyNASA | Sign Up" link. The main content area is divided into three columns:

- Left Column (NASA Safety Center):** Contains links for Home, Mission & Vision, and Monthly Safety Message.
- Middle Column (NSC Overview):**

What is the NSC?

The NASA Safety Center (NSC) was established in October 2006 to support the safety and mission assurance requirements of NASA's portfolio of programs and projects.

Focused on improving the development of personnel, processes and tools needed for the safe and successful achievement of NASA's strategic goals, the NSC is comprised of four functional offices: Technical Excellence, Knowledge Management Systems, Audits and Assessments and Mishap Investigation Support.



The NSC resides in the Ohio Aerospace Institute, Brook Park, Ohio, and is a tenant of NASA's Glenn Research Center. The NASA Safety Center reports to the Office of Safety and Mission Assurance at NASA Headquarters, Washington, D.C.
- Right Column:**

For More Information

Please contact the NSC by email at nasa-nsc@nasa.gov or write to:

NASA Safety Center
22800 Cedar Point Road
Cleveland, OH 44142
(440) 962-3230

NASA Safety Center (NASA Only)

Our People

Director,
Alan H. Phillips
+ Biography

Deputy Director,
Rafael Sanabria
+ Biography

Our Organization
+ View Org Chart

<http://www.nasa.gov/offices/nsc/home/>



Program Safety & Mission Success