

Mission Success Starts With Safety



# Construction Safety

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SSC Construction Inspection  
Safety Findings/Stats

May 2011



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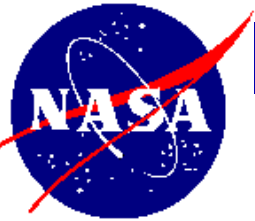
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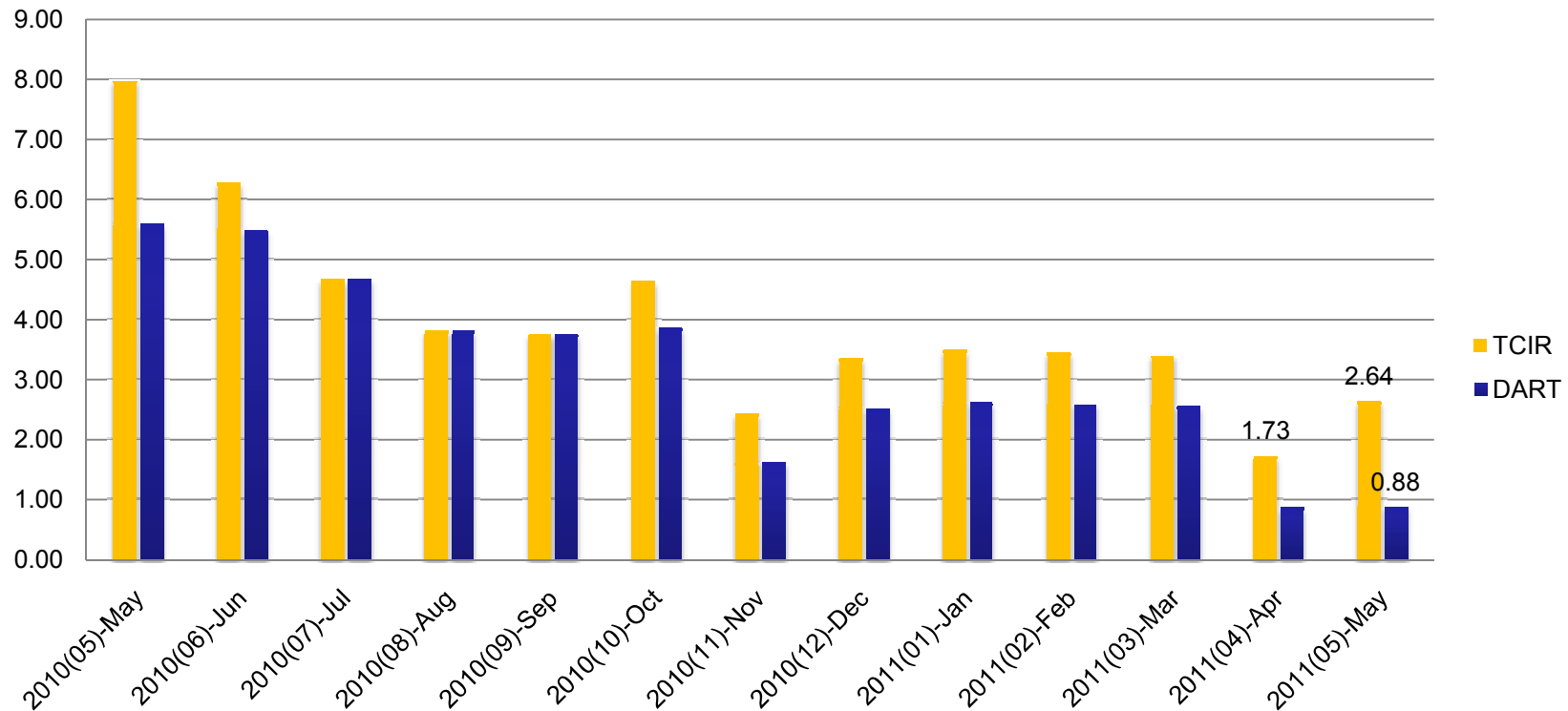


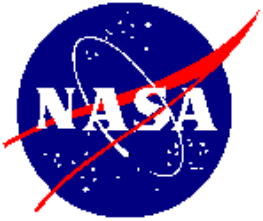
# Construction Days Away, Restricted Duty, Transferred Cases Incident Rate (DART), Total Case Incident Rate (TCIR)

2009 NAICS Industry Code (Construction) DART = 2.3, TCIR = 4.3

*Zero or down is good*

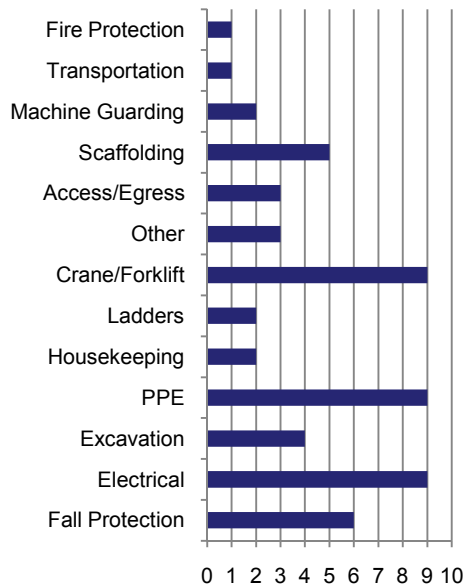
NASA Direct Construction work resulted 1 restricted duty and 2 medical treatment in FY2011, with 1 recordable in CY2011... (one recordable in May with lacerated arm in HW 607 job)



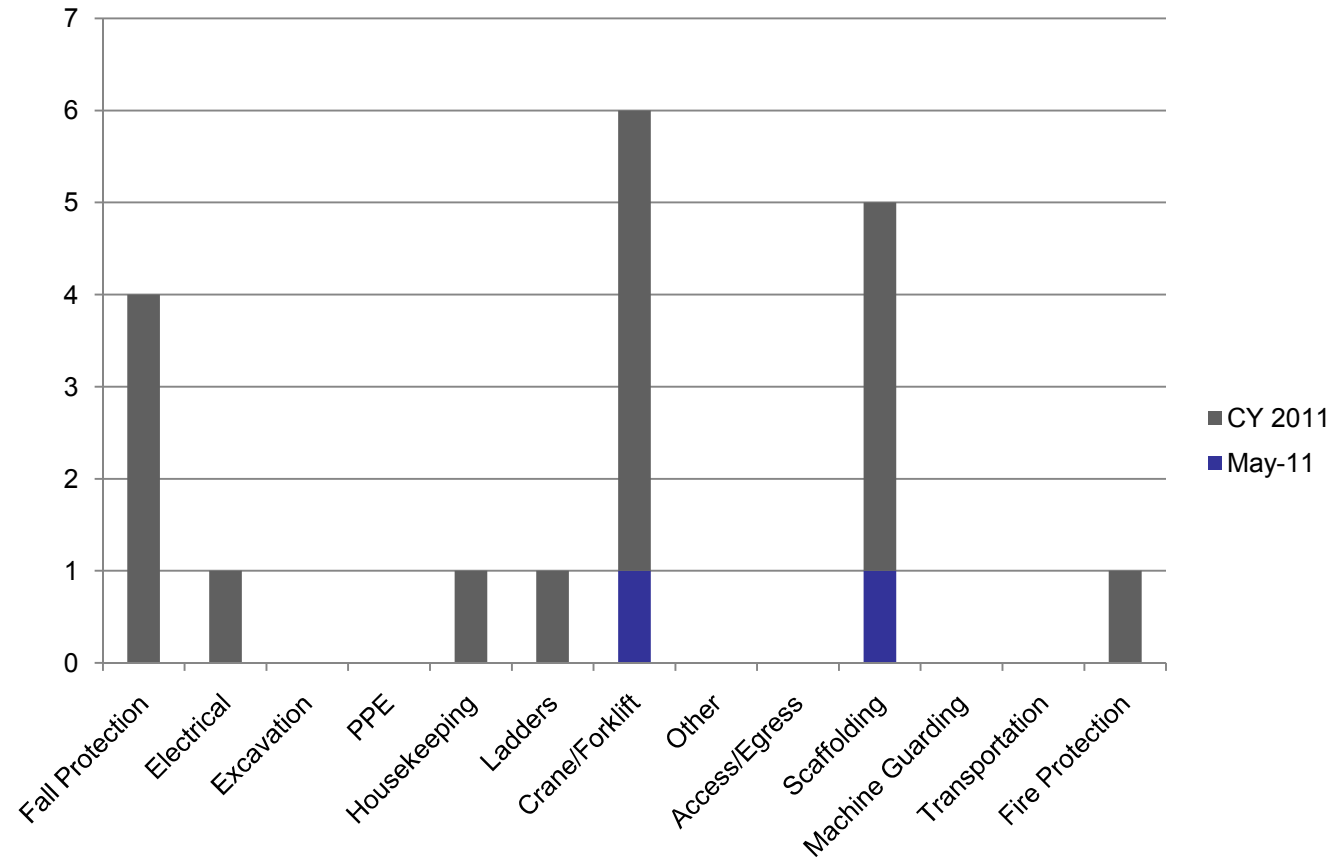


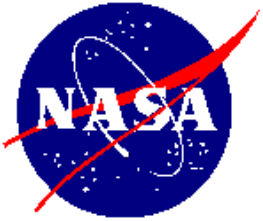
# Construction Safety Data: Construction Site Findings

Construction Site Findings  
(CY2010)



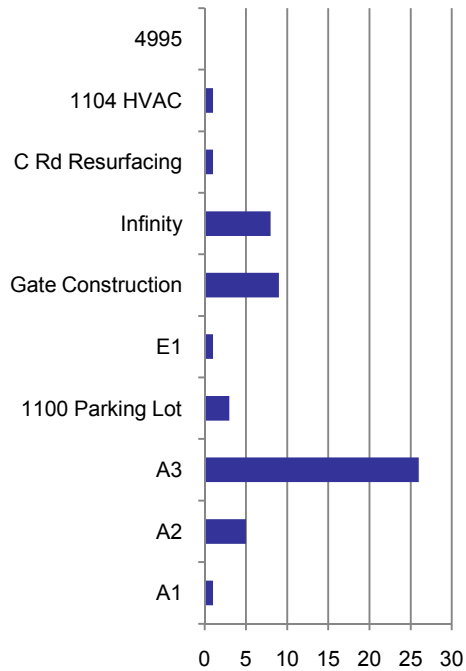
Construction Site Findings (CY2011)



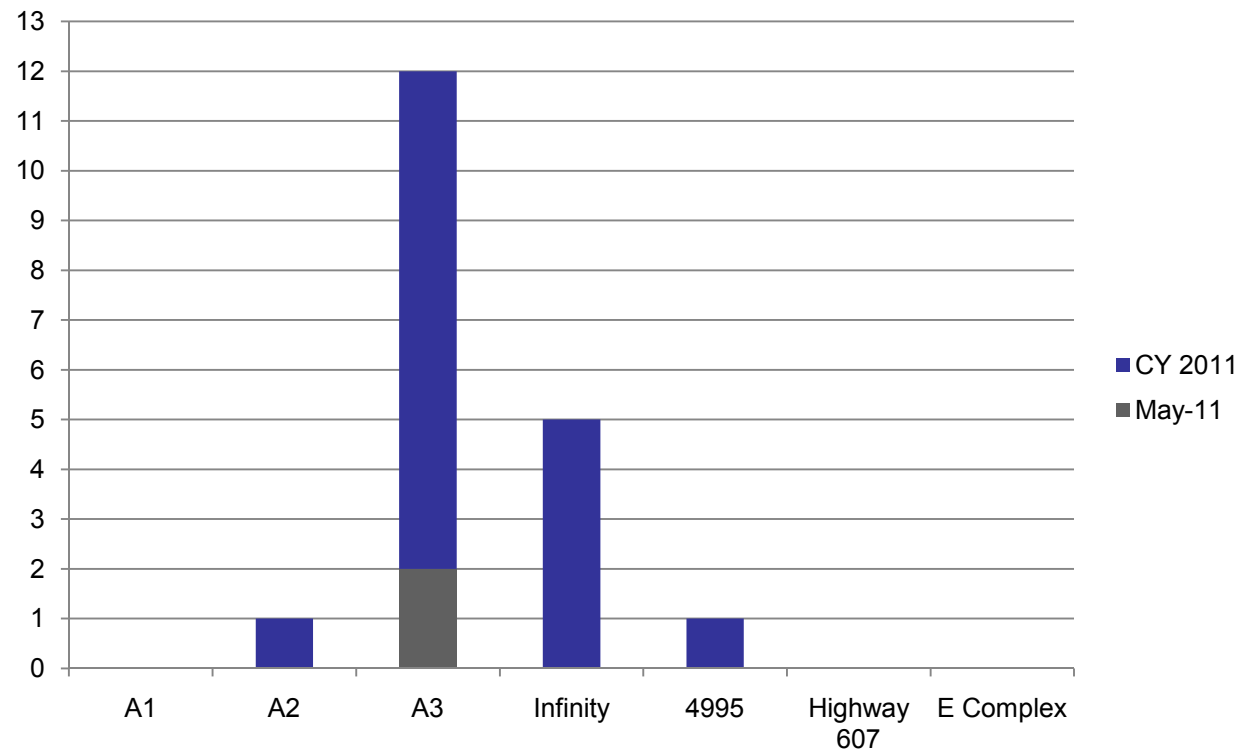


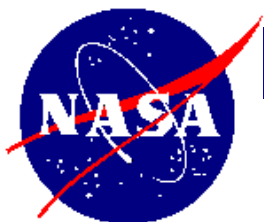
# Construction Safety Data: Construction Site Findings

Construction Site Findings  
(CY2010)



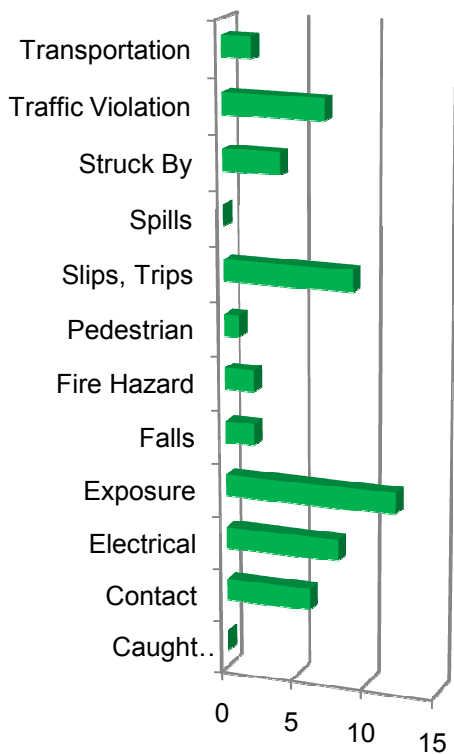
Construction Site Findings (CY2011)



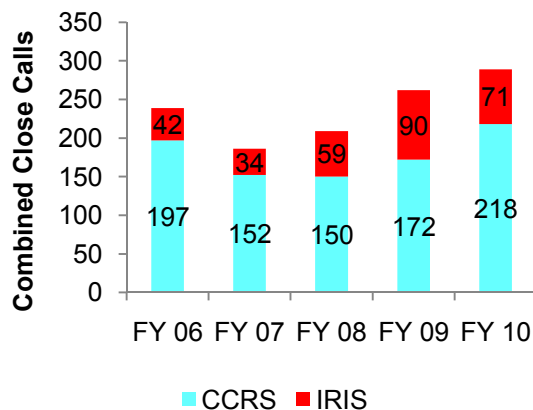


# SSC Close Calls

## CCRS Close Calls FY 2011

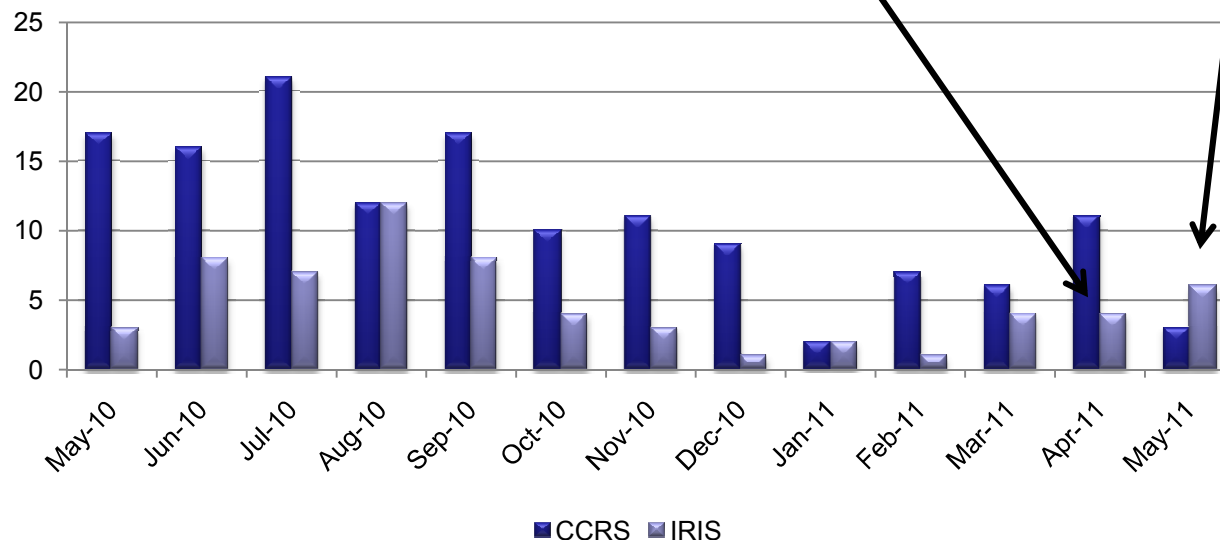


## Annual History



IRIS CC/Aerial work platform strike electrical line

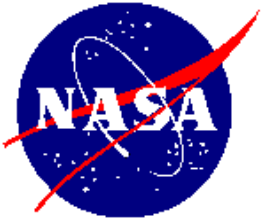
IRIS CC include: E2 work striking unmarked ground; Abandoned overhead com line strike; A3 plate steel fell from The 155' level. No construction CCRS close calls



■ CCRS ■ IRIS

\*IRIS Close Calls include events with minor equipment damage < \$1000, but with the potential to cause a mishap; and/or, an injury requiring first aid but with greater potential for harm. CCRS close calls are those close calls not meeting the aforementioned criteria.

\*\*For listing of close calls see backup.



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# Construction Safety Findings: 02-06 May 2011

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## **Findings Total: 1**

**-Serious Findings: 0**

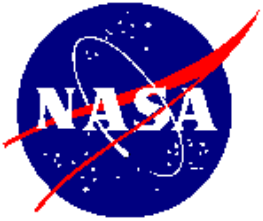
**-Less than Serious Findings: 1**

1. Scaffold was found to be erected with one half of the platform being supported by a permanent guard rail of the facility. The scaffold erector could not demonstrate that the guard rail could support the load and initially, refused to correct the issue. 29 CFR 1926.45 1(a)(1)

## **Mishaps / Close Calls: 0**

**-Other: 1**

1. M&D Mechanical utilized a portion of the NASA Safety Incentive program funds to provide a lunch and Safety Awards to their employees and the Cypress House, on SSC.



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# Construction Safety Findings: 09-13 May 2011

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**Findings Total: 0**

**Mishaps / Close Calls: 2**

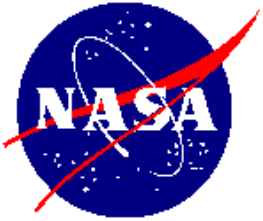
**- Mishap: 1**

1. A truck driver was in the process of cleaning the lip of a dump truck bed with a shovel, when the tail gate fell, cutting the driver's forearm. The truck tail gate, which was being suspended by a backhoe unexpectedly fell, and as it did, a protruding latch pin contacted the driver's arm cutting him. The driver was transported to the SSC clinic, where he received 14 stitches and prescription strength medication, making this a type D mishap (OSHA Recordable).

**- Close Call: 1**

1. A contractor damaged an over head fire protection communication line while loading a trailer with construction debris. The line was "abandoned in place" and not active during the time of the incident. (IRIS Close Call)





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# Construction Safety Findings: 16-20 May 2011

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**Findings Total: 0**

**Mishaps / Close Calls: 0**

**- Other Information:**

Roy Anderson Corp arranged for Grainger Safety Equipment to provide a presentation and demonstration on the correct use of a fall arrest system. During the demo, a 200 lb. dummy was dropped from an apparatus a number of times while varying fall protection equipment each time. Forces imparted during the drop were recorded. The well received demo was attended by about 50 workers from AT&V, M&D, Stone Mountain, and RAC.



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# Construction Safety Findings: 23-27 May 2011

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## Findings Total: 1

-Serious Findings: 0

-Less than Serious Findings: 1

1. A boom truck was in use with an improper annual inspection. The 15 ton crane had an inspection sticker with the wrong serial number and incorrectly stated the rated capacity at 30 Ton. 29 CFR 1926.550(a)(2)

## Mishaps / Close Calls: 1

-Close Call: 1

1. A steel plate, measuring 8" X 14" X  $\frac{3}{4}$ " was accidentally bumped off the top of a 5 gallon bucket and dropped 50 feet from 155' to 105'. No workers were injured and there was no property damage. The contractor has placed nets around the deck in question to prevent recurrence.



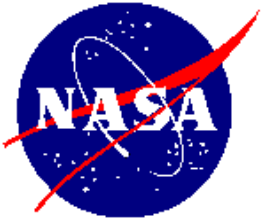
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The following video demonstrates how simple things on a construction site can be misinterpreted and may eventually get someone injured.

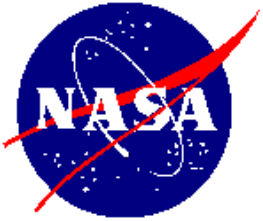


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# Construction Safety





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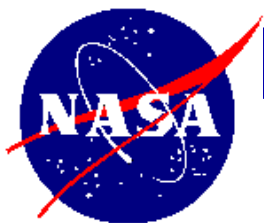
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Have a SAFE month!



# Construction Safety Findings: Incident Information Reporting System (IRIS) Cases

IRIS Case Number	October	Organization	Incident Description	Closed	Type	Med Case #
S-2010-279-00007	10/6/2010	RAC/ICI	Foreign body in eye	Closed	D	C-2010-279-00004
S-2010-327-00009	11/17/2010	AT&V	Possible lead based paint exposure at A1 T/S	Closed	FA	C-2010-327-00007
S-2011-073-00001	12/1/2010	RAC/ICI	Employee dropped wrench on hand	Open	C	C-2010-336-00009
S-2011-010-00008	1/5/2011	M&D Mechanical	Fork lift operator ran forks into pipe	Closed	D	N/A
S-2011-034-00002	2/2/2011	Drace	While core drilling, cut electrical line	Closed	D	N/A
S-2011-049-00009	2/18/2011	Drace	While core drilling, cut communication line	Closed	CC	N/A
S-2011-073-00002	2/24/2011	AT&V	Welding sparks started fire on LVL 5 A3 T/S	Open	D	N/A
S-2011-070-00005	3/7/2011	Stone Mountain	Employee almost struck by falling scaffolding	Open	CC	N/A
S-2011-076-00005	3/16/2011	AT&V	A3 Test Cell Door Clamp fell	Open	D	N/A
S-2011-084-00002	3/21/2011	AT&V	A magnet dropped approximately 160 feet from A3	Open	CC	N/A
S-2011-109-00012	4/18/2011	M&D Mechanical	A3 worker cut face with grinder	Open	FA	Nonclinic
S-2011-119-00003	4/27/2011	AT&V	Aerial work platform struck electrical wire	Open	CC	N/A
S-2011-103-00003	4/12/2011	FOSC	E2 comline struck during excavation	Open	CC	N/A
S-2011-125-00001	5/4/2011	FOSC	Unmarked Ground struck during excavation	Open	CC	N/A
S-2011-130-00001	5/9/2011	NPD	Truck driver lacerated an arm while cleaning truck	Open	D	C-2011-144-00004
S-2011-131-00003	5/10/2011	FOSC	Abandoned abovehead line struck while loading trainer	Open	CC	N/A
S-2011-145-00004	5/24/2011	AT&V	Plate steel fell from 155' level on A3 T/S	Open	CC	N/A



# NASA Mishap Classification

## Classification Level & Investigation Type

## Property Damage

## Injury

### Type A Mishap

Total direct cost of mission failure and property damage is \$2,000,000 or more,

*or*

Crewed aircraft hull loss has occurred,

*or*

Occurrence of an unexpected crewed aircraft departure from controlled flight (except high performance jet/test aircraft such as F-15, F-16, F/A-18, T-38, OV-10, and T-34, when engaged in flight test activities).

Occupational injury and/or illness that resulted in:  
A fatality,

*or*

A permanent total disability,

*or*

The hospitalization for inpatient care of 3 or more people within 30 workdays of the mishap.

### Type B Mishap

Total direct cost of mission failure and property damage of at least \$500,000 but less than \$2,000,000.

Occupational injury and/or illness has resulted in permanent partial disability.

*or*

The hospitalization for inpatient care of 1-2 people within 30 workdays of the mishap.

### Type C Mishap

Total direct cost of mission failure and property damage of at least \$50,000 but less than \$500,000.

Nonfatal occupational injury or illness that caused any workdays away from work, restricted duty, or transfer to another job beyond the workday or shift on which it occurred.

### Type D Mishap

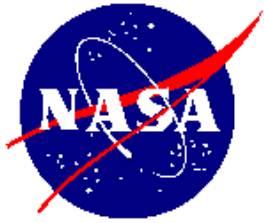
Total direct cost of mission failure and property damage of at least \$1,000 but less than \$50,000.

Any nonfatal OSHA recordable occupational injury and/or illness that does not meet the definition of a Type C mishap.

### Close Call

An event in which there is no equipment/property damage or minor equipment/property damage (less than \$1000), but which possesses a potential to cause a mishap.

An event in which there is no injury or only minor injury requiring first aid, but which possesses a potential to cause a mishap



# NASA Mishap Classification

- Medical Treatment (Type D) is defined as 1 dose prescription med, OTC med at prescription strength or anything other than the following:

First Aid includes:

- Observation or counseling
- Diagnostic procedures, including X-ray, blood tests
- Over-the-counter med's at over-the-counter strength
- Tetanus
- Cleaning, flushing or soaking wounds
- Wound coverings, including suture substitutes such as butterfly bandages and Steri-strips
- Hot/cold treatment
- Non-rigid support such as ace, non-rigid back belts, etc.
- Temporary immobilization for transport purposes
- Drilling of nail to relieve sub-ungual hematoma
- Eye patches
- Foreign Body (FB) removal from eye using only irrigation or swab
- Simple skin FB removal
- Finger guards
- Massages