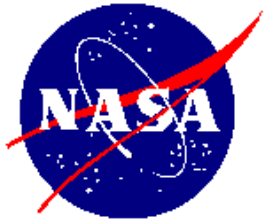




# SSC Construction Inspection Safety Findings/Stats

# January 2011



Mission Success Starts With Safety

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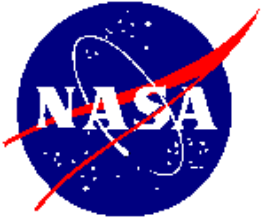
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## Construction Safety Findings:

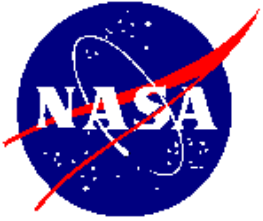
29 NOV-03 DEC 2010

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**Findings Total: 0**

**Mishaps / Close Calls: 1**

An A3 Subcontractor, in the process of tightening bolts onto blind flange with a ratchet wrench, dislodged a pipe which fell, and in the act of preventing injury to the leg or and ankle, hurt his hand. The worker went to an off-site urgent care clinic, and was given prescription medication and put on work restrictions: no pushing, pulling, no climbing ladders, no gripping/grasping more than 2 hours per day. (Decision was reached by the SSC clinic in concert with the urgent care facility. Patient was told to come to the site clinic due to work related injury.) (IRIS Restricted Duty)



# Construction Safety Findings:

06-10 Dec 2010

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## Findings Total: 4

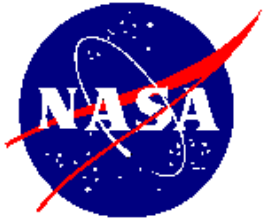
- While conducting an audit of Trans-Gulf Constructors, work was stopped during a crane lift. Trans-Gulf was assisting a sub-contractor who was removing their rented scaffolding from the A2 Test Stand. The workers rigging the scaffolding were not in proper PPE. Work was allowed to commence when the workers were in proper PPE. The Trans-Gulf foreman was counseled about the issue of ensuring workers are in proper PPE while conducting lifts.

- While conducting an audit of Trans-Gulf Constructors, it was noted that the two grove RT-58D cranes were leaking hydraulic fluid; the foreman was asked to investigate the issue. A mechanic was site to investigate and measures were taken to contain the leaking hydraulic fluid.

- While conducting an audit of Roy Anderson at the Infinity jobsite a worker was discovered in a scissor lift that had two fall protection lanyards connected together, Roy Anderson Safety stopped the worker and corrected the discrepancy.

- During the same inspection, two power cords were found with exposed wires. Both cords were removed from service.

- Mishaps / Close Calls: 0**



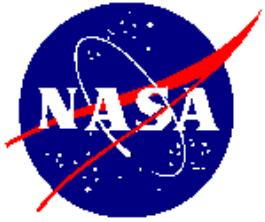
Mission Success Starts With Safety

# Construction Safety Findings:

06-10 Dec 2010

Crane 1





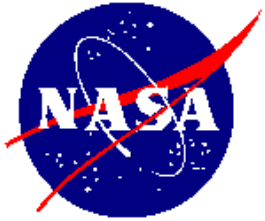
Mission Success Starts With Safety

# Construction Safety Findings:

06-10 Dec 2010

Crane 1





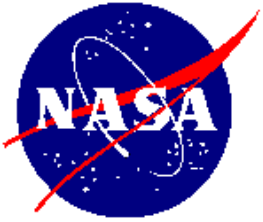
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# Construction Safety Findings:

06-10 Dec 2010

Crane 2





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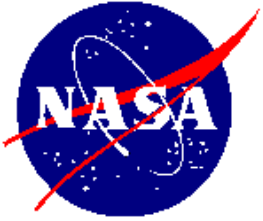
# Construction Safety Findings:

06-10 Dec 2010

Crane 2







# Construction Safety Findings: 13-17 Dec 2010

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## Findings Total: 3

- A-3: A worker was found wearing personal fall arrest (harness/lanyard) that was anchored to one of the stair platform temporary guard rail cables.
- A-3: A worker was found operating a grinder without proper hearing protection.
- A-3: Workers found using an aerial lift and a scissor lift without documenting the inspections for those pieces of equipment for that day.

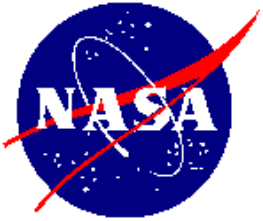
## •Mishaps / Close Calls: 0

## •Other Issues:

- A-2: Contractor was using scaffold with a “Hook-on” style ladder. The workers are required to travel approximately 36 feet up the ladder to the to access the working deck of the scaffold, exposing them to a fall from a great height. OSHA Standards are vague and the interpretations are contradictory. SSC SMA will revise the SSC Scaffold Procedure to better address situations like this case, in an effort to better protect the workers and not just be compliant with OSHA Standards.

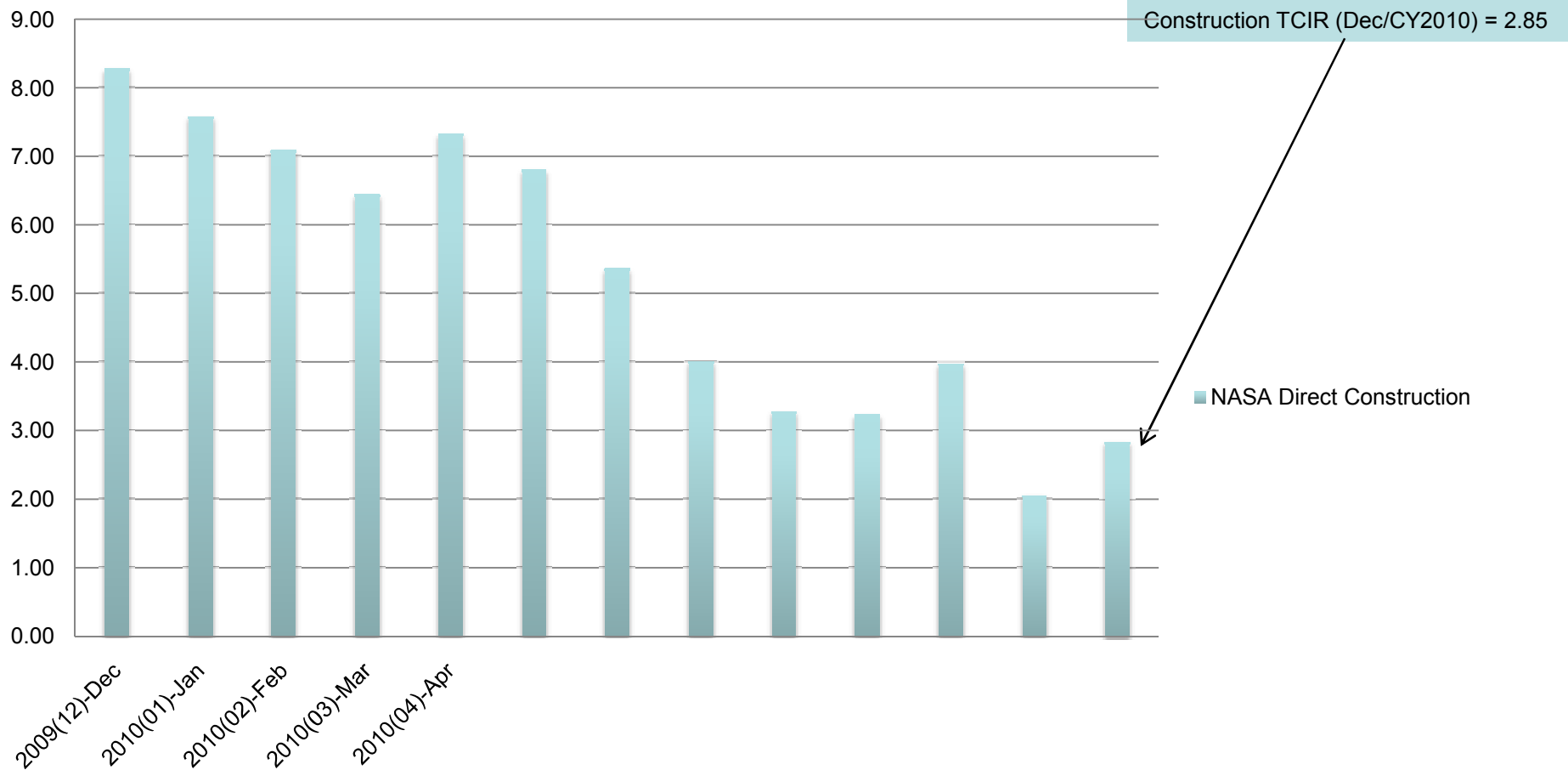


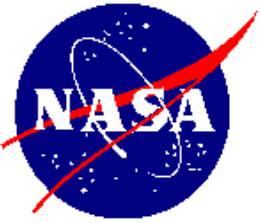
# Construction Metrics



# Construction Safety Data: IRIS Data - Total Case Incidence Rate TCIR

NAICS Industry Code (Testing Laboratories) TCIR = 1.6  
NAICS Industry Code (Construction) TCIR = 4.7





## Mission Success Starts With Safety

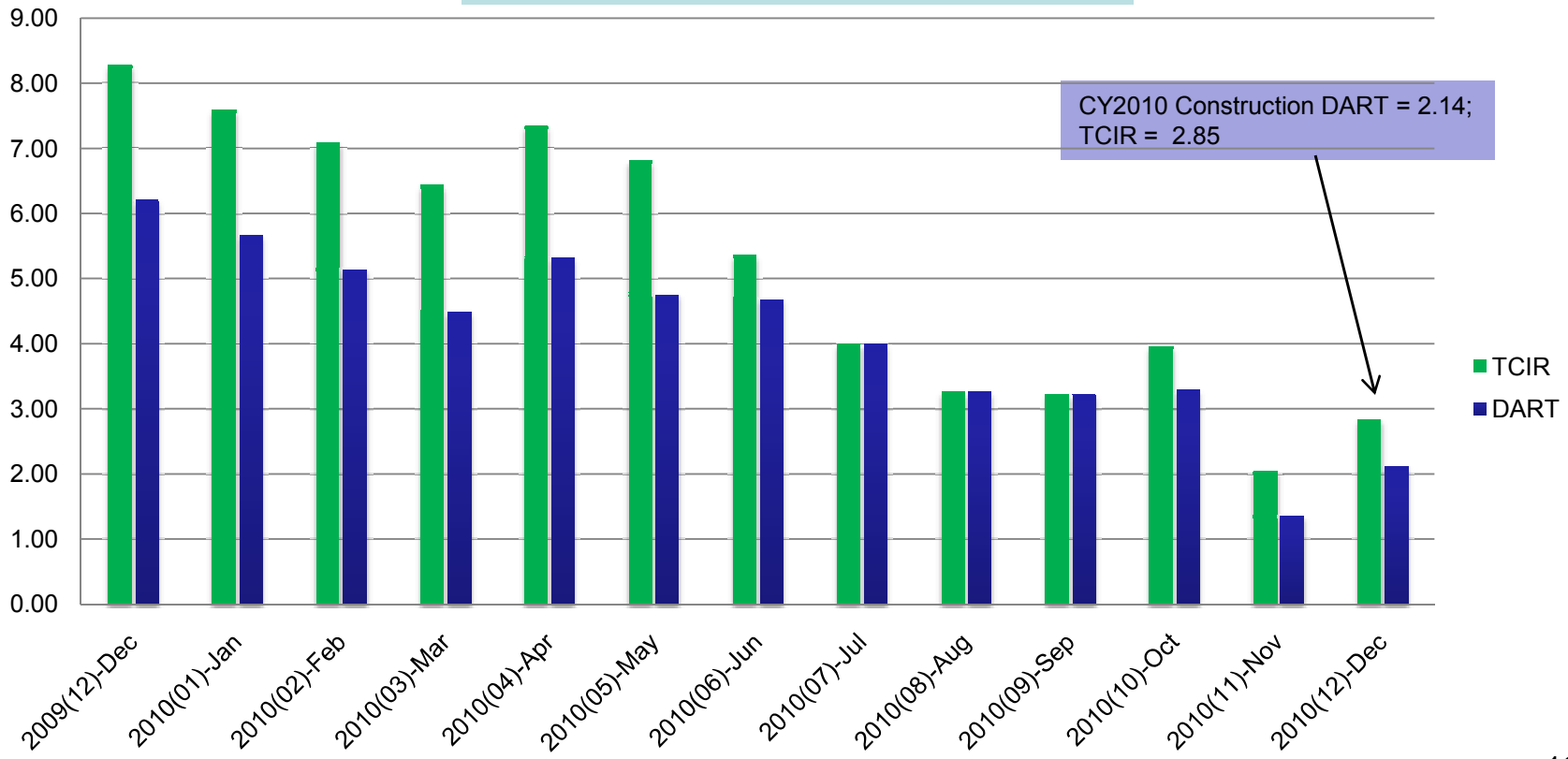
# Construction Days Away, Restricted Duty, Transferred Cases Incident Rate (DART), Total Case Incident Rate (TCIR)

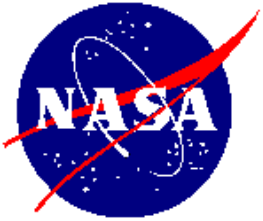
NAICS Industry Code (Construction) DART = 2.5, TCIR = 4.7

*Zero or down is good*

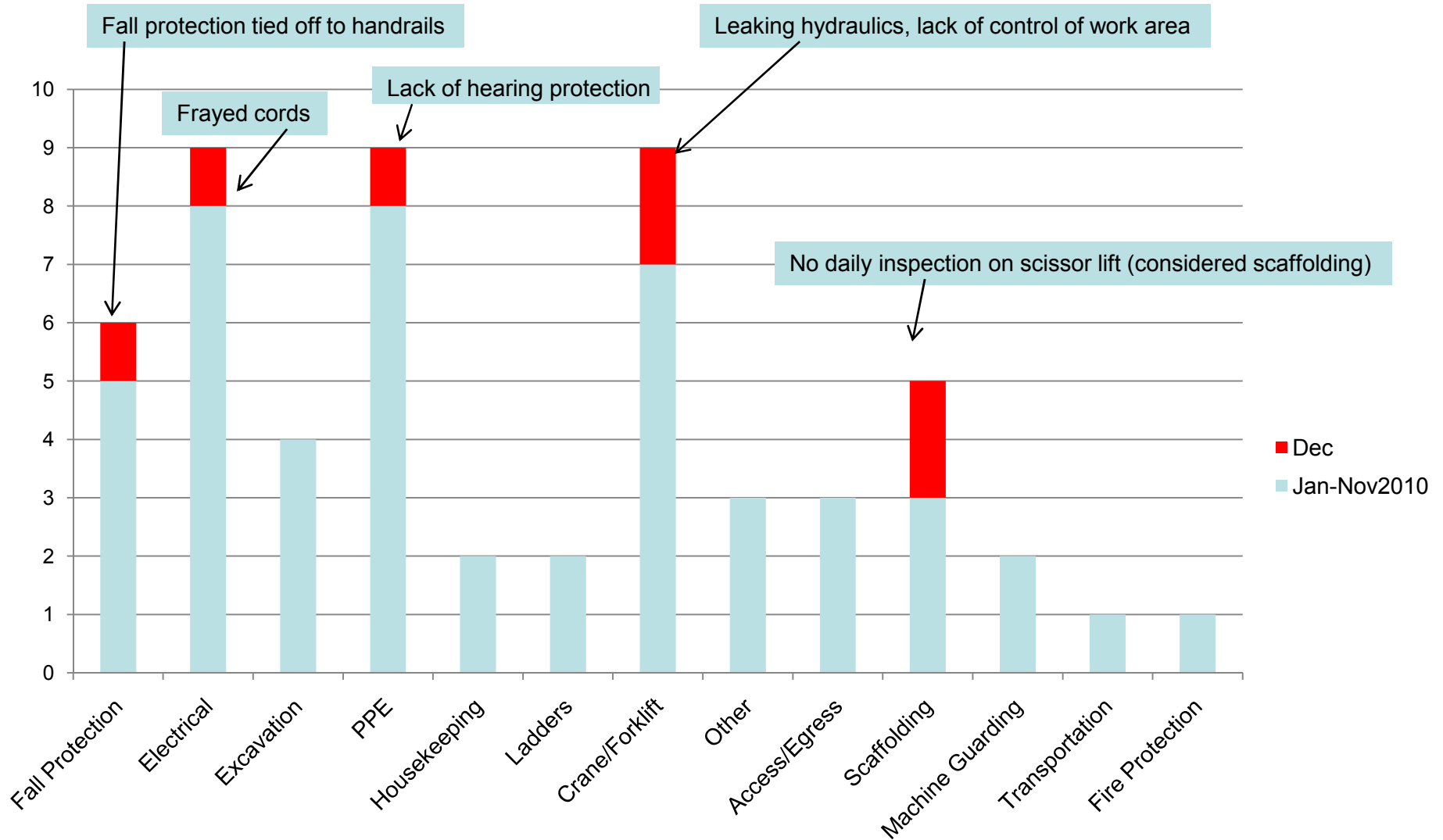
Restricted duty case (hand injury) sole recordable for month of December

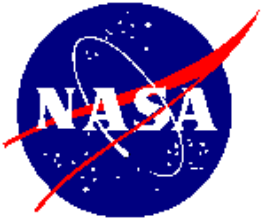
NASA Direct Construction work resulted in only 4 OSHA recordable incidents in CY2010, 3 of which were restricted duty. **No lost time injuries...**



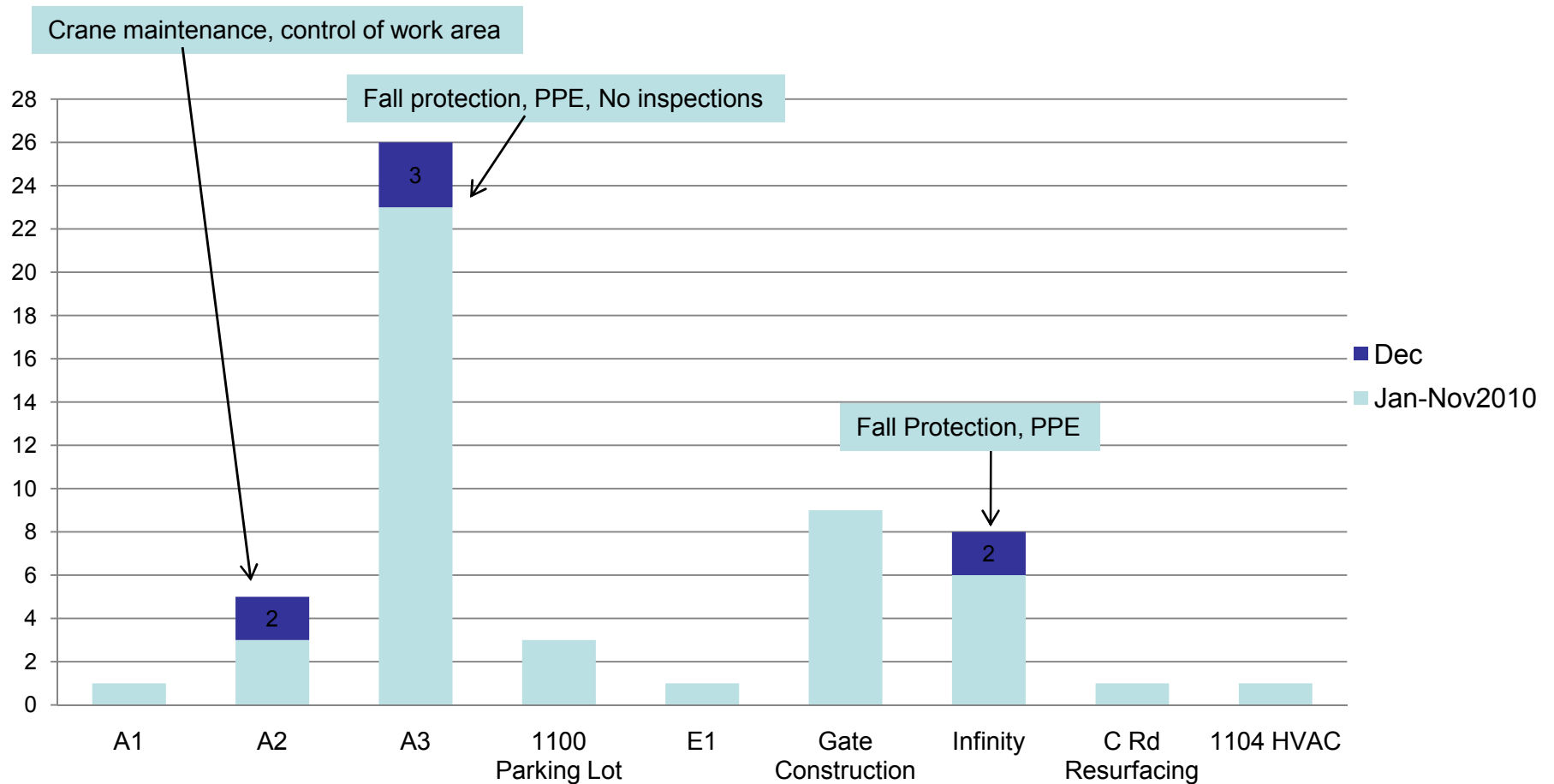


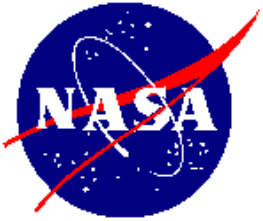
# Construction Safety Data: Construction Site Findings (CY2010)





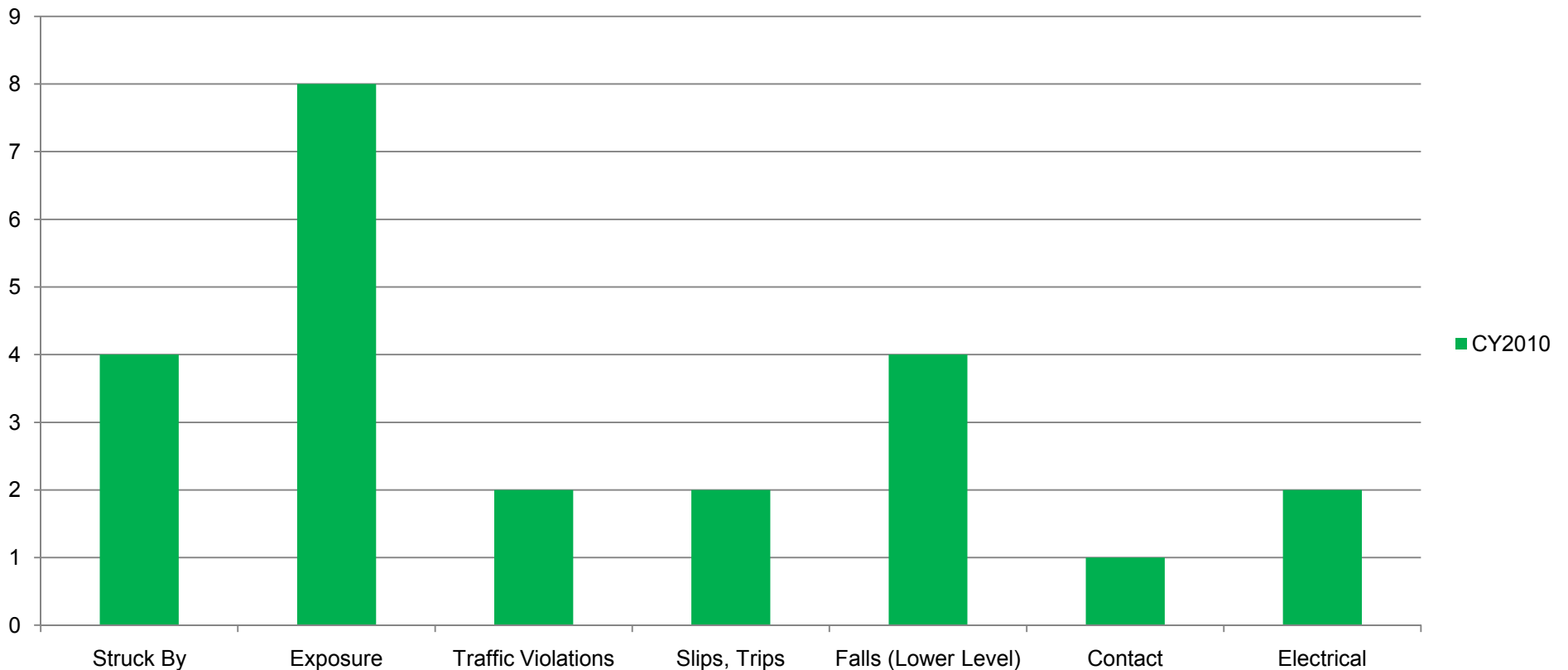
# Construction Safety Data: Construction Site Findings (CY2010)



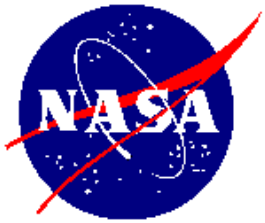


# Construction Safety Data: Construction Site Close Calls (CCRS)

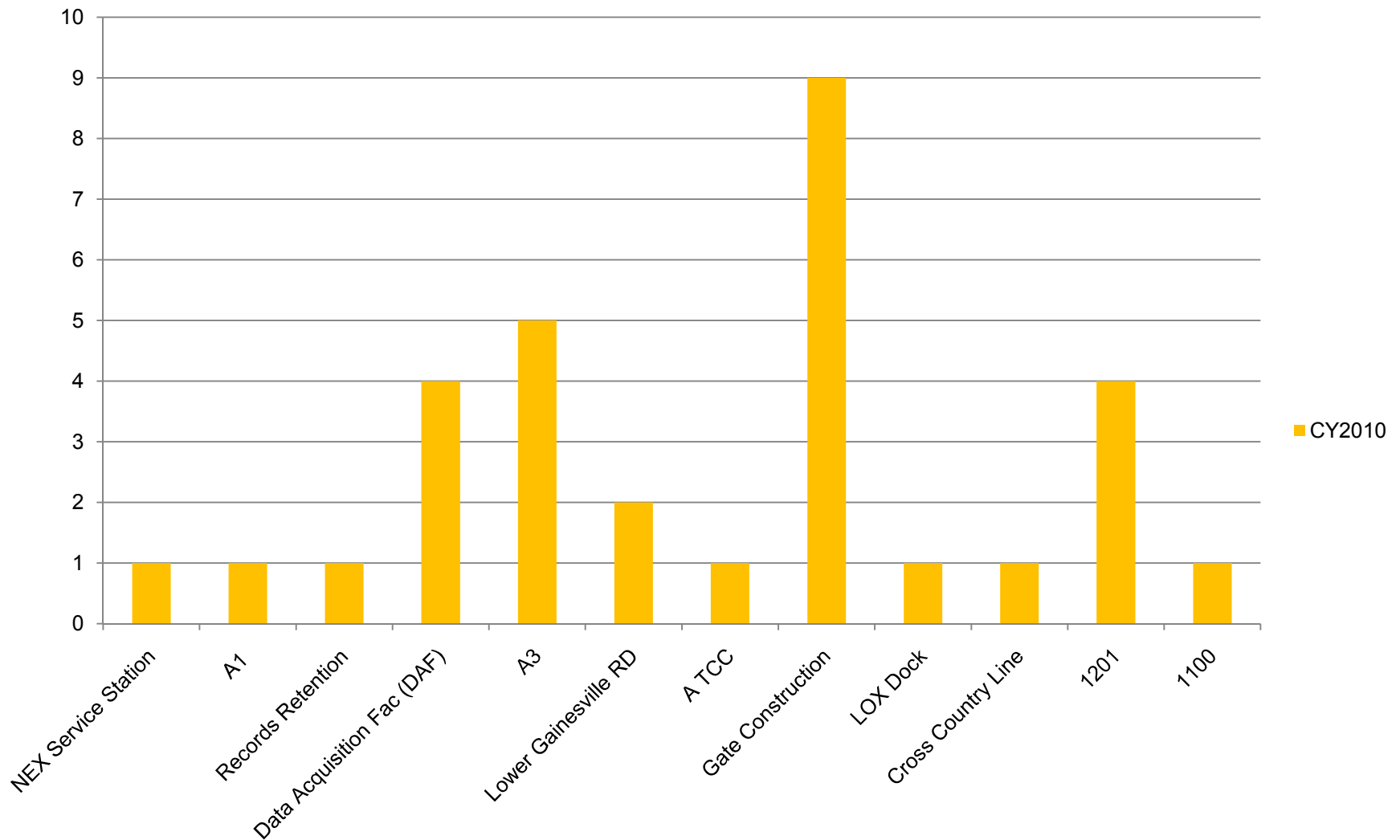
No construction CCRS Close Calls during December.



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 these aforementioned criteria.



# Construction Safety Data: Construction Site Close Calls (CCRS)





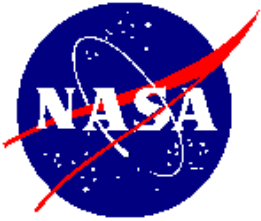


# Backup



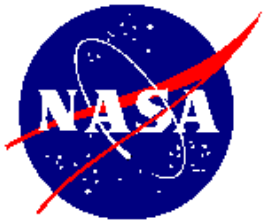
# Construction Safety Findings: Incident Information Reporting System (IRIS) Cases

IRIS Case Number	Date of Incident	Organization	Incident Description	30 Day Update	Est Comp Date	Closed	Type	Med Case #
S-2010-014-00005	01-13-10	South Gulf Inc	2" air line coupling to a 25 ton hoist separated	Jan 14	22-Jan	Closed	CC	
S-2010-029-00008	01-26-10	Roy Anderson	Articulating lift boom sensor failure	Jan 29	18-Mar	Closed	CC	
S-2010-036-00005	01-29-10	Roy Anderson	Left shoulder sprain while welding pipe	Feb 5			FA	
S-2010-047-00005	02-08-10	Can't Be Beat	Strong chemical odor detected while digging	Feb 16	18-Mar	Closed	CC	
S-2010-047-00006	02-11-10	DC General	Water line strike	Feb 16	18-Mar	Closed	CC	
S-2010-063-00017	02-25-10	DC General	Improperly marked telephone line strike	Mar 04	27-May	Closed	CC	
S-2010-071-00006	03-11-10	Can't Be Beat	Ground cable strike while augering for GH supports	Mar 10	18-Mar	Closed	CC	
S-2010-083-00007	03-23-10	FOSC	A FOSC Sub struck a sprinkler head	Mar 23	28-Sep	Closed	CC	
S-2010-083-00008	03-23-10	DC General	Mini excavator struck phone/power utility	Mar 23	30-Mar	Closed	CC	
S-2010-088-00007	03-25-10	Roy Anderson	Insect bite to right hand	Mar 29	13-Apr	Closed	FA	C-2010-084-00002
S-2010-098-00004	04-07-10	Roy Anderson	Employee lifted and felt pain in right shoulder (REST)	Apr 27			C	C-2010-106-00001
S-2010-118-00002	04-27-10	Roy Anderson	Right elbow strain while moving pipe (REST)	Apr 28			C	C-2010-117-00007
S-2010-144-00004	05-20-10	Can't Be Beat	Damage to reclamation line by augering equipment	May 20	25-May	Closed	CC	
S-2010-147-00002	05-26-10	LMIT	Severed water line while digging/boring	May 26			D	
S-2010-175-00010	06-23-10	FOSC	Arc-flash at B-3305	Jun 23			CC	
S-2010-194-00003	06-26-10	FOSC	Damage was found to a safety net on A-2 Test Stand	Jun 26			CC	
S-2010-190-00005	07-8-10	Roy Anderson	Gravel truck driver struck low hanging electrical wire	Jul 8			CC	
S-2010-208-00008	07-17-10	Trans Gulf	Contractor struck an unidentified pipe/service	Jul 17			CC	
S-2010-222-00009	08-10-10	FOSC	Damage was sustained to a PVC pipe	Aug 10	28-Sep	Closed	CC	
S-2010-237-00005	08-24-10	FOSC	A contractor damaged a buried plastic gas line	Aug 24			CC	
S-2010-263-00001	09-17-10	SDVE, LLC	Conduit cut in feed to de-energized panel	Sep 17			CC	
S-2010-267-00005	09-22-10	M&D Mech	Load dropped 12" onto flat bed trailer	Sep 22			CC	
S-2010-279-00007	10-6-10	Roy Anderson	Foreign matter in eye from grinding operations	Nov 5			D	C-2010-279-00004
S-2010-327-00009	11-17-10	ATV	Possible lead based paint exposure at A1 T/S	Dec17			FA	C-2010-327-00007



# Construction Safety Findings: Close Call Reporting System (CCRS) Cases

Date-Time Submitted	Reviewed Incident Description	Event Type	Location
10/13/2009 12:44	Workers are using a large crane to remove the canopy from the old gas station pumps. Sparks are flying from a worker apparently cutting the canopy. The service station is still open. There are people entering/exiting the building while this work is in progress. (Witnessed by several people outside of Building 1110)	Struck By	NEX Service Station 3219
10/26/2009 9:43	While performing a walk down of the A1 test stand for the 30-day flame permit with a fire fighter, I found workers with Construction Steel Inc. working off of scaffolding in a construction area without wearing safety glasses, a worker climbing up the scaffold using the cross bracing, the worker did not use the ladder on the scaffolding to access it, another worker that was standing on the ground/floor was throwing objects from the floor to the workers that was on top of the scaffold. One of the workers that was already working on the scaffold climbed up to the top level which was not fully decked.	Falls (Lower Level)	A1 Construction Site 4120
10/28/2009 11:14	I arrived on jobsite at building 3203 for an atmosphere and flame permit request. Upon arrival, a sub-contractor for NAOO, Cuevas Machine Company was already performing grinding work on the tank inside the high bay area. The workers also had (3) compressed gas cylinders stored in the horizontal position.	Fire Hazard	3203
10/30/2009 8:06	While descending a ladder, a sub-contractor, Advance Controls Concepts "ACCI" attempted to step from the third rung of the ladder onto the floor when he lost his footing with the foot that remained on the ladder. The worker fell to the floor buttocks first and struck the back of his head on the wall. The worker was taken to the SSC Medical Clinic where he received first aid treatment and was return to duty.	Falls (Lower Level)	Records Retention Facility Construction 3204
11/5/2009 15:55	Contractor working on construction area of level 2 of B4995 cut 4 PWR phone lines and a T-1 network Canoga Park line. PWR temporarily repaired line.	Contact	Data Acquisition Facility 4995
12/10/2009 18:27	As I was walking to the area north of the fence I tripped, but did not fall, on a wire that was about 1-1.5 " above the ground. The wire had been left when the section of the fence had been removed. I asked a Fucich welder, who was returning with a GFCI, if anything could be done, he suggested bolt cutters. He asked another worker to get the cutters, I asked him to remove the tripping hazard. When I met with Wayne Martin, Holliday Construction, later that morning I told him about it.	Slips, Trips	A3 Construction Site



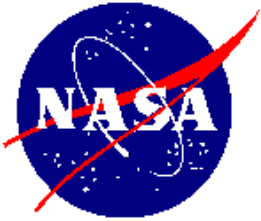
# Construction Safety Findings: Close Call Reporting System (CCRS) Cases

12/11/2009 13:03	As I was driving north on Lower Gainesville Road approaching Endeavour, the road abruptly ended. The contractor had began work on the intersection and cut a trench in the road without putting up any signage. Being caught by surprise I darted into the on coming lane. This could result in a head on collision or something worse. The contractor could have put up some warning signs about the work zone and they could have had some flagmen directing traffic.	Traffic Violations	Lower Gainesville RD
1/11/2010 11:58	Fumes from an adjacent Facility Landlord's contractor's roofing activities entered B901's Engine Room resulting in employee discomfort (i.e. nausea). There were no injuries. Employees immediately evacuated the area until EH&S and facility management personnel gave the all clear.	Exposure	9101
1/27/2010 17:49	While scaffold builders were erecting scaffold on the CSC slab, one of the workers' hammer fell when he went to return back to its holder on his pouch. It fell ~160 ft straight down inside the barricaded work area. No workers were in the barricaded area. There were no injuries or damage to equipment.	Struck By	A3 Construction Site
2/4/2010 8:23	Contractors core drilling holes in the side of the building allowed water to leak into the building and migrate into the tunnel.	Exposure	A Test Control Center 4110
3/12/2010 9:48	Contractors were parked on both sides of road and looking in the grassy area. One guy had pulled his truck up, got out and walked south across the road directly in front of me without looking. If I had not have been paying attention and have had it happen before I would have struck the guy at 50mph. He did not even look where he was going.	Pedestrian	8301
3/21/2010 6:08	Do to the construction going on at the Northgate there needs to be more lighting. When the temp. guard shack was installed Security was told that the door of the shack could not face the traffic lane {the guards could not exit toward the traffic for their safety.} However I guess it's ok for the gusrds to work with no proper lighting. Also the cones lining the 14" deep hole aren't reflectorized or lit up with light carts.	Struck By	North Gate Construction
5/20/2010 8:10	While coming in the South Gate this morning, I noticed that the noise from the road construction is extremely loud. Seems to me that the Guards should be wearing hearing protection.	Exposure	South Gate Construction
5/26/2010 13:30	I noticed that the guards at the South Gate were not wearing PPE yet nearby there is heavy machinery busting up concrete.	Exposure	South Gate Construction



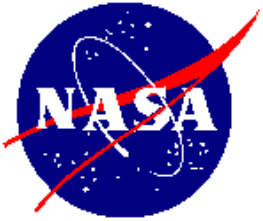
# Construction Safety Findings: Close Call Reporting System (CCRS) Cases

<p>5/27/2010 9:39</p>	<p>Contractors are boring conduit to install new communication lines on Lower Gainesville heading toward the Cypress House. When i showed up the archeologist's on site were in the construction zone not wearing the appropriate PPE (hardhats). On 5/26/10 I advised them of the PPE procedure and they abided by the rules. Today I went to the site and the archeologist was on the construction site again not wearing a hard hat again. i reminded him again of the PPE regulations and asked him to get a hard hat before entering the worksite again. The archeologist could have hit his head on the trackhoe since he was working in close vicinity of the machinery.</p>	<p>Exposure</p>	<p>Lower Gainesville RD</p>
<p>6/1/2010 17:36</p>	<p>Approaching the South Gate this morning, I was surprised by the sudden closure of the left lane, with no warning signs. I was prepared for the construction and already driving slowly, however, the left lane was closed just after coming around the last curve, with no warning, and with barricades and one right arrow sign that blended into the rest of the construction equipment. Luckily, there was no one to my right, as I suddenly had to change lanes. I've seen this on one other occasion, when I was riding with someone else. This could easily cause an accident, from people suddenly stopping and/or changing lanes.</p>	<p>Traffic Violations</p>	<p>South Gate Construction</p>
<p>6/9/2010 9:54</p>	<p>WATERHOSE LAYING ACROSS THE WALKWAY IN FRONT OF FRONT DOORS</p>	<p>Slips, Trips</p>	<p>South Gate Construction</p>
<p>6/11/2010 13:06</p>	<p>Over the last two months, it has become apparent that many people onsite at the A-3 Test Stand are not hearing/understanding the lightning advisories and/or warnings. The possible reasons for these occurrences may be: certain loudspeakers have not been continuously operative; the other speakers are not clearly audible at A-3; the noise at the construction site has been steadily increasing over the past few weeks as more contractors and more equipment have arrived onsite. Workers should vacate the site as quickly as possible during lightning incidents, particularly the work above grade, and seek shelter to avoid being in danger of lightning strikes. Only an effective warning system can accomplish this.</p>	<p>Exposure</p>	<p>A3 Construction Site</p>
<p>6/30/2010 15:48</p>	<p>behind bld 3101 where the ground was dug up there is a piece of plywood that is suppose to "help" make a walkway for SSC employees when exiting through the back of the bld (they dug the ground up and tried to refill in the whole with the dirt, but now the stop is simply holding water) well with all the rain, that piece of plywood is simply 'floating'. a few ppl stepped on it for support and the plywood jetted out from under their feet ALMOST causing said subjects to fall, we complained and someone put rocks under the plywood to help stabilize it- but this still isn't helping.</p>	<p>Slips, Trips</p>	<p>South Gate Construction</p>
<p>7/15/2010 16:00</p>	<p>Contractor who is removing LOX line inadvertently cut and removed newly installed conduit for new intercom stations. Unknowingly cutting into any line and not knowing the nature of its contents</p>	<p>Electrical</p>	<p>LOX Dock</p>



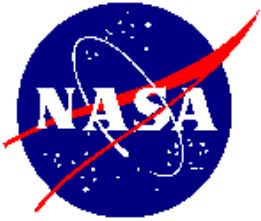
# Construction Safety Findings: Close Call Reporting System (CCRS) Cases

<p>7/21/2010 16:11</p>	<p>Hydrogen cross country line is in close proximity to the roadway and there are no protective structures to protect from vehicular impact. This is also the situation at the roadway inside E2 and also at the roadway going to 4080.</p>	<p>Struck By</p>	<p>Cross Country H2 Line Construction D RD</p>
<p>7/26/2010 9:56</p>	<p>I had stopped at the South Gate security checkpoint in the left lane to show my badge to the security guard. As I recall, orange cones separated the two entrance lanes and blocked the construction area from the roadway except at the concrete pad. At the time, I noticed a number of construction workers who were to my left working on several concrete posts. As I started to move forward past the guard, one of the construction workers stepped down from the concrete pad into the street directly in front of my car. It didn't appear that he looked toward my car before stepping into the road. He was outside the orange cone safety area and standing in the road blocking my path. I stopped my car and waited for him to move; but he did not look in my direction. I eased forward slowly; but he still didn't move. I had to swerve towards the cones on my right to move around him. It appeared to me that he never moved or turned toward my car as I went past him. If I had been distracted, in a hurry, or looking to my right where the row of orange cones blocked me from entering the right lane; I could have surged forward and seriously injured him. I don't drive a small car that could have steered past and missed him. I have a very large, white GMC Yukon with wide mirrors, so I know that he couldn't have missed seeing me, had he looked. I do not know whether he was wearing ear plugs. I did not observe that he was participating in a conversation. He never looked at my car (now to his left) or acknowledged that I was sitting there waiting for him to move from my path so that I could proceed.</p>	<p>Struck By</p>	<p>South Gate Construction</p>
<p>8/4/2010 15:42</p>	<p>From: 12:51-Lightning Warning; 1:38-All Clear; 2:22-Warning; 2:54-All Clear. Sometimes these would come over the "brick" radios and not the PA, sometimes on the PA and not the radio. There was confusion on the construction site and word was not getting into the field. At 2:50 we had some workers in the field and some still in the shelters. When I called the Security desk the attendant said it would not be for a few minutes before he could tell me anything. When I told him I had people in the field and would he tell me what the present conditions were; he said he could not and was short about it. The potential danger was that I had people in the field and I did not know if they were in danger of a lightning strike. People could have gotten hurt or killed. Plus work was disrupted and our alert system credibility was compromised.</p>	<p>Exposure</p>	<p>A3 Construction Site</p>



## Construction Safety Findings: Close Call Reporting System (CCRS) Cases

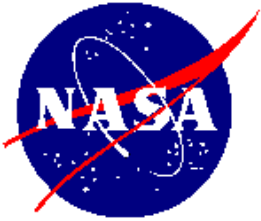
9/2/2010 16:30	The ceiling in communication room 151 is leaking. There is water trapped inside of the light fixture above network equipment. Lights in fixture are no longer working. Water is also dripping onto the floor creating a slip hazard. Some ceiling and floor tiles are stained because of leak.	Electrical	4995
9/6/2010 0:30	On Monday Sept 6, the B-1104 Boiler rapidly overheated and continued to fire without shutdown with potential for an explosive event. The SSC Fire Dept was informed of the situation by EMCS, whereby, the fire dept immediately responded and shutdown gas service to unit, thereby, shutting the boiler down. The contractor was called out to investigate the malfunction. No further information available. (transferred to IRIS)	Exposure	1104



# Construction Safety Findings: Close Call Reporting System (CCRS) Cases

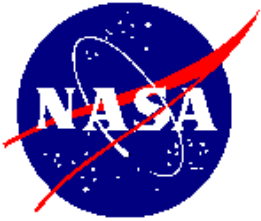
Case Number	Date-Time Submitted	Reviewed Incident Description	Safety Location Type	Safety Location	Safety Sub-Location	Submitter Organization	Attachments
11-002	10/4/2010 10:21:35 AM	As requested by NASA Safety, PWR is documenting an additional electronic close call regarding diesel fumes in the DAF building. On 9/27/10, diesel fumes entered the building while using a diesel operated crane to remove tapes from the building, NASA electronic close call #10-206. On 10/20/2009, a similar problem with diesel fumes entering the building was documented on NASA electronic close call #10-011. The closure rationale for this close call (10-011) would be to provide administrative controls to mitigate such hazards. Apparently this is not working.	Building	4995 ()		PWR, INC - Pratt & Whitney/Rocketdyne Inc	<a href="#">View</a>
11-010	10/27/2010 3:36:02 PM	There is water collecting in on of the lights and dripping on the floor. Someone could easily slip and fall with the water on the floor. I don't know if this is from the A/C leaking or not. I had been raining the day before and the morning, so it could also be a leak in the roof. The potential to damage electronic equipment also exists. I did wipe up the floor to prevent possible fall. If there is water on the floor again, leak is still present.	Building	4995 ()	RM 150 ()	LMES&S - Lockheed Martin Enterprise Solutions & Services	<a href="#">View</a>
11-013	11/3/2010 11:31:37 AM	I was in the Post Office when a fire alarm sounded - only myself and the postal worker were there. We decided to exit the door closest to the Post Office, but construction was going on in that area - the yellow caution signs were visible and the red "do not enter" tape was displayed. When I saw this I said to the postal worker, "we can't exit her because of the caution signs". She said, they (construction workers) told me I could just go under the red tape, I come this way everyday. I told her that is not safe. I turned around and exited through another door, but she preceeded to exit through the construction tape.	Building	1100 (Exterior)	North side (Near old clinic/post office area entrance)	LA - Office of Human Capital	<a href="#">View</a>





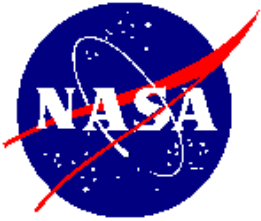
# Construction Safety Data: Construction Site Inspections

Date of report	Category	Area	Finding
23-29 October 2009	Other	BLDG 3204	Several employees attempting to work in poorly illuminated rooms. 29 CFR 1926.26(open)
30 October - 05 November 2009	PPE	A-3	An employee was working in a visible cloud of dust that was generated from cleaning out freshly drilled holes in a concrete slab. The employee took no measures to protect against the health hazards associated with silica dust. 29 CFR 1926.55 Repeat (open)
06-12 November 2009	Fall Protection	A-3	Employees were working from elevated platforms without required safety equipment to complete a fall rescue, as outlined in the contractor's safety plan.
04-10 December 2009	Electrical	BLDG 3204	Contractor installed a temporary light assembly that did not provide protection for the lamps from accidental contact or breakage. 29 CFR 1926.405
11-17 December 2009	Ladders	BLDG 3204	Worker was standing on top of a stepladder with the right foot on the top step and the left foot on the cross bracing on the back of the ladder. 29 CFR 1926.1053(b)(13) and (b)(14).
11-17 December 2009	Other	BLDG 3204	Workers on the construction site without receiving the site specific safety orientation. 29 CFR 1926.21(b)(2).
01-07 January 2010	Cranes	A-3	Damage was found on one leg of the four-legged bridle sling used to lift a personnel platform. 29 CFR 1926.550(g).
29 January-04 February 2010	Fall Protection	A1	Two workers were in an area of level seven where the guard rails were removed without having their personal fall arrest systems properly tied-off. Both workers were exposed to a fall of well over six feet. 29 CFR 1926.501
19-25 March 2010	Excavation	Gate Job	An employee damaged a marked, buried electric line with an excavator. The employee failed to hand dig to positively locate the line. SSC SSTD 8070.0119-MISC (SSC Standard For Dig Permit), section 5.2.3



# Construction Safety Data: Construction Site Inspections

30 April-06 May 2010	Scaffolding	A-3	A working platform/scaffold was not being erected per manufacturer requirements. (SSC SCWI 8715.0008 9.28a)
28-04 Jun 2010	PPE	A-3	Employee was drilling holes into steel beams without hearing protection.
28-04 Jun 2010	Electrical	A-3	Contractor using welder outlet unequipped with GFCI protection along with extension cord running
11-17 Jun 2010	Access/Egress	A-3	Contractor took the initiative to construct a safety stairway over the 66" industrial water pipe enabling employees to access both sides without having to climbing over or under.
11-17 Jun 2010	PPE	A-3	Contracted employees were found to be required to have completed medical evaluations before the utilization of vented hood respirators. –OSHA standard 1910.134 (E). The employer shall provide a medical evaluation to determine the employee's ability to use a respirator, before the employee is fit tested or required to use the respirator in the workplace. The employer may discontinue an employee's medical evaluations when the employee is no longer required to use a respirator.
18-24 Jun 2010	Housekeeping	E-1 Flame Trench	Contractor failed to remove combustible scrap and debris from the job site or empty trash receptacles at regular intervals.
18-24 Jun 2010	Other	Gate Job	Contractor failed to attend the mandatory monthly safety meeting at SSC, for the months of May and June, 2010.
12-16 Jul 2010	Excavation	Infinity	The Contractor was excavating a trench that ranged in depth from 5 to 9 feet; the trench was not adequately sloped for the type of soil (which is class C). Ground water has been washing in on the trench causing the sloping to slide in on the trench. The sloping has since been fixed and the trench is being properly maintained. The competent person for the trench has inspected the site. (Next slide depicts picture of site)



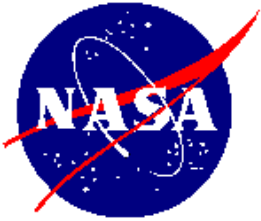
# Construction Safety Data: Construction Site Inspections

19-23 Jul 2010	Excavation	Infinity	<p>Sub-contractor at site had an excavation with many discrepancies; the excavation was on the South side of the building. The discrepancies were discovered during the weekly jobsite audit. All discrepancies have been corrected and the contractor conducted a safety stand-down to discuss working safely in an excavation. (see pictures) The discrepancies were as follows:</p> <ul style="list-style-type: none"> <li>-No ladder was available to workers to enter and exit excavation.</li> <li>-The required number of ladders are not provided (1 per 25 ft)</li> <li>-Sloping was not per standard for type C soil (1 ½ to 1 ratio)</li> <li>-Excavation was not barricaded where it abuts the road</li> <li>-Spoil pile was not set back the required two feet.</li> <li>-Next two slides depict site</li> </ul>
26-30 Jul 2010	Cranes	A2	<p>Contractor at the A-2 Test Stand was operating a Grove 20 ton cranes and was moving a large section of stainless steel pipe across the entrance/exit to the stand; they did not have any flagmen to warn approaching or exiting traffic. NASA Safety notified contractor of requirement; Contractor will hold safety meeting to discuss hazards of lifting pipe across a thoroughfare.</p>
02-06 Aug 2010	PPE	Gate Job	<p>Contractor at South Gate was seen by Safety on two occasions not wearing the proper PPE (safety Glasses), whereupon the Superintendent was notified and took corrective action by removal of offending employee</p>
09-13 Aug 2010	Fall Protection	A-3	<p>A painter working at the A3 test stand was using fall protection. However, in the process, he tied his lanyard to a guardrail and also tied the lanyard back onto itself (which has the potential to induce a side load and or rollout). A meeting was conducted with the painters at the site on the proper use of fall protection and a meeting was scheduled with the entire paint crew on the proper use of fall protection. (serious)</p>
09-13 Aug 2010	Electrical	Gate Job	<p>During an audit of the South Gate a small tear was found in a power cord and the strain relief boot on a drill was found to be at the end of the power cord. These issues were brought to the attention of workers and were corrected on the spot.</p>
09-13 Aug 2010	Excavation	SW 1100 parking Lot	<p>A subcontractor paving the parking lot southwest of building 1100 was using heavy equipment to remove gravel without barricading the site; safety brought the issue to the attention of workers at the site. The site is now barricaded and the contractor over the sub was notified.</p>



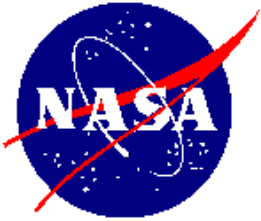
# Construction Safety Data: Construction Site Inspections

16-20 Aug 2010	Scaffolding	Gate Job	During an audit of the South Gate, found a Scaffolding which was not erected properly I.e. The retention clips on the cross bracing were not seated properly and one section of cross bracing was not seated to its corresponding pin; notified foreman and findings were corrected on the spot.
16-20 Aug 2010	Machine Guarding	A3	A bench grinder was found to have the tool rest pushed down and was not set to the OSHA required 1/8 of an inch of clearance from the grinding wheel.
16-20 Aug 2010	Transportation	A3	A golf cart was found to have its seat belt broken and jury rigged with a knot as a fix for the discrepancy. This finding is a repeat violation.
16-20 Aug 2010	Fall Protection	A3	The temporary guard rail at level 7 does not have a mid-rail at the North West and South West sides; The sides are barricaded with red danger tape. This issue was reported back on the Aug 02 Slide (see below). (I-Beams were moved to accommodate equipment installation; the beams had guard rails attached; the guardrails left behind from the I-beam removal were not OSHA compliant. Turnbuckles are to be installed by a sub-contractor to bring the guardrails into compliance. Remember if you change a safety system, ensure you bring the system back into compliance.)
23-27 Aug 2010	Ladders	Gate Job	During an audit of the North Gate, a sub-contractor was found using a folding stepladder incorrectly; notified the site foreman who then counseled the sub in the correct use of ladders.
23-27 Aug 2010	PPE	A3	A3 Contractor was found welding without the proper clothing (i.e. long sleeve fire retardant shirt) and counseled/told to correct this. He was found to repeat this on another occasion was removed from welding activities for the second offense .



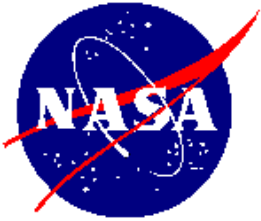
# Construction Safety Data: Construction Site Inspections

30Sept-3Aug2010	Access/Egress	1100 Parking Lot	Bastion discovered that Holiday Builders had expanded their work zone into the roadway without the proper barricades and flagman in place, and non construction workers were seen entering in the work zone. Work was stopped until the proper barricades were put into place.
30Sept-3Aug2010	Crane/Forklift	1100 Parking Lot	During an audit of DNP, a caterpillar was discovered to have a hydraulic leak on the backhoe portion of the vehicle. After, the fire department and environmental was notified, the vehicle was fixed and the hydraulic fluid was cleaned up at the worksite.
30Sept-3Aug2010	Electrical	A3	During an audit of the test stand a contractor was found to have run extension cords through standing water north of the Tank farm. The contractor was instructed to use the readily available extension cord trays. (This is a repeat finding.)
30Sept-3Aug2010	Crane/Forklift	A3	Two forklifts at the A3 site with no daily inspection forms present on the vehicle.
6-10Sept2010	Fire Protection	A3	During an audit of the A3 test stand a fire extinguisher was found not having the monthly inspection; safety tagged and inspected the fire extinguisher.
13-17Sept2010	Fall Protection	Gate Job	During an audit of the North gate , a worker was discovered on the canopy roof in fall protection performing electrical work , but was found to be working alone. Work was stopped and the worker counseled on the dangers of working alone.
13-17Sept2010	PPE	Gate Job	During an audit of the South gate it was discovered that a worker starting to work next to roadway was not using a colored vest. The worker was asked to wear a vest, to which he complied.
13-17Sept2010	Other	C Road resurf	An employee, working with the asphalt/road striping crew, was flagging traffic around the road striping area (C Road) using a reflective vest tied to a stick for a traffic flag.



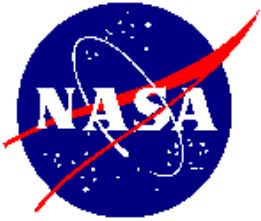
# Construction Safety Data: Construction Site Inspections

27Sept-1 Oct 2010	Crane/Forklift	Infinity	At the Infinity site; S&L steel was observed lifting a structural steel beam with substandard slings; the lift was stopped and the slings were removed. The slings exhibited wear issues along their length. The PM as well as site safety were brought to the site and a meeting was conducted with the crane operator to ensure that this type incident does not happen again. It should be noted that site safety and the PM has had to stop S&L Steel and document safety discrepancies three other times for various offences.
27Sept-1 Oct 2010	Other	A3	There is a problem with personnel feeding the alligator at the A3 Test Stand. Personnel should abide by center policy which is not to feed wild animals. The danger is that animals will lose their fear of people which increases the potential for an attack.
02-07Oct2010	Crane/Forklift	A2	During an audit of Trans-Gulf (A2 Test Stand Vacuum jacketed piping) found a Komatsu excavator with a leaking hydraulic ram which controls the actuating of the bucket. Notified site safety to have the equipment fixed.
02-07Oct2010	Electrical	1104	During an audit of DNP found a hand grinder with a faulty power cord and also found a pipe threading machine with exposed wires going into and out of the foot pedal switch; notified workers to remove the items from the worksite until fixed.
02-07Oct2010	Scaffolding	A3	During an inspection of the A3 test stand a contractor was observed working on a tank scaffold protected with wire rope clamps which were installed improperly (the saddle was improperly placed on the rope.)
11-15Oct2010	Crane/Forklift	A2	During an audit of Trans-Gulf (A2 Test Stand Vacuum jacketed piping) a sling was found with some wear on two places- at the end of the sling on the eye, and wear in the middle of the sling. The crane operator and site safety were asked to inspect the sling and to remove it from service if needed. Upon a site visit the next day it was observed that the sling had not been removed from service. The workers and site safety was ordered to remove the sling from service. COTR was notified of non compliance. The sling has since been verified to have been removed from service.
18-22Oct	PPE	Gate Job	An employee was observed at the south gate grinding on concrete without PPE, or using water to keep the dust down.



# Construction Safety Data: Construction Site Inspections

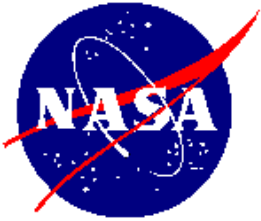
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18-22Oct	PPE	Gate Job	An employee was observed at the south gate grinding on concrete without PPE, or using water to keep the dust down.



# Construction Safety Data: Construction Site Inspections

25-29Oct2010	Electrical	A3	Contractor at the A3 Test Stand has been found to have power cords running through water on at least three separate occasions and has refused to mitigate the violations. It must be noted that there are cable trays available onsite to mitigate the hazard the contractor just refuses to use them.
01-05Nov2010	Electrical	A3	Two findings were brought forward by OSHA inspectors one was two extension cords tied to the structure of the A3 Test Stand to supply the Liebherr Crane with power (Battery Recharge).
01-05Nov2010	Access/Egress	A3	The second finding was that auditors pointed out gaps on the inward side of stairs on all construction site trailers. The next three pictures depict the findings and corrections.
08-12 NOV 2010	Ladders	A3	Sub-Contractor at the A3 Test Stand was hired to build a carport. The workers were standing on top of a twelve foot step ladder.
08-12 NOV 2010	Fall Protection	A3	Sub-Contractor at the A3 Test Stand was hired to build a carport. Workers were using a tie down strap as part of a fall protection system.
08-12 NOV 2010	Electrical	A3	Sub-Contractor at the A3 Test Stand was hired to build a carport. The power cords were frayed exposing wires; and workers were not using the required GFCI.
08-12 NOV 2010	Housekeeping	Infinity	Workers using a Hilti gun at the Infinity site were leaving unspent rounds on the ground. NASA Safety along with the site foreman reiterated the importance of controlling the rounds and storing unused rounds in water per OSHA requirements. The foreman stated that they would hold training to ensure that this does not happen again.
14-19 NOV 2010	PPE	A3	An A3 Sub-Contractor was not providing proper hand protection/gloves to their workers; some workers were buying their own gloves. Safety is working with the contractor to correct this issue. Employers need to be reminded that they are responsible for providing proper PPE to their workers.
22-26 NOV 2010	Machine Guarding	Infinity	During an audit of the Infinity a sub-contractor (FL Cranes) had secured the guard of a miter saw with a screw; Roy Anderson safety verbally counseled the foreman and the finding was corrected on the spot.
22-26 NOV 2010	Electrical	Infinity	During an audit of the Infinity one power cord was found with exposed wires; the cord ends were cut by Roy Anderson safety and cord was taken to sub-contractor.





# Construction Safety Data: Construction Site Inspections

06-10 Dec 2010	Crane/Forklift	A2	While conducting an audit of Trans-Gulf Constructors, work was stopped during a crane lift. Trans-Gulf was assisting a sub-contractor who was removing their rented scaffolding from the A2 Test Stand. The workers rigging the scaffolding were not in proper PPE. Work was allowed to commence when the workers were in proper PPE. The Trans-Gulf foreman was counseled about the issue of ensuring workers are in proper PPE while conducting lifts.
06-10 Dec 2010	Crane/Forklift	A2	While conducting an audit of Trans-Gulf Constructors, it was noted that the two grove RT-58D cranes were leaking hydraulic fluid; the foreman was asked to investigate the issue. A mechanic was site to investigate and measures were taken to contain the leaking hydraulic fluid.
06-10 Dec 2010	Scaffolding	Infinity	While conducting an audit of Roy Anderson at the Infinity jobsite a worker was discovered in a scissor lift that had two fall protection lanyards connected together, Roy Anderson Safety stopped the worker and corrected the discrepancy.
06-10 Dec 2010	Electrical	Infinity	During the same inspection, two power cords were found with exposed wires. Both cords were removed from service.
13-17 Dec 2010	Fall Protection	A3	A worker was found wearing personal fall arrest (harness/lanyard) that was anchored to one of the stair platform temporary guard rail cables.
13-17 Dec 2010	PPE	A3	A worker was found operating a grinder without proper hearing protection.
13-17 Dec 2010	Scaffolding	A3	Workers found using an aerial lift and a scissor lift without documenting the inspections for those pieces of equipment for that day.