

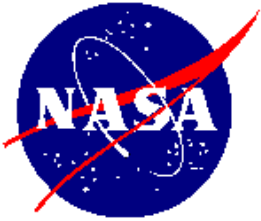
Mission Success Starts With Safety



Construction Safety

SSC Construction Inspection
Safety Findings/Stats

September 2011



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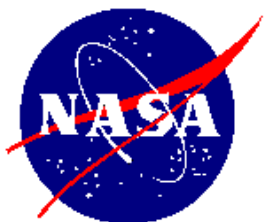
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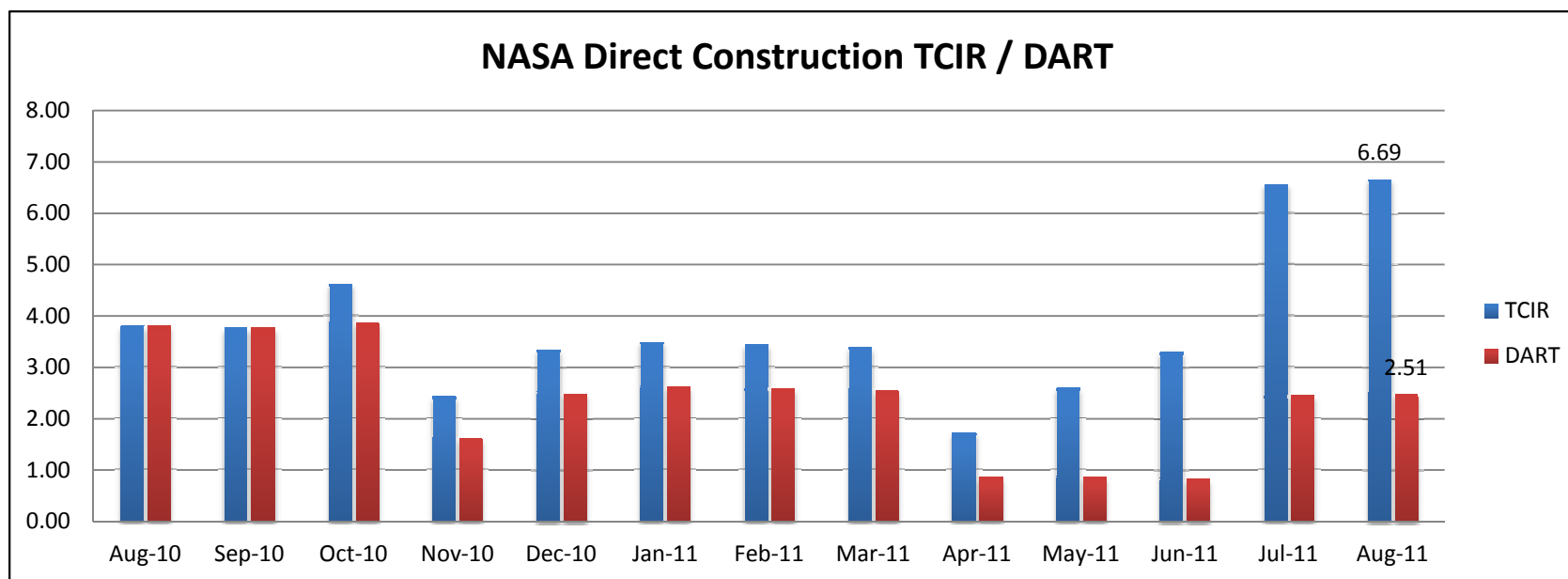
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<http://constructionsafety.ssc.nasa.gov/>



SSC Construction Metrics

- For the month of August:
 - 0% of CCRS items (0 out of 8) were construction related
 - 28% of IRIS incidents (5 out of 18) were construction related



2009 NAICS Industry Code (Construction) TCIR = 4.3

2009 NAICS Industry Code (Construction) DART = 2.3



Construction Safety Findings: 29 August – 02 September 2011

Findings Total: 2

-Serious Findings: 0

-Less than Serious Findings: 2

1. Gasoline found stored on construction site in a can that did not appear to be an “approved” safety can. 29 CFR 1926.152(a)(1)
2. Extension cord routed through the north blast door had damage to the outer insulating sheath, due to being pinched in the blast door. 29 CFR 1926.404(b)(1)(iii)(C)

Mishaps / Close Calls: 1

-Mishap: 0

-Close Call(s): 1

1. While cycling valves on the sprinkler system on level 19 of the B Test Stand, water poured out of the two inch return line on Level 3. Apparently, the contractor removed a cap on Level 3 and failed to replace it prior to charging the system. There was no damage and the contractor immediately cleaned up the water.



Construction Safety Findings: 06-09 September 2011

Findings Total: 0

-Serious Findings: 0

-Less than Serious Findings: 0

Mishaps / Close Calls: 1

-Mishap: 1

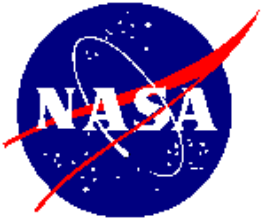
1. While moving a mobile crane north on Road 5, the slightly raised boom contacted overhead power lines. No one was injured but, the lines, several poles and a transformer station were damaged. This case is currently under investigation.

-Close Call(s): 0

-Other:

1. NASA Project Management and SMA Offices worked together to draft and obtain approval on a Temporary Safety Variance Request to allow the contractor to work under an active Lightning Warning while securing and relocating the tug boat and barges to safe haven for Tropical Storm Lee.





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Construction Safety Findings: 12-16 September 2011

Findings Total: 0

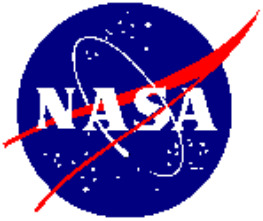
-Serious Findings: 0

-Less than Serious Findings: 0

Mishaps / Close Calls: 0

Other:

1. A-3 has started “Joint Site Walks” where safety, construction management and craftsmen from different trades walk the site and identify safe and unsafe practices/conditions. The joint walks foster open communication between safety, management and the workers on issues and expectations. It has been an excellent forum.



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Construction Safety Findings: 19-23 September 2011

Findings Total: 0

-Serious Findings: 0

-Less than Serious Findings: 0

Mishaps / Close Calls: 1

-Mishap: 0

-Close Call(s): 1

1. A worker was carrying boards across an area with some standing water, slipped on algae, and received a minor abrasion on the back of his ear. The supervisor subsequently bandaged the cut. The area was barricaded off, and swept to remove water. Options being considered include spraying the area with an algaecide, and to sweep on a regular basis. As well, the feasibility of cutting a drainage trough in concrete is being investigated. (First Aid)



Construction Safety Findings: 26-29 September 2011

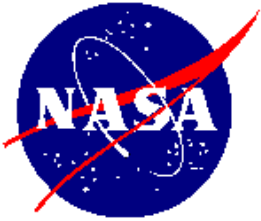
Findings Total: 0

Mishaps / Close Calls: 2

-Mishap: 0

-Close Call(s): 2

1. An A3 employee was standing on the south stairs, 1st landing, and pointing with the right hand to the east toward some scaffolding. In so doing, the back of the right wrist was struck by an unidentified object, falling from above.(First aid)
2. Contractors were working at a lift station near B-9110 while SSC was under a Lightning Warning. There was a danger that the workers could have been injured by a lightning strike. The event is under investigation to determine if the personnel involved were aware of the requirement to follow the directions given during the Lightning Warning announcement. (CCRS Close Call)



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Construction Safety Findings: 26-29 September 2011

Informational: (1)

1. A Fall Protection rescue system demonstration took place on the A3 T/S on Monday, October 3, 2011. The system facilitates the safe rescue of those whose fall protection system has deployed, and are awaiting rescue.

ROLLGLISS™ R500 MODELS
ROLLGLISS™ R500 RESCUE & ESCAPE DEVICE
SAIA

Model	Weight	Length	Material	Capacity	Features	Notes
32211M	10.5 lbs (4.8 kg)	24 in (61 cm)	Aluminum	250 lbs (113 kg)	Standard	
32211M	10.5 lbs (4.8 kg)	24 in (61 cm)	Aluminum	250 lbs (113 kg)	Standard	
32211M	10.5 lbs (4.8 kg)	24 in (61 cm)	Aluminum	250 lbs (113 kg)	Standard	
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During an Emergency, Quick Rescue and Escape is Vital – Every Second Counts!

- Versatile system is rated for self rescue, multiple rescues or, once activated, rescue of those who have become trapped.
- Multiple international design codes are used on the lifeline to ensure the vital rescue leads to quicker rescue.
- Rotational lifting wheel helps eliminate any twisted forces from a descent.
- Compact and lightweight design with fully ergonomic handles allows for 2-3 ft. performance in a 10-15' descent rate per ft. descent.
- Full functionality and easy operation makes efficient and effective rescue.
- Device is designed from high-quality and durable materials available for various performance and durability.
- Meets applicable industry standards including ANSI and ISO 9001:2008, ISO 9001:2015, etc.

iSAFE EQUIPPED

VERSATILE DESIGN, SUPERIOR PERFORMANCE

The Rollgliss™ R500 offers the choice of controlled descent rescue, evacuation or the versatility of assisted rescue with lifting capabilities. This state-of-the-art, fully automatic controlled descent device sets new standards of performance and safety in the rescue market. The system excels in handling, technology, function, safety and versatility – even under the most difficult conditions. The R500 is the result of 50 years of experience in the manufacture and practical use of safety and rescue systems, and has been examined and tested in accordance to the most stringent standards.

The Rollgliss™ R500 provides quick and safe operation with superior technology and design. The system can be used for rescue and evacuation from heights up to 1,500 ft. (500m) for one user 210 lbs. (140kg) or 230 ft. (100m) for two users totaling 300 lbs. (240kg). It features 3/8 in. (9.5mm) super-static kernmantle rope, and is configured with connecting hardware at each end of the lifeline. This configuration allows the R500 to operate in both directions – one end of the lifeline descends as the other ascends reaching the system for another rescue. During assisted-rescue scenarios, a fabric webbing can be attached to the R500 device, raised to a point that allows their fall arrest device to be removed, then lowered to the ground safely.

Remember, during an emergency every second counts. You can survive and trust the SMC-SALIA™ Rollgliss™ systems, in use all over the world.

- Wind Turbine Construction & Maintenance
- Offshore and Land-Based Oil Drilling Rigs
- Utility Power-Tower Construction & Maintenance
- Fire & Emergency Rescue Services
- Commercial Construction Sites
- Industry and ARD Facilities
- Government & Military Operations
- And More!

Specifications:

- Maximum Working Load: 250 lbs. (113 kg)
- Maximum Working Strength: 1,500 lbs. (680 kg)
- Load Capacity: 250 lbs. (113 kg)
- Maximum Working Height: 1,500 ft. (500 m)
- Maximum Working Length: 24 in. (61 cm)
- Material: Aluminum
- Weight: 10.5 lbs. (4.8 kg)
- Dimensions: 24 in. (61 cm) x 4 in. (10 cm) x 4 in. (10 cm)
- Operating Temperature: -20°C to 50°C (-4°F to 122°F)
- Storage Temperature: -20°C to 50°C (-4°F to 122°F)
- Humidity: 5% to 95% RH
- Shock Resistance: 100 g, 10 ms
- Vibration Resistance: 100 g, 10 ms
- Corrosion Resistance: 100 g, 10 ms
- UV Resistance: 100 g, 10 ms
- Salt Crystallization Resistance: 100 g, 10 ms
- Sulfur Dioxide Resistance: 100 g, 10 ms
- Ammonia Resistance: 100 g, 10 ms
- Hydrogen Sulfide Resistance: 100 g, 10 ms
- Hydrogen Chloride Resistance: 100 g, 10 ms
- Hydrogen Fluoride Resistance: 100 g, 10 ms
- Hydrogen Cyanide Resistance: 100 g, 10 ms
- Hydrogen Sulfide Resistance: 100 g, 10 ms
- Hydrogen Chloride Resistance: 100 g, 10 ms
- Hydrogen Fluoride Resistance: 100 g, 10 ms
- Hydrogen Cyanide Resistance: 100 g, 10 ms



- Aluminum Housing:** Durable, strong and light, to decrease load being lowered for better performance.
- Lifting Wheel:** Features self-aligning bearing during assisted rescue, and stays easy for storage.
- Rescue Web:** Built using superior rescue rope, rated for the total weight to be lowered, plus the protection system, or descender can lower the victim to the ground.
- Remainly Resistant Case:** Fully sealed case provides all year maximum storage life, superior resistance to moisture, salt, and UV light. It is 300 ft. (100 m) long, 3 in. (76 mm) wide, and 3 in. (76 mm) high. It allows easy to remove the case and store the device.
- Anchorings:** Used to anchor the device with either a webbing or rope.
- Ladder Bracket:** Quickly and easily attaches device to the edge of a fixed ladder.
- Signal:** Provides instant status during use or has one rescue operation.
- Case Strap:** Used in conjunction with the signal to lock-off the device and stop or top the victim during rescue.
- Puffies:** Can be used to increase the rescue rate if needed.
- Edge Protector:** Protects the rescue webbing contact with fixed edges and helps to decrease friction.
- Lifeline Hook:** Prevents self locking when used in industry controlled environments with our "Free-Run-Up" system for assisted rescue operations.

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What we are trying to avoid! “Big Blue” – Milwaukee, Wisconsin

Brewer's Ball Park Stadium on July 14, 1999 in Milwaukee, Wisconsin.
Three men lost their lives in the accident.

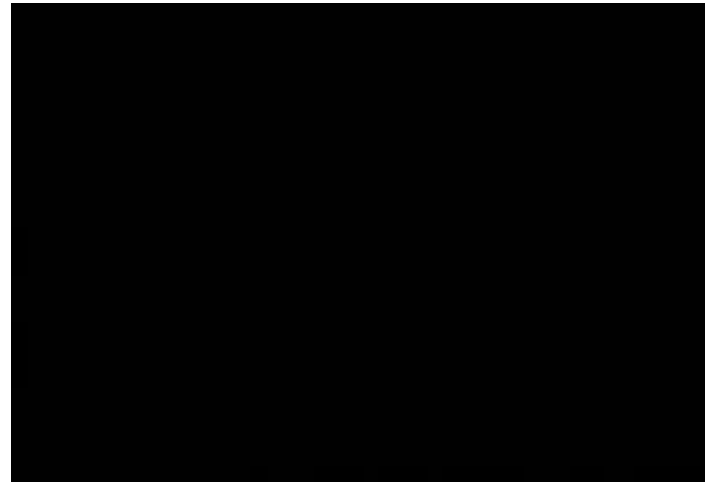
Although the video is only 1 minute and 10 seconds in length, seeing it
is an experience you won't soon forget.



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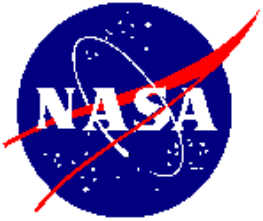


Construction Safety

NIOSH In-house FACE Report 99-11

Summary

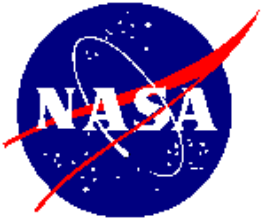
On July 14, 1999, three male ironworkers (the victims), ages 39, 40, and 52, died after falling approximately 300 feet to the ground when the suspended personnel platform they were occupying was struck by the uncontrolled load of a heavy-lift crane. The victims were working in windy conditions during the construction of a county sports stadium. The three ironworkers were suspended about 300 feet above the ground to observe the hoisting of a 450-ton roof section. The roof section had been hoisted to about 330 feet and transported over its connection location by the heavy-lift crane crew. As the roof section was being lowered into place, the heavy-lift crane began to tip over. The crane continued tipping, and the roof section collided with the personnel platform, knocking it and the victims to the ground. Fire department and emergency medical personnel were immediately notified and responded within 5 minutes. The victims were pronounced dead on site by the county medical examiner.



Construction Safety

The park opened for the 2001 baseball season – a year late because of the crane accident. Total construction time including repair time for the crane accident was 53 months.

Through December 2001, \$413.9 million has been spent on park construction, which was 28.5% more than the \$322 million first anticipated. This cost figure does not include the \$100 million in repair costs covered by insurance for the crane accident or the potential costs of \$99.25 million in civil and punitive damages a jury awarded to the beneficiaries of the three ironworkers who were killed (also covered by insurance). An appeals court decision later reduced this award to \$27 million, but other appeals are expected that could raise this figure. (It is not expected that the figure could be lowered any more). The total costs will approach \$1 billion when all the lawsuits are finished, and the interest on the bonds is included (\$330.8 million).



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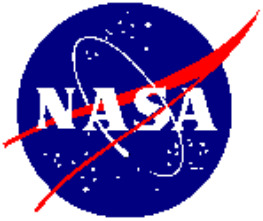
Asbestos contractor sentenced to six years in prison for violating Clean Air Act and lying to OSHA

The Department of Justice (DOJ) announced Sept. 22 that asbestos contractor Keith Gordon-Smith, owner of Gordon-Smith Contracting, convicted of multiple counts of violating the Clean Air Act and lying to OSHA inspectors, was sentenced to 72 months in prison and ordered to pay \$300,000 in restitution. DOJ stated that the defendant caused employees of Gordon-Smith Contracting Inc. to improperly remove asbestos during the partial demolition of a building on the site of the former Genesee Hospital in Rochester, N.Y.

"The Court's sentence properly punishes Gordon-Smith and his company for the egregious crimes that placed workers and their families at risk and for his complete disregard of the environmental laws that protect human health and the environment," said Ignacia S. Moreno, Assistant Attorney General for the Environment and Natural Resources Division of the Department of Justice.

Among other things, Gordon-Smith ordered workers to tear out copper pipes and scrap metal from a six-story building that contained over 70,000 square feet of asbestos. When the workers--who were not provided with any masks or protective clothing--removed the pipes, ceiling tiles and scrap metal, they were repeatedly exposed to asbestos which they told jurors was falling on them "like snow." Workers testified that Gordon-Smith repeatedly told them that the material was not asbestos. Following worker complaints, OSHA sent an inspector to the Genesee Hospital to ensure that the workers were protected. On three separate occasions, Gordon-Smith falsely denied that any pre-abatement disturbance of asbestos took place. He falsely stated that tiles and scrap metal were torn out by other, unknown parties, when in fact he had himself ordered his workers to do so. See the [news release](#)* for more information.

Source – OSHA QuickTakes 10/3/11



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Have a SAFE month!