



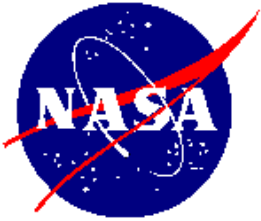
Mission Success Starts With Safety



Construction Safety

SSC Construction Inspection
Safety Findings/Stats

August 2011



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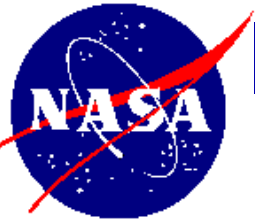
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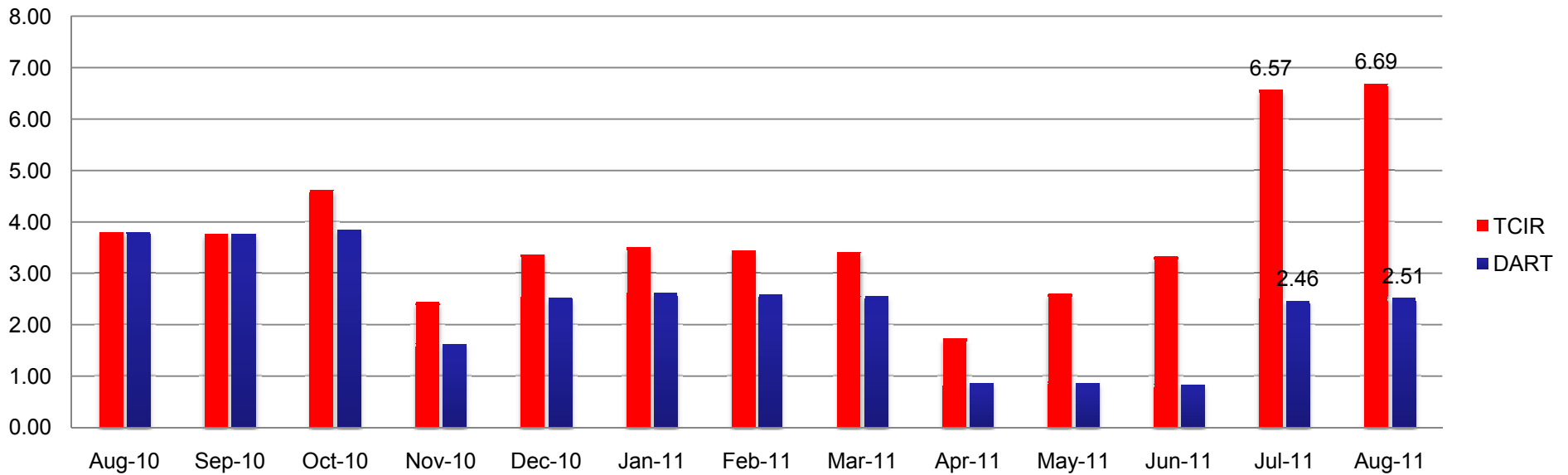
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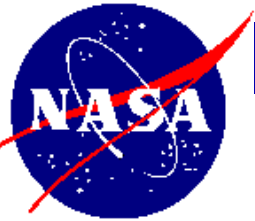
Construction Days Away, Restricted Duty, Transferred Cases Incident Rate (DART), Total Case Incident Rate (TCIR)

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

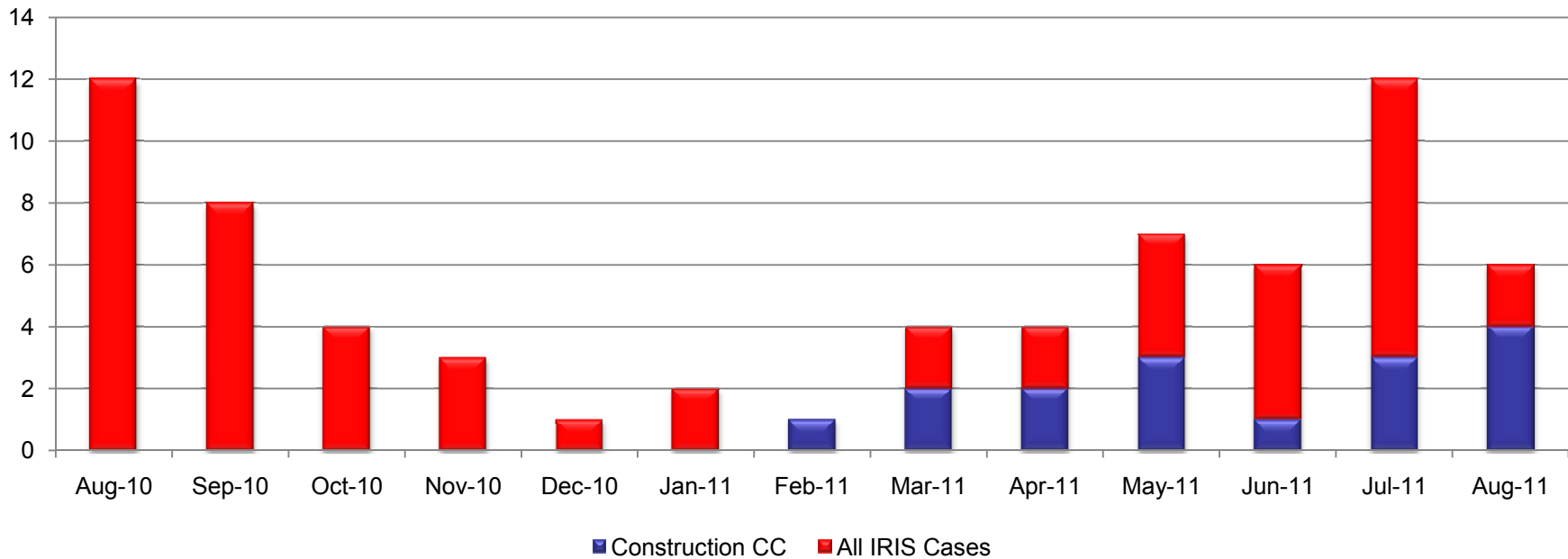
Zero or down is good



| | | | | | |
|------------------|-----------|--|------|---|--------|
| S-2011-189-00004 | 7/8/2011 | Const cont steps on threaded rod, injures knee | Open | C | B1 T/S |
| S-2011-193-00002 | 7/11/2011 | Worker's eye sensitive after grinding | Open | D | A3 |
| S-2011-202-00008 | 7/20/2011 | Worker was stung behind the ear by a bee | Open | D | A3 |
| S-2011-202-00009 | 7/20/2011 | Worker stepped in ditch and knee popped | Open | C | A3 |



IRIS/Construction Close Calls



| | | | | | |
|-------------------------|------------------|---|-------------|-----------|--------------|
| S-2011-193-00003 | 7/11/2011 | Four clamps fell off A3 T/S | Open | CC | A3 |
| S-2011-195-00010 | 7/14/2011 | Slag falls to A3 deck; no injuries | Open | CC | A3 |
| S-2011-208-00004 | 7/26/2011 | Long bar fell from scaffolding | Open | CC | A3 |
| S-2011-223-00010 | 8/10/2011 | Detector/level 19 triggered by welding smoke | Open | CC | B T/S |
| S-2011-227-00004 | 8/15/2011 | A scaffold worker dropped a folding hand saw | Open | CC | A3 |
| S-2011-228-00008 | 8/16/2011 | Clamp fell through hole in bag to base of the stand. | Open | CC | A3 |
| S-2011-230-00008 | 8/18/2011 | I beam jaw clamp fell 8 ft to a lower level. | Open | CC | A3 |



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Construction Safety Findings: 01-05 August 2011

Findings Total: 0

-Serious Findings: 0

-Less than Serious Findings: 0

Mishaps / Close Calls: 0

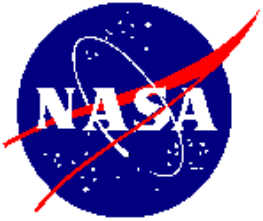
-Mishap: 0

-Close Call: 0

-Other: 1

1. A-3: Several NASA and construction contractors are teaming together to improve safety, encourage worker involvement and incentivize/recognize safe performance at A-3.

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



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Construction Safety Findings: 08-12 August 2011

Findings Total: 0

-Serious Findings: 0

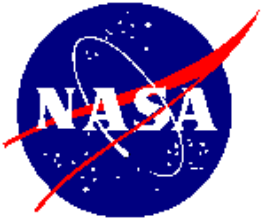
-Less than Serious Findings: 0

Mishaps / Close Calls: 1

-Mishap: 0

-Close Call: 1

B T/S: Smoke/Dust from cutting/welding operations on level 20 overwhelmed a smoke detector on level 19, providing a positive for alarm. No injury, and/or property damage occurred. **(1926.353(a)(2)** General mechanical ventilation shall be of sufficient capacity and so arranged as to produce the number of air changes necessary to maintain welding fumes and smoke within safe limits...)



Construction Safety Findings: 15-19 August 2011

Findings Total: 0

-Serious Findings: 0

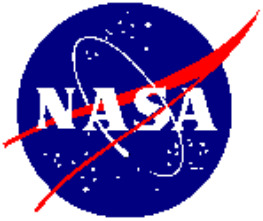
-Less than Serious Findings: 0

Mishaps / Close Calls: 3

-Mishap: 0

-Close Call(s): 3

1. A3: A scaffold worker was returning a folding hand saw to his tool belt/tether when the carabineer pin/gate failed. The saw fell ~12' to an I-beam. The area under the worker was properly barricaded/posted as an exclusion zone.



Construction Safety Findings: 15-19 August 2011

-Close Call(s): (cont.)

2. A3: A worker was transferring 1"X1.5" metal brackets (~2 oz) from a bag to a bucket when a bracket slipped thru a hole in the bag, and fell through the grating to the base of the stand. No one was in the area where the bracket landed.
3. A3: A jaw clamp for an I-beam fell 8 ft to a lower level when a worker reached for it while installing a retractable lanyard. The jaw clamp which tightens on the beam when a downward load is on it, slid off the open ended I-beam when the worker accidentally applied a lateral force on it. It fell to a lower level 8 feet below. Interim corrective action is to ensure clamps, etc are secured in place on open ended I-beams or the I-beam is capped.



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Construction Safety Findings: 22-26 August 2011

Findings Total: 0

-Serious Findings: 0

-Less than Serious Findings: 0

Mishaps / Close Calls: 0

-Mishap: 0

-Close Call(s): 0



A-3 Safety Initiatives

- Contract specs to be modified to be consistent; specifically, with respect to safe work above and below workers.
- Contractors have established “zero tolerance” policy for willful violations or neglect/unsafe acts (4 Aug 11)
- Site wide tailgate meeting every Monday
- “No Work Below” for high risk operations (equipment lifts, scaffold assembly/disassembly, crane operations, etc.)
 - SPAs, 2-week look ahead/planning, and barricade/exclusion zones
- Securing equipment/materials
 - Bagging, buckets/containers for tools/small parts
 - Brackets and tie downs
 - Belt and wrist tethers for tools/equipment



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Actions Forward

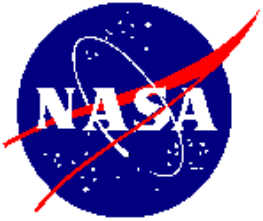
- Netting and chicken wire
- FOD walks
- COTRs, Safety, Construction Mgt, and Contractor PM forum for improvement ideas and action (very productive)
 - Worker inputs, buy-in, motivation and recognition programs
 - Suggestion box
 - Focused awareness and training (workers/foreman/supervisors)
 - Safety Councils/walk downs with craftsmen/workers
- Called in Guardian to design personal/debris netting





A-3 Safety Initiatives

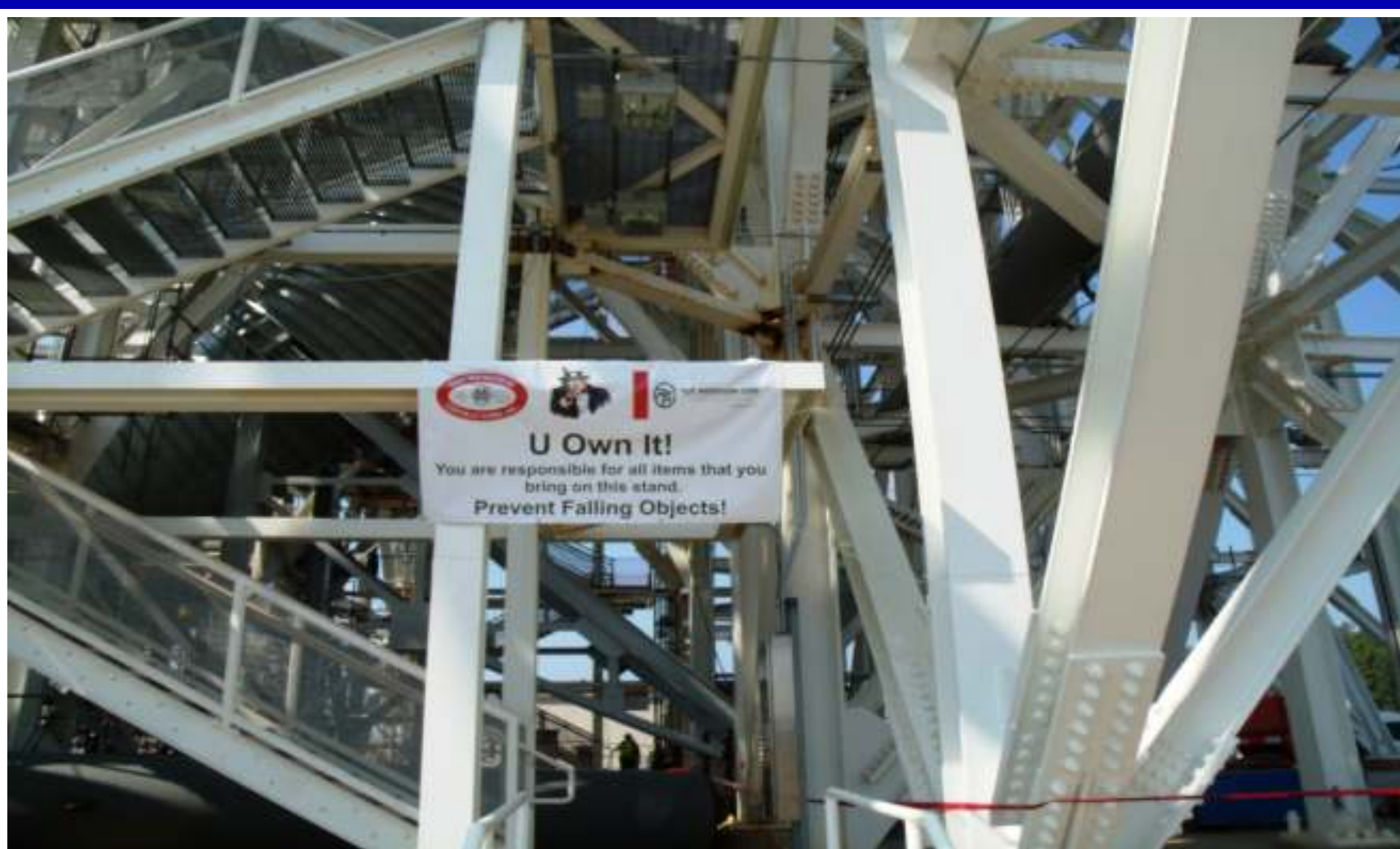
- Site wide toolbox meeting, Mondays 6:30
- A3 Safety Council attended by COTRs, Safety, PMs, Construction Management, meets on the 2nd and 4th week every month.
- RAC/M&D hired 2 safety monitors to work with crews.
- RAC/M&D safety themed lunch on 19 Aug 11.

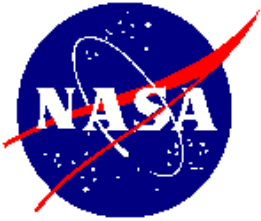


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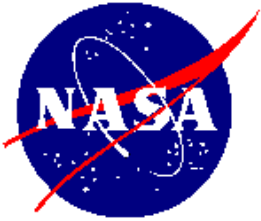
A-3 Safety Initiatives





Construction Safety Findings: 22-26 August 2011

| | | | |
|---|--|---|--|
|  National Aeronautics and Space Administration John C. Stennis Space Center Stennis Space Center, MS 39529-8000 | | CONSTRUCTION PROJECT HAZARD ANALYSIS | |
| General Information | | | |
| The Construction Contractor, sub contractors are responsible for the completion of a Construction Hazard Analysis (CPHA). The CPHA is required at the start of every project. It is only completed once unless the job scope changes and modifications are necessary. | | | |
| Company: | | Origination Date: | |
| Project Title: | | Expiration Date: | |
| <input type="checkbox"/> Attach Copy of Management of Change Form (MOC), if work is performed in a process covered under the Process Safety Management Standard. | | | |
| APPROVALS - Sign below to indicate approval of this CPHA | | | |
| All affected Construction Supervisors and Applicable Trades | | Construction Manager or Designee | |
| | | | |
| Bldg., Area, & Process Description: | | | |
| Start with a general description of the building, area, and process. Then more specifically detail the locations affected by the work to be done. | | | |
| | | | |
| Purpose & Description of Work: | | | |
| Describe why the work is being done. Then describe what will be done and how. | | | |
| | | | |
| Precautions and Instructions: | | | |
| The following section will provide a brief description of a few safety and health requirements and instructions. It does not take the place of the NASA SSC Construction Safety and Health work instruction which should be referenced for more detail. | | | |
| | | | |



Construction Safety Findings: 22-26 August 2011

SCWI-875-0008 Rev a

Construction Safety and Health Program

16.4.1 Basic Requirements

- a. A Construction Project Hazard Analysis (CPHA) shall be completed and approved by the COTR (or designee) prior to any work commencing on all projects.
- b. The CPHA shall include details on the specific scope of work under the contract and shall be revised and re-submitted whenever conditions change (e.g., job scope).
- c. The CPHA shall be included in the contractor's Safety and Health Plan for review and acceptance by the contractor's designated safety and health professional.

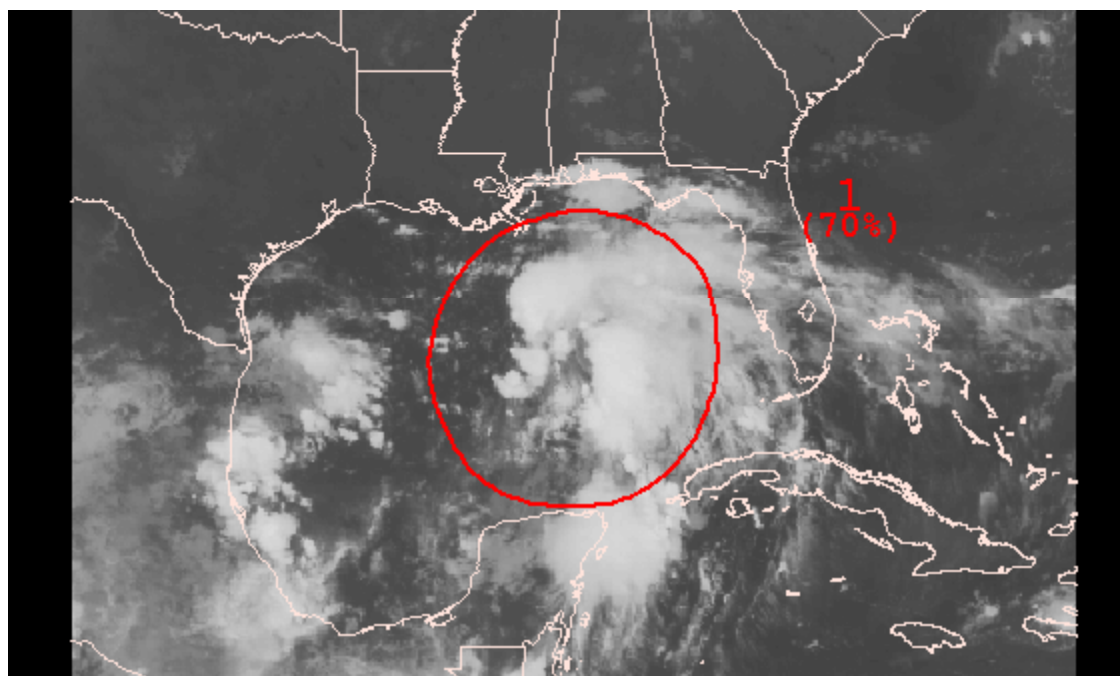
6.4.2 Format

- a. The CPHA shall conform to Form SSC-853, SSC Construction Project Hazard Analysis.
- b. If another form of CPHA is used, it shall contain the following information:
 1. Name of contractor or subcontractor conducting construction activities
 2. General description of construction activity (e.g., pile-driving, pouring foundation, structural assembly of building)
 3. Description of the task and basic job steps
 4. Date of Project Hazard Analysis
 5. Location of construction activity (e.g., Stennis Space Center (Project) Area)
 6. Estimated start date of construction activities at SSC
 7. Numerical identification for each phase of work
 8. Description of each phase of work associated with each individual position (e.g., arc welding, electric hand tools, acetylene and oxygen cutting, painting, fuel-powered hand tools, compressed air, excavation, and backfill)
 9. Description of all of the hazards to which the employee or other employees in the area are exposed for each phase of work (e.g., flammability, falls from heights, fumes, paint spills, electric shock, maintenance of the leads)
 10. Description of the precautionary action taken to ensure the identified hazard does not cause an accident; for example:
 - (a). Storing hazardous material in well-ventilated area free from excessive heat, sparks, open flames, or direct rays of the sun
 - (b). Inspecting electrical cord before use and using ground fault circuit interrupter
 - (c). Storing excavated material and retaining it at least two (2) feet 600 mm from the edge of the excavation and at a distance to prevent excessive loading on the face of the excavation.
 11. Contractor/subcontractor signature



Construction Safety

Atlantic Graphical TWO Area 1 close-up



[Return to Atlantic Graphical TWO](#) 1. A TROUGH OF LOW PRESSURE LOCATED OVER THE CENTRAL GULF OF MEXICO IS PRODUCING A LARGE AREA OF CLOUDINESS AND THUNDERSTORMS AND GUSTY WINDS MAINLY ON ITS EAST SIDE. UPPER-LEVEL WINDS ARE CURRENTLY UNFAVORABLE FOR DEVELOPMENT. HOWEVER...CONDITIONS ARE FORECAST TO BECOME MORE CONDUCTIVE LATER TODAY...AND THE SYSTEM COULD BECOME A TROPICAL DEPRESSION DURING THE NEXT DAY OR SO. THIS SYSTEM HAS A HIGH CHANCE...70 PERCENT...OF BECOMING A TROPICAL CYCLONE DURING THE NEXT 48 HOURS AS IT MOVES SLOWLY NORTHWESTWARD. INTERESTS ALONG THE ENTIRE NORTHERN GULF OF MEXICO COAST SHOULD MONITOR THE PROGRESS OF THIS DISTURBANCE.



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Construction Safety

Have a SAFE month!