

# AREA CLEARANCE AUTHORIZATION

1. Requestor's Organization Code: 7320 Date: September 27, 2002

2. Contract No./Title: Institutional Facilities Operations, Repair & Maintenance (IFORM)

3. Contractor: Call Henry Inc. Subcontractor: \_\_\_\_\_

4. Utilities, services and/or equipment shutdowns and area clearance are required to perform the following work:

a. Type of work: Power Panel 5 year Maintenance

b. Location of work: Building 113 (Panels SP400, SL100, SP100, SP10034A,F600)

c. Utilities, services, and/or equipment requiring NASA shutdown: Bldg 90 k2b1 # 23c,

Bldg 85 P100 # 1& 8, Bldg 85 F1000A # 5

d. Request shutdown on: 10-21-2002 @ 9:00A

e. Work completed, restore services on: 10-21-2002 @ 3:00P

5. NASA will shutdown the utilities, services, and/or equipment listed above and will maintain them in a shutdown position until authorized to restore services.

A NASA Safety permit is  /is not  (check one) required for this shutdown activity.

6. Has the System Coordination Meeting been held?  Yes

Requested by: (Must include at least one civil servant signature)

Scott Marabito (date) \_\_\_\_\_

Project Engineer/Technician (date) \_\_\_\_\_

Approval by (All signatures required except either CAD or PD, as appropriate:

(First) Danzey, Gabel, Swedinovich, or Loder 3-3200 9-27-02  
CAD (date)

(Second) \_\_\_\_\_

D. Diamond 3-8970  
AQE/SSC-COTR (date) \_\_\_\_\_

(Fourth) T. GERACI  
R. Molosky 3-2261 Ronald Molosky 9-30-02  
Facility Manager (date)

Concurrence by: \_\_\_\_\_

Project Manager (date) \_\_\_\_\_

(date) \_\_\_\_\_  
S. Marabito 3-8399 Scott Marabito 9/27/02  
Contractor's Representative (date)

R. Olinek 3-5613 Richard Olinek 9/27/02  
Quality Control (date)

(First) \_\_\_\_\_  
O'Hara, Held, Blazek, or Loder 3-3100 9/27/02  
PD (date)

(Third) \_\_\_\_\_

L. Zala 3-5443  
System Manager (date) \_\_\_\_\_

(Fifth) \_\_\_\_\_

D. Bluell 3-8307  
Building Manager/Area Supervisor (date) \_\_\_\_\_

Smith, Galmarini, Wilder, Neading, Jolliffe, Mount  
Safety Office (date) \_\_\_\_\_

7. Distribute approved Area Clearance Authorization to all parties.

DISTRIBUTION: All Signees  
0616/Official File (original)  
Requester's Branch Chief  
Contract File

**CLOSEOUT ACTION:** When the work is complete and services have been restored the Requester will provide electronic notification to all parties.

Dennis Bluell  
cannot schedule this time



National Aeronautics and Space Administration

Glenn Research Center

# CONFINED SPACE ENTRY PERMIT

Date Issued 6/16/00  
Expires 6/16/00

NOTE 1: IN THE EVENT OF AN EMERGENCY, CALL 911  
NOTE 2: IF THE CONDITIONS OR PROCEDURES SPECIFIED ON THIS PERMIT CHANGE, STOP WORK IMMEDIATELY AND NOTIFY THE SAFETY OFFICE AT 3-6735 (3314 OR 3342 AT PBS).

## PART 1: HAZARD ASSESSMENT (To be filled out by the Entry Supervisor)

Confined space identification number None Location of confined space 125 BSMT

Description of confined space AIR INTAKE

Description of work to be performed  
Repair Sump Pumps

Materials or chemicals located and /or brought into the confined space (MSDS's) must be posted)

Equipment located or to be brought into the confined space  
Hand tools

### CHECK ALL POTENTIAL HAZARDS (Check all inherent and introduced hazards)

#### Hazardous Atmospheres

- Flammable
- Toxic
- Irritant
- Corrosive
- Oxygen -Deficient
- Oxygen -Enriched
- Other (List)

#### Physical Hazards

- Temperature
- Chemical Absorption
- Noise
- Entrapment
- Vibration
- Electrical Equip.
- Mechanical Equip.

- Spark-producing operations
- Spilled Liquids
- Engulfment
- Radiation
- Entry and Exit Limitations

#### Other Anticipated Hazards (describe below)

## PART 2: HAZARD CONTROLS (To be filled out by Entry Supervisor)

Yes  No Is lockout/tagout required?  
List isolation points: Power to Pump

Yes  No Are GFCI's required on all electrical power?

Yes  No Is explosion-proof equipment required?

Yes  No Are barriers required?

Yes  No Is communication equipment required?

Yes  No Is telephone or 2-way radio for summoning rescue available?

#### Check required emergency equipment:

- Fire Extinguisher (type?) \_\_\_\_\_
- Emergency Shower / Eyewash \_\_\_\_\_
- Safety Harness \_\_\_\_\_
- Life Line Retrieval Line \_\_\_\_\_
- Tripod and Winch (for 5+ ft. vertical) \_\_\_\_\_
- Other (specify) \_\_\_\_\_

Yes  No Are MSDS's for all materials in the confined space (or to be brought into the confined space) attached?

Yes  No Have entrants and standby personnel been trained per Chapter 16 of the Glenn Safety Manual?

Yes  No Has the standby person been informed to remain continuously posted outside the confined space?

Special entry and/or work procedures? Secure area, escort required to pit entrance.

List required Personal Protective Equipment \_\_\_\_\_

**PART 3: PERMIT REVIEW** (to be completed by the Safety Office 3-6735)

- Yes  No Has appropriate air monitoring been identified?  
 Yes  No Are respirators required? List types:  
 Yes  No Are hazard controls and PPE appropriate and adequate?  
 Yes  No Has SAO approved the Operating Procedure?  
 Yes  No Is continuous air monitoring required?

Describe any special entry requirements:

Permit Approved: John Brinkman 3-3028  
 Safety Assurance Office: Name John Brinkman Phone 7 Jun 00  
 Signature [Signature] Date

**PART 4: AIR SAMPLING RESULTS** (to be completed by the SAO 3-2088)

Air Monitoring Equipment used:

Model	Serial Number	Date Calibrated	User's Name

Air Monitoring Results (to be conducted at various areas throughout)

Date	Time	Location(s)	Oxygen, % (19.5-23.5%)	Combustibles, % LEL (0-10% of LEL)	H <sub>2</sub> S	CO	Toxic Chemicals
6-7-00	0855	BB#125-001-13	21.0	0	0	0	NO
6-8-00	0742	" " " "	21.0	0	0	0	NO

Has all required air monitoring been done throughout the confined space? Test done by

**PART 5: LIST ALL AUTHORIZED ENTRANTS AND STANDBY PERSONNEL**  
(completed by the Entry Supervisor and initiated by Entrants and Standby Personnel)

Entrants	Signature	Standby Personnel	Signature
Bill Broderick	<u>[Signature]</u>	PAT DANIEL	<u>[Signature]</u>

**PART 6: CERTIFICATION** (Entrants and Standby Personnel shall review the permit and Operating Procedure. After this is done they shall sign the permit next to their names in Part 5.)

I certify that the requirements of this permit have been met.

ENTRY SUPERVISOR Name Scott Macabita  
 Signature [Signature] Date 6/6/00 Phone 5399 Organization CHI  
 Name Michael A. Michan  
 Signature [Signature] Date 6/6/00 Phone 3811 Organization NASA 7525

When confined space entry work is completed send this permit to the Safety Office, MS 501-4

*Rick*

**TEMPORARY CRANE REQUEST OR PERMANENT STRUCTURE NOTIFICATION**

Michael A. Micham  
Requester's Name

7521 / CHI  
Organizational Code/ Company

Don Musick  
216-433-5737  
Telephone #  
John Tinbier - 2132

45  
Adjacent Bldg. Number

Oct. 11 - 18, 2002  
Dates Required ("window dates")

Duration (Days/Weeks/Months)

General  
Contractor Gov't. Crane

55'  
Anticipated Boom Height

Michael A. Micham  
COTR/TR/QAE Signature

Brief Description of Work

*Lifting roofing material to roof area. Installation of new roof on B-143.*  
*Warren Roofing / Call Henney*

Is this a critical lift?  Yes  No Reference GRC Safety Manual Chapter 20 - Cranes and Lifting Devices

After completing this form, please route to the Construction Management Branch to the attention of David M. Herb at M/S 21-15, or his alternate, Boyd M. Vance at M/S 21-15.

**OFFICIAL USE (do not complete the following)**

- AGL Study is Required (Approval may require up to 6 months)
- AGL Study is NOT Required and you may proceed with the work

Center Crane Coordinator Signature Ben Van 10/10/02  
(date)

**All cranes operating on the Glenn Research Center must call the FAA Tower at the airport each day the crane will be operating, and inform them of the time the crane will go up and be taken down. The telephone number of the Cleveland Hopkins Airport Tower is (216) 898-2028.**

It is the responsibility of the COTR/TR/QAE to perform the following:

- Coordinate with Main Gate Security (433-2203 / 2204) for crane access to Lab. Provide a copy of this crane permit to the operator prior to starting work. The permit must be with the operator at all times while operating crane.
- Complete the Crane Daily Checklist  
Send completed checklist to Safety Office, Mail Stop 6-3
- Call the FAA Tower each day, at the start of work and the end of each day.
- **WHEN ALL CRANE WORK HAS BEEN COMPLETED, NOTIFY CLEVELAND TOWER, SO THE PERMIT CAN BE CANCELED.**

Note: All new permanent structures must also be submitted, and an AGL Study may be required. The AGL Study is performed by the FAA in DesPlaines, IL, and may require up to 6 months for approval.

Note: If government equipment (crane, high lift, etc.), please specify name of operator:

Glenn Research Center Organization Procedure	Title: Vertical Structure and Temporary Crane Permit Request Process	
	Document No.: GRC-W7500.028	Rev.: B

## CRANE DAILY CHECKLIST

Certifications

- Equipment
- Slings and rigging
- Operator

Safety Flag

- 3'x3' orange and white check pattern
- Must be mounted at top of crane

Communication equipment

- 2-way radio if there isn't a line of sight between the operator and the rigger
- Cellular Phone for 2-way communication with Hopkins airport

Personal protection

- Hard hats
- Gloves
- Tag line
- ~~Harness / life line~~
- Ladder

Area inspection

- Wires 13' min. clearance
- Stacks
- Obstructions
- Boom clearance
- Outrigger footing
- No fluid/hydraulic leakage

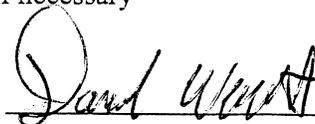
Setup

- Outrigger padding
- Flag on mast**
- Tag line
- Cones or flagging to post lifting zone
- Flag men if necessary

Signatures



Responsible Ground Person



Crane Operator

Upon completion of the crane operation the Requester/COTR/QAE must send a copy of this form to the NASA Safety Office as Mail Stop 6-3.

HOT WORK AUTHORIZATION PERMIT

Start Date of Hot Work: 11/17/99 Anticipated Completion of Hot Work: 11/18/99

Location/Building: 302 Roof

Requestor:

Prime Contractor: Subcontractor: Onsite Contractor: CHI

TID: Manuf Engr: Other:

Specific Sites: (Floor/Room No.) #1 302 Roof #2 #3

Description of Hot Work Operation: Change out Compressor

Type of Hot Work Operation (Check which apply): Welding Cutting Soldering Brazing Other

Has the Contractor's Site-Specific Safety & Health Plan been approved for Hot Work?: Yes No Not Applicable

Does this location have Detection/Suppression systems which will require deactivation?: Yes No

Fire watch personnel (if req'd) will be provided during and for 30 minutes after work including any coffee and lunch breaks: Yes No

Fire Extinguisher(s) at Work Site: Type: ABC Size: 30#

Nearest Location of Pull Station/Telephone: IN Building

PERMIT APPROVALS:

Requested by: Prime Contractor Supervisor (date) Subcontractor Supervisor (date) Onsite Contractor Supervisor (date) QC Representative (if applicable) (date)

Requested by: Onsite Contractor Supervisor (date)

Requested by: TID/Manf.Engr./Other Supervisor (date)

Reviewed by: COYR/Signature (date)

Approved by: Glenn Safety Office (date)

Renewed by: Glenn Safety Office (date) Comment(s)

ORIGINAL TO BE POSTED AT WORK SITE

PERMIT CLOSE-OUT - Hot Work Completed: Requestor Signature (date)

DAILY PRECAUTIONS / FIRE WATCH CHECKSHEET

DATE: 11/17/99

Building or adjacent structure: 302

Site or Specific Location: 302 Roof

Prime Contractor: Subcontractor: Onsite Contractor: CHI
TID: Manuf Engr: Other:

GENERAL SET-UP

Has a Hot Work Authorization Permit been issued?
Has HOT WORK equipment to be used been inspected?
Potential for fumes/by-products to travel to other areas?
Are all guards/barriers/barricades in place?
Do detectors/suppression systems require deactivation?

PRECAUTIONS TO BE TAKEN WITHIN 35 FEET OF HOT WORK OPERATION

All flammable liquids, dusts, lint and oil deposits removed?
Explosive atmosphere in area eliminated?
Floors swept clean?
Combustible floors wet down or covered with fire blankets?
All wall openings and floor openings/drain covered?
Fire resistive tarpaulins suspended beneath work?
Any adjacent combustible coverings/insulation present in area of hot work?
Any heat transfer/conduction potential to any combustible material through a wall?
Any enclosed equipment being worked on cleaned of all combustibles?
Any enclosed container being worked on purged of flammable liquids/vapors?

General Safety/Fire Prevention Remarks/Comments/Instructions:

FIRE WATCH /HOT WORK MONITORING

Nearest Location of Pull Station/Telephone: 20 HLL EXIT
Fire Extinguisher(s) at Work site: Type 307 Size ABC
Names of Worker(s) who will remain at work site for at least 30 minutes after Hot Work is completed to ensure that no potential of fire exists in the area: BRANSON

Prime Contractor Superintendent Signature:
Onsite/TID/Manufacturing/Other Supervisor Signature: Scott Marafio 11/17/99
Fire Watch Signature: Branson

SAFETY SPECIALIST

Area Checked for explosive gases and low oxygen?
Set-up and precautions verified?
Safety Specialist Verification:
Hot Work operation started: 11:30 AM
Hot Work operation ended: 3:30 PM

Prior to and upon completion of hot work, notify the Dispatcher at PABX 3-2088.

## LeRC Lockout / Tagout Planning Form

REQUESTOR: \_\_\_\_\_ CADO Tag No.: \_\_\_\_\_ EPDO Tag No.: \_\_\_\_\_

JOB DESCRIPTION: \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

PROJECT AUTHORIZED EMPLOYEE REPRESENTATIVES:

ISOLATION VERIFIED  
 (AER to initial and date)

- |          |       |
|----------|-------|
| 1. _____ | _____ |
| 2. _____ | _____ |
| 3. _____ | _____ |
| 4. _____ | _____ |

AREA CLEARANCE REQUIRED? NO  YES  IF YES, ATTACH COMPLETED AREA CLEARANCE

LOCK-OUT/TAG-OUT DEVICES: \_\_\_\_\_ REFERENCE DOCUMENT: \_\_\_\_\_

*If no defined isolation procedure exists, or if additional devices not listed in the procedure are required, list LO/TO devices below: (additional spaces on other side)*

DEVICE NO.	DEVICE DESCRIPTION	F.P.I.	SWITCHPERSON CODE
1.			
2.			
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			

NAME OF SWITCHPERSON PERFORMING ISOLATION:

- A. \_\_\_\_\_  
 B. \_\_\_\_\_  
 C. \_\_\_\_\_

DATE TO START ISOLATION OF DEVICES: \_\_\_\_\_ DATE TO COMPLETE ISOLATION OF DEVICES: \_\_\_\_\_

DATE OF ISOLATION VERIFICATION TOUR (if necessary): \_\_\_\_\_

DATE FOR PROJECT COMPLETION: \_\_\_\_\_

THIS LOCKOUT/TAGOUT PLAN HAS BEEN REVIEWED AND AGREED UPON BY ALL PARTIES.

\_\_\_\_\_  
 Requestor Signature and Date

