AFPD-8820.2-001, Rev B-1 Effective Date: October 1, 2020 Expiration Date: October 1, 2025

## Compliance is mandatory.

SUBJECT: Construction Safety

**RESPONSIBLE OFFICE:** Facilities Engineering & Logistics Management Branch

# 1. POLICY

- a. It is Armstrong Flight Research Center (AFRC) (hereinafter referred to as "Center"), in Edwards, California, policy to execute construction-related work through safe and effective operations that curtail risk to personnel, real property, and collateral equipment. No construction-related work performed on or in a Center facility, regardless of its complexity, will be implemented in a way that would compromise the safety of any person.
- b. In order to obtain that goal, all proposed construction-related work assignments, work orders, contracts, subcontracts, task orders, change orders, or credit card orders initiated to perform alterations and/or repairs on a facility configuration will be submitted to Facilities Engineering & Logistics Management Branch for consultation and approval prior to initiating the order.
- c. Furthermore, task orders, invitations for bids, requests for proposal, or contract modification requests for construction-related work to be performed by personnel other than Facilities Engineering & Logistics Management Branch will be signed by the Chief of Facilities Engineering & Logistics Management Branch or designee, as well as the Chief of the Safety & Environmental Branch or designee. Planning, design, construction, activation, and disposal work performed by Facilities Engineering & Logistics Management Branch will be reviewed per protocols described in Armstrong Flight Operational Procedure (AFOP)-8820.2-001, Facility Modification and Construction Work.
- d. This policy exists to prevent construction accidents, including injury prevention to National Aeronautics and Space Administration (NASA) employees, contractors, and the public. This policy exists to prevent damage to real and personal property.
- e. If the policy is not followed, personal hardships, loss of work, reduced productivity, poor employee morale, and increased cost to NASA, support contractors, and construction contractors will ensue.

#### 2. APPLICABILITY

a. This policy is applicable to all employees, including contractors to the extent required by contract, who request these activities as well as those who implement them.

- b. This directive is applicable to the Center, including Component Facilities and Technical and Service Support Centers.
- c. In this directive, all mandatory actions (i.e., requirements) are denoted by statements containing the term "shall." The term "may" denotes a discretionary privilege or permission, "can" denotes statements of possibility or capability, "should" denotes a good practice and is recommended, but not required, "will" denotes expected outcome, and "are/is" denotes descriptive material.
- d. In this directive, all document citations are assumed to be the latest version unless otherwise noted.

#### 3. AUTHORITY

- a. NPD 8820.2, Design and Construction of Facilities
- b. NPR 8820.2, Facility Project Requirements
- c. NPR 8831.2, Facilities Maintenance and Operations Management
- d. NPR 8715.3, NASA General Safety Program Requirements

#### 4. APPLICABLE DOCUMENTS AND FORMS

- a. 29 CFR Part 1910, Occupational Safety and Health Standards
- b. 29 CFR Part 1926, Safety and Health Regulations for Construction
- c. NASA-STD-8719.7, Facility System Safety Guidebook
- d. AFOP-8820.2-001, Facility Modification and Construction Work
- e. AFPD-8700.1-001, Organizational & Individual Safety Responsibilities

#### 5. RESPONSIBILITY

- a. The Chief of Facility Engineering & Logistics Management Branch shall ensure a commitment to construction safety by employing systems and processes that ensure the safety of the public, employees, and assets; set a goal of zero safety incidents; and ensure that the Center construction safety specification section, AFRC Safety Requirements, is current. These requirements are located at <a href="https://mars.ndc.nasa.gov/cpx/dsweb/Get/Document-725733/">https://mars.ndc.nasa.gov/cpx/dsweb/Get/Document-725733/</a>. For questions relating to the Center construction safety program and this document, contact the Chief of Facilities Engineering & Logistics Management Branch.
- b. The Facility Engineering & Logistics Management Branch project managers, operations specialists, and leads, who serve as Contracting Officer Representatives (CORs), shall ensure the Center construction safety specification section, AFRC Safety Requirements, is included in all construction contracts, ensure safety requirements are adhered to, ensure construction

documents meet current program requirements and comply with current codes, and approve/disapprove all construction safety related contractor submittals including Accident Prevention Plans (APPs), work plans, and Activity Hazard Analyses (AHAs). For questions relating to individual construction contract safety issues/requirements, contact the assigned Project Manager, Operations Specialist, and/or Lead. The list of assignments can be obtained by contacting the Chief or Deputy Chief of Facilities Engineering & Logistics Management Branch.

- c. The Safety & Mission Assurance Directorate shall conduct independent review to ensure construction documents meet current program requirements and comply with current codes and standards, provide oversight of the construction safety program, and ensure that the Center construction safety specification section, AFRC Safety Requirements, is independently reviewed. For questions relating to safety program requirements, contact the Director of Safety & Mission Assurance.
- d. The Office of Procurement shall ensure the Center construction safety specification section, AFRC Safety Requirements, is included in all construction contracts, ensure that the contractor's APP is approved prior to commencement of construction work on site, and enforce safety requirements.

#### 6. DELEGATION OF AUTHORITY

Armstrong Flight Research Center Policy Directive (AFPD)-8700.1-001, Organizational & Individual Safety Responsibilities delegates responsibility for assigned construction safety to Construction Project Managers.

### 7. MEASUREMENT/VERIFICATION

Refer to AFOP-8820.2-001, Facility Modification and Construction Work.

#### 8. CANCELLATION

AFPD-8820.2-001A-3, Construction Safety, dated September 1, 2015

/s/David D. McBride, Center Director



**DISTRIBUTION:** Approved for release via the Document Library.

Public distribution is unlimited.

# **Attachment A: Acronyms**

AFOP Armstrong Flight Research Center Operational Procedure

AFPD Armstrong Flight Research Center Policy Directive

AFRC Armstrong Flight Research Center

AHA Activity Hazard Analysis

APP Accident Prevention Plan

CFR Code of Federal Regulations

COR Contracting Officer Representatives

NASA National Aeronautics and Space Administration

NPD NASA Policy Directive

NPR NASA Procedural Requirement

STD Standard

# **Attachment B, Requirement Verification Matrix**

PARAGRAPH	REQUIREMENT	COMPLIANT	NON-COMPLIANT
5, a	The Chief of Facility Engineering & Logistics Management Branch shall ensure a commitment to construction safety by employing systems and processes that ensure the safety of the public, employees, and assets; set a goal of zero safety incidents; and ensure that the Center construction safety specification section, AFRC Safety Requirements, is current.		
5, b	The Facility Engineering & Logistics Management Branch project managers, operations specialists, and leads, who serve as Contracting Officer Representatives (CORs), shall ensure the Center construction safety specification section, AFRC Safety Requirements, is included in all construction contracts, ensure safety requirements are adhered to, ensure construction documents meet current program requirements and comply with current codes, and approve/disapprove all construction safety related contractor submittals including Accident Prevention Plans (APPs), work plans, and Activity Hazard Analyses (AHAs).		
5, c	The Safety & Mission Assurance Directorate shall conduct independent review to ensure construction documents meet current program requirements and comply with current codes and standards, provide oversight of the construction safety program, and ensure that the Center construction safety specification section, AFRC Safety Requirements, is independently reviewed.		
5, d	e. The Office of Procurement shall ensure the Center construction safety specification section, AFRC Safety Requirements, is included in all construction contracts, ensure that the contractor's APP is approved		

prior to commencement of	
construction work on site, and	
enforce safety requirements.	

# **Document History Log**

This page is for informational purposes and does not have to be retained with the document.

# Baseline, 06-15-10

# Admin Change Baseline-1, 08-02-10

Formatted to comply with Agency standards. The content did not change.

# Admin Change Baseline-2, 10-08-10

 Pages 1, 4: Moved documents not cited in DPD from Applicable Documents section to Reference Documents in Attachment B

# Admin Change Baseline-3, 03-08-12

• Added missing Attachment A to document.

# Admin Change Baseline-4, 04-30-14

- Updated to reflect name change of Dryden to Armstrong.
- Replaced Attachment A.

## Admin Change Baseline-5, 05-05-14

- Attachment A:
  - Updated the note preceeding the attachment.
  - Removed extra page.

### Revision A, 08-18-15

- Throughout: Changed alluses of "shall" to "will".
- Added Safety Office review and comment requirement to match NPR 8820.2.
- Removed former attachment A, Armstrong Safety Requirements, and inserted link to the document.
- Moved measurement description to DCP-F-001.

## Revision A-1, 06-27-17

- Admin change
- Revision A to Revision A-1
- DPD-8820.2-001 renumbered in accordance with Center instruction.

#### Revision A-2, 06-05-18

- Admin change
- Updated document numbers, organizational codes, and organizational titles to new designations
- Replaced "a. Refer to DCP-F-001" from Section 7. MEASUREMENTS, with "None."

## Revision A-3, 06-08-18

- Admin change
- Updated organizational designations
- Replaced "a. Refer to DCP-F-001" from Section 7. MEASUREMENTS, with "AFOP-8820.1-001."

### Revision B, 10-06-20

Updated sections throughout.

# Admin Change B-1, 06-10-21

• Added Verification Matrix