

Langley Policy Directive

LAPD 1700.2 U-1 Effective Date: March 6, 2017 Expiration Date: March 31, 2022

# Subject: Safety Assignments and Responsibilities

**Responsible Office: Safety and Mission Assurance Office** 

## 1. POLICY

This policy directive sets forth organizational and functional safety assignments and specifies the authorities and responsibilities of each.

## 2. APPLICABILITY

This directive is applicable to all Government, contractor, or other organization employees at LaRC, in accordance with the terms expressed in their respective agreements, joint operating procedures, or contracts with LaRC.

### 3. AUTHORITY

- a. NPD 1800.2, NASA Occupational Health Program
- b. NPD 8700.1, NASA Policy for Safety and Mission Success
- c. 29 CFR 1960, Basic Program Elements for Federal Employee Occupational Safety and Health Programs and Related Matters.

### 4. APPLICABLE DOCUMENTS

- a. NASA STD 8719.11, Safety Standard for Fire Protection
- b. NPR 8715.3C, NASA General Safety Program Requirements
- c. LAPD 1700.1, Safety Program
- d. LPR 1046.1, Emergency Management Plan (EMP)
- e. LPR 1710.11, Fire Protection Program
- f. LPR 1710.40, Langley Research Center Pressure Systems Handbook
- g. LPR 1710.41, Langley Research Center Standard for the Evaluation of Socket and Branch Connection Welds
- h. LPR 1710.42, Safety Program for the Maintenance of Ground-Based Pressure Vessels and Pressurized Systems
- i. LPR 1740.6, Personnel Safety Certification
- j. LMS-CP-4760, Reporting Injuries, Illnesses, and Compensation Claims
- k. LMS-CP-8621, Reporting, Investigating, and Recordkeeping for Mishaps, Close Calls, and Previously Unidentified Serious Workplace Hazards
- I. Langley Form (LF) 1, Appointment of Facility Coordinator(s)/Facility Safety Head(s) (FC/FSH)

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- m. LF 243, Appointment of Facility Environmental Coordinator(s) (FEC)
- n. LF 260, Orientation Survey for Facility Safety Heads or Facility Coordinators
- o. LF 261, Documentation Review for Facility Safety Heads (FSH) and Facility Coordinators (FC)

### 5. **RESPONSIBILITY**

- a. Center Director is responsible for:
  - (1) Providing a safe and healthful workplace environment for all Center employees (on-site or off-site)
  - (2) Delegating the implementation of the safety program to the Director of Safety and Mission Assurance Office (SMAO)
- b. Safety & Mission Assurance Office Director is responsible for:
  - (1) Serving as the LaRC focal point for safety resources planning.
  - (2) Developing the Center safety program with the Center Director, Organizational Directors, and Safety Manager.
  - (3) Working with Organizational Directors to provide the coordination and implementation of the safety program.
  - (4) Providing the LaRC safety point of contact between NASA Headquarters, other NASA installations, other Government agencies, and industry. This includes safety-reporting requirements placed on the Center.
  - (5) Providing an individual to serve as the Center Safety Manager.
  - (6) Providing an individual to serve as the Center Emergency Manager.
  - (7) Providing an individual to serve as the Center Authority Having Jurisdiction (AHJ)/LaRC Fire Chief
  - (8) Maintaining LaRC's medical services.
  - (9) Providing an individual to serve as LaRC's Occupational Health Officer (OHO).
- c. Organizational Directors are responsible for:
  - (1) Providing a safe and healthful workplace environment for all their organizational employees, civil servants and contractors (on-site or off-site), by ensuring all facilities occupied and operated are safe for occupancy and are maintained properly, and that activities (e.g., research operations, etc.) are conducted in a safe manner.
  - (2) Ensuring their direct managers/supervisors are providing a safe and healthful workplace to their employees and any safety concern or issues are properly addressed.
  - (3) Assigning a Facility Safety Head (FSH), a Facility Coordinator (FC), and a Facility Environmental Coordinator (FEC) to their facilities by submitting an LF 1 and an LF 243.

- d. All Managers/Supervisors are responsible for:
  - (1) Ensuring the safety of the employees who report directly to them and of all other personnel (contractors and visitors) in their areas of responsibility.
  - (2) Ensuring their direct employees obtain the appropriate safety training and safety certifications required to perform their jobs.
  - (3) Ensuring all FSHs, FCs, and FECs who report directly to them complete the training requirements as identified and instructed on LPR 1740.6.
  - (4) Ensuring all FSHs, FCs, and FECs who report directly to them perform their duties as assigned in all the applicable LAPDs and LPRs.
  - (5) Ensuring their direct employees perform hazardous activities in accordance with all applicable LAPDs and LPRs.
  - (6) Reporting and investigating any injury/illness incurred by a direct employee in accordance with LMS-CP-4760 and LMS-CP-8621.
  - (7) Resolving any safety concern within their areas of responsibility
  - (8) Ensuring monthly safety inspections of areas occupied by their direct employees are conducted by the FSH.
  - (9) Conducting monthly safety meetings or activities for their areas of responsibility and entering them on the Safety Office website. Office work areas require annual safety meetings, while industrial work areas (shops, laboratories, tunnels, etc.) require monthly safety meetings.
  - (10) Working with their facility's FSH, FC, FEC, and the SFAB to ensure operations, maintenance and modifications are conducted in a safe manner and in accordance with applicable LAPDs and LPRs.
- e. Principal and Alternate FSHs are responsible for:
  - (1) Acting as agents of their Organizational Director/Managers/Supervisors and the SFAB to ensure the safety of their assigned facility(ies) by providing oversight of facility day-to-day operations, maintenance, and modifications.
  - (2) Completing the training requirements as identified in LPR 1740.6.
  - (3) Ensuring all operations in their assigned facility(ies) are in compliance with all applicable LAPDs and LPRs.
  - (4) Ensuring modifications of their assigned facility(ies) are performed in accordance with all applicable LAPDs and LPRs.
  - (5) Resolving facility-related safety concerns brought to their attention by a Manager, Supervisor, FEC, the SFAB, or any other Center employee, facility or organization.
  - (6) Bringing to the attention of the appropriate Manager/Supervisor any safety concern associated with an employee performing work in their assigned facility(ies).

- (7) Keeping their Organizational Director, Managers, and Supervisors abreast of safety Issues that need their attention.
- (8) Provide their emergency contact information (office, home and cellular phone) to the SFAB to be used in case of an emergency in their facility(ies).
- (9) Provide support to the Center Emergency Management & Responders regarding any emergency situation in their facility(ies).

Note: These FSH roles may be held by a contractor employee upon approval from the SFAB and the employee's Contract Manager.

- f. Principal and Alternate FCs are responsible for:
  - (1) Acting as agents of their Organizational Director/Managers/Supervisors and the Center Operations Directorate (COD) to ensure the safe and successful operation of their assigned facility(ies) by providing oversight of the day-today operations, maintenance, and modifications.
  - (2) The Facility Coordinator shall be involved in all aspects of day-to-day operations of the facility, including occupants' relations, maintenance and repair, security, janitorial services, landscaping, snow removal, etc.
  - (3) Completing the training requirements as identified in LPR 1740.6.
  - (4) Ensuring proper maintenance and repairs are performed in their assigned facility(ies).
  - (5) Coordinating activities (e.g., modifications, repairs, utility interruptions, etc.) conducted in their assigned facility(ies) with other FCs and LaRC organizations or facilities to ensure safety throughout the Center.
  - (6) Working with their respective FSH and FEC to ensure all operations in their assigned facility(ies) are in compliance with all applicable LAPDs and LPRs.
  - (7) Working with their respective FSH and FEC to ensure all modifications of their assigned facility(ies) are performed in accordance with all applicable LAPDs and LPRs.
  - (8) Working with their respective FSH to resolve facility-related safety concerns brought to their attention by a Manager/Supervisor, the SFAB, or any other Center employee, facility, or organization.
  - Bringing to the attention of their respective FSH any safety concern associated with an employee performing work in their assigned facility(ies). Stop work on any unsafe task/job
  - (10) Provide their emergency contact information (office, home, and cellular phone) to the SFAB to be used in case of emergency in their facility(ies).
  - (11) Keeping their Organizational Directors, Managers, and Supervisors abreast of facility and/or safety issues that need their attention.

Note: These FC roles may be held by a contractor employee upon approval from the SFAB and the employee's Contract Manager.

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- g. Branch Head, SFAB, is responsible for:
  - (1) Functioning as the LaRC Safety Manager.
  - (2) Reviewing and approving requests submitted by Center personnel (civil servants and contractors), and subcontractors prior to performing work involving the addition, deletion, upgrade or modification of facilities, systems, or equipment.
  - (3) Maintaining a list of SFAB point-of-contacts and Principal and Alternate FSHs and FCs.
  - (4) Providing assistance to Organizational Directors, Managers, and Supervisors, FSHs, and FCs in their safety duties and responsibilities.
  - (5) Formulating, implementing, and overseeing of LaRC occupational safety and health and facility assurance policies, LAPDs and LPRs, to ensure compliance with Agency, Occupational Safety and Health Administration (OSHA) and other applicable regulations and standards..
  - (6) Providing a member for each project review meeting and Executive Safety Council (ESC) safety committees. This member may be a civil servant or a contractor as circumstances warrant.
  - (7) Providing occupational safety and health services for civil service employees, including a safety training/certification program.
  - (8) Maintaining and reviewing safety records and metrics, as applicable.
  - (9) Assisting Contracting Officers in determining the adequacy of contractors' safety programs, including off-site programs.
  - (10) Serving as the Center's interface with OSHA in maintaining the Center as an OSHA Voluntary Protection Program (VPP) STAR site.
  - (11) Providing programmatic oversight of LaRC's safety and facility assurance program as delineated in applicable LAPDs, LPRs, Agency, OSHA, and other applicable regulations and standards.
  - (12) Ensuring Monthly Safety Inspections and Annual Safety audits are conducted per OSHA and NPR 8715.3C.
  - (13) Providing Center safety status to Senior Management.
- h. Center Operations Directorate (COD) is responsible for:

Providing a NASA Langley Duty Officer.

- i. NASA Langley Duty Officer is responsible for:
  - Serving as the official Center point-of-contact for operational and maintenance support after normal working hours, including evenings, weekends, and holidays.
  - (2) Responding to requests for assistance, monitoring conditions at the Center, equipment alarms and security systems.
  - (3) Responding to whenever a safety problem arises after normal duty hours.

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- (4) Immediately notifying the LaRC Safety Manager of any after hour safety problems.
- (5) Adhering to the duties prescribed in the LaRC Duty Officer's Handbook, an Appendix to the Center Maintenance, Operations, and Engineering Contract (CMOE).
- (6) Serving as the Point of Contact for communications from Langley Air Force and the Center utility providers.
- j. Research Services Directorate is responsible for:
  - (1) Providing an individual to serve as LaRC's Aviation Safety Officer (ASO).
  - (2) Providing an individual to serve as LaRC's Range Safety Officer (RSO).
- k. All LaRC employees (civil servant and contractor) are responsible for:
  - (1) Ensuring a safe and healthful workplace.
  - (2) Reporting and stopping any unsafe condition or work practice that presents imminent danger to personnel or equipment/property.
  - (3) Notifying a line Manager/Supervisor or the Safety Manager of any hazardous condition that may cause or result in employee injury/illness or that may cause equipment and/or property damage without fear of disciplinary action or any form of retaliation.
- I. Critical Center Safety Positions

The following positions are Center-unique or mandated by NASA or Industry standards/requirements. The positions and the proposed individuals to fill them will be submitted to the Center Director for approval through the Secretary of the Executive Safety Council by the individuals' Organizational Directors (in accordance with appendix A).

- (1) The LaRC Fire Chief is the Center Authority Having Jurisdiction and is responsible for:
  - (a) Ensuring compliance for matters involving compliance with safety-related portions of regulations in accordance with LAPD 1700.1, including current building codes, National Fire Protection Association regulations, Life Safety Codes, American Society of Mechanical Engineers elevator codes, NASA Pyrotechnics and Explosives documents, and other related NASA-specific criteria.
  - (b) Verifying the Center's fire protection and detection system design, installation, and maintenance; life safety; fire prevention; elevators; pyrotechnics, explosives, and propellants; fire suppression; incident command; water supply (as it pertains to fire suppression); emergency vehicle access; hazardous material storage; and areas of rescue assistance for the disabled.
  - (c) Seeking to secure compliance to the extent practicable with all nationally recognized codes and standards, state and local regulations, industry safe practices, the Occupational Safety and Health Administration, the

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Underwriters Laboratories, the Factory Mutual Research Corporation, the National Fire Protection Association, NASA specific regulations, as well as other applicable requirements.

- (d) Rendering interpretations of the above mentioned regulations, making decisions regarding their applicability and equivalencies, and mediating disputes that arise when technically justified.
- (e) Ensuring compliance for matters involving compliance with safety-related portions of regulations in accordance with LAPD 1700.1, including National Electric Code, National Fire Protection Association (70E), as well as other related NASA-specific criteria.

Providing programmatic oversight of Inspection, Testing, and Maintenance (IT&M) activities involving fire protection, fire alarm and detection systems, emergency communication systems, Center evacuation alarm system, the Emergency Dispatch Office, and the Emergency Operations Center in accordance with LPR 1710.11 and NASA STD 8719.11.

- (2) Emergency Manager is responsible for:
  - (a) Providing emergency response activities, including, but not limited to, those involving fire suppression, emergency medical response, rescue, weapons of mass destruction, hazardous materials response and mitigation, and inclement weather.
  - (b) The implementation of LPR 1046.1.
  - (c) Providing Center status to Senior Management regarding an emergency.
  - (d) Appointing a Continuity of Operations Plan (COOP) Coordinator for the Center.
- (3) Standard Practice Engineers are responsible for:

The Standard Practice Engineers (SPEs) provide engineering consulting services for design, procurement, field, and service operations to ensure code compliance and standard practices; serve as a point of contact for technical questions, unique and complex applications, and facility breakdowns; provide guidance and options to accomplish work; transfer lessons learned; and promote good engineering practices. SPE areas and their function are as follows:

- (a) The Pressure Systems SPE serves as the Center expert and final authority on the application of national consensus standards and LaRC requirements concerning ground-based pressure systems. He/she is responsible for reviewing all new designs and all plans for modifications or repairs to LaRC pressure systems.
- (b) The Electrical Systems SPE serves as the Center authority for high-energy electrical systems, including the LaRC's power distribution system. He/she is responsible for reviewing project activities affecting new and existing electrical systems for compliance with applicable codes, NASA policies and procedural requirements, and standard practices. He/she interprets electrical safety

requirements as needed for Center facilities and personnel to ensure compliance with LPR 1710.6 and LPR 1710.10.

- (c) The Mechanical Systems SPE is the Center authority for high-energy mechanical systems. He/she is responsible for reviewing new designs, modifications, and repairs of high-energy mechanisms for compliance with national codes, NASA policies and procedural requirements, and standard practices.
- (d) The Facility Automation Systems SPE is the Center authority for the review of facility automation systems and software. He/she is responsible for reviewing project activities affecting new and existing systems for compliance with national codes, NASA policy and procedural requirements, and standard practices.
- (e) The Welding SPE is the Center authority for welding operations. In concert with the Welding SPE for Facilities, he/she is responsible for reviewing new designs, modifications, and repairs for compliance with national codes, NASA policies and procedural requirements, and standard practices applicable to welding. The Welding SPE shall verify that acceptable quality welding is always performed at Langley Research Center. Duties include:
  - i. Auditing all welding operations being performed for NASA-Langley Research Center.
  - ii. Reviewing and approving the welding documentation requirements for contracts.
  - iii. Approving procedure qualification records, weld procedure specifications and welder qualifications prior to the start of welding operations.
  - iv. Analyzing weld joint configurations.
  - v. Review of drawings containing welding requirements for correctness and applicability of the correct welding specifications.
  - vi. Determining the materials for which welding procedures should be developed, and also establishing the priorities for weld procedure development.
  - vii. Providing direction on improving welding practices, including consulting with various organizations on the purchase of any new welding equipment.
- (f) The Welding SPE for Facilities is the Center authority for welding operations associated with facility systems. He/she is responsible for reviewing new designs, modifications, and repairs for compliance with national codes, NASA policies and procedural requirements, and standard practices applicable to welding. He/she performs the duties of the Welding SPE as they apply to facility systems. He/she also serves as an alternate to the Welding SPE.
- (g) The Wind Tunnel Models SPE is the resident expert for the review of wind tunnel model systems design and analysis. He/she serves as the point of

contact to assist facilities in interpreting the requirements for compliance with LPR 1710.15.

- (h) Pyrotechnic SPE is responsible for providing support to the Center Programs and Projects utilizing explosives, pyrotechnics and propulsion by:
  - i. Reviewing hardware specifications.
  - ii. Assisting in the design of explosive, pyrotechnic, and propulsion systems and procedures.
  - iii. Reviewing and approving procedures requiring explosive, pyrotechnics and/or propulsion engineering.
  - iv. Coordinating with the Explosives Safety Officer (ESO) to ensure procedures are in compliance with approved Center Pyrotechnics and Explosives Requirements.
  - v. Reviewing active Explosives Safety Permits annually with Potentially Hazardous Materials Committee (PHMC) Chair, ESO, AHJ, and FSH.
  - vi. Presenting to the PHMC an annual status report regarding projects and programs utilizing explosives, pyrotechnic, and propulsion systems.
- (i) Space/Flight Systems Pressure Systems SPE serves as the Center expert and final authority on the application of Agency and Aerospace Industry consensus standards and LaRC requirements concerning flight-grade pressure systems. He/she is responsible for reviewing all new designs and all plans for modifications or repairs to LaRC space/aviation pressure systems.
- (j) Structural/Civil SPE serves as the Center expert and final authority on the application of Agency and Industry consensus standards and LaRC requirements concerning structural systems. He/she is responsible for reviewing all new designs and all plans for modifications or repairs to LaRC facilities/structures systems.
- (k) The Metrology and Calibration Program SPE is the Center authority on metrology, calibration, and measurement assurance related matters. He/she provides specialized expertise to NASA HQ, NASA Centers and other government agencies in designing and monitoring policies, strategies, and programs in metrology. He/she is responsible for advising/reviewing project and facility activities for compliance with metrology and calibration requirements of NPD 8730.1, implementation of standard practices, and ensuring metrology-related contracts are compliant with ANSI/NCSL Z540.1-1994 or ANSI/ISO/IEC 1725: 2000.
- (4) System Managers are responsible for:
  - (a) Lifting Device and Equipment Manager implements and coordinates the Center's lifting devices and equipment program in accordance with NASA STD 8719.9; "Standard for Lifting Devices and Equipment."
  - (b) Pressure Systems Manager implements and coordinates the Center's pressure systems recertification program in accordance with NPD 8710.5 and

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NASA STD 8719.17, "NASA Requirements for Ground-Based Pressure Vessels and Pressurized Systems."

- (c) Fall Protection Systems Manager implements and coordinates the Center's fall protection program in accordance with NPR 8715.3.
- (d) Radio Frequency (RF) Manager implements and coordinates the Center's Electromagnetic (EM) Spectrum Management program in accordance with NPD 2750.5.
- (5) Safety Officers
  - (a) Radiation Safety Officer is responsible for:
    - i. Meeting the Nuclear Regulatory Commission requirements for a Radiation Safety Officer.
    - ii. Serving as the Center's Ionizing and Non-Ionizing Radiation Safety Officer.
    - iii. Implementing and coordinating the Center's Ionizing and Non-Ionizing safety program in accordance with the Department of Labor, OSHA Title 29 Codes of Federal Regulations (CFR), Part 1910.1096 and NPR 8715.3.

(b) Occupational Health Officer is responsible for:

- i. Ensuring initial first aid treatment/service/referral is available as medically required for all individuals injured on LaRC.
- ii. Ensuring job-related physical protocols and examinations for civil service employees are provided.
- iii. Providing medical and injury/illness data to the SFAB as described in LMS-CP-4760.
- iv. Ensuring a medical individual serves as a member of the Institutional Review Board.
- v. Providing occupational health status reports to Senior Management.
- (c) Aviation Safety Officer (ASO) is responsible for:
  - i. Providing technical guidance on safety aspects of flight programs.
  - ii. Maintaining surveillance of aviation activities for conformance with prescribed directives, standards, and procedures, and proposing corrective action when required.
- iii. Reviewing aviation training and assessing qualifications to ensure safety of operations.
- iv. Serving as a member of the Airworthiness and Safety Review Board.
- v. Providing aviation safety status reports to Senior Management.
- vi. Implementing and coordinating the Center's aviation safety program in accordance with NPR 8715.3.

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- (d) Explosives Safety Officer shall:
- i. Meet the following criteria:
  - a) Five years' of experience working hands-on with explosive materials and devices.
  - b) Or a degree in an explosives-related field plus 24 months of experience.
  - c) DOT HazMat Employee certified in accordance with 49 CFR 172.700 172.704, including explosives-specific training.
  - d) Ammunition & Explosives Safety certified.
  - e) NASA Basic Explosives Training.
- ii. Be responsible for implementing and coordinating the Center's explosives safety program in accordance with NPR 8715.3, NASA-STD-8719.12 and LPR 1710.7.
- (e) Range Safety Officer is responsible for implementing and coordinating the Center's Range Flight Safety program in accordance with NPR 8715.5.

#### 6. DELEGATION OF AUTHORITY

None

#### 7. MEASUREMENT/VERIFICATION

None

#### 8. CANCELLATION

LAPD 1700.2, dated September 6, 2011.

/s/ Clayton P. Turner March 6, 2017

Center Deputy Director

#### **Distribution:**

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### **APPENDIX A: Safety Functions and Directorate Assignments**

Assignment	Naming Directorate
Authority Having Jurisdiction (AHJ)	Safety & Mission Assurance Office
Occupational Health Officer (OHO)	Safety & Mission Assurance Office
SM, Fall Protection Manager	Safety & Mission Assurance Office
SM, Lifting Device & Equipment Manager	Center Operations Directorate
SM, Pressure System Manager	Center Operations Directorate
SM, RF Manager	Engineering Directorate
SO, Aviation Safety Officer	Research Services Directorate
SO, Explosives Safety Officer	Safety & Mission Assurance Office
SO, Radiation Safety Officer (Ionizing & Non- Ionizing)	Safety & Mission Assurance Office
SO, Range Safety Officer	Research Services Directorate
SPE, Electrical Systems	Center Operations Directorate
SPE, Facility Automation Systems	Center Operations Directorate
SPE, Mechanical Systems	Center Operations Directorate
SPE, Metrology and Calibration Program	Research Directorate
SPE, Pressure Systems	Center Operations Directorate
SPE, Project Pyrotechnics & Propulsion	Engineering Directorate
SPE, Space/Flight Pressure Systems	Engineering Directorate
SPE, Structural/Civil	Center Operations Directorate
SPE, Welding	Safety & Mission Assurance Office
SPE, Welding for Facilities	Center Operations Directorate
SPE, Wind Tunnel Models	Research Directorate