NASA Procedural Requirements

NPR 8715.3E
Effective Date: December 16, 2021
Expiration Date: December 21, 2026

COMPLIANCE IS MANDATORY FOR NASA EMPLOYEES

Requesting Relief from Agency Mission Assurance Requirements

Responsible Office: Office of Safety and Mission Assurance

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Preface

P.1 Purpose

a. This directive defines NASA procedural requirements for requesting relief from Agency mission assurance requirements and the associated roles and responsibilities.

b. The procedural requirements for requesting relief from Agency institutional safety requirements is provided in NPR 8715.1, NASA Safety and Health Programs.

c. This directive has been significantly updated from the initial release of revision D. The procedural requirements for requesting relief from Agency mission assurance requirements, previously contained in Section 1.13, is the only content that remains. References in other documents to Section 1.13 of earlier versions of this NPR should be interpreted as references to Chapter 1 in this revision.

(1) NPR 8715.1 provides requirements (1) for protecting the public, NASA workforce, and high-value assets from all hazards associated with NASA activities and operations created or controlled by NASA, and (2) for protecting NASA civil servants while performing official NASA duties from any hazard, regardless of location. Content related to institutional safety previously addressed in this directive that is now in NPR 8715.1 includes public safety, operational safety, aviation safety, fire safety, safety training, and facility safety.

(2) This change cancels most requirements previously contained in chapter 1, Programmatic Safety Requirements. NPR 8705.2, Human-Rating Requirements for Space Systems, and NPR 8705.4, Risk Classification for NASA Payloads, provide requirements for mission success of crewed and robotic space flight missions respectively.

(3) This change cancels procedural requirements previously contained in chapter 2, System Safety. Accepted standards and guidance for the conduct of system safety include NASA/SP-2010-580, NASA System Safety Handbook, Volume 1: System Safety Framework and Concepts for Implementation, NASA/SP-2014-612, NASA System Safety Handbook Volume 2: System Safety Concepts, Guidelines, and Implementation Examples, MIL-STD-882, Standard Practice for Safety Systems, and ISO 14620-1:2018, Space systems - Safety requirements - Part 1: System Safety. Technical Authorities may accept other standards for use by programs and projects.

(4) Chapter 6, Nuclear Safety for Launching of Radioactive Materials, in earlier versions of this directive was replaced by NPR 8715.26, Nuclear Flight Safety.

P.2 Applicability

a. This directive is applicable to NASA Headquarters and NASA Centers, including Component Facilities and Technical and Service Support Centers.

b. This directive is applicable to NASA missions and NASA controlled activities in support of NASA missions. 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.

c. In this directive, all document citations are assumed to be the latest version unless otherwise noted.

P.3 Authority

NPD 8700.1, NASA Policy for Safety and Mission Success.

P.4 Applicable Documents and Forms

None.

P.5 Measurement/Verification

Compliance with the requirements contained in this directive is monitored by the Mission Directorates, by the program and project Safety and Mission Assurance Technical Authorities (TA), and by the NASA Office of Safety and Mission Assurance. Compliance may also be verified as part of selected life cycle reviews and by assessments, reviews, and audits of the requirements and processes defined within this directive.

P.6 Cancellation

NPR 8715.3D, NASA General Safety Program Requirements, dated December 16, 2021.

Chapter 1. Requesting Relief from Agency Mission Assurance Requirements

1.1 Overview of the NASA Safety Program

1.1.1 It is Agency policy that all requirements are complied with unless relief is formally granted. Requesting relief from requirements is both an expected and accepted part of establishing proper requirements. Documented authorizations of relief are frequently referred to as either waivers or deviations.

1.1.2 NASA cannot authorize relief from external requirements, such as Federal, state, or local regulations, voluntary consensus standards incorporated by reference in Federal regulations, or Requests for relief from a Federal, state, or local safety regulation are reviewed by the NASA Headquarters Office of Safety and Mission Assurance and submitted to the appropriate Federal, state, or local agency for approval.

1.2 Roles and Responsibilities

1.2.1 The Chief, SMA is the Approving Authority for relief from Agency mission assurance requirements. The Approving Authority is the person or organization responsible for oversight of the requirement and authorized to grant relief from the requirement.

1.2.2 The Chief, SMA delegates the approving authority of Agency Mission Assurance requirements imposed on programs and projects, including the acceptance of alternate technical standards, to the program or project SMA TA except for the following areas for which the Chief, SMA retains this authority:

a. Orbital debris mitigation, including requirements in NPR 8715.6, NASA Procedural Requirements for Limiting Orbital Debris and Evaluating the Meteoroid and Orbital Debris Environments, and standards incorporated by reference therein.

b. Planetary protection, including requirements in NPR 8715.24, Planetary Protection Provisions for Robotic Extraterrestrial Missions, NID 8715.129, Biological Planetary Protection for Human Missions to Mars, and standards used to implement those requirements as agreed to between the program or project and OSMA.

c. Nuclear flight safety, including requirements in NPR 8715.26, Nuclear Flight Safety, and standards used to implement those requirements as agreed to between the program or project and OSMA.

d. Human-rating spaceflight systems, including requirements in NPR 8705.2, excluding standards incorporated by reference therein.

e. Mission risk classification, including requirements in NPR 8705.4, excluding standards incorporated by reference therein.

f. Mishap investigations, including requirements in NPR 8621.1, NASA Procedural Requirements for Mishap and Close Call Reporting, Investigating, and Recordkeeping.

g. NASA interim directives that replace or augment the documents cited above.

1.2.3 The Chief, SMA consults with the Associate Administrator, Administrator, and other

stakeholders as appropriate when authorizing relief from requirements in those areas.

1.2.4 The Mission Directorate Associate Administrator will submit the request when the Chief, SMA is the Approving Authority.

1.3 Requesting Relief from Agency Mission Assurance Requirements

1.3.1 The requestor shall include the following information in the request:

a. The requirement(s) for which relief is being sought.

b. A description of the request for relief (i.e., the nature of the proposed departure from the requirement).

c. The reasons and justification for the relief, why it is not possible, or desirable, to comply with the requirement.

d. The resulting change in risk to the public, workforce, high-value property, and orbital and planetary environments.

e. The resulting change in risk to crew safety and mission success.

f. Confirmation the relief does not conflict with applicable Federal statutes or regulations, or with Agency policy or higher-level requirement.

g. When and whether compliance will be achieved.

h. Alternate actions to be taken for managing the risk.

i. Findings and recommendations from the program or project SMA TA regarding the technical merits of the case.

j. For matters involving human safety risk, formal agreement to assume the risk from the actual risk taker(s) (or official spokesperson[s] and applicable supervisory chain).

1.3.2 Relief is not granted until the request has been approved and any increase in risk has been accepted by the appropriate authorities based on the risk impacts.

1.3.3 NPR 8000.4 contains requirements for decisions to accept risk to safety and mission success.

Appendix A. Acronyms

NASA National Aeronautics and Space Administration

NPD NASA Policy Directive

NPR NASA Procedural Requirements

OSMA Office of Safety and Mission Assurance

OSTP Office of Science and Technology Policy

SMA Safety and Mission Assurance

TA Technical Authority

Appendix B. References

B.1 NPD 1000.0, NASA Governance and Strategic Management Handbook.

B.2 NPD 1000.3, The NASA Organization.

B.3 NPR 1400.1, NASA Directives and Charters Procedural Requirements.

B.4 NPR 1441.1, NASA Records Management Program Requirements.

B.5 NPR 7120.5, NASA Space Flight Program and Project Management Requirements.

B.6 NPR 7120.8, NASA Research and Technology Program and Project Management Requirements.

B.7 NPR 8000.4, Agency Risk Management Procedural Requirements.

B.8 NPR 8621.1, NASA Procedural Requirements for Mishap and Close Call Reporting, Investigating, and Recordkeeping.

B.9 NPR 8705.2, Human-Rating Requirements for Space Systems.

B.10 NPR 8705.4, Risk Classification for NASA Payloads.

B.11 NPR 8715.1, NASA Safety and Health Programs.;

B.12 NPR 8715.6, NASA Procedural Requirements for Limiting Orbital Debris and Evaluating the Meteoroid and Orbital Debris Environments.

B.13 NPR 8715.24, Planetary Protection Provisions for Robotic Extraterrestrial Missions.

B.14 NPR 8715.26, Nuclear Flight Safety

B.15 NID 8715.129, Biological Planetary Protection for Human Missions to Mars.

B.16 NASA-STD-8719.14, Process for Limiting Orbital Debris.

B.17 NASA-STD-8719.27, Implementing Planetary Protection Requirements for Space Flight.

B.18 NASA-HDBK-8715.26, Information and Best Practices Related to NASA Nuclear Flight Safety for Space Flights Involving Space Nuclear Systems.

B.19 NASA/SP-2010-580, NASA System Safety Handbook, Volume 1: System Safety Framework and Concepts for Implementation.

B.20 NASA/SP-2014-612, NASA System Safety Handbook Volume 2: System Safety Concepts, Guidelines, and Implementation Examples.

B.21 MIL-STD-882, Standard Practice for Safety Systems.

B.22 ISO 14620-1:2018, Space systems - Safety requirements - Part 1: System safety