Effective Date: May 7, 2018

Expiration Date: May 7, 2023

COMPLIANCE IS MANDATORY

Subject: Verification of Product / Service Conformance to Requirements

Responsible Office: Code QS / System Safety and Mission Assurance

CHANGE LOG

Status [Baseline /Revision /Cancelled]	Document Revision	Date of Change	Description
Baseline	0	05/12/2005	New document (Mark Washington)
Revision	1	09/11/2009	Revalidate document (Koushik Data)
Revision	2	05/07/2018	Removed unnecessary repetition, Added a requirement to perform a residual risk assessment prior to releasing an incompletely verified product for urgent use, Added a requirement for the PRACA manager to monitor and trend product non-acceptance/rejection rates.

POLICY

It is NASA Ames policy to:

- a. Verify that its products and services meet requirements or meet the requirements of this APD before delivery to ARC from an outside organization, from ARC to an outside organization, or from one ARC organization to another ARC organization.
- b. Plan and perform receiving, in-process and final inspections, tests, verification and validation activities, and reviews to verify conformance to requirements.
- c. Verify the conformance of the materials, components, assemblies, software, services, data, and facilities that directly affect the conformance of products and services delivered to or by Ames.
- d. Document and maintain verification methods and acceptance criteria.
- e. Retain records of verification and acceptance in accordance with NPR 1441.1.

APPLICABILITY

- a. This Ames Policy Directive (APD) is applicable to ARC employees and contractors (to the extent specified or referenced in the relevant contracts, grants, or agreements) that deliver and receive products and services within and outside of ARC.
- b. In this directive, all mandatory actions (i.e., requirements) are denoted by statements containing the term "shall." The terms: "may" or "can" denote discretionary privilege or permission, "should" denotes a good practice and is recommended, but not required, "will" denotes expected outcome, and "are/is" denotes descriptive material.
- c. This APD applies to ARC, contractors, grant recipients, and parties to agreements to the extent specified or referenced in the contracts, grants, or agreements.
- d. In this directive, all document citations are assumed to be the latest version unless otherwise noted.
- e. This APR applies to all work (herein referred to as a Project) being led by Ames Research Center including those activities which are not captured under the Program/project designation (ref. NPR 7120.5).
- f. The requirements of this document are applicable to the Project's extant phase as of the effective date of the APR and to phases yet to be completed.
- g. For those activities wherein Ames is partnering with other domestic or foreign Governments, academics, and/or industry partners, the applicable procedural requirements shall be jointly negotiated by the cognizant authorities and delineated in the statement of work or customer agreement for the task. This agreement will establish the hierarchy and reconciliation of the procedural requirements to be followed.
- h. This APR applies to all ARC employees and contractors (to the extent specified in their contract with NASA) who support the above described activities as a member of a technical team or in any other capacity.

AUTHORITY

NPR 8700.1, NASA Policy for Safety and Mission Success.

APPLICABLE DOCUMENTS AND FORMS

- a. NASA-HDBK-8739.18, Procedure Handbook for NASA Program & Project Management of Problems, Non-conformances, and Anomalies
- b. APD 4520.1, Receival and Inspection Reports
- c. APR 8000.4, Risk Management
- d. APR 8735.1, Control of Nonconforming Products and Services

RESPONSIBILITY

- a. Responsible Managers have the responsibility to:
- (1) Ensure activities that define verification methods, acceptance criteria, inspector qualification/responsibilities and necessary records are planned for product and service acquisition and development.
- (2) Ensure verification activities are implemented as planned:
- (a) Acquisitions (e.g., Customer-supplied items, purchases, etc.) are to be verified by the purchase initiator as conforming to specified requirements during receiving inspections and tests, or during acceptance at the supplier's facility by Ames representatives:
- (b) These verifications may be tailored based on the criticality of the acquisition to its application, the degree of control exercised during production, and the availability of conformance records from the supplier.
- (c) When delivered to ARC, procurements are to be processed in accordance with APD 4520.1 Receival and Inspection Reports.
- (3) In-process and final verification activities (inspections/tests etc.) are to be recorded and conducted by personnel specifically qualified in accordance with planned methods and acceptance criteria.
- (4) Product/service delivery is not to proceed until all planned inspections, tests, verification and validation activities, and reviews have been satisfactorily completed and recorded including the availability of all associated data and documentation.
- (5) Ensure products/services released for urgent use before completion of verification activities are:
- (6) Suitably identified and recorded as having incomplete verification.
- (7) Not precluded from subsequent completion of planned verification activities due to assembly or including within an assembly etc.
- (8) Approved for premature release by the Responsible Manager, and Systems Safety and Mission Assurance, and, where applicable, by the customer after a residual risk assessment has been performed (the residual risk should be "low" per APR 8000.4).
- (9) Ensure products/services that do not meet documented requirements are handled in accordance with APR 8735.1, Control of Nonconforming Products and Services.
- (10) Ensure records of verification completion status and acceptance status are maintained, including identifying the person(s) who authorized acceptance or delivery of the product/service.
- b. The PRACA Manager has the responsibility to:

Ensure product/service quality levels (e.g., acceptance rates from verification activities as reflected in NCRs) are monitored for overall patterns and trends over time and action is initiated in accordance with APR 1280.1 when improvement opportunities are identified.

DELEGATION OF AUTHORITY

None.

MEASUREMENT/VERIFICATION

Verification of conformance to requirements in this directive are measured through Center and Responsible Organizational management reviews, self-assessments, and subsequent analysis and reports of conformance to requirements, as well as periodic internal audits.

CANCELLATION

APD 8735.3	expired Jul	y 6, 2015.
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/S/

Eugene Tu Director

DISTRIBUTION:

Distribution of this document is controlled by the Center Data Management System (CDMS).

ATTACHMENT A. DEFINITIONS

Nonconformance. Non-fulfillment of a documented requirement.

Responsible Manager. The Line or Project Manager responsible for delivering and/or acquiring a product and/or service for the Center.

Verification. Confirmation that products and services meet requirements.

ATTACHMENT B. ACRONYMS

APD Ames Policy Directive

APR Ames Procedural Requirements

ARC Ames Research Center

HNBK Handbook

NPD NASA Policy Directive

NPR NASA Procedural Requirements