



# Ames Policy Directive

APD 7120.6

Effective Date: October 3, 2018

Expiration Date: October 3, 2023

COMPLIANCE IS MANDATORY

**Subject: Ames Research Center Knowledge Management Policy**

**Responsible Office: D/Office of the Chief Engineer, Ext. 4-4283, M/S 241-20**

### CHANGE LOG

Status [Baseline /Revision /Cancelled]	Document Revision	Date of Change	Description
Baseline	0	10/3/2018	This APD replaces APR 7120.6 due to the cancellation of NPR 7120.6 and the new APD 7120.6, Knowledge Policy on Programs and Projects.

## 1. POLICY

This Ames Research Center Policy Directive (APD) provides direction for compliance with the NPD 7120.6, agency knowledge policy on programs and projects.

In order to support the Center's diverse set of competencies, projects, and facilities, the Center's KM strategy is to implement a combination of centralized and decentralized processes (identified annually) to manage its knowledge so that it is identified, captured, protected, disseminated, and acted on to continuously enable and enhance the Center's mission. For the types of knowledge that have broad applicability such as project lessons learned, Problem Reporting, Analysis, and Corrective Action (PRACA – reference APR 8735 series), and mishap reports and safety alerts a centralized, but not necessarily integrated, process shall be used (reference APR 8715.1). For knowledge that is of a specific and narrow nature such as scholarly, scientific, and technical data, a decentralized process may be used. Knowledge that applies to how the Center performs its work shall be managed via the Center Data Management System (CDMS), which houses the various requirements, processes, and work instructions utilized by all employees to perform their work (reference APR 8700.2). The owner of each knowledge management system or database shall ensure that their system strictly adheres to NASA policy and federal law governing the protection of trade secrets, proprietary information, Personally Identifiable Information (PII), or other sensitive data.

## 2. APPLICABILITY

- a. 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.
- b. This APD applies to ARC, contractors, grant recipients, and parties to agreements to the extent specified or referenced in the contracts, grants, or agreements.
- c. In this directive, all document citations are assumed to be the latest version unless otherwise noted.

## 3. AUTHORITY

- a. NPD 7120.6 Knowledge Policy on Programs and Projects.

#### 4. APPLICABLE DOCUMENTS AND FORMS

- a. NPD 1000.0, NASA Governance and Strategic Management Handbook
- b. NPD 1000.3, The NASA Organization
- c. NPD 7120.4, NASA Engineering and Program/Project Management Policy
- d. NPD 1382.17H, NASA Privacy Policy
- e. NID 1600.55, Sensitive But Unclassified Information
- f. NPR 1382.1A, NASA Privacy Procedural Requirements
- g. NPR 2190.1B, NASA Export Control Program
- h. NPR 2200.2, Requirements for Documentation, Approval, and Dissemination of NASA Scientific and Technical Information
- i. NPR 7120.5, NASA Space Flight Program and Project Management Requirements
- j. NPR 8705.6, Safety and Mission Assurance Audits, Reviews and Assessments
- k. APR 7120.5, Program and Project Management for Space Flight Systems
- l. APR 8700.2, Continuous Improvement Action (CIA)
- m. APR 8715.1, Ames Health & Safety Procedural Requirements
- n. APD 8700.1, Problem, Nonconformance, Preventative and Corrective Action Management Policy

#### 5. RESPONSIBILITY

- a. Office of the Director

(1) The Office of the Director shall appoint the Center's Chief Knowledge Officer (CKO) and ensure KM requirements and activities are supported with adequate resources and embedded within the Center's scientific, engineering, and supporting business practices.

- b. CKO

(1) The CKO shall be responsible for overseeing the planning and execution of the Center's knowledge activities consistent with the strategy outlined below and for supporting the Agency CKO in planning and implementing the Agency's knowledge system. The CKO shall lead an annual exercise to inventory the various KM systems used at the Center and to identify any gaps or needs with respect to KM. In addition, the CKO shall lead or facilitate efforts to address any identified KM gaps.

c. All Directorates shall support the implementation of this Ames Policy Directive (APD) by supporting the CKO's various data calls and KM related committees, working groups, knowledge forums, and lessons learned activities. This includes but is not limited to:

- (1) Identify and capture knowledge critical to NASA's mission; assess gaps in knowledge retention and sharing; and plan measures to address knowledge management gaps, using approaches that may include online tools, search/tag/taxonomy tools, case studies and publications, lessons learned/knowledge processes, knowledge networks, or face-to-face activities.
- (2) Share and respond to annual NASA CKO meeting for the purpose of promoting greater Agency integration and collaboration.
- (3) Actively promote the role of knowledge management agenda.
- (4) Identify resources, capabilities, and infrastructure necessary to support knowledge management in your organization.

- (5) Align knowledge management practices with Agency needs and policies.
  - (6) Ensure coordination with the Office of the Center Chief Information Officer, the Export Administrator, the Office of the Chief Counsel, and other offices, as appropriate, on protecting and managing knowledge consistent with NASA policy, Federal law, and regulations.
- d. Program, Project, Line Managers, and all Center Personnel:
- (1) Actively participate in knowledge- management activities to ensure mission success and the retention of vital information and lessons learned as follows:
    - (a) Assume responsibility for gathering, organizing, and sharing knowledge.
    - (b) Host and attend knowledge-sharing sessions across organizations.
    - (c) Actively participate in knowledge activities in order to learn and contribute knowledge to the shared goal of mission success.
    - (d) Ensure that technical reports, data, or other means used to document knowledge are marked with respect to proprietary or export control restrictions and consistent with guidance set forth for SBU in NID 1600.55 at the time of generating those documents.
  - (2) Notify the CKO when significant KM activities occur (i.e., LL capture meetings, professional paper/presentations, training and development activities, mishap/close call investigations, audit and assessment out briefs).

## **6. DELEGATION OF AUTHORITY**

- a. None

## **7. MEASUREMENT/VERIFICATION**

- a. 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.
- b. Internal assessments through Ames Management System (AMS) audits and assessments in accordance with APR 8700.3, Internal Assessments of the Ames Management System.
- c. External assessments through the Requirement Flow Down and SMA Engineering Design Audits and Assessments (REDAA) and the Quality Audit, Assessment, and Review (QAAR) audits and assessments performed by the NASA Safety Center in accordance with NPR 8705.6, Safety and Mission Assurance (SMA) Audits, Reviews, and Assessments.
- d. All records associated with this APD shall be recorded in accordance with APR 1440.1.

**8. CANCELLATION**

- a. APR 7120.6, Ames Research Center Lessons Learned Collection and Dissemination, dated August 2, 2007.
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Eugene Tu  
Director

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**DISTRIBUTION:**

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

**ATTACHMENT A. DEFINITIONS**

Knowledge Management. a collection of policies, processes, and practices relating to the use of intellectual- and knowledge-based assets in an organization.

Lessons Learned. captured knowledge or understanding gained by experience. A lesson must have a real or assumed impact on operations; be factually and technically correct; identify a design, process, or decision that reduces or eliminates the potential for failures and mishaps, or reinforces a positive result.

## **ATTACHMENT B.      ACRONYMS**

AMS	Ames Management System
AMSWG	Ames Management System Working Group
APD	Ames Policy Directive
APR	Ames Procedural Requirements
CDMS	Center Directives Management System
CKO	Chief Knowledge Officer
COP	Communities of Practice
KM	Knowledge Management
LL	Lessons Learned

Note: An LL is not the appropriate mechanism to report a condition or activity that requires immediate attention. The Center has other mechanisms for this such as Close Call, Mishap, Hazard, and Accident reports. These other mechanisms may be a source for an LL that can be documented in a non-time critical period, after the immediate threat has been addressed.

NPR	NASA Procedural Requirements
QUAAR	Quality Audit, Assessment, and Review
OCE	Office of the Chief Engineer
REDDAA	Requirement Flow Down and SMA Engineering Design Audit and Assessment
SMA	Safety and Mission Assurance
SS&MA	System Safety and Mission Assurance