BY ORDER OF THE COMMANDER
ARNOLD ENGINEERING COMPLEX
(AEDC)

ARNOLD ENGINEERING DEVELOPMENT COMPLEX INSTRUCTION 99-104

30 JUNE 2016

Test And Evaluation

TEST DATA RETENTION

COMPLIANCE WITH THIS PUBLICATION IS MANDATORY

ACCESSIBILITY: Publications and forms are available on the e-Publishing website at **www.e-Publishing.af.mil** for downloading or ordering

RELEASABILITY: There are no releasability restrictions on this publication

---

OPR: AEDC/TST

Certified by: AEDC/TS
(Col Rodney F. Todaro)

Pages: 5

This instruction implements Air Force Policy Directive (AFPD) 99-1, *Test and Evaluation Process*. It extends the guidance in Air Force Instruction (AFI) 99-103, *Capabilities-Based Test and Evaluation* and applies to all Arnold Engineering Development Complex (AEDC) personnel. This instruction describes the data retention guidelines to be used for proper management of test data produced during test operations at AEDC.

Ensure that all records created as a result of processes prescribed in this publication are maintained in accordance with (IAW) Air Force Manual (AFMAN) 33-363, *Management of Records*), and disposed of IAW the Air Force Records Disposition Schedule (RDS) located at **https://www.my.af.mil/afrims/afrims/afrims/rims.cfm**. Refer recommended changes and questions regarding this publication to the Office of Primary Responsibility (OPR) listed above using the AF IMT 847, *Recommendation for Change of Publication;* route AF IMT 847 through the appropriate functional chain of command.

1. Background

1.1. The primary product of Arnold Engineering Development Complex (AEDC) is decision-quality information derived from data produced through the course of test planning, execution, and post-test processing. As the quantity of data produced per test has increased, so has the cost of retaining the data for future use. For this reason, an instruction for managing the long-term retention of data is required. This instruction establishes the guidelines for test data retention used at AEDC as described below.

1.2. The scope of this policy is applicable to test data generated from all AEDC data system(s). This policy does not pertain to the retention of technical reports, only the retention of data. Technical reporting policy and procedures are identified in AEDC Instruction (AEDCOI) 99-10, *Technical Reporting.*

2. Roles and Responsibilities

2.1. **Data Owner**. For externally funded testing, the Data Owner is the external organization committing funds for the work to be completed by AEDC via a Statement of Capability (SOC). For internally funded data collection, the Data Owner is the AEDC organization owning the facility or system from which data has been collected for technology development, system upgrade/checkout, and/or return-to-service operations.

2.2. **Test Manager**. The Test Manager, as defined in AEDCI 99-100 *Test and Evaluation Project Management,* is responsible for identifying the Data Custodian and Test Owner in writing and ensures this information is appropriately distributed. Test Manager shall inform Test Customer of the Data Retention Policy prior to testing. The Data Retention Policy will be referenced by the SOC.

2.3. **Data Manager**. The Data Manager is the organization responsible for data usage during and after collection. Data Managers are responsible for coordinating the disposition of the data they are assigned to manage. The Data Manager will be responsible for coordinating with the Test Manager to ensure that a data package is provided to the Test Owner with each performed test. The Data Manager will set the initial disposition date, not to exceed the maximum retention period.

2.4. **Data Custodian**. The Data Custodian is the organization responsible for the archival and management of a data set. Data custodians ensure the integrity and availability of the data from collection to final disposition.

3. Data Management Process.

3.1. **Initiate the Data Archival Period**. Data collected for the Data Owner will be given an archival date categorized by the completion date of the test project from which that data were collected. This archival date will initiate the start time for the data retention period. A collection system will be used to identify, record, and document relevant metadata such as: key personnel, data type(s), data collection system(s), retention period and other needed information.

3.2. **Data Storage and Maintenance.** Once the data are collected, the Data Manager will turn over the data to the Data Custodian to be maintained in accordance with Table 1 below. Table 1 describes data collected during test operations, and the retention requirements identified in AFRIMS Table 99-01, Rule 3.00. Attachment 2 has specific examples of AEDC systems impacted by this policy.

Table 1. Data Retention Plan Table.

Data Type		um Retention Period	Retrieval Time
Dynamic, Steady State and Transient	Raw Data	5 years	1 week
	Processed Data	25 years	5 minutes
Data Video	Raw Data	5 years	4 hours
	Processed Data	25 years	5 minutes
Image Data	Raw Data	5 years	5 minutes
Surveillance Video	Raw Data (U	1 week	4 hours
	Processed Data	5 years	5 minutes

3.3. **Data Disposition/Deletion**. Once data are near the end of its retention period, the Data Manager shall provide notification of this action to the Data Owner for approval. For data retained for five (5) years or greater, the Data Owner will have 60 days to respond to the notification. The only exception is when an extension has been requested and approved by the Data Manager. Routing for further approval by external stakeholders shall be the responsibility of the Data Owner. If deletion is approved, the Data Custodian shall destroy the data within five (5) days. If the data owner requires the data be retained beyond the original deletion date, the Data Manager will provide an estimate to the Data Owner for the funding required to extend the period. The estimate will be based on several factors, which include but are not limited to required storage space and retention time. If an extension is approved and funded, a new disposition date will be identified.

4. Policies. All local and downward directed policies shall be followed to properly handle and destroy any media according to its classification.

RODNEY F. TODARO, Colonel, USAF
Commander

Attachment 1

GLOSSARY OF REFERENCES AND SUPPORTING INFORMATION

References

Air Force Policy Directive (AFPD) 99-1, *Test and Evaluation Process*, 3 Jun 01214

Air Force Instruction (AFI) 99-103, *Capabilities-Based Test and Evaluation*, 16 Oct 2013 Air Force Manual (AFMAN) 33-363, *Management of Records*, 1 Mar 2008

Department of Defense (DoD) 5220.22-M, *National Industrial Security Program Operating Manual*, 28 Feb 2006

AEDCOI 99-10, *Technical Reporting*, Apr 2009

AEDCI 99-100, *Test and Evaluation Project Management*, 15 Apr 2015 T99-01 R03.00, *Rules for Records Management*

Adopted Forms

AF IMT 847, *Recommendation for Change of Publication*

Abbreviations and Acronyms

AEDC—Arnold Engineering Development Complex

AEDCI—Arnold Engineering Development Complex Instruction

AFI— Air Force Instruction

AFMAN - Air Force Manual

AFPD - Air Force Policy Directive

AMAPS— Automatic Model Attitude Positioning System

ASCII— American Standard Code for Information Interchange

CADDMAS—Computer Aided Dynamic Data Measurement and Analysis System

Cam— Camera

CTS— Captive Trajectory System

DVR—Digital Video Recorder

EDAPS—Enterprise Data Acquisition and Processing System

EU— Engineering Units

EUD— Engineering Unit Data

HD— High Definition

IAW— In Accordance With

IR—Infra Red

NSMS – Non-Intrusive Stress Measurement System

OPR— Office of Primary Responsibility

PDPAS—Propulsion Data Processing and Analysis System

RDS— Records Disposition Schedule

SD— Standard Definition

SOC—Statement of Capability

STAT— Space Threat Assessment Testbed

TAIMG— Test Article Imaging System

Terms

Data Retrieval Time— The worst-case time from a request to retrieve test data to when an authorized user should have access to that data.

Data Video— A combination of standard and high definition digital cameras are used during tests to provide primary test data. The data generated are first recorded in a raw digital format and then further compressed into smaller files for distribution.

Dynamic Data— High response, high frequency measurements that are recorded at or above 20,000 samples per second. An example of these measurements is high frequency pressure measurements related to engine stress.

Image Data— A combination of standard and high definition digital cameras is used during tests to provide primary test data. The data generated are first recorded in a raw digital format and then further compressed into smaller files for distribution. Upon request, these files can be split into smaller files for delivery to both internal analysis personnel and/or the test customer.

Processed Data— The converting of raw data to machine-readable form and its subsequent processing (as storing, updating, rearranging, or printing out) by a computer. Data are acquired from various sources, converted to engineering units (EU) and placed on a server through multiple stages of processing. Once the data are converted to EU and merged, the data are processed through various performance programs and math models and those results are again placed on a server.

Raw Data— Raw data are unprocessed signal data. This information may be stored in a file, or may be a collection of numbers and characters that can be stored on a computer's hard disk.

Steady State— Data points which are averaged over some time (usually 5 – 10 seconds).

Surveillance Video—Video captured for the purposes of system and personnel safety and is used for event investigations. Signals are transmitted from a camera to the receivers forming a closed circuit used to maintain close observation of a person, group, or thing.

Transient—Data points containing every captured sample. These data points are generally recorded during changing (transient) test conditions.

Test Data—Data that provides information about a test article (or an experiment) for verification of the system specifications or the limits, or design criteria for further developments. Test Data is acquired (or calculated) from a test (or an experiment) defined to find out (or accomplish) certain characteristics (or performance) of a test article in specific test operating conditions. Test Data are (1) measurements of test article conditions, (2) measurements of the environment being simulated for the article being tested, and (3) all data derived from the measurements.