RESPONSIBLE OFFICE: Office of Director

SUBJECT: Facility Software Classification Policy

1. POLICY

a. Definition: Facility Software – Software developed or acquired to operate or support the operations of a research facility.

b. Facility Software in Major Engineering / Research Facilities (see definition of Major Engineering / Research Facility in NPR 7150.2, NASA Software Engineering Requirements) will be classified as indicated in Figure 1, Facility Software (SW) Class Decision Tree.

c. Major Engineering / Research Facilities at Langley Research Center are:

   1) National Transonic Facility (NTF)
   2) 14- x 22-Foot Subsonic Tunnel (14x22)
   3) 8-Foot High Temperature Tunnel (8’ HTT)
   4) Transonic Dynamics Tunnel (TDT)
   5) Unitary Plan Wind Tunnel (UPWT)
   6) West Area High Pressure Air System (Compressor Station)
   7) Steam Distribution System (Steam Plant)
   8) Stratton Substation

2. APPLICABILITY

This directive is applicable to all Government, contractor, or other organization employees who support software engineering for the Research Directorate and Center Operations Directorate at LaRC, in accordance with the terms expressed in their respective agreements, joint operating procedures, or contracts with LaRC.

Verify the correct revision before use by checking the LMS Web site.
3. **AUTHORITY**

a. The National Aeronautics and Space Act, as amended, 51 U.S.C. 20112 and 20113

b. NPR 7150.2, NASA Software Engineering Requirements
4. **APPLICABLE DOCUMENTS AND FORMS**

a. LPR 7150.2, LaRC Software Engineering Requirements  

5. **RESPONSIBILITY**

a. Software Managers executing LPR 7150.2, LaRC Software Engineering Requirements, shall use this policy to classify their Facility Software in lieu of the definitions of Software Classes in LPR 7150.2.

6. **DELEGATION OF AUTHORITY**

None

7. **MEASUREMENT/VERIFICATION**

a. Verification will be accomplished by inspection as part of the LaRC Internal Audit process.

8. **CANCELLATION**

LAPD 7150.10A, dated February 2, 2015

Clayton P. Turner October 1, 2020  
Center Director Date  

*Original signed on file*
Facility Software (SW) Class Decision Tree

Is this a Major Facility\(^1\)?

Is SW Independent from Facility Operation\(^2\)?

Is SW Safety Critical?

Is SW Safety Critical?

Class D

Class C

Class D + Safety Critical

Class C + Safety Critical

Class D

Class C

Class D

\(\text{Note: Data acquisition and control systems are considered part of major facility operations per example of Class C software in NPR 7150.2}\\)

\(^1\) Major Facilities: NTF, 14x22, 8' HTT, TDT, UPWT, Compressor Station, Steam Plant, Stratton Substation

\(^2\) Note: Data acquisition and control systems are considered part of major facility operations per example of Class C software in NPR 7150.2

Figure 1.

Verify the correct revision before use by checking the LMS Web site.