


Template No.

CEMILAC_SYSGP_SVCP_11

**Software Verification Cases and
Procedures
of <LRU/SYSTEM Name>
for
<Platform Name>**

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Amendment History

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1. Introduction:

The Software Verification Cases and Procedures (SVCP) is a detail description of the verification process activities to be implemented.

1.1. Purpose and Scope

This purpose of this document is to provide the Test Case Procedure, Environment and Evaluation method for Requirement verification of the project <Project>. This document shall covers all requirements defined in SRD.

1.2. Applicable documents

Define the list of all applicable documents in following sections:

1.2.1. External documents

Define the list of all applicable documents of external origin, relevant for this project.

<e.g. Software Standard, Document Templates etc>

1.2.2. Internal documents

Define the list of all applicable documents of internal origin, relevant for this project with Document Identification, Document No., Issue, Revision, Date etc.

<e.g. Software Requirement Document, ICD etc>

1.3. Acronyms and Abbreviations

Define all the abbreviations and acronyms with their expanded names in this section.

1.4. Part Number and Nomenclature

Define all software builds having unique part number and nomenclature to identify them for configuration management.

2. System Overview

This section provides an overview of the system, including description of its functions along with block diagram.

3. Software Overview

This section provides an overview of the software, including description of its all major functions.

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4. Test Environment:

Define Hardware and Software environment for integration testing with hardware platform.

4.1. Testing Tools Required

4.1.1. Hardware

Define details of all hardware tools required for executing S/W-H/W Integration Testing.

<e.g. Test Rig, ATE, Bought out Equipment's, Measuring Instruments, Cables, Bus Connector hubs, add-on cards, laptops, PCs, Power supplies etc. should be identified>.

4.1.2. Software

Define details of all software tools/Builds e.g. test software including software loaded in the test rig/ATE, Simulators, pre-recorded flight data, data files to be played as input to the software etc should be identified and defined.

4.2. Test Setup

Define the diagrammatic representation of one or more combinations for above test including hardware and software to be used for executing the test cases.

5. Review and Analysis Procedure

5.1. Review

Define the scope and depth of the review method to be used, including checklists and other means.

5.2. Analysis

Define the scope and depth of the analysis method to be used, including traceability and coverage analysis.

5.3. Test

Define the scope and depth of the testing method to be used, including testing with test rig and emulators etc.

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6. Test Cases and Procedures

Define the purpose of each test case, set of inputs, conditions and expected results, the step-by-step instructions for how each test case is to be set up and executed, how the test results are interpreted and the test environment to be used.

6.1. Test Case No #: Name

6.1.1. Purpose of Test

This section describes the objective of the test case including specific input, output and special condition (if required).

<Define the Traceability w.r.t. to TS>

6.1.2. Prerequisite Conditions

< Define the pre-condition requirement (if any) which is necessary to be fulfilled before executing the Test Cases or any special test setup, additional test input ect>

6.1.3. Test Inputs

<Define all set of input (Data or Conditions) that are to be provided to software under test to validate it's functionality and performance>.

6.1.4. Expected Test Result

<Define the expected test result for each test case to declare the test as successful>.

6.1.5. Criteria for Evaluating Result

<Define criteria for each Test Case to evaluate whether a Test Case Pass/Fail>.

6.1.6. Test Procedure

<Define the step-by-step procedure to perform intended functionality of each test case> .

6.1.7. Assumption and Constraints

<Define any limitations/ restrictions (if any) that affect execution of test, also any baseline expectation that must hold true for the Test Case to be true>.

7. Recording of Test Results

<Define the method for logging and recording the test results. Test sheets for each and every are to be prepared for records. In case of failures, test rejection and resumption criteria for requirements to be given>. The Report must have following information in header:

<LRU Name: >

<Part No.: >

<SI No.:>

<S/W Version: >

< Software Checksum: >

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<Test Rig Name: > < Test Rig Part No.: > < Test Rig SI No.:>
 <S/W Version of Test Rig:> , <Checksum of Test Rig S/W>

 <Testing Place:> <Testing Date:> <Testing Time:>

 <Other Relevant Information may added, as required>

8. Traceability Matrix

Define the forward and backward traceability matrix for all Test Cases defined in SVCP w.r.t. each requirements/sub-requirement defined in SRD.

Appendix A:

<Include in the document, if required for specific purpose>

<e.g. Test Reports for all test cases for all requirements having valid/invalid conditions>

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