

Glenn Research Center Organization Procedure	Title: Test Article Failure	
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REVISION LOG	
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Purpose: To describe the steps to be followed for Test Article Failures

Scope: This Work Instruction covers the Aero Branches (7610, 7620, 7660) in the Research Testing Division.

References:

- Glenn Safety Manual - Chapter 21 (Mishap Reporting/Accident Investigation)
- GRC-P7600.003 Aero Test Engineering

Records:

- The Run report reporting the Test Failure
- Test Failure Investigation Report.

Definition

Test failure.

Unexpected damage of research hardware, including support test hardware or instrumentation that occur during a test run, but no significant test facility damage. Test failures can be minor (e.g., combustor liner erosion), in which case they are to be reported through run reports, or they can be significant (e.g., combustor liner burnout), in which case damage is to be reported directly to the division chief. The Glenn Safety Office is to be notified verbally of significant test failures. Significant test failures will be investigated by an RTD team and a written report submitted to the Division Chief with a copy to the Glenn Safety Office.

Instructions:

- 6.1 Personnel Injury resulting from the operation of the test article during testing if yes go to 6.9
- 6.2 Facility Damaged greater than \$25,000.00 if yes go to 6.9
- 6.3 Test Article Damage greater than \$25,000.00 if yes go to 6.5
For instances where the test article damage is less than \$25,000.00 go to 6.4
- 6.4 Include all documentation of test article failure in the run report. Save for Project File END
- 6.5 Notify the appropriate branch chief who will then inform the safety office and the appropriate Facility Manager
- 6.6 Secure the area and Freeze the Escort History Files. The Branch Chief forms an investigation team consisting of individuals independent of the team.
Team then:
 - Investigates and documents what happened. (Photos, depositions, etc.)
 - Has the Escort system's history files looked at for further information
 - Has the facility control system's history files (if they exist) looked at for further information
- 6.7 Investigation team issues a Report. This goes to the Division Chief, Branch Chief and the Facility Manager
- 6.8 A Copy is also sent to the Safety Office. END
- 6.9 Follow the Glenn Safety Manual

TEST ENGINEERING TEAM

SAFETY OFFICE

