

15 May 1957

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STABILITY AND CONTROL AREA REPORT

A proposed scheme for preparation and progress reporting of work associated with Stability and Control Area Report is submitted for your approval.

Control System

1.0 Design Studies

- 1.1 Evolution of Project 1794 Control System ~~Control System~~
- 1.2 ~~Proj 1794~~ Control System Description of Final Design
- 1.3 Reliability and Flight Safety Characteristics

2.0 Aircraft Stability and Control Characteristics

- 2.1 Longitudinal Motion
 - 2.1.1 Steady State Characteristics from Wind Tunnel Data
 - 2.1.2 Selection of Control System Gearing
 - 2.1.3 Transient Response Analysis to Determine Flight Limitations
 - 2.1.3.1 Gust Response
 - 2.1.3.2 Pilot Demand
 - 2.1.3.3 Stall and Post Stall Motions
 - 2.1.4 Reducing Aerodynamic Instability
- 2.2 Lateral Motion
- 2.3 Hovering
- 2.4 Transition

3.0 Control System Tests

- 3.1 PV.704 Tests
 - 3.1.1 Unit Development
 - 3.1.2 Frequency Response Rig No. 1
- 3.2 Project 1794 Tests
 - 3.2.1 Single Nozzle Segment Response
 - 3.2.2 Eight Nozzle Segment Response
 - 3.2.3 In Flight Mechanical Analog
 - 3.2.4 Hovering Mechanical Analog

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