

# Design Delegation / 148 Seminar 2019

A proposed AC for Experimental and Certification Test Flying  
..... Tim Dutton - CAA 

# Contents



Need

Summary of the document

Drafting Status

# Need

Large variability in industry

Relevant rules are high level and somewhat scattered (Part 19, Part 21 and airworthiness standards)

Provides people outside the design space with a reference for that to expect

Feedback from industry was that more guidance would be useful

Little information available internationally




# Summary of document

Concerns flight test process NOT flight dynamics (i.e. typical subpart B requirements)

No large changes to expectations

Guidance is related to;

- CAR21.35 (inspections and tests)
- CAR21.39 (Flight tests)
- CAR21.193 (Special category— experimental certification requirements)
- CAR19.405 (Test Pilots)
- CAR91.101 (Aircraft Airworthiness)

**Advisory Circular**  
**AC21-X**

Draft Revision 0  
xx yy 2019

**Flight Test Guidance**

**General**  
Civil Aviation Authority advisory circulars contain guidance and information about standards, practices, and procedures that the Director has found to be an **acceptable means of compliance** with the associated rules and legislation.

However the information in the advisory circular does not replace the requirement for participants to comply with their own obligations under the Civil Aviation Rules, the Civil Aviation Act 1990 and other legislation.

An advisory circular reflects the Director's view on the rules and legislation. It expresses CAA policy on the relevant matter. It is not intended to be definitive. Consideration will be given to other methods of compliance that may be presented to the Director. When new standards, practices, or procedures are found to be acceptable they will be added to the appropriate advisory circular. Should there be any inconsistency between this information and the rules or legislation, the rules and legislation take precedence.

An advisory circular may also include **guidance material** generally, including guidance on best practice as well as guidance to facilitate compliance with the rule requirements. However, guidance material should not be regarded as an acceptable means of compliance.

An advisory circular may also include **technical information** that is relevant to the standards or requirements.

**Purpose**  
This advisory circular provides material to assist in conducting flight test activities to support the certification of an aviation product or part.

**Related Rules**  
This advisory circular relates to Civil Aviation Rule Part 21 *Certification of Products and Parts*, Part 19 *Transition Rules* and Part 91 *General Operating and Flight Rules*. Specifically the advisory circular relates to CAR21.35, CAR21.39, CAR21.193, CAR19.405 and CAR91.101.

**Change Notice**  
This is the initial issue of this advisory circular.

Published by  
Civil Aviation Authority  
PO Box 3555  
Wellington 6140

Authorised by  
Manager International & Regulatory Strategy

# Summary of document

Outlines typical Flight Test Flow

Plan

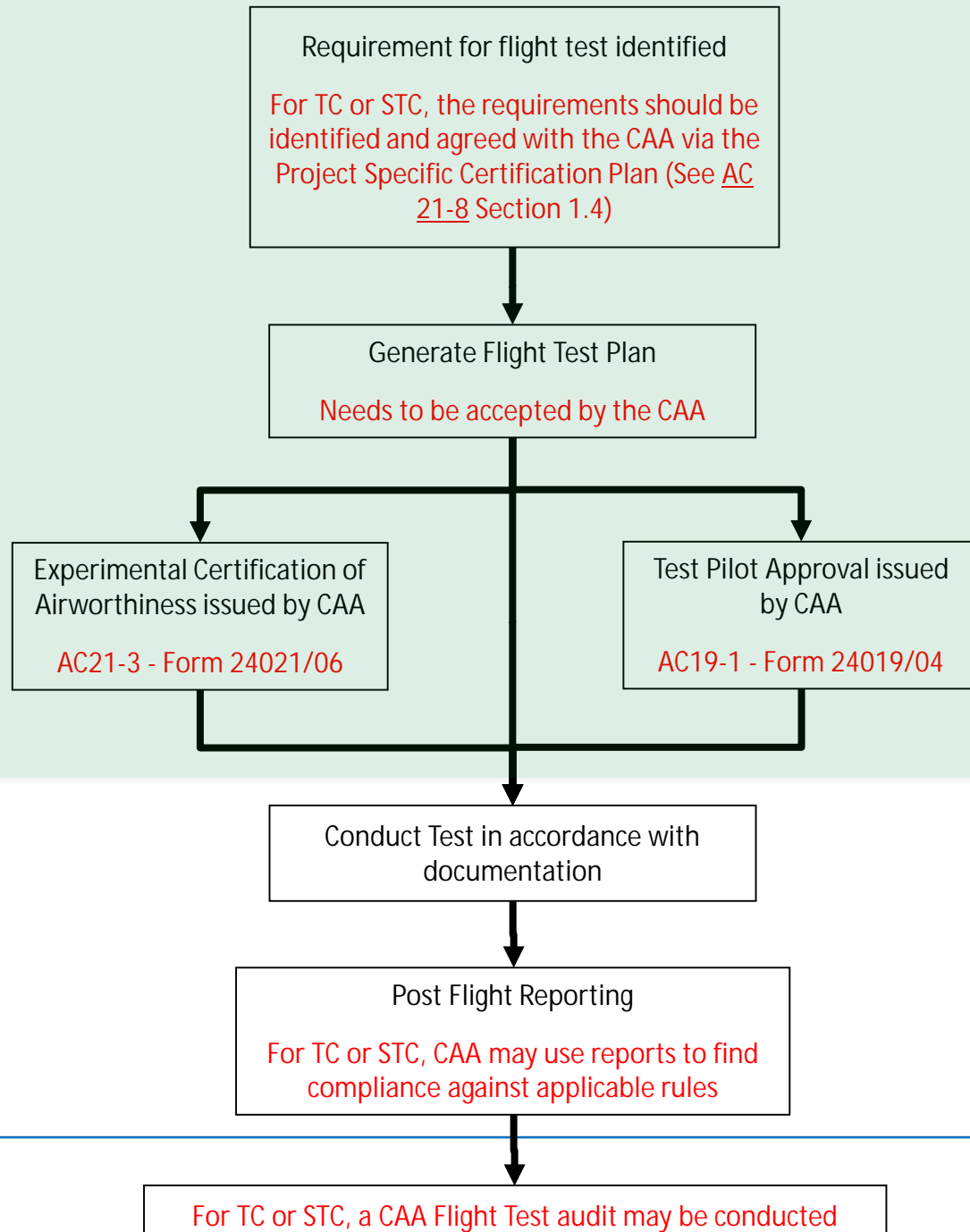


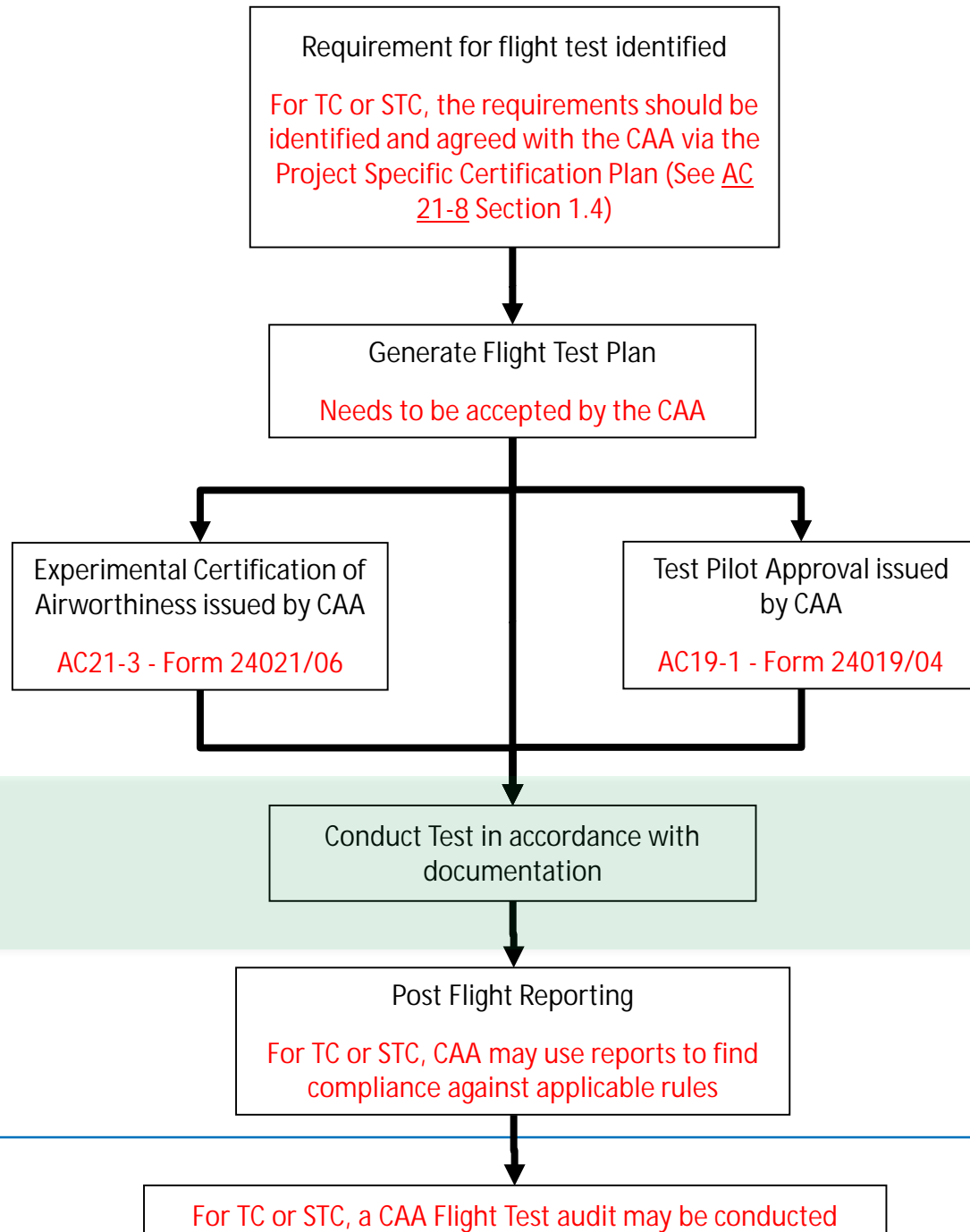
Conduct



Report

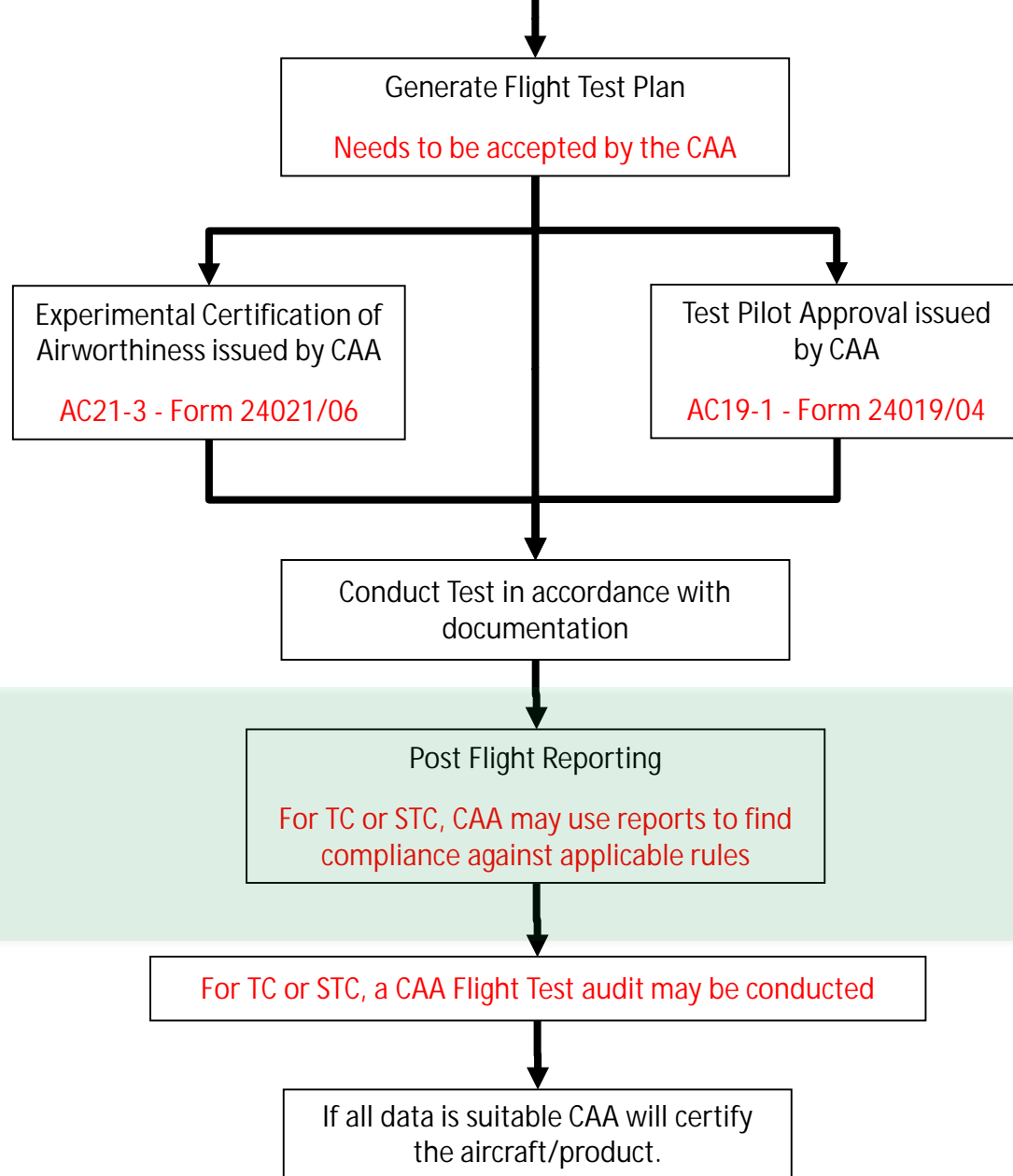
# Plan





Conduct





# Report



# Summary of document

Outlines typical Plan, Conduct, Report flow

Integrates with other relevant material both from CAA and outside sources

Majority of content relates to planning

# Planning a test

Written to work as a guide for sections of a test plan

- Introduction
- Test Requirements
- Support Requirements
- Risk Management
- Schedule
- Test/compliance Matrix



**Test Plan**

# Conducting a test

Readiness Review

Briefing

Testing

Debrief



# Reporting a test

Immediate 'reporting'



Compliance reporting



# Drafting Status

Document has been drafted and is currently in internal review

Will be consulted publicly soon



# Questions

