

DEVELOPMENT AND OPTIMIZATION OF FLIGHT TEST PROPOSALS

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ABSTRACT

Synopsis: This presentation will address Development and Optimization of New Flight Test Proposals and Continuation of Existing Proposals from the point of view of an Aircraft Integrator. The process for documenting the relationship between the contractor and customer and defining the flight test requirements will be explored.

Approach: Successful Flight Test Programs are initiated with detailed and coordinated Flight Test proposals. The flight test proposal consists of the following elements:

Definition of requirements

Alternatives to Flight Test

Types of testing considered

Prerequisites to test: Aircraft Ground tests; Lab tests; Analysis

Test location: Ranges and infrastructure

Test assets: Reuse of existing assets and acquisition of new assets

Instrumentation of Test Aircraft:

Design; Procurement; Manufacturing Process: Fabrication and Installation; Checkout

Ground Test Equipment

Support Aircraft Requirements

Flight Test Data Processing Requirements

Supplier support

Government Support

Airborne Software Requirements

Test aircraft Modifications

T-2 Modification Documents; Coordination with the production process; Multiple mod sites

Estimated test flights

Flight Test Plans

For each of these elements, the following must be considered

Schedule

Statement of Work Preparation

Cost Estimates

Manpower; Safety; Risk Assessment

Conclusions: Strategy for success will be developed using these elements which will provide lessons learned for inclusion of test requirements in winning proposals.