

# ARINC IA Project Initiation/Modification (APIM)

Name of proposed project

APIM #: 16-203

Simulator Continuing Qualification (SCQ) Working Group

## Suggested Subcommittee assignment

The intent of this activity is to initiate discussion to alternative means of [continuing qualification and validation](#) of FSTD's— and share and promote new ideas and ways of optimizing regular testing and checking methods. We invite your organization to participate in this “idea generation” activity to ensure we consider ideas from across the industry.

[This](#) activity will entertain the contrarian opinion about an over reliance on QTGs for annual validation for performance and handling of the FSTD. The premise for this point is that the QTG is a valuable testing tool to validate the simulation software initially, but often does not lend itself to identify problems with the simulation software over a recurring period. However, as an industry we spend thousands of hours repeating tests – where the actual software has not changed. The challenge is to develop a more optimized approach to validating the simulation software and focus more on the hardware in the loop, where there are regular areas that should be checked and problems often occur, effectively over the lifecycle of the FSTD.

[This activity](#) will [seek to define methods or procedures for alternate means of compliance for continued qualification of FSTDs](#). We will explore ways we can potentially separate software validation from hardware testing – and thus more effectively test our machines.

## Project Scope

[The activity will produce a standard or set of guidelines for an alternate means of compliance for the continuing evaluation of FSTDs.](#)

## Project Benefit

- [More relevant recurrent testing for FSTDs](#)
- [Improving the reliability of FSTDs](#)
- [Saving time and money in recurrent testing](#)
- [Reducing regulatory workload in reviewing recurrent QTGs](#)

## Companies Supporting Effort

|   |  |  |
|---|--|--|
| Boeing                                    | Airbus                                     | Delta                                    |
| Zensim                                    | <a href="#">FlightSafety International</a> | <a href="#">Air Canada</a>               |
| <a href="#">TRU Simulation + Training</a> | <a href="#">FedEx</a>                      | <a href="#">American</a>                 |
| <a href="#">CAE</a>                       | <a href="#">ANA</a>                        | <a href="#">Aircrew Training Systems</a> |

**Issues to be worked**

- [Alternate means of testing integrated FSTDs that increases value of recurrent testing](#)
- [Address requirement for annual continuing qualification QTGs that do not add value to recurrent testing](#)
- [Validation of method](#)

**Recommended Coordination with other groups**

The group will need to coordinate with regulatory authorities, airframe manufacturers, airlines and operators, TDMs, FDD [and](#) RAeS.

**Projects/programs supported by work**

- [FSTD continuing qualification](#)
- [Regulatory Awareness](#)
- [All](#) FSTD types

**Timetable for projects/programs**

2<sup>nd</sup> Quarter of 2018

**Documents to be produced and date of expected result**

New ARINC Standard [or guideline](#);

**Comments**

None

**Meetings**

The following table identifies the number of meetings and proposed meeting days needed to produce the documents described above.

| Activity | Mtgs              | Mtg-Days |
|----------|-------------------|----------|
| SCQ      | <a href="#">4</a> | 2        |

***For IA Staff use***

Date Received: \_\_\_\_\_ IA Staff Assigned: Sam Buckwalter

Potential impact: \_\_\_\_\_  
(A. Safety    B. Regulatory    C. New aircraft/system    D. Other)

Forward to committee(s) (FSEMC): \_\_\_\_\_ Date Forward: \_\_\_\_\_

Committee resolution: \_\_\_\_\_  
(0 Withdrawn    1 Authorized    2 Deferred    3 More detail needed    4 Rejected)

Assigned Priority: \_\_\_\_\_ Date of Resolution: \_\_\_\_\_  
A. – High (execute first)    B. – Normal (may be deferred for A.)

Assigned to SC/WG: \_\_\_\_\_