



Volume I, Number 3

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Notice

The material in *Sim Notes* is meant only as general information. In all cases no maintenance action published in *Sim Notes* should be taken that is not in consonance with your particular company's operating and maintenance procedures, your approved maintenance manuals, or your certification agency's directives.



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2011 FSEMC — Orlando, Florida

ARINC Industry Activities organized and held the 17th annual FSEMC Conference in Orlando, Florida. The conference was hosted by The Opinicus Corporation.

This year's FSEMC was attended by 315 aerospace professionals representing 52 simulator user organizations, 4 airframe manufacturers, 6 simulator manufacturers, and 49 suppliers. Truly a worldwide event, attendees from 29 countries participated.

Make your plans now for next year in Dallas, Texas!

2012 FSEMC — Call for Presentations

The FSEMC Steering Committee welcomes suggested topics for presentations for the 2012 FSEMC. See details inside.

2012 FSEMC — Plan Now!
September 17-20
Dallas, Texas

Upcoming 2012 FSEMC

2012 FSEMC
September 17-20
Dallas, Texas



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VISUAL SYSTEMS

Omni Mandalay Bay at Las Colinas
221 East Las Colinas Boulevard
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2012 FSEMC

Call for Presentation Topics

The Flight Simulator Engineering and Maintenance Conference (FSEMC) will take place September 17-20, 2012, at the Omni Mandalay Bay hotel in Dallas, Texas.

On behalf of the FSEMC Steering Committee, it is our pleasure to formally invite the flight simulation training device industry to submit ideas, abstracts, and topics intended for presentation at the 2012 FSEMC. The deadline for submittals is February 1, 2012.

Symposium Topics

The purpose of FSEMC is to provide the industry an opportunity to openly and collectively discuss questions about chronic simulator engineering and maintenance problems. The presentations often introduce new or challenging topics for discussion at the conference. We welcome your input – “It is your conference, it is what you make of it!”

To submit your suggestions, please contact:

Sam Buckwalter
FSEMC Executive Secretary
sbuckwal@arinc.com.



The FSEMC Provides Solutions and More

The FSEMC is an aviation industry activity organized by ARINC Industry Activities to assist aviation interests in cooperating to develop shared technical solutions and to establish technical standards.

FSEMC seeks to reduce life-cycle costs, as well as to improve the operation of flight simulators and training devices by promoting reliability, better maintenance, and support techniques through the exchange of engineering, maintenance, and associated technical information and the development of voluntary technical standards related to simulation and training. FSEMC also seeks to promote and advance the state of the art of the flight simulation and training industry to the mutual benefit of its members.

Attended by more than 350 flight simulator experts from around the world, the annual conference identifies technical solutions to engineering and maintenance issues, and as a result, the airline industry saves more than \$19 million annually.

The Meeting

During the meeting, a moderator presents each question for discussion. Airline and simulator users are given the first opportunity to respond—a practice that emphasizes that a single organization may not be alone when experiencing a problem. In some cases, one or more organizations may have already experienced the problem and may have a solution to offer.



After the airline and simulator users have responded, the moderator will ask the suppliers to respond. In many cases a solution is already available because the supplier has investigated and resolved the problem before the meeting.

In most cases, the proposed solution, or a promise to provide a solution following the meeting, is accepted and the question is closed. In those cases where the solution is not accepted or one is not yet available, the question is usually held open and will be so noted in the report of the meeting.

To ensure an accurate record of the meeting, the audio is recorded and a report is prepared.

The Meeting After the Meeting

After each day's meeting, supplier and manufacturer hospitality suites will be open to all attendees. According to attendees, this unlimited one-on-one access in one location is as valuable as the meeting itself.

The AAI Reception

On Monday evening the Airline Avionics Institute (AAI) hosts a fantastic reception that includes over 25 tabletop exhibits. This reception provides an excellent vehicle for both large and small manufacturers to display the latest innovations in product support to potential airline customers.



The Guest Program

For guests that accompany conference delegates, the guest program begins with a coffee held on Monday morning—an informal event that provides an opportunity to make new friends and catch up with old ones. In addition, plans are made to attend the scheduled and informal gatherings.

Final Words

For past FSEMC attendees, there should be little need to urge you to return in 2012. For those who are not still convinced, try answering the following questions:

1. Does your company have chronic simulator engineering and maintenance questions?
2. Would your company benefit from one-on-one access to a broad cross-section of simulator equipment manufacturers and suppliers, service organizations, airframe manufacturers, and other simulator users in one location?

2011 FSEMC Follow-Up Items



The responses to most FSEMC discussion items result in a solution being accepted and the discussion item being closed. When discussion items need further action by one ore more suppliers, the resolution is published in *Sim Notes*. For a description of items removed from the follow-up list, refer to appropriate issues of *Sim Notes*.

Item	Section	Submitter	Respondent	Follow-up
04-115 05-124 07-090	Avionics	AAL DAL	GE Aviation	GE and Boeing to consider addition of simsoft to correct FMC failures
09-074	Motion Control	AFR	Thales	Thales to collect responses from users and research possible fixes
11-061	Other Training Devices	FDX	IS&S	Research an OPC Option to switch configurations

Shipping to FSEMC?

Please make your plans EARLY to consider export requirements and extended travel times over land or sea.

FSEMC Shipping – FSEMC has selected Transit Air Cargo as the official freight carrier for ground and air shipments as well as storage, delivery, pickup, and reshipment.

U.S. Shipments - For shipments originating within the USA, please contact Howard Umeda, Transit Air Cargo, +1 800 247-1600, Ext 106, fax +1 714-571-0406, or howard.umed@transitair.com.

International Shipments - For international shipments originating outside the U.S., please contact Howard Umeda, Transit Air Cargo, International Department, fax +1 714-571-0330, or howard.umed@transitair.com.

Transit Air Cargo will handle air and ocean shipments, including the inbound and outbound customs documentation.



Industry Highlights

FSEMC Survey Results at a Glance

Below is a summary of the responses received from the surveys handed out during the 2011 FSEMC Survey.

Surveys		
	Total Attendees	315
	Total Surveys	98
		31.11%
1. On a scale of 1 - 10, (1 is poor, 10 is excellent), which mark would you give this year's FSEMC?	1	2
	0	0
	0.00%	0.00%
	3	4
	0	0
	0.00%	0.00%
	5	6
	0	3
	0.00%	3.13%
	7	7.5
	13	2
	13.54%	2.08%
	8	9
	33	32
34.38%	33.33%	
10	AVERAGE	
13	8.40	
13.54%		
		Percent
2. The presentation topics were of interest to you.		
Strongly Agree	21	23%
Agree	70	75%
Disagree	1	1%
Strongly Disagree	1	1%
Total	93	
3. What percentage of your submitted questions were addressed to your satisfaction?		
76-100%	37	65%
50-75%	18	32%
25-49%	1	2%
Less Than 25%	1	2%
Total	57	
4. Our company also benefited from the questions and discussions submitted by other companies.		
Strongly Agree	12	15%
Agree	69	85%
Disagree	0	0%
Strongly Disagree	0	0%
	81	

Notes from the Chairman

By Mike Jackson
FSEMC Chairman

The last FSEMC Conference was held in Orlando in September 2011. The conference went well, and attendance was excellent. We had well over 300 attendees, including regulatory participation from the FAA, EASA, and Transport Canada. Opinius did a masterful job of hosting, and everyone had a great time. The visit to their plant was a very eye-opening experience for many.

The presentations and discussions from this last conference are available on the FSEMC website. Also, the reports from previous conferences are available at the website,

<http://www.aviation-ia.com/fsemc/reports/index.html> .

During the regulatory panel session, there was a fair amount of discussion centering around the seeming lack of progress in adopting the latest ICAO standard, Document 9625 rev 3. It does not appear that any of the regulatory agencies have a firm timetable, nor even any firm plans, to adopt 9625 in the near future. At this point, the message seems to be to wait and see, followed by some further waiting.

There are a number of current and potential Working Groups addressing different concerns. More information on each of these activities can be found through the FSEMC's website.

Simulator Quality Management System: The primary intent of the SQMS working group was to assist operators with preparations for SQM audits as a result of FAA regulations (14 CFM Part 60). The steering committee agreed to continue the working group to provide guidance on the FAA's voluntary program for Extended Evaluation Intervals (EEI), as well as to develop a matrix that could show similarities and differences of the major international regulations.

ATC Environment Working Group: The FSEMC Steering Committee agreed to hold a meeting to gauge interest in this issue and to discuss a scope and vector for the working group. The project's intent is to produce a standard to define different levels of Air Traffic Control (ATC) simulation and what would be the requirements of each level. The standard could be used as a current standard for those users and operators who wish to incorporate ATC simulation into their training environment using the current technology.

Industry Highlights

The standard would also help both users and suppliers in the flight simulation industry to meet future simulated ATC environment requirements of ICAO 9625, Manual of Criteria for the Qualification of Flight Simulation Training Devices, and the FAA proposed new Attachment 3 of Appendix Q to Part 121. The meeting is tentatively scheduled for January 17-18, 2012, in Atlanta, Georgia. As this subject has a generally broader scope than simply training devices, we are seeking participation from the broader training community for this effort.

Malfunction Standardization Working Group: The steering committee agreed to hold an exploratory meeting to gauge interest in this issue and to discuss a scope and vector for the working group. Issues that the exploratory meeting will discuss include:

- Reports of differences in malfunction effects for same simulated malfunction on same aircraft types from different suppliers
- Increasing numbers of computer/software driven aircraft have driven training more towards checklists on ECAM and EICAS displays

The exploratory meeting is scheduled for November 3-4, 2011, in Prague, Czech Republic.

Simulator Software Working Group: The group's three focus areas are to provide guidance in the management of Loadable Software Aircraft Parts (LSAP), standardize software change notices, and develop use cases of software changes.

Guidance for Uniform Acceptance Procedures (GUAP) Working Group: The activity is intended to produce a guidance document for simulator users on standardized simulator acceptance procedures while meeting multiple regulatory requirements (JARs and FARs). Goals and issues to be worked include:

- Create a common list of requirements from the JARs and FARs
- Develop an outline of procedures to meet both sets of requirements
- Identify differences and additional requirement not common to both

The first meeting is scheduled for November 1-2, 2011, in Prague, Czech Republic.

ARINC Report 437: *Guidelines for Training Facilities*: During the conference industry session, the delegates were briefed about the recent changes with regards to training facilities. Most of the new developments have had to do with electromechanical motion systems. A show of hands regarding the update of ARINC Report 437 indicated sufficient interest in going forward with a supplement. The approach for the update will be to coordinate with industry experts through email and teleconferences.

Standard for Cost Effective Acquisition Working Group: This group is chaired by AMC, but also affects the training device community. It seeks to provide guidelines to purchasing groups so that FSTD concerns can be covered in contracts.

See <http://www.aviation-ia.com/amc/projects/scea/index.html>

FSEMC's influence is growing, and more people are realizing the value of attending and participating in the conference. For example, through the SQMS Working Group, the FAA is looking to the FSEMC to help define an EEI program that can be more widely adopted and that will be of benefit to all parties. By starting with JAA guidelines, hopefully we can help craft a program that would be accepted by both FAA and EASA, and hopefully other agencies worldwide. Having a common EEI program that can be accepted globally is of great benefit to many of our constituents and hopefully to the regulatory agencies as well. It can be another step on the road to that magical, mythical land of "Harmonization".

The ATC working Group also has a very big task ahead of them. The simulation of the ATC environment is a new and very broad subject. As the representative of an airline, I would urge all airlines to consider participation in this effort. In particular, I believe that representatives from Flight Training should attend this meeting and be part of the Working Group. The working group of FSEMC professionals can and will discuss the technical aspects of the subject. However, the group will also need to discuss and standardize (to the extent possible) the training aspects of ATC simulation. Subjects could include:

- Useful value added features vs. nice to have vs. technical gimmickry
- Level of instructor involvement and instructor controls
- Integration with other FSTD features
- Level of ATC simulation vs type of training device

The goal of "Harmonization" can be further advanced by the work done in the Malfunction and Acceptance Procedures Working Groups. These are areas that will benefit from having a common understanding of procedures and nomenclature. They will also help the regulatory agencies more easily understand the procedures and processes leading up to the initial qualification of FSTD's. Again, these problem areas were issues that were brought up by our constituents and that FSEMC has adopted to work on for the mutual benefit of the industry.

I am always afraid that the people who read the doo-dah that I write may pass it off as not really affecting them. Some of that may be true, but some of it isn't. When we have meetings that discuss and set future plans and

Industry Highlights

standards, they may not affect you this week or next month. But in a couple of years, when your regulatory agency institutes a rule that causes you problems, then you will complain that you never had a chance to make any inputs. Well, that's wrong. This is your chance to make inputs. If you don't speak up and express your concerns, you may find that the industry has agreed on future requirements that could hit your bottom line. For example, in the discussions that led up to the new version of 9625, Flight Training representatives felt that the visual field of view should be significantly larger than current practice. Airline industry representatives pointed out that the costs of adopting that requirement, such as larger facility sizes, would be prohibitive. Without the input of knowledgeable industry representatives, we could be faced with higher costs that do not add anything to the safety mission of training.

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Preparation is Execution

By Scott Smith
ARINC Industry Activities

It seems that the month after the annual FSEMC is like coming out of afterburner in a fighter jet. For weeks, the preparations for the conference are at a feverish pitch. And then, after four successful days, someone hits the emergency stop button.

The 17th annual FSEMC was a great event. The attendees' arrival went smoothly, the AAI reception was a blast, and the daily conference remained interesting and engaging. The feedback that the ARINC Industry Activities team received was nearly 100 percent outstanding.

If the conference is the product, then there must be a math problem behind the curtain. To get the greatest product, either your divisors are minute, or your multipliers are great. Our team continuously works on minimizing the divisors and increasing our multiplication efforts.

There is a phrase I use quite often in the office:

"Preparation is execution"

The team at ARINC Industry Activities spends an average of 580 hours in putting together the conference. In a short sentence, we produce the FSEMC brochure, program, report, and conduct the conference in a continuous cycle throughout the year. Across 4 people, that is about 3.5 weeks each in a 52 week year.

Our teamwork is a multiplier. Any self-help book on business will explain that a bit better, but here is my explanation. Our goal is the best possible conference for our customers. Our preparation is almost a set quantity; over 17 years we have the production line running like a jet engine:

- Intake of information for the program
- Squeeze that information into a usable form
- Explosive action at the conference
- Produce a higher velocity force through the FSEMC report

But our teamwork *can* improve the quality of our preparation. All of us continuously consider our customer's needs, wishes, and comments. That consideration translates into better products and services.

Which brings me to explain this newsletter. You are reading the latest improvement in our customer service. This is the first edition of *Sim Notes*, a newsletter produced by the FSEMC to inform the flight simulation industry on the activities of the FSEMC.

Industry Highlights

From feedback for our constituents, we heard that surfing the FSEMC webpages for new information (meeting announcements, meeting reports, conference materials, etc.) ultimately would provide the information needed, but took a bit of work and time to accomplish.

Sim Notes will be published 3 times a year. Its primary goal is to provide the FSEMC's activities in a single location. It will be a way for the FSEMC Steering Committee to convey important details about working groups, conference details, and new developments in the flight simulation training industry.

Our team at ARINC Industry Activities welcomes your feedback and inputs to improve this newest multiplier in our equation. Please feel free to contact us, or any member of the steering committee, and let us know what would provide the greatest good for the FSEMC.

Continued success to all, and thanks for another great yearly conference.

- Smitty



FCS Activities

Future Concepts for Simulators Subcommittee

**By Sam Buckwalter
FSEMC Executive Secretary**

The objective of the FSC Subcommittee is to foster the development of Flight Training Device (FTD) engineering and maintenance concepts.

Current Working Groups and Activities

**Simulator Software
Simulator Quality Management Systems
Guidance for Uniform Acceptance Procedures
Simulated Malfunctions
Simulated Air Traffic Control Environment**

ARINC Standards developed by the FSEMC

ARINC Report 432: *Training Requirements for Flight Training Equipment Support Personnel*
ARINC Report 433: *Standard Measurements for Flight Simulator Quality*
ARINC Report 434: *Synthetic Training Device (STD) - Life Cycle Report*
ARINC Report 435: *Guidelines for Cabin Training Devices*
ARINC Report 436: *Guidelines for Electronic Qualification Test Guide*
ARINC Report 437: *Guidelines for Training Facilities*
ARINC Report 440: *Guidelines for the Provisioning and Support of Training Equipment Data*
ARINC Report 441: *Guidelines for the Supply of Binary Format Software for Training Purposes*
ARINC Report 442: *Guidelines for the Supply of Source Code/Electronic Block Diagrams for Training Purposes*
ARINC Report 443: *Data Collection for Visual Databases*
ARINC Report 444: *Overview of Export Control Issues for Flight Training Devices*
ARINC Report 610C: *Guidance for Design of Aircraft Equipment and Software for use in Training Devices*

The following pages outline the objectives and activities of the current simulator industry projects of the FSC Subcommittee.

Simulator Software Working Group

**by Scott Smith
ARINC Industry Activities**

The Simulator Software (SSG) Working Group held their second meeting in Lutz, Florida, hosted by The Opinicus Corporation.

The intent of this working group is to produce an ARINC Standard that provides guidance to the flight simulation industry on control, configuration management, and distribution of software used in flight training devices.

The group discussed the scope and objectives of the project, including:

- Identifying common needs of organizations for software control
- Outlining the major challenges to the project
- Benefits of standardized software control in the simulation industry

The group has defined the types of software used in synthetic training devices, primarily the loadable software aircraft parts from flying airframes that are unmodified, modified, retargeted, or simulated. These definitions serve as a starting point for further discussions in producing a guidance document.

The group set objectives and milestones for the project. Action items were assigned to revise and continue to develop the strawman document.

The next Simulator Software Working Group meeting is tentatively scheduled for January 2012, location to be determined.

For more information, please see the ARINC IA website:

<http://www.aviation-ia.com/fsemc/projects/ssg/index.html>

FCS Activities

Simulator Quality Management Systems Working Group

by Scott Smith
ARINC Industry Activities

The Simulator Quality Management Systems (SQMS) Working Group was chartered by the FSEMC Steering Committee in response to its constituents requests at the 2009 annual conference. The main driver was changes in FAA regulatory requirements in establishing and maintaining Quality Management Programs (QMP) in flight simulation training organizations operating in the United States.

The purpose of the working group is to provide program guidance documents for the introduction and usage of a simulator quality management system in an operational flight simulation training environment.

FSEMC Sample SQMS

In meetings held in 2010-2011, The SQMS Working Group produced a simple, easy to follow sample QMS for sponsors to utilize when developing their respective programs. This FSEMC working paper was distributed via the FSEMC website, as well as the FAA's National Simulator Program (NSP) website.

Feedback from participants estimated that a significant number of simulator sponsors referred to this sample to develop their organization's QMS programs. The group has discussed the need to update this sample QMS, and it was agreed that the sample was still valid and accurate, and did not need an update.

Extended Evaluation Intervals

The SQMS Working Group will begin discussion and documenting industry's best practices for an effective, Extended Evaluation Interval (EEI) program to complement an organization's SQM program. In meetings held in 2010-2011, The SQMS Working Group produced a simple, easy to follow sample QMS for sponsors to utilize when developing their respective programs. This FSEMC working paper was distributed via the FSEMC website, as well as the FAA's National Simulator Program (NSP) website.

The next Simulator Quality Management Systems Working Group meeting is tentatively scheduled for March 2012, location to be determined.

For more information, please see the ARINC IA website:

<http://www.aviation-ia.com/fsemc/projects/sqm/index.html>

Guidance for Uniform Acceptance Procedures Working Group

**by Scott Smith
ARINC Industry Activities**

In response to the FSEMC conference delegates' inputs, the FSEMC Steering Committee has chartered a working group to discuss and document guidance for uniform acceptance procedures.

Project Scope

The project's intent is to produce a standard that would provide guidance for accepting a full-flight simulator while meeting multiple regulatory requirements (JARs and FARs).

Project Benefit

To provide a clear reference for Flight Simulator sponsors to meet the requirements for European Joint Aviation Authority (JAA) and United States Federal Aviation Administration (FAA) acceptance.

Issues to be worked

Create a common list of requirements from JARs and FARs.
Develop outline of procedures to meet both sets of requirements.
Identify differences and additional requirements not common to both.

Deliverables

An ARINC Project Paper is the expected result of the working group's activities. The FSEMC Steering Committee will consider the adoption of the document when mature, and if adopted, the document is intended to become an ARINC Standard.

The GUAP Working Group meeting is November 1-2, 2011, in Prague, CZ.

For more information, please see the ARINC IA website:

<http://www.aviation-ia.com/fsemc/projects/guap/index.html>

FCS Activities

Simulated Malfunctions Exploratory Meeting

**by Scott Smith
ARINC Industry Activities**

The FSEMC Steering Committee will hold an exploratory meeting to discuss simulated malfunctions used in Flight Simulation Training Devices (FSTD). The meeting is in response to discussions introduced in the past two FSEMC conferences. During the conferences, delegates indicated that there would be substantial benefits in studying different simulated malfunction effects found in FSTDs built by different manufacturers.

As an example, a flight training organization trains aircrew on a common modern airframe. The organization utilizes FSTDs from different manufacturers, but finds that common malfunctions introduce different effects (or same effects at differing times) into the training experience.

Preliminary assumptions are made to support the exploratory meeting and are considered with regards to computer driven aircraft.

1. With Primary and Secondary Flight Computers and Flight Warning Computers now standard on modern aircraft, training has been targeted towards checklists presented on ECAM and EICAS displays.
2. Loadable Software from the aircraft is increasingly being used on Flight Training Devices in one form or other.
3. While following ECAM/EICAS checklist is the primary training requirement, recent aircraft accidents may have identified a possible rethink to this approach.
4. Open Discussion – With increasing loadable aircraft software on simulators, the industry may benefit from considering the way malfunctions are designed for use on simulators.

The exploratory meeting will provide an open forum for the flight training device industry to discuss malfunction examples, and the potential benefits of producing guidance on standardizing simulated malfunctions.

The ultimate intent of the meeting is to gauge interest in establishing an FSEMC working group to continue the project. Given sufficient interest, An ARINC Project Initiation/Modification (APIM) will be drafted for consideration by the FSEMC Steering Committee to charter the working group.

The meeting is November 3-4, 2011, in Prague, CZ.

For more information, please contact Scott Smith at sjsmith@arinc.com

Simulated Air Traffic Control Environment Working Group

by Scott Smith
ARINC Industry Activities

In response to the FSEMC conference delegates' inputs, the FSEMC Steering Committee has chartered a working group to discuss and document guidance for simulated air traffic control environments.

Project Scope

The project's intent is to produce a standard to define different levels of ATC simulation and what would be the requirements of each level. The document would generally follow along the lines of previous work done by the IATA Flight Simulator Working Group in 2002. The standard could be used as a current standard for those users and operators who wish to incorporate ATC simulation into their training environment using the current technology. The standard would also help both users and suppliers in the Flight Simulation industry to meet future simulated ATC environment requirements of ICAO 9625, Manual of Criteria for the Qualification of Flight Simulation Training Devices, and the FAA proposed new Attachment 3 of Appendix Q to Part 121.

Project Benefit

The addition of a simulated ATC environment to FSTD's is a step forward in the Training Industry. This addition will help improve realism of simulation and provide the students with a training workload that more closely mimics the real world. There are organizations that are currently designing and manufacturing ATC simulation systems, as well as working on marketing these systems to the User Community. There are currently no standards for these types of systems nor any current regulatory requirements. The intent of this document is to provide user input into what kind of features and capabilities such systems must have to gain acceptability in the User community.

The standard will provide a clear reference for the FSTD Industry to develop and field simulated ATC systems, whether as stand-alone training systems, add-ons to existing training devices, or as an integrated part of a complete training device. The document will aid suppliers in working to develop systems that include the features needed for training within the ATC environment rather than simply engineering and technology advances.

The standard will establish acceptable levels of instructor workload and interaction in order to ensure that the system is an aid to instruction rather than a distraction that ends up not being used due to its complexity. The document will define any required interfaces between an ATC simulation system and other components of the training device, such as the visual system, weather simulation system, other surveillance systems, and any other applicable systems.

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The standard will define acceptable limits as to what can be expected to be included in these types of systems and what would be beyond the scope of required ATC simulation. The document will describe the requirements for maintainability and ease of update of such systems and how they can be reconfigured as the ATC environment changes. The document will allow assessors and regulators to determine if a proposed or offered system meets the requirements of ICAO 9625 for the appropriate level of approval.

The following is a preliminary list of issues that may be addressed in the document:

- Identify required ATC cues
- Identify future regulatory requirements as described by ICAO 9625
- Map the requirements into system features
- Identify instructor control systems
- Interfaces with external systems
- Long term maintenance and update capability
- Recommend best methods of presenting ATC cues to simulation outputs

Recommended Coordination with other groups

The group will need to coordinate with regulatory authorities such as FAA, EASA, Transport Canada, and simulator support groups. Possible groups include the ATA STiG, RAeS, NASA. Participation will also be needed from Flight training groups to properly identify the training impact.

The ATC Working Group will hold its first meeting January 17-18, 2012, in Atlanta, Georgia.

For more information, please contact Scott Smith at sjsmith@arinc.com



Standard for Cost Effective Acquisition (SCEA) Working Group

**by Sam Buckwalter
ARINC Industry Activities**



SCEA Activities

The Avionics Maintenance Conference's SCEA Working Group held their third meeting October 2-3, 2011. More information can be found in the SCEA Working Group Meeting Report on the SCEA webpage given at the end of this article.

The next meeting of the Standard for Cost Effective Acquisition (SCEA) Working Group is tentatively scheduled for January 30-31, 2012, in Cocoa Beach, Florida. The working group is Chaired by Marijan Jozic, KLM. More information can be found in the SCEA Working Group Meeting announcement webpage.

The purpose of this SCEA Standard activity is to provide guidance and insight to the Airlines' and other organizations' procurement teams to ensure cost effective acquisition. This working group was created to safeguard the requirements, and the related rationale for each of the various Airline Engineering, Airplane/Component Maintenance, and Training departments are documented so they can be included in any and all airline created procurement contracts. The requirements of these departments, as captured in this standard, must be considered during all stages of procurement activities from development of the Request-For-Proposal to final selection and contract award.

Proper consideration of these requirements during the procurement activities ensure that the product is adequately supported during each of the various stages of an airplane, system (including training systems), or component useful life. Inclusion of these requirements in the procurement contract will make the difference between the long term successful utilization of the product or its early and expensive demise.

Most procurement activities involving the major Airframe manufacturers include product support requirements within the contractual agreements. History has shown when properly applied, followed, and kept current, these product support agreements meet most of the airlines requirements. However, when the procurement activity takes place in an environment that does not include the Airframe Manufacturers support requirements, such as an airline directly procured equipment, Buyer Furnished Equipment (BFE), STC, or other modification, the airline procurement process often overlooks many of the important and costly support

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requirements. The result is inadequate support, shorter useful lifetimes, and higher costs to the Airline.

Some of the issues being addressed are:

- Definition of a basic Product Support Model to illustrate the essential mechanisms that facilitate and ensure seamless and economical maintenance support throughout the equipment and aircraft life cycle.
- Take into account the requirements for support for aircraft engineering, aircraft maintenance, and training device acquisition and operation initially and over the life cycle of the aircraft or modification at the time of initial procurement.
- Definition of a basic Aircraft Operational Model.
- Definition of a basic Aircraft Life-Cycle Cost Model.
- Reference ARINC Specifications and Guidelines to facilitate an assessment of the economical and strategic advantage of those standards.
- Creation of a checklist of items essential for aircraft operation, specifically Line/Component Maintenance.
- Creation of a checklist of items essential for Training Device design, manufacture, operation, and maintenance.

The SCEA Working Group is developing material for ARINC Project Paper 674. This report is intended to be used by Airlines, Flight Simulation Training Device (FSTD) operators, Airframers, and Integrators as they communicate their life cycle requirements to the procurements departments by the engineering, maintenance, and training communities individually.

The next meeting will be January 30-31 in Cocoa Beach, Florida. For more information about the SCEA, please see the ARINC IA website:

<http://www.aviation-ia.com/amc/projects/scea/index.html>

Who Should Attend

The meeting should be attended by engineers from airline shops, MRO shops, purchasing departments, simulation departments, and airline system engineers, as well as people involved in contract activities (supporting activities or actual contracting).



SIM NOTESSM

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ARINC Industry Activities Calendar

Guidance for Uniform Acceptance Procedures Working Group	November 1-2	Prague CZ
Simulated Malfunction Exploratory Meeting	November 3-4	Prague CZ
ATC Simulated Environment Working Group (Tentative)	January 17-18 2012	Atlanta Georgia
2012 FSEMC Presentation Topics Deadline	February 1 2012	
Simulator Quality Management Systems Working Group (Tentative)	March 2012	Renton Washington

**2012 FSEMC
 September 17-20, 2012
 Omni Mandalay at Las Colinas Hotel
 Dallas, Texas**

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