

Mar 14th, 3:40 PM - 5:00 PM

Panel 4 (Session A): OEM, Simulation, & Training Support

Peter Morton

Moderator: President, PMM Inc

Scott McFadzean

Panelist: VP Operations, Diamond Aircraft

Cody Honeyman

Panelist: Fleet Sales Director, Cessna

Jeremy Brown

Panelist: Sales Representative, Frasca

Mike Murphy

Panelist: Sales Manager, Piper

Follow this and additional works at: <https://commons.erau.edu/ntas>

Morton, Peter; McFadzean, Scott; Honeyman, Cody; Brown, Jeremy; and Murphy, Mike, "Panel 4 (Session A): OEM, Simulation, & Training Support" (2016). *National Training Aircraft Symposium (NTAS)*. 21.
<https://commons.erau.edu/ntas/2016/monday-march-14/21>

This Event is brought to you for free and open access by the Conferences at Scholarly Commons. It has been accepted for inclusion in National Training Aircraft Symposium (NTAS) by an authorized administrator of Scholarly Commons. For more information, please contact commons@erau.edu.

NTAS/PS&DS 2016 Supplemental Notes

Panel 4 (Session A): OEM, Simulation, & Training Support

Diamond

- Scott McFadzean – Diamond Aircraft (see presentation)
 - *See Diamond McFadzean PowerPoint Presentation*
 - Only manufacturer that combines next generation airframes, avionics, and engines (composite, low cost/lead free fuel, controllable and stable airframe)
 - Best safety record based on NTSB statistics
 - DA42- market leader in twin engines
 - Use Austro Engines (based on Mercedes Benz diesel engines)
 - G1000 avionics and ADS-B In and Out

Q: What about ADS-B Out retrofit for diamond fleet

A: We have full retrofit capability for the entire fleet.

Q: Flight data monitoring or maintenance equipment

A: Quite a spread in options including flight data tracking

Cessna

- Cody Honeyman – Cessna/Textron
 - *See Cessna Honeyman PowerPoint Presentation*
 - TopHawk is a way of giving back to the aviation industry and be able to give back to the universities. We plan to continue and expand this program.
 - See video at <http://cessna.txtav.com/tophawk>
 - Integrated Cessna/Beechcraft into Textron/Cessna
 - See presentation
 - ADSB in and out solutions available
 - Retrofitting available also
 - Can be coupled with 2016 skyhawk
 - Skyhawk wireless data logging long with a wifi enabled ramp
 - Auto-sync with router, dumps data; transfers in about 50-70 seconds

Piper

- Mike Murphy – Piper Aircraft (see presentation)
 - *See Piper Murphy PowerPoint Presentation*
 - Focused on the trainer market; Especially cost control
 - Retrofit available sometime this year (Q3?)

Frasca

- Jeremy Brown – Frasca Simulation (see presentation)
 - *See Frasca Brown PowerPoint Presentation*
 - Displays real world ADS-B traffic and Weather in the Frasca simulators
 - What do you guys, as academia and training providers need?
 - Dr. Ken Byrnes (ERAU) – We've had ADS-B for a while (mixed used for training and research). Earlier we talked about how to quantify pilot competency, for us it's providing the most real world scenarios and overall flight training experience. One issue with using ADS-B real world traffic is that we don't have the audio to go with it.

- Warren (LeTourneau) – XM scripted makes most sense for cost effective. Would need to be a training scenario that can be moved to geographic locations, need it to keep changing so students don't memorize it.
- Chip (Delta State) – We use weather through ADS-B In
- Guy Smith (ERAU) – It looks like you have to generate traffic from instructor, is there a way to simply generate random traffic, so that it is most alike with real world flying? Do control laws allow for full stall or inversion (upset recovery) so as to prepare for the ATP-CTP requirements?
 - Answer: We have a module for unusual attitudes
 - Engineers have been working on adjusting the rate at which a roll should be induced
- Peter Morton – Does Frasca or anyone in simulation have a role in the ARC for the ATP-CTP requirements and how to demonstrate in sims?
 - Answer: We don't have participation at the Regional level. We have that capability but it's not at the level required by FAA.
- Gary Morrison (CAE) – General aviation and universities need to be on the lookout for what will be coming in the future.
- Guy Smith (ERAU)– Piper has a button you can press when they go into an unusual attitude. I think that may be inhibiting to training the pilot to react appropriately/recover without that button.
 - Mike (Piper) – It is good that we have the enhanced safety feature as a marketing tool. And good for a scenario in case the pilot is incapacitated and a passenger has to react.
 - Joel Stewart (Garmin) – The blue button has been retrofitted to most aircraft including experimental aircraft. Effective and a good move for those safety situations. It is very popular and we're building a lot of autopilots with that autopilot capability
- Kevin Comstock (ALPA) – There have been some studies that indicated training recovery should start earlier in a pilots training. Are the aircraft coming off the manufacturing line capable of doing upset recovery and bank angles of over 90 degrees?
 - Mike - All piper aircraft are not spin certified. The aircraft is structurally capable but not certified.
 - Diamond- DA20 is spin certified; in Canada spin training is part of a private pilot check ride. The DA40 and DA42 are not certified but are structurally capable.