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# ATCA TODAY

TUESDAY, OCTOBER 18 • NATIONAL HARBOR, MD



Attendees network at the opening reception.

## Across the Twain: Enterprise Architecture and Budgeting

**W**hen it comes to air traffic management financing, is the budgeting process simply pie in the aviation sky? During a Monday morning session, panelists discussed FAA funding and how it affects enterprise architecture.

“People spend a lot of time making NAS budgets, but money comes in ‘colors’ like operations and F&E [facilities and equipment] funding,” said panel moderator Rich Golaszewski, GRA Inc.

Panelists agreed that the FAA’s capital budget is unpredictable and needs to be stabilized. And issues like the rapid growth in unmanned aerial systems (UAS) are challenging the FAA’s flexibility and agility

in budget setting.

The result, said Margaret Jenny of RTCA, is that “often the loudest bully in the room gets the funding.”

To counterbalance that, during the federal budget sequestration, RTCA worked on setting priorities for FAA enterprise architecture funding.

Jenny said the top four priorities now include performance based navigation, including time-based flow management and optimization of metroplex operations, data communications, airport surface data sharing, and wake re-categorization.

Melissa Rudinger, Aircraft

*Continued on page 9*

## Will PBO Help the Aviation Industry Straighten Up and Fly Right?

**W**hen it comes to men’s pants, the expectations are simple. “The standard is just that a man needs to keep his pants up,” said Marc Warren, an aviation attorney with Crowell & Moring. “The tensile strength of the suspenders or the width and color of the belt don’t apply.”

But when it comes to aviation safety standards, “we can do better than that,” Warren said. And performance-based oversight (PBO) is the

accessory that can make it happen.

During a Monday afternoon session, Warren moderated a panel discussion of how PBO can produce better safety results in the aviation industry.

Rob Puentes, The Eno Center for Transportation, said PBO is the application of data and metrics to make sure the system is performing as well as it should, and is doing

*Continued on page 10*



Melissa Rudinger, AOPA, presents a talk during “An Enterprise Architecture and its Budget: Never the Twain Shall Meet?”

## **DUE TO HIGH EXPECTED ATTENDANCE, MOVED TO ATCA ARENA IN EXHIBIT HALL:** SENSR Program Cross-Agency Workshop on Wednesday

### Spectrum Efficient National Surveillance Radar (SENSR) Program – Cross Agency Workshop

**Wednesday, October 19,  
9:30 – 11 a.m.**

ATCA Arena, Exhibit Hall

**D**OT and FAA, in partnership with DoD, DHS, and Department of Commerce’s Na-

tional Oceanic and Atmospheric Administration (NOAA), intend to stand up a cross-agency program titled Spectrum Efficient National Surveillance Radar (SENSR), to assess the feasibility of acquiring new surveillance solutions (potentially radar or non-radar) that may result in a consolidation of incumbent legacy surveillance radars (e.g. long range aircraft, short range aircraft,

and weather surveillance), or a system of systems surveillance capability. If successful, this effort may result in making the 1300 – 1350 MHz band available for reallocation to shared Federal and/or non-Federal use. This meeting will allow for each Agency / Department to provide their responsibility, plans, and mission for the overall program.

## Exhibit Hall Hours

**Tuesday, October 18**  
**9 a.m.–5 p.m.**  
**Wednesday, October 19**  
**8:30 a.m.–2 p.m.**

# ATCA

61st ATCA Annual Conference & Exposition

# TODAY

## Annual Conference Committee

**Committee Chair**  
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**FAA-Co-Chair**  
**Paul Fountaine**, FAA

**Jim Ries**, CSRA, Inc.  
**Roger Stern**, Leidos  
**Mike Ball**, Northrop Grumman  
**Mike Borden**, General Dynamics

Information Technology

**Tony Militello**, MITRE

**Jessie Hillenbrand**, Aireon

**Mark Rodgers**, CSSI, Inc.

**Mike Hawthorne**, Veracity Engineering

**Kara Evanko**, Metron Aviation  
**David Grizzle**, Dazzle Partners, LLC

**Jonathan Fath**, Harris Corporation

**Teri Barbee**, Hewlett Packard Enterprise

**Eric Nixon**, Engility

**Donna McLean**, Donna McLean Associates

**Rachel Kinney**, Gryphon Sensors

**Beth Larson**, Thales

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**Sandra Strickland**

Exhibition and Events

Coordinator

**Tim Wagner**

Membership Manager

**7:30 a.m. - 5 p.m.**  
**Registration Open**  
Convention Center Prefunction Area

**7:30 - 8:30 a.m.**  
**Welcome Coffee**  
Maryland Ballroom Foyer

**7:30 - 8:30 a.m.**  
**ATCA Membership Meeting and New Member Welcome Breakfast**  
Maryland Ballroom B&D

**8:30 - 8:45 a.m.**  
**Keynote Address**  
**Neil Planzer**, ATCA Chairman, The Boeing Company  
Maryland Ballroom A&C



**9 a.m. - 5 p.m.**  
**Exhibit Hall Open**  
Prince George's Exhibit Halls D&E

**10 - 10:45 a.m.**  
**Break with Exhibitors**  
Sponsored by:



**10:45 a.m. - 12 p.m.**  
**Flying Through the Air with the Greatest of Ease: How International ANSPs Prioritize Resources** — Maryland Ballroom A&C  
Moderator: **Neil Planzer**, ATCA Chairman, The Boeing Company  
Speakers: **Micilia Albertus-Verboom**, DC-ANSP; **Maurice Georges**, DSNA; **David McMillan**, Gatwick Airport BOD; **Kevin Shum**, CAAS; **Ed Sims**, Airways New Zealand; **Rudy Kellar**, NAV CANADA

**8:45 - 10 a.m.**  
**2016 FAA PBN Strategy – Now That It's Official, What Can We Expect?** — Maryland Ballroom A&C  
Moderator: **Ken Speir**, Delta  
Speakers:

**Erwin Lassooij**, ICAO; **Deborah Lawrence**, PMO, FAA; **Jeff McCoy**, FAA Tech; Ops; **Brian Townsend**, American Airlines; **Jeff Woods**, NATCA



Speir

Lassooij

Lawrence

McCoy



Townsend

Woods

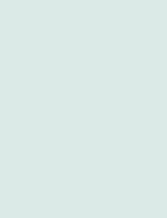
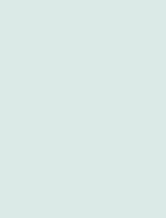


Albertus-Verboom

Georges

McMillan

Shum



Kellar

Sims



Robyn

Bertram

Eck

Grizzle

**1:30 - 3 p.m.**  
**Acquisition Programs:**  
**Too Big Not to Fail?** — Maryland Ballroom A&C

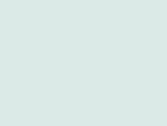
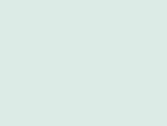
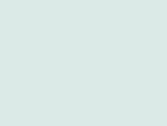
Moderator: **Dorothy Robyn**

Speakers: **Chris Bertram**, B+S Strategies; **Jim**

**Eck**, FAA; **David Grizzle**, Dazzle Partners; **Nathan**

**Tash**, FAA; **David Hanlon**, AIA, Air Transportation

Systems Committee



Robyn

Bertram

Eck

Grizzle



Merkle

Burleson

Fontaine

Nichols

**3 - 3:30 p.m.**  
**Ice Cream Break with Exhibitors**  
Prince George's Exhibit Halls D&E

Sponsored by:



**3:30 - 5 p.m.**  
**FAA Surveillance Strategy** — Maryland Ballroom A&C

Moderator: **Jay Merkle**, Director, Systems Integration and Requirements Analysis

FAA Speakers:

**Carl Burleson**, Deputy Assistant Administrator, Office of Policy; **Paul Fontaine**, Director, Advanced Concepts and Technology Development;

**Rebecca Guy**, Manager, Emerging Solutions;

**Robert Nichols**, Manager, Surveillance Services

## 61st ATCA Annual Conference Abstracts

**Tuesday, October 18**

**8:45 a.m.**

**2016 FAA PBN Strategy – What Can We Expect?**

With all this talk about PBO, what about Performance Based Navigation (PBN)? Panelists will break it down and dissect the FAA's new PBN strategy, so come prepared with questions. Discussion will focus on the strategy's emphasis on NAS resiliency, cybersecurity, and emergency preparedness, as well as challenges to highly complex airspace.

**10:45 a.m.**

**Flying Through the Air with the Greatest of Ease: How International ANSPs Prioritize Resources**

Do they do it better across the pond? What can we learn from the operations and resource prioritization of international ANSPs? How do they stack up against the FAA and its PBO? Now is your chance to find out for yourself.

**3:30 p.m.**

**FAA Surveillance Strategy**

The FAA will be providing a holistic view of the surveillance strategy which will include information on NextGen, Automatic Dependent Surveillance – Broadcast (ADS-B), Spectrum Efficient National Surveillance Radar Program (SENSR) and policy.

**Wednesday, October 19**

**8:30 a.m.**

**UAS in the USA**

Now, let's talk about technology. 2016 has been the year of the drone. The constant stream of new UAS technologies and capabilities has been akin to Christmas morning (made slightly ironic seeing how many of us will probably receive drones this holiday season). However, the FAA has the unfortunate task of taking away our toys until we eat our vegetables. Integrating UAS to a NAS built for manned aircraft, and keeping manufacturers, ANSPs, and users happy – all the while keeping the NAS safe

**Tuesday, October 18**

**1:30 p.m.**

**Acquisition Programs: Too Big Not to Fail?**

It's the elephant in the room: Acquisitions. Love it or hate it, the FAA's approach to acquisitions is essential to our way of doing business. There are advantages and disadvantages aplenty (all parties are forced into a winner-take-all process, but is that a bad thing?), but bureaucracy is the tie that binds us all, right?



Come armed with questions, but let's keep it clean, folks.

(always the FAA's number one priority) – is no easy task. Panelists will break down the logistics of this behemoth mission at this session.

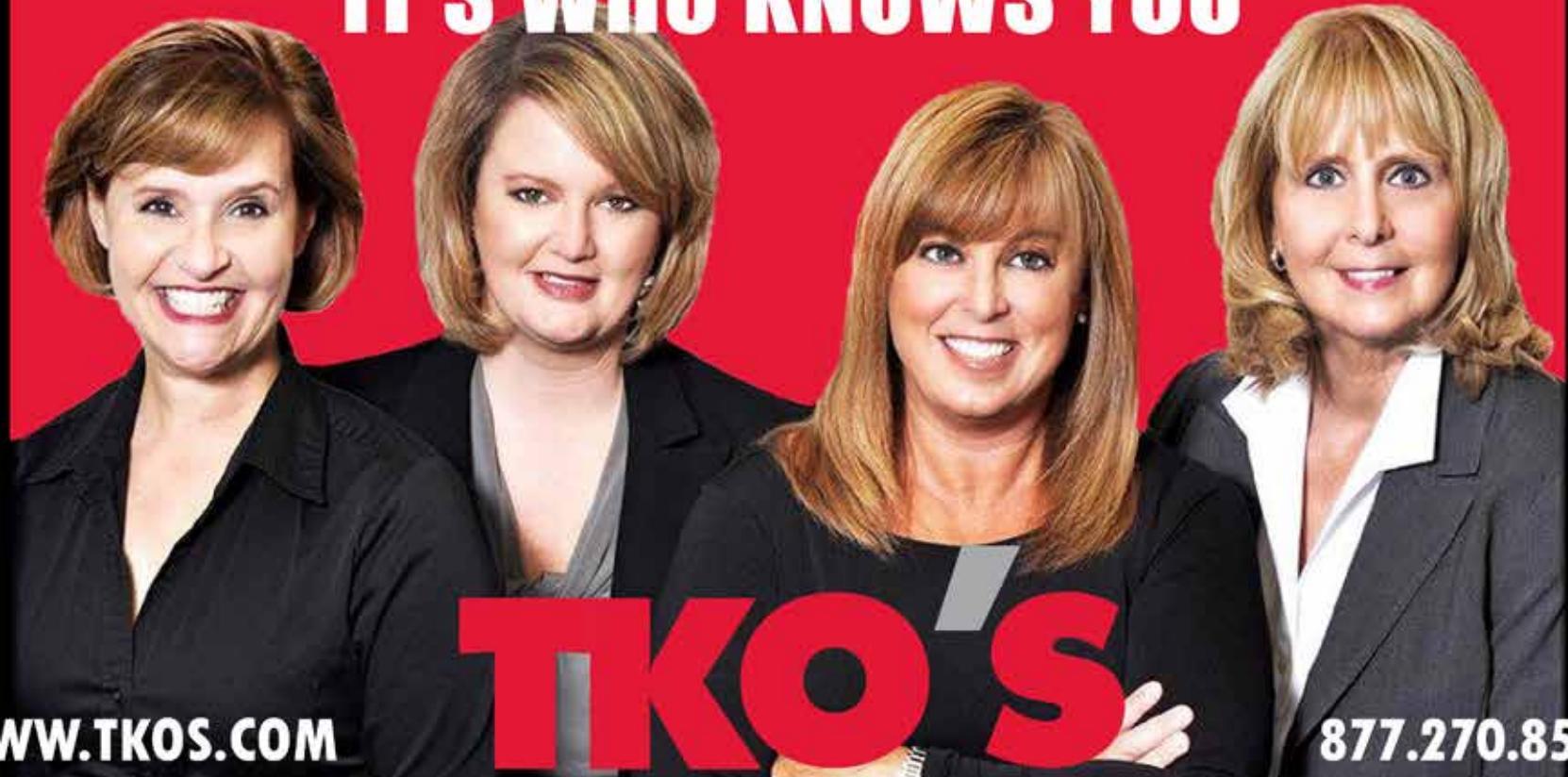
**1 p.m.**

**A Cross-Generational Industry Perspective**

The conference concludes with a big picture view of our industry and a recap of the last three days as told

by six people all at different stages of their careers: two veterans, two young professionals, and two just starting out in aviation. Our panelists will talk of highs and lows at the conference and why the ATCA Annual – a veritable microcosm of our industry – is so important in one's career evolution in aviation.

## IT'S NOT WHO YOU KNOW IT'S WHO KNOWS YOU



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# NextGen: Moving Forward and Delivering Benefits

## A Word from the FAA

NextGen's benefits are becoming increasingly apparent to NAS users. Over the past year, the FAA has made notable achievements in every phase of our modernization effort, which is fundamentally changing the way we see, navigate, and communicate in the NAS. NextGen is reducing delays, enhancing safety, and improving aviation's environmental footprint.

Improvements to date have already generated \$1.6 billion in benefits. The FAA estimates NextGen improvements will provide \$160.6 billion in benefits between 2010 and 2030. These future benefits

come from reduced flight delays, improved flight efficiency, and cost savings. The significant and measurable benefits we are now seeing would not have been possible without the close collaboration of our stakeholders — air traffic controllers, pilots, labor unions, air carriers, general and business aviation, manufacturers, and vendors.

As of this writing, Data Communications (Data Comm) tower services are now operational at over 46 airports and are expected to be deployed to 10 more towers in the coming months — three years ahead of schedule. Data Comm will save operators about \$10 billion over the program's 30-year life cycle and the



FAA about \$1 billion in future operating costs.

The FAA commissioned the Standard Terminal Automation Replacement System (STARS) this year at the last of our 11 largest Terminal Radar Approach Control (TRACON) facilities. The group includes nine of the 10 busiest facilities of this type in the world. Under the FAA's Terminal Automation Modernization and Replacement (TAMR) program, STARS provides new and advanced functionalities for controllers, including state-of-the-art, flat-panel LCD displays, the ability to save workstation preferences, and minimum aircraft separation keys. It also offers an easier-to-maintain infrastructure for airway transportation system specialists. Although, not a NextGen funded effort, TAMR is providing the foundational infrastructure for key NextGen technologies such as Automatic Dependent Surveillance-Broadcast (ADS-B).

Once aircraft flying in most controlled airspace are equipped with ADS-B Out by January 1, 2020, controllers will have an improved, real-time view of air traffic. The improved accuracy, integrity, and reliability of ADS-B signals over radar, coupled with new advanced Performance Based Navigation (PBN) procedures, means controllers eventually will be able to safely reduce the minimum separation distance between aircraft and increase capacity in the nation's skies. ADS-B has been completely integrated into the En Route Automation Modernization platform and is in the process of being integrated with the TAMR program.

We are partnering with industry through the Equip 2020 Working Group to resolve the barriers to equipage that industry has identified. Most US airlines have plans in place to ensure they are equipped. For general aviation, we are offering a \$500 incentive to help owners of fixed-wing, single-engine

piston aircraft equip.

PBN has permeated all aspects of the NAS, from regional airports to major hubs and metroplexes. Implementation is on or ahead of schedule. We now have more PBN — mostly satellite-enabled procedures — in the NAS than ones that rely on ground-based navigation aids. This means reduced flight times, millions of dollars in fuel savings, decreased carbon emissions, and fewer flight delays.

The FAA has worked hand-in-hand with the NextGen Advisory Committee (NAC) to identify industry priorities to ensure the capabilities and procedures that matter most are implemented as soon as

NextGen is reducing delays, enhancing safety, and improving aviation's environmental footprint.

possible. Working together, we have executed a plan and proved that we can deliver on near-term NextGen capabilities. We have completed more than 60 commitments, delivering a multitude of capabilities and benefits to NAS users. The NAC will continue to play a vital role in ensuring NextGen's success.

As we continue to implement NextGen, much of our planning must take into account the demands of an evolving NAS — one that must accommodate new entrants such as commercial space transportation vehicles and unmanned aircraft systems.

The extraordinary work that has been accomplished with NextGen is a testament to government-industry collaboration, steady congressional funding, and tireless work by our stakeholders. The foundational infrastructure for NextGen is complete, but we must continue to maintain these elements in equilibrium so that advancements in our nation's air transportation system will advance and remain on schedule.

## NEXTGEN THEATER SCHEDULE

### Tuesday, October 18th

#### Integrating NextGen



9:30 – 9:45 a.m.

#### Welcome

**Speaker:** Kristen Burnham, Vice President, Program Management Organization, Air Traffic Organization, FAA

10 – 11:30 a.m.

#### NextGen Weather Systems User Forum

Moderated by: Ernie Dash, FAA

**Speakers:** Alfred Moosakhanian, FAA; Matt Tucker, NATCA; Joseph Venuti, MIT Lincoln Labs; Rocky Stone, United Airlines; Bob Carson, Harris Corp.; Barry Hausman, Raytheon

1:30 – 2:30 p.m.

#### SWIM In Action: Life After Connecting

Moderated by: Jeri Groce, FAA

**Speakers:** Daniel Baker, FlightAware; Tim Grovac, PASSUR; Diane McClatchy, Rockwell Collins

2:45 – 3:45 p.m.

#### Integrating ATM Applications Globally: Creating a Harmonized ATM System

**Speakers:** Thien Ngo, FAA; Jon Standley, FAA

### Wednesday, October 19th

#### Achieving NextGen

10 – 11 a.m.

#### Achieving a Vision for Remote Tower Services in the US

**Speaker:** Andras Kovacs, FAA



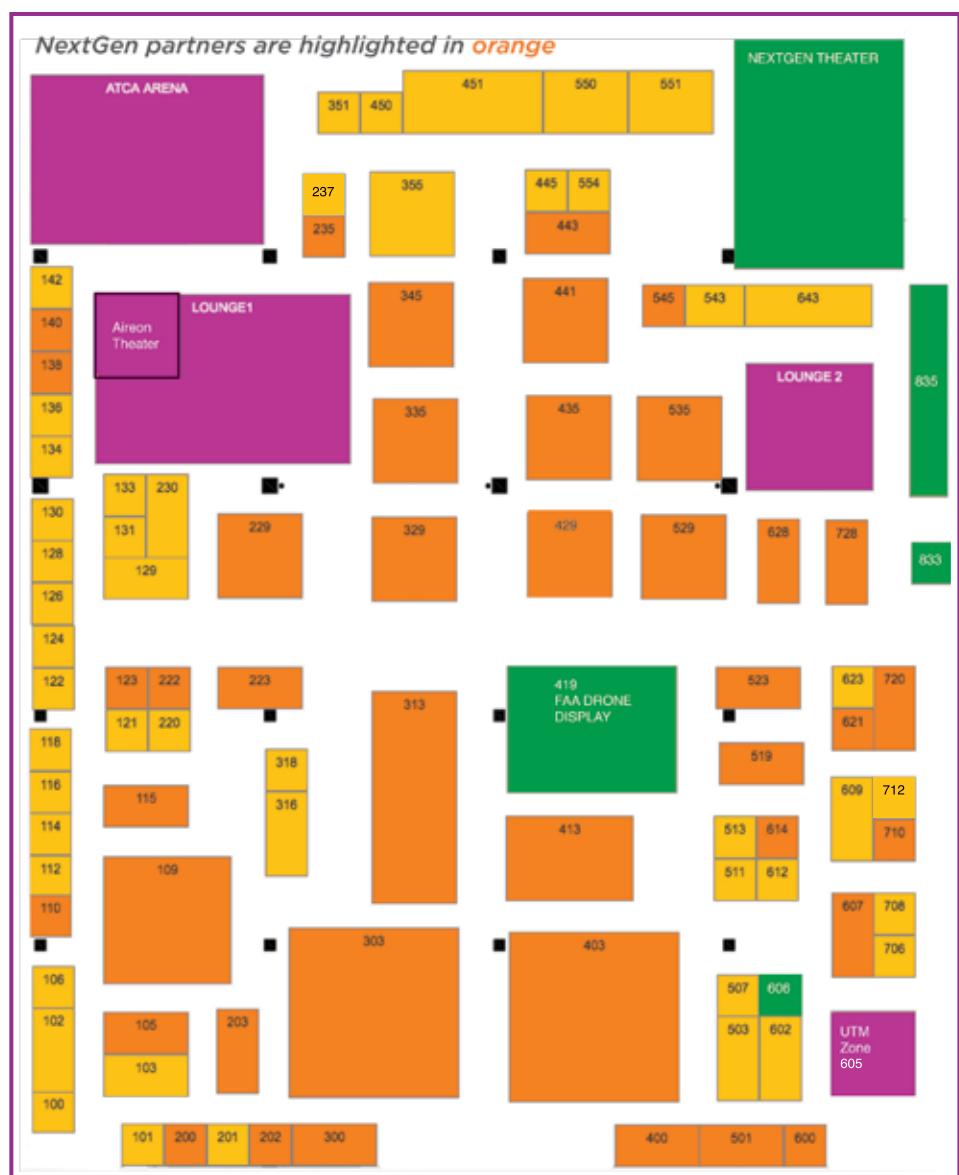
Don't Miss the FAA Drone Cage — now on display INSIDE the Exhibit Hall! Demos will take place throughout the week.



# IT'S TIME FOR A NEW APPROACH TO ATM

With the ever-growing amount of traffic in the sky, air traffic management (ATM) is a critical priority that requires continuous progress. Working together with industry and government organizations, Boeing is committed to an ATM transformation that improves safety, efficiency and the environment for all. At the core of Boeing's ATM solutions are secure network-centric operations that will incorporate the capabilities of modern airplanes, as well as ensure global interoperability and real-time access to critical information. The time is now, and Boeing is ready to help.

<b>Company Name .....</b>	<b>Booth</b>	
Advanced ATC.....	351	Grant Thornton .....
Aireon LLC.....	535	Harris Corporation .....
Airtel ATN .....	123	IHS Jane's.....
Airways Corporation New Zealand.....	445	IHSE USA LLC .....
All Weather, Inc.....	220	Infina, Ltd .....
ATAC .....	545	Intelligent Automation, Inc.....
ATCA.....	451	Intersoft Electronics NV.....
Boeing.....	303	Iron Bow Technologies .....
CACI.....	355	JMA Solutions, LLC .....
CGH Technologies, Inc. ....	728	Kongsberg .....
Chassis Plans.....	129	Kongsberg Geospatial .....
Cl <sup>2</sup> Aviation Bermuda, Ltd. ....	708	Leidos.....
Cl <sup>2</sup> Aviation, Inc.....	706	LS Technologies, LLC .....
Cobec Consulting, Inc. ....	114	MCR, LLC .....
Cobham.....	124	Metron Aviation .....
Crown Consulting, Inc. ....	140	Midwest ATC Service, Inc. ....
CSRA.....	441	MITRE.....
CSSI, Inc.....	501	Moog .....
Diamond Antenna & Microwave Corp.	507	Mosaic ATM, Inc .....
DIGITALiBiz, Inc. (iBiz) .....	519	MSAG .....
DOT/Volpe Center.....	602	Nantucket Holiday for Heroes and Service Dogs for Heroes.....
Easat Radar Systems Limited .....	122	National Air Traffic Controllers Association.....
EIZO.....	511	National Center for Atmospheric Research .....
Embry-Riddle Aeronautical University - Ph.D. in Aviation.....	142	NAVCANADA .....
Endura LLC .....	128	NAVCANatm.....
Enovative Technologies .....	554	NextGen Federal Aviation.....
Enroute Computer Solutions, Inc. ....	105	NextGen Theater .....
Ernst & Young.....	118	Noblis .....
Esterline Belgium bvba .....	316	Northrop Grumman .....
Evans Consoles Incorporated .....	110	Pragmatics Inc .....
Evans Incorporated .....	614	Raytheon Company .....
FAA Emergency Response Vehicle....	835	Rigil Corporation.....
FAA Drone Display .....	419	Robinson Aviation (RVA), Inc. ....
FAAMA.....	450	Rockwell Collins .....
FAA Commercial Space.....	833	Russ Bassett Corp. .....
FAA Small Business .....	606	Saab Sensis .....
Flatirons Solutions.....	100	Searidge Technologies .....
Frequentis USA, Inc. ....	435	Selex ES .....
G&D North America.....	513	Sennheiser Communications.....
General Dynamics.....	529	



Siemens Industry.....	101	Thales .....	329
SkySoft-ATM.....	523	TKO's.....	609
Snowflake Software .....	600	UTM Zone.....	605
Solace .....	237	Veracity Engineering .....	400
STR-SpeechTech Ltd. ....	612	Visit Madrid!/ (Conference Studio) .....	550
Sunhill Corporation.....	203	WiMAX Forum .....	200
Systems Atlanta, Inc. ....	621	World ATM Congress .....	551
Telephonics.....	345		
Telrad Networks.....	201		
Tetra Tech	607		

*List as of October 17, 2016*



**The ATCA Board of Directors meets, as they send off Neil Planzer as Chairman and welcomes Charlie Keegan as incoming chair.**



**2016 ATCA Awards recipients are  
photographed after receiving  
their awards**

**Visit the ATCA Booth (#451) to win ATCA gear! Pretend you're an air traffic controller at ATCA's photo booth!**

## Tuesday, October 18 Exhibit Hall Theater Schedules and Abstracts

### AIREON FLY-BY THEATER

10 - 10:20 a.m.

#### Building a Security Strategy

*Speaker:* Jeffrey Lush, Chief Technologist, HP Federal - Civilian

10:30 - 10:50 a.m.

#### How To Talk To a Pilot Who Is Not a Pilot: Communication Challenges in the UAV World.

*Speaker:* Andy Osantowske and Michelle DeLauer, Evans Incorporated

11 - 11:20 a.m.

#### How Airports Can Benefit from a Versatile Remote Tower Platform

*Speaker:* Neil Bowles, Head of Air Traffic Management, Searidge Technologies

11:30 - 11:50 a.m.

#### Weather Translation

12 - 1:15 p.m.

#### Tomorrow's Air Traffic Controllers: CTI High Complexity Tracon Simulation Training

*Speakers:* Lily Alexander, Daniel Andrate, Keran Hanna, Kelsey McGrath, Omar Ramos, Lizmarie Rodrigues, Marco Taborra; Vaugh College

1:30 - 1:50 p.m.

#### Aviation Data Exchange and Analysis

*Speaker:* Paul Comitz, CACI

2 - 2:20 p.m.

#### Migration of TDM to IP in the NAS - Risk Mitigation Solutions

*Speaker:* Steve Wigent, Manager, Business Development, Sunhillo

2:30 p.m. - 2:50 p.m.

#### Overview of Aircraft Cyber Security Challenges

*Speakers:* Eric Jacobs, Director, MSAG

3 - 3:50 p.m.

#### YAP Tower Talks

*Speakers:* Jared Stout, FAA; Ashley Spencer, JMA; Phil Yeung, Noblis

4 - 4:20 p.m.

#### Aviation Industry Inefficiency

*Speaker:* Mark Palmer, Innovation Director, Thales

### ATCA ARENA

9 - 9:45 a.m.

#### ATC Slatwall Consoles - Supporting Safety in the NAS

Air Traffic Control (ATC) Slatwall consoles support safety in the US National Airspace System (NAS) by allowing ATC equipment to be positioned properly. The tools used by air traffic controllers to provide the separation and safety services for aircraft are supported and contained within consoles that provide the man-machine interface between humans and technology. The location, ease of use, flexibility, and maintenance of these tools becomes critical when controllers perform their duties to separate aircraft and ensure the safe, orderly and expeditious flow of air traffic. Slatwall ATC consoles allows equipment to be properly positioned, enables the re-positioning of equipment to accommodate differences in human physiology, and provides greater flexibility in technology integration than ever before. The advancement of ATC Slatwall consoles provides greater ability for controllers to utilize the tools provided to them, enhancing ATC safety operations and offering many other advantages including saving space and reducing costs.

*Speaker:* David Rivers, Director, ATC, Evans Consoles Incorporated

10 - 10:45 a.m.

#### Using Public Cloud Service Providers (CSPs) in the Federal Government

Session will cover the benefits of hosting, managing and securing applications and websites in the cloud. Recommended pre-planning, Standard Operating Procedures, design and financial preparation in addition to lessons learned will be discussed.

*Speaker:* Steven Oh, Senior Principal, Strategic Solutions Architect, CSRA

12 - 12:45 p.m.

#### Future Air Traffic Management Networks

Major companies such as Google and Facebook already take advantage of software-defined networks. Similar network strategies will take Air Navigation Service Providers' business processes to a new level. This will result in dramatically reduced dependency on expensive network hardware, while maintaining or increasing service availability and operational safety. Network virtualization techniques improve end-to-end network testing, and simplify network deployment processes. This presentation describes the streamlined and transparent utilization of diverse network media types and the ability to grow network capacity in a safe and flexible manner.

*Speaker:* Stefan Galler, Senior Product Business Manager, Frequentis AG

1:00 p.m. - 5:00 p.m.

#### AeroMACS 2016 - National Harbor

A seminar for all participants to meet, exchange ideas, and develop business and cooperative relationships. The event will highlight the opportunities, challenges, and strategies involved in operating efficient AeroMACS networks.

This seminar is constructed to allow the global Aviation Community to network, share key lessons, and collaborate for the benefit of the industry. Our goal is for attending participants to gain concrete knowledge that will help them build best-in-class AeroMACS networks.

*Topics of discussion will include:*

- Future Aeronautical Communications
- AeroMACS Applications, Integration and Deployments
- Network and Security Considerations for AeroMACS
- Certification for AeroMACS Equipment and Devices

And more...

### WEDNESDAY, OCTOBER 19 CONFERENCE PROGRAM

7:30 a.m. - 1 p.m.

#### Registration Open

Convention Center Prefunction Area

7:30 - 8:30 a.m.

#### Welcome Coffee

Maryland Ballroom Foyer

8:30 - 9:45 a.m.

#### UAS in the USA - Maryland

Ballroom A&C

*Moderator:* Craig Marcinkowski, Gryphon Sensors

*Speakers:* Dallas Brooks, Mississippi State University; John Cavolowsky, NASA;

Travis Mason, Google; Pasha Saleh, AirMap

8:30 a.m. - 2:00 p.m.

#### Exhibit Hall Open

Prince George's Exhibit Halls D&E

9:45 - 11:00 a.m.

#### Break with Exhibitors

11:00 - 11:30 a.m.

#### Keynote Address

Maryland Ballroom B&D

**Hon. Christopher A. Hart**, National Transportation Safety Board (NTSB)

11:30 a.m. - 1 p.m.

#### "Working Lunch Keynote"

Maryland Ballroom B&D

**Teri Bristol**, COO, FAA Air Traffic Organization (ATO)

1 - 2:15 p.m.

#### A Cross-Generational Industry Perspective

Maryland Ballroom A&C

*Moderator:* Lillian Ryals, The MITRE Corporation

*Speakers:* Paul Engola, Leidos; Andy Hoag, Aireon; Mike Ball, Northrop Grumman; Dave Rhodes, CSRA; Ariel Scheirer, Ascent Consulting Company; Sarah Staab, DTIS

2:30 - 3 p.m.

#### Keynote Address

Maryland Ballroom A&C

**Hon. Michael Huerta**, Administrator, FAA

3 p.m.

#### Closing Remarks

Maryland Ballroom A&C

**Peter F. Dumont**, President and CEO, ATCA

6 - 7 p.m.

#### 2016 Glen A. Gilbert Memorial Award Reception

Maryland Ballroom Foyer

*Sponsored by:*



7 - 9 p.m.

#### 2016 Glen A. Gilbert Memorial Award Banquet

Maryland Ballroom

Honoring **Paul M. Rinaldi**, President, National Air Traffic Controllers Association (NATCA)

*Sponsored by:*



9 - 11 p.m.

#### Glen A. Gilbert Dessert Reception

Lower Atrium

*Sponsored by:*



## New Zealand ANSP Shares Insight on ATC Training for Millennials

The millennial generation has influenced everything from communication to clothing. And now it's changing air traffic control (ATC) training, said Sharon Cooke, vice president of global training for Airways of New Zealand, during the Monday morning session, "What Will Be the Game Changer for ATC Training?"

"There's a paradigm shift in ATC training from everyone doing everything themselves, versus working smarter together," she said. "And it's being driven by the new generation of learners."

Airways controls civil and military air traffic over a 37-million kilometer airspace, using 16 towers and 900 employees. Cooke said it also has a large international footprint, including engagements with 75 countries.

Consequently, Airways has five training campuses worldwide, including Puerto Rico and China, Cooke said. And that global presence, along with next-generation trainee demands, has made Airways a leader in 21st century ATC training initiatives.

Airways has digitalized its training system to accommodate trends it's identified: more re-

gional collaboration among ANSPs, which reduces training costs and gives individual ANSPs the flexibility to scale their training up or down; more civil/military cooperation; an emphasis on trainees having both technical and academic qualifications so they can transfer to different jobs within the ANSP; self-directed learning and use of simulators to lower the student-to-instructor ratio; and millennial trainees' desire for mobile/remote learning.

Cooke said another trend is an emphasis on student-funded or scholarship training rather than employer-funded training, with a guaranteed placement in on-the-job training if students successfully complete the training course.

"We find students are more motivated to succeed if they have some skin in the game, and the promise of a job at the end of their training," she said.

But if students are paying for training, it's important to give them a high degree of confidence they will succeed, Cooke said. That's why Airways does extensive advance screening of students—which Cooke says results in 90 percent pass rates.

Airways also works with four uni-



Sharon Cooke, Airways International, talks about next generation traffic control training at the ATCA Arena Theater on the Exhibit Hall floor.

versities worldwide to offer students a two-year aviation management degree, followed by one year of ATC training with Airways.

Airways is also a leader in E-learning initiatives. "Millennial learners have the expectation that information will be available to them at any place, any time, and E-learning delivers that," Cooke said. "E-learning modules also reduce expenses across global campuses."

Airways' E-learning blueprint includes a platform digital ecosystem that can grow as ATC training requirements change. "It's more than just a learning management system," said Cooke. For instance, it has portals for instructors and students; an online application process; pre-screening of students, including personality assessment and aptitude testing; and reference checking.

Airways outsourced the software development, but included people from the ANSP's training academy and operations.

Along with portable, full-size and LED-panel 3D stimulators, Airways has also developed Air-

books Airways Interactive Resources for cutting-edge training content—including videos, interactive animations and games, quizzes, and chat rooms for classmates. "This is a tool the millennial generation told us they can learn from," Cooke said.

Airbooks also work well for refresher training, she said. Materials are sent directly to controllers' devices so they don't have to physically attend training sessions. Airbooks also contain Airways' user and reference manuals, so controllers always have the latest version.

"The technology allows us to work together. We don't have to be in our own boxes anymore—we can share our information and resources globally," said Cooke.

But there are also challenges. "There is a fine line between bleeding edge and leading edge," Cooke said. "It always costs much more than you think, and there is no such thing as 'off the shelf.' We always have to modify and adapt what we're doing."

### SPEAKER SPOTLIGHT



**NAME:** Chris Bertram

**TITLE:** Founding Partner

**ORGANIZATION:** B + S Strategies

**SESSION:** Acquisition Programs: Too Big Not to Fail?

**TIME AND LOCATION:** Today at 1:30 p.m., Maryland Ballroom A & C

**THE MESSAGE I WANT TO GET ACROSS IN MY PANEL IS ...** Trying to successfully run and modernize the ATC system while operating within the federal government bureaucracy is almost impossible.

**I FEEL MOST SUCCESSFUL WHEN ...** I am getting work done.

**I'M MOST PROUD OF ...** My two kids – who aren't really kids anymore.

**IF YOU COULD HAVE LUNCH WITH ANYONE, WHO WOULD IT BE?** Winston Churchill.

**WHAT BOOK IS CURRENTLY ON YOUR NIGHT STAND?**

My night stand usually has a combination of books I intend to read and some I want to reread. Right now I am rereading The White Nile by Alan Moorehead. It is a history of the 19th century explorers traveling through Africa searching for the source of the Nile.

**HOW I GOT INTO THE AVIATION INDUSTRY:**

I arrived in graduate school to study economics and public policy a couple of years after the airline industry was deregulated. It was an economics experiment happening in real time that students could actually watch unfold. I have followed aviation ever since.

### GET IN THE FAST LANE!

Walk-ins are welcome! Apply for TSA Pre✓® at Annual! Your fast pass to an expedited airport experience is just steps away from the Exhibit Hall floor.



## Funding

*Continued from page 1*

Owners and Pilots Association (AOPA), said the association's funding priorities include flight service, certification reform, the Piston Aviation Fuels Initiative (PAFI), contract towers, and the Airport Improvement Program (AIP). AOPA also wants no user fees and FAA reauthorization.

Panelists devoted the bulk of the session to answering questions from the audience, including:

### **So give us your opinions on how to get stable funding?**

Victoria Wassmer, FAA: The FAA's funding authorization has been extended to Sept. 30, 2017. This gives the agency the opportunity to work with the new administration and Congress to get more stable funding. Priorities include examination of public-private partnerships for maintenance and facility improvements, along with workforce policies and procedures.

**Does our funding structure prevent the FAA from quickly responding to industry game-changers such as space-based ADS-B [Automatic Dependent Surveillance-Broadcast]? Other ANSPs [air navigation surface providers] have moved fast. What about us?**

Wassmer: We're looking at that right now. By this spring we should have an update, including how to pay for enhanced surveillance.

Elizabeth "Lynn" Ray, FAA: One issue is making a business case for ocean navigation.

Jenny: We're working on an answer of what makes sense in terms of enhanced surveillance. Along with who will pay, what approach will you take to dealing with a potential monopoly?

**There are no revenue mechanisms for UAS and commercial space to contribute to the budget. How can they be incentivized to contribute?**

Ray: Many are already contributing substantially. It's hard to incentivize necessary government functions like rulemaking.

Wassmer: It's an important question that will be front and center in the next year for the Drone Advisory Committee (DAC).

**Controller staffing is low, often resulting in mandatory overtime and controllers making over \$100,000 a year in overtime pay. What kind of plan is in place to address this?**

Ray: Hiring plans are in place and are on target. We did take a

big hit during the sequester, so it's going to take time to build the numbers back up. There are some agreements in place for dealing with hard-to-staff facilities.

Wassmer: We met our staffing goals (over 1,600 controllers hired) for this year, and have a goal of over 1,700 controller hires next year.

### **To what extent are delivered programs staying in the F&E budget further crowding out NextGen, because operating cost savings are elusive?**

Wassmer: One of the big things Michael Huerta has emphasized is the importance of collaborating with all types of stakeholders: industry, labor partners, and general aviation users. As we propose different things that we think look good, if we don't sit down and talk with our stakeholders, it doesn't re-

ally do us any good. I think we're making progress in that area. The majority of our operational cost savings that came out of the sequester has been in our information technology (IT) commodity arena: about \$40 million in continued cost savings.

Jenny: It's really about a new way of managing new programs, including addressing F&E, along with understanding and addressing all the operational aspects from the very beginning and making that part of the initial funding.

### **Should we privatize?**

Rudinger: I have a saying tacked to the door on my office: "If you think there's a simple solution, you don't understand the problem." We have to look at which specific areas within the FAA that need to be reformed. Privatization is the simple

answer. And when you say "privatize," you immediately get the battle lines drawn. From an operator system and the general aviation community, we think the system works great as it is.

### **How does the FAA intend to change out aging infrastructure?**

Ray: The high-level answer is that it will be done programmatically and collaboratively. You can't do it without that; there are too many pieces. For instance, there have been some locations that say if we want to keep our VHF Omni Directional Radio Range (VOR), can we pay for it?

## Shuttle Bus Schedule

**October 18 • 19**

**Departures from FAA**

**(with access to L'Enfant Plaza Metro)**

FAA FOB10A from the C Street side of the building to Gaylord National Harbor Resort & Convention Center

7:30 a.m.  
8:00 a.m.  
8:30 a.m.  
9:00 a.m.  
9:30 a.m.  
10:00 a.m.  
10:30 a.m.  
11:00 a.m.  
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12:00 a.m.  
12:30 p.m.  
1:00 p.m.  
1:30 p.m.  
2:00 p.m.  
2:30 p.m.  
3:00 p.m.  
3:30 p.m.  
4:15 p.m.  
4:45 p.m.  
5:30 p.m.  
6:15 p.m.

*October 19 Only:*

Last Shuttle Departs at 3:00 p.m.

**Departures from**

**Gaylord National Harbor**

**Resort & Convention Center**

Returning to FAA FOB10A. Depart from Porte-Cochere off Maryland Ballroom Foyer

8:15 a.m.  
8:45 a.m.  
9:15 a.m.  
9:45 a.m.  
10:15 a.m.  
10:45 a.m.  
11:15 a.m.  
11:45 a.m.  
12:15 p.m.  
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2:15 p.m.  
2:45 p.m.  
3:15 p.m.  
3:45 p.m.  
4:30 p.m.  
5:15 p.m.  
5:45 p.m.  
6:30 p.m.  
7:00 p.m.  
7:30 p.m.

*October 19 Only:*

Last Shuttle Departs at 4:30 p.m.

Travel times are approximately 30 minutes each way depending on traffic conditions.

## WORD TRAFFIC

### Find the 61st Annual ATCA Sponsors!

Locate the sponsors in the puzzle and circle each one. They may be across, down or diagonal in any direction.



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## NEED ASSISTANCE?

Stop by the Shuttle desk in the Maryland Ballroom Foyer near the doors exiting to the parking garage.

## From the Exhibit Floor...



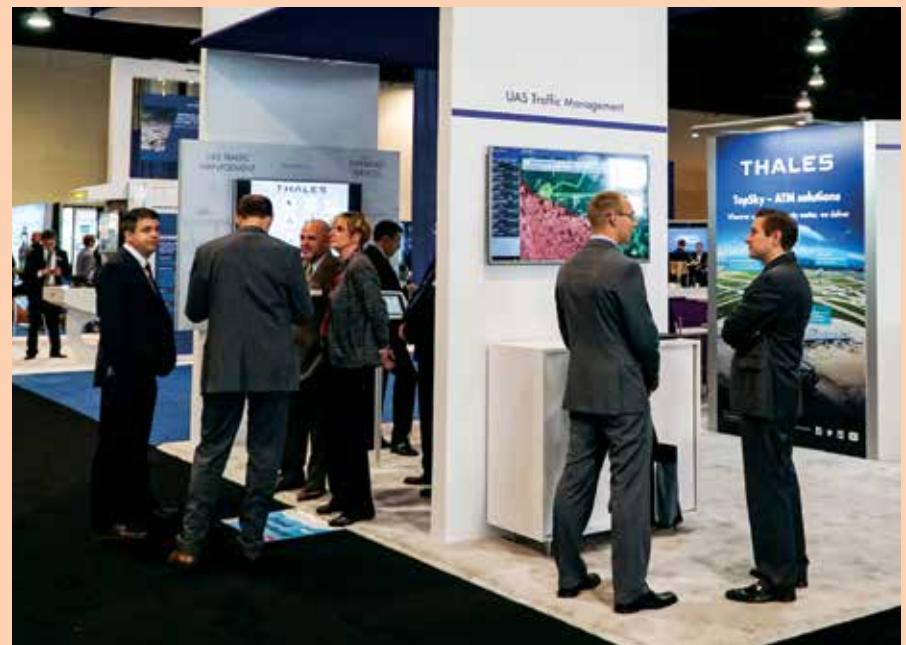
Assistant Administrator for NextGen Jim Eck hosted a media round-table yesterday, where he led press through the NextGen Phases of Flight display and briefed the status of NextGen. Eck hopes to do a similar type of event for Congressional staff in the near future. "Now we're at a point where progress has achieved a capability, like getting the surface management capability in place. I hope it starts to signal there's really good progress being put in place," Eck said.



"ATCA Annual is the place to be face-to-face with people you work with remotely. It's a central meeting point."

**—Pat Urbanek, Searidge Technologies (Booth 429)**

Don't miss Searidge Technologies' session, "How Airports Can Benefit from a Versatile Remote Tower Platform," today at 11 a.m. in Aireon Fly-By Theater



"ATCA is an opportunity to engage with others in industry. We get executives from FAA to come by our booth and check out technologies. It's a good opportunity to get them aside and see their needs as well."

**—Frank Matus, Thales (Booth 329)**

## Oversight

*Continued from page 1*

everything both public and private stakeholders want it to accomplish.

Rather than measuring outputs, PBO measures outcomes, Puentes said. "It's not necessarily about how many planes, trains, and automobiles you move; it's more about thinking of what you're actually trying to accomplish."

Puentes said the movement from compliance-based regulation or prescriptive oversight to PBO is driven by new tools offered by big data, the desire to squeeze as much as possible out of the existing safety system, and increasing constraints in both resources and finances.

Peggy Gilligan, FAA, said PBO is the "natural evolution of how we're going to continue to build the safety standards we've already accomplished. It's the natural evolution of where our partnership with the industry is going. Now we have the ability to understand so much more about what's happening in the system as it's happening. Quite literally, it's something we couldn't have done 10 years ago."

Gilligan said PBO has been well received by the FAA workforce. It allows the aviation industry to work together to figure out how to address big risk areas, like weather, that aren't encompassed in traditional safety management systems.

There are varying levels of PBO, Gilligan said. For instance, a new airline may have different safety oversight than a legacy airline like

United or American. "It's more of a change for the industry than it is for the FAA," she said. "We're working with industry to see the emerging risk, and what performance-based outcomes need to change to mitigate that risk."

Matt Hampton, Office of the Inspector General, U.S. Department of Transportation, said PBO is viewed as big paradigm shift. "Having the right staffing levels and capability in house is very important," he said. "A key question we get is does the FAA have the right number of inspectors and the right expertise?"

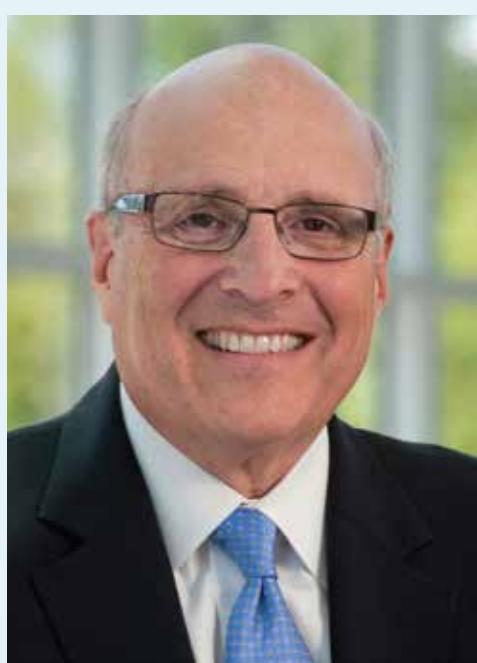
Martin Rolfe, NATS, said the U.K. has used PBO for about eight years. "When we started we knew we had a safe system, but we could see safety wasn't going to improve by just doing more of the same. PBO enabled us to focus on things we worried about," like infringement of aircraft into controlled airspace.

Compared to compliance-based regulation, "PBO allows us to fill in the gap," Rolfe said. "It encourages people to think much more broadly. There are people in this industry who know where the problems lie and how to fix them, so this gives them a voice in the whole process."

Brian Wynne, Association for Unmanned Vehicle Systems (AUVSI), said along with drones, PBO could also apply to automated vehicles and railway transit.

"I expect that 10 years from now, performance-based oversight will be a very different conversation," he said.

Please join us  
in a toast to  
**Neil Planzer**  
and  
congratulate  
him on  
his retirement  
from Boeing.  
Today,  
3 – 3:30 p.m.,  
Boeing  
Booth #303



## Hurricane Nicole a Breeze for CI<sup>2</sup> Aviation Bermuda

When Hurricane Nicole hit Bermuda late last week, CI<sup>2</sup> Aviation Bermuda wasn't scared. They were prepared because they had seen worse.

"Hurricanes are our biggest natural threat, but we pride ourselves on our hurricane preparedness plan," said Mark Bourne, ATC services manager for CI<sup>2</sup> Aviation Bermuda.

Preparations for Hurricane Nicole, which at one point escalated to a Category 4 storm, were the culmination of learning experiences. Hurricane Fabian in 2003, which damaged major roadways and an ATC antenna on the island, was one such learning experience and convinced the island to invest in a Doppler weather radar.

CI<sup>2</sup> Aviation Bermuda – which provides ATC, Aerodrome, ground electronics, navigational aids and ATC communications, operations and maintenance, and weather and forecasting services at Bermuda's L.F. Wade International Airport – has worked tirelessly to bring an increased level of service. Their work showed when the airport only sustained minor property and vegetation damage during Hurricane Nicole, the worst hurricane to hit in more than a decade.

"It's one thing to prepare and it's another to respond," said Bourne. "The impact to the NAS was minimal."

The company's preparation now starts 72 hours before a storm. This includes topping off all emergency generators and vehicles, securing all hangar doors and potential debris, and maintaining close communication with the FAA. As a result of their efforts, their SSR radar and VRDE were returned in less than a day and the airport operations returned to full capacity 18 hours after the storm ended.

So, beyond storm preparation, what's next for CI<sup>2</sup> Aviation?

"We're growing the company locally and internationally and looking at possible airspace expansion, [in addition to] more training for staff, and equipment upgrades,

Can't make it to Silicon Valley to watch the NASA UTM TCL2? Not to worry ... we'll be streaming it LIVE from Reno, NV, today at 1:30 - 2 p.m. in the UTM Zone in the Exhibit Hall!

even moving towards PBN," said Ian Mills, ground electronics services manager for CI<sup>2</sup> Aviation Bermuda.

The possibilities are endless for CI<sup>2</sup> Aviation Bermuda. Visit them on the Exhibit Hall floor at booth 708.

**"ATCA Annual is a great vehicle – it allows you to collaborate with different partners," said Ian Mills of CI<sup>2</sup> Aviation Bermuda, now a member of the CI<sup>2</sup> Aviation, Inc. family.**



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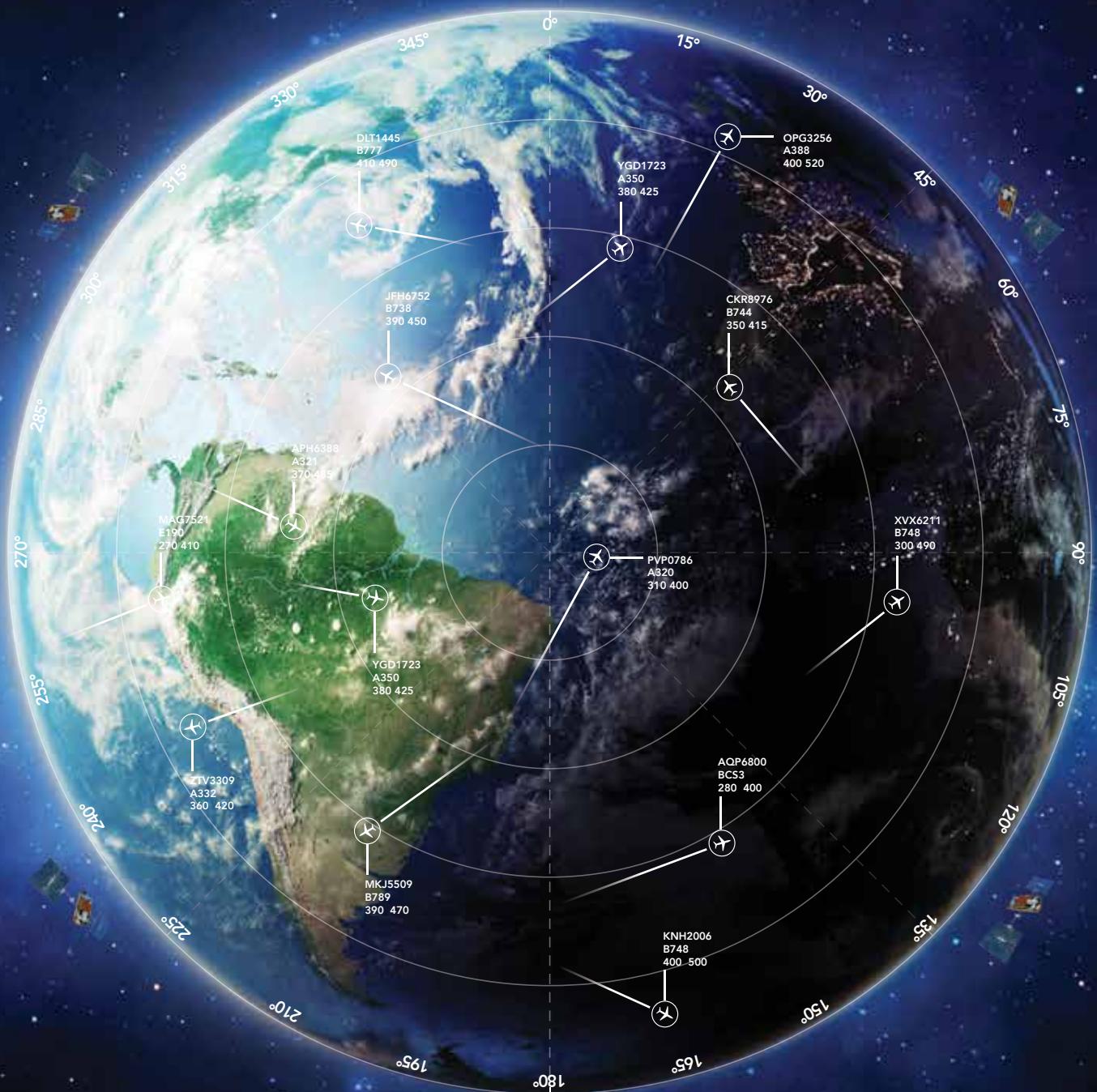
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