Can’t Miss Events!

9.00 – 14.00
Registration Open

10.00 – 14.00
Booth Sign up for World ATM Congress 2014
World ATM Congress
Booth # 1263

10.15 – 11.00
Spotlight Stage
French School of Civil Aviation

10.15 – 12.00
Aviation Arena
CANSO – Runway Safety

10.15 – 13.00
Technical University of Madrid Workshop
“Bridging the Gap Between Policy, Industry, and Academia”

10.00 – 14.00
ARGUS 3D Final Workshop

EUROCONTROL Director General Discusses Centralisation

The skies over Europe look gloomy: Air traffic in December was the lowest in five years, and EUROCONTROL predicts a further decline in 2013 compared to 2012. In addition, EUROCONTROL Director General Frank Brenner says functional airspace blocks will take longer than hoped to produce major operational benefits.

It’s a tough time to be looking at costs, Brenner said during a Wednesday morning presentation. But one way to control costs is to examine an individual organisation or company’s costs. “Only when we ask this very personal question can we see results,” he said.

At EUROCONTROL, for instance, operating costs have been dramatically cut and staff has been reduced by 10 percent. The budget hasn’t increased for five years. Now, Brenner says, EUROCONTROL is examining how it can save the rest of the network money.

During the next few years, Brenner said there are going to be a large number of projects moving toward implementation, at a current cost of $1 billion euro a year. So, he asked, does it make sense for each air navigation service provider (ANSP) to implement all of the 300 ideas and solutions from SESAR? After looking at solutions via the nine functional airspace blocks (FABs) instead of at the national or local level, Brenner said EUROCONTROL believes 70 to 90 SESAR ideas would make more sense to deploy at the FABs. Ten projects could and should be implemented at the network level, he said. These projects mainly have to do with managing data in order to make it more reliable and consistent, such as calculating and sharing the 4D trajectory.

Data management is a clear candidate to be a centralized service of the future, Brenner said, because it can...
Project Management Experts Give Their Perspectives on ATM Challenges

The aviation industry is complex and unique. But that doesn’t mean it can’t benefit from the basic principals other industries use to build complicated systems and deal with the process of change, said Steve Fulton, Technical Fellow, GE Aviation, during a Wednesday morning session.

Fulton moderated a panel of project management experts who applied their knowledge to air traffic management. The experts included:

- Pierre Bonnal, Senior Project Manager, European Organization for Nuclear Research (CERN). Bonnal, who works on the Hadron Super Collider, said there are similarities in managing traffic in the skies and managing particles underground. Like the aviation industry, there are huge quantities of data, personnel, and countries involved.

- Todd W. Zarfos, Vice President of Engineering for Commercial Aviation Services and Senior Chief Engineer of Support, Boeing Commercial Airplanes. Zarfos, who worked on the Boeing 777, said having a stable platform, including knowing what needs to be done to improve the airplane and meet market demand, is crucial and can be used for development of other projects.

- Chris Benich, Vice President of Aerospace Regulatory Affairs, Honeywell. Benich has experience working on multiple flight systems on airplanes and then linking those with ground systems.

The panelists answered a variety of questions posed by Fulton and the audience, including:

- Are we ready to deliver what the industry is expecting?

A successful organisation requires many ideas in order to produce a single product, Bonnal said. To accomplish this, the organisation needs to allow creativity. “Good project management practices say developing a product in keeping with set requirements is the best thing, but this is not always the case,” he said. “One has to keep in mind that managing a requirement is not taking just one picture and sticking with that picture for years.”

- We face barriers from outside parties. How have you overcome external barriers in your business?

Bonnal said when an institution wants to participate on the Super Collider, there is usually a memorandum of understanding rather than a contract. Consequently, the institution may do what it wishes rather than what others expect. “It’s like a picnic where no one brings dessert,” he said. “All the contributors bring what they want and have different expectations, wishes and needs, so you have to adapt.”

- How can global harmonization be achieved if we focus mainly on region-specific projects like NextGen and SESAR?

“Sometimes we get too involved in the engineering and technical side of things because we can, with less focus on what is needed,” Benich said. “The air traffic world can be very cool and very sexy and can do all these interesting things, but do we need to? We need to be more judicious about im-

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Robust FREE Education

Looking for exclusive and free perspectives on air traffic? Here at World ATM Congress 2013 you can witness the leading edge of aviation professionals in interactive forums.

The Spotlight Stage offers product presentations from industry partners, and is located at the right rear of the exhibition hall.

The Aviation Arena includes both presentations and roundtable discussions, located in the North Conference Center.

**Spotlight Stage**
10.15 – 11.00
French School of Civil Aviation
The Goals and the Challenges of the Strip Tie Project
Christophe Hurter

**Aviation Arena**
10.15–12.00
CANSO
Runway Safety; Speakers: Max Bie, Airservices Australia; Graham Wadeson, NATS; Herb King, Federal Aviation Administration

This session will provide a technical briefing on the CANSO Runway Safety Maturity checklist. The speakers will share tools to successfully measure the safety maturity of runways and best practice guides for both Air Traffic Controllers and Pilots on the prevention of unstable approaches.

**Technical University of Madrid**
10.15 – 13.00
Workshop on Education and Training of Engineers and Researchers in Aeronautics
“Bridging the gap between policy, industry and academia.”

The main objective of this workshop is to get a better understanding of:
- the current status of cooperation between Academia and Industry,
- successful current experiences of industry and university partnerships,
- the reasons behind the gap between Academia and Industry,
- the consequences of the gap, and
- what can be done to close the gap.

10.15 – 10.25 Welcome by Francisco Sáez
10.25 – 10.45 Rafael Gallego, General Director, INDRA
10.45 – 11.05 Cristina Cuerno, Deputy Director for External Relations, PEGASUS network
11.05 – 11.25 Olaf Heinzinger, Senior Manager Intelligent Systems, EADS
11.25 – 11.45 José Miguel de Pablo, Director, CRIDA
11.45 – 12.05 Philippe Palanque, Head of ICS research team, IRIT/University of Toulouse
12.05 – 12.25 Chip Meserole, Director, Advanced ATM, The Boeing Company
12.25 – 13.00 Panel Discussion

**ARGUS 3D Final Workshop:**
10.00 – 14.00, Room N105
Security Enhancements Through Innovative Radar Technologies

ARGUS 3D (Air Guidance and Surveillance 3D) is able to identify many kinds of non-cooperative targets by analysing multiple sources of data from an innovative three-dimensionał Primary Surveillance Radar (PSR), conventional sensors (primary radar, secondary radar, ADBS) and a network composed of multitude of multi-operational passive bistatic and high resolution radar.

ARGUS 3D final objective consists of study, design and realization of a simple demonstrator of a low cost, interoperable, radar based, system able to identify, all kinds of non-cooperative threats with the contribution of data.

**European Space Dome in Madrid:**
12-18 February, 10.00-20.00

The European Commission has launched the European Space Expo to show how space and its applications provide benefits to Europe’s citizens.

Through the investment in the flagship programmes of Galileo, EGNOS and GMES, the citizens of Europe will benefit from the many services and applications, which are expected to create global market opportunities and help to support job creation and economic growth.

Visiters to the Expo can see, touch and experience the wide range of innovative technologies and services that space offers them.

The easiest way to get from World ATM Congress to the Expo is via Metro: the Feria de Madrid is located at Campo de las Naciones (L8) and the Expo is located at Príncipe Pío (L10). You will make your transfer at Nuevos Ministerios.

It takes a team effort to move the world.

GE is partnering with aviation stakeholders to lay the foundation for a better air traffic system. Our Air Traffic Optimization Services include Aeronautical Information Management, Arrival Synchronization and Performance-based Navigation that help transform the way the industry operates – and changes the way we all approach new solutions.

It’s just one more way GE is going above and beyond to make the future of flight more efficient than ever before.

See how at booth #1104.
World ATM Congress Exhibitor Listing and Floor Plan
IFEMA, Madrid — 12–14 February, 2013

Company .................................. Booth
AAL ................................................ 951
AC-B ...............................................553
ACI Aero ........................................ 403
Adacel Systems, Inc. .................... 817
ADPI ............................................... 369
AENA .............................................. 844
Aeris Alliance ................................ 951
Air Traffic & Navigation Services (ATNS) ........................................ 1241
Air Traffic Control Association (ATCA) ........................................... 1265
Air Traffic Management
Magazine ........................................ 985
Air Traffic Technology
International ................................ 983
Airbus/Prosky ................................ 805
Airports Authority of India ............ 301
Airtel ATN ......................................... 982
Airways International NZ ............ 1226
All Weather, Inc. .............................. 1103
APAC, GmbH .................................. 590
APEX .............................................. 571
ARINC Incorporated .................... 915

Company .................................. Booth
AT-One ........................................... 470
ATRiCS GmbH ................................. 1204
ATIS Data ........................................ 951
AviBit Data Processing GmbH ........ 836
AVITECH AG ..................................... 553
BARCO ........................................... 126
Boeing Company (The) ................. 816
C Speed, LLC .................................. 925
CANSO .......................................... 1261
CGH Technologies, Inc. ............... 878
CGX AERO ..................................... 220
Civil/Military ATM Conference (CMAC) .................................... 1265
Cobham Flight Inspection ............. 1320
Combitech AB ................................. 225
COMSOFT GmbH ......................... 1137
CS SI .............................................. 423
Czech Air Navigation Institute (CANI) ........................................... 367
Delair Air Traffic Systems GmbH ....... 1239
DFS Deutsche Flugsicherung GmbH ............................................. 834
DHMI ............................................. 1067

Company .................................. Booth
DHMI/TUBITAK BILGEM ............... 1067
Diamond Antenna ....................... 1201
DW International .......................... 466
EASA (Media Consulta Event GmbH) ........................................... 501
Egis Avia ......................................... 428
EIZO .............................................. 237
Eltel .............................................. 225
Embry Riddle Aeronautical University ........................................... 1338
ENAC (the French Civil Aviation University) ................................. 220
ENAC Research .............................. 1231
ENAV spa ....................................... 927
Entry Point North ............................ 821
ERA a.s .......................................... 1115
Eurasia Coordination Council ....... 1203
EUROCONTROL .............................. 947
European Satellite Service
Provider (ESSP SAS) ................. 1240
European Space Expo/
EGNOS ........................................ 1340

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Thursday, 14 February, 2013

World ATM NOW

Leaders Discuss Depoliticized, Corporatized ANSPs

Industry experts and the heads of Canadian, Irish, and Caribbean air navigation service providers (ANSPs) helped forecast the future of ANSP consolidation and collaboration during a Wednesday afternoon session.

“I often think of ANSPs as telephone boxes in the age of the mobile phone, and all we’re doing is repainting the telephone boxes,” said session moderator Jeff Poole, Director General, Civil Air Navigation Services Organisation (CANSO). “What does the future hold for ANSP business models? Is business as usual an option?”

Definitely not, said panelists. They agreed that the future of successful ANSPs is to depoliticize them, make them truly business-oriented, and consolidate them across countries.

New technologies and procedures give the ability to manage air traffic from any location, which means political borders should be irrelevant, said Robert Poole, Director of Transportation Studies, Reason Foundation. Consolidation of facilities is key to serious cost reductions, he said, but “the basic lesson of the new paradigm is that airspace consolidation, irrespective of political boundaries, needs to happen first, and then you decide where to put facilities.”

But that’s easier said than done. “Until you solve each country giving up its airspace rights, I’m not hopeful,” said John Crichton, President and CEO, NAV CANADA.

In Europe, Eamonn Brennan, CEO, Irish Aviation Authority, pointed out that there have been an “incredible amount of meetings, workshops, forums, groups, and task forces about a Single European Sky, but you can’t see any action.”

In the Caribbean, most ANSPs are government owned and see each other as competitors, so consolidation is as difficult as it is in Europe, said Micilia Albertus-Verboom, Director General, Civil Air Navigation Services Organisation (CANSO). “What does the future look like for ANSP business models? Is business as usual an option?”

Definitely not, said panelists. They agreed that the future of successful ANSPs is to depoliticize them, make them truly business-oriented, and consolidate them across countries.

The motivation to do this may be economic. Poole said reducing the number of air route traffic control centers (ARTCC) in the U.S. from 20 to 13 resulted in a one-time cost savings of $1.7 billion, and an additional $1 billion a year.

Brennan called for closing 10 centers in Europe by 2020, starting with the large states so that smaller members aren’t stripped of their ANSPs. This could make the idea of future closings more palatable, he said. ‘The real story is the Single European Sky needs to get tougher, unit rates need to fall, capacity can operate with existing technology, and we need to change soon,” Brennan said.
Challenges

Implementing changes in this economic environment.

What do you propose to get the ATM investment plans aligned from a national, regional and global standpoint?

Zarfos pointed out that capacity will soon get the attention of some political leaders. Bonnal pointed out that services by principal are not tangible and cannot be stored. Most project management activities focus on delivering services, but most consumer attention is on developing products. “The challenge is to find tangible products to promote,” he said.

In the 1960s, the U.S. took 10 years to put a man on the moon. Why are NextGen and SESAR taking so long?

The key, said Benich and Zarfos, is to show that even though 20-year objectives like a Single European Sky haven’t yet been met, NextGen and SESAR implementation is still progressing. “We need to be much more short term and show what we’re delivering now, including more efficiency and more capacity,” Benich said. “A big vision is good, but small steps are needed to show improvements along the way for the primary stakeholders.”

Added Zarfos: “If it was only technology and innovation, we would have solved this a long time ago.” But instead, projects like SESAR and NextGen are based on tens of thousands of human interactions every day, and politics and governmental issues create challenges.
Transforming the air traffic management (ATM) system is essential for improving safety, efficiency and the environment around the globe. Boeing is fully committed and uniquely qualified to help make ATM transformation a reality. It’s the right time and Boeing is the right partner.
NATS Scoops Prestigious Award at Key Industry Showcase

NATS, the UK based global provider of air traffic services and solutions, picked up a top award at the IHS Jane’s A.T.C Awards in Madrid Monday night. The company, jointly with Lockheed Martin and Altran, overcame fierce competition to win in the Enabling Technology category for its next generation air traffic control tools, iFACTS.

iFACTS is a set of tools which reduces a controller’s workload and increases the amount of traffic they can safely and comfortably handle. It provides decision making support and facilitates the early detection of conflicts in and around the sector. It means controllers can quite literally see into the future and predict aircraft positions, heights and headings up to 18 minutes ahead of time.

Frank Wood, General Manager NATS Programmes Division, said: "iFACTS has helped revolutionise the way NATS works, with the amount of ATC attributable delay reaching record lows. This is clearly great news for our customers and it is fantastic to see that achievement has been recognised by the industry."

Last year, delays attributable to NATS averaged just 1.6 seconds per flight during, although in reality 99.8 per cent of UK flights did not suffer any NATS air traffic control delay at all. The Jane’s A.T.C Awards were presented at the CAAS, Mr Eric Stefanello, Director-General of CAAS, and Mr Yap Ong Heng, Director-General of CAAS, and Mr Eric Stefanello, President of Airbus ProSky, to jointly develop a Concept of Operations for Air Traffic Flow Management (ATFM) based on Collaborative Decision Making (CDM). The RCA follows the foundational Memorandum of Cooperation (MOC) on Air Traffic Management (ATM) research and development collaboration that was signed in November 2012. The MOC is part of CAAS’ larger effort to advance ATM research and development in Singapore under its Centre of Excellence for ATM initiative. The Asia Pacific, being the world’s fastest growing region for air travel, will face increasing complexity in the operating environment due to rapid growth in air traffic. Under this RCA, CAAS and Airbus ProSky will embark on a joint research project to address the challenges of air traffic flow in the context of the specific operational dynamics of the region. A technology tested that runs on the Harmony ATFM solution platform will be built in Singapore for the development, experimentation, demonstration and refinement of the ATM Concept of Operations. The Harmony solution suite has been successfully deployed for similar ATFM research and development projects that were conducted in the United States, South Africa and Australia. This joint research project will be the first to be undertaken under the MoC collaboration framework as well as the Centre of Excellence for ATM initiative.

Airbus ProSky and the Civil Aviation Authority of Singapore Collaborate to Enhance Air Traffic Efficiency

A joint research project to be undertaken by the two organisations towards advanced air traffic flow management solutions in Singapore and the Asia Pacific region.

A further important step in strengthening the collaborative partnership between the Civil Aviation Authority of Singapore (CAAS) and Airbus ProSky was taken yesterday with the signing of a Research Collaboration Agreement (RCA) between Mr Yap Ong Heng, Director-General of CAAS, and Mr Eric Stefanello, President of Airbus ProSky, to jointly develop a Concept of Operations for Air Traffic Flow Management (ATFM) based on Collaborative Decision Making (CDM). The RCA follows the foundational Memorandum of Cooperation (MOC) on Air Traffic Management (ATM) research and development collaboration that was signed in November 2012. The MOC is part of CAAS’s larger effort to advance ATM research and development in Singapore under its Centre of Excellence for ATM initiative.

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FTEJerez Presents its ATC Training Courses at World ATM Congress

FTEJerez, an internationally renowned pilot and air traffic control training organization, based in Jerez de la Frontera, south of Spain, is presenting its portfolio of premium training solutions from full ab-initio training courses to Team Resource Management and O&TI courses at the World ATM Congress being held at the Ifema in Madrid.

FTEJerez has many years experience in the aviation training arena and enjoys wide international recognition as one of the leading airline pilot training organisations in Europe. With more than 25 year of experience, FTEJerez has trained more than 2,000 pilots who are now flying for more than 50 airlines. Some of the world’s leading airlines, such as Aer Lingus, British Airways, Emirates or Qatar Airways, have chosen FTEJerez as their training provider for their cadet pilots.

FTEJerez, in partnership with Global Aerospace Logistics, was the first private or public training institution certified by Spain’s Air Navigation Regulator, AESA, to conduct ATC training in Spain. The ATC training programme is in accordance with Eurocontrol’s Common Core Content requirements as well as EU Directives. It is based on the same philosophy that has made our pilot training services an industry benchmark: an unwavering focus on quality.

Visit FTEJerez at booth #1318.

Frequentis and Rheinmetall Defence Jointly Launch smartVISION

This innovative visualization concept, supporting the implementation of Remote Towers and Contingency Solutions, has undergone successful trials conducted together with the DFS (Deutscher Flugsicherungs Bund) at Dresden Airport in Germany.

Frequentis and Rheinmetall Defence have jointly developed a new, alternative method for displaying the classical “out of the window” view of the environment surrounding an airport tower. This new solution has been named “smartVISION”. Frequentis expertise in ATM (Air Traffic Management) has been successfully combined with the visual surveillance know-how of Rheinmetall Defence to provide a mature and proven product baseline for this solution.

To overcome the typical problems facing conventional cameras, such as sunlight reflections, poor contrast and bad light conditions, the smartVISION solution offers a completely new visualization approach based on advanced thermal camera technology and video-based surveillance and tracking functionality.

For more information, visit Frequentis at booth # 526.

Eric Stefanello, President, Airbus ProSky, and Yap Ong Heng, Civil Aviation Authority of Singapore, sign a collaborative partnership in the exhibit hall at the Airbus ProSky booth Wednesday.

Thursday, 14 February, 2013
SAFER SKIES FROM TAKEOFF TO TOUCHDOWN.

For more than 60 years, Raytheon has delivered the most innovative Air Traffic Management (ATM) solutions. We invented or perfected many of the technologies that form the backbone of today’s global ATM infrastructure, and continue to pioneer training and innovation that provide safe transportation for more passengers than any company in the world. Raytheon solutions will make it possible for initiatives like NextGen to modernize the airspace and enhance customer safety.
Please stop by our Stand #1116 to learn about the new standard in IP-based voice switches for global ATM, or visit us at www.harris.com/vcs21

Robert Poole, The Reason Foundation, addresses the panel after a question from the audience during “Session Four: ANSP Cooperation – Performance and Delivery: Myth or Reality?”

William Gaillard, Senior Advisor to the President, UEFA, talks about “What Football Can Teach Us About Dealing with Change.”
From checkered flags on the ground, to radar to digital to satellites, the steady advance of air traffic control has been led by innovators from Lockheed Martin and its legacy companies. Today, more than 60 percent of the world’s air traffic is controlled by systems designed, built, and deployed by Lockheed Martin. Flying has become safer and more efficient than ever before. And billions of passengers arrive at their destinations, never knowing that they’ve flown there on a 60-year history of achievement.

A story you’ll find only at: www.lockheedmartin.com/100years
There’s still more to see.

We’ll be back in 2014.

World ATM Congress 2014

4–6 March 2014 Madrid, Spain www.worldatmcongress.org

More information at www.worldatmcongress.org