



# ICASC Review

International Committee for Aerospace Standards and Calibration



## contents

Welcome P.1

Word from the ICASC Chairman P.2

About ICASC P.2

IFIS Schedule P.3

## Get Involved

### Membership

At ICASC we are always seeking new members who would like to volunteer their time and effort for worthwhile activities. Feel free to contact any of the ICASC members and let them know if you are interested.

### Future IFIS Suggestions

Your feedback provides important input for the next IFIS. IFIS suggestion questionnaires are available. Please remember to return them before leaving to help improve future symposiums.

Please visit our booth, propose changes to our website, share your complaints with us and share your satisfaction with other attendees.

### fact

In February, 2010, The population of Beijing exceeds 22 million.  
Ref: Chinadaily.com

## Welcome to the 16<sup>th</sup> International Flight Inspection Symposium (IFIS)

The 16th IFIS is held in Beijing, China. It's hosted by Civil Aviation Administration of China (CAAC), organized by Flight Inspection Center of CAAC, and carried out by China Aviation Supplies Holding Company. The theme for this year's Symposium is "Improving Flight Inspection for NextGen Technology". With advancement in airspace navigation, new technologies and concepts of operation and management have been applied. NextGen technology is now leading the way. Satellite-based Navigation and Performance-Based

Navigation have become major means. In the near future, more advanced and efficient methods will emerge to support further growth of airspace navigation. Against this background, flight inspection is presented with various opportunities and challenges. Only through self-improvement can it keep pace with the newest technological trends.

The Symposium this year offers a platform for cooperation and exchanges of flight inspection organizations from all countries and regions. Here we will discuss how to improve flight inspection to better serve airspace navigation, airspace availability and flight safety. The Symposium also provides a



chance for all exhibitors to display their new products and technologies in the development of aerospace industry. We sincerely hope that by pooling our wisdom together, the flight inspection community will bring in more opportunities and write a new chapter in flight inspection history.



# ICASC

Serving the International Flight Inspection and Flight Calibration Community

For IFIS Suggestions or Comments send inquiries to:

ICASC Executive Secretariat at  
Glenn.R.Bissonnette@faa.gov



# ICASC

Serving the International Flight Inspection and Flight Calibration Community



## ICASC and its history

At the 8th International Flight Inspection Symposium (IFIS), June 1994, the delegates expressed their desire that an organization be formed to serve the flight inspection community on a continuing basis. The two-year gap between symposiums left a void in technical information sharing. Additionally, there was no efficient method to provide timely and accurate updates on what was happening globally in the flight inspection arena. Thus the ICASC was born. Thirteen delegates met in Brussels, Belgium, in May 1995 and developed a draft charter. The Charter was approved by the delegates of the 9th IFIS in Braunschweig, Germany in June 1996. Work began immediately to overcome the information-sharing problem. The obvious vehicle to transport this sharing of information was the rapidly growing internet. Hence, the committee began to develop an ICASC website dedicated to the flight inspection community. You can find the website at [www.icasc.org](http://www.icasc.org). There you will find a wealth of flight inspection/calibration related information.



## 16th International Flight Inspection Symposium June 21-25, 2010

### A Word from the ICASC Chairman

Mr. Joseph F. Doubleday -  
ICASC Chairman

#### Welcome

How exciting it is to be attending an IFIS in the impressive city of Beijing, China. There is an air of old and new interwoven throughout all aspects of this city that provides a truly unique venue for the Symposium. Our Chinese hosts have taken great strides to

ensure each of us experience a rewarding symposium, and afford us an opportunity to taste some of the traditions and sites that make this city such a wonder.

The ICASC has made explosive strides in the last two years and gained a certain degree of prominence in several areas. At the eighth meeting of its 186th Session, on March 9 2009, Representatives of the Council to the International Civil Aviation Organization included ICASC in the list of international organizations that may be invited to attend suitable ICAO meetings. Several of our members are now filling positions on various ICAO panels. Fabrizio Maracich represents ICASC as the newly received ICAO National Flight Procedures Panel member, while John Mundy represents ICASC on the ICAO Navigation Systems Panel. In addition, ICASC accepted an ICAO tasking to develop new Flight Validation draft guidance material that has led to the creation of two new draft volumes to ICAO Doc 9906, The Quality

Assurance Manual for Flight Procedures Design. ICASC created Volume 5, Flight Validation and Volume 6, Flight Validation Pilot Training and Evaluation. Both volumes were vetted with the International Flight Procedures Panel and formally presented to ICAO at the IFPP/6 meeting in Bangkok, Thailand in March, 2010.

ICASC continues to explore ways to serve the flight inspection community by resolving to find a process to utilize the talents of the ICASC members to provide answers to common flight inspection questions and conduct further study within the flight inspection arena. Look for developments in this area in the near future.

I challenge each of you fortunate enough to attend the 16th IFIS, to fully participate, share your ideas and experiences to promote greater understanding in the flight inspection mission.



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## IFIS Venue

China National Convention Center is in the Asian Games Village – the cross of the North Fourth Ring road and the central axis of Beijing, beside Birds Nest and Water Cube. It is 20 kilometers from the Capital Airport, 9 kilometers from Tiananmen Square, 10 kilometers from the Summer Palace and 80 kilometers from the Great Wall (Badaling section). It is very close to the Olympic Games Village and the Olympic's "Birds Nest" and "Water Cube".



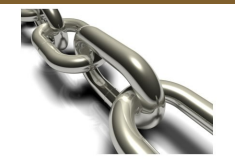
### IFIS 2010 Presentations

#### Presentation Author, Organization Radio Frequency Interference:

Investigation of Terminal Area DME Signal Interference  
Todd Bigham, FAA  
Airborne RFI Detection For China Civil Aviation  
Pan Yi, Liu Tong, CFI  
How to make the airborne detection of RFI more efficient and more accurate  
Liu Tong, CFI  
Flight Inspection Techniques: Calibrating DME Coverage Predictions with Flight Inspection Measurements  
Gerhard E. Berz, Eurocontrol, Jochen Bredemeyer, FCS, etc  
Flight evaluation and validation of PBN Instrument Flight Procedure in France  
Franck Buffon, Sagem  
ILS Checker: New mobile bench software dedicated to ILS ground measurements with R&S EVS Receiver  
Klaus Theisen, Rhodes & Schwarz  
Robust Computation of Reference Datum Height  
Cheng Zhong, Derek A. Blackford, FAA  
The Analysis and Solutions about GP Structure Problem in Flight Inspection on High Elevation Plateau Airports  
Gemao  
Experiences in Flight Inspecting GBAS  
Thorsten Heinke, Aerodata  
Reduction of flight measurements for ILS inspection  
Jaap Heijstek, Jaco Verpoorte, etc  
Practice on RNAV flight inspection in China  
Zhang Minghao  
Current Issues in Flight Inspection Measurements  
Gerhard  
Data Management: Data Integrity and the Gold Standard  
William R. Geiser, FAANO  
Title  
Patrice GONZALEZ, AERO  
inSYS  
Integrity of Flight Inspection Data  
Frank Musmann, Aerodata  
Nav aids: The investigation of the influence of snow upon GS  
JCAB

#### Presentation Author, Organization Procedures Validation:

Research, Prototyping and Analysis of Flight Validation Data Gathering and Evaluation Capabilities  
The MITRE CAASD  
The Quality Assurance Manual for Flight Procedure Design, Doc 9906  
F. Maracich, ENAV, Glenn Bissonnette, FAA  
Flight Validation of PBN Procedures  
Mr. Donald P. Pate  
Procedure Evaluation and Validation with Pre-Production Databases  
Capt Thomas Wede, AFI  
Certification of FIS: A Suitable Quality Management System for Flight Inspection  
Su Fenglan, Liu Tong  
The Uncertainty Evaluation of Flight Calibration Parameters  
Wang Lening, Pan Yi  
Results of Experiments of the R&S Receiver EVS 300 for VOR and ILS Flight Inspection  
Labaste Philippe, DSNA/DTI  
Aspects Affecting Measurement Uncertainty of Flight Inspection Systems  
Peter Thirkettle, ICASC Technical Working Group  
Timing Synchronization and Uncertainty in Flight Inspection Systems  
Larry Brady, Airfield Technology  
Operational Issues: The Considerations About Flight Inspection At The Busiest Airports  
Zhang Jiayi, Pan Yi  
Field Strength Versus Signal Strength  
Dale Rhoads, FAA  
How to save time and money on ILS Flight Inspection by using correct methods and input data  
Aif W Bakken, Northrop Grumman  
Being Intolerant of Tolerances  
Dr Richard McFarland, Dr Michael Braasch  
Expanded Role of Flight Inspection: Improving Flight Inspection by process automation  
Sileno Godicke, ENAV  
Necessities for Flight Inspecting ADS-B Signals  
Thorsten Heinke, Aerodata  
ADS-B data evaluation supported by the flight tests in western China  
Liu Wei  
Space Weather: It's Effect on GNSS, DGNSS, SBAS, and Flight Inspection  
David Powell, Todd Walter, Stanford University  
Study on flight inspection methods for GBAS  
Zheng Jinhua



## STRONG PRINCIPLES

### ICASC Vision

To be the medium for standardization and continuity in the exchange of technical, regulatory and commercial flight calibration information.

### ICASC Mission

To promote airspace system safety by encouraging competency of flight calibration services worldwide.



## ICASC Collaborates

The International Civil Aviation Organization (ICAO) is the 188 member State organization headquartered in Montreal, Canada. ICAO develops the Standards and Recommended Practices (SARPs) for aviation navigation and landing facilities, as well as guidance material for flight inspection of those facilities. The SARPs addressing the facilities are found in ICAO Annex 10, and in guidance material addressing flight inspection, ICAO DOC 8071, Testing of Radio Navigation Aids. The ICASC is working in collaboration with ICAO. ICAO can be visited at their website: <http://www.icao.int>