

IFIS2024

International Flight Inspection Symposium

08 TO 12 JULY 2024, NAGOYA, JAPAN



International Flight Inspection Symposium

08 TO 12 JULY 2024, NAGOYA, JAPAN



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Welcome to



IFIS2024
International Flight Inspection Symposium
08 TO 12 JULY 2024, NAGOYA, JAPAN



ONUMA Toshiyuki

Senior Deputy Director-General of the Civil Aviation Bureau (CAB), Ministry of Land, Infrastructure, Transport and Tourism (MLIT)

On behalf of the International Flight Inspection Symposium (IFIS), hosted by the Japan Civil Aviation Bureau (JCAB) in collaboration with the International Committee for Airspace Standards and Calibration (ICASC), we are pleased to welcome you to the first IFIS to be held in Japan.

The theme of this year's IFIS is "Enhancing Flight Inspection Safety." Flight inspections are essential for the safe operation of aircraft. At the same time, the safe conduct of flight inspections is also important. The IFIS is a gathering of flight inspectors, aviation authorities, air navigation service providers, and related companies from all over the world, and for all of them, "Enhancing safety" is an endless theme. I look forward to deepening the discussions on "Pilot Peer Support" based on Just Culture with the participants here towards improving safety.

Nagoya, the host city of the IFIS, is a city that continues to develop, where traditional culture and new aerospace industry are fused together. Through your stay, we hope you will enjoy the beautiful Japanese traditional culture, nature, hospitality, and interactions with the people.

Photography policy

Your presence at IFIS 2024 constitutes your agreement to be photographed, filmed, videotaped or otherwise recorded by the organising committee and its service providers. This agreement extends to the approval that your image or voice may be distributed in print or electronic communications media without any compensation being paid to you.

FEEDBACK

Click on link below for the IFIS 2024 Quick Feedback Survey

<https://enquete.cc/q/IFIS2024>



Joseph Doubleday

ICASC Chairman

Welcome to the 22nd International Flight Inspection Symposium! We trust this week will build upon the rich history of the biennial IFIS and its intent to create a better understanding and focus on the important area of flight inspection and validation of instrument flight procedures.

On behalf of the International Committee for Airspace Standards and Calibration, we wish to express our appreciation to JCAB for hosting the 22nd International Flight Inspection Symposium in Beautiful Nagoya, Japan. We know this week is packed with technical information and elegant social events and should prove to be insightful and entertaining.

To all of the delegates attending this IFIS, I encourage you to participate in the technical discussions to the fullest and enjoy the rich Japanese culture to which you will be engaged.

This is an opportunity to renew acquaintances and to make new friends as you go through the week.

Coupled with the normal plenary sessions, we have included a workshop on Wednesday that promises to provide the latest updates in validation of instrument flight procedures. Please provide feedback throughout the symposium that we can use to enhance future events. Our goal is to make these as useful to all attendees as possible.

Complimentary WiFi

Wireless internet connectivity is available in the plenary room and exhibition area to all the delegates:

SSID : Portmesse_conv_FreeWiFi

No password needed



DAY 1 Monday, 8 July 2024

10:30-11:00 Opening Ceremony

NAKANISHI Yoshinobu, Professor, Toyo University

DOUBLEDAY Joseph, Chairman, ICASC

ISHIZAKI Norihiro, Japan Civil Aviation Bureau

11:00-11:30 ICAO Director Speech

MERKLE Michele, Director, Air Navigation Bureau, ICAO

11:30-12:15 Sponsored Session 1

TRONES Jostein Lodve, Norwegian

TUEKENMEZ Neset, Aerodata

12:15-13:15 Lunch/ Poster Session

CERBER: A Multi-Antenna GNSS receiver for RFI situation awareness and mitigation

CARRIE Guillaume

13:15-14:00 Sponsored Session 2

BEISBARDT Alexandre, Safran

BOHABOJ Tracy, Duncan

LI Xiaoqiang, Beijing Sky Aviation

ARRELL Scott, Embraer

14:00-15:00 **Session 1** International standards for flight inspections / PBN inspection and verification by FAA

Moderator: MARACICH Fabrizio

ICAO Developments

BERZ Gerhard

Flight Inspection Airborne Processor Application (FIAPA), RNAV Approach Mode Lessons Learned

ELLIOTT Bradley

15:00-15:30 Coffee Break

15:30-16:30 **Session 2** Technology

Moderator: JAGIENIAK Stefan

Electromagnetic Goggles for NAVAID Antenna Pattern Visualization

PHELPS Brady

ILS ground and flight inspection comparison tool

SPITZ Bertrand

17:30-19:30 Opening Reception at 2nd floor, Port Messe Nagoya Convention Center





ELECTRONICS & DEFENSE

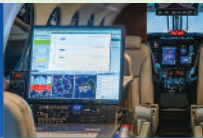
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DAY 2 Tuesday, 9 July 2024

10:30-11:00 **Coffee Service**

11:00-12:30 **Session 4 Flight Validation**

Moderator: WEDE Tom

Challenges and Viable Solutions in Commercializing SFOL Pulse-based DME

KIM Euiho

Evaluation of Multi-DME Positioning Performance in Japan through Flight Experiments

KEZUKA Atsushi

How to guarantee IFP data integrity from procedure design to FIS in IFP flight validation activities

GHISINI Enrico

12:30-13:30 **Lunch/ Poster Session**

Flight Inspection Drone implementation process: Russia

MUNIROV Vitaly

Technology and Practice of PAPI Flight Inspection Based on Unmanned Aerial Vehicles (UAVs)

LI Xiaoqiang

Explore The Flight Test and Application of Flight Inspection Using UAV

ZHANG Tianlu

13:30-15:00 **Peer Support/ Q&A Session**

Moderator: YAMAUCHI Shinsuke

Speaker: NAKAHAMA Keiko Ph.D.

Received M.A. in Psychology from WA in the U.S. and trained in a variety of psychological disorders. After returning to Japan, she worked in the fields of psychiatry and psychosomatic medicine for more than 10 years.

In Aviation field, she was certified by the International Critical Incident Stress Foundation (ICISF) as a peer training instructor in 2006 to provide Critical Incident Stress Management (CISM) to aviation personnel. In 2015, she received her Ph.D. in Vienna, Austria on peer support education and activities for aviation personnel. she also has worked as a counselor and educator in a general corporation and a university.

Speaker: USUI Naohiro

NCA 748 Captain / Flight Operation Quality Assurance (FOQA) Team Leader /
NCA PSEP Chief Coordinator / ALPA J PA Chief Coordinator

1999 ~ JAL (B744 / B777)

2008 ~ CISM Japan Peer Support

2012 ~ Jetstar Japan

2017 Jetstar Japan Trust Pilot Program Establish

2020 ALPA - J Pilot Assistance System Establish as Chief Coordinator

2022 Nippon Cargo Airline Pilot Support & Education Program (PSEP) Establish

15:00-15:30 **Coffee Break**

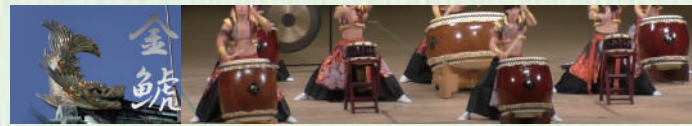
15:30-16:30 **Session 3 Training & JCAB topic**

Moderator: BADSKY Floyd

Traps and Pitfalls reloaded
JAGIENIAK Stefan

*Basic Analysis for Supply and Demand of Data Link Communications
for TBO in Digital Transformation era*
HONGO Nobuo

18:00-20:00 **Culture Tour at SCMAGLEV and Railway Park**



Floor Map

Portmesse Nagoya Convention Hall 3F

- A1 Japan Radio
- A2 NTT Data
- A3 FCS Flight Calibration Services GmbH
- A17 Hitachi Kokusai Electric
- A18 Electronic Navigation Research Institute
- A21 International Committee for Airspace Standards and Calibration
- A23 NEC
- A25 Navicom Aviation
- A26 Flight Calibration Services Limited
- A27 Japan Civil Aviation Bureau



DAY 3 Wednesday, 10 July 2024

9:00-10:30 **Session 6** Radio communication failure (RFI: Radio Frequency Interference)

Moderator: BJELKAROY Sigurd

Mitigation measures for GNSS failures

URASHIRI Yuushin

1030/1090MHz Occupancy Monitoring and evaluation project in JAPAN

HONGO Nobuo

Detection, Characterization, and Localization of GNSS RFI

STANISAK Mirko

10:30-11:00 **Coffee Break**

11:00-12:30 **Session 7** Radio communication failure (RFI: Radio Frequency Interference)

Moderator: BJELKAROY Sigurd

Electromagnetic Interference Evaluations of Aircraft Radio Altimeter Due to Sub-6 Band 5G Mobile Communications System at Japanese Conditions

FUTATSUMORI Shunichi

High-precision Reference Positioning in Case of GNSS Jamming

STANISAK Mirko

Visualization of Electromagnetic Field Intensities of Instrument Landing System

HONDA Junichi

12:30-13:30 **Lunch/ Poster Session**

4 errors of the VOR system during the flight check and how to fix it

RAMEZANI Mohammadreza

14:15-17:15 **Tour of the Flight Inspection Center /+ Workshop for Flight Validation (Registered only)**

Tour of Flight Inspection Center /+ Workshop

Static Display

Three flight inspection aircrafts will be displayed in the JCAB hangar.

JCAB C700



JASDF U125



Quoted from the Ministry of Defense website

JCAB CJ4



JCAB hangar



Workshop

Instructor

WEDE Tom & MARACICH Fabrizio (ICASC Member)

Theme

- What is Validation
- Major regulations governing procedure design
- DOC9906 volume5 2nd Edition: Amended validation process
- FVP life: Common mistakes discovered while performing IFP validation
- JCAB validation tool demonstration
- Q & A

validation tool





CFIS
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by Flight Inspection Center of China
- **IFIS: Lightweight Flight Inspection System**
Versatile solutions adapted for small aircraft
- **RFIS: RPAS-based Flight Inspection System**
Time/cost efficient, trustworthy, multifunctional solutions
for navAids regular inspection and routine maintenance
- **Tailor-made Solutions**
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 - Specialized test equipment and software development
 - Expert training design and service

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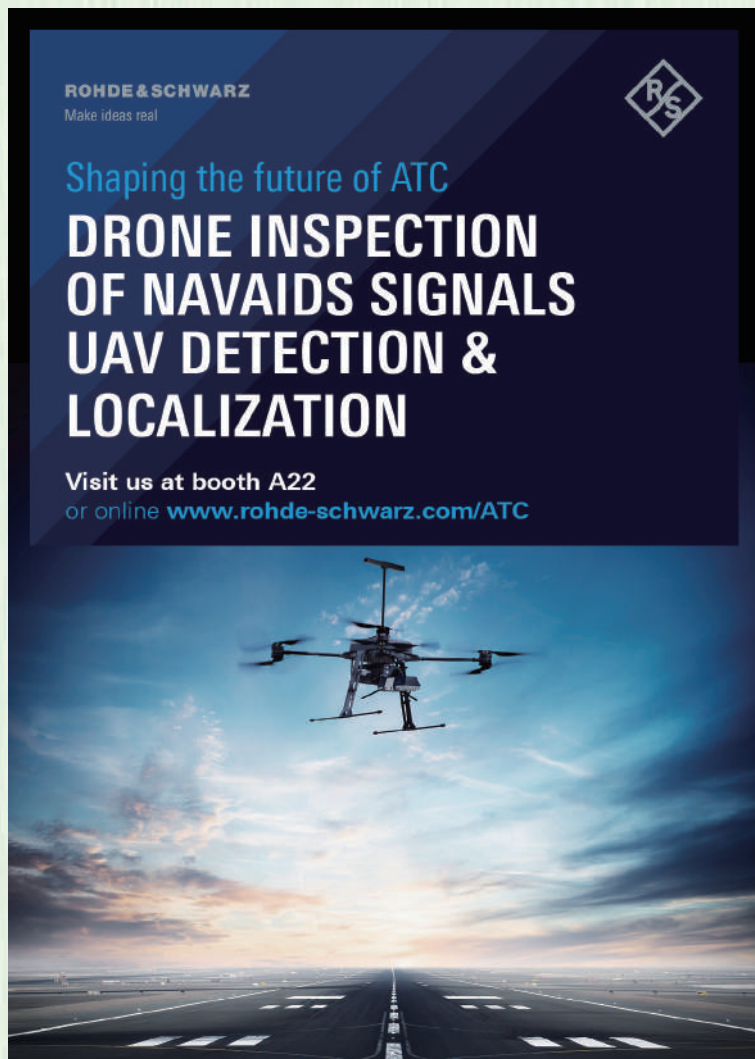
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**AIRFIELD
TECHNOLOGY**

DAY 4 Thursday, 11 July 2024

9:00-10:30 **Session 8** Flight inspection using UAV

Moderator: DIBENEDETTO Mike

UAV-based PAPI Measurement: Post-Processing Method as a Novel Approach for Flight Check

RYTTER Adam

Optimizing FIS Integration - Leveraging OEM and Modifier Strengths

DAY Jason

The contributions of a lightweight and innovative drone equipped with a fully integrated solution to optimize NAVAIDS flight inspection.

MAHIQUES Mathieu

10:30-11:00 **Coffee Break**

11:00-12:30 **Session 9** Flight inspection using UAV

Moderator: JACOLOT Florence

NAVIGATIONAL AIDS CHECK BY USING DRONE IN REPUBLIC OF KOREA

HONG Jinyoung

Experience with fixed wing UAV NAVAID's measurements

JOHNSEN Per Anders

Comparison of results in measurement methods of navigation aid systems using UAV in far and near Field

RAHANAM Ebrahim

12:30-13:30 **Lunch/Poster Session**

Flight Inspection Drone implementation process: Russia

MUNIROV Vitaly

Technology and Practice of PAPI Flight Inspection Based on Unmanned Aerial Vehicles (UAVs)

LI Xiaoqiang

Explore The Flight Test and Application of Flight Inspection Using UAV

ZHANG Tianlu

13:30-14:30 **Session 10** Flight inspection using UAV

Moderator: GRANDT Morten

UAS-based NAVAID flight and ground inspection

WILKENS Claus-S.

Drones ahead: how technology combined with pressure for efficiency will affect the Flight Inspection

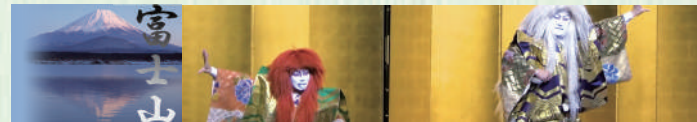
Service community

WEDE Tom

17:00-21:00 **Gala Dinner at Hilton Nagoya**

17:00-18:00

Pre open with Japanese tea ceremony service



DAY 5 Friday, 12 July 2024

9:30-11:00 **Session 11** Flight inspection using UAV

Moderator: DIBENEDETTO Mike

A Ultra-lightweight ILS Receiving Payload Base on Multi-rotor UAV for Flight Inspection

WANG Pengfei

CNS drone measurement system maturity, evolution ongoing

DEMULE Herve

Utilization of Drones for Flight Inspection in JAPAN

MARUHASHI Mitsuhiro

11:00-11:30 **Coffee Break**

11:30-12:00 **Closing**



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