## 11<sup>th</sup> International Summer School on Aviation Psychology & Human Factors

ISAP'23: 3-7 July 2023

## Inter-modal transport systems: interdisciplinary learning & cooperation

FH JOANNEUM Graz, Alte Poststraße 147, 8020 Graz

## Monday, 3<sup>rd</sup> July 2023: Intermodal Transport Systems/ Pilot Training

10:00-12:00

**AAPA Registration Desk** 

Coffee / Meet & Greet / Soft opening

Austrian Aviation Psychology Association

12:00-13:00

Lunch (Taste'njoy powered by ISS)

#### 13:00-13:30 (AP.147.HS.005)

#### **ISAP'23 OPENING CEREMONY**

Dr. Margit Kanka (AAPA Chair)

Dr. Michaela Schwarz (ISAP'23 Organising Committee)

Dipl.-Psych. Gunnar Steinhardt (EAAP President)

Dr.-Ing. Holger Friehmelt (Head of Institute Aviation, FH JOANNEUM)

#### 13:30-14:30



# **KEYNOTE 1 New Mobility Systems**Prof. Peter Jorna (NL)

#### 14:30-15:00

#### **Coffee Break**

15:00-17:30 (AP.147.HS.005)

**SESSION 1: PANEL DISCUSSION**Intermodal Transport Systems

Facilitated by AAPA, with representatives from:

- 1. Academia
- 2. Aviation/Road
- 3. Air Operations
- 4. Mobility
- 5. Rail

Details see page 6-7

#### 15:00-17:30 (AP.147.HS.006)

**SESSION 2: WORKSHOP** 

Kicking Tires and Lighting Fires – Understanding the Tribe Called "Pilots"

Gunnar Steinhardt (EAAP, NL)

Nicklas Dahlstrom (Emirates Airlines, UAE)

### 19:00 WELCOME RECEPTION @NOVA- AIR Aircraft Hotel Graz

Short bus/ taxi ride to Fischeraustrasse 22, 8051 Graz; welcome drink & finger food included! https://www.novapark.at/novaair/

## Tuesday, 4th July 2023: HMI Design / Usability Engineering

08:00-09:00

**AAPA Registration Desk** 

Coffee / Meet & Greet

Austrian Aviation Psychology Association

**Session Chair: tbc** 

09:00-10:00 (AP.147.HS.005)



**KEYNOTE 2** 

100 rules to design the perfect human machine interface in vehicles (working title)

Peter Rößger (beyond HMI, DE)

10:00-10:30

Coffee & Posters

To submit a scientific poster, please send an English abstract to isap@aapa.or.at

10:30-12:00 (AP.147.HS.005) 10:30-12:00 (AP.147.HS.006)

SESSION 3 SESSION 4

Artificial intelligence and artificial networks

on crew monitoring

Optimizing a multimodal journey
Theodor Zeh (Frequentis, AT)

Oliver Daum (German Air Force, DE)
Andreas Schmidt (German Air Force, DE)

12:00-13:00

Lunch (Taste'njoy powered by ISS)

13:00-14:30 (AP.147.HS.005) 13:00-14:30 (AP.147.HS.006)

SESSION 5 SESSION 6

Current R&D projects at FH JOANNEUM Graz

Holger Friehmelt (AT)

Flying the fastest and largest aeroplanes: interview with a Saab Draken & Boeing 777 pilot

pilot

Eugen Pongratz (AT) Michaela Schwarz (AT)

14:30-15:00

**Coffee & Posters** 

To submit a scientific poster, please send an English abstract to <a href="mailto:isap@aapa.or.at">isap@aapa.or.at</a>

15:00-17:30

**OPERATIONAL VISITS** 

Visits are organised in small groups (max. 12 / visit), subject to registration, first in first served.

- FH JOANNEUM Aviation Laboratory
- Gate 08 Flight & Racing Simulation Centre Graz
- Austrian Aviation Museum (Graz-Thalerhof)
- Ground Handling Services (Airport Graz)
- Air Traffic Control Tower (Austro Control, GmbH) tbc

#### 19:00 After Work Drinks & Dinner (own expense)

Restaurant reservation for 30 pax in a local restaurant

### Wednesday, 5th July 2023 – METHODS / TRAINING & SELECTION

08:00-09:00

**AAPA Registration Desk** 

Coffee / Meet & Greet

Austrian Aviation Psychology Association

**Session Chair: tbc** 

09:00-10:00 (AP.147.HS.005)



**KEYNOTE 3** 

Aviation Psychology & Human Factors: Applied Methods and Techniques Ioana Koglbauer (Airbus Defense and Space GmbH, DE)

10:00-10:30

**Coffee & Posters** 

To submit a scientific poster, please send an English abstract to isap@aapa.or.at

10:30-12:00 (AP.147.HS.005) 10:30-12:00 **SESSION 7 SESSION 8** Methods and techniques in the validation of Pilot Selection in Turkey (working title) innovative air-traffic management concepts Deniz Kilicgedik-Sazak (SunExpress, TR) Bernd Lorenz (EUROCONTROL, FR)

12:00-13:00

Lunch (Taste'njoy powered by ISS)

13:00-14:30 13:00-14:30 (AP.147.HS.005)

**SESSION 9 - WORKSHOP SESSION 10 - WORKSHOP** 

Training challenges in police helicopter **Introduction to Job Analysis in Aviation** 

pilots (Working title) Jóhann Wíum (EAAP, IS) Alfred Pritz (BMI, AT)

14:30-15:00

**Coffee & Poster** 

To submit a scientific poster, please send an English abstract to isap@aapa.or.at

15:00-17:30 (AP.147.HS.005) 15:00-17:30

**SESSION 11 - WORKSHOP** 

Introduction to Aviation Selection methods

Jóhann Wíum (EAAP, IS)

**SESSION 12 - WORKSHOP** 

Hypoxic training to prevent risks in flyingchallenges of measuring human factors

Cynthia Schinkel (German Air Force, DE) Rebecca Fill Giordano (hr+ in cooperation with

AMST Systemtechnik GmbH, AT)

19:00 TOWN HALL RECEPTION with the Mayor Graz (drinks included)

Short tram ride or 30min. walk to city centre (Hauptplatz 1, 8010 Graz)

## Thursday, 6th July 2023 – MAINTENANCE / SAFETY MANAGEMENT

08:00-09:00

**AAPA Registration Desk** 

Coffee / Meet & Greet

Austrian Aviation Psychology Association

**Session Chair: tbc** 

09:00-10:00 (AP.147.HS.005)

**KEYNOTE 4** 



Maintenance Human Factors in Safety Management (working title) John deLeeuw (USA)

10:00-10:30

**Coffee & Posters** 

To submit a scientific poster, please send an English abstract to isap@aapa.or.at

10:30-12:00 (AP.147.HS.005)

10:30-12:00

**SESSION 13 - PANEL DISCUSSION:** 

**Integrated Maintenance Systems** 

**SESSION 14** Cognitive neuroscience and safety research

Facilitated by the European Aviation

Maintenance Training Committee (EAMTC)

Julia Behrend (FR)

**Human Factors in Aircraft Accident** 

Investigation from an Airports perspective

Just Culture Training in Rescue Services

With representatives from:

- 1. Academia
- 2. Aviation
- 3. Maintenance
- 4. Training
- 5. UAV

Details see page 6-7

#### 12:00-13:00

#### Lunch (Taste'njoy powered by ISS)

13:00-14:30 13:00-14:30 (AP.147.HS.005)

**SESSION 15 - WORKSHOP SESSION 16 - WORKSHOP** 

Competency-based training and assessment

in maintenance and the role of transversal

competencies

(working title) Lydia Kes (NL) Ryan Antoon (USA)

Ben Pietersma (NL)

#### 14:30-15:00

#### **Coffee & Poster**

To submit a scientific poster, please send an English abstract to isap@aapa.or.at

15:00-17:30 (AP.147.HS.005) 15:00-17:30

**SESSION 17 - WORKSHOP** SESSION 18 - WORKSHOP

Maintenance in times of fleet grounding-

learning from Covid

Don-Felix Ryzek (DE) Hans Mayer (NL) Werner Kiemayer (easyJet Europe, AT) Michaela Schwarz (AT)

19:00 After Work Drinks & Dinner (own expense)

Restaurant reservation for 30 pax in a local restaurant

(working title)

## Friday, 7th July 2023 - Space Psychology & HF/ Regulations

08:00-09:00

**AAPA Registration Desk** 

Coffee / Meet & Greet

Christian Czihak (AeMC Salzburg, AT) Peter Metzger (Austro Control, AT)

Austrian Aviation Psychology Association

Session Chair: Michael Lehner-Morawec (Austro Control, GmbH, AT)

09:00-10:00 (AP.147.HS.005)



#### **KEYNOTE 5**

Aviation Psychology and Human Factors in the aviation regulatory framework Jóhann Wíum (EAAP, IS)

10:00-10:30

#### **Coffee & Posters**

To submit a scientific poster, please send an English abstract to isap@aapa.or.at

10:30-11:15 (AP.147.HS.005)	10:30-11:15
SESSION 19	SESSION 20
Aviation- vs. Space Psychology: responsibilities and duties Vladimir Ivkovic (USA) Margit Kanka (AT)	EASA PART MED – Comprehensive Mental Health Assessment & Pilot Peers Support Programs Christian Czihak (AeMC Salzburg, AT) Alois Farthofer (AT) Peter Beer (AT)
11:15-12:00 (AP.147.HS.005)	11:15-12:00
SESSION 21 Methods & application in Space Psychology Vladimir Ivkovic (USA)	SESSION 22 EASA Age 60 Rule: the role of the aviation psychologist and aeromedical examiner

#### 12:00 -12:30 (AP.147.HS.005)

#### Wrap up and close of ISAP'23

Dr. Michaela Schwarz/ Margit Kanka (AAPA Chairs)

Dipl.-Psych. Gunnar Steinhardt (EAAP President)

Dr.-Ing. Holger Friehmelt (Head of Institute of Aviation (Master) FH JOANNEUM)

#### 12:30 LUNCH/ DEPARTURE

#### Lunch (Taste'njoy powered by ISS)

For details on registration fees, please go here: <a href="https://aapa.or.at/ISAP23">https://aapa.or.at/ISAP23</a>
What is included in my registration fee?

- Coffee breaks
- Full lunch (different plates, salad bar, desert, including one soft drink)
- Welcome reception (Monday)
- Entrance fees for operational visits (Tuesday)
- Town hall reception (Wednesday)
- Personnel cost for conference rooms (security, technician, cleaning)
- Travel / accommodation cost speakers/ lecturers/ panellists

Persons, who are exempted from registration fees, pay a <u>basic daily fee of 25€</u> to cover the proportionate cost for catering, conference room and staff.

## Panel Discussion 1 - Intermodal Transport Systems

This panel will be dedicated to discussing new and innovative ideas on how to better integrate regional aviation in other transport systems such as rail-/tram-, road-/bus transport and unmanned aircraft systems. Selected representatives from transport system industries will be sharing their ideas and vision around the following burning questions:

- How can transport systems be integrated to ensure seamless first and last mile connectivity?
- How can short-haul flights be subsidized with rail and bus services? (air meets rail, bus shuttle services etc.)
- How will flying cars/ air taxis/ drone deliveries influence passenger mobility?
- How can passengers services be improved (home check-in & face recognition security, flexible connection planning depending on delays, integrated ticketing, electronic bag tags/ never q again etc.)
- 1. Academia: Holger Friehmelt (FH JOANNEUM, Head of Aviation Institute)
- 2. Aviation/Road: Peter Jorna (Former Board Member Pal-V)
- 3. Air Operations: Isabel Doppelreiter (Female Pilot's Working Group, IFALPA)
- 4. Mobility: Günter Penetzdorfer (Denkfabrik Mobilität)
- 5. Rail: Frank Michelberger (Head of Carl Ritter von Ghega Institute, FH St. Pölten)

If you have an innovative idea related to the topics above or a question that you would like to pose live to the panel, please send an email to <a href="mailto:isap@aapa.or.at">isap@aapa.or.at</a>.

## **Panel Discussion 2 - Integrated Maintenance Systems**

Panel 2 will be focusing on increasing aviation safety by integrating maintenance systems. The use of integrated maintenance software, predictive maintenance services and

- How to revolutionize the airport experience for passengers and airlines with a connected aviation ecosystem?
- Can predictive maintenance really reduce maintenance-related delays and unscheduled maintenance events?
- Could an aircraft hangar also serve as train, train or bus depot/ workshop?
- How to maintain competence of future aircraft maintenance technicians and engineers?
- How to digitalize critical infrastructure?
- 1. Academia: Holger Friehmelt (FH JOANNEUM, Head of Aviation Institute)
- 2. Aviation: Hans-Jörg Lotter (Zimex Aviation, AT)
- 3. Maintenance: Hans Mayer (European Aviation Maintenance Training Committee)
- 4. Training: Lydia Kes (MBO College Airport, Rocva NL)
- 5. UAV: Matthias Fiegl (Smart Digital Austria)

If you have an innovative idea related to the topics above or a question that you would like to pose live to the panel, please send an email to <a href="mailto:isap@aapa.or.at">isap@aapa.or.at</a>.

#### ISAP'23 – List of Scientific Posters

- 1. Usability of Touch Displays in Aircraft (Dr. Andreas Schmidt, German Airforce, Germany)
- 2. Traffic display concepts for drone pilots (Markus Peukert, TU Darmstadt, Germany)
- 3. A European Competency Framework for Aviation Psychologists and Human Factors Specialists in Aviation (Michaela Schwarz, former EAAP President, Austria)
- 4. The Latin American Aeronautical Community Perception on Psychology (Mónica, Gómez Caniella, ULAPA, Uruguay)



## The ISAP'23 Organising Committee is looking forward to welcoming you in Graz!

Any queries should be sent to isap@aapa.or.at









