29th EAAP - SCIENTIFIC PROGRAM
PERFORMANCE, SAFETY AND WELL-BEING IN AVIATION

MONDAY 20 SEPTEMBER

Opening Ceremony
9.00-09.30
President of EAAP Prof. Peter Jorna
Representative of Local Organizing Group Mr. Bernd Lorenz
Aviation Official from Hungary

Keynotes
09.30-10.15
Keynote Speaker: Mr. Jules Kneepkens, EASA Rulemaking Director
Questions to EASA

10.15-10.45
Coffee break
10.45-11.15 Keynote Speaker: Performance Prof. Don Harris
10.45-11.45 Keynote Speaker: Safety Dr. Henk Blom
11.45-12.15 Keynote Speaker: Well Being Prof. Sidney Dekker

12.15-13.30
Lunch
13.30-14.00 Keynote Speaker: SESAR Dr. Manfred Barbarino
14.00-14.45 Discussion with keynote speakers - Chair: Prof. Monica Martinussen

14.45-15.15
Tea break

PAPER SESSIONS

1: Future Aviation & Human Factors

15.15-15.35 1 Lorenz
Evidence-based ATM Concept Validation

15.15-16.30 15.35-15.55 2 Eissfeldt
Not quite the same - Ability Requirements for Aviators in Future ATM

15.55-16.15 3 Roerdink
Integration of Human Factors in Air Traffic Management System Design

Questions & Discussion Session 1
## TUESDAY 21 SEPTEMBER

### PAPER SESSIONS

**2 : ATCo Selection**

4. **Heintz**
   A large scale validation study on air traffic controller selection

5. **Kirchberger**
   Is being good at rotating cubes required to become an air traffic controller?

6. **Pentcheva**
   Comparative Analysis of the Bulgarian System for Selection of ATCo's and FEAST

7. **Eschen - Léquedé**
   Performance in Hybrid Teams: Questionnaire to measure Personality's Influence

**4 : Civil Pilot Selection**

16. **Matton**
   French pilot selection - correspondence between cutoff scores and maximal test information

17. **Zierke**
   Knowledge Tests for Ab-Initio Pilot Selection in Civil Aviation

18. **Yazgan**
   Weighting of pilot selection criteria using analytic network process

**5 : Air Force Selection**

19. **Roth**
   NextGen of Simulator-based Devices for the Selection of Flying Personnel in the German Armed Forces (GAF)

**10.30-11.00**

Coffee break

**11.00-12.30**

(includes discussion)

3. **HF in Future ATM**

8. **Schulze-Kissing**
   Demonstrating new ATM concepts in a new low cost simulation environment

9. **Urvoy**
   Concept for a Human Centered 4D Surface Guidance System

10. **Schuver-van Blanken**
   The ATCo Cognitive Process Model: A model for analysing cognitive complexity in ATM

11. **Feuerberg**
   Increasing controller productivity by single-person-operation - An empirical investigation

**5 : Air Force Selection (cont.d)**

20. **Eisl**
   PC-Flight Simulator Experience as predictor for success in the GAF Pilot Aptitude Test Battery

21. **King**
   Human Factors Considerations of Unmanned Air Vehicle

22. **McMillan**
   Profile of USAF Remote Piloted Aircraft Pilots

23. **Thompson**
   Size really matters - A strategy for selecting RPA pilots using power and effect size

**12.30-13.45**

Lunch

**13.45-15.10**

(includes discussion)

3. **HF in Future ATM (cont.d 1)**

12. **Meeuwen**
   Self-directed Learning Skills in Air-traffic Control Training: An Eye-tracking Approach

13. **Helsdingen**
   Transfer of Gaming: Measuring the Training Value of Flight Simulator Games

14. **Justen**
   ATC Shared Mental Models: Effects on team behaviour, communication, and performance

15. **Walkowiak**
   Cognitive flexibility in Air Traffic Control systems: A theoretical overview

**6 : Air Force / Civil Flight Training**

24. **Wesemann**
   A Paradigm Change in the Diagnosis and Therapy of Airsickness

25. **Stein**
   Simulator-Induced Syndrome During Initial Flight Training in an EC135 Simulator

26. **Fornette**
   How to help pilot cadets to be more adaptive and successful?

27. **Schaueble**
   Do Teachers’ Beliefs of Airline Flight Instructors predict the effectiveness of their training?

**15.10-15.30**

Tea break

**15.30-17.00**

POSTER SESSION

**16.00-17.30**

EAAP Business Meeting
### WEDNESDAY 22 SEPTEMBER

#### PAPER SESSIONS

**3 : HF in Future ATM (cont.d 2)**

- **28 Fricke-Ernst**
  - EUROSS: An Observation Methodology to Capture Best Practices in the Operations-Room

- **29 Kessel**
  - Digital Ground-Ground Data Com-Assisted Verbal Communication for Multi-Sector ATM

- **30 Oehme**
  - Automation in Aerodrome Traffic Control

- **31 Inoue**
  - Knowledge Management Framework for ATC Expertise based on Distributed Cognition Analysis

**9 : Aeronautical Decision Making**

- **38 Li**
  - Pilots’ Problem-solving Processes Using Different ADM Mnemonics

- **39 Lindvall**
  - Procedure violations and decision-making among airline pilots

- **40 Henderson**
  - Vulnerabilities of experience in the flight deck

- **41 Wiggins**
  - Cues in the Interpretation of Weather Radar Returns

**10 : Coffee break**

**11 : 10.30-11.00**

- **32 Wang**
  - The Impact of High-Stakes Decision-Making on Air Traffic Controllers’ Workload: A Simulation Study

- **7 : Astronaut Selection**

- **33 Maschke**
  - European Astronauts: Results of the Selection Campaign 2008/2009

- **34 Pecena**
  - Psychological Selection Process and Support during Confinement Studies

- **35 Soll**
  - Test Subject Selection for two Berlin Bed Rest Studies and the Mars500 Project

**10 : Crew / Company Resource Management**

- **42 Bienefeld**
  - Emergency at 35'000 ft.: How Cockpit and Cabin Crews lead each other to safety

- **43 Brown**
  - Flight Attendant/Pilot Communication, in a Post 9/11 Environment: Viewed from Both Sides of the Flightdeck Door

- **44 Ritzmann**
  - Developing Crew Resource Management training for flight attendants

- **45 Furuta**
  - Simulation of Team Cooperation Processes in En-Route Air Traffic Control

**12.30-13.45**

- **8 : Airport Safety**
  - **36 Nunes**
    - Mitigating runway incursion risk: technological solutions based on voluntary event reporting

- **37 Remawi**
  - The Relationship between the Implementation of Safety Management Systems and Attitudes towards Unsafe Acts of Airport Personnel

- **10 : Crew / Company Resource Mgt (cont.d)**

- **46 Antersijn**
  - The Naked Organization: Mediation as part of the next step towards safety

- **47 Groppe**
  - Monitoring the Aircraft Turn-Round Process: Qualitative Cognitive Model

**13.45-14.30**

**14.30**

**BUDAPEST CITY VISIT**
THURSDAY 23 SEPTEMBER

PAPER SESSIONS

11 : Fear of Flying

48 Gerwen
Overview of Fear of Flying Prevalence, Assessment and Treatment Methods

49 Busscher
Physiological reactivity to phobic stimuli in people with and without fear of flying

50 Genc
Cognitive, Behavioural and Emotional Experience of Turkish Air Passengers: Flight Anxiety and Managerial Implications

51 Grootenhuis
Cabin Crew and Fear of Flying

12 : Pilots and Stress / Fatigue

56 Cherng
Civil Pilots’ Personality Traits Play an Important Role to Impact on their Stress and Flight Safety

57 Lempereur
The Psychological Effects of Constant Evaluation on Airline Pilots: A Qualitative Exploratory Study

58 Kallus
Are psycho-physiological stress reactions in flight predictable from simulated flight situations?

59 Andreßen
Alertness Management Training in Civil Aviation

9.00-10.30
(includes discussion)

10.30-11.00
Coffee break

11.00-12.30
(includes discussion)

11 : Fear of Flying (cont.d)

52 Lubek
Treating Fear of Flying successfully: a treatment protocol

53 Triscari
Description and effectiveness of three standardized treatment programs for fear of flying: CB Therapy, VRET Therapy and EMDR

54 Georgieva
Programme “Help with Fear of flying” – Development and improvement in Bulgaria

55 Arondeus
Cognitive coping strategies of unsuccessfully treated fearful flyers

12 : Accident Investigation

60 Cheng
The Development of RSAF’s Human Factors Analysis Model: A Case Study

61 Doorn
Aircraft Specific Accidents in Sport Aviation in the US (1982 – 2007)

62 Stanski
Wake Turbulence Accidents

63 Trebbi
The heuristic effect in ATC communication

11.00-12.30
(includes discussion)

12.30-14.00
Lunch

TUTORIALS

14.00-16.30

TUTORIAL 1 - Oakes, Bor, Eriksen - Fear of Flying: Let’s get real
TUTORIAL 2 - Verschragen & Grootenhuis - Fear of Flying and the Inner Critic
TUTORIAL 3 - Zigterman & Delorme - Fear of Flying and Mindfulness
TUTORIAL 4 - Heemstra - Identifying Human Factors Pro-actively
TUTORIAL 5 - Marques & Venus - CRM : Where do we go from here?
TUTORIAL 6 - Thomas - Fatigue Risk Management Systems

14.00-16.30

POSTER SESSION

20.00
GALA DINNER and EAAP AWARD CEREMONY 2010
FRIDAY 24 SEPTEMBER

PAPER SESSIONS

14 Pilot Performance / Future Flight Deck

64 Koglbauer
Evolution of Pilots’ Performance and Psychophysiological State in Managing Unusual Attitudes, Full Stalls and Spins in Simulator Training and Real Flight

65 Rohacs
Subjective aspects of the less-skilled pilots

66 Keinrath
A Cognitive Adaptive Man-Machine Interface for future flight decks

10.35-11.00 Coffee break

15 The Human Factors Case

67 Burdekin
Sharing knowledge: improving human performance through behavioural safety training in high-risk, high-reliability industries

68 Kolrep
Task Analysis Tool for Human Factors Cases in Aviation

Keynote Speaker: Airport Noise : Prof. Peter Jorna
Last but not least: Aircraft Noise Perception & Demonstration..

CLOSURE OF CONFERENCE
POSTERS
(posters will be on exhibition continuously)

Selection
1. Piedade: Predictive validity for military ATC performance
2. Tarnowski: Development and preliminary validation of Ambient Vision Test
3. Zieliński: Benefits of working memory in mental rotation task: spatial memory span connected with efficiency, not correctness in Pilot’s Spatial Test
4. Bleckley: Confirmatory Factor Analyses of the Self-Description Inventory (SDI+) in a Sample of United States of America (USA) Federal Aviation Administration Air Traffic
5. Gundersen: Applicants’ reactions and attitudes toward the selection system for military and civil pilot training in Norway

Stress Management
7. Balachandran: Exploring new therapeutic tools to the use of psychotropic medication
10. Triscari: The elaboration experience of an event with high emotional impact on the staff of an airline based on the Critical Incident Stress Management Model.

Cockpit and Cabin Comfort
12. Winzen: Subjective Measures complementing Objective Measures when analyzing Thermal Comfort in the Aircraft Cabin

Accident Investigation
14. Molinari Barreto: The Human Factor Investigation in the Satellite Launch Vehicle Accident VLS-1 V03

Cognitive Processes
16. Biernacki: The role of fluid intelligence in motor learning
17. Zuzan: Mental Capacity of Private Pilots (PPL)

Organizational Safety
18. D’Oliveira: Organizational Safety: From safety culture to resilience
19. D’Oliveira: Cultural Intelligence, Diversity and Management: Implications for the Aviation Industry
20. Franco: Aviation CRM at the Operation Room. Understanding how to apply the International Best Practices