DATS – setting the scene

11-12 February 2019

Billy Josefsson, Manager Automation & Human Performance and Academic Collaboration
NORRKÖPING SWEDEN 11–12TH FEBRUARY 2019
DIGITAL AIR TRAFFIC SERVICES

Workshop

on Safety and Workload

Meeting room: TMP 55 / TP5035, Täppan building 5th floor
11:30 - Lunch at Visualization center (sponsored by SAAB)
13:15 - Billy Josefsson, LFV and Valentin Polishchuk, LIU: Welcome notes, round table, introduction
14:00 - KEYNOTE: Erik Bäckman, SAAB group, VP Operations Saab Digital Air Traffic Solutions, RTC Sundsvall: **Starting Point for the Reality**
15:00 - Coffee break
15:15 - Tatiana Polishchuk and Christiane Schmidt, LIU: **Starting Point for Research**, CAPMOD project
16:00 - Lothar Meyer, LFV: **Safety and Risk assessment**, MERASSA project
16:30 - Active discussions, work in groups
17:15 - Finish for today
18:30 - Social Event: Dinner (own cost), location to be announced
Ett steg tillbaka upp till spelning steg för steg
STARTING POINT
-technology
-services
-learning
-exchange
-collaboration; industry – users - academy
What is the RTC research challenges?

✔ Safety
  - Demonstration,
  - Risk and Safety Assessment

✔ Understanding Workload
  - detect
  - channel it
  - predict

Your conference paper reached 50 reads
Achieved on Feb 9, 2019
Conference paper: Scheduling air traffic controllers at the remote tower center
Innovative Research

Research Evaluation Demonstration

Validation Demonstration Evaluation

Operations Evaluation

Implementers & receivers / users

LFV & LiU et collaborators
Observations and comments

✓ Progress
✓ Starting point --------------- YES
✓ CAPMOD --------------------- on track?
✓ MERASSA ------------------- ETRA----------------- on track?
✓ Is research fit for purpose?
✓ Are we doing the right research, with the right people?
✓ New areas?
✓ Specific Issues (look at boards)
Next

✓ Exchange useful?
  - Researchers?
  - Others / Users /

✓ Write up a short summary and way fwd... Key issues , , keep the network.
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What we are doing

- Work on **Safety & risk assessment** is high priority (MERASSA → ETRA)
- Work on **workload management and optimisation of staff** (CAPMOD)

What about....

- Change Management
- Training
- Social Dialogue
- Standardisation
What’s in the Research pipe for DATS, 3,4,5-10 yrs ahead

✓ Labelinteraction (less or no need for e strip)
✓ Workload monitoring
✓ Automatic Speech Recognition
✓ New sensors
✓ Augumented Reality
✓ Attention Guidance supported by AI
✓ Automation support for training and verification of competence
✓ Resilient Strategies for multiple information sources (RE5 → X10 → hybrid i/f)
Collaboration LFV and LiU

Linköping University – Science for the aviation of tomorrow

- COMMON LONG TERM PROGRAM 2012–2025
- SMART DECISION SUPPORT
- ADVANCED HMI
- SENSORS
- STRATEGIES FOR AUTOMATION PROGRAM HUMAN-MACHINE
- UTM
- SPACE-TO-GROUND
- AIR TRAFFIC VISUALIZATION
- SAFETY/RESILIENCE/HUMAN PERFORMANCE
Day2

09:00 - Eamonn Wylie: Remote Tower Operations: A Professional Staff Organisation's Perspective
09:30 - Steve Burchill: Adaptive Automation: Status, Current Applications and Emerging Considerations
10:00 - Jarkko Hirvonen: Probabilistic Snowcasting Methods used in Finnish Meteorological Institute
10:30 - Outlook, closing notes
10:45 - Coffee break
11:00 - Walk to the city center
11:30 - Open Repetition with SON (Norrköping Symphony Orchestra) at Louis De Geer Concert and Congress Centre
12:30 - Lunch at De Geer(sponsored by LFV Research & Innovation)