Resilience, why and what?

SNA-RP* and thoughts ahead of TORC training

*Service Navigation Aérien – Région Parisien
Air Navigation Service – Paris region
Context: air traffic management

- Apply separation rules to keep aircraft at a safe distance from each other in their area of responsibility
- ATCOs interact with each others (adjacent sectors) and with pilots in a highly dynamic environment
- ATM is a highly regulated domain in which front line operators (ATCOs) are autonomous in their decision makings and problem solving
- Adaptation to surprises is perceived as part of ATCOs daily job (they are trained for flexibility)

- For what situation: emergency management
- Expectations:
  - To explore the contribution of the approach to highlight organisational needs for emergency management (functions’ definition)
  - To nurture the available resources to deal with emergencies
- Process leading to the involvement in the project:
  - Late involvement (2nd year)
  - TORC training basis already set
  - Experimentation took place at regional level proposed by national level
2 settings

@ Roissy – Charles de Gaulle

• In the framework of a overall reflection of an organisational change
• In the aftermath of the disruptions experienced in January 2015 (Charlie Hebdo attacks)
• One of the runway closed in summer 2016 for maintenance + EURO 2016 football cup
• Orly airport (South of Paris) with limited capacity over the same period for maintenance reasons
  - Reduced possibility to divert traffic in case of problems

@ Orly

• In the framework of the “unusual situations training”
  - 1 day formal recurrent training on procedures to be applied to deal with “expected” unexpected situations
• Training is both:
  - theoretical
  - practical in simulator

• Number of personnel:
One shared scenario

• Reduced staff due to personal issue

• 3 “normal” events
  ▪ Weather deterioration
  ▪ 2 technical problems (radar screens black out + breakdown of ILS)

• 1 crisis
  ▪ Reported suspicion of explosion in the terminal by one pilot
SNA-RP experiences with the TORC game
Matériel – Le tapis de jeu

- Prendre conscience de la situation
- Créer du sens
- Anticiper
- Prendre une décision
- Estimer les conséquences de la décision

Situation Routinière maîtrisée
Reconsidérer les routines
Sortir du cadre

Dédale 2016
• 2 different experiences to fit into 2 frameworks

• A « standard » TORC game for Orly
  • Trainees around the board game
  • 2 groups of 5 ATCOs (no management)
  • Game lead by Dedale (introduction of surprises, animation of discussions and debriefings,

• A « revised » game setting for Roissy – Charles de Gaulle
  ▪ Personnel in their offices/ job positions communicating by phone (as they would do in reality)
  ▪ 1 group of 5 trainees (ATCOs and middle management) + 5 observers
  ▪ Game lead by a SNA-RP representative, by phone, playing multiple roles (pilots, colleagues, management, fire-fighters, police...)
  ▪ Overall debrief at the end of the game lead by Dedale
Feedback

Added value from the game

- Identification of critical roles in the existing organisations for dealing with emergency
- Emergence of roles which could be entitled for coordinating responses
- Experience the limits of available procedures
- Identification of possible shortages in organisational resources
- Identification of potential communication flaws
- Identification of specific training needs

Improvement needs

- Find the appropriate balance in the surprises to:
  - Match the hierarchical responsibility for decision making
  - Avoid falling in trivial “daily surprises” for personnel which job is a constant adaptation
- Represent in the game the dynamic aspects of ATM domain (Connection with operational context)
- Integrate the TORC training in a larger organisational reflection