Impact of a new technique such as Behavior Detection on human factors in security operations

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IMPACT OF A NEW TECHNIQUE ON HUMAN FACTORS

Introducing new techniques / technologies in aviation security :

➔ Not a guarantee for an increased performance

➔ Arouses new expectations from the operators

➔ Impact on Human Factors

The introduction of **Behavior Detection** in France is one example.

BEHAVIOR DETECTION

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Assessing threat posed by persons through behavioural detection

• Risk-based approach to aviation security

• Identify persons who may pose a threat

    ➔ Additional security mesasures

• Recognition of behavioural characteristics

• Can be applied to the general public, passengers and other

BEHAVIOR DETECTION IN FRANCE

- 2009 : Pilot project at Paris - Charles de Gaulle Airport

- 2011 : extension to Paris - Orly Airport

- Based on the TSA BD Programme : SPOT

- Objective : to adapt SPOT in a different culture and organisation

- Complementary measure at the checkpoint

BEHAVIOR DETECTION AND HUMAN FACTORS

Two major considerations :

1. Designing a new set of tasks, with dedicated staff :
   ➜ An opportunity to reconsider Human Factors good practices

2. Behavior Detection relies 100% on the human competency :
   Raises the question of efficiency and reliability
   ➜ Need of carefull thinking on :
   - the staffing
   - overseeing of activities
   - performance evaluation

BEHAVIOR DETECTION AND HUMAN FACTORS

1. **Consideration given to Human Factors good practices**

- Interest in the task
- Responsability, autonomy
- Professionnal reward
- Work indentity
- Perception of control by passengers
- Change in role
- Team work
- Feed-back activities

Further investigations :
- Fatigue management
- Monotony

BEHAVIOR DETECTION AND HUMAN FACTORS

2. Technique relying 100% on the human competency

-Observation, decision making, investigation :

➔ What to observe ? How to decide ?

-Human factor : strengh or weakness ?

➔ What can be observed, what human limitations ?

Two axes for answers :

-Grounded premises : provide a framework

➔ Validity of the disposal

Ex. « Terrorists don't fear to die but to fail their mission »

-Thorough work on the professionnalisation and the implementation conditions

➔ Selection, training, monitoring, decision-support tools

Further investigations :
What measurement of performance ?

BEHAVIOR DETECTION AND HUMAN FACTORS

Key factors for success :

• Rely on academic studies

• Ensure close follow-up of the operations

➔ Support the construction of this new activity

QUESTIONS ?