



#### Agenda:

Geir Petter Mikkelsen:

Training of ATC personnel regarding prevention of birdstrikes

Pål Ranestad:

What about the future, then?

## Initial training

- \* Theoretical training regarding the subject. Includes elements from the Airport Bird-Control training
- \* Elements of the challenge with birds, are included in the simulator exercises. For instance:
  - \* Vehicle on RWY after report of possible birdstrike,
  - \* A/C returning with engine fire due to birdstrike etc.

## Unit training

- \* The trainee training program includes theoretical classroom instruction during PRE-OJT.
  - \* Information related to bird-life at the local unit.
  - \* Local methods and procedures on how to handle bird-life challenges.
- \* The depth of the instruction can vary from unit to unit depending on the local challenges related to bird-life.
- \* During OJT the trainee learns how to make use of this knowledge in operational scenarios.
- \* Regulations: Local unit regulations, Avinor central regulation RFL II (AGA 1)

## Continuation training

- \* Continuation training is divided into
  - \* refresher,
  - \* emergency and
  - \* conversion training.
- \* In particular refresher and emergency training includes aspects regarding bird hazards. Continuation training for each controller is 2 days/year.
- \* The frequency of topics related to bird hazards in this training, can vary from unit to unit.

## Then, what about the future



## ATCO contribution

- \* Support pilots and bird-controllers
- \* Receive and forward information
- \* Issue clearances

## Purpose

- \* Information serving decisions
  - \* Pilots
  - \* Bird-control
  - \* ATCO
- \* What is needed to make these decisions?

## Influence on decision-making

- \* Phase of flight
- \* Type of ACFT
- \* Traffic density
- \* Type of bird

## Quality of information

- \* Live updated
- \* Essential and risk based
- \* Useful

## Presentation of information to ATCO

- \* Challenges
  - \* Flow of information
  - \* Great variety of information
  - \* Many systems not integrated
- \* Demands
  - \* Info should be easy accessed and assessed
  - \* Only important info has a value

## Equipment

- \* Radars or cameras
- \* Remote operated TWR's

## Conclusion, sort of..

- \* Pilots should describe their needs, what, when and why
- \* Sharing information in a very dynamic environment, demands
  - \* Accuracy
  - \* Live updates
  - \* Risk-based selection (limited «alarms»)
  - \* Integrated presentation