

BIRD STRIKE COMMITTEE EUROPE

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BIRDSTRIKE - THE AIRPORT MANAGER'S BRIEF

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BIRDSTRIKES - THE AIRPORT MANAGER'S BRIEF

Introduction

1. Birds represent a hazard to aircraft in the air. An aircraft striking a bird may suffer damage to its engines, its structure or its windscreen. The severity of the damage will depend on the weight of the bird, the speed of the aircraft and the strength of the part struck. At best a birdstrike will result in a delay or a diversion and a maintenance test, at worst it could result in a catastrophic accident. In Europe, civil aircraft strike a bird about once in every 1500 flights and once in every 2000 take-offs and landings. Military aircraft suffer a rather lower take-off and landing rate but have more en-route strikes because they carry out more flights at low level. Several military and civil aircraft are lost each year due to birdstrikes and the cost is considerable.

The Airport Manager's Responsibility

2. The Airport Manager must be responsible for ensuring that all measures are taken to make operations from his airfield as safe as possible. The birdstrike problem has been studied for many years by specialists in several fields and their advice is readily available. Therefore before starting bird scaring, the Airport Manager should first check on help and advice available from:

- a. Local ornithological and agricultural authorities.
- b. National aviation agencies.
- c. International literature.

The Principles of Birdstrike Prevention

3. The basic principles of birdstrike prevention are:

- a. On or near the airfield, keep the birds away from aircraft.
- b. En-route keep the aircraft away from birds.

4. On the Airfield. A study should be made of past birdstrikes and the number of aircraft movements in order to assess the risk and allocate resources to counter-measures. This should be compared with studies made at other airports with a similar style of operations.

5. Establish which species of birds are present on the airfield. Then discover if and why they are nesting, roosting, or feeding. If birds are nesting or roosting, make the area unattractive to them by changing the habitat, or harassment, or both. If they are feeding, remove the food supply by, for instance, closing garbage dumps, changing crops, or allowing the grass to grow long and hide the food source.

6. Habitat changing must be done with care because there is a risk that an even more dangerous species may replace that which is displaced. Bird scaring must be carried out scientifically to ensure that the birds do not adapt to the harassment. The operators must be trained to respond to new threats instantly and to trends intelligently. This requires good communications, adequate resources, a highly motivated organisation and, above all, efficient supervision.

7. Off the Airfield. The Airport Manager's responsibility for en-route is to ensure that the operators have available to them information on local bird migrations as they vary with time of year, time of day, and the weather. Details of the effect of local agricultural seasons and changing water conditions, which require local study and knowledge, should be combined with the international migration situation and presented to the operator in such a way that he is able to assess the risk to his operation. The operator should also be provided with facilities so that he can get more detailed information from specialists if he so desires. He should be made aware of services available to him in the planning phase and during actual flight.

8. Birdstrike Check List. The birdstrike problem will initially require:

- a. A statistical survey.
- b. An ornithological survey.
- c. An agricultural survey.

From these surveys will come:

- a. A definition of the threat.
- b. A formulated plan.

Which in turn will lead to:

- a. An allocation of resources.
- b. A works services programme.
- c. A training programme for personnel.

Once birdscaring operations are under way, there will be a requirement for:

- a. A reporting system to local and national levels.
- b. A user information system.
- c. A monitoring system to judge effectiveness and modify operations to meet the changing threat.
- d. A programme to maintain personnel motivation.