# PROJECT FOR ORGANISATION AND REGULATION OF THE SPLA (SERVICE DE PREVENTION ET DE LUTTE AVIAIRE) IN FRANCE

#### P. Pazzetta

Keywords: Hazard management, Organisation, Bird Control Teams

# 1 - Definition of the SPLA (bird hazard prevention and combat service)

Prevention consists in rendering the medium inhospitable to birds by controlling the airport environment: efficient management of grass mowing and control of stretches of water, choice of the most appropriate crops, creation of paths for anti-bird combat, infrastructure projects...

Birdstrike activities consists in applying bird-scaring facilities either permanently or case-by-case, in the form of fixed means (noise generators, remote-controlled distress shriek emitters, ...1 and mobile means (pyrotechnics, bird-hunting, airborne distress shriek emitters, ...).

#### 2 – Objectives

The main objective of the birdstrike service on an airfield is to improve air safety by reducing the risk of collisions between birds and aircraft. There can be no guarantee of certainty as regards results, owing to the considerable mobility of birds.

# 3- Principles

The level of protection provided essentially depends on the probability of an aircraft accident occurring as a result of colliding with birds during take-off and landing.

This probability and the risks involved mainly depend on the characteristics of the local ornithological situation, the level of traffic and the types of aircraft using the airfield.

#### 4 - Organisation

# 4.1 <u>Civil aviation missions</u>

The DGAC (Direction Generale de l'Aviation Civile) determines policy with regard to bird hazard prevention and combat. In particular, it decides standard means and equipment, defines personnel training programmes and launches studies on the layout and testing of new equipment. It acts as adviser and provides technical support to the local services.

At local level, the DGAC is responsible for:

deciding the appropriate levels of the means for each airfield and publishing them through aeronautical information channels ;

issuing the official approval of the SPLA through the airfield instructions specifications, with the assistance of the STNA (Service Technique de la Navigation Aerienne- Air Navigation Technical Service);

verifying application of the provisions adopted for anti-bird combat on airfields; arranging the necessary concertation with the administrative authorities for the actions to be taken to correct the ornithological environment in the vicinity of aerodromes (public rubbish tips, gravel quarries, lakes and lagoons, etc...).

# 4.2 Mission of airport managers

With regard to prevention of ornithological hazards, the mission is:

- to apply provisions concerning modifications to the airport environment to render it inhospitable to birds :
- sowing and upkeep of grass-covered areas and the << tall grass >> technique,
- reducing the number of preys,
- choosing the right decorative bush landscaping and upkeep of wooded areas, management of watering-holes, action on crops, restricting rearing of pigeons near airports;
- making sure that the risk of collision with birds is not increased as a result of work undertaken within the airport perimeter. The necessary steps must be taken in concertation with the DAC (Direction de l'Aeronautique Civile) and after consulting the STNA.

As regards anti-bird combat:

- organising and applying the means decided by the regional directorate in accordance with table appended. The purpose of these means is to render the service in permanent coordination with the air traffic authorities;
- drawing up local instructions concerning anti-bird combat in concertation with the airport managers.

As regards anti-bird combat means:

- using and servicing the appropriate equipment for anti-bird combat approved by the STNA.

#### 4.3 Function of the air traffic authority

In addition, the staff of the air traffic autority responsible for providing the airport control service has the following mission:

- observing bird life activity as part of permanent surveillance of the aircraft movements area within the limits of visibility from their work positions;
- informing the anti-bird combat technicians and co-ordinating their actions in the light of the existing traffic:
- keeping the airports users adequately informed during peak periods of ornithological activity.

#### 4.4 Function of the air crews and carriers

The crews must inform the air traffic authorities of all flocks and movements of birds detected and all impacts with birds.

Within the airport zone, all impacts with birds must be reported by the crew on the air traffic authority radio frequency.

In addition, all impacts between birds and an aircraft must be entered on a bird impact report by the crew and the aircraft maintenance services (see appendix 2 for the standard form).

The rot-proof remanants of birds (feathers, down, claws and beaks) recovered on the runway or aircraft and those recovered in the engines or air-cells during maintenance inspections must be sent to the STNA for study.

# 5 Personnel

The SPLA managers and anti-bird combat technicians whose missions it is to manage or participate in anti-bird combat operations must first be officially qualified by the director of civil aviation on which the airport depends.

This personnel will either be exclusively involved in birdstrike activities have or may have a different job on the airport, compatible with the activity of the SPLA.

# 6 Equipment

The equipment used for anti-bird combat is subject to the approval of the STNA. It comprises mobile equipment, the principle of which consists in using case-bycase or permanently either airborne bird-scaring devices based on pyrotechnics, distress shrieks and destruction shots or salvos, and fixed equipment consisting of noise generators and other electro-acoustic equipment.

#### 7 Level of birdstrike means

#### 7.1 Determination of allocation of minimum birdstrike means

By analysing the characteristics of the local ornithological environment (species encountered, periods of ornithological activity of either permanent, seasonal or random character, bird population densities), the volume of commercial traffic and the different types of aircraft, the minimum allocation is determined for the means or personnel and equipment to be provided for the bird hazard prevention and combat service of each aerodrome.

Three levels (A Yo C) exist, depending on the level of risk of bird collision.

Appendix 1 summarises the allocations.

# 7.2 Temporary reduction of means

Should it not prove possible to provide the protective actions that would normally have been taken, owing to the unavailability of all or part of the means set up to ensure the bird hazard prevention service, appropriate steps, defined in the local instructions, will be taken by the air traffic authority and indicated to the users.

# 7.3 <u>Information for users</u>

The users are kept informed of the airfield birdstrike facilities through aeronautical information channels. They feature in aeronautical publications, the aeronautical information manual (AIM) and the VFR airport charts (VACs).

# 8 Implementation

# 8.1 SPLA operating hours

The bird hazard prevention and combat service (SPLA) is provided throughout the aeronautical day, though it may be extended into the night period in special ornithological circumstances.

#### 8.2 Local instructions

To meet the objectives defined in the decree, precise regulations determined jointly with the airport authorities are drawn up in accordance with the standard local regulations specification by the regional coordinator, so as to give detailed instructions concerning:

- the operating hours of the service;
- the tasks of all persons involved in bird hazard prevention operations on the airport;
- the steps to be taken should ornithological activity become particularly intense or should certain facilities be unavailable.

# Appendix 1

COOLE TA	Personnel	S AND MINIMUM RESOURCES MOBILE MEANS				Additional fixed means
Level of means		Vehicles	Distress shriek generator	Pyrotechnic s	Hunting gear	defined by the DACs as advised by the STNA (optional)
A many bear such trains used trains us	1 SPLA manager 1 ALA1	1 vehicle approved for anti-bird combat	Jecres, pre p in acco polinator, s got had by	1 revolver + banger rockets 1 hand-gun + long range rockets	1 12mm calibre rifle + lead shot cartridges	Remote-controlled distress shriek generators Noise generators
B in a series of the series of	1 SPLA manager 1 ALA2	1 vehicle approved for anti-bird combat, available on request	one 1 sta one brid- orid of 360 one 5 requi	1 revolver + banger rockets 1 hand-gun + long range rockets	1 12mm calibre rifle + lead shot cartridges	Remote-controlled distress shriek generators Noise generators
C	1 SPLA manager 1 ALA2	1 authorised vehicle	enu ed sei	1 revolver + banger rockets 1 hand-gun + long range rockets	s Especia 10	1 12mm calibre rifle + lead shot cartridges (optional)

ALA1: Birdstrike technician permanently present on the airport platform, engaged in surveillance of ornithological activity and scaring operations immediately any birds representing a danger to aerial navigation are detected, or at the request of the control towel or a pilot.

ALA2: Birdstrike technician present on the airport, acting at the request of the control tower or a pilot, for anti-bird combat, within an optimum response time of approximately 5 minutes.