

BIRD STRIKE COMMITTEE EUROPE

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**BIRDSTRIKE MOTIVATION PROGRAM FOR PILOTS  
"THE SPANISH AIR FORCE RESULTS"**

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**Summary**

Following a short introduction, the paper contains brief details of the Bird Strike Prevention Plan and statistics showing the increase on the number of pilot birdstrike reports during '85/95 period.

**Key Words:** Statistics, Military Aviation, Reporting, Public Relations

## The Bird Strike Prevention Program

### 1. INTRODUCTION

The Spanish Air Force Accident Prevention Plan was completely re-structured in the early nineties as a result of a series of mayor accidents. During the rethinking process much attention was paid to the risks imposed by the environment, and among them the birdstrike hazard and consequently a specific Bird Strike Prevention Plan was designed in 1993.

### 2. THE BIRD STRIKE PREVENTION PLAN

The first step of the Bird Strike Prevention Plan (BSPP) was to asses and analyse the risk of birdstrikes on air bases and airfields as a result of which five (5) airbases were provided with Bird control Units, based mainly on falconery techniques but using also different support methods, as described in the Spanish Air Force paper presented in the 22th BSCE (Viena).

The second pilar of the BSPP was to provide better information to pilots on the bird risks at low level navigation in order to avoid the overflight of high bird concentration areas and other ecologically sensible areas.

The information provided to pilots is based on geographical maps ("GIS") showing bird concentration areas and main bird migration routes. The GIS is supported by the Environmental Authorities not directly related, but in close contact with the Spanish MoD. No real time information of migration movements is available yet but much work is done to achieve some kind of near real time information by observers of ornithological societies and environmental agencies.

One of the main problems of the SAF regarding birds is the increasing number of vultures (*Gyps Fulvus*) all over the iberian peninsula, and mainly in the sub-pirinean region where the air force main fire range is located. Untill a better solution is found, seasonal re-scheduling for on fire-range operations is imposed to avoid the risk of bird strike, which is extremely high at noon.

Educating and motivating pilots is another of the main pilars of the prevention plan. The education/motivation program is achieved by conferences and briefings during safety seminars and inspections/evaluations, and articles about bird strike incidents/accidentes and avoidance techniques published on the S.A.F. Flight Safety Magazine, called "Boletín de Seguridad de Vuelo". Those articles are signed by biologist, BCU professionals and pilots.

In 1994 the Eurobird data base and the birdstrike incident report form were adopted as standard by the SAF, allowing a better flow of information to and from the european supported data base.

Full participation in international forums related with the birdstrike risk was also seek in order to get a better overview of all the new findings and techniques used to reduce the risk of birdstrikes. SAF has undertaken an active role on the BSCE and on the Military BSC at Low Level since 1992.

### 3. MOTIVATING PILOTS

Eventhough an important effort was made to motivate pilots in order to prevent birdstrikes, mainly through briefings and articles in the "Boletin de Seguridad de Vuelo", the Flight Safety organization was getting not more than 10 pilot incident reports per year (see fig.1) since 1987. This output was not consistent with the very large population of birds of all species in continental Spain. Consecuently, it was decided to take an agresive approach to the problem and action was undertaken: it was decided to use an actual SAF birdstrike, that happend in 1994 near the Talavera AFB, which resulted in very important damage to an F5-B (canopy, cockpit and ejection seats) and serious injuries to one of the pilots (the backseater), who lost his left eye (a very similar accident occured in the early '80s in the same area ).

A negative motivation input like the catastrophic result of a bird strike may work if used in small dose. The repetition of this type of message creates a kind of habit and finally becomes unusefull. So, it was planned to chang to the preventive and positive side of bird strike after a first "shot" of negative motivation.

After consultation with the psychiatrist branch of the Aeromedicine Investigation Center (CIMA) it was decided to use the photographic material of the aircraft and helmet of the pilot to produce a poster that was to be distributed to all units, together with the flight safety magazine.

As a result of the distribution of the poster in May '95 (togheter with the flight safety magazine #5) there was a strong pilot reaction among the jet pilots, some of them even called the F.S. Section of the Air Staff on the phone, saing that it was unfair to use the suffering of a fellow pilot even for prevention purposes. Any way, the pilot who was involved in that particular birdstrike (he is still currently flying as an EW officer not as a pilot) gave his full support to the idea.

The direct output of this campaing was a dramatic increase on the number of birstrike reports, more than 400% over the previous month (fig. 2) were received in may '95, and what is even better is that increase was sustained in the following months. As can be seen in fig.1 the total number of birdstrike report for 1995 was almost ten times that of 1994, and the estimated number of reports for 1996 will be bigger based on the reports received in the first five months.

To maintain the momentum gained by this aggressive campaign a supplementary effort is planned on the education of the Flight Safety Officers who run the Accident Prevention Plan on a daily basis.

#### 4. CONCLUSIONS

Getting more, and better documented, birdstrike reports out of the pilots and ground personnel will allow the Spanish Air Force to better assess the bird strike risk and thus focus the resources on the real problems and find more realistic and effective solutions on how to share the airspace with our feathered friends.

Madrid, may 1996

## ANEX A, FIGURES

### BIRDSTRIKE PER YEAR

1984 to 1995

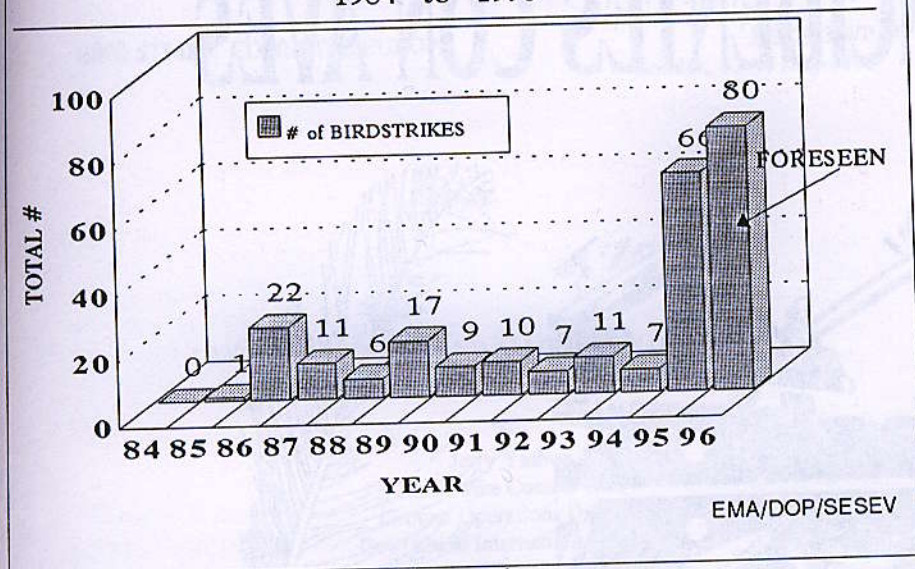


Figure 1.

### BIRDSTRIKE PER MONTH

1995

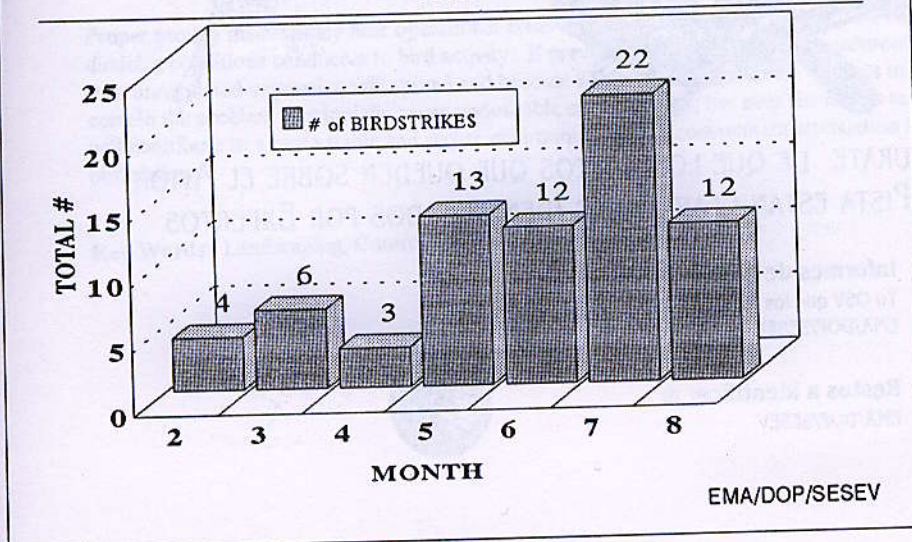
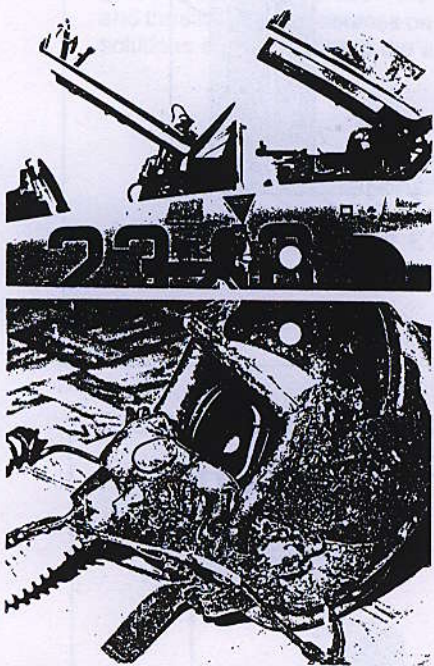


Figure 2.

# INFORMA DE TODOS LOS INCIDENTES CON AVES



ASEGURATE DE QUE LOS RESTOS QUE QUEDEN SOBRE EL AVION  
O LA PISTA ESTAN CLARAMENTE IDENTIFICADOS POR EXPERTOS

**Informes de Indicentes a:**

Tu OSV que los remitirá a  
EMA/DOP/SESEV

**Restos a identificar a:**

EMA/DOP/SESEV

