

MAY 1973

Preliminary works before the opening of Malmoe/Sturup airport  
for the purpose of reducing the risks of bird strikes.

by J. Karlsson and L-O Turesson, Swedish Board of Civil Aviation.

Summary

Some preliminary studies concerning bird problems started already 4 years before the opening of the new airport Malmoe/Sturup. In the autumn of 1968 a time-lapse film was made from bird echo studies of the radar PPI of the Malmoe surveillance radar station. The following autumn studies continued with taking series of polaroid photographs during some part of the bird migration period.

As a complement to the radar studies visual observations were going on a few days from about 10 stations near the future airport. The same kind of activities were performed 1970 and the planning of special field works started up. These field works were aimed at reducing the bird frequency in the airport area as much as possible. More comprehensive migration studies were carried out 1971 in co-operation with the Swedish Royal Air Force and the Ornithological Society of the province of Scania. A report of the latter studies was given to BSCE at the 7th meeting in London.

At the beginning of 1972 a working programme for the purpose of reducing the risks of bird strikes was drawn up. (The date for opening of the airport was fixed to 1st December 1972). The programme was made up by the following items :

1. Employment of a biologist for taking over the main part of the increasing preliminary works.
2. Plan for completing of the earlier field works based upon a careful survey of the airport area. The works consist of drainage of ponds, filling of holes, cutting off tress and bushes. In addition, some areas must be cleaned up carefully. The plan was presented in the summer of 1972 and partly executed in the autumn.
3. Research with the intention of finding the best type of grass crop, in respect of avoiding bird strikes, for the Sturup airport. The sowing was accomplished in the autumn of 1972. Experimental work of this type is still going on with the object in view of trying to find the best kind of grass for future airports.
4. Tests with different types of scarring equipments and methods have started. Sturup has been supplied with distress call equipment, gas cannons and bird scarring ammunition used for special pistols.

.../...

5. Radar observations have been done this spring from a mobile equipment near the airport area with the intention of studying local and migrational bird movements. Bird height determination have been possible to do with the RHI of the radar. This kind of observations will be used as a basic component of bird warning system.
6. The work with the earlier mentioned bird intensity forecasting system is going on and the intention is to carry out trials during the first autumn season of Strurup airport.