



***NORDIC BIRD STRIKE ADVISORY GROUP  
(NBSAG)***

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**Minutes from the 8th meeting of  
The Nordic Bird Strike Advisory Group (NBSAG)**

Keflavik Iceland 28 – 29 August 2003

Attendance list:

**Denmark**

Stanley Lundgaard Sörensen, Commander, Flight Safety Branch  
Bent Junker-Hansen, Wildlife manager  
Gert Sjösten, Deputy Chief Aerodromes and Ground Aids

**Finland**

Johua Joutsen, Engineer  
Osmo Leppanen, Areodrome Inspector

**Iceland**

Stefan Thordersen, Manager of Security and Faciliation  
Arngrimur Gudmundsson, Chief Security Inspector  
Ingimar Eydal, Assistant Fire Chief, Akureyri  
Óskar Ingi Sigmundsson, Project Manager, Airport Security Reykjavík  
Þórður Pálsson, Fire Department, Akureyri  
Friðbjörn Jónsson, Keflavík FES Airfield Ops.  
Hjörtur Hannesson, Deputy Chief, Keflavík FES Airfield Ops.  
Kristján Jens Kristjánsson, Fire Prevention Officer, Capital Distr.  
Guðmundur Ólafsson, Keflavík FES Airfield Ops.  
Bergur Sigurðsson, Suðurnes Public Health Authority  
Sigurður Hermannsson, ICAA, District Manager  
Haraldur Ólafsson, Chief Air Traffic Controller, Keflavík  
Þórður Ólafson, Instructor ATS School ICAA  
Aðalsteinn Leifsson, Reykjavik Airport.

**Norway**

Laila Johansen, Inspector Aerodrome  
Odin Leirvag, Chief Pilot, Braathens  
Pal Wang-Norerud, Senior Engineer Avinor  
Christian K.Aas, Researcher, Zoological Museum  
Tore Standrud, Manager Airside Safety

**Sweden**

Hans Pettersen, Airport Facilities Supervisor  
Johnny Person, Airport Wildlife Manager  
Carl Johan Møgstrand, Flygplatsman Airside  
Jan Löf, Training Leader

## **Minutes**

### **1. Welcome and introduction**

Mr. Christian K. Aas welcomed the participants to the meeting and thanked the Icelandic hosts for the arrangements. Mr. Stefan Thordersen welcomed the participants on behalf of the Icelandic authorities.

The day started by an introductory tour of Keflavik Aiprort. The participants then convened at Hotel Keflavik for the meeting itself.

After introductions were completed, the chairman, Mr. Christian Aas informed the participants that Dr. Russ De Fusco, would regrettably be unable to attend the IBSC meeting to be held in Warsaw

### **Social and practical arrangements**

Mr. Stefán Thordersen provided the participants with necessary information regarding dinner arrangements as well as a guided tour around the Reykjanes peninsula

### **2. Election of new secretary for the NBSAG-meeting.**

Stefan was elected secretary for this meeting.

### **3. Follow-up from the last NBSAG-meeting. Short report from the chairman.**

The minutes from the last meeting and a list of actions and progress were distributed.

### **4. Summary report on bird strikes 2002**

The chairman, Christian, presented a report on bird strikes.. At the last NBASA meeting, it was decided that all participating countries would provide Mr. Osmo Leppanen of Finland with all necessary data relevant to the compilation of the report. Unfortunately, Iceland and Denmark did not do so.

Osmo Leppanen explained how the Finnish Aviation Authorities defined damage to aircraft and showed slides of aircraft damaged after bird strikes.

Stefan Thordersen explained that the Icelandic authorities had experienced difficulties in collecting information regarding bird strikes.

Bent Junker Hansen presented a report on bird strikes in Denmark, excluding Copenhagen Airport. Mr. Hansen emphasized the importance of all airports collecting data on bird strikes since almost all bird strikes occurred in the vicinity of an airport. Mr. Hansen also stated that if unable to frighten the birds away, the only remaining option would be to have them shot.

Mr. Stanley Sørensen, from Danish Air Force, explained the problems the Danish Air Force experienced regarding bird strikes and displayed pictures of aircraft damaged by bird strikes.

## **5. The bird strike statistics from the major Nordic airports 2002**

A short report from the chairman who was standardized by method from Mogens Hansen.

## **7. Special bird problems at your airport, or your airline**

Nordic airports will make a proposal to change JAR-OPS 1.420(d). The Nordic countries must all agree on the issue

Stefan Thordersen stated that all bird strikes should be reported to the authorities.

Christian K.Aas proposed that Ismo Aaltonen from Finnair would draft the proposals for the next meeting, including guidelines on the reporting of bird strikes. The proposal was accepted by all delegates.

## **9. Important bird-aircraft problem in each country (all Countries)**

Oskar Ingi Sigmundsson explained that other airports in Iceland had experienced problems with bird species, under protection due to the threat of extinction. Several such species had nested in the vicinity of the airports.

## **11. European Bird Avoidance Models-EUR-BAM- a good tool for the Nordic air forces.**

Christian K.Aas gave a short presentation on the issue. EUR-BAM Computer models specially made for air forces to prevent bird strike.

## **12. A short report from a EUR-BAM workshop in Amsterdam 8<sup>th</sup> July this year.**

Christian K.Aas gave a short presentation on the issue. EUR-BAM is a computer program which calculates risk of a bird strike for a given flight. He

stated that the participation of all of the Nordic countries is of great importance.

Christian K.Aas also discussed BOSS Bird Observation System. BOSS is an program that utilizes radar to detect birds.

Some of the delegates felt that the meeting was not progressing in the right direction. They proposed that the primary focus of these meetings should be the bird strike problem in each and every country and how they can be responded to. The information could then be used on NBSAG meetings. The creation of a website containing all relevant information, from all participating countries was proposed.

### **13. The working groups/tasks within NBSAG the next step**

- a. Precautionary work at airports**
- b. Bird hazard information procedures**
- c. Collection of data on bird congregations, ecology, behaviour and movements, especially at and close to airports.**

Precautionary measures at airports. The goal was for the group was to collect info. Christian K.Aas offered his assistance on the matter.

Odin Leirvåg objected to the proposal and stated that the work was very important and should be done in accordance with ICAO standards and recommended practices on BASH. Odin also stated the importance of the collection of information. He said that data on type of birds, ecology, behavior and movements, at and close to airports should be collected. He proposed two different types of forms for this purpose

Pål Wang suggested that each country should state what was hindering the active control of birds.

Aðalsteinn Leifsson said the group should focus on advising on methods that are active on bird controls. He informed the meeting of problems they experienced with protected species at Reykjavík Airport.

Bent Junker Hansen said that Danish law permitted the killing of birds if they constituted a risk to air safety.

Aðalsteinn Leifsson suggested that the data should be collected at all major Nordic airports. Each and every country should then present the results and the methods used at the next meeting.

Haraldur Ólafsson said it was very important to establish a website so that information could be made available to interested parties.

Bent Junker Hansen said it would be very important to collect info at those meetings to take home with you.

Odin Leirvåg asked if all countries would be using the ICAO model for BASH

Laila Johansen said that all the documentation in Annex 14 were now Standards. And should be implemented.

#### **14. Birds shot at airports-presentation of number of birds shot 2001 and 2002 in every country**

Hjörtur Hannesson presented the Keflavik Fire Department BASH program and handed out the new NAS KEF BASH program. He reviewed a report on the BASH program.

Stefan Thordersen reviewed report of Kef Airport BASH program and handed out the report. In the year 2001 were 5823 shot. In the year 2002 were 5594 birds shot at Keflavik Airport.

Bent Junker Hansen presented report from Denmark. In 2001 420 birds were shot. While they numbered 415 in the year 2002. He informed the participants that the Saltholm authorities had successfully used oil to destroy eggs. The total number of birds was significantly decreased ( 15-20 thousand nests 20 years ago opposed roughly 5000 nests currently.

Osmo Leppanen reviewed report from Finland. In the year 2001, 891 birds were shot at Finnish airports. In the year 2002 this number dropped to 702 birds shot.

Carl-Johan Högstrand presented a report from Arlanda airport in Sweden. 213 birds were shot in 2002-2003. They have also problems with fox and rabbit

Jan Löf presented report from Göteborg airport. 74 birds were shot in 2001 while that number dropped to 26 in 2002.

Christian K.Aas reviewed report from Stavanger Norway. 1200 birds were shot in the year 2001 while 397 birds were shot in 2002. He requested that all reports should be sent to Mr. Olavi Stenm in Finland.

Christian K.Aas reviewed a report from Warsaw and presented a paper of studies done at John F. Kennedy airport in New York, regarding shooting of gulls.

#### **15. Election of new chairman for the NBSAG**

Oskar Ingi Sigmundsson from ICAA was elected as the next chairman.

## **16. Other business**

Odin Leirvåg explained a SAS audit on BASH which is performed by Bratheens. The audit is based on 30 questions. Several airports in Norway are audited. Odin will present a paper of this issue at the next meeting.

The participants agreed that the host country should provide a secretary for the meetings. .

## **17. Next meeting**

Next meeting should be in Denmark but the Danish delegates did not have the authority to accept it at this time. If that proves to be impossible, the meeting will be held in Norway. The exact date has not been established but the meeting will be held sometime between May and September

The chairman Oskar Ingi Sigmundsson will be in contact with Jørn Larsen for the behalf of Danmark about the meeting. Alternatively he will contact Hans Cristian Stelgård from Norway.

Keflavik Airport 06. 09.2004

Arngrímur Gudmundsson  
Chairman and secretary  
2003-2004