

Minutes from the 16th meeting of the Nordic Bird Strike Advisory Group. 22-23 May 2014 in Copenhagen Airport.

Session 1: Statistics and risk assessment

Statistics

The afternoon session on statistics and risk assessment was attended by ca. 20 people. After a brief introduction to bird strike prevention in Denmark, a number of presentations on national statistics of bird strike were shown.

Jens Erik Ditlevsen, Danish Transport Authority, presented the national statistics for 2013 for <u>Denmark</u>. Denmark has mandatory reporting from airlines and airports. The ICAO form is used. The statistics are heavily influenced by the number of strikes at Copenhagen Airport, which is by far the largest airport in Denmark. For smaller airports there are quite big variations, partly due to a small number of operations and bird strikes. The variations are especially apparent when looking at the relative rate, i.e. strikes per 10.000 operations. The conclusion for 2013 is that the overall number of bird strikes seems to have been going down for the past few years.

Juha Joutsen, Finavia, presented the national statistics for <u>Finland</u>. The Finnish national bird strike committee was established in 1979 after a severe incident in 1978. After that bird control was set up and various precautionary activities were conducted. In Finland radar observation of arctic birds migration is carried out. A bird and wild life strike preventing manual has been made. Finland has challenges with geese, and has a zero tolerance inside the airports. The statistics show a varied number of yearly bird strikes with an increase in 2012, deviating substantially from other years. Various analyses of bird size, weather conditions, strike altitude etc. are conducted.

Martin Ekenstierna, Swedavia Malmø Airport, presented the national statistics for <u>Sweden</u> on behalf of the Swedish Transport Agency. Swedavia owns and runs 10 airports in Sweden. The statistics showed that there are yearly variations in the number of bird strikes. There has been a constant increase in the last 5 years, even though the number of movements has actually decreased. It was also showed that the migration routes for birds pass the southern part of Skåne, where Malmø Airport is situated, and continues across the Baltic Sea, passing Copenhagen Airport as well. The statistics also showed that august is the month with the

most strikes, and that most strikes happen below 500 feet. About 44 % happen during approach/landing, and 32 % during take-off.

Christian Aas, Natural History Museum of Oslo, presented the national statistics for Norway. 31 of AVINOR'S airports are covered, and a bird strike-index is calculated based on the size, the number of bird strikes and the number of movements. Also bird strikes by the Royal Norwegian Air Force are covered.

Risk assessment

Thomas Lau Christensen, safety manager Copenhagen Airport, presented the risk assessment work done at Copenhagen Airport.

Per Hansen, The Royal Danish Air Force, presented the risk assessments done on the military airfields in Denmark. These include two airports also used for civil aviation. Yearly reports are made in a standardized format by the wild life consultant. It includes a risk assessment and risk matrix, but also the consultant's assessments of other issues not part of the matrix play an important part. For instance the presense of swans, geese and deer can constitute a big risk, which is not always shown in the risk matrix.

Martin Ekenstierna, Swedavia Malmø Airport, presented the risk assessment work done at Malmø Airport. He had constructed a risk assessment method, with weight, flocking, presence, flying pattern as contributing factors. The score for each species is inserted in an ACI- risk assessment matrix describing severity and probability. He also described how the reporting and the monitoring is done at the airport. This involves – among other things – GPS positions for all control activities at the airport.

Pål Ranestad, AVINOR, presented the risk assessment work done at AVINOR's airports in Norway. The method involves data for the previous 5 years on bird strikes and weight. 5 airports are reviewed every year. The method is based on an Australian model. It involves a ranking system based on weight, flock behavior and flight behaviour.

Common standard for reporting

Jens Erik Ditlevsen, Danish Transport Authority, recalled that the discussion of a common standard for reporting has been on the agenda for a number of years. From an authority perspective it could be useful to be able to compare the situation in airports between different countries. It is difficult to assess the acceptable level of bird strike risk, and a comparison with other countries could contribute to get a larger perspective. Of course there are individual differences that need to be taken into account.

Several participants said, that we need to be absolutely sure, what we are comparing. There may be differences in geographical position, migrating routes, character of operations and so on.

It was concluded that a way forward could be to share the yearly statistics and reports on the NBSAG web site, and not at this point to decide on an actual common standard.

EASA and ICAO

Jens Erik Ditlevsen, Danish Transport Authority, gave a short presentation on the new EASA regulation on aerodromes, which also covers bird/wild life prevention.

Session 2: Bird Control

This session deals with three oral presentations performed by extern attendees: Bogdan Bogdanov (Volacom): Cross-field innovation for bird strike prevention. Siete Hamminga & Ronald Tukker (Robin Radar Systems BV): Next Generation Bird Strike Mitigation: effective use of avian radar at civil airports, and Lucas Coe-Starr (TONI Bird Control Solutions GmbH): Emerging Wildlife Control Technologies. Their presentations are attached by links in the NBSAG website.

Day 2 – The future of NBSAG

Jens Erik Ditlevsen recalled that the NBSAG has had an – at times – not very visible role, with a limited participation. But the turbulent times for other international fora (IBSC and WBA) could signal that it is a good time to strengthen the Nordic cooperation in this field.

Pål Ranestad presented a proposal for a new Terms of Reference, which had been sent out in advance. This was adopted with minor corrections.

Christian Aas presented the NBSAG web site, which he maintains. The web site is paid for in turn by the members, about 1000 NKR/year in total. It was decided to continue with the web site and to improve the contents of it. For instance national statistics, guidances and so on could be presented on the NBSAG web site.

Regarding the relationship with the World Birdstrike Association, Pål Ranestad will coordinate the activities and inform on further developments.

Next meeting will be arranged in Norway 2016.