2016 - BIRD STRIKE COMMITTEE ITALY ANNUAL REPORT

Observations and comments (a brief summary in English)

The BSCI stated that the total number of wildlife strikes at Italian airports increased from 1288 (2015) to 1313 (2016). The number of impacts occurred under 300 ft. also increased from 933 to 998.

The presence of **Common swifts**(*Apus apus*) and **Barn swallows**(*Hirundorustica*) in the spring-summer period, due to particular ecological and meteorological factors, increased again as well as the number of impacts (+8,54%), but with little or no consequences in terms of damage.

In the same time, the collisions with **Yellow-Legged Gulls** (*Larusmichaellis*) and **Black-Headed Gulls**(*Larusridibundus*) decreased from 134 to 125 impacts, representing 12,32% of all strikes however. The small decrease can be related with the closure of two landfills near to the airports of Rome Fiumicino and Genoa.

The impacts with **Herons** (12 and 1,20%) still represent a remarkable threat. **Feral pigeons** represent the 3,31 % of all collisions.

As for the consequences of the strikes, the following table shows the main effects:

| YEAR | DAMAGING STRIKES | MULTIPLE STRIKES | IMPACTS WITH INGESTIONS | IMPACTS WITH EFFECTS ON THE FLIGHT (EOF) |
|------|---------------------|---------------------|-------------------------|--|
| 2013 | 21 | 54 | 21 | 18 |
| 2014 | 20 | 64 | 20 | 8 |
| 2015 | 37 | 92 | 18 | 30 |
| 2016 | 41 | 81 | 27 | 32 |

Three out of four incident categories show an increase and the fourth is still a high datum. The high number of multiple impacts (as reported worldwide) should lead to a new consideration of the bird mass index used for establishing aircraft certification standards by the aeronautical authorities.

In the year 2011, the BSCI adopted a new criterion to measure the wildlife hazard at the airports, based on more factors rather than the simple number of impacts and aircraft movements: the Birdstrike Risk Index or BRI₂. In the year 2016, no Italian airport was above the value of an "acceptable risk" posed by BRI₂ (0.50) while only 3 airports are over the index of 0,25. One of them (Venice) is close to the threshold however.

| AIRPORT | 2016 | 2015 |
|---------|------|------|
| | | |
| VENICE | 0,41 | 0,33 |
| BERGAMO | 0,33 | 0,27 |
| GENOA | 0,29 | 0,25 |

No BRI₂ average national datum is provided in the report; using the old index (number of impacts out of 10k movements) we can observe that the Italian average datum (commercial aviation) is now 9,85 (10,03 in 2014), being 5,00 the "threshold of attention" established by ENAC in the past. This datum is constantly higher than the threshold since 2008.

Even though the number/movements index cannot be considered reliable like the more modern risk matrixes are, however this datum stands meaningful.

Like in the past, we realize that some operators reportedly do not inspect with an acceptable frequency their airport areas. Some of these airports also present high BRI₂ values and this may confirm a relationship between the bird control activity on the ground and the risk index value; we therefore believe that the IBSC standard regarding runway inspections should be adopted as a national regulation.

As for the scaring and harassment devices in use, the report shows a prevalence of distress calls and blank cartridge firearms, but they are followed by a long list of heterogeneous devices from the simplest (car lights and sirens) to the most modern (LRAD).