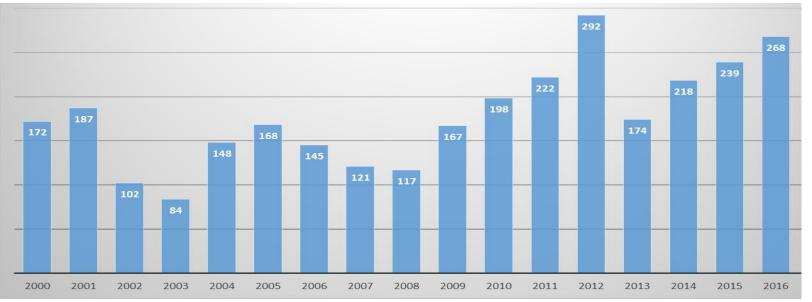
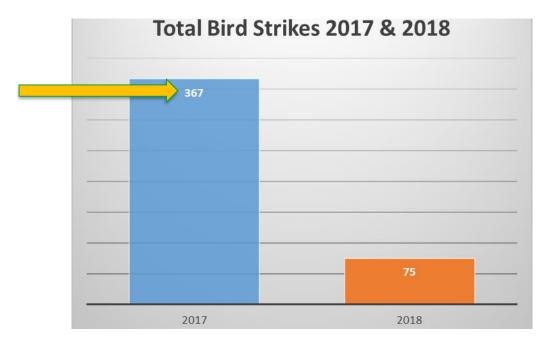


NBSAG 2018

Jukka-Pekka Nikolajeff

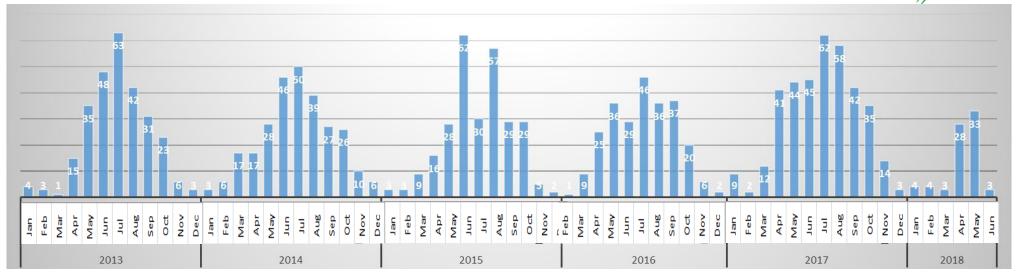
Vastuullinen liikenne. Rohkeasti yhdessä. **Annual Birdstrike statistics 2000 - 2016**



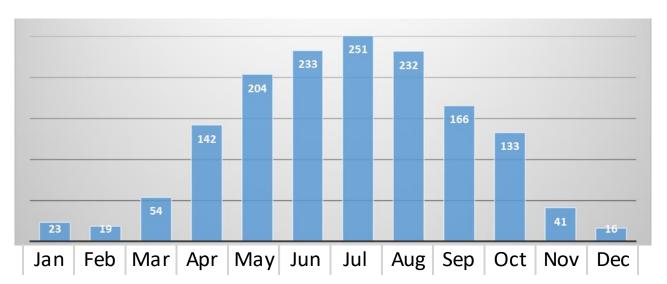


Bird Strikes by Month



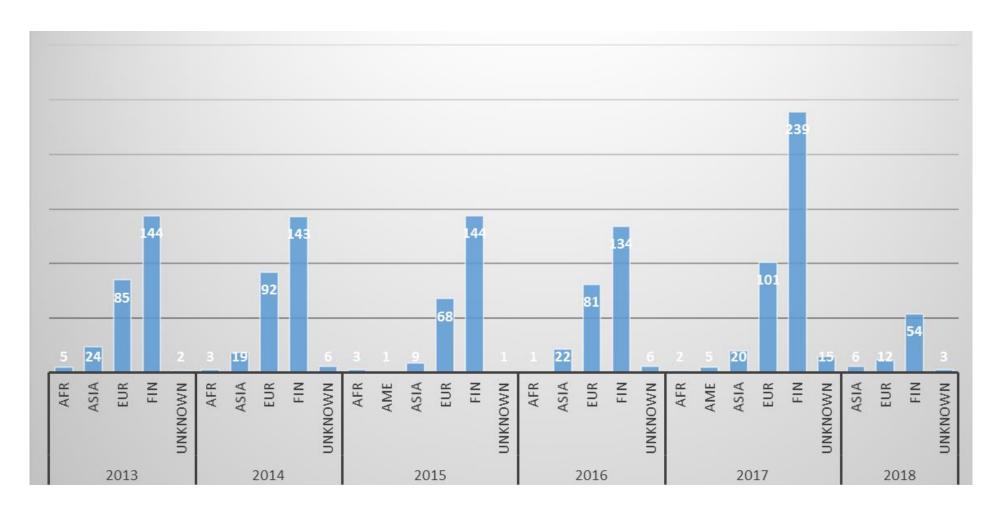


And all time monthly distribution:



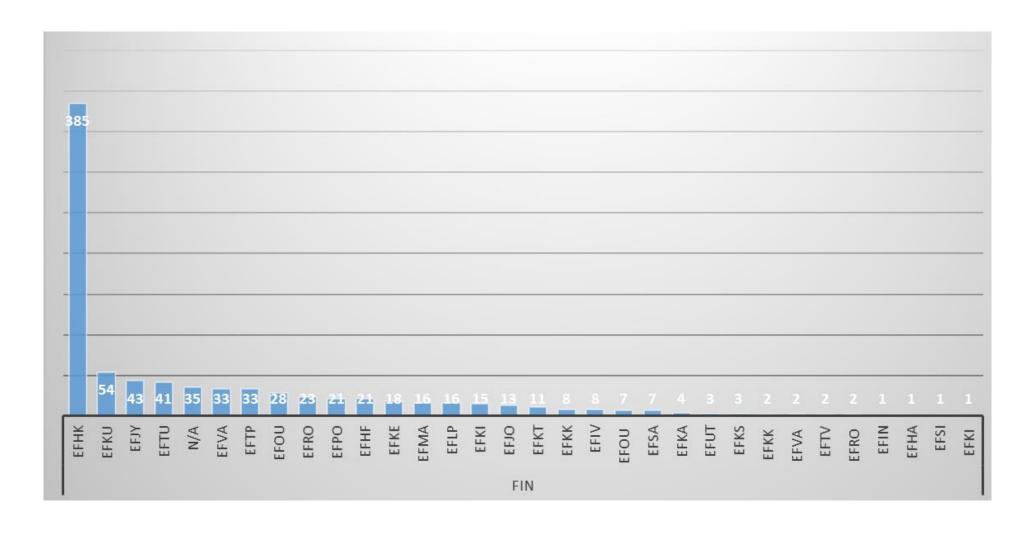
Birdstrikes by area of operation





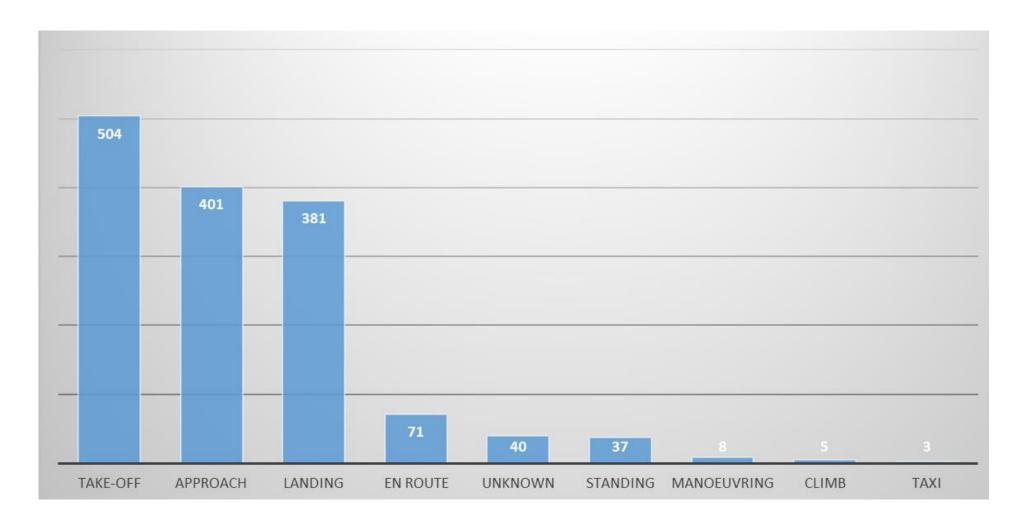
By APT (Finland) (2013 - 2018)





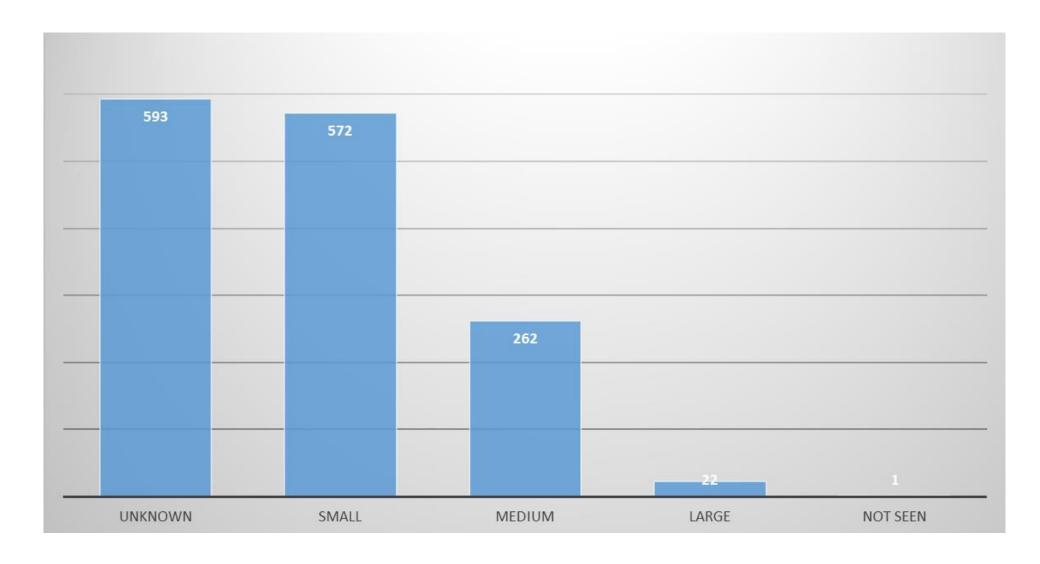
By Phase of the flight





By Bird Size - all

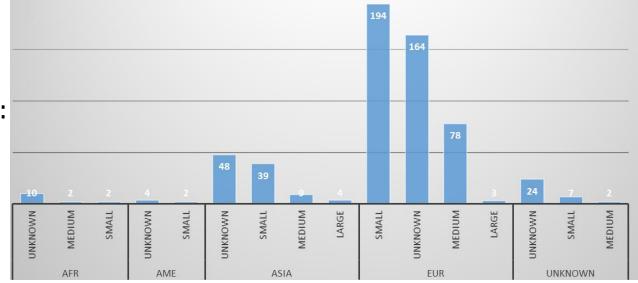




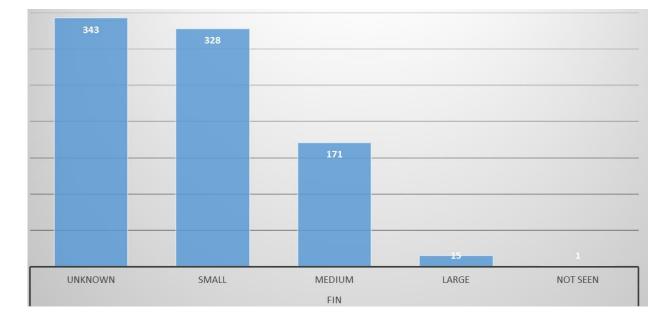
By Bird Size







Finland:



Highests costs caused by birdstrike, 2016-2018



Selected the costs exeeding 5000€ in CAT operations

2016 DURING TAKE-OFF ROLL BIRD STRIKE ON ENGINE #2 BENDED FANBLADES FOUND BIRD STRIKE DURING LANDING ROLL	60 000,00 € 24 850,00 € 5 350,00 €
BIRD STRIKE TO ENG NO. 1 BIRDSTRIKE TO ENG#2 BIRD STRIKE TO ENG#2 BIRD STRIKE DURING ROTATION TO LEFT SIDE BIRDSTRIKE ENG #2 BIRD STRIKE BIRD STRIKE BIRD STRIKE ON RH SIDE UPPER PITOT TUBE BIRD STRIKE ON RADOME BIRD STRIKE BIRD STRIKE BIRD STRIKE BIRD STRIKE BIRD STRIKE BIRD STRIKE	135 918,00 € 78 975,00 € 70 450,00 € 72 625,19 € 68 646,87 € 51 846,00 € 35 726,27 € 37 750,00 € 25 000,00 € 24 659,00 € 10 000,00 € 5 560,00 €
2018 BIRD STRIKE BIRD STRIKE TO PROP	73 400,00 € 11 440,00 €

The costs of inspecting Birdstrikes



Each birdstrike requires an inspection, thus causing costs.

Some of the CAT operators has set a fixed price for each inspection, but the others may only record 0€.

- -In this example, the fixed price for a birdstrike inspection is set at 350€/inspection.
- -During the time frame 2016-2018 a total of 324 inspections were done

The total costs of only inspecting the birdstrikes was as high as 113400€

- Including visual-/ walk around type inspections.
- Excluding all detailed inspections, as boroscope-, NDT- etc., which will create a price tag based on manhours.

Operational delays and cancelled flights



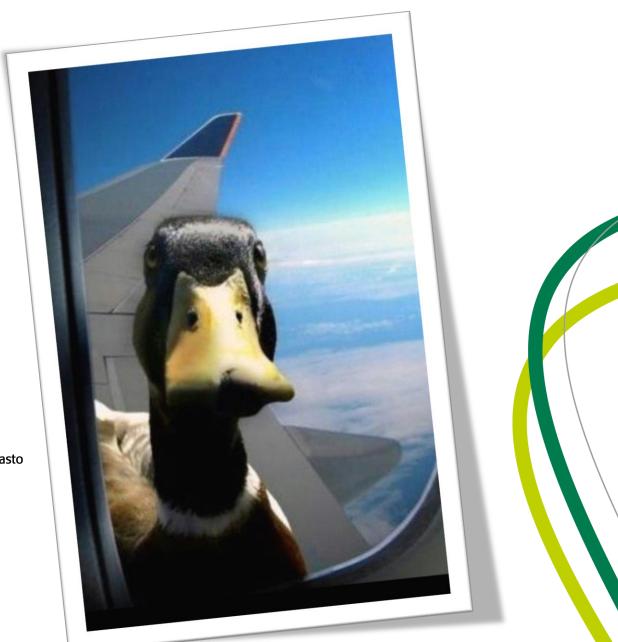
The direct costs of the operational delays or flight cancellations are classified sensitive by the operators.

Depending of the turn around times, some of the birdstrikes may cause operational delays, or in the worst cases a flight to be cancelled.

In the time frame 2016-2018, the example operator has informed 41 cases when a flight has been delayed.

- The duration of the delay at shortest was 2 minutes all the way to more than 8 hours.

The same operator informed that 5 flights were cancelled due a birdstrike damage.





Liikenteen turvallisuusvirasto

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