Will conspicuous pied propellers keep birds away from the aircraft?

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Widerøe – Established 1934
420 departures pr. day. Allmost all airports are located on the coastline. "Special operation" on 24 airports, -shorth field, less than 800 meter rwy, with steep approach.
Every other minute a Widerøe aircraft lands or departs

Bird strikes is a major safety issue
Average 50 pr. year.

• Cost
• Down time
• Inspections
• >250 000 €
The propeller painting project

Lufstransport Coast Guard

FAA-AM-78-29
The propeller painting project

The five aircraft included in the propeller painting project by 15 June 2012

<table>
<thead>
<tr>
<th>Aircraft registration</th>
<th>Date of technical order</th>
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</thead>
<tbody>
<tr>
<td>LN-WIP</td>
<td>31 January 2012</td>
</tr>
<tr>
<td>LN-WIL</td>
<td>17 April 2012</td>
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<td>LN-WII</td>
<td>21 April 2012</td>
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<td>LN-WSB</td>
<td>03 May 2012</td>
</tr>
<tr>
<td>LN-WIA</td>
<td>15 May 2012</td>
</tr>
</tbody>
</table>
Birdstrikes in Widerøe last 5 years

Birdstrikes by flight phase
Birdstrikes by aircraft registration

Preliminary results

• The 5 aircraft included in the project struck birds 28 times prior to the project, and 3 times after the project was initiated =>
  – Before: 0,12 birdstrikes per "aircraft-month"
  – After: 0,35 birdstrikes per "aircraft-month"

• Spring season only:
  – Before: 0,14 birdstrikes per "aircraft-spring-month"
  – After: 0,19 birdstrikes per "aircraft-spring-month"

• Very surprisingly! But…
Discussion

• The data are very scarce! Only 0,5-4 months.
• The project will go on for several years and include another 25 aircraft
• There could be geographical differences
• The size or risk of the birds not yet considered
  – Two out of three birdstrikes in 2012 with small birds
• Finally, we cannot rule out the possibility that the project may not be as effective as desired.