



Bird Strike Control

01-04 July 2013, Bangkok, Thailand

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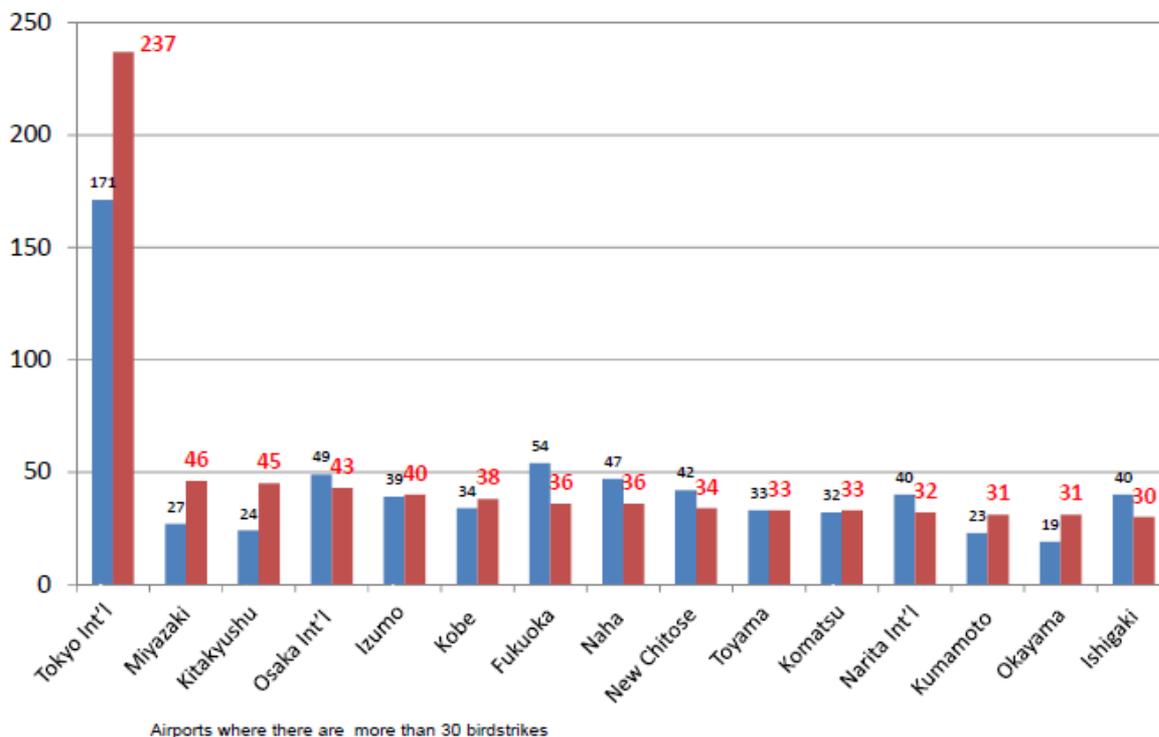
JAPAN CIVIL AVIATION BUREAU



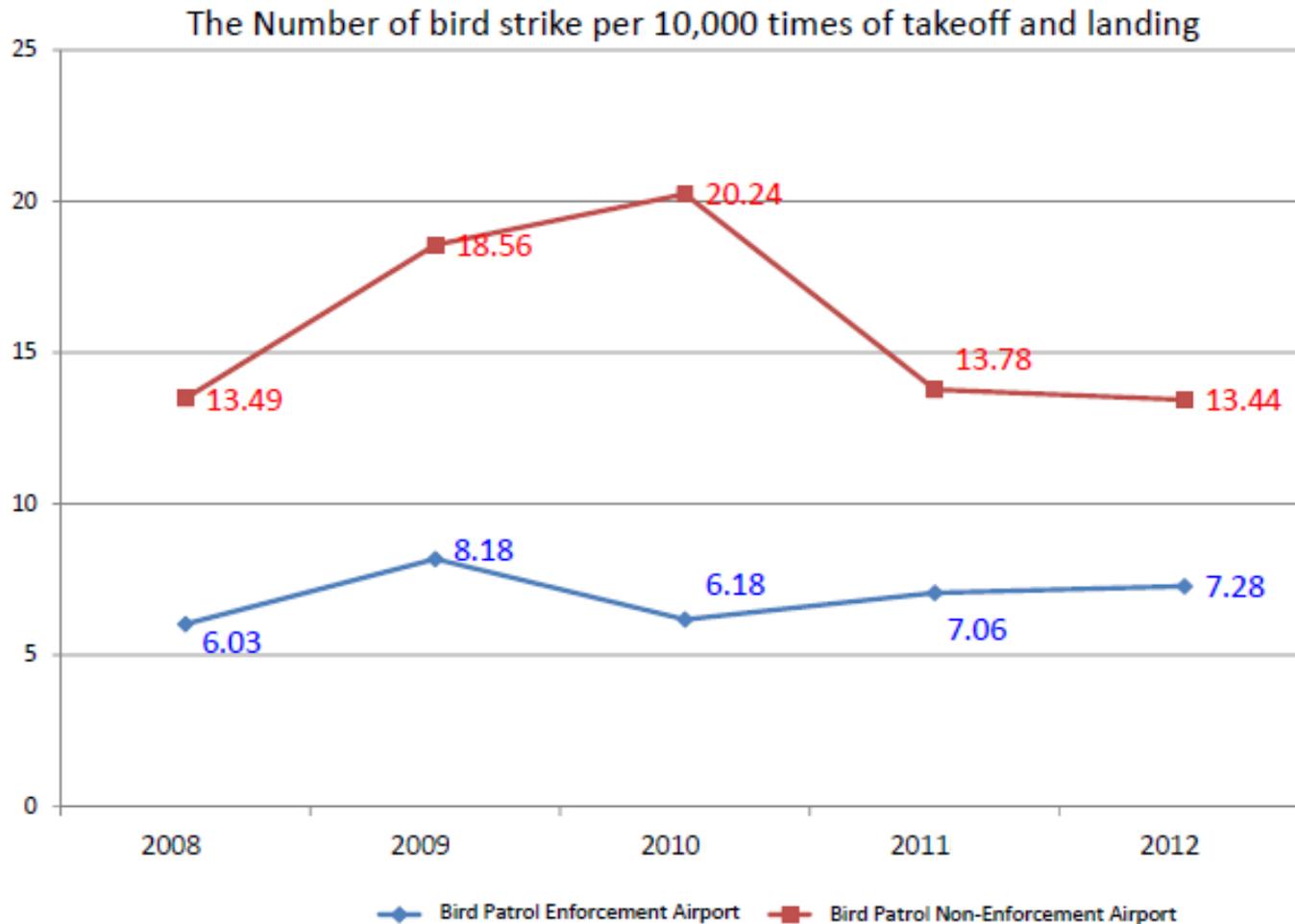
Bird Strike Control

- **Introduction**
- **Organization**
- **Bird Strike Control Program**
- **Best Practice**

- Japan has **90 civil airports** and **21 civil heliports** which are managed by the government (Civil Aviation Bureau, MLIT), private companies and local government. In addition, there are **8 civil-military joint use airports**.
- Approximately **1700 bird strikes** occurred in Japan in 2012 . Including **3 aircraft accidents**.
- The number of bird strikes in each airport are as indicated below.

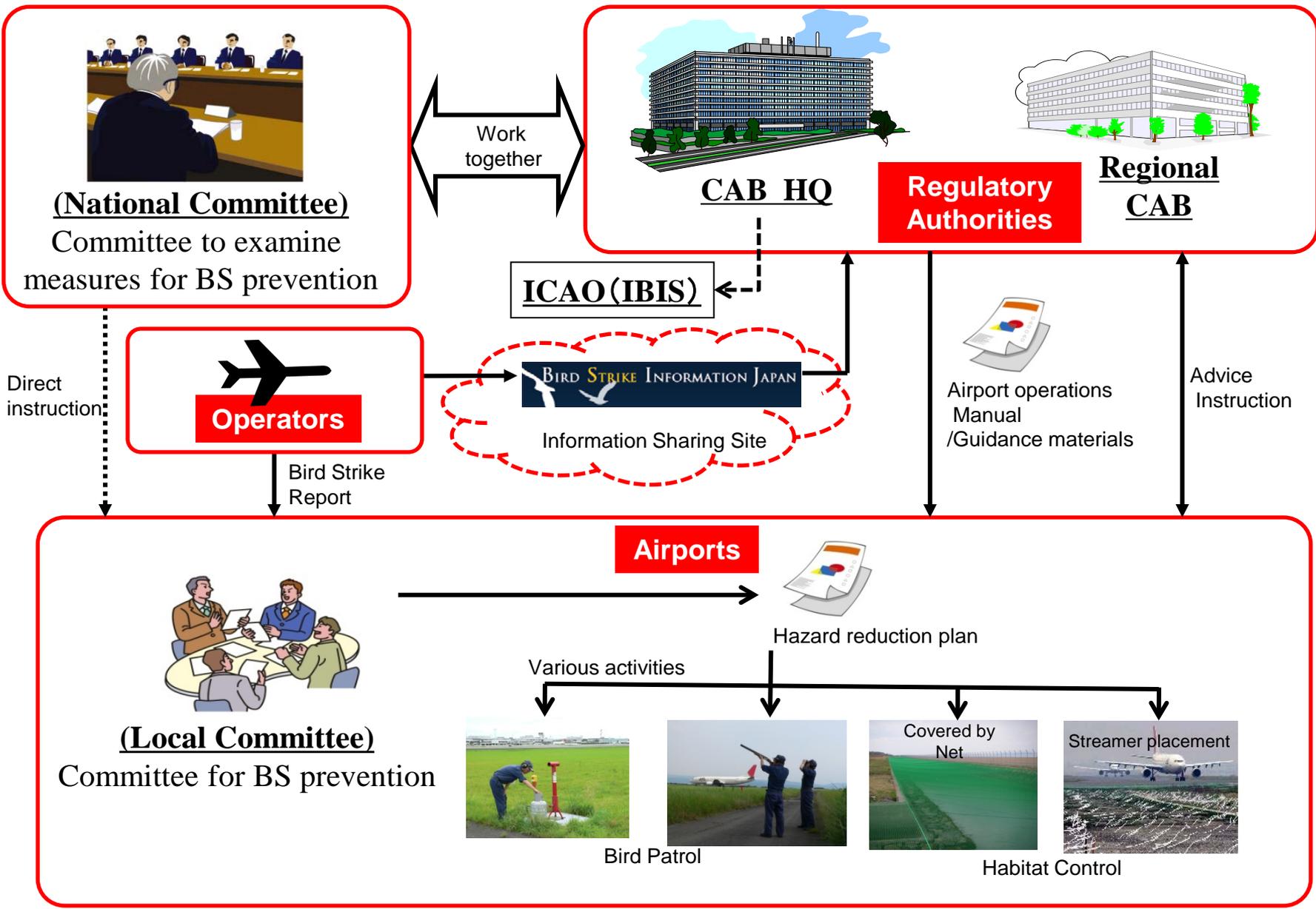


- The number of bird strikes in Japan per 10,000 take-offs and landings in recent years.



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Bird Strike Control Program - 1

Airport Administrator/Operator

Environmental Research (Food, Water and Shelter)

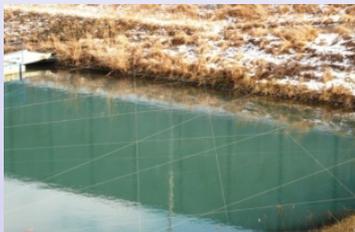


Research Vegetation at or around Airport



Research Birds Moving Route

Habitat Control



Water area

Lines over water
(Ward off birds)



Nest Management

Cutting trees at/near
Airport



Grass area

Cutting grass that become a feed for birds

Bird Sweep



Bird Patrol



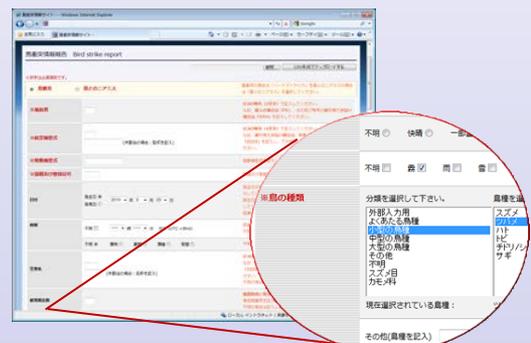
Long Range Acoustic
Device (at Night)



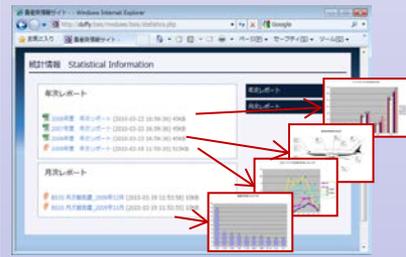
Rocket

Data Analysis

Bird Strike Information Sharing Site



Bird Strike Reports



Statistical Information



Manuals, Best Practices

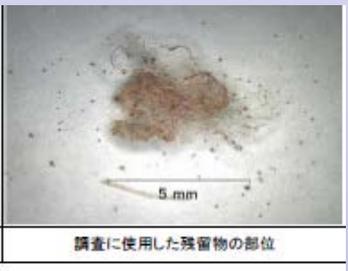
etc.

- Collect Bird Strike Report from operators by INTERNET
- Bird Strike Database (with photo and document)
- Sharing Bird Strike information and documentation with all stakeholders

Bird Species Identification by DNA or Feather Analysis



Identification by feather analysis



Identification by DNA analysis



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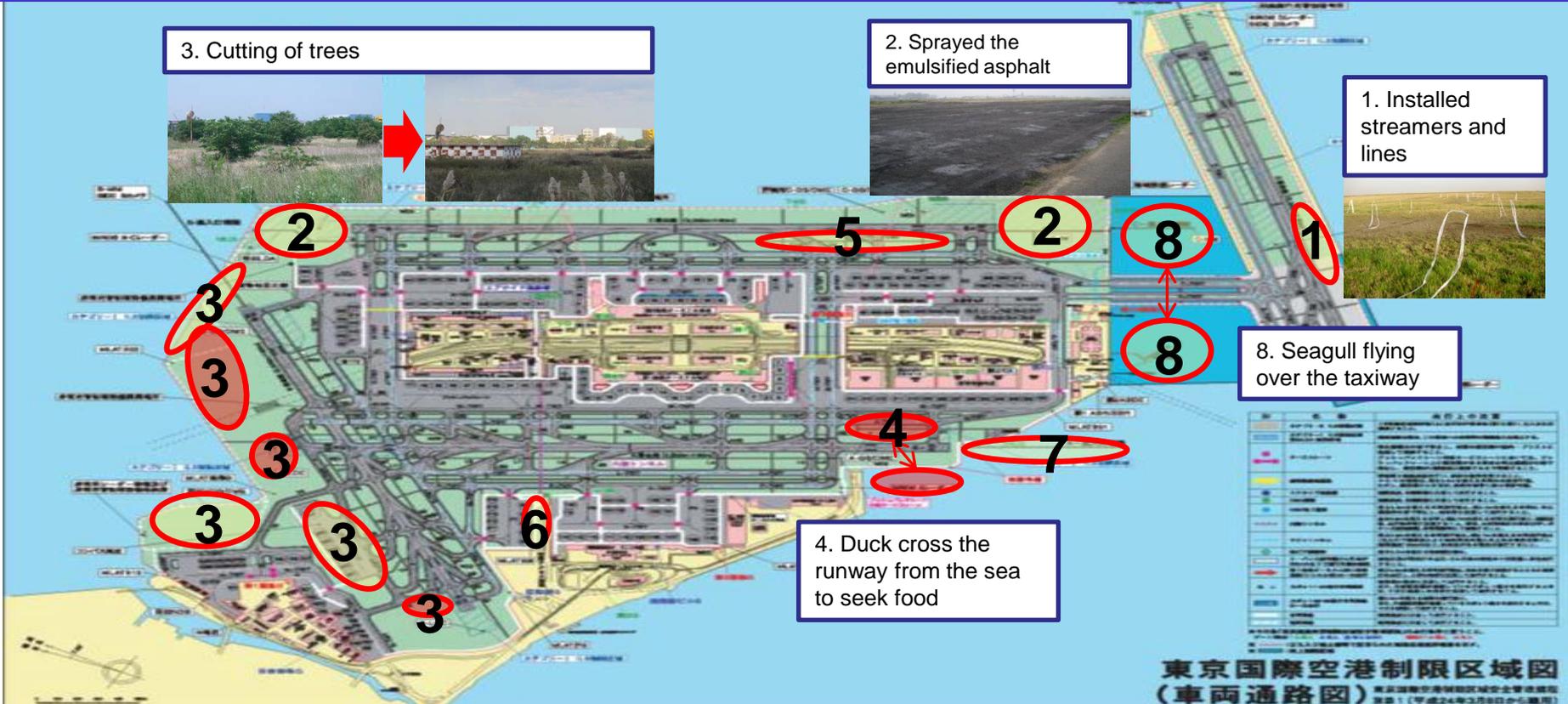
Tokyo Int'l Airport / RJTT – Environmental Measures that enhance bird exclusion

The measures taken by advice

1. Installed streamers and lines on nesting area for little tern measures.
2. Sprayed the emulsified asphalt and installed streamers and lines on nesting area for little tern measures
3. Cutting of trees.
4. Removal of legumes (3 times / year implementation of mowing.)
Because drainage is poor, consider measures such as soil improvement.
5. Removal of legumes (3 times / year implementation of mowing.)
6. Reservoirs disappearance by construction.

Conventional measures

7. Request cooperation to security boat so as not stimulate the duck.
- Conduct threatening effect by fireworks and blank ammunition etc. to make ducks learn that it is a dangerous place.
8. Summon the flying seagull over taxiway by distress call and exterminate them.



Kansai Int'l Airport / RJBB – Taking into account endangered bird species

Prevention of Nesting (Little Tern Measures)

Spraying Emulsified Asphalt



Emulsified asphalt sprayed area



Non-sprayed area

- Emulsified asphalt sprayed area expelled little terns.
- Little terns came to non-sprayed area and numbers of eggs laid were found.
- After completion of spraying to all the area, the number of little terns has dramatically decreased.

Bird Patrol and Long Range Acoustic Device



Bird Patrol on and around the runway



Long Range Acoustic Device

- Expanding the route of bird patrol to around the runway in April.
- Starting the runway bird patrol at night (20 PM, 24PM) in May.
- Starting the runway bird patrol on 8AM in July.
- Using the Long Range Acoustic Device around the clock.

Thank you for your attention.

If you have any questions or need more information,
Please do not hesitate to contact me.

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