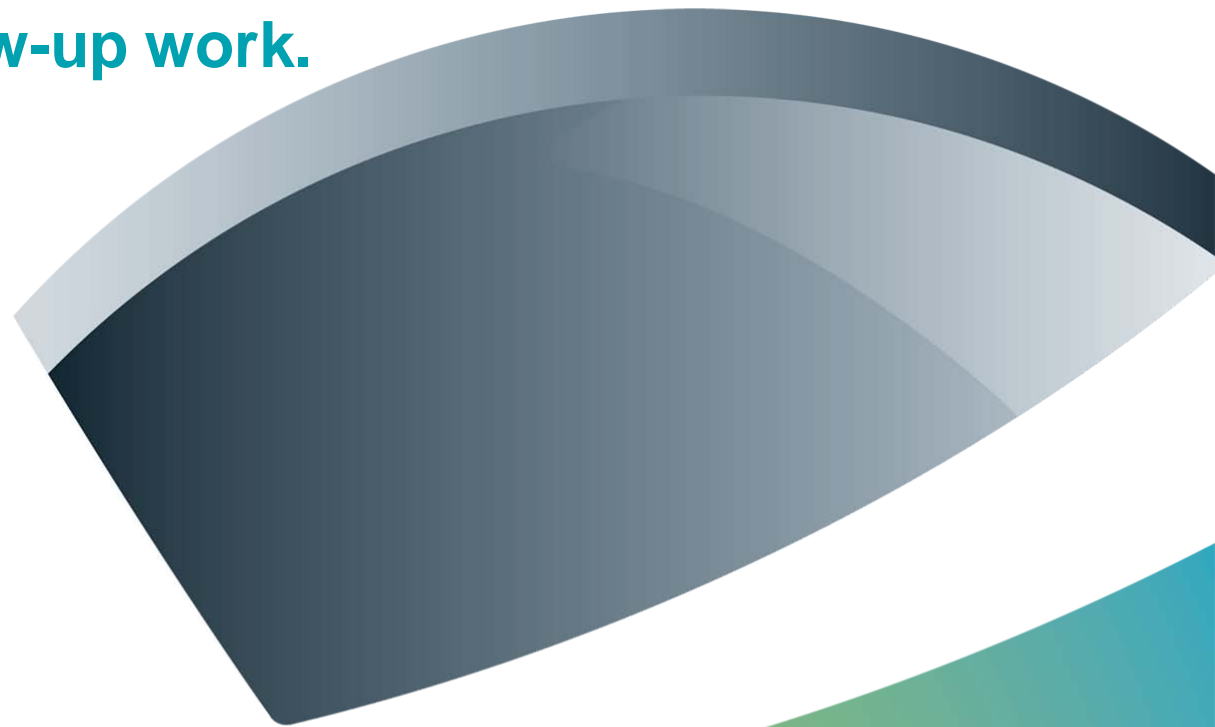




Luftfartstilsynet
CIVIL AVIATION AUTHORITY - NORWAY

The Norwegian Helicopter Safety Study – Inland Operations.

Status of the follow-up work.



Luftfartstilsynet

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I will talk about...

- Background for inland helicopter safety work.
- The Committee for Helicopter Safety - Inland Operations



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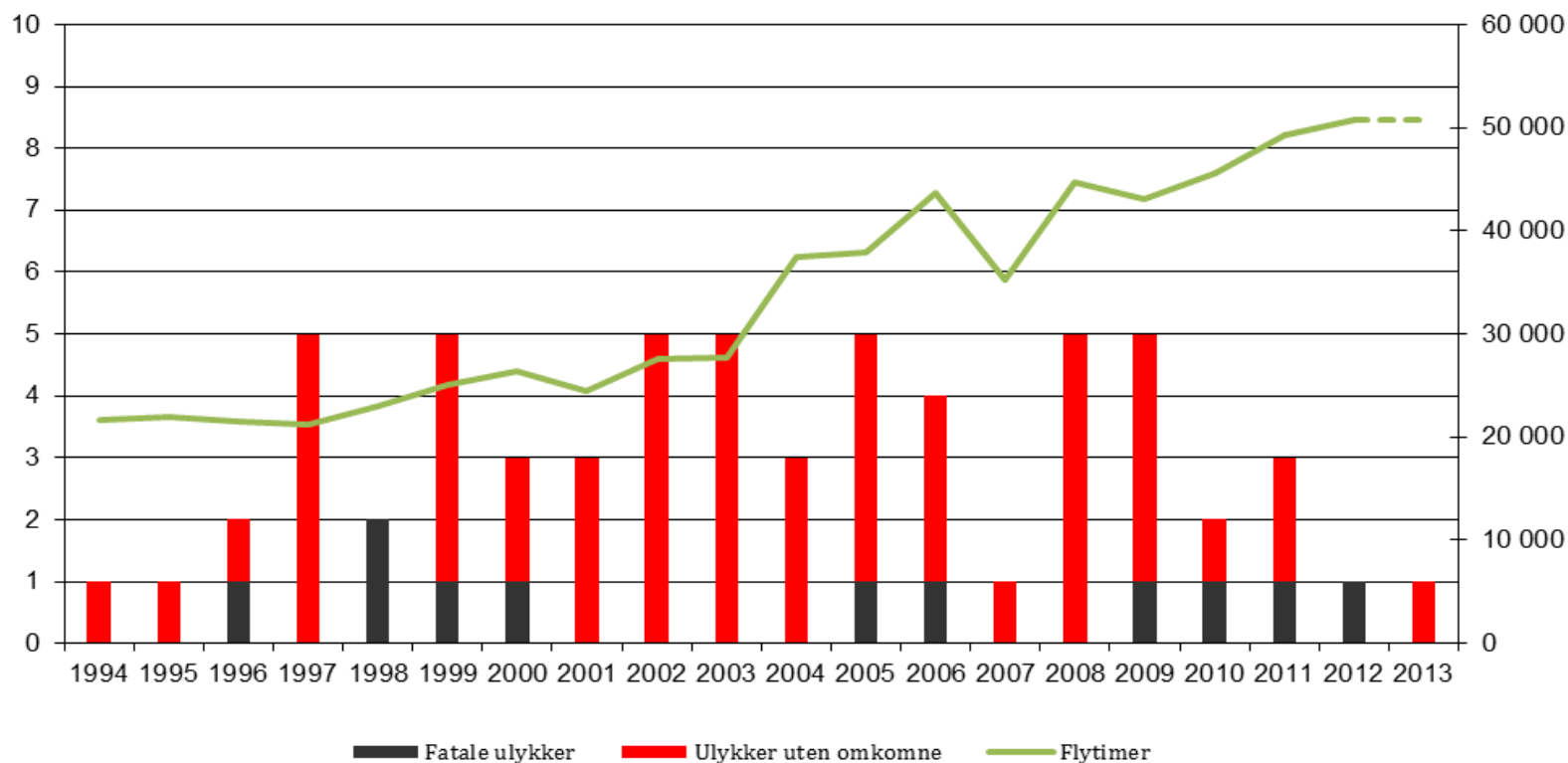
- The Helicopter Safety Study...
Short Summary
Main recommendations
Approach to follow-up work



Innlands helikopter - ulykker og aktivitet

Antall ulykker

Flytimer



Statistics...

- * **Since 2010 - 15 fatalities, a total of 14 accidents (Norwegian)**

Horten Jan. 2010



Hardanger 2011



Mosjøen 2012



Reindrift

Lübeckbukta 2012



Sollihøgda 2014





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Establishment of the Inland Committee

- FsF established May 2009.
- Meets 3-4 times per year, two day meetings.
- Meets primarily in the period Sept-May to avoid the main helicopter season.
- N-CAA covers all meeting expenses for the members.



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Important!

- Vital working conditions for the Committee:
 - Political support (MOT)
 - Authority support (N-CAA)



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Members

- The Committee is led by the N-CAA, but is independent.
- All inland helicopter AOC-holders are invited as members, including Police and Air Ambulance.
- One representative for the PPL-H environment.



Mandate

- The Committee shall work for a **substantial improvement of flight safety** for inland helicopters, with zero accidents as a goal.
- The Committee shall be an **influencing factor** towards the authorities and the operators. The Committee shall raise questions and problems related to flight safety and **come up with recommendations for improvement**.
- The Committee shall, in addition to working on a national level, cooperate with international organizations working with helicopter safety.



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Helicopter Safety Study – Inland Operations



**SIKKERHETS-
STUDIE
INNLANDS
HELIKOPTER**

SAFETEC



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Helicopter Safety Study – Inland Operations

- Ministry of Transport financed a Safety Study for Inland Helicopters in 2011.
- Study performed by **SAFETEC**.
- Finished February 2013.
- Further work with the recommendations is led by the Committee for Helicopter Safety – Inland Operations.



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Study Summary

- The number of Aerial Work related accidents in inland operations is disturbing because the number of fatal accidents has increased.



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Study Summary

- Highest probability for fatal accidents:
 - Pax (A to B)
 - A to A
 - Survey flights
 - Ferry flights
 - Private flights
 - Foreign operators
- These are the types of operations which the industry consider has the lowest risk.
- These are the types of operations which are flown by the pilots with least experience.



Study Summary

- The following conditions increase the probability for an incident to end up as an accident:
 - Weather
 - Lack of planning
 - Loss of control
 - Pilot age
 - Pilot experience (less than 1000 fl.hrs or more than 5000)
 - Operator (private, operators without AOC, small Aerial Work operators)



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Study Summary

- The majority of the Aerial Work-operators have had a **negative financial result** the last 5 years.
- In spite of repeated loss, the industry is fed new capital.
- Investment based on
 - expectations of increased requirement for helicopter services
 - a profitable market for purchase and sale of helicopters.



Study Summary

- Among customers/users of helicopter services, **price is the primary criterion for selection of operator.**
- This is also true for **companies where the Government is main shareholder**, and public agencies.
- Pushed prices causes cut in cost and reduced flight safety work.
- Cut in cost, in particular within filming and reindeer herding, is stimulated by:
 - Competition from private pilots without any commercial approval
 - Extended use of foreign operators with different framework and lower operating costs

Study Summary

- In the future we can expect:
 - 2 accidents annually
 - 55% chance for fatalities





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Study Summary

- After 2013 we can expect an **increase** in the number of accidents and the chance for fatalities **unless measures are implemented.**
- The Safety Study has made 41 recommendations with various effect.



Recommendations

- The most effectful recommendations are:
 1. Adjustment of regulations to suit helicopter inland operations.
 2. Strengthened supervision and audits.
 3. Increased control of foreign operators.
 4. Increased control of private pilots.
 5. Increased requirements for AOC and Aerial Work permits.
 6. Establishments of a branch union.
 7. Tender criteria must focus on safety – not on price.
 8. Professionalization of the customers/users.

Work in progress (N-CAA)...

- N-CAA:
 - EASA OPS – limit the consequences for Norwegian operators
 - Improve the CAA inspector's competence
 - Increase resources in the Helicopter Section
 - Increase financial audits



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Work in progress (FsF)...

- Committee for Helicopter Safety – Inland Operations (FsF):
 - Freelance pilots (participation in all safety work, minimum one day payment).
 - Safety related equipment in helicopters.
 - Increased training (AS350 simulator in Norway).
 - Required power reserve in all inland operations (10%).
 - Involve the insurance business and customers in safety work.
 - System for GPS marking of obstacles and power lines.
 - Recommended Guidelines for the Power Industry's use of Helicopters.
 - Professionalization of the customers/users (Customer seminars).
 - A committee standard for mission-specific training and competence for pilots and crew members.

Thank you for your attention.

