

HEMS

RMT.0325/326



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MOUNTAIN HEMS

Including rescue / mountain rescue and performance



VOTED 15 Feb 2023

Safety at public interest sites



Safety of emergency flights in a degraded visual environment



MAJOR SAFETY IMPROVEMENTS

- → Approved public interest sites : No new sites + No permanent & excessive worsening of obstacles at current sites.
- → Extended scope of HEMS : HEMS rules & mitigations extended to all emergency (including non-medical) flights.
- \rightarrow NVIS at night
- → Moving maps (pending HTAWS RMT)
- → Aircraft tracking

→ Operator risk assessment and commander's risk assessment.



MAJOR SAFETY IMPROVEMENTS

- \rightarrow Crew composition & crew concept
- \rightarrow TCM fitness, training
- \rightarrow AP/SAS for single-pilot night HEMS
- → TCM seating: no more seating in the cabin due to stretcher deployment
- \rightarrow Pilot night experience
- \rightarrow Pilot training



OPERATIONAL FLEXIBILITY

- \rightarrow Enabling HEMS IFR operations *
- → High altitude : Oxygen * & Performance rules that work
- \rightarrow Introduction of single-engines in HEMS
 - \rightarrow For operations previously not in the scope of HEMS
 - \rightarrow At very high altitudes when cat A helicopters are not available
- \rightarrow Flexibility for Hoist and cargo sling operations in HEMS
- \rightarrow HEMS operating site dimensions **
- \rightarrow Usage of NVGs of different makes & models * / **
- * With positive safety implication

****** introducing performance-based regulations



TIMELINES



HEMS TIMELINES

- \rightarrow THE <u>HEMS OPINION 08-2022</u>: Voted at the EASA CMT on 15 Feb 2023
- \rightarrow Publication of amended rules \rightarrow approx. April 2023
- \rightarrow HEMS Decision AMC/GM Q3 \rightarrow approx. May Sept 2023

\rightarrow Application \rightarrow 1 year after publication = approx. Apr 2024

- → Except:
 - → NVIS at night ; weather station at HEMS base at night
 - \rightarrow Auto Pilots / SAS
 - → crew composition for non-medical rescue
 - → Performance for non-medical rescue

- \rightarrow approx. Apr 2026
- \rightarrow approx. Apr 2028
- → approx. Apr 2026
- → approx. Apr 2028





HELICOPTER IFR

PinS and LLR



Helicopter Point in Space Operations in Controlled and Uncontrolled airspace



Helicopter Low Level Route Operations in Controlled and Uncontrolled airspace

Edition 2.0 NETWORK SUPPORTING EUROPEAN AVIATION

WHY HELICOPTER IFR ?

→ Epidemic of VFR / IMC accidents in all helicopter operations

- \rightarrow CAT
- \rightarrow HEMS
- \rightarrow NCC
- \rightarrow NCO
- \rightarrow SPO





TODAY'S HELICOPTERS

→ IFR certified helicopters are becoming widely available

- \rightarrow RNP 0.3 capability is available
- → RNP AR capability is being demonstrated

→ RNP1 or 0.3 en-route can lower the MSA dramatically to avoid icing.



HELICOPTER PinS / LLR

- → PANS OPS enables service providers to design helicopter routes, approaches and departures
 - \rightarrow IFR to an aerodrome or Instrument FATO ? YES.
 - \rightarrow IFR to a FATO \rightarrow YES. With PinS approach & Departure.
 - \rightarrow IFR to an Operating site ? \rightarrow YES. PinS with 'proceed VFR'



ONSHORE IFR IN THE AIR OPS REGULATION (oct 22)

\rightarrow Fuel requirements for IFR

→ From 'greater than maxi fuel' to 'comparable to VFR fuel'

\rightarrow IFR minima

→ From 'no lower than VFR minima' to 'real helicopter IFR minima'

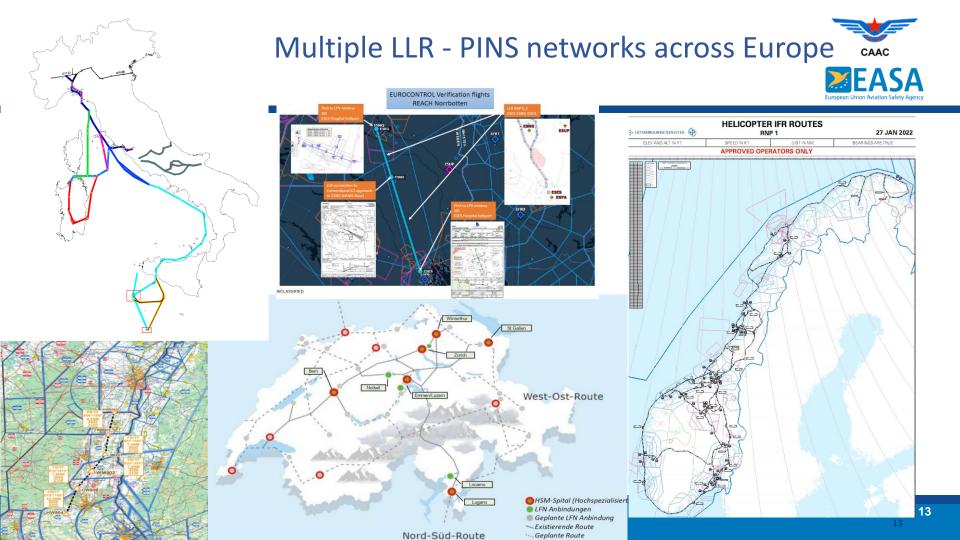
→ Helicopter PinS approaches

→ From 'impossible to use' to 'ready for operations'

\rightarrow Crew training for IFR :

→ From 'excessively expensive' to 'accessible'





PinS and LLR density in Europe

Europe

- High density \rightarrow
- Lower density + momentum \rightarrow
- Pins/LLR design well under way \rightarrow
- In development \rightarrow



IMPACT ON HEMS OPERATIONS

→ IMPROVED SAFETY & RELIABILITY

- \rightarrow Inter-hospital flight
- \rightarrow IFR option to return to base / to main hospital
- → BUT ALSO
 - → Mountain HEMS
 - \rightarrow HEMS to / from isolated islands
 - \rightarrow And so many other cases

→ EVEN WITH LOW DENSITY PinS/LLR network





FLY SAFE WITH NEW HEMS REGULATIONS

AND WHY NOT IFR CAPABILITY !





An Agency of the European Union

