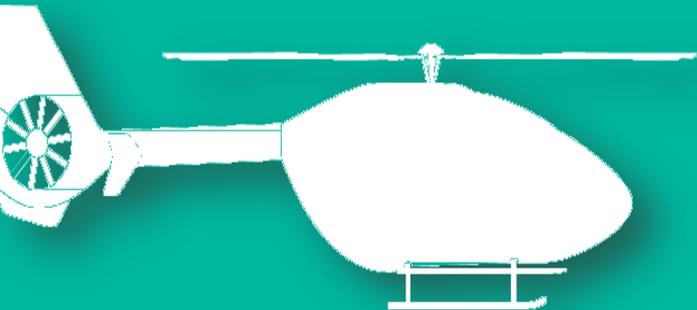


PinS development for HEMS Operations in Piedmont

Speakers:

Andrea Reviglio

Roberto Vacca



Who is AIRGREEN

Airgreen offers complete services using the helicopters

✓ 30 years of activity

✓ 21 Helicopters

✓ 80 Employees (in Maintenance, Training)

Flight Operations,



During the last 10 years
Airgreen has performed
more than 26.000 HEMS missions

AIRGREEN



EASA SPA-PBN

Airgreen in 2015 obtained PBN approval on the AOC to LPV minima thanks to:

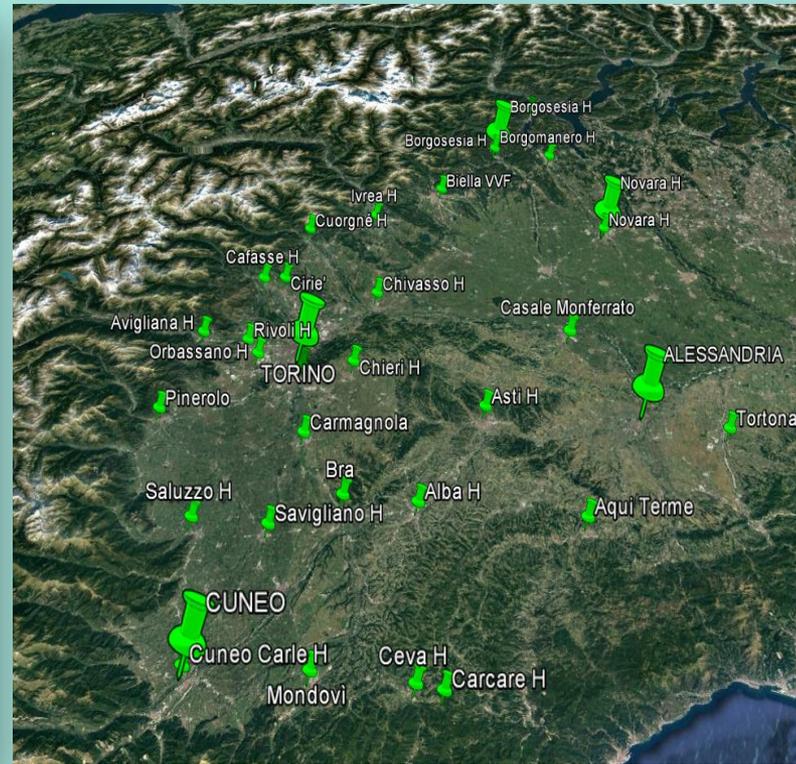
- ✓ Approved training programs
- ✓ Revision of OM and SOPs
- ✓ AW139 fleet retrofit

All the costs were sustained by the Company



Typical winter day

Low level fogs are an obstacle for mountain rescue and hospital transfer flights



HEMS Operations in Piedmont

HEMS operations are nowadays conducted at almost the 100% in VFR

Major hazard that jeopardizes safety is the **inadvertent entry in IMC**



AIRGREEN



HEMS Operations in Piedmont

Joining IFR conventional routes is usually **impossible** due to:

- ✓ **Minimum Enroute Levels** (due to ice and patient conditions)
- ✓ **Longer route segments** (causing delays in the service)



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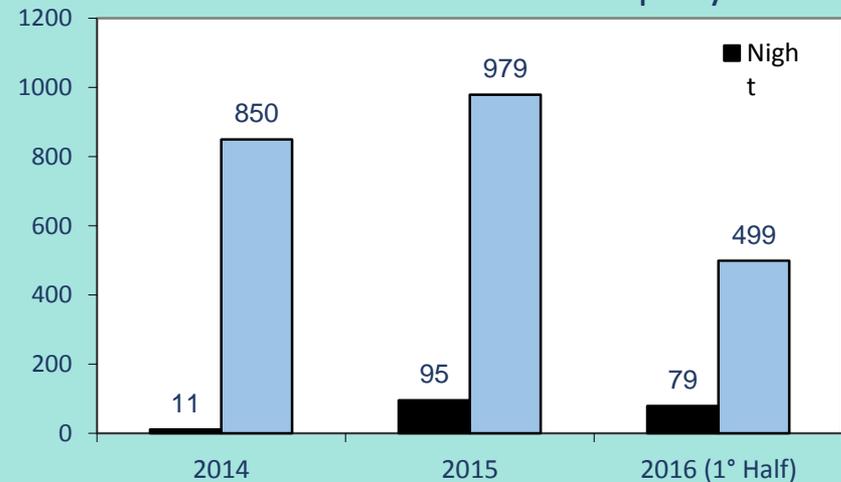


HEMS Operations in Piedmont



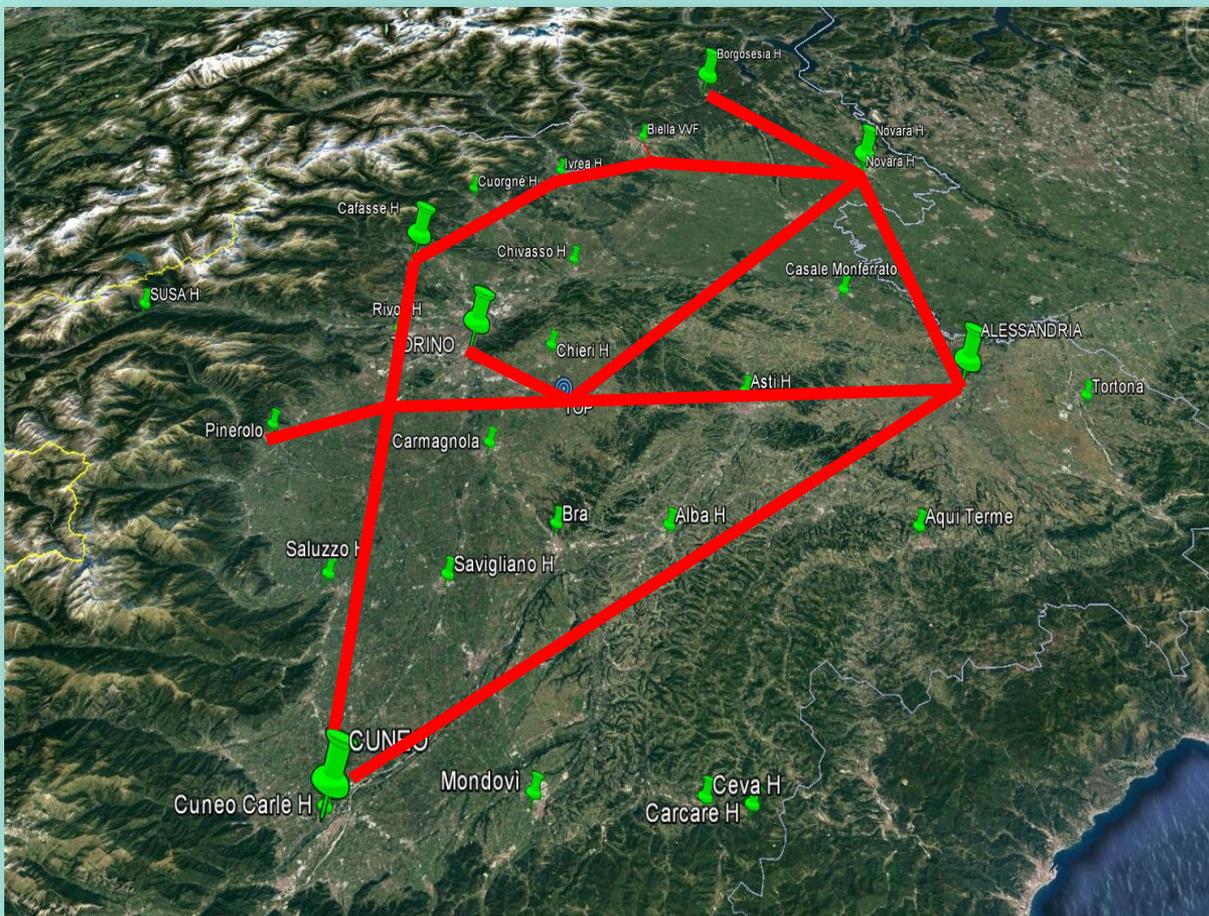
Since October 2014 the beginning of **night operations** all performed in VFR/N has even **fostered this hazard**

Turin base missions per year



PBN route network project

The implementation of **PBN base route network** can be the solution



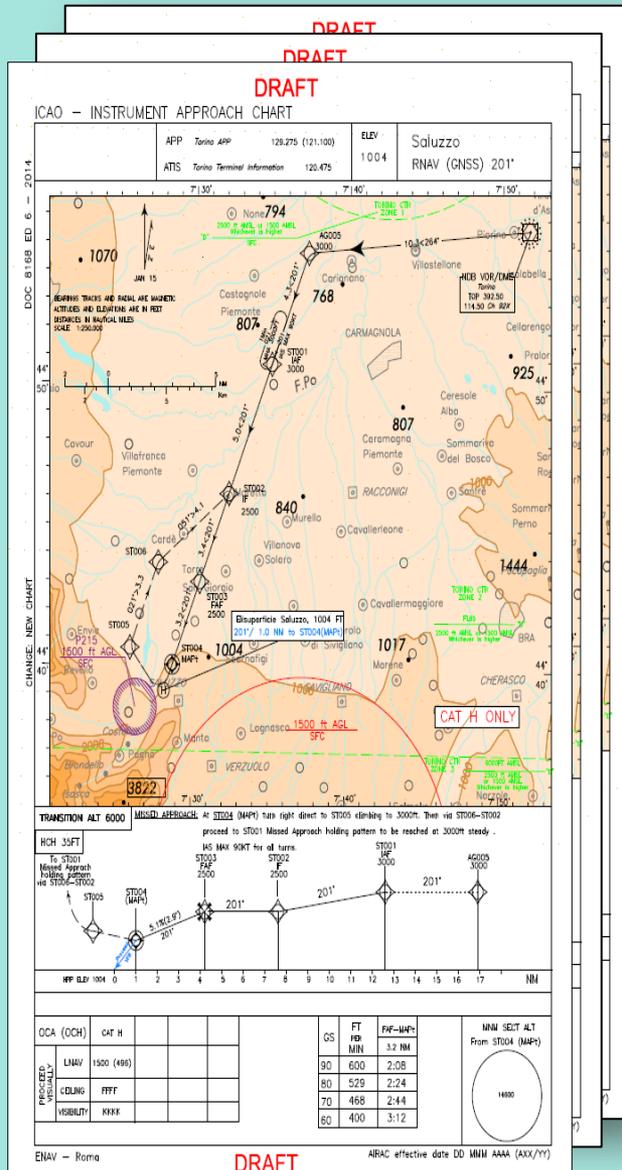
PBN route network project

In 2014 the Piedmont Regional Health Service financed a 3 phased contract with ENAV (Italian Flight Procedure Designer) for the development of:

- ✓ Approach and departure procedures to **16 PinS** (Hospital and remote landing sites)
- ✓ **Low level 18** linking routes connecting the PinS Procedures

It is estimated that the entire network will allow to **increase the number of missions by 15% per year**

Work in progress



Up to now 7 approach and departure procedures have already been designed for the major hospital sites

Also 7 linking low level routes have been already developed

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Unresolved issues

The project has been delayed due to the following issues:

- ✓ **Flight validation plan** accepted by Italian Authority
- ✓ **Missed Approach** based on conventional NAVAIDS
- ✓ IFR procedures **outside controlled airspace**



Conclusions



The approval of the whole network is a challenge

We are confident to start operation on the first route by the end of 2016

The operations will probably start in VFR, to collect data on helicopter and crews behaviour

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Thank you!

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