

Future Transport Helicopter (FTH) - Status, Solutions, Opportunities

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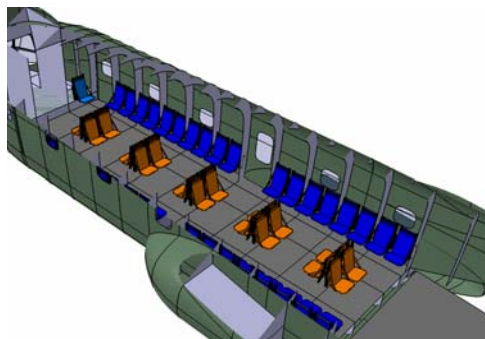
Based on French/German requirements for a new military heavy lift helicopter, Nations have defined a NATO Staff Target for the Future Transport Helicopter (FTH). In addition, a significant gap of capabilities for large civil transport helicopters (~15 metric tons of loads) has arisen in the civil vertical lift world.

Over the last few years, Eurocopter and its cooperation partner have intensively investigated and systematically elaborated different options to transfer the given requirements and required capabilities into a dual use (civil/military) vertical heavy lift solution for the upcoming decades, pursuing the joint design, development, certification and manufacturing.



A major role in the design considerations of the FTH is also the ability to be operated as a joint mobile multi-agency, civil/military disaster management platform in worldwide humanitarian and relief operations. Through this, specific attention has been given to analyze the possibility for a transatlantic cooperation and the match to satisfy the needs of the world market,

The pre-design for a FTH has reached a level of maturity that is enabling the detailed analysis to balance considerations like “off-the-shelf” versus “design to cost” or “joint civil/military application”, leveling today’s tight budgets with state off- the-art technologies and capabilities to fulfill the operational needs. This includes the recognition and implementation of demanding environment-friendly requirements as well as a significant growth potential for adaptations and modifications to come. Wind tunnel tests have been performed and first structural parts using newest composite materials and techniques have been built and successfully tested.



Recognizable design key-features of the FTH are a tandem-rotor configuration, maximum take-off weight in excess of 30 metric tons, a wide body cargo compartment to carry all loads internally, long range self-deploy capabilities, full crashworthy overall helicopter design, complete application of civil safety standards and a focus on life-cycle costs, since smaller fleets

and an increased amount of flight hours per helicopter will become the driving factor for modern helicopter concepts.

An overview of the complete life-cycle including development, manufacturing, in-servicing, support and possible options for multi-national pooling and sharing of assets might lead to the conclusion that the FTH program has the potential to become the largest helicopter program in the coming decades.



Nevertheless, the start of the FTH program is a challenge but should also be considered as a huge opportunity for participating Nations, future governmental and non-governmental operators and the European Aerospace Industry.

Lessons Learned from previous programs and the leverage of skills, experiences, technologies and resources will be the key to offer the next generation heavy transport helicopter with best performances and cost standards.

The presentation will provide an in-depth look into Eurocopter's view on the Future Transport Helicopter in regard to challenges, opportunities, co-operations and possible solutions. Key-design features of the current pre-design will be disclosed.