

6 Conclusions

The transformation of the A109 to a single engine helicopter has been a challenging task as highlighted by the long development process even though the use of a proof of concept demonstrator has helped to reduce the critical areas of refinement. This was also due to the Agusta position that no compromises were acceptable on the basic requirements driving this project. The final result is remarkable as can be noticed by the dramatically reduced basic empty weight now standing at 1430 Kg allowing 1270Kg of internal useful load and 1400 Kg of external load capability. Excellent speed performance has been achieved (V_{ne} of 152Kts and V_h in excess of 140Kts) together with good range and endurance characteristics. These will contribute to the ability to fulfil a wide range of missions and tasks making the PT6B-37 powered A119 Koala one of the most flexible machines of its category.