



ExxonMobil

Aviation Lubricants

Mobil AGL Synthetic Aviation Gear Lubricant

Introduction

Transmissions in civilian and military helicopters often operate under very challenging conditions — from heavy loads to extreme temperature variations, and reliability is non-negotiable. Choosing the right lubricant can help minimize these conditions, ensuring reliability, a long time between overhauls (TBO) and low maintenance costs.

Reliability in extreme conditions

Mobil AGL Synthetic Aviation Gear Lubricant offers measurably better wear protection for transmissions operating at high temperatures than Type I (MIL-L-7808) and Type II (MIL-L-23699) turbine oils, as well as wear resistance that is especially beneficial to military and other helicopters operating under unusual stresses.

Mobil AGL is formulated with synthesized hydrocarbon-based fluids. The combination of a naturally high viscosity index and a unique proprietary additive system help enable the gear lubricant to provide outstanding performance in extreme service applications at high temperatures, well beyond the capabilities of mineral oils.

Exxon Mobil Corporation pioneered synthetic lubricants more than 50 years ago and has been a leader in synthetic lubricant research and manufacturing ever since. Mobil AGL continues the legacy. It is specifically formulated to provide outstanding equipment protection, extend oil life and enable problem-free operation.



Mobil AGL can help extend the life and reliability of your helicopter transmission.

Tested and proven in the real world

Arizona-based MD Helicopters, an aerospace company with products known for speed, strength and high performance, tested Mobil AGL extensively. The company started investigating lubrication improvements for its fleet's transmissions when some operators experienced difficulty reaching a 3,000-hour main transmission overhaul period.

“Field evaluation tests on our single-engine product line allowed increasing the overhaul period of main rotor transmissions from 3,000 to 4,000 hours, if the transmission operated exclusively with Mobil AGL,” says MD Helicopters Engineer Scott Hendrickson. “The 33 percent increase in time between overhauls (TBO) provides operators with a corresponding decrease in operating costs.”

MD Helicopters requires the use of Mobil AGL in all current production transmissions and recommends its use in older designs.



The exclusive use of Mobil AGL can mean longer TBOs and a corresponding decrease in operating costs.

ExxonMobil recommends Mobil AGL for use in helicopter transmissions only. Before using Mobil AGL, operators should confirm the OEM's approved transmission lubricants.

Delivering results

ExxonMobil's researchers are always striving to make our aviation lubricants better than the products need to be. For this group of innovative thinkers, developing a product to meet an OEM's specification is often just a starting point. That is why we continually push the boundaries of lubricant technology. This passion and the need to exceed expectations is key to ExxonMobil creating results-oriented formulations.



Reliability is non-negotiable. Mobil AGL helps ensure problem-free operation.

Mobil AGL offers the following features, advantages and potential benefits:

| Features | Advantages and Potential Benefits |
|--|---|
| Superb extreme temperature thermal/oxidation resistance | <ul style="list-style-type: none"> • Helps extend transmission's extreme-temperature operating capability • Long oil life, reduced need and costs for oil change-outs • Helps minimize sludge and deposits for trouble-free operation and long filter life |
| High viscosity index and absence of wax | <ul style="list-style-type: none"> • Maintains viscosity and film thickness at extreme temperatures |
| Low traction coefficient | <ul style="list-style-type: none"> • Helps reduce overall friction and can increase efficiency in sliding mechanisms such as gearing, with potential for reduced power consumption and lower steady-state operating temperatures • Helps minimize effects of micro slip in rolling contact bearings for longer rolling-element life potential |
| High load carrying capability | <ul style="list-style-type: none"> • Helps protect equipment and extend life; helps minimize unexpected downtime and extend service periods |
| Balanced additive combination | <ul style="list-style-type: none"> • Helps prevent rust and corrosion • Helps ensure problem-free operation and reduce operating costs |



Mobil AGL is lower density than comparable Type I and Type II turbine lubricants, which means less weight on the helicopter and an opportunity for the operator to carry more of what is mission critical.

To learn more about Mobil AGL Synthetic Aviation Gear Lubricant, please contact your local ExxonMobil Aviation Lubricants representative, or visit www.exxonmobilaviationlubes.com