

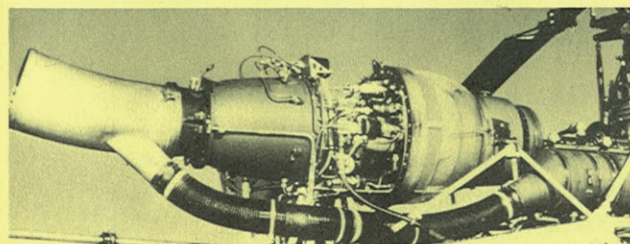
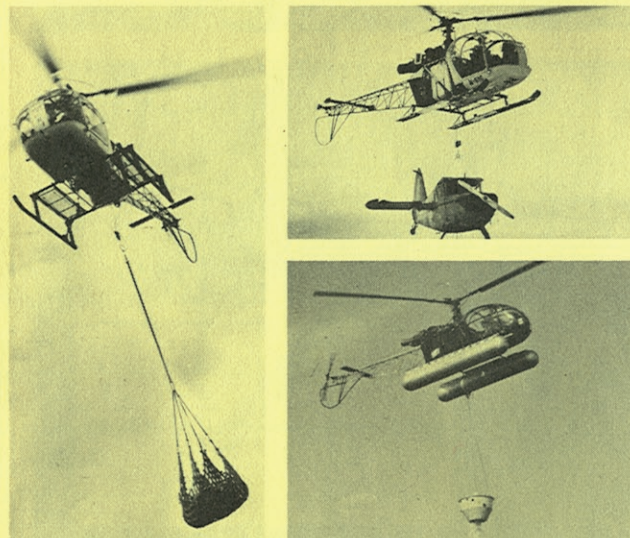
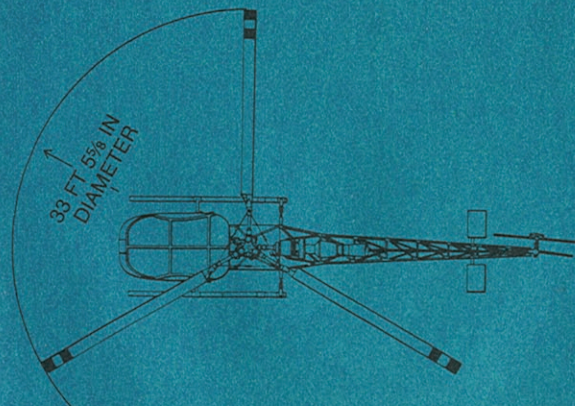
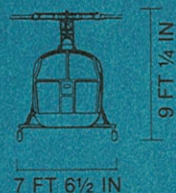
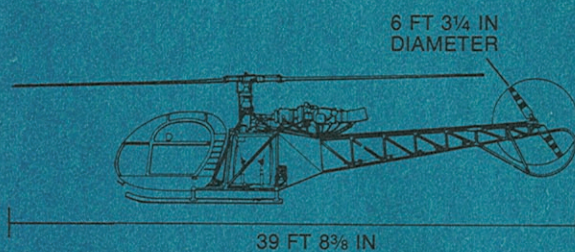


**VOUGHT
HELICOPTER
INCORPORATED**

Alouette II Astazou

Performance (Standard Day)

Maximum Takeoff Gross Weight	3,650 Pounds
Useful Load	1,660 Pounds
I GE Hovering Altitude, Standard Temp	} See "Power Story" on other side.
I GE Hovering Altitude, Standard Temp +20°C (+95°F at SL)	
O GE Hovering Altitude, Standard Temp	
O GE Hovering Altitude, Standard Temp +20°C (+95° F at SL)	}
Maximum Airspeed at SL Vne	
Cruise Speed at SL	112 Miles Per Hour
Maximum Range, 9,500 feet	510 Miles
Maximum Range, at SL	444 Miles
Maximum Endurance at SL	5.3 Hours
Average Fuel Consumption	30.0 Gallons Per Hour



The Alouette II was the first turbine powered helicopter to go into mass production. Over 1,200 are currently in operation with more than 2 million hours of flight time accumulated.

It is a true five-place helicopter and has power to spare from its rugged Astazou II A fixed shaft turbine engine. It is designed for ready accessibility and maintenance ease. This workhorse will be in the air when others are on the ground.

Alouette II Astazou

The Power Story

GENERAL DESCRIPTION

The Alouette II is powered by a constantly governed Turbomeca Astazou II A single shaft, fixed turbine engine which is mechanically connected to the main rotor through a conventional clutch and transmission system.

This direct mechanical connection between the power turbine and main rotor permits the engine's governor to also maintain rotor RPM and, as such, eliminates the need for a conventional throttle on the collective pitch lever.

The engine, under sea level standard conditions, has a maximum takeoff power rating of 523 SHP and a maximum continuous power rating of 473 SHP. The Astazou II A provides over 35% more power than required for sea level operations and thus functions during most of its operational life at power settings considerably lower than maximum available.

This reserve power provides a wide safety margin and is also available for acceleration, climb and maneuverability.

HOVERING PERFORMANCE

The Alouette II's wide power margin enables it to perform at high gross weights under extreme temperature and altitude conditions. This performance capability is significant since most commercial operations are conducted under atmospheric conditions much more severe than the arbitrary sea level standard day. Therefore, to give a realistic performance picture, hovering altitudes are shown for an atmosphere 36°F hotter than standard. (Figures 1 and 2)

The hover altitudes shown, both IGE and OGE, are not ceilings because sufficient power and collective pitch remain available to climb vertically to altitudes shown within the shaded area of figure 2.

POWER COMPARISON

The outstanding power margin of the Alouette II Astazou is further illustrated in figure 3, which

ALOUETTE II ASTAZOU
HOVERING ALTITUDES

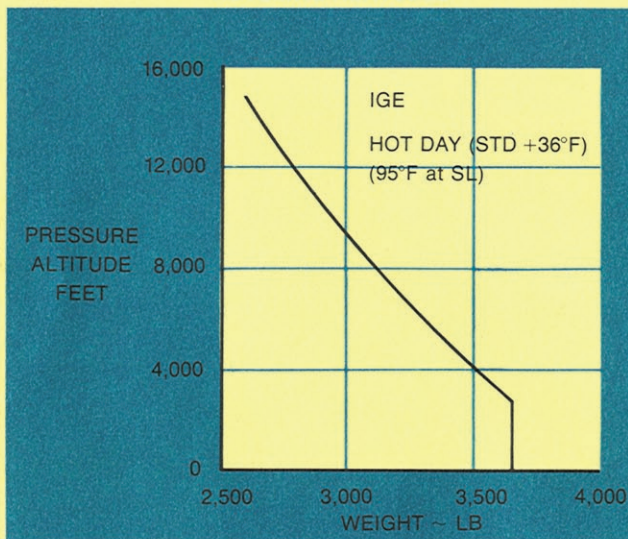


FIG. 1

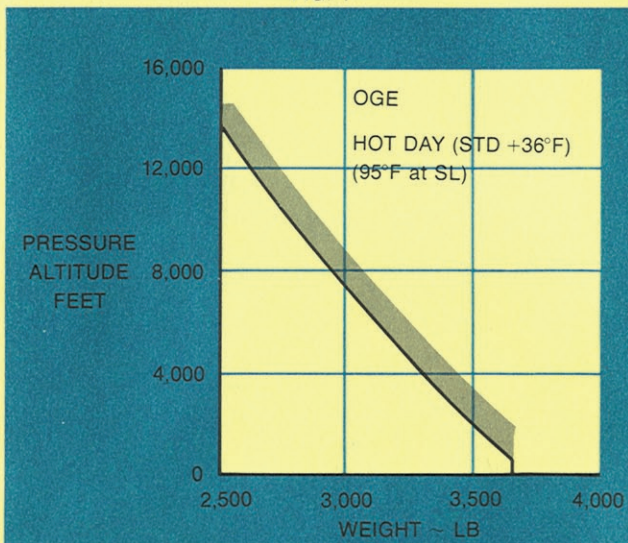


FIG. 2

shows that under sea level standard conditions only 373 SHP is required to hover OGE at maximum gross weight. When compared to the 523 SHP capability of the engine, a power reserve of over 35% is provided.

When considering power available and power required as a function of temperature, figure 4 shows that sufficient power is available for sea

ALOUETTE II ASTAZOU
POWER COMPARISON

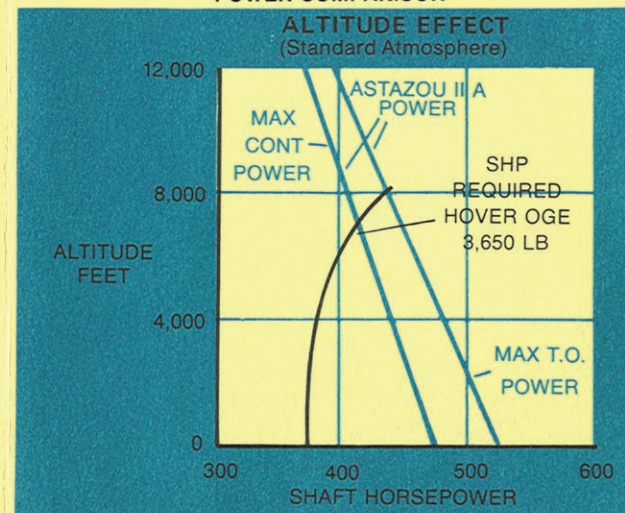


Fig. 3

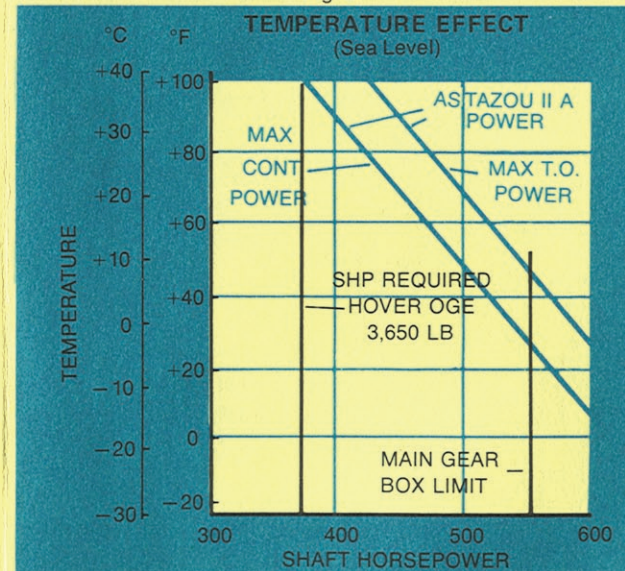


FIG. 4

level hover at maximum gross weight with temperatures exceeding 100°F.

SUMMARY

The unique characteristics of the Alouette II Astazou's power system design—power in reserve and simplified operating controls—provide both safety and performance in a single machine.