



**Chetak**





## Chetak

Chetak is the Indian version of the internationally renowned Alouette III. Built under licence from SNIAS of France by Hindustan Aeronautics Limited, this multirole helicopter has a proven performance record in over sixty countries.

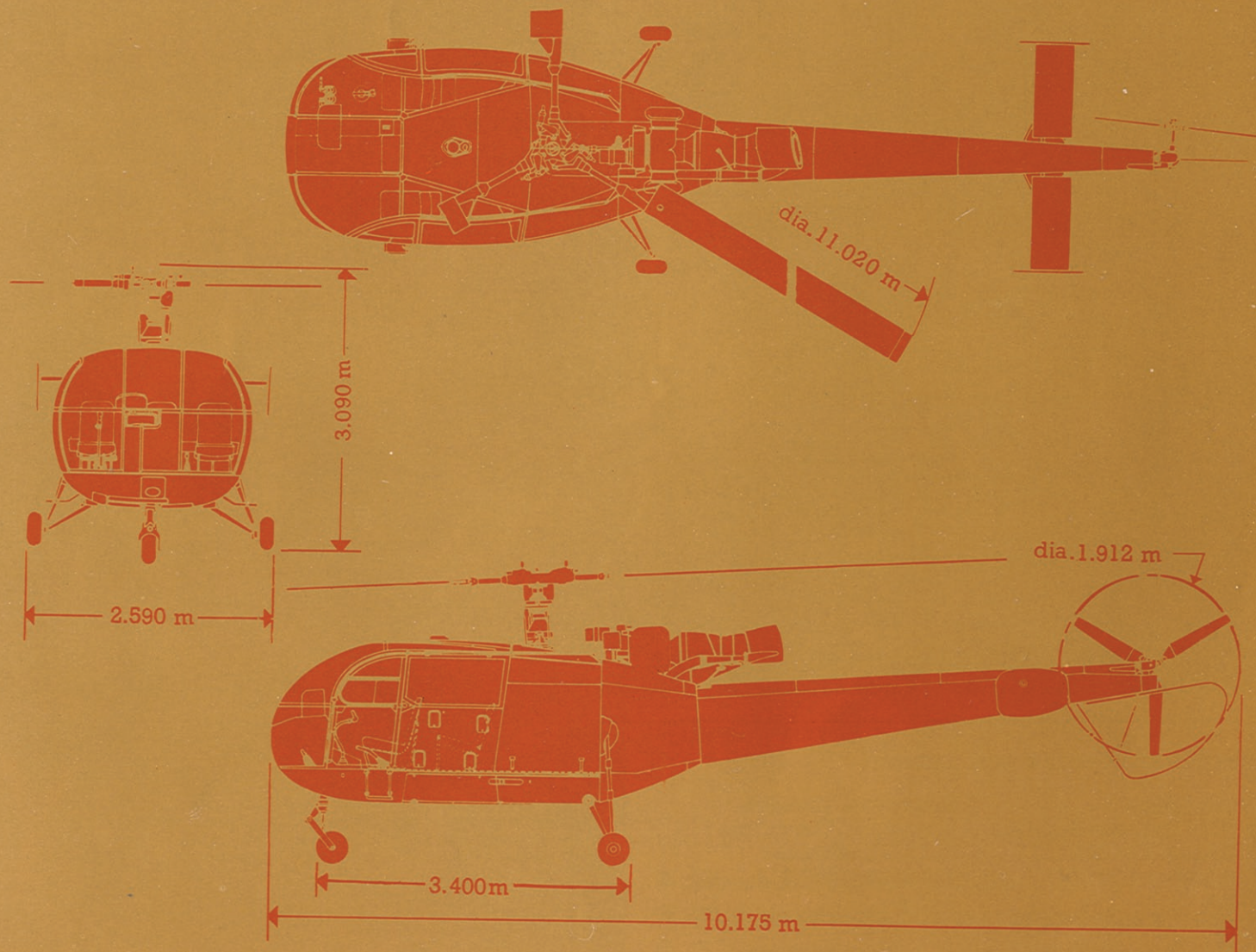
Simple in design and endowed with a spacious cabin served by four doors, this highly manoeuvrable chopper is capable of performing in a variety of diverse roles such as an air ambulance, a rescue craft and as a cargo and passenger transport.

Admirably suited to air observation duties in its military version, the Chetak also answers the exacting requirements of anti-submarine and anti-tank warfare.

Scanning and identification of targets is accomplished by a gyro-stabilised monocular sight mounted on the cabin roof. Armament can include torpedoes, guns and air-to-surface wire-guided missiles. The automatic starting system gives the Chetak an uncommon instant start capability that cuts down the time from start to take-off to less than a minute.

The Chetak is powered by a Turbomeca Artouste III B engine manufactured at HAL. This reliable power plant has a high power reserve and excellent endurance, giving the Chetak unrivalled performance in 'hot-and-high' conditions.





## Basic Data

### Dimensions

Overall length (Rotor rotating)	12.820 m
Overall width (Rotor rotating)	11.020 m
Overall length (Blades folded)	10.030 m
Overall width (Blades folded)	2.590 m
Overall height	3.090 m

### Weight

Empty weight	1110 kgs
Maximum gross weight	2100 kgs
Useful load	990 kgs

### Power Plant

Turbomeca Artouste III B gas turbine engine rated at 550 hp upto 4000 m (ISA).

### Fuel

Total internal fuel capacity 575 litres with usable fuel of 573 litres.

### Avionics

One VHF set with facility for pre-setting 10 channels, ADF, and an intercom system with four stations. Alternative avionics can be fitted on customers' request.

### Armament

The Chetak can be fitted with 4 AS 11 wire-guided missiles and APX 334 monocular gyro-stabilised sight.

## Performance

### Speed

		Gross weight (kg)	
		1700	2100
Maximum speed VNE			
At sea level	km/hr	210	210
Cruising speed (TAS)			
At sea level	km/hr	200	190
At 2000 m	km/hr	198	166
At 3000 m	km/hr	187	147

### Ceiling

Hovering ceiling IGE	m	5500	1950
Hovering ceiling OGE	m	5000	550
Service ceiling	m	6050	4250

### Range

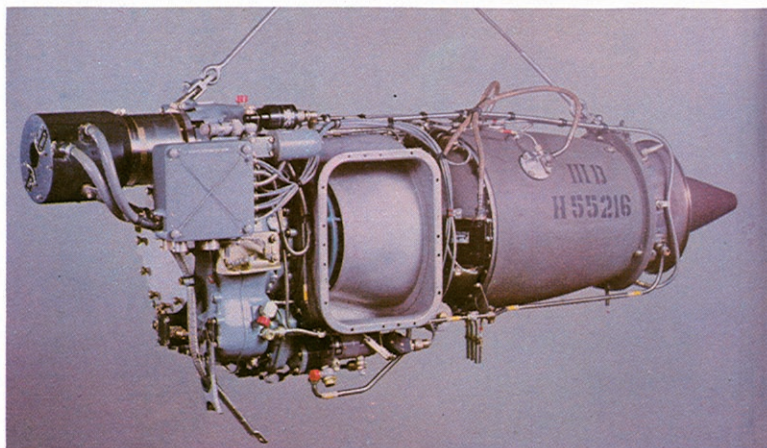
At sea level	km	565	495
At 2000 m	km	650	550
At 3000 m	km	680	—

### Endurance

At sea level	hrs	3.2	3.0
At 2000 m	hrs	3.7	3.4
At 3000 m	hrs	4.0	3.5



A Turbomeca Artouste III B gas turbine anchored at three points on the body structure develops 550 hp at 33,500 rpm upto a height of 4000 metres (ISA). The transmission system consists of a 3-stage main gear box driven through a centrifugal clutch, free wheel assembly, main drive shaft and tail gear box. The main rotor, 11 metres in diameter, rotates at 353.2 rpm and carries 3 fully articulated metal blades of parallel planform with built-in twist.



The semi monocoque tail boom attached to the rear end of the body structure is fitted with a tail rotor guard and a horizontal stabilizer with two vertical fins. The tail rotor measures 1.912 metres in diameter, rotates at 2001 rpm and carries 3 blades articulated in the flapping plane.



### Other refinements include

- Hydraulic servo-controls
- High sensitivity constant speed governor
- A computer and a collective pitch indicator





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