

**JAPAN CIVIL AVIATION BUREAU  
MINISTRY OF LAND, INFRASTRUCTURE AND TRANSPORT**

|                                                       |
|-------------------------------------------------------|
| No.29                                                 |
| Rev.0                                                 |
| KAWASAKI HEAVY INDUSTRIES,LTD<br>KAWASAKI HUGHES 369D |
| January 23, 2004                                      |

**TYPE CERTIFICATE DATA SHEET NO. 29**

This data sheet, which is part of Type Certificate No.29, prescribes conditions and limitations under which the product for which the type certificate was issued meets the airworthiness requirements of the Japan Civil Aeronautics Law and Regulations.

Type Certificate Holder:      Kawasaki Heavy Industries, LTD. (KHI)  
3-1-1, Higashi Kawasaki-Cho, Chuo-ku, Kobe-city, Hyogo-prefecture, JAPAN

**Model KAWASAKI HUGHES 369D (Normal Category Helicopter, Approved April 20, 1978)**

Engine

1(one) Allison 250-C20B

Fuel

See JCAB Approved Flight Manual for Model KHI 369D.

Engine Ratings & Operating Limits

|                     | <u>Takeoff (5 min)</u> | <u>Max. Continuous</u> |
|---------------------|------------------------|------------------------|
| Shaft Horsepower:   | 375SHP                 | 350SHP                 |
| Torque:             | 318ft-lb<br>(87.2psi)  | 297ft-lb<br>(81.3psi)  |
| Gas Producer        |                        |                        |
| rpm, N1:            | 53,519rpm (105%)       | 53,519rpm (105%)       |
| Output Shaft        |                        |                        |
| rpm, N2:            | 6,196rpm (103%)        | 6,196rpm (103%)        |
| Measured Gas Temp.: | 1,490° F (810°C)       | 1,360° F (738°C)       |

See JCAB approved Flight Manual for other limitations including speed and temperature transients.

Rotor Limits & Engine Operating Speeds

| <u>Power Off (Rotor Tach)</u>           | <u>Power On (Rotor/Engine Tach)</u>     |
|-----------------------------------------|-----------------------------------------|
| Maximum: 523 rpm (109% N <sub>2</sub> ) | Maximum: 492 rpm (103% N <sub>2</sub> ) |
| Minimum: 410 rpm (87% N <sub>2</sub> )  | Minimum: 487 rpm (102% N <sub>2</sub> ) |

Airspeed limits (IAS)

V<sub>NE</sub> (Never Exceed Speed): 288km/h (156kt) IAS

See JCAB approved Flight Manual for reduction of V<sub>NE</sub> with altitude and temperature.

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Center of Gravity (C.G.) Range

| Gross Weight<br>(lb) | Longitudinal      |                | Lateral       |                |
|----------------------|-------------------|----------------|---------------|----------------|
|                      | Forward<br>(Sta.) | Aft*<br>(Sta.) | Left<br>(in.) | Right<br>(in.) |
| 3,000                | 99                | 103            | —3            | +3             |
| 1,538                | 99                | 107.4          | —3            | +3             |

Note: Facing forward, + indicates right, and — indicates left of helicopter centerline.

Empty weight C.G. range

None

Maximum weight

3,000 lb.

Minimum crew

1 (Pilot seat: Left hand)

Max. Passengers

5 (1 as pilot, 4 as passengers)

Maximum Cargo

1,300 lb at 115 lb / ft<sup>2</sup>, Sta. 78.5 to 124

50 lb. evenly distributed in utility storage compartment at Sta. 55.

Fuel capacity

Total Tank Capacity: 416 lb

Usable Fuel Capacity: 403.5lb

Fuel weights are based on JP-4 fuel.

Oil capacity

Engine Oil: 6.00lb (STA133.3in)

Transmission Oil: 11.60lb (STA105.0in)

Maximum Operating Altitude

16,000 ft (density altitude)

Datum Line

Longitudinal datum (STA.0): 96.89 in forward of forward jacking point.

Horizontal datum (W.L.0): 11.98 in under of forward jacking point.

Rotor Blade and Control Movements

For rigging information refer to the KHI Model 369D Maintenance Instructions.

Serial Numbers Eligible

6701 through 6709

### Certification Basis

KHI has applied for certification on February 14, 1960.

- Civil Aeronautics Regulations Annex 1 “Technical Standards for Ensuring Safety of Aircraft and Equipment.”
- Model KAWASAKI HUGHES 369D of the TAIKUSEI-SINSA-YORYO (JCAB Airworthiness Standards dated November 14, 1977 (KU-KEN-854).
- Civil Aeronautics Regulations Annex 3 Chapter 1 (equivalent to ICAO Annex 16 Volume 2) for Fuel Venting Requirements.

### Equipment

Refer to equipment and parts list.

### Special Equipment

When equipped with Cargo Hook, or hoist, airworthiness category of "Special Aircraft X" is applied. Refer to the related JCAB approved Flight Manual Supplements.

### Publications

JCAB approved Flight Manuals

Maintenance Manual ("Airworthiness limitations" section are JCAB approved.)

### Required Equipment

The basic required equipment as prescribed in the applicable Japan Civil Aeronautics Law and Regulations must be installed in the aircraft.

### Service Information

Service Bulletins and other service information when JCAB-approved will carry a statement to that effect.

Note: 1     A current Weight & Balance Report must be in each aircraft at the time of original airworthiness certification and at all times thereafter except in the case of an operator having an JCAB approved loading system for weight and balance control.

Note: 2     Helicopter operation must be in accordance with the JCAB approved Flight Manual. All placards required by either JCAB approved Flight Manual, the applicable operating rules, or the Certification Basis must be installed in the helicopter.