

KU-KEN- 1217

No.TCD -3359-90

Date October 16, 1990

Japan Civil Aviation Bureau

TAIKUSEI-KAIZEN-TSUHO

Airworthiness Directive

The undermentioned examinations or modifications are mandatory.

1. Applies to : Hughes 369D, E, HS and Kawasaki-Hughes 369D, HS with tail rotor blade P/N 369D21613-() or 369A1613-()

2. Compliance required as indicated

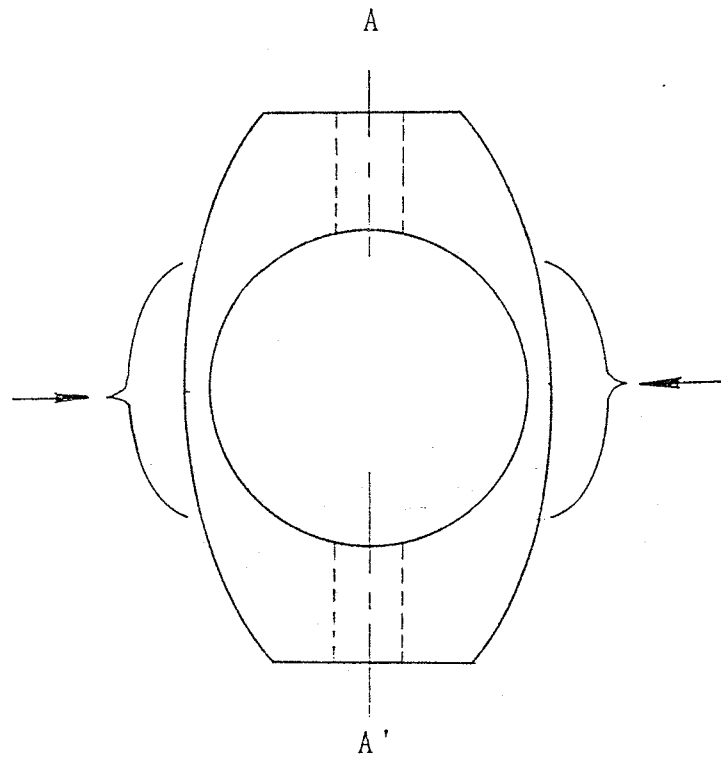
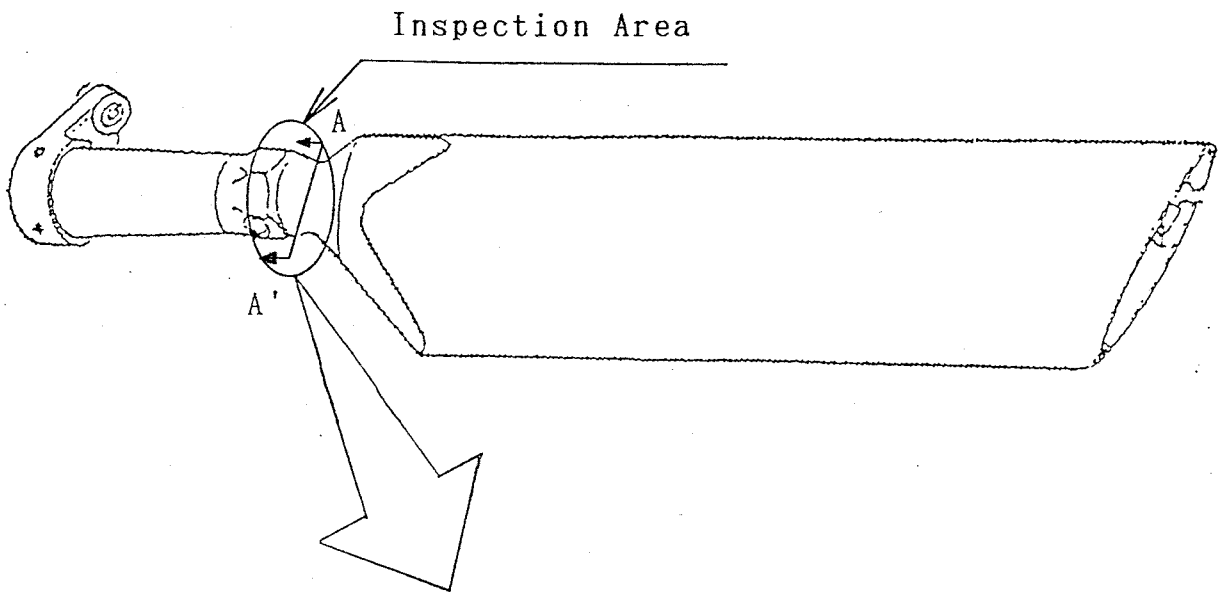
To prevent the separation of the tail rotor blades, accomplish the following:

- 2.1 Before first flight after the effective date of this AD and before the first flight of the day thereafter, conduct a detailed visual inspection of periphery of the root fitting, which is ^{3/}quasi-parallel to the retention strap attachment bolt, of the tail rotor blades (P/N 369D21613-() or 369A1613-()) for cracks (See attached Figure 1).
- 2.2 If there is any suspected indication of cracking found during the inspection of 2.1, inspect, prior to the next flight, the blade using dye penetrant method or other appropriate non-destructive testing method after removing the paint.

- 2.3 Within 25 hours in service after the effective date of this AD, verify the inner hole dimension of the root fitting of each tail rotor blade (See attached Figure 2).
- 2.4 If cracks are found or if the dimension is not within the limit as a result of the inspection of 2.1, 2.2 and/or 2.3, replace the blade with airworthy one with correct dimension and without cracks in accordance with Maintenance Manual. This action terminates the requirements of 2.1, 2.2 and 2.3 of this AD.
- 2.5 The tail rotor blade which is removed as a result of the measurement of 2.3 may be reused, if the result of precise measurement is within the limit.
- 2.6 Alternate means of compliance with this AD may be used, if approved by Director General of Japan Civil Aviation Bureau.

3. Remarks

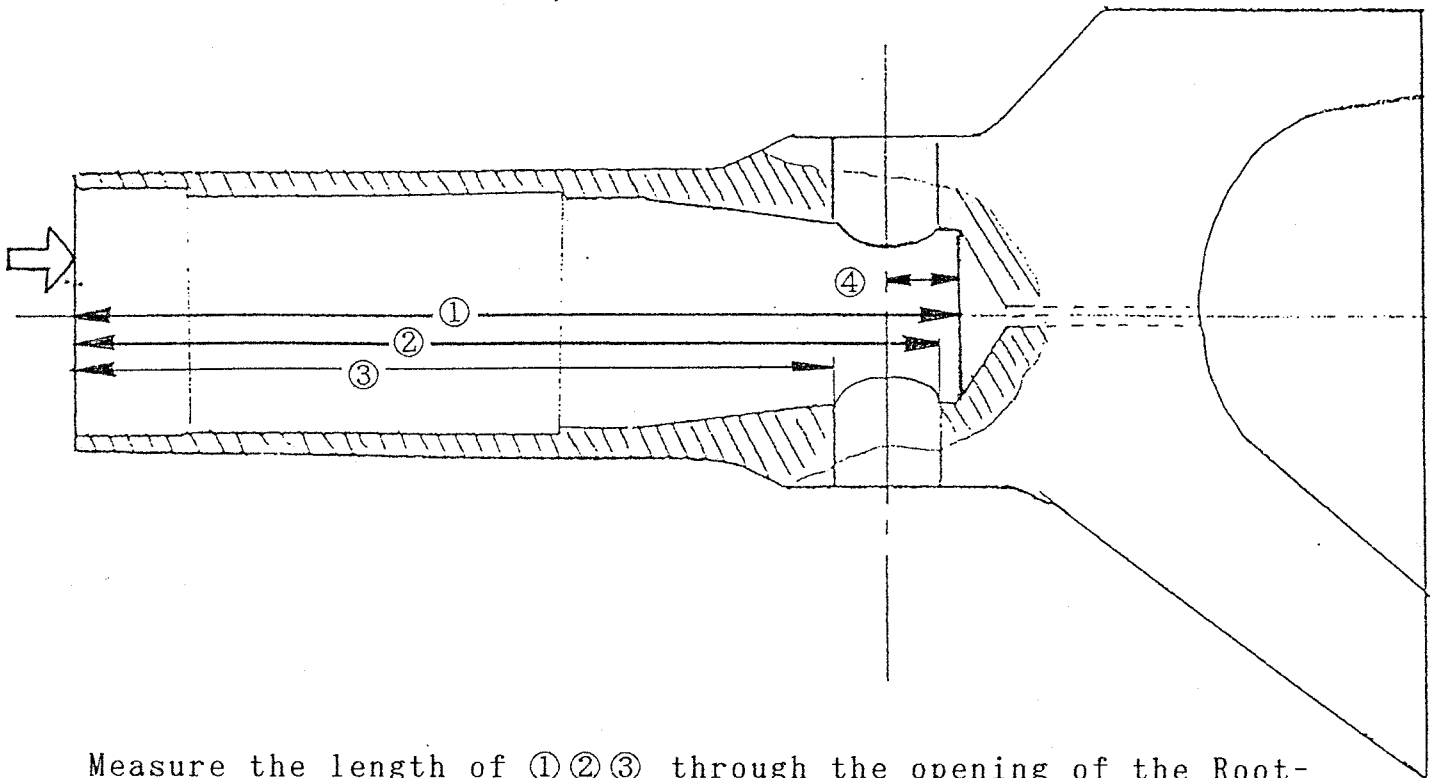
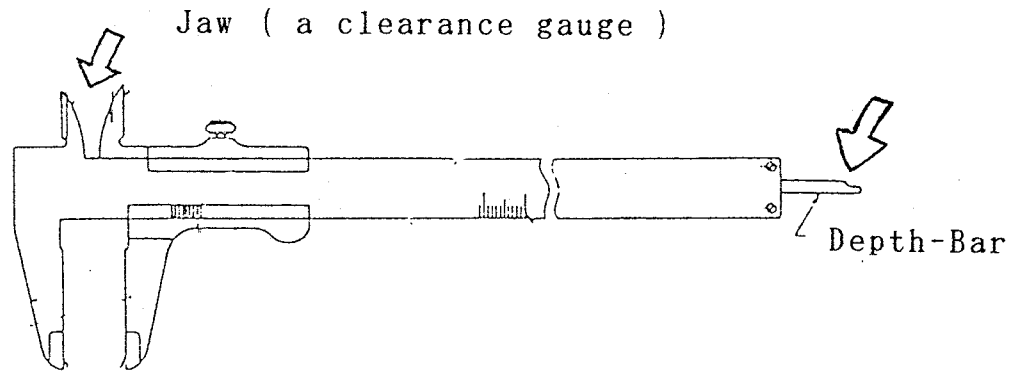
- 3.1 This AD becomes effective on October 23, 1990.
- 3.2 The precise measurement of 2.5 of this AD may be conducted at Gifu Factory of Kawasaki Heavy Industry Co, Ltd.
- 3.3 This AD is a interim measure, and it will be further revised as necessary after the measure by the US.FAA will be determined.



Detailed Inspection Area

Figure 1

Example of Measurement Method



Measure the length of ① ② ③ through the opening of the Root-Fitting using the Depth-Bar of the caliper.

The Jaw (a clearance gauge) of the caliper may be used to measure the diameter of the retension strap fitting bolt hole. Calculate the length of ④ (the length between the center of the bolt hole and the taper portion of the drilling) as follows.

$$\textcircled{4} = (\textcircled{1} - \textcircled{2}) + (\textcircled{2} - \textcircled{3}) \times \frac{1}{2}$$

Then, value of ④ must not exceed following limits.

$$\textcircled{4} : 0.410 + 0.01 \text{ inch } (10.41 + 0.25 \text{ mm })$$

Figure 2