



**HUGHES
SERVICE INFORMATION
LETTER**

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TO—All owners and operators of Hughes Helicopters

SUBJECT: **PRESSURE VARIATION WITH TEMPERATURE -
 AMPHIBIOUS FLOAT LANDING GEAR**

MODELS AFFECTED: All 269A-1 & 269B Flotation Gear Equipped Helicopters

Reference

Supplements to the Rotorcraft Flight Manual for Hughes
200 Model 269A-1 & Hughes 300 Model 269B
Supplemental Type Certificate SH37WE
Rotorcraft Amphibious Float Landing Gear

Water or air temperatures markedly lower than air temperature at time of float inflation will cause a corresponding reduction of float pressure. Since flight operation is restricted to float pressure between 1.0 psig and 6.0 psig, minimum inflation pressure should be increased above the low limit sufficiently to compensate for any anticipated decrease because of low air or water temperature.

When colder air or water temperature operation is anticipated near the low altitude limit, as listed in the Owner's Manual, increase float pressure low limit 0.5 psig for each 15° temperature decrease variance from the initial inflation temperature.

Example: 70° Air Temp. at time of fill
 45° Water Temp. at anticipated landing
 25° Temperature variation

Indicated pressure change = $\frac{25^{\circ}}{15^{\circ}} \times 0.5 \text{ psig} = 0.8 \text{ psig}$

The above example indicates float pressure should be increased 0.8 psig to compensate for the eventual pressure contraction after accomplishing a landing in 45° water. No increase of float pressure will be required in the example if the landing elevation is 2000 feet or more, higher than the float inflating altitude.