WEIGHT — ALTITUDE — TEMPERATURE LIMITATIONS
FOR TAKEOFF, LANDING AND IN-GROUND-EFFECT MANEUVERS

NOTE. ALLOWABLE GROSS WEIGHTS OBTAINED FROM THIS CHART MAY EXCEED CONTINUOUS HOVER CAPABILITY UNDER CERTAIN AMBIENT CONDITIONS. REFER TO HOVER CEILING CHARTS IN SECTION 4.

Figure 1-1. Weight-altitude-temperature limitations for takeoff, landing, and in-ground-effect maneuvers.

Bell 412 with BLR FastFin® System
Bell 412 with BLR FastFin® System

**Engine RPM 100%**

14,000 FT. DENSITY ALTITUDE LIMIT FOR MANEUVERS

**Notes**
1. **Downwind Hover Limitation - Hovering IGE or OGE with the Relative Wind Within These Azimuth Angles is Limited to Wind Velocities of 35 Knots at All Density Altitudes.**
2. **OGE Pedal Critical Wind Azimuth - Hovering IGE with the Relative Wind Within These Azimuth Angles Can Result in Inability to Maintain Heading Due to Large Left Pedal Requirements for Certain Wind Velocities.**
3. **OGE Longitudinal Cyclic Critical Wind Azimuth - Aft Cyclic May Be Limited with Longitudinal AFCS Hardover.**

**Figure 1-2. Maximum speed – Sideward and rearward flight, crosswind and tailwind at a hover.**
Section 5

WEIGHT AND BALANCE

Note all items remain as in the basic flight manual except the following:

The BLR FastFin™ System adds 3.8 lbs to the empty weight of the helicopter when installed. Revise the rotorcraft equipment list and weight and balance using the following data:

<table>
<thead>
<tr>
<th>Equipment</th>
<th>Weight</th>
<th>Arm</th>
<th>Moment</th>
</tr>
</thead>
<tbody>
<tr>
<td>BLR 412 S&amp;FF Kit</td>
<td>3.8</td>
<td>266</td>
<td>1011.4</td>
</tr>
</tbody>
</table>