


	<p>IAGC STEP CHANGE INITIATIVE LAND SESIMIC</p> <p>HSE ALERT HIGH POTENTIAL INCIDENT (HiPo)</p>	
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Title:	Helicopter Forced Landing (Autorotation) Incident		
Region:	North America		
Date & Time of Incident:	August 11, 2008 @ 1440hrs		
Weather & Environment: <i>(Choose as many as apply from lists at right)</i>	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 50%; vertical-align: top;"> <p><u>Weather</u></p> <p><input type="checkbox"/>_X_Clear/Dry <input type="checkbox"/>_Cloudy</p> <p><input type="checkbox"/>_Rain/Wet <input type="checkbox"/>_Flooding</p> <p><input type="checkbox"/>_Snow/Ice <input type="checkbox"/>_Fog</p> <p><input type="checkbox"/>_Wind <input type="checkbox"/>_Sandstorm</p> <p><input type="checkbox"/>_Lightning</p> <p><input type="checkbox"/>_Excessive Cold <input type="checkbox"/>_Excessive Heat</p> </td> <td style="width: 50%; vertical-align: top;"> <p><u>Topography</u></p> <p><input checked="" type="checkbox"/>_X_Forest/Jungle <input type="checkbox"/>_Wetlands/Swamp</p> <p><input type="checkbox"/>_Shrubland <input type="checkbox"/>_Grass/Savanna</p> <p><input type="checkbox"/>_Barren Plains <input type="checkbox"/>_Desert/Dunes</p> <p><input type="checkbox"/>_TZ/Shallow Water <input type="checkbox"/>_Snow/Ice</p> <p><input type="checkbox"/>_Hills/Mountains <input type="checkbox"/>_Crops/Farmlands</p> <p><input type="checkbox"/>_Urban <input type="checkbox"/>_Industrial Area</p> </td> </tr> </table>	<p><u>Weather</u></p> <p><input type="checkbox"/>_X_Clear/Dry <input type="checkbox"/>_Cloudy</p> <p><input type="checkbox"/>_Rain/Wet <input type="checkbox"/>_Flooding</p> <p><input type="checkbox"/>_Snow/Ice <input type="checkbox"/>_Fog</p> <p><input type="checkbox"/>_Wind <input type="checkbox"/>_Sandstorm</p> <p><input type="checkbox"/>_Lightning</p> <p><input type="checkbox"/>_Excessive Cold <input type="checkbox"/>_Excessive Heat</p>	<p><u>Topography</u></p> <p><input checked="" type="checkbox"/>_X_Forest/Jungle <input type="checkbox"/>_Wetlands/Swamp</p> <p><input type="checkbox"/>_Shrubland <input type="checkbox"/>_Grass/Savanna</p> <p><input type="checkbox"/>_Barren Plains <input type="checkbox"/>_Desert/Dunes</p> <p><input type="checkbox"/>_TZ/Shallow Water <input type="checkbox"/>_Snow/Ice</p> <p><input type="checkbox"/>_Hills/Mountains <input type="checkbox"/>_Crops/Farmlands</p> <p><input type="checkbox"/>_Urban <input type="checkbox"/>_Industrial Area</p>
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Field Work Group: <i>(ie. Line, Survey, Drilling, Vibes, Shooting crew etc.)</i>	Helioportable recording operations while moving equipment with a long-line in heavily wooded area.		
Incident Description: <i>(insert photo(s) if available)</i>	<p>A Bell 206 L3 was moving line equipment when the aircraft lost power and the pilot was forced to make an emergency landing. At the time of the incident, the helicopter was not carrying any passengers. The carousel was empty; the pilot had deployed the last bag and was transitioning to another pick-up site when the engine lost power at 300 feet above ground level traveling at approximately 70 knots. The pilot then turned the helicopter towards an area covered with small trees. The pilot disconnected the long-line before attempting to force land the helicopter. The pilot was not injured in the incident, but the helicopter was damaged when it rolled on its side due to the rough terrain.</p> <div style="text-align: center;">  </div>		
Conclusions:	<p>The Federal Aviation Administration (FAA) was notified about the incident and an investigation was initiated. The FAA's investigation was assisted by the helicopter company's on-site mechanic. The preliminary result of the internal investigation was that the air line between the fuel control and governor became disconnected, allowing erroneous information between the two components which resulted in the engine spooling down to idle.</p> <p>While there is no conclusive evidence to show what caused the air line to become loose and eventually disconnect, the air line was recently removed during maintenance work on the turbine. However; the aircraft was flight tested after the maintenance was completed and no problems were</p>		

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		<p>reported.</p> <p>The cause for a fitting to become disconnected could be inappropriate torque and/or exposure to vibrations over time. The typical indication for the fitting slowly backing off would be noticeable engine power surges. However, this indication was not evident and no engine problems were reported a week into the operation after the engine maintenance. It is not yet determined why the sudden air line disconnected without any previous indications.</p> <p>Immediate action taken: All company pilots and mechanics were notified regarding the preliminary findings. They were instructed to visually inspect all air lines for signs of air leakage and manually examine the torque on all air line fittings. Mechanics were instructed to apply torque stripes to all air line fittings after checking for proper torque.</p> <p>Long-term action taken: After any major engine work involving the pressurized air lines, the standard procedure of cross-checking a mechanic's work will be enhanced by applying two torque stripes in different colors. The primary mechanic will mark the fitting after applying appropriate torque. The second mechanic cross-checking the appropriate torque will apply another stripe in a different color.</p> <p>Torque stripes are visual indicators for the pilot during the preflight. A mis-aligned torque stripe will indicate movement of the fitting that must be brought to a mechanic's attention.</p> <p>The helicopter company also took the opportunity to review its internal ERP procedures and worked with Global's crew management and HSE officers to enhance the overall emergency procedures for a downed helicopter.</p>
	Alert Issued:	August 29, 2008