



CAV SYSTEMS

# TKS OWNER OPERATOR TRAINING SYLLABUS

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CAV Systems

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## OWNER/OPERATOR TRAINING OVERVIEW

### DAY ONE

<b>0830 - 1000</b>	<b>Introduction to TKS</b>
	Introduction of staff, building and course safety briefing, power point on the history of TKS and CAV Ice Protection.
<b>BREAK</b>	
<b>1030 - 1200</b>	<b>TKS 101</b>
	<p>The designing of a freezing point depressant ice protection system.</p> <ul style="list-style-type: none"> <li>• FPD system description</li> <li>• Design overview</li> <li>• Aircraft physical description</li> <li>• Icing envelope analysis</li> <li>• Panel design process</li> <li>• Typical system operation</li> <li>• System flow balance</li> <li>• Design process summary</li> </ul>
<b>LUNCH</b>	
<b>1300 - 1400</b>	<b>General Systems</b>
	<p>Overview of the TKS system</p> <p>Parts: porous panels, stall triggers, proportioning units, pumps, tanks, windshield systems, propeller systems, fluid lines and fittings, control panels.</p>
<b>BREAK</b>	<b>General Systems / Repair Station Tour</b>
<b>1500 - 1630</b>	<p>Continued overview of parts</p> <p>A tour of the repair station: how pumps, proportioning units and windshield pumps are tested</p> <p>Explanation of the test benches we use to test parts</p>
<b>END</b>	

### DAY TWO

<b>0830 - 1000</b>	<b>Flying in icing conditions</b>
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	<p>What to expect out of a TKS system when flying in icing conditions</p> <ul style="list-style-type: none"> <li>• Design of the system to withstand icing conditions.</li> <li>• When and how to use the system in various icing conditions.</li> <li>• No-hazard system vs. FIKI system in icing.</li> </ul>
<b>BREAK</b>	
<b>1030 - 1200</b>	<b>Care of a TKS System</b>
	<ul style="list-style-type: none"> <li>• Porous panel cleaning</li> <li>• Avoidance of solvents and wax on porous panels</li> <li>• Running main pumps and windshield pumps</li> <li>• Care of the propeller system (i.e. feed tubes, boots and nozzles)</li> </ul>
<b>LUNCH</b>	
<b>1300 - 1400</b>	<b>Servicing the TKS System</b>
	<p>Maintenance requirements of the TKS system</p> <p>Overview of filter changes, metering pump overhauls, windshield pump overhauls, proportioning unit overhauls</p>
<b>BREAK</b>	<b>Troubleshooting, Q&amp;As, Certificate presentation</b>
<b>1500 - 1630</b>	<ul style="list-style-type: none"> <li>• Overview on typical technical support questions from owners/operators</li> <li>• Questions and answer session covering the entire course Certificates issued.</li> <li>• USB drives issued with documentation and course materials applicable to owners/operators.</li> </ul>
<b>END</b>	