



## Flight AIE 802 CYUL – CYGW

CM1 \_\_\_\_\_  
CM2 \_\_\_\_\_

Date \_\_\_\_\_

### FLIGHT INFORMATION

AIRPORT SETTING		AIRCRAFT SETTING		DH8-100	DH8-300
Airport	CYUL	Aircraft OEW	LBS	27304 LBS	
Runway	06R	Pax Weight (total)	LBS (XX)	8056 LBS (45)	
Gate	23	Bag & Cargo Weight	LBS	2744 LBS	
Takeoff Alt	N/A	Fuel   MIN DIV	LBS   LBS	5000 LBS   1526 LBS	
Emergency Return	CYUL	Aircraft TOW	LBS	42904 LBS	
<b>RUNWAY SETTING</b>		Center of Gravity	MAC %	MAC 32 %	
		MEL/CDL	N/A		
RWY Condition	BARE & DRY 6/6/6	De-ice/Anti-ice	N/A		
Braking Action	GOOD	Dangerous Goods	N/A		
RWY Lighting	3	Doors Open	PAX   BAGGAGE		
<b>WEATHER SETTING</b>		<b>CLEARANCE</b>			
Time of Day	DAY	ATC clears AIE 802 to CYGW airport via FPL, CYUL two dep, 06R, squawk 4222, dep. Freq. 124.65			
Altimeter	29.70				
Wind	060/15	<b>TAXI CLEARANCE</b>			
Temperature	12/07	Left on north ramp and tower 119.9 holding short on right side of the bay			
Visibility	15 SM				
Ceiling	SKY CLEAR				

### FLIGHT SUMMARY

CM1	CM2
<ul style="list-style-type: none"> <li>FLIGHT DECK PREPARATION</li> <li>ENGINE START (NORMAL START)</li> <li>TAXI</li> <li>VISUAL AND ORAL ALARMS (GROUND)</li> <li>TAKEOFF AND CLIMB</li> <li>FGC – ADU AWARENESS</li> <li>ILS</li> <li>LANDING</li> <li>T/O-VECTORS-INTERCEPT-ILS</li> </ul>	<ul style="list-style-type: none"> <li>FLIGHT DECK PREPARATION</li> <li>TAKEOFF AND CLIMB</li> <li>FGC – ADU AWARENESS</li> <li>VISUAL AND AURAL ALARMS (FLIGHT)</li> <li>HOLD</li> <li>RNAV – PROCEED</li> <li>LANDING</li> <li>T/O-VECTORS-INTERCEPT-RNAV</li> </ul>

### Threat and Error Management

<p><b>Threats</b></p> <p><i>Events or errors that occur beyond the influence of the line personnel, increase operational complexity, and which must be managed to maintain the margins of safety.</i></p>	<p><b>Anticipated – Foreseen</b> </p> <ul style="list-style-type: none"> <li>Weather</li> <li>Airport Congestion</li> <li>Crosswinds</li> <li>Runway Conditions</li> </ul>	<p><b>Unanticipated – Unforeseen</b> </p> <ul style="list-style-type: none"> <li>In-flight Malfunction</li> <li>Automation Anomalies</li> <li>Unforecasted Weather</li> <li>TCAS TA/RA</li> <li>Non-Standard Phraseology</li> </ul>	<p><b>Latent – Unseen</b> </p> <ul style="list-style-type: none"> <li>Incorrect Documentation</li> <li>Equipment Design Issues</li> <li>Organizational / Cultural Changes</li> <li>Complacency</li> <li>Fatigue/Stress</li> <li>Illusions</li> </ul>				
<p><b>Errors</b></p> <p><i>Actions or inactions by the line personnel that lead to deviations from organisational or operational intentions or expectations.</i></p>	<p><b>Aircraft Handling</b> </p> <ul style="list-style-type: none"> <li>Vertical, lateral or speed deviations</li> <li>Incorrect FGC inputs</li> <li>Incorrect altimeter</li> <li>Taxiing too fast</li> </ul>	<p><b>Procedural</b> </p> <ul style="list-style-type: none"> <li>Wrong APS entered on Load and Trim</li> <li>Checklists from memory or performed late</li> <li>Omitted briefing or missed items</li> <li>Incorrect logbook entries</li> </ul>	<p><b>Communications</b> </p> <ul style="list-style-type: none"> <li>Missed calls</li> <li>Incorrect phraseology</li> <li>Transmitting while another transmission is in progress</li> <li>Incorrect read back</li> <li>Miscommunication or misinterpretation between crew members</li> </ul>				
<p><b>Error Types</b></p>	<p><b>Slips</b> </p> <ul style="list-style-type: none"> <li>Actions that do not go as planned</li> </ul>	<p><b>Lapses</b> </p> <ul style="list-style-type: none"> <li>Memory failures</li> </ul>	<p><b>Mistakes</b> </p> <ul style="list-style-type: none"> <li>Failure in the plan of action</li> </ul>	<p><b>Violations</b> </p> <ul style="list-style-type: none"> <li>Routine or exceptional acts of sabotage</li> </ul>			
<p><b>Undesired Aircraft States (UAS)</b></p> <p><i>Operational conditions where an unintended situation results in a reduction in margins of safety.</i></p>	<p><b>Aircraft Handling Issues</b> </p> <ul style="list-style-type: none"> <li>Aircraft control</li> <li>Unnecessary weather penetration</li> <li>Operation outside aircraft limitations</li> <li>Unstable approach</li> <li>Continued landing after unstable approach</li> </ul>	<p><b>Navigation</b> </p> <ul style="list-style-type: none"> <li>Misalignment on runway</li> <li>Proceeding to the wrong taxiway or runway</li> <li>Proceeding to the wrong destination</li> </ul>	<p><b>Incorrect Aircraft Config</b> </p> <ul style="list-style-type: none"> <li>Systems</li> <li>Flight Controls</li> <li>Automation</li> <li>Engine</li> <li>Weight and Balance</li> </ul>				
<p><b>UAS Outcomes</b></p>	<p><b>Return to Safe Operations</b></p>	<p><b>An Additional Error</b></p>	<p><b>Occurrence – Incident/Accident</b></p>				
TEM Countermeasures	<b>Planning</b>	<b>SOP Briefing</b>	The required briefing was interactive and operationally thorough	<ul style="list-style-type: none"> <li>Concise, not rushed, and met SOP requirements</li> <li>Bottom lines were established</li> </ul>			
		<b>Plans Stated</b>	Operational plans and decisions were communicated and acknowledged	<ul style="list-style-type: none"> <li>Shared understanding about plans</li> <li>“Everybody on the same page”</li> </ul>			
		<b>Workload Assignment</b>	Roles and responsibilities were defined for normal and non normal situations	<ul style="list-style-type: none"> <li>Workload assignments were communicated and acknowledged</li> </ul>			
		<b>Contingency Management</b>	Crew members developed effective strategies to manage threats to safety	<ul style="list-style-type: none"> <li>Threats and their consequences were anticipated</li> <li>Used all available resources to manage threats</li> </ul>			
	<b>Execution</b>	<b>Monitor / Cross-check</b>	Crew members actively monitored and cross checked systems and other crew members	<ul style="list-style-type: none"> <li>Aircraft position, settings, and crew actions were verified</li> </ul>			
		<b>Workload Assignment</b>	Operational tasks were prioritized and properly managed to handle primary flight duties	<ul style="list-style-type: none"> <li>Avoided task fixation</li> <li>Did not allow work overload</li> </ul>			
		<b>Automation Management</b>	Automation was properly managed to balance situational and/or workload requirements	<ul style="list-style-type: none"> <li>Automation setup was briefed to other members</li> <li>Effective recovery techniques from automation anomalies</li> </ul>			
	<b>Review</b>	<b>Evaluation / Modification of Plans</b>	Existing plans were reviewed and modified when necessary	<ul style="list-style-type: none"> <li>Crew decisions and actions were openly analyzed to make sure the existing plan was the best plan</li> </ul>			
		<b>Inquiry</b>	Crew members asked questions to investigate and/or clarify current plans of action	<ul style="list-style-type: none"> <li>Crew members not afraid to express a lack of knowledge</li> <li>“Nothing taken for granted” attitude</li> </ul>			
		<b>Assertiveness</b>	Crew members stated critical information and/or solutions with appropriate persistence	<ul style="list-style-type: none"> <li>Crew members spoke up without hesitation</li> </ul>			
		<b>TEM / Cognitive Ease</b>			<b>Bias</b>		
		When the Pilot has experience, is in a good mood, is familiar with situation and surroundings, there is an increased risk of incidents occurring – Pilot may let their guard down.			<a href="#">Expectation Bias</a>		
			<a href="#">Plan Continuation Bias</a>				
			<a href="#">Confirmation Bias</a>				
			<a href="#">Recency Effect Bias</a>				
<b>Dirty Dozen</b>							
<a href="#">1. Lack of Communication</a>	<a href="#">2. Complacency</a>	<a href="#">3. Lack of Knowledge</a>	<a href="#">4. Distraction</a>	<a href="#">5. Lack of Teamwork</a>	<a href="#">6. Fatigue</a>		
<a href="#">7. Lack of Resources</a>	<a href="#">8. Pressure</a>	<a href="#">9. Lack of Assertiveness</a>	<a href="#">10. Stress</a>	<a href="#">11. Lack of Awareness</a>	<a href="#">12. Norms</a>		