



# Flight AIE850 CYUL-CYOW

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

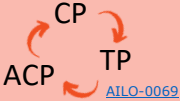
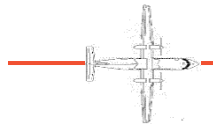
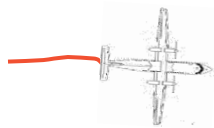
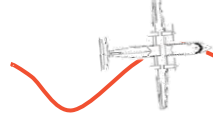
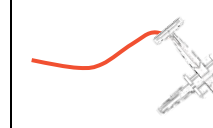
Date \_\_\_\_\_

FLIGHT INFORMATION				
AIRPORT SETTING		AIRCRAFT SETTING	DH8-100	DH8-300
Airport	CYUL	Aircraft OEW	23601 LBS	27304 LBS
Runway	06L	Pax Weight (total)	4800 LBS (24)	8500 LBS (45)
Gate	23	Bag & Cargo Weight	2000 LBS	2600 LBS
Takeoff Alt	CYMX	Fuel   MIN DIV	3500 LBS   LBS	4500 LBS   1650 LBS
Emergency Return	CYOW	Aircraft TOW	33901 LBS	42704 LBS
RUNWAY SETTING		Center of Gravity	MAC 31%	MAC 29%
		MEL/CDL	N/A	
RWY Condition	DRY	De-ice/Anti-ice	N/A	
Braking Action	GOOD	Dangerous Goods	IATA	
RWY Lighting	5	Doors Open	PAX   BAGGAGE	
WEATHER SETTING		CLEARANCE		
Time of Day	NIGHT	ATC clears AIE 850 to CYOW airport via Montreal 3 Dep, FPL, Departure RWY 06L, squawk 4545, dep. Freq. 124.65		
Altimeter	29.70	TAXI CLEARANCE Taxi right on north ramp, contact tower 119.3 holding short.		
Wind	330/20			
Temperature	19/19			
Visibility	RVR600			
Ceiling	OVC002			

FLIGHT SUMMARY	
CM1	CM2
<ul style="list-style-type: none"> <li>• PREFLIGHT</li> <li>• FLIGHT DECK PREPARATION</li> <li>• ENGINE START</li> <li>• TAXI</li> <li>• TAKEOFF</li> <li>• CLIMB</li> <li>• LOSS OF GENERATED POWER</li> <li>• DESCENT</li> <li>• HOLDING</li> <li>• ILS APPROACH</li> <li>• MISSED APPROACH</li> <li>• ILS APPROACH</li> <li>• LANDING</li> <li>• AFTER LANDING</li> </ul>	<ul style="list-style-type: none"> <li>• PREFLIGHT</li> <li>• FLIGHT DECK PREPARATION</li> <li>• ENGINE START</li> <li>• TAXI</li> <li>• TAKEOFF</li> <li>• CLIMB</li> <li>• #2 HYDRAULIC SYSTEM FAIL</li> <li>• DESCENT</li> <li>• HOLDING</li> <li>• NON-PRECISION APPROACH</li> <li>• MISSED APPROACH</li> <li>• NON-PRECISION APPROACH</li> <li>• LANDING</li> <li>• AFTER LANDING</li> </ul>

<ul style="list-style-type: none"><li>• TAXI IN &amp; SHUTDOWN</li><li>• PM DUTIES</li></ul>	<ul style="list-style-type: none"><li>• TAXI IN &amp; SHUTDOWN</li><li>• PM DUTIES</li></ul>
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### Grading Index

		Marks			
		4	3	2	1
Technical Skill Elements	Aircraft Handling	<ul style="list-style-type: none"> <li><b>No deviation</b></li> <li>Effective quality and accuracy</li> <li>Regulatory and aircraft limitations compliance</li> <li>Safety of flight assured</li> </ul>	<ul style="list-style-type: none"> <li><b>Minor deviation</b></li> <li>Acceptable quality and accuracy</li> <li>Regulatory and aircraft limitations compliance</li> <li>Safety of flight maintained</li> </ul>	<ul style="list-style-type: none"> <li><b>Major deviation</b></li> <li>Poor quality and accuracy</li> <li>Regulatory and aircraft limitations compliance</li> <li>Safety of flight reduced</li> </ul>	<ul style="list-style-type: none"> <li><b>Critical deviation</b></li> <li>Unacceptable quality and accuracy</li> <li>Regulatory or aircraft limitations non-compliance</li> <li>Safety of flight compromised</li> </ul>
	Technical Skills and Knowledge	<ul style="list-style-type: none"> <li><b>No error</b></li> <li>Effective practical understanding</li> <li>Effective following SOPs, rules and regulations</li> </ul>	<ul style="list-style-type: none"> <li><b>Minor error</b></li> <li>Acceptable practical understanding</li> <li>Acceptable following SOPs, rules and regulations</li> </ul>	<ul style="list-style-type: none"> <li><b>Major error</b></li> <li>Poor practical understanding</li> <li>Poor following SOPs, rules and regulations</li> </ul>	<ul style="list-style-type: none"> <li><b>Critical error</b></li> <li>Unacceptable practical understanding</li> <li>Unacceptable following SOPs, rules and regulations</li> </ul>
Non-Technical Skills Elements	Cooperation	<ul style="list-style-type: none"> <li>Effective team building and maintaining</li> <li>Effective consideration of others</li> <li>Effective support of others</li> <li>Effective solving conflicts</li> </ul>	<ul style="list-style-type: none"> <li>Acceptable team building and maintaining</li> <li>Acceptable consideration of others</li> <li>Acceptable support of others</li> <li>Acceptable solving conflicts</li> </ul>	<ul style="list-style-type: none"> <li>Poor team building and maintaining</li> <li>Poor consideration of others</li> <li>Poor support of others</li> <li>Poor solving conflicts</li> </ul>	<ul style="list-style-type: none"> <li>Unacceptable team building and maintaining</li> <li>Unacceptable consideration of others</li> <li>Unacceptable support of others</li> <li>Unacceptable solving conflicts</li> </ul>
	Leadership and Managerial Skills	<ul style="list-style-type: none"> <li>Effective use of authority and assertiveness</li> <li>Effective providing and maintaining standards</li> <li>Effective planning and coordination</li> <li>Effective workload management</li> </ul>	<ul style="list-style-type: none"> <li>Acceptable use of authority and assertiveness</li> <li>Acceptable providing and maintaining standards</li> <li>Acceptable planning and coordination</li> <li>Acceptable workload management</li> </ul>	<ul style="list-style-type: none"> <li>Poor use of authority and assertiveness</li> <li>Poor providing and maintaining standards</li> <li>Poor planning and coordination</li> <li>Poor workload management</li> </ul>	<ul style="list-style-type: none"> <li>Unacceptable use of authority and assertiveness</li> <li>Unacceptable providing and maintaining standards</li> <li>Unacceptable planning and coordination</li> <li>Unacceptable workload management</li> </ul>
	Situational Awareness	<ul style="list-style-type: none"> <li>Effective system awareness</li> <li>Effective environmental awareness</li> <li>Effective awareness of time and anticipation of future events</li> </ul>	<ul style="list-style-type: none"> <li>Acceptable system awareness</li> <li>Acceptable environmental awareness</li> <li>Acceptable awareness of time and anticipation of future events</li> </ul>	<ul style="list-style-type: none"> <li>Poor system awareness</li> <li>Poor environmental awareness</li> <li>Poor awareness of time and anticipation of future events</li> </ul>	<ul style="list-style-type: none"> <li>Unacceptable system awareness</li> <li>Unacceptable environmental awareness</li> <li>Unacceptable awareness of time and anticipation of future events</li> </ul>
	Decision Making	<ul style="list-style-type: none"> <li>Effective problem definition / diagnosis</li> <li>Effective option generation</li> <li>Effective risk assessment &amp; option selection</li> <li>Effective outcome review</li> </ul>	<ul style="list-style-type: none"> <li>Acceptable problem definition / diagnosis</li> <li>Acceptable option generation</li> <li>Acceptable risk assessment &amp; option selection</li> <li>Acceptable outcome review</li> </ul>	<ul style="list-style-type: none"> <li>Poor problem definition / diagnosis</li> <li>Poor option generation</li> <li>Poor risk assessment &amp; option selection</li> <li>Poor outcome review</li> </ul>	<ul style="list-style-type: none"> <li>Unacceptable problem definition / diagnosis</li> <li>Unacceptable option generation</li> <li>Unacceptable risk assessment &amp; option selection</li> <li>Unacceptable outcome review</li> </ul>
Pictorial					

### Threat and Error Management

<b>Threats</b> <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>		<b>Anticipated – Foreseen</b> ☁️ <ul style="list-style-type: none"> <li>Weather</li> <li>Airport Congestion</li> <li>Crosswinds</li> <li>Runway Conditions</li> </ul>		<b>Unanticipated – Unforeseen</b> 🚨 <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>		<b>Latent – Unseen</b> 🕒 <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>	
<b>Errors</b> <i>Actions or inactions by the line personnel that lead to deviations from organisational or operational intentions or expectations.</i>		<b>Aircraft Handling</b> 🛩️ <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>		<b>Procedural</b> 📄 <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>		<b>Communications</b> 🗣️ <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>	
<b>Error Types</b>		<b>Slips</b> 🧻 <ul style="list-style-type: none"> <li>Actions that do not go as planned</li> </ul>	<b>Lapses</b> 🧠 <ul style="list-style-type: none"> <li>Memory failures</li> </ul>	<b>Mistakes</b> 🧑 <ul style="list-style-type: none"> <li>Failure in the plan of action</li> </ul>	<b>Violations</b> ⚖️ <ul style="list-style-type: none"> <li>Routine or exceptional acts of sabotage</li> </ul>		
<b>Undesired Aircraft States (UAS)</b> <i>Operational conditions where an unintended situation results in a reduction in margins of safety.</i>		<b>Aircraft Handling Issues</b> 🛩️ <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>		<b>Navigation</b> 📍 <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>		<b>Incorrect Aircraft Config</b> ⚠️ <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>	
<b>UAS Outcomes</b>		<b>Return to Safe Operations</b>		<b>An Additional Error</b>		<b>Occurrence – Incident/Accident</b>	
<b>TEM Countermeasures</b>	<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.		<ul style="list-style-type: none"> <li><a href="#">Expectation Bias</a></li> <li><a href="#">Plan Continuation Bias</a></li> <li><a href="#">Confirmation Bias</a></li> <li><a href="#">Recency Effect Bias</a></li> </ul>				
	<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>	