Flight AIE853
CYUL-CYGL
WINTER/ICING

CM1 _____
CM2 _____

Date_____

FLIGHT INFORMATION

AIRPORT SETTING		AIRCRAFT SETTING	DH8-100	DH8-300
Airport	CYUL	Aircraft OEW	23601 LBS	27372 LBS
Runway	06L	Pax Weight (total)	4200 LBS (24)	8500 LBS (45)
Gate	23	Bag & Cargo Weight	1000 LBS	2896 LBS
Takeoff Alt	CYUL	Fuel | MIN DIV	5600 LBS | LBS	4430 LBS |1440 LBS
Emergency Return	CYUL	Aircraft TOW	34401 LBS	42998 LBS
RUNWAY SETTING		Center of Gravity	MAC 30%	MAC 27%
		MEL/CDL		
RWY Condition	WET SNOW 3/3/3	DE-ICE/ANTI-ICE	Type 1 and type 4 at the gate.	
Braking Action	MEDIUM	Dangerous Goods	IATA	
RWY Lighting	3	Doors Open	PAX | BAGGAGE	
WEATHER SETTING		**CLEARANCE**		
Time of Day	DAY	ATC clears AIE 853 to CYUY airport via Montreal 3 Dep, FPL, Departure RWY 06L, squawk 4225, dep. Freq. 124.65		
Altimeter	29.86			
Wind	330/20KT	**TAXI CLEARANCE**		
Temperature	-1/-2	Taxi right on north ramp and contact tower 119.3 holding short.		
Visibility	½ SM			
Ceiling	OVC002			

FLIGHT SUMMARY

CM2

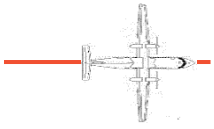
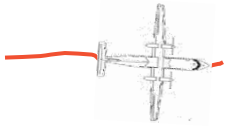
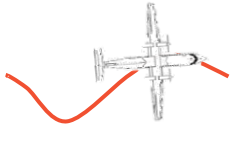
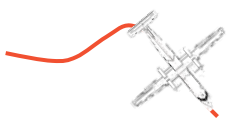
- FLIGHT DECK PREPARATION
- ABORTED ENGINE START
- ENGINE START
- TAXI
- TAKEOFF – ENGINE FAILURE
- ABNORMAL SPEED INDICATION
- ENGINE FAILURE AND SHUTDOWN/DRIFT DOWN (CLIMB/CRUISE/DESCENT)
- DESCENT
- NON-PRECISION APPROACH
- ENGINE FAILURE DURING GO-AROUND AND MISSED APPROACH
- ILS APPROACH
- ONE ENGINE INOPERATIVE LANDING

CM1

- FLIGHT DECK PREPARATION
- ABORTED ENGINE START
- ENGINE START
- TAKEOFF – ENGINE FAILURE
- SYMBOL GENERATOR FAILURE
- HOLDING
- NON- PRECISION APPROACH
- ENGINE FAILURE DURING GO-AROUND AND MISSED APPROACH
- ILS APPROACH
- ONE ENGINE INOPERATIVE LANDING
- REJECT TAKEOFF
- ENGINE FIRE ON THE GROUND

• **PM DUTIES**	• **EVACUATION** • **PM DUTIES**

Grading Index

CP / TP / ACP (AILO-0069)		Marks			
		4	3	2	1
Technical Skill Elements	Aircraft Handling	• **No deviation** • Effective quality and accuracy • Regulatory and aircraft limitations compliance • Safety of flight assured	• **Minor deviation** • Acceptable quality and accuracy • Regulatory and aircraft limitations compliance • Safety of flight maintained	• **Major deviation** • Poor quality and accuracy • Regulatory and aircraft limitations compliance • Safety of flight reduced	• **Critical deviation** • Unacceptable quality and accuracy • Regulatory or aircraft limitations non-compliance • Safety of flight compromised
	Technical Skills and Knowledge	• **No error** • Effective practical understanding • Effective following SOPs, rules and regulations	• **Minor error** • Acceptable practical understanding • Acceptable following SOPs, rules and regulations	• **Major error** • Poor practical understanding • Poor following SOPs, rules and regulations	• **Critical error** • Unacceptable practical understanding • Unacceptable following SOPs, rules and regulations
Non-Technical Skills Elements	Cooperation	• Effective team building and maintaining • Effective consideration of others • Effective support of others • Effective solving conflicts	• Acceptable team building and maintaining • Acceptable consideration of others • Acceptable support of others • Acceptable solving conflicts	• Poor team building and maintaining • Poor consideration of others • Poor support of others • Poor solving conflicts	• Unacceptable team building and maintaining • Unacceptable consideration of others • Unacceptable support of others • Unacceptable solving conflicts
	Leadership and Managerial Skills	• Effective use of authority and assertiveness • Effective providing and maintaining standards • Effective planning and coordination • Effective workload management	• Acceptable use of authority and assertiveness • Acceptable providing and maintaining standards • Acceptable planning and coordination • Acceptable workload management	• Poor use of authority and assertiveness • Poor providing and maintaining standards • Poor planning and coordination • Poor workload management	• Unacceptable use of authority and assertiveness • Unacceptable providing and maintaining standards • Unacceptable planning and coordination • Unacceptable workload management
	Situational Awareness	• Effective system awareness • Effective environmental awareness • Effective awareness of time and anticipation of future events	• Acceptable system awareness • Acceptable environmental awareness • Acceptable awareness of time and anticipation of future events	• Poor system awareness • Poor environmental awareness • Poor awareness of time and anticipation of future events	• Unacceptable system awareness • Unacceptable environmental awareness • Unacceptable awareness of time and anticipation of future events
	Decision Making	• Effective problem definition / diagnosis • Effective option generation • Effective risk assessment & option selection • Effective outcome review	• Acceptable problem definition / diagnosis • Acceptable option generation • Acceptable risk assessment & option selection • Acceptable outcome review	• Poor problem definition / diagnosis • Poor option generation • Poor risk assessment & option selection • Poor outcome review	• Unacceptable problem definition / diagnosis • Unacceptable option generation • Unacceptable risk assessment & option selection • Unacceptable outcome review
Pictorial					

Threat and Error Management

Threats

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.

Anticipated – Foreseen	Unanticipated – Unforseen	Latent – Unseen
• Weather • Airport Congestion • Crosswinds • Runway Conditions	• In-flight Malfunction • Automation Anomalies • Unforecasted Weather • TCAS TA/RA • Non-Standard Phraseology	• Incorrect Documentation • Equipment Design Issues • Organizational / Cultural Changes • Complacency • Fatigue/Stress • Illusions

Errors

Actions or inactions by the line personnel that lead to deviations from organisational or operational intentions or expectations.

Aircraft Handling	Procedural	Communications
• Vertical, lateral or speed deviations • Incorrect FGC inputs • Incorrect altimeter • Taxiing too fast	• Wrong APS entered on Load and Trim • Checklists from memory or performed late • Omitted briefing or missed items • Incorrect logbook entries	• Missed calls • Incorrect phraseology • Transmitting while another transmission is in progress • Incorrect read back • Miscommunication or misinterpretation between crew members

Error Types	Slips	Lapses	Mistakes	Violations
	• Actions that do not go as planned	• Memory failures	• Failure in the plan of action	• Routine or exceptional acts of sabotage

Undesired Aircraft States (UAS)

Operational conditions where an unintended situation results in a reduction in margins of safety.

Aircraft Handling Issues	Navigation	Incorrect Aircraft Config
• Aircraft control • Unnecessary weather penetration • Operation outside aircraft limitations • Unstable approach • Continued landing after unstable approach	• Misalignment on runway • Proceeding to the wrong taxiway or runway • Proceeding to the wrong destination	• Systems • Flight Controls • Automation • Engine • Weight and Balance

UAS Outcomes	Return to Safe Operations	An Additional Error	Occurrence – Incident/Accident

TEM Countermeasures

Planning	**SOP Briefing**	The required briefing was interactive and operationally thorough	• Concise, not rushed, and met SOP requirements • Bottom lines were established
	Plans Stated	Operational plans and decisions were communicated and acknowledged	• Shared understanding about plans • "Everybody on the same page"
	Workload Assignment	Roles and responsibilities were defined for normal and non normal situations	• Workload assignments were communicated and acknowledged
	Contingency Management	Crew members developed effective strategies to manage threats to safety	• Threats and their consequences were anticipated • Used all available resources to manage threats
Execution	**Monitor / Cross-check**	Crew members actively monitored and cross checked systems and other crew members	• Aircraft position, settings, and crew actions were verified
	Workload Assignment	Operational tasks were prioritized and properly managed to handle primary flight duties	• Avoided task fixation • Did not allow work overload
	Automation Management	Automation was properly managed to balance situational and/or workload requirements	• Automation setup was briefed to other members • Effective recovery techniques from automation anomalies
Review	**Evaluation / Modification of Plans**	Existing plans were reviewed and modified when necessary	• Crew decisions and actions were openly analyzed to make sure the existing plan was the best plan
	Inquiry	Crew members asked questions to investigate and/or clarify current plans of action	• Crew members not afraid to express a lack of knowledge • "Nothing taken for granted" attitude
	Assertiveness	Crew members stated critical information and/or solutions with appropriate persistence	• Crew members spoke up without hesitation

TEM / Cognitive Ease

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.

Bias

- Expectation Bias
- Plan Continuation Bias
- Confirmation Bias
- Recency Effect Bias

Dirty Dozen

1. Lack of Communication	2. Complacency	3. Lack of Knowledge	4. Distraction	5. Lack of Teamwork	6. Fatigue
7. Lack of Resources	8. Pressure	9. Lack of Assertiveness	10. Stress	11. Lack of Awareness	12. Norms