OPERATIONAL RISK MANAGEMENT MATRIX
INSTRUCTIONS FOR USE

INSTRUCTIONS: Assign a value to each of the stated risk factors, and place in the appropriate box on the right-hand side of the page. When all categories have a risk value assigned, calculate total and place in the box labeled **"Total Calculated Risk Assessment"**. Based upon your judgment and the values stated in the table labeled **"Overall Risk Assessment"**, take whatever steps necessary to either fly, correct the unsafe conditions within your control, or cancel the flight, as appropriate.

RISK LEVELS:
Low — 0 - 75
Moderate — 76 – 150
High — 151 +

MAN — SUGGESTED RISK VALUES:

Experience / Training: High time pilots are statistically less likely to have accidents.
Pilot Currency: Recency of pilot experience also lowers possibility of accidents.
Health / Crew Rest: Fatigue or health problems can and will degrade a pilot's skills.

MACHINE — SUGGESTED RISK VALUES:

Maintenance Factors: Awareness of mechanical flaws vital to safety of mission.
Performance Factors: Lowest search altitudes increase chance of hitting tall objects; Highest introduces chance of hypoxia; Intermediate altitudes statistically the safest.
Communications: Spotty comms or blind spots distract crew, prevent them from watching for traffic and add to pilot workload.

MISSION — SUGGESTED RISK VALUES:

Operations Tempo: The more aircraft involved, the greater the chance for collision.
Search Complexity: High workload caused by unfamiliar tasks can add to distractions.

ENVIRONMENT — SUGGESTED RISK VALUES:

Weather: Icing - Even the possibility of light icing in the forecast is a no-go.
Ceiling - Marginal VFR adds to risk; Hard IFR increases risk substantially.
Hazards - Turbulence, thunderstorms all require careful pilot judgment.
Winds - Winds greater than 15 kts increase the risk of landing accidents.
Visibility - Low visibilities add to risk of collision, disorientation or IFR.
Terrain: The higher the land, the greater the possibility of controlled flight into terrain.
Night Ops: Night VFR is higher risk than day; Night IFR is statistically the riskiest of all.
Airfield: More incidents occur at airfields unfamiliar to the pilot than at the home field.

ADDITIONAL CIRCUMSTANCES — SUGGESTED RISK VALUES:

CAPF 5 & 91: Forced landing simulations or engine cuts add greatly to checkride risk.
Overwater: Being further than gliding distance increases the hazard of the mission.
CD Overwater: Lack of an immersion suit makes long overwater trips a no-go in cold water.

— Use Values Assigned As Maximums — Assign Lower As Appropriate —

CAP AVIATION
OPERATIONAL RISK MANAGEMENT WORKSHEET

Pilot Name: _____ **Date:** _____ **Mission #:** _____ **A/C #:** _____ **Sortie:** _____

HAZARD	LOW RISK	PTS.	MODERATE RISK	PTS.	HIGH RISK *	PTS.	VALUE
H U M A N							
Experience / Training	≥ 1,000 hours PIC ≥ 50 hours mission time	**0**	≥ 250 < 1,000 hours PIC ≥ 25 < 50 hours mission time	**10**	< 250 hours PIC < 25 hours mission time	**20**	
Pilot Currency	≥ 10 hours within last 30 days	**0**	≥ 5 < 10 hours within last 30 days	**10**	< 5 hours within last 30 days	**20**	
Health / Crew Rest	Good health and proper crew rest	**0**	Fair health with adequate crew rest	**10**	Poor health or signs of fatigue	**No Go**	
M A C H I N E							
Maintenance Factors	Fully Functional	**0**	Partially Non-Functional	**15**	Fully Non-Functional	**No Go**	
Performance Factors	≤ 5,000' Density Altitude	**0**	> 5,000' ≤ 8000' Density Altitude	**10**	> 8,000' Density Altitude	**20**	
A/A & A/G Comms	Good comms and/or high bird available	**0**	Some blind spots or faulty comms and no high bird	**10**	Poor comms and no high bird	**15**	
M I S S I O N							
Operations Tempo	1 - 2 total mission aircraft	**0**	3 - 4 total mission aircraft	**10**	> 4 total mission aircraft	**20**	
Search Complexity	Simple tasks, no new technology	**0**	Complex tasks, no new technology	**10**	Complex tasks, new technology	**20**	
E N V I R O N M E N T							
Weather (current & forecast)	Icing: none Turbulence: none X-Winds: ≤ 5 kts.	**0** **0** **0**	Icing: none Turbulence: lite.-mod. X-Winds: > 5 ≤ 10 kts.	**0** **10** **5**	Icing: ≥ light Turbulence: severe. X-Winds: > 10 kts.	**No Go** **No Go** **50**	
VFR Flight ceiling/vis	≥ 3000 agl And ≥ 5 sm	**0**	≥ 1,000 agl < 3,000 agl And / or ≥ 3 < 5 sm	**25**	< 1,000 agl and / or < 3 sm visibility	**No Go**	
IFR Flight ceiling/vis	≥ 500 agl < 1,000 agl and/or ≥ 1 sm < 3 sm visibility	**25**	< 500 agl and/or < 1 sm visibility	**50**	Below departure airport approach minimums	**No Go**	
Terrain	Low, flat	**0**	Foothills / featureless	**15**	Mountainous	**30**	
Night Ops			V F R	**25**	I F R	**75**	
Airfield	Familiar	**0**	Unfamiliar	**25**			
ADDITIONAL FACTORS							
CAPF 5 & 91	No forced landings or simulated engine cuts	**0**	Forced landings and/or simulated engine cuts	**50**			
Overwater			Within gliding distance of land	**50**	Outside gliding distance of land	**100**	
Extended Overwater			With immersion suit Water temp < 60° F	**75**	Without immersion suit Water temp < 60° F	**No Go**	
TOTAL CALCULATED RISK ASSESSMENT:							**0**

OVERALL RISK ASSESSMENT		Initials	Date / Time
Low Risk = 0 — 75 †	FRO		/
Moderate Risk = 76 — 150 †	Squadron DO / DOS / CC or AOBD		/
High Risk = > 151 †	Wing DO / DOS /CC or IC		/
No Go	Mission can be rejected by any direct participant at any level		/

Notes: * Implement suitable controls for any item in the high range. † Approvals are granted in ascending order of command *and only with PIC concurrence*. **All approvals are optional, based upon local procedures and established Wing policies.**