

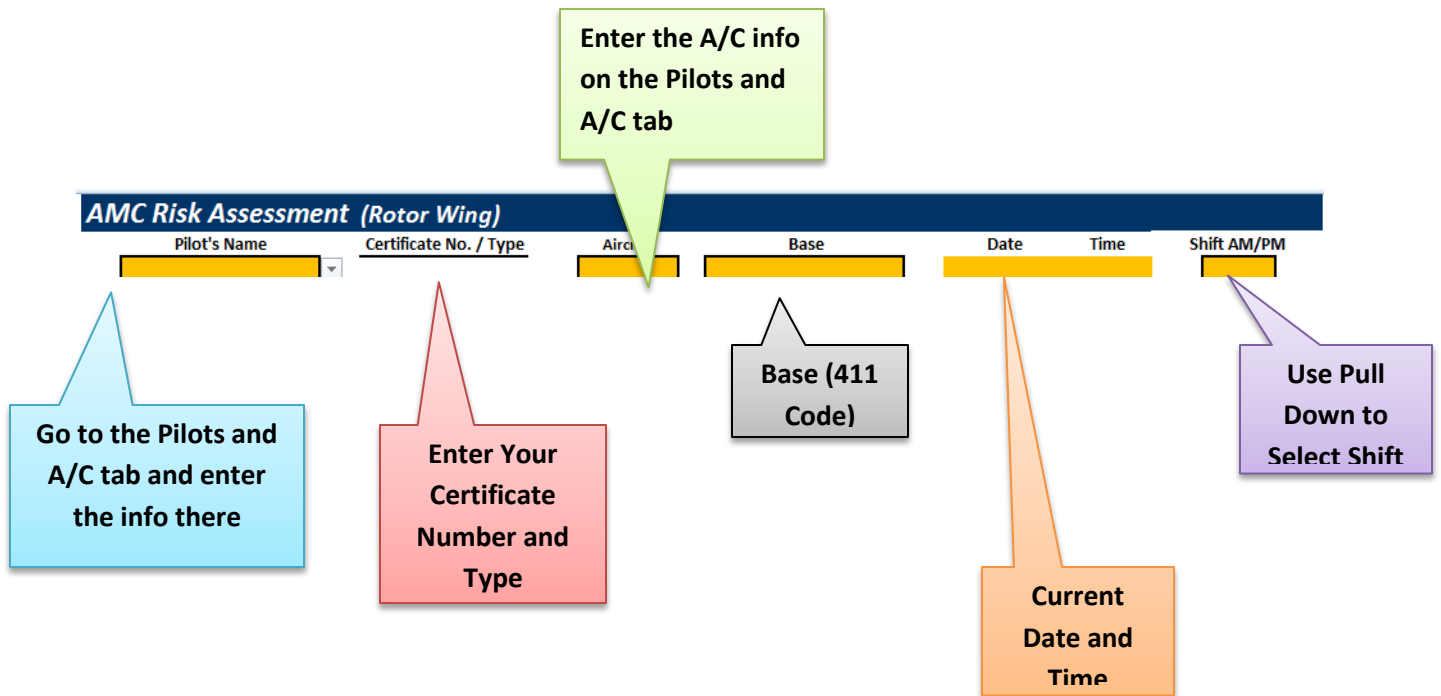
# Risk Assessment Tool

The New Risk Assessment Tool is designed to provide the pilot with a robust method of assessing the risk for each shift, leg and flight. The document is in an Excel format and is available on the Portal (insert http here).

There are five sections to the Tool:

- The Header, which contains fields to personalize the form
- The “Shift Change” field
- The “Aircraft” field”
- The “Flight Request” field
- The Footer, which contains threshold data

First, the Header - Each pilot should fill in the information requested as follows:



On the left side of the sheet is the “Shift Change” field. This contains risks that probably will not change during the shift (static) and therefore can be completed at the beginning of each shift.

<b>AT SHIFT CHANGE</b>		<i>value</i>
<b>Pilot and Medical Crewmembers:</b>		
1) Pilot has < 1 year Single Pilot or HEMS experience	<input type="checkbox"/>	5
2) Pilot has < 1 year experience at current base	<input type="checkbox"/>	3
3) Pilot has < 3,000 total RW flight hours	<input type="checkbox"/>	4
4) Pilot has < 100 flight hours in make/model	<input type="checkbox"/>	4
5) Pilot's last flight greater than 30 days	<input type="checkbox"/>	3
6) Pilot's last NVG flight greater than 30 days	<input type="checkbox"/>	3
7) Pilot's last instrument approach greater than 90 days	<input type="checkbox"/>	3
8) Pilot has had a break in service with Air Methods (>60 days)	<input type="checkbox"/>	5
9) Med crewmember not ACRM trained	<input type="checkbox"/>	3
10) Med crewmember has < 2 years HEMS experience	<input type="checkbox"/>	2
11) Med crewmember is not NVG qualified/current	<input type="checkbox"/>	4
12) Pilot/Med crewmember's NVG experience less than 50 hrs	<input type="checkbox"/>	3
13) New Medical Crew/Pilot mix	<input type="checkbox"/>	3
14) Pilot is on 4th (or greater) consecutive Shift	<input type="checkbox"/>	4
<b>Crew Subtotal:</b>		<input type="text"/>
<b>Aircraft:</b>		
1) IFR capable aircraft	<input type="checkbox"/>	-1
2) NVG compatible aircraft	<input type="checkbox"/>	-1
3) Operational autopilot	<input type="checkbox"/>	-1
4) Inoperative forced trim system (if installed)	<input type="checkbox"/>	3
5) Inoperable or non-TCAS aircraft	<input type="checkbox"/>	4
6) Navigation/Radio/AFCS/CSAS equipment on MEL	<input type="checkbox"/>	2
7) Unfamiliar Navigation/ Radio equipment	<input type="checkbox"/>	3
8) Scheduled heavy maintenance due within 8 flight hours	<input type="checkbox"/>	2
9) Inoperative heating/air-conditioning system ( $\leq 30^{\circ}\text{F}$ , $\geq 75^{\circ}\text{F}$ )	<input type="checkbox"/>	4
10) A/C weight within 200 lbs of max HOGF or has CG issues	<input type="checkbox"/>	3
11) Spare aircraft to be utilized (and is different from Primary)	<input type="checkbox"/>	3
12) Multiple aircraft at location	<input type="checkbox"/>	3
<b>Aircraft Subtotal:</b>		<input type="text"/>

Most of the lines are self-explanatory. However:

Shift Change, Line 6 – ACRM (Air Crew Resource Management) - if the crewmember has received AMC’s Medical Crewmember Training and is actively participating in Medical Crewmember CTS, then this block can be ignored.

Aircraft, Line 1- An IFR capable aircraft is defined as one where there is an IFR/DIFR/SPIFR Supplement or STC in the RFM and all of the items required are functional.

Aircraft, Line 8 – Scheduled Heavy Maintenance is defined as a maintenance event that will take the A/C OOS for longer than 72 hours.

Aircraft, Line 12 – Multiple A/C can mean either A/C that are permanently based at the location or the possibility that there is a spare there temporarily.

On the right side of the sheet is the “Flight Request” field. This contains risks that may (i.e. probably will) change each time you fly. These are the dynamic risks.

<b>Flight Request:</b>	<i>value</i>	
1) Weather below AMC minimums	<input type="checkbox"/> NF	
2) Reported icing conditions along route	<input type="checkbox"/> NF	
3) Upon landing Fuel will be less than Reserve + 10 minutes	<input type="checkbox"/> NF	
4) T/D for wx by other operator for icing, T-storms or below VFR	<input type="checkbox"/> 5	
5) Flightcrew has flown >3 flights during their current shift	<input type="checkbox"/> 5	
6) Wind > than 30 Knots or spread > than 15 Knots	<input type="checkbox"/> 5	
7) Moderate turbulence	<input type="checkbox"/> 4	
8) Flight in or near mountainous terrain (95.11 defined)	<input type="checkbox"/> 5	
9) Flight over hazardous terrain (as locally defined)	<input type="checkbox"/> 4	
10) Scene flight	<input type="checkbox"/> 4	
11) Specialty flight (e.g. search & assist, NICU, etc.)	<input type="checkbox"/> 4	
12) Unaided night VFR flight	<input type="checkbox"/> 5	
13) Night flight utilizing NVG	<input type="checkbox"/> 2	
14) Night illumination less than 28%	<input type="checkbox"/> 3	
15) Ground reference low	<input type="checkbox"/> 4	
16) Flight taking place between 1:00AM - 5:00AM	<input type="checkbox"/> 4	
17) Landing surface has snow, ice or standing water	<input type="checkbox"/> 4	
18) Ceiling within 200 ft of Base/Pilot minimums	<input type="checkbox"/> 4	
19) Visibility within 2 miles of Base/Pilot minimums	<input type="checkbox"/> 4	
20) Convective activity within 25 miles of route	<input type="checkbox"/> 4	
21) Temp./dew point within 2° F with < 5 Knots wind	<input type="checkbox"/> 4	
22) Route of flight greater than 150nm (round trip)	<input type="checkbox"/> 3	
23) SPIFR flight	<input type="checkbox"/> 1	
24) Forecasted icing conditions along route	<input type="checkbox"/> 5	
25) Single engine flight over heavily populated area or < 1,000' AGL	<input type="checkbox"/> 3	
26) Air temperature greater than 95° or less than 20° F	<input type="checkbox"/> 2	
27) Possible bird activity (Migratory or Indigenous)	<input type="checkbox"/> 3	
28) Operations in Class B or C airspace or near TFR	<input type="checkbox"/> 1	
29) Flight within local flying area	<input type="checkbox"/> -1	
<b>Flight Request Subtotal:</b>		<input type="text"/>

This section is also self-explanatory. A few clarifications:

Line 4 – This can be confusing if the weather is fine at the base but another operator turned it down because of lousy weather elsewhere. It is meant to cause the PIC to double check and find out why the flight was turned down (perhaps the other operator/base saw something the PIC missed).

Line 11 – This also includes any avalanche beacon work. Hoist operations will have a separate Risk Assessment Tool.

Line 15 – This is subjective. If the pilot feels that ground reference is low, then he should check the box. If he is comfortable with the reference level, then he should ignore the line.

Each section adds up automatically and then provides a Risk Assessment Total for the section and for the entire sheet in the bottom left hand corner. Additionally, the Risk Thresholds are in the blue bar along the bottom of the sheet.

**LOW(<30)/MED(30-49) = Mitigate as Necessary    HIGH(>50) = Mitigate to Low/Med    EX HIGH (>64) = Mitigate to Low/Med or Decline**

Mitigating the risk, either for individual section or for the sheet as a whole, is left to the discretion of the PIC. Mitigating factors can be as varied as the risks themselves. Pilots can use any method of mitigating the risks that they find workable and acceptable, so long as the mitigators do not violate any FAR or company policy. Additionally, if the PIC cannot mitigate a High or Ex High risk to an acceptable level for flight acceptance, then the PIC might consider conferring with either the OCC or with their Regional Management structure in an attempt to gain assistance in finding mitigators to a lower risk threshold.

Complete an initial RA at the beginning of each shift. Then print the page and take it with you in the A/C so you can re-adjust the RA number/level for each leg of the flight. The RA number will be entered on the DFL in the remarks section. Each leg must have an RA number.

For questions, concerns or help – please send an email to:



And put “Risk Assessment” in the subject line.