

- For IFR flights, or flights not in the vicinity of the airport/heliport (helistop); weather reports, forecasts, alternates, and known air traffic delays.
- For all flights; runway lengths, takeoff and landing requirements as indicated by an approved Aircraft Flight Manual, if a flight manual does not exist, the pilot information manual.
- NOTAMs (FDC, D, and L as applicable), including TFRs.
- Condition of navigation facilities.
- Weather (including hazards).
- Medical control, flight following centers, and medical personnel/crewmembers will be kept abreast of any weather or operational limitations, which may affect medical flights.

## **2.49 Pilot's Maintenance and Servicing Procedures**

In certain cases, Air Methods' pilots may be authorized to perform specific maintenance on an aircraft. The pilot will be trained, qualified, and authorized to do the task in accordance with Air Methods' Pilot Maintenance and Servicing Procedures (PMSP). Any preventive maintenance performed by the pilot will be documented in the aircraft maintenance records in accordance with FAR 43.9 and the Air Methods' PMSP. The completed training record and quiz shall be forwarded by the Authorized Instructor to the Pilot Records Department via the proper 135FORMS email address for disposition into the Pilot's training records. Pilot Training Records Specialists are agents for the Chief Pilot. Servicing items such as refueling, adding oil to engines and gearboxes are not considered preventive maintenance. Pilots will not perform specific maintenance on any aircraft or system for which they have not received training.

## **2.50 Risk Assessment Program**

To assist in reducing incidents and accidents, Air Methods has developed and implemented an operational risk assessment program to assist pilots in identifying, assessing, and managing risks and then ensuring that they are mitigated, deferred, or accepted.

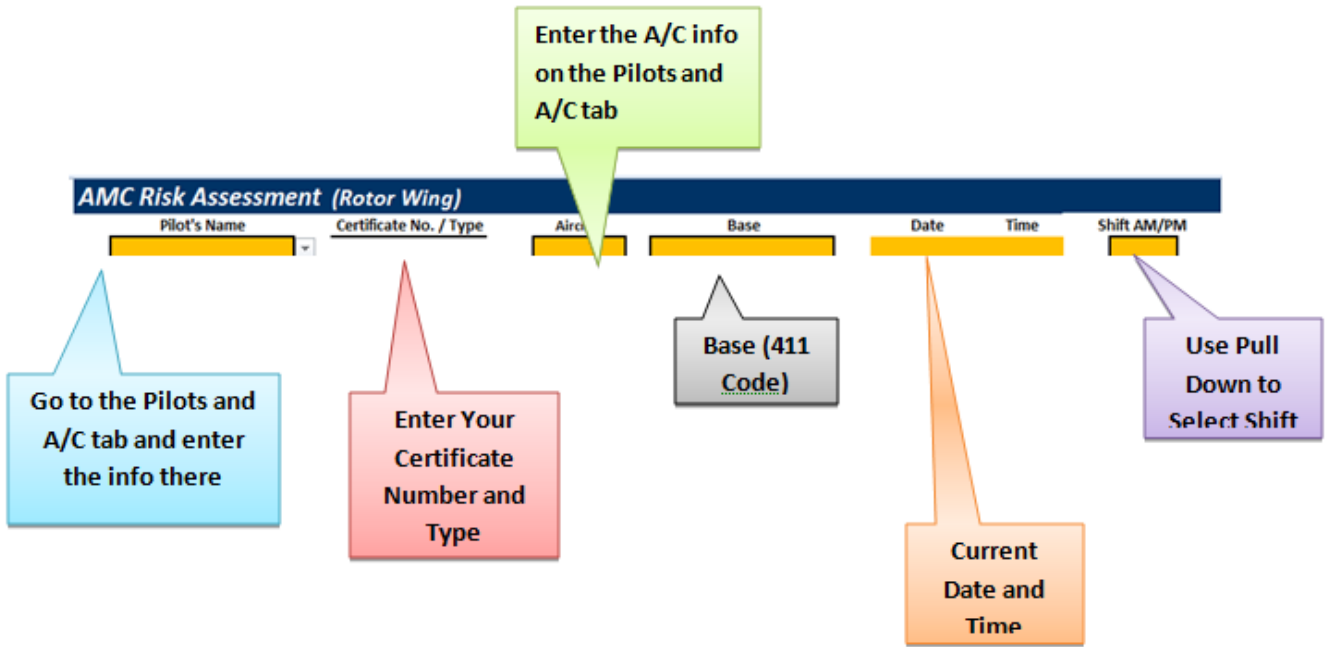
The Risk Assessment Tool is designed to provide the pilot with a robust method of assessing the risk for each shift, leg, and flight. The document is in an Excel format and is available on FlightDeck > 135 Aviation Ops > Risk Assessment. Right click on the document and "Save As" to your computer before you begin working with the sheet. This will prevent modification to the Master Sheets in the Intranet Folder.

There are five sections to the Tool:

- Personal Information
- Shift Change Information
- Aircraft Information
- Flight Request Information
- Threshold Data

### **2.50.1 Personal Information Section**

Each pilot should fill in the information requested in the header, as follows:



2.50.2 Shift Change Section

On the left side of the tool is the "Shift Change" section (shown below). This section contains risks that probably will not change during the shift (static) and therefore can be completed at the beginning of each shift. Check all those that apply.

Most of the lines in this section are self-explanatory, however:

- Shift Change, Line 9 – 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.













<b>AT SHIFT CHANGE</b>	<i>value</i>
<b><i>Pilot and Medical Crewmembers:</i></b>	
1) Pilot has < 1 year Single Pilot or HEMS experience	<input type="checkbox"/> 5 <span style="background-color: #00FF00; width: 15px; height: 15px; display: inline-block;"></span>
2) Pilot has < 1 year experience at current base	<input type="checkbox"/> 3 <span style="background-color: #00FF00; width: 15px; height: 15px; display: inline-block;"></span>
3) Pilot has < 3,000 total RW flight hours	<input type="checkbox"/> 4 <span style="background-color: #00FF00; width: 15px; height: 15px; display: inline-block;"></span>
4) Pilot has < 100 flight hours in make/model	<input type="checkbox"/> 4 <span style="background-color: #00FF00; width: 15px; height: 15px; display: inline-block;"></span>
5) Pilot's last flight greater than 30 days	<input type="checkbox"/> 3 <span style="background-color: #00FF00; width: 15px; height: 15px; display: inline-block;"></span>
6) Pilot's last NVG flight greater than 30 days	<input type="checkbox"/> 3 <span style="background-color: #00FF00; width: 15px; height: 15px; display: inline-block;"></span>
7) Pilot's last instrument approach greater than 90 days	<input type="checkbox"/> 3 <span style="background-color: #00FF00; width: 15px; height: 15px; display: inline-block;"></span>
8) Pilot has had a break in service with Air Methods (>60 days)	<input type="checkbox"/> 5 <span style="background-color: #00FF00; width: 15px; height: 15px; display: inline-block;"></span>
9) Med crewmember not ACRM trained	<input type="checkbox"/> 3 <span style="background-color: #00FF00; width: 15px; height: 15px; display: inline-block;"></span>
10) Med crewmember has < 2 years HEMS experience	<input type="checkbox"/> 2 <span style="background-color: #00FF00; width: 15px; height: 15px; display: inline-block;"></span>
11) Med crewmember is not NVG qualified/current	<input type="checkbox"/> 4 <span style="background-color: #00FF00; width: 15px; height: 15px; display: inline-block;"></span>
12) Pilot/Med crewmember's NVG experience less than 50 hrs	<input type="checkbox"/> 3 <span style="background-color: #00FF00; width: 15px; height: 15px; display: inline-block;"></span>
13) New Medical Crew/Pilot mix	<input type="checkbox"/> 3 <span style="background-color: #00FF00; width: 15px; height: 15px; display: inline-block;"></span>
14) Pilot is on 4th (or greater) consecutive Shift	<input type="checkbox"/> 4 <span style="background-color: #00FF00; width: 15px; height: 15px; display: inline-block;"></span>
<b>Crew Subtotal:</b>	<input style="width: 50px; height: 20px;" type="text"/>

2.50.3 Aircraft Section

Also on the left side of the tool is the “Aircraft” section (shown below). These are also risks that probably will not change during the shift (static) and therefore can be completed at the beginning of each shift. Check all those that apply.

Most of the lines in this section are self-explanatory, however:

- 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 out of service for longer than 72 hours.
- Aircraft, Line 12 - Multiple Aircraft can mean either aircraft that are permanently based at the location or the possibility that there is a spare there temporarily.

<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 HOGE 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"/>

#### 2.50.4 Flight Request Section

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

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

- Line 1 – If the weather is below AMC minimums, then the flight is obviously a no-go unless the weather improves.
- Line 2 – This is an obvious “No Fly”.
- Line 3 – This is included to require the pilot to conduct a “second” look at his fuel status – specifically, if there are conditions that might cause that status to be within 10 minutes of the reserve (winds, weather that might require a deviation from the planned course, etc).
- Line 4 – This can be confusing if the weather is fine at the base but another operator turned it down because of poor 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.

<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"/>

2.50.5 Risk Thresholds Section

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 (shown below).

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

Mitigating the risk, either for individual sections or for the entire tool, is left to the discretion of the PIC. Even if the Risk Assessment shows an “NF”, the PIC still retains the authority to make the final decision. 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 mitigations do not violate any FAR or company policy. Additionally, if the PIC cannot mitigate an NF, 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 mitigations to a lower the risk threshold.

These matrices must be made available to each pilot and the pilot must utilize them before making a decision to accept or decline a flight assignment. The pilot will advise the communications center of their risk assessment value (A=Low, B=Med, C=High or D=Ex High) by phone, in person, or by radio prior to liftoff or as soon as possible after liftoff.

Complete an initial Risk Assessment at the beginning of each shift. Complete as much of the sheet as you can: If the line applies, click the box. If the line does not apply, do not click the box. Once completed, print the page and take it with you in the aircraft so you can re-adjust the Risk Assessment number/level for each leg of the flight. Enter the Risk Assessment number on the DFL in the Remarks section. Each leg must have a Risk Assessment number.

For Flight Log entries (the dispatch software used at AirCom and in hospital communication centers), use the old letter system (A=Low, B=Med, C=High, D=Ex High).

Retain these for 30 days and then discard them. We are not asking you scan and submit (as you do with the DFL). This entire process will eventually move to an online format, which will allow us to gather specific data.

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

[pilotrisk@airmethods.com](mailto:pilotrisk@airmethods.com)

**NOTE:** Please put “Risk Assessment” in the subject line.

## 2.51 Runway Incursions

The FAA defines *runway incursion* (in part) as, "Any occurrence at an airport involving an aircraft, vehicle, person, or object on the ground that creates a collision hazard or results in a loss of separation with an aircraft taking off, intending to takeoff, landing or intending to land". It is the responsibility of each pilot (PIC or SIC) operating an Air Methods aircraft to prevent runway incursions.

The following procedures, though not all inclusive, when utilized will help prevent runway incursions:

- Pilots operating aircraft without a SIC shall review airport diagrams prior to entry into the traffic pattern or prior to hover/taxi operations. Airplane pilots should have the airport diagram out for reference during all taxi operations.
- Pilots operating aircraft with an SIC will have the airport diagram out and available for reference by the pilot not flying during all taxi operations.
- Review all NOTAMs for runway/taxiway closures and construction areas.
- Request progressive taxi instructions when unsure of the taxi route.
- Turn on aircraft lights while taxiing.
- It is advisable to write down taxi instructions so as to not forget instructions and to act as a guide for reading back clearances.

- In a two pilot crew configuration, any disagreement over taxi instructions must be resolved prior to beginning the taxi operation.
- All pilots shall read back all taxi and hold short of runway instructions in the order issued by ATC. Reading back instructions in the order issued by ATC will help prevent “hear back/read back” errors. Standard phraseology will be used to facilitate clear, concise communication between the flight crew and ATC.
- While taxiing, monitor instructions to other aircraft and question ATC as soon as possible if a conflict between your and another becomes apparent.
- Prior to taking a runway for takeoff, scan the full length of the runway and approach paths for other conflicting aircraft.
- Do not hold in position for an extended period of time on an active runway without direct communication with ATC. This is especially important at night.
- Clear the active runway on rollout as quickly as possible, and then wait for taxi instructions before further movement.
- When approaching to land, monitor ATC instructions to other aircraft to “taxi into line up and wait” for the runway you are cleared to land on. Also be aware of other aircraft being cleared to land on the same runway you have been cleared to land on.
- At uncontrolled airports, or airports without operational control towers:
  - Follow Standard air traffic procedures. Utilize AF/Ds or other similar commercial products to determine if other than standard traffic pattern procedures are dictated for the particular airport where operations are planned.
  - Monitor CTAF or UNICOM as recommended in the AIM.
  - State the name of the airport at the beginning and end of each radio transmission.

Further guidance may be found in the Aeronautical Information Manual.

## **2.52 Safety Belts, Child Restraints, and Carry On Baggage**

[91.517]

Each required flight crewmember, occupying a station equipped with a seat belt and/or shoulder harness, shall have that seat belt and (when equipped) shoulder harness fastened at all times when at that station. The shoulder harness may be removed if it inhibits performance of the individual’s required duties, except during takeoff, approach, landing, and surface operations.

Each passenger, including medical personnel, who has reached their second birthday, shall occupy an approved seat or berth with a separate safety belt properly secured about them during surface movement, takeoff, and landing.

A child who has not reached their second birthday may be held in the lap of an adult. The adult and child may not share a restraining device.

Any child seat utilized must conform to all applicable motor vehicle standards and have on it, in red letters, the following statement: “THIS RESTRAINT IS CERTIFIED FOR USE IN MOTOR VEHICLES AND