

OPERATIONS MANUAL



REVISION 06 - 02/25/2016

██████████ SHREVEPORT, LOUISIANA 71137
OFFICE: ██████████ FAX ██████████

M. Operational Control Coordinator (OCC) / Operational Control Supervisor

- 1) Operational Control Coordinators will be trained in accordance with the Metro Aviation Training Manual.
- 2) The OCC is responsible for confirming whether a flight or series of flights can be initiated, conducted, or terminated safely and in accordance with the authorizations, limitations, and procedures in this manual, and the applicable regulations.
- 3) The OCC will review Metro Aviation Form OCF-1 to confirm the readiness for flight of each assigned pilot and aircraft, with any restrictions to the crew or aircraft. The OCF-1 will also be updated with any changes to status or any deferred maintenance and applicable restrictions.
- 4) The OCC is responsible for confirming PIC initiates a flight or series of flights, and determining the flight(s) are conducted and terminated safely. The OCC reviews this information on Metro Aviation Form OCF-2.
- 5) The OCC is responsible for ensuring that applicable company policies and procedures are followed and adhered to as they relate to his/her job description.
- 6) The OCC is authorized to terminate a flight for any reason that may be contrary to FARs or policy.

N. Director of Part 135 Training

The Director of Part 135 Training reports to the Director of Operations and is responsible for all administrative, operational, and budgetary functions of the Part 135 Training Department.

- 1) Supervises all MAI Part 135 headquarters-based and field assigned training personnel.
- 2) Directs company-wide training schedules / activities and required personnel.
- 3) Manages Part 135 interests in company owned Level-D Flight Simulators and Flight Training Devices.
- 4) Develops training department policy and procedure.
- 5) Directs the development of company training programs including, but not limited to:
 - Basic indoctrination training
 - Initial and recurrent flight training
 - Initial and recurrent ground training
 - Instrument training (ground and flight)
 - Night Vision Goggle training (ground and flight)
 - Requalification training
 - Transition training
 - MAI-specific medical crew training
 - Operational Control Specialist training
 - Line Oriented Flight Training (LOFT)
 - Scenario-based simulator training
- 6) In accordance with applicable FAR and MAI policy, coordinates pilot record keeping with the Chief Pilot.
- 7) Understands and is knowledgeable of applicable FARs, FAA Orders, Advisory Circulars, and MAI policy and procedure.
- 8) As requested, develops and distributes department report to the Director of Operations or Chief Pilot.
- 9) Coordinates with the Director of Operations and Director of Maintenance to assign field aircraft to training events.

- 2) Maintenance Memo (MM)
 - a. These will be distributed to licensed, or unlicensed technicians directly involved with the maintenance or repair of aircraft and when applicable to others that a specific memo may affect.
 - b. These memos will be used to distribute information that will enhance or change the maintenance practices of MAI.
- 3) Company Policy Memo (CP)
 - a. These memos will be distributed to all employees. They will be used to inform employees about changes to the company policy manual and also to distribute information regarding changes in company programs directly affecting the employee. Each employee has been issued an employee handbook and it is recommended that these memos be kept in those manuals.
- 4) General Information Memo (GI)
 - a. These memos will be used as reminders to all or specific employee groups covering previously issued memos or general information.

4. Conduct of Operations

- A. Transportation of customers and property will be rendered in a safe and efficient manner within the highest safety standards. Employees must operate within the scope of all company policies and Federal Aviation Regulations. The operations of the company are governed by the applicable parts of FARs 91 and 135, Metro Aviation, Inc. Operations Manual and the Operations Specifications approved by the FAA.
- B. The Pilot-in-Command of the aircraft has final authority and responsibility for decisions relating to safety of flight and will select the most conservative course of action if a conflict arises concerning a Metro Aviation, Inc. policy or procedure, an FAR or other civil rule.

5. Customer Relations

- A. The principle aim of the company is to provide all customers with the best possible service and maximum convenience while maintaining the highest level of safety in all ground and flight operations.
- B. At all times, contact with the customer is to be conducted in a courteous and professional manner.
- C. Customers will not be involved in inter-company conflicts nor should company personnel involve the customer in problems of maintenance, aircraft availability, etc., beyond the extent that it effects availability of service. Keep all company situations within the company.
- D. Company personnel should not get involved with customer conflicts unrelated to our contracted work.

6. Disciplinary Action

Any failures to comply with FARs, Operations Manual, Policies, or Procedures are subject to disciplinary actions as provided in Metro Aviation, Inc. Employee Manual, and may be subject to legal enforcement action by the FAA.

7. Drugs and Medications

- A. Pilots will not assume flight duty if any prescription or nonprescription drug is taken whose initial or residual affects might interfere with the ability to perform his/her flight duties safely.
- B. Any doubt as to the affect of drugs or medication will rest on the advice of a physician.

SECTION 200 - OPERATIONAL CONTROL**201 - OPERATIONAL CONTROL**

The following individuals are authorized to exercise operational control and may authorize others who are trained and qualified to exercise the authority of operational control as required by FAR 135.77.

Director of Operations
James Arthur
██████████
Shreveport, LA 71137

Chief Pilot
Kenneth P. Morrow
██████████
Shreveport, LA 71137

Director of Maintenance
Mark Breton
██████████
Shreveport, LA 71137

In addition to the above named representatives, Operational Control is delegated to the duty positions listed below, with the scope of operational control indicated.

- Operational Control Coordinator – Confirm aircraft and crew member status – monitor and terminate flights as appropriate to the status.
- Aviation Site Manager/Lead Pilot – Schedule or assign a current, qualified crew member.
- Pilot-in-Command – When scheduled or assigned to duty can initiate, conduct and terminate a flight or series of flight.

Any of the individuals authorized to exercise operational control will ensure that when safety conditions can not be met, the flight is canceled, delayed, rerouted or diverted appropriate to the risk.

A list of employees authorized to exercise operational control is kept on file at Metro Aviation, Inc.'s Shreveport, La. office, on the company web site, at each base and filed with the BTR FSDO. This list will be updated as necessary.

1. General Operational Control

Operational Control is a two tier system. The first tier involves the placement of an airworthy aircraft, listed in Op Specs D085 and a current and qualified crew.

The second tier is determining whether a flight or series of flights can be initiated, conducted, or terminated safely and in accordance with all policies, procedures, general operations manual and regulations.

2. Operational Control Center

The Operational Control Center (OCC) at Metro Aviation, Inc. in Shreveport will be staffed 24 hours per day with appropriately trained Operational Control Coordinators. Upon completion of the OCF-1 form by the field pilot, it will be transmitted to the OCC either telephonically, via fax or via the MAI company web site. The OCC will review the information. In addition to the review, the OCC will monitor the continuing operations via the OCF-2 forms.

The OCC will continually monitor flight operations, weather trends and aircraft status.

Any change that may affect the ability of the pilot to initiate, conduct, or terminate a flight or series of flights in accordance with the Operations Manual, Operations Specifications, or Metro Operations Memos,

the OCC will establish immediate contact with the duty pilot or the Flight Com center agent with the information. In no case is the OCC instructing the pilot to make a flight or series of flights; however, the OCC does have the authority to terminate a flight or series of flights that if made, would cause the Operations Specifications to be violated.

In the event of an overdue aircraft, aircraft emergency or precautionary landing, the Communications Specialist will notify the OCC, who will then notify the appropriate individuals per the PAIP.

3. Operational Control Coordinator

The Operational Control Coordinator (OCC) will:

- A. Operational Control Coordinator must complete training in accordance with Metro Aviation Training Manual section 1850.
- B. For each base of responsibility, the OCC shall review and mark as reviewed, the Metro Aviation Form OCF-1 found on [REDACTED] to determine that a qualified crew and airworthy aircraft is placed in service. Any restriction to the crew or deferred maintenance on the aircraft must be noted on the OCF-1 (i.e. restricted from Night, IFR, NVG or etc.). The OCF-1 may be received telephonically or fax when website information is not available.
- C. The OCC will monitor each flight or series of flights that is initiated, and ensure safe termination of the flight(s). This will be accomplished by the Metro Aviation Form OCF-2 found on [REDACTED] or through information received from base flight coordinators or Metro Aviation personnel.
 - 1) The OCF-2 will indicate that it has changed/edited or has an entry in the “comments” by a bold dispatch number.
 - 2) The ETE/ETA field will be bold if the flight is scheduled to exceed the pilots 12 hrs of duty time, in such case, the OCC will pay particular attention that the pilot does not exceed 14 hrs of duty.
- D. If notified of an in-flight emergency, or of an overdue aircraft, by the Flight Coordinator or other flight following agencies, the OCC will be immediately notified and ensure current Post Accident/Incident Plan (PAIP) procedures are initiated and followed.
- E. At any time, in the event that the OCC becomes aware of a potential risk or issue of non-compliance with the authorizations, limitations, and procedures in this manual, and the applicable regulations, the OCC has the authorization to terminate a flight in a manner appropriate to the risk.

4. Flight Coordinator

The Flight Coordinator will:

- A. Flight Coordinators will be trained in accordance with Training Manual section 1860.
- B. Enter flight request information to the OCF-2. Upon receiving acceptance or decline from the pilot, that information will be entered on the OCF-2 on [REDACTED] This action will generate a Flight Control Number which will be given to the pilot. The OCF-2 will be sent to the OCC telephonically or by fax when website is not available.
- C. Maintain current and all required flight plan information required per FAR 91.153 on file at the base of operations.

NOTE: This information is: Aircraft Registration number/Call Sign, Type Aircraft, Name and address of Pilot-in-Command, point of departure, proposed route of flight, altitude or “VFR”, true airspeed, point of first intended landing, estimated time to that point, fuel on board (in hours), and the number of people on board.

commercial flying by the flight crew member may not exceed -

- i. 8 hours for a flight crew consisting of one pilot; or
 - ii. 10 hours for a flight crew consisting of two pilots; and
 - iii. If the combined duty and rest periods equal 24 hours
- 8) Each assignment under FAR 135.267 must provide for at least 10 consecutive hours of rest during the 24 hour period that precedes the planned completion time of the assignment.
 - 9) When a flight crew member has exceeded the daily flight time limitations in this section, that crew member must have a rest period in accordance with FAR 135.267 before being assigned or accepting an assignment for further flight time.
 - 10) Prior to the end of shift, the pilot will enter the total flight time flown during the duty period by logging on to the website, and choosing the "Duty/Flight" tab from the top row, and then choosing the "Flight Time" tab from the submenu.
 - 11) FAR 135.267, When a flight crew member has exceeded the daily flight time limitations in this section, because of circumstances beyond the control of the certificate holder or flight crew member (such as adverse weather conditions) that flight crew member must have a rest period before being assigned or accepting an assignment for flight time of at least-
 - a. Eleven consecutive hours of rest if the flight time limitation is exceeded by not more than 30 minutes;
 - b. Twelve consecutive hours of rest if the flight time limitation is exceeded by more than 30 minutes, but not more than 60 minutes; and
 - c. Sixteen hours of rest if flight time is exceeded by more than 60 minutes.
 - 12) The certificate holder must provide each flight crew member at least 13 rest periods of at least 24 consecutive hours each calendar quarter.
 - 13) All flight crew members will log all commercial flight time on the Metro Aviation flight and duty log. In addition to logging commercial flight time, all other flight time should be logged.

C. Preflight Duties

- 1) Pilot's Shift Briefing – The pilot starting duty, and the pilot being relieved of duty will conduct an informative shift briefing to review weather status, ASRs, aircraft airworthiness, and any other pertinent information.
- 2) Log in for Duty - All pilots are to log on to the Metro Aviation, Inc. website (www.metroaviation.com) at the beginning of each shift. Enter the actual date and time of the start of your duty shift. At the ending of your duty shift you will enter the actual date and time you are ending the shift.
- 3) A detailed weather briefing must be obtained prior to flight that includes current and forecast weather conditions for the point of departure, en route phase(s), destination(s), and alternate(s), including NOTAMS utilizing sources approved in the Metro Aviation Operations Specifications Part A010. This briefing should be updated at intermediate stops whenever possible.
- 4) Risk Assessment – Pilots must perform a Preflight Risk Analysis prior to the first leg of each air ambulance operation. Refer to Section 12, Operational Risk Analysis in this chapter for risk analysis procedures.
- 5) Determine that the aircraft is loaded in compliance with applicable weight and balance procedures set forth in this Operations Manual and the approved Aircraft Flight Manual weight and balance section and compute a weight and balance calculation for the standard fuel load and the current medical attendants on shift.
- 6) The aircraft Flight and Maintenance Log Book and Status Sheet must be checked for status and deferred maintenance. Any discrepancies must be complied with or deferred in accordance with the Minimum Equipment List (MEL), and signed off prior to flight. If Metro Aviation Maintenance personnel are present, the PIC starting duty will conduct an informative shift briefing with a mechanic to review Aircraft Airworthiness, Deferred Discrepancies, Upcoming

7. Flight Plans

- A. All company aircraft will file a flight plan using one or more of the following:
- 1) FAA Flight Service Station
 - 2) An Internet Web based service (██████████)
 - 3) Hospital Flight Coordinator at the Hospital of operation for EMS operations.
 - 4) Offshore Flight Coordinator for Gulf of Mexico Operations.
 - 5) Responsible individual(s) who have detailed information of the operation in remote areas.
- B. All flight plans not filed with FSS must include the same information required on FAA VFR flight plans (FAR Part 135.79).
- C. When the PIC files a flight plan with the Hospital Flight Coordinator or Offshore Flight Coordinator he/she is responsible for advising the Flight Coordinator of any delays or changes.

8. Inadvertent IMC or Loss of Visual Surface Reference

Inadvertent IMC does not only mean situations where an aircraft enters clouds, but also entering areas of reduced visibility, darkness with no ground lighting, and/or lowering ceiling resulting in the loss of visual ground reference. Pilots are expected to avoid inadvertent IMC and the loss of visual surface reference by maintaining situational awareness of weather changes and environmental conditions.

Pilots should be prepared for the possibility of inadvertent IMC or loss of visual surface reference. All company aircraft will carry current instrument approach charts and low altitude en route maps for the area where the aircraft is assigned or expected to be flown. These charts and maps are to be used in the event that the aircraft enters into “inadvertent IMC” or “loss of visual reference”.

A minimum safe altitude chart for each base local area will be carried on each base aircraft for quick reference by the pilot. The chart will also be posted in the pilot flight planning area at each base. The MSA chart will depict up to four sectors of the local area centered on the base with approach frequencies and minimum safe MSL altitudes depicted for each sector. The minimum safe altitude for each sector will be 1000 feet above the highest obstacle within that sector and depicted in MSL (an example MSA chart is in [Appendix I](#)). The MSA chart will be checked for accuracy with each new sectional chart issue and dated to indicate its currency.

Minimum safe altitudes outside the local area will be 1000 feet above the maximum elevation figure as depicted on the VFR Sectional Chart for the aircraft location or the minimum off route obstruction clearance altitude as depicted on IFR Low En route chart.

Inadvertent IMC is an emergency situation which requires maximum pilot attention. Good crew resource management is essential to safely deal with the emergency and make a successful recovery. Pilots will brief their medical crew members on their roles and responsibilities in the event of an inadvertent IMC prior to flight in marginal VFR conditions or en route if marginal VFR conditions are encountered.

In case of inadvertent IMC or Loss of visual surface reference the following procedure will be followed:

- A. Maintain positive control of the aircraft with reference to instruments
 - 1) Attitude - Level
 - 2) Heading – Turn only to avoid known obstacles
 - 3) Power – Adjust to climb power
 - 4) Airspeed – Adjust to climb airspeed
 - 5) Make turns no greater than standard rate
- B. Climb to the minimum safe altitude (MSA) to clear all obstacles in the area.
- C. Communicate
 - 1) Declare an emergency to ATC
 - a. Squawk 7700
 - b. Report:
 - i. last known position,
 - ii. heading, altitude,
 - iii. fuel remaining, and
 - iv. souls on board
 - 2) State nature of emergency (inadvertent IMC), intentions, and request for assistance
 - a. Weather: Determine if VFR conditions can be reached with ATC assistance.
 - b. Obstacles: Remain at or above a minimum safe altitude.
 - c. ATC can provide frequencies, vectors, courses, and altitude for airways and approaches.
 - d. If no assistance is available in the aircraft, use ATC for as much help as you need.
 - e. Complete the approach procedure to a landing or entering VMC conditions.
 - f. Maintain VMC and land.

9. International Operations

See Metro Aviation International Operations Manual.

10. Medical Oxygen Procedures

- A. General Oxygen Safety
 - 1) The Pilot-in-Command will be present and supervise all oxygen operations to include filling the transfill system.
 - 2) Prior to each flight, all oxygen equipment shall be inspected by the medical attendant(s) for general condition and pressure in the tank(s), then properly secured.
 - 3) All stowed equipment in the cabin or baggage areas must be secured in such a way as to not damage the oxygen equipment.
 - 4) During ground operations, unsecured oxygen bottles shall not be set on end.
 - 5) No smoking will be allowed in or around the aircraft when oxygen equipment is installed and/or in use.
 - 6) Petroleum products or lubricants shall not be used on any oxygen equipment, and shall not be

- 3) Training and Qualification
 - a. No person may act as an NVG Observer in HNVGO carrying passengers unless he is qualified and current in NVG operations.
 - b. Initial qualification will be conducted by a qualified NVG Instructor or Check Airman IAW Metro Aviation training manual.
- 4) Night Vision Goggle Operating Experience
 - a. No person may act as an NVG Observer in HNVGO carrying passengers, unless in the preceding 90 days, that person has completed three NVG operations as defined below:
 - i. NVG Visual Inspection and operational check.
 - ii. An arrival using a area reconnaissance.
 - iii. A takeoff using NVGs.
 - iv. A landing using NVGs.
 - b. An NVG Observer may fly in HNVGO without passengers in order to obtain NVG Operating experience.

F. Flight Operations

NOTE: Unless addressed below, there is no change to the General Operations Manual.

- 1) Preflight and Departure
 - a. Operational Restrictions
 - i. Landings to unimproved areas require a minimum crew of pilot and one other crew member/NVG Observer utilizing NVGs.
 - ii. The pilot may use single NVG operations for take off from unimproved areas as long as a dual NVG crew accomplish a high and low reconnaissance, which must include the evaluation of egress route(s). Consideration must be given to any change in conditions (wind, obstructions, and weather conditions), since the time of reconnaissance.
 - b. Route Planning
 - i. When HNVGO is to be conducted, route planning shall include:
 1. The potential terrain, obstacles such as wires and towers, and other significant features to the flight.
 2. Escape routes if unanticipated weather is encountered.
 3. Alternate routes if NVG failure occurs.
 4. Other preflight planning information as required by the GOM.
 - c. HNVGO Ceiling and Visibility Requirements
 - i. The higher of the appropriate shall be utilized when conducting HNVGO;
 1. Locally defined night minimums.
 2. Ceiling and visibility per Table 1, "Weather Minimums" in the Helicopter Operations section of this manual.
 - d. At no time shall NVGs be utilized to continue flight into weather below the minimums.
- 2) En Route
 - a. Operational Restrictions
 - i. Pilots will maintain aided flight whenever they are outside their Local Flying Area or outside of urban lighted areas.
- 3) The restriction in (i) above does not prevent the pilot from unaided flight for the purposes of performing cockpit duties or from taking the brief unaided flight break to reduce eye fatigue when at a safe altitude and in stable flight.

- 4) Briefing of Passengers
 - a. When practical, passengers shall be briefed that the crew will utilize NVG during the flight.
 - 5) Equipment Requirements (Night NVG Flights)
 - a. To conduct HNVGO, the following equipment must be on the aircraft and fully operational:
 - i. The appropriate NVG compatible cockpit lighting.
 - ii. At least the pilot and one other qualified and current crew member/NVG Observer must be using Operational NVGs for landing at unimproved areas.
 - iii. A radar altimeter.
 - iv. Other equipment for night flight as specified in the Flight Manual STC, MEL and Operations Manual.
- G. Crew Concept
- 1) Crew Resource Management
 - a. All crew members shall utilize CRM principles and procedures during the course of their flying duties.
 - b. An aircraft conducting HNVGO, depending on the mission, may consist of a Pilot-in-Command or a Pilot-in-Command and an additional non pilot crew member.
 - i. **PILOT-IN-COMMAND:** The person designated as PIC is directly responsible for, and is the final authority as to, the operation of the aircraft. He is expected to utilize all available resources in reaching a final decision. The PIC may require participation by a non pilot crew member who is utilizing NVG.
 - ii. **NVG OBSERVER (HNVGO):** The person designated as a NVG Observer is responsible to act as directed by the Pilot-in-Command. The NVG Observer shall participate in the decision making process by offering timely suggestions, and opinions. When not engaged in HNVGO duties, the NVG Observer reverts to his other assigned duty such as medical attendant.
 - 2) Light Discipline
 - a. When conducting HNVGO, no lighting shall be utilized which might interfere with proper NVG operation.
 - b. Interior lights may be utilized if properly isolated from the NVG crew.
 - c. Use of landing and search lights will be as required by conditions.
- H. Emergency Procedures
- 1) Inadvertent IMC
 - a. Initiate the inadvertent IMC recovery procedure as described in Section 301 - I - General.
 - b. Transition to unaided flight as necessary.
 - 2) NVG Equipment Malfunction
 - a. Announce **“GOGGLE FAILURE.”**
 - b. Switch to the second battery. If vision is not restored, flip up goggles (stow position) and continue flight in the unaided mode.
 - c. If the route of flight is over an area where there is inadequate surface definition or lighting to maintain attitude reference, institute inadvertent IMC procedure and return to an area of adequate surface reference.
 - d. At least the pilot and one other NVG qualified and current crew member/NVG Observer must be using operational NVGs to land at an unimproved site.

10. VFR Flight Planning

- A. Prior to conducting VFR operations the pilot must determine the minimum safe altitudes along the planned en route phase of flight.
- 1) The minimum safe cruise altitudes shall be determined by evaluating the terrain and obstacles along the planned route of flight.
 - 2) The pilot must ensure that all terrain and obstructions along the route of flight, except for takeoff and landing, are cleared vertically by no less than the following:
 - a. Day – 300’ above the highest obstacle within 1000’ horizontally
 - b. Night – 500’ above the highest obstacle within 2000’ horizontally
 - 3) Prior to each flight, the PIC must identify and document, for each leg of flight on the flight manifest sheet, the highest obstacle along the planned route of flight.
 - 4) Using the minimum safe cruise altitudes, the pilot must determine the minimum required ceiling and visibility to conduct the planned flight by applying the weather minimum derived from Table 1. “Weather Minimums” below, as appropriate to the conditions of the planned flight, and the visibility and cloud clearance requirements applicable to the class of airspace the planned flight will operate in and visual surface reference, or at night, visual surface light reference, sufficient to safely control the helicopter.
 - 5) Pilots may deviate from the planned flight path as required by conditions or operational considerations. During such deviations, the pilot is not relieved from the weather or terrain/obstruction clearance requirements of the regulations. Re-routing, change in destination, or other changes to the planned flight that occur while the aircraft is on the ground at an intermediate stop require evaluation of the new route in accordance with A 1- A 4 above.

11. Weather Minimums

- 1) Minimum weather requirements in this section apply to all VFR operations, with the exception of certain IFR to VFR transition operations described in Section 2, Helicopter IFR Operations, in this chapter.
- 2) Table-1 NVIS or TAWS minima may be used if either NVIS or TAWS is installed and operational in the aircraft. Operations with night vision goggles (NVG / NVIS) will be in accordance with the NVG section of this manual
- 3) In some cases Metro's minimums are more restrictive than those in the FARs and in all cases the more conservative minimum will apply.
- 4) Helicopter flights during icing conditions are prohibited.
- 5) With the approval of the Director of Operations, individual bases are allowed to adopt higher minimums to meet local conditions.
- 6) Multi-Engine helicopters may conduct VFR operations over clouds provided:
 - a. The pilot has visual reference to the surface.
 - b. Climb and descent can be conducted VFR clear of clouds and in accordance with FAR 135.211.
 - c. The point of origin and destination is forecast to allow descent under VFR and to remain so for 1 hour after ETA.
 - d. Conditions allow continuation of flight under VFR if the critical engine fails.

Table 1: Weather Minimums

Location	Day		Night		Night using an Approved NVIS or HTAWS	
	Ceiling	Flight Visibility	Ceiling	Flight Visibility	Ceiling	Flight Visibility
Non-Mountainous Local Flying Areas	800 ft	2 statute miles	1,000 ft	3 statute miles	800 ft	3 statute miles
Non-Mountainous Non-Local Flying Areas	800 ft	3 statute miles	1,000 ft	5 statute miles	1,000 ft	3 statute miles
Mountainous Local Flying Areas	800 ft	3 statute miles	1,500 ft	3 statute miles	1,000 ft	3 statute miles
Mountainous Non-Local Flying Areas	1,000 ft	3 statute miles	1,500 ft	5 statute miles	1,000 ft	5 statute miles

RISK ASSESSMENT TOOL - EMS HELICOPTER

Check All That Apply.

EMS HELICOPTER - STATIC RISK		
Title	Score	Check
Less than 8 Hours Sleep Prior to Shift	1	<input type="checkbox"/>
Consecutive shifts > 6	1	<input type="checkbox"/>
Consecutive night shift > 3	1	<input type="checkbox"/>
On Duty > 10 Hours	1	<input type="checkbox"/>
PIC < 1 yr or 100 Flights at program	2	<input type="checkbox"/>
1 or more Med Crew < 1 Yr or 100 Flight at program	1	<input type="checkbox"/>
PIC < 100 Hours in Type	2	<input type="checkbox"/>
Last Flight > 30 Days	1	<input type="checkbox"/>
Last Night Flight > 30 Days	1	<input type="checkbox"/>
Last HNVGO > 30 Days	2	<input type="checkbox"/>
Last Instrument App. > 30 Days (Practice or Actual)	2	<input type="checkbox"/>
Relief pilot new to Local Area area and Med crew	2	<input type="checkbox"/>
No Food or Hydration in Last 3 Hours	1	<input type="checkbox"/>
In differently equipped or different model aircraft	1	<input type="checkbox"/>
Instruments or Equipment Deferred (MEL)	1	<input type="checkbox"/>
IFR qualified pilot in IFR aircraft	-2	<input type="checkbox"/>
Aircraft equipped with functioning AFCS	-2	<input type="checkbox"/>
TOTAL:		0

EMS HELICOPTER - DYNAMIC RISK		
Title	Score	Check
Night Flight	1	<input type="checkbox"/>
First Flight after maintenance Completed on Aircraft	2	<input type="checkbox"/>
NVG use not available or permitted for flight	3	<input type="checkbox"/>
Scene Flight	1	<input type="checkbox"/>
Flight Requiring Special Flight Permit (Ferry Flight)	3	<input type="checkbox"/>
Wx Abort by Other Aircraft or Operator	3	<input type="checkbox"/>
Wx Turndown by Other Aircraft or Operator	2	<input type="checkbox"/>
Temp/Dewpoint Within 2 Degrees C & Less Than 5kts Wind	2	<input type="checkbox"/>
Fog, Snow, or Ground Ice Reported or Forecast Along Route	3	<input type="checkbox"/>
Ceilings and visibility < 500ft and 1 sm above Minimums	3	<input type="checkbox"/>
Ceilings and visibility < 200ft and 1 sm above Minimums	4	<input type="checkbox"/>
IFR Alternate Required	1	<input type="checkbox"/>
Deteriorating Wx Trend	2	<input type="checkbox"/>
Convective Activity Along Route	2	<input type="checkbox"/>
Surface Winds > 30kts or Gust Spread > 10kts	2	<input type="checkbox"/>
Moderate or Greater Turbulence below 3000ft AGL Reported or Forecast	2	<input type="checkbox"/>
Mountainous, Offshore, or Hazardous Terrain along Route	2	<input type="checkbox"/>
Less than 10 minutes fuel above required minimums	2	<input type="checkbox"/>
T.O. weight < 5% below gross mass limit or HOGE not assured	2	<input type="checkbox"/>
OAT > 85°F or < 32°F	1	<input type="checkbox"/>
More than 3 Flights in Current Duty Period	3	<input type="checkbox"/>
Flight Ending > 12 Hour Duty	3	<input type="checkbox"/>
TOTAL:		0

EMS HELICOPTER - CONTROL MEASURES		
Title	Score	Check
Use Pre-Designated LZ at Scene	-1	<input type="checkbox"/>
Operate Flight Under IFR	-4	<input type="checkbox"/>
Delay Flight Until Risks Lowered	-4	<input type="checkbox"/>
Add Fuel Stop	-2	<input type="checkbox"/>
Change Route to Avoid Hazardous Terrain or Weather	-2	<input type="checkbox"/>
Reduce Aircraft Weight to Increase Performance	-2	<input type="checkbox"/>
TOTAL:		0

TURNDOWN REASONS		
Title	Score	Check
Weather Unacceptable	-30	<input type="checkbox"/>
Medical Crew Declined	-30	<input type="checkbox"/>
Insufficient Duty Time Available	-30	<input type="checkbox"/>
Aircraft Range Inadequate	-30	<input type="checkbox"/>
Aircraft Performance or Equipment Inadequate	-30	<input type="checkbox"/>
TOTAL:		0

TOTAL RISK: 0

Remarks Required for Total Risk above 16; OCC Authorization required above 21!

Remarks:

Flight OCC#: _____

Pilot Signature: _____

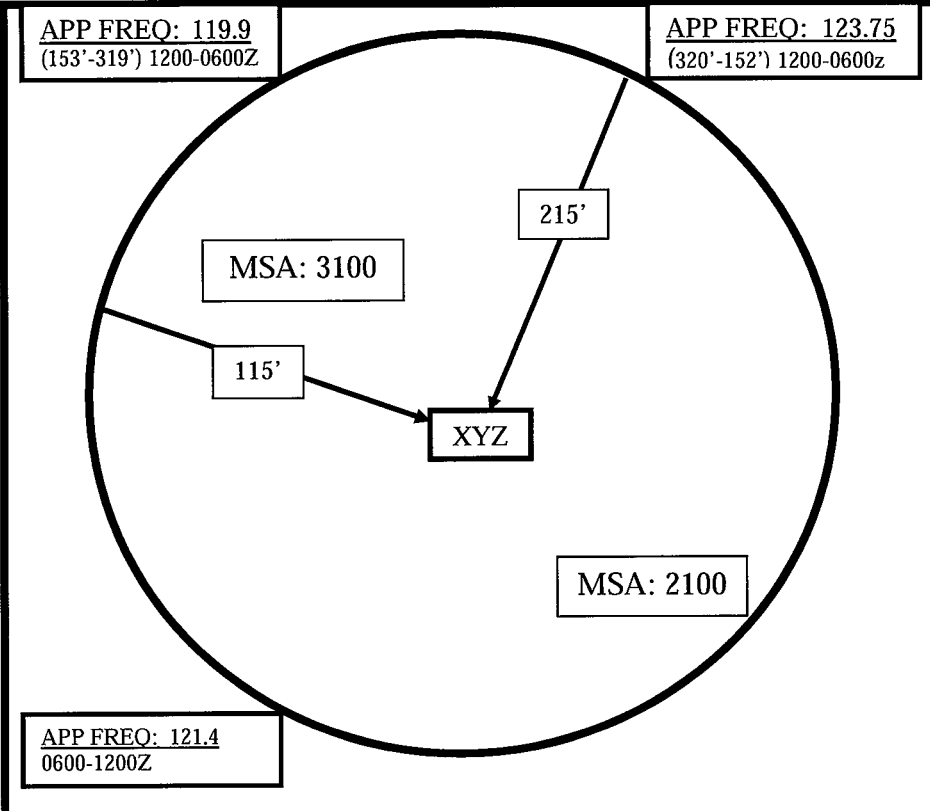
Date & Time: _____

MSA CHART (SAMPLE)



IIMC Procedure for 30 NM radius.
MSA Chart oriented to MAG N

Location: Metro XYZ
Currency Date: 12/10/2008



AVOID-Be aware of the WX conditions and be prepared for the possibility of IIMC or loss of visual reference. Always maintain situational awareness and pay close attention to weather changes.

RECOVER

- Attitude Indicator (Level Wings-Level Horizon)
- Power (Adjust torque to climb power to gain altitude or cruise if above MSA)
- Airspeed (Adjust to climb airspeed)
- Heading (Turn only to avoid known obstacles, keep aircraft under control)
- Make all turns no greater than standard rate.

Climb to the minimum safe altitude (MSA) to clear all obstacles in the area.
Outside local area (chart circle) MSA = 1000 feet above MEF on sectional chart or MOOCA on IFR Low Chart for location.

Contact appropriate Approach Control/Center and Declare an Emergency. Squawk 7700 when able. Report location, altitude, heading, fuel status, and number of persons on board. State that you are inadvertent IMC and request assistance.

The following procedures shall be utilized in following order of preference:

1. Radar vectors to VMC conditions.
2. Vectors to the closest appropriate approach.
 - Complete the approach procedure to landing or entering VMC conditions. Maintain VMC and land.

02/01/2009