IIMC Procedure – Med Crew Read-Out Checklist for Garmin 430/530 stacks

1. **AIRCRAFT LEVEL, ANNOUNCE 'IIMC' TO CREW**
2. **TURN ONLY TO AVOID KNOWN OBSTACLES**
3. **ADJUST COLLECTIVE TO CLIMB POWER**
4. **ADJUST AIRSPEED TO BEST RATE OF CLIMB**
5. **ENGAGE AUTOPILOT IF AVAILABLE**
6. **CLIMB TO MSA**
7. **CONTACT NEAREST APPROACH FACILITY OR 121.5**
   DECLARE AN EMERGENCY
   REQUEST VECTORS TO VMC OR NEAREST AIRPORT ILS
8. **ANNOUNCE 'READY FOR CHECKLIST' TO CREW**
9. If airport, select **AIRPORT IDENTIFIER** on **GPS**
10. Select **PROC TO ILS LOC** on **GPS**
11. Select **VECTORS**
12. **STANDARD RATE TURNS** for **COURSE CHANGES**
13. **CHECK LOCALIZER FREQ** with **APPROACH PLATE**
14. **SELECT VLOC** on **BOTH GPS**
15. **SET APPROACH COURSE DEGREES** on **HEADING BUG**
16. **SELECT NAV SOURCE** to **ILS**
17. **SET TOWER FREQ** from **APPROACH PLATE** to **STANDBY**
18. **SET RADAR ALTIMETER** to **MISSED APPROACH ALTITUDE**
19. Approaching **FINAL APPROACH FIX** or while being radar vectored to Final, adjust collective **TRQ** to **INTERMEDIATE POWER**
20. Cross **FINAL APPROACH FIX**
21. At **GLIDE SLOPE** capture, adjust collective to **APPROACH POWER**
22. Maintain **90 KIAS**; start clock at **FAF**
23. Maintain **LOCALIZER** course and **GLIDE SLOPE** within three quarters scale deflection
24. Time from **FAF** to **MAP** from **APPROACH PLATE**
25. Continue approach until **MISSED APPROACH POINT**

About the Vision Zero IIMC checklist for HAA crews

Sudden and unexpected encounters with IIMC by VFR pilots often have serious and sometimes fatal results. A VFR pilot must immediately transition into flight solely on instruments. The workload that this places on a pilot unfamiliar, not current or not proficient in instrument flight is extremely high. In addition to flying the aircraft as their primary responsibility, he or she also has to prepare for a successful outcome. Studies have shown that, in the majority of instances, throughout this encounter, the pilot alone deals with all the necessary actions and often misses vital steps in the process that can have an adverse result, while the crew sit silent.

Vision Zero's proposal

The aim of this checklist is to reduce the workload on the pilot by involving the crew in the process to ensure no steps are overlooked. In aircraft where both crew members are behind the pilot, both can ensure that the actions are being read in the correct order. For larger aircraft, where a crew member is sitting alongside the pilot, the rear passenger can read out the actions. The pilot can respond and the crew member in front can verify or, depending on the level of crew training at a particular program, even assist with the necessary action.

This checklist is provided to give a base format for such CRM to take place and be practised among helicopter air ambulance crews. Items highlighted in RED are memory items for the pilot. Each program and each aircraft configuration may require changes or adjustments to suit each need. For those programs without Garmin 430 or 530, please use this IIMC card as a foundation, and edit as needed to ensure it is appropriate for your program and installed nav/com equipment so that no step is omitted.

Overall risk resource management is vital with any transport and the purpose of this checklist is not to replace CRM processes but to be an additional tool in assisting flight teams who inadvertently encounter IFR (Instrument Flight Rule) conditions. The checklist should be applied to your program's CRM education with rote memory (memorization) of items in RED by the pilot before the crew utilize the checklist and ensure no steps are missed. Good CRM training includes 'arm chair flying communication' among flight team members to outline specific roles in an IIMC encounter.

As always, good communication is the key – hope for the best, but prepare for the worst. Practice will make perfect.

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