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**ENTRIES INTO INSTRUMENT APPROACHES
AT FYWH (HOSEA KUTAKO INTERNATIONAL AIRPORT)**

1. Difficulties with the Instrument Approach Procedures at FYWH, specifically for Runway 26 have been reported, specifically with aircraft leaving the protected airspace of the procedure or not completing an entry into the procedure as expected. This may compromise safety and could also lead to losses of separation when aircraft do not follow the procedures as expected.
2. Aeronautical Information including instrument approach procedures are published by the NCAA in the Namibian AIP as the primary reference document for such information.

VERIFICATION OF DATA

3. Third-party vendor data providers may reproduce this Aeronautical Information into Electronic Flight Bags (EFB) and code such into Flight Management System (FMS), however the NCAA does not oversee the reproduction of these by data-houses. It is the **responsibility** of the **Operator** to ensure the correctness of the data purchased from a third-party vendor, through a quality control process, prior to operating within Namibia.
4. Operators should have a contract with third-party vendor data providers and include processes to identify errors and notify the vendor of incorrect information within their product. If incorrect information is found in the Operator's EFB or FMS, the Operator shall have a process of informing crews about this and advising where the correct information may be accessed.

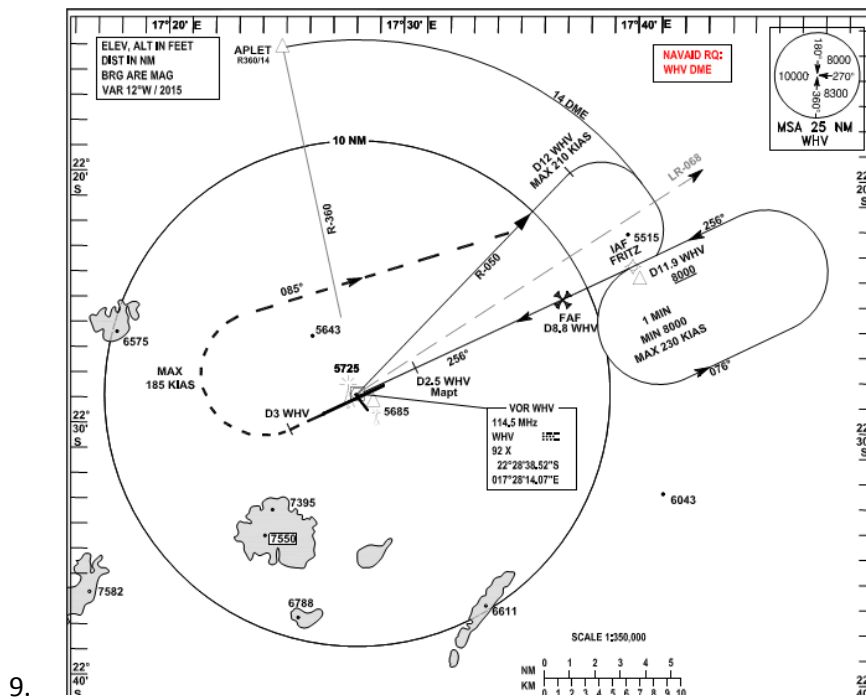
APPROACH WITH NO DELAY

5. There are three entry Initial Approach Fixes that would normally position an aircraft to approach FRITZ from the North-east for a direct entry to complete the approach if no delay is expected.

FRITZ HOLD

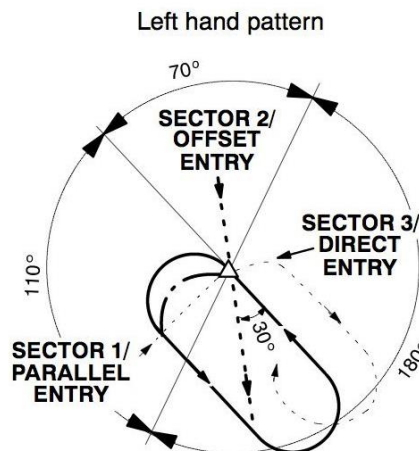
6. Although there are a number of different Instrument approach procedures (ILS/VOR/RNP APCH) the holding fix FRITZ is synonymous to all the procedures.
7. It should be noted that the FRITZ hold is a non-standard left-hand holding pattern (see image overleaf).

8.



WHV VOR Approach Runway 26

10. In completing the instrument approach procedures for runway 26 at FYWH it has been noted that some crews do not remain within the airspace protected for the instrument approach and attempt to position over FRITZ without completing the correct sector entry when joining the Hold/Initial Approach Fix at FRITZ. Only when joining from the east (Sector 3) or if completing the approach via the right-hand base from APLET or WHV R050 may aircraft complete a Direct-entry at FRITZ.
11. Traffic cleared direct to FRITZ from the North-west, West, and South-west would be expected to complete an offset entry (Sector 2) or a Parallel entry (Sector 1) into the FRITZ hold depending on angle of arrival.



12. Even if the crew are not expected to enter the hold (i.e. cleared for the Approach from FRITZ) the sector entry should still be completed, with crews completing the entry in the same direction of the FRITZ Hold (South of R076 WHV).

NON-COMPLIANT JOININGS AND SECTOR ENTRIES

13. Through radar monitoring, crews have been observed not complying with the correct sector entries. The following incorrect application of procedures has been observed.
 - a. Crew attempting to intercept R050 WHV outbound without being cleared via WHV or flying via the beacon.
 - b. Crews attempting to fly the 14DME arc without having been cleared via or flying via APLET.
 - c. Crew attempting to fly the outbound heading of the hold and passing south abeam FRITZ, then turning left to intercept FRITZ on the inbound heading 256°.
 - d. Crews initiating a sector entry to the North of R076 WHV as if entering a right-hand hold.
 - e. Crews attempting to do a procedure turn (specifically to the North of FRITZ).
14. Under no circumstances should crews attempt to join the instrument approach procedure via a non-standard Initial Approach Fix or attempting to join the procedure after an Initial Approach Fix as described above. This may lead to an aircraft leaving the protected airspace designed for the instrument approach procedure and not provide the required clearance from obstacles. This may also lead to losses of separation or spatial disorientation due to the aircraft positioning in an unexpected manner.

EXPECTED APPROACH TIMES

15. An Expected Approach Time is usually determined only when the delay is expected to be 10 minutes or more.
16. Expected approach time is the time at which ATC expects that an arriving aircraft, following a delay, will leave the holding fix to commence its approach for a landing, however the actual time of leaving the holding fix will depend upon the approach clearance.
17. The Expected Approach Time is issued based on an estimation of traffic operations, however due to the limitations of aircraft movements on the maneuvering area at FYWH various factors may affect the ATC ability to clear the holding aircraft for the approach. Factors such as aircraft taxi speeds, taxiway availability, wind velocities, aircraft not having sterile cabins for departure etc. may result in the ATC requiring to further delay the holding aircraft.
18. Even if an EAT has expired, an aircraft should not commence the approach unless cleared to do so by the ATC. In the event of a loss of communications the appropriate radio failure procedure shall be followed by the crew prior to commencing the approach.

ADDITIONAL ATC ROUTING

19. Due to requirements for traffic management or separation, Air Traffic Control may clear aircraft to route via a number of different scenarios to better enhance traffic flow and efficiency.

WHV-FRITZ

20. If ATC clears an aircraft to route WHV – FRITZ. In such cases the crew shall be expected to route the aircraft via WHV then route to FRITZ (Radial 076, 11,9DME WHV). On reaching the IAF FRITZ the crew would be expected to complete a Sector Entry into the FRITZ Hold by either completing a Parallel Entry (Sector 1) or an Off-set Entry (Sector 2) in the airspace protected for the FRITZ hold (i.e. to the South-east of FRITZ)
21. In certain instances when there is no further need to route via WHV (Separation achieved etc.) the clearance may be revised to route direct to FRITZ. In such cases the correct sector entry should still be flown depending on the arrival angle at FRITZ.

WHV R050

22. In some cases ATC may clear an aircraft to intercept and maintain Radial 050 WHV outbound. In such cases the ATC has not cleared an aircraft for an approach and requires the aircraft to remain tracking Radial 050 outbound until further cleared (e.g. standby turning inbound). Crew are not to initiate the right-hand base turn at 12 DME and should continue on Radial 050 outbound until advised by ATC. When separation is achieved ATC will normally turn the aircraft right direct FRITZ (track guidance should also be given when receiving a radar service) and the aircraft will be expected to complete a direct entry into the hold or approach as cleared.

MINIMUM SECTOR ALTITUDE (MSA) AND RADAR VECTORING AREA (RVA)

23. Whilst crews are positioning prior to commencing with the instrument approach procedure or if crews are instructed to remain tracking on a radial of WHV, then crew should ensure that they do not descend below the MSA applicable for the sector they are operating within, unless ATC has given such crew a radar vector or is positive surveillance control has been confirmed.
24. In cases where crew have been issued a radar vector, the crew should not descend below the minimum altitude defined for the Radar Vectoring Area (RVA) they are operating within. Should ATC clear an aircraft below the RVA this should be challenged by the crew.
25. Crews operating on an IFR flight plan should not descend below the base of controlled airspace and should plan their descent to remain within controlled airspace even if the MSA/RVA is a lower altitude.

MONITORING OF APPROACHES

26. Air Traffic Control should monitor the approached flown by the aircraft. If ATC notice that an aircraft are not complying with the correct Instrument Approach Procedure or Sector Entry, then ATC should challenge the crew on frequency and request that the crew advise the reason for non-compliance.
27. Crews who become disorientated during an approach should notify ATC immediately and request assistance to the Initial Approach Fix if required.

28. Crew should be aware of their altitude at all times in the approach and, unless able to continue with visual reference to terrain and on a visual approach, if found to descend below the approach profile altitudes, crews should initiate a climb/missed approach and inform ATC.
29. Crews and Air Traffic Control are encouraged to report all instances of Non-compliance so that these may be further investigated.

CONCLUSION

30. Although this AIC is predominantly aimed at approaches at FYWH, crews should be aware that other Instrument Approach Procedures may have similar requirements.
31. Crews should always ensure that all maneuvers are completed within the protected area of the instrument approach procedure and that all sector entries are done to remain within the holding pattern.