SESSION 72: APPROACH PROCEDURES — MIXED SCENARIO: FULL APPROACH SEQUENCE

1. Before beginning the approach, you conduct a full briefing. The briefing should cover the approach name, frequencies, courses, altitudes, minimums, and the:

A. Cruise fuel burn

B. Departure weather

C. En route winds

D. Missed approach procedure

2. You confirm the approach loaded matches your clearance by checking the:

A. Approach name/runway and that the localizer is tuned and identified

B. Cruising altitude

C. Transponder code

D. Departure frequency

3. ATC vectors you to intercept the localizer. You first establish on the:

A. Glideslope

B. Missed approach track

C. Localizer course, before glideslope intercept

D. Circling area

4. You intercept the glideslope. To avoid a false glideslope, you intercept it:

A. From above

B. From below, at the published glideslope intercept altitude

C. After the threshold

D. At the MAP

5. Established on the glideslope, you control the descent rate primarily with:

A. Bank angle

B. The localizer needle

C. Pitch, supported by power, to keep the glideslope centered

D. The heading indicator

6. At a groundspeed of 100 knots, the approximate descent rate to hold the 3-degree glideslope is about:

A. 250 fpm

B. 1,000 fpm

C. 300 fpm

D. 500 fpm (100 × 5)

7. The glideslope needle moves above center. You are:

A. On the glideslope

B. Right of course

C. Above the glideslope

D. Below the glideslope; reduce the descent rate to recapture it

8. You reach the DA (250 HAT) and see only the approach light system. Under §91.175 you may descend:

A. To 100 feet above the TDZE on the ALS, and no lower unless the red terminating/side row bars are distinctly visible

B. To the runway immediately

C. To any altitude

D. To the threshold

9. At the DA, to continue below it to a landing, all three §91.175(c) conditions must be met continuously, including that the flight visibility is:

A. Reported by ATC

B. Forecast in the TAF

C. Not less than the visibility prescribed for the approach

D. Shown on the GPS

10. At 100 feet above the TDZE you acquire the runway threshold and touchdown zone, and you are positioned for a normal descent. You may:

A. Level off

B. Go missed

C. Continue the descent and land

D. Circle

11. Suppose instead that at the DA you see nothing required. You must:

A. Descend to find the runway

B. Execute the missed approach

C. Level off and continue

D. Land

12. The initial missed approach actions, in order, are:

A. Power (pitch to the climb attitude), clean up the configuration, then navigate

B. Configure, then climb, then power

C. Navigate, then power, then climb

D. Turn, then power, then climb

13. The published missed approach directs a climb to 2,000 then a climbing left turn direct to a holding fix. You begin the turn:

A. At the DA

B. At the FAF

C. Immediately at the threshold

D. At the missed approach point (not before, to protect obstacle clearance)

14. Your IFR GPS shows the approach suspended at the MAP. To get missed-approach guidance you:

A. Tune a VOR

B. Unsuspend/activate the missed approach so it sequences the legs

C. Reverse course manually

D. Disregard the navigator

15. During the missed approach climb, your priority order is:

A. Aviate (fly the climb), navigate (the missed track), communicate (advise ATC)

B. Communicate, then aviate

C. Navigate, then aviate

D. Configure, then aviate

16. Suppose at the DA you had instead acquired the runway but were too high to land normally. The correct action is to:

A. Dive to land

B. Descend below DA anyway

C. Go missed (the normal-descent condition is not met)

D. Circle below the DA

17. Had the active runway been 18 (not aligned with the 27 final), you would have used the:

A. ILS straight-in minimums

B. LNAV minimums

C. En route minimums

D. Circling minimums, maneuvering visually at/above the circling MDA within the protected area

18. Executing a circling missed approach (had you been circling), the initial maneuver is a:

A. Straight-ahead climb

B. Descent to the MDA

C. Turn away from the airport

D. Climbing turn toward the landing runway to remain over the airport, then the published missed

19. After the missed approach, you reach the holding fix. With the weather still at minimums and improving slowly, you decide to hold briefly but set a:

A. Higher MDA

B. New transponder code

C. "Bingo" fuel at which you commit to diverting

D. Lower DA

20. Your fuel must always preserve enough to:

A. Reach the alternate (if required) and land with the required reserves

B. Make unlimited attempts

C. Return to the departure airport

D. Hold indefinitely

21. A second attempt is more likely to succeed if you:

A. Fly it identically

B. Correct any errors from the first attempt or request a lower-minimums approach if available

C. Descend below minimums

D. Increase speed

22. You reach your bingo fuel without the weather improving. The prudent decision is to:

A. Attempt the approach again

B. Hold longer

C. Descend below minimums

D. Divert to the alternate while you have adequate reserves

23. You advise ATC of the missed approach and your divert intentions so that ATC can:

A. Cancel the approach

B. Provide vectors and coordination for the divert

C. Lower the minimums

D. Reset the transponder

24. Throughout the approach and missed approach, your fundamental responsibility is to:

A. Fly the aircraft precisely, make timely decisions at the DA and MAP, and manage the contingencies safely

B. Rely on the autopilot without monitoring

C. Continue below minimums to find the runway

D. Disregard the published procedure

25. Summarizing Area VI, the DPE asks the unifying principle of instrument approaches. The best answer:

A. Always land off the first approach

B. Brief and fly the approach precisely to the DA/MDA, descend below it to land only when the §91.175 conditions are met, and otherwise execute the missed approach and manage the subsequent decisions safely

C. Descend below minimums when the runway is glimpsed

D. The approach equipment flies the aircraft without pilot judgment

ANSWER KEY & EXPLANATIONS — SESSION 72

1. D. Missed approach — The briefing covers the approach name, frequencies, courses, altitudes, minimums, and the missed approach procedure.

2. A. Name/navaid match — The loaded approach is confirmed by checking the name/runway and that the localizer is tuned and identified.

3. C. Localizer first — You first establish on the localizer course before glideslope intercept.

4. B. From below — To avoid a false glideslope, intercept it from below at the published glideslope intercept altitude.

5. C. Pitch + power — The descent rate on the glideslope is controlled primarily with pitch, supported by power.

6. D. ~500 fpm — At 100 knots, the 3-degree descent rate is about 100 × 5 = 500 fpm.

7. C. Above GS — A glideslope needle above center means you are above the glideslope; reduce the descent rate to recapture it.

8. A. ALS to 100 ft — With only the ALS at the DA, you may descend to 100 feet above the TDZE, and no lower unless the red terminating/side row bars are distinctly visible.

9. C. Flight visibility — To continue below the DA, the flight visibility must be not less than the visibility prescribed for the approach.

10. C. Continue to land — With the threshold/TDZ acquired and positioned for a normal descent, you may continue the descent and land.

11. B. Missed approach — Seeing nothing required at the DA requires executing the missed approach.

12. A. Power/clean up/navigate — The initial missed approach actions are power (pitch to the climb attitude), clean up the configuration, then navigate.

13. D. At the MAP — The published missed-approach turn begins at the missed approach point, not before, to protect obstacle clearance.

14. B. Unsuspend/activate — If the GPS suspends at the MAP, you unsuspend/activate the missed approach so it sequences the legs.

15. A. Aviate/navigate/communicate — The priority is aviate (fly the climb), navigate (the missed track), communicate (advise ATC).

16. C. Go missed — Acquiring the runway but too high to land normally means the normal-descent condition is not met, so go missed.

17. D. Circling minimums — For a runway not aligned with the final course, you use the circling minimums, maneuvering visually at/above the circling MDA within the protected area.

18. D. Climbing turn toward runway — A circling missed approach begins with a climbing turn toward the landing runway to remain over the airport, then the published missed.

19. C. Bingo fuel — Holding to await improvement, you set a "bingo" fuel at which you commit to diverting.

20. A. Reach alternate + reserves — Fuel must always preserve enough to reach the alternate (if required) and land with the required reserves.

21. B. Correct errors/lower minimums — A second attempt is more likely to succeed if you correct errors or request a lower-minimums approach if available.

22. D. Divert — Reaching bingo fuel without improvement, the prudent decision is to divert while you have adequate reserves.

23. B. Vectors/coordination — Advising ATC of the missed approach and divert lets ATC provide vectors and coordination.

24. A. Fly/decide/manage — Your fundamental responsibility is to fly the aircraft precisely, make timely decisions at the DA and MAP, and manage the contingencies safely.

25. B. Brief/fly/decide/miss — The unifying Area VI principle is to brief and fly the approach precisely to the DA/MDA, descend below it to land only when the §91.175 conditions are met, and otherwise execute the missed approach and manage the subsequent decisions safely.