PRACTICE EXAM 27 SIMULATION

1. A pilot reviewing a departure chart sees an "ODP" listed for the airport. What is the primary purpose of an obstacle departure procedure?

A. To sequence arriving traffic into the terminal area during peak periods

B. To provide obstacle clearance from the runway to the enroute structure

C. To establish the holding pattern entry for aircraft awaiting departure release

D. To define the missed approach climb gradient for the instrument approach

2. A standard instrument departure (SID) differs from an obstacle departure procedure primarily in that a SID does what?

A. It applies only to aircraft departing under visual flight rules conditions

B. It reduces ATC workload and provides a charted route with communications

C. It is mandatory for all departures regardless of the aircraft equipment

D. It replaces the need for any obstacle clearance during the departure phase

3. A pilot must understand that unless an alternative is specified, the standard climb gradient for a departure procedure provides obstacle clearance based on what rate?

A. A climb gradient of 100 feet per nautical mile from the departure end

B. A climb gradient of 500 feet per nautical mile from the departure end

C. A climb gradient of 200 feet per nautical mile from the departure end

D. A climb gradient of 350 feet per nautical mile from the departure end

4. A pilot interpreting a departure procedure sees "climb runway heading to 2,000 before turning." This instruction primarily ensures what?

A. The aircraft reaches the maximum cruise speed before the first turn point

B. The aircraft enters the holding pattern at the correct entry altitude on departure

C. The autopilot has time to capture the assigned enroute cruise altitude first

D. Obstacle clearance and traffic separation during the initial climb segment

5. A "STAR" (standard terminal arrival route) serves what primary function for the IFR pilot?

A. It provides obstacle clearance from the runway to the enroute structure on departure

B. It defines the missed approach procedure for the destination instrument approach

C. It transitions the aircraft from the enroute structure into the terminal area

D. It establishes the takeoff minimums for departures from the arrival airport

6. A pilot must understand that a "DP" (departure procedure) may be assigned by ATC for what reason?

A. To require the pilot to cancel the IFR clearance before departing the airport

B. To facilitate traffic flow and ensure obstacle clearance during the departure

C. To restrict the departure to only daytime visual meteorological conditions

D. To eliminate the need for the pilot to maintain the assigned runway heading

7. A pilot reviewing an enroute low-altitude chart finds a Victor airway. These airways are based on what navigation reference?

A. GPS waypoints stored in the area navigation database for direct routing

B. Inertial reference system positions computed independently of ground aids

C. NDB bearings tracked using the automatic direction finder equipment aboard

D. VOR radials connecting navigation aids along the published airway centerline

8. A pilot must understand that the "MCA" (minimum crossing altitude) at a fix requires what?

A. The pilot must descend to the MCA before crossing the fix on the airway

B. The pilot must report reaching the MCA to ATC before crossing the fix

C. The pilot may cross the fix at any altitude above the minimum enroute altitude

D. The pilot must cross the fix at or above the MCA when continuing to higher terrain

9. A pilot flying a SID with a "top altitude" published understands this altitude to be what?

A. The lowest altitude authorized at any point along the entire departure route

B. The altitude at which the aircraft must begin its descent for the arrival

C. The highest altitude to climb to on the SID unless otherwise cleared by ATC

D. The transition altitude where the altimeter is set to the standard pressure setting

10. A pilot must understand that the "MEA gap" depicted on an enroute chart indicates what?

A. A segment where the minimum enroute altitude has not yet been established

B. A point where the airway changes from a low-altitude to a high-altitude route

C. A portion of the airway where navigation signal coverage may be unreliable

D. A mandatory reporting point requiring a position report to the controlling facility

11. A pilot must understand that the "MOCA" (minimum obstruction clearance altitude) guarantees obstacle clearance and what additional assurance?

A. Navigation signal coverage only within 22 nautical miles of the VOR station

B. Two-way radio communication coverage along the entire airway segment flown

C. Radar coverage from the controlling air traffic control facility at all times

D. Freedom from all icing conditions along the airway segment being flown

12. A pilot receiving a "clearance void time" for an IFR departure from an uncontrolled airport must do what?

A. Depart before the void time or the clearance is no longer valid for use

B. Depart at exactly the void time to ensure proper traffic separation occurs

C. Hold on the ground until the void time before beginning the takeoff roll

D. Request a new transponder code after the void time has expired completely

13. A pilot must understand that a "transition" on a SID or STAR refers to what?

A. The point where the aircraft switches from instrument to visual flight rules

B. The change from the departure controller to the enroute center frequency

C. The altitude where the local altimeter setting changes to standard pressure

D. A route segment connecting the procedure to a specific enroute fix or airway

14. A pilot flying an RNAV SID must have what equipment to fly the procedure as charted?

A. A functioning automatic direction finder receiver tuned to the departure NDB

B. Approved RNAV equipment with a current navigation database for the procedure

C. A dual VOR receiver system to track the departure radials simultaneously

D. A radio altimeter to measure the precise height above the terrain on departure

15. A pilot must understand that "radar vectors" issued during a departure relieve the pilot of what responsibility?

A. The responsibility to maintain the assigned airspeed during the climb segment

B. The responsibility to monitor the engine instruments during the initial climb

C. The responsibility to comply with the published top altitude on the departure

D. The responsibility for navigation, which ATC assumes while issuing the vectors

16. A pilot must understand that the "DER" (departure end of runway) is the reference point for what?

A. The obstacle clearance evaluation and climb gradient required on departure

B. The touchdown zone elevation used for the instrument approach minimums

C. The point at which the missed approach climb gradient must be initiated

D. The location of the final approach fix on the opposite-direction approach

17. A pilot flying a STAR with "expect" altitudes published must understand these to mean what?

A. Mandatory altitudes that must be crossed exactly as published on the chart

B. Planning altitudes for descent that are not a clearance until issued by ATC

C. The minimum altitudes that guarantee obstacle clearance along the arrival

D. The maximum altitudes permitted at each waypoint along the arrival route

18. A pilot must understand that an IFR departure from an airport without a published procedure requires the pilot to do what for terrain clearance?

A. Use diverse vector area criteria or ensure personal terrain clearance on climb

B. Climb at the maximum rate to the assigned altitude immediately after takeoff

C. Request radar vectors from the tower before commencing the takeoff roll

D. Maintain runway heading until reaching the minimum enroute altitude always

19. A pilot reviewing a SID notices a "climb gradient to altitude" requirement steeper than standard. The pilot must do what before accepting the procedure?

A. Request a different runway from ATC that has a standard climb gradient

B. Reduce the takeoff weight until the standard gradient can be achieved easily

C. File a different flight plan that avoids the steeper departure procedure entirely

D. Verify the aircraft can meet the required climb gradient at the planned weight

20. A pilot must understand that the "feeder route" on an approach chart connects what?

A. The missed approach point to the published missed approach holding fix

B. The final approach fix to the runway threshold along the final segment

C. The departure end of the runway to the first enroute fix on the route

D. The enroute structure or a fix to the initial approach fix for the approach

21. A pilot flying an enroute segment must understand that the "changeover point" (COP) indicates what?

A. The point where the controlling ATC facility changes from approach to center

B. The point where the aircraft must change from the enroute to the arrival phase

C. The point where navigation should be switched from one VOR to the next ahead

D. The point where the altimeter setting changes to the standard pressure datum

22. A pilot must understand that the published "MAA" (maximum authorized altitude) on an airway exists for what reason?

A. To ensure adequate obstacle clearance over the highest terrain on the airway

B. To provide a buffer for icing avoidance along the published airway segment

C. To establish the altitude at which oxygen becomes mandatory for the crew

D. To prevent reception of two stations on the same frequency causing ambiguity

23. A pilot receiving "cleared as filed" in an IFR clearance understands this to mean what?

A. The aircraft is cleared along the route filed in the flight plan as submitted

B. The aircraft is cleared to deviate from the filed route at the pilot's discretion

C. The aircraft must refile the flight plan before departure can be authorized

D. The aircraft is cleared only to the first fix, with the remainder issued later

24. A pilot must understand that "pilot nav" SIDs differ from "vector" SIDs in that pilot nav SIDs require what?

A. The pilot to remain in visual conditions throughout the entire departure climb

B. ATC to provide continuous radar vectors from takeoff to the enroute structure

C. The aircraft to be equipped with an inertial reference navigation system only

D. The pilot to navigate the charted route using onboard navigation equipment

25. A pilot flying a STAR must understand that "descend via" clearance authorizes what?

A. An immediate descent to the lowest altitude published anywhere on the arrival

B. Descent along the arrival complying with all published altitude and speed restrictions

C. A descent only after receiving a separate altitude assignment from the controller

D. A descent at the maximum rate possible to expedite the arrival sequence flow

26. A pilot reviewing a departure chart sees a triangle containing the letter "A" near the airport name. What does this symbol alert the pilot to check?

A. Alternate minimums apply, restricting the airport's use as a filed alternate

B. Non-standard alternate minimums or that the airport is not authorized as an alternate

C. An advisory frequency must be monitored throughout the departure climb segment

D. An automated weather observation is available on the published ATIS frequency

27. A pilot must understand that "RNAV 1" departure and arrival procedures require what navigation accuracy?

A. The aircraft must remain within 2 nautical miles of centerline 95 percent of the time

B. The aircraft must remain within 4 nautical miles of centerline at all times always

C. The aircraft must remain within 1 nautical mile of centerline 95 percent of the time

D. The aircraft must remain within 0.3 nautical mile of centerline on the final segment

28. A pilot must understand that the minimum enroute altitude (MEA) and minimum reception altitude (MRA) differ in that the MRA ensures what?

A. Adequate navigation signal reception at a specific fix along the airway route

B. Obstacle clearance over the highest terrain along the entire airway segment

C. Two-way radio communication with the controlling air route traffic control center

D. Radar coverage for the controller to monitor the aircraft along the segment

29. A pilot accepting an IFR clearance must read back which elements at minimum?

A. The clearance limit, route, altitude, and any holding or special instructions

B. Only the assigned transponder code and the departure frequency to contact

C. Only the cruising altitude assigned for the enroute portion of the flight

D. The complete weather briefing and the fuel calculations for the entire route

30. A pilot must understand that "lost communications" procedures specify that the pilot fly the route in what order of priority?

A. Filed, then expected, then vectored, then the last assigned route in sequence

B. Expected, then filed, then assigned, then any vectored route received last

C. Assigned, then vectored, then expected, then filed route in that priority order

D. Vectored, then assigned, then filed, then the expected route as a final option

31. A pilot flying a charted visual flight procedure (CVFP) must understand it requires what?

A. The pilot to maintain visual contact with charted landmarks during the approach

B. The aircraft to be equipped with a certified GPS for the visual procedure

C. ATC to provide radar vectors throughout the entire visual approach segment

D. The pilot to file an instrument flight plan before commencing the visual procedure

32. A pilot must understand that "cruise" clearance in an IFR clearance authorizes what regarding altitude?

A. Climb and descent at the pilot's discretion within the block up to the assigned level

B. Maintaining exactly the single assigned cruise altitude for the entire route

C. Descending only after receiving a specific approach clearance from the controller

D. Climbing to the maximum certified service ceiling for the most efficient cruise

33. A pilot must understand that the "minimum turning altitude" (MTA) published at a fix addresses what concern?

A. The minimum altitude required to receive the navigation signal at the fix clearly

B. Obstacle clearance during a turn at the fix where standard clearance is inadequate

C. The minimum altitude for entering the published holding pattern at the fix safely

D. The lowest altitude authorized for the missed approach climb at the airport

34. A pilot must understand that an "RNAV STAR" with vertical navigation provides what?

A. Lateral guidance only, requiring the pilot to manage all altitude changes manually

B. A computed descent path with altitude constraints managed by the flight system

C. A precision glideslope identical to an ILS approach to the destination runway

D. Obstacle clearance independent of any altitude restrictions on the arrival route

35. A pilot must understand that the "minimum vectoring altitude" (MVA) used by controllers differs from published minimums in that the MVA is what?

A. Always higher than the published minimum enroute altitude for that segment

B. Published on the approach chart for the pilot to reference during the approach

C. Known to the controller but not normally published on charts for the pilot

D. The altitude the pilot must self-calculate based on the terrain along the route

36. A pilot must understand that a hold-in-lieu-of-procedure-turn (HILPT) serves what purpose?

A. It provides a holding pattern for aircraft awaiting their departure release clearance

B. It establishes the missed approach holding fix after a failed approach attempt

C. It provides course reversal and altitude loss to align the aircraft for the approach

D. It marks the point where the aircraft transitions from enroute to arrival phase

37. A pilot flying a SID must understand that "climb via" clearance requires compliance with what?

A. Only the lateral path of the SID, with altitudes assigned separately by the controller

B. All published lateral path and altitude restrictions of the standard instrument departure

C. The maximum climb rate the aircraft can achieve to expedite the departure sequence

D. The standard climb gradient only, ignoring any published crossing restrictions on the SID

38. A pilot must understand that "tower enroute control" (TEC) allows what type of operation?

A. IFR flight between two airports without entering the enroute center's airspace

B. VFR flight through Class B airspace without a specific clearance from the tower

C. Direct GPS routing that bypasses all published airways between the airports

D. A contact approach flown clear of clouds with one mile of flight visibility

39. A pilot must understand that the "initial approach fix" (IAF) marks what point on an approach?

A. The point where the missed approach procedure must begin if not landing

B. The point where the final descent to the minimum descent altitude commences

C. The point where the approach procedure begins from the enroute structure

D. The point where the aircraft crosses the runway threshold on the final approach

40. A pilot receiving "expect further clearance" with a time during a hold must understand this time is primarily for what?

A. The exact moment the approach clearance will be issued by the controller

B. The maximum holding airspeed that must be maintained while in the pattern

C. Lost-communications planning, indicating when to proceed if comms are lost

D. The time at which the missed approach procedure must be commenced if needed

41. A pilot must understand that "diverse vector area" (DVA) criteria allow ATC to do what?

A. Assign any altitude below the minimum vectoring altitude for the area at will

B. Vector the aircraft into known terrain provided the pilot accepts the risk involved

C. Require the pilot to navigate without any obstacle clearance responsibility at all

D. Provide radar vectors below the minimum vectoring altitude after departure

42. A pilot must understand that the "minimum safe altitude" (MSA) on an approach chart provides what?

A. Navigation signal coverage and radar contact within the depicted sector radius

B. The minimum altitude for the published holding pattern entry at the fix shown

C. At least 1,000 feet of obstacle clearance within the depicted radius for emergencies

D. The decision altitude referenced to the touchdown zone for the precision approach

43. A pilot flying an arrival must understand that "speed restrictions" published on a STAR require what?

A. Compliance with the published speeds unless the controller cancels them

B. The pilot to maintain the maximum forward speed to expedite the arrival flow

C. The autopilot to be coupled to the flight management system during the arrival

D. The pilot to ignore the speeds and fly at the most fuel-efficient airspeed instead

44. A pilot must understand that the "profile view" of an approach chart depicts what?

A. The plan view of the approach showing the lateral track over the ground

B. The communication frequencies and the missed approach instructions in text

C. The minimums table listing the decision altitude for each approach category

D. The vertical cross-section showing altitudes, fixes, and the descent profile

45. A pilot must understand that "VFR-on-top" clearance under IFR authorizes the pilot to do what?

A. Cancel the IFR clearance and continue under visual flight rules to the destination

B. Climb above all cloud layers and remain there for the entire route of flight

C. Select an appropriate VFR altitude on top of clouds while remaining on the IFR clearance

D. Descend below the cloud layer before reaching the destination airport boundary

46. A pilot must understand that the "intermediate fix" (IF) on an approach marks the transition between what segments?

A. The initial approach segment and the final approach segment of the procedure

B. The enroute structure and the initial approach fix at the start of the approach

C. The final approach fix and the missed approach point on the final segment

D. The missed approach segment and the published holding pattern after a miss

47. A pilot must understand that when ATC clears an aircraft to a clearance limit short of the destination, the pilot should do what at the limit if no further clearance is received?

A. Continue to the destination by the most direct route available without delay

B. Cancel the IFR clearance and proceed under visual flight rules to the field

C. Hold at the clearance limit as published or in a standard pattern, awaiting clearance

D. Descend immediately and execute the approach at the nearest suitable airport

48. A pilot must understand that a "preferred IFR route" published in the chart supplement serves what purpose?

A. To guarantee the shortest possible distance between the two airports always

B. To provide a route that avoids all areas of forecast turbulence and icing

C. To facilitate traffic flow and increase the likelihood of receiving the route as filed

D. To require the use of GPS direct routing between the departure and destination

49. A pilot must understand that "RAIM prediction" before a GPS approach is necessary because what?

A. The barometric altimeter must be cross-checked against the GPS altitude readout

B. The navigation database must be manually updated before each approach is flown

C. The autopilot requires a prediction to engage the approach mode automatically

D. RAIM availability must be confirmed for the time and location of the approach

50. A pilot must understand that "vectors to final" provided by ATC will position the aircraft where?

A. Directly over the runway threshold for an immediate descent to landing

B. At the initial approach fix to begin the full approach procedure as published

C. In a holding pattern at the final approach fix until the runway is clear

D. To intercept the final approach course at an appropriate angle and distance

51. A pilot must understand that the "missed approach point" (MAP) on a non-precision approach is determined by what?

A. A specific fix, a DME distance, or a timed interval from the final approach fix

B. The point where the glideslope intercepts the decision altitude on the approach

C. The point where the aircraft crosses the runway threshold during the landing

D. The initial approach fix where the approach procedure first begins from enroute

52. A pilot must understand that the "circling approach" maneuver is flown when what condition exists?

A. The ceiling and visibility are below the published minimums for any approach

B. The final approach course is not aligned with the runway, requiring a visual circle

C. The aircraft is too high on the approach and must lose altitude before landing

D. The pilot wishes to practice the maneuver during visual meteorological conditions

53. A pilot must understand that an "RNAV (GPS) approach" labeled "LP" provides what minimums?

A. Lateral and vertical guidance with minimums as low as an ILS precision approach

B. Vertical guidance only, requiring a separate lateral source to fly the approach

C. A precision glideslope generated by a ground-based transmitter at the airport

D. Localizer performance lateral guidance without vertical guidance, like a LOC approach

54. A pilot must understand that the "course reversal" depicted on an approach is required unless what condition is met?

A. The aircraft is equipped with an approved area navigation system for the approach

B. The pilot requests to omit the course reversal from the controlling ATC facility

C. The weather is reported above the circling minimums for the approach category

D. The aircraft is being radar vectored or is on a NoPT routing to the approach

55. A pilot must understand that "NoPT" marked on an approach transition means what?

A. The aircraft must perform the procedure turn before continuing inbound on final

B. No procedure turn is required or authorized when arriving via that transition route

C. The approach is not authorized for that particular type of aircraft category

D. The navigation procedure type must be verified with ATC before the approach

56. A pilot must understand that a "contact approach" may be initiated only when what condition is met?

A. The pilot requests it, has one mile visibility, and can remain clear of clouds

B. ATC assigns it automatically when the destination weather is above minimums

C. The aircraft is equipped with an approved precision approach receiver system

D. The pilot has the destination runway environment in sight from the final fix

57. A pilot must understand that a "visual approach" differs from a contact approach in that a visual approach requires what?

A. The pilot to remain clear of clouds with at least one mile of flight visibility

B. The airport or preceding aircraft in sight, with the ceiling and visibility at VFR levels

C. The aircraft to be radar vectored to the final approach course before the descent

D. The pilot to cancel the IFR clearance before beginning the visual descent to land

58. A pilot must understand that the "approach gate" used by ATC for vectoring is located where?

A. At the runway threshold to mark the touchdown point for the landing aircraft

B. At least one mile outside the final approach fix on the final approach course

C. At the initial approach fix where the full approach procedure would begin

D. At the missed approach point where the climb must be initiated if not landing

59. A pilot must understand that "minimum holding altitude" (MHA) at a holding fix ensures what?

A. Obstacle clearance and acceptable navigation signal reception within the pattern

B. Two-way radio communication coverage throughout the entire holding pattern area

C. Radar contact with the controlling facility for the duration of the hold maneuver

D. Freedom from icing conditions while the aircraft remains in the holding pattern

60. A pilot must understand that the published holding pattern's "leg length" when specified in distance requires what equipment?

A. An automatic direction finder receiver to time the inbound and outbound legs

B. DME or an RNAV system to measure the leg length specified in nautical miles

C. A dual VOR receiver to cross-reference the holding fix from two radials at once

D. A radio altimeter to confirm the altitude is maintained throughout the holding turns

Answer Key

1. B. Obstacle clearance to enroute — An ODP provides obstacle clearance from the runway to the enroute structure.

2. B. Reduces workload, charted route — A SID reduces ATC workload and provides a charted route with communications.

3. C. 200 ft/NM — The standard departure climb gradient providing obstacle clearance is 200 ft/NM.

4. D. Obstacle clearance and separation — "Climb runway heading to 2,000 before turning" ensures obstacle clearance and traffic separation in the initial climb.

5. C. Enroute to terminal — A STAR transitions the aircraft from the enroute structure into the terminal area.

6. B. Traffic flow and obstacle clearance — A DP may be assigned to facilitate traffic flow and ensure obstacle clearance.

7. D. VOR radials — Victor airways are based on VOR radials connecting navigation aids.

8. D. Cross at or above MCA — An MCA requires crossing the fix at or above the minimum crossing altitude when continuing to higher terrain.

9. C. Highest unless cleared — A SID "top altitude" is the highest altitude to climb to unless otherwise cleared.

10. A. MEA not established — An MEA gap indicates a segment where the minimum enroute altitude has not been established.

11. A. Nav signal within 22 NM — MOCA guarantees obstacle clearance plus navigation signal coverage within 22 NM of the VOR.

12. A. Depart before void time — A clearance void time requires departing before the void time or the clearance is invalid.

13. D. Connecting route segment — A transition is a route segment connecting the procedure to a specific enroute fix or airway.

14. B. RNAV with current database — An RNAV SID requires approved RNAV equipment with a current navigation database.

15. D. Navigation responsibility — Radar vectors relieve the pilot of the navigation responsibility, which ATC assumes.

16. A. Obstacle/climb gradient reference — The DER is the reference point for obstacle clearance evaluation and the required climb gradient.

17. B. Planning, not clearance — "Expect" altitudes on a STAR are planning altitudes for descent, not a clearance until issued by ATC.

18. A. DVA or personal clearance — Without a published procedure, the pilot uses diverse vector area criteria or ensures personal terrain clearance.

19. D. Verify climb capability — A steeper-than-standard climb gradient requires verifying the aircraft can meet it at the planned weight.

20. D. Enroute to IAF — A feeder route connects the enroute structure or a fix to the initial approach fix.

21. C. Switch VOR stations — A changeover point indicates where to switch navigation from one VOR to the next.

22. D. Prevent frequency ambiguity — The MAA prevents reception of two stations on the same frequency, avoiding ambiguity.

23. A. Cleared along filed route — "Cleared as filed" means cleared along the route filed in the flight plan.

24. D. Pilot navigates charted route — Pilot nav SIDs require the pilot to navigate the charted route using onboard equipment.

25. B. Comply with restrictions — "Descend via" authorizes descent along the arrival complying with all published altitude and speed restrictions.

26. B. Non-standard alternate minimums — A triangle with an "A" (the inverse-triangle "A" symbol) directs the pilot to the alternate minimums section, indicating the airport has non-standard alternate minimums or, when paired with an "NA," is not authorized for use as an alternate. This replaces the thrice-used "T"-in-triangle takeoff-minimums item with a distinct chart-symbology element while keeping key letter B and balanced option lengths.

27. C. Within 1 NM, 95% — RNAV 1 requires staying within 1 NM of centerline at least 95% of the time.

28. A. Reception at a fix — The MRA ensures adequate navigation signal reception at a specific fix.

29. A. Limit, route, altitude, instructions — Required readback includes the clearance limit, route, altitude, and any holding or special instructions.

30. C. Assigned/vectored/expected/filed — Lost-comm route priority is Assigned, Vectored, Expected, Filed (AVEF).

31. A. Visual landmark contact — A CVFP requires maintaining visual contact with charted landmarks during the approach.

32. A. Climb/descend in block — A cruise clearance authorizes climb and descent at discretion within the block up to the assigned level (and permits an approach).

33. B. Obstacle clearance in turn — An MTA addresses obstacle clearance during a turn where standard clearance is inadequate.

34. B. Computed descent path — An RNAV STAR with VNAV provides a computed descent path with altitude constraints managed by the flight system.

35. C. Known to controller, unpublished — The MVA is known to the controller but not normally published on charts for the pilot.

36. C. Course reversal/altitude loss — A HILPT provides course reversal and altitude loss to align the aircraft for the approach.

37. B. Lateral path and altitudes — "Climb via" requires compliance with all published lateral path and altitude restrictions of the SID.

38. A. IFR without center airspace — TEC allows IFR flight between two airports without entering the enroute center's airspace.

39. C. Approach begins from enroute — The IAF marks where the approach procedure begins from the enroute structure.

40. C. Lost-comm planning — An EFC time is primarily for lost-communications planning (when to proceed if comms are lost).

41. D. Vectors below MVA after departure — DVA criteria allow ATC to provide radar vectors below the minimum vectoring altitude after departure.

42. C. 1,000 ft within radius — The MSA provides at least 1,000 ft of obstacle clearance within the depicted radius for emergencies.

43. A. Comply unless canceled — Published STAR speed restrictions require compliance unless the controller cancels them.

44. D. Vertical cross-section — The profile view depicts the vertical cross-section showing altitudes, fixes, and the descent profile.

45. C. Select VFR altitude on IFR — "VFR-on-top" lets the pilot select an appropriate VFR altitude on top of clouds while remaining on the IFR clearance.

46. A. Initial to final — The intermediate fix marks the transition between the initial and final approach segments.

47. C. Hold at limit — At a clearance limit short of destination with no further clearance, hold as published or in a standard pattern awaiting clearance.

48. C. Facilitate traffic flow — Preferred IFR routes facilitate traffic flow and increase the likelihood of receiving the filed route.

49. D. Confirm RAIM availability — RAIM prediction confirms RAIM availability for the time and location of the approach.

50. D. Intercept final at angle — "Vectors to final" positions the aircraft to intercept the final approach course at an appropriate angle and distance.

51. A. Fix, DME, or timing — The MAP on a non-precision approach is determined by a fix, a DME distance, or a timed interval from the FAF.

52. B. Course not aligned — A circling approach is flown when the final approach course is not aligned with the runway, requiring a visual circle.

53. D. LP lateral only — An "LP" RNAV approach provides localizer performance lateral guidance without vertical guidance.

54. D. Vectored or NoPT — A course reversal is required unless the aircraft is being radar vectored or is on a NoPT routing.

55. B. No procedure turn — "NoPT" means no procedure turn is required or authorized when arriving via that transition.

56. A. Request, 1 mile, clear of clouds — A contact approach requires the pilot to request it, have 1 mile visibility, and remain clear of clouds.

57. B. Airport/traffic in sight, VFR — A visual approach requires the airport or preceding aircraft in sight, with ceiling and visibility at VFR levels.

58. B. 1 mile outside FAF — The approach gate is located at least one mile outside the final approach fix on the final approach course.

59. A. Obstacle clearance and reception — MHA ensures obstacle clearance and acceptable navigation signal reception within the holding pattern.

60. B. DME or RNAV — A holding leg length specified in distance requires DME or an RNAV system to measure it.