
TEMA: 0113 ATP - (CHAP. 02) EQUIPMENT, NAVIGATION, AND FACILITIES

COD_PREG: PREGUNTA:

RPTA:

8135 Who must the crew of a domestic or flag air carrier airplane be able to communicate with, under normal conditions, along the entire route (in either direction) of flight?

C

OPCION A: ARINC.

OPCION B: Any FSS.

OPCION C: Appropriate dispatch office.

8140 Information recorded during normal operations of a cockpit voice recorder in a large pressurized airplane with four reciprocating engines

A

OPCION A: may all be erased or otherwise obliterated except for the last 30 minutes.

OPCION B: may be erased or otherwise obliterated except for the last 30 minutes prior to landing.

OPCION C: may all be erased, as the voice recorder is not required on an aircraft with reciprocating engines.

8141 Which rule applies to the use of cockpit voice recorder erasure feature?

B

OPCION A: All recorded information may be erased, except for the last 30 minutes prior to landing.

OPCION B: Any information more than 30 minutes old may be erased.

OPCION C: All recorded information may be erased, unless the DGAC needs to be notified of an occurrence.

8142 For the purpose of testing the flight recorder system,

B

OPCION A: a minimum of 1 hour of the oldest recorded data must be erased to get a valid test.

OPCION B: a total of 1 hour of the oldest recorded data accumulated at the time of testing may be erased.

OPCION C: a total of no more than 1 hour of recorded data may be erased.

8143 A cockpit voice recorder must be operated

A

OPCION A: from the start of the before starting engine checklist to completion of final checklist upon termination of flight.

OPCION B: from the start of the before starting engine checklist to completion of checklist prior to engine shutdown.

OPCION C: when starting to taxi for takeoff to the engine shutdown checklist after termination of the flight.

8145 When an air carrier flight is operated under IFR or over-the-top on "victor airways," which navigation equipment is required to be installed in duplicate?

A

OPCION A: VOR.

OPCION B: VOR and DME.

OPCION C: ADF.

8146 When must an air carrier airplane be DME equipped?

B

OPCION A: In Class E airspace for all IFR or VFR on Top operations.

OPCION B: Whenever VOR navigational receivers are required.

OPCION C: For flights at or above FL 180.

8147 When a pilot plans a flight using NDB NAVAIDS, which rule applies?

C

OPCION A: The airplane must have sufficient fuel to proceed, by means of VOR NAVAIDS, to a suitable airport and land.

OPCION B: The pilot must be able to return to the departure airport using other navigation radios.

OPCION C: The airplane must have sufficient fuel to proceed, by means of VOR NAVAIDS, to a suitable airport and complete an instrument approach by use of the remaining airplane radio system.

8148 What action should be taken by the pilot in command of a transport category airplane if the airborne weather radar becomes inoperative en route on an IFR flight for which weather reports indicate possible thunderstorms?

B

OPCION A: Request radar vectors from ATC to the nearest suitable airport and land.

OPCION B: Proceed in accordance with the approved instructions and procedures specified in the operations manual for such an event.

OPCION C: Return to the departure airport if the thunderstorms have not been encountered, and there is enough fuel remaining.

8149	If an air carrier airplane is flying IFR using a single ADF navigation receiver and the ADF equipment fails, the flight must be able to	A
OPCION A:	proceed safely to a suitable airport using VOR aids and complete an instrument approach by use of the remaining airplane radio system.	
OPCION B:	continue to the destination airport by means of dead reckoning navigation.	
OPCION C:	proceed to a suitable airport using VOR aids, complete an instrument approach and land.	

8150	If an air carrier airplane's airborne radar is inoperative and thunderstorms are forecast along the proposed route of flight, an airplane may be dispatched only	C
OPCION A:	when able to climb and descend VFR and maintain VFR/OT en route.	
OPCION B:	in VFR conditions.	
OPCION C:	in day VFR conditions.	

8151	An air carrier airplane's airborne radar must be in satisfactory operating condition prior to dispatch, if the flight will be	A
OPCION A:	conducted under VFR conditions at night with scattered thunderstorms reported en route.	
OPCION B:	carrying passengers, but not if it is "all cargo".	
OPCION C:	conducted IFR, and ATC is able to radar vector the flight around areas of weather.	

8152	While on an IFR flight in controlled airspace, the failure of which unit will precipitate an immediate report to ATC?	C
OPCION A:	One engine, on a multiengine aircraft.	
OPCION B:	Airborne radar.	
OPCION C:	DME.	

8154	Which airplanes are required to be equipped with a ground proximity warning glide slope deviation alerting system?	A
OPCION A:	All turbine powered airplanes.	
OPCION B:	Passenger-carrying turbine-powered airplanes only.	
OPCION C:	Large turbine-powered airplanes only.	

8194	Which equipment requirement must be met by an air carrier that elects to use a dual Inertial Navigation System (INS) on a proposed flight?	C
OPCION A:	The dual system must consist of two operative INS units.	
OPCION B:	A dual VORTAC/ILS system may be substituted for an inoperative INS.	
OPCION C:	Only one INS is required to be operative, if a Doppler Radar is substituted for the other INS.	

8195	An air carrier operates a flight in VFR over-the-top conditions. What radio navigation equipment is required to be a dual installation?	A
OPCION A:	VOR.	
OPCION B:	VOR and ILS.	
OPCION C:	VOR and DME.	

8196	Routes that require a flight navigator are listed in the	C
OPCION A:	International Notices To Airmen.	
OPCION B:	International Aeronautical Information Manual.	
OPCION C:	Certificate holder's, Operations Specifications.	

8197	Where are the routes listed that require special navigation equipment?	A
OPCION A:	Certificate holder's, Operations Specifications.	
OPCION B:	International Aeronautical Information Manual.	
OPCION C:	International Notices To Airmen.	

8203	An air carrier that elects to use an Inertial Navigational System (INS) must meet which equipment requirement prior to takeoff on a proposed flight?	B
OPCION A:	The INS system must consist of two operative INS units.	
OPCION B:	Only one INS is required to be operative, if a Doppler Radar is substituted for the other INS.	
OPCION C:	A dual VORTAC/ILS system may be substituted for an inoperative INS.	

8868	Which RMI illustration indicates the aircraft to be flying outbound on the magnetic bearing of 235° FROM the station? (Wind 050° at 20 knots.)	B
OPCION A:	2.	
OPCION B:	3.	
OPCION C:	4.	

8869	Fig. 125 What is the magnetic bearing TO the station as indicated by illustration 4?	B
OPCION A:	285°.	
OPCION B:	055°.	
OPCION C:	235°.	

8870	Fig. 125 Which RMI illustration indicates the aircraft is southwest of the station and moving closer TO the station?	A
OPCION A:	1.	
OPCION B:	2.	
OPCION C:	3.	

8871	Fig. 125 Which RMI illustration indicates the aircraft is located on the 055° radial of the station and heading away from the station?	B
OPCION A:	1.	
OPCION B:	2.	
OPCION C:	3.	

8901	What is the advantage of HIRL or MIRL on an IFR runway as compared to a VFR runway?	B
OPCION A:	Lights are closer together and easily distinguished from surrounding lights.	
OPCION B:	Amber lights replace white on the last 2,000 feet of runway for a caution zone.	
OPCION C:	Alternate red and white lights replace the white on the last 3,000 feet of runway for a caution zone.	

8902	Identify touchdown zone lighting (TDZL).	A
OPCION A:	Two rows of transverse light bars disposed symmetrically about the runway centerline.	
OPCION B:	Flush centerline lights spaced at 50-foot intervals extending through the touchdown zone.	
OPCION C:	Alternate white and green centerline lights extending from 75 feet from the threshold through the touchdown zone.	

8903	Identify runway remaining lighting on centerline lighting systems.	B
OPCION A:	Amber lights from 3,000 feet to 1,000 feet, then alternate red and white lights to the end.	
OPCION B:	Alternate red and white lights from 3,000 feet to 1,000 feet, then red lights to the end.	
OPCION C:	Alternate red and white lights from 3,000 feet to the end of the runway.	

8904	Identify taxi lead off lights associated with the centerline lighting system.	B
OPCION A:	Alternate blue and white lights curving from the centerline of the runway to the centerline of the taxiway.	
OPCION B:	Green lights curving from the centerline of the runway to the centerline of the taxiway.	
OPCION C:	Blue lights curving from the centerline of the runway to the centerline of the taxiway.	

8905	How can a pilot identify a military airport at night?	C
OPCION A:	Green, yellow, and white beacon light.	
OPCION B:	White and red beacon light with dual flash of the white.	
OPCION C:	Green and white beacon light with dual flash of the white.	

8906	How can a pilot identify a lighted heliport at night?	A
OPCION A:	Green, yellow, and white beacon light.	
OPCION B:	White and red beacon light with dual flash of the white.	
OPCION C:	Green and white beacon light with dual flash of the white.	

8907	Identify the runway distance remaining markers.	A
OPCION A:	Signs with increments of 1,000 feet distance remaining.	
OPCION B:	Red markers laterally placed across the runway at 3,000 feet from the end.	
OPCION C:	Yellow marker laterally placed across the runway with signs on the side denoting distance to end.	

8908	What are the indications of Precision Approach Path Indicator (PAPI)?	A
OPCION A:	High - white, on glidepath - red and white; low - red.	
OPCION B:	High - white, on glidepath - green; low - red.	
OPCION C:	High - white and green, on glidepath - green; low - red.	

8909	What does the pulsating VASI consist of?	C
OPCION A:	Three-light system, two pulsing and one steady.	
OPCION B:	Two-light projectors, one pulsing and one steady.	
OPCION C:	One-light projector, pulsing white when above glide slope or red when more than slightly below glide slope, steady white when on glide slope, steady red for slightly below glide path.	

8910	What are the indications of the pulsating VASI?	B
OPCION A:	High - pulsing white, on glidepath - green, low - pulsing red.	
OPCION B:	High - pulsing white, on glidepath - steady white, slightly below glide slope steady red, low - pulsing red.	
OPCION C:	High - pulsing white, on course and on glidepath - steady white, off course but on glidepath - pulsing white and red; low - pulsing red.	

8911	What is the advantage of a three-bar VASI?	B
OPCION A:	Pilots have a choice of glide angles.	
OPCION B:	A normal glide angle is afforded both high and low cockpit aircraft.	
OPCION C:	The three-bar VASI is much more visible and can be used at a greater height.	

8912	A pilot of a high-performance airplane should be aware that flying a steeper-than-normal VASI glide slope angle may result in	B
OPCION A:	a hard landing.	
OPCION B:	increased landing rollout.	
OPCION C:	landing short of the runway threshold.	

8913	The higher glide slope of the three-bar VASI is intended for use by	C
OPCION A:	high performance aircraft.	
OPCION B:	helicopters.	
OPCION C:	high cockpit aircraft.	

8914	What is the purpose of REIL?	A
OPCION A:	Identification of a runway surrounded by a preponderance of other lighting.	
OPCION B:	Identification of the touchdown zone to prevent landing short.	
OPCION C:	Establish visual descent guidance information during an approach.	

8915	Identify REIL.	C
OPCION A:	Amber lights for the first 2,000 feet of runway.	
OPCION B:	Green lights at the threshold and red lights at far end of runway.	
OPCION C:	Synchronized flashing lights laterally at each side of the runway threshold.	

8916	What does the tri-color VASI consist of?	B
OPCION A:	Three light bars; red, green, and amber.	
OPCION B:	One light projector with three colors; red, green, and amber.	
OPCION C:	Three glide slopes, each a different color; red, green, and amber.	

8917	Which color on a tri-color VASI is a "high" indication?	B
OPCION A:	Red.	
OPCION B:	Amber.	
OPCION C:	Green.	

8918	Which color on a tri-color VASI is an "on course" indication?	C
OPCION A:	Red.	
OPCION B:	Amber.	
OPCION C:	Green.	

8919	Which color on a tri-color VASI is a "low" indication?	A
OPCION A:	Red.	
OPCION B:	Amber.	
OPCION C:	Green.	

8920	What is the normal range of the tri-color VASI at night?	A
OPCION A:	5 miles.	
OPCION B:	10 miles.	
OPCION C:	15 miles.	

8921	What does the Precision Approach Path Indicator (PAPI) consist of?	B
OPCION A:	Row of four lights parallel to the runway; red, white, and green.	
OPCION B:	Row of four lights perpendicular to the runway; red and white.	
OPCION C:	One light projector with two colors; red and white.	

8922	Fig. 129 What is the runway distance remaining at "A" for a daytime takeoff on runway 9?	A
OPCION A:	1,000 feet.	
OPCION B:	1,500 feet.	
OPCION C:	2,000 feet.	

8923	Fig. 130 What is the runway distance remaining at "A" for a nighttime takeoff on runway 9?	B
OPCION A:	1,000 feet.	
OPCION B:	2,000 feet.	
OPCION C:	2,500 feet.	

8924	Fig. 130 What is the runway distance remaining at "B" for a daytime takeoff on runway 9?	C
OPCION A:	2,000 feet.	
OPCION B:	2,500 feet.	
OPCION C:	3,000 feet.	

8925	Fig. 130 What is the runway distance remaining at "C" for a daytime takeoff on runway 9?	B
OPCION A:	2,500 feet.	
OPCION B:	2,000 feet.	
OPCION C:	1,500 feet.	

8926	Fig. 130 What is the runway distance remaining at "D" for a daytime takeoff on runway 9?	B
OPCION A:	500 feet.	
OPCION B:	1,000 feet.	
OPCION C:	1,500 feet.	

8927	Fig. 131 What is the runway distance remaining at "E" for a daytime takeoff on runway 9?	B
OPCION A:	1,500 feet.	
OPCION B:	2,000 feet.	
OPCION C:	2,500 feet.	

8928	Fig. 131 What is the runway distance remaining at "A" for a nighttime takeoff on runway 9?	B
OPCION A: 2,000 feet. OPCION B: 3,000 feet. OPCION C: 3,500 feet.		
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8929	Fig. 131 What is the runway distance remaining at "D" for a daytime takeoff on runway 9?	A
OPCION A: 3,000 feet. OPCION B: 2,500 feet. OPCION C: 1,500 feet.		
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8930	Fig. 131 What is the runway distance remaining at "B" for a nighttime takeoff on runway 9?	B
OPCION A: 1,000 feet. OPCION B: 2,000 feet. OPCION C: 2,500 feet.		
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8931	Fig. 131 What is the runway distance remaining at "F" for a daytime takeoff on runway 9?	C
OPCION A: 2,000 feet. OPCION B: 1,500 feet. OPCION C: 1,000 feet.		
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8932	Fig. 131 What is the runway distance remaining at "C" for a nighttime takeoff on runway 9?	A
OPCION A: 1,000 feet. OPCION B: 1,500 feet. OPCION C: 1,800 feet.		
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8945	How may a pilot determine if a LORAN-C receiver is authorized for IFR operations?	A
OPCION A: Consult the Airplane Flight Manual Supplement. OPCION B: A placard stating, "LORAN-C APPROVED FOR IFR EN ROUTE, TERMINAL AND APPROACH SEGMENTS." OPCION C: An airframe logbook entry that the LORAN-C receiver has been checked within the previous 30-calendar days.		
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8946	What documents the authorized operational level of LORAN-C?	B
OPCION A: A placard stating "KIRAB-C APPROVED FOR IFR." OPCION B: The Airplane Flight Manual Supplement or DGAC Form 337, Major Repair and Alteration. OPCION C: An entry in the aircraft maintenance logbook giving place, date, and signature of authorizing official.		
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8947	LORAN-C is based upon measurements of the difference in time arrival of pulses generated by what type radio stations?	C
OPCION A: A group of stations operating on the 108-115 MHz frequency band. OPCION B: Two stations operating on the 90-110 MHz frequency band. OPCION C: A chain of stations operating on the 90-110 kHz frequency band.		
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8949	Which class of NOTAM gives the latest information on LORAN-C chain or station outages?	B
OPCION A: NOTAM (L)'s under the identifier "LORAN-C." OPCION B: NOTAM (D)'s under the identifier "LRN." OPCION C: Class II NOTAM's published every 14 days.		
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8956	Which component associated with the ILS is identified by the last two letters of the localizer group?	B
OPCION A: Inner marker. OPCION B: Middle compass locator. OPCION C: Outer compass locator.		

8957	Which component associated with the ILS is identified by the first two letters of the localizer identification group?	C
OPCION A: Inner marker. OPCION B: Middle compass locator. OPCION C: Outer compass locator.		
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8958	What aural and visual indications should be observed over an ILS inner marker?	A
OPCION A: Continuous dots at the rate of six per second. OPCION B: Continuous dashes at the rate of two per second. OPCION C: Alternate dots and dashes at the rate of two per second.		
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8959	What aural and visual indications should be observed over an ILS middle marker?	C
OPCION A: Continuous dots at the rate of six per second. OPCION B: Continuous dashes at the rate of two per second. OPCION C: Alternate dots and dashes at the rate of two per second.		
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8960	What aural and visual indications should be observed over an ILS outer marker?	B
OPCION A: Continuous dots at the rate of six per second. OPCION B: Continuous dashes at the rate of two per second. OPCION C: Alternate dots and dashes at the rate of two per second.		
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8961	Within what frequency range does the localizer transmitter of the ILS operate?	B
OPCION A: 108.10 to 118.10 MHz. OPCION B: 108.10 to 111.95 MHz. OPCION C: 108.10 to 117.95 MHz.		
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8962	If installed, what aural and visual indications should be observed over the ILS back course marker?	A
OPCION A: A series of two dot combinations, and a white marker beacon light. OPCION B: Continuous dashes at the rate of one per second, and a white marker beacon light. OPCION C: A series of two dash combinations, and a white marker beacon light.		
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8963	The lowest ILS Category II minimums are	B
OPCION A: DH 50 feet and RVR 1,200 feet. OPCION B: DH 100 feet and RVR 1,200 feet. OPCION C: DH 150 feet and RVR 1,500 feet.		
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8964	What is the lowest Category IIIA minimum?	C
OPCION A: DH 50 feet and RVR 1,200 feet. OPCION B: RVR 1,000 feet. OPCION C: RVR 700 feet.		
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8965	How does the SDF differ from an ILS LOC?	A
OPCION A: SDF - 6° or 12° wide, ILS - 3° to 6°. OPCION B: SDF - offset from runway plus 3°, ILS - aligned with runway. OPCION C: SDF - 15° usable off course indications, ILS - 35°.		
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8966	What functions are provided by ILS?	C
OPCION A: Azimuth, distance, and vertical angle. OPCION B: Azimuth, range, and vertical angle. OPCION C: Guidance, range, and visual information.		
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8967	How does the LDA differ from an ILS LOC?	B
OPCION A: LDA. 6° or 12° wide, ILS - 3° to 6°. OPCION B: LDA. offset from runway plus 3°, ILS - aligned with runway. OPCION C: LDA. 15° usable off course indications, ILS - 35°.		

8968	When is the course deviation indicator (CDI) considered to have a full-scale deflection?	B
OPCION A:	When the CDI deflects from full-scale left to full-scale right, or vice versa.	
OPCION B:	When the CDI deflects from the center of the scale to full-scale left or right.	
OPCION C:	When the CDI deflects from half-scale left to half-scale right, or vice versa.	

8969	Which "rule-of-thumb" may be used to approximate the rate of descent required for a 3° glidepath?	A
OPCION A:	5 times groundspeed in knots.	
OPCION B:	8 times groundspeed in knots.	
OPCION C:	10 times groundspeed in knots.	

8970	What facilities may be substituted for an inoperative middle marker during a Category I ILS approach?	B
OPCION A:	ASR and PAR.	
OPCION B:	The middle marker has no effect on straight-in minimums.	
OPCION C:	Compass locator, PAR, and ASR.	

8971	Fig. 135 to 138 Which displacement from the localizer and glide slope at the 1.9 NM point is indicated?	B
OPCION A:	710 feet to the left of the localizer centerline and 140 feet below the glide slope.	
OPCION B:	710 feet to the right of the localizer centerline and 140 feet above the glide slope.	
OPCION C:	430 feet to the right of the localizer centerline and 28 feet above the glide slope.	

8972	Fig. 136 -138 Which displacement from the localizer centerline and glide slope at the 1,300-foot point from the runway is indicated?	C
OPCION A:	21 feet below the glide slope and approximately 320 feet to the right of the runway centerline.	
OPCION B:	28 feet above the glide slope and approximately 250 feet to the left of the runway centerline.	
OPCION C:	21 feet above the glide slope and approximately 320 feet to the left of the runway centerline.	

8973	Fig. 137 - 138 Which displacement from the localizer and glide slope at the outer marker is indicated?	A
OPCION A:	1,550 feet to the left of the localizer centerline and 210 feet below the glide slope.	
OPCION B:	1,550 feet to the right of the localizer centerline and 210 feet above the glide slope.	
OPCION C:	775 feet to the left of the localizer centerline and 420 feet below the glide slope.	

8974	What international Morse Code identifier is used to identify a specific interim standard Microwave Landing System (MLS)?	B
OPCION A:	A two letter Morse Code identifier preceded by the Morse Code for the letters "IM."	
OPCION B:	A three letter Morse Code identifier preceded by the Morse Code for the letter "M."	
OPCION C:	A three letter Morse Code identifier preceded by the Morse Code for the letters "ML."	

8975	To at least which altitude AGL is the approach azimuth guidance angle coverage of a Microwave Landing System (MLS)?	A
OPCION A:	20,000 feet.	
OPCION B:	10,000 feet.	
OPCION C:	8,000 feet.	

8976	What are the lateral approach azimuth angle limits, referenced to either side of the landing runway, of a Microwave Landing System (MLS)?	C
OPCION A:	At least 15°.	
OPCION B:	20°.	
OPCION C:	At least 40°.	

8977	What are the respective range limits for the front and back guidance of a Microwave Landing System (MLS)?	C
OPCION A:	10 NM and 10 NM.	
OPCION B:	15 NM and 10 NM.	
OPCION C:	20 NM and 7 NM.	

8978	What information is provided by the Microwave Landing System (MLS) precision navigation system?	A
OPCION A:	Azimuth, elevation, and distance information.	
OPCION B:	Azimuth, elevation, and three-letter identification.	
OPCION C:	Range, elevation, and ISMLS readouts.	

8979	In addition to basic information, what expansion capabilities does the Microwave Landing System (MLS) have?	B
OPCION A:	Back azimuth glide slope.	
OPCION B:	Back azimuth and data transmissions.	
OPCION C:	Variable front and back azimuth upon request.	

8980	What azimuth coverage of the Microwave Landing System (MLS) can be expected?	B
OPCION A:	Laterally 20° each side, vertically 15° to 20,000 feet, and range 50 NM.	
OPCION B:	Laterally 40° each side, vertically 15° to 20,000 feet, and range 20 NM.	
OPCION C:	Laterally 15° each side, vertically 6° to 20,000 feet, and range 20 NM.	

8981	What is the difference, if any, between the front and back azimuth of the Microwave Landing System (MLS)?	B
OPCION A:	None, except indicator reversal.	
OPCION B:	Transmissions are at a lower rate.	
OPCION C:	Back azimuth has no DME/P.	

8982	In addition to navigation information, what data is transmitted on the Microwave Landing System (MLS) frequencies?	C
OPCION A:	MLS status, missed approach procedure, and airport conditions.	
OPCION B:	ATC clearances, missed approach procedures, and airport conditions.	
OPCION C:	MLS status, airport conditions, and weather.	

8983	What does operational flexibility of the Microwave Landing System (MLS) include?	A
OPCION A:	Selectable glidepath angles and boundaries providing obstruction clearance in the terminal area.	
OPCION B:	An azimuth of 40° in width providing obstacle clearance within 22 NM of the airport.	
OPCION C:	Curved and segmented approaches collocated with a fixed glidepath angle.	

8984	Fig. 139 What is the lateral displacement of the aircraft in nautical miles from the radial selected on the No.1 NAV?	A
OPCION A:	5.0 NM.	
OPCION B:	7.5 NM.	
OPCION C:	10.0 NM.	

8985	Fig. 139 On which radial is the aircraft as indicated by the No.1 NAV?	C
OPCION A:	R-175.	
OPCION B:	R-165.	
OPCION C:	R-345.	

8986	Fig. 139 Which OBS selection on the No.1 NAV would center the CDI and change the ambiguity indication to a TO?	B
OPCION A:	175.	
OPCION B:	165.	
OPCION C:	345.	

8987	Fig. 139 What is the lateral displacement in degrees from the desired radial on the No.2 NAV?	C
OPCION A:	1°.	
OPCION B:	2°.	
OPCION C:	4°.	

8988 Fig. 139 A
Which OBS selection on the No.2 NAV would center the CDI?

- OPCION A:** 174.
OPCION B: 166.
OPCION C: 335.
-

8989 Fig. 139 C
Which OBS selection on the No.2 NAV would center the CDI and change the ambiguity indication to a TO?

- OPCION A:** 166.
OPCION B: 346.
OPCION C: 354.
-

8990 Fig. 140/141 A
To which aircraft position(s) does HSI presentation "A" correspond?

- OPCION A:** 9 and 6.
OPCION B: 9 only.
OPCION C: 6 only.
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8991 Fig. 140-141 B
To which aircraft position(s) does HSI presentation "B" correspond?

- OPCION A:** 11.
OPCION B: 5 and 13.
OPCION C: 7 and 11.
-

8992 Fig. 140-141 C
To which aircraft position(s) does HSI presentation "C" correspond?

- OPCION A:** 9.
OPCION B: 4.
OPCION C: 12.
-

8993 Fig. 140-141 C
To which aircraft position(s) does HSI presentation "D" correspond?

- OPCION A:** 1.
OPCION B: 10.
OPCION C: 2.
-

8994 Fig. 140-141 B
To which aircraft position(s) does HSI presentation "E" correspond?

- OPCION A:** 8 only.
OPCION B: 8 and 3.
OPCION C: 3 only.
-

8995 Fig. 140 - 141 A
To which aircraft position(s) does HSI presentation "F" correspond?

- OPCION A:** 4.
OPCION B: 11.
OPCION C: 5.
-

8996 Fig. 140-141 B
To which aircraft position(s) does HSI presentation "G" correspond?

- OPCION A:** 7 only.
OPCION B: 7 and 11.
OPCION C: 5 and 13.
-

8997 Fig. 140 - 141 B
To which aircraft position(s) does HSI presentation "H" correspond?

- OPCION A:** 8.
OPCION B: 1.
OPCION C: 2.
-

8998 Fig. 140 - 141 C
To which aircraft position(s) does HSI presentation "I" correspond?

- OPCION A:** 4.
OPCION B: 12.
OPCION C: 11.
-

8999 Fig. 142 - 143 C
To which aircraft position does HSI presentation "D" correspond?

- OPCION A:** 4.
OPCION B: 15.
OPCION C: 17.
-

9000 Fig. 142 - 143 B
To which aircraft position does HSI presentation "E" correspond?

- OPCION A:** 5.
OPCION B: 6.
OPCION C: 15.
-

9001 Fig. 142-143 C
To which aircraft position does HSI presentation "F" correspond?

- OPCION A:** 10.
OPCION B: 14.
OPCION C: 16.
-

9002 Fig. 142-143 A
To which aircraft position does HSI presentation "A" correspond?

- OPCION A:** 1.
OPCION B: 8.
OPCION C: 11.
-

9003 Fig. 142 - 143 C
To which aircraft position does HSI presentation "B" correspond?

- OPCION A:** 9.
OPCION B: 13.
OPCION C: 19.
-

9004 Fig. 142-143 C
To which aircraft position does HSI presentation "C" correspond?

- OPCION A:** 6.
OPCION B: 7.
OPCION C: 12.
-

9019 What would be the identification when a VORTAC is undergoing routine maintenance and is considered unreliable? C

- OPCION A:** A test signal, "TESTING", is sent every 30 seconds.
OPCION B: Identifier is preceded by "M" and an intermittent "OFF" flag would appear.
OPCION C: The identifier would be removed.
-

9020	Which indication may be received when a VOR is undergoing maintenance and is considered unreliable?	A
OPCION A:	Coded identification T-E-S-T.	
OPCION B:	Identifier is preceded by "M" and an intermittent "OFF" flag might appear.	
OPCION C:	An automatic voice recording stating the VOR is out-of-service for maintenance.	

9023	What DME indications should a pilot observe when directly over a VORTAC site at 12,000 feet?	B
OPCION A:	0 DME miles.	
OPCION B:	2 DME miles.	
OPCION C:	2.3 DME miles.	

9024	Where does the DME indicator have the greatest error between the ground distance and displayed distance to the VORTAC?	A
OPCION A:	High altitudes close to the VORTAC.	
OPCION B:	Low altitudes close to the VORTAC.	
OPCION C:	Low altitudes far from the VORTAC.	

9080	During an en route descent in a fixed-thrust and fixed-pitch attitude configuration, both the ram air input and drain hole of the pitot system become completely blocked by ice. What airspeed indication can be expected?	B
OPCION A:	Increase in indicated airspeed.	
OPCION B:	Decrease in indicated airspeed.	
OPCION C:	Indicated airspeed remains at the value prior to icing.	

9081	What can a pilot expect if the pitot system ram air input and drain hole are blocked by ice?	A
OPCION A:	The airspeed indicator may act as an altimeter.	
OPCION B:	The airspeed indicator will show a decrease with an increase in altitude.	
OPCION C:	No airspeed indicator change will occur during climbs or descents.	

9082	If both the ram air input and drain hole of the pitot system are blocked by ice, what airspeed indication can be expected?	A
OPCION A:	No variation of indicated airspeed in level flight if large power changes are made.	
OPCION B:	Decrease of indicated airspeed during a climb.	
OPCION C:	Constant indicated airspeed during a descent.	

9099	When setting the altimeter, pilots should disregard	A
OPCION A:	effects of nonstandard atmospheric temperatures and pressures.	
OPCION B:	corrections for static pressure systems.	
OPCION C:	corrections for instrument error.	

9163	En route at FL270, the altimeter is set correctly. On descent, a pilot fails to set the local altimeter setting of 30.57. If the field elevation is 650 feet, and the altimeter is functioning properly, what will it indicate upon landing?	C
OPCION A:	585 feet.	
OPCION B:	1,300 feet.	
OPCION C:	Sea level.	

9164	What is corrected altitude (approximate true altitude)?	B
OPCION A:	Pressure altitude corrected for instrument error.	
OPCION B:	Indicated altitude corrected for temperature variation from standard.	
OPCION C:	Density altitude corrected for temperature variation from standard.	

9172	If the ambient temperature is warmer than standard at FL350, what is the density altitude compared to pressure altitude?	B
OPCION A:	Lower than pressure altitude.	
OPCION B:	Higher than pressure altitude.	
OPCION C:	Impossible to determine without information on possible inversion layers at lower altitudes.	

9173	If the ambient temperature is colder than standard at FL310, what is the relationship between true altitude and pressure altitude?	B
OPCION A:	They are both the same, 31,000 feet.	
OPCION B:	True altitude is lower than 31,000 feet.	
OPCION C:	Pressure altitude is lower than true altitude.	

9174	Which pressure is defined as station pressure?	B
OPCION A:	Altimeter setting.	
OPCION B:	Actual pressure at field elevation.	
OPCION C:	Station barometric pressure reduced to sea level.	

9222	How will the airspeed indicator react if the ram air input to the pitot head is blocked by ice, but the drain hole and static port are not?	A
OPCION A:	Indication will drop to zero.	
OPCION B:	Indication will rise to the top of the scale.	
OPCION C:	Indication will remain constant but will increase in a climb.	

9258	What type service should normally be expected from an En Route Flight Advisory Service?	A
OPCION A:	Weather advisories pertinent to the type of flight, intended route of flight, and altitude.	
OPCION B:	Severe weather information, changes in flight plans, and receipt of position reports.	
OPCION C:	Radar vectors for traffic separation, route weather advisories, and altimeter settings.	

9261	Below FL 180, en route weather advisories should be obtained from an FSS on	B
OPCION A:	122.1 MHz.	
OPCION B:	122.0 MHz.	
OPCION C:	123.6 MHz.	

9356	For what purpose may cockpit voice recorders and flight data recorders NOT be used?	B
OPCION A:	Determining causes of accidents and occurrences under investigation by the DGTA.	
OPCION B:	Determining any certificate action, or civil penalty, arising out of an accident or occurrence.	
OPCION C:	Identifying procedures that may have been conducive to any accident.	

9357	How long is cockpit voice recorder and flight recorder data kept, in the event of an accident or occurrence resulting in terminating the flight?	A
OPCION A:	60 days.	
OPCION B:	90 days.	
OPCION C:	30 días.	

9375	What is the maximum permissible variation between the two bearing indicators on a dual VOR system when checking one VOR against the other?	A
OPCION A:	4° on the ground and in flight.	
OPCION B:	6° on the ground and in flight.	
OPCION C:	6° and in flight and 4° on the ground.	

9376	Which entry shall be recorded by the person performing a VOR operational check?	C
OPCION A:	Frequency, radial and facility used, and bearing error.	
OPCION B:	Flight hours and number of days since last check, and bearing error.	
OPCION C:	Date, place, bearing error, and signature.	

9377	Which checks and inspections of flight instruments or instrument systems must be accomplished before an aircraft can be flown under IFR?	A
OPCION A:	VOR within 30 days and altimeter systems and transponder within 24 calendar months.	
OPCION B:	ELT test within 30 days, altimeter systems within 12 calendar months, and transponder within 24 calendar months.	
OPCION C:	Airspeed indicator within 24 calendar months, altimeter system within 24 calendar months, and transponder within 12 calendar months.	

9378	A pilot approaching to land a turbine-powered aircraft on a runway served by a VASI shall	C
OPCION A:	not use the VASI unless a clearance for a VASI approach is received.	
OPCION B:	use the VASI only when weather conditions are below basic VFR.	
OPCION C:	maintain an altitude at or above the glide slope until a lower altitude is necessary for a safe landing.	

9380	What action is necessary when a partial loss of ILS receiver capability occurs while operating in controlled airspace under IFR?	C
OPCION A:	Continue as cleared and file a written report to the DGTA if requested.	
OPCION B:	If the aircraft is equipped with other radios suitable for executing an instrument approach, no further action is necessary.	
OPCION C:	Report the malfunction immediately to ATC.	

9381	What action should be taken if one of the two VHF radios fail while IFR in controlled airspace?	A
OPCION A:	Notify ATC immediately.	
OPCION B:	Squawk 7600.	
OPCION C:	Monitor the VOR receiver.	

9386	While flying IFR in controlled airspace, if one of the two VOR receivers fails, which course of action should the pilot-in-command follow?	B
OPCION A:	No call is required if one of the two VOR receivers is operating properly.	
OPCION B:	Advise ATC immediately.	
OPCION C:	Notify the dispatcher via company frequency.	

9387	While flying in controlled airspace under IFR, the ADF fails. What action is required?	C
OPCION A:	Descend below Class A airspace.	
OPCION B:	Advise dispatch via company frequency.	
OPCION C:	Notify ATC immediately.	

9403	Which facility may be substituted for the middle marker during a Category I ILS approach?	C
OPCION A:	VOR/DME FIX.	
OPCION B:	Surveillance radar.	
OPCION C:	Compass locator.	

9404	What record shall be made by the pilot performing a VOR operational check?	B
OPCION A:	The date, frequency of VOR or VOT, number of hours flown since last check, and signature in the aircraft log.	
OPCION B:	The date, place, bearing error, and signature in the aircraft log or other record.	
OPCION C:	The date, approval or disapproval, tach reading, and signature in the aircraft log or other permanent record.	

9405	During a VOT check of the VOR equipment, the course deviation indication centers on 356° with the TO/FROM reading FROM. This VOR equipment may	B
OPCION A:	be used if 4° is entered on a correction card and subtracted from all VOR courses.	
OPCION B:	be used during IFR flights, since the error is within limits.	
OPCION C:	not be used during IFR flights, since the TO/FROM should read TO.	

9406	If an airborne checkpoint is used to check the VOR system for IFR operations, the maximum bearing error permissible is	A
OPCION A:	plus or minus 6°.	
OPCION B:	plus 6° or minus 4°.	
OPCION C:	plus or minus 4°.	

9407	A function of the minimum equipment list is to indicate required items which	C
OPCION A:	are required to be operative for overwater passenger air carrier flights.	
OPCION B:	may be inoperative for a one-time ferry flight of a large airplane to a maintenance base.	
OPCION C:	may be inoperative prior to beginning a flight in an aircraft.	

9408	When is DME required for an instrument flight?	A
OPCION A:	At or above 24,000 feet MSL if VOR navigational equipment is required.	
OPCION B:	In terminal radar service areas.	
OPCION C:	Above 12,500 feet MSL.	

9410	Information obtained from flight data and cockpit voice recorders shall be used only for determining who was responsible for any accident or incident.	C
OPCION A:	who was responsible for any accident or incident.	
OPCION B:	evidence for use in civil penalty or certificate action.	
OPCION C:	possible causes of accidents or incidents.	

9411	Which ground components are required to be operative for a Category II approach in addition to LOC, glide slope, marker beacons, and approach lights?	C
OPCION A:	Radar and RVR.	
OPCION B:	RCLS and REIL.	
OPCION C:	HIRL, TDZL, RCLS, and RVR.	

9412	When may a pilot descend below 100 feet above the touchdown zone elevation during a Category II ILS instrument approach when only the approach lights are visible?	C
OPCION A:	After passing the visual descent point (VDP).	
OPCION B:	When the RVR is 1,600 feet or more.	
OPCION C:	When the red terminal bar of the approach light systems are in sight.	

9413	In addition to the localizer, glide slope, marker beacons, approach lighting, and HIRL, which ground components are required to be operative for a Category II instrument approach to a DH below 150 feet AGL?	C
OPCION A:	RCLS and REIL.	
OPCION B:	Radar and RVR.	
OPCION C:	TDZL, RCLS, and RVR.	

9416	When instructed by ATC to "Hold short of a runway (ILS critical area, etc.)," the pilot should stop with the nose gear on the hold line.	B
OPCION A:	with the nose gear on the hold line.	
OPCION B:	so that no part of the aircraft extends beyond the hold line.	
OPCION C:	so the flight deck area of the aircraft is even with the hold line.	

9417	You have just landed at JFK and the tower tells you to call ground control when clear of the runway. You are considered clear of the runway when	C
OPCION A:	the aft end of the aircraft is even with the taxiway location sign.	
OPCION B:	the flight deck area of the aircraft is even with the hold line.	
OPCION C:	all parts of the aircraft have crossed the hold line.	

9421	Holding position signs have	A
OPCION A:	white inscriptions on a red background.	
OPCION B:	red inscriptions on a white background.	
OPCION C:	yellow inscriptions on a red background.	

9422	Airport information signs, used to provide destination or information, have	C
OPCION A:	yellow inscriptions on a black background.	
OPCION B:	white inscriptions on a black background.	
OPCION C:	black inscriptions on a yellow background.	

9423	Hold line markings at the intersection of taxiways and runways consist of four lines (two solid and two dashed) that extend across the width of the taxiway. These lines are	B
OPCION A:	white in color and the dashed lines are nearest the runway.	
OPCION B:	yellow in color and the dashed lines are nearest the runway.	
OPCION C:	yellow in color and the solid lines are nearest the runway.	

9425	TCAS I provides	B
OPCION A:	traffic and resolution advisories.	
OPCION B:	proximity warning.	
OPCION C:	recommended maneuvers to avoid conflicting traffic.	

9426	TCAS II provides	A
OPCION A:	traffic and resolution advisories.	
OPCION B:	proximity warning.	
OPCION C:	maneuvers in all directions to avoid the conflicting traffic.	

9427	Each pilot, who deviates from an ATC clearance in response to a TCAS advisory, is expected to	C
OPCION A:	maintain the course and altitude resulting from the deviation, as ATC has radar contact.	
OPCION B:	request a new ATC clearance.	
OPCION C:	expeditiously return to the ATC clearance in effect prior to the advisory, after the conflict is resolved.	
<hr/>		
9428	Each pilot who deviates from an ATC clearance in response to a TCAS advisory is expected to	C
OPCION A:	maintain the course and altitude resulting from the deviation, as ATC has radar contact.	
OPCION B:	request ATC clearance for the deviation.	
OPCION C:	notify ATC of the deviation as soon as practicable.	
<hr/>		
9429	If Receiver Autonomous Integrity Monitoring (RAIM) is not available when setting up for GPS approach, the pilot should	C
OPCION A:	continue to the MAP and hold until the satellites are recaptured.	
OPCION B:	proceed as cleared to the IAF and hold until satellite reception is satisfactory.	
OPCION C:	select another type of approach using another type of navigation aid.	
<hr/>		
9430	Without Receiver Autonomous Integrity Monitoring (RAIM) capability, the accuracy of the GPS derived	A
OPCION A:	altitude information should not be relied upon to determine aircraft altitude.	
OPCION B:	position is not affected.	
OPCION C:	velocity information should be relied upon to determine aircraft groundspeed.	
<hr/>		
9431	Overriding an automatically selected sensitivity during a GPS approach will	A
OPCION A:	cancel the approach mode annunciation.	
OPCION B:	require flying point-to-point on the approach to comply with the published approach procedure.	
OPCION C:	have no effect if the approach is flown manually.	
<hr/>		
9432	If a visual descent point (VDP) is published on a GPS approach, it	B
OPCION A:	will be coded in the waypoint sequence and identified using ATD.	
OPCION B:	will not be included in the sequence of waypoints.	
OPCION C:	must be included in the normal waypoints.	
<hr/>		
9436	Fig. 156 This sign, which faces the runway and is visible to the pilot, indicates	B
OPCION A:	a point at which the pilot should contact ground control without being instructed by the tower.	
OPCION B:	a point at which the aircraft will be clear of the runway.	
OPCION C:	the point at which the emergency arresting gear is stretched across the runway.	
<hr/>		
9437	Fig. 157 This is an example of:	C
OPCION A:	an ILS Critical Area Holding Position Sign.	
OPCION B:	a Runway Boundary Sign.	
OPCION C:	an ILS Critical Area Boundary Sign.	
<hr/>		
9570	Fig. 112 While arcing left on the IAH 10 DME Arc, the pilot experiences a left crosswind component. Where should the bearing pointer be referenced relative to the 90° (wingtip) position to maintain the 10 DME range? (Refer to Appendix 3, Figure 112)	C
OPCION A:	On the left wingtip reference.	
OPCION B:	Behind the left wingtip reference.	
OPCION C:	Ahead of the left wingtip reference.	
<hr/>		
9723	Authorization to conduct any GPS operation under IFR requires that	C
OPCION A:	the equipment be approved in accordance with TSO C-115a.	
OPCION B:	the pilot must review appropriate weather, aircraft flight manual (AFM), and operation of the particular receiver.	
OPCION C:	procedures must be established for use in the event that the loss of RAIM capability is predicted to occur.	

9724	Authorization to conduct any GPS operation under IFR requires that	B
OPCION A:	the pilot review appropriate weather, aircraft flight manual (AFM), and operation of the particular GPS receiver.	
OPCION B:	air carrier and commercial operators must meet the appropriate provisions of their approved operations specifications.	
OPCION C:	the equipment be approved in accordance with TSO C-115a.	

9725	When using GPS for navigation and instrument approaches, a required alternate airport must have	A
OPCION A:	an approved instrument approach procedure, besides GPS, that is expected to be operational and available at the ETA.	
OPCION B:	a GPS approach that is expected to be operational and available at the ETA.	
OPCION C:	authorization to fly approaches under IFR using GPS avionics.	

9727	A GPS missed approach requires that the pilot take action to sequence the receiver	B
OPCION A:	over the MAWP.	
OPCION B:	after the MAWP.	
OPCION C:	just prior to the MAWP.	

9728	If the missed approach is not activated, the GPS receiver will display	C
OPCION A:	an extension of the outbound final approach course, and the ATD will increase from the MAWP.	
OPCION B:	an extension of the outbound final approach course.	
OPCION C:	an extension of the inbound final approach course.	

9729	If flying a published GPS departure,	C
OPCION A:	the data base will contain all of the transition or departures from all runways.	
OPCION B:	and if RAIM is available, manual intervention by the pilot should not be required.	
OPCION C:	the GPS receiver must be set to terminal course deviation indicator sensitivity.	

9730	Missed approach routing in which the first track is via a course rather than direct to the next waypoint requires	C
OPCION A:	that the GPS receiver be sequenced to the missed approach portion of the procedure.	
OPCION B:	manual intervention by the pilot, but will not be required, if RAIM is available.	
OPCION C:	additional action by the operator to set the course.	

9731	Land and Hold Short Operations (LAHSO) include landing and holding short:	B
OPCION A:	of an intersecting taxiway only.	
OPCION B:	of some designated point on the runway.	
OPCION C:	only of an intersecting runway or taxiway.	

9732	A Land and Hold Short Operations (LAHSO) clearance, that the pilot accepts:	B
OPCION A:	must be adhered to.	
OPCION B:	does not preclude a rejected landing.	
OPCION C:	precludes a rejected landing.	

9733	In conducting Land and Hold Short Operations (LAHSO), the pilot should have readily available:	A
OPCION A:	the published Available Landing Distance (ALD), landing performance of the aircraft, and slope of all LAHSO combinations at the destination airport.	
OPCION B:	the published runway length and slope for all LAHSO combinations at the airport of intended landing.	
OPCION C:	the landing performance of the aircraft, published Available Landing Distance (ALD) for all LASHO combinations at the airport of intended landing, plus the forecast winds.	

9734	The airport markings, signage and lighting associated with Land and Hold Short (LAHSO) consists of:	B
OPCION A:	yellow hold-short markings, red and white signage, and in-pavement lights.	
OPCION B:	red and white signage, yellow hold-short markings, and at some airports, in-pavement lights.	
OPCION C:	red and black signage, in-pavement lights, and yellow hold-short markings.	
