CODIGO	N	Area	PREGUNTA	RTA	OPCION_A	OPCION_B	OPCION_C
PTL	1	CONOCIMIENTO GENERAL DE AERONAVES	What is the purpose of the wing main spar	A	To withstand bending and torsional loads	To withstand compressive and torsional loads	To withstand compressive and shear loads
PTL	2	CONOCIMIENTO GENERAL DE AERONAVES	What is the purpose of wing ribs	B	To withstand the fatigue stresses	To shape the wing and support the skin	To house the fuel and landing gear
PTL	3	CONOCIMIENTO GENERAL DE AERONAVES	The airframe structure must remain substantially intact after experiencing:	C	The design ultimate load times a 1.5 safety factor	The design limit load plus the design ultimate load	The design limit load times a 1.5 factor of safety
PTL	4	CONOCIMIENTO GENERAL DE AERONAVES	How can wing bending moments be reduced in flight?	B	"By using aileron ""up-float"" and keeping the centre section fuel tanks full for as long as possible"	"By using aileron ""up-float"" and using the fuel in the wings last"	"By having tail-mounted engines and using aileron ""down-float"""
PTL	5	CONOCIMIENTO GENERAL DE AERONAVES	The primary purpose of the fuselage is to:	B	Support the wings	House the crew and payload	Keep out adverse weather
PTL	6	CONOCIMIENTO GENERAL DE AERONAVES	The pressure gauge of an hydraulic system provides information regarding the pressure of:	A	the hydraulic fluid in the system	the air and hydraulic fluid in the system	the proportional pressure in the system
PTL	7	CONOCIMIENTO GENERAL DE AERONAVES	A shuttle valve:	B	is used to replace NRVs.	allows two supply sources to operate one unit	allows one source to operate two units
PTL	8	CONOCIMIENTO GENERAL DE AERONAVES	A relief valve:	C	relieves below system pressure.	maintains pressure to a priority circuit.	relieves at its designed pressure
PTL	9	CONOCIMIENTO GENERAL DE AERONAVES	The primary purpose of a hydraulic reservoir is:	A	to compensate for leaks, displacement and expansion.	to allow a space into which spare fluid may be stored.	to indicate system contents.
PTL	10	CONOCIMIENTO GENERAL DE AERONAVES	With air in the hydraulic system you would:	B	ignore it because normal operation would remove it.	bleed the air out of the system.	allow the accumulator to automatically adjust itself.

PTL	11	CONOCIMIENTO GENERAL DE AERONAVES	Pascal's law states that	C	pressure is inversely proportional to load	liquid is compressible	applied force acts equally in all directions.
PTL	12	CONOCIMIENTO GENERAL DE AERONAVES	The purpose of an accumulator is to:	B	relieve excess pressure.	store fluid under pressure.	store compressed gas for tyre inflation.
PTL	13	DERECHO AEREO	The minimum height to which an aircraft may safely continue a precision approach, without visual reference is known as the:	A	decision height	minimum descent altitude	decision altitude
PTL	14	DERECHO AEREO	What is a star?	B	Standard arrival	Estándar instrument arrival	Special terminal arrival
PTL	15	DERECHO AEREO	In an instrument approach procedure, the segment in which alignment and descent for landing are made is called:	A	final approach segment	initial approach segment	intermediate approach segment
PTL	16	DERECHO AEREO	What is the meaning of OCA?	C	Oceanic control area	Obstacle clearance altitude	Oceanic control area or obstacle clearance altitude
PTL	17	DERECHO AEREO	What is the meaning of MEHT?	B	Mean height over threshold.	Minimum eye height.	Minimum elevation height.
PTL	18	DERECHO AEREO	The term used to describe the visual phase of flight after completing an instrument approach, to bring an aircraft into position for landing on runway which is not suitably located for straight-in approach, is:	C	contact approach	visual approach.	visual manouvering (circling).
PTL	19	DERECHO AEREO	A racetrack is:	B	a right hand circuit pattern.	"a procedure used for descent; resembling a holding-pattern (including the entry)."	traffic landing and taking-off again within 1 hour and returning to the same airport of the original departure.
PTL	20	DERECHO AEREO	""""Operational control"" of a flight refer to"	A	Exercising authority over initiating, conducting, or erminating a flight.	Exercising the privileges of pilot-in-command of an aircraft.	the specific duties of any required crewmember.

PTL	21	DERECHO AEREO	A crewmember interphone system is required on which airplane?	A	An airplane with more than 19 passenger seats	A turbojet airplane	A large airplane
PTL	22	DERECHO AEREO	A flight crewmember must be able to don and use a quick-donning oxygen mask within	B	8 seconds	5 seconds	10 seconds
PTL	23	DERECHO AEREO	A turbine-engine-powered flag air carrier airplane is released to an airport which has no available alternate. What is the required fuel reserve?	C	30 minutes, plus 10 percent of the total flight time	2 hours at normal cruise speed in a no wind condition fuel consumption	2 hours at normal cruise fuel consumption
PTL	24	DERECHO AEREO	An air carrier uses an airplane that is certified for operation with a flightcrew of two pilots and one flight engineer. In case the flight engineer becomes incapacitated	B	One pilot must be qualified and have a flight engineer certificate to perform the flight engineer duties	"At least one other flight crewmember must be qualified to perform the flight engineer duties "	One crewmember must be qualified to perform the duties of the flight engineer
PTL	25	DERECHO AEREO	An applicant who is scheduled for a practical test for an airline transport pilot certificate, in an aircraft, needs	B	At least a current third-class medical certificate.	A first-class medical certificate.	A second-class medical certificate.
PTL	26	DERECHO AEREO	At which cabin altitude must oxygen be provided for all passengers during the entire flight at those altitudes	C	15,000 feet	14,000 feet	16,000 feet
PTL	27	DERECHO AEREO	By regulation, who shall provide the pilot in command of a domestic or flag air carrier airplane information concerning weather, and irregulrities of facilities and services?	B	Air route traffic control center	The aircraft dispatcher	Director of operations or flight follower

PTL	28	DERECHO AEREO	Category II ILS operations below 1600 RVR and a 150-foot DH may be approved after the pilot in command has	A	"logged 100 hours' flight time in make and model airplane under 14 CFR part 121 and three Category II ILS approaches in actual or simulated IFR conditions with 150-foot DH since the beginning of the sixth preceding month"	logged 90 hours' flight time, 10 takeoffs and landings in make and model airplane and three Category II ILS approaches in actual or simulated IFR conditions with 150-foot DH since the beginning of the sixth preceding month, in operations under 14 CFR parts 91 and 121	made at least six Category II approaches in actual IFR conditions with 100-foot DH within the preceding 12 calendar months
PTL	29	DERECHO AEREO	Duty and rest period rules for domestic air carrier operations require that a flight crewmember	B	Not be on duty aloft for more than 100 hours in any 30 day period	"not be assigned to any duty with the air carrier during any required rest period OPCION B: not be on duty aloft for more than 100 hours in any 30 day period OPCION C: be relieved of all duty for at least 24 hours during any 7 consecutive days"	Not be on duty aloft for more than 100 hours in any 30 day period
PTL	30	DERECHO AEREO	Each large aircraft operating over water must have a life preserver for each	A	aircraft occupant	seat on the aircraft	passenger seat, plus 10 percent
PTL	31	DERECHO AEREO	Each air carrier flight deck crewmember on flight deck duty must be provided with an oxygen mask that can be rapidly placed on his face when operating at flight altitudes	A	above FL 250	of FL 260	of FL 250

PTL	32	DERECHO AEREO	For a flight over uninhabited terrain, an airplane operated by a flag or supplemental air carrier must carry enough appropriately equipped survival kits for	B	all of the passengers, plus 10 percent	all aircraft occupants	all passenger seats
PTL	33	DERECHO AEREO	How much supplemental oxygen for emergency descent must a pressurized turbine-powered air transport airplane carry for each flight crewmember on flight deck duty when operating at flight altitudes above 10,000 feet?	C	Sufficient for the duration of the flight above 8,000 feet cabin pressure altitude	Sufficient for the duration of the flight at 10,000 feet flight altitude, not to exceed 1 hour and 50 minutes	A minimum of 2 hours supply
PTL	34	DERECHO AEREO	If a turbine-engine-powered, pressurized airplane is not equipped with quick-donning oxygen masks, what is the maximum flight altitude authorized without one pilot wearing and using an oxygen mask?	C	FL 200	FL 300	FL 250
PTL	35	DERECHO AEREO	If an aircraft dispatcher cannot communicate with the pilot of an air carrier flight during an emergency the aircraft dispatcher should	B	comply wiht the company's lost aircraft plan	take any action considered necessary under the ircumstances	phone the ARTCC where the flight is located and ask for a phone patch with the flight
PTL	36	DERECHO AEREO	If the weather forecast do not require the listing of an alternate airport on an IFR flight, the airplane must carry sufficient fuel to fly to the destination airport and	C	fly for 45 minutes thereafter at normal cruise climb speed	make one missed approach and thereafter have a 45 minute reserve at normal cruising speed	fly thereafter for 45 minutes at normal cruising speed

PTL	37	DERECHO AEREO	In the event of an engine emergency, the use of a cockpit check procedure by the flightcrew is	B	"encouraged; it helps to ensure that all items on the procedure are accomplished"	required by regulations to prevent reliance upon memorized procedures	required by the FAA as a doublecheck after the memorized procedure has been accomplished
PTL	38	DERECHO AEREO	In airplanes where a third gyroscopic bank-and pitch indicator is required, that instrument must	A	"continue reliable operation for a minimum of 30 minutes after total failure of the electrical generating system"	continue reliable operation for at least 30 minutes after the output of the airplane's electrical generating system falls below an optimun level.	be operable by a selector switch which may be actuated from either pilot station
PTL	39	DERECHO AEREO	If either pilot of an air carrier airplane leaves the duty station while flying at FL 410, the other pilot	B	and the flight engineer shall put on their oxygen masks and breathe oxygen	shall put on the oxygen mask and breathe oxygen	must have a quick-donning type oxygen mask available
PTL	40	DERECHO AEREO	Life preservers required for overwater operations are stored	C	within easy reach of each passenger	under each occupant seat	within easy reach of each seated occupant
PTL	41	DERECHO AEREO	Regulations require that interior emergency lights must:	B	operate automatically when subjected to a negative G load	be operable manually from the flightcrew station and a point in the passenger compartment	be armed or turned on during taxiling and all flight operations
PTL	42	DERECHO AEREO	The crew interphone system on a large turbojet-powered airplane provides a means of two-way communications between ground personnel and at least one of two flight crewmembers in the pilot compartment, when the aircraft is on the ground. The interphone station for use by ground personnel must be located so that those using the system,from that station	A	May avoid visible detection from within the airplane	Are always visible, from within the airplane	Are able to avold the intake areas of the engines

PTL	43	DERECHO AEREO	The kinds of operation that a certificate holder is authorized to conduct are specified in the	A	Certificate holder's operations specifications	Application submitted for an Air Carrier or Operating Certificate, by the applicant	Air Carrier Certificate or Operating Certificate
PTL	44	DERECHO AEREO	"The maximum flight time in 24 consecutive hours that a flag air carrier may schedule a pilot in a two-pilot crew A without a rest period is"	A	10 hours	12 hours	8 hours
PTL	45	DERECHO AEREO	The persons jointly responsable for the initiation, continuation, diversion, and termination of a supplemental air carrier or commercial operator flight are the	A	"Pilot in command and director of operations "	Pilot in command and chief pilot	Pilot in command and the flight follower
PTL	46	DERECHO AEREO	The required crewmember functions that are to be performed in the event of an emergency shall be assigned by the	B	"Pilot in command "	Certificate holder	Air carrier's chief pilot
PTL	47	DERECHO AEREO	The reserve fuel supply for a domestic air carrier flight is	C	45 minutes at normal fuel consumption in addition to the fuel required to the alternate airport	30 minutes plus 15 percent at normal fuel consumption in addition to the fuel required to the alternate airport	45 minutes at normal fuel consumption in addition to the fuel required to fly to and at the most distant alternate airport
PTL	48	DERECHO AEREO	The training required for crewmembers or dispatchers who have been qualified and served in the same capacity on other airplanes of the same group is	C	"Difference training "	Upgrade training	Transition training

PTL	49	DERECHO AEREO	The two pilots stations of a pressurized aircraft are equipped with approved quick- donning masks. What is the maximun altitude authorized if one pilot is not wearing an oxygen mask and breathing oxygen?	A	35,000 feet MSL	41,000 feet MSL	25,000 feet MSL
PTL	50	DERECHO AEREO	Under which condition is a flight engineer required as a flight crewmember in FAR Part 121 operations?	A	If required by the airplane's type certificate	If the airplane is being flown on proving flight, with revenue cargo aboard	If the airplane is powered by more than two turbine engines
PTL	51	DERECHO AEREO	What action shall the pilot in command take if it becomes necessary to shut down one of the two engines on an air carrier airplane?	C	Land at the nearest airport, including military, that has a crash and rescue unit	Land at the airport which the pilot considers to be as safe as the nearest suitable airport in point of time	Land at the nearest suitable airport in point of time at which a safe landing can be made
PTL	52	DERECHO AEREO	What aircraft operating under FAR Part 135 are required to have a third gyroscopic bank-and-pitch indicator installed?	A	All airplanes that are turbojet powered	All turbine powered aircraft having a passenger seating capacity of 30 seats or more	All multiengine airplanes that require a two pilot flightcrew
PTL	53	DERECHO AEREO	What information must be contained in, or attached to, the dispatch release for a domestic air carrier flight	B	Names of all passengers on board and minimum fuel supply	Departure airport, intermediate stops, destinations, alternate airports, and trip number	Cargo load, weight and balance data, and identification number of the aircraft
PTL	54	DERECHO AEREO	What information must be included on a domestic air carrier dispatch release?	A	Minimum fuel supply and trip number	Evidence that the airplane is loaded according to schedule, and a statement of the type of operation	Company or organization name and identification number of the aircraft
PTL	55	DERECHO AEREO	What instrument flight time may be logged by a second-in-command of an aircraft requiring two pilots?	B	One-half the time the airplane is in actual IFR conditions.	All of the time the second-in-command is controlling the airplane solely by reference to flight instruments.	One-half the time the flight is on an IFR flight plan.

PTL	56	DERECHO AEREO	What is the flight level that operations may be conducted without the pilot at the controls wearing and using an oxygen mask, while the other pilot is away from the duty station?	C	Above FL 250	FL 240	FL 250
PTL	57	DERECHO AEREO	What is the minimum number of acceptable oxygen-dispensing units for first-aid treatment of occupants who might require undiluted oxygen for physiological reasons?	B	Four	Two	Three
PTL	58	DERECHO AEREO	What is the minimum passenger seating configuration that requires a second in command?	B	15 seats	10 seats	20 seats
PTL	59	DERECHO AEREO	What is the passenger oxygen supply requirement for a flight, in a turbine-powered aircraft, with a cabin pressure altitude in excess of 15,000 feet? Enough oxygen for	B	30 percent of the passengers	each passengers for the entire flight above 15,000 feet cabin altitude	10 percent of the passengers for 30 minutes
PTL	60	DERECHO AEREO	When carrying a passenger aboard an all-cargo aircraft, which of the following applies?	C	Crew-type oxygen must be provided for the passenger	The passenger must have access to a seat in the pilot compartment	"The pilot in command may authorize the passenger to be admitted to the crew compartment "
PTL	61	DERECHO AEREO	When a supplemental air carrier is operating over an uninhabited area, how many appropriately equipped survival kits are required aboard the aircraft?	C	One for each passenger seat	One for each passenger, plus 10 percent	One for each occupant of the aircraft
PTL	62	DERECHO AEREO	When may a Category II ILS limitation be removed?	C	When six ILS approaches to Category II minimums have been completed in the past 6 months.	120 days after issue or renewal.	When three Cat II ILS approaches have been completed to a 150-foot decision height and landing.

PTL	63	DERECHO AEREO	When the pilot in command is responsible for a deviation during an emergency, the pilot should submit a written report within	A	72 hours after returning to home base	24 hours after returning to home base	12 hours after returning to home base
PTL	64	DERECHO AEREO	Where can the pilot of a flag air carrier airplane find the latest NOTAMs?	B	Notices To Airmen publication	Any company dispatch facility	Airport/Facility Directory
PTL	65	DERECHO AEREO	Which is a ddisadvantage of thr one-step over the two-step process when deicing/anti-icing an airplane?	C	It is more complicated	the holding time is increased	more fluid is used whith the one-step method when large deposits of ice and snowmust be fluseh off airplane surfaces.
PTL	66	DERECHO AEREO	Which document includes descriptions of the required crewmember functions to be performed in the event of an emergency?	C	Airplane Flight Manual	Pilot's Emergency Procedures Handbook	Certificate holder's manual
PTL	67	DERECHO AEREO	Which documents are required to be carried aboard each domestic air carrier flight?	A	Dispatch release, load manifest (or information from it), and flight plan	Dispatch release and weight and balance release	Load manifest (or information from it) and flight release
PTL	68	DERECHO AEREO	"Which is a definition of the term ""crewmember""?"	C	Only a pilot, flight engineer, or flight navigator assigned to duty in an aircraft during flight time.	Any person assigned to duty in an aircraft during flight except a pilot or flight engineer.	A person assigned to perform duty in an aircraft during flight time.
PTL	69	DERECHO AEREO	Which is a requirement for flightcrew use of oxygen masks in a pressurized cabin airplane?	C	At altitudes above FL 250, one of the two pilots at the controls shall use an oxygen mask continuosly.	Both pilots at the controls shall use oxygen masks above FL 350	At altitudes above 25,000 feet MSL, if one pilot leaves the pilot duty station, the remaining pilot at the controls shall use an oxygen mask.
PTL	70	DERECHO AEREO	Which is one of the requirements that must be met by a required pilot flight crewmember in re-establishing recency of experience?	A	" At least one ILS approach to the lowest ILS minimums authorized for the certificate holder and a landing from that approach "	At least one landing must be made with a simulated failure of the most critical engine	At least three landings must be made to a complete stop

PTL	71	DERECHO AEREO	Which requirement applies to emergency equipment (fire extinguishers, megaphones, first-aid kits, and crash ax) installed in an air carrier airplane?	B	Emergency equipment cannot be located in a compartment or area where it is not immediately visible to a flight attendant in the passenger compartment	Emergency equipment must be clearly identified and clearly marked to indicate its method of operation	All emergency equipment, must be readily accessible to the passengers
PTL	72	DERECHO AEREO	Who is required to submit a written report on a deviation that occurs during an emergency?	A	Person who declares the emergency	"Pilot in command "	Dispatcher
PTL	73	DERECHO AEREO	"Who is responsible for obtaining information on all current airport conditions, weather, and irregularities of navigation facilities for a supplemental air carrier flight?"	A	Pilot in command	Aircraft dispatcher	Director of operations or flight follower
PTL	74	DERECHO AEREO	Who is responsible, by regulation, for briefing a domestic or flag air carrier pilot in command on all available B weather information?	C	Director of operations	Company meteorologist	Aircraft dispatcher
PTL	75	DERECHO AEREO	Which document specifically authorizes a person to operate an aircraft in a particular geographic area?	B	Operating Certificate	Operations Specifications	Dispatch Release

PTL	76	DERECHO AEREO	"Cada cuanto tiempo deberá efectuar un entrenamiento recurrente en esa posición, El Piloto de Transporte de Línea Aérea (PTL) que haya de actuar como Piloto de relevo en crucero,en las maniobras descritas ? "	C	" El Piloto de Transporte de Línea Aérea (PTL) certificado para desempeñarse como Piloto de Relevo en Crucero en vuelos de largo alcance, deberá efectuar un entrenamiento recurrente en esa posición, en las maniobras descritas dos vecez al año y de conformidad con el Manual de entrenamiento aprobado."	" El Piloto de Transporte de Línea Aérea (PTL) certificado para desempeñarse como Piloto de Relevo en Crucero en vuelos de largo alcance, deberá efectuar un entrenamiento recurrente en esa posición, en las maniobras descritas cada dos años de conformidad con el Manual de entrenamiento aprobado."	El Piloto de Transporte de Línea Aérea (PTL) certificado para desempeñarse como Piloto de Relevo en Crucero en vuelos de largo alcance, deberá efectuar un entrenamiento recurrente en esa posición, en las maniobras descritas una vez al año y de conformidad con el Manual de entrenamiento aprobado.
PTL	77	DERECHO AEREO	Como debera cumplirse el entrenamiento para el Piloto de Transporte de Línea Aérea (PTL) que haya de actuar como Piloto de Relevo en crucero, en vuelos de largo alcance ?	A	Este programa deberá cumplirse en un simulador de vuelo con un mínimo de dos (2) periodos de dos (2) horas cada uno y un chequeo ante Inspector de la UAEAC ó ante Examinador Designado.	Este programa deberá cumplirse en un simulador de vuelo con un mínimo de dos (2) periodos de dos (2) horas cada uno y un chequeo ante Examinador Designado.	Este programa deberá cumplirse en un simulador de vuelo con un mínimo de un (1) periodo de dos (2) horas cada uno y un chequeo ante Inspector de la UAEAC ó ante Examinador Designado.
PTL	78	DERECHO AEREO	Como se realiza el Recobro de autonomía de un PTL despues de un receso de mas de sesenta meses de inactividad de vuelo?.	A	"Si el receso es mayor a 60 meses, deberá cumplir con el entrenamiento inicial de vuelo y de tierra, en el equipo en que se desea recobrar la autonomía y presentar un chequeo de proeficiencia ante Inspector de la UAEAC ó Examinador Designado en el equipo en que desea recobrar la autonomía."	Si el receso es mayor a 60 meses y es menor de 120 meses, deberá cumplir con un reentrenamiento, en el equipo en que se desea recobrar la autonomía	Si el receso excede60 meses y es menor de 65 meses, deberá efectuar un repaso del curso de tierra y un periodo de dos horas de avión o simulador, ante un Inspector de la UAEAC, examinador Designado o Piloto Chequeador en el equipo en que desea recobrar la autonomía.

PTL	79	DERECHO AEREO	Cual es la definicion de tiempo de servicio para un Piloto de transporte de Linea aérea?	A	Tiempo de servicio es todo período de tiempo durante el cual el tripulante se halle a disposición de la empresa. El tiempo de servicio de los tripulantes asignados a un vuelo empieza a contarse una hora y media antes de la iniciación programada de los vuelos internacionales y una hora antes de los vuelos domésticos y se termina de contar al finalizar el vuelo.	Tiempo de servicio es todo período de tiempo durante el cual el tripulante se halle a disposición de la empresa. El tiempo de servicio de los tripulantes asignados a un vuelo empieza a contarse una hora antes de la iniciación programada de los vuelos internacionales y una hora antes de los vuelos domésticos y se termina de contar al finalizar el vuelo.	Tiempo de servicio es todo período de tiempo durante el cual el tripulante se halle a disposición de la empresa. El tiempo de servicio de los tripulantes asignados a un vuelo empieza a contarse dos horas antes de la iniciación programada de los vuelos internacionales y una hora antes de los vuelos domésticos y se termina de contar al finalizar el vuelo.
PTL	80	DERECHO AEREO	Cuales son las condiciones para poder ejercer las atribuciones de la licencia de Piloto de Transporte de Linea Aérea?	B	"Para mantener vigentes las atribuciones de la licencia y poder ejercerlas, todos los pilotos y copilotos de transporte de línea aérea comercial regular deben cumplir con lo indicado en el numeral 2.4.1.1.4."	"Para mantener vigentes las atribuciones de la licencia y poder ejercerlas, todos los pilotos y copilotos de transporte de línea aérea comercial regular deben cumplir con lo indicado en el numeral 2.2.1.1.4."	Para mantener vigentes las atribuciones de la licencia y poder ejercerlas, todos los pilotos y copilotos de transporte de línea aérea comercial regular deben cumplir con lo indicado en el numeral 2.7.1.1.4.
PTL	81	DERECHO AEREO	Cuando el Examinador Designado actúe como instructor de vuelo	C	podrá desempeñarse como examinador.	se entenderá que este actúa como examinador	no podrá desempeñarse como examinador

PTL	82	DERECHO AEREO	"Cuando la UAEAC convalide una licencia extranjera otorgada por un Estado contratante de la OACI"	A	Esta autorización será expedida con restricciones y/o limitaciones, incluyendo fecha de vencimiento (que no podrá exceder el vencimiento de la licencia original), tipo de aeronave y el explotador colombiano para el cual se prestará el servicio.	Esta autorización será expedida sin restricciones y/o limitaciones, sin incluir fecha de vencimiento (que podrá exceder el vencimiento de la licencia original), tipo de aeronave y el explotador colombiano para el cual se prestará el servicio.	Esta autorización será expedida con restricciones y/o limitaciones, incluyendo fecha de vencimiento (podrá exceder el vencimiento de la licencia original), tipo de aeronave y el explotador colombiano para el cual se prestará el servicio.
PTL	83	DERECHO AEREO	"El Piloto de Transporte de Línea Aérea (PTL) que haya de actuar como Piloto de relevo en crucero, en vuelos de largo alcance, deberá cumplir con el entrenamiento previsto en el numeral 2.2.7. de los RAC y con el programa de entrenamiento aprobado por la UAEAC a la empresa de transporte aéreo"	C	"Si la empresa lo considera se adicionará, como mínimo, las siguientes maniobras en la silla izquierda: a. Pérdida de motor durante crucero; b. Descenso de emergencia; c. Actitudes inusuales de la aeronave; d. Fallas eléctricas, fallas de navegación; y e. Aterrizajes en silla derecha como piloto no volando."	"No es mandatorio sin embargo se podran efectuar a criterio las siguientes maniobras en la silla derecha: a. Pérdida de motor durante crucero; b. Descenso de emergencia; c. Actitudes inusuales de la aeronave; d. Fallas eléctricas, fallas de navegación."	"Correcto y se adicionará, como mínimo, las siguientes maniobras en la silla derecha: a. Pérdida de motor durante crucero; b. Descenso de emergencia; c. Actitudes inusuales de la aeronave; d. Fallas eléctricas, fallas de navegación; y e. Aterrizajes en silla derecha como piloto no volando."
PTL	84	DERECHO AEREO	En la cabina de mando cual es la posición de los Tripulantes?	C	Serán definidas de acuerdo con las autorizacion de la compañía operadora de la aeronave y el piloto al mando podrá ocupar el asiento del copiloto y viceversa.	estarán definidas y serán ocupadas de acuerdo con las prescripciones del fabricante de la aeronave, sin embargo el piloto al mando podrá ocupar el asiento del copiloto y viceversa previa autorizacion.	estarán definidas y serán ocupadas de acuerdo con las prescripciones del fabricante de la aeronave, de modo que el piloto al mando no podrá ocupar el asiento del copiloto, ni viceversa.

PTL	85	DERECHO AEREO	En que consiste la habilitación de competencia lingüística en el idioma inglés ?	A	Los requisitos en materia de competencia lingüística aplicables en USA a pilotos comprenden los descriptores integrales y el nivel lingüístico para la aviación civil de la escala de calificación de competencia lingüística de la UAEAC	"Comunicarse eficazmente en situaciones de trato oral, (teléfono-radiotelefono) y en situaciones de contacto directo, Comunicarse con precisión y claridad sobre temas comunes, concretos y relacionados con el trabajo y utilizar estrategias de comunicación apropiadas para intercambiar mensajes"	Los requisitos en materia de competencia lingüística aplicables en Colombia a pilotos comprenden los descriptores integrales y el nivel lingüístico para la aviación civil de la escala de calificación de competencia lingüística de la UAEAC
PTL	86	DERECHO AEREO	Es posible que las horas voladas como copiloto sean aceptadas como horas de vuelo como piloto de una aeronave ?	C	En caso de horas de vuelo cumplidas de acuerdo con el Numeral 2.2.1.4.2., se computarán cuatro (4) horas de copiloto por una (1) hora de piloto al mando.	En caso de horas de vuelo cumplidas de acuerdo con el Numeral 2.2.1.4.2., se computarán tres (3) horas de copiloto por una (1) hora de piloto al mando.	En caso de horas de vuelo cumplidas de acuerdo con el Numeral 2.2.1.4.2., se computarán dos (2) horas de copiloto por una (1) hora de piloto al mando.
PTL	87	DERECHO AEREO	"La instrucción recibida por el piloto en un dispositivo de instrucción para simulación de vuelo será aceptable como parte de las 1500 horas, limitando el crédito por dicha experiencia a un máximo de 100 horas"	B	"Es cierto pero de las cuales, no más de 50 se habrán adquirido en un entrenador de vuelo aprobado por la UAEAC al correspondiente centro de instrucción aeronáutica."	"Es cierto pero de las cuales, no más de 25 se habrán adquirido en un entrenador de vuelo aprobado por la UAEAC al correspondiente centro de instrucción aeronáutica."	"Es cierto pero de las cuales, no más de 100 se habrán adquirido en un entrenador de vuelo aprobado por la UAEAC al correspondiente centro de instrucción aeronáutica."

PTL	88	DERECHO AEREO	"La licencia de Piloto de Transporte de Línea Aérea - Avión, se expedirá a quien haya de actuar como piloto al mando (Comandante) en aviones de servicios aéreos comerciales de transporte público regular y no regular (pasajeros, correo o carga), en aviones con un peso superior a"	A	5.700 Kg. (12.500 lb.)	5.500 Kg.(12.300 Lb)	5.000 Kg.(12.000 Lb)
PTL	89	DERECHO AEREO	La UAEAC, contempla tres métodos de convalidación de licencias	A	Personal extranjero que viene con carácter transitorio a capacitar personal colombiano	Personal extranjero que desea trabajar permanen -temente en Colombia	Personal extranjero que viene con carácter transitorio a volar en Colombia
PTL	90	DERECHO AEREO	Los exámenes de vuelo para pilotos de transporte de línea (PTL-PTH) seran presentados ante	A	Inspectores de la UAEAC o ante Examinadores Designados autorizados.	Inspectores de la UAEAC solamente.	Piloto o Ingeniero Chequeador ó ante Examinador Designado
PTL	91	DERECHO AEREO	"Que conocimientos apropiados a las atribuciones que la licencia de piloto de transporte de línea aérea - AVIÓN confiere a su titular, debe tener?"	A	"Las disposiciones y reglamentos pertinentes, normas aplicables al transporte aéreo; el reglamento del aire; los métodos y proedimientos de los servicios de tránsito aéreo y el RAC."	Haber realizado cuarenta (40) horas de vuelo por instrumentos , un máximo de veinte horas de vuelo en dispositivo de entrenamiento de vuelo y/o en simulador de vuelo	"Los procedimientos previos al vuelo, que incluirán la utilización de un documento equivalente, y de los documentos correspondientes de los servicios de tránsito aéreo."
PTL	92	DERECHO AEREO	Que experiencia de vuelo debe tener un piloto aspirante a obtener la licencia PTL?	B	"será titular de licencia de Piloto Comercial (PCA) y habrá realizado como mínimo tresmil (3.000) horas totales de vuelo como piloto de aviones (piloto al mando o copiloto)"	"será titular de licencia de Piloto Comercial (PCA) y habrá realizado como mínimo mil quinientas (1.500) horas totales de vuelo como piloto de aviones (piloto al mando o copiloto)"	será titular de licencia de Piloto Comercial (PCA) y habrá realizado como mínimo dos mil quinientas (2.500) horas totales de vuelo como piloto de aviones (piloto al mando o copiloto)

PTL	93	DERECHO AEREO	Que otras actividades se consideran también como tiempo de servicio para un PTL ?	A	"a. El transcurrido en calidad de reserva. b. El necesario para transportarse, por cualquier medio, hacia un lugar diferente a la base de residencia del tripulante y el regreso por cualquier medio a la misma; o el que de cualquier modo implique su traslado en condición de tripulante adicional (tripadi)."	Es el que aparece publicado en los itinerarios oficiales de las respectivas empresa,	Es el lapso durante el cual los tripulantes son asignados para actividades de vuelo y disponibilidad para cualquier entrenamiento y cursos de tierra.
PTL	94	DERECHO AEREO	Que otros conocimientos debe tener el poseedor de la licencia de piloto de transporte de línea aérea - AVIÓN ?	B	"Los procedimientos previos al vuelo, que incluirán la utilización de un documento equivalente, y de los documentos correspondientes de los servicios de tránsito aéreo."	Principios del Derecho aéreo,conocimiento general de los sistemas de la aeronave,rendimiento,factores humanos,meteorología y navegacion entre otros.	Haber realizado cuarenta (40) horas de vuelo por instrumentos , un máximo de veinte horas de vuelo en dispositivo de entrenamiento de vuelo y/o en simulador de vuelo

PTL	95	DERECHO AEREO	Que se entiende por tiempo programado ?	C	"Es el que aparece en los itinerarios adicionales de las respectivas empresa, En los casos de los vuelos no publicados en los itinerarios oficiales, se considera como tiempo programado el previsto en el respectivo plan de vuelo. El tiempo programado no debe exceder los limites establecidos para tiempo de vuelo y tiempo de servicio."	"Es el que aparece publicado en los itinerarios de las respectivas empresa, previamente aprobado por la direccion de operaciones. En los casos de los vuelos no publicados en los itinerarios, se considera como tiempo programado el previsto en el respectivo plan de vuelo. El tiempo programado no debe exceder los limites establecidos para tiempo de vuelo y tiempo de servicio."	"Es el que aparece publicado en los itinerarios oficiales de las respectivas empresa, previamente aprobado por la UAEAC. En los casos de los vuelos no publicados en los itinerarios oficiales, se considera como tiempo programado el previsto en el respectivo plan de vuelo. El tiempo programado no debe exceder los limites establecidos para tiempo de vuelo y tiempo de servicio."
PTL	96	DERECHO AEREO	How far from other parking areas or installations is the parking area designated for aircraft subjected to unlawful interference to be not less than?	B	50 m	100 m	200 m
PTL	97	DERECHO AEREO	An airport security program shall be established by each State for:	B	any airport identified as having a poor safety record.	each airport serving international civil aviation.	airports that are perceived as being under increased threat of acts of unlawful interference.
PTL	98	DERECHO AEREO	The movement area of an airfield, the adjacent lands and buildings or the parts of them with controlled access is called:	B	Terminal	Airside	manoeuvring area
PTL	99	DERECHO AEREO	If an aircraft subjected to an act of unlawful seizure has landed on its territory, each Contracting State shall:	B	let the aircraft depart if it is necessary to protect human life.	A and C	detain the aircraft on ground.
PTL	100	DERECHO AEREO	An aircraft shall not carry munitions of war:	C	unless the commander agrees.	unless they are unloaded and made safe.	unless the written permission of the Authority and the operator is obtained.

PTL	101	DERECHO AEREO	Each State, according ICAO Annex 17, shall ensure the establishment of a security programme:	B	that is common for all airports within State.	at each airport.	for every airline operating in the State.
PTL	102	DERECHO AEREO	Who is responsible to establish security measures?	B	The State of the Operator	Each ICAO contracting State	ICAO
PTL	103	DERECHO AEREO	The national civil aviation security programme shall be established by:	A	each contracting state.	ICAO	ICAO and other organications including the contracting state concerned.
PTL	104	DERECHO AEREO	Standards and Recommended Practices for Security are contained in ICAO Annex:	A	17	15	12
PTL	105	DERECHO AEREO	During taxi to the runway for takeoff, tha aircraft is accidentally taxied onto the grass and the undercarriage is seriously damaged. Nobody on board or on the ground is hurt. What type of occurrence is this?	C	Incident	Serious incident	Accident
PTL	106	DERECHO AEREO	Which of the following defines transition altitude?	A	The altitude at which 1.013 mb is set and vertical position then reported as a flight level.	The flight level below which the vertical position of an aircraft is determined by reference to 1.013 mb.	The altitude below which the vertical position of an aircraft is determined by reference to QFE.
PTL	107	DERECHO AEREO	"You are flying in a mountainous region and you see the letter ""X"" on the ground. What does this mean?"	A	Medical assistance required.	Mechanical assistance required.	All have survived.
PTL	108	FACTORES HUMANOS EN LA AVIACIÓN	A pilot is flying in IFR weather conditions and has two-way radio communications failure. What altitude should be used?	A	Last assigned altitude, altitude ATC has advised to expect, or the MEA, whichever is highest.	An altitude that is at least 1,000 feet above the highest obstacle along the route.	A VFR altitude that is above the MEA for each leg.

PTL	109	FACTORES HUMANOS EN LA AVIACIÓN	A pilot is holding at an initial approach fix after having experienced two-way radio communications failure. When should that pilot begin descent for the instrument approach?	C	At the EFC time, if this is within plus or minus 3 minutes of the flight plan ETA as amended by ATC.	At flight plan ETA as amended by ATC.	At the EFC time as amended by ATC.
PTL	110	FACTORES HUMANOS EN LA AVIACIÓN	A pilot is more subject to spatial disorientation when	C	ignoring or overcoming the sensations of muscles and inner ear.	eyes are moved often in the process of cross-checking the flight instruments.	body sensations are used to interpret flight attitudes.
PTL	111	FACTORES HUMANOS EN LA AVIACIÓN	After experiencing two-way radio communications failure en route, when should a pilot begin the descent for the instrument approach?	A	Upon arrival at any initial approach fix for the instrument approach procedure but not before the flight plan ETA as amended by ATC.	Upon arrival at the holding fix depicted on the instrument approach procedure at the corrected ETA, plus or minus 3 minutes.	At the primary initial approach fix for the instrument approach procedure at the ETA shown on the flight plan or the EFC time, whichever is later.
PTL	112	FACTORES HUMANOS EN LA AVIACIÓN	Hazardous vortex turbulence that might be encountered behind large aircraft is created only when that aircraft is	A	developing lift.	operating at high airspeeds.	using high power settings.
PTL	113	FACTORES HUMANOS EN LA AVIACIÓN	Haze can give the illusion that the aircraft is	B	closer to the runway than it actually is.	farther from the runway than it actually is.	the same distance from the runway as when there is no restriction to visibility.
PTL	114	FACTORES HUMANOS EN LA AVIACIÓN	How does the wake turbulence vortex circulate around each wingtip?	C	Inward, upward, and around the wingtip.	Counterclockwise when viewed from behind the aircraft.	Outward, upward, and around the wingtip.
PTL	115	FACTORES HUMANOS EN LA AVIACIÓN	Hypoxia is the result of which of these conditions?	A	Insufficient oxygen reaching the brain.	Excessive carbon dioxide in the bloodstream.	Limited oxygen reaching the heart muscles.
PTL	116	FACTORES HUMANOS EN LA AVIACIÓN	If a pilot is being radar vectored in IFR conditions and losses radio communications with ATC, what action should be taken?	C	Fly directly to the next point shown on the IFR flight plan and continue the flight.	Squawk 7700 and climb to VFR on Top.	Fly directly to a fix, route, or airway specified in the vector clearance.

PTL	117	FACTORES HUMANOS EN LA AVIACIÓN	If you take off behind a heavy jet that has just landed, you should plan to lift off	B	prior to the point where the jet touched down.	beyond the point where the jet touched down.	at the point where the jet touched down and on the upwind edge of the runway.
PTL	118	FACTORES HUMANOS EN LA AVIACIÓN	In the dark, a stationary light will appear to move when stared at for a period of time. This illusion is known as	C	somatogravic illusion.	ground lighting illusion.	autokinesis.
PTL	119	FACTORES HUMANOS EN LA AVIACIÓN	It is the responsibility of the pilot and crew to report a near midair collision as a result of proximity of at least	B	50 feet or less to another aircraft.	500 feet or less to another aircraft.	1,000 feet or less to another aircraft.
PTL	120	FACTORES HUMANOS EN LA AVIACIÓN	Loss of cabin pressure may result in hypoxia because as cabin altitude increases	C	the percentage of nitrogen in the air is increased.	the percentage of nitrogen in the air is decreased.	oxygen partial pressure is decreased.
PTL	121	FACTORES HUMANOS EN LA AVIACIÓN	Scanning procedures for effective collision avoidance should constitute	A	looking outside for 15 seconds, then inside for 5 seconds, then repeat.	1 minute inside scanning, then 1 minute outside scanning, then repeat.	looking outside every 30 seconds except in radar contact when outside scanning is unnecessary.
PTL	122	FACTORES HUMANOS EN LA AVIACIÓN	Sudden penetration of fog can create the illusion of	A	pitching up.	pitching down.	leveling off.
PTL	123	FACTORES HUMANOS EN LA AVIACIÓN	The illusion of being in a nose-up attitude which may occur during rapid acceleration takeoff is known as	C	inversion illusion.	autokinesis.	somatogravic illusion.
PTL	124	FACTORES HUMANOS EN LA AVIACIÓN	To allow pilots of in-trail lighter aircraft to make flight path adjustments to avoid make turbulence, pilots of heavy and large jet aircraft should fly	B	below the established glidepath and slightly to either side of the on-course centerline.	on the established glidepath and on the approach course centerline or runway centerline extended.	above the established glidepath and slightly downwind of the on-course centerline.
PTL	125	FACTORES HUMANOS EN LA AVIACIÓN	To avoid the wingtip vortices of a departing jet airplane during takeoff, the pilot should	B	lift off at a point well past the jet airplane's flightpath.	climb above and stay upwind of the jet airplane's flightpath.	remain below the flightpath of the jet airplane.

PTL	126	FACTORES HUMANOS EN LA AVIACIÓN	Under what condition does ATC issue safety alerts?	B	When collision with another aircraft is imminent.	If the aircraft altitude is noted to be in close proximity to the surface or an obstacle.	When weather conditions are extreme and wind shear or large hail is in the vicinity.
PTL	127	FACTORES HUMANOS EN LA AVIACIÓN	Under what conditions should a pilot on IFR advise ATC of minimum fuel status?	C	When the fuel supply becomes less than that required for IFR.	If the remaining fuel suggests a need for traffic or landing priority.	If the remaining fuel precludes any undue delay.
PTL	128	FACTORES HUMANOS EN LA AVIACIÓN	What airport condition is reported by the tower when more than one wind condition at different positions on the airport is reported?	B	Light and variable.	Wind shear.	Frontal passage.
PTL	129	FACTORES HUMANOS EN LA AVIACIÓN	What altitude and route should be used if the pilot is flying in IFR weather conditions and has two-way radio communications failure?	A	Continue on the route specified in the clearance and fly the highest of the following: the last assigned altitude, altitude ATC has informed the pilot to expect, or to the MEA.	Descend to MEA and, if clear of clouds, procceed to the nearest appropriate airport. If not clear of clouds, maintain the highest of the MEAs along the clearance route.	Fly the most direct route to the destination, maintaining the last assigned altitude or MEA, whichever is higher.
PTL	130	FACTORES HUMANOS EN LA AVIACIÓN	What causes hypoxia?	C	Excessive carbon dioxide in the atmosphere.	An increase in nitrogen content of the air at high altitudes.	A decrease of oxygen partial pressure.
PTL	131	FACTORES HUMANOS EN LA AVIACIÓN	"What does the term ""minimum fuel"" imply to ATC? "	C	Traffic priority is needed to the destination airport.	Emergency handling is required to the nearest suitable airport.	Advisory that indicates an emergency situaion is possible should an undue delay occur.
PTL	132	FACTORES HUMANOS EN LA AVIACIÓN	What effect would a light crosswind have on the wingtip vortices generated by a large airplane that has just taken off?	A	The upwind vortex will tend to remain on the runway longer than the downwind vortex.	A crosswind will rapidly dissipate the strength of both vortices.	The downwind vortex will tend to remain on the runway longer than the upwind vortex.
PTL	133	FACTORES HUMANOS EN LA AVIACIÓN	What illusion, if any, can rain on the windscreen create?	C	Does not cause illusions.	Lower than actual.	Higher than actual.

PTL	134	FACTORES HUMANOS EN LA AVIACIÓN	What is a sympton of carbon monoxide poisoning?	C	Rapid, shallow breathing.	Pain and cramping of the hands and feet.	Dizziness.
PTL	135	FACTORES HUMANOS EN LA AVIACIÓN	What is the effect of alcohol consumption on functions of the body?	A	Alcohol has anadverse effect, especially as altitude increases.	Small amounts of alcohol in the human system increase judgment and decision-making abbilities.	Alcohol has little effect if followed by equal quantities of black coffee.
PTL	136	FACTORES HUMANOS EN LA AVIACIÓN	What is the hijack code?	B	7200.	7500.	7777.
PTL	137	FACTORES HUMANOS EN LA AVIACIÓN	What is the most effective way to use the eyes during night flight?	B	Look only at far away, dim lights.	Scan slowly to permit offcenter viewing.	Concentrate directly on each object for a few seconds.
PTL	138	FACTORES HUMANOS EN LA AVIACIÓN	What minimum condition is suggested for declaring an emergency?	A	Anytime the pilot is doubtful of a condition that could adversely affect flight safety.	When fuel endurance or weather will require an en route or landing priority.	When distress conditions such as fire, mechanical failure, or structural damage occurs.
PTL	139	FACTORES HUMANOS EN LA AVIACIÓN	What wind condition prolongs the hazards of wake turbulence on a landing runway for the longest period of time?	B	Direct tailwind.	Light quartering tailwind.	Light quartering headwind.
PTL	140	FACTORES HUMANOS EN LA AVIACIÓN	When making a landing over darkened or featureless terrain such as water or snow, a pilot should be aware of the possibility of illusion. The approach may appear to be too	A	high.	low.	shallow.
PTL	141	FACTORES HUMANOS EN LA AVIACIÓN	When making an approach to a narrower-than-usual runway, without VASI assistance, the pilot should be aware that the approach	B	altitude may be higher than it appears.	altitude may be lower than it appears.	may result in leveling off too high and landing hard.

PTL	142	FACTORES HUMANOS EN LA AVIACIÓN	When using the Earth's horizon as a reference point to determine the relative position of other aircraft, most concern would be for aircraft	C	above the horizon and increasing in size.	on the horizon with little relative movement.	on the horizon and increasing in size.
PTL	143	FACTORES HUMANOS EN LA AVIACIÓN	Which flight conditions of a large jet airplane create the most severe flight hazard by generating wingtip vortices of the greatest strength?	A	Heavy, slow, gear and flaps up.	Heavy, slow, gear and flaps down.	Heavy, fast, gear and flaps down.
PTL	144	FACTORES HUMANOS EN LA AVIACIÓN	Which is the purpose may flight spoilers be used?	C	Aid in longitudinal balance when rolling an airplane into a turn.	Increase the rate of descent without increasing aerodynamic drag.	Reduce the wings' lift upon landing.
PTL	145	FACTORES HUMANOS EN LA AVIACIÓN	Which is a common sympton of hyperventilation?	A	Tingling of the hands, legs, and feet.	Increased vision keenness.	Decreased breathing rate.
PTL	146	FACTORES HUMANOS EN LA AVIACIÓN	Which observed target aircraft would be of most concern with respect to collision avoidance?	C	One which appears to be ahead and moving from left to right at high speed.	One which appears to be ahead and moving from right to left at slow speed.	One which appears to be ahead with no lateral or vertical movement and is increasing in size.
PTL	147	FACTORES HUMANOS EN LA AVIACIÓN	Which procedure is recommended to prevent or overcome spatial disorientation?	C	Reduce head and eye movement to the greatest possible extent.	Rely on the kinesthetic sense.	Rely entirely on the indications of the flight instruments.
PTL	148	FACTORES HUMANOS EN LA AVIACIÓN	Which range of codes should a pilot avoid switching through when changing transponder codes?	C	0000 through 1000.	7200 and 7500 series.	7500, 7600, and 7700 series.
PTL	149	FACTORES HUMANOS EN LA AVIACIÓN	Which statement is true concerning the wake turbulence produced by a large transport aircraft?	B	Vortices can be avoided by flying 300 feet below and behind the flight path of the generating aircraft.	The vortex characteristics of any given aircraft may be altered by extending the flaps or changing the speed.	Wake turbulence behind a propeller-driven aircraft is negligible because jet engine thrust is a necessary factor in the formation of vortices.
PTL	150	FACTORES HUMANOS EN LA AVIACIÓN	Which would most likely result in hyperventilation?	A	A stressful situation causing anxiety.	The excessive consumption of alcohol.	An extremely slow rate of breathing and insufficient oxygen.

PTL	151	FACTORES HUMANOS EN LA AVIACIÓN	While in IFR conditions, a pilot experiences two-way radio communications failure. Which route should be flown in the absence of an ATC assigned route or a route ATC has advised to expect in a further clearance?	C	The most direct route to the filed alternate airport.	An off-airway route to the point of departure.	The route filed in the flight plan.
PTL	152	FACTORES HUMANOS EN LA AVIACIÓN	While making prolonged constant rate turns under IFR conditions, an abrupt head movement can create the illusion of rotation on an entirely different axis. This is known as	B	autokinesis.	Coriolis illusion.	the leans.
PTL	153	FACTORES HUMANOS EN LA AVIACIÓN	Wingtip vortices created by large aircraft tend to	A	sink below the aircraft generating the turbulence.	rise from the surface to traffic pattern altitude.	accumulate and remain for a period of time at the point where the takeoff roll began.
PTL	154	FACTORES HUMANOS EN LA AVIACIÓN	You should advise ATC of minimum fuel status when your fuel supply has reached a state where, upon reaching your destination, you cannot accept any undue delay.	C	This will ensure your priority handling by ATC.	ATC will consider this action as if you had declared an emergency.	If your remaining usable fuel supply suggests the need for traffic priority to ensure a safe landing, declare an emergency due to low fuel and report fuel remaining in minutes.
PTL	155	FACTORES HUMANOS EN LA AVIACIÓN	What illusion, if any, can rain on the windscreen create?	C	Does not cause illusions.	Lower than actual.	Higher than actual.
PTL	156	METEOROLOGÍA	A calm wind that is forecast, in the International Terminal Aerodrome Forecast (TAF), is encoded as	B	VRB00KT.	00000KT.	00003KT.
PTL	157	METEOROLOGÍA	A clear area in a line of thunderstorm echoes on a radar scope indicates	C	the absence of clouds in the area.	an area of no convective turbulence.	an area where precipitation drops are not detected.
PTL	158	METEOROLOGÍA	Anti-icing fluid should provide freezing point proctetion to	C	menos 20° F ambient F315	32° F out side temperature or below	A freezing point no greater than 20° F below the ambient or airplane surface temperature

PTL	159	METEOROLOGÍA	A PROB40 (PROBability) HHhh group in an International Terminal Aerodrome Forecast (TAF) indicates the probability of	A	thunderstorms or other precipitation.	precipitation or low visibility.	thunderstorms or high wind.
PTL	160	METEOROLOGÍA	A severe thunderstorm is one in which the surface wind is	A	50 knots greater and/or surface hail is 3/4 inch or more in diameter.	55 knots or greater and/or surface hail is 1/2 inch or more in diameter.	45 knots or greater and/or surface hail is 1 inch or more in diameter.
PTL	161	METEOROLOGÍA	A squall line is a sudden increase of at least 15 knots in average wind speed to a sustained speed of	B	24 knots or more for at least 1 minute.	22 knots or more for at least 2 minutes.	20 knots or more for at least 1 minute.
PTL	162	METEOROLOGÍA	A strong wind shear can be expected	A	on the low pressure side of a 100 knots jetstream core.	where the horizontal wind shear is 15 knots, in a distance equal to 2.5° longitude.	if the 5° C isotherms are spaced 100 NM or closer together
PTL	163	METEOROLOGÍA	An aircraft that encounters a headwind of 40 knots, within a microburst, may expect a total shear across the microburst of	B	40 knots.	80 knots.	90 knots.
PTL	164	METEOROLOGÍA	An aircraft that encounters a headwind of 45 knots, within a microburst, may expect a total shear across the microburst of	C	40 knots.	80 knots.	90 knots.
PTL	165	METEOROLOGÍA	At lower levels of the atmosphere, friction causes the wind to flow across isobars into a low because the friction	A	decreases windspeed and Coriolis force.	decreases pressure gradient force.	creates air turbulence and raises atmospheric pressure.
PTL	166	METEOROLOGÍA	At which location does Coriolis force have the least effect on wind direction?	C	At the poles.	Middle latitudes (30° to 60°).	At the Equator.
PTL	167	METEOROLOGÍA	Atmospheric pressure changes due to a thunderstorm will be at the lowest value	B	during the downdraft and heavy rain showers.	when the thunderstorm is approaching.	immediately after the rain showers have stopped.

PTL	168	METEOROLOGÍA	Clear air turbulence (CAT) associated with a mountain wave may extend as far as	B	1,000 miles or more downstream of the mountain.	5,000 feet above the tropopause.	100 miles or more upwind of the mountain.
PTL	169	METEOROLOGÍA	Constant pressure analysis charts contain contours, isotherms and some contain isotachs. The contours depict	C	ridges,lows,troughs and hights aloft.	highs,lows,troughs, and ridges on the surface.	highs,lows,troughs,and ridges corrected to MSL.
PTL	170	METEOROLOGÍA	Convective clouds which penetrate a stratus layer can produce which threat to instrument flight?	C	Freezing rain.	Clear air turbulence.	Embedded thunderstorms.
PTL	171	METEOROLOGÍA	Doppler wind measurements indicate tha the windspeed change a piloto may expect when flying through the peak intensity of a microburst is approximately	C	15 Knots	25 Knots	45 Knots
PTL	172	METEOROLOGÍA	During the life cycle of a thunderstorm, which stage is characterized predominately by downdrafts?	B	Cumulus.	Dissipating.	Mature.
PTL	173	METEOROLOGÍA	Freezing Point Depressant (FPD) fluid residue on engine fan or compressor blades	C	can increase performance and cause stalls or surges.	could cause FDP vapors to enter the aircraft but would have no affect on engine thrust or power.	can reduce engine performance and cause surging and/or compressor stalls.
PTL	174	METEOROLOGÍA	"Freezing Point Depressant (FPD) fluids are highly soluble in water;however, "	C	Ice is slow to absorb it but fast to melt when in contac whit FPD	Ice absorbs it very fast but is slow to melt when in contac whit it	Ice is slow to absorb it, an to melt when in contac with it.
PTL	175	METEOROLOGÍA	Freezing Point Depressant (FPD) fluids used for deicing	B	provide ice protection during flight.	are intended to provide ice protection on the ground only.	on the ground, cause no performance degradation during takeoff.
PTL	176	METEOROLOGÍA	Freezing rain encountered during climb is normally evidence that	B	a climb can be made to a higher altitude without encountering more than light icing.	a layer of warmer air exists above.	ice pellets at higher altitudes have changed to rain in the warmer air below.

PTL	177	METEOROLOGÍA	How are haze layers cleared or dispersed?	B	By convective mixing in cool night air.	By wind or the movement of air.	By evaporation similar to the clearing of fog.
PTL	178	METEOROLOGÍA	How can the stability of the atmosphere be determined?	A	Ambient temperature lapse rate.	Atmospheric pressure at various levels.	Surface temperature/dewpoint spread.
PTL	179	METEOROLOGÍA	How does Coriolis force affect wind direction in the Southern Hemisphere?	A	Causes clockwise rotation around a low.	Causes wind to flow out of a low toward a high.	Has exactly the same effect as in the Northern Hemisphere.
PTL	180	METEOROLOGÍA	In comparison to an approach in a moderate headwind, which is an indication of a possible wind shear due to a decreasing headwindwhen descending on the glide slope?	B	Less power is required.	Higher pitch attitude is required.	Lower descent rate is required.
PTL	181	METEOROLOGÍA	"In the International Terminal Aerodrome Forecast (TAF), a variable wind direction is noted by ""VRB"" where the three digit direction usually appears. A calm wind appears in the TAF as "	C	00003KT.	VRB00KT.	00000KT.
PTL	182	METEOROLOGÍA	In which meteorological conditions can frontal waves and low pressure areas form?	B	Warm fronts or occluded fronts.	Slow-moving cold fronts or stationary fronts.	Cold front occlusions.
PTL	183	METEOROLOGÍA	Isobars on a surface weather chart represent lines of equal pressure	B	at the surface	reduced to sea level	at a given atmospheric pressure altitude
PTL	184	METEOROLOGÍA	Maximum downdrafts in a microburst encounter may be as strong as	C	1,500 ft/min.	4,500 ft/min.	6,000 ft/min.
PTL	185	METEOROLOGÍA	Maximum downdrafts in a microburst encounter may be as strong as	C	8,000 ft/min.	7,000 ft/min.	6,000 ft/min.

PTL	186	METEOROLOGÍA	METAR KHRO 131753Z 09007KT 7SM FEW020 BKN040 30/27 A3001. SPECI KHRO 131815Z 13017G26KT 3SM +TSRA SCT020 BKN045TCU 29/24 A2983 RMK RAB12 WS TKO LDG RW14R FRQ LTGICCG VC.What change has taken place between 1753 and 1815 UTC at Harrison (KHRO)?	B	The ceiling lowered and cumulonimbus clouds developed.	Thundershowers began at 12 minutes past the hour.	Visibility reduced to IFR conditions.
PTL	187	METEOROLOGÍA	METAR KMAF 131756Z 02020KT 12SM BKN025 OVC250 27/18 A3009 RMK RAE44. Which weather condition is indicated by this METAR report at Midland (KMAF)?	A	Rain of unknown intensity ended 16 minutes before the hour.	The ceiling was at 25,000 feet MSL.	Wind was 020° magnetic at 20 knots.
PTL	188	METEOROLOGÍA	METAR KSPS 131757Z 09014KT 6SM -RA SCT025 OVC090 24/22 A3005. SPECI KSPS 131820Z 01025KT 3SM +RA FC OVC015 22/21 A3000. Which change took place at Wichita Falls (KSPS) between 1757 and 1820 UTC?	C	The rain became lighter.	Atmospheric pressure increased.	A funnel cloud was observed.
PTL	189	METEOROLOGÍA	On the constant pressure analysis chart, aircraft and satellite observations are used in the analysis over areas of sparse data. An aircraft observation is plotted using	B	a station circle at the aircraft location.	a square at the aircraft location.	a star at the aircraft location.
PTL	190	METEOROLOGÍA	On the constant pressure analysis chart, satellite and aircraft observations are used in the analysis over areas of sparse data. A satellite observation is plotted using	C	a station circle at the cloud top location.	a square at the cloud top location.	a star at the cloud top location.

PTL	191	METEOROLOGÍA	Snow on top of deicing or anti-icing fluids	B	need not be considered as adhering to the aircraft.	must be considered as adhering to the aircraft.	must be considered as adhering to the aircraft, but a safe takeoff can be made as it will blow off.
PTL	192	METEOROLOGÍA	SPECI KGLS 131802Z 10012G21KT 060V140 2SM+SHRA SCT005BKN035 OVC050CB24/23 A2980 RMK RAB57 WS TKO RW09L WSHFT 58 FROPA. This SPECI report at Galveston (KGLS) indicates which condition?	B	Wind steady at 100° magnetic at 12 knots, gusts to 21.	Precipitation started at 57 after the hour.	5,000 feet overcast with towering cumulus.
PTL	193	METEOROLOGÍA	Test data indicate that ice, snow, or frost having a thickness and roughness similar to medium or coarse sandpaper on the leading edge and upper surface of a wing can	C	reduce lift by as much as 40 percent and increase drag by 30 percent.	increase drag and reduce lift by as much as 40 percent.	reduce lift by as much as 30 percent and increase drag by 40 percent.
PTL	194	METEOROLOGÍA	Test data indicate that ice, snow, or frost having a thickness and roughness similar to medium or coarse sandpaper on the leading edge and upper surface of a wing can	B	reduce lift by as much as 40 percent and increase drag by 30 percent.	reduce lift by as much as 30 percent and increase drag by 40 percent.	increase drag and reduce lift by as much as 40 percent.
PTL	195	METEOROLOGÍA	The adverse effects of ice, snow, or frost on aircraft performance and flight characteristics include decreased lift and	C	increased thrust.	a decreased stall speed.	an increased stall speed.
PTL	196	METEOROLOGÍA	The horizontal wind shear, critical for turbulence (moderate or greater) per 150 miles is	B	18 knots or less.	greater than 18 knots.	not a factor, only vertical shear is a factor.
PTL	197	METEOROLOGÍA	The prevailing visibility in the following METAR is METAR KFSM 131756Z AUTO 00000KT M1/4SM R25/0600V1000FT -RA FG VV004 06/05 A2989 RMK AO2 $	A	less than 1/4 statute mile.	measured 1/4 statute mile.	a mean (average) of 1/4 statute mile.

PTL	198	METEOROLOGÍA	The purpose of diluting ethylene glycol deicing fluid with water in non-precipitation conditions is to	B	raise the eutectic point.	decrease the freeze point.	increase the minimum freezing point (onset of crystallization).
PTL	199	METEOROLOGÍA	The VV001 in the following METAR indicates METAR KFSM 131756Z AUTO 00000KT M1/4SM R25/0600V1000FT -RA FG VV001 A2989 RMK AO2 VIS 3/4 RWY19 CHINO RWY19 $	B	an observer reported the vertical visibility as 100 feet.	a 100 foot indefinite ceiling.	the variability value is 100 feet.
PTL	200	METEOROLOGÍA	Thrust is being managed to maintain desired indicated airspeed and the glide slope is being flown. Which characteristics should be observed when a tailwind shears to a constant headwind?	B	PITCH ATTITUDE: Increases. VERTICAL SPEED: Increases. INDICATED AIRSPEED: Decreases, then increases to approach speed.	PITCH ATTITUDE: Increases. VERTICAL SPEED: Decreases. INDICATED AIRSPEED: Increases, then decreases.	PITCH ATTITUDE: Increases. VERTICAL SPEED: Increases. INDICATED AIRSPEED: Decreases, then increases to approach speed.
PTL	201	METEOROLOGÍA	Turbulence encountered above 15,000 feet AGL, not associated with cloud formations, should be reported as	C	convective turbulence.	high altitude turbulence.	clear air turbulence.
PTL	202	METEOROLOGÍA	Under what conditions would clear air turbulence (CAT) most likely be encountered?	A	When constant pressure charts show 20-knot isotachs less than 60 NM apart.	When constant pressure charts show 60-knot isotachs less than 20 NM apart	When a sharp trough is moving at a speed less than 20 knots.
PTL	203	METEOROLOGÍA	Vertical wind shear can be determined by comparing winds on vertically adjacent constant pressure charts. The vertical wind shear that is critical for probability of turbulence is	B	4 knots or greater per 1,000 feet.	6 knots or more pre 1,000 feet	greater than 8 knots per 1,000 feet

PTL	204	METEOROLOGÍA	"Weather conditions expected to occur in the vicinity of the airport, but not at the airport, are denoted by the letters ""VC"". When VC appears in a Terminal Aerodrome Forecast, it covers a geographical area of "	A	a 5 to 10 statute mile radius from the airport.	a 5-mile radius of the center of a runway complex.	10 miles of the station originating the forecast.
PTL	205	METEOROLOGÍA	What action is recommended when encountering turbulence due to a wind shift associated with a sharp pressure trough?	A	Establish a course across the trough.	Climb or descend to a smoother level.	Increase speed to get out of the trough as soon as possible.
PTL	206	METEOROLOGÍA	What characterizes a ground-based inversion?	C	Convection currents at the surface.	Cold temperatures.	Poor visibility.
PTL	207	METEOROLOGÍA	What condition is indicated when ice pellets are encountered during flight?	B	Thunderstorms at higher levels.	Freezing rain at higher levels.	Snow at higher levels.
PTL	208	METEOROLOGÍA	What condition is necessary for the formation of structural icing in flight?	C	Supercooled water drops.	Water vapor.	Visible water.
PTL	209	METEOROLOGÍA	What condition produces the most frequent type of ground- or surface-based temperature inversion?	C	The movement of colder air under warm air or the movement of warm air over cold air.	Widespread sinking of air within a thick layer aloft resulting in heating by compression.	Terrestrial radiation on a clear, relatively calm night.
PTL	210	METEOROLOGÍA	What feature is associated with a temperature inversion?	A	A stable layer of air.	An unstable layer of air.	Air mass thunderstorms.
PTL	211	METEOROLOGÍA	What feature is normally associated with the cumulus stage of a thunderstorm?	C	Beginning of rain at the surface.	Frequent lightning.	Continuous updraft.

PTL	212	METEOROLOGÍA	"What information from the control tower is indicated by the following transmission? ""SOUTH BOUNDARY WIND ONE SIX ZERO AT TWO FIVE, WEST BOUNDARY WIND TWO FOUR ZERO AT THREE FIVE"". "	C	A downburst is located at the center of the airport.	Wake turbulence exists on the west side of the active runway.	There is a possibility of wind shear over or near the airport.
PTL	213	METEOROLOGÍA	What is a characteristic of the troposphere?	B	It contains all the moisture of the atmosphere.	There is an overall decrease of temperature with an increase of altitude.	The average altitude of the top of the troposphere is about 6 miles.
PTL	214	METEOROLOGÍA	What is a difference between an air mass thunderstorm and a steady-state thunderstorm?	B	Air mass thunderstorms produce precipitation which falls outside of the updraft.	Air mass thunderstorm downdrafts and precipitation retard and reverse the updrafts.	Steady-state thunderstorms are associated with local surface heating.
PTL	215	METEOROLOGÍA	What is a feature of a stationary front?	C	The warm fron surface moves about half the speed of the cold front surface.	Weather conditions are a combination of strong cold front and strong warm front weather.	Surface winds tend to flow parallel to the frontal zone.
PTL	216	METEOROLOGÍA	What is a feature of air movement in a high pressure area?	B	Ascending from the surface high to lower pressure at higher altitudes.	Descending to the surface and then outward.	Moving outward from the high at high altitudes and into the high at the surface.
PTL	217	METEOROLOGÍA	What is a feature of supercooled water?	B	The water drop sublimates to an ice particle upon impact.	The unstable water drop freezes upon striking an exposed object.	The temperature of the water drop remains at 0 °C until it impacts a part of the airframe, then clear ice accumulates.
PTL	218	METEOROLOGÍA	What is an important characteristic of wind shear?	C	It is primarily associated with the lateral vortices generated by thunderstorms.	It usually exists only in the vicinity of thunderstorms, but may be found near a strong temperature inversion.	It may be associated with either a wind shift or a wind speed gradient at any level in the atmosphere.
PTL	219	METEOROLOGÍA	What is indicated about an air mass if the temperature remains unchanged or decreases slightly as altitude is increased?	C	The air is unstable.	A temperature inversion exists.	The air is stable.

PTL	220	METEOROLOGÍA	"What is indicated by the term ""embedded thunderstorms""? "	C	Severe thunderstorms are embedded in a squall line.	Thunderstorms are predicted to develop in a stable air mass.	Thunderstorms are obscured by other types of clouds.
PTL	221	METEOROLOGÍA	What is likely location of clear air turbulence?	A	In an upper trough on the polar side of a jetstream.	Near a ridge aloft on the equatorial side of a high pressure flow.	Downstream of the equatorial side of a jetstream.
PTL	222	METEOROLOGÍA	What is the approximate rate unsaturated air will cool flowing upslope?	A	3° per 1,000 feet.	2° per 1,000 feet.	4° per 1,000 feet.
PTL	223	METEOROLOGÍA	What is the effect of Freezing Point Depressant (FPD) fluid residue on engine fan or compressor blades?	C	could cause FPD vapors to enter the aircraft but would have no affect on engine thrust or power.	It can increase performance and cause stalls or surges.	It can reduce engine performance and cause surging and/or compressor stalls.
PTL	224	METEOROLOGÍA	What is the expected duration of an individual microburst?	C	Five minutes with maximum winds lasting approximately 2 to 4 minutes.	One microburst may continue for as long as an hour.	Seldom longer than 15 minutes from the time the burst strikes the ground until dissipation.
PTL	225	METEOROLOGÍA	What is the general direction of movement of a hurricane located in the Caribbean or Gulf of Mexico?	A	Nortwesterly curving to northeasterly.	Westerly, until encountering land ,then easterly.	Counterclockwise over oper water, then dissipating outward over land.
PTL	226	METEOROLOGÍA	What is a likely location of clear air turbulences?	A	In a upper trough on the polar side a jetstream.	Near a ridge aloft on the equatorial side of a high pressure flow.	Downstream of the equatorial side of a jetstream.
PTL	227	METEOROLOGÍA	What is the expected duration of an individual microburst?	C	Two minutes with maximum winds lasting approximately 1 minute.	One microburst may continue for as long as 2 to 4 hours.	Seldom longer than 15 minutes from the time the burst strikes the ground until dissipation.
PTL	228	METEOROLOGÍA	What is the lowest cloud in the stationary group associated with a mountain wave?	A	Rotor cloud.	Standing lenticular.	Low stratus.
PTL	229	METEOROLOGÍA	What is the primary cause of all changes in the Earth's weather?	A	Variations of solar energy at the Earth's surface.	Changes in air pressure over the Earth's surface.	Movement of air masses from moist areas to dry areas.

PTL	230	METEOROLOGÍA	What is the recommended technique to counter the loss of airspeed and resultant lift from wind shear?	C	Lower the pitch attitude and regain lost airspeed.	"Avoid overstressing the aircraft, ""pitch to airspeed,"" and apply maximum power."	Maintain, or increase, pitch attitude and accept the lower-than-normal airspeed indications.
PTL	231	METEOROLOGÍA	What is the result when water vapor changes to the liquid state while being lifted in a thunderstorm?	A	Latent heat is released to the atmosphere.	Latent heat is transformed into pure energy.	Latent heat is absorbed from the surrounding air by the water droplet.
PTL	232	METEOROLOGÍA	What is the single source reference that contains information regarding volcanic eruption, turbulence, and icing conditions for a specific region?	B	Weather Depiction Chart	In flight weather advisories	Area forecast
PTL	233	METEOROLOGÍA	What minimum thickness of cloud layer is indicated if precipitation is reported as light or greater intensity?	A	4,000 feet thick.	2,000 feet thick.	A thickness which allows the cloud tops to be higher than the freezing level.
PTL	234	METEOROLOGÍA	What temperature condition is indicated if precipitation in the form of wet snow occurs during flight?	A	The temperature is above freezing at flight altitude.	The temperature is above freezing at higher altitudes.	There is an inversion with colder air below.
PTL	235	METEOROLOGÍA	What term describes an elongated area of low pressure?	A	Trough.	Ridge.	Hurricane or Typhon.
PTL	236	METEOROLOGÍA	What type turbulence should be reported when it causes in altitude and/or attitude more than two-thirds of the time, with the aircraft remaining in positive control at all times?	B	Continuous severe chop.	Continuous moderate turbulence.	Intermittent moderate turbulence.
PTL	237	METEOROLOGÍA	What type turbulence should be reported when it momentarily causes slight, erratic chnages in altitude and/or attitude, one-third to two-thirds of the time?	C	Occasional light chop.	Moderate chop.	Intermittent light turbulence.

PTL	238	METEOROLOGÍA	What type weather change is to be expected in an area where frontolysis is reported?	B	The frontal weather is becoming stronger.	The front is dissipating.	The front is moving at a faster speed.
PTL	239	METEOROLOGÍA	What weather condition occurs at the altitude where the dewpoint lapse rate and the dry adiabatic lapse rate converge?	A	Cloud bases form.	Precipitation starts.	Stable air changes to unstable air.
PTL	240	METEOROLOGÍA	"What weather difference is found on each side of a ""dry line""? "	B	Extreme temperature difference.	Dewpoint difference.	Stratus versus cumulus clouds.
PTL	241	METEOROLOGÍA	What weather feature occurs at altitude levels near the tropopause?	A	Maximum winds and narrow wind shear zones.	Abrupt temperature increase above the tropopause.	Thin layers of cirrus (ice crystal) clouds at the tropopause level.
PTL	242	METEOROLOGÍA	What weather is predicted by the term VCTS in a Terminal Aerodrome Forecast?	A	Thunderstorms are expected in the vicinity.	Thunderstorms may occur over the station and within 50 miles of the station.	Thunderstorms are expected between 5 and 25 miles of the runway complex.
PTL	243	METEOROLOGÍA	When advection fog has developed, what may tend to dissipate or lift the fog into low stratus clouds?	B	Temperature inversion.	Wind stronger than 15 knots.	Surface radiation.
PTL	244	METEOROLOGÍA	When does minimum temperature normally occur during a 24-hour period?	A	After sunrise.	About 1 hour before sunrise.	At midnight.
PTL	245	METEOROLOGÍA	When flying over the top of a severe thunderstorm, the cloud should be overflown by at least	A	1,000 feet for each 10 knots windspeed.	2,500 feet.	500 feet above any moderate to a severe turbulence layer.
PTL	246	METEOROLOGÍA	When saturated air moves downhill, its temperature increases	B	at a faster than dry air because of the release of latent heat.	at a slower rate than dry air because vaporization uses heat.	at a slower rate than dry air because condensation releases heat.
PTL	247	METEOROLOGÍA	When will frost most likely form on aircraft surfaces?	A	On clear nights with stable air and light winds.	On overcast nights with freezing drizzle precipitation.	On clear nights with convective action and a small temperature/dewpoint spread.

PTL	248	METEOROLOGÍA	Where are jetstreams normally located?	B	In areas of strong low pressure systems in the stratosphere.	At the tropopause where intensified temperature gradients are located.	In a single continuous band, encircling the Earth, where there is a break
PTL	249	METEOROLOGÍA	Where can the maximum hazard zone caused by wind shear associated with a thunderstorm be found?	C	In front of the thunderstorm cell (anvil side) and on the southwest side of the cell.	Ahead of the roll cloud or gust front and directly under the anvil cloud.	On all sides and directly under the thunderstorm cell.
PTL	250	METEOROLOGÍA	Where do squall lines most often develop?	B	In an occluded front.	Ahead of a cold front.	Behind a stationary front.
PTL	251	METEOROLOGÍA	Where do the maximum winds associated with the jetstream usually occur?	A	In the vicinity of breaks in the tropopause on the polar side of the jet core.	Below the jet core where a long straight stretch of the jetstream is located.	On the equatorial side of the jestream where moisture has formed cirriform clouds.
PTL	252	METEOROLOGÍA	Where is a common location for an inversion?	B	At the tropopause.	In the stratosphere.	At the base of cumulus clouds.
PTL	253	METEOROLOGÍA	Where is the normal location of the jetstream relative to surface lows and fronts?	A	The jetstream is located north of the surface systems.	The jetstream is located south of the low and warm front.	The jetstream is located over the low and crosses both the warm front and the cold front.
PTL	254	METEOROLOGÍA	Where is the usual location of a thermal low?	C	Over the arctic region.	Over the eye of a hurricane.	Over the surface of a dry, sunny region.
PTL	255	METEOROLOGÍA	Which action is recommended if jetstream turbulence is encountered with a direct headwind or tailwind?	C	Increase airspeed to get out of the area quickly.	Change occurs to fly on the polar side of the jetstream.	Change altitude or course to avoid a possible elongated area.
PTL	256	METEOROLOGÍA	Which action is recommended regarding an altitude change to get out of jetstream turbulence?	A	Descend if ambient temperature is falling.	Descend if ambient temperature is rising.	Maintain altitude if ambient temperature is not changing.
PTL	257	METEOROLOGÍA	Which airplane performance characteristics should be recognized during takeoff when encountering a tailwind shear that increases in intensity?	A	Loss of, or diminished, airspeed performance.	Decreased takeoff distance.	increase climb perfomance inmediatelyafter takeoff
PTL	258	METEOROLOGÍA	Which are the only cloud types forecast in the Terminal Aerodrome Forecast?	B	Altocumulus.	Cumulonimbus.	Stratocumulus.

PTL	259	METEOROLOGÍA	Which area or areas of the Northern Hemisphere experience a generally east to west movement of weather systems?	B	Arctic only	Arctic and subtropical	Subtropical only
PTL	260	METEOROLOGÍA	Which arttic flying hazard is cause when a cloud layer of uniform thickness overlies a snow or ice covered surface?	B	Ice fog	Whiteout	Blowing snow.
PTL	261	METEOROLOGÍA	Which atmospheric factor cause rapid movement of surface fronts?	A	Upper winds blowing across the front.	Upper low located directly over the surface low.	The cold front overtaking and lifting the warm front.
PTL	262	METEOROLOGÍA	Which condition is present when a local parcel of air is stable?	A	The parcel of air resists convection.	The parcel of air cannot be forced uphill.	As the parcel of air moves upward, its temperature becomes warmer than the surrounding air.
PTL	263	METEOROLOGÍA	Which condition produces weather on the lee side of a large lake?	A	Warm air flowing over a colder lake may produce fog.	Cold air flowing over a warmer lake may produce advection fog.	Warm air flowing over a cool lake may produce rain showers.
PTL	264	METEOROLOGÍA	Which condition would INITIALLY cause the indicated airspeed and pitch to increase and the sink rate to decrease?	C	Sudden decrease in a headwind component.	Tailwind which suddenly increases in velocity.	Sudden increase in a headwind component.
PTL	265	METEOROLOGÍA	Which conditions are necessary for the formation of upslope fog?	A	Moist, stable air behind moved over gradually rising ground by a wind.	A clear sky, little or no wind, and 100 percent relative humidity.	Rain falling through stratus clouds and a 10- to 25-knot wind moving the precipitation up the slope.
PTL	266	METEOROLOGÍA	Which conditions result in the formation of frost?	C	The temperature of the collecting surface is at or below freezing and small droplets of moisture are falling.	Dew collects on the surface and then freezes because the surface temperature is lower than the air temperature.	Temperature of the collecting surface is below the dewpoint and the dewpoint is also below freezing.
PTL	267	METEOROLOGÍA	Which event usually occurs after an aircraft passes through a fron into the colder air?	C	Temperature/dewpoint spread decreases.	Wind direction shifts to the left.	Atmospheric pressure increases.
PTL	268	METEOROLOGÍA	Which feature is associated with the tropopause?	C	Absence of wind and turbulence.	Absolute upper limit of cloud formation.	Abrupt change of temperature lapse rate.

PTL	269	METEOROLOGÍA	Which INITIAL cockpit indications should a pilot be aware of when a constant tailwind shears to a calm wind?	C	"Altitude increases; pitch and indicated airspeed decrease."	Altitude, pitch, and indicated airspeed decrease.	Altitude, pitch, and indicated airspeed increase.
PTL	270	METEOROLOGÍA	Which INITIAL cockpit indications should a pilot be aware of when a headwind shears to a calm wind?	C	Indicated airspeed decreases, aircraft pitches up, and altitude decreases.	Indicated airspeed increases, aircraft pitches down, and altitude increases.	Indicated airspeed decreases, aircraft pitches down, and altitude decreases.
PTL	271	METEOROLOGÍA	What should the deice/anti-ice fluid temperature be during the last step of a two-phaseprocess?	C	Hot	Warm front.	Cold front occlusions.
PTL	272	METEOROLOGÍA	"Which is a definition of ""severe wind shear""? "	B	"Any rapid change of horizontal wind shear in excess of 25 knots; vertical shear excepted."	Any rapid change in wind direction or velocity which causes airspeed changes greater than 15 knots or vertical speed changes greater than 500 ft/min.	Any rapid change of airspeed greater than 20 knots which is sustained for more than 20 seconds or vertical speed changes in excess of 100 ft/min.
PTL	273	METEOROLOGÍA	Which is a necessary condition for the occurrence of a low-level temperature inversion wind shear?	B	The temperature differential between the cold and warm layers must be at least 10 °C.	A calm or light wind near the surface and a relatively strong wind just above the inversion.	A wind direction difference of at least 30° between the wind near the surface and the wind just above the inversion.
PTL	274	METEOROLOGÍA	Which is an effect of ice, snow, or frost formation on an airplane?	A	Increased stall speed	Increased pitchdown tendencies	increase angle of attack for stalls
PTL	275	METEOROLOGÍA	Which of the following will decrease the holding time during anti-icing using a two-step process?	A	Ap`ly heated type 2 fluid	Decrease the water content	Increase the viscosity of type 1 fluid
PTL	276	METEOROLOGÍA	Which primary source contains information regarding the expected weather at the destination airport, at the ETA?	C	Low-Level Prog Chart.	Radar Summary and Weather Depiction Charts.	Terminal Aerodrome Forecast.

PTL	277	METEOROLOGÍA	Which procedure increases holding time when deicing/anti-icing an airplane using a two-step process?	A	Heated Type 1 fluid followed by cold Type 2 fluid.	Cold Type 2 fluid followed by hot Type 2 fluid.	Heated Type 1 or 2 fluid followed by cold Type 1 fluid.
PTL	278	METEOROLOGÍA	Which process causes adiabatic cooling?	A	Expansion of air as it raises.	Movement of air over a colder surface.	Release of latent heat during the vaporization process.
PTL	279	METEOROLOGÍA	Which term applies when the temperature of the air changes by compression or expansion with no heat added or removed?	C	Katabatic.	Advection.	Adiabatic.
PTL	280	METEOROLOGÍA	Which type cloud is associated with violent turbulence and a tendency toward the production of funnel clouds?	A	Cumulonimbus mamma.	Standing lenticular.	Stratocumulus.
PTL	281	METEOROLOGÍA	Which type clouds are indicative of very strong turbulence?	B	Nimbostratus.	Standing lenticular.	Cirrocumulus.
PTL	282	METEOROLOGÍA	Which type clouds may be associated with the jetstream?	B	Cumulonimbus cloud line where the jetstream crosses the cold front.	Cirrus clouds on the equatorial side of the jetstream.	Cirrostratus cloud band on the polar side and under the jetstream.
PTL	283	METEOROLOGÍA	Which type frontal system is normally crossed by the jetstream?	C	Cold front and warm front.	Warm front.	Occluded front.
PTL	284	METEOROLOGÍA	Which type jetstream can be expected to cause the greater turbulence?	C	A straight jetstream associated with a high pressure ridge.	A jetstream associated with a wide isotherm spacing.	A curving jetstream associated with a deep low pressure trough.
PTL	285	METEOROLOGÍA	Which type of icing is associated with the smallest size of water droplet similar to that found in low-level stratus clouds?	C	Clear ice.	Frost ice.	Rime ice.
PTL	286	METEOROLOGÍA	Which type precipitation is an indication that supercooled water is present?	B	Wet snow.	Freezing rain.	Ice pellets.

PTL	287	METEOROLOGÍA	Which type storms are most likely to produce funnel clouds or tornadoes?	B	Air mass thunderstorms.	Cold front or squall linde thuunderstorms.	Storms associated with icing and supercooled water.
PTL	288	METEOROLOGÍA	Which type weather conditions are covered in the Convective SIGMET	A	Embedded thunderstorms, lines of thunderstorms, and thunderstorms with 3/4-inch hail or tornadoes.	Cumulonimbus clouds with tops above the tropopause and thunderstorms with 1/2-inch hail or funnel clouds.	Any thunderstorm with a severity level of VIP 2 or more
PTL	289	METEOROLOGÍA	Which type wind flows downslope becoming warmer and dryer?	C	Land breeze.	Valley wind.	Katabatic wind.
PTL	290	METEOROLOGÍA	Which weather condition is an example of a nonfrontal instability band?	A	Squall line.	Advective fog.	Frontogenesis.
PTL	291	METEOROLOGÍA	Which weather condition is defined as an anticyclone?	B	Calm.	High pressure area.	low pressure area
PTL	292	METEOROLOGÍA	Which weather condition is present when the tropical stor is upgraded to a hurricane?	C	Highest windspeed, 100 knots or more.	A clear area of hurricane eye has formed.	Sustained winds of 65 knots or more.
PTL	293	METEOROLOGÍA	Which weather phenomenon signals the beginning of the mature stage of a thunderstorm?	B	The appearance of an anvil top.	The start of rain at the surface.	Growth rate of the cloud is at its maximum.
PTL	294	METEOROLOGÍA	Which wind-shear condition results in a loss of airspeed?	B	Decreasing headwind or tailwind.	Decreasing headwind and increasing tailwind.	Increasing headwind and decreasing tailwind.
PTL	295	METEOROLOGÍA	Which wind-shear condition results in an increase in airspeed?	C	Increasing tailwind and decreasing headwind.	Increasing tailwind and headwind.	Decreasing tailwind and increasing headwind.
PTL	296	METEOROLOGÍA	Why are downdrafts in a mature thunderstorm hazardous?	A	Downdrafts are kept cool by cold rain which tends to accelerate the downward velocity.	Downdrafts converge toward a central location under the storm after striking the surface.	Downdrafts become warmer than the surrounding air and reverse into an updraft before reaching the surface.
PTL	297	METEOROLOGÍA	A breaking action given by ATS of 0,25 and below is:	C	medium/poor	good	poor
PTL	298	METEOROLOGÍA	On a wet runway:	A	the surface is soaked but no significant patches of standing water are visible.	the surface shows a change of colour due to moisture.	significant patches of standing water are visible.

PTL	299	METEOROLOGÍA	The duration of an ATIS message should not exceed:	B	1 minute.	30 seconds.	2 minutes.
PTL	300	METEOROLOGÍA	"A runway would not be reported as ""flooded"" unless:"	C	significant patches of standing water are visible.	30% of the runway surface is covered to a depth between 3 mm and 15 mm with water.	extensive standing water is visible.
PTL	301	METEOROLOGÍA	The SIGMET service in the ATP is in the following part:	A	GEN	AGA	ENR
PTL	302	METEOROLOGÍA	The contents of Aeronautical Information Publication (AIP) are:	A	GEN, ENR (enroute) and AD (aerodromes).	GEN, AGA, COM, RAC, FAL, SAR, MET, MAP.	GEN, AGA, COM, ENR, FAL.
PTL	303	METEOROLOGÍA	"What is the meaning of ""WIP""?"	C	With permission	With effect from	Work in progress.
PTL	304	METEOROLOGÍA	The ICAO document concerning the provision of the AIS is Annex _____ to the Convention on Civil Aviation.	B	9	15	7
PTL	305	METEOROLOGÍA	A detailed description of lower ATS routes can be found in part ____ section ____ of the AIP.	B	"1; ENR0"	"2; ENR3"	"3; ADO"
PTL	306	METEOROLOGÍA	An aircraft in flight in an IFR would receive a report of severe turbulence in the ____format.	A	SIGMET	SPECI	AIREP
PTL	307	METEOROLOGÍA	Select the acronym corresponding to the following definition: an special NOTAM series notifying, by means of a specific format, an important change for the aircraft operations, due to a volcano activity, a volcano eruption or a volcanic ash cloud.	C	VULTAM	NAVTAM	ASHTAM
PTL	308	METEOROLOGÍA	Which of the following is information that is not given in AIP approach and landing charts:	B	DME frequencies	visibility minima	OCH or OCA

PTL	309	METEOROLOGÍA	Each contrating state shall provide an Aeronautical Information Service (AIS) in its territory and for areas in which the state is responsible for the Air Traffic Services outside its territory, and this shall include the preparation and origination of:	B	only NOTAM's and Circulars.	integrated Aeronautical Information Package.	only AIP and NOTAM's.
PTL	310	METEOROLOGÍA	Which of the following phenomena would cause a SIGMET to be transmitted to aircraft flying at subsonic cruising levels?	C	Cumulo-nimbus cloud, volcanic ash or severe icing.	Active thunderstorms, moderate or severe turbulence or heavy hail.	Severe line squalls, heavy hail or severe icing.
PTL	311	METEOROLOGÍA	The temporary, long-term modification (3 months or more) and the short-term extensive or graphical information are published as follows:	C	AIP Amendments	trigger NOTAM	AIP Supplements
PTL	312	METEOROLOGÍA	The identification of each prohibited, restricted and danger area shall be composed by:	C	the nationality letters for the location indicators assigned to the state, followed by P, R and D.	the letters P (Prohibited), R (Restricted) and D (Dangerous) for the area concerned and figures.	the nationality letters for location indicators assigned to the state or territory, followed the letters P, R and D and figures.
PTL	313	METEOROLOGÍA	Runway Visual Range is reported and passed to an aircraft when the visibility falls below:	A	1.500 m	1.500 ft	1.100 m
PTL	314	METEOROLOGÍA	Which of the following describe the state of the surface of a runway?	B	"Wet; damp; flushed; contaminated."	"Dry; damp; wet; water patches; flooded."	"Dry; wet; water patches; flooded."
PTL	315	METEOROLOGÍA	Surface friction information is provided for:	C	the whole runway	each 1/2 of the runway	each 1/3 of the runway
PTL	316	METEOROLOGÍA	Which of the following has had a significant effect on the role and importance of aeronautical information and flight data?	B	ICAO	The introduction of RNAV, RNP and computer systems.	The speed of aeroplanes.

PTL	317	NAVEGACIÓN	In a precision approach category I lighting sysem, the center line and crossbar lights shall be:	C	fixed lights showing variable green.	flashing lights showing variable white.	fixed lights showing variable white.
PTL	318	NAVEGACIÓN	Where on a taxiway is the runway vacated sign located?	B	30 m from the runway center line.	At the boundary of the ILS/MLS sensitive area.	60 m from the runway center line.
PTL	319	NAVEGACIÓN	Runway center line lights must be provided:	B	on runways equipped for category I precision approaches.	on a precision approach runway category II or III.	on runways intended to be used for takeoff with an RVR>400 m by aeroplanes with high landing speeds.
PTL	320	NAVEGACIÓN	Touchdown zone markings are placed:	A	150 m from the runway threshold.	300 m from the runway threshold.	450 m from the runway threshold.
PTL	321	NAVEGACIÓN	Runway end lights shall be:	C	fixed lights showing variable red.	fixed lights showing variable white.	fixed unidirectional lights showing red in the direction of the runway.
PTL	322	NAVEGACIÓN	What is required if a stop bar is not provided at a taxi-holding position and the runway is intended to be used in RVR condition less than 550 m?	B	Traffic lights.	Specific operational procedures to limit the number of aircraft on the manoeuvring area to one at a time and vehicles on the manoeuvring area to the essential minimum.	Ground movement radar.
PTL	323	NAVEGACIÓN	Alternate yellow and green centerline lights of a taxiway indicate:	C	the proximity of a runway.	a rapid exit taxiway.	an ILS/MLS critical/sensitive area.
PTL	324	NAVEGACIÓN	Taxiway center line lights on a taxiway other than an exit taxiway shall be fixed light showing:	A	Green, yellow, and white beacon light.	yellow	white
PTL	325	NAVEGACIÓN	Which of the following is not a mandatory instruction sign:	C	runway designation sign.	road holding position sign.	direction sign.

PTL	326	NAVEGACIÓN	Where a runway has a displaced threshold and the whole of the runway is used for takeoff, which of the following runway lights can be used to indicate the center of the runway from the beginning of a runway to the displaced threshold?	A	An approach lighting system if its characteristics and intensity settings afford the guidance required during takeoff and it does not dazzle the pilot of an aircraft taking off.	Red center line lights.	Green/yellow alternating runway edge lights.
PTL	327	NAVEGACIÓN	The horizontal deviation on the expanded ILS display represented by one dot is aproximately:	B	1°	2°	0.5°
PTL	328	NAVEGACIÓN	The heading inputs to the EHSI are from:	C	The IRS	The FMC	the IRS through the symbol generator
PTL	329	NAVEGACIÓN	A cockpit voice recorder must be operated	A	from the start of the before starting engine checklist to completion of final checklist upon termination of flight.	from the start of the before starting engine checklist to completion of checklist prior to engine shutdown.	when starting to taxi for takeoff to the engine shutdown checklist after termination of the flight.
PTL	330	NAVEGACIÓN	A function of the minimum equipment list is to indicate instruments or equipment which	C	are required to be operative for overwater passenger air carrier flights.	may be inoperative for a one-time ferry flight of a large airplane to a maintenance base.	may be inoperative prior to beginning a flight in an aircraft.
PTL	331	NAVEGACIÓN	A GPS missed approach requires that the pilot take action to sequence the receiver	B	over the MAWP	after the MAWP.	just prior to the MAWP.
PTL	332	NAVEGACIÓN	A Land and Hold Short Operations (LAHSO) clearance, that the pilot accepts:	B	must be adhered to.	does not preclude a rejected landing.	precludes a rejected landing.
PTL	333	NAVEGACIÓN	A pilot approaching to land a turbine-powered aircraft on a runway served by a VASI shall	C	not use the VASI unless a clearance for a VASI approach is received.	use the VASI only when weather conditions are below basic VFR.	maintain an altitude at or above the glide slope until a lower altitude is necessary for a safe landing.
PTL	334	NAVEGACIÓN	A pilot of a high-performance airplane should be aware that flying a steeper-than-normal VASI glide slope angle may result in	B	a hard landing.	increased landing rollout.	landing short of the runway threshold.

PTL	335	NAVEGACIÓN	Airport information signs, used to provide destination or information, have	C	yellow inscriptions on a black background.	white inscriptions on a black background.	black inscriptions on a yellow background.
PTL	336	NAVEGACIÓN	An air carrier airplane's airborne radar must be in satisfactory operating condition prior to dispatch, if the flight will be	A	conducted under VFR conditions at night with scattered thunderstorms reported en route.	"carrying passengers, but not if it is ""all cargo""."	conducted IFR, and ATC is able to radar vector the flight around areas of weather.
PTL	337	NAVEGACIÓN	An air carrier operates a flight in VFR over-the-top conditions. What radio navigation equipment is required to be a dual installation?	A	VOR.	VOR and ILS.	VOR and DME.
PTL	338	NAVEGACIÓN	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	The INS system must consist of two operative INS units.	Only one INS is required to be operative, if a Doppler Radar is substituted for the other INS.	A dual VORTAC/ILS system may be substituted for an inoperative INS.
PTL	339	NAVEGACIÓN	Authorization to conduct any GPS operation under IFR requires that	C	the equipment be approved in accordance with TSO C-115a.	the pilot review appropriate weather, aircraft flight manual (AFM), and operation of the particular GPS receiver.	air carrier and commercial operators must meet the appropriate provisions of their approved operations specifications.
PTL	340	NAVEGACIÓN	Authorization to conduct any GPS operation under IFR requires that	B	the pilot review appropriate weather, aircraft flight manual (AFM), and operation of the particular GPS receiver.	air carrier and commercial operators must meet the appropriate provisions of their approved operations specifications.	the equipment be approved in accordance with TSO C-115a.
PTL	341	NAVEGACIÓN	Automated flight decks or cockpits	B	enhance basic pilot flight skills	decrease the workload in terminal areas.	often create much larger pilot errors than traditional cockpits
PTL	342	NAVEGACIÓN	Below FL 180, en route weather advisories should be obtained from an FSS on	B	122.1 MHz.	122.0 MHz.	123.6 MHz.

PTL	343	NAVEGACIÓN	During a VOT check of the VOR equipment, the course deviation indicator centers on 356° with the TO/FROM reading FROM. This VOR equipment may	B	be used if 4° is entered on a correction card and substracted from all VOR courses.	be used during IFR flights, since the error is within limits.	not be used during IFR flights, since the TO/FROM should read TO.
PTL	344	NAVEGACIÓN	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	Increase in indicated airspeed.	Decrease in indicated airspeed.	Indicated airspeed remains at the value prior to icing.
PTL	345	NAVEGACIÓN	Each pilot who deviates from an ATC clearance in response to a TCAS II, resolution advisory (RA) is expected to	C	maintain the course and altitude resulting from the deviation, as ATC has radar contact.	request ATC clearance for the deviation.	notify ATC of the deviation as soon as practicable.
PTL	346	NAVEGACIÓN	Each pilot, who deviates from an ATC clearance in response to a TCAS advisory, is expected to notify ATC and	C	maintain the course and altitude resulting from the deviation, as ATC has radar contact.	request a new ATC clearance.	expeditiously return to the ATC clearance in effect prior to the advisory, after the conflict is resolved.
PTL	347	NAVEGACIÓN	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	585 feet.	1,300 feet.	Sea level.
PTL	348	NAVEGACIÓN	For the purpose of testing the flight recorder system,	B	a minimum of 1 hour of the oldest recorded data must be erased to get a valid test.	a total of 1 hour of the oldest recorded data accumulated at the time of testing may be erased.	a total of no more than 1 hour of recorded data may be erased.

PTL	349	NAVEGACIÓN	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	white in color and the dashed lines are nearest the runway.	yellow in color and the dashed lines are nearest the runway.	yellow in color and the solid lines are nearest the runway.
PTL	350	NAVEGACIÓN	Holding position signs have	A	white inscriptions on a red background.	red inscriptions on a white background.	yellow inscriptions on a red background.
PTL	351	NAVEGACIÓN	How can a pilot identify a lighted heliport at night?	A	Green, yellow, and white beacon light.	White and red beacon light with dual flash of the white.	Green and white beacon light with dual flash of the white.
PTL	352	NAVEGACIÓN	How can a pilot identify a military airport at night?	C	Green, yellow, and white beacon light.	White and red beacon light with dual flash of the white.	Green and white beacon light with dual flash of the white.
PTL	353	NAVEGACIÓN	How does the LDA differ from an ILS LOC?	B	LDA. 6° or 12° wide, ILS - 3° to 6°.	LDA. offset from runway plus 3°, ILS - aligned with runway.	LDA. 15° usable off course indications, ILS - 35°.
PTL	354	NAVEGACIÓN	How does the SDF differ from an ILS LOC?	A	SDF - 6° or 12° wide, ILS - 3° to 6°.	SDF - offset from runway plus 3°, ILS - aligned with runway.	SDF - 15° usable off course indications, ILS - 35°.
PTL	355	NAVEGACIÓN	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	60 days.	90 days.	30 días.
PTL	356	NAVEGACIÓN	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	Indication will drop to zero.	Indication will rise to the top of the scale.	Indication will remain constant but will increase in a climb.
PTL	357	NAVEGACIÓN	Identify REIL.	C	Amber lights for the first 2,000 feet of runway.	Green lights at the threshold and red lights at far end of runway.	Synchronized flashing lights laterally at each side of the runway threshold.

PTL	358	NAVEGACIÓN	Identify runway remaining lighting on centerline lighting systems.	B	Amber lights from 3,000 feet to 1,000 feet, then alternate red and white lights to the end.	Alternate red and white lights from 3,000 feet to 1,000 feet, then red lights to the end.	Alternate red and white lights from 3,000 feet to the end of the runway.
PTL	359	NAVEGACIÓN	Identify taxi leadoff lights associated with the centerline lighting system.	C	Alternate green and yellow lights curving from the centerline of the runway to the centerline of the taxiway.	Alternate green and yellow lights curving from the centerline of the runway to the edge of the exit.	Alternate green and yellow lights curving from the centerline of the runway to a point on the exit
PTL	360	NAVEGACIÓN	Identify the runway distance remaining markers.	A	Signs with increments of 1,000 feet distance remaining.	Red markers laterally placed across the runway at 3,000 feet from the end.	Yellow marker laterally placed across the runway with signs on the side denoting distance to end.
PTL	361	NAVEGACIÓN	Identify touchdown zone lighting (TDZL).	A	Two rows of transverse light bars disposed symmetrically about the runway centerline.	Flush centerline lights spaced at 50-foot intervals extending through the touchdown zone.	Alternate white and green centerline lights extending from 75 feet from the threshold through the touchdown zone.
PTL	362	NAVEGACIÓN	If a required instrument on a multiengine airplane becomes inoperative, which documents dictates whether the flight may continue en route?	C	A master Minimun Equipment List for the airplane.	Original dispatch release.	Certificate holder's manual
PTL	363	NAVEGACIÓN	If a visual descent point (VDP) is published on a GPS approach, it	B	will be coded in the waypoint sequence and identified using ATD.	will not be included in the sequence of waypoints.	must be included in the normal waypoints.
PTL	364	NAVEGACIÓN	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	proceed safely to a suitable airport using VOR aids and complete an instrument approach by use of the remaining airplane radio system.	continue to the destination airport by means of dead reckoning navigation.	proceed to a suitable airport using VOR aids, complete an instrument approach and land.
PTL	365	NAVEGACIÓN	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	when able to climb and descend VFR and maintain VFR/OT en route.	in VFR conditions.	in day VFR conditions.

PTL	366	NAVEGACIÓN	If an airborne checkpoint is used to check the VOR system for IFR operations, the maximum bearing error permissible is	A	plus or minus 6°.	plus 6° or minus 4°.	plus or minus 4°.
PTL	367	NAVEGACIÓN	If both the ram air input and drain hole of the pitot system are blocked by ice, what airspeed indication can be expected?	A	No variation of indicated airspeed in level flight if large power changes are made.	Decrease of indicated airspeed during a climb.	Constant indicated airspeed during a descent.
PTL	368	NAVEGACIÓN	If installed, what aural and visual indications should be observed over the ILS back course marker?	A	A series of two dot combinations, and a white marker beacon light.	Continuous dashes at the rate of one per second, and a white marker beacon light.	A series of two dash combinations, and a white marker beacon light.
PTL	369	NAVEGACIÓN	If receiver autonomous Integrity Monitoring (RAIM) is not available when setting up for GPS approach, the pilot should	C	continue to the MAP and hold until the satellites are recaptured.	proceed as cleared to the IAF and hold until satellite reception is satistactory.	select another type of approach using another type of navigation aid.
PTL	370	NAVEGACIÓN	If the ambient temperature is colder than standard at FL310, what is the relationship between true altitude and pressure altitude?	B	They are both the same, 31,000 feet.	True altitude is lower than 31,000 feet.	Pressure altitude is lower than true altitude.
PTL	371	NAVEGACIÓN	If the ambient temperature is warmer than standard at FL350, what is the density altitude compared to pressure altitude?	B	Lower than pressure altitude.	Higher than pressure altitude.	Impossible to determine without information on possible inversion layers at lower altitudes.
PTL	372	NAVEGACIÓN	If the middle marker for a Category I ILS approach is inoperative,	C	the RVR required to begin the approach is increased by 20 %	the DA/DH is increase by 50 feet.	the inoperative middle marker has not effect on straight-in minimums.

PTL	373	NAVEGACIÓN	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	RCLS and REIL.	Radar and RVR.	TDZL, RCLS, and RVR.
PTL	374	NAVEGACIÓN	In conducting Land and Hold Short Operations (LAHSO), the pilot should have readily available:	A	the published Available Landing Distance (ALD), landing performance of the aircraft, and slope of all LAHSO combinations at the destination airport.	the published runway length and slope for all LAHSO combinations at the airport of intended landing.	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.
PTL	375	NAVEGACIÓN	Information obtained from flight data and cockpit voice recorders shall be used only for determining	C	who was responsible for any accident or incident.	evidence for use in civil penalty or certificate action.	possible causes of accidents or incidents.
PTL	376	NAVEGACIÓN	Information recorded during normal operations of a cockpit voice recorder in a large pressurized airplane with four reciprocating engines	A	may all be erased or otherwise obliterated except for the last 30 minutes.	may be erased or otherwise obliterated except for the last 30 minutes prior to landing.	may all be erased, as the voice recorder is not required on an aircraft with reciprocating engines.
PTL	377	NAVEGACIÓN	Land and Hold Short Operations (LAHSO) include landing and holding short:	B	of an intersecting taxiway only.	of some designated point on the runway.	only of an intersecting runway or taxiway.
PTL	378	NAVEGACIÓN	Missed approach routing in which the first tracck is via a course rather than direct to the next waypoint requires	C	tha the GPS receiver be sequenced to the missed approach portion of the procedure	manual intervention by the pilot, but will not be required , if RAIM is aqvailable	additional action by the operator to setthe course
PTL	379	NAVEGACIÓN	Overriding an automatically selected sensitivity during a GPS approachwill	A	cancel the approach mode annunciation	require flying point-to-point on the approach to comply with the published procedure.	have not affect if the aproach is flown manually.
PTL	380	NAVEGACIÓN	Routes that require a flight navigator are listed in the	C	Airplane Flight Manual	International Flight Information Manual.	Air carrier´s Operations Specifications.

PTL	381	NAVEGACIÓN	Taxi lead-off lights associated with the centerline lighting system	C	Alternate green and yellow lights curving from the centerline of the runway to the centerline of the taxiway.	Alternate green and yellow lights curving from the centerline of the runway to thebeginning of the taxiway.	Alternate green and yellow lights curving from the centerline of the runway to a edge of the taxiway.
PTL	382	NAVEGACIÓN	TCAS I provides	B	traffic and resolution advisories.	proximity warning.	recommended maneuvers to avoid conflicting traffic.
PTL	383	NAVEGACIÓN	TCAS II provides	A	traffic and resolution advisories.	proximity warning.	maneuvers in all directions to avoid the conflicting traffic.
PTL	384	NAVEGACIÓN	The airport markings, signage and lighting associated with Land and Hold Short (LAHSO) consists of:	B	yellow hold-short markings, red and white signage, and in-pavement lights.	red and white signage, yellow hold-short markings, and at some airports, in-pavement lights.	red and black signage, in-pavement lights, and yellow hold-short markings.
PTL	385	NAVEGACIÓN	The higher glide slope of the three-bar VASI is intended for use by	C	high performance aircraft.	helicopters.	high cockpit aircraft.
PTL	386	NAVEGACIÓN	The moving map below reflects a loss of	A	position information.	the AHRS.	the ADC
PTL	387	NAVEGACIÓN	The sign shown is an example of	A	a mandatory instruction sign	runway headingnotification signage	an airport directional sign
PTL	388	NAVEGACIÓN	The lowest ILS Category II minimums are	B	DH 50 feet and RVR 1,200 feet.	DH 100 feet and RVR 1,200 feet.	DH 150 feet and RVR 1,500 feet.
PTL	389	NAVEGACIÓN	What action is necessary when a partial loss of ILS receiver capability occurs while operating in controlled airspace under IFR?	C	Continue as cleared and file a written report to the DGTA if requested.	If the aircraft is equipped with other radios suitable for executing an instrument approach, no further action is necessary.	Report the malfunction immediately to ATC.
PTL	390	NAVEGACIÓN	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	Request radar vectors from ATC to the nearest suitable airport and land.	Proceed in accordance with the approved instructions and procedures specified in the operations manual for such an event.	Return to the departure airport if the thunderstorms have not been encountered, and there is enough fuel remaining.

PTL	391	NAVEGACIÓN	What action should be taken if one of the two VHF radios fail while IFR in controlled airspace?	A	Notify ATC immediately.	Squawk 7600.	Monitor the VOR receiver.
PTL	392	NAVEGACIÓN	What are the indications of Precision Approach Path Indicator (PAPI)?	A	"High - white, on glide path - red and white; low - red."	"High - white, on glide path - green; low - red."	"High - white and green, on glide path - green; low - red."
PTL	393	NAVEGACIÓN	What are the indications of the pulsating VASI?	B	High - pulsing white, on glide path - green, low - pulsing red.	High - pulsing white, on glide path - steady white, slightly below glide slope steady red, low - pulsing red.	"High - pulsing white, on course and on glide path - steady white, off course but on glide path - pulsing white and red; low - pulsing red."
PTL	394	NAVEGACIÓN	What aural and visual indications should be observed over an ILS inner marker?	A	Continuous dots at the rate of six per second.	Continuous dashes at the rate of two per second.	Alternate dots and dashes at the rate of two per second.
PTL	395	NAVEGACIÓN	What aural and visual indications should be observed over an ILS middle marker?	C	Continuous dots at the rate of six per second.	Continuous dashes at the rate of two per second.	Alternate dots and dashes at the rate of two per second.
PTL	396	NAVEGACIÓN	What aural and visual indications should be observed over an ILS outer marker?	B	Continuous dots at the rate of six per second.	Continuous dashes at the rate of two per second.	Alternate dots and dashes at the rate of two per second.
PTL	397	NAVEGACIÓN	What can a pilot expect if the pitot system ram air input and drain hole are blocked by ice?	A	The airspeed indicator may act as an altimeter.	The airspeed indicator will show a decrease with an increase in altitude.	No airspeed indicator change will occur during climbs or descents.
PTL	398	NAVEGACIÓN	What DME indications should a pilot observe when directly over a VORTAC site at 12,000 feet?	B	0 DME miles.	2 DME miles.	2.3 DME miles.
PTL	399	NAVEGACIÓN	What does the Precision Approach Path Indicator (PAPI) consist of?	B	"Row of four lights parallel to the runway; red, white, and green."	"Row of four lights perpendicular to the runway; red and white."	"One light projector with two colors; red and white."
PTL	400	NAVEGACIÓN	What does the pulsating VASI consist of?	C	Three-light system, two pulsing and one steady.	Two-light projectors, one pulsing and one steady.	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.

PTL	401	NAVEGACIÓN	What does the tri-color VASI consist of?	B	"Three light bars; red, green, and amber."	"One light projector with three colors; red, green, and amber."	"Three glide slopes, each a different color; red, green, and amber."
PTL	402	NAVEGACIÓN	What facilities may be substituted for an inoperative middle marker during a Category I ILS approach?	B	ASR and PAR.	The middle marker has no effect on straight-in minimums.	Compass locator, PAR, and ASR.
PTL	403	NAVEGACIÓN	What functions are provided by ILS?	C	Azimuth, distance, and vertical angle.	Azimuth, range, and vertical angle.	Guidance, range, and visual information.
PTL	404	NAVEGACIÓN	What is corrected altitude (approximate true altitude)?	B	Pressure altitude corrected for instrument error.	Indicated altitude corrected for temperature variation from standard.	Density altitude corrected for temperature variation from standard.
PTL	405	NAVEGACIÓN	What is the advantage of a three-bar VASI?	B	Pilots have a choice of glide angles.	A normal glide angle is afforded both high and low cockpit aircraft.	The three-bar VASI is much more visible and can be used at a greater height.
PTL	406	NAVEGACIÓN	What is the advantage of HIRL or MIRL on an IFR runway as compared to a VFR runway?	B	Lights are closer together and easily distniguished from surrounding lights.	Amber lights replace white on the last 2,000 feet of runway for a caution zone.	Alternate red and white lights replace the white on the last 3,000 feet of runway for a caution zone.
PTL	407	NAVEGACIÓN	What is the lowest Category IIIA minimum?	C	DH 50 feet and RVR 1,200 feet.	RVR 1,000 feet.	RVR 700 feet.
PTL	408	NAVEGACIÓN	What would be the identification when a VORTAC is undergoing routine maintenance and is considered unreliable?	C	"A test signal, ""TESTING"", is sent every 30 seconds"	"Identifier is preceded by ""M"" and an intermittent ""OFF"" flag would appear."	The identifier would be removed.
PTL	409	NAVEGACIÓN	What is the maximum permissible variation between the two bearing indicators on a dual VOR system when checking one VOR against the other?	A	4° on the ground and in flight.	6° on the ground and in flight.	6° and in flight and 4° on the ground.
PTL	410	NAVEGACIÓN	What is the normal range of the tri-color VASI at night?	A	5 miles.	10 miles.	15 miles.
PTL	411	NAVEGACIÓN	What is the purpose of REIL?	A	Identification of a runway surrounded by a preponderance of other lighting.	Identification of the touchdown zone to prevent landing short.	Establish visual descent guidance information during an approach.

PTL	412	NAVEGACIÓN	What record shall be made by the pilot performing a VOR operational check?	B	The date, frequency of VOR or VOT, number of hours flown since last check, and signature in the aircraft log.	The date, place, bearing error, and signature in the aircraft log or other record.	The date, approval or disapproval, tach reading, and signature in the aircraft log or other permanent record.
PTL	413	NAVEGACIÓN	What type navigation system is Inertial Navigation System (INS) ? A navigation computer which provides position	C	from information by compass, airspeed,and an input of wind and variation data.	from radar-type sensors that measure ground speed and drift angles.	by signals from self-contained gyros and accelerometers
PTL	414	NAVEGACIÓN	What type service should normally be expected from an En Route Flight Advisory Service?	A	Weather advisories pertinent to the type of flight, intended route of flight, and altitude.	Severe weather information, changes in flight plans, and receipt of position reports.	Radar vectors for traffic separation, route weather advisories, and altimeter settings.
PTL	415	NAVEGACIÓN	What would be the identification when a VORTAC is undergoing routine maintenance and is considered unreliable?	C	"A test signal, ""TESTING"", is sent every 30 seconds."	"Identifier is preceded by ""M"" and an intermittent ""OFF"" flag would appear."	The identifier would be removed.
PTL	416	NAVEGACIÓN	When an air carrier flight is operated under IFR or over-the-top which navigation equipment is required to be installed in duplicate?	A	VOR.	ADF.	VOR and DME.
PTL	417	NAVEGACIÓN	When are severe weather watch bulletins (WW) issued?	C	Every 12 hours as required	Every 24 hours as required.	Unscheduled and issued as required
PTL	418	NAVEGACIÓN	"When instructed by ATC to ""Hold short of a runway (ILS critical area, etc.),"" the pilot should stop"	B	with the nose gear on the hold line.	so that no part of the aircraft extends beyond the hold line.	so the flight deck area of the aircraft is even with the hold line.
PTL	419	NAVEGACIÓN	When is DME or suitable RNAV required for an instrument flight?	A	At or above 24,000 feet MSL if VOR navigational equipment is required.	above 12,500 feet MSL	in terminal radar service areas
PTL	420	NAVEGACIÓN	When is DME required for an instrument flight?	A	At or above 24,000 feet MSL if VOR navigational equipment is required.	In terminal radar service areas.	Above 12,500 feet MSL.
PTL	421	NAVEGACIÓN	When is the course deviation indicator (CDI) considered to have a full-scale deflection?	B	When the CDI deflects from full-scale left to full-scale right, or vice versa.	When the CDI deflects from the center of the scale to full-scale left or right.	When the CDI deflects from half-scale left to half-scale right, or vice versa.

PTL	422	NAVEGACIÓN	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	After passing the visual descent point (VDP).	When the RVR is 1,600 feet or more.	When the red terminal bar of the approach light systems are in sight.
PTL	423	NAVEGACIÓN	When must an air carrier airplane be DME equipped?	B	In Class E airspace for all IFR or VFR on Top operations.	Whenever VOR navigational receivers are required.	For flights at or above FL 180.
PTL	424	NAVEGACIÓN	When setting the altimeter, pilots should disregard	A	effects of nonstandard atmospheric temperatures and pressures.	corrections for static pressure systems.	corrections for instrument error.
PTL	425	NAVEGACIÓN	When taxiing on an airport with ASDE-X (airport surface detection equipment -X), you should	B	operate the transponder only when the airport is under IFR or at night during your taxi.	operate the transponder with altitude reporting all of the time during taxing.	be ready to activate the transponder upon ATC request while taxing.
PTL	426	NAVEGACIÓN	When using GPS for navigation and instrument approaches, a required alternate airport must have	A	an approach instrument approach procedure, besides GPS, that is expected to be operational and available at the ETA.	a GPS approach that is expected to be operational and available at the ETA.	authorization to fly approaches under IFR using GPS avionics.
PTL	427	NAVEGACIÓN	When you see this pavement marking from the cockpit, you	C	can taxi past this pointat yourown risk.	"must hold short until "" cleared "" to taxi on to or past the runway."	"may not cross the line until ATC allows you to "" enter "" or "" cross "" by instruction."
PTL	428	NAVEGACIÓN	Where does the DME indicator have the greatest error between the ground distance and displayed distance to the VORTAC?	A	High altitudes close to the VORTAC.	Low altitudes close to the VORTAC.	Low altitudes far from the VORTAC.
PTL	429	NAVEGACIÓN	Where is a list maintained for routes that require special navigation equipment?	A	Air Carrier's Operations Specifications.	International Flight Information Manual.	Airplane Flight Manual
PTL	430	NAVEGACIÓN	Which rule applies to the use of the cockpit voice recorder erasure feature?	B	All recorded information may be erased, except for the last 30 minutes prior to landing.	Any information more than 30 minutes old may be erased.	All recorded information may be erased, unless the DGAC needs to be notified of an occurrence.

PTL	431	NAVEGACIÓN	"Which ""rule-of-thumb"" may be used to approximate the rate of descent required for a 3° glide path?"	A	5 times groundspeed in knots.	8 times groundspeed in knots.	10 times groundspeed in knots.
PTL	432	NAVEGACIÓN	Which airplanes are required to be equipped with a ground proximity warning glide slope deviation alerting system?	A	All turbine powered airplanes.	Passenger-carrying turbine-powered airplanes only.	Large turbine-powered airplanes only.
PTL	433	NAVEGACIÓN	Which checks and inspections of flight instruments or instrument systems must be accomplished before an aircraft can be flown under IFR?	A	VOR within 30 days and altimeter systems and transponder within 24 calendar months.	ELT test within 30 days, altimeter systems within 12 calendar months, and transponder within 24 calendar months.	Airspeed indicator within 24 calendar months, altimeter system within 24 calendar months, and transponder within 12 calendar months.
PTL	434	NAVEGACIÓN	Which class of NOTAM gives the latest information on LORAN-C chain or station outages?	B	"NOTAM (L)'s under the identifier ""LORAN-C.""""	"NOTAM (D)'s under the identifier ""LRN.""""	Class II NOTAM's published every 14 days.
PTL	435	NAVEGACIÓN	"Which color on a tri-color VASI is a ""high"" indication?"	B	Red.	Amber.	Green.
PTL	436	NAVEGACIÓN	"Which color on a tri-color VASI is a ""low"" indication?"	A	Red.	Amber.	Green.
PTL	437	NAVEGACIÓN	"Which color on a tri-color VASI is an ""on course"" indication?"	C	Red.	Amber.	Green.
PTL	438	NAVEGACIÓN	Which component associated with the ILS is identified by the first two letters of the localizer identification group?	C	Inner marker.	Middle compass locator.	Outer compass locator.
PTL	439	NAVEGACIÓN	Which component associated with the ILS is identified by the last two letters of the localizer group?	B	Inner marker.	Middle compass locator.	Outer compass locator.
PTL	440	NAVEGACIÓN	Which entry shall be recorded by the person performing a VOR operational check?	C	Frequency, radial and facility used, and bearing error.	Flight hours and number of days since last check, and bearing error.	Date, place, bearing error, and signature.

PTL	441	NAVEGACIÓN	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	The dual system must consist of two operative INS units.	A dual VORTAC/ILS system may be substituted for an inoperative INS.	Only one INS is required to be operative, if a Doppler Radar is substituted for the other INS.
PTL	442	NAVEGACIÓN	Which facility may be substituted for the middle marker during a Category I ILS approach?	C	VOR/DME FIX.	Surveillance radar.	Compass locator.
PTL	443	NAVEGACIÓN	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	Radar and RVR.	RCLS and REIL.	HIRL, TDZL, RCLS, and RVR.
PTL	444	NAVEGACIÓN	Which indication may be received when a VOR is undergoing maintenance and is considered unreliable?	A	Coded identification T-E-S-T.	"Identifier is preceded by ""M"" and an intermittent ""OFF"" flag might appear."	An automatic voice recording stating the VOR is out-of-service for maintenance.
PTL	445	NAVEGACIÓN	Which pressure is defined as station pressure?	B	Altimeter setting.	Actual pressure at field elevation.	Station barometric pressure reduced to sea level.
PTL	446	NAVEGACIÓN	Which equipment requirement must be met by an air carrier that elects to use a dual Inertial Navigation System C	C	The dual system must consist of two operative INS units.	Only one INS is required to be operative, if a Doppler Radar is substituted for the other INS.	A dual VORTAC/ILS system may be substituted for an inoperative INS.
PTL	447	NAVEGACIÓN	"Which "" rule-of-thumb"" may be used to approximate the rate of descent required for a 3° glidepath?"	A	5 times groundspeed in knots.	8 times groundspeed in knots.	10 times groundspeed in knots.
PTL	448	NAVEGACIÓN	(INS) on a proposed flight?	B	All recorded information may be erased, except for the last 30 minutes prior to landing.	Any information more than 30 minutes old may be erased.	All recorded information may be erased, unless the DGAC needs to be notified of an occurrence.

PTL	449	NAVEGACIÓN	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	No call is required if one of the two VOR receivers is operating properly.	Advise ATC immediately.	Notify the dispatcher via company frequency.
PTL	450	NAVEGACIÓN	While flying in controlled airspace under IFR, the ADF fails. What action is required?	C	Descend below Class A airspace.	Advise dispatch via company frequency.	Notify ATC immediately.
PTL	451	NAVEGACIÓN	While on an IFR flight in controlled airspace, the failure of which unit will precipitate an immediate report to ATC?	C	One engine, on a multiengine aircraft.	Airborne radar.	DME.
PTL	452	NAVEGACIÓN	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	ARINC.	Any FSS.	Appropriate dispatch office.
PTL	453	NAVEGACIÓN	With no traffic identified by TCAS, you	B	can rest assured that no other aircraft are in the area.	must continually scan for other traffic in visual conditions.	must scan only for hot air balloons.
PTL	454	NAVEGACIÓN	Within what frequency range does the localizer transmitter of the ILS operate?	B	108.10 to 118.10 MHz.	108.10 to 111.95 MHz.	108.10 to 117.95 MHz.
PTL	455	NAVEGACIÓN	You arrived at the initial fix for the LPV approach into XYZ. The preflight briefer issued you an unrealiable advisory on the approach before you took off. Your avionics indicates good signals and full GPS service is available.	A	know you can fly the approach down to LPVminimums.	cannot use that approach because of the advisory from FSS.	must revert to another approach system such as VOR

PTL	456	NAVEGACIÓN	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	the aft end of the aircraft is even with the taxiway location sign.	the flight deck area of the aircraft is even with the hold line.	all parts of the aircraft have crossed the hold line.
PTL	457	NAVEGACIÓN	NAVSTAR/GPS operates in the band the receiver determines position by:	A	UHF, range position lines	UHF, secondary radar principles	SHF, secondary radar principles
PTL	458	NAVEGACIÓN	The minimun number of satellites required for a 3D fix is:	B	3	4	5
PTL	459	NAVEGACIÓN	The most significant error of GNSS is:	C	GDOP	Receiver clock	Ionospheric propagation
PTL	460	NAVEGACIÓN	When using GNSS to carry out a non-precision approach the MDA will be determined using:	A	barometric altitude	GPS altitude	Radio altimeter height
PTL	461	NAVEGACIÓN	Which of the following statements concerning NAVSTAR/GPS time is correct?	C	satellite time is the same as UTC	the satellite runs its own time based on seconds and weeks which is independent of UTC	the satellite runs its own time based on seconds and weeks which is correlated with UTC
PTL	462	NAVEGACIÓN	Find the heading of the various legs of the traffic patterns for runway 31	B	Left entry: 020°- Left base 040°- Downwind 020°- Right entry 040°- Right Base 030°	Left entry: 085°- Left base 040°- Downwind 130°- Right entry 175°- Right Base 220°	Left entry: 040°- Left base 210°- Downwind 130°- Right entry 175°- Right Base 220°
PTL	463	NAVEGACIÓN	Find the time: Groud speed 145- Distance 128NM	A	53 min.	59 min.	40 min
PTL	464	NAVEGACIÓN	Whit this data find the wind direction and speed: Track 169°-Ground Speed 132 knots-True heading 173°- True airspeed 160 knots.	C	WCA 12L- Wind Direction 110°- Wind Speed 39 knots	WCA 12L- Wind Direction 220°- Wind Speed 28 knots	WCA 4° R- Wind Direction 191°-Wind Speed 30 knots
PTL	465	NAVEGACIÓN	find ground speed and true course (track): Wind direction 185°-Wind speed 40 knots- True heeading 115°- True airspeed 170 knots.	A	Ground speed 161 knots-WCA 13R-True course 102°	Ground speed 173 knots-WCA 8L-True course 248°	Ground speed 116 knots-WCA 8R-True course 344°

PTL	466	NAVEGACIÓN	Given: Fuel gallons: 20. Find: pounds	A	120 Pounds	130 Pounds	150 Pounds
PTL	467	NAVEGACIÓN	Given: 288 Status Miles. Find: Nautical Miles	B	160 NM	250 NM	150 NM
PTL	468	NAVEGACIÓN	Given Oil, Gallons: 4. Find: Pounds	C	20 Pounds	60 Pounds	30 Pounds
PTL	469	NAVEGACIÓN	Pressure Altitude: 0 ft- Ture Air Temperature: 40°C. Find density altitude	C	4.000 ft	2.000 ft	3.000 ft
PTL	470	NAVEGACIÓN	Pressure altitude: 12,000- OAT -10°C- CAS 190 MPH. Find True Airspeed	A	228 knots	170 knots	235 MPH
PTL	471	NAVEGACIÓN	A radio wave is:	C	An energy wave comprising an electrical field in the same plane as magnetic field.	An electrical field alternating with a magnetic field	An energy wave where there is an electrical field perpendicular to magnetic field
PTL	472	NAVEGACIÓN	The frequency band containing the frequency corresponding to 29.1 cm is:	A	UHF	VHF	SHF
PTL	473	NAVEGACIÓN	An aircraft wishes to track towards a VOR along the 274 radial. If variation is 10° W what should be set on the OBS?	C	274°	264°	094°
PTL	474	NAVEGACIÓN	The VOR indication on a RMI whose deviation is not zero:	A	Are magnetic.	Are compass.	Are relative.
PTL	475	NAVEGACIÓN	The coverage of an ILS localiser extends to____either side of the on course line out to a range of___ nm	C	10°, 35nm	35°, 10nm	35°, 17nm
PTL	476	NAVEGACIÓN	The outer marker of an ILS installation has a visual identification of:	C	alternating dots and dashes on a blue light.	continuous dots at a rate of 2 per second, blue light	continuous dashes at a rate of 2 per second, blue light.
PTL	477	NAVEGACIÓN	The correct sequence of colours of a colour Airbone Weather Radar as returns get stronger is:	C	red yellow green	yellow green red	green yellow red.

PTL	478	NAVEGACIÓN	The antenna of an airborne weather radar is stabilised:	B	in pitch, roll, and yaw	in pitch and roll	In pitch and roll whether the stabilisation is on or off.
PTL	479	NAVEGACIÓN	The special SSR codes are as follows: Emergency_____, radio failure_____, entering an airspace_____,unlawful interference with the conduct of the flight_____.	A	"7700; 7600; 2000; 7500."	"7700; 7600; 7500; 2000."	"7600; 7500; 2000; 77000."
PTL	480	NAVEGACIÓN	If the SSR transponder IDENT button is pressed	A	an identification pulse is automatically and continuously transmitted for 20 seconds, 4.35 µ sec after the last framing pulse.	an identification pulse is automatically and continuously transmitted for 20 seconds, 4.35 µ sec before the last framing pulse.	an identification pulse is automatically and continuously transmitted for 10 seconds, 4.35 µ sec after the last framing pulse.
PTL	481	NAVEGACIÓN	A DME transponder does not respond to pulses received from radars other than DME because:	C	each aircraft transmits pulses at a random rate.	MDME transmits and receives on different frequencies.	it will only accept the unique twin DME pulses.
PTL	482	NAVEGACIÓN	The accuracy associated with DME is:	C	+ or - 3% of range, or 0.5nm, whichever is greater.	+ or -1.25% of range	+/-0.25 nm +/-1.25% of range
PTL	483	NAVEGACIÓN	For a VOR and a DME beacon to be said to be associated the aerial separation must not exceed_____ in a terminal area and _____ outside a terminal area.	C	100m 2000m	50feet 200feet	30m 600m
PTL	484	NAVEGACIÓN	"DME and VOR are ""frequency paired"" because:"	C	the same receiver can be used for both aids.	the VOR transmitter is easily converted to the required DME frequency.	cockpit workload is reduced
PTL	485	NAVEGACIÓN	Which provisions on a VFR flight in Class E airspace are correct?	B	"Service provided: Air Traffic Control Service; ATC Clearance: non required."	"Service provided: Traffic Information as far as practical; ATC Clearance: not required."	"Service provided: Air Ttraffic control Service; ATC Clearance: required."

PTL	486	NAVEGACIÓN	The vertical IFR separation minimum being applied by ATC within a controlled airspace above FL290 is:	B	1.000 feet (300 m)	2.000 feet (600 m)	500 feet (150 m)
PTL	487	NAVEGACIÓN	A minimum vertical separation shall be provided until aircraft are stablished inbound on the ILS localizer course and/or MLS final approach track. This minimum is, when independent parallel approaches are being conducted:	C	150 m (500 ft)	200 m (660 ft)	300 m (1.000 ft)
PTL	488	NAVEGACIÓN	"The wake turbulence category ""heavy"" is applied to aircraft of (MTOM):"	B	126.000 lbs or more	136.000 fg or more	more than 136.000 lbs
PTL	489	NAVEGACIÓN	"When, in air space where VFR are permitted, the pilot in command of an IFR flight wishes to continue his flight in accordance with visual flight rules, until the destination is reached: 1. He must inform the control unit (""cancel IFR""). 2. He must request and obtain clearance. 3. He may request his IFR flight plan to be changed to a VFR flight plan. 4. The flight plan automatically becomes a VFR flight plan. The correct combination of statements is:"	A	1, 4	1, 3	2, 4

PTL	490	NAVEGACIÓN	A MEDIUM (wake turbulence category) aircraft is following a HEAVY category aircraft during a radar approach. What is the minimum wake turbulence radar separation to be applied?	A	5 NM.	a NM providing 1.000 ft vertical separation also maintained.	6 NM.
PTL	491	NAVEGACIÓN	At least which services have to be provided by ATS within a flight information region?	A	Flight information service and alerting service.	Flight information service.	Flight information service and air traffic advisory service.
PTL	492	NAVEGACIÓN	Radar controlled aircraft on intermediate or final approach may be requested to make minor speed adjustements by ATC. The adjustements shall never be more than:	C	25 knots at any stage.	10 knots and not within 5 NM of threshold.	20 knots and not within 4 NM of threshold.
PTL	493	NAVEGACIÓN	One of the functions ensured by a radar control unit for the provision of approach control service is:	A	to conduct surveillance radar approaches.	to apply a reduced vertical separation of 500 feet between IFR flights and VFR flights.	to apply a horizontal separation less than 5 NM.
PTL	494	NAVEGACIÓN	A s called VISUAL APPROACH can be performed:	A	when an instrument approach is not completed and visual reference to terrain is subsequently maintained.	an approach made under VFR using instrument height and track guidance.	during IFR and VFR approaches in VMC.
PTL	495	NAVEGACIÓN	A TMA is:	B	an area in which submission of a flight pan is not required.	a CTA established to cover several major air traffic routes around one or more major aerodromes.	a CTR

PTL	496	NAVEGACIÓN	At the commencement of final approach, if the controller possesses wind information in the form of components, significant changes in the mean surface wind direction and speed shall be transmitted to aircraft. The mean head-wind component significant change is:	C	8 kts	5 kts	10 kts
PTL	497	NAVEGACIÓN	An aircraft making a radar approach should be directed to consider executing a missed approach if the aircraft is not visible on the radar display for any significant interval during the:	A	last 2 NM of the approach.	last 4 NM of the approach.	last 3 NM of the approach.
PTL	498	NAVEGACIÓN	"What is the definition of ""aerodrome traffic""?"	B	Traffic on the manoeuvring area and in the circuit.	Traffic on the manoeuvring area and in the local vicinity of the aerodrome.	Traffic on the movement area and in the local vicinity of the aerodrome.
PTL	499	NAVEGACIÓN	Which letter is used in a flight plan to indicate that the flight commences in accordance with VFR and subsequently changes to IFR?	B	I	Z	V
PTL	500	NAVEGACIÓN	Normally all turns, which are requested by a radar controller have to be executed as:	C	prescribed by the aircraft operations.	deciden on pilot's discretion.	standard rate turns if not otherwise instructed by ATC.
PTL	501	NAVEGACIÓN	ATS airspaces where IFR and VFR flights are permited, all flights are subject to air traffic control service and are separated from each other are classified as:	C	class E	class A	class B

PTL	502	NAVEGACIÓN	"The definition of ""Manoeuvring Area"" is:"	B	that part of an aerodrome to be used for takeoff, landing and taxiing of aircraft, including apron(s).	that part of an aerodrome to be used for takeoff, landing and taxiing of aircraft, excluding apron(s).	that part of an aerodrome to be used for takeoff, landing and taxiing of aircraft, including movement area and apron(s).
PTL	503	NAVEGACIÓN	The Air Traffic control Services do not prevent collisions with terrarin.	A	Correct, expect when an IFR flight is vectored by radar.	Prevent collisions with terrain.	Do not prevent collisions with terrain.
PTL	504	NAVEGACIÓN	For visual approaches, the following shall apply: A) A visual approach may only be requested when the reported ceiling is at or above the initial approach altitude/level. B) When so requested by a pilot, ATC is obliged to clear the aircraft for a visual approach. C) When cleared for a visual approach, the pilot has to maintain own separation to other aerodrome traffic. D) Separation has to be provided by ATC between an aircraft for a visual approach and other arriving and departing aircraft.	C	B and C	B only	A and D
PTL	505	NAVEGACIÓN	The maximum speed for an aircraft flying in class F or G airspace below FL100 is:	A	250 kts IAS	250 kts TAS	280 kts IAS
PTL	506	NAVEGACIÓN	If you are flying a surveillance radar approach (SRA). What information is reported by radar controller?	B	Distance from touchdown and observed deviation from the glide path.	Distance fron touchdown and pre-computed levels through which the aircraft should be passing to maintain the glide path.	Range and bearing from touchdown.

PTL	507	NAVEGACIÓN	"If the crew on an arriving aircraft approaching a controlled aerodrome will report ""field in sight"", a clearance for ""visual approach"" may be given under certain conditions"	C	The approach must be passing the FAF.	Continued approach will be according to VFR.	The air traffic controller will provide separation to other controlled traffic.
PTL	508	NAVEGACIÓN	Minimum radar vectoring altitudes should be sufficiently high to minimise:	C	exposure to noise on the ground	radar slant range error.	activation of ground proximity warnings.
PTL	509	NAVEGACIÓN	Which of the following Annexes to the Chicago convention contains international standards and recommended practices for air traffic services (ATS)?	C	Annex 6	Annex 14	Annex 11
PTL	510	NAVEGACIÓN	Repetitive flight plans (RPLs) shall be used for flights operated regularly on the same day(s) of consecutive weeks and:	C	on at least 20 days consecutively.	on at least ten occasions or every day over a period of at least 20 consecutive days.	on at least ten occasions or every day over a period of at least ten consecutive days.
PTL	511	NAVEGACIÓN	What are the three Air Traffic Services?	C	Area Control, Tower Control, Approach Control.	Flight Information Service, Area Control, Approach Control.	Air Traffic Control Services, Flight Information Services, Alerting Services.
PTL	512	NAVEGACIÓN	Who is responsible to determine minimum flight altitudes for ATS routes?	C	The pilot.	The publishers of aeronautical handbooks.	Each State for ATS routes over their territory.
PTL	513	NAVEGACIÓN	The abreviation RNP means:	C	required navigation precision	requested navigation position	required navigation performance
PTL	514	NAVEGACIÓN	Required Navigation Performance (RNP) shall be prescribed	B	by regional air navigation agreements.	by states on the basis of regional air navigation agreements.	by ICAO on the basis of regional air navigation agreements.
PTL	515	NAVEGACIÓN	The accuracy required of a precision area navigation system is:	C	0.25 nm	2 nm	1 nm

PTL	516	NAVEGACIÓN	A basic 2D RNAV system will determine tracking information from:	B	twin DME	VOR/DME	Twin VOR
PTL	517	NAVEGACIÓN	The IRS position can be updated:	A	on the ground only	at designated positions en-route and on the ground	on the ground and overhead VOR/DME
PTL	518	NAVEGACIÓN	The FMC position will be at its most inaccurate:	C	on take-off	at TOC	at TOD
PTL	519	NAVEGACIÓN	Which positions can be input to the FMC using a maximum of 5 alpha-numerics?	B	SIDS & STARS, reporting points and airways designators	Navigation facilities, reporting points and airways designators	SIDS & STARS and latitude and longitude
PTL	520	NAVEGACIÓN	The FMC navigational database can be acceses by the pilots:	B	to update the database	to read information only	to change information between the 28 day updates
PTL	521	NAVEGACIÓN	Above latiyudes of 84° a twin FMS/triple IRS system will go to de-coupled operations. The reason for this is:	A	to prevent error messages as the IRS longitudes show large differences	to ease the pilot's workload	to improve the system accuracy
PTL	522	NAVEGACIÓN	The period of validity of the navigational database is:	A	28 days	1 month	determined by the national authority and may be from 28 days to 91 days
PTL	523	PERFORMANCE Y PLANIFICACIÓN DE VUELO	A commercial operator plans to ferry a large, four-engine, reciprocating-engine-powered airplane from one facility to another to repair an inoperative engine. Which is an operational requirement for the three-engine flight?	B	The gross weight at takeoff may not exceed 75 percent of the maximum certificated gross weight.	Weather conditions at the takeoff and destination airports must be VFR.	The computed takeoff distance to reach V1 must not exceed 70 percent of the effective runway length.
PTL	524	PERFORMANCE Y PLANIFICACIÓN DE VUELO	"A definition of the term ""viscous hydroplanning"" is where "	B	the airplane rides on standing water.	a film of moisture covers the painted or rubber-coated portion of the runway.	the tires of the airplane are actually riding on a mixture of steam and melted rubber.
PTL	525	PERFORMANCE Y PLANIFICACIÓN DE VUELO	An outside air pressure decreases, thrust output will	C	increase due to greater efficiency of jet aircraft in thin air.	remain the same since compression of inlet air will compensate for any decrease in air pressure.	decrease due to higher density altitude.

PTL	526	PERFORMANCE Y PLANIFICACIÓN DE VUELO	At what minimum speed (rounded off) could dynamic hydroplaning occur on main tires having a pressure of 121 psi?	B	90 knots.	96 knots.	110 knots.
PTL	527	PERFORMANCE Y PLANIFICACIÓN DE VUELO	At what minimum speed will dynamic hydroplaning begin if a tire has an air pressure of 70 psi?	C	85 knots.	80 knots.	75 knots.
PTL	528	PERFORMANCE Y PLANIFICACIÓN DE VUELO	At what speed, with reference to L/Dmax, does maximum range for a jet airplane occur?	C	A speed less than that for L/Dmax.	A speed equal to that for L/Dmax.	A speed greater than that for L/Dmax.
PTL	529	PERFORMANCE Y PLANIFICACIÓN DE VUELO	At what speed, with reference to L/Dmax, does maximum rate-of-climb for a jet airplane occur?	A	A speed greater than that for L/Dmax.	A speed equal to that for L/Dmax.	A speed less than that for L/Dmax.
PTL	530	PERFORMANCE Y PLANIFICACIÓN DE VUELO	Compared to dynamic hydroplaning, at what speed does viscous hydroplaning occur when landing on a smooth, wet runway?	B	At approximately 2.0 times the speed that dynamic hydroplaning occurs.	At a lower speed than dynamic hydroplaning.	At the same speed as dynamic hydroplaning.
PTL	531	PERFORMANCE Y PLANIFICACIÓN DE VUELO	Equivalent shaft horsepower (ESHP) of a turbo-prop engine is a measure of	B	turbine inlet temperature.	shaft horsepower and jet thrust.	propeller thrust only.
PTL	532	PERFORMANCE Y PLANIFICACIÓN DE VUELO	"For which of these aircraft is the ""clearway"" for a particular runway considered in computing takeoff weight limitations? "	B	Those passenger-carrying transport aircraft certificated between August 26, 1957 and August 30, 1959.	Turbine-engine-powered transport airplanes certificated after September 30, 1958.	U.S. certified air carrier airplanes certificated after August 29, 1959.
PTL	533	PERFORMANCE Y PLANIFICACIÓN DE VUELO	How can turbulent air cause an increase in stalling speed of an airfoil?	A	An abrupt change in relative wind.	A decrease in angle of attack.	Sudden decrease in load factor.

PTL	534	PERFORMANCE Y PLANIFICACIÓN DE VUELO	How should reverse thrust propellers be used during landing for maximum effectiveness in stopping?	B	Gradually increase reverse power to maximum as rollout speed decreases.	Use maximum reverse power as soon as possible after touchdown.	Select reverse-pitch after landing and use idle power setting of the engines.
PTL	535	PERFORMANCE Y PLANIFICACIÓN DE VUELO	How should thrust reversers be applied to reduce landing distance for turbojet aircraft?	A	Immediately after ground contact.	Immediately prior to touchdown.	After applying maximum wheel braking.
PTL	536	PERFORMANCE Y PLANIFICACIÓN DE VUELO	If an engine failure occurs at an altitude above single-engine ceiling, what airspeed should be maintained?	B	VMC.	VYSE.	VXSE.
PTL	537	PERFORMANCE Y PLANIFICACIÓN DE VUELO	If severe turbulence is encountered, which procedure is recommended?	B	Maintain a constant altitude.	Maintain a constant attitude.	Maintain constant airspeed and altitude.
PTL	538	PERFORMANCE Y PLANIFICACIÓN DE VUELO	Maximum range performance of a turbojet aircraft is obtained by which procedure as aircraft weight reduces?	B	Increasing speed or altitude.	Increasing altitude or decreasing speed.	Increasing speed or decreasing altitude.
PTL	539	PERFORMANCE Y PLANIFICACIÓN DE VUELO	Minimum specific fuel consumption of the turbo-prop engine is normally available in which altitude range?	B	10,000 feet to 25,000 feet.	25,000 feet to the tropopause.	The tropopause to 45,000 feet.
PTL	540	PERFORMANCE Y PLANIFICACIÓN DE VUELO	The most important restriction to the operation of turbojet or turboprop engines is	B	limiting compressor speed.	limiting exhaust gas temperature.	limiting torque.
PTL	541	PERFORMANCE Y PLANIFICACIÓN DE VUELO	Under normal operating conditions, which combination of MAP and RPM produce the most severe wear, fatigue, and damage to high performance reciprocating engines?	A	High RPM and low MAP.	Low RPM and high MAP.	High RPM and high MAP.

PTL	542	PERFORMANCE Y PLANIFICACIÓN DE VUELO	Under what condition is Vmc the highest?	B	Gross weight is at the maximum allowable value.	CG is at the most rearward allowable position.	CG is at the most forward allowable position.
PTL	543	PERFORMANCE Y PLANIFICACIÓN DE VUELO	Under which condition during the landing roll are the main wheel brakes at maximum effectiveness?	A	When wing lift has been reduced.	At high groundspeeds.	When the wheels are locked and skidding.
PTL	544	PERFORMANCE Y PLANIFICACIÓN DE VUELO	What action is appropriate when encountering the first ripple of reported clear air turbulence (CAT)?	C	Extend flaps to decrease wing loading.	Extend gear to provide more drag and increase stability.	Adjust airspeed to that recommended for rough air.
PTL	545	PERFORMANCE Y PLANIFICACIÓN DE VUELO	What characterizes a transient compressor stall?	C	Loud, steady roar accompanied by heavy shuddering.	Sudden loss of thrust accompanied by a loud whine.	"Intermittent ""bang"", as backfires and flow reversals take place."
PTL	546	PERFORMANCE Y PLANIFICACIÓN DE VUELO	What effect does an uphill runway slope have upon takeoff performance?	A	Increases takeoff distance.	Decreases takeoff speed.	Decreases takeoff distance.
PTL	547	PERFORMANCE Y PLANIFICACIÓN DE VUELO	What effect does high relative humidity have upon the maximum power output of modern aircraft engines?	B	Neither turbojet nor reciprocating engines are affected.	Reciprocating engines will experience a significant loss of BHP.	Turbojet engines will experience a significant loss of thrust.
PTL	548	PERFORMANCE Y PLANIFICACIÓN DE VUELO	What effect does landing at high elevation airports have on groundspeed with comparable conditions relative to temperature, wind, and airplane weight?	A	Higher than at low elevation.	Lower than at low elevation.	The same as at low elevation.
PTL	549	PERFORMANCE Y PLANIFICACIÓN DE VUELO	What effect will an increase in altitude have upon the available equivalent shaft horsepower (ESHP) of a turboprop engine?	A	Lower air density and engine mass flow will cause a decrease in power.	Higher propeller efficiency will cause an increase in usable power (ESHP) and thrust.	Power will remain the same but propeller efficiency will decrease.

PTL	550	PERFORMANCE Y PLANIFICACIÓN DE VUELO	What effect would a change in ambient temperature of air density have on gas-turbine-engine performance?	C	As air density decreases, thrust increases.	As temperature increases, thrust increases.	As temperature increases, thrust decreases.
PTL	551	PERFORMANCE Y PLANIFICACIÓN DE VUELO	What effect, if any, does high ambient temperature have upon the thrust output of a turbine engine?	A	Thrust will be reduced due to the decrease in air density.	Thrust will remain the same, but turbine temperature will be higher.	Thrust will be higher because more heat energy is extracted from the hotter air.
PTL	552	PERFORMANCE Y PLANIFICACIÓN DE VUELO	What effect, if any, will landing at a higher-than-recommended touchdown speed have on hydroplaning?	C	No effect on hydroplaning, but increases landing roll.	Reduces hydroplaning potential if heavy braking is applied.	Increases hydroplaning potential regardless of braking.
PTL	553	PERFORMANCE Y PLANIFICACIÓN DE VUELO	What effective runway length is required for a turbojet-powered airplane at the destination airport if the runways are forecast to be wet or slippery at the ETA?	B	70 percent of the actual runway available, from a height of 50 feet over the threshold.	115 percent of the runway length required for a dry runway.	115 percent of the runway length required for a wet runway.
PTL	554	PERFORMANCE Y PLANIFICACIÓN DE VUELO	What indicates that a compressor stall has developed and become steady?	A	Strong vibrations and loud roar.	"Occasional loud ""bang"" and low reversal."	Completes loss of power with severe reduction in airspeed.
PTL	555	PERFORMANCE Y PLANIFICACIÓN DE VUELO	"What is an area identified by the term ""stopway""? "	B	An area, at least the same width as the runway, capable of supporting an airplane during a normal takeoff.	An area designated for use in decelerating an aborted takeoff.	An area, not as wide as the runway, capable of supporting an airplane during a normal takeoff.
PTL	556	PERFORMANCE Y PLANIFICACIÓN DE VUELO	What is controlled by the waste gas of a turbo-charged reciprocating engine?	B	Supercharger gear ratio.	Exhaust gas discharge.	Throttle opening.
PTL	557	PERFORMANCE Y PLANIFICACIÓN DE VUELO	What is the best method of speed reduction if hydroplaning is experienced on landing?	C	Apply full main wheel braking only.	Apply nosewheel and main wheel braking alternately and abruptly.	Apply aerodynamic braking to the fullest advantage.

PTL	558	PERFORMANCE Y PLANIFICACIÓN DE VUELO	What is the correct symbol for minimum unstick speed?	A	Vmu.	Vmd.	Vfc.
PTL	559	PERFORMANCE Y PLANIFICACIÓN DE VUELO	What is the name of a plane beyond the end of a runway which does not contain obstructions and can be considered when calculating takeoff performance of turbine-powered aircraft?	A	Clearway.	Stopway.	Obstruction clearance plane.
PTL	560	PERFORMANCE Y PLANIFICACIÓN DE VUELO	What is the resulting performance loss when one engine on a twin-engine airplane fails?	B	Reduction of cruise airspeed by 50 percent.	Reduction of climb by 50 percent or more.	Reduction of all performance by 50 percent.
PTL	561	PERFORMANCE Y PLANIFICACIÓN DE VUELO	What performance is characteristic of flight at maximum L/D in a propeller-driven airplane?	A	Maximum range and distance glide.	Best angle of climb.	Maximum endurance.
PTL	562	PERFORMANCE Y PLANIFICACIÓN DE VUELO	"What should a pilot do to maintain ""best range"" airplane performance when a tailwind is encountered? "	C	Increase speed.	Maintain speed.	Decrease speed.
PTL	563	PERFORMANCE Y PLANIFICACIÓN DE VUELO	When a turbine-engine-powered airplane is to be ferried to another base for repair of an inoperative engine, which operational requirement must be observed?	A	Only the required flight crewmembers may be on board the airplane.	The existing and forecast weather for departure, en route, and approach must be VFR.	No passengers except authorized maintenance personnel may be carried.
PTL	564	PERFORMANCE Y PLANIFICACIÓN DE VUELO	Where is the critical altitude of a supercharged reciprocating engine?	A	The highest altitude at which a desired manifold pressure can be obtained.	Highest altitude where the mixture can be leaned to best power ratio.	The altitude at which maximum allowable BMEP can be obtained.

PTL	565	PERFORMANCE Y PLANIFICACIÓN DE VUELO	Which condition has the effect of reducing critical engine failure speed?	A	Slush on the runway or inoperative antiskid.	Low gross weight.	High density altitude.
PTL	566	PERFORMANCE Y PLANIFICACIÓN DE VUELO	Which condition reduces the required runway for takeoff?	C	Higher-than-recommended airspeed before rotation.	Lower-than-standard air density.	Increased headwind component.
PTL	567	PERFORMANCE Y PLANIFICACIÓN DE VUELO	Which is correct symbol for the stalling speed or the minimum steady flight speed at which the airplane is controllable?	B	Vso.	Vs.	Vs1.
PTL	568	PERFORMANCE Y PLANIFICACIÓN DE VUELO	Which is the correct symbol for design cruising speed?	A	Vc.	Vs.	Vma.
PTL	569	PERFORMANCE Y PLANIFICACIÓN DE VUELO	Which is the correct symbol for the minimum steady-flight speed or stalling speed in the landing configuration?	C	Vs.	Vs1.	Vso.
PTL	570	PERFORMANCE Y PLANIFICACIÓN DE VUELO	Which is the definition of V2 speed?	B	Takeoff decision speed.	Takeoff safety speed.	Minimum takeoff speed.
PTL	571	PERFORMANCE Y PLANIFICACIÓN DE VUELO	Which maximum range factor decreases as weight decreases?	C	Angle of attack.	Altitude.	Airspeed.

PTL	572	PERFORMANCE Y PLANIFICACIÓN DE VUELO	Which operational requirement must be observed by a commercial operator when ferrying a large, three-engine, turbojet-powered airplane from one facility to another to repair an inoperative engine?	C	The computed takeoff distance to reach V1 must not exceed 70 percent of the effective runway length.	The existing and forecast weather for departure, en route, and approach must be VFR.	No passengers may be carried.
PTL	573	PERFORMANCE Y PLANIFICACIÓN DE VUELO	Which operational requirement must be observed when ferrying a large, turbine-engine-powered airplane when one of its engines is inoperative?	A	The weather conditions at takeoff and destination must be VFR.	Weather conditions must exceed the basic VFR minimums for the entire route, including takeoff and landing.	The flight cannot be conducted between official sunset and sunrise.
PTL	574	PERFORMANCE Y PLANIFICACIÓN DE VUELO	Which operational requirement must be observed when ferrying an air carrier airplane when one of its three turbine engines is inoperative?	A	The weather conditions at takeoff and destination must be VFR.	The flight cannot be conducted between official sunset and official sunrise.	Weather conditions must exceed the basic VFR minimums for the entire route, including takeoff and landing.
PTL	575	PERFORMANCE Y PLANIFICACIÓN DE VUELO	Which performance factor decreases as airplane gross weight increases, for a given runway?	A	Critical engine failure speed.	Rotation speed.	Accelerate-stop distance.
PTL	576	PERFORMANCE Y PLANIFICACIÓN DE VUELO	Which place in the turbojet engine is subjected to the highest temperature?	C	Compressor discharge.	Fuel spray nozzles.	Turbine inlet.
PTL	577	PERFORMANCE Y PLANIFICACIÓN DE VUELO	Which procedure produces the minimum fuel consumption for a given leg of the cruise flight?	A	Increase speed for a headwind.	Increase speed for a tailwind.	Increase altitude for a headwind, decrease altitude for a tailwind.
PTL	578	PERFORMANCE Y PLANIFICACIÓN DE VUELO	Which term describes the hydroplanning which occurs when an airplane's tire is effectively held off a smooth runway surface by steam generated by friction?	A	Reverted rubber hydroplanning.	Dynamic hydroplanning.	Viscous hydroplaning.

PTL	579	PERFORMANCE Y PLANIFICACIÓN DE VUELO	Which type of compressor stall has the greatest potential for severe engine damage?	C	"Intermittent ""backfire"" stall."	"Transient ""backfire"" stall."	Steady, continuous flow reversal stall.
PTL	580	PERFORMANCE Y PLANIFICACIÓN DE VUELO	What is the maximum allowable weight that may be carried on a pallet which has the dimensions of 138.5 X 97.6 inches? Floor load limit - 235 lb/sq ft Pallet weight - 219 lb Tiedown devices - 71 lb	B	21,840.9 pounds.	21,769.9 pounds.	22,059.9 pounds.
PTL	581	PERFORMANCE Y PLANIFICACIÓN DE VUELO	What is the maximum allowable weight that may be carried on a pallet which has the dimensions of 143 X 125.2 inches? Floor load limit - 209 lb/sq ft Pallet weight - 197 lb Tiedown devices - 66 lb	C	25,984.9 pounds.	25,787.9 pounds.	25,721.9 pounds.
PTL	582	PERFORMANCE Y PLANIFICACIÓN DE VUELO	What is the maximum allowable weight that may be carried on a pallet which has the dimensions of 24.6 X 68.7 inches? Floor load limit - 85 lb/sq ft Pallet weight - 44 lb Tiedown devices - 29 lb	A	924.5 pounds.	968.6 pounds.	953.6 pounds.
PTL	583	PERFORMANCE Y PLANIFICACIÓN DE VUELO	What is the maximum allowable weight that may be carried on a pallet which has the dimensions of 33.5 X 48.5 inches? Floor load limit - 76 lb/sq ft Pallet weight - 44 lb Tiedown devices - 27 lb	C	857.4 pounds.	830.4 pounds.	786.5 pounds.
PTL	584	PERFORMANCE Y PLANIFICACIÓN DE VUELO	What is the maximum allowable weight that may be carried on a pallet which has the dimensions of 34.6 X 46.4 inches? Floor load limit - 88 lb/sq ft Pallet weight - 41 lb Tiedown devices - 26 lb	A	914.1 pounds.	940.1 pounds.	981.1 pounds.

PTL	585	PERFORMANCE Y PLANIFICACIÓN DE VUELO	What is the maximum allowable weight that may be carried on a pallet which has the dimensions of 36 X 48 inches? Floor load limit : 169 lbs/sq ft Pallet weight: 47 Lbs Tiedown devices: 33 Lbs	A	1,948.0 pounds.	1,995.0 pounds.	1,981.0 pounds.
PTL	586	PERFORMANCE Y PLANIFICACIÓN DE VUELO	What is the maximum allowable weight that may be carried on a pallet which has the dimensions of 36.5 X 48.5 inches? Floor load limit - 107 lb/sq ft Pallet weight - 37 lb Tiedown devices - 33 lb	C	1,295.3 pounds.	1,212.3 pounds.	1,245.3 pounds.
PTL	587	PERFORMANCE Y PLANIFICACIÓN DE VUELO	What is the maximum allowable weight that may be carried on a pallet which has the dimensions of 36.5 X 48.5 inches? Floor load limit - 112 lb/sq ft Pallet weight - 45 lb Tiedown devices - 29 lb	B	1,331.8 pounds.	1,302.8 pounds.	1,347.8 pounds.
PTL	588	PERFORMANCE Y PLANIFICACIÓN DE VUELO	What is the maximum allowable weight that may be carried on a pallet which has the dimensions of 42.6 X 48.7 inches? Floor load limit - 121 lb/sq ft Pallet weight - 47 lb Tiedown devices - 33 lb	B	1,710.2 pounds.	1,663.2 pounds.	1,696.2 pounds.
PTL	589	PERFORMANCE Y PLANIFICACIÓN DE VUELO	What is the maximum allowable weight that may be carried on a pallet which has the dimensions of 76 X 74 inches? Floor load limit : 176 lbs/sq ft Pallet weight : 77 Lbs Tiedown devices: 29 Lbs	A	6,767.8 pounds.	6,873.7 pounds.	6,796.8 pounds.

PTL	590	PERFORMANCE Y PLANIFICACIÓN DE VUELO	What is the maximum allowable weight that may be carried on a pallet which has the dimensions of 81 X 83 inches? Floor load limit 180 lbs/sq ft Pallet weight 82 Lbs tiedown devices : 31 Lbs	C	8,403.7 pounds.	8,321.8 pounds.	8,290.8 pounds.
PTL	591	PERFORMANCE Y PLANIFICACIÓN DE VUELO	What is the maximum allowable weight that may be carried on a pallet which has the dimensions of 87.7 X 116.8 inches? Floor load limit - 175 lb/sq ft Pallet weight - 137 lbTiedown devices - 49 lb	A	12,262.4 pounds.	12,448.4 pounds.	12,311.4 pounds.
PTL	592	PERFORMANCE Y PLANIFICACIÓN DE VUELO	What is the minimum floor load limit that an aircraft must have to carry the following pallet of cargo? Pallet dimensions are 116.8 X 87.7 inches Pallet weight - 137 lbs. Tiedown devices - 49 lbs. Cargo weight - 12,262.4 lbs.	B	172 lbs/sq ft.	176 lbs/sq ft.	179 lbs/sq ft.
PTL	593	PERFORMANCE Y PLANIFICACIÓN DE VUELO	What is the minimum floor load limit that an aircraft must have to carry the following pallet of cargo? Pallet dimensions are 37.5 X 35 inchesPallet weight - 34 lbs.Tiedown devices -23 lbs. Cargo weight 1,255.4 lbs.	C	152 lbs/sq ft.	148 lbs/sq ft.	144 lbs/sq ft.
PTL	594	PERFORMANCE Y PLANIFICACIÓN DE VUELO	What is the minimum floor load limit that an aircraft must have to carry the following pallet of cargo? Pallet dimensions are 39 X 37 inches Pallet weight - 37 lbs. Tiedown devices - 21 lbs Cargo weight - 1,094.3 lbs.	A	115 lbs/sq ft.	112 lbs/sq ft.	109 lbs/sq ft.

PTL	595	PERFORMANCE Y PLANIFICACIÓN DE VUELO	What is the minimum floor load limit that an aircraft must have to carry the following pallet of cargo? Pallet dimensions are 48.5 X 33.5 inches Pallet weight - 44 lbs. Tiedown devices - 27 lbs. Cargo weight - 786.5 lbs.	B	79 lbs/sq ft.	76 lbs/sq ft.	73 lbs/sq ft.
PTL	596	PERFORMANCE Y PLANIFICACIÓN DE VUELO	What is the minimum floor load limit that an aircraft must have to carry the following pallet of cargo? Pallet dimensions are 78.9 X 98.7 inches Pallet weight - 161 lbs. Tiedown devices - 54 lbs. Cargo weight - 9,681.5 lbs.	C	180 lbs/sq ft.	186 lbs/sq ft.	183 lbs/sq ft.
PTL	597	PERFORMANCE Y PLANIFICACIÓN DE VUELO	What minimum floor load limit must an aircraft have to carry the following pallet of cargo? Pallet size is 78.9 wide and 98.7 long Pallet weight - 161 lb Tiedown devices - 54 lb Cargo weight - 9,681.5 lb	C	185 lbs/sq ft.	179 lbs/sq ft.	183 lbs/sq ft.
PTL	598	PERFORMANCE Y PLANIFICACIÓN DE VUELO	"What is the maximum allowable weight that may be carried on a pallet which has the dimensions of 33.5 X 48.5 B inches?Floor load limit - 66 lb/sq ft Pallet weight - 34 lb Tiedown devices - 29 lb"	B	744.6 pounds.	681.6 pounds	663.0 pounds.
PTL	599	PERFORMANCE Y PLANIFICACIÓN DE VUELO	What is the maximum allowable weight that may be carried on a pallet which has the dimensions of 24.6 X 68.7 inches? Floor load limit - 79 lb/sq ft Pallet weight - 43 lb Tiedown devices - 27 lb	B	884.1 pounds.	857.1 pounds.	841.1 pounds.

PTL	600	PERFORMANCE Y PLANIFICACIÓN DE VUELO	What is the minimum floor load limit that an aircraft must have to carry the following pallet of cargo? Pallet dimensions are 78.9 X 98.7 inches Pallet weight - 161 lbs. Tiedown devices - 54 lbs. Cargo weight - 9,681.5 lbs.	C	180 lbs/sq ft.	186 lbs/sq ft.	183 lbs/sq ft.
PTL	601	PERFORMANCE Y PLANIFICACIÓN DE VUELO	Whe weight and CG of an aircraft used in air taxi service must have been calculated from those values established by actual weighing of the aircraft within what period of time?	A	Multiengine aircraft, preceding 36 calendar months.	Multiengine and single-engine aircraft, preceding 36 calendar months.	"Multiengine aircraft, last 36 calendar months; single-engine, last 24 calendar months."
PTL	602	PERFORMANCE Y PLANIFICACIÓN DE VUELO	What is the maximum allowable weight that may be carried on a pallet which has the dimensions of 33.5 X 48.5 inches? Floor load limit - 66 lb/sq ft Pallet weight - 34 lb Tiedown devices - 29 lb	C	744.6 pounds.	681.6 pounds.	663.0 pounds.
PTL	603	PERFORMANCE Y PLANIFICACIÓN DE VUELO	What is the maximum allowable weight that may be carried on a pallet which has the dimensions of 42.6 X 48.7 inches? Floor load limit - 117 lb/sq ft Pallet weight - 43 lb Tiedown devices - 31 lb	A	1,611.6 pounds.	1,654.6 pounds.	1,601.6 pounds.
PTL	604	PERFORMANCE Y PLANIFICACIÓN DE VUELO	What is the maximum allowable weight that may be carried on a pallet which has the dimensions of 96.1 X 133.3 inches? Floor load limit - 249 lb/sq ft Pallet weight - 347 lb Tiedown devices - 134 lb	A	21,669.8 pounds.	21,803.8 pounds.	22,120.8 pounds.

PTL	605	PERFORMANCE Y PLANIFICACIÓN DE VUELO	What is the maximum allowable weight that may be carried on a pallet which has the dimensions of 98.7 X 78.9 inches? Floor load limit - 183 lb/sq ft Pallet weight - 161 lb Tiedown devices - 54 lb	C	9,896.5 pounds.	9,735.5 pounds.	9,681.5 pounds.
PTL	606	PRINCIPIOS DE VUELO	Airflow separation over the wing can be delayed by using vortex generators	C	directing high pressure air over the top of the wing or flap through slots and making the wing surface smooth.	directing a suction over the top of the wing or flap through slots and making the wing surface smooth.	making the wing surface rough and/or directing high pressure air over the top of the wing or flap through slots.
PTL	607	PRINCIPIOS DE VUELO	At what Mach range does the subsonic flight range normally occur?	A	Below .75 Mach.	From .75 to 1.20 Mach.	From 1.20 to 2.50 Mach.
PTL	608	PRINCIPIOS DE VUELO	At which speed will increasing the pitch attitude cause an airplane to climb?	B	Low speed.	High speed.	Any speed.
PTL	609	PRINCIPIOS DE VUELO	By changing the angle of attack of a wing, the pilot can control the airplane's	B	lift, gross weight, and drag.	lift, airspeed, and drag.	lift and airspeed, but not drag.
PTL	610	PRINCIPIOS DE VUELO	Describe dynamic longitudinal stability.	B	Motion about the longitudinal axis.	Motion about the lateral axis.	Motion about the vertical axis.
PTL	611	PRINCIPIOS DE VUELO	For a given angle of bank, the load factor imposed on both the aircraft and pilot in a coordinated constant-altitude turn	C	is directly related to the airplane's gross weight.	varies with the rate of turn.	is constant.
PTL	612	PRINCIPIOS DE VUELO	For which purpose may flight spoilers be used?	A	Reduce the wings' lift upon landing.	Increase the rate of descent without increasing aerodynamic drag.	Aid in longitudinal balance when rolling an airplane into a turn.
PTL	613	PRINCIPIOS DE VUELO	How can an airplane produce the same lift in ground effect as when out of ground effect?	B	The same angle of attack.	A lower angle of attack.	A higher angle of attack.
PTL	614	PRINCIPIOS DE VUELO	How can the pilot increase the rate of turn and decrease the radius at the same time?	B	Steepen the bank and increase airspeed.	Steepen the bank and decrease airspeed.	Shallow the bank and increase airspeed.

PTL	615	PRINCIPIOS DE VUELO	Identify the type stability if the aircraft attitude remains in the new position after the controls have been neutralized.	C	Negative longitudinal static stability.	Neutral longitudinal dynamic stability.	Neutral longitudinal static stability.
PTL	616	PRINCIPIOS DE VUELO	Identify the type stability if the aircraft attitude tends to move farther from its original position, after the controls have been neutralized.	A	Negative static stability.	Positive static stability.	Negative dynamic stability.
PTL	617	PRINCIPIOS DE VUELO	Identify the type stability if the aircraft attitude tends to return to its original position after the controls have been neutralized.	B	Positive dynamic stability.	Positive static stability.	Neutral dynamic stability.
PTL	618	PRINCIPIOS DE VUELO	If an aircraft with a gross weight of 2,000 pounds were subjected to a total load of 6,000 pounds in flight, the load factor would be	B	2 Gs.	3 Gs.	9 Gs.
PTL	619	PRINCIPIOS DE VUELO	If no corrective action is taken by the pilot as angle of bank is increased, how is the vertical component of lift and sink rate affected?	C	Lift increases and the sink rate increases.	Lift decreases and the sink rate decreases.	Lift decreases and the sink rate increases.
PTL	620	PRINCIPIOS DE VUELO	In a light, twin-engine airplane with one engine inoperative, when is it acceptable to allow the ball of a slip-skid indicator to be deflected outside the reference lines?	B	While maneuvering at minimum controllable airspeed to avoid overbanking.	When operating at any airspeed greater than Vmc.	When practicing immiment stalls in a banked attitude.
PTL	621	PRINCIPIOS DE VUELO	The reason for variations in geometric pitch along a propeller or rotor blade?	B	It permits a relatively constant angle of incidence along its length when in cruising flight.	It permits a relatively constant angle of attack along its length when in cruising flight.	It prevents the portion of the blade near the hub or root from stalling during cruising flight.

PTL	622	PRINCIPIOS DE VUELO	The safest and most efficient takeoff and initial climb procedure in a light, twin-engine airplane is?	B	Changes the stalling angle of attack to a higher angle.	accelerate to an airspeed slightly above Vmc, then lift off and climb at the best rate-of-climb airspeed.	An increase in induced drag requiring a higher angle of attack.
PTL	623	PRINCIPIOS DE VUELO	the purpose of leading-edge slats on high-performance wings is:	B	Direct airflow over the top of the wing at high angles of attack.	Direct air from the high pressure area under the leading edge along the top of the wing.	Decrease lift at relative slow speeds.
PTL	624	PRINCIPIOS DE VUELO	The primary purpose of high-lift devices is to increase the	B	L/Dmax.	lift at low speeds.	drag and reduce airspeed.
PTL	625	PRINCIPIOS DE VUELO	Under what condition should stalls never be practiced in a twin-engine airplane?	A	With one engine inoperative.	With climb power on.	With full flaps and gear extended.
PTL	626	PRINCIPIOS DE VUELO	Upon which factor does wing loading during a level coordinated turn in smooth air depend?	B	Rate of turn.	Angle of bank.	True airspeed.
PTL	627	PRINCIPIOS DE VUELO	What effects indicated stall speed?	A	Weight, load factor, and power.	Load factor, angle of attack, and power.	Angle of attack, weight, and air density.
PTL	628	PRINCIPIOS DE VUELO	What are some characteristics of an airplane loaded with the CG at the aft limit?	A	Lowest stall speed, highest cruise speed, and least stability.	Highest stall speed, highest cruise speed, and least stability.	Lowest stall speed, lowest cruise speed, and highest stability.
PTL	629	PRINCIPIOS DE VUELO	What characteristic should exist if an airplane is loaded to the rear of its CG range?	C	Sluggish in aileron control.	Sluggish in rudder control.	Unstable about the lateral axis.
PTL	630	PRINCIPIOS DE VUELO	"What criteria determines which engine is the ""critical"" engine of a twin-engine airplane? "	A	The one with the center of thrust closest to the centerline of the fuselage.	The one designated by the manufacturer which develops most usable thrust.	The one with the center of thrust farthest from the centerline of the fuselage.
PTL	631	PRINCIPIOS DE VUELO	What does the blue radial line on the airspeed indicator of a light, twin-engine airplane represent?	A	Maximum single-engine rate of climb.	Maximum single-engine angle of climb.	Minimum controllable airspeed for single-engine operation.

PTL	632	PRINCIPIOS DE VUELO	What effect does an increase in airspeed have on a coordinated turn while maintaining a constant angle of bank and altitude?	C	The rate of turn will decrease resulting in a decreased load factor.	The rate of turn will increase resulting in a increased load factor.	The rate of turn will decrease resulting in no changes in load factor.
PTL	633	PRINCIPIOS DE VUELO	What effect does the leading edge slot in the wing have on performance?	B	Decreases profile drag.	Changes the stalling angle of attack to a higher angle.	Decelerates the upper surface boundary layer air.
PTL	634	PRINCIPIOS DE VUELO	What effect, if any, does altitude have on VMC for an airplane with unsupercharged engines?	C	None.	Increases with altitude.	Decreases with altitude.
PTL	635	PRINCIPIOS DE VUELO	What condition should stalls never be practiced in a twin-engine airplane?	B	When practicing immiment stalls in a banked attitude.	operating With one engine inoperative.	When operating at any airspeed greater than Vmc.
PTL	636	PRINCIPIOS DE VUELO	What flight condition should be expected when an aircraft leaves ground effect?	A	An increase in induced drag requiring a higher angle of attack.	A decrease in parasite drag permitting a lower angle of attack.	An increase in dynamic stability.
PTL	637	PRINCIPIOS DE VUELO	What is a characteristic of longitudinal instability?	A	Pitch oscillations becoming progressively greater.	Bank oscillations becoming progressively greater.	Aircraft constantly tries to pitch down.
PTL	638	PRINCIPIOS DE VUELO	What is a purpose of flight spoilers?	B	Increase the camber of the wing.	Reduce lift without increasing airspeed.	Direct airflow over the top of the wing at high angles of attack.
PTL	639	PRINCIPIOS DE VUELO	What is load factor?	C	Lift multiplied by the total weight.	Lift substracted from the total weight.	Lift divided by the total weight.
PTL	640	PRINCIPIOS DE VUELO	What is one disadvantage of a sweptwing design?	B	The wing root stalls prior to the wingtip section.	The wingtip section stalls prior to the wing root.	Severe pitchdown moment when the center of pressure shifts forward.
PTL	641	PRINCIPIOS DE VUELO	What is the condition known as when gusts cause a sweptwing-type airplane to roll in one direction while yawing in the other?	C	Porpoise.	Wingover.	Dutch roll.
PTL	642	PRINCIPIOS DE VUELO	What is the effect on total drag of an aircraft if the airspeed decreases in level flight below that speed for maximum L/D?	A	Drag increases because of increased induced drag.	Drag increases because of increased parasite drag.	Drag decreases because of lower induced drag.

PTL	643	PRINCIPIOS DE VUELO	What is the free stream Mach number which produces first evidence of local sonic flow?	C	Supersonic Mach number.	Transonic Mach number.	Critical Mach number.
PTL	644	PRINCIPIOS DE VUELO	What is the highest speed possible without supersonic flow over the wing?	B	Initial buffet speed.	Critical Mach number.	Transonic index.
PTL	645	PRINCIPIOS DE VUELO	What is the movement of the center of pressure when the wingtips of a sweptwing airplane are shock-stalled first?	B	Inward and aft.	Inward and forward.	Outward and forward.
PTL	646	PRINCIPIOS DE VUELO	What is the primary function of the leading edge flaps in landing configuration during the flare before touchdown?	A	Prevent flow separation.	Decrease rate of sink.	Increase profile drag.
PTL	647	PRINCIPIOS DE VUELO	What is the principal advantage of a sweepback design wing over a straightwing design?	A	The critical Mach number will increase significantly.	Sweepback will increase changes in the magnitude of force coefficients due to compressibility.	Sweepback will accelerate the onset of compressibility effect.
PTL	648	PRINCIPIOS DE VUELO	What is the purpose of a control tab?	A	Move the flight controls in the event of manual reversion.	Reduce control forces by deflecting in the proper direction to move a primary flight control.	Prevent a control surface from moving to a full-deflection position due to aerodynamic forces.
PTL	649	PRINCIPIOS DE VUELO	What is the purpose of a servo tab?	B	Move the flight controls in the event of manual reversion.	Reduce control forces by deflecting in the proper direction to move a primary flight control.	Prevent a control surface from moving to a full-deflection position due to aerodynamic forces.
PTL	650	PRINCIPIOS DE VUELO	What is the purpose of an anti-servo tab?	C	Move the flight controls in the event of manual reversion.	Reduce control forces by deflecting in the proper direction to move a primary flight control.	Prevent a control surface from moving to a full-deflection position due to aerodynamic forces.
PTL	651	PRINCIPIOS DE VUELO	What is a purpose of flight spoilers?	B	Increase the camber of the wing.	Reduce lift without increasing airspeed.	Direct airflow over the top of the wing at high angles of attack.

PTL	652	PRINCIPIOS DE VUELO	Which is a purpose of leading-edge slats on high-performance wings?	C	Decrease lift at relative slow speeds.	Improve aileron control during low angles of attack.	Direct air from the high pressure area under the leading edge along the top of the wing.
PTL	653	PRINCIPIOS DE VUELO	What is a purpose to used flight spoilers ?	C	Increase the rate of descent without increasing aerodynamic drag.	Aid in longitudinal balance when rolling an airplane into a turn.	Reduce the wings' lift upon landing.
PTL	654	PRINCIPIOS DE VUELO	What is the purpose of an elevator trim tab?	C	Provide horizontal balance as airspeed is increased to allow hands-off flight.	Adjust the speed tail load for different airspeeds in flight allowing neutral control forces.	Modify the downward tail load for various airspeeds in flight eliminating flight-control pressures.
PTL	655	PRINCIPIOS DE VUELO	What is the reason for variations in geometric pitch along a propeller or rotor blade?	A	It permits a relatively constant angle of attack along its length when in cruising flight.	It prevents the portion of the blade near the hub or root from stalling during cruising flight.	It permits a relatively constant angle of incidence along its length when in cruising flight.
PTL	656	PRINCIPIOS DE VUELO	What is the relationship between induced and parasite drag when the gross weight is increased?	B	Parasite drag increases more than induced drag.	Induced drag increases more than parasite drag.	Both parasite and induced drag are equally increased.
PTL	657	PRINCIPIOS DE VUELO	What is the relationship of the rate of turn with the radius of turn with a constant angle of bank but increasing airspeed?	A	Rate will decrease and radius will increase.	Rate will increase and radius will decrease.	Rate and radius will increase.
PTL	658	PRINCIPIOS DE VUELO	What is the result of a shock-induced separation of airflow occurring symmetrically near the wing root of a sweptwing aircraft?	B	A high-speed stall and sudden pitchup.	"A severe moment or ""tuck under""."	Severe porpoising.
PTL	659	PRINCIPIOS DE VUELO	What is the safest and most efficient takeoff and initial climb procedure in a light, twin-engine airplane? Accelerate to	C	best engine-out, rate-of-climb airspeed while on the ground, then lift off and climb at that speed.	Vmc, then lift off at that speed and climb at maximum angle-of-climb airspeed.	an airspeed slightly above Vmc, then lift off and climb at the best rate-of-climb airspeed.
PTL	660	PRINCIPIOS DE VUELO	What performance should a pilot of a light, twin-engine airplane be able to maintain at VMC?	A	Heading.	Heading and altitude.	Heading, altitude, and ability to climb 50 ft/min.

PTL	661	PRINCIPIOS DE VUELO	What procedure is recommended for an engine-out approach and landing?	A	The flightpath and procedures should be almost identical to a normal approach and landing.	The altitude and airspeed should be considerably higher than normal throughout the approach.	A normal approach, except do not extend the landing gear or flaps until over the runway threshold.
PTL	662	PRINCIPIOS DE VUELO	What true airspeed and angle of attack should be used to generate the same amount of lift as altitude is increased?	B	The same true airspeed and angle of attack.	A higher true airspeed for any given angle of attack.	A lower true airspeed and higher angle of attack.
PTL	663	PRINCIPIOS DE VUELO	What will be the ratio between airspeed and lift if the angle of attack and other factors remain constant and airspeed is doubled? Lift will be	C	the same.	two times greater.	four times greater.
PTL	664	PRINCIPIOS DE VUELO	When are inboard ailerons normally used?	C	Low-speed flight only.	High-speed flight only.	Low-speed and high-speed flight.
PTL	665	PRINCIPIOS DE VUELO	When are outboard ailerons normally used?	A	Low-speed flight only.	High-speed flight only.	Low-speed and high-speed flight.
PTL	666	PRINCIPIOS DE VUELO	Which direction from the primary control surface does a servo tab move?	B	Same direction.	Opposite direction.	Remains fixed for all positions.
PTL	667	PRINCIPIOS DE VUELO	Which direction from the primary control surface does an anti-servo tab move?	A	Same direction.	Opposite direction.	Remains fixed for all positions.
PTL	668	PRINCIPIOS DE VUELO	Which direction from the primary control surface does an elevator adjustable trim tab move when the control surface is moved?	C	Same direction.	Opposite direction.	Remains fixed for all positions.
PTL	669	PRINCIPIOS DE VUELO	Which is a purpose of ground spoilers?	A	Reduce the wings' lift upon landing.	Aid in rolling an airplane into a turn.	Increase the rate of descent without gaining airspeed.
PTL	670	PRINCIPIOS DE VUELO	Which is a purpose of leading-edge flaps?	A	Increase the camber of the wing.	Reduce lift without increasing airspeed.	Direct airflow over the top of the wing at high angles of attack.
PTL	671	PRINCIPIOS DE VUELO	Which is a purpose of leading-edge slats on high-performance wings?	A	Increase lift at relative slow speeds.	Improve aileron control during low angles of attack.	Direct air from the high pressure area under the leading edge along the top of the wing.

PTL	672	PRINCIPIOS DE VUELO	Which is a purpose of wing-mounted vortex generators?	A	Reduce the drag caused by supersonic flow over portions of the wing.	Increase the onset of drag divergence and aid in aileron effectiveness at high speed.	Break the airflow over the wing so the stall will progress from the root out to the tip of the wing.
PTL	673	PRINCIPIOS DE VUELO	Which of the following are considered primary flight controls?	C	Tabs.	Flaps.	Outboard ailerons.
PTL	674	PRINCIPIOS DE VUELO	Which of the following is considered a primary flight control?	B	Slats.	Elevator.	Dorsal fin.
PTL	675	PRINCIPIOS DE VUELO	Which of the following is considered an auxiliary flight control?	C	Ruddervator.	Upper rudder.	Leading-edge flaps.
PTL	676	PRINCIPIOS DE VUELO	Why do some airplanes equipped with inboard/outboard ailerons use the outboards for slow flight only?	B	Increased surface area provides greater controllability with flap extension.	Aerodynamic loads on the outboard ailerons tend to twist the wingtips at high speeds.	Locking out the outboard ailerons in high-speed flight provides variable flight control feel.
PTL	677	PRINCIPIOS DE VUELO	Why must the angle of attack be increased during a turn to maintain altitude?	A	Compensate for loss of vertical component of lift.	Increase the horizontal component of lift equal to the vertical component.	Compensate for increase in drag.
PTL	678	PRINCIPIOS DE VUELO	Within what Mach range does transonic flight regimes usually occur?	B	.50 to .75 Mach.	.75 to 1.20 Mach.	1.20 to 2.50 Mach.
PTL	679	PROCEDIMIENTOS OPERACIONALES	A runwaymay be contaminated by frozen water deposits. What are the three states of frozen water reported by ATC?	C	Clear ice, rime ice and snow.	Light snow, heavy snow, blizzard.	Snow, ice and slush.
PTL	680	PROCEDIMIENTOS OPERACIONALES	"Which ""code letter"" shall be chosen to identify a taxiway to be used by an aircraft having a wheel base of 15 m?"	C	"Code letter ""D""."	"Code letter ""B"""	"Code letter ""C""."

PTL	681	PROCEDIMIENTOS OPERACIONALES	The part of an aerodrome used for embarking and disembarking passengers, loading of cargo and mail as well as the servicing of aircraft is called?	A	Apron	Ramp	Stand
PTL	682	PROCEDIMIENTOS OPERACIONALES	Category II operation is:	C	a runway intended for the operation of class II type aircraft.	a precision instrument approach and landing, with either a DH lower than 100 ft, or with no DH and a RVR not less than 200 m.	a precision instrument approach and landing, with a DH lower than 200 ft but no lower than 100 ft, and a RVR not less than 350 m.
PTL	683	PROCEDIMIENTOS OPERACIONALES	The aerodrome elevation is the height of:	C	the airfield reference datum.	the threshold of the main precision runway.	the highest point in the landing area.
PTL	684	PROCEDIMIENTOS OPERACIONALES	"According with the ""Aerodrome Reference Code"" the ""Code number 4 "" shall identify an aircraft reference field length of:"	A	1.800 m and over.	1.600 m	1.500 m
PTL	685	PROCEDIMIENTOS OPERACIONALES	For planning purposes, an aerodrome is categorised by aerodrome reference code. This code is composed of two elements: a number and a letter. What does the number relate to:	C	Load classification number.	Single wheel loading classification.	Aerodrome reference field length.
PTL	686	PROCEDIMIENTOS OPERACIONALES	An aerodrome reference point is defined as the:	B	elevation of the highest point of the landing area.	the designated geographical location of the aerodrome.	pre-fñight altimeter check location.
PTL	687	PROCEDIMIENTOS OPERACIONALES	Which of the following Annexes to the Chicago convention contains minimum specifications for the design of aerodromes?	C	Annex 11	Annex 6	Annex 14

PTL	688	PROCEDIMIENTOS OPERACIONALES	"""An area symmetrical obout the extended runway center line and adjacent to the end of the strip primarily intended to reduce the risk of damage to an aeroplane undershooting or overruning the runway"" is the definition for:"	B	Clearway.	runway end safety area.	stopway
PTL	689	PROCEDIMIENTOS OPERACIONALES	A volume of airspace extending upwards and outwards fron an inner portion of the strip to specified upper limits which is kept clear of all obstructions is called:	A	obstacle free zone	critical area	non transgression zone
PTL	690	PROCEDIMIENTOS OPERACIONALES	Which of the following group shows the correct designators for three parallel runways seen from the direction ot the approach?	B	29, 29C, 29.	29L, 29C, 29R.	29L, 29, 29R.
PTL	691	PROCEDIMIENTOS OPERACIONALES	"""Instrument runways"" are the following runways intended for the operation of aircraft using instrument approach procedures."	A	Non precision approach runways, precision approach runways category I, II and III.	Precision approach runways category I, II and III.	Instrument approach runways, precision approach runways category I, II and III.
PTL	692	PROCEDIMIENTOS OPERACIONALES	In the case of parallel runways, each runway designation number shall be supplemented:	B	"by a number like ""0"" and ""01"" for 2 parallel runways."	"by a letter - for example 2 parallel runways ""l"" and ""r"" - for 3 ""L"", ""C"" and ""R""."	by a letter for 2 parallel runways.
PTL	693	PROCEDIMIENTOS OPERACIONALES	Aerodromes signs should be in the following configuration:	A	"information signs; yellow or black background with black or yellow inscriptions."	"mandatory instruction signs; lack background with red inscriptions."	"information signs; orange background with black inscriptions."
PTL	694	PROCEDIMIENTOS OPERACIONALES	The ICAO bird strike information system is also known as:	B	IBSI	IBIS	IRIS

PTL	695	PROCEDIMIENTOS OPERACIONALES	Within the Annex to the ICAO convention that specifies dimensions of aerodromes are codes for different runways. Which is the minimum width of a runway with runway code 4?	B	35 metres	45 metres	40 metres
PTL	696	PROCEDIMIENTOS OPERACIONALES	The length of a clearway should not exceed:	A	1/2 TORA	1/2 TODA	1/2 LDA
PTL	697	PROCEDIMIENTOS OPERACIONALES	An OCA is referenced to:	B	the Aerodrome Reference Point.	Mean Sea Level.	the relevant Runway Threshold.
PTL	698	PROCEDIMIENTOS OPERACIONALES	A minimum instrument altitude for enroute operations off of published airways which provides obstruction clearance of 1,000 feet in non-mountainous terrain areas and 2,000 feet in designated mountainous areas.	B	Minimum Obstruction Clearance Altitude (MOCA)	Off-Route Obstruction Clearance Altitude (OROCA)	Minimum Safe/Sector Altitude (MSA)
PTL	699	PROCEDIMIENTOS OPERACIONALES	A pilot is operating in Class G airspace. If existing weather conditions are below those for VFR flight, an IFR flight plan must be filed and an ATC clearance received prior to	B	takeoff if weather conditions are below IFR minimums.	entering controlled airspace.	entering IFR weather conditions.
PTL	700	PROCEDIMIENTOS OPERACIONALES	An alternate airport for departure is required	A	if weather conditions are below authorized landing minimums at the departure airport.	when the weather forecast at the ETD is for landing minimums only at the departure airport.	when destination weather is marginal VFR (ceiling less than 3,000 feet and visibility less than 5 SM).

PTL	701	PROCEDIMIENTOS OPERACIONALES	"An ATC ""instruction"" "	B	"is the same as an ATC ""clearance.""""	is a directive issued by ATC for the purpose of requiring a pilot to take a specific action providing the safety of the aircraft is not jeopardized.	"must be ""read back"" in full to the controller and confirmed before becoming effective."
PTL	702	PROCEDIMIENTOS OPERACIONALES	Assuming that all ILS components are operating and the required visual references are not acquired, the missed approach should be inititiated upon	A	arrival at the DH on the glide slope.	arrival at the visual descent point.	expiration of the time listed on the approach chart for missed approach.
PTL	703	PROCEDIMIENTOS OPERACIONALES	Assuring that appropriate aeronautical charts are aboard an aircraft is the responsibility of the	C	aircraft dispatcher.	flight navigator.	pilot in command.
PTL	704	PROCEDIMIENTOS OPERACIONALES	At what maximum indicated airspeed can a B-727 operate within Class B airspace without special ATC authorization?	B	230 knots.	250 knots.	275 knots.
PTL	705	PROCEDIMIENTOS OPERACIONALES	At what maximum indicated airspeed can a reciprocating-engine airplane operate in the airspace underlying Class B airspace?	B	180 knots.	200 knots.	230 knots.
PTL	706	PROCEDIMIENTOS OPERACIONALES	At what maximum indicated airspeed may a reciprocating-engine-powered airplane be operated within Class D airspace?	C	156 knots.	180 knots.	200 knots.
PTL	707	PROCEDIMIENTOS OPERACIONALES	At what minimum altitude is a turbine-engine-powered, or large airplane, required to enter Class D airspace?	A	1,500 feet AGL.	2,000 feet AGL.	2,500 feet AGL.

PTL	708	PROCEDIMIENTOS OPERACIONALES	Below what altitude, except when in cruise flight, are non-safety related cockpit activities by flight crewmembers prohibited?	A	10,000 feet.	14,500 feet.	FL 180.
PTL	709	PROCEDIMIENTOS OPERACIONALES	Civil aircraft holding at an altitude of 14,000 feet at a military or joint civil/military use airports should expect to operate at which holding pattern airspeed?	C	250 knots	260 knots	230 knots
PTL	710	PROCEDIMIENTOS OPERACIONALES	Except during an emergency, when can a pilot expect landing prority?	C	When cleared for an IFR approach.	When piloting a large, heavy aircraft.	In turn, on a first-come, first-serve basis.
PTL	711	PROCEDIMIENTOS OPERACIONALES	How often are NOTAMs broadcast to pilots on a scheduled basis?	C	15 minutes before and 15 minutes after the hour.	Between weather broadcasts on the hour.	Hourly, appended to the weather broadcast.
PTL	712	PROCEDIMIENTOS OPERACIONALES	How should a pilot describe braking action?	C	00 percent, 50 percent, 75 percent, or 100 percent.	Zero-zero, fifty-fifty, or normal.	Nil, poor, fair, or good.
PTL	713	PROCEDIMIENTOS OPERACIONALES	How should an off-airway direct flight be defined on an IFR flight plan?	B	The initial fix, the true course, and the final fix.	All radio fixes over which the flight will pass.	The initial fix, all radio fixes which the pilot wishes to be compulsory reporting points, and the final fix.
PTL	714	PROCEDIMIENTOS OPERACIONALES	If a four-engine air carrier airplane is dispatched from an airport that is below landing minimums, what is the maximum distance that a departure alternate airport may be located from the departure airport?	B	Not more than 2 hours at cruise speed with one engine inoperative.	Not more than 2 hours at normal cruise speed in still air with one engine inoperative.	Not more than 1 hour at normal cruise speed in still air with one engine inoperative.

PTL	715	PROCEDIMIENTOS OPERACIONALES	If ATC requests a speed adjustment that is not within the operating limits of the aircraft, what action must the pilot take?	C	Maintain an airspeed within the operating limitations as close to the requested speed as possible.	Attempt to use the requested speed as long as possible, then request a reasonable airspeed from ATC.	Advise ATC of the airspeed that will be used.
PTL	716	PROCEDIMIENTOS OPERACIONALES	"If being radar vectored to the final approach course of a published instrument approach that specifies ""NO PT"", the pilot should "	B	advise ATC that a procedure turn will not be executed.	not execute the procedure turn unless specifically cleared to do so by ATC.	execute a holding-pattern type procedure turn.
PTL	717	PROCEDIMIENTOS OPERACIONALES	If visual reference is lost while circling to land from an instrument approach, what action(s) should the pilot take?	A	Make a climbing turn toward the landing runway until established on the missed approach course.	Turn toward the landing runway maintaining MDA, and if visual reference is not gained, perform missed approach.	Make a climbing turn toward the VOR/NDB, and request further instructions.
PTL	718	PROCEDIMIENTOS OPERACIONALES	"In what airspace will ATC not authorize ""VFR on Top""? "	C	Class C airspace	Class B airspace	Class A airspace
PTL	719	PROCEDIMIENTOS OPERACIONALES	Maximum holding speed for a civil turbojet aircraft at a joint use airport civil/navy between 7,000 and 14,000 feet is	B	265 knots.	230 knots.	200 knots.
PTL	720	PROCEDIMIENTOS OPERACIONALES	Maximum holding speed for a propeller-driven airplane may hold at is:	A	265 knots	230 knots.	156 knots.
PTL	721	PROCEDIMIENTOS OPERACIONALES	Maximum holding speed for a turbojet airplane above 14,000 feet is	C	210 knots.	230 knots.	265 knots.

PTL	722	PROCEDIMIENTOS OPERACIONALES	NOTAM (L)s are used to disseminate what type of information?	B	Conditions of facilities en route that may cause delays.	Taxi closures, personnel and equipment near or crossing runways, airport lighting aids that do not affect instrument approaches criteria, and airport rotating beacon outages.	Time critical information of a permanent nature that is not yet available in normally published charts.
PTL	723	PROCEDIMIENTOS OPERACIONALES	Pilots should notify controllers on initial contact that they have received the ATIS broadcast by	C	"stating ""Have numbers"""	"stating ""Have Weather"""	repeating the alphabetical code word appended to the broadcast.
PTL	724	PROCEDIMIENTOS OPERACIONALES	Prior to listing an airport as an alternate airport in the dispatch or flight release, weather reports and forecasts must indicate that weather conditions will be at or above authorized minimums at that airport	C	for a period 1 hours before or after the ETA.	during the entire flight.	when the flight arrives.
PTL	725	PROCEDIMIENTOS OPERACIONALES	The minimum weather conditions that must exist for an airport to be listed as an alternate in the dispatch release for a domestic air carrier flight are	B	those listed in the NOAA IAP charts for the alternate airport, at the time the flight is expected to arrive.	those specified in the certificate holder's Operations Specifications for that airport, when the flight arrives.	those listed in the NOAA IAP charts for the alternate airport, from 1 hour before or after the ETA for that flight.
PTL	726	PROCEDIMIENTOS OPERACIONALES	The prescribed visibility criteria of RVR 32 for the runway of intended operation is not reported. What minimum ground visibility may be used instead of the RVR value?	B	3/8 SM.	5/8 SM.	3/4 SM.

PTL	727	PROCEDIMIENTOS OPERACIONALES	The visibility criteria for a particular instrument approach procedure is RVR 40. What minimum ground visibility may be substituted for the RVR value?	B	5/8 SM.	3/4 SM.	7/8 SM.
PTL	728	PROCEDIMIENTOS OPERACIONALES	"Under what conditions may a pilot on an IFR flight plan comply with authorization to maintain ""VFR on Top""? "	B	Maintain IFR flight plan but comply with visual flight rules while in VFR conditions.	Maintain VFR altitudes, cloud clearances, and comply with applicable instrument flight rules.	Maintain IFR altitudes, VFR cloud clearances, and comply with applicable instrument flight rules.
PTL	729	PROCEDIMIENTOS OPERACIONALES	Under what conditions may an air carrier pilot continue an instrument approach to the DH, after receiving a weather report indicating that less than minimum published landing conditions exist at the airport?	C	If the instrument approach is conducted in a radar environment.	When the weather report is received as the pilot passes the FAF.	When the weather report is received after the pilot has begun the final approach segment of the instrument approach.
PTL	730	PROCEDIMIENTOS OPERACIONALES	Under which condition, if any, may a pilot descend below DH or MDA when using the ALSF-1 approach light system as the primary visual reference for the intended runway?	C	Under no condition can the approach light system serve as a necessary visual reference for descent below DH or MDA.	Descent to the intended runway is authorized as long as any portion of the approach light system can be seen.	The approach light system can be used as a visual reference, except that descent below 100 feet above TDZE requires that the red light bars be visible and identifiable.
PTL	731	PROCEDIMIENTOS OPERACIONALES	What action is expected of an aircraft upon landing at a controlled airport?	B	Continue taxiing in the landing direction until advised by the tower to switch to ground control frequency.	Exit the runway at the nearest suitable taxiway and remain on tower frequency until instructed otherwise.	Exit the runway at the nearest suitable taxiway and switch to ground control upon crossing the taxiway holding lines.
PTL	732	PROCEDIMIENTOS OPERACIONALES	"What action should a pilot take if asked by ARTCC to ""VERIFY 9,000"" and the flight is actually maintaining 8,000? "	C	Immediately climb to 9,000.	Report climbing to 9,000.	Report maintaining 8,000.

PTL	733	PROCEDIMIENTOS OPERACIONALES	What action should a pilot take if within 3 minutes of a clearance limit and further clearance has not been received?	C	Assume lost communications and continue as planned.	Plan to hold at cruising speed until further clearance is received.	Start a speed reduction to holding speed in preparation for holding.
PTL	734	PROCEDIMIENTOS OPERACIONALES	What action should a pilot take when a clearance is received from ATC that appears to be contrary to a regulation?	B	Read the clearance back in its entirety.	Request a clarification from ATC.	Do not accept the clearance.
PTL	735	PROCEDIMIENTOS OPERACIONALES	"What action should be taken when a pilot is ""cleared for approach"" while being radar vectored on an unpublished route? "	B	Descend to minimum vector altitude.	Remain at last assigned altitude until established on a published route segment.	Descend to initial approach fix altitude.
PTL	736	PROCEDIMIENTOS OPERACIONALES	"What action should the pilot take when ""gate hold"" procedures are in effect? "	A	Contact ground control prior to starting engines for sequencing	Taxi into position and hold prior to requesting clearance	Start engines, perform pre-take-off check, and request
PTL	737	PROCEDIMIENTOS OPERACIONALES	What action(s) should a pilot take if vectored across the final approach course during an IFR approach?	B	Continue on the last heading issued until otherwise instructed.	Contact approach control, and advise that the flight is crossing the final approach course.	Turn onto final, and broadcast in the blind that the flight has proceeded on final.
PTL	738	PROCEDIMIENTOS OPERACIONALES	What altitude is a pilot authorized to fly when cleared for an ILS approach? The pilot	B	may begin a descent to the procedure turn altitude.	must maintain the last assigned altitude until established on a published route or segment of the approach with published altitudes.	may descend from the assigned altitude only when established on the final approach course.
PTL	739	PROCEDIMIENTOS OPERACIONALES	"What cloud clearance must be complied with when authorized to maintain ""VFR on Top""? "	A	May maintain VFR clearance above, below, or between layers.	Must maintain VFR clearance above or below.	May maintain VFR clearance above or below, but not between layers.

PTL	740	PROCEDIMIENTOS OPERACIONALES	What is the difference between a visual and a contact approach?	B	A visual approach is an IFR authorization while a contact approach is a VFR authorization.	A visual approach is initiated by ATC while a contact approach is initiated by the pilot.	Both are the same but classified according to the party initiating the approach.
PTL	741	PROCEDIMIENTOS OPERACIONALES	What is the maximum distance that a departure alternate airport may be from the departure airport for a two-engine airplanes?	B	1 hour at normal cruise speed in still air with both engines operating.	1 hour at normal cruise speed in still air with one engine operating.	2 hours at normal cruise speed in still air with one engine operating.
PTL	742	PROCEDIMIENTOS OPERACIONALES	What is the maximum holding speed for a civil turbojet holding at a civil at 15,000 feet MSL, unless a higher speed is required due to turbulence or icing and ATC is notified?	A	265 knots.	230 knots.	250 knots.
PTL	743	PROCEDIMIENTOS OPERACIONALES	What is the maximum indicated airspeed a reciprocating-engine-powered airplane may be operated within Class B airspace?	C	180 knots.	230 knots.	250 knots.
PTL	744	PROCEDIMIENTOS OPERACIONALES	What is the maximum indicated airspeed a turbine-powered aircraft may be operated below 10,000 feet MSL?	B	288 knots.	250 knots.	230 knots.
PTL	745	PROCEDIMIENTOS OPERACIONALES	What is the minimum flight visibility and distance from clouds for flight at 10,500 feet, in Class E airspace, with a VFR -on Top clearance during daylight hours?	B	3 statute miles, 1000 feet above, 500 feet below, and 2,000 feet horizontal	5 statute miles, 1000 feet above, 1,000 feet below, and 1 mile horizontal.	5 statute miles, 1000 feet above, 500 feet below, and 1 mile horizontal
PTL	746	PROCEDIMIENTOS OPERACIONALES	What is the normal procedure for IFR departures at locations with pre-taxi clearance programs?	C	Pilots request IFR clearance when ready to taxi. The pilot will receive taxi instruction with clearance.	Pilots request IFR clearance when ready to taxi. Pilots will receive taxi clearance, then receive IFR clearance while taxiing or on run-up.	Pilots request IFR clearance 10 minutes or less prior to taxi, then request taxi clearance from ground control.

PTL	747	PROCEDIMIENTOS OPERACIONALES	What is the pilot's responsibility for clearance or instruction readback?	A	Except for SID's, read back altitude assignments, altitude restrictions, and vectors.	If the clearance or instruction is understood, an acknowledgment is sufficient.	Read back the entire clearance or instruction to confirm the message is understood.
PTL	748	PROCEDIMIENTOS OPERACIONALES	What is the primary purpose of a STAR?	B	Provide separation between IFR and VFR traffic.	Simplify clearance delivery procedures.	Decrease traffic congestion at certain airports.
PTL	749	PROCEDIMIENTOS OPERACIONALES	"What is the purpose of the term ""hold for release"" when included in an IFR clearance? "	A	A procedure for delaying departure for traffic volume, weather, or need to issue further instructions.	When an IFR clearance is received by telephone, the pilot will have time to prepare for takeoff prior to being released.	Gate hold procedures are in effect and the pilot receives an estimate of the time the flight will be released.
PTL	750	PROCEDIMIENTOS OPERACIONALES	What is the required flight visibility and distance from clouds if you are operating in Class E airspace at 9,500 feet with a VFR clearance during daylight hours?	A	3 statute miles, 1,000 feet above, 500 feet below, and 2,000 feet horizontal.	5 statute miles, 500 feet above, 1,000 feet below, and 2,000 feet horizontal.	3 statute miles, 500 feet above, 1,000 feet below, and 2,000 feet horizontal.
PTL	751	PROCEDIMIENTOS OPERACIONALES	What is the suggested time interval for filing and requesting an IFR flight plan?	A	File at least 30 minutes prior to departure and request the clearance not more than 10 minutes prior to taxi.	File at least 30 minutes prior to departure and request the clearance at least 10 minutes prior to taxi.	File at least 1 hour prior to departure and request the clearance at least 10 minutes prior to taxi.
PTL	752	PROCEDIMIENTOS OPERACIONALES	What minimum aircraft equipment is required for operation within Class C airspace?	B	Two-way communications.	Two-way communications and transponder.	Transponder and DME.
PTL	753	PROCEDIMIENTOS OPERACIONALES	What minimum ground visibility may be used instead of a prescribed visibility criteria of RVR 16 when that RVR value is not reported?	A	1/4 SM.	3/4 SM	3/8 SM.

PTL	754	PROCEDIMIENTOS OPERACIONALES	"What minimum information does an abbreviated departure clearance ""cleared as filed"" include? "	C	Clearance limit and en route altitude.	Clearance limit, en route altitude, and SID, if appropriate.	Destination airport, en route altitude, and SID, if appropriate.
PTL	755	PROCEDIMIENTOS OPERACIONALES	What pilot certification and aircraft equipment are required for operating in Class C airspace?	A	No specific certification but a two-way radio.	At least a Private Pilot Certificate and two-way radio.	At least a Private Pilot Certificate, two-way radio, and TSO-C74b transponder.
PTL	756	PROCEDIMIENTOS OPERACIONALES	What report should the pilot make at a clearance limit?	A	Time and altitude/flight level arriving or leaving.	Time, altitude/flight level, and expected holding speed.	Time, altitude/flight level, expected holding speed, and inbound leg length.
PTL	757	PROCEDIMIENTOS OPERACIONALES	What restriction applies to a large, turbine-powered airplane operating to or from a primary airport in Class B airspace?	B	Must not exceed 200 knots within Class B airspace.	Must operate above the floor when within lateral limits of Class B airspace.	Must operate in accordance with IFR procedures regardless of weather conditions.
PTL	758	PROCEDIMIENTOS OPERACIONALES	"What separation or service by ATC is afforded pilots authorized ""VFR on Top? "	C	The same afforded all IFR flights.	3 miles horizontally instead of 5.	Traffic advisories only.
PTL	759	PROCEDIMIENTOS OPERACIONALES	What service is provided for aircraft operating within the outer area of Class C airspace?	A	The same as within Class C airspace when communications and radar contact is established.	Radar vectors to and from secondary airports within the outer area.	Basic radar service only when communications and radar contact is established.
PTL	760	PROCEDIMIENTOS OPERACIONALES	What services are provided for aircraft operating within Class C airspace?	A	Sequencing of arriving aircraft, separation of aircraft (except between VFR aircraft), and traffic advisories.	Sequencing of arriving aircraft (except VFR aircraft), separation between all aircraft, and traffic advisories.	Sequencing of all arriving aircraft, separation between all aircraft, and traffic advisories.
PTL	761	PROCEDIMIENTOS OPERACIONALES	"What special consideration is given for turbine-powered aircraft when ""gate hold"" procedures are in effect? "	B	They are given preference for departure over other aircraft.	They are expected to be ready for takeoff when they reach the runway or warm-up block.	They are expected to be ready for takeoff prior to taxi and will receive takeoff clearance prior to taxi.

PTL	762	PROCEDIMIENTOS OPERACIONALES	What type information is disseminated by NOTAM (D)s?	A	Status of navigation aids, ILSs, radar service available, and other information essential to planning.	Airport or primary runway closings, runway and taxiway conditions, and airport lighting aids outages.	Temporary flight restrictions, changes in status in navigational aids, and updates on equipment such as VASI.
PTL	763	PROCEDIMIENTOS OPERACIONALES	When a composite flight plan indicates IFR for the first portion of the flight, what is the procedure for the transition?	B	The IFR portion is automatically canceled and the VFR portion is automatically activated when the pilot reports VFR conditions.	The pilot should advise ATC to cancel the IFR portion and contact the nearest FSS to activate the VFR portion.	The pilot should advise ATC to cancel the IFR portion and activate the VFR portion.
PTL	764	PROCEDIMIENTOS OPERACIONALES	When a departure alternate is required for a three-engine air carrier flight, it must be located at a distance not greater than	A	2 hours from the departure airport at normal cruising speed in still air with one engine not functioning.	1 hour from the departure airport at normal cruising speed in still air with one engine inoperative.	2 hours from the departure airport at normal cruising speed in still air.
PTL	765	PROCEDIMIENTOS OPERACIONALES	When a speed adjustment is necessary to maintain separation, what minimum speed may ATC request of a turbine-powered aircraft departing an airport?	C	188 knots.	210 knots.	230 knots.
PTL	766	PROCEDIMIENTOS OPERACIONALES	When a speed adjustment is necessary to maintain separation, what minimum speed may ATC request of a turbine-powered aircraft operating below 10,000 feet?	B	200 knots.	210 knots.	250 knots.
PTL	767	PROCEDIMIENTOS OPERACIONALES	When does ATC issue a STAR?	A	Only when ATC deems it appropriate.	Only to high priority flights.	Only upon request of the pilot.
PTL	768	PROCEDIMIENTOS OPERACIONALES	When entering a holding pattern above 14,000 feet, the initial outbound leg should not exceed	B	1 minute.	1-1/2 minutes.	1-1/2 minutes or 10 NM, whichever is less.

PTL	769	PROCEDIMIENTOS OPERACIONALES	When holding at an NDB, at what point should the timing begin for the second leg outbound?	C	Abeam the holding fix or when the wings are level after completing the turn to the outbound heading, whichever occurs first.	At the end of a 1-minute standard rate turn after station passage.	When abeam the holding fix.
PTL	770	PROCEDIMIENTOS OPERACIONALES	When must the pilot initiate a missed approach procedure from an ILS approach?	C	At the DH when the runway is not clearly visible.	When the time has expired after reaching the DH and the runway environment is not clearly visible.	At the DH, if the visual references for the intended runway are not distinctly visible or anytime thereafter that visual reference is lost.
PTL	771	PROCEDIMIENTOS OPERACIONALES	When proceeding to the alternate airport, which minimums apply?	C	The IFR alternate minimums section in front of the NOAA IAP book.	2000-3 for at least 1 hour before until 1 hour after the ETA.	The actual minimums shown on the chart for the airport.
PTL	772	PROCEDIMIENTOS OPERACIONALES	When simultaneous ILS approaches are in progress, which of the following should approach control be advised immediately?	A	Any inoperative or malfunctioning aircraft receivers.	If a simultaneous ILS approach is desired.	If radar monitoring is desired to confirm lateral separation.
PTL	773	PROCEDIMIENTOS OPERACIONALES	When takeoff minimums are not prescribed for a civil airport, what are the takeoff minimums under IFR for a three-engine airplane?	B	1 SM.	1/2 SM.	300 feet and 1/2 SM.
PTL	774	PROCEDIMIENTOS OPERACIONALES	When the forecast weather conditions for a destination and alternate airport are considered marginal for operations, what specific action should the dispatcher or pilot in command take?	C	List an airport where the forecast weather is not marginal as the alternate.	Add 1 additional hour of fuel based on cruise power settings for the airplane in use.	List at least one additional alternate airport.
PTL	775	PROCEDIMIENTOS OPERACIONALES	When using a flight director system, what rate of turn or bank angle should a pilot observe during turns in a holding pattern?	A	3° per second or 25° bank, whichever is less.	3° per second or 30° bank, whichever is less.	1-1/2° per second or 25° bank, whichever is less.

PTL	776	PROCEDIMIENTOS OPERACIONALES	Where are position reports required on an IFR flight on airways or routes?	A	Over all designated compulsory reporting points.	Only where specifically requested by CORPAC Flight Planning.	When requested to change altitude or advise of weather conditions.
PTL	777	PROCEDIMIENTOS OPERACIONALES	Which IFR fix(es) should be entered on a composite flight plan?	C	All compulsory reporting points en route.	The VORs that define the IFR portion of the flight.	The fix where the IFR portion is to be terminated.
PTL	778	PROCEDIMIENTOS OPERACIONALES	Which reports are always required when on an IFR approach not in radar contact?	A	Leaving FAF inbound or outer marker inbounds and missed approach.	Leaving FAF inbound, leaving outer marker inbound or outbound, and missed approach.	Leaving FAF inbound, leaving outer marker inbound or outbound, procedure turn outbound and inbound, and visual contact with the runway.
PTL	779	PROCEDIMIENTOS OPERACIONALES	Which reports are required when operating IFR in radar environment?	C	Position reports, vacating an altitude, unable to climb 500 ft/min, and time and altitude reaching a holding fix or point to which cleared.	Position reports, vacating an altitude, unable to climb 500 ft/min, time and altitude reaching a holding fix or point to which cleared, and a change in average true airspeed exceeding 5 percent or 10 knots.	Vacating an altitude, unable to climb 500 ft/min, time and altitude reaching a holding fix or point to which cleared, a change in average true airspeed exceeding 5 percent or 10 knots, and leaving any assigned holding fix or point.
PTL	780	PROCEDIMIENTOS OPERACIONALES	While being vectored to the final approach course of an IFR approach, when may the pilot descend to published altitudes?	C	Anytime the flight is on a published leg of an approach chart.	When the flight is within the 10-mile ring of a published approach.	Only when approach control clears the flight for the approach.
PTL	781	PROCEDIMIENTOS OPERACIONALES	"With regard to flight crewmember duties, which of the following operations are considered to be in the ""critical phase of flight""? "	C	Taxi, takeoff, landing, and all other operations conducted below 10,000 feet MSL, including cruise flight.	Descent, approach, landing, and taxi operations, irrespective of altitudes MSL.	Taxi, takeoff, landing, and all other operations conducted below 10,000 feet, excluding cruise flight.
PTL	782	PROCEDIMIENTOS OPERACIONALES	The best extinguishant to use on a wheel or brake fire is:	B	CO2	Dry powder	Freon

PTL	783	PROCEDIMIENTOS OPERACIONALES	Where does the intermediate missed approach segment end?	C	At the point where the climb is established.	Where the turn towards the IAF is made.	Where 50 m obstacle clearance is obtained and can be maintained.
PTL	784	PROCEDIMIENTOS OPERACIONALES	The initial missed approach segment:	A	begins at the MAPt and ends where the climb is established.	begins at the threshold and end s at the point where the climb is established.	begins where the pilot looses the guidance criteria and ends when OCH is passed.
PTL	785	PROCEDIMIENTOS OPERACIONALES	Which of the following standard instrument departures is not a straight departure?	B	A departure where the initial departure track differs more than 20° from the runway alignment.	A departure where the initial departure track differs more than 15° from the runway alignment.	A departure where the initial departure track differs more than 10° from the runway alignment.
PTL	786	PROCEDIMIENTOS OPERACIONALES	Which of the following frequences are used for emergency operations?	C	243 MHz.	2.182 kHz.	121,5 MHz, 243 MHz and 2.182 kHz.
PTL	787	PROCEDIMIENTOS OPERACIONALES	What is the meaning of V seen on the ground in the vicinity of an aircraft crash site?	A	Assistance required.	Supplies and fuel required.	Medical assistance required.
PTL	788	PROCEDIMIENTOS OPERACIONALES	"Which code shall be used on mode ""A"" to provide recognition of an emergency aircraft?"	B	Code 7000	Code 7700	Code 7500
PTL	789	PROCEDIMIENTOS OPERACIONALES	Pilots shall not SQUAK IDENT unless they:	B	operate within controlled airspace.	are requested by ATC	operate outside controlled airspace.
PTL	790	PROCEDIMIENTOS OPERACIONALES	If a transponder failure is detected before departure from an aerodrome the aircraft:	C	cannot fly	can fly for up to 24 hours by which time the transponder must be repaired	can fly to an aerodrome where the transponder can be repaired.

PTL	791	PROCEDIMIENTOS OPERACIONALES	Which of the statements below describes the Accelerate Stop Distance Available (ASDA)?	C	The length of the runway declared available and suitable for the ground run of an aeroplane taking off.	The length of the runway plus the length of the clearway.	The length of the runway plus the length of the stopway.
PTL	792	PROCEDIMIENTOS OPERACIONALES	What is the only object permitted to protrude through the plane of a precision approach CAT II and CAT III lighting system within 60 m of the center line of the approach lights?	A	An ILS or MLS azimuth (centerline guidance) antenna.	Any fixed object no more than 45 ft high.	The ILS glidepath antenna.