

(M17)螺旋槳：

題號	答案	題目
1(0047013)	B	<p>What is the operational force that causes the greatest stress on a propeller? (A) Aerodynamic twisting force. (B) Centrifugal force. (C) Thrust bending force.</p> <p>運轉中之螺旋槳所承受之最大應力來自？(A) 氣動扭曲力(B) 離心力(C) 推力曲力</p>
2(0046776)	A	<p>Blade stations are measured from the (A) centre of the hub. (B) tip. (C) shank.</p> <p>槳葉站位的測量從哪裡開始？(A) 槳轂中心點 (B) 尖端 (C) 柄</p>
3(0024427)	C	<p>Oil pressure moves a turbo propeller to (A) reverse position. (B) feather position. (C) both reverse and low pitch position.</p> <p>渦輪螺旋槳利用滑油壓力將槳葉移動至 (A) 反槳位置 (B) 順槳位置 (C) 反槳及低螺距位置</p>
4(0046878)	C	<p>Propeller synchronizing works utilizing (A) RPM Levers. (B) propeller lever. (C) governor.</p> <p>使螺旋槳同步運轉係透過 (A) 轉速控制手柄 (B) 螺旋槳控制手柄 (C) 調節器</p>
5(0046889)	C	<p>Where is the de-icing boot ? (A) Root. (B) Trailing edge. (C) Blade leading edges.</p> <p>除冰靴裝在何處？(A) 根部 (B) 後緣 (C) 槳葉前緣</p>
6(0046722)	C	<p>Propeller efficiency is (A) the ratio of output speed to input propeller speed. (B) the ratio of the work applied to the geometric pitch to useful work on the C.S.U.(Constant Speed Unit). (C) the ratio of the useful work done by the propeller to work done by the engine on the propeller.</p> <p>螺旋槳的效率是 (A) 輸出速度與輸入的螺旋槳速度比值 (B) 在恆速裝置上，施加於幾何螺距的功和施加於恆速裝置上的有效功的比值 (C) 螺旋槳的有效功與發動機對螺旋槳所做的功之比值</p>
7(0046743)	C	<p>Thrust bending force on a propeller blade (A) intensifies the</p>

		<p>centrifugal forces to some degrees. (B) can be used in propeller design to reduce some operation stress. (C) tends to bend the propeller blade forward at the tip.</p> <p>螺旋槳槳葉的推力彎曲力 (A) 可增強離心力至某一程度 (B) 在螺旋槳設計上，可以減少某些操作應力 (C) 具有將螺旋槳槳葉在尖端處向前彎曲的傾向</p>
8(0046710)	C	<p>What force on a propeller blade turns the blades to a fine pitch? (A) ATM(Aerodynamic Twisting Moment). (B) Torque. (C) CTM(Centrifugal Twisting Moment).</p> <p>什麼樣的力作用在螺旋槳槳葉上，使得槳葉轉向細螺距 (A) 氣動旋轉力矩 (B) 扭矩 (C) 離心扭力矩</p>
9(0059176)	A	<p>The chord line of a propeller is (A) a line joining the leading and trailing edges. (B) a line joining the tip to the root of the blade. (C) a line joining the tips of the blades.</p> <p>螺旋槳的弦線即為(A) 前緣與後緣的連線 (B) 接合尖端和槳葉根部的連線 (C) 全部槳葉尖端的連線</p>
10(0046768)	A	<p>Total power of a turbo-prop engine is measured in (A) Equivalent Shaft Horsepower (ESHP). (B) Shaft Horsepower (SHP). (C) Brake Horsepower (BHP).</p> <p>渦輪槳葉發動機的總功率測量 (A) 等效軸馬力 (B) 軸馬力 (C) 制動馬力</p>
11(0046792)	B	<p>The spinner is installed to (A) generate a propeller tip vortex. (B) to smooth the airflow covering over the propeller hub. (C) conduct an acrobatic manoeuvre.</p> <p>螺旋槳裝置槳錐(spinner)以 (A) 產生螺旋槳尖端漩渦 (B) 將覆蓋槳轂(hub)的氣流整成流線型 (C) 進行特技動作</p>
12(0046749)	A	<p>Electronic torque measuring systems utilize (A) strain gauges in the reduction gear. (B) stress gauges in the reduction gear. (C) pressure transducers in the reduction gear.</p> <p>電子扭矩測量系統利用 (A) 減速齒輪的應變計 (B) 減速齒輪的應力表 (C) 減速齒輪壓力傳感器</p>
13(0047018)	A	<p>A propeller has an airfoil section and like a wing. The cambered side of the propeller is its...(A) blade back. (B) blade chord. (C) blade</p>

		<p>leading edge.</p> <p>螺旋槳有與機翼類似的翼剖面，其有曲度(camber)的那一面為？ (A) 葉背 (B) 葉片翼弦 (C) 葉片前緣</p>
14(0024426)	B	<p>What operational force tends to increase propeller blade angle ? (A) Centrifugal twisting force. (B) Aerodynamic twisting force. (C) Thrust bending force.</p> <p>何種操作力傾向增加槳葉角度？(A) 離心扭力 (B) 氣動扭力 (C) 推力彎曲力</p>
15(0046800)	B	<p>To achieve reverse pitch the blade angle must be (A) more than 17°. (B) less than 0°. (C) more than 90°.</p> <p>為了反槳，槳葉角度必須 (A) 大於17度 (B) 小於0度 (C) 大於90度</p>
16(0024425)	C	<p>Propeller blade tracking is the process of determining (A) the plane of rotation of the propeller with respect to the aircraft longitudinal axis. (B) that each blade has the same angle of attack, to prevent vibration. (C) the positions of the tips of the propeller blades relative to each other.</p> <p>螺旋槳葉片軌跡檢查是為了確認 (A) 螺旋槳相對於飛機縱軸的迴轉面 (B) 每個葉片都具有相同的攻角以避免震動 (C) 螺旋槳葉片尖端彼此的相對位置</p>
17(0046784)	C	<p>A propeller operating in the Beta range is that the power lever position is operated between (A) Flight idle and Ground idle. (B) coarse and flight fine pitch. (C) flight idle and maximum reverse.</p> <p>螺旋槳在beta範圍運作於那兩個之間 (A) 飛行怠速和地面怠速 (B) 粗螺距和飛行細螺距 (C) 飛行怠速和最大反推力</p>
18(0046783)	B	<p>A two position prop uses (A) high pitch for take off and low pitch for cruise. (B) low pitch for take off and climb and high pitch for cruise. (C) high pitch for take off, low pitch for climb and descent and high pitch for cruise.</p> <p>兩位置螺旋槳使用 (A) 高螺距使用在起飛，低螺距使用於巡航 (B) 低螺距用於起飛和爬升，高螺距用於巡航 (C) 高螺距使用於起飛和巡航，低螺距使用爬升和降低高度</p>
19(0046750)	C	<p>A conventional turboprop torque meter uses (A) hydraulic oil as the</p>

		<p>pressure medium. (B) coiled spring levers as the pressure medium. (C) engine oil as the pressure medium.</p> <p>傳統的渦輪螺旋槳的扭矩儀使用 (A) 液壓油作為壓力介質 (B) 螺旋彈簧桿作為壓力介質 (C) 發動機滑油作為壓力介質</p>
20(0046723)	C	<p>Geometric Pitch is the distance moved (A) in one revolution. (B) in one revolution when slip is maximum. (C) in one revolution without slip.</p> <p>理論上，螺距幾何移動距離 (A) 在一個旋轉 (B) 在一個旋轉內螺旋槳滑距最大 (C) 在一個旋轉沒有螺旋槳滑距</p>
210046843)	A	<p>What is the purpose of the auto pitch system? (A) To prevent over-speeding in the event of the flight low pitch stop failure. (B) To reduce drag during power loss. (C) To save the pilot making minor changes when changing altitude.</p> <p>Auto pitch系統的目的為何? (A) 防止萬一low pitch停止的功能失效發生時會超速飛行(B) 當失去動力時減少阻力 (C) 當改變高度時，可讓飛行員免去做出微小變化的操作</p>
22(0046834)	C	<p>The constant speed unit (C.S.U.) governor works on the principle of (A) manual selection through a gearbox. (B) centrifugal twisting moments. (C) spring pressure acting against centrifugal force.</p> <p>恆速調節器的運作原理為? (A) 通過傳動齒輪以手動選擇 (B) 離心力扭矩 (C) 彈簧壓力對抗離心力</p>
23(0024414)	A	<p>The propeller governor (A) controls the flow of oil to and from the pitch-change mechanism. (B) controls the relief valve in the accumulator assembly. (C) controls the spring tension on the boost pump speeder spring.</p> <p>螺旋槳調速器是? (A) 控制滑油流入或流出變距機構的方向 (B) 控制在儲壓器內的洩壓閥。 (C) 控制加壓泵調速上的彈簧張力。</p>
24(0046863)	A	<p>What are the rotational speed and blade pitch angle requirements of a constant-speed propeller during take-off? (A) High speed and low pitch angle. (B) High speed and high pitch angle. (C) Low speed and high pitch angle.</p> <p>當定速螺旋槳起飛時，其螺旋槳轉速與槳葉角度為何? (A) 高速度和低螺距角度 (B) 高速度和高螺距角度 (C) 低速度和高螺距角</p>

		度
25(0046869)	A	<p>Synchronisation is used to (A) reduce vibration and noise. (B) reduce the pitch of the fastest running blade. (C) preset the phase angle of propellers.</p> <p>同步調速使用在 (A) 減少振動和噪音 (B) 減少運轉最快的那片槳葉的螺距 (C) 預設螺旋槳的相位角度</p>