DA40-J&0 (Ted Yin viD)			
Initial Papers	DA4O-18O (Ted Yin vl.O)	• Electric Pump·····on	• MFD Range/Track Up ··· set
Nature	Ground Operations		
Papers			
Fire Extinguisher			
Mags	•		
Electrical off Morphy Morphy Morphy Electrical off Morphy Morphy Morphy Morphy Electrical Morphy		· Throttle · · · · · · · · · · · · · · · · · · ·	► ELT check (121.5)
Avionics off Essential Bus off Mixture idle cutoff Mixture idle cutoff Prop high RPM Throttle 1000 RPM Prop high RPM Throttle 1000 RPM Nags: off then both Oil Pressure 14-35 psi Nags: key out Master 10 Naster (Alternator) on Tach Time note Flaps check & set 70 Lights/Pitot test Fuel Pump check Fuel Pump check Fuel Pump check Fuel Pump check Fuel Note Master off Controls free & correct Hobbs Time note Hobbs Time on test/sample Caps/Drains/Vents Surfaces/Controls Surfaces/Controls Surfaces/Controls Surfaces/Controls Stall Strips/Fairings Exhaust/Antennas Prop/Air Intakes x3 Pritot/Stall Struts/Tires/Brakes Ties/Chocks Canopy/Door Final Balkaround Pre-Stant Rear Door Friel Tolliage off Pre-Stant Rear Door Parking/Brakes test/set Circuit Brkrs. check Strobe (ACL) on Parking/Brakes Circuit Brkrs. check Strobe (ACL) on Avionics off Fuel Selector least Canopyy pos. L/Z Passenger brief Mixture idle cutoff Mixture lison Proposite for the RPM Mixture idle cutoff Mixture lison Pre-Stant Naster (Battery) on Naster (Alternator) on Tach Mixture lison Prictle idle Master (Battery) on Naster (Alternator) on Tach Mixture lison Proposite for Naster (Alternator) Master (Alternator) on Tach Time onto Master (Alternator) on Tach Time onto Master (Alternator) Master (Alternator) on Tach Time onto Master (Alternator) on Tach Time onto Master (Alternator) Master (Alternator) on Tach Time onto Master (Alternator) Master (Alternator) on Tach Time onto Master (Alternator) Masser (Alternator) on Tach Time onto Master (Alternator) Master (Alternator) on Tiedoms/Chocks on Tiedoms/Cho	_		
Mixture idle cutoff Prop high RPM Throttle 1000 RPM Mags off then both Oil Pressure 11-35 psi Mags Mass Mags	► Avionics ····· off		
Nixture	► Essential Bus ····· off	• Mixture nich	• ACL Stropeson
Friedly First Fi	► Mixture ······ idle cutoff	Throttle	Maga off they both
Master	► Prop·····high RPM	▶ Oil Pressure 15 secs.	Mixture idle cutoff
Flaps	► Throttle ·····idle	► Fuel Pressure ··· 14-35 psi	▶ Mags key out
Filaphs:/Pitot		► Master (Alternator) ····· on	► Tach Time ······ note
Fuel Pump	•		
Fuel Pump	_		
Frue1	·		1 030 1 119/10
Flass		Pre-Taxi	
Hobbs Time			
Walkaround	/ \		
Fuel/0il test/sample			
Fuel/Oil test/sample Caps/Drains/Vents Surfaces/Controls Stall Strips/Fairings Exhaust/Antennas Prop/Air Intakes x3 Pritot/Stall Struts/Tires/Brakes Ties/Chocks Canpy/Door Brial Walkaround Pre-Start Rear Door Redder Pedals adjust Seat Belts on Parking/Brakes test/set Circuit Brkrs. check Strobe (ACL) on Avionics off Essential Bus off Essential Bus off Fuel Selector least Canpy pos. 1/2 Prime Mixture idle cutoff Prop high RPM Friction adjust Master (Battery) on Final Caps/Door backup/AP(?) Radio test ATIS PFD/backup/AP(?) Cappy/Door lock Canpoy/Door lock Post-Flight walkaround Flooded Engine Electric Pump off Capsy/Door of test Pleating-Proposition Relative lean (full aft) Throttle 1/2 position Fleatse-check Canpoy/Door lock Canpoy/Door Brake Set Pleat Set Belts check Canpoy/Door Brake Set Plight Controls check Heading/Altitude set Comm/Nav/FPL set Post-Flight walkaround Fleatseyawaw Flooded Engine Flectric Pump off Fleatseric Pump off Fleatric Pump off Fleatseric Pump off Cappy/Door lack Fleatseric Pump off Fleatseric Pump off Fleatseric Pump off Fleatseric Pump off Cappy/Door lack Fleatseric Pump off Fle			
> Surfaces/Controls > Stall Strips/Fairings > Exhaust/Antennas > Prop/Air Intakes x3 > Pitot/Static/Stall > Struts/Tires/Brakes > Ties/Chocks > Canopy/Door Final Walkaround Pre-Start Rear Door Rudder Pedals adjust > Seat Belts Canopy/Bor Rear Door Runder Pedals adjust > Seat Belts Circuit Brkrs Circuit Brkrs Circuit Brkrs Circuit Brkrs Canopy/pos Fuel Selector Runder Proble Selector Runder Proble Selector Runder Proble Selector Runder Run	•		
> Stall Strips/Fairings Exhaust/Antennas Prop/Air Intakes x3 Pribot/Static/Stall Struts/Tires/Brakes Ties/Chocks Canopy/Door Final Walkaround Pre-Start Rear Door	'	► ATIS······ PFD/backup/AP(?)	► Canpoy/Door············lock
Final Walkaround Pre-Start Rear Door Secure Rudder Pedals adjust Seat Belts On Parking/Brakes test/set Circuit Brkrs Check Strobe (ACL) On Avionics Off Essential Bus Off Fuel Selector least Canopy pos. 1/2 Passenger brief Prime Mixture idle cutoff Priction adjust Mixture lean Flooded Engine Flooded Engine Electric Pump off Mixture lean (full aft) Mags. start Vien Mixture rich (rapidly) Finish up normal start Airspeeds (KIAS) Vr 59 Vs 0 41, Vs1 59 Mixture rich (rapidly) Finish up normal start Airspeeds (KIAS) Vr 59 Mixture rich (rapidly) Finish up normal start Airspeeds (KIAS) Vr 59 Vs 0 74,73/bå/b0 Mixture rich (rapidly) Finish up normal start Airspeeds (KIAS) Vr 59 Mass 254b/2535/2205/lå7 Vg 0 74,73/bå/b0 Approach Speeds Up 75,73/bå/b0 Approach Speeds Up 75,73/bå/b0 Approach Speeds Up 74,73/bå/b0 LDG 73,71/b3/58 Va Mixture lean (full aft) Mixture rich (rapidly) Finish up normal start Airspeeds (KIAS) Vg 0 74,73/bå/b0 Approach Speeds Up 74,73/bå/b0 Approach Speeds Up 74,73/bå/b0 Approach Speeds Up 74,73/bå/b0 Approach Sp		$\blacktriangleright \ \mbox{Radio} \cdots \cdots \mbox{test}$	► Post-Flight ····· walkaround
Prop/Air Intakes x3 Pitot/Static/Stall Struts/Tires/Brakes Ties/Chocks Canopy/Door Final Walkaround Pre-Start Rear Door secure Rudder Pedals adjust Seat Belts on Parking/Brakes test/set Circuit Brkrs check Strobe (ACL) on Avionics off Fuel Selector least Canopy pos l/2 Passenger brief Mixture idle cutoff Prime Mixture idle cutoff Prop high RPM Master (Battery) on Clearance obtain Brakes check Clearance obtain Brakes release/test Clearance obtain Brakes release/test Throttle l/2 position Mags. Throttle l/2 position Mags. Start Throttle check Canopy/Door lock Canopy/Door lock Mixture set Seat Belts check Canopy/Door lock Mixture set Seat Belts check Canopy/Door lock Mags. Check Canopy/Door lock Mixture set Seat Belts check Canopy/Door lock Mags. Check Mixture set Mixture rich (rapidly) Finish up normal start Mixture set Mixture rich (rapidly Finish up normal start Mixture set Mixture rich (rapidly Finish up normal start Mixture set Mixture rich (rapidly Finish up normal start Mixture set Mixture rich (rapidly Finish up normal start Vr Sg Wixture lean Finish up normal start Mixture rich (rapidly Finish up normal start Airspeeds (KIAS) Vr Sg Wixture lean Finish up normal start Airspeeds (KIAS) Mass "Zela-Lab-Zela-Lab-Zela-Lab-Zela-Lab-Zela-Lab-Zela-Lab-Zela-Lab-Zela-Lab-Zela-Lab-Zela-Lab-Zela-Lab-Zela-Lab-Zela-Lab-Zela-Lab-Zela-Lab-Zela-Lab-Zela-Lab-Zela-Lab-Zela-Lab-Zel			
Pitot/Static/Stall Brakes release/test Throttle 1/2 position Mags. start Throttle 1/2 position T		► Check ····· TC/AI/HSI<->MC	► Electric Pump ····· off
Fires/Chocks Canopy/Door Final Walkaround Pre-Start Rear Door Secure Rudder Pedals adjust Seat Belts On Parking/Brakes test/set Circuit Brkrs Check Strobe (ACL) On Avionics Off Fuel Selector least Canopy Dos I/2 Passenger brief Prime Mixture 1 dle cutoff Prime Mixture 1 dle cutoff Prop 1 high RPM Friction 2 adjust Masser (Battery) On Parkins/Chocks Run-Up Mags Strut Mags Strut Minder Pedals Set Minder Pedals Air Speeds (KIAS) Mags Throttle 1/2 position Mags Strut Minder Pedals Set Minder Pedals Air Speeds (KIAS) Mixture 1 check Mixture 1 check Throttle 2000 RPM Cycle Prop x3 -250-500 Mags Mixture 1 check Mixture 1 check Throttle 1/2 position Mags Strut Minder Pedals Set Minder Pedals Mixture 1 check Mixture 1 check Mixture 1 check Throttle 1/2 position Mags Strut Mixture 1 check Mixture 1 check Mixture 1 check Mixture 1 check Throttle 1/2 position Mags Strut Mixture 1 check Mixture 1 check Mixture 1 check Mixture 1 check Throttle 1/2 position Mags Start Mixture 1 check Throttle 1/2 position Mags Start Mixture 1 check		► Clearance ····· obtain	▶ Mixture ··· lean (full aft)
Pre-Start Pringhum adjust Pre-Start Pre-Start Pre-Start Pringhum adjust Pre-Start Pre-Start Pringhum adjust Pringhum adjust Pre-Start Pre-Start Pre-Start Pringhum adjust Pringhum adjust Pre-Start Pre-Start Pre-Start Pringhum adjust Pringhum adjust Pre-Start Pre-Start Pringhum adjust Pringhum adjust Pre-Start Propudation Pre-Start Pre-Start Pre-Start Pre-Start Pringhum adjust Pringhum adjust Pre-Start Propudation Pre-Start Propudation Pre-Start Propudation Pre-Start Propudation Pre-Start Pre-Start Pringhum adjust Pri		► Brakes·····release/test	▶ Throttle \cdots 1/2 position
Canopy/Door		Run-Up	▶ Mags. · · · · start
Pre-Start			
> Rear Door	Final Walkaround		
Packing/Brakes test/set Circuit Brkrs check Strobe (ACL) on Avionics off Essential Bus off Fuel Selector least Canopy pos. 1/2 Passenger brief Prime Mixture 1dle cutoff Prop high RPM Master (Battery) on Packing/Brakes adjust Flight Controls check Heading/Altitude set Comm/Nav/FPL set Nass 25446/2535/2205/lå74 Vy Up) 7b/73/bå/b0 Climb(T/0) b7/673/bå/b0 Climb(T/0) b7/673/bå/b0 Climb(T/0) b7/673/bå/b0 Climb(T/0) b7/73/bå/b0 Climb(T/0) b7/673/bå/b0 Climb(T/0) b7/73/bå/b0 Climb(T/0) b7/73/bå/b0 Vy Up) 7b/73/bå/b0 Vy Up) 7b/73/bå/b0 Climb(T/0) b7/673/bå/b0 Climb(T/0) b7/673/bå/b0 Climb(T/0) b7/673/bå/b0 Climb(T/0) b7/673/bå/b0 Climb(T/0) b7/673/bå/b0 Climb(T/0) b7/73/bå/b0 Climb	Pre-Start		
Rudder Pedals			
> Seat Belts		► Flight Controls ······ check	Airspeeds (KIAS)
Circuit Brkrs Check Fuel Selector fullest Wg 76/73/68/60 Avionics Off Essential Bus Off Fuel Selector least Canopy pos 1/2 Passenger brief Mixture Check Throttle Alternate Air Check Throttle Idle Prime Mixture Idle Cutoff Prop high RPM Mixture Idle Alternate Static Check Master (Battery) On Mass 2646/2535/2205/1874 Fuel Selector fullest Wg 76/73/68/60 Vy(Up) 76/73/68/60 Climb(T/0) 67/66/60/54 Vy(Up) 76/73/68/60 Climb(T/0) 67/66/60/54 Approach Speeds Up 76/73/68/60 T/0 74/72/66/59 D6 73/71/63/56 Va Mixture Idle Idle Mixture Idle Idle Mixture Idle Idle Mixture Idle Idle Idle Mixture Idle Idl		Heading/Altitude ····· set	► Vr 59
Fuel Selector fullest			
Mixture	► Circuit Brkrscheck	• Fuel Selection fullect	
Avionics	► Strobe (ACL)····on		
► Essential Bus off ► Fuel Selector least ► Canopy pos. 1/2 ► Passenger Mags. L/R -175₁ +/-50 ► Approach Speeds Up Up 76/73/b8/b0 T/0 74/72/bb/59 LDG 73/71/b3/58 ► Prime Mixture ■ Mixture leant ► Prop Mixture ■ Mixture leant ► Prime Mixture ■ Mixture leant ► Prop high RPM ► Full Check (initial) Alternate Static ■ Approach Speeds Up 74/72/bb/59 LDG 73/71/b3/58 Va Mix UP ■ Mix UP 227 • yes 111 @ 2646-2284 no 108 @ 2535-2161 • O/w 94 @ below 2284/2161 • O/w 94 @ below 2284/2161 • Steen Turn: <=450 > >=68	► Avionics·····off		
Mags	► Essential Bus ····· off		
Alternate Air Check T/0 74/72/66/59 Passenger brief Indicators Check Indicators Check Throttle Idle Prime Throttle Idle Throttle Idle Mixture Idle Outoff Mixture Iean Iean Prop high RPM Full Check (initial) Alternate Static Check Master (Battery) On GPS/System/Ann Check Steen Turn: <=450 >=64			• •
Indicators		_	
Throttle idle	► Passenger ···· brief	• Indicatorscheck	. 1/2 73/71/13/54
▶ Prime ■ Throttle 1000 RPM ■ Mixture idle cutoff ■ Mixture lean ■ Prop high RPM ▶ Full Check (initial) yes 111 @ 2646-2284 ■ Friction adjust Alternate Static check o/w 94 @ below 2284/2161 ■ Master (Battery) GPS/System/Ann Steen Turn: <=450 >=68	Start	• Throttleidle	▶ Va
 Mixture ······idle cutoff Mixture ·······lean Prop ·······high RPM Full Check (initial) Friction ·······adjust Alternate Static ··· check Master (Battery) ······· on GPS/System/Ann ····· check Steen Turn: <=45° >=548 	► Prime	• Throttle1000 RPM	
Prop ··········· high RPM ► Full Check (Initial) Friction ······· adjust ■ Alternate Static ···· check O/w 94 @ below 2284/2161 Master (Battery) ······ on ■ GPS/System/Ann ····· check Steen Turn: <=450, >=64			
Friction Alternate Static Check O/w 94 0 below 2284/2161 Master (Battery) On GPS/System/Ann. Steen Turn: <=450, >=64			-
Master (Battery)······ on	_		
● Throttle···································	-		
	• Inrottle	■ AP ······ MET/HDG	

In-Flight Operations	Descent	2. Mixture ·· full/check
Pre-Takeoff ► Abort Plan/Lost Comm. ► Canopy/Door lock ► Trim T/0 ► Fuel Selector fullest	► High Altitude ···· pump on	3. Pump
<pre>► Flaps T/0 ► Mixture rich ► Prop high RPM ► Pitot Heat as required ► (Air Conditioner off) ► Review Airspeeds ► Time note/start</pre>	<pre>- <= 50°F(22.8°C)/min. Pre-Landing - ATIS/Rwys/Approach Plan - "CCGUMPSF" - 6 Fuel Selector - M Mixture</pre>	 Windmill 1.45nm/lkft Stationary 1.7nm/lkft Wind and Landing Site Longer Flow Engine Inst check Short Flow
Takeoff Takeoff Tights Camera Action Electric Pump on Mixture/Prop/Throttle Engine Inst. green Vr. 59 then 57-60 Safe Altitude Prop 2400 RPM Pump off	■ Seat Belts secure ■ F Flaps as required ■ T/0 SlOB KIAS ■ LDG SPI KIAS ■ Trim as required ■ Lights as required	 Mags Mixture slowly richen Stationary Restart Airspeed Electrical Avionics Master both Both KIAS Flectrical off Master
• Lights as required Climb • T/O: Vy	► Throttle full ► Vy	 Mags. Engine-off Landing Fuel Selector Mixture Mags. off Master e Belt and Seat check Flaps LDG (when able) Unlatch Door?/Brace Engine Fire Cabin Heat off
➤ Trim······ as required ➤ High Altitude ··· pump on Cruise ➤ Flaps ··· UP ➤ Throttle ··· 21-24" ➤ Prop ··· 1800-2400 RPM ➤ Mixture ■ Economy ··· max EGT¬ <=75% ■ Best··· 100°F(55°C) lower	➤ Throttle	► Emergency Descent ► Landing is ensured • Fuel Selector off • Throttle full • Pump off • Master on • Emergency Windows open ► Engine-off Landing Electrical Fire
• Higher Power ······· richen → High Altitude ··· pump on → Flow Check (→ 15 min) • Trim, Switch Tanks • Mixture/Prop/Throttle • Flaps, Engine Inst. • Pump, Mag, Master → CHT ······ 150-400°F → Oil ··· 145-220°F	 ▶ Ventilation ········· open ▶ Emergency Windows ····· open ▶ Canopy ···· open (partially open in the property of the property open in th	► Emergency Switch

_	172S-G1000 (Ted v1.2)		Mixture3/4 rich		Takeoff
			"Prop Clear!"		
	Initial		Mags start		"Lights: Camera: Action"
	Papers ····· A.R.O.W.		Throttle 1000 RPM		Mixture/Throttle
•	Control Lock·····off		Oil Pressure 30 secs.		Engine Instgreen
•	Mags key out		Volts/Amps ······ [>26] [>0]		Vr 55 kts
_ •	Mixture idle cutoff		Mixture ······ lean for taxi	•	Vx···· 62 kts₁ Vy···· 74 kts
()►	Throttle idle				Climb / Cruise
	Avionics off		Pre-Taxi		Cruise Climb75-85 kts
•	Fuel Shutoff ····· on	•	Flaps ····· up		• Flaps ·······up
•	Fuel ···· both	•	lightsas required		Mixture ······· lean >3000
•	Master on	•	Avionics on/set		Flow Check (~15 min)
•	Fuel ····· note	•	$GPS \cdots \cdots DB \ date$		• Fuel, Trim
•	Flaps down	•	Fuel Totalizer enter		• Flaps: Engine Inst:
	Lights/Pitot····· test	•	ATIS ······ PFD/backup/AP(?)		• Mixture: Throttle
	Avionics on/off ······ fans	•	Radio · · · · test		■ Master: Mag:: Pump
	Master off	•	Transponder squawk		
	Hobbs Time ···· note				Descent
	Walkaround	•	Clearance obtain	•	Mixture richen slowly
1 1	Fuel/0il····· dip/sample	•	brakes ····· test		
	Caps/Drains/Vents		Run-Up	•	Flow Check
	Surfaces/Controls	•	Brakes set		Pre-Landing
	Exhaust/Antennas		Seat Belts····· check	•	
	Prop/Belt/Air Intake	•	Doors/Windows secure		"CCGIMPSF"
	Pitot/Static/Stall		Flight Controls ···· correct		• G: Fuel······on/both
	Gear/Tires/Brakes	•	Instruments ····· scan		• M: Mixture ·······rich
	Ties/Baggage Door	•	Alternate Static ····· check		• S: Seat Belts ······ secure
•	Final Walkaround		AP MET/HDG		• F: Flaps ······ as required
	Pre-Start		${\tt Trim} \cdots \cdots {\tt takeoff}$		Trimas required
•	Doors ····· secure	•	$Fuel \cdots \cdots on/both$		Ldg. Lighton
•	Belts/Seat Track	•	Hdg./Alt. Bugs		Approach 80-65 kts
←	Brakes ····· check, set	•	GPS/Status Bar/Ann. Test		Post-Landing
\bigcirc \triangleright	Circuit Brkrscheck	•	MFD Range/Track Up		
-	Passenger ···· brief	•	Comm/Nav/VOR/FP		Throttle 1000 RPM
•	Beacon on	•	Mixture rich		rilxture ······· lean
•	Avionicsoff	•	Throttle 1800 RPM		riaps up
•	Fuel ···· both		riags	•	Trim taken to the
	Start		Engine Instcheck		
	Stby. Battery test/arm		Idle Check	•	Lights as required
•	Engine inano xs	_	Mixturo loan		
_	AOT C2 IFF \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	_	Lights as noguined		Shutdown
•	Amps ······· S<0/ann on	-	ADSR Handheld as required		ELT·····check (121.5)
•	Prime:			•	Avionicsoff
	• Mixture idle cutoff		Pre-Takeoff	٠	Lightsoff
	• Brakes ····· secure				Beacon on
	• Master····on	•	$Fuel \cdots \cdots on/both$		
	• Throttle ···· slight				
	• Aux• Pump·····on				
	• Mixture prime				
	·warm: D-3 sec		Pitot heat ····· as required		
	· cold: 3-5 sec		Review Airspeeds		Tach Time ······ note
	• Aux. Pump ····· off	•	Time note/start	•	Stby. Batteryoff

Post-Flight
► ADSB Handheld ···· off
► Tiedowns/Chocks
▶ Pitot Cover
► Fuel ······ switch to L/R
► Gust Lock
⟩► Close Flight Plan
'► Hobbs Time·····note
► Check Under Seats
► Cabin / Baggage ······ lock
► Post-Flight Walkaround
Engine Failure
► Short Flow
• Fuel ····· on/both
Mixture ····· full/check
Electrical Pump ····· on
• Alternate Airon
• Mags•····check all
► Glide and Trim
) • Speed: Lå kts
• Ratio: 9, 1.48nm/1000ft
► Wind and Landing Site
► Longer Flow
• Engine Indicators
• Short Flow Again
► No Restart
• Fuel off
• Mixture ······ idle cut-off
• Prop/Throttle · · · · · off
MagsoffMasteroff
1
• Unlatch Door • Brace
■ Brace

► Approach ····· 80/70/65 kts