

Training Plan () Aircraft Recurrent Training Piper PA46 Meridian & Mirage



Wright Aviation Services LLC February, 2015

Wright Aviation Services PA46 Recurrent Training



Annual Recurrent – Bringing It All Together

Objective

The PT will demonstrate the knowledge and skill level appropriate and demonstrate judgment, aeronautical decision making skills and single pilot management skills to effectively, efficiently, and safely operate the PIPER PA46 in an actual cross-country exercise. The training flight will be conducted under simulated or actual IFR conditions and VFR conditions.

Prerequisites

Successful completion of Lesson 4 and all ground training components.

PT Preparation

Complete and/or review the following:

- 1. Review previous lessons
- 2. Review the POH
- 3. Plan flight profile using the maneuvers and procedures listed in the course syllabus
- 4. Personal and Weather Risk Assessment

Briefing Items

INITIAL INTRODUCTION

PT will conduct a thorough and complete pre-flight briefing with no assistance.

- 1. Weather data procurement and analysis
- 2. Pilot in Command responsibilities
- 3. Review Personal and Weather Risk Assessment

SRM

- 1. Decision making, risk management
- 2. Automation/task management
- 3. Situational awareness
- 4. CFIT awareness
- 5. Use of flight plan

SAFETY

- 1. Mid-air collision avoidance procedures
- 2. Appropriate NOTAMS
- 3. Airport diagrams and taxi procedures
- 4. Instrument approach procedures
- 5. Emergency procedures

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FLIGHT LESSON 5 – Bringing It All Together

Preflight: The PT will plan the flight profile and perform all preflight procedures, engine start-up, avionics set-up, taxi and before-Take-off procedures. This is accomplished prior to Take-off for each leg of the flight. Runway incursions, ground operations, collision avoidance, abnormal indications, and corrective actions should be performed without assistance from the CFI. All decisions affecting the operation of the flight should be made by the PT employing appropriate aeronautical decision-making skills.

Leg 1: The PT will initiate a normal Take-off and initial climb manually then fly the DP with an autopilot-assisted departure. The PT will perform a DP utilizing the GPS inputs to the HSI and MFD for situational awareness. The autopilot will be disengaged prior to cruise with entry into cruise accomplished manually. The first leg should proceed under Basic Attitude Instrument (BAI) flying conditions. In cruise the PT will execute the proper procedures for an in-flight power plant failure. Airspeed and configuration changes will be practiced during transitions from one phase of flight to another both manually and with auto-flight assistance. The PT will plan and perform an instrument approach as appropriate (ILS or GPS) at the first airport followed with an autopilot assisted missed approach to the hold and then a hand-flown, MOR Operation (PA46-500 only), non-precision approach to a full-stop landing.

Leg 2: The PT will perform a normal Take-off and autopilot assisted departure. In cruise the PT will perform the proper procedures for handling a significant engine power loss, control surface failures, and a complete electrical failure, maintaining control of the aircraft by sole reference to the compass, altimeter and airspeed indicator. With power restored but primary instruments inoperative, the PT will plan and perform a hold followed by a non-precision instrument approach at the second airport to a full-stop landing. (if equipped with IFR GPS, this will be a LNAV approach)

Leg 3: The PT will perform a normal Take-off and autopilot assisted departure. The IFR flight plan will be cancelled and the 3rd leg will proceed under VFR with flight flowing. The PT will perform recovery from unusual attitudes; perform the procedure for VMC demo, critical engine failure, an emergency descent and a diversion to the home airport. The PT will perform a VFR entry into the downwind pattern with a midfield engine failure and in the pattern followed by landing to a full stop. The PT will then perform a normal closed traffic pattern Take-off followed by a landing gear failure and manual gear extension to a 50% flap, full stop landing. The PT will then taxi back and, with all systems restored, perform a second traffic pattern with a zero-flap landing to a full stop.

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Post-flight: FLIGHT LESSON 5 – Bringing It All Together

The PT will perform all aircraft shutdown and securing procedures. PT will conduct a basic post-flight debriefing and self-critique facilitated by the instructor.

Scenario One:

(note: these activities will be completed as part of the training scenario and are not intended to be a list of training tasks to be completed in numerical order)

Scenario		Desired PT			
Activities	Scenario Sub Activities	Scenario Outcome			
FLIGHT PLAN	FLIGHT PLANNING:				
	13. Weight and Balance and Aircraft:	Manage/Decide			
Flight	14. Performance Calculations:	Manage/Decide			
Planning	15. Preflight SRM Briefing:	Manage/Decide			
	16. Decision Making and Risk	Manage/Decide			
	Management:				
PRE-FLIGHT	ACTIVITIES:				
Normal	External Inspection	Perform			
Prefliaht &	Internal Inspection	Perform			
Cocknit	PFD/MFD/GPS/Autopilot Programming	Perform			
Procedures	SRM	Explain			
ENGINE STA	RT:				
	Normal	Manage/Decide			
Powerplant	External Power	Manage/Decide			
Start	Flooded Start	Manage/Decide			
	Hot Start	Manage/Decide			
	Low Oil Pressure	Manage/Decide			
Start	Starter Engaged	Manage/Decide			
Malfunctions	N/A	N/A			
	N/A	N/A			



Scenario		Desired PT				
Activities Scenario Sub Activities		Scenario Outcome				
BEFORE TAK	BEFORE TAKE-OFF:					
	Complete Checklist items	Perform				
Boforo Tavi	Appropriate Clearances	Perform				
Delore Taxi	Radio Setups	Perform				
	GPS/FMS Programming	Perform				
	Safety & Collision Avoidance	Manage/Decide				
Taviing	Instrument Verifications	Perform				
тахініў	Aircraft ground handlings	Perform				
	Complete Checklist items	Perform				
	Flight Controls	Perform				
	Engine Run-up	Perform				
	Propeller(s) Check	Perform				
	Electrical Systems Checks	Perform				
Before	Hydraulic Systems Checks	Perform				
Take-off	Auto Flight Systems Checks	Perform				
Checks	Pressurization System Check/Set	Perform				
	Ice Protection Systems Check/Set	Perform				
	Avionics Systems Check/Set	Perform				
	Checklist Review	Perform				
	SRM Briefing	Explain				
TAKE-OFF						
	Normal/Visual	Perform				
	Instrument	Perform				
	Aborted Take-off	Perform				
Take-off	Crosswind	Perform				
	Maximum Performance	Perform				
	IFR Departure Procedure	Perform				
	SRM	Explain				
CLIMB						
	Automated climb	Perform				
	Manual climb	Perform				
Climb	Navigation Programming	Perform				
Procedures	Power Management	Perform				
	Checklist Review	Perform				
	SRM	Explain				
Cruise Procedures						
	Fuel Management	Manage/Decide				
	Best Economy vs. Best Power	Manage/Decide				
	Manual Cruise	Perform				
Cruise	Autopilot Cruise	Perform				
Procedures	Navigation Programming	Perform				
	Automated navigation leg	Perform				
	Checklist Review	Perform				
	SRM	Explain				



Scenario Activities	Scenario Sub Activities	Desired PT Scenario Outcome
Control Performa	ance	
	Straight and Level	Perform
Instrument/Visual	Normal Turns	Perform
Crosscheck	Climbing and Descending Turns	Perform
	Steep Turns	Perform
	Configuration Changes	Perform
Low Speed	Slow Flight	Perform
Envolope	Approach to Stalls	Perform
сплеюре	Recovery from Autopilot Induced Stall	Perform
	SRM	Explain
Descent		
	Vertical Navigation (VNAV) Planning	Manage & Decide
	Navigation Programming	Perform
Planning and	Manual Descent	Perform
Execution	Autopilot Descent	Perform
LXECUTION	Pressurization	Perform
	Checklist Review	Perform
	SRM	Explain
Landing		
	Descent Planning	Manage & Decide
VFR Approach to	Before Landing Procedures	Perform
Land	Speed Planning & Control	Perform
Lanu	Traffic Pattern Entry	Perform
	SRM	Explain
	Descent Planning	Manage/Decide
IEP Approach to	Before Landing Procedures	Perform
	Speed Planning & Control	Perform
Lanu	IFR Landing Transition	Perform
	SRM	Explain
	Normal Landing	Perform
	Maximum Performance Landing	Perform
Landings	Partial Flap Landing	Perform
Landings	Zero Flap Landing	Perform
	Cross Wind Landings	Perform
	Balked Landing	Perform
After Landing		
Aircraft Shutdown	Aircraft Shutdown and Securing	Perform
and Securing Procedures	Aircraft Towing, Ground Handling and Tie-down	Perform



Scenario Activities	Scenario Sub Activities	Desired PT Scenario Outcome
Automated Avior	nics Operation and Systems Inte	erface
	Primary Flight Display	Manage/Decide
EFIS Systems	Multi Function Display-Normal Operation	Manage/Decide
	EHSI Operation	Explain
	Powerplant	Manage/Decide
	Fuel	Manage/Decide
	Electrical	Manage/Decide
	Avionics/GPS Systems	Manage/Decide
Systems	Autoflight	Manage/Decide
Management	Landing Gear	Manage/Decide
_	Ice Protection	Manage/Decide
	Pressurization	Manage/Decide
	Oxygen	Manage/Decide
	SRM	Explain
	Tuning & Identifying	Perform
	Situational Awareness	Perform
	Intercepting Radial	Perform
Navigation - VOP	Tracking Radial to/from	Perform
	Intersections	Perform
	Position Reporting	Perform
	Holding	Perform
	SRM	Explain
	Programming	Perform
	Situational Awareness	Perform
	Intercepting Courses	Perform
Navigation - CPS	Tracking Courses to/from	Perform
Navigation – GPS	Intersections/Waypoints	Perform
	Position Reporting	Perform
	Holding	Perform
	SRM	Explain



Scenario		Desired PT	
Activities	Scenario Sub Activities	Scenario Outcome	
Instrument Appr	oaches		
	Normal/Manual	Perform	
	MOR Operation (PA46-500 only)	Perform	
ILS	Autopilot Coupled Approach	Perform	
	Circling Approach	Perform	
	SRM	Explain	
	Normal/Manual	Perform	
	MOR Operation (PA46-500 only)	Perform	
LOC	Autopilot Coupled Approach	Perform	
	Circling Approach	Perform	
	SRM	Explain	
	Normal/Manual	Perform	
	MOR Operation (PA46-500 only)	Perform	
GPS	Autopilot Coupled Approach	Perform	
	Circling Approach	Perform	
	SRM	Explain	
	Normal/Manual	Perform	
	MOR Operation (PA46-500 only)	Perform	
VOR	Autopilot Coupled Approach	Perform	
	Circling Approach	Perform	
	SRM	Explain	
	From Precision	Perform	
	From Non-Precision	Perform	
Missed Approach	From Circle	Perform	
Missed Approach	MOR Operation (PA46-500 only)	Perform	
	Use of Navaids	Perform	
	SRM	Explain	
Abnormal and Er	nergency Procedures		
	Engine Fail Before Rotation	Manage/Decide	
	Engine Fail After Rotation	Manage/Decide	
	Inflight Fail/Troubleshoot	Manage/Decide	
Powernlant	Engine Securing	Manage/Decide	
i owei plane	MOR Op (PA46-500 only) Maneuvering	Manage/Decide	
	Best Glide Speed	Manage/Decide	
	Engine Fire In Flight	Manage/Decide	
	Propeller Overspeed	Manage/Decide	
	SRM	Explain	
	Alternator Fail	Manage/Decide	
Flectrical	Electrical Fire	Manage/Decide	
Liectrical	Battery Only Operations	Manage/Decide	
	SRM	Explain	
	Engine Driven Fuel Pump Failure	Manage/Decide	
Fuel	Crossflow	Manage/Decide	
	SRM	Explain	



Scenario		Desired PT			
Activities	Scenario Sub Activities	Scenario Outcome			
Abnormal and Emergency Procedures (continued)					
	Unsafe Gear Indication	Manage/Decide			
Landing Gear	Emergency Extension	Manage/Decide			
-	SRM	Explain			
	Unscheduled Trim	Manage/Decide			
Elight Controls	Autopilot Failure	Manage/Decide			
Flight Controls	Flap Malfunction	Manage/Decide			
	SRM	Explain			
	Rapid Decompression	Manage/Decide			
Draccurization	Door Seal	Manage/Decide			
Pressurization	Emergency Descent	Manage/Decide			
	SRM	Explain			
	ADI Failure	N/A			
	HSI Failure	Manage/Decide			
Flight	Airspeed Failure	Manage/Decide			
Instruments	Static System Blockage	Manage/Decide			
	Unusual Attitude Recovery	Perform			
	SRM	Explain			
	Communication Failure	Manage/Decide			
	Glide Slope Failure	Manage/Decide			
	PFD Failure	Manage/Decide			
	MFD Failure	Manage/Decide			
Avionics	GPS Failure	Manage/Decide			
	NAV 1/2 Failure	Manage/Decide			
	Smoke Removal	Perform			
	Ice Protection	Perform			
	Emergency Evacuation	Explain			
	SRM	Explain			
Airmanship and	Special Emphasis Items				
	Aircraft Control	Perform			
	Checklist/Memory Items	Perform			
Airmanship	Smoothness In Handling	Perform			
	Conduct In Emergencies	Manage/Decide			
	SRM	Explain			
	Collision Avoidance	Manage/Decide			
	Wake Turbulence Avoidance	Manage/Decide			
Special Emphasis	LAHSO	Manage/Decide			
Itoms	Communication Management	Manage/Decide			
1(011)5	Runway Incursion Awareness	Manage/Decide			
	Windshear	Manage/Decide			
	SRM	Explain			

Risk Assessment and Management

Personal Minimums Worksheet

Using the above guidelines, the following worksheet should be used to formulate a comfortable set of personal minimums. These minimums should be numerical values that can be practically applied to flight operations. Day VFR

	DAY VFR	Night VFR	Day IFR	Night IFR
CEILING				
VISIBILITY				
WIND CONDITION				
RUNWAY LENGTH/WIDTH				
RUNWAY CONDITION				
REST PERIOD (IM SAFE CHECKLIST)				
FUEL RESERVES				
OTHER (E.G., ICING, THUNDER STORMS, MOUNTAIN FLYING)				
REMARKS:				

PILOT	DATE	INSTRUCTOR	DATE

Risk Assessment and Management

Flight Risk Assessment

Before each flight, assess each of the following conditions and assign a numeric rating of 1 to 5 in the right hand column for each factor. Add up all factors to obtain an overall risk estimate and see where it falls in the Green/Yellow/Red Risk Chart.

	1	2	3	4	5	Rating
Flight Type	VFR		IFR			
Solo or Dual	Dual		Solo			
Day or Night	Day		Night			
Your Rating	ATP CFI/CFII	Com	PPL w/IFR	PPL	Student	
Rest in Last 24 hrs	>8 hrs	7-6 hrs	5 hrs	4 hrs	>4 hrs	
Visibility	>15 miles	15-10 miles	9-6 miles	5-3 miles	<3 Miles	
Ceiling-AGL	>10K	10K-5K	5K-3K	3K-1K	<1000 ft	
Crosswind Departure	0-5 kts	6-10 kts	11-15 kts	16-20 kts	>20 kts	
Crosswind Destination	0-5 kts	6-10 kts	11-15 kts	16-20 kts	>20 kts	
Weather Deteriorating Stability Slowly Rapidly						
Destination Familiarity	Yes		No			
Your Time in Acft type	>200	199-150	149-100	99-50	<50 hrs	
Hours flown last 90 days	>20	19-15	14-10	9-5	<5	
Total Hours Flight Time	<2000	2000-501	500-251	250-100	>100	
	·	·	Т	otal Ris	k Score:	
No unusual hazards . Use normal flight planning and established personal minimums and operating procedures.					14-30	
Somewhat riskier than usual . Conduct flight planning with extra care. Review personal minimums and operating procedures to ensure that all standards are being adhered to. Consider alternatives to reduce risk factors.					31-47 or a 5 in any row	
Conditions present much higher than normal risk. Conduct flight planning with extra care and review all elements to identify components that can be modified to reduce risk. If available, consult with more experienced pilot or instructor for guidance before flight. Develop contingency plans before flight to deal with all high-risk items. Decide beforehand on alternates and brief passengers and other crew members on special precautions to be taken during the flight. Consider delaying flight until conditions improve and risk diminishes.					48-63 or a 5 in any two rows	



Course Summary:

Client:	
Aircraft Type:	
"N" Number:	
Completion	
Date:	

Completion Certificate Awarded Completion Certificate Not Awarded Reason: (see comment below)

I understand that the following training is provided as transition training and I (pilot) need to maintain proficiency by flying often and seeking recurrent training. I have participated in the evaluation of each lesson and concur with those evaluations.

I have reviewed and ac	cept the evaluation and agree v	vith the above statement.
Client	Instructor	// Date
COMMENTS		

CO	MM	EN7	'S:
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Noted instructor times	
Total ground instruction time:	
Total flight instruction time:	