

Standing Order FTD Training (FNPT II)

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General

- During the first 20 missions, we consider the DA42 as a single engine aircraft. This means:
 - after take off, we retract the gear as soon as we have a positive climb. and 85kts.
 - For the briefing, we brief it like a single engine (no engine failure procedure).
“in case of an engine failure, pitch down, speed 85, land straight ahead or slightly left or right.”
- Logbook must be filled out by the student and signed by the instructor after each session. In the column type of STD write: **FNPT II DA42 B-XXX** (simulator approval number).

FNPTII SFA

- Briefing room: 2B17, 2nd floor SFA.
- The power settings from the FNPT II don't match the real aircraft completely. For this reason, you can use the **pitch-power table** given below. (Annex 1).

Take Off procedure in DA42 simulator (Frasca).

Due to the limited rudder authority in the Frasca DA42 simulator (simulator problem) it is impossible to maintain proper runway centerline during the initial take off run.

Full rudder authority is regained when IAS is above 25kts.

Avoid crosswind from the left as this greatly increase the left turn tendency during the roll.

A 10kts headwind or crosswind from the right is recommended.

This new procedure will apply to execute the take off.

1. Perform a rolling take off
 2. Set 30% load
 3. Track runway centerline **using rudder only** (No braking!)
- When passing 25 KIAS and rudder is effective:
4. Slowly increase power to full
 5. Resume normal procedure.

As this procedure greatly increases the take off distance, it is only allowed in the simulator. Real flights take offs should be performed as in the QRH.

Do not brake during the take off roll, feet on the lower part of the pedals at the start of the roll.

FNPT II Hub'Air

- o 51 Excelsiorlaan, 1930 Zaventem
- o <http://www.hubair.be/contact.htm>
- o **Use the Belgium missions.** Make sure you have the Belgium missions with you!
- o Briefing room: any available room
- o When you arrive at Hub'air, please present yourself at the reception. The instructor must sign the attendance sheet.
- o Simulator logbook: difference between [End – start], try to have a block time rounded up to a value of 6minutes for Blue One .

FNPT II OAC

- For a route description, I'd like to refer to the website from OAC.
<http://www.o-a-c.be/>
- The G1000 doesn't have the USA data, so use **the "Belgium" missions.** Make sure you have the Belgium missions with you!
- For the (de)briefing, you can use any available classroom. Preferably, use the "Africa" classroom, or the white board in the simulator room.

- The instructor can ask for a badge. (in case of loss, 15Euro will be charged.) Because we will only be using this simulator for a short term, we are not going to provide the students with a badge.
- When you arrive at OAC, please present yourself to Rita Mertens or Lies Van Poucke.
- Fill out the logbook of the simulator at the end of the session.
 - Flight times:
 - **Start:** the actual time when the electrical master switch is on
 - **End:** when the electrical master switch is off
 - **Block:** difference between [End – start], try to have a block time rounded up to a value of 6minutes for Blue One .
 - Student name: write “SFA – family name student – mission number”
 - Flight Instructor: write FI’s name and sign the form
- For correct start up and shutdown of the FNPT, please follow the instructions. You can find the paper with the instructions on the side panel of the Instructor station above the computer screen.
- The computer screen of the instructor station is a “touch screen”. Do not use the mouse, or keyboard! Only use the touch screen to operate the simulator.

Finally, may I remind you that we are visitors at O.A.C. and Hub’air.

Good luck with the training,

Pieter Gabriël & Louis-Philippe Lopez
Assistant CFI SFA

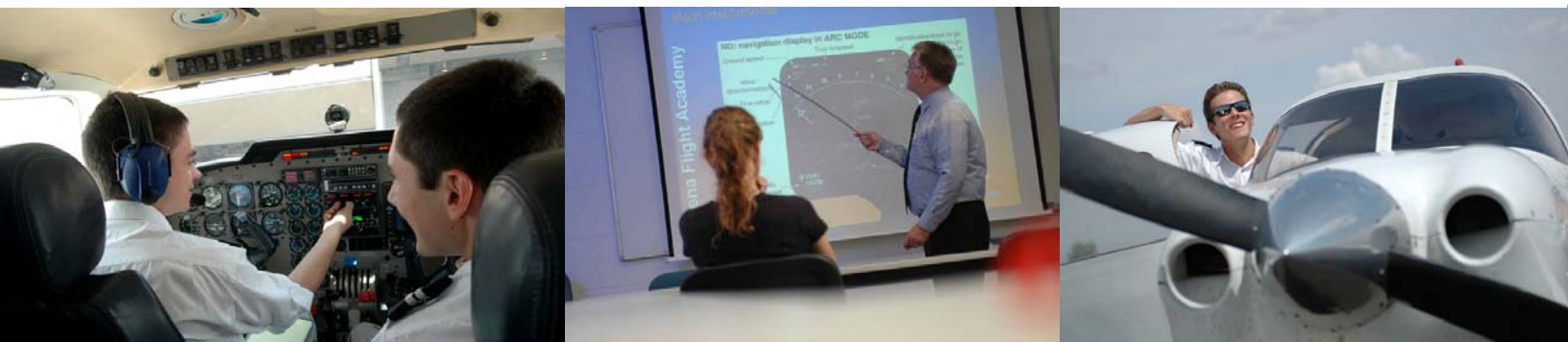
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Annex 1: Pitch – Power Sim FNPT II SFA (DA42)

<u>Speed</u>	<u>Config</u>	<u>Power</u>	<u>BA °</u>	<u>Attitude (# fingers)</u>
<u>Take off:</u>				
• Vr 75	Clean	Full	+10°	Nose just above the horizon
<u>Climb:</u>				
• 80	Clean	Full	+15°	2 fingers above the horizon
• 90	Clean	90%/Full	+10°	Nose just above the horizon
• 105	Clean	90%/Full	+7°	2 fingers
<u>Level:</u>				
• 105	Clean	45%	+2°	4.5 fingers
• 120	Clean	55%	+0°	5 fingers
• 135 (cruise)	Clean	70%	-1°	6 fingers
<u>Descent (500fpm):</u>				
• 105	Clean	35%	-2.5°	6 fingers
• 120	Clean	45%	-2°	6 fingers
<u>Descent (1000fpm):</u>				
• 105	Clean	23%	-4.5°	8 fingers/hand: below thumb
• 120	Clean	37%	-5°	8 fingers/hand: below thumb
<u>Turn:</u>				
• 105	Clean	45%	+2°	4 fingers at 20° AOB
• 120	Clean	55%	+0°	5 fingers at 20° AOB
<u>Traffic pattern:</u>				
• Downwind, 105	Clean	45%	+2°	4.5 fingers
• Downwind, 95	Fapp	52%		6 fingers
• Base, 90	Fapp / GD	40%		7 fingers
• Final, 85	Flan / GD	70%		Aim to blocks
<u>Steep turn:</u>				
• 120	Clean	50%	+1°	
<u>ILS approach:</u>				
• 100	Fapp / GD	50% (600fpm) 53% (500fpm)		-5°
<u>Pattern A,B,C:</u>				
• <u>120</u>				
• + 500 fpm	75%			
• SLF	55%			
• - 500fpm	45%			
• <u>105</u>				
• + 500 fpm	60%			
• SLF	45%			
• - 500fpm	35%			
15%	= 500 fpm = 20kts			
3%	= 100 fpm = 5kts			
5%	= 5kts (120kts -> 125kts)			
	= 10kts (105kts -> 95kts)			

Annex 2: TM Part 3, Belgian Airports

Refer to the following pages for the Training Manual Part 3 M1 - M20, adapted to Belgian Airports. (28 pages).



**A T P (A)
I N T E G R A T E D
C O U R S E**

**FTD SESSIONS BELGIAN
AIRPORTS**

MISSION MI TO M20

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DETAILED FTD MISSION LIST—TRAINING BELGIAN AIRPORTS

On the following pages, the detailed mission list is shown, showing the mission objectives, the homework/instructor briefing topics, the content of the synthetic flight lesson, weather and ATC clearance data and the completion standards.

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FTD—M1	FAMILIARIZATION				
SIMULATED AIRCRAFT TYPE	DA42	MISSION TIME	1.5	SPLIT PLANNED	1.5 FTD
LESSON OBJECTIVE	Become familiar with DA42 systems and Garmin 1000. Introduce normal procedures: from briefing to and including before taxi checklist. Demonstrate takeoff and climbout. Introduce effect of flight controls and basic maneuvers. Demonstrate approach and landing.				

HOMEWORK / BRIEFING TOPICS	AIR EXERCISES
QRH:	COCKPIT LAYOUT FAMILIARIZATION
<ul style="list-style-type: none"> • PITCH/POWER TABLE, MANEUVERS, SPEEDS 	NORMAL PROCEDURES (FLOWS AND CHECKLISTS):
<ul style="list-style-type: none"> • NORMAL PROCEDURES, PATTERNS, LIMITATIONS 	<ul style="list-style-type: none"> • FROM BRIEFING TO BEFORE TAXI CHECKLIST
<ul style="list-style-type: none"> • FLOW AND CHECKLIST HANDLING 	INTRODUCTION TO ATC & COMM SELECTION PROCEDURES
DA42 SYSTEMS, GARMIN 1000	GARMIN 1000 OPERATION:
VFR MANUAL CHAPTERS:	<ul style="list-style-type: none"> • HDG, ALT, QNH SELECTIONS
<ul style="list-style-type: none"> • EFFECT OF CONTROLS, SLF, CLIMB, DESCENT, TURNS 	<ul style="list-style-type: none"> • FREQUENCY TUNING: VHF, VOR, ADF
ATTITUDE FLYING, CONTROL PERFORMANCE CONCEPT	<ul style="list-style-type: none"> • USE OF AUDIO PANEL
SCAN & TRIM TECHNIQUE	<ul style="list-style-type: none"> • AUTOPILOT
FOCUS ON THE IMPORTANCE OF LOOKOUT	<ul style="list-style-type: none"> • MENUS
	FLIGHT:
	<ul style="list-style-type: none"> • TAKEOFF & CLIMBOUT (DEMO)
	<ul style="list-style-type: none"> • EFFECT OF CONTROLS
	<ul style="list-style-type: none"> • ATTITUDE FLYING, SCAN & TRIM TECHNIQUE
	<ul style="list-style-type: none"> • SLF, TURNS, CLIMB, DESCENT
	<ul style="list-style-type: none"> • TRAFFIC PATTERN & NORMAL LANDING AT EBAW (DEMO)

COMPLETION STANDARDS
<ul style="list-style-type: none"> • Become familiar with DA42 cockpit and systems. • Become familiar with Garmin 1000. • Participation in normal procedures, flows and checklists (led by instructor). • Understanding of effect of controls. • Understanding of principles of attitude flying and control performance concept. • Understanding of scan & trim technique.

ATC CLEARANCE
AFTER TAKEOFF, HDG 270, CLIMB 4 000 FT

ATIS & WEATHER
EBAW RWY 29 27005KT CAVOK 25/05 Q1015

FTD 2—M2	BASIC INSTRUMENT FLYING				
SIMULATED AIRCRAFT TYPE	DA42	MISSION TIME	1.5	SPLIT PLANNED	1.5 FTD
LESSON OBJECTIVE	Practice normal procedures, scans & checklists. Review procedures and maneuvers introduced in mission 1. Exercise straight and level flight with acceleration/deceleration, straight and level flight at different configurations, turns, climbs and descents. Introduce trainee in transition to landing configuration.				

HOMEWORK / BRIEFING TOPICS
QRH:
<ul style="list-style-type: none"> • MANEUVERS: SPEEDS • TRAFFIC PATTERN
REVIEW TOPICS MISSION 1 AS REQUIRED

COMPLETION STANDARDS
<ul style="list-style-type: none"> • Display increased proficiency in normal procedures, scans & checklists. • Normal takeoff within safety limits. • Show understanding of primary and secondary airplane control effects. • Properly execute in-flight maneuvers. • Normal turn: 20–40°, ± 200ft. • Altitude control: ± 200ft. • Show increased understanding of ATC communications. • Understanding and execution of after landing & shutdown procedures.

AIR EXERCISES
NORMAL PROCEDURES (FLOWS AND CHECKLISTS)
<ul style="list-style-type: none"> • FROM BEFORE TAXI CHECKLIST TO AFTER T/O CHECKLIST
ATC COMMUNICATIONS (INSTR)
TAXI
TAKEOFF EBAW
CLIMBOUT
SLF
ACCELERATION/DESCCELERATION
FLIGHT AT DIFFERENT CONFIGURATIONS
LEVEL TURNS
CLIMB / DESCENT
TRAFFIC PATTERN
NORMAL LANDING AT EBAW

ATC CLEARANCE
AFTER TAKEOFF, HDG 270, CLIMB 4000 FT, FREQ 126.9, TPD 1200

ATIS & WEATHER
EBAW RWY 29 27005KT CAVOK 23/06 Q1015

FTD BELGIAN AIRPORTS

FTD 3—M3		BASIC INSTRUMENT FLYING			
SIMULATED AIRCRAFT TYPE	DA42	MISSION TIME	1.5	SPLIT PLANNED	1.5 FTD
LESSON OBJECTIVE	ATC will be gradually handed over to trainee. Review mission 2. Exercise climbing/descending turns. Introduce go around.				

HOMEWORK / BRIEFING TOPICS	AIR EXERCISES
CLIMBING/DESCENDING TURNS	NORMAL PROCEDURES
GO AROUND	<ul style="list-style-type: none"> FROM BEFORE TAXI CHECKLIST AFTER T/O CHECKLIST
	TAXI
REVIEW TOPICS MISSION 1 & 2 AS REQUIRED	TAKEOFF
	CLIMBOUT
	ACCELERATION / DECELERATION
	FLIGHT AT DIFFERENT CONFIGURATIONS
	CLIMB / DESCENT
	URNS (LEVEL / CLIMBING / DESCENDING)
	TRAFFIC PATTERN
	GO AROUND
	TRAFFIC PATTERN
	NORMAL LANDING AT EBAW
	AFTER LANDING & SHUTDOWN PROCEDURE

COMPLETION STANDARDS
<ul style="list-style-type: none"> Display increased proficiency in coordinated airplane attitude control during basic maneuvers. Perform unassisted takeoffs. Normal turns: 20–40° bank. Altitude control: ± 200ft. Show increased “anticipation” attitude. Understanding and execution of approach & landing, after landing, shutdown and postflight actions/checklists/procedures.

ATC CLEARANCE
AFTER TAKEOFF HDG 270, CLIMB 3000 FT, FREQ 126.9, TPD 1200

ATIS & WEATHER
EBAW RWY 29 33008KT CAVOK 21/04 Q998

FTD 4—M4		BASIC INSTRUMENT FLYING			
SIMULATED AIRCRAFT TYPE	DA42	MISSION TIME	1.5	SPLIT PLANNED	1.5 FTD
LESSON OBJECTIVE	The trainee will be introduced in flying on instruments. Emphasis on basic attitude flying and selective radial scan. Introduce straight & level flight, climbs & descends and turns on instruments. Demo of ILS approach.				

HOMEWORK / BRIEFING TOPICS	AIR EXERCISES
IFR MANUAL: BASIC INSTRUMENT FLYING	NORMAL PROCEDURES
<ul style="list-style-type: none"> AIRCRAFT CONTROL CONCEPT ATTITUDE & POWER CONTROL BASIC INSTRUMENT FLIGHT MANEUVERS 	<ul style="list-style-type: none"> FROM BRIEFING TO AFTER TAKEOFF CHECKLIST
QRH:	TAKEOFF EBAW
<ul style="list-style-type: none"> PATTERN PRECISION APPROACH 	BASIC ATTITUDE FLYING
REVIEW PITCH/POWER TABLE	RADIAL SELECTIVE SCAN
	STRAIGHT & LEVEL FLIGHT
	CLIMB & DESCENT
	TRANSITION SLF ⇔ CLIMB / DESCENT
	TRANSITION CLIMB / DESCENT ⇔ SLF
	URNS, TRANSITION SLF ⇔ TURN (ROLL IN) AND OPPOSITE
	SPEED CONTROL
	POWER CONTROL
	CONFIGURATION CHANGES
	EBAW ILS 29 APPROACH (DEMO BY INSTRUCTOR)
	<ul style="list-style-type: none"> RADIO SETUP BY INSTRUCTOR NO C/L, NO CALLOUTS, NO PREPARATION, NO BRIEFING
	NORMAL LANDING EBAW
COMPLETION STANDARDS	ATC CLEARANCE
<ul style="list-style-type: none"> Demonstrate operational knowledge of basic instrument flying. Display basic understanding of airplane control by use of instruments. Indicate basic integration of airplane control inputs and instrument indications. Altitude control: ± 150ft. Heading control: ± 15°. 	AFTER TAKEOFF, HDG 270, CLIMB 4000FT, FREQ 126.9, TPD 1200
	ATIS & WEATHER
	EBAW RWY 29 33004KT 5000 OVC005 21/18 Q1015

FTD 5—M5		BASIC INSTRUMENT FLYING			
SIMULATED AIRCRAFT TYPE	DA42	MISSION TIME	1.5	SPLIT PLANNED	1.5 FTD
LESSON OBJECTIVE	Further training of instrument flying with advanced instrument maneuver training. Introduction to ILS approach.				

HOMEWORK / BRIEFING TOPICS	AIR EXERCISES
IFR MANUAL:	NORMAL PROCEDURES
• TIMED TURNS	• FROM BRIEFING TO AFTER LANDING CHECKLIST
QRH:	BLIND TAKEOFF
• PRECISION APPROACH PATTERN CALLOUTS	BASIC ATTITUDE FLYING
	CLIMB/DESCENT
REVIEW TOPICS MISSION 4 AS REQUIRED	TIMED TURNS
	• LEVEL
	• CLIMBING & DESCENDING
	STEEP TURNS
	VECTORS TO FINAL WITH IMC GO AROUND
	EBAW ILS 29 APPROACH
	• APPROACH PREPARATION & RADIO SETUP BY INSTRUCTOR
	NORMAL LANDING EBAW

COMPLETION STANDARDS
<ul style="list-style-type: none"> • Demonstrate an increased understanding of and competence in full panel instrument attitude control. • Perform smooth execution of IFR maneuvers. • Altitude control: $\pm 100\text{ft}$. • Heading control: $\pm 10^\circ$. • Airspeed control: $-10/+10\text{kts}$.

ATC CLEARANCE
AFTER TAKEOFF HDG 350, CLIMB 4000FT, FREQ 126.9, TPD 1237

ATIS & WEATHER
EBAW RWY 29 25007KT 7000 OVC003 23/21 Q1000

FTD 8—M8		RADIO NAVIGATION FLYING			
SIMULATED AIRCRAFT TYPE	DA42	MISSION TIME	1.5	SPLIT PLANNED	1.5 FTD
LESSON OBJECTIVE	Further training on the use of the VOR. Emphasis on interceptions, tracking, course changes and impact of the wind. Demo of a non-precision approach.				

HOMework / BRIEFING TOPICS	AIR EXERCISES
IFR MANUAL :	TAKEOFF
<ul style="list-style-type: none"> RADIO NAVIGATION , VOR , GENERAL 	CLIMBOUT
<ul style="list-style-type: none"> RADIO NAVIGATION , VOR , INTERCEPTIONS 	INFLIGHT VOR SELECTION—IDENTIFICATION—USE
<ul style="list-style-type: none"> EMPHASIS ON VIZUALISATION 	VOR POSITIONING
QRH:	VOR INBOUND INTERCEPTIONS (MINIMUM 3 EXERCISES)
<ul style="list-style-type: none"> NON-PRECISION APPROACH 	VOR TRACKING
	STATION PASSAGE—CONE OF CONFUSION
	VOR OUTBOUND INTERCEPTIONS (MINIMUM 3 EXERCISES)
	INBOUND COURSE CHANGES
	OUTBOUND COURSE CHANGES
	WIND CORRECTIONS DURING VOR TRACKING & INTERCEPTION
	EBCI VOR RWY 25 APPROACH (DEMO BY INSTRUCTOR)
	<ul style="list-style-type: none"> QUICK RADIO SETUP
	<ul style="list-style-type: none"> INCLUDING C/L AND CALLOUTS
	<ul style="list-style-type: none"> NO PREPARATION, NO BRIEFING
	LANDING
COMPLETION STANDARDS	ATC CLEARANCE
<ul style="list-style-type: none"> Demonstrate a continued understanding and competence in full panel instrument attitude control, even with additional workload and exercises. Trainee displays basic understanding and knowledge in use of VOR and impact of wind on interceptions and tracking. Trainee displays good positional awareness using VOR. Altitude control: ± 100ft. Heading control: ± 5°. Airspeed control: -5/+10kts. Tracking: within 1/2 deflection once established. Interceptions: no recurrent errors in calculations or execution. 	AFTER TAKEOFF, HDG 180, CLIMB 4000FT, FREQ 133.12, TPD 1237
	ATIS & WEATHER
	EBCI RWY 25 20009KT 8000 OVC008 18/15 Q1000

FTD 9—M9	RADIO NAVIGATION FLYING				
SIMULATED AIRCRAFT TYPE	DA42	MISSION TIME	1.5	SPLIT PLANNED	1.5 FTD
LESSON OBJECTIVE	Further training on the use of the ADF-instrument (NDB). Emphasis on interceptions, tracking, course changes and impact of the wind. Non-precision approach training.				

HOMEWORK / BRIEFING TOPICS	AIR EXERCISES
IFR MANUAL :	NORMAL OR BLIND TAKEOFF
<ul style="list-style-type: none"> • RADIO NAVIGATION , ADF , GENERAL 	CLIMBOUT
<ul style="list-style-type: none"> • RADIO NAVIGATION , ADF , INTERCEPTIONS 	INFLIGHT ADF SELECTION—IDENTIFICATION—USE
<ul style="list-style-type: none"> • EMPHASIS ON VISUALISATION 	NDB POSITIONING
QRH:	NDB INBOUND INTERCEPTIONS (MINIMUM 3 EXERCISES)
<ul style="list-style-type: none"> • NON-PRECISION APPROACH 	NDB TRACKING
	APPROACHING STATION + STATION PASSAGE
	NDB OUTBOUND INTERCEPTIONS (MINIMUM 3 EXERCISES)
	INBOUND COURSE CHANGES
	OUTBOUND COURSE CHANGES
	WIND CORRECTIONS DURING VOR TRACKING & INTERCEPTION
	EBAW 2NDB RWY 29 APPROACH (DEMO BY INSTRUCTOR)
COMPLETION STANDARDS <ul style="list-style-type: none"> • Demonstrate a continued understanding and competence in full panel instrument attitude control, even with additional workload and exercises. • Trainee displays basic understanding and knowledge in use of NDB and impact of wind on interceptions and tracking. • Trainee displays good positional awareness using NDB. • Altitude control: ± 100ft. • Heading control: ± 5°. • Airspeed control: -5/+10kts. • Tracking: within 10° deflection once established. • Interceptions: no recurrent errors in calculations or execution. 	<ul style="list-style-type: none"> • QUICK RADIO SETUP
	<ul style="list-style-type: none"> • INCLUDING C/L AND CALLOUTS
	<ul style="list-style-type: none"> • NO PREPARATION, NO BRIEFING
	LANDING
	ATC CLEARANCE
	AFTER TAKEOFF, LT INTC QDR 240 WW NDB, CLIMB 4000FT, FREQ 126.9, TPD 1222
	ATIS & WEATHER
	EBAW RWY 29 35007KT 6000 OVC003 15/10 Q1015

FTD 11—M11		ADVANCED INSTRUMENT FLYING			
SIMULATED AIRCRAFT TYPE	DA42	MISSION TIME	1.5	SPLIT PLANNED	1.5 FTD
LESSON OBJECTIVE	Introduce 8 figures, base turns, procedure turns. Demo of DME arc. Exercise ILS approach including full approach preparation and approach briefing. Emphasis remains on control and performance attitude flying concept.				

HOMEWORK / BRIEFING TOPICS	AIR EXERCISES
IFR MANUAL:	NORMAL OR BLIND TAKEOFF
• BASE TURN	CLIMBOUT
• PROCEDURE TURNS	ONC NDB & GSY VOR
8 FIGURE (3 MINUTES TIMING)	• 8 FIGURES VOR—3 MINUTES TIMING
DME ARCS	• 8 FIGURES NDB—3 MINUTES TIMING
APPROACH PREPARATION & APPROACH BRIEFING	BASE TURNS—ONC NDB & GSY VOR
REVIEW GO AROUND	PROCEDURE TURNS—ONC NDB & GSY VOR
	• 45/180
	• 80/260
	DME ARC—GSY VOR (DEMO BY INSTRUCTOR)
	EBCI ILS 25 APPROACH
	• INCLUDING APPROACH PREPARATION & BRIEFING
	• INCLUDING C/L AND CALLOUTS
	GO AROUND
	EBCI ILS 25 APPROACH (TIME PERMITTING)
	LANDING (TIME PERMITTING)

COMPLETION STANDARDS
<ul style="list-style-type: none"> • Demonstrate a thorough understanding of and competence in full panel instrument attitude control. • Trainee displays smoothness of input control. • Perform smooth and correct execution of procedure turns, base turns and 8 figures. • Demonstrate understanding of impact of the wind on turns and maneuvers. • Demonstrate ability to fly ILS approach within 1 dot glideslope and localizer deviation. • Ability to perform a structured approach briefing. • Altitude control: $\pm 100\text{ft}$. • Heading control: $\pm 5^\circ$. • Airspeed control: $-5/+10\text{kts}$. • Tracking: within 5° or half deflection.

ATC CLEARANCE
AFTER TAKEOFF, SA 4DME GSY VOR, LT HDG 180, INTC R220 OUTB GSY VOR, CLIMB 4000FT, FREQ 133.12, TPD 1555

ATIS & WEATHER
EBCI RWY 25 24004KT 7000 OVC005 21/18 Q1008

FTD 13—M13	ADVANCED INSTRUMENT FLYING				
SIMULATED AIRCRAFT TYPE	DA42	MISSION TIME	1.5	SPLIT PLANNED	1.5 FTD
LESSON OBJECTIVE	Introduce VOR holdings. Non-precision approach training including approach preparation and briefing. Emphasis remains on control and performance attitude flying concept.				

HOMEWORK / BRIEFING TOPICS
IFR MANUAL:
<ul style="list-style-type: none"> • RADIO NAVIGATION, HOLDINGS • IMPACT OF WIND • APPLYING WIND CORRECTIONS

AIR EXERCISES
NORMAL OR BLIND TAKEOFF
CLIMBOUT
VOR HOLDING EXERCISES
EBLG VOR RWY 23L APPROACH
<ul style="list-style-type: none"> • INCLUDING APPROACH PREPARATION & BRIEFING • INCLUDING C/L AND CALLOUTS
GO AROUND OR LANDING
EBLG VOR RWY 23L APPROACH (TIME PERMITTING)
LANDING (TIME PERMITTING)

COMPLETION STANDARDS
<ul style="list-style-type: none"> • Demonstrate a thorough understanding of and competence in full panel instrument attitude control. • Trainee displays smoothness of input control. • Display basic understanding of VOR holdings and holding entries. • Ability to perform a structured approach briefing. • Altitude control: ± 100ft. • Heading control: ± 5°. • Airspeed control: -5/+10kts. • Tracking: within 5° or half deflection.

ATC CLEARANCE
AFTER TAKEOFF, <u>SID BY INSTRUCTOR</u> , CLIMB 4000FT, FREQ 125.0, TPD 1222

ATIS & WEATHER
EBLG RWY 23L CALM 6000 OVC011 10/07 Q1018

FTD 14—M14	ADVANCED INSTRUMENT FLYING				
SIMULATED AIRCRAFT TYPE	DA42	MISSION TIME	1.5	SPLIT PLANNED	1.5 FTD
LESSON OBJECTIVE	Further VOR holding and non-precision approach training. Emphasis remains on control and performance attitude flying concept.				

HOMEWORK / BRIEFING TOPICS
IFR MANUAL:
• RADIO NAVIGATION, HOLDINGS
• IMPACT OF WIND
• APPLYING WIND CORRECTIONS

COMPLETION STANDARDS
<ul style="list-style-type: none"> • Demonstrate a thorough understanding of and competence in full panel instrument attitude control. • Trainee displays smoothness of input control. • Display basic understanding of VOR holdings and holding entries. • Understand impact of the wind on execution of holdings and holding entries and demonstrate ability to apply correct wind corrections. • Ability to perform a structured approach briefing. • Altitude control: ± 100ft. • Heading control: ± 5°. • Airspeed control: -5/+10kts. • Tracking: within 5° or half deflection.

AIR EXERCISES
TAKEOFF
CLIMBOUT
VOR HOLDING EXERCISES
EBLG VOR RWY 23L APPROACH
• INCLUDING APPROACH PREPARATION & BRIEFING
• INCLUDING C/L AND CALLOUTS
GO AROUND
EBLG VOR RWY 23L APPROACH
LANDING

ATC CLEARANCE
AFTER TAKEOFF, <u>SID BY INSTRUCTOR</u> , CLIMB 4000FT, FREQ 125.0, TPD 1423

ATIS & WEATHER
EBLG RWY 23L 20008KT 8000 OVC011 08/05 Q1021

FTD BELGIAN AIRPORTS

FTD 16—M16		ADVANCED INSTRUMENT FLYING			
SIMULATED AIRCRAFT TYPE	DA42	MISSION TIME	1.5	SPLIT PLANNED	1.5 FTD
LESSON OBJECTIVE	Further NDB holding and non-precision approach training. Introduce flying on standby instruments and touch-and-go landing technique. Emphasis remains on control and performance attitude flying concept.				

HOMEWORK / BRIEFING TOPICS	AIR EXERCISES
NDB HOLDINGS:	TAKEOFF
• RADIO NAVIGATION, HOLDINGS	CLIMBOUT
• IMPACT OF WIND	NDB HOLDING
• APPLYING WIND CORRECTIONS	FLYING ON STANDBY INSTRUMENTS (FAIL PFD)
TOUCH-AND-GO LANDING	EBOS 2 NDB RWY 26 APPROACH
FLYING ON STANDBY INSTRUMENTS	• INCLUDING APPROACH PREPARATION & BRIEFING
	• INCLUDING C/L AND CALLOUTS
	• FULL PROCEDURE OR RADAR VECTORS TO FINAL
	TOUCH-AND-GO LANDING
	EBOS 2 NDB RWY 26 APPROACH
	LANDING

COMPLETION STANDARDS
<ul style="list-style-type: none"> • Demonstrate a thorough understanding of and competence in full panel instrument attitude control. • Trainee displays smoothness of input control. • Display basic understanding of NDB holdings and holding entries. • Understand impact of the wind on execution of holdings and holding entries and demonstrate ability to apply correct wind corrections. • Ability to perform a structured approach briefing. • Altitude control: $\pm 100\text{ft}$. • Heading control: $\pm 5^\circ$. • Airspeed control: $-5/+10\text{kts}$. • Tracking: within 5° or half deflection.

ATC CLEARANCE
AFTER TAKEOFF, <u>SID BY INSTRUCTOR</u> , CLIMB 4000FT, FREQ 120.6, TPD 1255

ATIS & WEATHER
EBOS RWY 26 32008KT 6000 OVC011 11/09 Q999

FTD 17—M17		ADVANCED INSTRUMENT FLYING			
SIMULATED AIRCRAFT TYPE	DA42	MISSION TIME	1.5	SPLIT PLANNED	1.5 FTD
LESSON OBJECTIVE	Exercise precision and non-precision approaches.				

HOMEWORK / BRIEFING TOPICS
IFR MANUAL:
• PRECISION APPROACHES
• NON-PRECISION APPROACHES
• TAKEOFF & LANDING MINIMA, APPROACH BAN
• REQUIRED VISIBILITY
• VISUAL SLOT, VDP
QRH:
• PRECISION & NON-PRECISION APPROACH
STUDY OF APPROACHES USED DURING MISSION

COMPLETION STANDARDS
<ul style="list-style-type: none"> • Demonstrate a thorough understanding of and competence in full panel instrument attitude control. • Trainee displays smoothness of input control. • Ability to perform a structured approach briefing. • Display increased proficiency and skill in flying precision and non-precision approaches. • Altitude control: ± 100ft. • Heading control: ± 5°. • Airspeed control: -5/+10kts. • Tracking: within 5° or half deflection. • ILS approach: within 1 dot glideslope and localizer deviation.

AIR EXERCISES
TAKEOFF
CLIMBOUT
EBCI ILS 25 APPROACH
• INCLUDING APPROACH PREPARATION & BRIEFING
• INCLUDING C/L AND CALLOUTS
• FULL PROCEDURE OR RADAR VECTORS TO FINAL
GO AROUND
EBCI ILS 25 APPROACH
TOUCH-AND-GO LANDING
CLIMBOUT
EBCI VOR RWY 25 APPROACH
• INCLUDING APPROACH PREPARATION & BRIEFING
• INCLUDING C/L AND CALLOUTS
• FULL PROCEDURE OR RADAR VECTORS TO FINAL
LANDING

ATC CLEARANCE
AFTER TAKEOFF, <u>SID BY INSTRUCTOR</u> , CLIMB 4000FT, FREQ 133.12, TPD 4255

ATIS & WEATHER
EBCI RWY 25 30010KT 6000 OVC008 20/17 Q997

FTD 18—M18		ADVANCED INSTRUMENT FLYING			
SIMULATED AIRCRAFT TYPE	DA42	MISSION TIME	1.5	SPLIT PLANNED	1.5 FTD
LESSON OBJECTIVE	Exercise precision and non-precision approaches. Introduce circling approach.				

HOMEWORK / BRIEFING TOPICS	AIR EXERCISES
CIRCLING APPROACH:	NORMAL PROCEDURES
<ul style="list-style-type: none"> PROCEDURE 	<ul style="list-style-type: none"> FROM BRIEFING TO AFTER LANDING
<ul style="list-style-type: none"> PATTERN 	TAKEOFF
<ul style="list-style-type: none"> MISSED APPROACH 	CLIMBOUT
REVIEW TOPICS OF PREVIOUS MISSIONS AS REQUIRED	EBOS 2 NDB RWY 26 APPROACH
	<ul style="list-style-type: none"> INCLUDING APPROACH PREPARATION & BRIEFING INCLUDING C/L AND CALLOUTS FULL PROCEDURE OR RADAR VECTORS TO FINAL
	GO AROUND
	EBOS 2 NDB RWY 26 APPROACH
	TOUCH-AND-GO LANDING
	EBOS ILS 26 APPROACH
	<ul style="list-style-type: none"> INCLUDING APPROACH PREPARATION & BRIEFING INCLUDING C/L AND CALLOUTS FULL PROCEDURE OR RADAR VECTORS TO FINAL
	CIRCLING
	LANDING
COMPLETION STANDARDS	
<ul style="list-style-type: none"> Demonstrate a thorough understanding of and competence in full panel instrument attitude control. Trainee displays smoothness of input control. Ability to perform a structured approach briefing. Display increased proficiency and skill in flying precision and non-precision approaches. Altitude control: $\pm 100\text{ft}$. Heading control: $\pm 5^\circ$. Airspeed control: $-5/+10\text{kts}$. Tracking: within 5° or half deflection. ILS approach: within 1 dot glideslope and localizer deviation. 	
ATC CLEARANCE	
AFTER TAKEOFF, <u>SID BY INSTRUCTOR</u> , CLIMB 4000FT, FREQ 120.6, TPD 3322	
ATIS & WEATHER	
EBOS RWY 26 24015KT 9999 OVC010 05/M01 Q1001	

FTD 19—M19		ADVANCED INSTRUMENT FLYING			
SIMULATED AIRCRAFT TYPE	DA42	MISSION TIME	1.5	SPLIT PLANNED	1.5 FTD
LESSON OBJECTIVE	Exercise precision, non-precision and circling approaches.				

HOMEWORK / BRIEFING TOPICS	AIR EXERCISES
LOCALIZER BACKCOURSE APPROACH	NORMAL PROCEDURES
REVIEW DME ARC PROCEDURE	<ul style="list-style-type: none"> FROM BRIEFING TO AFTER LANDING
REVIEW TOPICS OF PREVIOUS MISSIONS AS REQUIRED	TAKEOFF
	CLIMBOUT
	EBAW VOR RWY 11 APPROACH
	<ul style="list-style-type: none"> INCLUDING APPROACH PREPARATION & BRIEFING INCLUDING C/L AND CALLOUTS
	CIRLING FOLLOWED BY GO AROUND
	EBAW 2 NDB RWY 29 APPROACH
	<ul style="list-style-type: none"> INCLUDING APPROACH PREPARATION & BRIEFING INCLUDING C/L AND CALLOUTS
	CIRLING FOLLOWED BY GO AROUND
	EBAW LOC BC 11 APPROACH INCLUDING DME ARC
	<ul style="list-style-type: none"> INCLUDING APPROACH PREPARATION & BRIEFING INCLUDING C/L AND CALLOUTS FULL PROCEDURE OR RADAR VECTORS TO FINAL
<i>Note: EBAW LOC BC 11 is a non-published approach.</i>	LANDING

COMPLETION STANDARDS
<ul style="list-style-type: none"> Demonstrate a thorough understanding of and competence in full panel instrument attitude control. Trainee displays smoothness of input control. Ability to perform a structured approach briefing. Display increased proficiency and skill in flying precision and non-precision approaches. Altitude control: ± 100ft. Heading control: $\pm 5^\circ$. Airspeed control: $-5/+10$kts. Tracking: within 5° or half deflection. ILS approach: within 1 dot glideslope and localizer deviation.

ATC CLEARANCE
AFTER TAKEOFF, <u>SID BY INSTRUCTOR</u> , CLIMB 3000FT, FREQ 126.9, TPD 3322

ATIS & WEATHER
EBAW RWY 11 07013KT 9999 OVC018 04/M04 Q1029

FTD 20—M20		FTD PROGRESS CHECK			
SIMULATED AIRCRAFT TYPE	DA42	MISSION TIME	1.5	SPLIT PLANNED	1.5 FTD
LESSON OBJECTIVE	The instructor will evaluate the trainee's performance in flight on a ME airplane in the FTD, as well as safe effective operation of the aircraft during all phases of flight.				

HOMESCHOOL / BRIEFING TOPICS	AIR EXERCISES
REVIEW TOPICS OF PREVIOUS MISSIONS AS REQUIRED	NORMAL PROCEDURES
	<ul style="list-style-type: none"> FROM BRIEFING TO AFTER LANDING
	TAKEOFF
	CLIMBOUT
	VOR INTERCEPTION EXERCISES
	HOLDING
	EBOS ILS 26 APPROACH
	<ul style="list-style-type: none"> INCLUDING APPROACH PREPARATION & BRIEFING INCLUDING C/L AND CALLOUTS
	GO AROUND
	NDB INTERCEPTION EXERCISES
	HOLDING
	EBOS 2 NDB RWY 26 APPROACH
	<ul style="list-style-type: none"> INCLUDING APPROACH PREPARATION & BRIEFING INCLUDING C/L AND CALLOUTS
	CIRCLING
	LANDING
COMPLETION STANDARDS	ATC CLEARANCE
<ul style="list-style-type: none"> Demonstrate a thorough understanding of and competence in full panel instrument attitude control. Trainee displays smoothness of input control. Ability to perform a structured approach briefing. Display increased proficiency and skill in flying precision, non-precision and circling approaches. Altitude control: ± 100ft. Heading control: $\pm 5^\circ$. Airspeed control: $-5/+10$kts. Tracking: within 5° or half deflection. ILS approach: within 1 dot glideslope and localizer deviation. 	AFTER TAKEOFF, <u>SID BY EXAMINER</u> , CLIMB 4000FT, FREQ 120.6, TPD 3322
	ATIS & WEATHER
	EBOS RWY 29 23015KT 7000 OVC016 18/12 Q1028

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Full Throttle Flight Training

