



# VFR STANDARDIZATION SYLLABUS USA

**SFA STAFF TRAINING**

**REV 1.0**

01 July 2008

Name Instructor in Training

INTENTIONALLY LEFT BLANK

## TABLE OF CONTENT

TABLE OF CONTENT .....	iii
RECORD OF REVISIONS.....	v
LIST OF EFFECTIVE PAGES .....	vii
GENERAL .....	1
SYLLABUS.....	11
APPENDIX 1.....	33
APPENDIX 2.....	37
APPENDIX 3.....	45

INTENTIONALLY LEFT BLANK



INTENTIONALLY LEFT BLANK

Page	Version—Date	Page	Version—Date
<b>NO PAGE NUMBER</b>	<b>TITLE PAGE</b>	<b>24</b>	V1.0—01JULY08
BLANK		<b>25</b>	V1.0—01JULY08
iii	V1.0—01JULY08	<b>26</b>	V1.0—01JULY08
BLANK		<b>27</b>	V1.0—01JULY08
v	V1.0—01JULY08	<b>28</b>	V1.0—01JULY08
BLANK		<b>29</b>	V1.0—01JULY08
1	V1.0—01JULY08	<b>30</b>	V1.0—01JULY08
BLANK		<b>31</b>	V1.0—01JULY08
3	V1.0—01JULY08	BLANK	
4	V1.0—01JULY08	<b>33</b>	V1.0—01JULY08
5	V1.0—01JULY08	BLANK	
6	V1.0—01JULY08	<b>35</b>	V1.0—01JULY08
7	V1.0—01JULY08	<b>36</b>	V1.0—01JULY08
8	V1.0—01JULY08	<b>37</b>	V1.0—01JULY08
9	V1.0—01JULY08	<b>38</b>	V1.0—01JULY08
BLANK		<b>39</b>	V1.0—01JULY08
11	V1.0—01JULY08	<b>40</b>	V1.0—01JULY08
12	V1.0—01JULY08	<b>41</b>	V1.0—01JULY08
13	V1.0—01JULY08	<b>42</b>	V1.0—01JULY08
14	V1.0—01JULY08	<b>43</b>	V1.0—01JULY08
15	V1.0—01JULY08	<b>44</b>	V1.0—01JULY08
16	V1.0—01JULY08	<b>45</b>	V1.0—01JULY08
17	V1.0—01JULY08	<b>46</b>	V1.0—01JULY08
18	V1.0—01JULY08	<b>47</b>	V1.0—01JULY08
19	V1.0—01JULY08	<b>48</b>	V1.0—01JULY08
20	V1.0—01JULY08	<b>49</b>	V1.0—01JULY08
21	V1.0—01JULY08	BLANK	
22	V1.0—01JULY08	BLANK	
23	V1.0—01JULY08	<b>NO PAGE NUMBER</b>	<b>BACK COVER</b>

INTENTIONALLY LEFT BLANK



# G E N E R A L

TABLE OF  
CONTENT

GENERAL

SYLLABUS

APPENDIX 1

APPENDIX 2

APPENDIX 3

INTENTIONALLY LEFT BLANK

## GENERAL

### 1. AIM OF THE COURSE

The aim of the VFR standardisation course is to train instructors not holding a JAR licence to the level of proficiency necessary to enable them to operate as flight instructor on single-engine aeroplanes in the SFA flight academy program in the USA.

The aim of the CPL standardisation course is to train instructors to give flight instruction on a complex single-engine aeroplane for a JAR CPL license.

### 2. STRUCTURE OF THE COURSE

The course comprises of 30 hours of ground instruction and 15 hours of dual VFR instruction. The instructor/student ratio is 1/2.

All instruction will be given by a flight instructor holding a JAR-FCL license and rating in accordance with JAR-FCL 1.330(f). Mission D05 (night Flight) will be given by a flight instructor holding a JAR-FCL license and rating in accordance with JAR-FCL 1.330 ( c ).

The skill test for a FI(A) rating will be taken by an examiner notified by the Authority for this purpose.

#### **2.1.THEORETICAL TRAINING**

The lists of the subjects of the theoretical training is provided in chapter 8. Partly this training is used as a refresher for the candidates, partly the subjects are additional to the knowledge the candidates already have.

##### **2.1.1.BRIEFINGS**

For this course the information provided in the briefings will be additional to the already existing knowledge of the candidate. It is vital for the optimal use of valuable training time to be prepared as much as possible and therefore everything that can be expected has to be known and imagined.

Giving classroom briefings to groups of student IP's has the advantage of standardization.

A qualified flight instructor will conduct all classroom briefings. During classroom briefing the use of overhead projector and sheets or beamer with for instance power point presentation, and an aircraft model are encouraged. A total time of 22:00 hours is required as specified under §8.2.

## 2.1.2.DEFINITIONS

### Classroom briefing

This is a detailed explanation and discussion conducted by an instructor and covering the major considerations of an exercise.

### Pre-flight briefing

The briefing includes an explanation of exactly what air exercises are to be taught by the instructor and practiced by the student during the flight. It should include how the flight will be conducted with regard to who is to fly the airplane and with what airmanship; weather and flight safety aspects currently apply.

The basic components of the briefing will be:

1. The aim
2. Airmanship (weather, flight safety etc)
3. The air exercise(s) what, why, how and by whom

### Debriefing

Time devoted by the instructor immediately after a specific flight lesson to consolidate the major points made during the flight clarifying any queries the student instructor might have and indicating progress made by the student, using fault analysis or praise as necessary and finally to indicate the nature of the next lesson.

Special attention shall be given to pre- and de-briefing in relation to performance of the student, efficient use of instruction time and introduction to SHAPE.

During these briefings there will be emphasize on the importance of basic attitude flying and scanning.

## 2.2 VFR / CPL FLIGHT TRAINING

### Air exercises

The air exercises are similar to those of a PPL(A) but with additional items designed to cover the needs of the flight instructor.

Planning of flight lessons.

The preparation of lesson plans is an essential pre-requisite of good instruction and the student instructor is to be given supervised practice in the planning and practical application of flight lesson plans.

General considerations.

The student instructor should complete flight training to practice the principles of basic instruction at the JAR CPL(A) level.

15:00 Hours will be flown within 9 missions. For each flight 0:30 hour pre flight briefing time and 0:30 hours debriefing time must be taken into account.

During all missions the instructor is PIC. The student instructor acts as PIC.

The basic principle of the training is based on the following considerations:

1. The student instructor should be able to fly the aircraft in such a manner, that it will be a perfect example for the student.
2. The student instructor should be able to pater all the applicable exercises.
3. The student instructor should be able to coach all the applicable exercises.

**3. ENTRY REQUIREMENTS**

- License: The student instructor must be in possession of a valid FAA CPL license and qualified to instruct on single engine (land) airplanes. When this license is a non JAA license, the student instructor must also obtain a JAR FI and IRI endorsement.
- Experience: At least 500 hours of flight time, including at least 200 hours of flight instruction and 200 hours of instrument time. 50 hours of this instrument time may be done in a synthetic training device.
- Others: Age at least 18 years.  
No aircraft accident or aviation violation convictions.  
To have the right to live and work in the US.  
Non-native English speaking candidates will perform an English proficiency test (can be waived by the HoT).
- Medical fitness: Student instructor must hold a valid ICAO medical class 1 or 2 license.
- Pre entry test: Aircraft Manuals and OM (open book, minimum score 80%)  
Pre entry flight test Appendix 3 Jar-FCL 1.240

## **4. TEACHING METHODS AND MATERIALS**

### Manuals to be used:

- Student syllabus VFR CPL USA
- Applicable Operating Manual (OM)
- Applicable Aircraft Manuals

Before and after each session the student will be briefed and debriefed.

The applicable homework assignment for the VFR syllabus shall be used as a guideline for the preflight briefing. For CPL the applicable lesson content shall be used as a guideline for the preflight briefing.

During the whole training course the student instructor occupies the RH seat.

It is the responsibility of both the instructor and the student instructor to ensure that all items of a particular training session have been demonstrated and practiced. It is therefore necessary to comply with the sequence and content of the syllabus for maximum results, depending on the adaptability of the student instructor. All exercises have to be completed before the module check can be taken.

## **5. SYMBOLS**

0 = item not performed, use a √ when it is completed.

## **6. SUPERVISION**

The HT will supervise the training program.

## **7. TRAINING EVALUATION**

The module check is an intermediate check and must meet the JAR FCL PPL (A ) minimums, a maximum of two exercises may be graded as S- and no exercise may be graded BS.

The completion of the training course shall be determined by a CPL check with the flight examiner (FE). The contents and required standard of this check are equal to the JAR FCL CPL (A) Skill Test. If an instructor fails the module, the Flight Examiner (FE) and HT will decide on the continuation of the training.

The module check consists of:

1. Oral briefing of a given subject
2. General knowledge questions
3. Demonstrate the subject as briefed under (1) in an aircraft whereby the Flight Examiner (FE) acts as a student
4. Other air exercises as discussed in preflight briefing and specified in the syllabus
5. Debriefing by the applicant
6. Debriefing of the applicant's performance during the exam

## 8. CLASSROOM BRIEFINGS: GROUND COURSE

### 8.1.PART 1 BASIC GROUND COURSE

All new flight instructors will receive one day ground course of **8 hours** including:

- 1.5 hours introduction to the school (organisation, maintenance, administration, airplanes,etc.);
- 2.0 hours familiarization with the JAR-FCL;
- 1.5 hours training methods of the school as per training manual part I;
- 1.0 hours familiarization with the local environment (ATC, Class B of Phoenix, other airports,...);
- 2.0 hours familiarization with aeroplane.

### 8.2.PART 2 ADVANCED GROUND COURSE

TOPIC	DURATION
Introduction:	1:00 hr.
OM power point presentation	0:30 hr.
Flight preparation	1:00 hr.
Flight release form (Mass & Balance)	1:00 hr.
Basic aircraft handling	1:30 hr.
Level flight	1:00 hr.
Level changes	1:00 hr.
Turns	1.00 hr.
Unusual attitudes	0.30 hr
Stalls	1:30 hr.
Circuit	2:00 hr.
Emergency handing	1:00 hr.
Practice forced landing	1:00 hr.
Precautionary landing	1:00 hr.
VFR Navigation	5:00 hr.
JAR CPL Skill Test contents and standards	1:00 hr.
Actions after flight + intro to SHAPE	1:00 hr.
<b>Total time required</b>	<b>22:00 hours</b>



Refer to Annex 1 for the schedule of the ground course.

## 9. FLIGHT TRAINING FOOTPRINT

DAY 1	DAY 2	DAY 3	DAY 4	DAY 5
Mission 1 <ul style="list-style-type: none"> <li>General Air work</li> </ul>	Mission 2 <ul style="list-style-type: none"> <li>General Airwork</li> </ul>	Mission 3 <ul style="list-style-type: none"> <li>PFL</li> <li>Circuits</li> </ul>	Mission 4 <ul style="list-style-type: none"> <li>PFL</li> <li>Stalls</li> <li>Circuits</li> </ul>	Mission 5 <ul style="list-style-type: none"> <li>General Airwork</li> <li>Night Flight</li> </ul>
M1 1:30	M2 1:30	M3 1:30	M4 1:30	M5 1:30
Actual 1:30	Actual 3:00	Actual 4:30	Actual 6:00	Actual 7:30
DAY 6	DAY 7	DAY 8	DAY 9	DAY 10
Mission 6 <ul style="list-style-type: none"> <li>Navigation</li> <li>Emergencies</li> <li>Circuits</li> </ul>	Mission 7 <ul style="list-style-type: none"> <li>Navigation</li> <li>Emergencies</li> <li>Circuits</li> </ul>	Mission 8 <ul style="list-style-type: none"> <li>Navigation</li> <li>Diversion</li> </ul>	Mission 9 <ul style="list-style-type: none"> <li>Review</li> </ul>	Module Check
M6 2:00	M7 2:00	M8 2:00	M9 1:30	M10 2:00
Actual 9:30	Actual 11:30	Actual 13:30	Actual 15:00	Actual 17:00

## 10. APPENDICES

- Appendix 1: Time table
- Appendix 2: Briefing items
- Appendix 3: Completion standards at the end of the course

INTENTIONALLY LEFT BLANK

# S Y L L A B U S

TABLE OF  
CONTENT

GENERAL

**SYLLABUS**

APPENDIX 1

APPENDIX 2

APPENDIX 3

MISSION 1					
DATE		PLANNED		ACTUAL	
AIRCRAFT TYPE		HOURS		HOURS	
INSTRUCTOR		FLIGHT TIME	01:30	FLIGHT TIME	
STUDENT INSTR		TOTAL	01:30	TOTAL	
HOMEWORK ASSIGNMENT			EXERCISES		√-0
<b>AIRCRAFT MANUALS</b>			<b>LOCAL FLIGHT</b>		
INTRODUCTION					
CHECKLISTS			<b>USE OF CHECKLIST</b>		
EXPANDED NORMAL CHECKLIST			<b>STARTUP &amp; TAXI PROCEDURES</b>		
OPERATING POLICY			<b>NORMAL TAKE OFF</b>		
NORMAL SYSTEM OPERATION			<b>CLIMB</b>		
EMERGENCY/ABNORMAL SYSTEM OPERATION			<ul style="list-style-type: none"> <li>• ATTITUDE REFERENCE</li> </ul>		
TRIMMING			<ul style="list-style-type: none"> <li>• AFTER TAKE OFF CHECKLIST</li> </ul>		
SPEEDING PITCH POWER TABLE			<ul style="list-style-type: none"> <li>• CRUISE CLIMB</li> </ul>		
GROUND OPERATIONS			<ul style="list-style-type: none"> <li>- USE OF TRIM</li> </ul>		
TAKE OFF PROCEDURES (PAGE 1&2)			<ul style="list-style-type: none"> <li>- POWER/ATTITUDE COORDINATION</li> </ul>		
AFTER TAKE OFF			<ul style="list-style-type: none"> <li>- COORDINATED FLIGHT</li> </ul>		
LEVEL OFF			<ul style="list-style-type: none"> <li>- CLEARING TURNS</li> </ul>		
TURNS			<b>LEVEL FLIGHT</b>		
SLEEPS TURNS			<ul style="list-style-type: none"> <li>• SPEED CHANGES</li> </ul>		
APPROACH			<ul style="list-style-type: none"> <li>- USE OF TRIM</li> </ul>		
TRAFFIC PATTERN			<ul style="list-style-type: none"> <li>- POWER/ ATTITUDE COORDINATION</li> </ul>		
GLIDE SLOPE			<ul style="list-style-type: none"> <li>- COORDINATED FLIGHT</li> </ul>		
NORMAL CIRCUIT			<b>TRANSITION</b>		
LANDINGS GENERAL			<ul style="list-style-type: none"> <li>• LEVEL FLIGHT TO CLIMB</li> </ul>		
			<ul style="list-style-type: none"> <li>• CLIMB TO LEVEL FLIGHT</li> </ul>		
			<ul style="list-style-type: none"> <li>• LEVEL FLIGHT TO DESCENT</li> </ul>		
			<ul style="list-style-type: none"> <li>• DESCENT TO LEVEL FLIGHT</li> </ul>		
			<ul style="list-style-type: none"> <li>- POWER/ATTITUDE COORDINATION</li> </ul>		
			<ul style="list-style-type: none"> <li>- COORDINATED FLIGHT</li> </ul>		

HOMEWORK ASSIGNMENT	EXERCISES	√-0
OM	<b>TURNS</b>	
	• NORMAL TURNS	
GENERAL	• STEEP TURNS (45°)	
RELATION TO OTHER SFA OR KLS MANUALS	– POWER/ATTITUDE COORDINATION	
INDEXING SYSTEM	– COORDINATED FLIGHT	
SYMBOLS	<b>CIRCUIT</b>	
UPDATING SYSTEM AND AMENDMENTS	• ENTRY PREPARATION	
ABBREVIATIONS	• CIRCUIT JOINING	
COMPANY NOTAMS	• RT CALLS	
	• 3° GLIDE PATH	
	• NORMAL LANDING	
	<b>ACTIONS AFTER FLIGHT</b>	

REMARKS

EXAMINER	STUDENT INSTRUCTOR
NAME	NAME
SIGNATURE	SIGNATURE

MISSION 2					
DATE		PLANNED		ACTUAL	
AIRCRAFT TYPE		HOURS	01:30	HOURS	
INSTRUCTOR		FLIGHT TIME	01:30	FLIGHT TIME	
STUDENT INSTR		TOTAL	03:00	TOTAL	

  

HOMECOM ASSIGNMENT	EXERCISES	√-0
AIRCRAFT MANUALS	LOCAL FLIGHT	
STALLS		
- CLEAN	START-UP & TAXI PROCEDURES	
- APPROACH	NORMAL TAKE OFF	
- LANDING	LEVEL FLIGHT	
SLOW FLIGHT	• SPEED CHANGES	
DESCENT	• SLOW FLIGHT	
	TRANSITIONS	
OM	• LEVEL FLIGHT TO CLIMB	
ORGANIZATION	• CLIMB TO LEVEL FLIGHT	
RESPONSIBILITIES OF THE PIC	• LEVEL FLIGHT TO DESCENT	
RESPONSIBILITIES OF THE STUDENT PILOT	- POWERED DESCENT	
PROCEDURE EXTRA TRAINING	- GLIDE	
DISCIPLINE AND DISCIPLINARY ACTIONS	• DESCENT TO LEVEL FLIGHT	
APPROVAL/AUTHORIZATION OGF FLIGHTS	URNS	
PREPARATION OF FLYING PROGRAM	• NORMAL TURNS	
CREW COMPOSITION	• CLIMBING TURNS	
COMMAND OF THE AIRPLANE	• STEEP TURNS (45°)	
LICENSES	STALLS	
SUCCESSION OF CMND & ORDER OF RANK	• FULL STALL IN CLEAN CONFIGURATION	
CARRIAGE OF PASSENGERS	• APPROACH TO STALL IN CLEAN CONFIGURATION	
DOCUMENTATION	• APPROACH TO STALL IN APPROACH CONFIG.	
AIRPLANE DOCUMENTATION	• APPROACH TO STALL IN LANDING CONFIG.	
RETENTION OF DOCUMENTS	- BRIEFING	
FLIGHT CREW QUALIFICATIONS RECORD	- USE OF CHECKLIST	
REVALIDATION (MED CERTIF & RATINGS)	- POWER/ATTITUDE COORDINATION	
PILOT'S LOGBOOKS	- COORDINATE FLIGHT	

HOMEWORK ASSIGNMENT	EXERCISES	√-0
	<b>CIRCUIT</b>	
	• ENTRY PREPARATIONS	
	• CIRCUIT JOINING	
	- RT CALLS	
	- 3° GLIDE PATH ON FINAL	
	• NORMAL LANDING	
	<b>ACTIONS AFTER FLIGHT</b>	

REMARKS

EXAMINER	STUDENT INSTRUCTOR
NAME	NAME
SIGNATURE	SIGNATURE

TABLE OF CONTENT

GENERAL

SYLLABUS

APPENDIX 1

APPENDIX 2

APPENDIX 3

MISSION 3					
DATE		PLANNED		ACTUAL	
AIRCRAFT TYPE		HOURS	03:00	HOURS	
INSTRUCTOR		FLIGHT TIME	01:30	FLIGHT TIME	
STUDENT INSTR		TOTAL	04:30	TOTAL	

HOMework ASSIGNMENT	EXERCISES	√-0
<b>AIRCRAFT MANUALS</b>	<b>LOCAL FLIGHT</b>	
OBSTACLE TAKE OFF (PAGE 5)		
ENGINE FAILURE DURING TAKE OFF ROLL	<b>OBSTACLE TAKEOFF</b>	
ENGINE FAILURE AFTER TAKE OFF	<b>CLIMB</b>	
ENGINE FAILURE (AT HIGHER ALTITUDE)	• VX	
UNUSUAL ALTITUDES	• NORMAL	
LANDINGS	• CRUISE	
GO AROUND	<b>TURN</b>	
TOUCH AND GO	• NORMAL TURNS	
ADVERSE WEATHER OPERATION	• CLIMBING TURNS	
EMERGENCY EQUIPMENT DESCRIPTION	• STEEP TURNS (45°)	
DITCHING	<b>PRACTICE FORCED LANDING (PFL)</b>	
EMERGENCY LANDING ON TERRAIN	• DETERMINATION OF 1000FT POINT	
IMMEDIATE RETURN	– PLANNING THE 10000FT POINT	
PRECAUTIONARY LANDING	– DOWNWIND DISTANCE	
PROCEDURES AFTER EMERGENCY LANDING	• MEMORY ITEMS	
	• USE OF EMERGENCY CHECKLIST	
<b>OM</b>	– MAYDAY CALL	
FLIGHT TIME LIMITATIONS	<b>FINAL CORRECTIONS</b>	
FLIGHT PLANNING (GENERAL)	– USE OF FLAPS	
SAFETY	– MINIMUM ALTITUDE	
	<b>PRECAUTIONARY LANDING</b>	
	• LANDING AREA	
	• INSPECTION RUN	
	– PAN PAN CALL	
	– USE OF EMERGENCY CHECKLISTS	









MISSION 5					
DATE		PLANNED		ACTUAL	
AIRCRAFT TYPE		HOURS	06:00	HOURS	
INSTRUCTOR		FLIGHT TIME	01:30	FLIGHT TIME	
STUDENT INSTR		TOTAL	07:30	TOTAL	

HOMework ASSIGNMENT	EXERCISES	√-0
<b>AIRCRAFT MANUALS</b>	<b>LOCAL FLIGHT: NIGHT FLIGHT</b>	
REVIEW OF ALL PREVIOUS PRACTICED EXERCISES		
	<b>NORMAL TAKE OFF</b>	
<b>OM</b>	<b>CLIMB</b>	
REVIEW OF ALL PREVIOUS INSTRUCTED OM ITEMS	<ul style="list-style-type: none"> <li>NORMAL</li> <li>CRUISE</li> </ul>	
	<b>URNS</b>	
NIGHT FLIGHT POWERPOINT	<ul style="list-style-type: none"> <li>NORMAL TURNS</li> <li>CLIMBING TURNS</li> <li>STEEP TURNS (45°)</li> </ul>	
	<b>PRECAUTIONARY LANDING</b>	
	<b>STALLS</b>	
	<ul style="list-style-type: none"> <li>APPROACH TO STALL IN CLEAN CONFIGURATION</li> <li>APPROACH TO STALL IN APPROACH CONFIG.</li> <li>APPROACH TO STALL IN LANDING CONFIG.</li> </ul>	
	<b>UNUSUAL ATTITUDES</b>	
	<ul style="list-style-type: none"> <li>NOSE HIGH RECOVERY</li> <li>NOSE LOW RECOVERY</li> </ul>	
	<b>CIRCUIT</b>	
	<ul style="list-style-type: none"> <li>NORMAL</li> <li>PRECISION</li> <li>SHORT FIELD</li> <li>WAVE-OFF</li> <li>ENGINE FAILURE AFTER TAKE OFF</li> <li>PRECAUTIONARY CIRCUIT (LANDING)</li> <li>GLIDE-IN LANDING</li> </ul>	



MISSION 6					
DATE		PLANNED		ACTUAL	
AIRCRAFT TYPE		HOURS	07:30	HOURS	
INSTRUCTOR		FLIGHT TIME	02:00	FLIGHT TIME	
STUDENT INSTR		TOTAL	09:30	TOTAL	
HOMEWORK ASSIGNMENT			EXERCISES		√-0
<b>AIRCRAFT MANUALS</b>			<b>NAVIGATION FLIGHT</b>		
GENERAL					
PRINCIPLES			<b>NORMAL TAKEOFF</b>		
PREPARATION			<b>NAVIGATION</b>		
EXECUTION OF FLIGHT			• LEANING OF MIXTURE		
NAVIGATION AROUND OBSTRUCTION			• LOG KEEPING		
CORRECTION WHEN OFF COURSE			• CORRECTIONS		
LOST PROCEDURES			– HEADING		
DIVERSION TO AN ALTERNATE			– PERFORMANCE		
QUICK CALCULATION			– TIME		
			– TO GET BACK ON TRACK		
<b>OM</b>			<b>FAILURE MANAGEMENT</b>		
PERFORMANCE			• ELECTRICAL SMOKE OR FIRE		
BASIC REQUIREMENTS			• DIVERSION		
FUEL POLICY			<b>CIRCUIT</b>		
MINIMUM SAFE ALTITUDE (VFR PART ONLY)			• PRECAUTIONARY		
DESTINATION LIST			• FLAPLESS		
GENERAL			• GUIDE IN		
STANDARD WEIGHTS			• WAVE OFF		
WEIGHT MINIMA GENERAL			• <b>ENGINE FAILURE AFTER TAKE OFF</b>		
GENERAL VFR OPERATING MINIMA					
DETERMINATION OF WIND COMPONENTS					
VALIDITY OF FORECAST					
CHANGE INDICATORS AND APPLICATION					
WIND LIMITATIONS					
VFR PLANNING MINIMA					
PLANNING MINIMA					













MISSION 9					
DATE		PLANNED		ACTUAL	
AIRCRAFT TYPE		HOURS	13:30	HOURS	
INSTRUCTOR		FLIGHT TIME	01:30	FLIGHT TIME	
STUDENT INSTR		TOTAL	15:00	TOTAL	

HOMework ASSIGNMENT	EXERCISES	√-0
<b>AIRCRAFT MANUALS</b>	<b>GENERAL REVIEW</b>	
PREPARE ESSENTIAL KNOWLEDGE TEST ARCHER, TO BE TAKEN BEFORE THIS FLIGHT		
	<b>TAKE OFF</b>	
	<b>NAVIGATION</b>	
<b>OM</b>	<b>FAILURE MANAGEMENT</b>	
DIFFERENCE SFA-KLS	<ul style="list-style-type: none"> <li>• ANY FAILURE</li> <li>• DIVERSION</li> </ul>	
	<b>PRACTICE FORCED LANDING (PFL)</b>	
	<b>PRECAUTIONARY LANDING</b>	
	<b>URNS</b>	
	<ul style="list-style-type: none"> <li>• NORMAL TURNS</li> <li>• CLIMBING TURNS</li> <li>• STEEP TURNS</li> </ul>	
	<b>SLOW FLIGHT</b>	
	<b>STALLS</b>	
	<ul style="list-style-type: none"> <li>• LANDING STALL FLAPS UP</li> <li>• DEPARTURE STALL</li> <li>• GO-AROUND STALL</li> <li>• APPROACH TO STALL APPROACH CONFIG.</li> </ul>	
	<b>UNUSUAL ATTITUDES</b>	
	<ul style="list-style-type: none"> <li>• NOSE HIGH RECOVERY</li> <li>• NOSE LOW RECOVERY</li> </ul>	
	<b>CIRCUIT</b>	
	<ul style="list-style-type: none"> <li>• FLAPLESS</li> <li>• GLIDE IN</li> <li>• WAVE OFF</li> <li>• PRECISION LANDING</li> <li>• ENGINE FAILURE AFTER TAKE OFF</li> </ul>	



MODULE CHECK					
DATE		PLANNED		ACTUAL	
AIRCRAFT TYPE		HOURS	15:00	HOURS	
EXAMINER		FLIGHT TIME	02:00	FLIGHT TIME	
STUDENT INSTR		TOTAL	17:00	TOTAL	

EXERCISES—SEE NOTE	BS	S-	S	S+	AS	REMARKS
ORAL BRIEFING						
FLIGHT PREPARATION						
WEIGHT AND BALANCE						
ATC FLIGHT PLAN:NAVIGATION PLAN						
DAILY INSPECTION						
COCKPIT HANDLING & START UP						
TAXI						
_____ TAKE OFF						
CLIMB						
MAINTAINING OF HEADING						
MAINTAINING ALTITUDE SPEED						
ORIENTATION/TIME & CORRECTIONS						
DIVERSION TO ALTERNATE DESTINATION						
USE OF NAVIGATION AIDS						
LEVEL FLIGHT WITH SPEED CHANGES						
NORMAL TURNS						
SLEEP TURNS (45°)						
TRANSITION CLIMB/LEVEL FLIGHT						
TRANSITION DESCENT/LEVEL FLIGHT						
STALL IN _____ CONFIGURATION						
PRACTICE FORCED LANDING						
PRECAUTIONARY LANDING						
SIMULATED FAILURES						
UNUSUAL ATTITUDES						
MEMORY ITEMS						
FAILURE MANAGEMENT						
DESCENDING TURNS						
JOINING TRAFFIC PATTERN						
NORMAL TRAFFIC PATTERN						



INTENTIONALLY LEFT BLANK



# A P P E N D I X I

TABLE OF  
CONTENT

GENERAL

SYLLABUS

APPENDIX 1

APPENDIX 2

APPENDIX 3

INTENTIONALLY LEFT BLANK

SCHEDULE VFR CPL TRAINING		
DAY	TOPIC	DURATION
DAY 1	Introduction to the school	01:30
	Familiarization with the JAR-FCL	02:00
	Training methods	01:30
	Familiarization with local environment	01:00
	Familiarization with aeroplane	02:00
Day 2	Introduction	01:00
	Om PowerPoint	01:30
	Flight preparation	01:00
	Flight Release Form	01:00
	Basic aircraft handling	01:00
	Level flight	01:00
	Level changes	01:00
Day 3	Questions/Review	01:00
	Turns	01:00
	Unusual attitudes	00:30
	Stalls	01:30
	Circuits	01:00
	Emergency handling	01:00
	Practise Forced Landing (PFL)	01:00
	Actions after flight	00:30
	Intro to SHAPE	00:30
Day 4	Questions/review	01:00
	M1	01:30
Day 5	M2	01:30
	Precautionary landing	01:00
Day 6	M3	01:30
	Student pilot briefing	01:00
Day 7	M4	01:30
	Student briefing	01:00
Day 8	M5	01:30
Day 9	M6	02:00
	Student pilot briefing	01:00
Day 10	M7	02:00

SCHEDULE VFR CPL TRAINING		
DAY	TOPIC	DURATION
Day 11	M8	02:00
Day 12	M9	02:00
Day 13	Module Check	02:00

# A P P E N D I X 2

TABLE OF  
CONTENT

GENERAL

SYLLABUS

APPENDIX 1

APPENDIX 2

APPENDIX 3

VFR/CPL BRIEFING		
SUBJECT	TOPIC	DURATION
INTRODUCTION	<ul style="list-style-type: none"> <li>• Aircraft Manuals                             <ul style="list-style-type: none"> <li>- Indexing</li> <li>- Expanded checklist</li> <li>- Flight techniques</li> <li>- Emergency checklist</li> <li>- Minimum equipment list</li> </ul> </li> <li>• Briefings                             <ul style="list-style-type: none"> <li>- Pre flight</li> <li>- Syllabus</li> <li>- De-briefing</li> </ul> </li> <li>• Entry level                             <ul style="list-style-type: none"> <li>- Passed the JAR/FCL standardisation</li> <li>- Passed the pre entry test                                     <ul style="list-style-type: none"> <li>♦ OM (open book)</li> <li>♦ Aircraft Manuals (open book)</li> </ul> </li> </ul> </li> <li>• Planning van de course                             <ul style="list-style-type: none"> <li>- Preparation time</li> <li>- Home work assignments</li> <li>- Desired level of knowledge</li> <li>- Schedule</li> </ul> </li> </ul>	01:00
OM POWERPOINT PRESENTATION		0:30
FLIGHT PREPARATION	<ul style="list-style-type: none"> <li>• Basic requirements                             <ul style="list-style-type: none"> <li>- KLS minimums</li> <li>- Determination of tail &amp; x-wind components</li> <li>- Alternate</li> <li>- Re-planning in flight</li> <li>- General VFR operating minima</li> <li>- Application of change indicators for flight planning</li> </ul> </li> </ul>	01:00

VFR/CPL BRIEFING		
SUBJECT	TOPIC	DURATION
FLIGHT RELEASE FORM (MASS & BALANCE)	<ul style="list-style-type: none"> <li>• Standard weights</li> <li>• Take-off distance (POH)</li> <li>• TODR dry &amp; wet (Aircraft Manuals)</li> <li>• Landing distance (POH)</li> <li>• Climb</li> <li>• Cruise</li> <li>• Mass &amp; balance form                             <ul style="list-style-type: none"> <li>- Navigation log (backside)</li> <li>- Fuel policy</li> <li>- Phase of flight</li> </ul> </li> </ul>	01:00
BASIC AIRCRAFT HANDLING.	<p>Checklist handling (Single pilot) (Aircraft Manuals, company notams)</p> <p>Use of checklist Attitude reference</p> <p>Eye reference</p> <p>Taxi speed (Aircraft Manuals)</p> <p>Turns</p> <p>Take off ( X-wind) (Aircraft Manuals)</p> <p>Use of ailerons</p> <p>Rotate</p> <p>Attitude reference</p> <p>Normal take off (Aircraft Manuals)</p> <p>Obstacle take off (Aircraft Manuals)</p> <p>Soft field take off (Aircraft Manuals)</p> <p>Short field take off (Aircraft Manuals)</p>	01:30
LEVEL FLIGHT	<ul style="list-style-type: none"> <li>• Speed changes                             <ul style="list-style-type: none"> <li>- Side effects</li> <li>- Attitude reference</li> </ul> </li> <li>• Slow flight                             <ul style="list-style-type: none"> <li>- Power attitude coordination</li> </ul> </li> </ul>	01:00

VFR/CPL BRIEFING		
SUBJECT	TOPIC	DURATION
LEVEL CHANGES	<ul style="list-style-type: none"> <li>• After take off (Aircraft Manuals)</li> <li>• Climb → Level (Aircraft Manuals)</li> <li>• Level → Climb</li> <li>• Level → Descent                             <ul style="list-style-type: none"> <li>- Glide descent</li> <li>- Cruise descent</li> <li>- Normal descent</li> <li>- Carburettor icing</li> </ul> </li> <li>• Decent → Level                             <ul style="list-style-type: none"> <li>- Attitude reference</li> </ul> </li> </ul>	01:00
URNS	<ul style="list-style-type: none"> <li>• Turns (Aircraft Manuals)</li> <li>• Climbing turns (Aircraft Manuals)</li> <li>• Steep turns (Aircraft Manuals)</li> <li>• Descending turns                             <ul style="list-style-type: none"> <li>- Attitude reference</li> </ul> </li> </ul>	01:00
UNUSUAL ATTITUDES	<ul style="list-style-type: none"> <li>• Nose low recovery</li> <li>• Nose high recovery</li> </ul>	00:30
STALLS	<ul style="list-style-type: none"> <li>• Approach to stall clean configuration (Aircraft Manuals)</li> <li>• Approach to stall approach configuration (Aircraft Manuals)</li> <li>• Approach to stall landing configuration (Aircraft Manuals)</li> <li>• Clean stall (Aircraft Manuals)</li> <li>• Landing stall (Aircraft Manuals)</li> <li>• Departure stall (Aircraft Manuals)</li> <li>• Go-around stall (Aircraft Manuals)                             <ul style="list-style-type: none"> <li>- Attitude reference</li> </ul> </li> </ul>	01:30



VFR/CPL BRIEFING		
SUBJECT	TOPIC	DURATION
CIRCUIT (2X01:00)	<ul style="list-style-type: none"> <li>• Traffic pattern (Aircraft Manuals)               <ul style="list-style-type: none"> <li>- General</li> <li>- Take off</li> <li>- Crosswind</li> <li>- Downwind leg</li> <li>- Base leg</li> <li>- Final approach leg</li> <li>- Profile corrections</li> <li>- 3 degree glide path</li> </ul> </li> <li>• Normal circuit</li> <li>• Landings (Aircraft Manuals)               <ul style="list-style-type: none"> <li>- General</li> <li>- Flaps up landing</li> <li>- Precision landing</li> <li>- Short field landing</li> <li>- Soft field landing</li> <li>- X-wind landing</li> </ul> </li> <li>• Flapless circuit</li> <li>• Low circuit</li> <li>• Precautionary circuit</li> <li>• Touch and go (Aircraft Manuals)</li> <li>• Go around (Aircraft Manuals)</li> <li>• Engine Failure After TO</li> <li>• Briefings &amp; calls</li> </ul>	02:00
EMERGENCY LANDING	<ul style="list-style-type: none"> <li>• Memory items (Aircraft Manuals)</li> <li>• Sequence blocks &amp; balls</li> <li>• Use of emergency checklist</li> <li>• Short term solutions</li> <li>• Long term solutions</li> </ul>	01:00

VFR/CPL BRIEFING		
SUBJECT	TOPIC	DURATION
PRACTICE FORCED LANDING	<ul style="list-style-type: none"> <li>• Suitable airfield (Aircraft Manuals)</li> <li>• Profile</li> <li>• Determination and use of 1000ft point                             <ul style="list-style-type: none"> <li>– Flying over the field</li> <li>– Flapless decent starting from the 1000 point</li> <li>– Use of flaps</li> <li>– Corrections of base</li> </ul> </li> </ul>	01:00
PRECAUTIONARY LANDING	<ul style="list-style-type: none"> <li>• Profile (Aircraft Manuals)</li> <li>• Procedure after landing (Aircraft Manuals)</li> </ul>	01:00
VFR NAVIGATION	<ul style="list-style-type: none"> <li>• Phase 1 (Aircraft Manuals 3.1.3)                             <ul style="list-style-type: none"> <li>– Departure &amp; Destination ( AFD &amp; destination list)</li> <li>– Local flying restrictions</li> <li>– Initial - exit point (IP &amp; EP)</li> <li>– Airspace restrictions</li> <li>– Route selection</li> <li>– Checkpoints</li> <li>– ATC frequency's along the route</li> <li>– Obstacle clearance +(&lt;5 Nm circle in red )</li> <li>– Determination of MSA</li> <li>– AFD (airport facility directory)                                     <ul style="list-style-type: none"> <li>♦ Notices</li> <li>♦ Chart bulletin</li> <li>♦ Airport diagram</li> </ul> </li> <li>– Plot the route in the chart                                     <ul style="list-style-type: none"> <li>♦ 2 min tick markers</li> <li>♦ 10 Nm markers</li> <li>♦ Arrows</li> </ul> </li> <li>– Flight plan log                                     <ul style="list-style-type: none"> <li>♦ (without the information depending of the weather)</li> </ul> </li> </ul> </li> </ul>	05:00

VFR/CPL BRIEFING		
SUBJECT	TOPIC	DURATION
	<ul style="list-style-type: none"> <li>• Phase 2 (actual flying day) (Aircraft Manuals 3.1.3)               <ul style="list-style-type: none"> <li>- Obtain and review the weather                   <ul style="list-style-type: none"> <li>♦ Departure</li> <li>♦ Destination</li> <li>♦ En route</li> <li>♦ Alternate</li> </ul> </li> <li>- Check notams</li> <li>- Go/no go decision</li> <li>- Complete the nav-log back and front side.</li> <li>- Complete flight release form ( W&amp;B)</li> <li>- ATC flight plan                   <ul style="list-style-type: none"> <li>♦ SAR Prepare Essential knowledge test</li> <li>♦ Contact numbers</li> </ul> </li> </ul> </li> <li>• Use cross country checklist to ensure all necessary items are completed</li> <li>• Flight execution (Aircraft Manuals)               <ul style="list-style-type: none"> <li>- Cockpit organization</li> <li>- Staying on track</li> <li>- Navigate from chart to ground</li> <li>- Revisions due to wind deviations / aircraft performance</li> <li>- Checks at every checkpoint</li> <li>- Navigation around obstructions ( dog leg )</li> <li>- Correcting when off course</li> <li>- Use of radio aids</li> <li>- Diversion</li> <li>- Lost procedure</li> </ul> </li> </ul>	

VFR/CPL BRIEFING		
SUBJECT	TOPIC	DURATION
	<p>ACTION AFTER FLIGHT + INTRO TO SHAPE</p> <ul style="list-style-type: none"> <li>• Close flight plan</li> <li>• Logbook</li> <li>• Syllabus</li> <li>• Navigation plan</li> <li>• Time and duty</li> <li>• Daily activity report</li> <li>• Intro to SHAPE</li> </ul>	01:00
	<p>JAR FCL CPL EXAM FORM</p> <ul style="list-style-type: none"> <li>• Lay out</li> <li>• Required standards</li> <li>• Passed/ not passed</li> </ul>	01:00
	<p>TESTS</p> <ul style="list-style-type: none"> <li>• OM test (closed book)</li> <li>• Essential knowledge test Archer</li> <li>• Required standard 80%</li> </ul>	01:30

# A P P E N D I X 3

COMPLETION STANDARDS
PREFLIGHT BRIEFING
<ul style="list-style-type: none"> <li>• The candidate will conduct a preflight briefing covering at least following items               <ul style="list-style-type: none"> <li>- notams</li> <li>- weather</li> <li>- Mass and balance calculations</li> <li>- Navigation planning inclusive fuelplanning</li> </ul> </li> </ul>
PRECISION LANDINGS
<ul style="list-style-type: none"> <li>• Wind: maximum 20KT (excl. Gusts)</li> <li>• The candidate instructor will fly 2 standard patterns using 40° flaps on final, with normal touchdown (= main gear first) at normal landing speed between the blocks. If he fails once, a retake is allowed (=&gt;2 out of 3 landings must be between two reference points 50M (150ft) apart).</li> <li>• The examiner will be judging               <ul style="list-style-type: none"> <li>- take off and liftoff</li> <li>- runway axis after takeoff</li> <li>- no turn below 500' AGL</li> <li>- rectangular circuit</li> <li>- turn from base to final not initiated below 400' AGL and completed at or above 300' AGL</li> <li>- slope (3 degrees) and speed (60 KIAS) on final</li> <li>- touchdown</li> <li>- If candidate instructor arrives too low or too high in final, a missed approach will be executed.</li> </ul> </li> </ul>

CONTINUED ON NEXT PAGE

**COMPLETION STANDARDS (Cont'd)****GENERAL FLIGHT**

- During the check ride the candidate instructor will exercise precise altitude, heading and speed control. The SATC starts are:
  - Altitude:  $\pm 100\text{FT}$
  - Heading:  $\pm 10^\circ$
  - Speed:  $-0/+5$  KIAS
- The candidate instructor will perform preflight, startup, taxi and runup as explained in the VFR Manual. He may expect the examiner to ask questions regarding:
  - maintenance status of the airplane
  - check list items and procedures

**EXERCISE DETAILS**

The following exercises will be performed:

Normal pattern with possible go-around. Standards are: climbing on the runway axis 1 speed  $-0/+5$  KIAS, pattern altitude  $\pm 100$  FT & speed when level  $-0/+5$  KIAS (if corrected immediately), headings in the pattern to correct for wind safe distance from other airplanes, approach speed  $-0/+5$  KIAS & slope 3 degrees, go around climb immediately established & check list items performed correctly.

Departing the pattern, climbing to at least 1000' AGL: correct procedure, assigned speed, good lookout.

Straight & Level flight: smooth transition to level flight & cruise speed, airplane in trim, altitude  $\pm 100$  FT, speed  $-0/+5$  KIAS, heading  $\pm 10^\circ$ , good lookout.

720° turns with 30° & 45° bank: use of outside references instead of attitude indicator, smoothness, ball centered, altitude  $\pm 100$  FT, corrections of speed deviations, bank stable, rollout on initial heading.

Compass turns (with and without directional gyro): on the magnetic compass the required accuracy is to roll out within 15° of the assigned heading the first time followed by a small 2nd correction (visually), without excessive speed and/or altitude excursions.

Slow flight (1.2 Vs): level flight  $\pm 100$  FT &  $\pm 10$  degrees, climb, descent, turn. If a stall occurs, this is disqualifying.

Climbs & descent at different speeds and with different rates. If a descent at a lower than actual speed is required, the deceleration will be in level flight before starting the descent. Important: lookout, use of rudder to compensate P-factor.

Eight figures at  $\pm 800'$  AGL with average bank  $\pm 30^\circ$ : wind corrections, constant speed and altitude ( $\pm 100$  FT,  $-0/+5$  KIAS), ball centered

Stalls: see VFR manual. A secondary stall, rough airplane handling, spin entry or excessive altitude loss are disqualifying.

Unusual attitudes: recovery sequence from both nose high and nose low.

CONTINUED ON NEXT PAGE



**EXERCISE DETAILS (Cont'd)**

Power Off Landing: At or above 2000' AGL within gliding range of the airport, the examiner will reduce engine power to idle. The candidate instructor will land (final turn completed above 300' AGL) between cones set on the runway 150 M (= 500 FT) apart. The exercise is to be performed as explained in the VFR Manual. Normal touchdown (main gear first) at normal speed. If the candidate instructor fails to land between the cones, a retake may be allowed by the examiner, but normally only in case of up-draft, downdraft or wind shear, if the candidate instructor's planning and execution of the 1st approach was OK.

Precautionary Landing: Touchdown before the reference point is disqualifying. If the approach was good but the touchdown too far, a 2nd try may be allowed (examiner's discretion). Immediate light braking to a full stop on the runway (candidate instructor must release brakes as necessary to prevent wheels from locking up).

Flapless pattern: see VFR Manual. Key points: increased pattern speeds, reduced power settings, long final, shallow slope (3 degrees), no flare touchdown.

Simulated Abnormal Procedure (examiner's discretion): e.g. engine failure after takeoff, partial power loss, rough engine, carburetor ice, oil problem, engine fire, electrical problem, flap or gear failure, instrument failure, door opens in flight, trim blocked, ... The candidate instructor's analysis and decision making will be evaluated, as well as his level of alertness and reaction time

INTENTIONALLY LEFT BLANK

INTENTIONALLY LEFT BLANK

# Full Throttle Flight Training



**Sabena Flight Academy**  
Brussels Airport—Building 201  
B-1820 Steenokkerzeel  
BELGIUM

Phone +32 752 25 711  
Fax +32 752 25 741  
[info@sfa.be](mailto:info@sfa.be)