



# **OPERATION MANUAL**

## **PART D**

### **TRAINING**

Rev. No.: 07

11 August 2022

**PT. Smart Cakrawala Aviation**

**SCA/OPS/1-004**



# MINISTRY OF TRANSPORTATION

## DIRECTORATE GENERAL OF CIVIL AVIATION

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Jakarta, October 28 2022

Our Ref : AU-010/39/14/DKPPU - 2022

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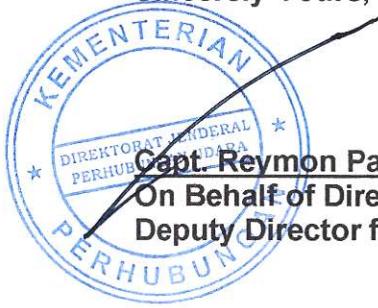
Subject : **REVIEW FOR THE APPROVAL OF OPERATION MANUAL PART D - TRAINING REV. 07 DATED AUGUST 11<sup>th</sup> 2022**

Dear Mr. Pongky Majaya,

I refer to the submission of the above mentioned document for review and approval on August 10<sup>th</sup> 2022.

The Document submitted has been reviewed and found in compliance with the Civil Aviation Safety Regulation part 135 and **Approved**.

**Sincerely Yours,**



**Capt. Reymon Palapa**  
On Behalf of Director of DAAO  
Deputy Director for Sub Directorate of Aircraft Operation

cc. : Director of DAAO



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LEP-4	LEP-4	05	April 2021
LEP-5	LEP-5	07	August 2022

This Operation Manual (OM) Part D – Training has been reviewed and found meet all applicable requirements set forth in the Aviation Act No. 1 Year 2009 and Civil Aviation Safety Regulations (CASR). This Operation Manual Part D is approved for use by PT Smart Cakrawala Aviation with the understanding that Director General of Civil Aviation (DGCA) may require further revisions to this Manual as regulatory requirements or airworthiness standard are amended.

Any change to these manuals shall be reported to the Director General of Civil Aviation (DGCA) for Approval.

Jakarta, October 28 2022

On behalf of the Director of Airworthiness and Aircraft Operations



~~CAPT. REYMON PALAPA~~

Deputy Director for Sub Directorate of Aircraft Operations



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PT. SMART CAKRAWALA AVIATION	D G C A
SIGNATURE :	SIGNATURE :
DATE : 18 August 2022	DATE : 18 August 2022
NAME : CAPT. JAHRON BURHANI	NAME : CAPT. ALFIN BASTIAN FIRDAUS
TITLE : OPERATION MANAGER	TITLE : PRINCIPAL OPERATION INSPECTOR

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**REVISIONS OF RECORD**

Revision Number	Pages Affected	SUBJECT	Issued On	Inserted Date	Signature
01	1-16	1.4.11 Mountain Training	Feb 19		
01	3-38	3.15 SPECIAL MOUNTAINOUS OPERATION (PAPUA OPERATIONS)	Feb 19		
02	3-7 until 3-20	3.4 INITIAL PILOT TRAINING CURRICULUM	12 June 19		
02	3-24	3.7.3 Ground Training	12 June 19		
02	3-26	3.8 DIFFERENCES TRAINING CURRICULUM	12 June 19		
02	3-28	3.10.2 PROFICIENCY CHECK	12 June 19		
02	3-41	3.15 TRAINING FOR ELEVATED HELIPORTS.	12 June 19		
02	5-13 until 5-15	5.11 HELICOPTER LANDING OFFICER	12 June 19		
02	A12-A15	Appendix A Form	12 June 19		
03	1-5	1.2 DEFINITIONS AND ABBREVIATION	26 FEB 2020		
03	3-22 until 3-29	3.4.3EUROCOPTER EC130T2	26 FEB 2020		
04	A-16	Appendix A Form	5 Aug 2020		
05	3-7 until 3-8	3.4.1 Pilot Training Syllabus for initial	24 Apr 2021		
05	3-11	3.4.2 Initial Technical Ground Training	24 Apr 2021		
05	3-11	3.4.3 Initial Flight Training	24 Apr 2021		
06	3-29	3.4.3.3 Ground Instructor H130	22 Oct 2021		
06	3-30 until 3-32	3.4.3.4 Flight Instructor H130	22 Oct 2021		
00	3-7	3.7. PILATUS PC-6 B2/H4 REQUALIFICATION TRAINING	22 Oct 2021		

## REVISIONS HIGHLIGHT

Revision Number	Revision Date	Chapter	Page	Description of Changed
01	Feb 2019	1.4.11 Mounting Training	1-16	Added Mounting Training
01	Feb 2019	3.15 Special Mountainous Operation (Papua Operation)	3-38	Added Special Mountainous Operation (Papua Operation)
02	12 June 2019	3.7.3 Ground Training	3-28	Added Recurrent Ground Training Syllabus
02	12 June 2019	3.8 DIFFERENCES TRAINING CURRICULUM	3-30	Added flight Syllabus and Hour requirement
02	12 June 2019	3.10.2 PROFICIENCY CHECK	3-32	Added syllabus PPC for Helicopter
02	12 June 2019	3.4 INITIAL PILOT TRAINING CURRICULUM	3-7 until 3-20	Revision Initial Pilot Training Curriculum , Added Syllabus training for Robinson R66
02	12 June 2019	3.15 TRAINING FOR ELEVATED HELIPORTS.	3-40	Added training Elevated Heliport
02	12 June 2019	5.11 HELICOPTER LANDING OFFICER	5-13 until 5-15	Added Syllabus training for HLO
02	12 June 2019	Appendix A Form	A12-A15	Added Form AIRMEN PROFICIENCY /QUALIFICATION CHECK FOR HELICOPTER and LINE QUALIFICATION FOR HELICOPTER
03	26 Feb 2020	1.2 DEFINITIONS AND ABBREVIATION	1-5	Added new type fleet Robinson R-66 and Eurocopter EX 130-T2
03	26 Feb 2020	3.4.3EUROCOPTER EC130T2	3-22 until 3-29	Added syllabus training initial H130T2
03	01 Mar 2021	3.4.1 Pilot Training Syllabus for initial	3-7 until 3-8	revisi minimum qualification requiredmet , PPC & Line Check Validation. Added training method
03	01 Mar 2021	3.4.2 Initial Technical Ground Training	3-11	Added record keeping for Initial Ground Training
03	01 Mar 2021	3.4.3 Initial Flight Training	3-11	Revision minimum Initial flight Training C 208 B Grand Caravan
04	06 Aug 2020	Appendix A form	A-16	Add Appendix A form
05	24 April 2021	Initial Pilot Training Curriculum	3-4 until 3-8, 3-11	Add Initial Pilot Training Curriculum
06	22 Oct 2021	3.4.3.3 Ground Instructor H130	3-29	Add Syllabus and requirements for Ground Instructor H130



# OPERATION MANUAL

**PART D**  
**TRAINING**

<b>Revision Number</b>	<b>Revision Date</b>	<b>Chapter</b>	<b>Page</b>	<b>Description of Changed</b>
06	22 Oct 2021	3.4.3.4 Flight Instructor H130	3-30 until 3-32	Add Syllabus for Flight Instructor H130
00	22 Oct 2021	3.7 PILATUS PC-6 B2/H4 REQUALIFICATION TRAINING	3-53 until 3-60	Add Pilatus PC-6 B2/H4 Requalification Training



# MINISTRY OF TRANSPORTATION

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Tangerang, 4 November 2021

Our Ref : *Au. 010/37/g/DKPPU - 2021*

To : Mr. Pongky Majaya  
PT Smart Cakrawala Aviation  
Gedung Smartdeal Lt. 4  
Jalan Cideng Timur No. 16A  
Jakarta Pusat 10130, Indonesia  
Tel. : +62-21-6305210  
Fax : +62-21-6324873  
Email : pongky.majaya@smartaviation.co.id

Subject : **REVIEW FOR THE APPROVAL OF OPERATION MANUAL PART D - TRAINING REV. 06 DATED 3 NOVEMBER 2021**

Dear Mr. Pongky Majaya,

I refer to the submission of the above mentioned document for review and approval on 3 November 2021.

The Document submitted has been reviewed and found in compliance with the Civil Aviation Safety Regulation part 135 and **Approved**.

**Sincerely Yours,**

Capt. Rizal Bayu Azi  
On Behalf of Director of DAAO  
Act. Head of Section Certification of Aircraft Operations

cc. : Director of DAAO



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### CONTROL PAGE

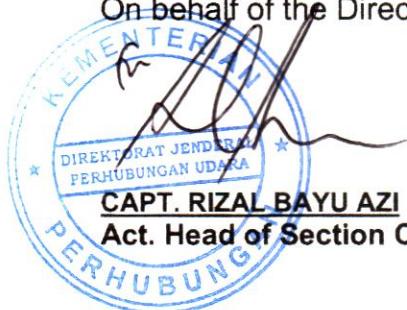
TITLE	PAGE	REV.	DATE
CONTROL PAGE	CP-1	06	November 2021
LEP-1	LEP-1	06	October 2021
LEP-2	LEP-2	06	April 2021
LEP-3	LEP-3	03	October 2021
LEP-4	LEP-4	03	February 2020
LEP-5	LEP-5	05	April 2021

This Operation Manual (OM) Part D – Training has been reviewed and found meet all applicable requirements set forth in the Aviation Act No. 1 Year 2009 and Civil Aviation Safety Regulations (CASR). This Operation Manual Part D is approved for use by PT Smart Cakrawala Aviation with the understanding that Director General of Civil Aviation (DGCA) may require further revisions to this Manual as regulatory requirements or airworthiness standard are amended.

Any change to these manuals shall be reported to the Director General of Civil Aviation (DGCA) for Approval.

Tangerang, 4 November 2021

On behalf of the Director of Airworthiness and Aircraft Operations



**CAPT. RIZAL BAYU AZI**  
Act. Head of Section Certification of Aircraft Operations



## PT SMART CAKRAWALA AVIATION

AIRMEN INITIAL CHECK REPORT		DATE OF COMPLETION		
NAME OF AIRMEN	LICENCE NUMBER	TYPE OF CHECK		
EMPLOYED BY	LOCATION OR ROUTE	TYPE OF AIRCRAFT/ SIMULATOR USED		
NAME OF CHECK AIRMEN	LOA NUMBER	BLOCK TIME		
<b>A. PREPARATION</b>		<b>S</b>	<b>U</b>	<b>REMAKS</b>
1. Flight plan checking .....		<input type="checkbox"/>	<input type="checkbox"/>	.....
2. Flops briefing .....		<input type="checkbox"/>	<input type="checkbox"/>	.....
3. Performance and Load sheet .....		<input type="checkbox"/>	<input type="checkbox"/>	.....
4. Walk around check .....		<input type="checkbox"/>	<input type="checkbox"/>	.....
5. Cabin check .....		<input type="checkbox"/>	<input type="checkbox"/>	.....
6. Cockpit check and set up .....		<input type="checkbox"/>	<input type="checkbox"/>	.....
7. Crew Briefing .....		<input type="checkbox"/>	<input type="checkbox"/>	.....
8. Irregularity solving .....		<input type="checkbox"/>	<input type="checkbox"/>	.....
<b>B. AIRCRAFT HANDLING</b>		<b>S</b>	<b>U</b>	
9. Starting .....		<input type="checkbox"/>	<input type="checkbox"/>	.....
10. Taxi .....		<input type="checkbox"/>	<input type="checkbox"/>	.....
11. Line up .....		<input type="checkbox"/>	<input type="checkbox"/>	.....
12. Take off .....		<input type="checkbox"/>	<input type="checkbox"/>	.....
13. Departure .....		<input type="checkbox"/>	<input type="checkbox"/>	.....
14. Climb .....		<input type="checkbox"/>	<input type="checkbox"/>	.....
15. Cruise .....		<input type="checkbox"/>	<input type="checkbox"/>	.....
16. Descent .....		<input type="checkbox"/>	<input type="checkbox"/>	.....
17. Arrival .....		<input type="checkbox"/>	<input type="checkbox"/>	.....
18. Approach .....		<input type="checkbox"/>	<input type="checkbox"/>	.....
19. Landing .....		<input type="checkbox"/>	<input type="checkbox"/>	.....
20. Deceleration .....		<input type="checkbox"/>	<input type="checkbox"/>	.....
21. Parking and termination .....		<input type="checkbox"/>	<input type="checkbox"/>	.....
22. Checklist .....		<input type="checkbox"/>	<input type="checkbox"/>	.....
<b>C. CREW RESOURCE MANAGEMENT</b>		<b>S</b>	<b>U</b>	
23. Co-ordination .....		<input type="checkbox"/>	<input type="checkbox"/>	.....
24. Personal Conflict Management .....		<input type="checkbox"/>	<input type="checkbox"/>	.....
25. Stress Management .....		<input type="checkbox"/>	<input type="checkbox"/>	.....
26. Situational Awareness .....		<input type="checkbox"/>	<input type="checkbox"/>	.....
27. Decision Making Concept .....		<input type="checkbox"/>	<input type="checkbox"/>	.....

RESULT

PASS

FAIL

Check Pilot	Crew Member	Chief Pilot
.....	.....	.....



PT SMART CAKRAWALA AVIATION

<b>INITIAL FLIGHT REPORT (Session 1)</b>		<b>DATE OF COMPLETION</b>
<b>NAME OF AIRMEN</b>	<b>LICENCE NUMBER</b>	<b>TYPE OF CHECK</b>
<b>EMPLOYED BY</b>	<b>LOCATION OR ROUTE</b>	<b>TYPE OF AIRCRAFT/SIMULATOR USED</b>
<b>NAME OF CHECK AIRMEN</b>	<b>LOA NUMBER</b>	<b>BLOCK TIME</b>
<b>FLIGHT MANUEVERS GRADE (S-Satisfactory U-Unsatisfactory N-Not Observed)</b>		



## PT SMART CAKRAWALA AVIATION

<b>INITIAL FLIGHT REPORT (Session 2)</b>		<b>DATE OF COMPLETION</b>
<b>NAME OF AIRMEN</b>	<b>LICENCE NUMBER</b>	<b>TYPE OF CHECK</b>
<b>EMPLOYED BY</b>	<b>LOCATION OR ROUTE</b>	<b>TYPE OF AIRCRAFT/ SIMULATOR USED</b>
<b>NAME OF CHECK AIRMEN</b>	<b>LOA NUMBER</b>	<b>BLOCK TIME</b>
<b>FLIGHT MANUEVERS GRADE (S-Satisfactory U-Unsatisfactory N-Not Observed)</b>		

RESULT OF CHECK	APPROVED	CHECK AIRMAN'S PERFORMANCE	SATISFACTORY
	DISAPPROVED		UNSATISFACTORY
NAME & SIGNATURE OF INSTRUCTOR/PILOT CHECK:	NAME & SIGNATURE OF PILOT		



# PT SMART CAKRAWALA AVIATION

<b>INITIAL FLIGHT REPORT (Session 3)</b>		<b>DATE OF COMPLETION</b>
<b>NAME OF AIRMEN</b>	<b>LICENCE NUMBER</b>	<b>TYPE OF CHECK</b>
<b>EMPLOYED BY</b>	<b>LOCATION OR ROUTE</b>	<b>TYPE OF AIRCRAFT/ SIMULATOR USED</b>
<b>NAME OF CHECK AIRMEN</b>	<b>LOA NUMBER</b>	<b>BLOCK TIME</b>
<b>FLIGHT MANUEVERS GRADE (S-Satisfactory U-Unsatisfactory N-Not Observed)</b>		

<b>ITEM</b>	<b>GRADE</b>		<b>REMARKS :</b>
	<b>A/C</b>	<b>SIM</b>	
<b>PREPARATION</b>			
1. Flight planning checking			
2. Flops briefing			
3. Performance and load sheet			
4. Walk around check			
5. Cabin check			
6. Cockpit check and set up			
7. Crew briefing			
8. Irregularity solving			
9. Discussion of ISA Performance Data			
10. Normal Operating and Emergency Procedures Checklist and Briefings			
<b>AIRCRAFT HANDLING</b>			
11. Taxiing			
12. Normal Propeller and Systems Check			
13. Line up			
14. Take Off (Takeoff, rejected, with engine failure just prior to V1)			
16. Hazardous Situation Training			
17. Departure (Pilot Incapacitation (crew training))			
18. Climb (VFR Pattern)			
19. Cruise (steep turn and stall)			
20. Decent			
21. Arrival (Steep Turns and Unusual Attitudes)			
22. Approach			
23. Landing (Normal and Engine Out Landing)			
24. Deceleration			
25. Parking and termination			
26. Checklist			
<b>CREW RESOURCE MANAGEMENT</b>			
31. Co-ordination			
32. Personal conflict management			
33. Stress management			
34. Situational awareness			
35. Decision making concept			

<b>RESULT OF CHECK</b>	<b>APPROVED</b>	<b>CHECK AIRMAN'S PERFORMANCE</b>	<b>SATISFACTORY</b>
	<b>DISAPPROVED</b>		<b>UNSATISFACTORY</b>
<b>NAME &amp; SIGNATURE OF INSTRUCTOR/PILOT CHECK:</b>		<b>NAME &amp; SIGNATURE OF PILOT</b>	



## PT SMART CAKRAWALA AVIATION

<b>INITIAL FLIGHT REPORT (Session 4)</b>		<b>DATE OF COMPLETION</b>
<b>NAME OF AIRMEN</b>	<b>LICENCE NUMBER</b>	<b>TYPE OF CHECK</b>
<b>EMPLOYED BY</b>	<b>LOCATION OR ROUTE</b>	<b>TYPE OF AIRCRAFT/ SIMULATOR USED</b>
<b>NAME OF CHECK AIRMEN</b>	<b>LOA NUMBER</b>	<b>BLOCK TIME</b>
<b>FLIGHT MANUEVERS GRADE (S-Satisfactory U-Unsatisfactory N-Not Observed)</b>		

RESULT OF CHECK	APPROVED	CHECK AIRMAN'S PERFORMANCE	SATISFACTORY
	DISAPPROVED		UNSATISFACTORY
NAME & SIGNATURE OF INSTRUCTOR/PILOT CHECK:	NAME & SIGNATURE OF PILOT		



# FLIGHT TRAINING FORM

<b>PARTICIPANT :</b>	<b>DATE :</b>
<b>TYPE OF TRAINING :</b>	<b>AIRCRAFT TYPE :</b>
	<b>TIME :</b>

NO	ITEM	S	U	REMARKS
1.	<b>PREFLIGHT</b>			
	a. Ground and Safety Orientation			
	b. Pre-Flights Inspection Verified			
	c. Pre Start			
2.	<b>NORMAL PROCEDURE &amp; TAKE OFF</b>			
	a. Engine Starts and Shut down			
	b. Hovering			
	c. Normal Take-off and Landing			
	d. Normal Approach			
	e. Steep Approach			
	f. Maximum Performance Take-off			
	g. Steep Approach			
	h. Limited Power Take-off & Approach Vertical			
	i. Take-off and Approach			
	j. T/O & L/D Rooftop Exercise			
	k. Slopes			
3.	<b>EMERGENCY PROCEDURE</b>			
	a. Fuel System malfunction			
	b. Hydraulics Failure			
	c. Electrical Failure			
	d. Autorotation ( Straight, 90°, 180°, 360°)			
	e. Hover Auto			
	f. Quick Stops			
	g. Lost Tail Rotor Effectiveness (LTE)			
	h. Pedals Start Inflight			
4.	<b>EVALUATION</b>			
	Review All Exercise:			
	-----			
	-----			
	-----			

Note

S : Satisfactory

U : Unsatisfactory

Result

:

Proficient

Not Proficient

PARTICIPANT / STUDENT SIGNATURE	INSTRUCTOR SIGNATURE
NAME:.....	NAME:.....



## TRAINING RECORD

PARTICIPANT :	DATE :
INSTRUCTOR :	AIRCRAFT TYPE :
TYPE OF TRAINING :	AIRCRAFT REG :

### FLIGHT INSTRUCTION / AIR EXERCISE CARRIED OUT

.....  
.....  
.....  
.....

### INSTRUCTOR PILOT COMMENTS

.....  
.....  
.....  
.....

Student / Participant performance : ..... Satisfactory / Unsatisfactory

Note : Unsatisfactory requires explanation on comments page with planned instruction programme for correction.

PARTICIPANT / STUDENT SIGNATURE :	INSTRUCTOR SIGNATURE :
NAME:.....	NAME:.....



## GROUND TRAINING PROGRAM FOR PPC

NAME / FUNCTION : .....  
LICENCE NUMBER : .....  
A/C TYPE : .....  
FLIGHT HOURS : .....  
DATE : .....

NO	SECTION	TIME
1	REGULATION 1. ..... 2. ..... 3. ..... 4. .....	..... ..... ..... .....
2	A/C System 1. ..... 2. ..... 3. ..... 4. .....	..... ..... ..... .....
TOTAL		..... Hours

AIRMAN SIGNATURE

FLIGHT INSTRUCTOR

CHIEF PILOT

( ) ( ) ( ) ( )

SCA-OPS-OMD 008  
REV.07



## INITIAL LINE FLIGHT APPROVAL

Trainee Name ..... Date .....

Flight Instructor ..... License No .....

The Smart Aviation Pilot named above has completed the minimum required ground and flight training program to be eligible for Line Flight Under Supervision (LFUS). This training program consisted of the following elements:

### DATE COMPLETE

Smart Aviation Indoctrination and Technical Ground Training .....  
Smart Aviation Caravan Training Manual Flight IF1 .....  
Smart Aviation Caravan Training Manual Flight IF2 .....  
Smart Aviation Caravan Training Manual Flight IF3 .....  
Smart Aviation Caravan Training Manual Flight IF4 .....  
Pilot Proficiency Check .....

The Pilot has achieved the following total flight training experience on the C208B G1000 during this course:

Total Flight time .....

Total landings .....

The trainee will be eligible to fly on commercial Smart Aviation flights as:

### Second In Command (SIC)

**Any flights conducted must be under the following conditions:**

**Until the completion of LFUS, the Pilot must fly with a Training Captain.  
LFUS must be completed with-in 30 days of this authorization.**

I certify that the Pilot has received the required training. I have determined that he/she is proficient and qualified to act as **SIC** for Smart Aviation.

**Flight instructor** .....

**Operation Manager** .....



## Flight Summary

Trainee Name: _____											
Date	A/C Reg.	Route		Off Block	On Block	Total Time	Hobbs Time	Ldgs	Lesson	IAP	Instructor
Page Total:									Signature:		
Carried Forward:											
Grand Total:											



# PT SMART CAKRAWALA AVIATION

AIRMEN PROFICIENCY/QUALIFICATION CHECK			DATE OF COMPLETION	
NAME OF AIRMEN	LICENCE NUMBER	TYPE OF CHECK		
EMPLOYED BY	LOCATION OR ROUTE	TYPE OF AIRCRAFT/ SIMULATOR USED		
NAME OF INSTRUCTOR/PILOT CHECK	LOA NUMBER	BLOCK TIME		
FLIGHT MANUEVERS GRADE (S-Satisfactory U-Unsatisfactory N-Not Observed)				
ITEM	GRADE		REMARKS :	
PREFLIGHT	A/C	SIM		
1. EQUIPMENT EXAMINATION (Oral or written)				
2. PREFLIGHT INSPECTION				
3. TAXING				
4. POWERPLANT CHECKS				
<b>TAKEOFFS</b>				
5. NORMAL				
6. INSTRUMENT				
7. CROSSWIND				
8. WITH SIMULATED POWERPLANT FAILURE				
9. REJECTED TAKEOFF				
<b>INSTRUMENT PROCEDURES</b>				
10. AREA DEPARTURE				
11. HOLDING				
12. AREA ARRIVAL				
13. ILS APPROACHES				
14. OTHER INSTRUMENT APPROACHES				
15. CIRCLING APPROACHES				
16. MISSED APPROACHES				
<b>INFLIGHT MANEUVERS</b>				
17. STEEP TURNS				
18. APPROACHES TO STALLS				
19. SPECIFIC FLIGHT CHARACTERISTICS				
20. POWERPLANT FAILURE				
<b>LANDINGS</b>				
21. NORMAL				
22. FROM AN ILS				
23. CROSSWIND				
24. WITH SIMULATED POWERPLANT(S) FAILURE				
25. REJECTED LANDING				
26. FROM CIRCLING APPROACH				
<b>OTHER'S</b>				
27. NORMAL AND ABNORMAL PROCEDURES				
28. EMERGENCY PROCEDURES				
29. JUDGEMENT				
30. CREW COORDINATIONS				
31. WINDSHEAR				
RESULT OF CHECK	APPROVED		CHECK AIRMAN'S PERFORMANCE	SATISFACTORY
	DISAPPROVED			UNSATISFACTORY
NAME & SIGNATURE OF INSTRUCTOR/PILOT CHECK:		NAME & SIGNATURE OF PILOT		



# ATTENDANCE REGISTER

TRAINING :		
SUBJECT :		
1. .....		
2. .....		
3. .....		
PLACE:	DATE:	TIME:

<b>ABSENT</b>	
<b>NAME</b>	<b>POSITION</b>

<b>INSTRUCTOR</b>	
<b>NAME</b>	<b>SIGNATURE</b>



## ROUTE QUALIFICATION/LINE CHECK

ROUTE QUALIFICATION / LINE CHECK		A/C TYPE :	
NAME	.....	<input type="checkbox"/> CAPTAIN <input type="checkbox"/> FIRST OFFICER	
NUMBER LICENSE	.....		
ROUTE	.....		
DATE	.....		
<b>A. PREPARATION</b> 1. Flight plan checking ..... 2. Flops briefing ..... 3. Performance and Load sheet ..... 4. Walk around check ..... 5. Cabin check ..... 6. Cockpit check and set up ..... 7. Crew Briefing ..... 8. Irregularity solving .....		S	U
<b>B. AIRCRAFT HANDLING</b> 9. Starting ..... 10. Taxi ..... 11. Line up ..... 12. Take off ..... 13. Departure ..... 14. Climb ..... 15. Cruise ..... 16. Descent ..... 17. Arrival ..... 18. Approach ..... 19. Landing ..... 20. Deceleration ..... 21. Parking and termination ..... 22. Checklist .....			
<b>C. GENERAL AND PILOTING</b> 23. Aviation law and Regulation ..... 24. Company Regulation and Procedure ..... 25. FMS / GPS ..... 26. Navigation and Critical points ..... 27. Fuel; usage and knowledge ..... 28. Adverse weather handing ..... 29. Communication ..... 30. Airport and Route knowledge ..... 31. Technical knowledge ..... 32. Abnormal and Emergency ..... 33. Flight Safety ..... 34. Passenger comfort and care .....			
<b>D. CREW RESOURCE MANAGEMENT</b> 35. Co-ordination ..... 36. Personal Conflict Management ..... 37. Stress Management ..... 38. Situational Awareness ..... 39. Decision Making Concept .....			
RESULT	<input type="checkbox"/> PASS		<input type="checkbox"/> FAIL
Check Pilot	Crew Member		Chief Pilot
.....	.....		.....



# OPERATION MANUAL

**PART D  
TRAINING**

## 1. INTRODUCTION

PT. Smart Cakrawala Aviation is authorized to conduct on demand operations in Commercial Air Transport day operation by VFR / IFR rules to the CASR Part 135 in accordance with the regulations applicable to operations (OPSPECs) and Authorization Conditions & Limitations (ACL).

### 1.1. COMPANY TRAINING PROGRAM

PT. Smart Cakrawala Aviation operation training program having obtained the appropriate initial and final approval of the DGCA, provides a training program that meets the requirements of CASR Part 135. To ensure that each flight crew, aircraft dispatcher, flight ground instructor, check airman, air transportation supervisor and each person assigned duties for the carriage and handling of dangerous articles and Dangerous Goods, is adequately trained to perform his/her assigned duties.

#### 1.1.1. Training Program Design & Philosophy

PT. Smart Cakrawala Aviation training program has been developed using a modular approach. This modular concept provides the framework for accommodating the rapidly increasing technology and methodology in training. This gives PT. Smart Cakrawala Aviation the capability to affect changes to the training program in a timely and systematic manner, while retaining the uniformity and standardization required instilling and promoting professionalism in all personnel under its cognizance.

PT. Smart Cakrawala Aviation training program embodies the corporate philosophy of the "Crew Qualification Process" / "Train to Qualify" whereby pertinent CASR and other regulatory requirements, along with company sponsored agenda, are applied in a systematic, comprehensive manner.

## 1.2. DEFINITIONS AND ABBREVIATION

### 1.2.1. Definitions

The following terms are used throughout this manual and are defined as follows:

#### **Air Carrier/Air Operator Certificate Holder**

Mean a person who undertakes directly by lease or other arrangements to engage in air transportation.

#### **Aircraft**

Any machine that can derive support in the atmosphere from the reaction of the air other than Reactions of the air against the earth's surface

#### **Categories of Training**

Courses of training which provide the necessary training and checking or testing for various types of crewmembers who have not previously qualified (or have or will become qualified) to serve in specific duty positions. Each category of training consists of:

1. Initial training.

The training required for flight crew and aircraft dispatchers who have not qualified and served in the same capacity on another airplane of the same group.

2. Transition training.

The training required for flight crew and aircraft dispatchers who have qualified and served in the same capacity on another airplane of the same group.

3. Upgrade training.

The training required for flight crew who have qualified and served as second in command on a particular airplane type, before they serve as Pilot-In-Command or Second-In-Command, respectively, on that airplane.

4. Recurrent Training.

The training must ensure that each flight crew or aircraft dispatcher is adequately trained and currently proficient with respect to the type aircraft (including differences training, if applicable) and flight crew position.

5. In-Flight Training.

The training refers to maneuvers, procedures and functions that must be flight training conducted in the airplane.

#### **Checking**

Specifically practical shall test, usually in real time.



## **Company Check Pilot (CCP)**

An employee of an air carrier who is the holder of a delegation of authority issued by the Director, authorizing the conduct of certain types of flight checks.

## **Competency Check (CC)**

Any required operational check performed on company personnel (other than flight crewmembers), by company supervisory personnel duty authorized to perform that check.

## **Courseware**

Instructional material developed for each curriculum. This is information in lesson plans, instructional guides, computer software programs, audio-visual programs, work-books, Pilot Operations Handling and handouts. Courseware reflects curriculum requirements and integrates with the company's instructional delivery methods

## **Curriculum**

A complete training agenda specific to an aircraft type and a flight crew duty position, which includes all required testing and/or checking requirements. Each curriculum consists of several segments.

## **Curriculum Segment**

A necessary phase of a curriculum, which can be separately evaluated and individually approved, but by itself does not qualify a person for a flight crew duty position.

Each curriculum segment consists of one or more training modules.

## **Designated Pilot examiner representative (DPER)**

A person who is the holder of a delegation accept applications for oral and flight tests necessary for recommending issuance of pilot licences and ratings under the applicable regulations.

## **Difference Training**

The training required for flight crew and aircraft dispatchers who have qualified and served on a particular type aircraft, when the DGCA finds difference training is necessary before a flight crew serves in the same capacity on a particular variation of that aircraft.

## **Duty free**

is a period at crewmember's home base where he/she shall be free of any duty from PT. Smart Cakrawala Aviation. Duty free serve the dual purpose of recovering from duty and to take care of the aspect of family and social life.

## **Duty Position**

The functional or operating position of a flight crew or aircraft dispatcher for CASR Part 135 operations. Duty positions are Pilot-In-Command (PIC), Second-In-Command (SIC) and FOO if applicable

## **Eligibility Period**

Three (3) calendar months consisting of the calendar month before the training/checking month, the training/checking month, and the calendar month after the training/checking month. During this period, a flight crew or aircraft dispatcher must receive the applicable training or checking to remain in a qualified status. Training or checking completed during the eligibility period is considered to be completed during the training/checking month (see also Check Month).

## **Final Approval**

A DGCA letter, without an expiration date, which authorizes an operator to continue training in accordance with a specific curriculum or curriculum segment. In addition, each page of the List of Effective Pages is stamped and signed by a DGCA representative to show continued DGCA approval.

## **First Officer (FO)**

A pilot qualified on an aircraft to perform the duties of second in command. May also be taken to mean co-pilot.

## **Flight**

An aircraft is deemed to be in flight any time it is no longer in contact with the earth's surface as the result of its weight being supported by the aerodynamic principles and design features of that particular aircraft.

## **Flight Time**

The total elapsed time from the moment the aircraft first moves under its own power for the purpose of takeoff, until the time it comes to rest at the end of the flight.

## **Government Check Pilot (GCP)**

A DGCA inspector authorized to perform flight checks.

## **License**

A document issued by, or under a delegation of authority from the Director, which authorizes the holder to exercise certain privileges as specified in that license, subject to the conditions and limitations contained therein.

## **Grouping Aircraft**

PT. Smart Cakrawala Aviation operates:

- a. Grand Caravan Cessna C 208 B – SEL Turboprop Aircraft;

- b. Grand caravan cessna C 208 – SEL Turboprop Aircraft
- c. Robinson R-66
- d. Eurocopter EC-130T2

## **In-flight training**

The training required for flight crew and aircraft dispatchers that must be conducted in the aircraft refer to maneuver, procedures or functions.

## **Instructional Delivery Methods**

Methodology for conveying information to a trainee. This may include lectures, demonstrations, audio-visual presentations, home study assignments or E-Learning, workshops, and drills. Training devices, simulators (if applicable), aircraft and computer workstations are also considered instructional delivery methods.

## **Medical Certificate**

Evidence of physical fitness certified on a form prescribed by the DGCA refers to CASR Part 67.

## **Pilot Flying (PF)**

The flight crew member who is manipulating the flight controls of an aircraft during flight time.

## **Pilot In Command (PIC)**

A pilot assigned to act as the Captain of an aircraft.

## **Pilot Proficiency Check (PPC)**

A flight check performed in whole or in part, an aircraft. Conducted by a GCP, CCP, or DPER for the purpose of establishing the level of proficiency, of a flight crew member.

## **Programmed Hours**

The hours specified in CASR Part 135 for certain categories of training (initial new-hire, initial equipment and recurrent). Programmed hours are specified in curriculum segment outlines in terms of training hours.

## **Qualification Curriculum Segment**

That segment of a specified curriculum that begins when formal training has been completed and ends when the airman is fully qualified to perform unsupervised and without restriction in revenue service.

## **Recurrent Training**

Recurrent training must ensure that each flight crew or aircraft dispatcher is adequately trained and currently proficient with respect to the type aircraft (including differences training, if applicable) and flight crew position involved, e.g. recurrent training is a periodic requirement of flight crew that are qualified in their position.

## **Rest Period**

The period of time during which a crewmember is released from all official duty or contact by the company. This period must exclude all time spent commuting by the most direct route, between the company designated rest facility and assigned duty station and, a specified period of prone rest with at least one additional hour provided for physiological needs.

## **Second in Command (SIC)**

A pilot assigned to act as a first officer or co-pilot of an aircraft.

## **Testing**

Any form of examination of knowledge or skill, whether oral, written, or practical.

## **Testing and Checking Methods**

Methods for evaluating trainees as they demonstrate a required level of knowledge in a subject, and when appropriate, apply the knowledge and skills learned in instructional situations to practical situations.

## **Training Day**

A training day consists of the period of time trainees spend in a training environment. A training day includes reasonable periods provided for breaks, with the exception of the time spent for a meal break. Reasonable breaks are normally considered ten minutes each training hour. For example, if training begins at 08.00 and ends at 16.00 (with 60 minutes for lunch), the total training credit is eight (8) hours for that training day, unless otherwise authorized by the DGCA, NO more than eight (8) hours formal classroom training shall be accomplished during any twenty-four (24) hours period.

## **Training Hours**

The total time necessary to complete the training required by a curriculum segment. This must provide an opportunity for instruction, demonstration, practice and testing, as appropriate. The time must be specified in hours on the curriculum segment outline

## **Training Module**

A central part of a curriculum segment that contains descriptive information, elements or events that relates to a specific subject. For example, C208 ground training curriculum segment must have training modules (composed of Element) pertaining to aircraft systems (hydraulic, pneumatic, electrical, etc.). As another example, the curriculum segment flight training must have training



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modules (composed of Event) pertaining to normal, abnormal and emergency procedures. A training module is usually completed in a single training session.

### Upgrading training

The training required for flight crew who have qualified and served as Second-In-Command on a particular aircraft type before they serve as Pilot-In-Command or Second-In-Command, respectively, on that aircraft

#### 1.2.2. Abbreviations

Several acronyms and abbreviations are used throughout this manual and are listed here: The following abbreviations may appear in this manual:

ACL	Authorization Conditions & Limitations
AFM	Aircraft Flight Manual
AIP	Aeronautical Information Publication
AOC	Air Operator Certificate
AOM	Aircraft Operating Manual
ASDA	Accelerate Stop Distance Available
ATC	Air Traffic Control
ATS	Air Traffic Service
BOW	Basic Operational Weight
CAPT	Captain
CASR	Civil Aviation Safety Regulation
CC	Competency Check
CCP	Company Check Pilot
CDL	Configuration Deviation List
CP	Chief Pilot
CVR	Cockpit Voice Recorder
DG	Dangerous Good
DGCA	Directorate General of Civil Aviation
DAAO	Directorate Airworthiness & Aircraft Operation
ERP	Emergency Response Plan
FD	Flight Director
FDR	Flight Data Recorder
FF	Flight Follower
F/O	First Officer



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FPD	Freezing Point Depressant
FSS	Flight Service Station
GCP	Government Check Pilot
GPS	Global Positioning System
GPWS	Ground Proximity Warning System
IFR	Instrument Flight Rule
IMC	Instrument Meteorological Condition
LDA	Landing Distance Available
MTOW	Maximum Takeoff Weight
MEA	Minimum En-route Altitude
MOCA	Minimum Obstacle Clearance Altitude
OM	Operations Manual
OAT	Outside Air Temperature
OCS	Operational Control System
OFP	Operational Flight Plan
PIC	Pilot in Command
POH	Pilots Operating Handbook
SAG	Safety Action Group
SIC	Second In-Command
SOC	System Operations Control
SOP	Standard Operating Procedure
TODA	Take Off Distance Available
TORA	Take Off Run Available
VFR	Visual Flight Rule
VMC	Visual Meteorological Condition



## **1.3. TRAINING ORGANIZATION**

### **1.3.1. Duties & Responsibilities**

The duties and responsibilities of the following training personnel are found in the PT. Smart Cakrawala Aviation Operations Manual Part A.

1. Operation Manager;
2. Chief Pilot;

### **1.3.2. Responsibilities for Certification**

Each instructor, supervisor, or check airman who is responsible for a particular ground training subject, segment of flight training, course of training, flight check, or competence check under CASR Part 135 shall certify as to the proficiency and knowledge of the flight crew, aircraft dispatcher, flight instructor, or check airman concerned upon completion of that training or check.

That certification shall be made a part of the flight crew or dispatcher's record.

When the certification required by this paragraph is made by an entry in a computerized record keeping system, the certifying instructor, supervisor, or check airman must be identified with the entry. However, the signature of the certifying instructor, supervisor, or check airman is NOT required for computerized entries.

### **1.3.3. Ground Training Facilities**

Flight crew and ground training is accomplished in two separate areas:

- a. Internal, and
- b. External (Contracted Ground Training Facility).

Subject material is presented in approved classroom facilities by means of programmed instruction using multi-media visual aids.

Each aircraft and engine system is presented through an overview slide/tape program, followed by detailed operations, procedures and performance presentations, most of which are also slide/tape programs.

#### **1. Company Ground Training Locations and Facilities**

PT. Smart Cakrawala Aviation training administration facilities are located in Corporate Headquarters at :

##### **1. Head Office**

Jl.Cideng Timur No 16A Jakarta Pusat 10130,Indonesia

##### **2. Administration office**

Jl Cideng Timur No 16A Jakarta Pusat 10130, Indonesia.

At this facility, PT. Smart Cakrawala Aviation maintains the master training records, manuals, and ground instructor offices. Basic Indoctrination and some recurrent training for flight crew and dispatchers are periodically held here.

## 2. Contracted Ground Training Facility

Smart Cakrawala Aviation will conduct all ground training, contract requirements, and Company training requirement. If Smart Cakrawala Aviation is unable to implement such training, Smart Cakrawala Aviation will use other approved training providers and will use Smart Cakrawala Aviation training syllabus. The training provider shall hold both DGCA and Smart Cakrawala Aviation approval.

To maintain standard competency of training provider, Smart Cakrawala Aviation will conduct assessment every 12 month.

The following is a Listing of approved training provider and location for Crew Members ground training:

No	TRAINING SUBJECT	TRAINING PROVIDER
1	Windshear	PT PERKASA MANDIRI ABADI (AVIATION TRAINING CENTER)
2	Crew Resource Management	Bandara Halim Perdama Kusuma Terminal Kedatangan LT.II Ruangan A50-PK, Jakarta Timur.
3	Dangerous Goods Training	
4	Aviation Security	

### Training Equipment

Systems Integration Training provides the trainee with training on how aircraft systems inter-relate with respect to normal, abnormal and emergency procedures.

Systems Integration Training is conducted using ground training devices, which portray specific cockpit layout and, in certain cases, switch and indicator / enunciator logic.

#### **1.3.4. Terminology**

The terminology defining PT. Smart Cakrawala Aviation ground training devices is as follow:

## **1. Paper Trainer**

This training device consists of full-scale photographs of the applicable aircraft flight deck panels positioned to simulate an aircraft cockpit.

## **2. Static Aircraft**

The device is aircraft of the various types on ground, and is used during training to accomplish the initial/recurrent ground training such as evacuation.

### **1.3.5. Aircraft Flight Training**

Flight training refers to conduct of training events in an aircraft. Flight Training Equipment (FTE) in accordance with PT. Smart Cakrawala Aviation approved training curriculum.

The primary objective of flight training is to provide flight crew the skills and knowledge necessary to perform to a desired standard. This is accomplished by the demonstration, instruction and practice of maneuvers and procedures (training events) pertinent to a particular aircraft and crewmember duty position.

The successful completion of flight training is validated at PT. Smart Cakrawala Aviation by appropriate testing and checking.

### **1.3.6. Scope**

The material contained in this section outlines the generic requirements for flight, and checks for PT. Smart Cakrawala Aviation pilots. This section includes initial, transition, upgrade and recurrent flight training requirements.

### **1.3.7. CASR Requirements**

Satisfactory completion of the flight training program (CASR Part 135 and part 61) for initial, transition and upgrade flight training for proficiency checks and for operating experience.

### **1.3.8. Check Airman/Instructor Responsibilities**

Inflight training and checks will be conducted by PT. Smart Cakrawala Aviation check airmen or instructors approved by DGCA.

### **1.3.9. Procedure for Grading**

Flight training and check forms will be graded as:

- S : Satisfactory
- U : Unsatisfactory
- SB : Satisfactory Briefing

The grades will be entered on the appropriate forms as "S" or "U" or "SB" along with the number of times the maneuver was attempted.

If not satisfactory, the written comment section should clearly indicate the overall performance well as point out any significant problem areas.



## **1.4. CURRICULUM SEGMENT OUTLINE**

### **1.4.1. Crew Resource Management (CRM)**

Flight training curriculum is developed using CRM concept, and is accomplished using an entire flight crew for each event and/or check. CRM concepts are used to form the basis for the procedures and techniques used during flight training, and are emphasized in the briefing/debriefing.

### **1.4.2. Common Core Training Modules**

It is NOT required to produce separate flight-training curriculum segment need for each category of training. For instance, initial, transition and upgrade training trainees for specific aircraft type will receive flight training with the same flight training curriculum segment.

### **1.4.3. Programmed Training Hours**

The total amount of time allotted to complete the training in the flight training curriculum segment outline is indicated in hours at the top of each curriculum segment outline. There are no programmed hours for PIC new-hire flight training, as all new hires are qualified as SIC.

### **1.4.4. Reduced Training Hours**

The scheduled flight training hours may be reduced provided that the check airman flight instructor recommends the trainee ready for check.

### **1.4.5. Maneuvers and Procedures**

Maneuvers and procedures to be used in the flight-training program are outlined in this manual. Specific details, including a description of maneuvers and pictorial diagrams, are contained in the respective manual for each aircraft.

### **1.4.6. Briefing/Debriefing Periods**

The standard briefing and the standard debriefing will be one (1) hour.

### **1.4.7. Ground Training**

A certain amount of hours is required in the classroom, ground training devices, flight training devices, flight simulators and/or aircraft to cover knowledge needed to support flight crew and aircraft dispatchers in performing their duties.

### **1.4.8. Cockpit Procedures Training**

Training trainees will receive eight (8) hours of Cockpit Procedures Training (CPT). Two periods of four (4) hour's duration are normal and are accomplished in the FTE. Trainees get credit for the entire period Regardless of position.

## **1.4.9. Flight Training**

Part of the flight-training curriculum provided to increase the safety and quality of the training. Introduce the trainees to the real feel of the aircraft controls.

## **1.4.10. Requalification Training**

Requalification training is for a crewmember that has been trained and qualified by PT Smart Cakrawala Aviation but has become unqualified to serve in a particular duty position due to not having received a required flight or competency check within the appropriate eligibility period. Pilot's Recency of Experience

A crewmember that has lost qualification due to lack of recency of experience must re-qualify for his/her crew position. The recency of experience requires a pilot crewmember to make at least three takeoffs and landings within the preceding ninety (90) days in the type Aircraft in which that crewmember is qualified to serve.

### **1. Recency of Experience**

A flight crew that has lost qualification due to lack of recency of experience must requalify for his/her flight crew position.

The recency of experience detailed in a pilot make at least 3 (three) takeoffs and landings within the preceding ninety (90) days in the type aircraft in which that flight crew is qualified to serve.

### **2. Takeoff/ Landings**

If a flight crew fails to make the required three takeoffs & landings within any consecutive ninety (90) day period, and has NOT completed training on another aircraft type during the interim, he/she must re-establish recency of experience in accordance with CASR Part 135.

The takeoffs and landings required in this paragraph will be made under the supervision of a PT. Smart Cakrawala Aviation check airman in an aircraft or flight simulator (if applicable) and must include:

- a. At least one take-off with a simulated failure of the most critical engine;
- b. At least one landing from an ILS approach to PT. Smart Cakrawala Aviation lowest authorized ILS minimum;
- c. At least one landing to a full stop.

### **3. Aircraft Type**

A pilot who has lost qualification on a particular aircraft type after qualifying on a different aircraft type will be expected to demonstrate proficiency including landings.

- a. More than 90 days but less than 6 months, the pilot must complete:

- 1) Either recurrent training or proficiency checks.



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- 2) Two takeoffs and landings in line operation observed by a check airman/Instructor within 45 days if the recurrent training or proficiency check was performed in a simulator.
  - b. More than 6 months but less than 12 months

PT. Smart Cakrawala Aviation pilots who become concurrent due to furlough, leave of absence, sick leave, etc., beyond six (6) months but not over twelve (12) months will be considered qualified in the same status on the aircraft type they last flew, if said pilot has satisfactorily completed:

- 1) Recurrent training;
- 2) Proficiency checks;
- 3) Two takeoffs and landings in line operation observed by a check airman/instructor within forty-five (45) days if the recurrent training or proficiency.

- c. More than 12 months

A pilot who has lost qualification for a period greater than twelve (12) will require re-qualification training. The number of these simulator or aircraft training periods varies for each type aircraft.

The training hours listed for re-qualification training are a minimum and may be increased if necessary. Furthermore, each flight crew's re-qualification is unique and must take into account factors such as time spent in other aircraft type, or perhaps an extended illness during which NO flying was accomplished.

#### Experience training figure for Captain

90 days - 6 months		6 - 12 months		> 12 months
-	Aircraft	-	Aircraft	
Recurrent or Prof. Check.	Recurrent or Prof check.	Recurrent or Prof Check.	Recurrent or Prof Check.	
Min 3 T/O - LDG (by Check airman/instructor)		Min 3 T/O & LDG (by Check Airman/ Instructor)		

## Experience training figure for First Officer

90 days - 12 months		12 - 24 months		> 24 months
-	Aircraft	-	Aircraft	Requalification
Recurrent or Prof. Check.	Recurrent or Prof check.	Recurrent or Prof Check.	Recurrent or Prof Check.	
Min 3 T/O - LDG (by Check airman/Instructor)		Min 3 T/O & LDG (by Check Airman/Instructor)		

### 1.4.11. Mountain Training

Flight instructors will place special emphasis on areas of aeroplane operation that are most critical to flight safety and comfort. Among these areas are correct aeroplane control, horizon definition and judgement, sound judgement in decision making, anxiety effect on decision making, situational awareness, threat and error management, anticipation, stall/spin awareness, spatial orientation, collision avoidance, weather appreciation especially assessment of wind and cloud and their significance, turbulence avoidance, turbulence mitigation, and emergency responses. Although these areas may not necessarily be shown under each exercise, they are essential to flight safety and will receive emphasis throughout the training.

### 1.4.12. External Load Training

External Load operations require a high degree of crew skill in order to maintain safe, efficient and cost effective results. A safe operating environment is promoted when crew members are knowledgeable, skilled and proficient. This can only be achieved with a proper training program and crew effort to maintain the highest level of airmanship possible. Training requirements outlined in this SOP should be regarded as the minimum required to ensure these standard.

External load training is normally conducted as part of the initial helicopter type training. However, due to its degree of difficulty, vertical reference/long line external load training is conducted as dedicated training.

## 1.5. TRAINING TO PROFICIENCY

Ordinarily, PT. Smart Cakrawala Aviation flight crew complete a flight training curriculum segment by successfully accomplishing each training event and the specified number of training hours.

However, a flight crew may successfully complete a flight training curriculum segment without completing the specified number of training hours, provided all of the following conditions is met:

1. The flight crew successfully completes all of the training events required by the curriculum segment.
2. PT. Smart Cakrawala Aviation check airman / flight instructor recommends that the flight test be conducted before completion of the specified number of training hours.
3. The flight crew satisfactorily completes the qualification curriculum segment requirements. If the flight crew fails to meet the qualification curriculum segment requirements because of a lack of proficiency, he/she will be required to complete all the training hours specified in the flight training curriculum segment.
4. PT. Smart Cakrawala Aviation check airman / flight instructor must then recommend the flight crew before re-accomplishing the failed qualification requirements.

## **1.6. PROCEDURES AND TECHNIQUES DOCUMENT**

CASR Part 135 requires that PT. Smart Cakrawala Aviation provide a procedures and techniques document for approval by the DGCA. This document provides detailed descriptions or pictorial displays of the approved normal, abnormal and emergency maneuvers, including the procedures and functions that will be performed in flight training.

In addition, the description of each maneuver or procedure conforms to PT. Smart Cakrawala Aviation procedural instructions for cockpit checks, altitude awareness, required call outs, crew coordination and crew resource management.

Finally, each maneuver or procedure specifies altitudes, configurations and the appropriate aim-speeds to be utilized during the conduct of in-flight training and checking.

### **1.6.1. Procedures and Techniques Manual**

PT. Smart Cakrawala Aviation maintains a procedures and techniques manual for each specific aircraft type operated. Any changes to the document will be initiated by the Chief Pilot and coordinated with the appropriate Operations Manager.

The changes will then be submitted to the DGCA Principal Operations Inspector for approval and inclusion in PT. Smart Cakrawala Aviation approved training program. The approved changes are then distributed to individual flight crew as revisions to the appropriate Procedures and Techniques Manual.

### **1.6.2. Instructor Guide**

Instructor guides or training syllabus, which support the procedures and techniques manuals, specify the conditions (such as weather, aircraft weight, and other parameters) to be applied during training on a maneuver or procedure.

The conditions specified in these guides are equivalent to the types of operations authorized by PT. Smart Cakrawala Aviation Operations Specifications in all areas, and Authorization Condition Limitations

## 1.7. PROCEDURES

### 1.7.1. Re-check after Failure

#### **Purpose**

To identify the policies and procedures to follow when a trainee does not achieve the minimum required standard for satisfactory course completion.

#### **Scope**

This policy applies to any trainee participating in a course of instruction covered by this manual.

#### **Policy**

Satisfactory performance for any written examination will be a minimum of 75% correct. Satisfactory performance for any dispatcher competence examination will be a 'Satisfactory' indication for every item covered during the check, examination or training.

Satisfactory performance for any pilot proficiency training or check, or any other line qualification or evaluation covered in this manual, will be a "Satisfactory" indication for every item covered during the check or evaluation.

#### **Guidelines**

##### **1. Quizzes**

For each quiz, make-up examinations will be given to those individuals who do NOT achieve a satisfactory score. The instructor will schedule the 'make-up examination'.

Trainees who do NOT achieve a satisfactory score on a make-up examination will be dismissed from the course of training immediately and released to their respective managers for further disposition.

##### **2. Final Exams**

There are 50 make-ups for a final exam. Trainees who do NOT achieve a 'Satisfactory' score on a final exam will be dismissed for the course of training and released to their respective managers for further disposition.

##### **3. Competence Exams**

An appropriate supervisor will give dispatcher or flight attendant competence exams or ground instructor and cover the applicable CASR required subjects.

Trainees who do NOT achieve a 'Satisfactory' score on the competence exam will be dismissed from the course of training and released to their respective managers for further disposition.

##### **4. Proficiency training or check, or any other line qualification or evaluation**

pilot proficiency training or check, or any other line qualification or evaluation as required by CASR Part 135 including any oral exam which might be given in conjunction with such a check, will be given by an appropriate check airman and cover the applicable CASR required subjects. Trainees who do NOT achieve a

satisfactory score on the proficiency training or check, or any other line qualification or evaluation, will be given retraining and a re-check. The appropriate supervisor will determine the amount and scope of re-training, with consideration given to the recommendations of the check airman. A different check airman will give the recheck when conditions permit.

If the flight crew fails the re-check, he/she will be removed from active flying status, and released to the respective supervisor (Chief Pilot) for further disposition.

For the purposes of this policy, the oral examination, the simulator evaluation, and the aircraft evaluation (if necessary) required for a type rating certificate make up a single testing event. If a trainee fails any part of the type rating certification, he/she may be given retraining and a re-check on that part.

Any second failure on any part of the type rating certification will result in the trainee's removal from active flying status and release to the respective manager for further disposition.

In the event that a flight crew is returned to his/her former flight crew position as a result of a failure, successful completion of a company oral and proficiency check for that flight crew position is required prior to that flight crew returning to line flying duties.

**NOTE:** **If the failure is due to lack of proficiency, and occurs during any flight training event which has been reduced in programmed hours under CASR Part 135 the full programmed hours of training must be accomplished prior to qualification.**

### 1.7.2. Duty Training and Rest Period

DUTY OF TRAINING	DUTY FREE
1 - 6 days	1 day
7 - 13 days	2 days
14 - 20 days	3 days
21 - 27 days	4 days
> 27 days	5 days

### 1.7.3. Records keeping.

Smart Cakrawala Aviation management shall establish and maintain a record of;

- A person's name, license number (where applicable), all ratings, certificates, and endorsements relating to the person's position and function,
- The person's medical category and the expiry date of that category,

- c. The dates on which the person while in the air carrier's employ, successfully completed any training, proficiency or competency check, examination or certification or other qualification required by CASR 135.
- d. A record of attendance of all portions of any course for which a course calendar or syllabus is required to be published,
- e. Information relating to any failure of a person, while in the air carrier's employ, to successfully complete a training, examination, proficiency or competency check, or to obtain any qualification required by CASR 135.
- f. The type and registration of any aircraft, or flight training device.

Smart Cakrawala Aviation will keep any record of training and examination for the period of time such record gives evidence of the person's currency. In the case of any proficiency or competency check, or a failure to qualify, the record shall be retained for a period of three years.

Any record required shall be in a form approved by the DGCA and such forms will be used regardless of where the training was completed. Smart Cakrawala Aviation will keep its record of training and checking in a computer format provided the information may be easily deciphered.



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## **2. MANDATORY TRAINING**

### **2.1. GENERAL**

Mandatory training is that training conducted by PT. Smart Cakrawala Aviation to qualify crewmembers and dispatchers beyond the scope of basic training covered in the other curriculum segments.

Mandatory Training carried out in order to full fill the requirements required by CASR 135. Mandatory training can be conducted in house training or to be subcontracted approved Training Centre as stated in OM D Chapter 1.3.3 Ground Training Facilities.



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## 2.2. OPERATIONS TRAINING PROGRAMS

Special training is that training conducted by PT. Smart Cakrawala Aviation to qualify flight crew and FOOs beyond the scope of basic training covered in the other curriculum segments. This section covers only those curriculum segment modules necessary to fulfill PT. Smart Cakrawala Aviation OPSPEC, ACL and CASR compliance.

The PT. Smart Cakrawala Aviation operations training program, having obtained the appropriate initial and final approval from the Operations Manager.

Provides a training program that meets the requirements of CASR Part 135 Subparts N(Training).

This training program is to ensure that each crewmember, flight and ground instructor, and check airman, air transportation supervisor and each person assigned duties for the carriage and handling of dangerous articles and magnetized materials, is adequately trained to perform his assigned duties. [CASR 135.421].

The Company's training program will be organized to include the following components as applicable to company operations

No.	Required Training Component by CASR 135	Initial	Recurrent
1.	Basic Indoctrination Training	Yes	Yes
2.	Windshear Training,	Yes	Yes
3.	Crew Resource Management Training,	Yes	Yes
4.	Transportation of Dangerous Goods Training,	Yes	Yes
5.	Emergency Equipment and Procedures Training,	Yes	Yes
6.	Technical Ground Training (Recurrent Type	Yes	Yes
7.	Rating),	Yes	Yes
8.	Aircraft Flight Training (Proficiency Check),	Yes	Yes
9.	Differences Training,	Yes	Yes
10.	Upgrade Training,	Yes	Yes
11.	Line Indoctrination Training for Flight Crew Members Recency of Experience Training	As Req.	As Req.

## **2.3. BASIC INDOCTRINATION TRAINING**

### **2.3.1. Introduction**

Company Indoctrination Training MUST be completed by all new hires pilots to PT Smart Cakrawala Aviation with no exceptions. The Basic Indoctrination Training, as an example, consists of subjects such as: duties and responsibilities, relevant state regulations, authorized operations and relevant sections of the all operational manuals.

### **2.3.2. Training objective**

Company indoctrination acquaints the student with PT. Smart Cakrawala Aviation policies, procedure, forms, organizational and administrative practices, and ensure the student has the requisite knowledge for subsequent aircraft ground and flight training curriculum segment.

Upon completion a student shall understand PT. Smart Cakrawala Aviation policies, procedure, and means of compliance with the CASR while engaged in business of air transportation.

### **2.3.3. Modules.**

Time scale ..... **16.0 Hours**

1. Duties and Responsibilities ..... 2.0 Hours

1. Company organization and management lines of communication;
2. Operational concepts, scope, and policy;
3. Records;
4. Employee standards and rules of conduct as they relate to safety;
5. Authority and responsibilities of duty position;
6. Company-required equipment;
7. Manuals distribution, responsibilities, organization, revision process;
8. Drug/Alcohol Awareness training.

2. Provisions of the CASR ..... 2.0 Hours

1. Certification, training, and qualification requirements;
2. Medical certificates, physical examination, fitness for duty requirements;
3. Flight control requirements (dispatch, flight release, flight following);
4. Duty and rest requirements;
5. Record keeping requirements;
6. Operational rules of the CASR;
7. Regulatory requirements for company manuals;
8. Other appropriate regulations (flight crew emergency authority, interference with crewmembers, and reporting requirements).

3. AOC / OPSPEC / ACL ..... 1.0 Hours

1. Regulatory basis in CASR 135;
2. Definitions, descriptions, and Organization of Ops Specs;
3. Limitations and authorizations of Ops Specs;
4. Description of Air Operator's Certificate.

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4. <u>Hazardous Materials</u> .....	1.0 Hours
1. General;	
2. Communications;	
3. Handling;	
4. Exceptions/Exemptions;	
5. Emergency procedures.	
5. <u>Aviation Security</u> .....	1.0 Hours
6. <u>Company OPERATIONS Flight Control</u> .....	2.0 Hours
1. Dispatch, flight release, flight following systems and procedures;	
2. Organization, duties and responsibilities;	
3. Weather and NOTAM information	
4. Company communications.	
7. <u>Weight and Balance</u> .....	2.0 Hour
1. Definitions (ZFW, moments, arms, datum, etc.);	
2. General loading procedures and CG computations;	
3. Effects of fuel burn and load shifts in flight;	
4. Weight and Balance forms, load manifests, fuel slips, and other applicable Documents.	
8. <u>Aircraft Performance and Airport Analysis</u> .....	2.0 Hours
• Definitions;	
• Effects of temperature and pressure altitude;	
• Airport analysis.	
9. <u>Meteorology</u> .....	2.0 Hour
1. Basic weather definitions (forecasts, reports, symbols);	
2. Temperature, pressure, winds;	
3. Atmosphere, moisture and clouds;	
4. Air masses and fronts;	
5. Thunderstorms, and wind-shear;	
6. Wake turbulence;	
7. Weather radar.	
10. <u>Navigation</u> .....	1.0 Hours
▪ Definitions;	
▪ Plot age concepts and procedures;	
▪ Navigational aids;	
▪ VHF, GPS.	

#### **2.3.4. Courseware**

- 1) Materials available to each training class include:



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- A. Operations Manual (OM); POH; Minimum Equipment List (MEL); AIP/INDOAVIS High/Low Area Charts, SIDS, Sample flight plans; Weather/navigational charts and maps as applicable.
- B. Other material as necessary.

2) Transparency.

## **2.3.5. Instructional Delivery Methods:**

Lecture, slides, video, and demonstration.

## **2.3.6. Training Environment:**

Classroom.

## **2.4. WINDSHEAR TRAINING**

### **2.4.1. Objective**

Wind-shear training has been established at PT. Smart Cakrawala Aviation in accordance with CASR Part 135. The objective of the program is to enhance cockpit skills to enable flight crew to recognize and avoid windshear, or in the case of an inadvertent encounter, to improve chances of survival by prompt and effective responses. The wind-shear training curriculum segment consists of both ground and flight training modules.

### **2.4.2. Windshear Ground Training**

Ground training will focus on the meteorology of wind-shear and will address avoidance as standard operating policy at PT. Smart Cakrawala Aviation. This training will consist of one module.

### **2.4.3. Modules**

#### **Initial / Recurrent Training.....16.0 / 8.0 Hours**

##### **1) WINDSHEAR GROUND TRAINING.....8.0 / 4.0 Hours**

- Wind shear weather;
- Effects of wind-shear;
- Wind-shear Recognition and Avoidance;
- Recovery Techniques – Takeoff;
- Recover Techniques – Approach and Landing;
- Aircraft Specific Techniques.

##### **2) WINDSHEAR FLIGHT TRAINING GENERAL BRIEFING MODULE ....4.0 / 2.0 hours**

- ✓ Evaluation of weather;
- ✓ Avoidance;
- ✓ Standard operating procedures;
- ✓ Recovery techniques;
- ✓ Scenario briefing;
- ✓ Description;
- ✓ Initial conditions;
- ✓ Piloting technique.

##### **3) DEBRIEFING .....2.0 / 1.0 Hours**

##### **4) EMERGENCY PROCEDURES .....1.0 / 1.0 Hour**



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- Reporting/signs requirements;
- Discrepancies;
- Incidents;
- Passenger operations;
- Company procedures.

## 2.5. DANGEROUS GOODS TRAINING

### 2.5.1. Objective

Completion will qualify a flight crew, or aircraft dispatcher to operate in compliance with applicable regulations concerning the handling and carriage of dangerous articles and magnetized materials.

### 2.5.2. Modules

**Initial / Recurrent Training ..... 8.0 / 8.0 Hours**

#### **HAZARDOUS MATERIALS TRAINING**

1. GENERAL HAZARDOUS MATERIALS INFORMATION ..... 2.0 / 2.0 Hours
  - Responsibilities;
  - Definitions and Classifications;
  - Use and application of the hazardous materials table;
  - ICAO Part 1.
2. COMMUNICATIONS REQUIREMENTS ..... 2.0 / 2.0 Hours
  - Shipping papers/certification;
  - Package / marking;
  - Labeling / placard;
  - ICAO Part 4.
3. HANDLING ..... 2.0 / 2.0 Hours
  - Acceptance and inspection of shipments;
  - Unacceptable HAZMAT shipments;
  - Forbidden materials 1 packages;
  - Notification of pilot;
  - Handling, storage, and loading;
  - Special handling: Vehicles, Poison, Asbestos, Radioactive;
  - Company procedures.
4. EXCEPTION / EXEMPTIONS ..... 1.0 / 1.0 Hour
  - Exceptions;
  - Exemptions;
  - Company procedures.
5. EMERGENCY PROCEDURES ..... 1.0 / 1.0 Hour
  - Reporting/signs requirements;
  - Discrepancies;
  - Incidents;
  - Passenger operations;

### 2.5.3. Courseware

1. ICAO, Technical Instructions for the Safe Transport of Dangerous Goods by Air;
2. IATA, Dangerous Goods Regulations (current edition).



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## **2.5.4. Instructional Delivery Methods**

Relative course materials issued during classroom sessions.

## **2.5.5. Training Environment**

- Classroom.

## **2.5.6. Testing / Checking**

Each training course has questions specific to the handling and carriage of dangerous articles and magnetized materials included in the final examination.

## **2.5.7. Record Keeping**

Completion of required training is documented in the training file for each flight crew

## **2.6. CREW RESOURCE MANAGEMENT**

### **2.6.1. Objective**

Completion of this curriculum segment satisfies the applicable requirements of CASR Part 135 as they relate to this PT. Smart Cakrawala Aviation Crew Resource Management program, and is designed to prevent incidents and accidents.

### **2.6.2. Introduction**

Crew Resource Management (CRM) program was developed in accordance with the guidelines in ICAO documents CRM Handbook and is designed to enhance safety by increasing the efficiency of flight crew. This increased efficiency is realized through training in team management, communications, situational awareness, decision-making, and recognition of the resources available to assist the flight crew in the safe, efficient completion of any PT. Smart Cakrawala Aviation flight operations.

### **2.6.3. Implementation**

CRM is a cultural mainstay at PT. Smart Cakrawala Aviation and is implemented in three phases: Awareness, Practice & Feedback, and Reinforcement. During the Awareness phase, CRM concepts and skills are discussed and practiced in the classroom environment. CRM emphasis during simulator training provides flight crew with the opportunity to practice CRM skills and attain feedback regarding their individual and flight crew performance through facilitated self-critique. The Reinforcement phase includes recurrent CRM training, incorporation of CRM concepts into PT. Smart Cakrawala Aviation literature and flight operations safety publications, and continual emphasis on effective CRM from management, check airmen, and instructors.

### **2.6.4. Modules**

#### **Modules (INITIAL).....16.0 Hours**

##### **1) AWARENESS PHASE.....6.0 Hours**

###### **INITIAL CRM PROGRAM:**

- Introduction and supporting remarks by management;
- Brief history of CRM evolution;
- Course overview. TEAM MANAGEMENT:
- Leadership, supporting roles;
- Team building: Creating the optimal CRM environment;
- Team maintenance: Monitoring crew performance, workload;
- Resource management: Establishing, maintaining, monitoring.

###### **COMMUNICATIONS PROCESSES:**

- Verbal: listening, inquiry, advocacy, assertiveness, and feedback;
- Non-verbal: facial expressions, gestures, hand signals;
- Written: publications, flight forms, and transcriptions.

## SITUATIONAL AWARENESS:

- Concepts;
- The senses and perception;
- Vigilance and monitoring;
- Detriments to acquiring and maintaining situational awareness;
- Levels of awareness matrix;
- Law of primacy. DECISION MAKING:
- The decision making process;
- Problem solving;
- Judgment;
- Risk;
- Error.

## CRM ACCIDENT REVIEW:

- Investigation from CRM perspective. CONCLUSION:
- Course summary;
- Course critique and feedback;
- Completion of course attendance records and certificate.

## 2) PRACTICES AND FEEDBACK PHASE .....6.0 Hours

### SIMULATOR CRM PROGRAM:

CRM and its proper application will be a continuing part of the PT. Smart Cakrawala Aviation simulator-training program. Check airmen and instructors will facilitate flight crew self-critique of CRM performance. Additional, as part of the CASR Part 135 advanced simulation plan, Line Oriented Flight Training (LOFT) is a part of all transition and initial equipment training.

### 3) TESTING / CHECKING: On-the-job monitoring, flight crew data collection in accordance with the CRM program .....2.0 Hours

### 4) RECORD KEEPING .....2.0 Hours

Information collected from line flight crew, check airmen, qualified line observers, and other evaluators will be monitored and will be used primarily to assess the organization's health with respect to effective use of CRM.

## **Modules (RECURRENT) .....1 Day (8.0 hours)**

### 1) CRM SKILLS AND CRM SYLLABUS

ICAO Human Factors-Skill Requirement CRM Syllabus, CRM Syllabus from an Operator.

### HUMAN PERFORMANCE AND LIMITATION

Introduction Basic Theory ICAO Human Performance Training Curriculum for Pilot JAR FCL Syllabus / HPL syllabus Practical Notes.

### ATTENTION, VIGILANCE, FATIGUE, STRESS AND WORKLOAD MANAGEMENT

Introduction Arousal and Workload Stress: Domestic and Work Related Sleep,



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Fatigue and Circadian rhythms Fatigue Alcohol and Medication Practical Notes  
Initial Training and Objectives, Recurrent Training and Objectives.

## INFORMATION PROCESSING

Introduction Basic Theory of Information Processing Information, Information Processing Limitations Practical Notes Initial Training and Objectives, Recurrent Training and Objectives.

## HUMAN ERROR, RELIABILITY AND ERROR MANAGEMENT

Introduction Basic Theory Error Management Practical Notes Initial Training and Objectives, Recurrent Training and Objectives.

## SITUATIONAL AWARENESS

Introduction Definitions Basic Theory Practical Notes Initial Training and Objectives, Recurrent Training and Objectives.

## COMMUNICATION, TEAMWORK, LEADERSHIP, DECISION MAKING AND MANAGERIAL SKILLS

Introduction Communications Leadership, Crew Teams Coordination, Practical Notes Initial Training and Objectives, Recurrent Training and Objectives.

## 2) AUTOMATION

- Introduction Training for Automation.

**NOTE: Subject will not covers all as listed, depends on problems highlight during operational activity.**



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## **2.7. APPROACH AND LANDING ACCIDENT REDUCTION (ALAR)**

### **2.7.1. Objective**

Upon successful completion of Approach and Landing Accident Reduction (ALAR) training, the trainee will be capable satisfactorily develops awareness of potential hazards during approach and landing.

### **2.7.2. Modules**

**Initial / Recurrent Training .....8.0 / 8.0 Hours**

**1) GROUND TRAINING:**

- Background;
- CFIT Accident Fatalities Review;
- CFIT Accident Contributing Factors;
- EGPWS; system design, warning modes and display, Standard Operating Procedures related to EGPWS warning;
- Recommendations; Altimeter, Safe Altitude, ATC, Flight Crew Complacency, Procedures, Understanding Approach Charts, Stabilized Approach, Auto-flight Systems, Training (EGPWS Escape Maneuvers, Hazards leads to CFIT, Altitude Awareness, Good Crew Resource Management; Briefing, Callouts);
- Evaluation using CFIT Checklist for Specified Airport/s.



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## 2.8. TRAFFIC AVOIDANCE SYSTEM (TAS)

### 2.8.1. Objective

Upon successful completion of training the trainee will be capable satisfactorily develop awareness and attitude of traffic collision hazard by respect to TAS.

### 2.8.2. Modules

#### 1. GROUND TRAINING.

Time scale .....1 Hour

- Background;
- Regulations;
- Technical Description;
- Target Surveillance;
- Collision – Avoidance Concept; Alert Threshold, Response to Traffic Advisories (TA) and use of proper TAS display information and system limitation;
- Logic Functions;
- Use of TAS.

## **2.9. EMERGENCY TRAINING**

### **2.9.1. Introduction**

There are two types of Emergency Training provided by PT. Smart Cakrawala Aviation to meet the requirements of CASR Part 135 - Emergency Training.

One type is "Aircraft Specific" and includes instruction and practice in emergency and abnormal procedures associated with aircraft systems, structural design and operational characteristics.

The other type of Emergency Training is referred to as "General Emergency Training" and pertains to emergency drill and situation that could be encountered in any PT. Smart Cakrawala Aviation aircraft.

The curriculum segment outlines for Initial, Transition, and Recurrent General Emergency Training contained in this chapter meet all the regulatory requirement of CASR Part 135. Because of basic logistic and other requirements, certain part of the General Emergency Training modules are presented coincidentally with other curriculum segments, such as Basic Indoctrination, Aircraft Ground or Security Training curriculum segment. This permits greater training continuity and flexibility. In these cases, the General Emergency Training modules are appropriately identified.

### **2.9.2. Requalification Training**

The General Emergency Training curriculum segment will be incorporated into Requalification Training for flight crewmembers that have been unqualified for more than twelve (12) months but less than twenty-four (24) months.

### **2.9.3. EMERGENCY DRILL & SITUATIONS**

#### **Objective**

After completion of the Drills contained in this curriculum segment, the students shall have completed and be proficient in the "Emergency-Drill" requirements contained in CASR Part 135.

#### **Modules**

**NOTE:** The Emergency Drill training modules, which require flight crews to actually operate the items of emergency equipment (hands-on), shall be conducted at least every twenty-four (24) months.

- 1) **EMERGENCY - DRILL SUBJECT AREA.....4.0 Hours (Initial) / 2.0 Hours (recurrent)** (Consists of five sub-modules)
  - a. Hand-held Fire Extinguisher:
    - Proper Charge Level (Inspection Tag, Date, etc.);
    - Demonstrated Removal and Stowage of Extinguishers;
    - Fire Fighting Drill(Actual Discharge of a Representative Types of Extinguisher);

b. Fire Fighting Training Module:

- A Video on the Description and Operation of each Type of Fire Extinguisher
- Installed on all Aircraft;
- An Actual Demonstration of the Above Fire Extinguishers;
- Hands-on Fire Fighting Drill Performed by each Member of the Class.

**NOTE:** This requirement needs to be accomplished only once during Initial New-Hire or Initial Equipment Training).

c. Ditching Equipment:

- Demonstrate the Donning, Use and Inflation of Individual Flotation Means (Life Preservers);
- Instruction on Life Raft - Removal from the Aircraft and Inflation of each Type of Raft;
- Instruction on the Use of Life Vest;
- Actual Boarding of a Life Raft;
- Instruction on Survival Equipment.

**NOTE:** Sub-modules A through E (Emergency Drills) above is part of the General Emergency Training Curriculum segment.

Additionally, in the last two elements of Sub-module A of the Emergency Situations subject area on the next page; actually extinguishing a fire and using an aircraft slide/raft are conducted as one-time training events for Initial New-hire students only.

**2) EMERGENCY - DRILL SUBJECT AREA.....4.0 /2.0 Hours**

a. Flight Crew Duties and Responsibilities:

- Emergency Assignments;
- Captain's Emergency Authority;
- Reporting Accidents and Incidents;
- Actual Discharge of each Type of Extinguisher to Extinguish an Actual Fire (Class A, B or C)

b. Crew Coordination and Company Communication:

- Notification Procedures;
- Ground Agency Notification Procedures;
- Company Communication Procedures.

c. Aircraft Fires:

- Principles of Combustion and Classes of Fires;
- Use of Appropriate Hand-held Extinguishers;
- Goggles;
- Toxic Fumes and Chemical Irritants;

d. First Aid Equipment:

- Contents of First Aid Kit and Emergency Medical Kit;

- Requirements for First Aid Kit integrity (Seals);  
➤ Use of Individual Item.
- e. Illness, Injury and Basic First Aid:
  - Ear and Sinus Blocks;
  - Shock;
  - Oral Resuscitation and CPR;
  - Burns;
  - Loss of Consciousness;
  - Death in Flight;
  - Heart Attack and Pregnancy Situations;
  - Seeking Medical Assistance.
- f. Ground Evacuation:
  - Aircraft Configuration;
  - Directing Passenger Flow;
  - Blocked or Jammed Exit Procedures;
  - Fuel Spills or Other Ground Hazards;
  - Handicapped Persons.
- h. Previous Aircraft Accident / Incidents:
  - AAIC Accident Reports Reviews;
  - DGCA Accident Reports Review.
- j. Hijacking and Other Unusual Situations this module is listed in this section under its own heading.

### **Checking Environment**

Job location

### **Testing / Checking**

On-the-job monitoring

### **Record Keeping**

Successful completion of the required 'Hands-on' Drills and the other evaluations described here is recorded in the Crewmembers Training files.

#### **2.9.4. GENERAL EMERGENCY TRAINING DITCHING DRILLS**

##### **Objective**

PT. Smart Cakrawala Aviation is designed to ensure flight crews are knowledgeable and properly trained in the procedures and equipment necessary to ensure survival,

##### **1. RAFT "HANDS-ON" TRAINING MODULES**

- a. Emergency Equipment - Equipment Identification and Familiarization.

**NOTE:** Each student will participate in a group demonstration in the location and use of each item of emergency equipment contained in the raft.



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b. Raft Drills:

- Raft Launching;
- Raft Inflation/Deflation;
- Use of Hand Pump.

**NOTE:** All drills will be conducted in a static raft on the training area floor.

## **Checking Environment**

Classroom

## **Testing / Checking**

On the Job Monitoring

## **Record Keeping**

Successful completion of the ditching drill is recorded in the Flight Crew Training file



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## **3. PILOT TRAINING**

### **3.1. INTRODUCTION**

This training manual is intended to serve as guidance material for pilots ground and/or flight training program to ensure that each pilot become qualified and remain adequately trained for each type of aircraft, duty position and kind of operation in which the pilot serves.

All pilots personal will receive training, testing and check according to the appropriate category of training.

## 3.2. TRAINING CATEGORY

### 3.2.1. Definitions

1. INITIAL NEW-HIRE, pilot who have not had previous experience or duty position with the PT. Smart Cakrawala Aviation methods, systems and procedures.
2. INITIAL EQUIPMENT, pilot who have been previously trained and qualified for a duty position by PT. Smart Cakrawala Aviation and who is being reassigned to any duty position on an aircraft of a different group.
3. TRANSITION, pilots who have been previously trained and qualified for a specific duty position and who is being assigned to the same duty position on a different aircraft type of the same group.
4. UPGRADE, pilots who have been previously trained and qualified as First Officers / Second-In-Command by PT. Smart Cakrawala Aviation and is being assigned as Captain / Pilot-In-Command of the same aircraft type.  
If assignment is not in the same aircraft type, INITIAL EQUIPMENT training or UPGRADE other group training is the applicable category.
5. RECURRENT, pilots who has been trained and qualified; who will continue to serve in the same duty position and aircraft type within eligibility period to maintain currency.
6. RE-QUALIFICATION, pilots who have been trained and qualified by PT. Smart Cakrawala Aviation, but unqualified to serve in particular duty position and/or aircraft due to not having received a required flight or competency check within the appropriate eligibility period.
7. DIFFERENCE, pilots who have been trained qualified and served on a particular duty position and aircraft type, when DGCA finds difference training is necessary before a pilot serves in the same duty position on a particular variation of that aircraft.
8. STANDARDIZATION, new hired pilots who have been qualified and served on a particular duty position and aircraft type to familiarize and standardize them with PT. Smart Cakrawala Aviation procedure.



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### 3.2.2. Training Category

PT. Smart Cakrawala Aviation provides training categories as follow:

Item	Initial		Transition	Up-Grade		ATPL	Requalif	Difference
	NH	EQ		ST	OG			
Basic Indoctrination	Yes							
Emergency (equipment, evacuation)	Yes	Yes	Yes		Yes		Yes*	Yes*
Aviation Security	Yes							
Dangerous goods	Yes							
Windshear	Yes							
Crew Resource Management	Yes							
Classroom (rating)	Yes	Yes	Yes		Yes	Yes	Yes	Yes
Cockpit Procedure Training	Yes	Yes	Yes	Yes	Yes		Yes*	
Full Flight Simulator	Yes*	Yes*	Yes*	Yes*	Yes*	Yes*	Yes*	Yes*
Aircraft Base Training	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes*
Line/Route Training	Yes	Yes	Yes	Yes	Yes		Yes	Yes*

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**Note :**

- NH ► Initial New Hire
- EQ ► Initial Equipment
- ST ► Same Type
- OG ► Other Group
- Yes\* ► if applicable.

### 3.2.3. Training Form

Training form PT.SCA consists of :

1. Person's name and license number
2. Medical category and the expiry date
3. The dates on which the person while in the certificate holder's employ
4. Type and registration of any aircraft, or flight training device.
5. Record of attendance



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### **3.2.4. Test / Check**

Test / Check have the following two primary objectives:

1. To ensure that each flight crewmember has reached an acceptable level of proficiency in all assigned duties before being released from training and supervision.
2. To provide a means, as part of the company's quality assurance program, to measure the effectiveness of training and to identify and correct any training deficiencies.

## 3.3. STANDARDIZATION TRAINING

### 3.3.1. Ground Training

**Time .....8.0 Hours**

- Class room refreshing course;
- Aircraft System;
- Performance, Weight & Balance;
- Flight Safety;
- Flight Techniques;
- OM, SOP and POH;
- Exam / Test.

### 3.3.2. Flight Training (if applicable) TIME SCALE.

- ◆ Pilot Flying (PF)..... **4.0 Hours plus 2 Sectors**
- ◆ Briefing and Debriefing..... **4.0 Hours**

#### Session 1

- a) Briefing..... 1.0 Hour
- b) Pilot Flying (PF)..... 2.0 Hours
- c) Debriefing..... 1.0 Hour
  - Engine starting
  - Taxi out and take off;
  - Steep turn;
  - Stall and Recovery;
  - VOR / G1000 and Go Around;
  - Visual Approach and Landing;
  - Taxi in and Parking;
  - Termination.

#### Session 2

- ✓ Briefing ..... 1.0 Hour
- ✓ Pilot Flying (PF) ..... 2.0 Hours
- ✓ Debriefing ..... 1.0 Hour
  - Fuel Calculation, Flight Plan, Weight & Balance and Coordination;
  - Preparation;
  - Engine Starting
  - Taxi out and Takeoff;
  - Departure follows SID;
  - Short base circuit;
  - Low circuit;
  - Flapless circuit;
  - Arrival follows STAR;
  - Landing and Taxi in;
  - Parking and Termination.



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**NOTE: LOFT should be done with more than 1 hour flight time and including CRM concept.**

### **3.3.3. Courseware**

- A. Operations Manual (OM); Minimum Equipment List (MEL); Pilot Operating Handbooks (POH); Standard Operating Procedures (SOP); AIP & Indoavis Chart; Flight Plans, Operational Navigation Charts (ONC);
- B. Other applicable material as necessary.

### **3.3.4. Instructional Delivery Methods:**

Aircraft demonstrated by the pilot being trained.

### **3.3.5. Training Environment:**

Aircraft.

### **3.3.6. Testing / Checking:**

Questions pertaining to duties will be done by Check Airmen. The Recurrent Training will continue until proficiency is attained.

### **3.3.7. Record Keeping:**

Successful completion of the Standardization Training will be logged on Form. The original of the form is made a part of each crewmembers training file.

## 3.4. INITIAL PILOT TRAINING CURRICULUM

### Training Objective

To provide pilots with the academic and practical “hands-on” training required attaining competency, qualifications and proficiency in the aircraft, in conformity with the crewmember qualification requirements described in the Civil Aviation Safety Regulations (CASR).

### Completion Standard

The pilot is able to demonstrate a working knowledge of procedures, switches and cockpit controls. The Pilot will strive to fly the Aircraft within the tolerance specified in Minimum Acceptable Performance Guidelines

#### 3.4.1. CESSNA CARAVAN 208

##### 3.4.1.1. Pilot Training Syllabus for initial

The course provides cockpit-oriented training in aircraft system and procedures.

The initial training course consists of:

- Classroom instructions ..... 40 hours (5 days)
- Cockpit procedures training ..... 2 hours
- Flight Training & check, ..... 5 hours

The systems ground school course will run five consecutive days as shown on the attached ground training syllabus and two day of cockpit base training.

Five-scheduled training Aircraft Sessions will be followed, with a 100 % check.

- a. PT. Smart Cakrawala Aviation provides an airplane only Flight Training Program to each pilot assigned to duty as a flight crew on the Cessna 208B Grand Caravan.
- b. The following summarizes the minimum qualification requirements are:
  - 1) Licensed Required: PIC – ATPL or CPL with Instrument Rating;  
SIC – CPL
  - 2) Type rating: Required.
- c. The following is a summary of the minimum training time for each of the training sections covered on this C208B type training program:

C208B TYPE TRAINING		APPLICABILITY		MINIMUM TIME REQUIRED	
Type of Training		INITIAL	ANNUAL	INITIAL	ANNUAL
Technical Ground		YES	YES	40 Hours	3 Hours
Aircraft Servicing and Ground		YES	NO	5 Hours	N/A
Flight Training –upgrading FO to		YES	YES	4 Hours	1 Hours
Flight Training – SIC		YES	YES	4 Hours	1 Hours

Flight Training – Instructor	FI	-	3 Hours	-
Flight Training – CCP	CCP	-	2 Hours	-

Minimum Aircraft Class rating ( Single Engine Land ) 3 hours but for Initial PIC or SIC should be continue Line training Min. 20 hours. For detail see syllabus line training.

d. Training Method

PT. Smart Cakrawala Aviation provide instructor, classrooms, material book (softcopy/hardcopy), and projector for ground training activities.

### 3.4.1.2. Initial Technical Ground Training

Technical Ground Training is provided to ensure the trainee pilot acquires a high level of comprehension of the operated aircraft. The course includes an in-depth description of the design and function of the aircraft systems and major components. Emphasis is placed upon normal, abnormal and emergency modes of operation of the aircraft systems including any applicable limitations and/or supplementary procedures. The course also outlines any differences in systems, limitations and procedures between the cargo and passenger configuration.

Ground Training as outlined in the syllabus below is provided by PT. Smart Cakrawala Aviation flight aircraft instructors. Each trainee will be issued a copy of the Pilot Operating handbooks including the standard operating procedures and differences material, prior to commencing the course.

At the completion of the Initial or Recurrent Course, an examination will be administrated. The exam will be scored and reviewed with the trainee.

The duration of the Initial and Recurrent Aircraft Specific Ground Training on the Company operated aircraft will be as outlined on this section, and in the case of Initial Training, the time will be allotted to each subject as follows:

Cessna Caravan 208

**Initial Technical Ground Training Syllabus.....40.0 Hours/ 5 Day**

NO	DESCRIPTION	HOURS
Day 1		
1	AIRCRAFT GENERAL ➤ Dimensions; ➤ Major Components and Systems	2.0 Hours
2	ELECTRICAL POWER SYSTEM ➤ General Description; ➤ Components; ➤ Controls and Indications; ➤ Operation; ➤ Limitations;	3.0 Hours



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	<ul style="list-style-type: none"><li>➤ Emergency / Abnormal.</li></ul>	
3	<p>LIGHTING</p> <ul style="list-style-type: none"><li>➤ Exterior Lighting;</li><li>➤ Interior Lighting.</li></ul>	1.0 Hours
4	<p>MASTER WARNING</p> <ul style="list-style-type: none"><li>➤ Warning Lights and Annunciators (Non G1000 aircraft);</li><li>➤ CAS Messages (G1000 aircraft).</li></ul>	1.0 Hours
5	<p>FIRE DETECTION AND PROTECTION</p> <ul style="list-style-type: none"><li>➤ General Description;</li><li>➤ Operation;</li><li>➤ Emergency / Abnormal.</li></ul>	1.0 Hours
Day 2		
6	<p>FUEL SYSTEM</p> <ul style="list-style-type: none"><li>➤ General Description;</li><li>➤ Components;</li><li>➤ Controls and Indications;</li><li>➤ Operation;</li><li>➤ Limitations;</li><li>➤ Emergency / Abnormal.</li></ul>	2.0 Hours
7	<p>POWERPLANT</p> <ul style="list-style-type: none"><li>➤ General;</li><li>➤ Major Sections;</li><li>➤ Engine Systems;</li><li>➤ Components;</li><li>➤ Controls and Indications;</li><li>➤ Operation;</li><li>➤ Limitations;</li><li>➤ Emergency / Abnormal.</li></ul>	2.0 Hours
8	<p>PROPELLER</p> <ul style="list-style-type: none"><li>➤ Description;</li><li>➤ Propeller Governor;</li><li>➤ Power Lever Control System.</li></ul>	2.0 Hours
9	<p>PNEUMATIC</p> <ul style="list-style-type: none"><li>➤ General Description;</li><li>➤ Controls and Indications.</li></ul>	2.0 Hours
Day 3		
10	<p>AIR CONDITIONING</p> <ul style="list-style-type: none"><li>➤ General Description;</li></ul>	2.0 Hours

	<ul style="list-style-type: none"> <li>➤ Air Conditioning System;</li> <li>➤ Cabin Heating, Ventilating and Defrosting System</li> </ul>	
11	<b>HYDRAULIC</b> <ul style="list-style-type: none"> <li>➤ Landing Gears;</li> <li>➤ Brakes;</li> <li>➤ Emergency / Abnormal.</li> </ul>	2.0 Hours
12	<b>FLIGHT CONTROLS</b> <ul style="list-style-type: none"> <li>➤ General Description;</li> <li>➤ Primary Flight Controls;</li> <li>➤ Secondary Flight Controls;</li> <li>➤ Operation;</li> <li>➤ Emergency / Abnormal.</li> </ul>	2.0 Hours
13	<b>OXYGEN SYSTEM</b> <ul style="list-style-type: none"> <li>➤ General;</li> <li>➤ Loading;</li> <li>➤ Computations</li> </ul>	2.0 Hour
Day 4		
14	<b>AVIONIC (G1000 aircraft)</b> <ul style="list-style-type: none"> <li>➤ General Description;</li> <li>➤ PFD and MFD Controls and Display;</li> <li>➤ Audio Panel Controls;</li> <li>➤ Automatic Flight Control System;</li> <li>➤ Flight Director and Yaw Damper Operation;</li> <li>➤ XM Satellite Weather / Weather Radar;</li> <li>➤ Terrain Awareness and Warning System (TAWS);</li> <li>➤ Traffic Advisory System (TAS);</li> <li>➤ Limitations;</li> <li>➤ Emergency / Abnormal</li> </ul>	6.0 Hours
15	<b>FLIGHT MANEUVERS</b> <ul style="list-style-type: none"> <li>➤ Normal Checklist;</li> <li>➤ Abnormal / Emergency Checklist;</li> <li>➤ Flight Profiles.</li> </ul>	2.0 Hours
Day 5		
16	<b>WEIGHT AND BALANCE</b> <ul style="list-style-type: none"> <li>➤ General;</li> <li>➤ Loading;</li> </ul>	2.0 Hours

	➤ Computations	
17	<b>PERFORMANCE</b> <ul style="list-style-type: none"> <li>➤ General;</li> <li>➤ Definitions and General Principles;</li> <li>➤ Takeoff and Landing Weight;</li> <li>➤ Performance Graphs;</li> <li>➤ Flight Planning;</li> <li>➤ Determination of V Speeds;</li> <li>➤ Takeoff Flight Path;</li> <li>➤ Approach and Landing Climbs;</li> <li>➤ Cruise Control;</li> <li>➤ Runway Analysis Charts.</li> </ul>	2.0 Hours
18	<b>EMERGENCY PROCEDURES</b> <ul style="list-style-type: none"> <li>➤ Fire Extinguisher System;</li> <li>➤ Engine Fires – Ground and Air;</li> <li>➤ Electrical Fires;</li> <li>➤ Cabin / Cargo Fires;</li> <li>➤ Heater Fires;</li> <li>➤ Smoke Evacuation;</li> <li>➤ Propeller Over-speed;</li> <li>➤ Emergency Descent;</li> <li>➤ Generator Failure;</li> <li>➤ Forced Landing;</li> <li>➤ Ditching;</li> <li>➤ Crew Evacuation;</li> <li>➤ Crew Coordination</li> </ul>	2.0 Hours
19	<b>REVIEW AND EXAMINATION</b>	2.0 Hours
<b>Record Keeping</b> Successful completion of Initial Ground Training will be logged on Form. The origin of the form is made a part of each crewmembers training file		

### 3.4.1.3. Initial Flight Training

PT. Smart Cakrawala Aviation utilizes an airplane only Flight Training Program for the C208B Initial and Recurrent Training program. The program will normally be accomplished in four (4) sessions of approximately one (1) hour for check (in the case of a PIC trainee), and four (4) sessions, of approximately one (1) hour for check (in the case of a SIC trainee), but in NO CASE shall the training times be less than those times laid down on this section of this manual.

Initial flight training C 208 B Grand caravan must be completed Class Rating Single Engine minimum 5 (five) hours. And must be completed Route Line Training by FI for

PIC 20 hours (min) and 40 hours (max) and for PIC must hold a minimum 1000 total hours.

Each training session will commence and terminate with a full pre- and post-flight briefing of the exercises planned to ensure all the maneuvers and procedures outlined below are practiced in a logical order, beginning with the less demanding sequences. During all normal, abnormal and emergency procedures, emphasis will be placed upon crew coordination and standard operating procedures (SOPs). Repetitions shall be at the discretion of the training pilot and simulated failures during Flight Training will only take place under operating conditions which do not jeopardize flight safety.

As part of the last training session, the pre-flight briefing will include a comprehensive oral quiz on the need to know recall items associated with the airplane limitations and emergency procedures, and any Company directives which are applicable to the operation of the operated aircraft. The trainee will be expected to respond to this quiz.

## **C208B Flight Training Syllabus**

**Flight Training ..... 5.0 Hours**

### **Session # 1 (Aircraft familiarization)**

- Briefing .....	0.5 hour
- Flight Training .....	1.0 hour
- Debriefing .....	0.5 hour

### **A. OBJECTIVE**

1. To familiarize the trainee with: Preflight, Cockpit (instruments, controls, switches, procedures), and the normal checklist.
2. To introduce start-up, ground handling techniques, flight characteristics, and shut-down procedures.

### **B. CONTENT**

1. Pre Flight Inspection
2. Prestart (Review Cockpit Layout and Practice Starts)
3. Engine Starting
4. Run Up and Systems Checks (Checklist Use)
5. Taxiing, Steering, Turn Radius, Wingtip/Tail Clearance
6. Take Off Including Pre Take Off Flow Checklist
7. Normal Climb and Power Settings and Flow Check
8. Cruise Incl. Level Off and Power Settings
9. Air Work:
  - A. Turns @ 30, 45, & 60 Degree Banks
  - B. Climbs and Descents at Various Speeds
  - C. Slow Flight—80KIAS, 75KIAS, With and W/O Flaps
- Take Offs & Landings

## 10. Shutdown and Securing

### **Session # 2 (Air work and Pattern)**

- Briefing ..... 0.5 hour
- Flight Training ..... 1.0 hour
- Debriefing ..... 0.5 hour

#### **A. OBJECTIVE**

1. To review the content of Session 1
2. To introduce full and imminent stalls and recoveries
3. Continue to build proficiency in take offs, landings, and cockpit procedures including checklist use.

#### **B. CONTENT**

1. Preflight Inspection
2. Start up, Taxi, Systems check
3. Steep turns and 45 and 60 Degrees bank
4. Slow flight at various flap and power settings
5. Steep descents with and without flaps, low and high speed
6. Stalls-straight and in a turn
  - a. Power off w/ and w/o flaps
  - b. Power on w/ and w/o flaps
7. Slips practice, with and w/o flaps
8. Take offs and Landing (full stop) Beta and brake use
9. Shutdown Procedure

### **Session # 3 (Precision and Special Takeoffs and Landings)**

- Briefing ..... 0.5 hour
- Flight Training ..... 1.0 hour
- Debriefing ..... 0.5 hour

#### **A. OBJECTIVE**

1. To review start up, system checks, and takeoff and landing procedures, including correct flow pattern for checklists.
2. To introduce and practice special takeoff and landing techniques.
3. To build proficiency in pattern work and developing a good stabilized power approach

#### **B. CONTENT**

1. Starting, Taxi, and systems checks

2. Short field take off
3. Short field landing
4. Soft field take off
5. Soft field landing
6. Obstacle climb,  $V_x$  20,  $V_x$ ,  $V_y$
7. Obstacle approaches to touchdown
8. Aborts on Take off
9. Go around
10. Trend monitoring en-route

### **Session # 4 (Emergency Procedures)**

- Briefing ..... 0.5 hour
- Area familiarization Flight Training ..... 1 hours
- Debriefing ..... 0.5 hour

#### **A. OBJECTIVE**

To learn and practice simulated emergency procedures applicable to all Sessions of flight.

#### **B. CONTENT**

1. Discussion in cockpit of all emergency procedures
2. Utilizing aircraft POH and emergency checklists.
3. Simulated Hot Start
4. Simulated Hung Start
5. Starter Energized light stays on after start sequence
6. Engine failure on takeoff roll and after lift off
7. Loss of Py Air and emergency power lever use
8. Trim Runaway
9. Engine flameout and restart in flight (simulated, starter assist)
10. Gliding practice, feathered and un-feathered, w and w/o flaps
11. 180-degree power off approaches (zero thrust)
12. Forced landing practice, pattern and en-route
13. Fires—Engine, Electrical, Cabin/load, wing
14. Annunciator panel warnings

### **Session # 5 (Operational check, safety and judgment)**

- Briefing ..... 0.5 hour
- Flight 100% Check (By CCP)..... 1.0 hour
- Debriefing ..... 0.5 hour

**A. OBJECTIVE**

1. To gain proficiency in normal operations and to review the elements of Lesson 1-4
2. Learn correct cargo and passenger loading and securing
3. Develop proficiency and Confidence

**B. CONTENT**

- Preflight briefing: Plan for flights and potential problems
- Flight/Route Planning
- Weight and Balance Calculations
- Loading and Tie down
- Expected Takeoff and Landing performance and margins
- Trim Runaway (while simulated IMC, no pax)
- Weather considerations, alternates, fuel reserves
- Trend monitoring
- Instrument approach practice as appropriate

**3.4.1.4. Line Training .....2 sectors**

**A. OBJECTIVE**

1. To gain PIC/SIC decision making
2. To familiarize with duties and responsibilities PIC/ SIC line flight

**B. CONTENT**

- 1) BRIEFING:
  1. Crew briefing, Flops briefing, Performance, Load-sheet;
  2. Fuel calculation and Flight plan;
  3. Coordination (Cockpit Crew, Mechanic and Ground staff);
  4. Aircraft Preflight and Set-up;
  5. Irregularity Solving.
- 2) AIRCRAFT HANDLING:
  1. Engine Starting
  2. Taxi out and Takeoff;
  3. Departure, Climbing and Cruising;
  4. Descent, Arrival and Approach;
  5. Landing and Taxi in;
  6. Parking and Termination.
- 3) GENERAL, PILOTING AND MANAGEMENT:
  1. Aviation Law, Regulation and Procedure;
  2. Navigation, Communication and Critical Point;
  3. Airport and Route Knowledge;
  4. Adverse Weather and Seasonal Meteorological Condition;
  5. Abnormal and Emergency;
  6. GPS;



## OPERATION MANUAL

**PART D  
TRAINING**

7. Technical Knowledge;
8. Personal Conflict and Stress Management;

### **3.4.1.5. Training Records**

- a. All training received will be recorded in accordance with Chapter 7 of this manual.
- b. Copies of the most recent PPC and/or written examination will also be attained in the training files.

## 3.4.2. ROBINSON R66

### 3.4.2.1. Ground Training

**Day 1.....8 Hours**

1. Aircraft System Information
2. General
3. Airframe
4. Landing Gear
5. Flight Controls
6. Power Plant
7. Powertrain
8. Rotor System (Main & Tail)
9. Fuel System
10. Electrical System
11. Hydraulic System
12. Ice & Rain Protection
13. Pilot Operating Handbook (POH)
14. Aircraft Performance & Limitations
15. Weight & Balance

**Day 2.....8 Hours**

1. Garmin G 500
2. System Over View
3. Primary Flight Display (PFD)
4. Nav/Com
5. Transponder
6. Audio Panel
7. Multi-Function Display (MFD)
8. Optional Equipment
9. Annunciations and Alert

**Examination/Test.....1.0 Hours**

### 3.4.2.2. Flight Training

**Flight 1 .....1.0 Hours**

- **AIM:**  
Aircraft familiarization, airwork exercise general handling, introduce and discuss flows.
- **BRIEFING/PREPARATION:**  
The trainee will study POH, normal and emergency operating procedures.
- **TASKS**
  - Preflight Inspection: Perform full pre-flight (daily) aircraft inspection with instructor; note special areas of concern.

- Engine start&: Normal engine start, discuss temperature and pressure indications. start problems
- Checklists: Special emphasis on “Before Taxi” as well as Blue Sky flight plan.
- Hovering: Take-off to hover, hovering turns, hover/air taxi, emphasis on wind awareness and potential loss of tail rotor effectiveness.
- Take-Off: Practice standard take-off briefing. Normal take-off, maintaining hover power slowly transition to forward flight, following the height/velocity diagram (POH sec. 5).
- Normal Climb: Maintain 60 kts. as per POH.
- Aircraft Handling: Transition to climb / descent / level off / trim & balance. Medium level turns 30° angle of bank, steep turn 45°angle of bank.
- Approach to a Hover: Normal approach and Landing (60-70 kts), maintain an approach angle of approximately 10°-12°, terminate approach in a hover over intended touchdown point.
- Shutdown: Learn shutdown procedure for engine as per checklist allowing 2 minutes cool down.
- Checklists/Flows: Learn and practice all company checklist flows.
- CRM/SOPs: Learn to use copilot (in this case instructor) as per company SOP and work as a team.

## Flight 2 ..... 1.0 Hours

- **AIM:**

The Trainee will further explore the Robinson R66.

- **BRIEFING/PREPARATION:**

The Trainee will study POH, normal and emergency operating procedures.

- **TASKS**

- Review of Flight 1: Review of Flight 1 and work on student's areas of weakness.
- Running Take-Off: Using 5% torque less than hover power, emphasis on maintaining heading with pedals and ground track with cyclic.
- Running Landing: Using 10% torque less than hover power, shallow approach with the touchdown speed slightly above ETL. Emphasis on level attitude, ground track and heading.
- Max Performance: Using available power (hover power +10%), climb vertically to clear Take-Off surrounding obstacles. Use of pedal to maintain heading and cyclic to maintain attitude.
- Settling with Power: To be conducted at minimum 1000 feet AGL. Use of right cyclic, left pedal and power application to overcome the situation with minimum loss of altitude.
- Steep Approach: An approach angle of 15°. Special emphasis on wind direction and the avoidance of settling with power.

## **Flight 3 .....1.0 Hours**

- **AIM:**

The Trainee will be introduced to the Robinson R66Emergency Procedures

- **BRIEFING/PREPURATION:**

The Trainee will study the Pilot Operating Handbook Section 3 (Emergency Procedures)

- **TASKS**

- Hovering Autorotation: Upon simulated engine failure, applies correct pedal input to maintain heading and allows the helicopter to settle prior to raising collective to cushion landing.
- Straight in Autorotation: Lowering collective immediately to maintain rotor RPM. Applying pedal as necessary to maintain trim.
- Establishing the recommended airspeed of 65-70 kts.
- Special emphasis on instrument scanning during auto rotative descent.
- Initiates flare at the correct altitude and arrives at the selected area with the aircraft level minimum possible airspeed.
- 180° Autorotation : Once established in autorotative descent on the downwind, initiate 180° turn maintaining the aircraft's attitude and adjust collective to maintain RPM in the green. Rolling out of the turn, ensure aircraft in trim, airspeed 65-70 kts and at 40 feet begin the cyclic flare.
- Anti-Torque Malfunction: Maintains an airspeed to help trim flight until a suitable landing area is selected.
- Right pedal locked forward of neutral, using airspeed and reduction of throttle to maintain heading on touchdown.
- Left pedal locked forward of neutral. Using an airspeed less than ETL and using collective pitch to control yaw at touchdown.

## **Flight 4 .....1.0 Hours**

- **AIM:**

Continued Emergency Procedures.

- **BRIEFING/PREPURATION:**

The trainee will study the Pilot Operating Handbook Section 3 (Emergency Procedures)

- **TASKS**

- Enhanced Autorotation: Maximum glide and minimum rate at descent configuration as per POH sec. 3.
- Methods for reducing glide distance including reduce airspeed, S turns and out of trim techniques.
- Hydraulic Failure: On the downwind leg of a traffic pattern, simulate hydraulic failure by turning off the hydraulic switch. Fly a normal approach and approaching hover altitude, maintain slow forward airspeed and allow

the helicopter to settle to the ground. Maintain heading with pedals, direction of cyclic and continue to lower the collective to full down.

- Low RPM Recovery: Simulated low RPM and recovery techniques by reducing collective pitch. Special emphasis on the lift/drag curve.

## **Flight 5 and DGCA Check.....1.0 Hours**

- **AIM:**

The trainee will be introduced to the Robinson R66Avionics and their relevant use.

- **BRIEFING/PREPURATION:**

The trainee will study the Garmin G500 and Garmin 750GTN Avionics Manuals

- **TASKS**

- Avionics: Use the primary navigation and communication avionics of the Robinson R66 and manage a flight from take-off to landing.
  - PFD System Knowledge, PFD set UP.
  - Avionics start and self-test.
  - COM/NAV Freq Setup, changing and management
  - Activation and use of flight plans. Creation of flight plans and waypoints.
  - Use of vertical navigation.
  - Use of audio panel for communication and Nav Identification.
  - Use of VOR/NAV/GPS indicator instruments
  - Introduction to HSI.
  - Use of terrain warning.
  - Use of Blue Sky equipment.
- Use the multi-function display (MFD) of the Robinson R66.
  - Flight plan Creation & Loading
  - Entering/Deleting Waypoints/Airways
  - MFD Systems Knowledge
  - COM/NAV Freq Setup
  - Engine/Fuel System Page
  - Reversionary Mode
- Navigation Exercise: Using the skills learned in the previous lessons and the avionics practice, fly a pre-determined route while being able to accommodate changes.

### **3.4.2.3. Testing / Checking**

Testing and checking pertaining to duties will be done by Check Airmen/CCP.

### **3.4.2.4. Record Keeping.**

Successful completion of the Initial will be logged on Form. The original of the form is made a part of each crewmember's training file.

### **3.4.3. EUROCOPTER EC 130 T2**

#### **3.4.3.1. Aircraft Ground Training**

##### **A. PREREQUISITE**

- SCA employee
- Hold ATPL/ CPL
- PPC expired more than 24 months
- Hold valid first class medical certificate

##### **B. INTRODUCTION**

This syllabus has been prepared to serve as a general outline to assist you attend this course. Normally, it serves as a guide for the instructor, but deviations will occur. Occasionally changes must be made due to unforeseen circumstances to accommodate training in the most effective manner. If some items are not covered where or when indicated, they will be covered at a different time.

##### **C. COURSE OUTLINE**

The ground training curriculum segment outline is comprised of three subject areas: General Operational Subjects, Aircraft Systems, and Systems Integration Training. Programmed training hours for each of these areas are given below.

##### **D. COURSE OBJECTIVE**

The course objective is to provide pilots with the academic and practical, hands-on training. Successful completion of the course will enable the pilot to transition to the model EC 130 T2 helicopter with comprehensive knowledge of the aircraft system, component and performance and thorough understanding of the operational characteristic, procedures and flight limitations.

##### **E. ACADEMICS**

This course of study includes instructor-guided classroom or E-learning discussions covering the following subjects.

##### **F. GENERAL OPERATIONAL SUBJECTS MODULES**

- 1) WEIGHT AND BALANCE .....0.7 Hours
  - a. General principles and methods of weight and balance determination
  - b. Limitations
  - c. Operations
- 2) PERFORMANCE .....0.8 Hours
  - a. Use of charts, tables, tabulated data, and other related material.
  - b. Performance problems, normal, abnormal, and emergency conditions.
  - c. Performance limiting factors such as ambient temperature, etc.

3) FLIGHT PLANNING .....	0.5 Hours
.....	
a. Flight planning charts such as fuel consumption charts	
b. Operation	
c. Limitations	
4) APPROVED ROTORCRAFT FLIGHT MANUAL .....	0.5 Hours
.....	
a. Applicability and description of the Rotorcraft Flight Manual	
b. Normal, Abnormal, and Emergency Procedures sections	
c. Limitations section	
d. Maneuvers and Procedures section	
e. General Performance section	
f. Systems description	
g. Appendices and bulletins	
<b>G. AIRCRAFT SYSTEM MODULES</b>	
1) LESSON1 – AIRCRAFT GENERAL.....	2.0 Hours
.....	
a. Origin and development of the helicopter	
b. Major aircraft sections, dimensions, and structures	
c. Crew and passenger compartments seating and emergency exits	
d. Aft fuselage section and baggage compartment	
e. Inspections and servicing	
f. Parking, mooring, and towing	
2) LESSON 2 – POWERPLANT .....	3.0 Hours
.....	
a. General	
- Type, nomenclature, and sections	
- Controls	
- Subsystems	
- Indications	
- FADEC	
b. Operation	
c. Limitations	
d. Emergency / Abnormal procedures	
3) LESSON 3 – FIRE PROTECTION.....	0.5 Hours
.....	
a). General	
- Fire detection	
- Fire extinguishing	
- Baggage compartment smoke detection	
- Fire extinguishers	
b). Operation	
c). Limitations	

- d). Emergency / Abnormal procedures
- 4) LESSON 4 – FUEL SYSTEM ..... 2.0 Hours
  - a). General
    - Tank and capacities
    - Type of fuel
    - Storage system
    - Engine fuel supply system
  - b). Operation
  - c). Limitations
  - d). Emergency / Abnormal procedures
- 5) LESSON 5 – ELECTRICAL POWER SYSTEMS ..... 2.5 Hours
  - a). General
    - System description
    - DC power
    - AC power
  - b). Operation
  - c). Limitations
  - d). Emergency / Abnormal procedures
- 6) LESSON 6 – LIGHTING ..... 0.5 Hours
  - a). General
    - Interior
    - Exterior
    - Emergency
  - b). Operation
  - c). Limitations
  - d). Emergency / Abnormal procedures
- 7) LESSON 7 – FADEC ..... 1.0 Hour
  - a). General
  - b). Operation
  - c). Limitations
  - d). Emergency / Abnormal procedures
- 8) LESSON 8 – POWERTRAIN ..... 1.5 Hours
  - a). General
    - Engine drive train
    - Main transmission

- Transmission subsystems
- Tail rotor drive system

b). Operation

c). Limitations

d). Emergency / Abnormal procedures

9) LESSON 9 – MAIN ROTOR ..... 0.5 Hours

- a). General
- b). Operation
- c). Limitations
- d). Emergency / Abnormal procedures

10) LESSON 10 – TAIL ROTOR ..... 0.5 Hours

- a. General
- b. Operation
- c. Limitations
- d. Emergency / Abnormal procedures

11) LESSON 11 – FLIGHT CONTROLS / AFCS ..... 2.0 Hours

- a). General
  - Collective
  - Cyclic
  - Anti-torque
  - Force trim
  - Aerodynamic / Fixed / Synchronized / Fly-by-wire (as applicable) elevator / stabilizer
  - Automatic flight control system
- b). Operation
- c). Limitations
- d). Emergency / Abnormal procedures

12) LESSON 12 – HYDRAULICS ..... 1.5 Hours

- a). General
  - Flight Control
  - Rotor Brake
- b). Operation
- c). Limitations
- d). Emergency / Abnormal procedures

13) LESSON 13 – ICE AND RAIN PROTECTION ..... 0.5 Hours

- a). General
  - Pitot / Static heater
  - Windshield wiper
  - Windshield defrosting / defogging
  - Heated windshield
  - Engine anti-icing
  - Engine inlet snow baffles
- b). Operation
- c). Limitations
- d). Emergency / Abnormal procedures

14) LESSON 14 – ENVIRONMENTAL SYSTEMS ..... 0.5 Hours

- a. General
  - Cockpit and cabin heating
  - Cockpit ventilation
  - Overhead cockpit and cabin ventilation
  - Air conditioning
- b. Operation
- c. Limitations
- d. Emergency / Abnormal procedures

15) LESSON 15 – AVIONICS ..... 1.5 Hours

- a. General
  - Communications
  - Flight instruments
  - Navigation equipment
  - Avionics instruments
- b. Operation
- c. Limitations
- d. Emergency / Abnormal procedures

16) LESSON 16 – KITS AND ACCESSORIES ..... 1.5 Hours

- a. General
  - Environmental control system
  - Heated windshield
  - High skid gear
  - External hoist
  - Cargo hook
  - Particle separator
  - Emergency floats

- Upper auxiliary fuel kit	
- Weather radar	
- Aft emergency pop-out windows	
- Global positioning system (GPS)	
- Life raft	
- Automatic Flight Control System (AFCS)	
b). Operation	
c). Limitations	
d). Emergency / Abnormal procedures	
17) LESSON 17 – PREFLIGHT MODULES.....	2.0 Hours
a). Before exterior check	
b). Exterior check	
18) REVIEW – EXAMINATION – CRITIQUE .....	2.0 Hours
<b>TOTAL.....</b>	<b>28.0 Hours</b>

### 3.4.3.2. FLIGHT TRAINING SYLLABUS – EC 130 T2

#### A. OBJECTIVE

To ensure complete knowledge of the current Model EC 130 T2 flight manual thorough understanding of the single engine and twin-engine performance data to demonstrate and practice all flight maneuvers in single and twin-engine configuration and to establish proficiency and safety in every phase of flight.

#### B. FLIGHT TRAINING SYLLABUS

1) SESSION 1 .....	1.0 Hour
a). Preparation	
- Preflight	
- Performance Limitations.	
b). Surface Operations	
- Powerplant Start	
- Pre-takeoff Checks.	
c). Takeoff	
- Hover Taxi	
- Normal and Crosswind Takeoff	
d). Climb	
- Normal	
- Traffic Patterns.	

- e). Landing
  - Normal
  - Crosswind
- f). After Landing Procedures

2) SESSION 2 ..... 1.0 Hour

- a). Review of Previous Flight
- b). Taxi: Air Taxi
- c). Takeoff
  - Normal
  - Powerplant failure
  - Rejected takeoff
- d). Landings: Single-Engine Landing
- e). After Landing Procedures: Parking
- f). System Procedures (Normal, Abnormal)
  - Flight Controls
  - Fire Detection and Extinguishing
  - Navigation and Avionics Equipment
  - AFCS
  - Engine Failure with Restart in Flight

3) SESSION 3 ..... 1.0 Hour

- a). Review of Previous Flight
- b). Taxi: Hover Taxi
- c). Takeoff
- d). Area departure: Single-Engine Procedures
- e). Approaches
  - Area Arrival
  - Precision Approach
- f). Landings: Rejected Landing
- g). System Procedures (Normal, Abnormal)
  - Electrical (AC and DC)
  - Flight Control Systems
  - Emergency Equipment
  - Loss of Tail Rotor Effectiveness
  - Environmental Systems.

4) SESSION 4 ..... 1.0 Hour

- a). Review of Previous Flight
- b). Enroute
  - Steep Turns
  - Recovery from Unusual Attitudes
  - Settling with Power
- c). Approaches
  - Missed Approach (Overshooting)
  - Approach with One Engine Inoperative
- d). Other Flight Procedures
  - Holding
- e). System Procedures (Normal, Abnormal)
  - Power plant
  - Fuel System
  - Electrical
  - Hydraulics
- f). System Procedures (Emergency)
  - In-Flight Fire and Smoke Removal
  - Emergency Descent
  - Autorotation with Power Recovery
  - Ditching (oral)
  - Emergency Evacuation
  - Hydraulic System Failure (No.1 or No.2)

5) SESSION 5 ..... 1.0 Hour

- a). Review all maneuvers
  - Normal
  - Emergencies

6) DGCA CHECK RIDE ..... 1.0 Hour

**TOTAL..... 6.0 Hours**

### **3.4.3.3 Ground Instructor EC 130 T2**

#### **A. Ground Training**

Ground training should include detailed review of the following documents and subjects:

1. Instruction – Ground and Flight
2. Evaluation – Written, Oral and Practical
3. Standards
  - Technical.
  - Attitude Development.
  - Customer Service.
  - Safety.
  - Image.
  - Conduct check only for those functions for which he has been authorized by the DGCA.

#### **B. Training Program**

##### **1. Prerequisites**

- Certificate and ratings.
- Currency.
- Airman experience requirements.
- CASR part 135 requirements.

##### **2. Fundamentals of Instruction**

- Principles of Teaching-Learning Process.
- Role of the Flight Instructor.
- The Instructor/Student Relationship.
- Professionalism and Safety Practices.
- Guided discussions.
- Demonstration-Performance Method.
- Programmed Instruction.
- Critique.
- Evaluation.
- Use of training aids.

##### **3. PT Smart Cakrawala Aviation OMD and Company Policies and Procedure**

- Contents of Manual.
- Testing requirements.
- Initial and recurrent training requirements.

##### **4. Review of CASR's**

- Part 61.
- Part 91.
- Part 135.

##### **5. Use of the DGCA Practical Test Standards**

- Objective.
- Description.

## **3.4.3.4 Flight Instructor EC 130 T2 TRAINING**

### **3.4.3.4.1 Training Objective**

To provide pilots (with PPC that has been expired for more than 24 months) knowledge and procedure regarding the operation of Pilatus EC 130 T2

### **3.4.3.4.2 Prerequisite**

- SCA employee
- Hold ATPL/ CPL Rated EC 130 T2
- Hold valid first class medical certificate

### **3.4.3.4.3 Instructional delivery method**

Lecturer Classroom

### **3.4.3.4.4 Training aid**

- PC/ Laptop
- Projector
- White board/ Flip Chart

### **3.4.3.4.5 Training Device**

- Aircraft EC 130 T2

### **3.4.3.4.6 Courseware**

- Operation Manual Part A, B, and C
- QRH EC 130 T2
- Rotorcraft Flight Manual EC 130 T2
- MEL EC 130 T2
- CASR part 135 & CASR part 133
- Other applicable material as necessary



# OPERATION MANUAL

**PART D  
TRAINING**

## 3.4.3.4.7 Flight Training

Session 1	Practice Normal Procedures and Maneuvers	1.0 Hours
	Aircraft and Equipment. Pre-flight. Engine(s) and System Checks. Pattern Flying in Hover. Air Taxiing. Taxiing on the surface. Normal and crosswind take-offs and landings. Airport traffic pattern and control procedures. Maximum performance take-offs and climbs. Steep Approaches. High Altitude or heavy load take-offs and landings. Slope take-offs. Confined area operations. Pinnacle/Platform operations. Climbs and climbing turns. Steep turns. Rapid Descent. Quick Stops.	
Session 2	Practice Normal Procedures and Maneuvers	1.0 Hours
	Aircraft and Equipment. Pre-flight. Engine(s) and System Checks. Pattern Flying in Hover. Air Taxiing. Taxiing on the surface. Normal and crosswind take-offs and landings. Airport traffic pattern and control procedures. Maximum performance take-offs and climbs. Steep Approaches. High Altitude or heavy load take-offs and landings. Slope take-offs. Confined area operations. Pinnacle/Platform operations. Climbs and climbing turns. Steep turns. Rapid Descent. Quick Stops.	
Session 3	Practice Abnormal and Emergency Procedures	1.0 Hours



# OPERATION MANUAL

**PART D  
TRAINING**

	Approach and landing with simulated engine failure (multi- engine helicopters). Autorotative approach and landing (single engine helicopters)  Simulated engine failure during hover.  Normal and abnormal procedures (as appropriate). Fire. Ditching. Evacuation. Operation of emergency equipment. Component or system failure. Two-way radio communications failure.  Any other emergency procedure outlined in the appropriate manufacturer's published recommendations.	
<b>Session 4</b>	<b>Practice Abnormal and Emergency Procedures</b>	<b>1.0 Hours</b>
	Approach and landing with simulated engine failure (multi- engine helicopters). Autorotative approach and landing (single engine helicopters)  Simulated engine failure during hover.  Normal and abnormal procedures (as appropriate). Fire. Ditching. Evacuation. Operation of emergency equipment. Component or system failure. Two-way radio communications failure.  Any other emergency procedure outlined in the appropriate manufacturer's published recommendations.	
<b>Session 5</b>	<b>Completion Standards</b>	<b>1.0 Hours</b>
	Demonstrate the competency to conduct pilot flight checks and/or pilot flight training as required under CASR part 135, and knows the appropriate safety measures to be taken for potential training emergencies and the likely results of untimely or improper safety	

### 3.4.4. PILATUS PC-6 B2-H4

#### 3.4.4.1 Pilot Training Syllabus for Initial

The course provides cockpit-oriented training in aircraft system and procedures.

The initial training course consists of:

- Classroom instructions ..... 40h (5 days)
- Cockpit procedures training ..... 2 hours
- Flight Training & check, ..... 7,5 hours

The systems ground school course will run five consecutive days as shown on the attached ground training syllabus and two day of cockpit base training.

Five-scheduled training Aircraft Sessions will be followed, with a 100 % check.

- a. PT. Smart Cakrawala Aviation provides an airplane only Flight Training Program to each pilot assigned to duty as a flight crew on the Pilatus PC-6 B2-H4.
- b. The following summarizes the minimum qualification requirements are:
  - 1) Licensed Required: PIC – ATPL or CPL with Instrument Rating;  
SIC – CPL
  - 2) Type rating: Required.
- c. The following is a summary of the minimum training time for each of the training sections covered on this Pilatus PC-6 B2-H4 type training program:

Pilatus PC-6 B2-H4 TYPE TRAINING	APPLICABILITY		MINIMUM TIME REQUIRED	
	INITIAL	ANNUAL	INITIAL	ANNUAL
Type of Training	INITIAL	ANNUAL	INITIAL	ANNUAL
Technical Ground	YES	YES	40 Hours	3 Hours
Flight Training –upgrading FO to PIC	YES	YES	4 Hours	1 Hours
Flight Training – SIC	YES	YES	4 Hours	1 Hours
Flight Training – Instructor	FI	-	3 Hours	-
Flight Training –CCP	CCP	-	2 Hours	-

- d. Training Method

PT. Smart Cakrawala Aviation provide instructor, classrooms, material book (softcopy/hardcopy), and projector for ground training activities.

#### 3.4.4.2 Initial Technical Ground Training

Technical Ground Training is provided to ensure the trainee pilot acquires a high level of comprehension of the operated aircraft. The course includes an in-depth description of the design and function of the aircraft systems and major components. Emphasis is placed upon normal, abnormal and emergency modes of operation of the aircraft systems including any applicable limitations and/or supplementary

procedures. The course also outlines any differences in systems, limitations and procedures between the cargo and passenger configuration.

Ground Training as outlined in the syllabus below is provided by PT. Smart Cakrawala Aviation flight aircraft instructors. Each trainee will be issued a copy of the Aircraft Flight Manual including the standard operating procedures and differences material, prior to commencing the course.

At the completion of the Initial or Recurrent Course, an examination will be administrated. The exam will be scored and reviewed with the trainee.

The duration of the Initial and Recurrent Aircraft Specific Ground Training on the Company operated aircraft will be as outlined on this section, and in the case of Initial Training, the time will be allotted to each subject as follows:

### PILATUS PC-6 B2-H4

**Initial Technical Ground Training Syllabus.....40.0 Hours/ 5 Day**

NO	DESCRIPTION	HOURS
Day 1		
1	AIRCRAFT GENERAL <ul style="list-style-type: none"> <li>➤ Dimensions;</li> <li>➤ Major Components and Systems</li> </ul>	2.0 Hours
2	PERFORMANCE <ul style="list-style-type: none"> <li>▪ General;</li> <li>▪ Definitions and General Principle</li> <li>▪ Takeoff and Landing Weight;</li> <li>▪ Performance Graphs;</li> <li>▪ Flight Planning:</li> <li>▪ Determination of V Speeds;</li> <li>▪ Takeoff Flight Path;</li> <li>▪ Approach and Landing Climbs;</li> <li>▪ Cruise Control;</li> <li>▪ Runway Analysis Charts.</li> </ul>	2.0 Hours
3	STRUCTURES <ul style="list-style-type: none"> <li>➤ STRUCTURES</li> <li>➤ General Description;</li> <li>➤ Fuselage;</li> <li>➤ Equipment;</li> <li>➤ Doors;</li> <li>➤ Windows;</li> <li>➤ Placards.</li> </ul>	1.0 Hours
4	WINGS <ul style="list-style-type: none"> <li>➤ General Description;</li> </ul>	1.0 Hours

	<ul style="list-style-type: none"> <li>➤ Components;</li> </ul>	
5	ACCES COVER <ul style="list-style-type: none"> <li>➤ General Description;</li> <li>➤ Components;</li> <li>➤ Controls and Indications;</li> <li>➤ Operation;</li> <li>➤ Limitations.</li> </ul>	1.0 Hours
6	CABIN HEATING AND VENTILATION <ul style="list-style-type: none"> <li>➤ General Description;</li> <li>➤ Components;</li> <li>➤ Controls and Indications;</li> <li>➤ Operation;</li> <li>➤ Limitations;</li> </ul>	1.0 Hours
Day 2		
7	WEIGHT AND BALANCE <ul style="list-style-type: none"> <li>➤ General Discription;</li> <li>➤ Loading;</li> <li>➤ Computations</li> </ul>	1.5 Hours
8	FLIGHT COTROLS <ul style="list-style-type: none"> <li>➤ Description;</li> <li>➤ Components;</li> <li>➤ Controls and Indications;</li> <li>➤ Operation;</li> <li>➤ Limitations;</li> <li>➤ Emergency / Abnormal.</li> </ul>	2.0 Hours
9	LANDING GEAR <ul style="list-style-type: none"> <li>➤ Tail Landing Gear</li> <li>➤ Break System.</li> <li>➤ Components;</li> <li>➤ Controls and Indications;</li> <li>➤ Operation;</li> <li>➤ Limitations.</li> <li>➤ Emergency / Abnormal.</li> </ul>	2.0 Hours
10	FUEL SYSTEM <ul style="list-style-type: none"> <li>➤ General Description;</li> <li>➤ Components;</li> <li>➤ Controls and Indications;</li> <li>➤ Operation;</li> <li>➤ Limitations;</li> <li>➤ Emergency / Abnormal.</li> </ul>	1.5 Hours
11	VACUUM SYSTEM	1.0 Hours

	<ul style="list-style-type: none"> <li>➤ General Description;</li> <li>➤ Components;</li> <li>➤ Controls and Indications;</li> <li>➤ Operation;</li> </ul>	
<b>Day 3</b>		
12	<b>OXYGEN SYSTEM</b> <ul style="list-style-type: none"> <li>➤ General;</li> <li>➤ Loading;</li> <li>➤ Computations.</li> </ul>	1.5 Hours
13	<b>ELECTRICAL POWER</b> <ul style="list-style-type: none"> <li>➤ General Description;</li> <li>➤ Battery;</li> <li>➤ Starter / Generator.</li> <li>➤ Components;</li> <li>➤ Controls and Indications;</li> <li>➤ Operation;</li> <li>➤ Limitations;</li> <li>➤ Emergency / Abnormal.</li> </ul>	2.0 Hours
14	<b>INSTRUMENTS</b> <ul style="list-style-type: none"> <li>➤ General Description;</li> <li>➤ Components;</li> <li>➤ Controls and Indications;</li> <li>➤ Operation;</li> <li>➤ Lights.</li> </ul>	2.0 Hour
15	<b>NAVIGATION</b> <ul style="list-style-type: none"> <li>➤ General Description;</li> <li>➤ Components;</li> <li>➤ Controls and Indications;</li> <li>➤ Operation;</li> <li>➤ Limitation;</li> <li>➤ Emergency / Abnormal</li> </ul>	1.5 Hour
16	<b>ICE PROTECTION</b> <ul style="list-style-type: none"> <li>➤ General Description;</li> <li>➤ Components;</li> <li>➤ Controls and Indications;</li> <li>➤ Operation;</li> <li>➤ Limitation;</li> </ul>	1.0 Hours
<b>Day 4</b>		
17	<b>POWER PLANT</b> <ul style="list-style-type: none"> <li>➤ General Description;</li> <li>➤ Engine Dat;</li> <li>➤ Engine Layout / Accessories;</li> </ul>	2.0 Hours

	<ul style="list-style-type: none"> <li>➤ Engine Fuel System;</li> <li>➤ Ignition;</li> <li>➤ Air Flow;</li> <li>➤ Engine Control;</li> <li>➤ Engine Ignition;</li> <li>➤ Oil System / Lubrication;</li> <li>➤ Exhaust;</li> <li>➤ Starting Engine;</li> <li>➤ Troubleshooting</li> </ul>	
18	<b>PROPELLER</b> <ul style="list-style-type: none"> <li>➤ General Description;</li> <li>➤ Operation;</li> <li>➤ Beta Valve.</li> </ul>	2.0 Hours
19	<b>GROUND HANDLING</b> <ul style="list-style-type: none"> <li>➤ General Description;</li> <li>➤ Operation.</li> </ul>	1.0 Hours
20	<b>SERVICING</b> <ul style="list-style-type: none"> <li>➤ General Description;</li> <li>➤ Operation.</li> </ul>	1.0 Hours
21	<b>EMERGENCY PROCEDURES</b> <ul style="list-style-type: none"> <li>➤ Engine Failure;</li> <li>➤ Fire Detection and Warning;</li> <li>➤ Fire Extinguisher System;</li> <li>➤ Engine Fires – Ground and Air;</li> <li>➤ Electrical Fires;</li> <li>➤ Cabin / Cargo Fires;</li> <li>➤ Heater Fires;</li> <li>➤ Smoke Evacuation;</li> <li>➤ Propeller Over-speed;</li> <li>➤ Emergency Descent;</li> <li>➤ Generator Failure;</li> <li>➤ Forced Landing;</li> <li>➤ Ditching;</li> <li>➤ Crew Evacuation;</li> <li>➤ Crew Coordination</li> </ul>	2.0 Hours
Day 5		
22	<b>REVIEW AND EXAMINATION</b>	8.0 Hours
<b>Record Keeping</b> Successful completion of Initial Ground Training will be logged on Form. The origin of the form is made a part of each crewmembers training file		

### **3.4.4.3 Initial Flight Training**

PT. Smart Cakrawala Aviation utilizes an airplane only Flight Training Program for the Pilatus PC-6 B2/H4 and Recurrent Training program. The program will normally be accomplished in four (4) sessions of approximately one (1) hour for check (in the case of a PIC trainee), and four (4) sessions, of approximately one (1) hour for check (in the case of a SIC trainee), but in NO CASE shall the training times be less than those times laid down on this section of this manual.

Initial flight training Pilatus PC-6 B2/H4 must be completed Class Rating Single Engine minimum 7.5 hours. And must be completed Route Line Training by FI 25 hours (tailwheel experiences) and 30 hours (non experiences) for and for PIC must hold a minimum 1000 total hours.

Each training session will commence and terminate with a full pre- and post-flight briefing of the exercises planned to ensure all the maneuvers and procedures outlined below are practiced in a logical order, beginning with the less demanding sequences. During all normal, abnormal and emergency procedures, emphasis will be placed upon crew coordination and standard operating procedures (SOPs). Repetitions shall be at the discretion of the training pilot and simulated failures during Flight Training will only take place under operating conditions which do not jeopardize flight safety.

As part of the last training session, the pre-flight briefing will include a comprehensive oral quiz on the need to know recall items associated with the airplane limitations and emergency procedures, and any Company directives which are applicable to the operation of the operated aircraft. The trainee will be expected to respond to this quiz.

#### **Pilatus PC-6 B2/H4 Flight Training Syllabus.....7.5 Hours**

##### **1) PREFLIGHT**

- Knowledge of Equipment;
- Daily and Transit (preflight) Check by Pilot;
- External / Internal Inspection;
- Use of Checklists;
- Taxiing, Brakes and Emergency Brakes;
- ATC Clearance;
- Radio-NAV / COM Selection and Tuning.

##### **2) TAKEOFF**

- Takeoff Briefing and Commands during Takeoff;
- Normal Takeoff and Initial Climb;
- Crosswind Takeoff;
- Instrument Takeoff;
- Rejected Takeoff.

##### **3) AIRWORK**

- c. Slow Flight
- d. Approach to Stall Series
- e. Steep Turns and Unusual Attitudes
- f. Vmc Demonstration (Optional)

4) VISUAL FLIGHT PROCEDURES From Visual Circling;

- Climbing and Descending
- Straight and Level Cruise
- Trimming;
- Level Turns: Standard Turns
- Stalls :
  - Clean (straight and level)
  - Flap Takeoff and U/C Down (rate one turn);
  - Landing Configuration.

**NOTE :** During stall recovery, emphasis should be made on achieving minimum altitude loss.

5) INSTRUMENT FLIGHT PROCEDURES (If Applicable)

- Basic Aircraft Control;
- Terminal Area Arrival and Departure;
- Holding;
- Precision and Non-precision Approaches:
  - Normal;
  - Engine Failure;
  - Missed Approach;
  - Visual and Circling.
  - Partial Panel Procedures.

6) LANDING

- Normal (from precision and non-precision approaches);
- Abnormal (from precision and non-precision approaches):
  - Simulated Forced;
  - Zero Flaps.
  - Normal.
  - Engine Failure.
  - Missed Approach.
  - Visual and Circling.
  - Partial Panel Procedures.

Crosswind;

- From Visual Circling;
- Balked Landing (from 50 feet).

7) EMERGENCY PROCEDURES

**A. Engine Failure:**

**CAUTION:** Engine failures are only to be simulated in flight. At no time may the engine be stopped intentionally for the purpose of practice. Engine failures are to be simulated using zero-thrust power setting.

**B. Emergency Power Lever:**

**CAUTION:** At no time may the emergency power lever (EPL) be taken out of the "normal" position while in flight except during an actual failure of the FCU. The student is to be introduced to the EPL during a ground exercise which still has to be conducted with great caution

- Engine Fire.
- Landing Gear:
  - Brake Operation.
- Electrical Malfunctions.
  - Fire;
  - Generator;
  - Flap Extension.
- Smoke Removal.
- Baggage / Cargo Fire (ground and airborne).
- Propeller Over-speed.
- Radio (NAV/COM) Failures.
- EGPWS and TCAS Alerts.
- Instrument Failure.

**Session # 1**

- Briefing .....	0.5 hour
- Flight Training .....	1.5 hour
- Debriefing .....	0.5 hour

**A. OBJECTIVE**

To familiarize the pilots with Aircraft operations through use of normal procedures and approved checklist. To develop ability to maintain attitude and orientation, recognize stall characteristic in various configurations and make prompt, efficient recovery.

**B. CONTENT**

1. Briefing
2. Performance Data
3. Normal Operating Procedures Checklists and Briefing
4. Avionics
5. Starting Engines
6. Taxiing
7. Normal Propeller and Systems Check
8. Take-off Climb
9. Airwork

- a. Slow Flight
- b. Approach to Stall Series
- c. Steep Turns and Unusual Attitudes
- d. Vmc Demonstration (Optional)
10. Approaches and Holding
11. Debriefing

## **Session # 2**

- Briefing ..... 0.5 hour
- Flight Training ..... 1.5 hour
- Debriefing ..... 0.5 hour

### **A. OBJECTIVE**

To develop the pilot's skill in aircraft operation with selected system malfunction and abnormal procedures in accordance with the Flight Manual.

### **B. CONTENT**

1. Briefing
2. Discussion of Takeoff Flap Performance Data ( if applicable )
3. Normal Operating and Emergency Procedures Checklist and Briefings
4. Starting Engines
5. Taxiing
6. Propeller and System check
7. Aborted Take off
8. Maximum Performance Take off
9. Climb
10. Electrical System Management
11. Fuel System Management
12. VFR Pattern
13. Instrument Approaches
14. Normal and Engine Out Landing
15. Debriefing

## **Session # 3**

- Briefing ..... 0.5 hour
- Flight Training ..... 1.5 hour
- Debriefing ..... 0.5 hour

### **A. OBJECTIVE**

To further develop the pilot's skill in aircraft operation with selected system malfunction and abnormal procedures. To continue to develop emergency procedure application, crew coordination, and approach planning.

### **B. CONTENT**

1. Briefing
2. Discussion of ISA Performance Data
3. Normal Operating and Emergency Procedures Checklist and Briefings
4. Starting Engines
5. Taxiing
6. Take-off
7. Hazardous Situation Training
  - a. Takeoff, rejected, with engine failure just prior to V1
  - b. Pilot Incapacitation (crew training)
8. Normal and Engine out Landing
9. Debriefing

## **Session # 4**

- Briefing ..... 0.5 hour
- Area familiarization Flight Training ..... 1.5 hours
- Debriefing ..... 0.5 hour

### **A. OBJECTIVE**

The pilot becomes proficient in normal aircraft operation to facilitate His/Her for check ride with Government check pilot and for line flying

### **B. CONTENT**

1. Briefing
2. Performance Data
3. Normal Operating Checklist and Briefings
4. Starting Engines
5. Taxiing
6. Take-off
7. Flight Controls System Management
8. Instrument Approaches
9. Airwork, review of all airwork
10. Precision, non-precision and missed approaches, normal landing
11. Circling approaches and rejected landings
12. Approaches
13. Debriefing

## **Session # 5**

- Briefing ..... 0.5 hour
- Flight 100% Check ..... 1.5 hour
- Debriefing ..... 0.5 hour

### **A. OBJECTIVE**

To evaluate the pilot ability to demonstrate his/her knowledge of aircraft systems, checklist procedures, and most importantly, his/her ability to control



## OPERATION MANUAL

### PART D TRAINING

the aircraft and direct the crew under a representative sample of conditions so outlined in the POH.

#### B. CONTENT

1. Maneuvers prescribed in CASR.

#### 3.4.4.4 Training Records

- a. All training received will be recorded in accordance with Chapter 7 of this manual.
- b. Copies of the most recent PPC and/or written examination will also be attained in the training files.

## **3.5. UPGRADING TRAINING (From FO to CAPT on the Same Type of Aircraft)**

### **3.5.1. Upgrade Training**

Upgrade training will be accomplished for those pilots qualified as SIC on the C208B who are upgrading to PIC, or who are qualified on other aircraft as a PIC. The training exercise will cover those items detailed in the Flight Training

### **3.5.2. Ground Training (Up-Grade)**

Ground School TIME SCALE: .....**12.0 hours** Class Room refreshing course

- Aircraft System
- Performance, Weight & Balance
- Flight technique
- OM, SOP
- Exam / Testing

### **3.5.3. Flight Training**

#### **TIME SCALE:**

- Pilot Flying (PF)..... **3.0 Hours**
- Briefing and Debriefing..... **3.0 Hours**

#### **Session 1**

- Briefing ..... 0.5 Hour
- Pilot Flying (PF) ..... 1.0 Hours
- Debriefing ..... 0.5 Hour
  - Preparation;
  - Engine Starting
  - Taxi out and Takeoff;
  - Climb with Speed Schedule;
  - Steep Turn and Stall Recovery;
  - VOR / NDB and G1000 Holding
  - Taxi in and Parking;
  - Termination.

#### **Session 2**

- Briefing ..... 0.5Hour
- Pilot Flying (PF) ..... 1.0 Hours
- Debriefing ..... 0.5Hours
  - Preparation with System Malfunction;
  - Engine Starting with Malfunction;
  - Taxi out with Malfunction;
  - Rejected Takeoff;
  - Low Circuit, Short Base Circuit;
  - Flapless Circuit;

- On Ground Emergency, Evacuation.

### Session 3 (Check)

➤ Briefing.....	0.5 Hour
➤ Pilot Flying (PF) 100% Check .....	1.0 Hours
➤ Debriefing .....	0.5 Hour

- Oral check: Technical Knowledge, Limitation;
- Procedure (Normal, Abnormal and Emergency);
- Preparation;
- Engine Starting (including malfunction);
- Crosswind Takeoff;
- VOR / NDB or G1000 Holding
- Rejected Takeoff;
- Low Circuit and Wave off;
- Short Base Circuit;
- Flapless Circuit and Landing;
- Taxi in and Parking, Termination.

### 3.5.4. Aircraft Base Training

**Time.....2.0 Hours**

- Preflight and Walk-around;
- Engine Starting;
- Taxi out;
- Takeoff, Normal Circuit and Landing;
- Takeoff Simulated Critical Engine Out after V1;
- Instrument Approach; ( if applicable)
- Go Around / Miss Approach; ( if applicable)
- Circuit and Landing; ( if applicable)
- Short Base Circuit;
- Low Circuit and Wave off;
- Flapless Circuit and Landing;
- Taxi in and Parking;
- Termination.

### 3.5.5. Line Training

**Time Scale .....20hrs(min) 40hrs(max)**

1) BRIEFING:

1. Crew briefing, Flops briefing, Performance, Load-sheet;
2. Fuel calculation and Flight plan;
3. Coordination (Cockpit Crew, Mechanic and Ground staff);
4. Aircraft Preflight and Set-up;
5. Irregularity Solving.

2) AIRCRAFT HANDLING:

1. Engine Starting
2. Taxi out and Takeoff;
3. Departure, Climbing and Cruising;
4. Descent, Arrival and Approach;
5. Landing and Taxi in;
6. Parking and Termination.

3) GENERAL, PILOTING AND MANAGEMENT:

1. Aviation Law, Regulation and Procedure;
2. Navigation, Communication and Critical Point;
3. Airport and Route Knowledge;
4. Adverse Weather and Seasonal Meteorological Condition;
5. Abnormal and Emergency;
6. GPS;
7. Technical Knowledge;
8. Personal Conflict and Stress Management;

**3.5.6. Courseware.**

Operations Manual (OM); Minimum Equipment List (MEL); Pilot Operating Handbooks (POH) & Standard Operating Procedure (SOP); Flight Plans, AIP, Indoavis Area Charts and Approach Charts; Other applicable material as necessary.

**3.5.7. Instructional Delivery Methods:**

Aircraft demonstrated by the pilot being trained.

**3.5.8. Training Environment:**

Aircraft

**3.5.9. Testing/Checking:**

Questions pertaining to duties will be done by Check Airmen. The Up-grading Training will continue until proficiency is attained.

**3.5.10. Record Keeping.**

Successful completion of the Up-grading Training will be logged on Form. The original of the form is made a part of each flight crew's training file.

## **3.6. CESSNA 208B REQUALIFICATION TRAINING**

### **3.6.1. Training Objective**

To provide pilots (with PPC that has been expired for more than 24 months) knowledge and procedure regarding the operation of Cessna 208B

### **3.6.2. Prerequisite**

- SCA employee
- Hold ATPL/ CPL Rated Cessna 208B
- PPC expired more than 24 months
- Hold valid first class medical certificate

### **3.6.3. Instructional delivery method**

Lecture and/or self-learning

### **3.6.4. Training aid**

- PC/ Laptop
- Projector
- White board/ Flip Chart

### **3.6.5. Training Device**

- Aircraft C208B

### **3.6.6. Courseware**

- Operation Manual Part A, B, and C
- POH C208B
- QRH C208B
- Airplane Flight Manual C208B
- Pilot Training Manual C208B
- SOP mountainous Flying
- MEL C208B
- Other applicable material as necessary

### 3.6.7. Curriculum segment

3.6.7.1. Ground Training Syllabus ..... 40.0 Hours/ 5 Days;

NO	DESCRIPTION	HOURS
Day 1		
1	AIRCRAFT GENERAL	2.0 Hours
2	ELECTRICAL POWER SYSTEM	3.0 Hours
3	LIGHTING	1.0 Hours
4	MASTER WARNING	1.0 Hours
5	FIRE DETECTION AND PROTECTION	1.0 Hours
Day 2		
6	FUEL SYSTEM	2.0 Hours
7	POWERPLANT	2.0 Hours
8	PROPELLER	2.0 Hours
9	PNEUMATIC	2.0 Hours
Day 3		
10	AIR CONDITIONING	2.0 Hours
11	HYDRAULIC	2.0 Hours
12	FLIGHT CONTROLS	2.0 Hours
13	OXYGEN SYSTEM	2.0 Hour
Day 4		
14	AVIONIC (G1000 aircraft)	6.0 Hours
15	FLIGHT MANEUVERS	2.0 Hours
Day 5		
16	WEIGHT AND BALANCE	2.0 Hours
17	PERFORMANCE	2.0 Hours
18	EMERGENCY PROCEDURES	2.0 Hours
19	REVIEW AND EXAMINATION	2.0 Hours



# OPERATION MANUAL

**PART D  
TRAINING**

## 3.6.7.2. Flight Training ..... 5.0 Hours

### A. Session # 1 (Aircraft familiarization)

- Briefing .....	0.5 hour
- Flight Training .....	1.0 hour
- Debriefing .....	0.5 hour

### B. OBJECTIVE

1. To familiarize the trainee with: Preflight, Cockpit (instruments, controls, switches, procedures), and the normal checklist.
2. To introduce start-up, ground handling techniques, flight characteristics, and shut-down procedures.

### C. CONTENT

1. Pre Flight Inspection
2. Prestart (Review Cockpit Layout and Practice Starts)
3. Engine Starting
4. Run Up and Systems Checks (Checklist Use)
5. Taxiing, Steering, Turn Radius, Wingtip/Tail Clearance
6. Take Off Including Pre Take Off Flow Checklist
7. Normal Climb and Power Settings and Flow Check
8. Cruise Incl. Level Off and Power Settings
9. Air Work:
  - A. Turns @ 30, 45, & 60 Degree Banks
  - B. Climbs and Descents at Various Speeds
  - C. Slow Flight—80KIAS, 75KIAS, With and W/O Flaps
10. Take Offs & Landings
11. Shutdown and Securing

### Session # 2 (Air work and Pattern)

- Briefing ..... 0.5 hour
- Flight Training ..... 1.0 hour
- Debriefing ..... 0.5 hour

### A. OBJECTIVE

1. To review the content of Session 1
2. To introduce full and imminent stalls and recoveries
3. Continue to build proficiency in take offs, landings, and cockpit procedures including checklist use.



# OPERATION MANUAL

**PART D  
TRAINING**

## B. CONTENT

1. Preflight Inspection
2. Start up, Taxi, Systems check
3. Steep turns and 45 and 60 Degrees bank
4. Slow flight at various flap and power settings
5. Steep descents with and without flaps, low and high speed
6. Stalls-straight and in a turn
  - a. Power off w/ and w/o flaps
  - b. Power on w/ and w/o flaps
7. Slips practice, with and w/o flaps
8. Take offs and Landing (full stop) Beta and brake use
9. Shutdown Procedure

### **Session # 3 (Precision and Special Takeoffs and Landings)**

• Briefing .....	0.5 hour
• Flight Training .....	1.0 hour
• Debriefing .....	0.5 hour

## A. OBJECTIVE

1. To review start up, system checks, and takeoff and landing procedures, including correct flow pattern for checklists.
2. To introduce and practice special takeoff and landing techniques.
3. To build proficiency in pattern work and developing a good stabilized power approach

## B. CONTENT

1. Starting, Taxi, and systems checks
2. Short field take off
3. Short field landing
4. Soft field take off
5. Soft field landing
6. Obstacle climb,  $V_x 20, V_x, V_y$
7. Obstacle approaches to touchdown
8. Aborts on Take off
9. Go around
10. Trend monitoring en-route

## **Session # 4 (Emergency Procedures)**

- Briefing ..... 0.5 hour
- Area familiarization Flight Training ..... 1 hours
- Debriefing ..... 0.5 hour

### **A. OBJECTIVE**

To learn and practice simulated emergency procedures applicable to all Sessions of flight.

### **B. CONTENT**

1. Discussion in cockpit of all emergency procedures
2. Utilizing aircraft POH and emergency checklists.
3. Simulated Hot Start
4. Simulated Hung Start
5. Starter Energized light stays on after start sequence
6. Engine failure on takeoff roll and after lift off
7. Loss of Py Air and emergency power lever use
8. Trim Runaway
9. Engine flameout and restart in flight (simulated, starter assist)
10. Gliding practice, feathered and un-feathered, w and w/o flaps
11. 180-degree power off approaches (zero thrust)
12. Forced landing practice, pattern and en-route
13. Fires—Engine, Electrical, Cabin/load, wing
14. Annunciator panel warnings

## **Session # 5 (Operational check, safety and judgment)**

- Briefing ..... 0.5 hour
- Flight 100% Check (By CCP)..... 1.0 hour
- Debriefing ..... 0.5 hour

### **A. OBJECTIVE**

1. To gain proficiency in normal operations and to review the elements of Lesson 1-4
2. Learn correct cargo and passenger loading and securing
3. Develop proficiency and Confidence

### **B. CONTENT**

- Preflight briefing: Plan for flights and potential problems
- Flight/Route Planning
- Weight and Balance Calculations
- Loading and Tie down

- Expected Takeoff and Landing performance and margins
- Trim Runaway (while simulated IMC, no pax)
- Weather considerations, alternates, fuel reserves
- Trend monitoring
- Instrument approach practice as appropriate

Note: 5 hours may be reduced (based on instructor recommendation) but not less than 2.5 hours

### **3.6.7.3 Line Training ..... 2 sectors**

#### **A. OBJECTIVE**

1. To gain PIC/SIC decision making
2. To familiarize with duties and responsibilities PIC/ SIC line flight

#### **B. CONTENT**

##### **1) BRIEFING:**

1. Crew briefing, Flops briefing, Performance, Load-sheet;
2. Fuel calculation and Flight plan;
3. Coordination (Cockpit Crew, Mechanic and Ground staff);
4. Aircraft Preflight and Set-up;
5. Irregularity Solving.

##### **2) AIRCRAFT HANDLING:**

1. Engine Starting
2. Taxi out and Takeoff;
3. Departure, Climbing and Cruising;
4. Descent, Arrival and Approach;
5. Landing and Taxi in;
6. Parking and Termination.

##### **3) GENERAL, PILOTING AND MANAGEMENT:**

1. Aviation Law, Regulation and Procedure;
2. Navigation, Communication and Critical Point;
3. Airport and Route Knowledge;
4. Adverse Weather and Seasonal Meteorological Condition;
5. Abnormal and Emergency;
6. GPS;
7. Technical Knowledge;
8. Personal Conflict and Stress Management;

## 3.7. PILATUS PC-6 B2/H4 REQUALIFICATION TRAINING

### 3.7.1 Training Objective

To provide pilots (with PPC that has been expired for more than 24 months) knowledge and procedure regarding the operation of Pilatus PC-6 B2/H4

### 3.7.2 Prerequisite

- SCA employee
- Hold ATPL/ CPL Rated Pilatus PC-6 B2/H4
- PPC expired more than 24 months
- Hold valid first class medical certificate

### 3.7.3 Instructional delivery method

- Lecture and/or Self-learning

### 3.7.4 Training aid

- PC/ Laptop
- Projector
- White board/ Flip Chart

### 3.7.5 Training Device

- Aircraft Pilatus PC-6 B2/H4

### 3.7.6 Courseware

- Operation Manual Part A, B, and C
- QRH Pilatus PC-6 B2/H4
- Airplane Flight Manual Pilatus PC-6 B2/H4
- Pilot Training Manual Pilatus PC-6 B2/H4
- SOP mountainous Flying
- MEL Pilatus PC-6 B2/H4
- Other applicable material as necessary

### 3.7.7 Curriculum Segment

#### 3.7.7.1. Ground Training Syllabus .....40.0 Hours/ 5 Days;

NO	DESCRIPTION	HOURS
Day 1		
1	AIRCRAFT GENERAL ➤ Dimensions; ➤ Major Components and Systems	2.0 Hours
2	PERFORMANCE	2.0 Hours

	<ul style="list-style-type: none"> <li>▪ General;</li> <li>▪ Definitions and General Principle</li> <li>▪ Takeoff and Landing Weight;</li> <li>▪ Performance Graphs;</li> <li>▪ Flight Planning:</li> <li>▪ Determination of V Speeds;</li> <li>▪ Takeoff Flight Path;</li> <li>▪ Approach and Landing Climbs;</li> <li>▪ Cruise Control;</li> <li>▪ Runway Analysis Charts.</li> </ul>	
3	<b>STRUCTURES</b> <ul style="list-style-type: none"> <li>➢ STRUCTURES</li> <li>➢ General Description;</li> <li>➢ Fuselage;</li> <li>➢ Equipment;</li> <li>➢ Doors;</li> <li>➢ Windows;</li> <li>➢ Placards.</li> </ul>	1.0 Hours
4	<b>WINGS</b> <ul style="list-style-type: none"> <li>➢ General Description;</li> <li>➢ Components;</li> </ul>	1.0 Hours
5	<b>ACCES COVER</b> <ul style="list-style-type: none"> <li>➢ General Description;</li> <li>➢ Components;</li> <li>➢ Controls and Indications;</li> <li>➢ Operation;</li> <li>➢ Limitations.</li> </ul>	1.0 Hours
6	<b>CABIN HEATING AND VENTILATION</b> <ul style="list-style-type: none"> <li>➢ General Description;</li> <li>➢ Components;</li> <li>➢ Controls and Indications;</li> <li>➢ Operation;</li> <li>➢ Limitations;</li> </ul>	1.0 Hours
<b>Day 2</b>		
7	<b>WEIGHT AND BALANCE</b> <ul style="list-style-type: none"> <li>➢ General Discription;</li> <li>➢ Loading;</li> <li>➢ Computations</li> </ul>	1.5 Hours
8	<b>FLIGHT COTROLS</b> <ul style="list-style-type: none"> <li>➢ Description;</li> <li>➢ Components;</li> <li>➢ Controls and Indications;</li> </ul>	2.0 Hours

	<ul style="list-style-type: none"> <li>➤ Operation;</li> <li>➤ Limitations;</li> <li>➤ Emergency / Abnormal.</li> </ul>	
9	<b>LANDING GEAR</b> <ul style="list-style-type: none"> <li>➤ Tail Landing Gear</li> <li>➤ Break System.</li> <li>➤ Components;</li> <li>➤ Controls and Indications;</li> <li>➤ Operation;</li> <li>➤ Limitations.</li> <li>➤ Emergency / Abnormal.</li> </ul>	2.0 Hours
10	<b>FUEL SYSTEM</b> <ul style="list-style-type: none"> <li>➤ General Description;</li> <li>➤ Components;</li> <li>➤ Controls and Indications;</li> <li>➤ Operation;</li> <li>➤ Limitations;</li> <li>➤ Emergency / Abnormal.</li> </ul>	1.5 Hours
11	<b>VACUUM SYSTEM</b> <ul style="list-style-type: none"> <li>➤ General Description;</li> <li>➤ Components;</li> <li>➤ Controls and Indications;</li> <li>➤ Operation;</li> </ul>	1.0 Hours
<b>Day 3</b>		
12	<b>OXYGEN SYSTEM</b> <ul style="list-style-type: none"> <li>➤ General;</li> <li>➤ Loading;</li> <li>➤ Computations.</li> </ul>	1.5 Hours
13	<b>ELECTRICAL POWER</b> <ul style="list-style-type: none"> <li>➤ General Description;</li> <li>➤ Battery;</li> <li>➤ Starter / Generator.</li> <li>➤ Components;</li> <li>➤ Controls and Indications;</li> <li>➤ Operation;</li> <li>➤ Limitations;</li> <li>➤ Emergency / Abnormal.</li> </ul>	2.0 Hours
14	<b>INSTRUMENTS</b> <ul style="list-style-type: none"> <li>➤ General Description;</li> <li>➤ Components;</li> <li>➤ Controls and Indications;</li> </ul>	2.0 Hour



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	<ul style="list-style-type: none"><li>➤ Operation;</li><li>➤ Lights.</li></ul>	
15	NAVIGATION <ul style="list-style-type: none"><li>➤ General Description;</li><li>➤ Components;</li><li>➤ Controls and Indications;</li><li>➤ Operation;</li><li>➤ Limitation;</li><li>➤ Emergency / Abnormal</li></ul>	1.5 Hour
16	ICE PROTECTION <ul style="list-style-type: none"><li>➤ General Description;</li><li>➤ Components;</li><li>➤ Controls and Indications;</li><li>➤ Operation;</li><li>➤ Limitation;</li></ul>	1.0 Hours
Day 4		
17	POWER PLANT <ul style="list-style-type: none"><li>➤ General Description;</li><li>➤ Engine Dat;</li><li>➤ Engine Layout / Accessories;</li><li>➤ Engine Fuel System;</li><li>➤ Ignition;</li><li>➤ Air Flow;</li><li>➤ Engine Control;</li><li>➤ Engine Inidation;</li><li>➤ Oil Syetem / Lubrication;</li><li>➤ Exhaust;</li><li>➤ Starting Engine;</li><li>➤ Troble Shooting</li></ul>	2.0 Hours
18	PROPELLER <ul style="list-style-type: none"><li>➤ General Description;</li><li>➤ Operation;</li><li>➤ Beta Valve.</li></ul>	2.0 Hours
19	GROUND HANDLING <ul style="list-style-type: none"><li>➤ General Description;</li><li>➤ Operation.</li></ul>	1.0 Hours
20	SERVICING <ul style="list-style-type: none"><li>➤ General Description;</li><li>➤ Operation.</li></ul>	1.0 Hours
21	EMERGENCY PROCEDURES <ul style="list-style-type: none"><li>➤ Engine Failure;</li><li>➤ Fire Detection and Warning;</li></ul>	2.0 Hours

	<ul style="list-style-type: none"> <li>➤ Fire Extinguisher System;</li> <li>➤ Engine Fires – Ground and Air;</li> <li>➤ Electrical Fires;</li> <li>➤ Cabin / Cargo Fires;</li> <li>➤ Heater Fires;</li> <li>➤ Smoke Evacuation;</li> <li>➤ Propeller Over-speed;</li> <li>➤ Emergency Descent;</li> <li>➤ Generator Failure;</li> <li>➤ Forced Landing;</li> <li>➤ Ditching;</li> <li>➤ Crew Evacuation;</li> <li>➤ Crew Coordination</li> </ul>	
Day 5		
22	REVIEW AND EXAMINATION	8.0 Hours
<p><b>Record Keeping</b></p> <p>Successful completion of Initial Ground Training will be logged on Form. The original of the form is made a part of each crewmembers training file</p>		

### 3.7.7.2 Flight Training..... 7.5 Hours

#### Session # 1

- Briefing .....	0.5 hour
- Flight Training .....	1.5 hour
- Debriefing .....	0.5 hour

#### C. OBJECTIVE

To familiarize the pilots with Aircraft operations through use of normal procedures and approved checklist. To develop ability to maintain attitude and orientation, recognize stall characteristic in various configurations and make prompt, efficient recovery.

#### D. CONTENT

1. Briefing
2. Performance Data
3. Normal Operating Procedures Checklists and Briefing
4. Avionics
5. Starting Engines
6. Taxiing
7. Normal Propeller and Systems Check
8. Take-off Climb
9. Airwork
- e. Slow Flight

- f. Approach to Stall Series
- g. Steep Turns and Unusual Attitudes
- h. Vmc Demonstration (Optional)
- 10. Approaches and Holding
- 11. Debriefing

## **Session # 2**

- Briefing ..... 0.5 hour
- Flight Training ..... 1.5 hour
- Debriefing ..... 0.5 hour

### **C. OBJECTIVE**

To develop the pilot's skill in aircraft operation with selected system malfunction and abnormal procedures in accordance with the Flight Manual.

### **D. CONTENT**

- 16. Briefing
- 17. Discussion of Takeoff Flap Performance Data ( if applicable )
- 18. Normal Operating and Emergency Procedures Checklist and Briefings
- 19. Starting Engines
- 20. Taxiing
- 21. Propeller and System check
- 22. Aborted Take off
- 23. Maximum Performance Take off
- 24. Climb
- 25. Electrical System Management
- 26. Fuel System Management
- 27. VFR Pattern
- 28. Instrument Approaches
- 29. Normal and Engine Out Landing
- 30. Debriefing

## **Session # 3**

- Briefing ..... 0.5 hour
- Flight Training ..... 1.5 hour
- Debriefing ..... 0.5 hour

### **C. OBJECTIVE**

To further develop the pilot's skill in aircraft operation with selected system malfunction and abnormal procedures. To continue to develop emergency procedure application, crew coordination, and approach planning.

### **D. CONTENT**

- 10. Briefing

11. Discussion of ISA Performance Data
12. Normal Operating and Emergency Procedures Checklist and Briefings
13. Starting Engines
14. Taxiing
15. Take-off
16. Hazardous Situation Training
  - c. Takeoff, rejected, with engine failure just prior to V1
  - d. Pilot Incapacitation (crew training)
17. Normal and Engine out Landing
18. Debriefing

## **Session # 4**

- Briefing ..... 0.5 hour
- Area familiarization Flight Training ..... 1.5 hour
- Debriefing ..... 0.5 hour

### **A. OBJECTIVE**

The pilot becomes proficient in normal aircraft operation to facilitate His/Her for check ride with Government check pilot and for line flying

### **B. CONTENT**

14. Briefing
15. Performance Data
16. Normal Operating Checklist and Briefings
17. Starting Engines
18. Taxiing
19. Take-off
20. Flight Controls System Management
21. Instrument Approaches
22. Airwork, review of all airwork
23. Precision, non-precision and missed approaches, normal landing
24. Circling approaches and rejected landings
25. Approaches
26. Debriefing

## **Session # 5**

- Briefing ..... 0.5 hour
- Flight 100% Check ..... 1.5 hour
- Debriefing ..... 0.5 hour

### **A. OBJECTIVE**

To evaluate the pilot ability to demonstrate his/her knowledge of aircraft systems, checklist procedures, and most importantly, his/her ability to control

the aircraft and direct the crew under a representative sample of conditions so outlined in the POH.

**B. CONTENT**

2. Maneuvers prescribed in CASR.

Note: 7.5 hours may be reduced (based on instructor recommendation) but not less than 2.5 hours

**3.7.7.3 Line Training ..... 2 sectors**

**A. OBJECTIVE**

3. To gain PIC/SIC decision making
4. To familiarize with duties and responsibilities PIC/ SIC line flight

**B. CONTENT**

1) BRIEFING:

6. Crew briefing, Flops briefing, Performance, Load-sheet;
7. Fuel calculation and Flight plan;
8. Coordination (Cockpit Crew, Mechanic and Ground staff);
9. Aircraft Preflight and Set-up;
10. Irregularity Solving.

2) AIRCRAFT HANDLING:

7. Engine Starting
8. Taxi out and Takeoff;
9. Departure, Climbing and Cruising;
10. Descent, Arrival and Approach;
11. Landing and Taxi in;
12. Parking and Termination.

3) GENERAL, PILOTING AND MANAGEMENT:

1. Aviation Law, Regulation and Procedure;
2. Navigation, Communication and Critical Point;
3. Airport and Route Knowledge;
4. Adverse Weather and Seasonal Meteorological Condition;
5. Abnormal and Emergency;
6. GPS;
7. Technical Knowledge;
8. Personal Conflict and Stress Management;

**3.7.7.4 Training Records**

- c. All training received will be recorded in accordance with Chapter 7 of this manual.
- d. Copies of the most recent PPC and/or written examination will also be attained in the training files.

## 3.8. RECURRENT TRAINING PILOT

### 3.8.1. Objective

Upon successful completion a pilot crewmember will fulfill the requirements of CASR Part 135.

### 3.8.2. Recurrent Technical Ground Training

Annual Technical Ground Training will be given to all flight crewmembers to ensure continued competency. The topics covered will be a review of the Initial Technical Ground Training and any changes to the program or amended operating procedures. Annual Technical Ground Training shall be three (24) hours in duration to satisfy Appendix N-B of the CASR Part 135.

### 3.8.3. Ground Training

GROUND TRAINING			
FIXED WING (Classroom Refreshing Course) 8.0 Hours		ROTARY WING (Classroom Refreshing Course) 8.0 Hours	
Aircraft System	2	Aircraft System	2
Performance, Weight & Balance	2	Performance, Weight & Balance	2
Flight Safety	1	APPROVED ROTORCRAFT FLIGHT MANUAL	1
Flight Technique	1	Flight Technique	1
Operations Manual, SOP	1	Operations Manual, SOP	1
Exam / Test	1	Final Exam	

### 3.8.4. Recurrent Flight Training

Annual Recurrent Flight Training will be given to all flight crewmembers to ensure continued competency. The training exercises will cover those items detailed in the Flight Training Syllabus. Annual Recurrent Flight Training shall be of duration not less than one (1) hour for PIC and SIC. The Recurrent Flight Training will be given at twelve (12) month intervals and will consist of a training session followed by a recurrent flight test. The recurrent flight test can be replaced by passing a Pilot Proficiency Check (PPC) given by a Company Check Pilot (CCP) or a DGCA Designated Check Pilot.

### 3.8.5. Flight Training

- Time scale ..... **2.0 Hours**
  - Flight Plan, Fuel Calculation and Weight & Balance;
  - Crew Coordination;
  - Engine Starting with Malfunction;
  - Taxi out and Takeoff with Malfunction;

- Departure and Climb with Malfunction;
- Cruise with Malfunction
- Arrival: Normal or with Malfunction;
- Instrument Approach;
- Landing: Normal or with Malfunction;
- Taxi in or On Ground Emergency, Evacuation;
- Termination.

**NOTE: Minimum-flying hour on this leg Is ONE hour & the CRM should include.**

### **3.8.6. Aircraft Base Training.**

➤ **Time scale.....1.0 Hour**

- Preflight and Walk Around;
- Engine Starting ;and Taxi out;
- Short Base Approach;
- Circling / Low Circuit;
- Rejected Landing / Wave-off;
- Flapless Circuit and Landing;
- Taxi in and Parking.

### **3.8.7. Courseware**

- A. Operations Manual (OM); Minimum Equipment List (MEL); Pilot Operating Handbooks (POH); Standard Operating Procedures (SOP); Flight Plans, Jeppesen Area Charts and Approach Charts;
- B. Other applicable material as necessary.

### **3.8.8. Instructional Delivery Methods:**

Aircraft demonstrated by the pilot being trained.

### **3.8.9. Training Environment:**

Aircraft

### **3.8.10. Testing / Checking:**

Questions pertaining to duties will be done by Instructor. The Recurrent Training will continue until proficiency is attained.

### **3.8.11. Record Keeping.**

Successful completion of the Recurrent Training will be logged on Form. The original of the form is made a part of each crewmember's training file.

## 3.9. DIFFERENCES TRAINING CURRICULUM

The training required for crewmembers who have qualified a served on a particular type aircraft, when the DGCA finds differences training is necessary before crewmembers serves in the same capacity on a particular variation of the aircraft. For example from Robinson R44 to Robinson R66 or from Cessna C208 to Cessna C208B. Differences training consist of at least instruction in each subject required where differences in aircraft fleet occur, and instruction in each maneuver or procedure required where differences in the aircraft fleet occur.

Differences training for all variations of a particular type aircraft maybe incorporated into the initial and recurrent ground and flight training programs for the aircraft type subjects to differences or, maybe published as separate syllabus.

### 3.9.1. Ground Training Differences.

**Time Scale.....8 Hours**

1. Aircraft General, System, Navigation, Powers, Electrical, etc.;
2. Performance and Weight & Balance;
3. Flight Safety;
4. Flight Technique;
5. Exam / Test.

### 3.9.2. Flight Training

**Time Scale.....1 Hour**

#### Session 1

**A. Briefing.....1 hour**

**B. Exercises.....1 hour**

1. Preparation
2. Engine starting
3. Hover/push back and taxi out
4. Take off
5. Hover and landing
6. Take off, normal circuit, and landing
7. Take off simulated one engine fail after V1
8. NDB/VOR approach
9. go around
10. circuit and landing
11. Low circuit
12. Wave off / rejected landing
13. Short base circuit
14. Flapless circuit and landing
15. Taxi in and parking
16. Termination

**C. Debriefing.....1 hour**



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### 3.9.3. Line Training

1. Minimum 4 sector or 4 hours.

## **3.10. CHECKING MODULES**

### **3.10.1. General**

A Checking Module is a module, which is a practical skill and knowledge check for pilots.

### **3.10.2. Proficiency Check**

The Proficiency Check Module consists of the proficiency check conducted in accordance with CASR Part 135. This check is normally conducted by Company Check Airmen in an aircraft. A proficiency check qualifies pilots for both VFR and IFR instrument rating. Refer to individual aircraft type.

### **3.10.3. Line Check**

Line checks are required for PIC on an annual basis and must be conducted in the aircraft on at least one representative route segment in which the pilot is likely to be assigned. Line Check is to be given by a Check Airman who is properly qualified in the particular aircraft being used.

1. The amount of time flown during an Initial Line Check may be credited towards the flight hour requirement.
2. Line Checks may be conducted during either revenue or non-revenue operations.

### **3.10.4. Pilot Qualification Check**

This Segment is the final segment of each training curriculum as outlined in this Operations Manual and is composed of specific Testing and Checking.

After completion of formal training, pilot must successfully complete this segment before being qualified to serve unsupervised as a required PT. Smart Cakrawala Aviation pilots.

### 3.11. PROFICIENCY CHECK

#### 3.11.1. Objective

Upon successful completion a flight crew will fulfill the requirements of CASR Part 135.

#### 3.11.2. Aircraft.

Time Scale.....		1.0 Hour
Pilot Proficiency Check		
Fixed wing	Rotary Wing	
<ol style="list-style-type: none"> <li>1. Pre-flight and Walk Around Check;</li> <li>2. Engine Starting and Pushback;</li> <li>3. Taxi out and Line-up;</li> <li>4. Takeoff Simulated Critical Engine Failure after V1;</li> <li>5. V2 Climbs and Clean up;</li> <li>6. Instruments Approach and Go Around; ( if applicable)</li> <li>7. Visual Approach and Landing; ( if applicable)</li> <li>8. Normal Circuit and Landing;</li> <li>9. Low Circuit and Wave-off;</li> <li>10. Flapless Circuit and Landing;</li> <li>11. Taxi in, Parking and Termination.</li> </ol>	<ol style="list-style-type: none"> <li>1. Pre-flight checks and inspection</li> <li>2. Knowledge and use of normal checklists and procedures</li> <li>3. Crew co-ordination and briefings</li> <li>4. Starting and shut down procedures</li> <li>5. Taxi procedures</li> <li>6. Hover maneuvers including crosswind (Helicopters)</li> <li>7. Use of aircraft equipment</li> <li>8. Basic flying accuracy and smoothness</li> <li>9. Steep turns</li> <li>10. Climbing and descending turns to specific heading</li> <li>11. Take-offs – various profiles</li> <li>12. Landings – various profiles</li> </ol>	
See Appendix A Form SCA-OPS-OMD 004 <b>AIRMEN PROFICIENCY</b>		See Appendix A Form SCA-OPS-OMD 008 <b>AIRMEN PROFICIENCY/ QUALIFICATION CHECK FOR HELICOPTER</b>

#### 3.11.3. Courseware

- A. Operating Manual (OM); Minimum Equipment List (MEL); Pilot Operating Handbooks (POH); Standard Operating Procedure (SOP); Flight Plan, AIP & Indo Avis Area Charts and Approach Charts;
- B. Other applicable material as necessary.

#### 3.11.4. Instructional Delivery Methods:

Inflight demonstration by the pilot being checked.

#### 3.11.5. Training Environment:

Aircraft.



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### **3.11.6. Testing / Checking:**

Questions pertaining to duties will be done by Check Airmen/CCP.

### **3.11.7. Record Keeping.**

Successful completion of the Proficiency Check will be logged on Form. The original of the form is made a part of each crewmember's training file.

## **3.12. LINE CHECK**

### **3.12.1. Objective**

Upon successful completion a flight crew will fulfill the requirements of CASR Part 135.

### **3.12.2. Modules**

#### **1. Aircraft Handling:**

- Preparation;
- Engine Start
- Taxi out and Takeoff;
- Climb, Cruise and Descent;
- Arrival, Approach and Landing;
- Taxi in and Parking.

#### **2. General Piloting and Management:**

- Aviation Law, Regulation and Procedure;
- Communications, Navigation and Critical Point;
- Airport, Area and Route Knowledge;
- Fuel Knowledge and Management;
- Adverse Weather and Seasonal Meteorological Condition;
- Abnormal and Emergency;
- Flight Safety;
- Technical Knowledge;
- Passenger Comfort and Care;
- Crew Resource Management.

### **3.12.3. Courseware**

- A. Operating Manual (COM); Minimum Equipment List (MEL); Pilot Operating Handbooks (POH); Standard Operating Procedure (SOP); Flight Plan, Jeppesen, AIP Area Charts and Approach Charts;
- B. Other applicable material as necessary.

### **3.12.4. Instructional Delivery Methods:**

Inflight demonstration by the pilot being checked.

### **3.12.5. Training Environment:**

Aircraft on revenue or non-revenue operation.

### **3.12.6. Testing / Checking:**

Check Airmen/Route Instructor will do questions pertaining to duties. The Line Check will be valid for the proceeding twelve (12) calendar month.

### **3.12.7. Record Keeping:**

Successful completion of the Line Check will be logged on Form.

The original of the form is made a part of each crewmember's training file.

## 3.13. QUALIFICATION CHECK

### 3.13.1. Objective

This Segment is the final segment of each training curriculum as outlined in this OM Part D and is composed of specific Testing and Checking.

After completion of formal training, pilot must successfully complete this segment before being qualified to serve unsupervised as a required PT. Smart Cakrawala Aviation pilot.

### 3.13.2. Modules

Qualification checks for Up-grading training consist of Aircraft, Route and Airport Qualification Check. Qualification check for other Up-grading training is Route and Airport Qualification Check.

**Time Scale .....8.0 Hours**

#### Session 1

- Flight Planning;
- Fuel Calculation;
- Load Sheet;
- Engine Starting with Malfunction;
- Taxi out and Takeoff with Malfunction;
- Departure and Climb with Malfunction;
- Cruise / Descend with Malfunction;
- Arrival: Normal or with Malfunction;
- Instrument Approach;
- Landing: Normal or with Malfunction;
- Taxi in or On Ground Emergency;
- Parking or Evacuation;
- Termination and Parking

#### Session 2

- Preparation (incl. malfunction);
- Engine Starting (incl. malfunction)
- Rejected Takeoff;
- Takeoff Critical Engine Fail after V1;
- Low Circuit and Wave-off / Rejected Landing;
- Short Base Circuit;
- Normal Circuit Critical Engine Fail above / below 500 feet;
- Flapless Circuit and Over Run Landing;
- On Ground Emergency;
- Evacuation;
- Written test: Technical and Aviation Knowledge.

### **3.13.3. Courseware**

- A. Operations Manual (OM); Minimum Equipment List (MEL); Pilot Operating Handbooks (POH); Standard Operating Procedure (SOP); Flight Plan, Jeppesen, AIP Area Charts and Approach Charts;
- B. Other applicable material as necessary.

### **3.13.4. Instructional Delivery Methods:**

In-flight demonstration by the pilot being checked.

### **3.13.5. Training Environment:**

Aircraft on revenue operations.

### **3.13.6. Testing / Checking:**

Testing and checking pertaining to duties will be done by Flight Instructor.

### **3.13.7. Record Keeping.**

Successful completion of the Qualification Check will be logged on Form. The original of the form is made a part of each crewmember's training file.

## **3.14. TRAINING FOR AERIAL SURVEY**

### **3.14.1. Ground Training**

TIME SCALE.....4 HOURS

1. Knowledge of equipment camera unit .....1.5 hours
2. Data area survey .....1.5 Hours
3. Operation Limitation for aerial Survey .....1 Hour

### **3.14.2. Flight Training**

TIME SCALE.....20 HOURS

1. Crew Briefing, FLOPS Briefing, Performance, Manifest
2. Fuel Calculation and Flight Plan
3. Coordination (cockpit crew, Engineer, And Photo Operator)
4. Aircraft preflight and set up
5. How to used G1000 for aerial survey.
6. Aircraft Handling
  - a. Engine Starting
  - b. Taxi Out and Take off
  - c. Departure, climbing and cruising
  - d. Air Work
    - Standard Bank
    - Medium Bank
    - Steep turn bank
    - Slow flight with 10° Flaps
    - Tears Drop Entry with timing
    - Maintain Heading and altitudes
    - Stall recovery
    - Emergency procedures
    - Decent, arrival and approach
    - Landing and Taxi in
    - Parking and termination.

### **3.14.3. General Piloting And Management**

- Aviation law, regulation and procedures
- Navigation, communication and critical point
- Airport and route knowledge
- Adverse Weather and seasonal meteorological condition
- Normal and emergency
- Technical knowledge

### **3.14.4. Course ware**

1. Operations Manual
2. MEL
3. Pilot Operating Handbook(POH)
4. Aerial Survey SOP
5. Flight Plan, AIP, Indoavis Aerial Chart and Approach Chart

### **3.14.5. Instructional Delivery Methods:**

In-flight demonstration by the pilot being checked.

### **3.14.6. Training Environment:**

Aircraft on revenue operations.

### **3.14.7. Testing / Checking:**

Testing and checking pertaining to duties will be done by Flight Instructor.

### **3.14.8. Record Keeping.**

Successful completion of the Qualification Check will be logged on Form. The original of the form is made a part of each crewmember's training file.



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### 3.15. TRAINING FOR MOUNTAINOUS OPERATIONS.

REV TO SOP MOUNTAINOUS MANUAL Section 3 Training.



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### 3.16. TRAINING FOR ELEVATED HELIPORTS.

REV TO SOP ELEVATED MANUAL Section 2 Training.

## 4. CHECKING AIRMAN OR INSTRUCTOR

### 4.1. DEFINITIONS

The following terms are used throughout this manual and are defined as follows:

#### 1. Check Airmen

A check airmen is an airmen designated by PT. Smart Cakrawala Aviation- DGCA who has the appropriate training experience and demonstrated ability to evaluate and certify to the knowledge and skills of other airmen. This evaluation is made on the basis of flight checks conducted as a qualification module in each specific training curriculum.

A check airmen is authorized to conduct training, checking and supervise according to the specific type of check airmen classification that has been approved by the DGCA. PT. Smart Cakrawala Aviation checks airmen are: "Company Check Pilot".

#### 2. Instructor (In-Flight, Route)

Instructor is an airmen designated by PT. Smart Cakrawala Aviation , who has the appropriate training, experience and demonstrated ability to instruct other airmen in a flight segment of specific flight training. Instructor may certify to the proficiency and knowledge of other airmen and recommend them for proficiency checks, flight checks and other special operational qualification flight checks.

Instructor is authorized to conduct as Second-In-Command operating experience [CASR Part 135.409.] Instructor may be authorized to perform these functions in the aircraft.

#### 3. Pilot Ground Instructor

Pilot Ground Instructor is a person designated by PT. Smart Cakrawala Aviation who has the appropriate knowledge, experience, training and demonstrated ability to instruct flight crew in curriculum segments other than flight segments. When designated by company, Pilot Ground Instructor may certify other airmen on the satisfactory completion of ground training curriculum segments.



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### 4.2. SCOPE OF CHECK AIRMAN TRAINING

For the purposes of training, all check airmen and instructors (with the exception of Pilot Ground Instructor) will receive training in the respective check pilot. This methodology ensures that all airmen and instructors involved in the training process are cognizant of the duties and responsibilities of the different facets of the PT Smart Cakrawala Aviation training program.

## 4.3. CHECK AIRMEN DUTIES AND RESPONSIBILITIES

The role of a check airman is:

- a. To ensure that the proficiency of a flight crewmember has reached a predetermined standard of competency before that crewmember is released from training.
- b. To ensure the competency of a flight crewmember remains at the required level as long as the crewmember is in line service.
- c. To provide the proper training and use of check airmen by PT Smart Cakrawala Aviation ensures the standardization of assigned flight crewmembers and provides the company with a valuable management resource.
- d. Check airmen must be knowledgeable in the applicable requirements of CASR Parts 61,135 policies, and other applicable regulations and safe operating practices required for particular crewmember positions.
- e. A check airman must have achieved and maintained a favorable record as a crewmember.
- f. A check airman's manner and professional reputation should reflect positively upon PT Smart Cakrawala Aviation.

The duties and responsibilities of Check Airmen are follows:

- a) Help develop the lesson plan for basic and advance training purposes.
- b) To prepare lesson materials including instructional training aids or other aids for the instruction and training purposes.
- c) To give instruction and training in order to develop the knowledge and skill and to change the attitude of the trainees to reach the required standard.
- d) To reform encourage and direct the trainees to reach the training objectives with an active two-way communication between the instructor and the trainees in training process.
- e) To evaluate various aspects connected to training and instruction matters
- f) To build methods, parameters, evaluating meters, standard and regulations meters to be used in evaluating the trainees.
- g) To make an objective evaluation, examination and scoring in accordance with the regulation.
- h) To evaluate and take action of the trainees evaluation result for method, materials and instruction techniques



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- i) To help in analyzing the company needs in developing program, curriculum, syllabus, training material, methods and training aids

## 4.4. CHECK AIRMEN CLASSIFICATION

### 4.4.1. General

There are three types of check airman designations recognized by PT. Smart Cakrawala Aviation and DGCA; three are pilot check airman designations.

### 4.4.2. Approval

Approval for each check airman designation is contingent on:

1. The check airman having been properly certified in the applicable aircraft.
2. Trained in accordance with PT. Smart Cakrawala Aviation approved check airman training program for the specific designation.
3. Having demonstrated to the DGCA the ability to conduct and accurately evaluate an airman's performance on the checks authorized for that designation.

### 4.4.3. Pilot Check Airmen Listing

The following PT. Smart Cakrawala Aviation personnel are qualified to perform flight training and checks, including proficiency checks, as listed and will be utilized as instructors in the appropriate phases of this training program.

FULL NAME	CODE	OTR NUMBER
-	-	-
-	-	-

### 4.4.4. Company Check Pilot Qualification

#### 1. Company Check Pilot – Line Check Pilot

##### QUALIFICATION:

- a. Hold the required certificate and ratings to serve as PIC of the specific aircraft in revenue service.
- b. Have completed PT. Smart Cakrawala Aviation check airman qualification training program.
- c. Recently qualified as Route Instructor on type.
- d. Meet the currency requirements to serve as PIC, including ground and flight training, line, proficiency or competency checks and 90-day landing currency.
- e. Satisfactorily demonstrate to a DGCA inspector the ability to conduct proficiency or line checks.
- f. Check pilot who have passed their 60<sup>rd</sup> birthday or check airmen who do not hold an appropriate medical certificate may not serve as a flight crewmember.



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## AUTHORIZED ACTIVITIES:

- Line Check.
- As Route Instructor.

## **2. Company Check Pilot – Flight Check Pilot**

### QUALIFICATION:

- a. Hold the required certificate and ratings to serve as PIC of the specific aircraft in revenue service.
- b. Have completed PT. Smart Cakrawala Aviation check airman qualification training program.
- c. Recently qualified as In-flight Instructor on type.
- d. Meet the currency requirements to serve as PIC, including ground and flight training, line, proficiency or competency checks and 90-day landing currency.
- e. Satisfactorily demonstrate to a DGCA inspector the ability to conduct proficiency or line checks or initial operating experience in an aircraft in flight (as applicable).
- f. Check pilot who have passed their 60<sup>rd</sup> birthday or check airmen who do not hold an appropriate medical certificate may not serve as a flight crewmember.

### AUTHORIZED ACTIVITIES:

- As Line Check Pilot.
- As Flight Instructor.
- Pilot Aircraft Proficiency Checks.

All CASR 135 Requirement Pilots Check.



## **4.5. INSTRUCTOR QUALIFICATION**

### **4.5.1. General**

An Instructor is an airman designated by PT. Smart Cakrawala Aviation., who has the appropriate training, experience and demonstrated ability to instruct other airmen in a specific training curriculum segment.

When designated, an Instructor may certify other airman on the satisfactory completion of a training curriculum segment, proficiency and knowledge of other airman and recommend them for check or other special operational qualification checks.

### **4.5.2. Ground Instructor**

#### QUALIFICATION:

1. Ground instructors, regardless of background and training, will demonstrate their proficiency. **(CASR 135.409)**
2. Ground instructors may be qualified in all or specific subjects under the qualification program, but may instruct only those subjects in which an approved PT. Smart Cakrawala Aviation instructor or DGCA representative has verified their competency.
3. All ground instructors must have satisfactorily completed either the PT. Smart Cakrawala Aviation ground school or an equivalent recognized course for the aircraft and or subjects they will be assigned to teach.
4. Ground instructors will be required to receive training in the following subjects:
  - a. Fundamental principles of the teaching / learning process.
  - b. Teaching methods and procedures.
  - c. Instructor / student relationship.

All ground instructors will review course outlines for all subjects. They will be required to teach and familiarize themselves with available training aids, forms, exam PT. Smart Cakrawala Aviation operation and teaching techniques used by PT. Smart Cakrawala Aviation.

#### AUTHORIZED ACTIVITIES:

1. Instruction in specified ground training curriculum segments.
2. Instruction on ground training subjects using any type of training device or mockup, including flight training devices, provided the use of such devices is an integral part of a PT. Smart Cakrawala Aviation approved ground training curriculum segment.



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3. Certification of the satisfactory proficiency and knowledge of flight crews.

### 4.5.3. RESERVED

### 4.5.4. Flight Instructor

#### QUALIFICATION:

1. All the qualification applicable for a Instructor.
2. Hold an Commercial Pilot Licence or Airline Transport Pilot License and Instrument Ratings that must be held to serve as a pilot in command.
3. Recently qualified as Route Instructor on type.
4. Satisfactorily completed in-flight training syllabus for In-flight Instructor.

#### AUTHORIZED ACTIVITY:

1. Conducting in-flight for flight instructor
2. Evaluate and recommend other airmen for line/route training progress
3. Training that must be conducted in the aircraft.

Evaluate the training progress, may certify to the proficiency and knowledge of other airmen and recommend them for proficiency check

## 4.6. INSTRUCTOR CURRICULUM

### 4.6.1. General

A complete training agenda specific for instructors to provide adequate ground and flight training, including testing and/or checking requirements.

### 4.6.2. Ground Instructor Curriculum

#### GROUND TRAINING.....48 Hours

- Fundamental principal of the teaching/learning process;
- Teaching methods and procedures;
- The instructor / student relationship;
- Review the course outline for all subjects they will be required to teach;
- Observe; Conduct a ground course session (or more) under supervision of a qualified ground instructor.

**Note:** for Ground Instructor Training at 142 or training center Approver DGCA for ground Instructor.

#### **4.6.3. Route Instructor Curriculum**

GROUND TRAINING.....**8.0 Hours (INITIAL)**  
.....**4.0 Hours (EXPERIENCED)**

- Route instructor duties, functions and responsibility;
- Knowledge of aerodrome, area facilities, procedures and limitation;
- Communication and air-traffic facilities, services and procedure;
- Seasonal meteorological characteristics;
- Notices to Airmen.

FLIGHT TRAINING.....**4.0 Hours**

- a. Right and left hand seat training in normal, abnormal and emergency condition.
- b. Air work and base training.

FLIGHT TRAINING.....**4.0 Hours**

- Right-hand seat line training Min. three (3) times take off and landings;
- As Route instructor on line / route training under supervisor Instructor;
- Satisfactorily demonstrate to the DGCA Inspector or Designated Pilot, the ability to conduct line / route training.

#### **4.6.4. Route Instructor Curriculum**

GROUND TRAINING.....**16.0 Hours**

- Route instructor function, duties and responsibility;
- Knowledge of aerodrome, area facilities, procedures and limitation;
- Communication;
- Seasonal meteorological characteristics;
- Notice to airmen;
- Appropriate method, procedures and techniques for conducting training.
- Proper evaluation of pilot performance including detection of:
  - a. Improper and insufficient training;
  - b. Personal characteristics that could adversely affect safety.
- Appropriate corrective action in the case of unsatisfactory training;
- The appropriate safety measures to be taken from either pilot seat for emergency situations that are likely to develop during training.

FLIGHT TRAINING.....**8.0 Hours**

- Right hand seat training;
- Airwork and base training;
- Simulated on abnormal and emergency condition;
- As Route instructor on route / line training under supervisor of Instructor;
- Satisfactorily demonstrate to the DGCA Inspector or Designated Pilot, the ability to conduct line / route training.

#### **4.6.5. Flight Instructor Curriculum.**

GROUND TRAINING.....**8.0 Hours**

- Inflight Instructor duties, functions and responsibility;
- Grading and Recording;
- Standardization;
- Performance and Evaluation.

**FLIGHT TRAINING.....10.0 Hours**

- Right hand seat training;
- Air work and Base training;
- Simulated on Abnormal and Emergency condition;
- Actions as Instructor on Right and Left hand seat;
- Recovery to be taken for emergency situation that is likely to develop during training, especially with inexperienced trainee;
- As inflight instructor on flight base training under supervisor check airmen;
- Satisfactorily demonstrate to the check airmen, the ability to conduct flight base training.

#### **4.6.6. Company Check Pilot Curriculum**

##### **1. Company Check Pilot – Aircraft Check Pilot**

**GROUND TRAINING.....8.0 Hours**

- Aircraft check pilot duties, functions and responsibility;
- Create of Aircraft training and checking syllabus;
- Method of Aircraft checking.

**AIRCRAFT TRAINING.....2.0 Hours**

1. Conducting Aircraft check under supervisor of check airmen;
2. Demonstrate to the DGCA Inspector to conduct Aircraft Check.

##### **2. Company Check Pilot – Line Check Pilot**

**GROUND TRAINING.....8.0 Hours**

- Line check pilot duties, functions and responsibility;
- Create of route training syllabus;
- Method of route/line checking.

**FLIGHT TRAINING.....4.0 Hours**

- Conducting route/line check under supervisor of check airmen;
- Demonstrate to the DGCA Inspector to conduct route/line check.

##### **3. Company Check Pilot – Flight Check Pilot**

**GROUND TRAINING.....8.0 Hours**

1. Check pilot duties, functions and responsibility;
2. Create of aircraft training and checking syllabus;
3. Method of aircraft checking.

**FLIGHT TRAINING.....2.0 Hours**

1. Conducting aircraft check under supervisor of check airman;

Demonstrate to the DGCA Inspector to conduct aircraft check.



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## 5. FLIGHT DISPATCHER.

### 5.1. GROUND TRAINING

The primary objective of aircraft ground training at PT. Smart Cakrawala Aviation is to provide Flight Dispatchers with the necessary knowledge for understanding the basic functions of aircraft systems and pertinent operational procedures. Upon completion of a specific ground training curriculum segment, the student will be sufficiently prepared to enter the flight training curriculum segment. Ground training is training for a specific aircraft type.



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## 5.2. CURRICULUM SEGMENT TRAINING

### 5.2.1. Initial Training

This training category is for Dispatchers who have not previously been qualified by PT. Smart Cakrawala Aviation for Dispatcher duties. The programmed hour for this curriculum is forty (40) hours, and a Dispatcher may be qualified on a maximum of two (2) aircraft rating. For additional aircraft qualification refers to Transition Ground Training.

### 5.2.2. Dispatcher Transition Training

This training category is for qualified Dispatchers to acquire additional qualification. The programmed hour for transition training is sixteen (16) hours.

Ground Training will consist of the subjects specified in the Initial Dispatcher Ground Training course in this section including a competence check. Primary emphasis will be given to subjects where significant differences prevail.

### 5.2.3. Dispatcher Competence Check

This Competence Check is in addition to the programmed hours for Dispatcher Initial Ground Training course and Dispatcher Recurrent Ground Training course.



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## **5.3. INITIAL / RECURRENT TRAINING**

### **5.3.1. Objective**

To provide the necessary experience and knowledge for each qualified Dispatcher.

### **5.3.2. Module**

Each Dispatcher must have aircraft line familiarization training of at least five (5) hours observing the flight. The requirement is reduced to a minimum of fifty percent (50%) by the substitution of one additional takeoff and landing for one hour of flight as specified in CASR Part 135 and CASR Part 63. Flight training is required for recurrent training each twelve (12) months.



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## 5.4. DIFFERENCES TRAINING

Differences training as specified in CASR Part 135 and CASR Part 63 will be required if the administrator finds that there are differences between aircraft of the same type operated by the certificate holder. This is to assure that each Dispatcher is adequately trained to perform his/her duties. The Administrator and Operations Manager will determine the number of programmed hours of Ground Training required.



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## **5.5. AIRCRAFT DISPATCHER SUPERVISOR**

A Dispatcher supervisor is a person designated by PT. Smart Cakrawala Aviation who has the appropriate knowledge, experience, training, and demonstrated ability to administer the Competence Check required by CASR Part 135 and CASR Part 67 for Dispatchers.

### **5.5.1. Qualifications**

Applicants for Dispatcher Supervisor will be selected from experienced qualified Dispatcher personnel. All applicants selected will demonstrate their ability in conducting a Competence Check to a qualified Dispatcher Supervisor.

### **5.5.2. Currency**

To remain current, Dispatcher Supervisors must have received Recurrent Ground School Training within the preceding twelve (12) months and Dispatcher experience within the preceding twelve (12) months on the aircraft assigned.



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## 5.6. AIRCRAFT DISPATCHER INITIAL TRAINING

### 5.6.1. Objective

Completion of this training module will qualify the individual to function as an Aircraft Dispatcher. Aircraft Dispatchers will complete this module.

### 5.6.2. Modules.

Time scale.....	40.0 Hours
a. AIRCRAFT SYSTEMS AND LIMITATIONS.....	7.0 Hours
- System Overview Specific to Dispatchers;	
- Minimum Equipment List.	
b. HAZARDOUS MATERIALS.....	4.0 Hours
c. EMERGENCY PROCEDURES.....	4.0 Hours
- Company Emergency Manual;	
- Emergency Notification Procedures;	
- Hijack;	
- Bomb Threat	
- Review / Examination (including Equipment).	
d. PLANNING AND PERFORMANCE.....	8.0 Hours
a) Weight and Balance;	
b) Airport Analysis;	
c) Performance:	
■ Limitations;	
■ Cruise Control 1 Fuel Consumption;	
e. Drift-down / En-route Limitations.	
f. FLIGHT PLAN FILING.....	8.0 Hours
Hours	
- Navigation;	
- Flow Control;	
- Review / Examination.	
g. DISPATCH RESOURCE MANAGEMENT.....	8.0 Hours
REVIEW AND EXAMINATION.....	1.0 Hour
COMPETENCE CHECK.....	As Required

### 5.6.3. Record Keeping

Successful completion of the training course is recorded in the Dispatcher's Training files.

## 5.7. AIRCRAFT DISPATCHER TRANSITION TRAINING (if applicable)

### 5.7.1. Modules.

Time scale.....15.0 Hours

	SUBJECT	HOURS



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A	Aircraft Systems and Limitations; Systems Overview Specific to Dispatchers; Minimum Equipment List; Flight Compartment Familiarizations;	7.0 hours
B	Wind Performance; Fuel Consumption; Altitude Capability / Step Climb.	2.0 hours
C	Operating Limitations; Takeoff; Landing; Airport Analysis.	2.0 hours
D	In-flight Performance; Cruise Control Tables; Climb : Time, Distance, Fuel; Drift-down : Speed, Range, Altitude; Descent; Holding; Divergence.	2.0 hours
E	Weight and Balance	1.0 hour
F	Review and Examination Competence Check	2.0 hours

## 5.8. AIRCRAFT DISPATCHER RECURRENT TRAINING (if applicable)

### 5.8.1. Modules

Time scale ..... 24.0 Hours

SUBJECT	HOURS
A. Aircraft Systems and Limitations	2.0 Hours
B. Emergency Equipment and Procedures	1.0 Hour
C. Handling of Hazardous Materials	2.0 Hours
D. Meteorology	3.0 Hours
E. Navigation / Flight Planning	2.0 Hours
F. CASR, Ops Specs, COM	3.0 Hours
G. Planning and Performance	1.0 Hour
H. Dispatch Procedures	2.0 Hours
I. Special Emphasis Items	2.0 Hours
J. Dispatch Resource Management	2.0 Hours
K. Pilot Group Interface	1.0 Hour
L. Differences Training	1.0 Hour
M. Home Study Review	2.0 Hours

**NOTE:** The home study examination will be provided to each Dispatcher a minimum of thirty (30) days in advance of Ground School. A maximum of 5.0 hours credit will be given with satisfactory completion and review to 100% during Recurrent Training. This home study examination will be considered part of the Recurrent Training course.

### 5.8.2. Competence Check .....As Required

### 5.8.3. Courseware.

- Videotapes;
- PT. Smart Cakrawala Aviation Operations Manual;
- CASRs;
- Maps, Charts, etc. (as required).

### 5.8.4. Instructional Delivery Methods

Lecture, audio-video presentation, demonstration.

Ample time is allotted for classroom discussion after each block of instruction.

### 5.8.5. Training Environment.

Classroom

### 5.8.6. Testing / Checking.

Examination



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### **5.8.7. Record Keeping**

Successful completion of the Training course is recorded in the Dispatcher's Training files.



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## 5.9. AIRCRAFT DISPATCHER COMPETENCE CHECK

### 5.9.1. Objective

Completion will ensure initial competence to perform all required Dispatcher activities. Trainee will demonstrate his/her ability to perform each of the following activities under company.

### 5.9.2. Modules

**Programmed Hours.....As Required**

a. GENERAL SUBJECTS

- 1) Meteorology - Air Masses and Front, Severe Weather - Icing, Fog, Wind-shear, Thunderstorm, etc.;
- 2) Weather reports - Terminal Forecast, Hourly Sequence, PIREP, etc.;
- 3) NOTAM System;
- 4) Use of Communications Systems - Characteristic, Normal / Emergency Procedure, Notification Procedures, etc.;
- 5) Characteristics of Appropriate Airport;
- 6) Navigation Aids and Publications;
- 7) Air Traffic Control and Instruments Approach Procedures.

b. AIRCRAFT SPECIFIC SUBJECTS (for each aircraft)

- 1) General Aircraft Knowledge - Operations and Performance;
- 2) Weight and Balance Computations;
- 3) Basic Aircraft Performance Limitations;
- 4) Dispatch Requirements and Procedures;
- 5) Flight Planning and Fuel Requirements;
- 6) Flight Operations Procedures - Severe Weather Avoidance;
- 7) Emergency Equipment and Procedures.

### 5.9.3. Checking Environment.

Job location

### 5.9.4. Testing / Checking.

On-the-job monitoring

### 5.9.5. Record Keeping.

Successful completion of the Competence Check is recorded on the appropriate form. The original of the form is made a part of each Dispatcher's Training files.

## **5.10. DANGEROUS GOODS TRAINING TYPE A**

### **5.10.1. Objective**

Completion will qualify FOO or Ground staff to operate in compliance with applicable regulations concerning acceptance of dangerous articles and magnetized materials, refer to ANNEX 18, CASR 92, AC 92-02, CASR 135.435, IATA DGR Manual and ICAO Technical Instruction for the Safe transport of Dangerous Good by Air. This

Training shall be given with interval 24 months

### **5.10.2. Modules**

Initial course .....	<b>50 hours</b>
Recurrent course .....	<b>27 hours</b>

#### **INITIAL**

1. Course Introduction
2. General Philosophy & Regulation
3. SMS
4. Limitation
5. General Requirements for shipper
6. Classification
7. List of Dangerous Goods
8. General Packing Requirement
9. Packing Instruction
10. Labelling & Marking
11. Shipper & Declaration and other relevant document
12. Acceptance Procedures
13. Storage and Loading
14. Pilot Notifications
15. Recognition of undeclared Dangerous Goods
16. Emergency Procedures
17. Provision for Pax and Crew
18. Performance Test
19. Comprehensive Examination

#### **RECURRENT**

- a) Course Introduction
- b) General Philosophy & Regulation

- c) Limitation
- d) General Requirements for shipper
- e) Classification
- f) List of Dangerous Goods
- g) Packing Instruction
- h) Labelling & Marking
- i) Shipper & Declaration and other relevant document
- j) Acceptance Procedures
- k) Storage and Loading
- l) Pilot Notifications
- m) Recognition of undeclared Dangerous Goods
- n) Emergency Procedures
- o) Provision for Pax and Crew
- 20. Radioactive material
- 21. Comprehensive Examination

### **5.10.3. Courseware**

- A. ICAO, Technical Instructions for the Safe Transport of Dangerous Goods by Air
- B. IATA, Dangerous Goods Regulations (current edition)

### **Instructional Delivery Methods**

Relative course materials issued during classroom sessions

### **Training Environment**

Classroom

### **Testing/Checking**

Each training course has questions specific to the handling and carriage of dangerous articles and magnetized materials included in the final examination

### **Record Keeping**

Completion of required training is documented in the training file for each crewmember. The trainee will be presented a certificate of completion

## **5.11. HELICOPTER LANDING OFFICER**

### **5.11.1. Introduction**

This syllabus is prepared to serve as a general outline to assist you attend the course. Normally, it serves as a guide for the instructor, but deviations will occur. Occasionally changes must be made due to unforeseen circumstances to accommodate training in the most effective manner. If some items are not covered where or when indicated, they will be covered at a different time.

### **5.11.2. Course Outline**

The ground training curriculum segment outline comprises of three subject areas: General Operational Subjects, Aircraft Systems, and Systems Integration Training. Programmed training hours for each of these areas are given below.

### **5.11.3. Course Objective**

The aim and objectives of the HLO Initial Training Programme are to equip the delegate with the initial knowledge, understanding and skills required to perform the role of Helicopter Landing Officer (HLO) safely and effectively.

### **5.11.4. General Operational Subjects Modules**

To successfully complete this programme, delegates must be able to:

1. Understand key parts of relevant helideck operation regulations and guidelines.
2. Understand helideck physical characteristics.
3. Understand obstacle-free requirements.
4. Understand helideck equipment and systems.
5. Understand typical hazards associated with helideck operations.
6. Understand meteorological requirements for helicopter operations.
7. Define the role and explain key responsibilities of the HLO.
8. State main HLO responsibilities and required actions:
  - a) 30 minutes before helicopter ETA
  - b) 10 minutes before helicopter ETA
  - c) Immediately before helicopter lands
  - d) After landing: rotors running turnaround
  - e) After landing - engines shut down and rotors not running
  - f) Helicopter tie-down, engine blanks and covers fitted
  - g) Helicopter start-up.
9. Understand the structure and terms in a typical pre-flight weather report and floating installation (or vessel) data required by helicopter pilot.
10. Understand how dangerous goods are identified, packaged and labeled according to IATA and ICAO regulations, to include 'Notification to Captain' requirement.

11. Understand typical HLO requirements for Normally Unattended Installations (NUIs).
12. Conduct radio checks and use standard radio communications protocols when communicating with relevant personnel, to include HLO-to-helicopter pilot communications.
13. Use correct and appropriate hand signals if radio communications are ineffective.
14. Check the helideck for contamination, debris or damage after take-off.
15. Brief HDAs prior to helicopter landing at appropriate times during helicopter operations.
16. Ensure HDAs are in required locations during helicopter operations.
17. Conduct and respond to required helideck protocols during helicopter operations, to include: safe-to-approach, helicopter anti-collision lights switched off and 'thumbs-up' from pilot (as agreed by operating company).
18. Check passenger and freight manifests.
19. Effectively supervise HDAs during passenger, freight and baggage handling (HLOs should not become involved in manual activity, such as carrying bags, at the expense of their supervisory role) Learning Outcomes 12 through 19 are to be assessed during practical exercises.

The optimum \*contact time for this HLO programme is 40 hours, which is to be delivered over consecutive days. An approximate ratio of 70% theory to 30% practical is appropriate for this training programme. The contact time is based on the maximum number of delegates/candidates undertaking the programme. Individual module/unit/element timings that are specified within the standard must be adhered to. The contact time must not exceed 8 hours in any one day and the \*\*total programme day must not exceed 10 hours. Practical and theory sessions must contain adequate breaks for delegate welfare.

The HLO Initial Training Programme comprises the following modules and elements:

**Module 1.....8 Hr**

Helideck Regulations and Guidelines Element 1.1 Regulations and guidelines

**Module 2.....8 Hr**

Helicopter and Helideck Hazards and Management Systems Element 2.1 helideck landing areas Element 2.2 Helideck equipment and systems Element 2.3 Helicopter and helideck hazards Element 2.4 Helicopter refuelling awareness

**Module 3.....8 Hr**

HLO Responsibilities during Helicopter Landing and Departure Element 3.1 The role and key responsibilities of an HLO Element 3.2 HLO checks, procedures and communications during helicopter operations Element 3.3 Supervise HDAs

**Module 4.....8 Hr**

Supervision of Passenger and Cargo Handling Element 4.1 Supervise cargo handling Element 4.3 Supervise passenger handling

**Module 5.....8 Hr**

HLO: Normally Unattended Installations (NUI) Element 5.1 HLO responsibilities on an NUI.

Additional training Training which must be completed before the HLO candidate is appointed to the HLO role e.g.

- Dangerous Goods by Air (DGbA)
- Radio operator competence
- Helicopter refueling (where required) and any region-specific training.
- Meteorological observation/weather reporting (where required by duty holder).

The optimum \*contact time for this HLO programme is 40 hours, which is to be delivered over consecutive days. An approximate ratio of 70% theory to 30% practical is appropriate for this training programme. The contact time is based on the maximum number of delegates/candidates undertaking the programme. Individual module/unit/element timings that are specified within the standard must be adhered to. The contact time must not exceed 8 hours in any one day and the \*\*total programme day must not exceed 10 hours. Practical and theory sessions must contain adequate breaks for delegate welfare.

**5.11.5. Course Ware**

- Operations Manuals (OM)
- Rotorcraft Flight Manual (RFM)
- Standard Operating Procedures (SOP)
- Other applicable material as necessary HLO (HELICOPTER LANDING OFFICER) MODULE

**5.11.6. Instructional Delivery Methods**

Inhouse Training and / Or Contracted Ground training Facilities by the HLO instructor.

**5.11.7. Training Environment**

Inhouse Training and / Or Contracted Ground training Facilities

**5.11.8. Testing/Checking**

Questions pertaining to duties will be done by instructor.

**5.11.9. Record Keeping**

Successful completion of the Up-grading Training will be logged on Form. The original of the form is made a part of each HLO training file.



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## OPERATIONS TRAINING FORMS

DESCRIPTION	FORM NUMBER	REMARKS
INITIAL FLIGHT REPORT	SCA-OPS-OMD 001	REV-00
INITIAL LINE FLIGHT APPROVAL	SCA-OPS-OMD 002	REV-00
FLIGHT SUMMARY	SCA-OPS-OMD 003	REV-00
AIRMEN PROFICIENCY	SCA-OPS-OMD 004	REV-00
ATTENDANCE REGISTER	SCA-OPS-OMD 005	REV-00
ROUTE QUALIFICATION/LINE CHECK	SCA-OPS-OMD 006	REV-00
FLIGHT TRAINING RECORD	SCA-OPS-OMD 007	REV-00
AIRMEN PROFICIENCY/QUALIFICATION CHECK FOR HELICOPTER	SCA-OPS-OMD 008	REV-00
LINE QUALIFICATION FOR HELICOPTER	SCA-OPS-OMD 009	REV-00
CAPTAIN UPGRADE TRAINING SYLLABUS	SCA-OPS-OMD-010	REV-00



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## 1. INITIAL FLIGHT REPORT

<b>INITIAL FLIGHT 1 (IF-1) REPORT</b>		
<b>NAME:</b>	<b>DATE OF FLIGHT:</b> ____/____/____	
<b>TASKS:</b>	<b>MARKING:</b>	<b>INSTRUCTOR COMMENTS:</b>
S= Satisfactory S/B= Satisfactory with Briefing U= Unsatisfactory		
Preflight:	_____	.....
Taxi:	_____	.....
Take off - Normal:	_____	.....
Climbing - Normal:	_____	.....
Basic Maneuvers:	_____	.....
Slow Flight	_____	.....
Stalls –Clean Config:	_____	.....
Stalls – Landing Config:	_____	.....
Descending – Prop Disk:	_____	.....
Approach:	_____	.....
Circuits - Normal:	_____	.....
Circuits – Touch & Go:	_____	.....
Circuits – Stop & Go:	_____	.....
Checklist and Flows:	_____	.....
PF and PM duties:	_____	.....
General – CRM:	_____	.....
General – SOP:	_____	.....
Off Block	:	<b>OTHER EXERCISES / REMARKS:</b>
In- Air	:	
Landing	:	
On Block	:	
Flight Time	.	
Hobbs Time	.	
Landings		
Route		

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## INITIAL FLIGHT 2 (IF-2) REPORT

<b>NAME:</b>	<b>DATE OF FLIGHT:</b> ____/____/____		
<b>TASKS:</b>		<b>MARKING:</b>	<b>INSTRUCTOR COMMENTS:</b>
S= Satisfactory S/B= Satisfactory with Briefing U= Unsatisfactory			
Take Off – Short Field:	_____		
Take Off – Soft Field:	_____		
Climbing – Vx/Vy:	_____		
Steep Turns:	_____		
Stalls – Clean Config:	_____		
Stalls – T/O Config:	_____		
Stalls – Landing Config:	_____		
UA Recovery:	_____		
Descending - Emergency:	_____		
Approach:	_____		
Landing – Short Field:	_____		
Landing – Soft Field:	_____		
Circuits:	_____		
Checklist and Flows:	_____		
Briefings:	_____		
General:	_____		
Post Flight Procedures:	_____		
Off Block	:	<b>OTHER EXERCISES / REMARKS:</b>	Instructor number and Signature:
In-Air	:		
Landing	:		
On Block	:		
Flight Time	.		
Hobbs Time	.		
Landings			
Route			



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## INITIAL FLIGHT 3 (IF-3) REPORT

<b>NAME:</b>	<b>DATE OF FLIGHT:</b> ____/____/____		
<b>TASKS:</b>	<b>MARKING:</b>	<b>INSTRUCTOR COMMENTS:</b>	
S= Satisfactory S/B= Satisfactory with Briefing U= Unsatisfactory			
Preflight – Performance:	_____		
Take off – Rejected:	_____		
EFATO:	_____		
FLWOP Cruise Alt:	_____		
Glide Approach:	_____		
Flap system malfunction:	_____		
Landing – Flapless:	_____		
Landing – Rejected:	_____		
Circuits:	_____		
Brake Failure:	_____		
Checklist and Flows:	_____		
Briefings:	_____		
General - TEM:	_____		
General - CRM:	_____		
General - ADM:	_____		
.....	_____		
Off Block	:	<b>OTHER EXERCISES / REMARKS:</b>	Instructor number and Signature:
In-Air	:		
Landing	:		
On Block	:		
Flight Time	.		
Hobbs Time	.		
Landings			
Route			

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## INITIAL FLIGHT 4 (IF-4) REPORT

**NAME:**

**DATE OF FLIGHT:** \_\_\_\_/\_\_\_\_/\_\_\_\_

**TASKS:**

**MARKING:**

**INSTRUCTOR COMMENTS:**

S= Satisfactory S/B= Satisfactory with Briefing U= Unsatisfactory

Preflight – Documents: \_\_\_\_\_

Preflight – Planning: \_\_\_\_\_

Checklist and Flows: \_\_\_\_\_

Briefings: \_\_\_\_\_

Navigation: \_\_\_\_\_

IP – Avionics: \_\_\_\_\_

IP – Autopilot: \_\_\_\_\_

General Handling: \_\_\_\_\_

Flight Maneuvers: \_\_\_\_\_

PF and PM Duties: \_\_\_\_\_

General: \_\_\_\_\_

Post-flight Procedures: \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

Off Block	:
In-Air	:
Landing	:
On Block	:
<b>Flight Time</b>	.
<b>Hobbs Time</b>	.
<b>Landings</b>	
<b>Route</b>	

**OTHER EXERCISES / REMARKS:**

Instructor number and  
Signature:



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## 2. INITIAL LINE FLIGHT APPROVAL

 <b>INITIAL LINE FLIGHT APPROVAL</b>	
<u>Trainee Name</u> .....	<u>Date</u> .....
<u>Flight Instructor</u> .....	<u>License No</u> .....
<p>The Smart Aviation Pilot named above has completed the minimum required ground and flight training program to be eligible for Line Flight Under Supervision (LFUS). This training program consisted of the following elements:</p>	
<b>DATE COMPLETE</b>	
Smart Aviation Indoctrination and Technical Ground Training .....	
Smart Aviation Caravan Training Manual Flight IF1 .....	
Smart Aviation Caravan Training Manual Flight IF2 .....	
Smart Aviation Caravan Training Manual Flight IF3 .....	
Smart Aviation Caravan Training Manual Flight IF4 .....	
Pilot Proficiency Check .....	
<p>The Pilot has achieved the following total flight training experience on the C208B G1000 <u>during this course</u>:</p>	
Total Flight time .....	
Total landings .....	
<p>The trainee will be eligible to fly on commercial Smart Aviation flights as:</p>	
<b><u>Second In Command (SIC)</u></b>	
<p><b>Any flights conducted must be under the following conditions:</b></p>	
<p><b>Until the completion of LFUS, the Pilot must fly with a Training Captain. LFUS must be completed with-in 30 days of this authorization.</b></p>	
<p>I certify that the Pilot has received the required training. I have determined that he/she is proficient and qualified to act as <b>SIC</b> for Smart Aviation.</p>	
Flight instructor .....	
Operation Manager .....	



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### 3. FLIGHT SUMMARY



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## 4. AIRMEN PROFICIENCY

PT SMART CAKRAWALA AVIATION			
AIRMEN PROFICIENCY/QUALIFICATION CHECK		DATE OF COMPLETION	
NAME OF AIRMEN	LICENCE NUMBER	TYPE OF CHECK	
EMPLOYED BY	LOCATION OR ROUTE	TYPE OF AIRCRAFT/ SIMULATOR USED	
NAME OF CHECK AIRMEN	LOA NUMBER	BLOCK TIME	
FLIGHT MANUEVERS GRADE (S-Satisfactory U-Unsatisfactory N-Not Observed)			
ITEM	GRADE		REMARKS :
PREFLIGHT	A/C	SIM	
1. EQUIPMENT EXAMINATION (Oral or written)			
2. PREFLIGHT INSPECTION			
3. TAXING			
4. POWERPLANT CHECKS			
TAKEOFFS			
5. NORMAL			
6. INSTRUMENT			
7. CROSSWIND			
8. WITH SIMULATED POWERPLANT FAILURE			
9. REJECTED TAKEOFF			
INSTRUMENT PROCEDURES			
10. AREA DEPARTURE			
11. HOLDING			
12. AREA ARRIVAL			
13. ILS APPROACHES			
14. OTHER INSTRUMENT APPROACHES			
15. CIRCLING APPROACHES			
16. MISSED APPROACHES			
INFILIGHT MANEUVERS			
17. STEEP TURNS			
18. APPROACHES TO STALLS			
19. SPECIFIC FLIGHT CHARACTERISTICS			
20. POWERPLANT FAILURE			
LANDINGS			
21. NORMAL			
22. FROM AN ILS			
23. CROSSWIND			
24. WITH SIMULATED POWERPLANT(S) FAILURE			
25. REJECTED LANDING			
26. FROM CIRCLING APPROACH			
OTHER'S			
27. NORMAL AND ABNORMAL PROCEDURES			
28. EMERGENCY PROCEDURES			
29. JUDGEMENT			
30. CREW COORDINATIONS			
31. WINDSHEAR			
RESULT OF CHECK	APPROVED	CHECK AIRMAN'S PERFORMANCE	SATISFACTORY
	DISAPPROVED		UNSATISFACTORY
NAME & SIGNATURE OF INSPECTOR/EXAMINER:		NAME & SIGNATURE OF APPLICANT	

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REV 00



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## 5. ATTENDANCE REGISTER

ATTENDANCE REGISTER		
<b>TRAINING :</b> <b>SUBJECT :</b> 1. ..... 2. ..... 3. .....		
PLACE:	DATE:	TIME:
ATTENDEES		
NAME	POSITION	SIGNATURE
ABSENT		
NAME	POSITION	
INSTRUCTOR		
NAME	SIGNATURE	



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## 6. ROUTE QUALIFICATION/LINE CHECK



## ROUTE QUALIFICATION/LINE CHECK

ROUTE QUALIFICATION / LINE CHECK		A/C TYPE :	
NAME	:	<input type="checkbox"/> CAPTAIN <input type="checkbox"/> FIRST OFFICER	
NUMBER LICENSE	:		
ROUTE	:		
DATE	:		
<b>A. PREPARATION</b> 1. Flight plan checking ..... 2. Flops briefing ..... 3. Performance and Load sheet ..... 4. Walk around check ..... 5. Cabin check ..... 6. Cockpit check and set up ..... 7. Crew Briefing ..... 8. Irregularity solving .....		S	U
<b>B. AIRCRAFT HANDLING</b> 9. Starting ..... 10. Taxi ..... 11. Line up ..... 12. Take off ..... 13. Departure ..... 14. Climb ..... 15. Cruise ..... 16. Descent ..... 17. Arrival ..... 18. Approach ..... 19. Landing ..... 20. Deceleration ..... 21. Parking and termination ..... 22. Checklist		S	U
<b>C. GENERAL AND PILOTING</b> 23. Aviation law and Regulation ..... 24. Company Regulation and Procedure ..... 25. FMS / GPS ..... 26. Navigation and Critical points ..... 27. Fuel; usage and knowledge ..... 28. Adverse weather handling ..... 29. Communication ..... 30. Airport and Route knowledge ..... 31. Technical knowledge ..... 32. Abnormal and Emergency ..... 33. Flight Safety ..... 34. Passenger comfort and care .....		S	U
<b>D. CREW RESOURCE MANAGEMENT</b> 35. Co-ordination ..... 36. Personal Conflict Management ..... 37. Stress Management ..... 38. Situational Awareness ..... 39. Decision Making Concept .....		S	U

RESULT

PASS

FAIL

Check Pilot	Crew Member	Chief Pilot
.....	.....	.....

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## 7. FLIGHT TRAINING RECORD



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## 8. AIRMEN PROFICIENCY/QUALIFICATION CHECK FOR HELICOPTER

PT SMART CAKRAWALA AVIATION					
AIRMEN PROFICIENCY/QUALIFICATION CHECK FOR HELICOPTER		DATE OF COMPLETION			
NAME OF AIRMEN	LICENCE NUMBER	TYPE OF CHECK			
EMPLOYED BY	LOCATION OR ROUTE	ROTORCRAFT/ SIMULATOR USED			
NAME OF INSTRUCTOR/CHECK PILOT	LOA NUMBER	BLOCK TIME			
FLIGHT MANOUEVERS GRADE ( S-Satisfactory U-Unsatisfactory N-Not Observed )					
ITEMS	A/C	SIM	ITEMS	A/C	SIM
PREFLIGHT PREPARATION			PERFORMANCE MANEUVER		
1. CERTIFICATES AND DOCUMENTS			32. RAPID DECELERATION		
2. AIRWORTHINESS REQUIREMENTS			33. STRAIGHT IN AUTOROTATION		
3. WEATHER INFORMATION			34. 180° AUTOROTATION		
4. CROSS-COUNTRY FLIGHT PLANNING			NAVIGATION		
5. NATIONAL AIRSPACE SYSTEM			35. PILOTAGE AND DEAD RECKONING		
6. PERFORMANCE AND LIMITATIONS			36. RADIO NAVIGATION AND RADAR SERVICES		
7. OPERATION OF SYSTEM			37. DIVERSION		
8. MINIMUM EQUIPMENT LIST			38. LOST PROCEDURES		
9. AEROMEDICAL FACTORS			FLIGHT AT SLOW AIR SPEED		
10. PHYSIOLOGICAL ASPECTS OF NIGHT FLYING			39. STRAIGHT-AND-LEVEL, TURN, CLIMB, AND DESCENTAIRSPEEDS		
11. LIGHTING AND EQUIPMENT FOR NIGHT FLYING			40. HIGH RATE OF DESCENT AND RECOVERY		
PREFLIGHT PROCEDURES			EMERGENCY OPERATIONS		
12. PREFLIGHT INSPECTION			41. POWER FAILURE AT HOVER		
13. COCKPIT MANAGEMENT			42. POWER FAILURE AT ALTITUDE		
14. ENGINE STARTING AND ROTOR ENGAGEMENT					
15. BEFORE TAKEOFF CHECK			43. POWER FAILURE – SINGLE-ENGINE HELICOPTER		
AIRPORT OPERATIONS			44. SYSTEMS AND EQUIPMENT MALFUNCTIONS		
16. RADIO COMMUNICATIONS AND ATC LIGHT SIGNALS			45. SETLING-WITH-POWER/VORTEX RING STATE		
17. TRAFFIC PATTERNS			46. LOW ROTOR RPM RECOVERY		
18. AIRPORT/HELIPORT RUNWAY, HELIPAD, AND TAXIWAY SIGN MARKINGS, AND LIGHTING			47. ANTITORQUE SYSTEM FAILURE		
HOVERING MANEUVERS			48. DYNAMIC ROLLOVER		
19. VERTICAL TAKEOFF AND LANDING			49. GROUND RESONANCE		
20. SLOPE OPERATIONS			50. LOW G CONDITION		
21. AIR TAXI/SURFACE TAXI			51. EMERGENCY EQUIPMENT AND SURVIVAL GEAR		
HOVER TAXI					
22. AIR TAXI					
TAKEOFFS, LANDINGS, AND GO-AROUNDS			POST-FLIGHT PROCEDURES		
23. NORMAL AND CROSSWIND TAKEOFF AND CLIMB			52. AFTER LANDING AND SECURING		
24. NORMAL AND CROSSWIND APPROACH AND LANDING					
25. MAXIMUM PERFORMANCE TAKEOFF AND CLIMB					
26. STEEP APPROACH					
27. ROLLING TAKEOFF					
28. CONFINED AREA OPERATIONS *(SPECIAL OPERATIONS)					



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ITEMS	A/C	SIM	ITEMS	A/C	SIM
29. PINNACLE/PLATFORM OPERATIONS *(SPECIAL OPERATIONS)					
30. SHALLOW APPROACH AND RUNNING ROLL-ON LANDING					
31. GO-AROUND					
<i>* SPECIAL OPERATIONS FOR ATPL USE ONLY</i>					
<b>REMARK</b>					
RESULT OF CHECK	APPROVED				
	DISAPPROVED				
NAME & SIGNATURE OF INSTRUCTOR / CHECK PILOT :			NAME & SIGNATURE OF APPLICANT :		



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## 9. LINE QUALIFICATION FOR HELICOPTER

		PT SMART CAKRAWALA AVIATION					
LINE QUALIFICATION CHECK FOR HELICOPTER				DATE OF COMPLETION			
NAME OF AIRMEN		LICENCE NUMBER		TYPE OF CHECK			
EMPLOYED BY		LOCATION OR ROUTE		ROTORCRAFT			
NAME OF INSTRUCTOR/CHECK PILOT		LOA NUMBER		BLOCK TIME			
FLIGHT MANOUEVERS GRADE ( S-Satisfactory U-Unsatisfactory N-Not Observed )							
SATISFIED		S	U	UNSATISFIED		U	
ITEM COVERED		S	U	ITEM COVERED		S	U
PRE-FLIGHT:				TURNAROUND: SHUTDOWN / RUNNING			
1. Weather briefing / Assessment		21. Freight & Baggage Handling					
2. ATC clearance / Local flight plan		22. Passenger Embarkation / disembarkation					
3. Payload Calculation		23. Payload calculation					
4. Ops Flight Plan		24. Refueling procedures & checks					
5. Crew briefing							
6. External Checks, Freight, Baggage Stow.		GENERAL:					
7. Passenger Briefing		25. CRM / Crew Coordination					
8. Cockpit & Start Checks		26. Use of Checklists					
START & TAKE OFF FROM BASE				27. Passenger & Freight Management			
9. Monitoring of start / Fire Guard		28. Airmanship, Safe routes, altitudes					
10. Engine Start & Post Start Checks		29. ATC liaison					
11. Taxi		30. Refueling / Post flight inspections					
12. Pre Take Off / After		31. Take Off Checks					
13. Transition & Climb		32. Post flight documentation					
ENROUTE :							
14. Navigation		QUESTIONNAIRE:					
15. Fuel Management		33. Radio Procedures					
16. Use of Area Navigation aids - (specify)		34. Operations Manual					
17. Position Reporting		35. Loading & Performance					
APPROACH:				36. Handling of Dangerous Goods			
18. Pre-Landing Checks							
19. Final Approach							
20. Landing & Touchdown							



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REMARK			
RESULT OF CHECK	APPROVED		
	DISAPPROVED		
NAME & SIGNATURE OF INSTRUCTOR / CHECK PILOT :		NAME & SIGNATURE OF APPLICANT :	