OPERATION MANUAL

PART B

PROCEDURES AND REQUIREMENTS

EC 130 T2

Rev. No.: 00

February 2020

PT. Smart Cakrawala Aviation

SCA/OPS/1-008

MINISTRY OF TRANSPORTATION
DIRECTORATE GENERAL OF CIVIL AVIATION

Jalan Medan Merdeka Barat No. 8
Jakarta 10110

No. Phone Central :
(021) 350550 - (021) 3505006
No. Phone DKPPU :
(021) 22566288 - (021) 25608887

No. Phone Central :
(021) 3505136 - (021) 3505139
No. Fax DKPPU :
(021) 2256 6399

Our Ref: AU.406/23/16/DKPPU - 2020

Tangerang, 29 June 2020

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

Subject : **REVIEW FOR THE APPROVAL OF OPERATION MANUAL PART B (EC 130 T2) REV. 00 DATED FEBRUARY 2020**

Dear Sir,

I refer to the submission of the above mentioned document for review and approval on 20 April 2020.

The document submitted has been reviewed and found in compliance with the latest Civil Aviation Safety Regulation Part 135 Amdt. 12 & Staff Instruction 8900-3.324 Amdt. 0 and the document is **Approved**.

Sincerely Yours,

KEMENTERIAN PERHUBUNGAN
DIREKTORAT JENDERAL PERHUBUNGAN UDARA

CAPT. SIGIT HANI HADIYANTO
On Behalf of Director of DAAO
Deputy Director of Aircraft Operations

CC. : Director of Airworthiness and Aircraft Operations

MINISTRY OF TRANSPORTATION
DIRECTORATE GENERAL OF CIVIL AVIATION

Jalan Medan Merdeka Barat No. 8
Jakarta 10110

No. Phone Central :
(021) 350550 - (021) 3505006
No. Phone DKPPU :
(021) 22566288 - (021) 25608887

No. Phone Central :
(021) 3505136 - (021) 3505139
No. Fax DKPPU :
(021) 2256 6399

CONTROL PAGE

TITLE	PAGE	REV.	DATE
CONTROL PAGE	CP – 1	00	29 June 2020
LIST OF EFFECTIVE PAGES	LEP-1	00	Feb 2020
LIST OF EFFECTIVE PAGES	LEP-2	00	Feb 2020
LIST OF EFFECTIVE PAGES	LEP-3	00	Feb 2020
LIST OF EFFECTIVE PAGES	LEP-4	00	Feb 2020
LIST OF EFFECTIVE PAGES	LEP-5	00	Feb 2020

The Operation Manual Part B (EC 130 T2) has been reviewed and found to meet all applicable requirements set forth in the Aviation Act No. 1 Year 2009 and Civil Aviation Safety Regulations (CASR). This Operation Manual Part B (EC 130 T2) 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 this manual shall be reported to the Director General of Civil Aviation (DGCA) for Approval.

Tangerang, 29 June 2020

On behalf of Director of Airworthiness and Aircraft Operations

KEMENTERIAN PERHUBUNGAN
DIREKTORAT JENDERAL PERHUBUNGAN UDARA

CAPT. SIGIT HANI HADIYANTO
Deputy Director of Aircraft Operations

LIST OF EFFECTIVE PAGES

SECTION	DESCRIPTION	PAGE	REV.NO	EFFECTIVE DATE
	CONTROL PAGE	CP-1	00	, 2019
	List Of Effective Page	LEP-1	00	February 2020
	List Of Effective Page	LEP-2	00	February 2020
	List Of Effective Page	LEP-3	00	February 2020
	List Of Effective Page	LEP-4	00	February 2020
	List Of Effective Page	LEP-5	00	February 2020
	Table Of Content	TOC-1	00	February 2020
	Table Of Content	TOC-2	00	February 2020
	Table Of Content	TOC-3	00	February 2020
	Table Of Content	TOC-4	00	February 2020
	Table Of Content	TOC-5	00	February 2020
	Manual Distribution List	DL-1	00	February 2020
	Revisions of Record	ROR-1	00	February 2020
	Revisions Highlight	RH-1	00	February 2020
1	GENERAL	1-1	00	February 2020
		1-2	00	February 2020
		1-3	00	February 2020
		1-4	00	February 2020
		1-5	00	February 2020
		1-6	00	February 2020
		1-7	00	February 2020
		1-8	00	February 2020
		1-9	00	February 2020
		1-10	00	February 2020
		1-11	00	February 2020
		1-12	00	February 2020
2	CERTIFICATION AND OPERATIONAL LIMITATIONS	2-1	00	February 2020
		2-2	00	February 2020
		2-3	00	February 2020
		2-4	00	February 2020
		2-5	00	February 2020
		2-6	00	February 2020
		2-7	00	February 2020
		2-8	00	February 2020

LIST OF EFFECTIVE PAGES

SECTION	DESCRIPTION	PAGE	REV.NO	EFFECTIVE DATE
	CERTIFICATION AND OPERATIONAL LIMITATIONS (Cont'd)	2-9	00	February 2020
		2-10	00	February 2020
		2-11	00	February 2020
		2-12	00	February 2020
3	NORMAL PROCEDURE	3-1	00	February 2020
		3-2	00	February 2020
		3-3	00	February 2020
		3-4	00	February 2020
		3-5	00	February 2020
		3-6	00	February 2020
		3-7	00	February 2020
		3-8	00	February 2020
		3-9	00	February 2020
		3-10	00	February 2020
		3-11	00	February 2020
		3-12	00	February 2020
		3-13	00	February 2020
4	SPECIFIC FLIGHT DECK PROCEDURES	4-1	00	February 2020
		4-2	00	February 2020
		4-3	00	February 2020
		4-4	00	February 2020
		4-5	00	February 2020
		4-6	00	February 2020
		4-7	00	February 2020
		4-8	00	February 2020
		4-9	00	February 2020
		4-10	00	February 2020
		4-11	00	February 2020
		4-12	00	February 2020
		4-13	00	February 2020
		4-14	00	February 2020
		4-15	00	February 2020
		4-16	00	February 2020
		4-17	00	February 2020

LIST OF EFFECTIVE PAGES

SECTION	DESCRIPTION	PAGE	REV.NO	EFFECTIVE DATE
	CERTIFICATION AND OPERATIONAL LIMITATIONS (Cont'd)	4-18	00	February 2020
		4-19	00	February 2020
		4-20	00	February 2020
		4-21	00	February 2020
5	ABNORMAL AND EMERGENCY PROCEDURES	5-1	00	February 2020
		5-2	00	February 2020
		5-3	00	February 2020
		5-4	00	February 2020
		5-5	00	February 2020
		5-6	00	February 2020
		5-7	00	February 2020
		5-8	00	February 2020
		5-9	00	February 2020
		5-10	00	February 2020
		5-11	00	February 2020
		5-12	00	February 2020
		5-13	00	February 2020
		5-14	00	February 2020
		5-15	00	February 2020
		5-16	00	February 2020
		5-17	00	February 2020
6	PERFORMANCE	6-1	00	February 2020
7	SUPPLEMENTARY PERFORMANCE DATA	7-1	00	February 2020
		7-2	00	February 2020
8	OTHER ACCEPTABLE PERFORMANCE DATA	8-1	00	February 2020
9	ADDITIONAL PERFORMANCE DATA	9-1	00	February 2020
10	FLIGHT PLANNING DATA	10-1	00	February 2020
		10-2	00	February 2020

LIST OF EFFECTIVE PAGES

SECTION	DESCRIPTION	PAGE	REV.NO	EFFECTIVE DATE
11	WEIGHT AND BALANCE CALCULATION	11-1	00	February 2020
		11-2	00	February 2020
		11-3	00	February 2020
12	LOADING	12-1	00	February 2020
		12-2	00	February 2020
		12-3	00	February 2020
		12-4	00	February 2020
13	SURVIVAL & EMERGENCY EQUIPMENT	13-1	00	February 2020
		13-2	00	February 2020
		13-3	00	February 2020
		13-4	00	February 2020
		13-5	00	February 2020
		13-6	00	February 2020
		13-7	00	February 2020
14	EMERGENCY EVACUATION	14-1	00	February 2020
15	AIRCRAFT SYSTEMS	15-1	00	February 2020
Appendix A	Standard Operating Procedure H130T2 Aerial Survey Flight			

LIST OF EFFECTIVE PAGES

PT. SMART CAKRAWALA AVIATION	D G C A
CAPT. JAHRON BURHANI OPERATION MANAGER	CAPT ALI RIDHO CERTIFICATION PROJECT MANAGER

3TABLE OF CONTENT

MANUAL DISTRIBUTION LIST

CONTROL NO.	ASSIGNMENT (Title of Organization)	REMARK
01	PT. Smart Cakrawala Aviation Library	MASTER
02	Indonesian DGCA	Hard & Soft Copy
03	Director	Soft Copy
04	Operation Manager	Soft Copy
05	Safety And Quality Manager	Soft Copy
06	Technical Manager	Soft Copy
07	Chief Pilot	Soft Copy
08	Chief Inspector	Soft Copy
09	Aircraft	Hard Copy
10	Home Base	Hard and Soft Copy
11	Satellite Base	Hard and Soft Copy
12	Aircrew	Soft Copy

REVISIONS OF RECORD

Revision Number	Pages Affected	SUBJECT	Effective Date	Inserted Date	Signature

REVISIONS HIGHLIGHT

Revision Number	Revision Date	Chapter	Page	Description of Changed

1. GENERAL

1.1. INTRODUCTION

This Operations Manual Part B ***(OM Part B)*** - Aircraft Operating Information is issued by Operations Department for guidance in the operation of AIRBUS EC-130T2 (H-130). The OM Part B cannot cover all circumstances. However, they are intended to assist flight crewmembers to operate aircraft within the limitations of the Pilot Operating Handbook. All flight crew are expected to exercise sound judgment and consistency in their application.

This AIRBUS EC-130T2 (H-130) OM Part B details the method of operation of the Robinson Series aircraft equipped with one Turbomeca model Ariel type 2D Engines.

This manual has been compiled for use by the flight crew and other personnel involved in the daily operation of the aircraft, and for the initial and recurrent training of such personnel.

This manual is to be read in conjunction with the relevant Flight Manual (FM) AIRBUS EC-130T2 (H-130) current revision 6 July 2018, the Civil Aviation Safety Regulation (CASR) and with the applicable sections of the Operations Manual Part A (OM part A). Where there is any variance between this manual and the FM or CASR, the FM or CASR will take precedence.

Nothing contained in this manual is to be construed as relieving the Pilot-in-Command (PIC) of the responsibility to take or direct action in an emergency or unusual circumstance which he considers necessary to preserve the safety of the aircraft and its passengers or cargo.

Standardization is one of the most powerful tools available to the crew to prevent the undesirable, to determine when something undesirable is occurring, and to deal with the undesirable should it occur. This OM Part B are provided as a part of the standardization tool. However, a standard procedure cannot be devised to cope with all situations. Although the OM Part B are to be complied with to the extent practical, there may be situations where compliance with some part is inadvisable. Should it be appropriate to deviate from the OM Part B all applicable flight crewmembers shall be thoroughly briefed.

1.2. EDITING, PUBLICATION AND AMANDEMENT RESPONSIBILITIES

1.2.1 Editing Manual

Annotation of Change

Amendments will be in the form of replacement pages. They will be accompanied by: Filing Instructions (for print copies), an updated List of Effective Pages (LEP), and a brief outline of the purpose and the nature of the changes. A solid vertical black bar will indicate all changes to text and diagrams, (change-bar) or in the margin closes to the page edge. Amended electronic copies shall be made available to all recipients.

Destruction and Disposal of Obsolete Operational Documents

On receipt of new documents either in hard copy, electronic or multimedia format, the previous version of the document shall be removed, destroyed and disposed of in an appropriate manner.

To maintain a "current" status of all the documents, any updated will distributed regularly updated through Company Mail issued with Flight Documents updated.

1.2.2 Publication of Manual

Publication Authority

Operation Manager shall be responsible for the publication of the amendments to the Operations Manual. And it will be distributing by an electronic copy, then paper copy of the amendment will be distributing respectively (see of distribution list).

Management and Control of Flight Operations Documents / Publications

Documents and Publications relating to Flight Operations are controlled and managed by Operation Manager. All publications / documents sourced from a vendor shall be Library. All publications / documents sourced from a vendor shall be documented and a record of subscription / purchase shall be a period of two years. The validity of subscription shall be monitored.

On receipt of updates / revision to the publications, records of such updates / revision shall be maintained. Library team shall be responsible for the documentation, control and updates. All obsolete documents in all forms shall be suitably destroyed and disposed of as per the airline operations practices and procedures in force.

Operation Manager shall ensure that all documents / publications:

a. Are reviewed and approved for adequacy prior to issue.
b. Are updated, reviewed and approved for re-issue as necessary.
c. The current revision status is displayed.
d. Are available at point of use.
e. Are eligible, readily identify able and retrievable
f. Documents of external origin are identified and their distribution suitably managed.

That all obsolete are withdrawn to prevent unintended use by removing them from circulation and destroying / disposing per the procedure in force. Should any document be retained for any purpose with the Flight Operations, they shall be suitably identified and annotated as such, are stored in suitable electronic media in a designated computer.

A distribution list for all operational documents to manage its dissemination shall be maintained. All operational documents shall be duty signed by the issuing authority and these signed copies shall be deemed as original copy and shall be maintained at Library. Dissemination
shall essentially be via electronic means like email to establish that the individual user has received the correct document.
All documents shall be published in PDF format for electronic dissemination. A record of receipt of all documents sent by Library to individual users shall be maintained for a period of 6 (six) months.
Each user, shall, further under take that they have received, read relevant documentation update shall be reflected in the Company Mail issued every Monday (if applicable) and available with the Flight Plan shall be handed over to the Flight Crew. All Flight Crew while signing the Flight Release and understood all the operational information disseminated as detailed in the Company Mail.

Documents

The following publications are considered "ORIGINAL" documents:

g. Any document prepared by Flight Operations and issued by Operation Manager with signature in ink is deemed an original document.
h. Document NOT generated by Operation Manager but received from manufacturers of aircraft and associated vendors.
i. All original documents shall be kept with Library. Library shall maintain controlled copies of documents / publications marked "Controlled Copy" in red. An updated list of 'Controlled Copy' issued shall be available with the Library.

A designated person shall crosscheck availability of all the issued 'Controlled Copy' at the intended location on a bi-annual basis and corrective action shall be taken in case of discrepancy as per company policy / procedure in force.

Controlled Copies are NOT photo copied. Controlled Copies of relevant documents shall be maintained in main libraries and onboard the aircraft. Library shall be responsible to update the controlled copies in case of revision / changes to the original. All copies when printed by individual user shall be deemed to be uncontrolled copies and need to be updated by the user as required.
Uncontrolled copies shall be marked as ***UNCONTROLLED COPY*** *in red stamp.*

The set of documents available at the main Library are detailed and updated regularly.

1.2.3 Amending the Manual

General

Assurance activities or periodic review – A manual that fails to take account of changing circumstances is no longer relevant and loses credibility. All amendments to contents are to be subject to an internal approval changes to the Operations Manual may be required as a result of changes in the course of business, new operational requirements, quality and vetting process. Hand written amendments are NOT permitted, except in situations requiring immediate amendment in the interests of safety

Responsibility

Each copy of the Operations Manual remains the property of PT. Smart Cakrawala Aviation, who assumes the overall responsibility for updating the contents of the manual. However, each holder of the Operations Manual is personally responsible for the security, the condition and the amendment status of their copy. And for controlling and monitoring to keep current and update Operations Manual is responsibility Operation Manager.

Internal Responsibility for Initiating Amendments

Responsibility for the content of the various parts of this manual is vested as follows:

a. Operation Manager shall be responsible for contents related to Flight Operations and Safety.
b. Chief Pilot / Deputy shall be responsible for the contents related to Training and Standards.
c. All holders of the Operations Manual are responsible to notify their superior without delay, in case they notice any error or discrepancy in the manual.

Revision Cycle

The Operations Manual shall be review and revise if necessary twice a year, in the third week of June and December, be effective on the first date of the next coming month (1stJuly and January), unless there is a reason to issue a non-scheduled revision.

Conflict

In case of a conflict of the dates in the application of a new procedure, then the new procedure shall be used.

In case there is a conflict between the contents of a paper copy and an electronic copy, then the electronic copy shall be deemed correct.

Approval

The contents of the Operations Manual have been approved in their entirety both internally and by the DGCA prior to initial issue. Further, the contents of all amendments or revisions to the Operations Manual must be acceptable to, or, where applicable, approved by, the DGCA. The following procedure shall apply:

1.2.4 Amendments Requiring DGCA Approval

When the amendment concerns any part of the Operations Manual which must be approve, this approval shall be obtained before the publication of the amendment.

Exceptionally, if the amendment has an implication on safety, they it may be published and applied immediately provided that the approval required has been applies.

1.2.5 Distribution Confirmation of Receipt

All Operations Manual copies will be electronically distributed by Operation Manager in format soft copies, save hard copies for offices (A4 format) and the airplane library (A5 format), for ease of in-flight use, and shall have a ring binder that permits easy use and amendment under flight standard responsibility, but for individuals or users have the option of obtaining a softcopy or printing a hard copy at their own expense and responsibility for accuracy and update.

1.2.6 Performance / Currency Manual

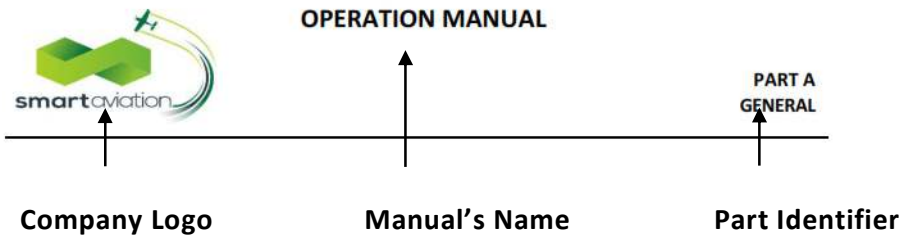
This Operations Manual will be reviewed for currency every 6 (six) month, the currency status of each page is given as follows:

- Manual Identifier / Issue Number / Revision / Date of Issue.

1.2.7 NOMENCLATURE

Chapter and Section Numbering
This Manual is subdivided into Chapters, Sections and Subsections.

1. Top of the Page



2. Bottom of the Page

1)

A "decimal" nomenclature is used, as follows:

- Chapter - First Numerical Identifier;

- Section - Second Numerical Identifier;
- Sub-section - Third Numerical Identifier, and as necessary a bracketed letter identifier.

Example: 1.5.1.is:

- Chapter 1 : International Standard.
- Section 5 : Amending the manual.
- Sub-section 1 : General.

1.2.8 MANUAL CONTROL NUMBER

This Operations Manual is pertaining to the Regulations & Quality System application in the flight operations activities will be identified and control by Operation Manager as document number SCA/OPS-1-001. Shown below is a brief description of the manual control number

SCA : Stands for the Company Names of PT. Smart Cakrawala Aviation.

OPS : Stands for the department issued manual.

1 : Stands for level manual procedure to be observed and implemented within company, its need approval from DGCA.

01 : Stands for Manual Serial Number for Operations Manual approved by DGCA

1.2.9 SYSTEM OF AMENDMENT AND REVISION

Operation Manager is responsible for the overall control of this manual and will authorize both the content and issuance of amendments and revisions.

Revisions will be numbered in sequence and will contain the date of issue. All revisions will be recorded in Revision Of Record (PAGE ROR) by the post holder for all departments.

However, it Is the responsibility of each manual holder to ensure all relevant staff is made aware of any material change to this manual.

1.3. APPLICABILITY

This Operations Manual Part B is applicable for the following Model / Series of AIRBUS EC-130T2 (H-130) aircraft:

Make and Model	Engine Type	Flight Instruments
AIRBUS EC-130T2 (H-130)	Turbomeca model Ariel type 2D Engines	GDU 620

1.4. AIRCRAFT DIMENSION

This section details Aircraft Dimension applicable to the specific aircraft type. The information is drawn from the Pilot Operating Handbook.

AIRCRAFT TYPE	DOCUMENTS MANUAL	SECTION
AIRBUS EC-130T2 (H-130)	Flight Manual	SECTION 1 GENERAL Subsection 1.2 Main Aircraft dimension

1.5. DESCRIPTIVE DATA

This section details descriptive data applicable to the specific aircraft type. The information is drawn from the Pilot Operating Handbook.

AIRCRAFT TYPE	DOCUMENTS MANUAL	SECTION
AIRBUS EC-130T2	Flight Manual	SECTION 1

1.6. DEFINITION

KIAS	Knots Indicated Airspeed is speed shown on the airspeed indicator.
KCAS	Knots Calibrated Airspeed is speed shown on the airspeed indicator corrected for instrument and position error. (See Section 5 for position error correction.)
KTAS	Knots True Airspeed is airspeed relative to un• disturbed air. It is KCAS corrected for pressure altitude and temperature.
Vne	Never-Exceed Airspeed.
Vy	Speed for best rate of climb.
Vh	Stabilized level-flight speed at maximum continuous power.
MSL Altitude	Altitude above mean sea level, indicated by the altimeter (corrected for position and instrument error) when the barometric subscale is set to the atmospheric pressure existing at sea level.
Pressure Altitude	Altitude indicated by the altimeter (corrected for instrument error) when the barometric sub• scale is set to 29.92 inches of mercury (1013.2mb).
Density Altitude	Altitude in ISA conditions at which the air would have the same density (it is pressure altitude corrected for OAT).
ISA	International Standard Atmosphere exists when pressure is 29.92 inches of mercury at sea level, temperature is 15°C at sea level, and temperature decreases 1.98 °C per 1000 feet of altitude
SHP	Shaft Horsepower is actual power delivered by the engine output shaft. (Shown by torque meter as percentage of 270 horse• power when N2 is 100%).
RPM	Revolutions Per Minute or speed of engine or rotor. Shown on R66 tachometers in percent. 100% engine output shaft (N2) RPM = 6016. 100% gas generator (N1) RPM = 50970. 100% main rotor RPM = 408.
N1	Engine gas generator (compressor) RPM
N2	Engine output shaft RPM.
MGT	Measured Gas Temperature (in turbine section).
MCP	Maximum Continuous Power (83% torque in the R66).
TOP	Takeoff Power (100% torque, limited to 5 minutes in the R66).
TOGW	Takeoff Gross Weight.
OAT	Outside Air Temperature.
GPH	Gallons Per Hour.
AGL	Above Ground Level.
IGE	In Ground Effect.
OGE	Out of Ground Effect.

1.7. UNITS OF MEASUREMENTS

1.7.1. The Dimensional Units Used in All Air and Ground Operations

MEASUREMENT OF	UNITS
Distance used in Navigation, Position reporting, etc.	Nautical Miles and tenths (note 1)
Relatively short distances such as those relating to reduced visibility and RVR.	Meters (note 2)
Aerodromes (runway length) Altitudes, elevations, and heights	Feet (ft)
Horizontal speed including wind	Knots
Vertical speed	Feet per minute
Wind direction for landing and take off	Degrees Magnetic
Visibility	Kilometers (note 2)
Altimeter setting	Hectopascal (InHg, mb)
Temperature	Degrees Celsius
Mass	Kilograms (pounds if specified in RFM)
Time	Hours and Minutes. The day beginning at Midnight Co-ordinate Universal Time (UTC)

Note 1 : One international nautical mile is 1852 meters
Note 2 : Visibility of less than 5 Km may be given in meters

1.7.2. Time System

The Co-ordinate Universal Time (UTC) is used in the air traffic and communications services and in the documents published by the Aeronautical Information Service (AIS), unless otherwise stated.

1.7.3. Local Time

- Western Indonesia is UTC + 7 hrs
- Central Indonesia is UTC + 8 hrs
- Eastern Indonesia Is UTC + 9 hrs

1.8. CONVERSION OF UNITS OF MEASUREMENTS

1.8.1. Volume

Converting	To	Multiply by
Imperial Gallons	Liters	4.54596
Liters	Imperial Gallons	0.219975
US Gallons	Liters	3.78531
Liters	US Gallons	0.264179
Imperial Gallons	US Gallons	1.20095
US Gallons	Imperial Gallons	0.832674

1.8.2. Distance

Converting	To	Multiply by
Feet	Meters	0.3048
Meters	Feet	3.28084
Miles	Nautical Miles	0.868976
Nautical Miles	Miles	1.15078
Nautical Miles	Kilometers	1.852
Kilometers	Nautical Miles	0.539957
Miles	Kilometers	1.609
Kilometers	Miles	0.621504

1.8.3. Speed

Converting	To	Multiply by
Knots	Miles per Hour	1.15078
Miles per Hour	Knots	0.8684976
Meters per Second	Knots	1.9
Knots	Meters per Second	0.5263157

1.8.4. Mass

Converting	To	Multiply by
Kilograms	Pounds	2.204622
Pounds	Kilograms	0.453592

1.8.5. Barometric Pressure

Converting	To	Multiply by
Inches Hg	Hectopascal	33.86
Hectopascal	Inches Hg	0.0295

1.8.6. Temperature

Converting	To	Formula
Celsius	Fahrenheit	(°C x 9/5) + 32
Fahrenheit	Celsius	(°F - 32) x 5/9

INTENTIONALLY BLANK

2. CERTIFICATION AND OPERATIONAL LIMITATIONS

2.1. CERTIFIED LIMITATIONS AND APPLICABLE OPERATIONAL LIMITATIONS

This section details limitations applicable to the AIRBUS EC-130T2 (H-130). The information is drawn from the Flight Manual.

2.1.1. Certification status.

PT. Smart Cakrawala Aviation AIRBUS EC-130T2 (H-130) are approved under EASA Certification. Republic Of Indonesia, Ministry Of Transportation Directorate General Of Civil Aviation type certificate validation number H005.

2.1.2. Passenger Seating Configuration.

It is the pilot's responsibility to ensure the airplane is properly loaded so the entire flight is conducted within the limits of the gross weight and center of gravity:
The passenger seating configuration of PT. Smart Cakrawala Aviation AIRBUS EC-130T2 (H-130) are detailed in the table below:

Remark :
1 and 2 .....Flight Crew
3-7.....Passenger seat

2.1.3. Types of operation.

PT. Smart Cakrawala Aviation AIRBUS EC-130T2 (H-130) aircrafts are approved for land operations under day VFR only and non-icing conditions. Flight into known icing conditions prohibited.

2.2. FLIGHT CREW LIMITATIONS

This section details flight crew limitations applicable to the specific aircraft type. The information is drawn from the Flight Manual.

AIRCRAFT TYPE	DOCUMENTS MANUAL	SECTION
AIRBUS EC-130T2 (H-130)	Flight Manual	SECTION 2 LIMITATIONS Subsection 2.1.2 Occupants

2.3. AIRSPEED LIMITATIONS

This section details airspeed limitations applicable to the specific aircraft type. The information is drawn from the Flight Manual.

AIRCRAFT TYPE	DOCUMENTS MANUAL	SECTION
AIRBUS EC-130T2 (H-130)	Flight Manual	SECTION 2 LIMITATIONS Subsection 2.3.1 Airspeed Limitation.

2.4. MASS AND CENTRE OF GRAVITY

2.4.1. Weight Limits

This section details Weight Limits applicable to the specific aircraft type. The information is drawn from the Flight Manual.

AIRCRAFT TYPE	DOCUMENTS MANUAL	SECTION
AIRBUS EC-130T2 (H-130)	Flight Manual	SECTION 2 LIMITATIONS-Subsection 2.2 Weight and Balance Limitation.

2.4.2. Center Of Gravity Limits.

This section details Center Of Gravity Limits applicable to the specific aircraft type. The information is drawn from the Flight Manual.

AIRCRAFT TYPE	DOCUMENTS MANUAL	SECTION
AIRBUS EC-130T2 (H-130)	Flight Manual	SECTION 2 LIMITATIONS Subsection 2.2 Weight and Balance Limitation.

2.5. MANEUVER LIMITS

This section details Maneuver Limits applicable to the specific aircraft type. The information is drawn from the Flight Manual.

AIRCRAFT TYPE	DOCUMENTS MANUAL	SECTION
AIRBUS EC-130T2 (H-130)	Flight Manual	SECTION 2 LIMITATIONS Subsection 2.3.5 Maneuvering Limitation

2.6. FLIGHT LOAD FACTOR LIMITS (FLIGHT ENVELOPES)

This section details Flight Load Factor Limits (Flight Envelopes) applicable to the specific aircraft type. The information is drawn from the Flight Manual.

AIRCRAFT TYPE	DOCUMENTS MANUAL	SECTION
AIRBUS EC-130T2 (H-130)	Flight Manual	SECTION 2 LIMITATIONS Subsection 2.3 Flight Envelopes Limitation.

2.7. MAXIMUM OPERATING ALTITUDE LIMIT

This section maximum operating altitude limit applicable to the specific aircraft type. The information is drawn from the Flight Manual.

AIRCRAFT TYPE	DOCUMENTS MANUAL	SECTION
AIRBUS EC-130T2 (H-130)	Flight Manual	SECTION 2 LIMITATIONS Subsection 2.3.2 Altitude Limitation.

2.8. OUTSIDE AIR TEMPERATURE LIMITS

This section outside air temperature limit applicable to the specific aircraft type. The information is drawn from the Flight Manual.

AIRCRAFT TYPE	DOCUMENTS MANUAL	SECTION
AIRBUS EC-130T2 (H-130)	Flight Manual	SECTION 2 LIMITATIONS Subsection 2.3.3 Temperature Limitation

2.9. FUEL LIMITATIONS

This section details Fuel Limitations applicable to the specific aircraft type. The information is drawn from the Flight Manual.

AIRCRAFT TYPE	DOCUMENTS MANUAL	SECTION
AIRBUS EC-130T2 (H-130)	Flight Manual	SECTION 1 GENERAL Subsection 1.3.4 Fuel SECTION 2 LIMITATIONS Subsection 2.5.1 Approved Fuels

2.10. ROTOR SPEED LIMITS

This section details Rotor speed limits applicable to the specific aircraft type. The information is drawn from the Flight Manual.

AIRCRAFT TYPE	DOCUMENTS MANUAL	SECTION
AIRBUS EC-130T2 (H-130)	Flight Manual	SECTION 2 LIMITATIONS Subsection 2.4.1 Main Rotor Limitations

2.11. PLACARDS

This section details Placards applicable to the specific aircraft type. The information is drawn from the Flight Manual.

AIRCRAFT TYPE	DOCUMENTS MANUAL	SECTION
AIRBUS EC-130T2 (H-130)	Flight Manual	SECTION 2 LIMITATIONS Subsection 2.6 Placards

2.12. PERFORMANCE LIMITATIONS

This section details Performance Limitations applicable to the specific aircraft type. The information is drawn from the Flight Manual.

AIRCRAFT TYPE	DOCUMENTS MANUAL	SECTION
AIRBUS EC-130T2 (H-130)	Flight Manual	SECTION 2 LIMITATIONS SECTION 5 - REGULATORY PERFORMANCE.

3. NORMAL PROCEDURES

3.1. PREFLIGHT

3.1.1. Crew Daily and Pre-flight Briefing

Crew Daily and pre-flight briefing are detailed in OM Part A section 3.6.1. Pilot self-dispatch system and FM EC-130T2 Section 4 NORMAL PROCEDURES Subsection 4.2 PREFLIGHT CHECK.

3.1.2. Operational Flight Plan

Every flight conducted in accordance with Part 135 of the DGAC is required to have an operational flight plan (**Please see APPENDIX form OM Part A**). Refer to the following pages for a description of the OFP. An Excel OFP shall be made available to crews at all stations.

3.1.3. Aircraft Preparation.

The PIC is responsible to prepare the aircraft before flight .In multi crew operations both pilots prepare the aircraft simultaneously. Preferably the PF on the first sector will do the cockpit inspection while the PM (in multi crew operations) on the first sector will do the external walkaround. After each sector of the day a brief walkaround should be done to check for obvious signs of damage. At the end of each flying day an external inspection should be done prior to leaving the aircraft or signing off the logbook.

3.1.4. Cockpit/ Cabin Preparation.

Cockpit/Cabin Preparation are detailed in FM EC-130T2 section 4 Normal Procedures Subsection 4.2 PREFLIGHT CHECK.

3.1.5. Cockpit Preflight Inspection Flow Items

Cockpit preflight Inspection Flow items are detailed in FM EC-130T2 section 4 Normal Procedures Subsection 4.2 PREFLIGHT CHECK.

3.1.6. Walk around

Walk around are detailed in FM EC-130T2 section 4 Normal Procedures Subsection 4.2 PREFLIGHT CHECK.

3.1.7. Fueling

Crew Daily and pre-flight briefing are detailed in Flight Manual EC130T2 Section 8.2.5 Fueling procedures.

3.1.7.1. Requests For Fuel

Every time there is a request for fuel, crew can use Smart Cakrawala Aviation fuel request form (OM A appendix). The minimum amount of fuel requested must be considered to the minimum fuel requirements for helicopter (OM A Chapter 8.9.3)

3.1.7.2. Gross Error Check

N/A

3.1.7.3. Fuel Draining

The fuel should be drain before the first flight for check water contamination Flight Manual EC135T2 section 4.2). For water drain refers to CMM chapter 6.3.4

3.2. PASSENGER BRIEFING

Always conduct a passenger safety briefing before allowing a passenger on board. Passenger safety briefings should include:

- **Risks**: A discussion of the risks associated with the flight. Ensure passengers know that you will be happy to cancel or discontinue a flight if anyone is uncomfortable.
- **Entry and exit**: Have passengers demonstrate proper operation of seatbelts and doors. Brief safe emergency entry and exit paths (away from tail rotor and within pilot's view). Do not board or disembark passengers with rotors turning unless procedures (such as ground escorts) are established before the flight.
- **Aircraft controls**: Always remove passenger-side controls. Ensure passengers secure any personal items brought on board. Caution passengers against inadvertently bumping the cyclic center post. Ensure passengers know how to operate headsets and intercom system.
- **Expectations for the flight**: Adhering to fixed schedules or flying over landmarks may not be possible due to weather, airspace, or performance limitations. If passengers are aware of these limitations prior to the flight, there will be less pressure for the pilot to attempt a task beyond his comfort or experience level.
- **High workload times**: Passengers should always tell the pilot about safety-related items such as traffic but should refrain from unnecessary conversation during takeoff, landing, and radio communications.

Note:

- **Should not carry passengers until accumulating 100 total hours helicopter experience including 20 hours pilot in command in type after receiving their helicopter rating.**
- **Should only fly in daylight with good VFR conditions and low winds.**
- **For the first several passenger-carrying flights, should limit flight to a local, familiar area.**
- **Doors-off flight with passengers is not recommended unless they have significant helicopter familiarity.**
- **Photo missions have risks well beyond regular passenger carrying flights and require specific training and experience.**

DURING TAXI

Selamat pagi/siang/sore para penumpang yang terhormat Selamat datang di .....
Penerbangan menuju .....(destination)
Memiliki waktu tempuh selama ...(hour)jam ...(minute)menit
Silakan memakai sabuk pengaman anda ,dan kami mohon untuk tetap memakai sabuk pengaman anda selama penerbangan.

Penerbangan ini bebas rokok.
Pesawat ini memiliki 4 (empat) pintu darurat. 2 (dua) didepan dan 2 (dua) di belakang.
Jaket pelampung tersedia di bawah kursi anda
Demi keselamatan anda kami mohon untuk membaca kartu petunjuk keselamatan yang tersedia.Terima Kasih.

TURBULENCE
Para Penumpang yang terhormat,
Kita akan memasuki cuaca kurang baik,
Kami mohon untuk mengencangkan sabuk pengaman anda.
Terima Kasih

10 MINUTES BEFORE LANDING
Para Penumpang yang terhormat,
Kita akan segera mendarat di bandara....(destination's airport)
Kami mohon untuk mengencangkan sabuk pengaman anda.
Terima kasih.

AFTER LANDING
Para penumpang yang terhormat,
Kita telah mendarat di bandara .....(destination's airport)
Kami mohon untuk tetap duduk dengan tenang sampai pesawat betul-betul berhenti
Petugas kami akan membukakan pintu untuk anda.
Terima Kasih untuk terbang dengan .....
Sampai jumpa kembali dipenerbangan selanjutnya.

3.3. BEFORE START

This section details before start applicable to the specific aircraft type. The information is drawn from the Flight Manual.

AIRCRAFT TYPE	DOCUMENTS MANUAL	SECTION
EC130 T2	Flight Manual	SECTION 4 NORMAL PROCEDURES Subsection 4.3.1 ENGINE PRESTART CHECK

3.4. ENGINE STARTING

This section details engine starting applicable to the specific aircraft type. The information is drawn from the Flight Manual.

AIRCRAFT TYPE	DOCUMENTS MANUAL	SECTION
EC130 T2	Flight Manual	SECTION 4 NORMAL PROCEDURES Subsection 4.3.2 ENGINE STARTING

3.5. DEPARTURE

This section details departure applicable to the specific aircraft type. The information is drawn from the Flight Manual.

AIRCRAFT TYPE	DOCUMENTS MANUAL	SECTION
EC130 T2	Flight Manual	SECTION 4 NORMAL PROCEDURES Subsection 4.4 TAKEOFF

3.6. TAKEOFF PROCEDURES

This section details takeoff procedures applicable to the specific aircraft type. The information is drawn from the Flight Manual.

AIRCRAFT TYPE	DOCUMENTS MANUAL	SECTION
EC130 T2	Flight Manual	SECTION 4 NORMAL PROCEDURES Subsection 4.4.2 TAKEOFF CHECK AND PROCEDURE

3.7. CLIMB PROCEDURE.

This section details Climb Procedure applicable to the specific aircraft type. The information is drawn from the Flight Manual.

AIRCRAFT TYPE	DOCUMENTS MANUAL	SECTION
EC130 T2	Flight Manual	SECTION 4 NORMAL PROCEDURES Subsection 4.5 CLIMB

3.8. CRUISE

This section details Cruise applicable to the specific aircraft type. The information is drawn from the Flight Manual.

AIRCRAFT TYPE	DOCUMENTS MANUAL	SECTION
EC130 T2	Flight Manual	SECTION 4 NORMAL PROCEDURES Subsection 4.6 CRUISE

3.9. DECENT

This section details Decent applicable to the specific aircraft type. The information is drawn from the Flight Manual.

AIRCRAFT TYPE	DOCUMENTS MANUAL	SECTION
EC130 T2	Flight Manual	SECTION 4 NORMAL PROCEDURES Subsection 4.7 APPROACH AND LANDING

3.9.1. Before Landing.

This section details Before Landing applicable to the specific aircraft type. The information is drawn from the Flight Manual.

AIRCRAFT TYPE	DOCUMENTS MANUAL	SECTION
EC130 T2	Flight Manual	SECTION 4 NORMAL PROCEDURES Subsection 4.7 APPROACH AND LANDING

PT Smart Cakrawala aviation is day VFR operation therefore Pilot should comply for VFR approach or visual approach follow ATC instruction or follow Operation Manual Part C Appendix B Route Information.

3.10. LANDING

This section details Landing applicable to the specific aircraft type. The information is drawn from the Flight Manual.

AIRCRAFT TYPE	DOCUMENTS MANUAL	SECTION
EC130 T2	Flight Manual	SECTION 4 NORMAL PROCEDURES Subsection 4.7.2 LANDING

3.11. NOISE ABATEMENT

This section details Noise Abatement applicable to the specific aircraft type. The information is drawn from the Flight Manual.

AIRCRAFT TYPE	DOCUMENTS MANUAL	SECTION
EC130 T2	Flight Manual	SECTION 9.18 NOISE REDUCTION

4. SPECIFIC FLIGHT DECK PROCEDURES

4.1. DETERMINING AIRWORTHINESS OF AIRCRAFT

The PIC must check the airworthiness documentation of the aircraft provided by maintenance before all the flights. Make sure that all defects have been rectified and Aircraft Maintenance Release has been signed by the Engineer.
If found aircraft system inoperative and it is MEL categorized, make sure the validity of DMI is not undue.

4.2. OBTAINING FLIGHT RELEASE

PT. Smart Cakrawala Aviation aircraft are released under a pilot self-dispatch system. Pilots shall ensure that all required documents are completed before departure. The required documents mentioned in Operation Manual Part A Chapter 8.11 Document, Form, and Additional Information.

4.3. INITIAL COCKPIT PREPARATION

The PIC should ensure that all required documents are on board and neatly stowed in the aircraft and that all required manuals and documents are easily accessible for use in flight if necessary. Cockpit should be kept neat and organized.

4.4. COCKPIT DISCIPLINE AND STERILE COCKPIT PROCEDURES

Activity which would distract any flight Pilot member from the performance of his/her duties or which could interfere in any way with the conduct of those duties is prohibited.

Activities such as eating meals and engaging in nonessential conversations during critical phases of flight are not permitted. Critical Phases of Flight include all ground operations,taxi, takeoff, landing, flight conducted below 5.000 feet above aerodrome elevation and the last 1.000 feet prior to assigned or chosen level.

During flight, pilots are not to read publications not related to the proper conduct of the flight

4.5. STANDARDS CALL-OUTS (For Multi Crew Operation)

N/A

4.6. COMMUNICATIONS

All aircraft are equipped with dual VHF and an HF radio. Standard phraseology and radio etiquette are to be observed at all times.

4.7. FLIGHT SAFETY

All PT. Smart Cakrawala Aviation crew are to realize the flight safety and the safety of passengers crew are of the utmost importance. If required by the situation, pilots are allowed to deviate from any rule or SOP that they deem necessary for the safety of flight. In such situations, pilots are to report to the Safety And Quality Manager the reason for such deviation.

4.8. TAXI GUIDELINES AND RAMP SIGNALS

Pilots are to follow all instructions given by ATC and mars halers except when such an instruction would directly jeopardize safety of the aircraft or others on the ground or in flight.

4.9. CHOICE OF RUNWAY

In controlled airspace, the pilot must follow the instructions of ATC. In uncontrolled airspace the runway choice is left up to the PIC and is dictated by prevailing winds, runway slope, and go around options. The PIC shall refer to the appropriate strip chart.

And at remote area shall consider of terrain conditions, obstacles, people and living environment

4.10. TAKEOFF IN LIMITED VISIBILITY

At controlled airports, the PIC must follow ATC instructions. In uncontrolled airspace the PIC should refer to the appropriate strip chart.

4.11. TAKE OFF IN ADVERSE WEATHER

At controlled airports, the PIC must follow ATC instructions. In uncontrolled airspace the PIC should refer to the appropriate strip chart.

4.12. USE AND LIMITATION OF THE WEATHER RADAR

N/A

4.13. USE OF LANDING LIGHTS

Landing lights should be used during takeoff and landing and within 10nm of an airport.

4.14. MONITORING OF FLIGHT INSTRUMENTS

During flight the pilot should continuously monitor the flight instruments as appropriate for each phase of flight.

4.15. POWER SETTINGS FOR TAKE OFF

For power setting for takeoff refer to FM EC130 T2 section 4 NORMAL PROCEDURES.

4.16. MALFUNCTIONS DURING TAKE OFF

This section details malfunctions during take off applicable to the specific aircraft type. The information is drawn from the Flight Manual.

AIRCRAFT TYPE	DOCUMENTS MANUAL	SECTION
EC130 T2	Flight Manual	SECTION 3 EMERGENCY PROCEDURES

4.17. CLIMB AT NORMAL SPEED, BEST ANGLE AND BEST RATE

This section details climb at normal speed, best angle and best rate applicable to the specific aircraft type. The information is drawn from the Flight Manual.

AIRCRAFT TYPE	DOCUMENTS MANUAL	SECTION
EC130 T2	Flight Manual	SECTION 4 NORMAL PROCEDURES Subsection 4.5 CLIMB

4.18. EN-ROUTE AND HOLDING PROCEDURES

N/A

4.19. DESCENT, APPROACH AND LANDING PROCEDURES.

This section details descent, approach and landing procedures applicable to the specific aircraft type. The information is drawn from the Flight Manual.

AIRCRAFT TYPE	DOCUMENTS MANUAL	SECTION
EC130 T2	Flight Manual	SECTION 4 NORMAL PROCEDURES

4.20. REPORTING MAINTENANCE DEFICIENCIES.

The PIC must fill the discrepancy Log and inform maintenance in case of a maintenance deficiency.

4.21. HOW TO OBTAIN MANTEINANCE AND SERVICE EN-ROUTE.

The PIC should contact the director of maintenance via the company flight follower on HF radio and discuss the issue with the director of maintenance or his designee.

5. ABNORMAL AND EMERGENCY PROCEDURES

5.1. GENERAL CONSIDERATIONS AND POLICY

The contents of this chapter pertain to the operations during emergency and malfunction situations procedures for Smart Cakrawala Aviation aircraft. It is impossible to develop guidance and procedures to deal with all situations.

The judgment, skill and training of all persons involved are necessary to bring an emergency and malfunctions situation to a safe conclusion.

The guidance in this chapter is in the form of instructions, expanded checklists, detailed procedures, or a combination of all of these. Unless safety is jeopardized they shall in the handling of emergency and malfunction situations.

This chapter also contains fault conditions considered to constitute an emergency or malfunctions condition. Red warning lights and amber caution lights are located on the instrument panel and provide the pilot with a visual indication of a condition, fault, or system malfunction by means of an individual system light. Illumination is an indication that a problem has occurred which unless treated properly, could affect flight safety. In addition, certain emergency conditions are made known by audio signals. Remedial action as described below should be taken with the urgency each situation warrants.

All corrective action procedures listed herein assume the pilot gives first priority to helicopter control and a safe flight path.

The helicopter should not be operated following any emergency landing or shutdown until the cause of the malfunction has been determined and corrective maintenance action taken.

5.2. SMOKE AND FIRE

This section details Smoke And Fire applicable to the specific aircraft type. The information is drawn from the Flight Manual.

AIRCRAFT TYPE	DOCUMENTS MANUAL	SECTION
EC130 T2	Flight Manual	SECTION 3 EMERGENCY PROCEDURES Subsection 3.4 SMOKE IN THE COCKPIT/CARGO

5.3. EXCEEDING STRUCTURAL LIMITS

Landing above maximum landing weight or exceeding airspeed, engine limits should all be reported in the maintenance log and to the maintenance manager.

5.4. LIGHTNING STRIKES

Any suspected or confirmed lightning strike should be immediately reported to the maintenance manager and reported in the maintenance log. The aircraft should not be flown again until released by maintenance.

5.5. DISTRESS COMMUNICATIONS AND ALERTING ATC TO EMERGENCIES

Follow the ICAO procedures in standard communication using PAN and MAY DAY codes. For detail please Operation Manual Part A Chapter 17.

5.6. ENGINE FILURE

This section details Engine Filure applicable to the specific aircraft type. The information is drawn from the Flight Manual.

AIRCRAFT TYPE	DOCUMENTS MANUAL	SECTION
EC130 T2	Flight Manual	SECTION 3 EMERGENCY PROCEDURES Subsection 3.2 ENGINE FLAME-OUT

5.7. SYSTEM FILURE

This section details System Filure applicable to the specific aircraft type. The information is drawn from the Flight Manual.

AIRCRAFT TYPE	DOCUMENTS MANUAL	SECTION
EC130 T2	Flight Manual	SECTION 3 EMERGENCY PROCEDURES

5.8. DIVERSION

When a diversion is made due to serious technical failure, the pilot must land as soon as possible at the closest suitable airport or airstrip.

These following items could be used to choose most suitable place to land:

- Runway condition: length, surface, wind, weather, terrain.
- Airport facility: maintenance facility available, medical care, fire department, ground staff assistance, fuel availability.
- Instrument approach procedure.
- Gliding distance or fuel on board

5.9. GROUND PROXIMITY WARNING

Flying under VFR, the pilot is responsible for terrain clearance and avoidance. Pilot must maintain visual contact when flying VFR for avoiding terrain and obstacle.

5.10. TCAS ADVISORIES

N/A

5.11. WINDSHEAR

The most prominent meteorological condition that causes significant low level wind shear are thunderstorms and certain frontal systems at or near airports.

Low level wind shear is hazardous to both arriving and departing traffic.

Low level wind shear can exist on all sides of a thunderstorm and up to 15 miles in front of the actual storm. The temperature difference across he front and the frontal speed determines the strength of the wind shear.

Turbulence may or may not be associated with the wind shear.

PIREP's are an important source of information on wind shear.

If wind shear is reported, expected or forecast the pilot should consider delaying departure until the wind shear threat dissipates, or plan a departure course that avoids the forecast or expected wind shear conditions.

During approach and landing the pilot should closely monitor power, pitch attitude, airspeed, and vertical velocity. If wind shear is encountered the pilot should react immediately to get out of the wind shear condition. This may require full power and pitch attitudes close to the critical angle of attack.

All pilots should immediately report any encounter with wind shear to ATC, in order to warn other pilots of the potential danger.

5.12. EMERGENCY LANDING AND DITCHING

This section details emergency landing and ditching applicable to the specific aircraft type. The information is drawn from the Flight Manual.

AIRCRAFT TYPE	DOCUMENTS MANUAL	SECTION
EC130 T2	Flight Manual	SECTION 3 EMERGENCY PROCEDURES The limitations specified in the basic flight manual and in the flight manual supplements remain applicable and are completed or modified

Note : The emergency floatation gear is approved for emergency use (not for ditching according to JAR 27) i.e. to aid in keeping rotorcraft sufficiently upright and in adequate trim to permit safe and orderly evacuation in case of emergency alighting on water.

5.13. AIRCRAFT EVACUATION

For evacuation procedure in emergency, refer to Chapter 14 Operation Manual Part B Emergency Evacuation and Operation Manual Part A Chapter 9.2 Passenger and Cargo Handling Procedures related to safety.

5.14. CREW INCAPACITATION

Crew incapacitation on Smart Cakrawala Aviation flights will be a fatal condition due to most of the flight will be a single pilot operation. A lot of factors could lead to crew incapacitation, but one of the most general is the health of the pilot. Each pilot is responsible maintain their heath condition and readiness for each flight, using I'M SAFE checklist or other assessment tools. Smart Cakrawala Aviation will ensure that every pilot done their medical test for every six months, and will have blood pressure checked before the first flight of the day as mentioned in CASR (only when there is facility available). Refer to OM Part A for medical test and blood pressure check requirement.

5.15. EMERGENCY DESCENT

This section details Emergency Descent applicable to the specific aircraft type. The information is drawn from the Flight Manual.

AIRCRAFT TYPE	DOCUMENTS MANUAL	SECTION
EC130 T2	Flight Manual	SECTION 3 EMERGENCY PROCEDURES Subsection 3.2 ENGINE FLAME-OUT

5.16. LOW FUEL

This section details Low Fuel applicable to the specific aircraft type. The information is drawn from the Flight Manual.

AIRCRAFT TYPE	DOCUMENTS MANUAL	SECTION
EC130 T2	Flight Manual	SECTION 3 EMERGENCY PROCEDURES Subsection 3.6.5 FUEL EMERGENCY

5.17. COMMUNICATION PROCEDURE

In an emergency, pilots are report their position (radial and distance from a known point) as well as the nature of their emergency. Ideally in controlled airspace, this will be to ATC.

In uncontrolled airspace, the report should be to another aircraft flying nearby and lastly to the company flight follower. Pilots should also activate the spider tracks alert feature at the first sign of trouble.

6. PERFORMANCE

6.1. GENERAL

For detail performance data of EC130 T2, refer to Flight Manual Section 5 - REGULATORY PERFORMANCE.

The following performance curves apply to the basic version of the aircraft.
Refer to supplements when optional equipment is fitted.
The performance data specified in the basic flight manual and in the flight manual supplements remain applicable.

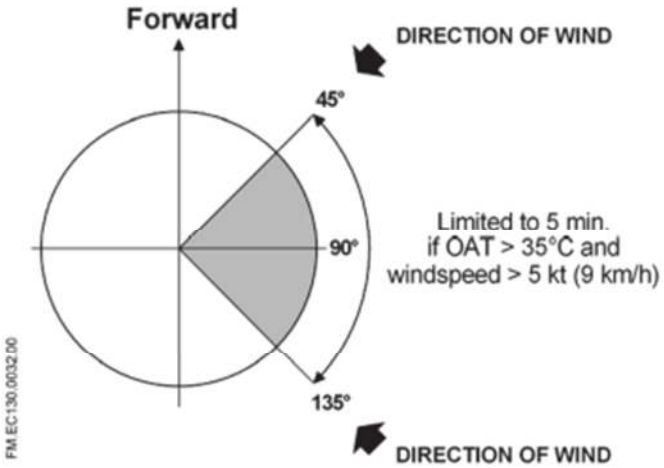
7. SUPPLEMENTARY PERFORMANCE DATA

7.1. FLIGHTS IN ICING CONDITIONS

Flight in known icing conditions prohibited.

7.2. MAXIMUM CROSSWIND AND TAILWIND COMPONENTS

If OAT > 35°C hover in and out of ground effect with a relative RH wind from 45° to 135° is limited to 5 min. for any power rating and any wind speed above 5 kt (9 km/h).



8. OTHER ACCEPTABLE PERFORMANCE DATA

N/A

9. ADDITIONAL PERFORMANCE DATA

Reserved

10. FLIGHT PLANNING DATA

10.1. FLIGHT PLANNING

PT. Smart Cakrawala Aviation flight planning is performed electronically in the Operational Flight Plan program. Data used for the calculations comes from Flight Manual EC135 T2 SECTION 4 NORMAL PROCEDURES Subsection 4.1.2 FLIGHT PLANNING

10.2. FUEL CALCULATION

Data used for the calculations comes from Flight Manual SECTION 5.2.9 COMPLEMENTARY PERFORMANCE DATA

11. WEIGHT AND BALANCE CALCULATION

11.1. WEIGHT AND BALANCE

The PIC is responsible for the proper loading, securing and weight distribution of all passengers and cargo onboard the aircraft. Operation outside of prescribed weight and balance limitations could result in an accident and serious or fatal injury.

All loads, including fuel, shall be distributed using the current Weight and Balance report.

The load shall be distributed to ensure that Center of Gravity will remain within the prescribed limits throughout the flight.

11.2. CALCULATIONS

1. Weight and Balance calculation form will be integrated with Operational Flight Plan and is computer-generated.
2. Such manual calculation is needed, instructions, tables and charts could be found in Flight Manual EC130 T2 Chapter 6 Weight and Balance
3. The PIC will ensure that all items carried, that are not included in the Basic Empty Weight, have been included in the weight calculations.
4. A sample Weight and Balance form, both manual and computer-generated, may be found in Section Appendix of this manual.

11.3. COMPLETION OF WEIGHT AND BALANCE

This section details Completion of Weight and Balance applicable to the specific aircraft type. The information is drawn from the Flight Manual.

AIRCRAFT TYPE	DOCUMENTS MANUAL	SECTION
EC130 T2	Flight Manual	CHAPTER 6 WEIGHT AND BALANCE

12. LOADING

When operating from main bases, the following can be done by ground staff and PIC must be notified with load sheet and/or other essential documentations:

1. All freights and passengers have been weighed correctly.
2. All goods carried are properly manifested, stamped and signed as required.
3. All load has actually been loaded in accordance with the load distribution depicted in Operational Flight Plan and Weight and Balance Data.

The PIC is also responsible for checking that

1. Sufficient fuel and oil with the correct grade is on board.
2. The load sheet produced and signed by ground operations does in fact correctly include the items referred to above.

When operating from remote area/airstrip without any ground staff, the pilot must:

1. Ensure the load sheet or manifest that have been produced by the agent on the ground is relevant with the loading which will be on board the airplane.
2. Distribute the loads properly and calculate weight and balance. In case the CG is not within limits or whenever the pilot needs specific CG configuration, re-arrange of cargo or passenger seating position shall be made.
3. Ensure the loads are within each zone and cargo pod maximum weight limitation.
4. Ensure the total loads are within limits for takeoff weight for that airstrip as depicted on the airstrip chart and as calculated in the OFP.
5. Secure all cargo properly to avoid shifting under flight or ground conditions.

12.1. Passenger and Cargo Loading

CARRYING PASSENGERS

Carrying passengers is an additional responsibility for the pilot in command. Passengers have placed their trust entirely in the hands of the pilot and should be advised of risks associated with the flight.

Risks include pilot experience level, aircraft capability, and operational considerations such as flight over water or night flight. Carrying a passenger in and of itself increases risk because passengers add workload and distractions.

WALKING INTO TAIL ROTOR

Non-pilot passengers have been killed by inadvertently walking into a rotating tail rotor. Every possible precaution must be taken by the pilot to prevent this tragic type of accident. The following rules should always be observed:

1) Never allow anyone to approach the helicopter unless they are escorted or have been properly instructed. If necessary, shut down and stop rotors before boarding passengers.
2) Always have strobe light flashing when rotors are turning.

3) Instruct passengers to establish and maintain eye contact with pilot when approaching helicopter. (This will force them to approach only from the nose or side, never the tail).
4) Instruct passengers to leave the helicopter in full view of the pilot and walk only around the nose, never the tail.
5) Be especially careful when landing off airports as unseen children or adults might approach the helicopter from the rear.

12.2. Center of Gravity Precautions

This section details Center of Gravity Precautions applicable to the specific aircraft type. The information is drawn from the Flight Manual.

AIRCRAFT TYPE	DOCUMENTS MANUAL	SECTION
EC130 T2	Flight Manual	SECTION 6 WEIGHT AND BALANCE

12.3. LOADING OF DANGEROUS GOODS

Ref to PT Smart Cakrawala Aviation Dangerous Goods Handling Manual.

13. SURVIVAL AND EMERGENCY EQUIPMENT.

13.1. EMERGENCY EXIT.

There are 4(four) doors for access emergency exit.2 (two) front doors and 2(two) doors rear cabin. The doors can be jettisoned by actualting the jettison lever (from inside) pretected by breakable transparent cover. It can causes the door fall away. It can also be operated from outside by the lever. There is nojettisoningcapability on standard sliding door.

13.2. CABIN FIRE EXTINGUISHER.

H130T2 has one handled cabin fire extinguisher position r/H pilot seat. Description of how to use cabin fire extinguisher can be found on every handheld fire extinguisher on the aircraft.

13.3. EMERGENCY LOCATOR TRANSMITTER (ELT).

This section details Emergency Locator Transmitter (Elt) applicable to the specific aircraft type. The information is drawn from the Flight Manual.

AIRCRAFT TYPE	DOCUMENTS MANUAL	SECTION
EC135 T2	Flight Manual	SECTION 9.3 SYSTEMS DESCRIPTION - EMERGENCY LOCATOR TRANSMITTER (OPTIONAL)

13.4. FIRST AID KIT.

Emergency medical kit, completed in accordance with the approved list is located in the co-pilot seat.

13.5. PORTABLE SURVIVAL KIT.

Portable survival kit is located in the compartment to starboard. The portable survival kit includes:

1. A set of survival means;
2. Signal flare;
3. Emergency lights.

13.6. EMERGENCY FLOATATION DEVICES.

In flight operations over water safety equipment is placed on board, namely:

1. Life vests (for the crew members and passangers) are located in the cockpit (for flight crew member) and under the passanger seat at the accessible location.
2. Liferaft for 5 person, which is located on the portside of the aircraft directly outside the front door, easily accessible and ready to use in case of emergency when flying over water;

Lifesaving equipment is inspected by a crew member during aircraft preflight preparation. Safety equipment use checklists are placed in the cabin and easily accessible for each crew on board.

13.7. OXYGEN EQUIPMENT.

N/A

14. EMERGENCY EVACUATION.

During an emergency situation and there is time to prepare, the PIC should advise all passengers to prepare for an emergency landing. The PIC should also remind the passengers to how to release their seatbelts AFTER landing and also how to open the doors. Remind the passengers to review their emergency briefing cards located in the aircraft.

14.1. AIRCRAFT ACCIDENT AND INCIDENT.

Description Aircraft Accident And Incident Are Specified in OM Part A Section 16 Handlng Of Accidents And Occurrences

15. AIRCRAFT SYSTEMS.

GENERAL

The EC130 T2 is a five-place, single main rotor, single engine helicopter constructed primarily of metal and equipped with skid-type landing gear.

The primary fuselage structure is welded steel tubing and riveted aluminum sheet. The tailcone is a monocoque structure in which aluminum skins carry most primary loads.

Fiberglass and thermoplastics are used in secondary cabin structure and in various ducts and fairings. The cabin doors are also constructed of fiberglass and thermoplastics.

Several cowl doors provide access to the drive system, engine, engine oil tank, fuel filler cap, and fuel sump drain.

A right-side door provides access to the main baggage compartment. Additional access to controls and other components for maintenance is provided by removable panels and cowlings.

The engine is located aft of the main baggage compartment.

The engine compartment is isolated from the rest of the airframe by firewalls in front of and above the engine.

The four cabin doors are removable. Refer to Section 8 for removal and installation procedures.

This section details Aircraft Systems applicable to the specific aircraft type. The information is drawn from the Flight Manual.

AIRCRAFT TYPE	DOCUMENTS MANUAL	SECTION
EC130 T2	Flight Manual	SECTION 7 DESCRIPTION AND SYSTEMS