



MINIMUM EQUIPMENT LIST

EC 130 T2

Rev. No.: 00

March 2020

PT. Smart Cakrawala Aviation

SCA/OPS/1-009



PT.SCA

OPERATION

MEL EC 130T2

MANUAL

01



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DIRECTORATE GENERAL OF CIVIL AVIATION

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Our Ref: AU-406/23/18/DKPPU-2020

Tangerang, 29 June 2020

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Subject: **REVIEW FOR THE APPROVAL OF MINIMUM EQUIPMENT EC 130 T2
REV. 00 DATED MARCH 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 8900-4.4 Amdt. 0 and the document is **Approved**.

Sincerely Yours,



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

CC.: Director of Airworthiness and Aircraft Operations



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CONTROL PAGE

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The Minimum Equipment List – EC 130 T2 that refer to Airbus Helicopter MMEL AS350-/EC130 Rev. 6 dated 07/03/2017 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 Minimum Equipment List – 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



CAPT. SIGIT HANI HADIYANTO
Deputy Director of Aircraft Operations

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Am

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PT. SMART CAKRAWALA AVIATION	
 CAPT. JAHRON BURHANI OPERATION MANAGER	 ANDREAS HERYANSYAH TECHNICAL MANAGER
D G C A	
 CAPT ALI RIDHO SHAHAB PRINCIPAL OPERATIONS INSPECTOR	 BALEO A S AIRWORTHINESS INSPECTOR



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REVISIONS HIGHLIGHT

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MANUAL DISTRIBUTION LIST

MANUAL DISTRIBUTION LIST

CONTROL NO.	ASSIGNMENT (Title of Organization)	REMARK
01	LIBRARY	MASTER
02	PK-SNX	Hard Copy
03	INDONESIAN DGCA	Soft Copy
04	DIRECTOR	Soft Copy
05	OPERATION MANAGER	Soft Copy
06	TECHNICAL MANAGER	Soft Copy
07	CHIEF PILOT	Hard Copy
08	CHIEF INSPECTOR	Hard and Soft Copy
09	BASE OPERATION	Hard and Soft Copy



PREAMBLE

The following is applicable for authorized certificate holders operating under CASR Parts 135 CASR require that all equipment installed on an aircraft in compliance with the Airworthiness Standards and the Operating Rules must be operative. However, the Rules also permit the publication of a Minimum Equipment List (MEL) where compliance with certain equipment requirements is not necessary in the interests of safety under all operating conditions. Experience has shown that with the various levels of redundancy designed into aircraft, operation of every system or installed component may not be necessary when the remaining operative equipment can provide an acceptable level of safety.

The DGCA approved MMELs for aircraft which Indonesia holds responsibility as state of design, and MMELs accepted which have been approved by a foreign state of design includes; those items of equipment related to airworthiness, operating regulations and other items of equipment which the DGCA finds may be inoperative and yet maintain an acceptable level of safety. The acceptable level of safety may be achieved by appropriate conditions and limitations; it does not contain obviously required items such as wings, flaps, and rudders.

The MMEL is the basis for development of individual operator MELs which take into consideration the operator's particular aircraft equipment configuration and operational conditions. Operator MELs, for administrative control, may include items not contained in the MMEL; however, relief for administrative control items must be approved by the DGCA. An operator's MEL may differ in format from the MMEL, but cannot be less restrictive than the MMEL. The individual operator's MEL, when approved and authorized, permits operation of the aircraft with inoperative equipment. Equipment not required by the operation being conducted and equipment in excess of CASR requirements are included in the MEL with appropriate conditions and limitations. The MEL must not deviate from the Aircraft Flight Manual Limitations, Emergency Procedures or with Airworthiness Directives. It is important to remember that all equipment related to the airworthiness and the operating regulations of the aircraft not listed on the MMEL must be operative.

Suitable conditions and limitations in the form of placards, maintenance procedures, crew operating procedures and other restrictions as necessary are specified in the MEL to ensure that an acceptable level of safety is maintained. The MEL is intended to permit operation with inoperative items of equipment for a period of time until repairs can be accomplished. It is important that repairs be accomplished at the earliest opportunity. In order to maintain an acceptable level of safety and reliability the MMEL establishes limitations on the duration of and conditions for operation with inoperative equipment.



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PREAMBLE

The MEL provides for release of the aircraft for flight with inoperative equipment. When an item of equipment is discovered to be inoperative, it is reported by making an entry in the Aircraft Maintenance Record/Logbook as prescribed by CASR. The item is then either repaired or may be deferred per the MEL or other approved means acceptable to the DGCA prior to further operation. MEL conditions and limitations do not relieve the operator from determining that the aircraft is in condition for safe operation with items of equipment inoperative. When these requirements are met, a Maintenance Release, Aircraft Maintenance Record/Logbook entry, or other approved documentation is issued as prescribed by CASR. Such documentation is required prior to operation with any item of equipment inoperative.

Operators are responsible for exercising the necessary operational control to ensure that an acceptable level of safety is maintained. When operating with multiple inoperative items, the interrelationships between those items and the effect on aircraft operation and crew workload will be considered. Operators are to establish a controlled and sound repair program including the parts, personnel, facilities, procedures and schedules to ensure timely repair.

WHEN USING THE MEL, COMPLIANCE WITH THE STATED INTENT OF THE PREAMBLE, DEFINITIONS, AND THE CONDITIONS AND LIMITATIONS SPECIFIED IN THE MEL IS REQUIRED.



1. DEFINITIONS

1. **Administrative Control Item (ACI).** An ACI is listed by the aircraft operator in the MEL for tracking and informational purposes. As an example, ACI may be used to track ETOPS accomplishment of required APU cold-soak, or in-flight verification starts. An ACI may be added to an aircraft operator's MEL by approval of the POI provided no relief is granted, or provided conditions and limitations are contained in an approved document (e.g., Structural Repair Manual (SRM) or Airworthiness Directive (AD)). If relief other than that granted by an approved document is sought for an ACI, a request must be submitted to the DGCA. If the request results in review and approval by the DGCA, the item becomes an MMEL item rather than an ACI.
2. **ATA System Page.** The ATA system page is divided into four (4) columns and contains: item and repair category; number installed; number required for dispatch; and remarks or exceptions. Standard ATA categories are used. Items are numbered sequentially.
 - a. **Item.** This column depicts the equipment, system, component, or function listed in the “Item” column.
 - b. **Repair Category.** See definition #20.
 - c. **Number Installed.** This column depicts the number (quantity) of instrument and equipment items normally installed in the aircraft. This number represents the aircraft configuration considered in developing this MEL. Should the number be a variable (e.g., fleet configuration differences, cockpit lighting items, cabin lighting items, cargo restraint components) a number is not required and the “-” symbol is used.
 - d. **Number Required for Dispatch.** This column depicts the minimum number (quantity) of instrument and equipment items required for operation provided the conditions specified in the “Remarks or Exceptions” column are met. Where the MMEL shows a variable number required for dispatch, the MEL must reflect the actual number required for dispatch or an alternate means of configuration control approved by the Administrator.
 - e. **Remarks or Exceptions.** This column may include a statement(s) either prohibiting or permitting operation with a specific number of instrument and equipment items inoperative, provisos (conditions and limitations) for such operation, and appropriate notes.
 - f. **Provisos.** Provisos are indicated by a number or a lower case letter in “Remarks or Exceptions”. Provisos are conditions or limitations that must be complied with for operation with the listed instrument or equipment item inoperative.
 - g. **Notes.** Notes provide additional information for crewmember or maintenance consideration. Notes are used to identify applicable material, which is intended to assist with compliance, but do not relieve the aircraft operator of the responsibility for compliance with all applicable requirements. Additional notes may be amended,



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deleted, or added to the MEL by the aircraft operator, as appropriate. Notes are not a part of the provisos.

- h. **Vertical Bar (change bar).** A vertical bar indicates a change, addition, or deletion in the adjacent text for the current revision of that page only. All change bars applicable to the previous revision of the MMEL are removed prior to the release of the next revision.
- 3. Airplane Flight Manual (AFM), Rotorcraft Flight Manual (RFM).** The DGCA-approved AFM/RFM is the document approved by the responsible DGCA during type certification. The approved flight manual for the specific aircraft is listed on the applicable Type Certificate Data Sheet (TCDS). The approved flight manual is the source document for operational limitations and performance parameters for an aircraft. The term "approved flight manual" can apply to either an AFM or an RFM. The DGCA requires an approved flight manual for aircraft type certification.
- 4. As required by CASR.** When the MMEL states, "As Required by CASR," the listed instrument or equipment item is subject to certain provisions (restrictive or permissive) expressed in the CASR operating rules. The number of items required by CASR must be operative. When the listed item is not required by CASR, it may be inoperative for the time specified by repair category.
- 5. Considered Inoperative.** The phrase, "Considered Inoperative", as used in the provisos, means that an instrument and equipment item must be treated for dispatch, taxi and flight purposes as though it were inoperative. The item will not be used or operated until the original deferred item is repaired. Additional actions include: documenting the item on the dispatch release (if applicable), placarding, and complying with all remarks, exceptions, and related MEL provisions, including any (M) and (O) procedures and observing the repair category.
- 6. Continuing Authorization - Single Extension.** An aircraft operator who has the authorization to use an DGCA-approved MEL may also have the authority to use a continuing authorization to approve a single (one-time) extension to the repair interval for category B or C items in accordance with Authorization, Conditions, and Limitations (ACL) D95. Continuing Authorization - Single Extension is not authorized for repair category A and D items.
- 7. Dash (-)** - Indicates a variable number (quantity) of the instrument and equipment items may be installed or required for dispatch. This is common when a fleet MEL is used since aircraft of the same make and model may have differing numbers of specific instrument and/or equipment items installed.
- 8. Day of Discovery** - This is the calendar-day an equipment/instrument malfunction was recorded in the aircraft maintenance record/logbook. This day is excluded from the calendar-days or flight-days specified in the MMEL for the repair interval of an inoperative instrument and/or equipment item. This provision is applicable to all MMEL items; i.e., categories A, B, C, and D.



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DEFINITIONS

- 9. Deactivated and/or Secured** - When the MMEL refers to an instrument and/or equipment item as deactivated and/or secured, the specified component must be put into an acceptable condition for safe flight. An acceptable method of deactivating and/or securing will be established by the aircraft operator.
- 10. Deleted** - "Deleted" in the remarks column after a sequence item indicates that the item was previously listed but is now required to be operative if installed in the aircraft.
- 11. Excess Items** - Excess items are those instrument and equipment items that have been installed that are redundant to the requirements of the CASR.
- 12. Flight Day** - A flight-day is a 24-hour period (from midnight to midnight) either universal coordinated time (UTC) or local time, as established by the aircraft operator, during which at least one flight is initiated for the affected aircraft.
- 13. Icing Conditions** – Icing conditions is an atmospheric environment that may cause ice to form on the aircraft (structural) or in the engine(s) (induction).
- 14. Inoperative** - A system and/or component malfunction to the extent that it does not accomplish its intended purpose and/or is not consistently functioning normally within its approved operating limit(s) and/or tolerance(s).
- 15. Inoperative Components of an Inoperative System** - Inoperative instrument and equipment items, which are components of a system that is inoperative, are usually considered components directly associated with and having no other function than to support that system (warning/caution systems associated with the inoperative system must be operative unless relief is specifically authorized per the MMEL).
- 16. Is Not Used** - The phrase "Is Not Used" in the provisos, remarks or exceptions for an MMEL instrument or equipment item may specify that another item in the MMEL "is not used". In such cases, crewmembers must not activate, actuate, or otherwise utilize that item under normal operations. It is not necessary for aircraft operators to accomplish the (M) procedure(s) associated with the item. However, operational requirements must be complied with, and an additional placard must be affixed, to the extent practical, adjacent to the control or indicator for the item that is not used. This informs crewmembers that an instrument or equipment item is not to be used under normal operations.
- 17. Nonessential Equipment and Furnishings (NEF)** - NEFs are those items installed on the aircraft as part of the original type certification (TC), STC, engineering order, or other form of alteration that have no effect on the safe operation of flight and would not be required by the applicable certification rules or operational rules. They are those items that, if inoperative, damaged, or missing, have no effect on the aircraft's ability to be operated safely under all operational conditions. NEF items are not instrument and equipment items already identified in the MEL or CDL of the applicable aircraft. They do not include instrument and equipment items that are functionally required to meet the certification rule or for compliance with any operational rule.
- 18. Operative** - An operative system and/or component will accomplish its intended purpose and is consistently functioning normally within its design operating limit(s) and tolerance(s). When an MMEL item specifies that an item of equipment must be operative,



it does not mean that its operational status must be verified; it's to be considered operative unless reported or known to be malfunctioning. When an MMEL item specifies that an item of equipment must be verified operative, it means that it must be checked and confirmed operative at the interval(s) specified for that MMEL item. When an MMEL item specifies that an item of equipment must be verified but no interval is specified, verification is required only at the time of deferral. Other terminology sometimes used interchangeably with "operative" within the MMEL is "operates normally", "fully operative", and "considered operative". The aircraft operator's MEL may incorporate standardized terminology of the aircraft operator's choice to specify that an item of equipment must be operative, provided the aircraft operator's MEL definitions indicate that the selected "operative" terminology means that the required item of equipment will accomplish its intended purpose and is consistently functioning normally within its design operating limit(s) and tolerance(s).

19. Placarding - Each inoperative instrument or equipment item must be placarded to inform and remind the crewmembers and maintenance personnel of the item condition. To the extent practical, placards should be located adjacent to the control or indicator for the item affected; however, unless otherwise specified (i.e. AFM), placard wording and location will be determined by the aircraft operator.

20. Repair Category - All users of an MEL approved under parts 135 must effect repairs of inoperative instrument and equipment items, deferred in accordance with the MEL, at or prior to the repair times established by the following letter designators. Part 91 MEL users (D095/D195 LOAs) are not required to comply with the repair categories, but will comply with any provisos defining a repair interval (flights, flight legs, cycles, hours, etc):

Repair Category A - This category item must be repaired within the time interval specified in the "Remarks or Exceptions" column of the aircraft operator's approved MEL. For time intervals specified in "calendar days" or "flight days", the day the malfunction was recorded in the aircraft maintenance record/logbook is excluded. For all other time intervals (i.e., flights, flight legs, cycles, hours, etc.), repair tracking begins at the point when the malfunction is deferred in accordance with the operator's approved MEL.

Repair Category B - This category item must be repaired within 3 consecutive calendar-days (72 hours) excluding the day the malfunction was recorded in the aircraft maintenance record/logbook. For example, if it were recorded at 10 a.m. on January 26th, the 3-day interval would begin at midnight the 26th and end at midnight the 29th.

Repair Category C - This category item must be repaired within 10 consecutive calendar-days (240 hours) excluding the day the malfunction was recorded in the aircraft maintenance record/logbook. For example, if it were recorded at 10 a.m. on January 26th, the 10-day interval would begin at midnight the 26th and end at midnight February 5th.

Repair Category D - This category item must be repaired within 120 consecutive calendar-days (2880 hours) excluding the day the malfunction was recorded in the aircraft maintenance record/logbook.

21. Takeoff - Takeoff is the act of beginning a flight in which an aircraft is accelerated from a state of rest to that of flight. For the purposes of MEL relief, this translates to the point at



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DEFINITIONS

which the pilot physically begins to apply power to initiate the takeoff from the runway or takeoff surface.

- 22. Visible Moisture** - An atmospheric environment containing water, in any form, that can be seen in natural or artificial light; for example, clouds, fog, rain, sleet, hail, or snow.
- 23. Visual Flight Rules (VFR)** - VFR is as defined in CASR Part 91. This precludes a pilot from filing an Instrument Flight Rules (IFR) flight plan.
- 24. Visual Meteorological Conditions (VMC)** - VMC means the atmospheric environment is such that would allow a flight to proceed under the visual flight rules applicable to the flight. This does not preclude operating under Instrument Flight Rules.
- 25. (M)** - This symbol indicates a requirement for a specific maintenance procedure which must be accomplished prior to operation with the listed item inoperative. Normally, these procedures are accomplished by maintenance personnel; however, other personnel may be qualified and authorized to perform certain functions. Procedures requiring specialized knowledge or skill, or requiring the use of tools or test equipment, should be accomplished by maintenance personnel. The satisfactory accomplishment of all maintenance procedures, regardless of who performs them, is the responsibility of the aircraft operator. Appropriate procedures are required to be produced as part of the aircraft operator's manual or MEL.
- 26. (O)** - This symbol indicates a requirement for a specific operations procedure which must be accomplished in planning for and/or operating with the listed item inoperative. Normally, these procedures are accomplished by the flight crew; however, other personnel may be qualified and authorized to perform certain functions. The satisfactory accomplishment of all procedures, regardless of who performs them, is the responsibility of the aircraft operator. Appropriate procedures are required to be produced as a part of the aircraft operator's manual or MEL.
- 27. Electronic Fault Alerting System** - New generation aircraft display system fault indications to the flight crew by use of computerized display systems. Aircraft manufacturers incorporate individual design philosophies when determining the data that is represented. The following are customized definitions (specific to each manufacturer) to help determine the level of messages affecting the aircraft's dispatch status.



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POLICY AND PROCEDURES

POLICY AND PROCEDURES

The following Policy and Procedures will be adhered to by PT Smart Cakrawala Aviation in the use of this Minimum Equipment List, (MEL):

1. It is the Pilot-in-Command's responsibility to become thoroughly familiar with the policy and procedures concerning the use of the MEL.
2. All items related to the airworthiness of the aircraft and not included on the MEL are required to be fully and properly operative.
3. If an inoperative item requires a maintenance procedure, that procedure must be accomplished and recorded prior to flight.
4. When the discrepancy is corrected, the maintenance person performing the maintenance will record it in the applicable aircraft maintenance records.
5. Inoperative items allowed by the MEL must be repaired, or inspected and deferred, by qualified maintenance personnel at the next required inspection. If the inspection is progressive or continuous, the discrepancy must be corrected whether or not the discrepancy is on a part or system required to be inspected as part of that particular inspection segment.
6. An item, which is inoperative, but required by special flight conditions, will be repaired before operating in those conditions.
7. The Pilot-in-Command will ensure that all discrepancies are recorded in the Aircraft Discrepancy Log Sheet.
8. The portion of the record containing the discrepancy records must be on board the aircraft during operation so that the Pilot-in-Command may be aware of any inoperative instruments or equipment.
9. Procedures outlined, such as pulling and tie-wrapping circuit breakers may be performed by a Flight Crewmember, however if the procedure requires specialized tools, training or appropriate licenses, it must be performed by a qualified individual.
10. PT Smart Cakrawala Aviation operate Day VFR only.



MINIMUM EQUIPMENT LIST – EC 130 T2

MEL MANAGEMENT PROGRAM

1. MEL MANAGEMENT PROGRAM

1.1. GENERAL

By authorization of the Minimum Equipment List (MEL), the DGCA of Indonesia permits dispatch of the aircraft for revenue and training flights with certain items or components inoperative provided an acceptable level of safety is maintained by appropriate operation, by a transfer of function to another operating component, or by reference to other instruments providing the required information.

Notes:

The provisions of the MEL are applicable until the aircraft commences the flight. The moment the aircraft starts its takeoff; it is usually considered that the flight has commenced. This means that MEL does not apply.

However, the decision to fly is left to the PIC who may decide operational or even economical reason to repair the aircraft at the departure airport.



1.2. USE OF THE MINIMUM EQUIPMENT LIST

As a general rule, all types of flight operations should be carried out strictly in accordance with the provisions issued by D.G.C.A. concerning the continued safe flight operations. C.A.S.R. Part 135 includes operation rules for the non-scheduled air transport, covering all requirements to be met by operators, such as aircraft requirements, instrument and equipment requirements, special operations requirements, radio apparatus requirements, operations personnel requirements and flight limitations.

Experience, however, has proven that there are some cases or situations where some of the requirements for flight operation by no means can be met, and it is understandable that with the various redundancies designed into the aircraft. It may not be necessary for every system or component installed on the aircraft to be operational when certain minimum operative instrument and equipment are provided for continued safe operations. Realizing this fact, it is necessary to prepare a D.G.C.A approved Minimum Equipment List (M.E.L) for each particular type of aircraft operated by PT. Smart Cakrawala Aviation, which means that under certain conditions an aircraft can be flown with some instruments or equipment inoperative, otherwise an uninterrupted operation in order to improve utilization and thereby provide more convenient and economic operation of the aircraft while an acceptable level of safety can be maintained.

The M.E.L. authorizes flight operations with some inoperative instrument, equipment and components provided that some acceptable level of safety is maintained. On the other hand, the M.E.L. also can be interpreted that for the sake of safety considerations there has to be some instruments, equipment or components which must be operative at all times and never be subjected to negligence.

The Minimum Equipment List (M.E.L) is designed to provide an operator of an aircraft with the list of instruments, equipment and components installed in aircraft which must be operative. It also consists of instruments, equipment and components installed in aircraft with some remarks on their status and limitations.

PT. Smart Cakrawala Aviation can use the M.E.L. as a guideline to determine that the aircraft is still safe to be flown under certain conditions or certain type of flight operations, although some of the instruments, equipment or components are inoperative, by judging whether the types of flight is within appropriate operating limitations; the function of inoperative instrument, equipment or component can be transferred to another instrument, equipment or components, or reference to the other instrument, equipment or components can provide the required information. Exposure to additional failures during continued operation with inoperative instruments, equipment or components must also be considered in determining that an acceptable level of safety is being maintained.

For the sake of simplicity and straightforward in nature, the M.E.L. does not include the obviously required items such as rotors, power train system flight control system, engines, landing gear etc. As the name implies, the M.E.L. also does not include items which are not in airworthiness nature, such as passenger convenience items, entertainment system etc. All items which are related to the airworthiness of the aircraft, except the obviously required items stated above, should be included in the M.E.L.,



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MEL MANAGEMENT PROGRAM

however, if there are some items(s) related to airworthiness of the aircraft which are not included in the M.E.L. found inoperative, the aircraft shall not be operated until some measure of rectification has been taken to get such items operative. It should be noted that the M E L. is not intended to be used as justification for the continued operations of the aircraft for an indefinite period of time with installed instrument, equipment or component inoperative. From this point of view, the MEL can be assumed only as an instrument used by operator of the aircraft to make a judgment whether the aircraft is airworthy when he meets certain conditions of the aircraft or when he is planning to exercise some type of flight operations. Therefore, it is important that the rectification be made at the very first opportunity, since there will always be a possibility to get into the situation where additional failures could render the aircraft un-airworthy.

The MEL, Specifies the minimum instrument, equipment or components for operations under VFR Day. It should be note that whenever an instrument, equipment or system is required in the MEL, all components of such item, equipment or system are also required unless such component are specifically authorized to be inoperative in the MEL.

It is important to note that:

ALL ITEM WHICH ARE RELATED TO THE AIRWORTHINESS OF THE AIRCRAFT AND NOT INCLUDED ON THE LIST ARE AUTOMATICALLY REQUIRED TO BE OPERATIVE.



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MEL MANAGEMENT PROGRAM

1.3. RECTIFICATION COMPLIANCE PROCEDURES

Deferment

All items found during Flight Operations or Maintenance inspections shall be rectified at first opportunity. In case rectification cannot be carried out at first opportunity due to lack of spare parts, tools or facilities, etc., M.E.L should be consulted with authority to determine whether it can be deferred or extended.

In the event of a failure during flight, the pilot in command must ensure that the malfunction item(s) is deactivated and the operating limitations observed.

If the rectification of the inoperative system, component or equipment could be deferred, the discrepancy then shall be written-up in the maintenance logbook as deferred and listed on the deferred discrepancy list of said maintenance logbook and transfer to DMI. Procedure related authorized personnel maintenance ref Chapter 9 Company Authorization Card and Appendix C- Company Maintenance Manual.

If any item found directly related to the airworthiness of the aircraft but, for some reason, not included on the M.E.L., the aircraft shall not be operated until some measure of rectification has been taken to get such items operative.

Rectification

Rectification of item(s) found inoperative during flight or maintenance operation shall be recorded in the maintenance logbook.

In clearing the previously deferred discrepancy, the discrepancy must be reentered in the maintenance logbook and noted as having been reentered from the deferred discrepancy list for the purpose of rectification. The maintenance personnel will then complete the appropriate sign-off in the maintenance logbook and update the discrepancy list.

Rectification of any item which can be deferred in accordance with this M.E.L. must be carried out at the specified time interval set forth in this M.E.L. However, if the deferred item cannot be rectified within the specified time limit, Chief Inspector could review the case and extend the time limit as required.



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MEL MANAGEMENT PROGRAM

1.4. CRITERIA FOR DISPATCH

The PIC of an aircraft is directly responsible, and the final authority for, the operation of that aircraft, as well as assure that multiple MEL items are inoperative.

Before dispatching an aircraft with multiple MEL items inoperative, it shall be checked that any interface or interrelationship between inoperative items will not result in degradation in the level of safety and/or an undue increase in crew workload. It is particularly in this area of multiple discrepancies and especially discrepancies in related systems that good judgment, based on the circumstances of the case including climatic and route conditions must be used.



1.5. CREW ACTION

Aircraft Dispatch

Whenever malfunctions are not completely cleared prior to dispatch, the flight crew shall verify whenever a dispatch is permitted according to the MEL.

Even if new malfunctions fall into the repair interval category “A” and immediate maintenance action is not required, the crew nevertheless shall inform maintenance as soon as possible.

Completion of Flight

Malfunctions encountered during last flight shall be checked whether they fall into the repair interval category “A”. If so, the MEL reference shall be entered in the AML. These “A” category items and any items required to be operative for all flight (“no-go items”) shall be reported to maintenance as soon as possible.

With the approved Operation Specifications;

1. Category A

Items in this category will be repaired as specified in the “Remarks” column of the aircraft approved MEL.

2. Category B

Items in this category will be repaired within three consecutive calendar days (72 hours) excluding the calendar day the malfunction was recorded in the aircraft Maintenance log or record.

3. Category C

Items in this category will be repaired within 10 consecutive calendar days (240 hours) excluding the calendar day the malfunction was recorded in the aircraft maintenance log or record.

4. Category D

Items in this category will be repaired within 120 consecutive calendar days (four months) excluding the calendar day the malfunction was recorded in the aircraft maintenance log or record.



1.6. MAINTENANCE ACTION

The MEL is intended to permit operation with equipment inoperative for that period necessary to organize repairs.

The MEL definitely is not intended as a tool for prolonged or even permanent operation of aircraft in a configuration deviating from certification status.

Therefore, every effort shall be made by maintenance to correct all Maintenance irregularities as early as practicable and that the aircraft is released from maintenance base in fully operation condition so that the effected aircraft can be returned to its certification status. In order to maintain this level, the MEL establishes limitations on the duration of operation with operative equipment (see DEFINITIONS, “Repair Interval Categories”, and REPAIR INTERVAL OVERRUN).

The decision of the PIC to comply with the appropriate MEL requirement and to postpone maintenance activity will supersede any other intention. The PIC shall be informed by maintenance as soon as practicable, should it be impossible to repair inoperative equipment prior to departure.

Whenever an aircraft is released by maintenance for dispatch with equipment inoperative, the following is required:

The Aircraft Flight and Maintenance Log (AFML) aboard the aircraft shall contain a detailed description of the inoperative equipment including the repair interval category from the MEL, the MEL reference (e.g. “21-1”), the time of AFML sign-off, special advice to the flight crew, and if necessary, information about corrective action taken.

When they are accessible to the crew in flight, the control(s) and/or indicator(s) related to inoperative equipment shall be clearly placarded (ref to Company Maintenance Manual 8.1.6 Maintenance Responsibilities Point D.)

If inadvertent operation could produce a hazard, such equipment shall be rendered inoperative (physically) as given in the appropriate Maintenance Procedure.

All Maintenance procedures related to RII refer to PT Smart Cakrawala Aviation Maintenance Program EC 130 T2 Chapter 3.2 RII Procedures.



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1.7. MEL EXTENSION REPAIR INTERVAL.

In exceptional cases, exceeding of any repair interval is unavoidable; it is permitted (basically) for one-time extension of the applicable interval for the same duration. However, in case of the required part are not immediately available or other factors beyond the control of the Company, the aircraft may be returned to schedule provided Maintenance Department shall issue MEL Extension Repair Interval and approved by Chief Inspector and Notify DGCA - PMI.

Refer to Authorizations, Conditions and Limitations (ACL) D95, PT. Smart Cakrawala Aviation may issue MEL Extension Repair Interval for **one time only** as specified at the MEL Category with these following conditions:

- Approved by Chief Inspector.
- Obtain an estimate delivery date of part from the supplier / vendor in the MEL Control form.
- Make coordination with Operation Department for further repair schedule.
- Attach the MEL Extension Repair Interval Form in to the Aircraft Flight and Maintenance Log.

This repair time Mel Extension Repair Interval valid for Category B & C.



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1.8. MANUAL CONTROL SYSTEM

1.8.1. Policy

Each Minimum Equipment List will have a control number and assignment entry on the manual cover page. A master list containing the manual number, location and revision status will be kept by Operation Manager.

1.8.2. Page Control System

a. Record of Revision

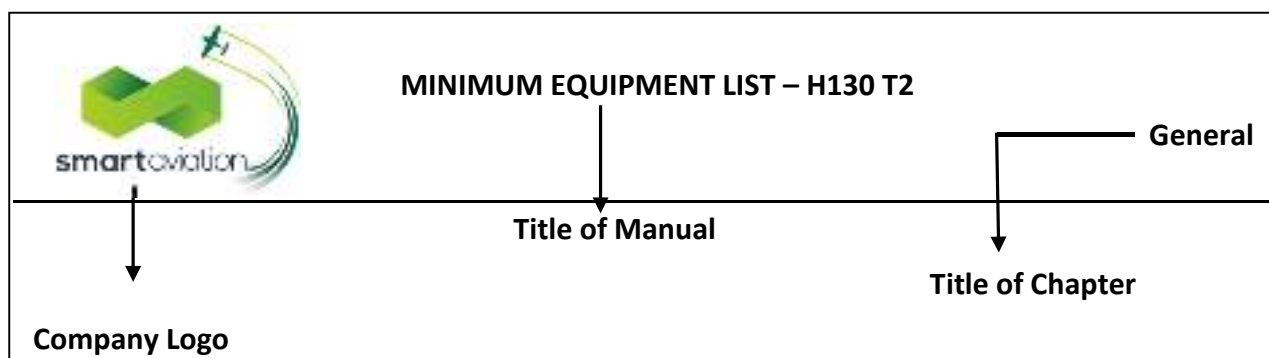
Designed to quickly identify the current revision status of the manual.

b. List of Effective Pages

Designed to provide a summary listing of all applicable pages and the revision date for the entire manual

c. Page Format

Top of the Page



Bottom of the Page

1. REVISION NO
3. SCA/OPS 2-001
4. April 2018

2. PAGE : 1-1

REMARK:

1. Revision Number
2. Section 1. Page 1
3. Company Manual Control Number
4. Date Of Issuance



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MEL MANAGEMENT PROGRAM

1.9. MANUAL REVISION AND DISTRIBUTION PROCEDURE

1.9.1 Revision Procedures

- a. Revision to the Minimum Equipment List is the responsibility of Operation Manager. The revisions are made on an as needed or as required basis to correct, add to, and/or more clearly define policies, procedures, methods, and techniques and to reflect new or revised procedures. All revisions will be submitted base on a manual change request and forwarded to Quality Publications.
- b. Whenever revisions are made, Operation Manager shall route them to the holders of manuals. The responsibility for inserting revisions is the direct responsibility of the manual holder.
- c. A vertical bar will be placed on the left hand margin of each page to indicate changes.
- d. If the only change was to the page number a vertical bar will be placed in the left hand margin next to the revision number.
- e. Operation Manager and Operation Manager will periodically review the Minimum Equipment List with current Master Minimum Equipment List. Operation Manager will coordinate with Operation Manager for reviewing the chapters related to the MMEL revision issued.
- f. This manual and revision will be approved by the Operation Manager , and forward to DGCA for approval. Upon approved by DGCA, sufficient copies will be made and distributed the revision page to each manual holder.
- g. Upon receipt of a revision, each manual holder shall responsible for inserting the revised pages on the manual, record of revision on the manual, and the superseded will return to Operation Manager
- h. A list of effective pages will be issued with each revision so each manual can be checked and kept current.

1.9.2 Record of Revisions

“Keep the Minimum Equipment List up to date by inserting revisions immediately”

Revisions for the Minimum Equipment List will be distributed with transmittal form containing instructions for inserting and/ or removal of pages (Appendix Form-OM Part A SCA-OPS-010 MANUAL REVISION REQUEST FORM).

The transmittal form is numbered consecutively and upon receipt and filling, the date of insertion and the name of the person filling it shall be entered to the corresponding number in the record below.

The list of effective pages will be included in order to continuously check at any time whether the Minimum Equipment List updated. The list of effective pages will be revised upon revision with each page.



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1.9.3 Distribution List

The Minimum Equipment List shall be distributed to all personnel involved and responsible for Operation and Maintenance Department activities as the Controlled Copy. Other personnel may obtain copy of this Minimum Equipment List from Operation Manager but will not receive the revisions. “Uncontrolled Copy” stamp will be provided in the selected pages manual copy.

Operation Manager will distribute this Minimum Equipment List to the listed functions below:

List of Minimum Equipment List holders:

No.	MEL Holder
001	LIBRARY
002	PK-SNX
003	INDONESIAN DGCA
004	DIRECTOR
005	OPERATION MANAGER
006	TECHNICAL MANAGER
007	OPERATION MANAGER
008	CHIEF INSPECTOR
009	BASE OPERATION



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MEL MANAGEMENT PROGRAM

1.10. APPLICABILITY AIRCRAFT

This Minimum Equipment List is applicable for the following aircraft:

No.	A/C Type	A/C Serial Number	Reg. Mark
1.	Airbus Helicopters EC 130 T2	8829	PK-SNX



MINIMUM EQUIPMENT LIST – EC 130 T2

ATA 18

Vibration and Noise Analysis

ATA SYSTEM SEQUENCE NUMBERS & ITEM		1. REPAIR CATEGORY			
		2. NUMBER INSTALLED			
		3. NUMBER REQUIRED FOR DISPATCH			
		4. REMARKS & EXCEPTIONS			
18-Vibration and Noise Analysis					
1. Active Vibration Control System (AVCS).					
(1)	Accelerometers (ACC).	D	5	0	(O) One or more may be inoperative. <u>Operational procedure:</u> The system must be deactivated by setting [AVCS] pushbutton to OFF position.
(2)	Actuators (AVCA).	D	4	0	(O) One or more may be inoperative. <u>Operational procedure:</u> The system must be deactivated by setting [AVCS] pushbutton to OFF position.
(3)	Controller and power amplifier (AVCCPA).	D	1	0	May be inoperative provided: [AVCS] pushbutton is set to OFF position.
(4)	Maintenance box.	D	1	0	May be inoperative.
(5)	Pushbutton (on console).	D	1	0	(M) May be inoperative provided that the system is deactivated. <u>Maintenance procedure:</u> The "AVCS" breakers located on the 31/32α breaker panel in the cargo compartment must be set to off position.
(6)	OFF indicator light (on pushbutton).	D	1	0	(O) May be inoperative. <u>Operational procedure:</u> The system must be deactivated by setting [AVCS] pushbutton to OFF position.
(7)	FAIL indicator light (on pushbutton).	C	1	0	May be inoperative.



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ATA 21
Air Conditioning

ATA SYSTEM SEQUENCE NUMBERS & ITEM		1. REPAIR CATEGORY			
		2. NUMBER INSTALLED			
		3. NUMBER REQUIRED FOR DISPATCH			
		4. REMARKS & EXCEPTIONS			
21-Air Conditioning					
1.	Environmental Control System (ECS).	C	1	0	(O) The aircraft may be dispatched when ECS control panel message HE is displayed or no message displayed "■" provided: (a) No visible moisture, and OAT above +5°C (41°F), (b) According to the mission foreseen, the known meteorological conditions do not require its use for heating and for demisting. Operational procedure: Close the backup P2 manual valve. Open the bad weather window if necessary. NOTE Loss of heating, demisting may be inoperative or degraded.
		C	1	0	(O) The aircraft may be dispatched when ECS control panel message ■ or F1 is displayed provided: (a) No visible moisture, and OAT above +5°C (41°F), (b) According to the mission foreseen, the known meteorological conditions do not require its use for heating and for demisting. Operational procedure: Open the bad weather window if necessary. NOTE Loss of heating and demisting.
		C	1	0	The aircraft may be dispatched when ECS control panel message EE is displayed provided: (a) According to the mission foreseen, the known meteorological conditions do not require its use for heating. NOTE Loss of heating, demisting remains operational.



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ATA 21
Air Conditioning

ATA SYSTEM SEQUENCE NUMBERS & ITEM		1. REPAIR CATEGORY				
		2. NUMBER INSTALLED				
		3. NUMBER REQUIRED FOR DISPATCH				
		4. REMARKS & EXCEPTIONS				
21-Air Conditioning						
	Environmental Control System (ECS) (cont'd).	C	1	0	The aircraft may be dispatched when ECS control panel message CO or C2 or PO or F2 is displayed. NOTE Demisting and heating remain operational.	
2.	P2 OVHT caution light on the CWP	C	1	0	(O) May be inoperative provided: (a) No visible moisture, and OAT above +5°C (41°F), (b) According to the mission foreseen, the known meteorological conditions do not require its use for heating and demisting. Operational procedure: Close the P2 manual valve. Open the bad weather window if necessary. NOTE Loss of heating, demisting may be inoperative or degraded.	



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ATA 23
Communications

ATA SYSTEM SEQUENCE NUMBERS & ITEM		1. REPAIR CATEGORY			
		2. NUMBER INSTALLED			
		3. NUMBER REQUIRED FOR DISPATCH			
		4. REMARKS & EXCEPTIONS			
23-Communications					
1.	Radio communication system (VHF Communication system)	C	2	1	One may be inoperative provided it is not powered by Battery Bus, and is not required for emergency procedures.
2.	Flight crew interphone system (Cockpit ICS)	C	1	1	May be inoperative for single pilot operations only.
3.	Headset	D	7	2	1. May be inoperative for passenger only. 2. Any in excess of those required by the flight manual (Section 2) and by the operational regulations may be inoperative.
4.	Audio selector panel	D	1	0	May be inoperative provided: a) The aircraft is flown in single pilot operation, and b) All audio warnings in the pilot's headset function correctly.



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ATA 24
Communications

ATA SYSTEM SEQUENCE NUMBERS & ITEM		1. REPAIR CATEGORY			
		2. NUMBER INSTALLED			
		3. NUMBER REQUIRED FOR DISPATCH			
		4. REMARKS & EXCEPTIONS			
24-Electrical Power					
1.	Generator caution light	B	1	0	May be inoperative provided the ammeter is operative.
2.	Battery	A	1	0	(M) Main battery may be inoperative provided: a. Cold Weather Starting Kit Battery is installed and operative, and b. Inoperative battery connector is disconnected and stowed. c. The aircraft may only depart on a flight or series of flights for the purpose or returning directly to base where repairs or replacement can be made Maintenance procedure: Put the operational battery in position of main battery (permutation) and the feeder (+) of the optional battery (out of order) on the rest position. Refer to AMM, Work card No. 05-50-01, 6-1 or MET No. 05-53-01-601 according to version.



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ATA 25
Equipment and Furnishings

ATA SYSTEM SEQUENCE NUMBERS & ITEM		1. REPAIR CATEGORY			
		2. NUMBER INSTALLED			
		3. NUMBER REQUIRED FOR DISPATCH			
		4. REMARKS & EXCEPTIONS			
25-Equipment and Furnishings					
1.	Crewmember shoulder harness	B	2	1	One may be inoperative or missing provided the affected seat is not required and not used.
2.	Passenger seat belt or shoulder harness	D	5	0	May be inoperative provided the seat is made unusable and placarded: "DO NOT OCCUPY".
3.	Cargo sling load indicator	D	1	0	May be inoperative provided another accurate means of weighing the slung loads is available.
4.	Emergency Locator Transmitter (ELT)	A	1	0	May be inoperative or missing provided system is deactivated, and flight is conducted for return to base.
5.	Emergency floatation equipment	D	1	0	Must be operative when conducting flight over water operation
6.	Survival equipment	D	1	0	The aircraft may only depart inhabited area
7.	First aid kit	A	1	0	May be incomplete for flight is conducted for return to base.
8.	Lifejackets	D	7	0	One life jacket for each person, must be worn when conducting flight over water operation.



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ATA 26
Fire Protection

ATA SYSTEM SEQUENCE NUMBERS & ITEM		1. REPAIR CATEGORY			
		2. NUMBER INSTALLED			
		3. NUMBER REQUIRED FOR DISPATCH			
		4. REMARKS & EXCEPTIONS			
26-Fire Protection					
1.	Portable fire extinguisher	A	1	0	<p>(M) Any in excess of those required May be inoperative or missing provided:</p> <ul style="list-style-type: none">a. Inoperative fire extinguisher is tagged inoperative, removed from installed location, and placed out of sight so it cannot be mistaken for a functional unit, andb. Required distribution is maintainedc. The aircraft may only depart on a flight or series of flight for the purpose of returning directly to base where repairs or replacement can be made <p>Maintenance procedure: Identified the inoperative extinguisher and placed it out of sight of the crew or the passengers</p>



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ATA 28
Fuel System

ATA SYSTEM SEQUENCE NUMBERS & ITEM		1. REPAIR CATEGORY			
		2. NUMBER INSTALLED			
		3. NUMBER REQUIRED FOR DISPATCH			
		4. REMARKS & EXCEPTIONS			
28-Fuel System					
1.	Fuel content indication	B	1	0	May be inoperative provided: a) The low fuel level warning light (Item 2) is operative, b) The aircraft does takeoff with the maximum quantity of fuel. c) Flight duration not more than 1 hour 50 min.
2.	Low fuel level warning light “FUEL” (“COMB”)	B	1	0	May be inoperative provided: a) The fuel content indication (Item 1) is operative, b) The aircraft does takeoff with the maximum quantity of fuel. c) Flight duration not more than 1 hour 50 min.
3.	Fuel flow meter	D	1	0	May be inoperative.



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ATA 30
Ice and Rain Protection

ATA SYSTEM SEQUENCE NUMBERS & ITEM		1. REPAIR CATEGORY				
		2. NUMBER INSTALLED				
		3. NUMBER REQUIRED FOR DISPATCH				
		4. REMARKS & EXCEPTIONS				
30-Ice and Rain Protection						
1.	Pitot heating system	C	1	0	May be inoperative for VFR flight provided: a) OAT > +5°C (41°F), b) There is no visible moisture.	
2.	Pitot head heating warning light "PITOT"	C	1	0	(M) May be inoperative for VFR flight provided heater is verified to be operative prior to each flight. <u>Maintenance procedure:</u> Before each flight, check the Pitot heating. Refer to AMM, Work card No. 05-50-01, 6-1 or MET No. 05-53-01-601 according to version.	
		C	1	0	OR May be inoperative for VFR flight provided: a) OAT > +5°C (41°F), b) There is no visible moisture.	



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ATA 31
Indicator and Recording Systems

ATA SYSTEM SEQUENCE NUMBERS & ITEM		1. REPAIR CATEGORY			
		2. NUMBER INSTALLED			
		3. NUMBER REQUIRED FOR DISPATCH			
		4. REMARKS & EXCEPTIONS			
31-Indicator and Recording Systems					
1.	Clocks	C	1	0	May be inoperative provided pilot assigned has a operative watch
2.	VEMD screens	B	2	1	(O) One may be inoperative provided the Flight Manual Section 3 procedures (VEMD screens failure) are respected. Operation Procedure: - Failure of one screen [OFF1] or [OFF2] OFF Read all available information on the other screen. Informations are available using the [SCROLL] pushbutton either on the VEMD or on the collective grip. If the top screen fails, the 3-parameters engine page will be automatically displayed on the lower screen. - Failure of both screens To avoid any power overlimit, the maximum authorized power will be the power needed to establish level flight with the following law: IAS kt = 100 kt at 0 Hp - (2 kt / 1000 ft). IAS km/h = 185 km/h at 0 Hp - (4 km/h per 300 m). LAND AS SOON AS PRACTICABLE Landing procedure: carry out a no hover landing. NR is constant at 394 rpm.



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ATA 33
Lights

ATA SYSTEM SEQUENCE NUMBERS & ITEM		1. REPAIR CATEGORY			
		2. NUMBER INSTALLED			
		3. NUMBER REQUIRED FOR DISPATCH			
		4. REMARKS & EXCEPTIONS			
33-Lights					
1.	Navigation/position lights	C	3	0	One or more may be inoperative for daytime VMC operations.
2.	Anti-collision lights Daylight operations	B	1	0	May be inoperative,
3.	Landing light	C	1	0	May be inoperative provided an adjustable landing light is installed and operative, OR May be inoperative for day operations only.
4.	Cockpit / instrument panel / flight compartment lighting and Instrument lighting system	C	8	0	One or more may be inoperative for day operations, OR
		C	8	4	Individual lights may be inoperative provided: a) Sufficient lighting is operative to make each required instrument, control, and other device for which it is provided easily readable, b) Sufficient flight deck emergency lighting is operative, c) Lighting configuration at dispatch is acceptable to the flight crew, OR
		C	8	4	Co-pilot station instrument lights may be inoperative for single pilot operations, provided no co-pilot station instrument is required to be used by the pilot.
5.	Cabin lighting system	C	4	0	May be inoperative for day operations.
6.	Cockpit utility light	C	1	0	May be inoperative for day operations. OR
		C	1	0	May be inoperative for night-time VMC flight provided: a) All instrument panel instrument lighting



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ATA 33
Lights

ATA SYSTEM SEQUENCE NUMBERS & ITEM		1. REPAIR CATEGORY			
		2. NUMBER INSTALLED			
		3. NUMBER REQUIRED FOR DISPATCH			
		4. REMARKS & EXCEPTIONS			
33-Lights					
					a) is operative, b) One torch per flight crew is readily available and operative.



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ATA 34
Navigation

ATA SYSTEM SEQUENCE NUMBERS & ITEM		1. REPAIR CATEGORY			
		2. NUMBER INSTALLED			
		3. NUMBER REQUIRED FOR DISPATCH			
		4. REMARKS & EXCEPTIONS			
34-Navigation					
1.	Airspeed Indicators	D	2	1	Any in excess of one may be inoperative provided the operative airspeed indicator is on the handling pilot's side.
2.	OAT indicator	C	1	0	May be inoperative provided another air temperature indicator is operative that is convertible to OAT.
3.	Altimeters	C	2	1	Any in excess of one may be inoperative provided: a) Flight is conducted over routes navigated by reference to visual landmarks, b) The operative altimeter is on the handling pilot's side.
4.	Slip indicator	C	1	0	Slip indicator may be inoperative provided another indicator operative convertible to slip indicator.
5.	Vertical Speed Indicators	B	1	0	May be inoperative provided the flight is conducted by day another VFR over routes navigated by reference to visual landmark.
6.	Gyroscopic rate of turn indicator	C	1	0	May be inoperative provided procedures do not require its use.
7.	Navigation system (VOR, ILS)	D	2	0	May be inoperative provided GPS operative.
8.	Standby magnetic compass	B	1	0	May be inoperative provided the stabilized direction indicator is operative, and another source of magnetic heading information is available.
9.	Global Positioning System (GPS)	D	1	0	May be inoperative
10.	G500H magnetometer sensor (GMU44)	A	1	0	May be inoperative for a maximum of 5 flights provided that operational regulations do not require its use, and if: a) Flight is conducted by day under VFR, b) Flight is not conducted over water out of sight of land or with a visibility less than 1 500 m, c) Standby magnetic compass is operative and used.
11.	GSU75 Air Data Attitude and Heading Reference System (ADAHRS) sensor	A	1	0	May be inoperative for a maximum of 5 flights provided that operational regulations do not require its use, and if: a) Flight is conducted by day under VFR



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ATA 34
Navigation

ATA SYSTEM SEQUENCE NUMBERS & ITEM		1. REPAIR CATEGORY			
		2. NUMBER INSTALLED			
		3. NUMBER REQUIRED FOR DISPATCH			
		4. REMARKS & EXCEPTIONS			
34-Navigation					
					<p>condition over routes navigated by reference to visual landmarks,</p> <p>b) Backup anemometer is installed and operative,</p> <p>c) Backup altimeter is installed and operative,</p> <p>d) Backup attitude instrument is installed and operative,</p> <p>e) Another temperature indicator is operative and convertible to OAT,</p> <p>f) Standby magnetic compass is operative and used.</p> <p>NOTE: If the GSU75 sensor is inoperative, the following data will not be available:</p> <ul style="list-style-type: none">– Attitude/Horizon data, - Air speed,– OAT,– HSI,– Altitude and pressure settings,– Vertical speed,– Heading,– SVT.
12.	GDU620 Primary Flight Display (PFD)	A	1	0	<p>May be inoperative for a maximum of 5 flights provided that operational regulations do not require its use, and if:</p> <p>a) Flight is conducted by day under VFR condition over routes navigated by reference to visual landmarks,</p> <p>b) Backup anemometer is installed and operative,</p> <p>c) Backup altimeter is installed and operative,</p> <p>d) Backup attitude instrument is installed and operative,</p> <p>e) Another temperature indicator is operative and convertible to OAT,</p> <p>f) Another clock indicator is operative,</p> <p>g) Standby magnetic compass is operative and used.</p> <p>NOTE:</p>



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ATA 34
Navigation

ATA SYSTEM SEQUENCE NUMBERS & ITEM		1. REPAIR CATEGORY			
		2. NUMBER INSTALLED			
		3. NUMBER REQUIRED FOR DISPATCH			
		4. REMARKS & EXCEPTIONS			
34-Navigation					
					<p>If the PFD is inoperative (black screen), the following primary flight data will not be available:</p> <ul style="list-style-type: none">– Attitude/Horizon data,– Air speed,– Wind,– OAT,– HSI,– Ground speed,– Altitude and pressure settings,– Vertical speed,– Heading,– Navigation source data,– SVT,– RA (if configured),– Time.
13.	GDU620 Mission and Navigation Multi-Function Display (MFD)	B	1	0	<p>May be inoperative for VFR flight.</p> <p>NOTE:</p> <p>In case of MFD failure following navigation data will not be available:</p> <ul style="list-style-type: none">– Maps,– Database navigation (airports, obstacles, VOR beacons, DME beacons, ...),– Geographic data (border, cities, ...).



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ATA 46
Information Systems

ATA SYSTEM SEQUENCE NUMBERS & ITEM		1. REPAIR CATEGORY			
		2. NUMBER INSTALLED			
		3. NUMBER REQUIRED FOR DISPATCH			
		4. REMARKS & EXCEPTIONS			
46-Information Systems					
1.	Synthetic Vision Technology (SVT) on GDU620	D	1	0	May be inoperative.



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ATA 52
Doors

ATA SYSTEM SEQUENCE NUMBERS & ITEM		1. REPAIR CATEGORY			
		2. NUMBER INSTALLED			
		3. NUMBER REQUIRED FOR DISPATCH			
		4. REMARKS & EXCEPTIONS			
52-Doors					
1.	Door warning system	C	1	0	May be inoperative provided doors closing and latching have been checked by the crew before take-off.



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ATA 63
Main Rotor Drive

ATA SYSTEM SEQUENCE NUMBERS & ITEM		1. REPAIR CATEGORY			
		2. NUMBER INSTALLED			
		3. NUMBER REQUIRED FOR DISPATCH			
		4. REMARKS & EXCEPTIONS			
63-Main Rotor Drive					
1.	Rotor brake system	C	1	0	(M) (O) May be inoperative provided: a) The rotor brake lever remains in released position, b) A check is performed to determine the rotor brake disk is free, c) For rotor stopping aircraft should be directed with a headwind below 30 kt, d) Wait full rotor shutdown before leaving the aircraft. <u>Maintenance procedure:</u> Maintenance inspection determines that the rotor brake disc is free when the rotor brake is released, Refer to AMM, Work card No. 05-50-01, 6-1 or MET No. 05-53-01-601 according to version. <u>Operational procedure:</u> – Headwind below 30 kt, – Main rotor blades are immobilized before leaving the aircraft.
2.	Main gear box chip detection warning light	C	1	0	(M) May be inoperative provided the magnetic plug is checked and without particles before first flight of the day. <u>Maintenance procedure:</u> Check for no particles on magnetic plug. Refer to AMM, Work card No. 05-50-01, 6-1 or MET No. 05-53-01-601 according to version.



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ATA 65
Tail Rotor Drive

ATA SYSTEM SEQUENCE NUMBERS & ITEM		1. REPAIR CATEGORY			
		2. NUMBER INSTALLED			
		3. NUMBER REQUIRED FOR DISPATCH			
		4. REMARKS & EXCEPTIONS			
65-Tail Rotor Drive					
1.	Tail gear box chip detection warning light	C	1	0	(M) May be inoperative provided the magnetic plug is checked and without particles before first flight of the day. <u>Maintenance procedure:</u> Check for no particles on magnetic plug. Refer to AMM, Work card No. 05-50-01, 6-1 or MET No. 05-53-01-601 according to version.



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ATA 72
Engine

ATA SYSTEM SEQUENCE NUMBERS & ITEM		1. REPAIR CATEGORY			
		2. NUMBER INSTALLED			
		3. NUMBER REQUIRED FOR DISPATCH			
		4. REMARKS & EXCEPTIONS			
72-Engine					
1.	Engine Data Recorder (EDR) (Aircraft equipped with engine Arriel 2D)	A	1	0	(O) May be inoperative for two hundred (200) hours flight. <u>Operational procedure:</u> The engine cycles and usage have to be reported manually in the engine logbook.



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ATA 77
Engine Indicating

ATA SYSTEM SEQUENCE NUMBERS & ITEM		1. REPAIR CATEGORY			
		2. NUMBER INSTALLED			
		3. NUMBER REQUIRED FOR DISPATCH			
		4. REMARKS & EXCEPTIONS			
77-Engine Indicating					
1.	NF / N2 indication	A	1	0	(O) May be inoperative provided: a) The Flight Manual Section 3 procedures (Nf* indication failure) are respected, b) The aircraft may only depart on a flight or series of flights for the purpose of returning directly to a base where repairs or replacements can be made. <u>Operational procedures:</u> Respect the procedure (Nf* indication failure) Section 3 of the flight manual. <u>NOTE:</u> (*) Nf or N2 according to versions.