AIRBUS HELICOPTER EC120B

9M-HFA

MASS AND BALANCE REPORT

IMPORTANT NOTE

This report is to be place at the front of the section 6 of the flight manual

This report contains Mass and Balance Report

This Mass and Balance Report is prepared MYCAS, approved by CAAM and can be used for flight operation.

The superseded report shall be removed from the flight manual prior to insert the latest Mass and Balance Report.

The information contained herein supersedes the information given in the previous Mass and Balance Report.

The effectivity of the report at the latest revision is specified on the List of Effective Pages

	NAME AND SIGNATURE	DATE	DESIGNATION
PREPARED	MOHD FIRDAUS ZAMHURY	17/07/2021	TECHNICAL SERVICE ENGINEER
VERIFIED	SYED ANSAR MOHAMED KALIK	17/07/2021	TECHNICAL SERVICE MANAGER
APPROVED BY	SYED ANSAR MOHAMED KALIK	17/07/2021	WEIGHING ENGINEER

GENERAL DATA / INFORMATION	
Reference	: MYCAS/MBR/1487/07/21 Rev 0
Produced By	: Mycopter Aviation Services Sdn. Bhd.
Aircraft Designation	: Airbus Helicopter EC120B
Registration Number	: 9M- HFA
Aircraft Manufacturer	: Airbus Helicopter
Aircraft Serial Number	:1487
Aircraft Operator	:Helang Flying Academy
CAAM CAMO Approval Number	: CAMO/2016/03
Mass Limitation-maximum authorised weight in flight *Ref: Flight Manual EC120B , Rev 7 pg 2-2*	: 1715 kg
Mass Limitation-minimum authorised weight in flight *Ref: Flight Manual EC120B , Rev 7 pg 2-2*	: 1035 kg

Centre of Gravity Limits

For Longitudinal Forward and Aft CG Limit at various gross weight, refer CAAM approved flight manual Section 2.2 (Weight and Balance Limitation)

Lateral Left Hand Limit: 0.09 m

Lateral Right Hand Limit: 0.08 m

Ref: Flight Manual EC120B , Rev 12 pg 2-3

Datum Reference

Longitudinal datum is located 4.00 m, forward of main rotor head centre line

Lateral datum is the aircraft symmetry plane.

Ref: Flight Manual EC120B , Rev 7 pg 2-2

Note

The Mass and Balance Report Ref: MYCAS/MBR/1487/07/21 supersedes all the previous report.

Note

It is the requirement that the Commander of the aircraft is to satisfy himself the load is of such mass and is so distributed and secured, that it may be safety carried in the intended flight.

Note

For the purpose of this report mass is equal to weight

Part A – Empty Mass

The aircraft was weighed on (date)	17/07/2021	
Empty Mass	1150.20 kg	
C.G of the aircraft in the same condition at this weight is	Longitudinal	4.220 m
	Lateral	-0.0077 m
Total moment about the datum in this condition is	Longitudinal	4853.272 kg.m
	Lateral	-8.836 kg.m

The Empty Mass includes the weight of total quantity of unusable fuel, oil and fluids in normal condition and the list of equipment as specified in the Basic Equipment List

Declaration

1. Aircraft 9M-HFA is reweighed due to the schedule of weighing for every 4 years and for application of COA renewal to comply with Malaysia Civil Aviation Regulation (MCAR 2016) Regulation 43 together with Notice and the CAD of Mass and Balance Programme. This Report consist of mass control calculation to determine Empty Mass and the C.G location from datum.

2. Aircraft was weighed at Mycopter Hangar, Subang Airport on 17/07/2021 as a weighing configuration of 5 seaters including flight crew. The aircraft was clean and weighing activity was done in calm weather where there is no rainy and windy condition. Fuel inside of the aircraft is totally drained. All weighing procedure is conducted as per AMM 08-00-00,6-2 Rev 6 Dated:13/04/2020

3. The weighing platform is rotated for the second weighing.

4. Basic Equipment list ***(Ref: MYCAS/MBR/BEL/1487/7/21)***, provide basis of the equipment installed on aircraft and cross checked before weighing activity. This activity is assisted by CAAM LAE Mr Ariff bin Saidi rated EC120B.

5. Weighing platform (Model: OP-902) is in good condition. Certificate of calibration of the weighing platform is due on 13/07/2022.

6. The aircraft was weight together with the skid. Landing gear position for this mass control calculation would not have any effect.

7. Definition of BEW, DOW and Total Loaded Weight for the Mass and Balance Report.

a. Empty Mass (EM)

Empty Mass includes the weight of structure, power plant, furnishing, system and other items of equipment that are considered an integral part of the

35.	WINDSHIELD WIPERS	1	/		/
36.	SAND FILTERS (RP)	1	0	/	/
37.	DUAL FLIGHT CONTROLS (RP)	1	/		/
38.	GROUND POWER RECEPTACLE	1	/		/
39.	2ND BATTERY	1	0	/	/
40.	STOWING INSTALLATION	1	0		/
41.	SLIDING DOOR (LH)	1	/		/
42.	AIR CONDITIONING SYSTEM	1	/		/
43.	EMERGENCY FLOATATION GEAR (FP)	1	/		/
44.	EMERGENCY FLOATATION GEAT (RP)	1	0	/	/
45.	CARGO SLING (FP)	1	0	/	/
46.	CARGO SLING (RP)	1	0	/	/
47.	EXTERNAL ELECTRIC MIRROR (RP)	1	0	/	/
48.	SHORT PROTECTIVE SKID SHOES	1	0	/	/
49.	LONG PROTECTIVE SKID SHOES	1	/		/
50.	SKIIS (RP)	1	0	/	/
51.	ENGINE WASHING INSTALLATION	1	0	/	/
52.	FUEL FLOW METER	1	/		/
G. BALLAST					
53.	BALLAST PLATES IN FENESTRON (FP)	3	/		/
54.	BALLAST PLATES IN FENESTRON (RP) *Remark: These item is part of Empty mass. During weighing. 6 ballast plates need to be removed as required by AMM 08-00-00,6-2. List of items to be added for these plates must be listed*	6	0		/
55.	BALLAST PLATES UNDER THE BATTERY (RP) *Remark: These item is part of Empty mass. During weighing. 4 ballast plates need to be removed as required by AMM 08-00-00,6-2. List of items to be added for these plates must be listed*	4	0		/