

Doc. Ref. No.	GAM/CAMO/MBP
Rev. Date	04/08/2021
Rev. No.	0

**PROCEDURE**

# MASS AND BALANCE PROCEDURE (MBP)

**Organisation** : GALAXY AEROSPACE (M) SDN BHD

**CAMO Approval No** : CAMO/2016/03

**Address** : Suite 11-14, Helicopter Centre,  
Malaysia International Aerospace Centre (MIAC),  
Sultan Abdul Aziz Shah Airport,  
47200 Subang,  
Selangor Darul Ehsan

**Tel No** : +603 7734 7226

**Fax No** : +603 7734 7526

**MBP Reference No** : GAM/CAMO/MBP

**Issue Number** : Issue 1

**Revision Number** : Revision 0

**Date of Issue** : 04<sup>th</sup> August 2021

**Date of Revision** : 04<sup>th</sup> August 2021

**Copy Number** : GAM/MBP/MASTER

**Copy Holder** : Technical Publication- Library GAM CAMO

This document is the property of GALAXY AEROSPACE (M) SDN. BHD. (1040262-D), no part of it shall be reproduced or transmitted to third parties without the express prior written authorization of GALAXY AEROSPACE (M) SDN. BHD. nor shall its contents be disclosed.

Doc. Ref. No.	GAM/CAMO/MBP
Rev. Date	04/08/2021
Rev. No.	0

**PROCEDURE**

**TABLE OF CONTENT**

**TRANSMITTAL LETTER..... 3**

**LIST OF EFFECTIVE PAGES (LOEP) ..... 4**

**DISTRIBUTION LIST..... 6**

**PART 0: INTRODUCTION..... 8**

**0.1 PURPOSE..... 9**

**0.2 SCOPE..... 9**

**0.3 RESPONSIBILITIES ..... 9**

**0.4 REFERENCE ..... 9**

**0.5 GENERAL REQUIREMENTS ..... 9**

**PART 1: WEIGHING ENGINEER ..... 10**

**1.0 RESPONSIBILITIES ..... 11**

**PART 2: MASS AND BALANCE REPORT (MBR)..... 13**

**2.0 MASS AND BALANCE REPORT (MBR)..... 14**

**PART 3: WEIGHING PROCESS ..... 15**

**3.0 WEIGHING PROCESS ..... 16**

**PART 4: WEIGHING EQUIPMENT PROCEDURE ..... 18**

**4.0 WEIGHING EQUIPMENT PROCEDURE ..... 19**

**PART 5: AIRCRAFT WEIGHING PROCESS (BY AIRCRAFT TYPE)..... 20**



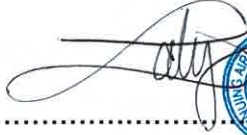



**5.0 PROCEDURES ..... 21**

**PROCEDURE**

Doc. Ref. No.	GAM/CAMO/MBP
Rev. Date	04/08/2021
Rev. No.	0

**TRANSMITTAL LETTER**

The Mass and Balance Procedure Issue 1 Revision 0 dated 04 August 2021 is hereby approved by the Quality Assurance Manager (QAM). The CAM Manager is responsible to ensure that the policies, procedures, and instruction contained in this procedure are adhered to by all personnel employed in the Continuing Airworthiness Management Organisation (CAMO) in the execution of their duties.

<p><b>PREPARED BY:</b></p> <p></p> <p></p> <p>.....</p> <p><b>Date:</b> 04 / 08 / 2021</p> <p>Nur Farhana Binti Othman Weighing Engineer</p>	<p><b>VERIFIED BY:</b></p> <p></p> <p></p> <p>.....</p> <p><b>Date:</b> 04 - 08 - 2021</p> <p>Zaty Nadira Binti Mohamed Zuhari Continuing Airworthiness Management Manager</p>
<p><b>Approved by:</b></p> <p></p> <p></p> <p>.....</p> <p><b>Date:</b> 04 - 08 - 2021</p> <p>Omar Bin Ahmad Quality Assurance Manager</p>	

Doc. Ref. No.	GAM/CAMO/MBP
Rev. Date	04/08/2021
Rev. No.	0

**PROCEDURE**

**LIST OF EFFECTIVE PAGES (LOEP)**

MBP PART	MBP CHAPTER	PAGE NO	REVISION	DATE
0	0.1	10	0	04 August 2021
	0.2	10	0	04 August 2021
	0.3	10	0	04 August 2021
	0.4	10	0	04 August 2021
	0.5	11	0	04 August 2021
1	1.0	14	0	04 August 2021
2	1.0	17	0	04 August 2021
3	1.0	19	0	04 August 2021
4	1.0	21	0	04 August 2021
5	1.0	23	0	04 August 2021

**Continuing Airworthiness Management  
Manager Approval:**



**ZATY NADHIRA BINTI MOHAMED ZUHARI**  
Continuing Airworthiness Management Manager  
Galaxy Aerospace (M) Sdn Bhd  
(1040262-D)

Date: 04-08-2021

**Quality Assurance Manager Approval:**



**OMAR BIN AHMAD**  
Quality Assurance Manager  
Galaxy Aerospace (M) Sdn. Bhd  
(1040262-D)

Date: 04-08-2021

**PROCEDURE**

**RECORD OF REVISIONS:**

Issue No / Date	Revision No	Affected Page(s)	Descriptions of Revision
1: 04/08/2021	0	All	Initial issue

This document is the property of GALAXY AEROSPACE (M) SDN. BHD. (1040262-D), no part of it shall be reproduced or transmitted to third parties without the express prior written authorization of GALAXY AEROSPACE (M) SDN. BHD. nor shall its contents be disclosed.

Doc. Ref. No.	GAM/CAMO/MBP
Rev. Date	04/08/2021
Rev. No.	0

**PROCEDURE**

**DISTRIBUTION LIST**

<b>COPY NUMBER</b>	<b>HOLDER</b>	<b>FORMAT</b>
GAM/MBP/MASTER	TECHNICAL LIBRARY GAM - CAMO	HARDCOPY
GAM/MBP/01	GALAXY AEROSPACE MANAGEMENT SYSTEM PORTAL	SOFTCOPY

Doc. Ref. No.	GAM/CAMO/MBP
Rev. Date	04/08/2021
Rev. No.	0

**PROCEDURE**

**ABBREVIATION**

A/C	Aircraft
AMO	Aircraft Maintenance Organisation
BCAR	British Civil Aviation Requirement
CAAM	Civil Aviation Authority of Malaysia
CAD	Civil Aviation Directive
CAGM	Civil Aviation Guidance Material
CAME	Continuing Airworthiness Management Exposition
CG	Centre of Gravity
CoA	Certificate of Airworthiness
GAM	Galaxy Aerospace (M) Sdn. Bhd
MBR	Mass and Balance Report
MCAR	Malaysia Civil Aviation Regulations
MCGS	Mass and Centre of Gravity Schedule
CAAM/MBP	Mass and Balance Programme
CAMO/MBP	Mass and Balance Procedure
CAMM	Continuing Airworthiness Management Manager
WE	Weighing Engineer
LAE	Licensed Aircraft Engineer
QA	Quality Assurance
QAM	Quality Assurance Manager

**PROCEDURE**

# PART 0: INTRODUCTION



Doc. Ref. No.	GAM/CAMO/MBP
Rev. Date	04/08/2021
Rev. No.	0

**PROCEDURE**

**0.1 PURPOSE**

- a) This Mass and Balance Procedures (GAM/CAMO/MBP) defines the procedures and guidelines for the CAMO personnel managing aircraft mass and balance activities in accordance with the requirements defines in GAM MBP and CAAM CAD 6805.

**0.2 SCOPE**

- a) This section outlines the procedures and guidelines for the accomplishment of aircraft weighing so that the aircraft may be correctly loaded during operation.

**0.3 RESPONSIBILITIES**

- a) All related personnel in CAMO

**0.4 REFERENCE**

No.	Reference	Document Title
[1]	BCAR	Sub-Section A5, Chapter A5-4 Weight and Balance of Aircraft Sub-Section A6, Chapter A6-4 Weight and Balance of Aircraft Sub-Section A7, Chapter A7-10 Weight and Balance Report
[2]	CAD 6805	Civil Aviation Directive 6405- Mass and Balance Programme
[3]	CAGM 6805	Civil Aviation Guidance Material 6405- Mass and Balance Programme
[4]	CAP 562 CAAIP	Airworthiness Procedures Leaflet 1 – 4 ‘Weight and Balance of Aircraft’
[5]	FAA AC 43.13-1B	Chapter 10: Weight and Balance
[6]	CAD 6 Part 3	Mass and Balance
[7]	GAM/CAAM/MBP	Mass and Balance Programme
[8]	GAM/CAAM/CAME	Continuing Airworthiness Management Exposition
[9]	MCAR 2016	Regulation 43 – Aircraft Weight Schedule
[10]	QAN 001	Management of Change

**0.5 GENERAL REQUIREMENTS**

- 0.5.1 Refer to GAM Mass and Balance Programme (GAM/CAAM/MBP) for details requirement.

**PROCEDURE**

# PART 1: WEIGHING ENGINEER

Doc. Ref. No.	GAM/CAMO/MBP
Rev. Date	04/08/2021
Rev. No.	0

**PROCEDURE**

**1.0 RESPONSIBILITIES**

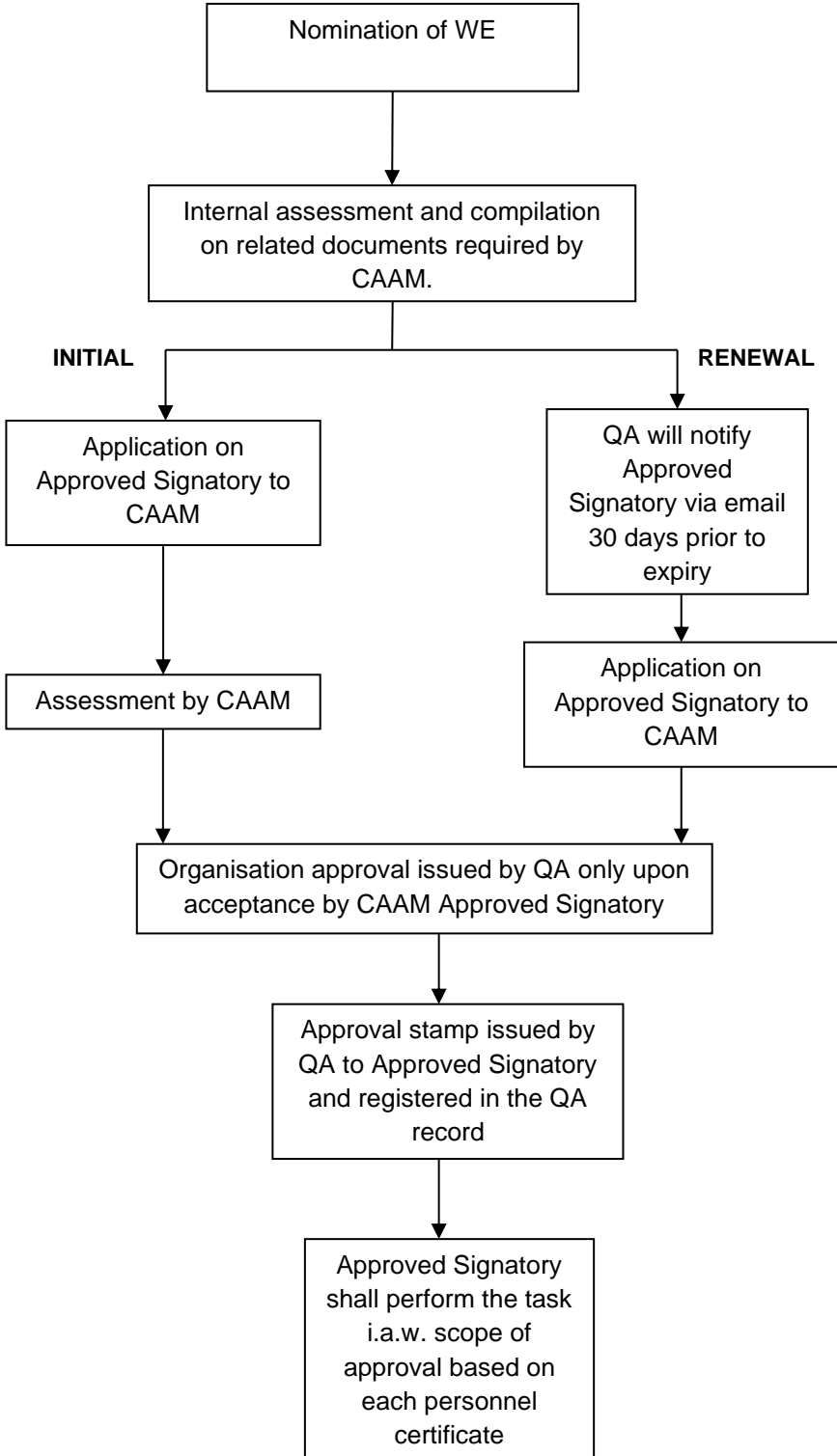
1.1 Aircraft weighing activity shall be supervised by a qualified WE to ensure compliance to the requirements of MBP and it shall be performed by AMO in accordance with CAD 8601 or CAD 8602 as applicable.

1.2 WE is responsible to issue aircraft MBR as applicable.

**1.3 Application /Renewal process of WE as per chart below:**

**PROCEDURE**

1.4 Process Initial and renewal of WE

CHART	REMARKS
 <pre> graph TD     A[Nomination of WE] --&gt; B[Internal assessment and compilation on related documents required by CAAM.]     B --&gt; C[INITIAL]     B --&gt; D[RENEWAL]     C --&gt; E[Application on Approved Signatory to CAAM]     E --&gt; F[Assessment by CAAM]     D --&gt; G[QA will notify Approved Signatory via email 30 days prior to expiry]     G --&gt; H[Application on Approved Signatory to CAAM]     F --&gt; I[Organisation approval issued by QA only upon acceptance by CAAM Approved Signatory]     H --&gt; I     I --&gt; J[Approval stamp issued by QA to Approved Signatory and registered in the QA record]     J --&gt; K[Approved Signatory shall perform the task i.a.w. scope of approval based on each personnel certificate]           </pre>	<ul style="list-style-type: none"> <li>Nomination by QA and CAMM. Refer to GAM/CAAM/MBP Chapter 3.0 – Approved Weighing Engineer.</li> <li>Compilation on related data and assessment by QA on the nominated WE</li> <li>Initial/ Renewal application submitted by QA to CAAM</li> <li>Organisation Approval and stamp approval issued and controlled by QA</li> </ul>

Doc. Ref. No.	GAM/CAMO/MBP
Rev. Date	04/08/2021
Rev. No.	0

**PROCEDURE**

# PART 2: MASS AND BALANCE REPORT (MBR)

Doc. Ref. No.	GAM/CAMO/MBP
Rev. Date	04/08/2021
Rev. No.	0

**PROCEDURE**

**2.0 MASS AND BALANCE REPORT (MBR)**

2.1 MBR shall be issued via form GAM/CAMO-037 and approved by WE.

2.2 In case where,

- (a) The customer request for updating previous MBR, which was prepared and approved by other organisation, the report shall be revised wholly under GAM MBP.
- (b) The aircraft is under maintenance inspection, the weighing activity may be executed, provided that all the required parts/ component are installed in their dedicated location.

Doc. Ref. No.	GAM/CAMO/MBP
Rev. Date	04/08/2021
Rev. No.	0

**PROCEDURE**

# PART 3: WEIGHING PROCESS

Doc. Ref. No.	GAM/CAMO/MBP
Rev. Date	04/08/2021
Rev. No.	0

**PROCEDURE**

**3.0 WEIGHING PROCESS**

3.1 As part of the weighing aircraft preparation, the following tasks shall be performed by qualified personnel via form GAM/CAMO-039 accordingly:

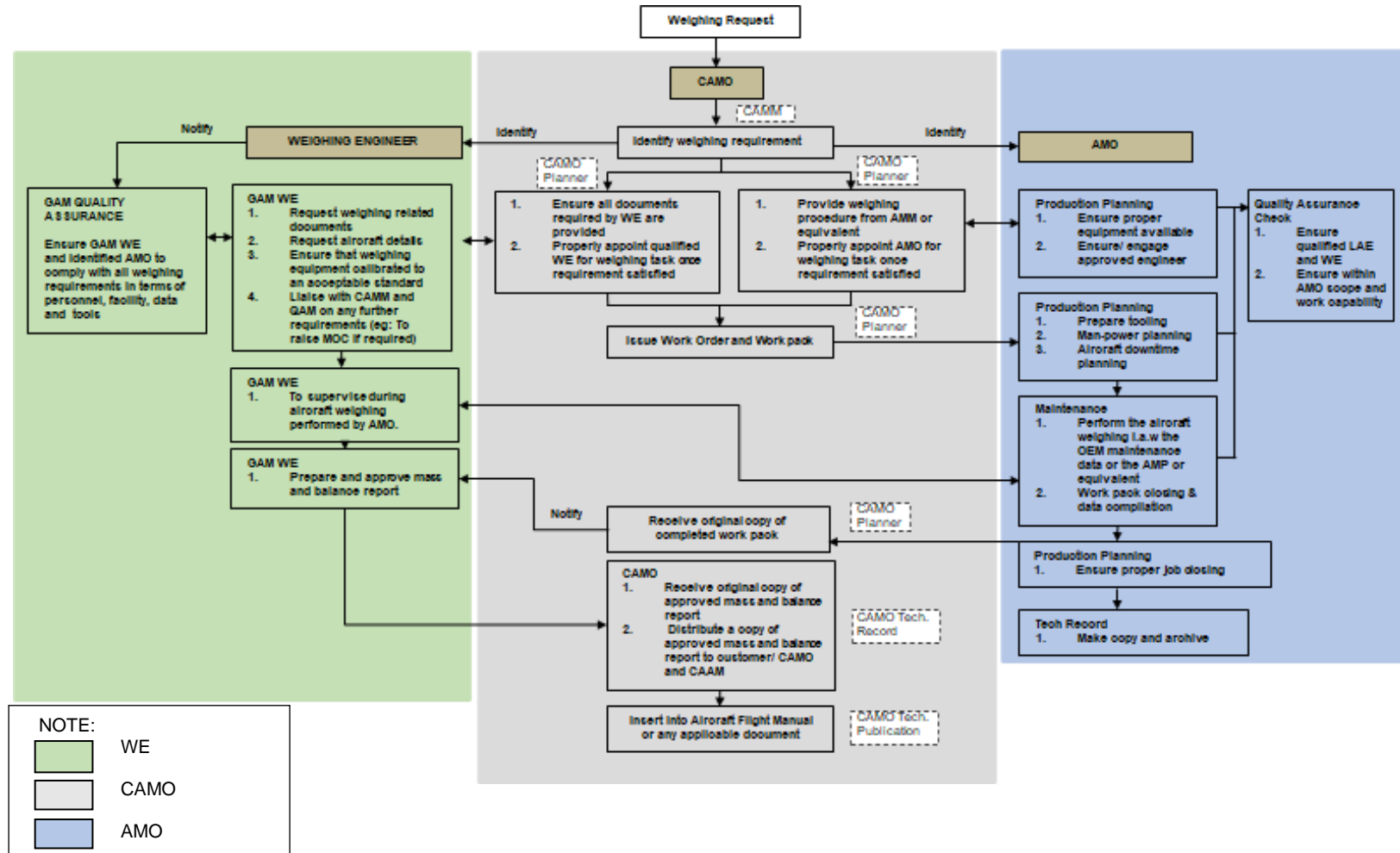
- a. Identification on aircraft details
- b. Identification on reason of Weighing
- c. Identification on related reference publications
- d. Identification on tools and weighing equipment involved
- e. Verification on Equipment list, its quantity, mass and location on aircraft
- f. Supervise the weighing process. It shall be carried out in accordance with instructions and recommendations of the aircraft TC holder and weighing scale manufacturer as applicable. If such data is not available, the CAMO shall be responsible for developing appropriate weighing instructions for its particular aircraft as may be agreed by the CAAM.

3.2 For the Mass and Balance Process Flowchart & Interfaces, refer figure below:



**PROCEDURE**

**MASS AND BALANCE PROCESS FLOWCHART & INTERFACES**



This document is the property of GALAXY AEROSPACE (M) SDN. BHD. (1040262-D), no part of it shall be reproduced or transmitted to third parties without the express prior written authorization of GALAXY AEROSPACE (M) SDN. BHD. nor shall its contents be disclosed.

**PROCEDURE**

# **PART 4: WEIGHING EQUIPMENT PROCEDURE**

Doc. Ref. No.	GAM/CAMO/MBP
Rev. Date	04/08/2021
Rev. No.	0

**PROCEDURE**

**4.0 WEIGHING EQUIPMENT PROCEDURE**

**4.1 M2400 Wireless Weighing Kit:**

Refer Jackson Aircraft Weighing System LLC, Wireless Weighing Instruction M2400 Wireless Laptop Scale System, Year revised 2018 or latest revision for the details procedure.

**4.2 Intercomp AC1-25LP Platform Scale:**

Refer AC1- 25LP Ops/Cal , Revision 1, dated June 2003 or latest approved revision for the details procedure.

**PROCEDURE**

# **PART 5: AIRCRAFT WEIGHING PROCESS (BY AIRCRAFT TYPE)**

**PROCEDURE**

**5.0 PROCEDURES**

5.1 For standard weighing procedure, refer to MBP (GAM/CAAM/MBP) Chapter 2.0

5.2 For specific weighing procedure, refer to appendices of this procedure:

<b>Appendix</b>	<b>Aircraft Type</b>
A	EC120B / H120
B	AS350 / H125
C	AS365 / EC155
D	EC135 / H135
E	AW139
F	AW189
G	A109S / AW109SP
H	A109E
I	A119 / AW119 MKII
J	R44
K	R66
L	AS355
M	S-76C++
N	Bell 429
O	Beechcraft King Air B300
P	Cessna 172
Q	Pilatus PC6
R	Caravan C208
S	Twin Otter
T	Beechcraft King Air B200
U	EC225
V	EC130

Doc. Ref. No	GAM/TS.P01
Rev. Date	01/04/2020
Rev. No	7

**PROCEDURE**

**APPENDIX A**

**A. SPECIFIC WEIGHING PROCEDURE FOR AIRCRAFT EC120B / H120 COLIBRI**

- A.1. Prepare aircraft for weighing per Section 08-00-00 para C.1 – C.12 of AMM.
- A.2. Only, if ballast plates installed more than 3 or ballast plates installed under the battery, remove per Section 53-53-00,4-2 para E.1.b of AMM.
- A.3. Remove rear cargo hold door per Section 52-30-00,4-3 para B.1 of AMM.
- A.4. Lift aircraft on jacks per Section 07-00-00,3-2 para C.1 of AMM.
- A.5. Level aircraft along the line of flight to ensure 0° longitudinally and 0° laterally per Section 08-00-00 para D.1.
- A.6. Weigh aircraft, record measurements and revise calculations per Section 08-00-00 para D.2.
- A.7. Compute the CG and CG correction per Section 08-00-00 para D.3 – 4.
- A.8. Upon completion, lower aircraft on ground per Section 07-00-00,3-2 para C.2 and remove all equipment used from aircraft.
- A.9. Install rear cargo hold door Section 52-30-00,4-3 para B.2 – 4 of AMM.
- A.10. Label the new weight and CG per Section 08-00-00 para D.5 of AMM.

**Reference: EC120B / H120 Electronic Technical Publication (Orion) AMM latest approved revision.**

Doc. Ref. No	GAM/TS.P01
Rev. Date	01/04/2020
Rev. No	7

**PROCEDURE**

**APPENDIX B**

**B. SPECIFIC WEIGHING PROCEDURE FOR AIRCRAFT AS350 / H125 ÉCUREUIL**

- B.1. Prepare aircraft for weighing per Section 08-10-00,3-1 para E of AMM.
- B.2. Install support equipment per Section 08-10-00,3-1 para F.1.a – c of AMM.
- B.3. Lift aircraft on jacks for weighing per Section 07-10-00,3-1 para F.1 of AMM.
- B.4. Set aircraft level laterally and in flight attitude per Section 08-20-00,3-1 para F of AMM.
- B.5. Unlock the lock of the moving plate of each ball anti-stress plate.
- B.6. Record measurements and revise calculations per Section 08-10-00,3-1 para F.1.f – i of AMM.
- B.7. Calculate the CG per Section 08-10-00,3-1 para 2 of AMM.
- B.8. Only, if the CG beyond the envelope, correct the balance per Section 08-10-00,3-2 of AMM.
- B.9. Upon completion, lower aircraft on ground per Section 07-10-00,3-2 para F.2 of AMM and remove all equipment used from aircraft.

**Reference: AS350 / H125 Electronic Technical Publication (Orion) AMM latest approved revision.**

Doc. Ref. No	GAM/TS.P01
Rev. Date	01/04/2020
Rev. No	7

**PROCEDURE**

**APPENDIX C**

**C. SPECIFIC WEIGHING PROCEDURE FOR AIRCRAFT EC155 / H155 / AS365 DAUPHIN**

- C.1. Prepare aircraft for weighing per Section 08-10-00-221 para E.1 – 16 of AMM.
- C.2. Position jacks, weighing equipment, and appropriate adapters under respective jacking points. Ensure that weighing equipment is zeroed.
- C.3. Jack aircraft per Section 07-10-00-581 para F.1 of AMM.
- C.4. Place levelling equipment on aircraft as outlined in Section 08-20-00-821 of AMM.
- C.5. Bleed the fuel tanks through the bleed and drain valves after levelling per Section 08-10-00-221 para E.20.
- C.6. Weigh aircraft, record measurements and revise calculations per Section 08-10-00-221 para F of AMM.
- C.7. Upon completion, lower aircraft on ground per Section 07-10-00-581 para F.2 and remove all equipment used from aircraft.

**Reference: EC155 / H155 / AS365 Electronic Technical Publication (Orion) AMM latest approved revision.**



Doc. Ref. No	GAM/TS.P01
Rev. Date	01/04/2020
Rev. No	7

**PROCEDURE**

**APPENDIX D**

**D. SPECIFIC WEIGHING PROCEDURE FOR EC135 / H135**

- D.1. Prepare aircraft for weighing per Section 08-10-00 of AMM.
- D.2. Position jacks, weighing equipment, and appropriate adapters under respective jacking points. Ensure that weighing equipment is zeroed.
- D.3. Jack aircraft per Section 07-10-00 of AMM.
- D.4. Place levelling equipment on aircraft as outlined in Section 08-20-00 of AMM.
- D.5. Weigh aircraft, record measurements and revise calculations per Section 08-10-00 of AMM.
- D.6. Upon completion, lower aircraft on ground per Section 07-10-00 and remove all equipment used from aircraft.

**Reference: EC135 / H135 Electronic Technical Publication (Orion) AMM latest approved revision.**

Doc. Ref. No	GAM/TS.P01
Rev. Date	01/04/2020
Rev. No	7

**PROCEDURE**

**APPENDIX E**

**E. SPECIFIC WEIGHING PROCEDURE FOR AIRCRAFT AW139**

- E.1. Prepare the aircraft for weighing per Section 39-A-08-31-00-00A-028A-A para 1 of AMM.
- E.2. Install support equipment per Section 39-A-HA-27-00-00A-066A-A of AMM.
- E.3. Lift the aircraft on jacks for weighing per Section 39-A-08-31-00-00A-028A-A para 2 of AMM.
- E.4. Install levelling equipment on aircraft as outlined in Section 39-A-08-21-00-00A-028A-A of AMM.
- E.5. Weigh the aircraft per Section 39-A-08-31-00-00A-028A-A para 3 of AMM.
- E.6. Upon completion, lower aircraft on ground and remove all equipment use from aircraft per Section 39-A-08-31-00-00A-028A-A para 4 and 5 of AMM.

**Reference: AW139 Interactive Electronic Technical Publication (IETP) Pub. No 502500016y latest approved revision.**

Doc. Ref. No	GAM/TS.P01
Rev. Date	01/04/2020
Rev. No	7

**PROCEDURE**

**APPENDIX F**

**F. SPECIFIC WEIGHING PROCEDURE FOR AIRCRAFT AW189**

- F.1. Prepare the aircraft for weighing per Section 89-A-08-31-00-00A-100A-A para 1 of AMM.
- F.2. Install support equipment per Section 89-A-08-31-00-00A-722A-A of AMM .
- F.3. Lift the aircraft on jacks for weighing per Section 89-A-08-31-00-00A-100A-A para 2 of AMM .
- F.4. Install levelling equipment on aircraft as outlined in Section 89-A-08-21-00-00A-100A-A for leveling using plumb bob and clinometer in the cabin or Section 89-A-08-21-00-00A-100B-A for leveling using a clinometer on the anti torque beam on the upper deck of AMM.
- F.5. Weigh the aircraft per Section 89-A-08-31-00-00A-100A-A para 3 of AMM.
- F.6. Upon completion, lower aircraft on ground and remove all equipment use from aircraft per Section 89-A-08-31-00-00A-522A-A of AMM.

**Reference: AW189 Interactive Electronic Technical Publication (IETP) Pub. No 502189009 latest approved revision.**

Doc. Ref. No	GAM/TS.P01
Rev. Date	01/04/2020
Rev. No	7

**PROCEDURE**

**APPENDIX G**

**G. SPECIFIC WEIGHING PROCEDURE FOR AIRCRAFT A109S / AW109SP**

- G.1. Prepare the aircraft for weighing per Section 0B-A-08-31-00-00A-000A-A para 1 to 3 of AMM .
- G.2. Install support equipment per Section 0B-A-08-31-00-00A-000A-A para 4 to 6 of AMM.
- G.3. Lift the aircraft on jacks for weighing per Section 0B-A-07-11-00-00A-000A-A para 1 of AMM.
- G.4. Place levelling equipment on aircraft as outlined in Section 0B-A-08-21-00-00A-000A-A of AMM.
- G.5. Weigh the aircraft, record measurements and revise calculations per Section 0B-A-08-31-00-00A-000A-A para 9 to 10 of AMM.
- G.6. Upon completion, lower aircraft on ground per Section 0B-A-07-11-00-00A-000A-A para 2 and remove all equipment used from aircraft.

**Reference: A109S/AW109SP Interactive Electronic Technical Publication (IETP) Pub. No 502700509 latest approved revision.**

Doc. Ref. No	GAM/TS.P01
Rev. Date	01/04/2020
Rev. No	7

**PROCEDURE**

**APPENDIX H.**

**H. SPECIFIC WEIGHING PROCEDURE FOR AIRCRAFT A109E**

- H.1. Prepare the aircraft for weighing per section of AMM 08-00-00.
- H.2. Position jacks, weighing equipment, and appropriate adapters under respective jacking points as per section 08-10-00. Ensure that weighing equipment is zeroed.
- H.3. Raise aircraft on jacks per section of AMM 07-10-00.
- H.4. Place levelling equipment on aircraft as outlined per section 08-20-02.
- H.5. Weight the aircraft per section 08-30-04 of AMM.
- H.6. Calculate the CG per Section 08-40-00 para B of AMM.
- H.7. Upon completion, lower aircraft on ground per section and remove all equipment used from aircraft.

**Reference: A109E INTERACTIVE ELECTRONIC TECHNICAL PUBLICATION (IETP)  
PUB. NO 502052138Y AMM latest approved revisio**

Doc. Ref. No	GAM/TS.P01
Rev. Date	01/04/2020
Rev. No	7

**PROCEDURE**

**APPENDIX I**

**I. SPECIFIC WEIGHING PROCEDURE FOR AIRCRAFT A119 / AW119 MKII**

- I.1. Prepare the aircraft for weighing per Section 08-30-4 para A and B.1 of AMM.
- I.2. Install levelling equipment on aircraft as outlined in Section 08-20-2 for leveling using spirit level or Section 08-20-3 for leveling using plumb bob of AMM.
- I.3. Install support equipment per Section 08-30-4 para B.3 to B.5 of AMM.
- I.4. Lift aircraft on jacks for weighing per Section 07-10-2 para B of AMM.
- I.5. Weigh aircraft per Section 08-30-4 para B.7 of AMM.
- I.6. Record measurements and revise calculations. Compute weight and CG per Section 08-40-1 of AMM.
- I.7. Upon completion, lower aircraft on ground per Section 07-10-2 para C and remove all equipment used from aircraft.

**Reference: A119/AW119MKII Interactive Electronic Technical Publication (IETP) Pub. No 502305799y latest approved revision.**

Doc. Ref. No	GAM/TS.P01
Rev. Date	01/04/2020
Rev. No	7

**PROCEDURE**

**APPENDIX J**

**J. SPECIFIC WEIGHING PROCEDURE FOR AIRCRAFT R44 ROBINSON**

- J.1. Prepare aircraft for weighing per Section 1.231 para 1 – 7 of AMM.
- J.2. Jack and hoist aircraft per Section 1.220 para 1 – 2 of AMM.
- J.3. Install levelling equipment on aircraft as outlined in Section 1.220 para 3 of AMM.
- J.4. Allow hub to freely teeter per Section 1.231 para 8 of AMM.
- J.5. Record the reading per Section 1.231 para 9 – 14 of AMM.
- J.6. Only, if CG (with full fuel and 150 lb pilot) is greater than 102.5 inches, nose ballast shall be determined per Section 1.231 para 15 of AMM. Revise measurements and calculations per Section 1.231 para 7 – 15.
- J.7. Upon completion, lower aircraft on ground and remove all equipment used from aircraft.

**Reference: R44 Maintenance Manual and Instructions for Continued Airworthiness RTR 460 Volume I latest approved revision.**

Doc. Ref. No	GAM/TS.P01
Rev. Date	01/04/2020
Rev. No	7

**PROCEDURE**

**APPENDIX K**

**K. SPECIFIC WEIGHING PROCEDURE FOR AIRCRAFT R66 ROBINSON**

- K.1. Prepare aircraft for weighing per Section 8–21 of AMM.
- K.2. Position jacks, weighing equipment, and appropriate adapters under respective jacking points. Ensure that weighing equipment is zeroed.
- K.3. Jack aircraft per Section 7–10.A of AMM.
- K.4. Place levelling equipment on aircraft as outlined in Section 8–11 of AMM.
- K.5. Weigh aircraft, record measurements and revise calculations per Section 8–22 of AMM.
- K.6. Only, if calculated CG is not in between range 101.50 and 102.50, adjust ballast per Section 8–22 para 6b – 6e of AMM.
- K.7. Reweigh aircraft and calculate new weight and CG per Section 8–22 until calculated CG between range 101.50 and 102.50.
- K.8. Upon completion, lower aircraft on ground per Section 7–10.B, secure aft tunnel cover and remove all equipment used from aircraft.

**Reference: R66 Maintenance Manual and Instructions for Continued Airworthiness**

**RTR 660 Volume I latest approved revision.**



Doc. Ref. No	GAM/TS.P01
Rev. Date	01/04/2020
Rev. No	7

**PROCEDURE**

**APPENDIX L**

**L. SPECIFIC WEIGHING PROCEDURE FOR AIRCRAFT AS355 TWINSTAR**

- L.1. Prepare aircraft for weighing per Section 08-00-00-603 para F of AMM.
- L.2. Position jacks, weighing equipment, and appropriate adapters under respective jacking points. Ensure that weighing equipment is zeroed.
- L.3. Jack aircraft per Section 07-00-00-301 para F of AMM.
- L.4. Set aircraft level laterally and in flight attitude per Section 08-00-00-601 para E of AMM.
- L.5. Record measurements and revise calculations per Section 08-00-00-603 para G of AMM.
- L.6. Calculate the CG per Section 08-00-00-603 para H of AMM.
- L.7. Only, if the CG beyond the envelope, correct the balance per Section 08-00-00-301 of AMM.
- L.8. Upon completion, lower aircraft on ground per Section 07-00-00-301 para G of AMM and remove all equipment used from aircraft.

**Reference: AS355 Electronic Technical Publication (Orion) latest approved revision.**

Doc. Ref. No	GAM/TS.P01
Rev. Date	01/04/2020
Rev. No	7

**PROCEDURE**

**APPENDIX M**

**M. SPECIFIC WEIGHING PROCEDURE FOR AIRCRAFT SIKORSKY S-76C++**

- M.1. Prepare aircraft for weighing by draining fuel and oils as per Chapter 12 of AMM.
- M.2. Position jacks, weighing equipment, and appropriate adapters under respective jacking points. Ensure that weighing equipment is zeroed.
- M.3. Jack aircraft per Section 7-10-00 of AMM.
- M.4. Place levelling equipment on aircraft as outlined in Section 8-00-00 para 1.A – C of AMM.
- M.5. Weigh aircraft, record measurements and revise calculations per Section 1.D – F of AMM.
- M.6. Upon completion, lower aircraft on ground per Section 7-10-00 and remove all equipment used from aircraft.

**Reference: S-76C Maintenance Manual Doc No. SA 4047-76C-2 latest approved revision**

Doc. Ref. No	GAM/TS.P01
Rev. Date	01/04/2020
Rev. No	7

**PROCEDURE**

**APPENDIX N**

**N. SPECIFIC WEIGHING PROCEDURE FOR AIRCRAFT BELL 429**

- N.1. Prepare aircraft for weighing by draining fuel and oils as per Chapter 12 of AMM.
- N.2. Position jacks, weighing equipment, and appropriate adapters under respective jacking points. Ensure that weighing equipment is zeroed.
- N.3. Jack aircraft per Section 7-10-00 of AMM.
- N.4. Place levelling equipment on aircraft as outlined in Section 8-00-00 para 1.A – C of AMM.
- N.5. Weigh aircraft, record measurements and revise calculations per Section 1.D – F of AMM.
- N.6. Upon completion, lower aircraft on ground per Section 7-10-00 and remove all equipment used from aircraft.

**Reference: BELL 429 Maintenance Manual, DOC NO. PMC-429-97499-02000-00 latest approved revision.**

Doc. Ref. No	GAM/TS.P01
Rev. Date	01/04/2020
Rev. No	7

**PROCEDURE**

**APPENDIX O**

**O. SPECIFIC WEIGHING PROCEDURE FOR AIRCRAFT SUPER KING AIR B300**

- O.1. Prepare aircraft for weighing by draining fuel and oils as per applicable Beechcraft King Air B300 Pilot's Operating Handbook (POH); Section 6- Weight and Balance / Equipment List for weighing instructions.
- O.2. Position jacks, weighing equipment, and appropriate adapters under respective jacking points (if applicable). Ensure that weighing equipment is zeroed.
- O.3. Jack aircraft in a level/ flight attitude as per Section 07-10-05, 201 of AMM.
- O.4. Level the aircraft as outlined in Section 08-20-00, 201 of AMM.
- O.5. The aircraft may also be levelled by inflating or deflating main or nose landing gear struts in combination with inflating or deflating the tires as per Section 8-20-00,201 of AMM.
- O.6. Weigh aircraft, record measurements and revise calculations per Beechcraft King Air B300 Pilot's Operating Handbook (POH); Section 6- Weight and Balance / Equipment List.
- O.7. Upon completion, remove the aircraft from the jacks and return the aircraft to normal flight condition. Remove all equipment used from aircraft.

**Reference: BEEHCRAFT SUPER KING AIR B300/B300C Maintenance Manual DOC NO. 130-590031-11 latest approved revision.**

Doc. Ref. No	GAM/TS.P01
Rev. Date	01/04/2020
Rev. No	7

**PROCEDURE**

**APPENDIX P**

**P. SPECIFIC WEIGHING PROCEDURE FOR AIRCRAFT CESSNA 172**

- S.1. Prepare the aircraft for weighing per section of AMM 8-10-00.
- S.2. Place levelling equipment on aircraft as outlined in section of AMM 8-10-00.
- S.3. Lateral levelling:
  - S.3.1 Find two points that are same on each upper door sill of the left and right cabin doors.
  - S.3.2 Put a level in position across these points.  
Note: Out-of-level tolerance for wing tips is three inches total.
  - S.3.3 Make a note of the aircraft's lateral osition.
  - S.3.4 If applicable, put jacks in position at the wings and tail jacking points.  
Refer to Jacking Maintenance Practices.
- S.4. Longitudinal levelling:
  - S.4.1 Find the two scews on the left side of the aircraft tail cone that are in line with water line zone.
  - S.4.2 Remove the screws.
  - S.4.3 Install studs or long screws of applicable length (approximately two inches long).
  - S.4.4 Put the level in position on the studs or screws.
  - S.4.5 Make a note of the aircraft's longitudinal position.
  - S.4.6 If applicable, put jacks in position at the wings and tail jacking points.  
Refer to Jacking Maintenance Practices.
    - a. Adjust the tail jack as required to get the necessary longitudinal position.
- S.5. Weight aircraft, record measurements and revise calculation per section of AMM.
- S.6. Upon completion, lower aircraft on ground per section and remove all equipment used from aircraft.

**Reference : CESSNA MODEL 172S (SERIES 1996 AND ON) AMM latest approved revision.**

Doc. Ref. No	GAM/TS.P01
Rev. Date	01/04/2020
Rev. No	7

**PROCEDURE**

**APPENDIX Q**

**Q. SPECIFIC WEIGHING PROCEDURE FOR AICRAFT PILATUS PC6**

- Q.1. Prepare the aircraft for weighing per section of AMM 08-00-00.
- Q.2. Position jacks, weighing equipment, and appropriate adapters under respective jacking points as per section 08-10-00. Ensure that weighing equipment is zeroed.
- Q.3. Raise aircraft on jacks per section of AMM 07-10-00.
- Q.4. Place levelling equipment on aircraft as outlined per section 08-20-00 para 2 of AMM.
- Q.5. Weight the aircraft per section 08-10-00 para 4.A and para 4.B of AMM.
- Q.6. Calculate the CG per Section 08-10-00 para 4.C. 1-2 of AMM.
- Q.7. Upon completion, lower aircraft on ground per section and remove all equipment used from aircraft.

**Reference : PILATUS PC-6 B2-H2/B2-H4 DOC. NO.01975 AMM latest revision.**

Doc. Ref. No	GAM/TS.P01
Rev. Date	01/04/2020
Rev. No	7

**PROCEDURE**

**APPENDIX R**

**R. SPECIFIC WEIGHING PROCEDURE FOR AIRCRAFT CARAVAN C208**

- R.1. Prepare the aircraft for weighing per section of AMM 8-00-00-0.
- R.2. Position jacks and weighing equipment and appropriate adapters under respective jacking points. Ensure that weighing equipment is zeroed.
- R.3. Place levelling equipment on aircraft as outlined in section of AMM 8-20-00-2.
  - BB.3.1 Longitudinal levelling using fuselage levelling points:
    - 1. Remove screws at longitudinal levelling points located on left side of fuselage.
    - 2. Obtain two screws of sufficient length to provide resting points for level.
    - 3. Install screws at longitudinal levelling points on fuselage.
    - 4. Position a spirit level on screws.
    - 5. Observe level.
    - 6. To level aircraft longitudinally, deflate nose gear tire to properly center bubble in level.
  - BB.3.2 Longitudinal levelling using pilot's seat rails:
    - 1. Move pilot's seat to the most forward position.
    - 2. Place level on top of (and parallel to) seat rail, just aft of pilot's seat.
    - 3. Observe level.
    - 4. To level aircraft longitudinally, deflate nose gear tire to properly center bubble in level.
  - BB.3.3 Lateral levelling:
    - 1. Place a spirit level directly on seat rails just aft of crew doors, removing carpet if necessary.
    - 2. Observe level.
    - 3. To level aircraft laterally, deflate main gear tire to properly center bubble in level.
- R.4. Weight aircraft, record measurements and revise calculations per section of AMM.
- R.5. Upon completion, lower the aircraft on ground per section and remove all equipment used from the aircraft.

Doc. Ref. No	GAM/TS.P01
Rev. Date	01/04/2020
Rev. No	7

**PROCEDURE**

**APPENDIX S**

**S. SPECIFIC WEIGHING PROCEDURE FOR AIRCRAFT TWIN OTTER DHC-5  
SERIES 300.**

- S.1. Prepare the aircraft for weighing per section of AMM 8-00-00.
- S.2. Place levelling equipment on aircraft as outlined in section of AMM 8-00-00.
- S.3. Weight aircraft, record measurements and revise calculation per section of AMM.
- S.4. Upon completion, lower aircraft on ground per section and remove all equipment used from aircraft.

**Reference : CESSNA MODEL 172S (SERIES 1996 AND ON) PSM-1-63-2 AMM latest approved revision**



Doc. Ref. No	GAM/TS.P01
Rev. Date	01/04/2020
Rev. No	7

**PROCEDURE**

**APPENDIX T**

**T. SPECIFIC WEIGHING PROCEDURE FOR AIRCRAFT BEECHCRAFT KING AIR 200**

- T.1. Prepare aircraft for weighing by draining fuel and oils as per applicable Beechcraft King Air B200 Pilot's Operating Handbook (POH); Section 6- Weight and Balance / Equipment List for weighing instructions.
- T.2. Position jacks, weighing equipment, and appropriate adapters under respective jacking points (if applicable). Ensure that weighing equipment is zeroed.
- T.3. Jack aircraft in a level/ flight attitude as per Section 07-10-05 of AMM.
- T.4. Level the aircraft as outlined in Section 08-20-00 of AMM.
- T.5. The aircraft may also be levelled by inflating or deflating main or nose landing gear struts in combination with inflating or deflating the tires as per Section 8-20-00 of AMM.
- T.6. Weigh aircraft, record measurements and revise calculations per Beechcraft King Air B300 Pilot's Operating Handbook (POH); Section 6- Weight and Balance / Equipment List.
- T.7. Upon completion, remove the aircraft from the jacks and return the aircraft to normal flight condition. Remove all equipment used from aircraft.

**Reference: BEECHCRAFT SUPER KING AIR B200 Maintenance Manual DOC. REF.:101-590010-19**

Doc. Ref. No	GAM/TS.P01
Rev. Date	01/04/2020
Rev. No	7

**PROCEDURE**

**APPENDIX U**

**U. SPECIFIC WEIGHING PROCEDURE FOR AIRCRAFT EC225**

- U.1. Prepare aircraft for weighing per Section 08-10-00 of AMM.
- U.2. Position jacks, weighing equipment, and appropriate adapters under respective jacking points. Ensure that weighing equipment is zeroed.
- U.3. Jack aircraft per Section 07-10-00 of AMM.
- U.4. Place levelling equipment on aircraft as outlined in Section 08-20-00 of AMM.
- U.5. Weigh aircraft, record measurements and revise calculations per Section 08-10-00 of AMM.
- U.6. Upon completion, lower aircraft on ground per Section 07-10-00 and remove all equipment used from aircraft.

**Reference: H225 Electronic Technical Publication (Orion)**

Doc. Ref. No	GAM/TS.P01
Rev. Date	01/04/2020
Rev. No	7

**PROCEDURE**

**APPENDIX V**

**V. SPECIFIC WEIGHING PROCEDURE FOR AIRCRAFT EC225**

- V.1. Prepare aircraft for weighing per Section 08-10-00 of AMM.
- V.2. Position jacks, weighing equipment, and appropriate adapters under respective jacking points. Ensure that weighing equipment is zeroed.
- V.3. Jack aircraft per Section 07-10-00 of AMM.
- V.4. Place levelling equipment on aircraft as outlined in Section 08-20-00 of AMM.
- V.5. Weigh aircraft, record measurements and revise calculations per Section 08-10-00 of AMM.
- V.6. Upon completion, lower aircraft on ground per Section 07-10-00 and remove all equipment used from aircraft.

**Reference: H130 Electronic Technical Publication (Orion)**