

WORKSHOP CAPABILITY PROCEDURE FOR TRUE BLUE POWER LITHIUM-ION AIRCRAFT BATTERY

GAM/WCP/PART 2.1.6

AMENDMENT - INITIAL

OWNER:

GALAXY AEROSPACE SDN. BHD

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PART 1.2 AMENDMENT RECORD

Each amendment of this document will be accompanied by a letter of transmittal showing the pages to be removed and those to be inserted. All pages will show the date of issue which can be cross checked with the list of effective pages to ensure it's current.

Date of Amendment	Amdt. No.	Details of Amendment
09/02/2024	Initial	Initial issue of GAM/WCP/PART 2.1.6

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PART 1.3 LIST OF EFFECTIVE PAGES

Latest Amendment Number: Initial

Date: 09/02/2024

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1.2	1	Initial	09/02/2024				
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maintenance.repair.overhaul

WORKSHOP CAPABILITY PROCEDURE

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PART 1.5 INTRODUCTION

1.5.1 Introduction

- a. This Workshop Capability Procedure is to address how GAM manages its' True Blue Power Lithium-ion Aircraft Battery workshop capabilities and activities and supporting MOE 2.9 Repair Procedure and Workshop Procedures Manual.
- b. GAM can now offer its expertise and MRO services to all carriers operating with True Blue Power Lithium-ion Aircraft Battery. The offer includes maintenance of battery for charging and capacity testing.
- c. This Workshop Capability Procedure covers GAM Capability, processes and certification within GAM Workshop Approval/System.

1.5.2 Reference

- a. MCAR 2016
- b. FAR Part 43.
- c. FAR Part 145.
- d. CAAM Civil Aviation Directives CAD 8708.
- e. FAA Order 8130.21H.
- f. GAM Maintenance Organisation Exposition GAM/MOE.
- g. GAM Repair Station and Quality Control Manual (RSQCM).
- h. GAM Workshop Procedure Manual GAM/WMP
- i. True Blue Power TB14 Series and TB28-12V Series Advanced Lithium-Ion Battery Installation Manual and Operating Instructions, Manual Number 9019706.
- j. True Blue Power TB17 Series Advanced Lithium-Ion Battery Installation Manual and Operating Instructions, Manual Number 9018047.
- k. True Blue Power Gen5 TB20 Series Advanced Lithium-Ion Battery Installation Manual and Operating Instructions, Manual Number 9019286.
- I. True Blue Power Gen5 TB30 Series Advanced Lithium-Ion Battery Installation Manual and Operating Instructions, Manual Number 9019287.
- m. True Blue Power Gen5 TB40 Series Advanced Lithium-Ion Battery Installation Manual and Operating Instructions, Manual Number 9019288.

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PART 1.6 REGISTER OF ISSUED MOC

Item	MOC Number	Significant Y/N	Rev. no.	Dated
01	GAM/MOC/24/0013	Y	Initial	09/02/2024

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PART 1.7 DESCRIPTION, SCOPE AND MODEL OF COMPONENT UNDER WORKSHOP CAPABILITY

1.7.1 Description

a. This section details GAM capability to perform maintenance checks and service to the specified True Blue Power Lithium-ion Aircraft Battery.

1.7.2 Scope of Capability

- a. Maintenance for workshop capability to be carried out by GAM for True Blue Power Lithium-ion Aircraft Battery are as per follows:
 - i. Charging
 - ii. Capacity Check

1.7.3 Model of Component under Workshop Capability

MODEL				
Advance Lithium-ion Aircraft Battery				
True Blue Power Model	True Blue Power Part Number	Rated Capacity C1 (Ah)		
TD14	6430014-2	13		
IB14	6430014-21	13		
	6430017-1			
TD17	6430017-2	17		
IDI/	6430017-3	17		
	6430017-4			
	6430014-1	26		
1020-120	6430014-11	26		

MODEL					
Gen5 Advance Lithium-ion Aircraft Battery					
True Blue Power Model	True Blue Power Part Number	Rated Capacity C1 (Ah)			
Gen5 TB20	6430020-1	20			
Conf TP20	6430030-1	30			
Geno TB30	6430030-2	30			
Conf TR40	6430040-1	40			
Gen5 TB40	6430040-2	40			

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PART 1.8 LIST OF APPROVED MAINTENANCE DATA

1.8.1 Minimum Requirement of Approved Manuals

Model	Manuals
TB14 and TB28-12V	True Blue Power TB14 Series and TB28-12V Advanced Lithium-Ion Battery Installation Manual and Operating Instructions, Manual Number 9019706 Latest Revision.
TB17	True Blue Power TB17 Series Advanced Lithium-Ion Battery Installation Manual and Operating Instructions, Manual Number 9018047 Latest Revision.
Gen5 TB20	True Blue Power Gen5 TB20 Series Advanced Lithium-Ion Battery Installation Manual and Operating Instructions, Manual Number 9019286 Latest Revision.
Gen5 TB30	True Blue Power Gen5 TB30 Series Advanced Lithium-Ion Battery Installation Manual and Operating Instructions, Manual Number 9019287 Latest Revision.
Gen5 TB40	True Blue Power Gen5 TB40 Series Advanced Lithium-Ion Battery Installation Manual and Operating Instructions, Manual Number 9019288 Latest Revision.

Note: Refer to <u>https://www.truebluepowerusa.com/</u> for the latest True Blue Power Lithium-ion Aircraft Battery, Technical Drawing, Service Bulletins and Safety Data Sheet.

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PART 1.9 EQUIPMENT, TOOL and CONSUMABLE REQUIREMENT

1.9.1 List of Equipment and Tool Requirement

		USA	AGE
DESIGNATION	CHARACTERISTIC	CHARGING	CAPACITY CHECK
Battery Charger and Discharger	Constant Current Load Bank Range 0 – 50 ADC Constant Voltage Charging Range 0 – 30.0 VDC	x	x
Digital Multimeter	Commercially available	X	x
Standard Mechanic's Tools	Commercially available	x	x

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PART 1.10 APPROVED FACILITY

1.10.1 Minimum Requirement of Facility

1.10.1.1 Lithium-ion Battery Workshop

Battery			
Type of Maintenance	Requirements		
	No special requirements except for the environment should be well-ventilated at the temperature of $23^{\circ}C \pm 3^{\circ}C$ (68-79°F).		
Charging and Capacity Check	According to the True Blue Power Lithium-Ion Battery Installation Manual and Operating Instructions section 1.5.3 Additional Precautions, "There are no limitations in storing or using this battery in the vicinity of other battery chemistries. This battery does not absorb any gas during storage, transportation or during normal operating conditions".		

1.10.2 Approved Facility for the Maintenance

- a. GAM has identified Lead-Acid Battery Room under Avionics Workshop at the Galaxy Aerospace (M) Sdn Bhd Operation Centre (GAM OC) as the Specific Approved Facility for all maintenance activities of True Blue Power Lithium-ion Aircraft Battery.
- b. Lead-Acid Battery Room is equipped with sufficient lighting, air conditioned, wall mounted ventilation fan, workbench, workstation and a laptop computer, internet connection, fire extinguisher, fire escape plan, INCOMING, HOLDING, OUTGOING and QUARANTINE area.
- c. As there are no special requirements called for by the OEM except for minor requirements on charging and discharge testing types of maintenance, it has been decided that any maintenance facility that can meet with the requirement are considered suitable for carrying out the maintenance work on the battery.
- d. List of approved maintenance facilities for the purpose of this capability are tabled below:

1.10.2.1 True Blue Power Lithium-ion Aircraft Battery

Type of Maintenance	Requirements
Charging and Capacity Check	 a. Specific Approved Facility at GAM OC. Lead Acid Battery Room Galaxy Aerospace (M) Sdn Bhd. Suite 11-14, Helicopter Centre, Malaysia International Aerospace Centre, Sultan Abdul Aziz Shah Airport, 47200 Subang, Selangor, Malaysia. b. Any GAM approved maintenance facility that can comply to the minimum facility requirement in para. 1.10.1.1, 1.10.2 (c) and approved by CAAM and FAA.

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GalaxyAerospace

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		Emergency Ligh
	\boxtimes	Smoke Detector
		Shutter
-		Sliding door
	<u>├───</u> {	Window
		First Aid Kit
		Sink
	$\overline{\Theta}$	Ventilation Fan

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PART 1.11 CERTIFYING PERSONNEL

1.11.1 Requirement for Certifying Personnel (WMP Part 1.7.5)

- a. For aircraft requirement is a B2 Company Approval Holder on type.
- b. For a Company Approval Holder on Category W1.3; Component C5 on True Blue Power Lithium-ion Aircraft Battery.

1.11.2 Minimum Qualification for Company Approval

a. As laid down in MOE Part 3.4.

1.11.3 Assessment on Certifying Personnel

a. Certifying Personnel are subjected to Technical Competency Assessment i.a.w MOE Part 3.4.

1.11.4 List of Company Approval Holders

a. List of Current Approval Holders of Component W1.3 on True Blue Power Lithium-ion Battery are listed as table below.

Scope Group	Approval Holders
a.I	B2 Category Approval Holder on type Approval Holder as listed in GAM/Q-001 (List of Approval Holder) and GAM/Q- 053 (Roster of Supervisory and Certifying Personnel) of the latest revision.
a.ll	B2 and W1 Category Approval Holder as listed in GAM/Q- 001 (List of Approval Holder) and GAM/Q-053 (Roster of Supervisory and Certifying Personnel) of the latest revision.

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PART 1.12 TRAINING REQUIREMENT

1.12.1 Initial/Recurrent Training

a. Training as required by MOE Part 3.4 and RSQCM Chapter 4.8.

1.12.2 Specific Training

a. Online Lithium-ion aircraft battery training provided directly from True Blue Power website for Certifying Personnel to perform the maintenance.

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