DESIGN AUTHORIZATION DATA SHEET Nº ERPAS-7950475

Authorization Holder:

XMOBOTS AEROESPACIAL E DEFESA LTDA
Rodovia Washington Luiz, S/N, KM 226 + 738 m
São Carlos/SP
CEP: 13571-291
Brazil

This data sheet, which is part of Design Authorization Process nº 00066.010521/2020-62, prescribes conditions and limitations under which the product, for which the Design Authorization was issued, meets the requirements of the Brazilian Special Aeronautical Regulation RBAC-E nº 94, Amdt. 00, Subpart E.

I - Model NAURU 500C, approved in November 2022.

RPAS	This is a Remotely Piloted Aircraft System (RPAS) that is comprised of the Remote Piloted Aircraft (RPA), a Remote Pilot Station (RPS), and other support equipment.

RPA

Type:	Monoplane fixed-high wing aeroplane, normally aspirated engine pusher configuration, skid landing gear and electrical vertical takeoff and landing system.
Wingspan:	3,64 m (11,94 ft).
Length:	1,86 m (6,10 ft).
Height:	0,73 m (2,4 ft).
Empty weight:	18,5 kg (40,78 lb).
MTOW:	25 kg (55,11 lb).
Maximum payload weight:	2 kg (4,4 lb).
Maximum operating altitude:	1.886 m (6.187 ft).

Airspeed limits:

V_{MAX} (See NOTE 5)	36 m/s (70 KIAS).
V_{MIN} (See NOTE 5)	18,9 m/s (36,7 KIAS).
$V_{NOMINAL}$ (See NOTE 5)	25 m/s (48,6 KIAS).

C2 LINK (RPA)

XMobots NAURU 60X5000 Air Data Terminal (ADT).
PN: 8500060.
ANATEL Homologation Certificate: 16586-22-02497.
Demonstrated C2 range: 60 km (32,4 NM) from Ground Data Terminal (GDT).

RPS

XMobots Hard Lock Keys for GCS operation PN: 8000153.
Type: Ground Control Station software for flight planning (XPlanner) and flight execution (XCockpit).

Flight planning:
Manufacturer: XMobots.
Model: XPlanner.
Flight execution:

Manufacturer: XMobots.
Model: XCockpit.
RPS software version: 304.13.0 or later.

C2 LINK (RPS)   XMobots GDT 60X5000 Ground Data Terminal (GDT).
PN: 3200706.
ANATEL Homologation Certificate: 16587-22-02497.

SUPPORT EQUIPMENT   A VHF radio communicator (aeronautical band) is required for flights above 122 m (400 ft).

FLIGHT LIMITATIONS   1. Diurnal and nocturnal operations in visual meteorological conditions (VMC), segregated airspace.
2. Visual Line of Sight (VLOS) up to 2 km (1.08 NM) from PIC or observer and Extended Visual Line of Sight (EVLOS) up to 5 km (2.7 NM) from PIC with the use of observers.
3. Beyond visual line of sight (BVLOS) up to 60 km (32,4 NM) from GDT.
4. Operation is permitted in non-urban areas.
5. The safety for urban operations has not been demonstrated.
6. Simultaneous operation of multiple RPA by a single remote pilot is prohibited.
7. Navigation lights system not compliant under TSO C-30 specifications.

SERIAL NUMBERS APPROVED   15 and following.

AUTHORIZATION BASIS   Brazilian Special Aeronautical Regulation RBAC-E n° 94, Amdt. 00, Subpart E, dated 2 May 2017.

MANUALS   1. System Flight Manual (SFM) No. ReD-CER-FW25-SFM_ Rev. A2.0-20221121 or later
2. Maintenance and Inspection Manual (MIM) No. ReD-CER-FW25-MIM Rev. A0.0-20221121 or later

II - <u>Model NAURU 500ISR, approved in March 2023.</u>

RPAS   This is a Remotely Piloted Aircraft System (RPAS) that is comprised of the Remote Piloted Aircraft (RPA), a Remote Pilot Station (RPS), and other support equipment.

RPA

Type:	Monoplane fixed-high wing aeroplane, normally aspirated engine pusher configuration, skid landing gear and electrical vertical takeoff and landing system.
Wingspan:	3,64 m (11,94 ft).
Length:	1,86 m (6,10 ft).
Height:	0,73 m (2,4 ft).
Empty weight:	18,5 kg (40,78 lb).
MTOW:	25 kg (55,11 lb).
Maximum payload weight:	2 kg (4,4 lb).
Maximum operating altitude:	1.886 m (6.187 ft).

Airspeed limits:

V_{MAX} (See NOTE 5)	36 m/s (70 KIAS).
V_{MIN} (See NOTE 5)	18,9 m/s (36,7 KIAS).
$V_{NOMINAL}$ (See NOTE 5)	25 m/s (48,6 KIAS).

C2 LINK (RPA)   XMobots NAURU 60X5000 Air Data Terminal (ADT).
PN: 8500060.
ANATEL Homologation Certificate: 16586-22-02497.
Demonstrated C2 range: 60 km (32,4 NM) from Ground Data Terminal (GDT).

RPS

XMobots Hard Lock Keys for GCS operation PN: 8000153.
Type: Ground Control Station software for flight planning (XPlanner) and flight execution (XCockpit).

> Flight planning:
> Manufacturer: XMobots.
> Model: XPlanner.
> Flight execution:
> Manufacturer: XMobots.
> Model: XCockpit.
> RPS software version: 304.13.0 or later.

Available as part of shelter in towed (PN 8610070) and van (PN 8610071) versions.

C2 LINK (RPS)

XMobots GDT 60X5000 Ground Data Terminal (GDT).
PN: 3200706.
ANATEL Homologation Certificate: 16587-22-02497.

SUPPORT EQUIPMENT

A VHF radio communicator (aeronautical band) is required for flights above 122 m (400 ft).

FLIGHT LIMITATIONS

1. Diurnal and nocturnal operations in visual meteorological conditions (VMC), segregated airspace.
2. Visual Line Of Sight (VLOS) up to 2 km (1.08 NM) from PIC or observer and Extended Visual Line Of Sight (EVLOS) up to 5 km (2.7 NM) from PIC with the use of observers.
3. Beyond visual line of sight (BVLOS) up to 60 km (32,4 NM) from GDT.
4. Operation is permitted in non-urban areas.
5. The safety for urban operations has not been demonstrated.
6. Simultaneous operation of multiple RPA by a single remote pilot is prohibited.
7. Navigation lights system not compliant under TSO C-30 specifications.

SERIAL NUMBERS APPROVED

15 and following.

AUTHORIZATION BASIS

Brazilian Special Aeronautical Regulation RBAC-E nº 94, Amdt. 00, Subpart E, dated 2 May 2017.

MANUALS

1. System Flight Manual (SFM) No. ReD-CER-FW25-SFM Rev. A3.0 or later.
2. Maintenance and Inspection Manual (MIM) No. ReD-CER-FW25-MIM Rev. A0.0-20221121 or later
3. Shelter Maintenance and Inspection Manual (SMIM) No. ReD-CER-FW25-SMIM_A0.0 or later.

CHANGE RECORDS

Revision	Changes	Date
Rev. 00	Original Issue	29 November 2022
Rev. 01	New model (Nauru 500 ISR) added	07 March 2023
Rev. 02	Navigation lights (Nauru 500C and 500 ISR) added	30 May 2024