Form
I.1.

Mutual Aid Box Alarm Systems
Unmanned Aircraft Systems Program (UAS)

In-Service Report

OVERVIEW

This document gathers information required by the MABAS Illinois to ensure the safe and effective operation and function of MABAS owned UAS assets, and ensure that all UAS are airworthy and maintained in a manner that ensures their ability to be immediately available for deployment in the event of a callout.

SCOPE AND INTENT

This report was developed with the intention of documenting and ensuring that UAS assets are maintained in an airworthy and deployable manner, and to identify and mitigate potential maintenance issues that may effect asset and fleet readiness. While this document does not need to be routinely submitted to MABAS, return to service records may be requested to investigate the cause of an equipment malfunction of the UAS asset.

WHEN REPORTING IS REQUIRED

The Remote Pilot in Command of the UAS returning from deployment shall ensure this report is completed Immediately upon returning a MABAS Owned UAS asset to service after any deployment or use, regardless of whether the UAS has been flown during the deployment or use.

WHEN REPORTING IS RECOMMENDED, BUT NOT REQUIRED

Reporting is not required when returning any UAS to service that is not a wholly owned MABAS asset. However, MABAS strongly recommends that agencies operating divisionally or locally owned UAS file this report after each return-to-service inspection to document the airworthiness of their UAS assets, identify potential maintenance issues, and limit liability.

DIRECTIONS

1. Complete the following form immediately upon returning a UAS to service.
2. Maintain a copy of the completed form in the aircraft log.
3. After 90 days from the date of completion, this form may be removed from the log and stored digitally.
4. Retain a copy of this form (digital or hardcopy) for 12 months from the date of completion.

GENERAL INFORMATION

Date	Time	Aircraft Identifier
RPIC Name		Aircraft Registration Number
RPIC Certification Number		Division No.
Sponsoring Agency		Contact Phone

AIRCRAFT RECORDS INSPECTION

Verify the following:

	Yes	No
Aircraft Registration Current?	☐	☐
Any abnormal operating conditions or previous damage reported?	☐	☐
Any recalls, directives, safety bulletins, or warnings from the UAS manufacturer?	☐	☐
Consumable parts within manufacturer's specified interval?	☐	☐

Describe any deficiencies: (If applicable).

AIRCRAFT VISUAL INSPECTION

Verify no cracking, chipping, bending, punctures, heat damage, or any unusual wear, other than cosmetic blemishes on superficial components present on any of the following items:

	Yes	No
UAS airframe	☐	☐
UAS powertrain (verify smooth action of motors)	☐	☐
UAS payloads	☐	☐
Flight control station	☐	☐
Rotors/aerodynamic components	☐	☐
Batteries	☐	☐
Ancillary equipment necessary for operation (anti-collision lights and other accessories)	☐	☐
Aircraft is clean and free of contamination	☐	☐

UAS FIRMWARE / SOFTWARE INSPECTION

Verify the following:

	Yes	No
Aircraft firmware up to date?	☐	☐
Flight control station firmware up to date?	☐	☐
Battery firmware up to date?	☐	☐
Supporting ground control station firmware up to date?	☐	☐

Describe any deficiencies: (If applicable).

UAS FLIGHT TEST

Verify the following:

	Yes	No
Geo-fencing unlocks applied as required	☐	☐
Sensor payloads functional in all ranges of motion	☐	☐
Data recording and telemetry operable	☐	☐
No errors or warnings present on instruments	☐	☐
Motors spin freely, no unusual sounds	☐	☐
Flight controls free, consistent and correct	☐	☐
All flight modes functional, operate as expected	☐	☐
Automated emergency procedures function as expected	☐	☐

Describe any deficiencies: (If applicable).

RETURN TO SERVICE DETERMINATION

What steps should be taken to prevent this deviation from occurring in the future?

	Yes	No
Based on the above, is the aircraft in an airworthy and deployment ready condition?	☐	☐

If no, describe what corrective action must be taken to return the aircraft to an airworthy condition.

ATTESTATION

I the undersigned, as Pilot in Command of the aircraft during the aforementioned flight, have read and understand the above form, and verify the above information is true and correct to the best of my knowledge and ability. I understand that the above information may be submitted to the Federal Aviation Administration in the event of an investigation into the cause of any related incident or violation. I understand the intent of this report is to ensure MABAS UAS airworthiness MABAS UAS operations.

_____ _____

Print Name Date

_____

Signature