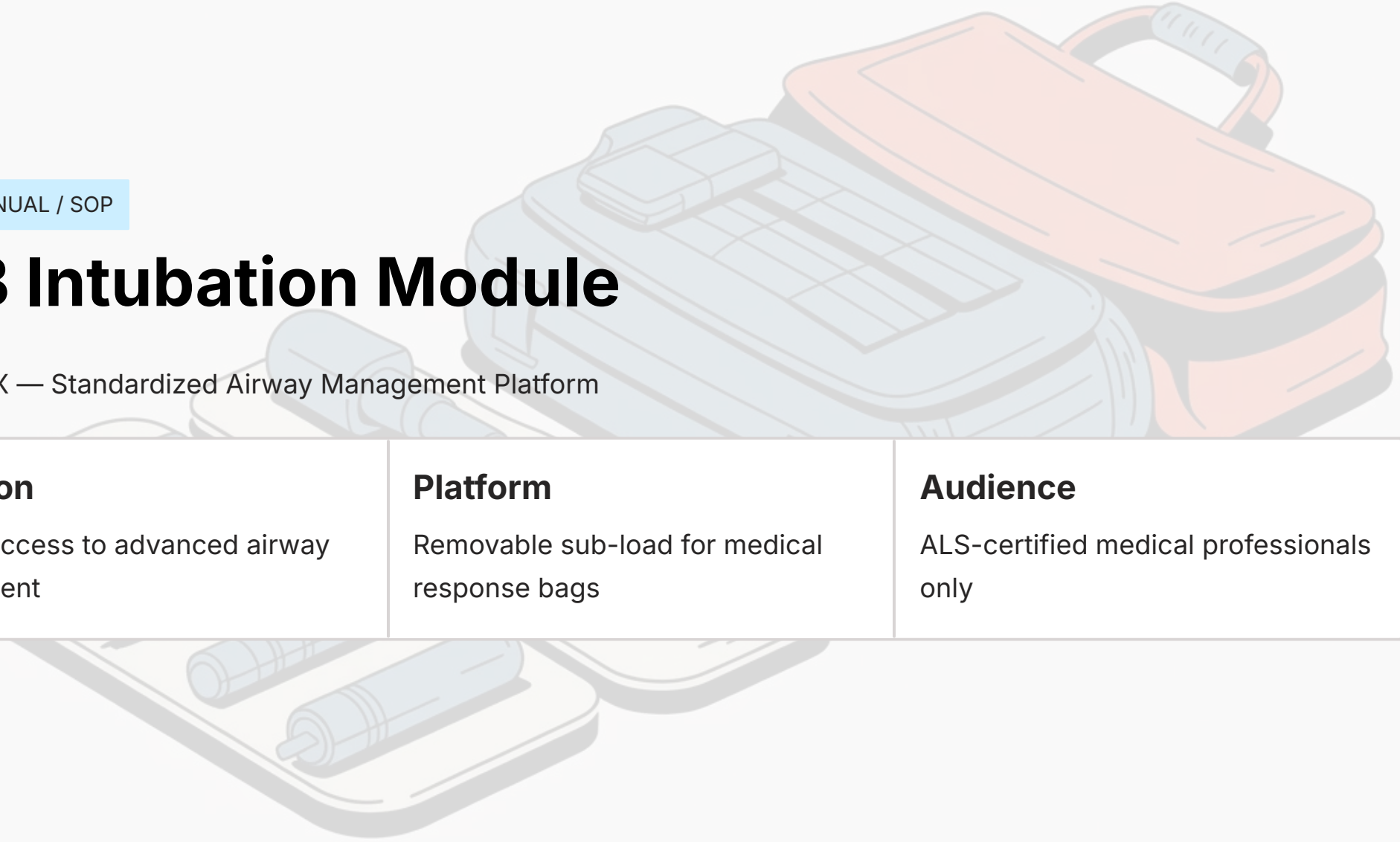
FIELD MANUAL / SOP

R&B Intubation Module

RB-S400X — Standardized Airway Management Platform



Mission	Platform	Audience
Rapid access to advanced airway equipment	Removable sub-load for medical response bags	ALS-certified medical professionals only

SECTION 1 — MISSION BRIEF

Doctrine, Purpose & Intended Use

1.1 Doctrine & Purpose

The RB-S400X is a **non-medical, organizational platform** designed to contain, protect, and provide rapid access to advanced airway management equipment. It functions as a standardized, removable sub-load within a larger medical response bag, trauma pack, or crash cart.

Its core objective is to **reduce cognitive load** on the operator and decrease time-to-intervention during high-stress airway emergencies by pre-organizing all necessary tools into a predictable, muscle-memory-based layout.

1.2 Intended User Profile

This module is intended exclusively for **trained and certified medical professionals** operating within their scope of practice:

- Paramedics
- Flight Nurses / Flight Medics
- Critical Care Technicians
- Physicians
- Other Advanced Life Support (ALS) providers

1.3 Operational Context

Designed for **pre-hospital, tactical, and in-hospital emergency settings** — removed from a primary pack and staged at the patient's head to create a dedicated, organized workspace for ET intubation, RSI, or supraglottic airway placement.

SECTION 2 — EQUIPMENT FAMILIARIZATION

External Chassis & Construction

1000D Cordura® Nylon Fabric

Forms the module's exterior shell. Provides high resistance to **abrasion, punctures, and fluid penetration**, protecting sensitive and sterile airway instruments from environmental damage during transport and deployment.

High-Visibility Color (Red / Royal Blue)

Functions as a **tactical identifier** — allows immediate visual acquisition of the dedicated airway kit from within a larger, potentially cluttered primary medical bag, directly reducing search time during a critical incident.

#8 YKK Zipper & Slides

The primary access mechanism. The large, durable zipper is engineered for **reliable, snag-free operation with gloved hands**, ensuring rapid and unobstructed entry to module contents under stress.

Physical Specifications: **14" L × 9.5" W × 3" H.** These dimensions define the module's carrying capacity and footprint. Operators must develop a standardized load plan that does not over-stuff the module, which could impede zipper function or damage contents.

SECTION 2 — EQUIPMENT FAMILIARIZATION

Internal Organization System

Integrated Elastic Loops

Loops are **sized for specific airway components**, designed to anchor:

- Laryngoscope handles
- Macintosh / Miller blades
- Endotracheal (ET) tubes
- Stylets and bougies

This prevents shifting during transit and presents tools in a **consistent, predictable layout** upon opening — critical for muscle-memory retrieval under stress.

Slot Pockets

Flat pockets intended for **ancillary and packaged supplies**, including:

- Lubricating jelly
- ET tube holders
- End-tidal CO_2 detectors
- Syringes

Segregating smaller items into dedicated pockets **prevents them from becoming lost** beneath larger components during high-pressure interventions.

SECTION 3 — STANDARD OPERATING PROCEDURE

Deployment SOP

Scenario: EMS unit dispatched to an unresponsive adult male in respiratory arrest. Primary paramedic determines need for definitive airway management via endotracheal intubation. Secondary provider is tasked with preparing equipment.

01

Identification & Retrieval

Open the primary medical jump bag. Visually identify the R&B module by its distinct color (e.g., Red = Airway). Retrieve the module and move to the patient's head.

02

Stage the Workspace

Place the closed module on a surface directly **superior to the patient's head**. This minimizes movement for the intubating provider. Ensure the surface is as clean and stable as possible.

03

Module Deployment

Grasp the YKK zipper pulls. Open the module **completely along its three-sided path**. Lay flat — the interior now serves as the direct, pre-organized workspace.

04

Equipment Preparation

Intubating provider calls out sizes (e.g., *"7.5 tube," "Mac 3 blade"*). Retrieve items from designated loops/pockets. Test light, inflate cuff, insert stylet. Pass prepared tools. Keep module open for backup devices.

05

Post-Intervention Recovery

Account for all non-disposable equipment. Secure contaminated disposables in a biohazard container. Wipe down non-disposable equipment per service protocol. **Mark module non-mission-capable** until decontaminated and restocked.

⚠️ SECTION 4 — CRITICAL WARNINGS

Warnings, Limits & Safety

🚨 **SCOPE OF PRACTICE WARNING:** This module is an organizational container for ALS equipment. Intubation and advanced airway management are **high-risk medical interventions** that MUST ONLY be performed by properly trained, certified, and authorized medical professionals acting under direct medical oversight and within their established scope of practice. **Improper use can lead to esophageal intubation, hypoxia, permanent disability, or death.**

⚠️ Not Crush-Proof

The 1000D Cordura construction is durable but **soft-sided**. It will not protect contents from severe impact or crushing forces. Do not store fragile items like glass medication vials without additional protection.

⚠️ Not Waterproof

The Cordura fabric is **water-resistant, but the zipper is not**. Submersion will result in water intrusion. Protect the module from heavy, prolonged rain or submersion in any liquids.

⚠️ Stowage Hazard

If over-filled, internal pressure can cause **zipper failure** or make the module difficult to open during an emergency. Adhere strictly to a tested and standardized load plan at all times.

SECTION 5 — SUSTAINMENT

Readiness, Inspection & Sustainment

Pre-Shift Inspection

- **Visual:** Check exterior for tears, frays, or contamination
- **Elastic Loops:** Verify integrity and elasticity — replace if frayed or loose
- **Hardware:** Operate zipper along full track; confirm both slides are present and functional
- **Inventory:** Verify all contents are present, sealed, and within expiration dates
- **Battery Check:** Confirm function of all battery-operated devices (e.g., laryngoscope)

Load Plan Standardization

All identical modules within an organization **must use the exact same internal layout.** This builds muscle memory and ensures any provider can open any module and immediately locate required equipment without hesitation.

The load plan must be **documented and used for all restocking actions**.

Decontamination Protocol

After any patient contact or contamination, take module **out of service immediately.** Remove all contents. Clean interior and exterior with a service-approved disinfectant. **Air dry completely** before restocking and returning to service.

Restocking Procedure

After every operational use, **fully restock to standardized load plan.** Replace all used disposables. Replace or sterilize all used non-disposables per service protocol. Verify expiration dates and re-check equipment function before returning to **mission-ready status.**