

STANDARD OPERATING PROCEDURE

R&B Medium Forestry Hose Pack

Model M/S-102 — Field SOP & Operator Reference

200 ft

1" single-jacket forestry hose
capacity

1 Operator

Single firefighter deployment
system

5 Sections

Mission · Equipment · SOP · Safety ·
Sustainment

SECTION 1

Mission Brief & Intended Use

The R&B Medium Forestry Hose Pack enables a **single firefighter** to transport and deploy **200 feet of 1-inch single-jacket forestry hose** for progressive hoselays in wildland fire environments.

The pack is designed for terrain inaccessible to standard fire apparatus, serving to:

- Extend initial attack lines beyond apparatus reach
- Support firing operations in remote areas
- Secure control lines where water access is critical but vehicle reach is limited



Core Operational Value

This system mitigates the inefficiency and safety risks of manually carrying loose hose rolls — **freeing the operator's hands** for navigating difficult terrain and carrying essential hand tools such as a Pulaski or McLeod.

SECTION 2

Equipment & Component Familiarization

GROUP 1: Structural & Carry Components

Main Body (22 oz. Vinyl)

Protects hose rolls from abrasion, puncture, moisture, and ember contact during transport through dense brush and rugged terrain. **High-visibility yellow** color aids in equipment accountability on the fireline.

Rigid Sidewalls & Hard Base

Maintains pack shape to prevent collapse, protects hose from crushing impacts, and allows for efficient, rapid reloading. Enables the pack to **stand independently on uneven ground**.

Padded Shoulder Straps

Distributes the load of a fully-loaded pack (**approx. 30–40 lbs** with hose plus water weight) across the shoulders and back. Frees the firefighter's hands for tools and balance on steep gradients.

Top Web Handle

Used for lifting the pack onto and off apparatus, passing it to another operator, or for short-distance repositioning **without fully donning the pack**.

GROUP 2: Hose Management Components

Dual Compartments

Designed to house **two separate 100-foot rolls** of 1" forestry hose for a continuous 200-foot progressive lay.

Removable Internal Divider

Physically separates the two hose rolls. **Critical to prevent tangling or binding**, ensuring a smooth, sequential deployment during the lay.

Top Flap

Secures the hose rolls during transport, preventing them from falling out and protecting them from **falling debris** en route to the deployment point.

Rear Deployment Flap

The **primary functional exit** for the hose. Allows hose to pay out directly from the compartments as the firefighter walks — a self-belaying system that minimizes tangles and kinks.

Standard Operating Procedure — Deployment

Scenario

A Type 6 engine crew has extended a 1.5" attack line to its maximum length engaging a flanking fire in steep, rocky terrain. A spot fire is identified **150 feet upslope**, beyond the current line's reach. A firefighter is tasked with deploying the R&B Hose Pack to extend a 1" lateral line from a wye valve to suppress the spot fire before it can establish itself.

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Phase 1: Pre-Deployment (Loading in Staging)

1. **Inspection:** Inspect pack for tears, frayed stitching, or damaged hardware. Confirm the removable divider is present and secured.
2. **Load Hose 1:** Place first 100-ft roll into one compartment. Female coupling at the bottom, male coupling at the top.
3. **Load Hose 2:** Place second 100-ft roll into adjacent compartment. Same orientation — female at bottom, male at top.
4. **Connect Rolls:** Connect the male coupling of Hose 1 to the female coupling of Hose 2, creating a continuous 200-ft hoselay inside the pack.
5. **Stage Coupling:** Position the final male coupling of Hose 2 at the top of the pack for immediate access.
6. **Secure Pack:** Close and tightly secure the top flap.

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Phase 2: Transport to Deployment Point

1. **Don Pack:** Don using the shoulder straps. Adjust for a snug and balanced fit, seated high on the back.
2. **Advance:** Proceed to the deployment point (e.g., the wye valve at the end of the main hoselay), carrying necessary tools and maintaining full situational awareness.

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Phase 3: Deployment (Progressive Lay)

1. **Position:** Arrive at connection point. Place pack on the ground.
2. **Connect:** Open top flap, retrieve male coupling, and connect securely to the female port on the wye valve. Ensure a solid connection.
3. **Deploy:** Open the rear deployment flap. Confirm the line is clear to be charged.
4. **Advance & Lay:** Signal for water. Begin walking deliberately toward the target. Hose will feed directly from the pack. **Do not run** — this can cause the hose to snag or kink.
5. **Completion:** Once all 200 feet are deployed, the pack will be empty. Let the empty pack drop or quickly un-don it and continue to the nozzle.

SECTION 4

Critical Warnings, Limits & Safety

 **Operational Load**

A fully loaded pack (hose only) weighs approximately **20–25 lbs.** Once charged with water, the static weight of the deployed line increases significantly. Account for physical strain on steep terrain to prevent slips, trips, and falls.

 **Compatibility**

This pack is designed **exclusively for 1" or 1.5" single-jacket, flexible forestry hose.** Attempting to load larger diameter or rigid hose will result in deployment failure.

 **Snag Hazard**

While the pack has a slim profile, it can still snag on dense vegetation or rock outcroppings. **Maintain constant awareness** of your surroundings while moving through the line.

 **Deployment Pace**

Advancing too quickly can cause the hose to bind inside the pack or form kinks behind you. **Maintain a steady, controlled walking pace** for a smooth and continuous lay.

 **Reloading Restriction**

Do NOT attempt to reload the pack in an active fire area or any IDLH (Immediately Dangerous to Life or Health) environment. Reloading must be conducted in a designated safe area, staging, or during re-supply only.

 **Equipment Integrity**

Failure of a shoulder strap or handle under load can result in injury and mission delay. If inspections reveal **compromised stitching or hardware**, immediately remove the pack from service until professionally repaired or replaced.

SECTION 5

Readiness, Inspection & Sustainment



Post-Deployment Cleaning

Empty the pack of all debris (dirt, leaves, ash). Wipe interior and exterior with a damp cloth to remove soot and grime. **Air dry completely** before storing to prevent mildew and material degradation.



Repair Protocol

Minor vinyl punctures may be repaired with a **heavy-duty vinyl patch kit**. Any damage to load-bearing straps or stitching is a **critical failure** — tag the pack and remove it from service for professional repair or disposal.



Pre-Shift Inspection

Before each operational period, conduct a visual and tactile inspection. Check all seams and stitching at load-bearing points. Verify vinyl integrity for punctures or tears. **Function-check all buckles and fasteners.**



Long-Term Storage

Store the clean, dry, and empty pack in a **climate-controlled environment away from direct UV light**, which will degrade the vinyl material and reduce the service life of the pack over time.