

# PRODUCT NEWS

## EFFICIENT PARACHUTE STORAGE

A modular system promotes safety and organization.

**A small, unused building on an Army base was updated to house an Air Force parachute packing and storage operation. The newly renovated facility keeps chutes safe and organized, protecting thousands of jumpers each year.**

### THE DESIGN CHALLENGE

An abandoned building on an Army base was donated to a nearby Air Force Directorate, and the building was renovated to bring it up to modern standards. Although the facility was intended to be used for packing and storing parachutes, there was inadequate space and equipment to fulfill the mission. Airmen were using mats on the floor to keep chutes clean while packing them, and they were stacking the chutes for short-term storage.

The situation needed to change. Although the facility met operational requirements, simply stacking the parachutes was not an option for longer-term storage. Parachutes can become compressed over time when they are stacked, and that could result in an unsafe situation over time. The Staff Sergeant in charge contacted the local Spacesaver representative, who had already designed several storage solutions for their facilities.

### THE SPACE-SAVING SOLUTION

The Spacesaver consultant visited the site to look at the space, evaluate the facility's packing and storage requirements, and start developing a better solution. "The Air Force chutes have specialized storage requirements above and beyond typical Army T-11 chutes," said the Spacesaver consultant. "The RA-1 is an advanced parachute system which includes not only the main chute but also the reserve; it's a complete system. The chute and the reserve are packed in the same bag, which means those bags weigh around 49 pounds each."

While Spacesaver already offered parachute storage racks, the local consultant contacted Spacesaver's engineering team to see if they could develop an even stronger rack that would be sturdy enough to support the heavy bags while still maximizing space in the small building. The engineering team swung into action, designing an improved modular rack system that was even stronger than racks that Spacesaver had previously offered.



Meanwhile, the Spacesaver consultant noted that the facility's parachute packing situation was not ideal; the rubber mats on the floor were keeping the chutes clean but they were not ergonomically sound and could lead to back strain over time. In order to create a more efficient packing facility, he also designed and installed a customized mezzanine and a 40-foot long parachute packing table with shelving, drawers and a laminate top.

When the Spacesaver racks arrived, the staff sergeant in charge had several of them installed inside the large packing room, along with a few outside the room. Now the racks outside the room are for chutes that have been "popped," or opened, and the racks in the packing room are for properly packed chutes that are ready for deployment. This makes it simple for airmen to see at a glance what needs to be done: they grab a chute off the popped racks, bring it into the packing room, pack it, and hang it on the rack. This ensures that all the chutes in the packing room are either already properly packed and hanging up, or they're in the process of being packed.

The new racks also simplify inventory and record-keeping. Regulations specify that packed chutes must be re-packed after a certain amount of time, which varies by parachute model. Some models of un-popped chutes must be re-packed every 120 days, for instance, while others can be stored for a full year. Each bag has a number that matches the parachute packed inside, and log books stored in each bag record the chute's service life and other details. By keeping the chutes organized by type and pack date, staff can easily locate chutes that are due for re-packing.



Spacesaver's parachute racks can be manufactured in a variety of widths and heights, and they can be configured to suit all varieties of parachutes used by the military. The cantilever arms are adjustable vertically on six-inch increments, and the arms can be slid along the horizontal bars for infinite adjustability. "There's a wide variety of parachutes within the military," said the Spacesaver consultant. "Spacesaver's parachute racks are flexible enough to accommodate them all."

Another useful feature is the racks' modularity. Individual sections can be easily relocated around the building as necessary, and they can even be moved to another facility. Larger facilities can mount rows of the racks on Spacesaver high-density storage systems, which move on rails to eliminate wasted space in aisles.

Ultimately, the system fits in perfectly in the military, where needs are constantly evolving. The system can be configured for new uses as missions change, as materials and equipment improve, and as processes become more streamlined.

# PRODUCT NEWS

## PARACHUTE RACKS ON CASTERS

### Portable storage for heavy hanging items

Spacesaver's parachute racks aren't only for parachutes, and they don't have to just sit around. They're designed to be sturdy enough to hold about 90 pounds per "arm," which means they can accommodate a range of parachutes, backpacks, and other gear. They can be set on the floor, installed on compact mobile carriages to save space, or mounted on caster bases for ultimate flexibility.

In the photo at left, parachute racks on caster bases can be moved to packing rooms, loaded up, and then moved to storage or cargo loading areas.



*Spacesaver's parachute racks on casters provide portable storage for parachutes at a military base (at left) and for dive equipment at a military dive school (at right).*

In the photo at right, a U.S. military dive school had been storing valuable scuba diving equipment in bags on the floor. Staff wanted to have convenient access to the bags near the boat loading area, but they also needed to be able to keep the dock area clear when they weren't actively loading or unloading gear.

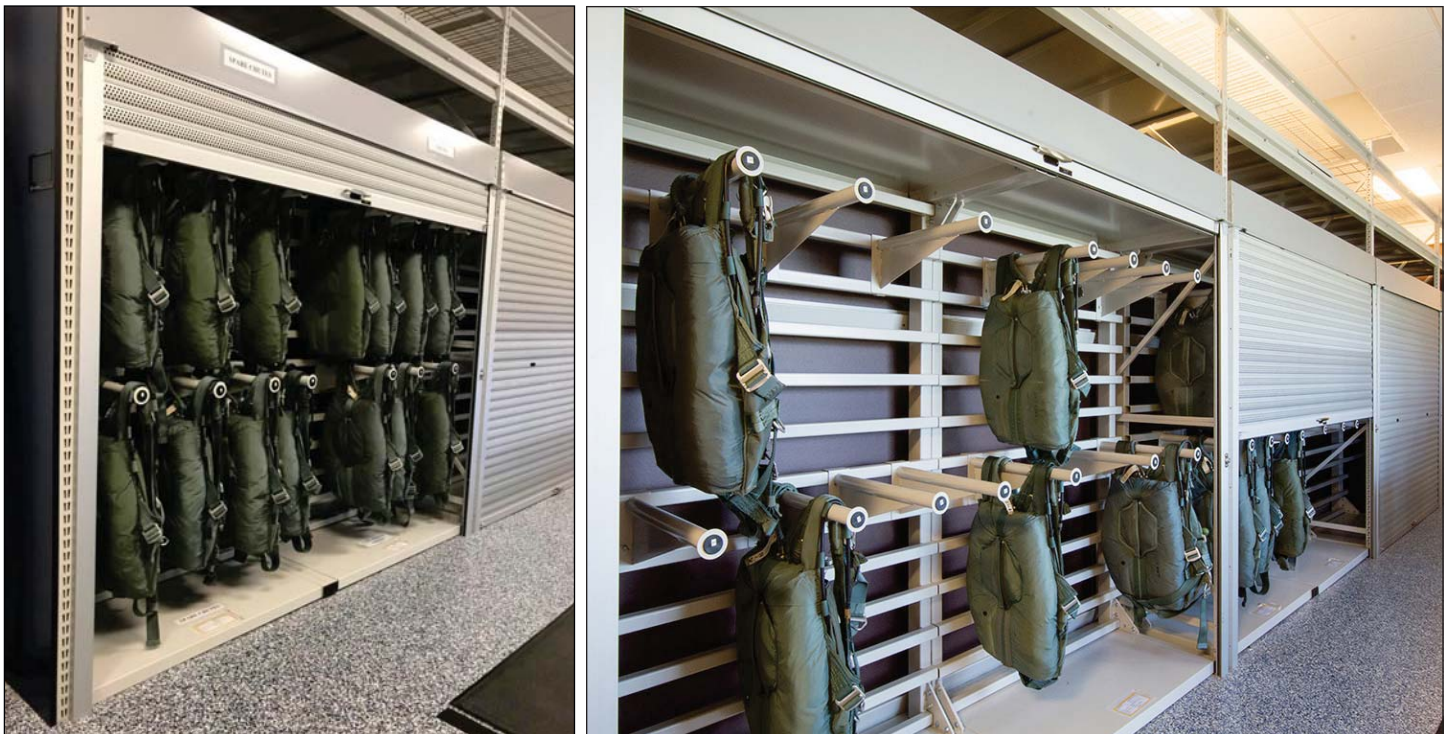
The local Spacesaver consultant suggested using parachute racks, which could easily bear the bags' weight and get them up off the floor. She also suggested mounting the racks on caster bases, which would give the crew the option of moving the equipment bags into the dock area for more efficient loading and unloading, and then simply rolling the racks out of the way afterward.



# PRODUCT NEWS

## PARACHUTE RACKS WITH TAMBOUR DOORS

Optimizing space and security while promoting proper ventilation



Jumpers trust their lives to their gear, so parachutes need to be carefully packed, stored, and secured. Adequate ventilation is a key element of proper chute storage, particularly in humid climates, as moisture build-up can result in the growth of damaging mildew and mold.

The Spacesaver team created a unique solution for parachute storage at Moody Air Force Base in southern Georgia. Along with two large compact mobile systems, static RaptorRAC® Widespan Shelving units were fitted with parachute racks and tambour doors.

The racks:

- Provide optimal storage density and efficiency
- Adjust vertically and horizontally, by hand (no tools needed)
- Are de-burred to prevent snagging and puncturing
- Can be custom sized for any space
- Prevent degradation of stored parachutes (manufactured with non-reactive materials)

The widespan shelving units, in addition to providing ample storage capacity, also provide structural support for locking tambour doors in front of the racks. The doors are perforated to allow for proper ventilation in Georgia's humid climate, and they ensure that the packed chutes stay secure.



# PRODUCT NEWS

## PARACHUTE CONTAINER



While Spacesaver's Parachute Container provides sturdy storage for backpacks and other gear, it was designed specifically for parachute storage in collaboration with the Airborne Division of the Army Quartermaster Company. The container provides ventilation, protection from ground moisture, and enough space to accommodate packed chutes for a plane full of jumpers.

As is often the case with Spacesaver products, the Parachute Container is the result of a series of iterative field tests. Spacesaver's engineering team created a prototype parachute container at the request of a European Air Force Base, and they asked the Airborne Division to test it. The Airborne Division was experiencing its own set of frustrations with parachute storage: they were using heavy-gauge wire baskets to store packed parachutes, and normal wear and tear was causing the baskets' metal wires to bend and break. This resulted in sharp edges and stray wires that could snag the bags or the chutes themselves, and mud and moisture could also seep in through the bottom of the baskets.

After an extensive testing and refinement process, Spacesaver's team developed Parachute Containers in standard and large sizes (see Spacesaver's Parachute Container Info Sheet for detailed information). In both models, the container's 11-gauge steel frame provides strength and rigidity, and 12-gauge steel diamond-perforated panels offer visibility and ventilation. The welded base provides forklift access from all sides. The containers are stackable up to three units high in static applications and, when space is at a premium, they can be used with pallet racking on Spacesaver's ActivRAC® Mobilized Storage System to make optimal use of storage space.

This product is an example of how the Spacesaver team works with clients through concept development and product testing, helping them become the catalysts for their own solutions.

