

# Bringing stripping and painting to the deployment site

**“We’ve never met a plane that couldn’t be stripped,” says Tom Meacham, Vice President of Blast Off Incorporated (Boi).**

This is a rightful claim from Boi as the aircraft services company has one of the most comprehensive lists of services in the coatings removal industry. Boi’s niche, stripping and painting helicopters for the U.S. Army, led to the development of Boi’s newest offering, the Portable Corrosion Control Containment Shelter System (PCCCCSS). Boi was approached by the Navy to develop a portable unit and after recent on-site testing, the PCCCCSS has been approved for use by the U.S. Navy, Marine Corps and Army. “These portable maintenance shelters will enable aircraft to get back in the field quickly,” says Meacham.

The PCCCCSS is comprised of several off-the-shelf pieces of equipment including a tension-fabric containment shelter made of a flame-resistant polyvinyl chloride (PVC) material integrated with a dual-use paint and de-paint ventilation system. The stripping is performed using a Plastic Media Blast (PMB) unit. The PCCCCSS is also outfitted with painting equipment, explosion-proof interior lighting, operator breathing apparatus and other safety equipment. If electrical power and compressed air are not readily available on-site, the PCCCCSS can be equipped with portable generators and air

compressors. The PCCCCSS can be placed indoors or outdoors on a concrete pad. If placed outdoors, the shelter provides cover from direct sunlight and provides a comfortable work environment. The tension-fabric allows enough light to perform the maintenance tasks.

The shelter was designed to house an H-60 helicopter. The dimensions are 60 feet long, 24 feet wide, and 18 feet high. The air wall ventilation system will provide an airflow rate slightly over 100 feet per minute. This amount of ventilation is needed to evacuate dust or paint vapors and to ensure the safety of the personnel and aircraft. The PCCCCSS is transported in three standard 20-foot shipping containers. A four-man crew can erect a helicopter-sized containment in less than three days. The PCCCCSS is outfitted with retractable wheels and when not in use, can be rolled out of the way. After use, the system may be disassembled for storage and moved to another location. Boi will deliver the units to the deployment site and get them operational.

“While the initial PCCCCSS was designed to accommodate an H-60 helicopter, the shelters can be configured to fit any size helicopter and/or any other equipment the Department of Defense wants to maintain,” says Meacham. “The Navy is looking at using the shelters as maintenance facilities for the Navy LCAC hover craft.”



*The PCCCCSS was designed to accommodate H-60 helicopters like this one taking off from the flight deck of the USS WASP. An AV-8B Harrier sits in the background. In the water, a landing craft air-cushion (LCAC) ferries personnel and supplies to the ship. The PCCCCSS is being considered by the Navy as a maintenance facility for LCAC, too. Photo by Lance Cpl. Jemssy Alvarez.*

Sending a PCCCSS to the deployment site offers numerous advantages over sending an aircraft back to a facility for painting and stripping:

- **Mission readiness.** For the Navy, the PCCCSS overcomes mission readiness problems created by the large number of aircraft returning from Iraq and Afghanistan.
- **Environmental benefits.** The shelter was designed to contain and control hazardous materials and hazardous wastes generated from painting and blasting operations. The shelter will enable deployment sites to be in compliance with environmental requirements.
- **Reduced costs.** A permanent facility can cost from \$1.4 to \$2.1 million. The cost to send an aircraft to a Naval Depot can exceed one million dollars. The cost of a PCCCSS is under \$500,000. The four units recently ordered by the U.S. Navy will save taxpayers about \$30 - \$50 million over the life of the shelters.

The Navy has ordered four PCCCSS units for forward deployed units in the Pacific Rim. The first fully operational PCCCSS was up and running in March, 2006 at Kaneohe Bay, Hawaii. The goal at this facility is to strip and paint 30 CH-53 helicopters in 24 months. "These units will keep helicopters in the proper maintenance phase during retrofits and corrosion inspections", says Meacham. Additional units will be headed to Japan and Guam later this year. ●



*An H-60 Seahawk is towed into a PCCCSS prototype for comprehensive proof testing at the Marine Corps base in Kaneohe Bay, Hawaii. The PCCCSS met the key safety and environmental requirements of a deployment site. The first fully-functional PCCCSS was up and running in Kaneohe Bay in March, 2006.*



## Blast Off Incorporated (Boi)

Boi is woman-owned business—Bobbie Maud Meacham is the owner and President of the company. Boi has facilities in Perdido, Alabama and DeKalb, Texas. Boi provides the following services:

- **General Contractor**  
Boi can modify a strip and paint facility or design and construct a new turnkey facility from the ground up.
- **Aircraft Paint Services**  
Boi offers a wide variety of aircraft corrosion control related services from a scuff and paint system to a complete strip, corrosion treatment and paint program. Plus, Boi offers their customers the convenience of stripe and "N" number changes with on-time delivery guaranteed.
- **Ground Support Equipment (GSE)**  
Boi offers the option of an on-site strip and paint operation. Boi can also support customers' GSE needs at one of their regional strip and paint facilities.
- **Specialty Service**  
Boi provides on-site services for War Bird restoration and preservation projects. Boi was proud to be chosen to restore the R5D (DC-3 Que Sera Sera) flown by Admiral Byrd—it was the first aircraft to land on the South Pole.
- **Drug Enforcement Units**  
Boi provides DEA units with special paint configurations for specific airborne projects (Fixed wing or Rotor wing).
- **Research and Development.**  
Boi offers equipment, facilities, and personnel to research and develop coatings removal and coatings application technology for plastic media, wheat starch, water blast, bicarbonate of soda, chemical strippers or chemical softeners.
- **Consulting Services**  
Boi offers a variety of consulting services to the aviation industry.
- **Training**  
Boi was the first company to develop and implement "Aircraft Specific" training seminars. These 40-hour training seminars educate potential plastic media blast operators on all aspects of the plastic media blasting process.
- **Environmental Services**  
Boi was the first company to offer a Plastic Media Lease Program. Since 1991, the United States Coast Guard has utilized Boi's media recycling program and thereby eliminated the production of hazardous waste associated with the use of plastic media.
- **Manufacturing**  
Boi is a leader in nozzle technology. Boi and U.S. Air Force engineers have developed a widespray fan nozzle that removes up to 5 times more paint than a conventional number 8 round nozzle, while lowering the amount of residual stress on the aircraft skins being blasted.

For more information on Boi, contact Tom Meacham by telephone: 1-251-937-5555 or email: [tom@blastoffinc.com](mailto:tom@blastoffinc.com)