

## 45<sup>th</sup> CIVIL ENGINEER SQUADRON



### **MISSION**

The 45th Civil Engineering Squadron is ready professionals focused on providing, protecting, and maintaining quality facilities and supporting infrastructure for assured access to space. The 45th CES is the largest squadron within the 45th Space Wing, overseeing more than 21,500 acres of land, at 14 operating locations -- including three airfields; seven launch complexes, and 1,500 homes. Much like a public works department for a civilian city, the civil engineers assigned to the 45th CES maintain all utilities and facilities at Patrick AFB, Cape Canaveral AS, Jonathan Dickinson Military Tracking Annex, Malabar Annex, Ramey Solar Observatory, Puerto Rico, Antigua Air Station, West Indies, and Ascension Island.

### **LINEAGE**

45<sup>th</sup> Civil Engineer Squadron

### **STATIONS**

Patrick AFB, FL

### **ASSIGNMENTS**

### **COMMANDERS**

LTC Brian D. Weidmann

### **HONORS**

**Service Streamers**

**Campaign Streamers**

## **Armed Forces Expeditionary Streamers**

### **Decorations**

### **EMBLEM**

### **MOTTO**

### **NICKNAME**

### **OPERATIONS**

The 45th Civil Engineer Squadrons Can Do, Will Do motto was put to the test this summer when tragedy struck near home at Patrick Air Force Base, FL. 45th CES members were called to action May 29 when Navy pilot Cmdr David Cashers F-18 crashed in Ft. Pierce, FL. The commander was on a routine training mission from Oceana Naval Air Station, VA, to Key West NAS, FL, when the fatal crash occurred. The Navy and Air Force came together in a massive search and recovery effort under a bright and sunny Florida sky in a barren field on the V-Bar 2 Ranch, about 70 miles south of Patrick AFB. As Patrick was the closest military installation to the site, 45<sup>th</sup> CES troops were among the first to arrive on scene as Disaster Preparedness, Search and Recovery (SAR), the Disaster Control Group and mobile command post were all set in motion. 45th CES troops went to work side-by-side with Navy personnel, contractors and other Air Force organizations from Patrick. This is where all their training paid off.

CES troops immediately brought in heavy equipment and began to build roads and bridges, clear trees and erect tents for work areas and food and water. They set up generators for power, communications, air conditioning and pumps, and provided initial fire rescue support. CES personnel also manned a 24-hour, 7-day a week mobile command post.

While all this is standard operating procedure. when a crisis hits, what happened next was not.

This was a unique plane crash. It was very localized. It wasn't spread over acres and acres of land. Said Lt Col Randy Horn, Det 1, 45th Support Group Commander and one of the on-scene commanders at the site. Larry Hornback, the services Combat Support Flight chief and SAR team chief for this operation, directed the SAR advance team to the site to assess conditions. Within 24 hours the team, led by 2Lt Sergio Rios, chief, Plans and Force Management, had photographic evidence that outlined the unique challenges facing them. After reviewing the photographs and getting a firsthand account from Lieutenant Rios, Hornback quickly assessed the situation. He realized the extremely sandy soil and overall nature of the crash would require extensive sifting of massive amounts of dirt. Although a shaking machine was available to find larger pieces, the soil would have to be resifted, by hand, for smaller items. Sifting to this degree is a relatively new thing. There was no hand sifting equipment available in the Air Force's inventory, said Hornback. That's when the 45th Civil Engineer Squadron rose to the challenge. I gave the concept of what was needed to the 45th civil engineer folks and they came through. TSgt Robert Erb, in the structures shop, received the call and asked all the right questions. At the time, all he really knew was that four hand sifters with stands were needed and fast! With a rough concept already formulated, he checked the materials on hand and began construction.

I knew they had to be fairly strong to sift a lot of dirt, with a sturdy stand and the ability to move around said Erb. After building the initial sifter box and stand out of aluminum that was already in the shop, he used the wheels off roller tables, normally used to slide lumber for cutting, to complete the design. After completing the first prototype himself, Sergeant Erb enlisted the aid of SrA Randall Kitchings, who procured necessary materials. Erb and Kitchings, along with other shop personnel, fabricated three more stands and delivered them to the crash site within two days of the accident.

The final product was not exactly the way I originally designed it. I would have liked to have made modifications to make them better, but they just needed them too fast, said Erb. The 45th CE troops came up with the sifting tables and they are just phenomenal, said Cmdr James O. Stutz, the Navy investigation team leader. So phenomenal in fact, that within hours of first using the sifters, Erb received a second request on Saturday afternoon at 2:30 p.m. for another six units. With the help of SSgt Herbert McCoy, the two worked straight through the night and completed the additional six units at 3:45 a.m. Ultimately, two-person crews sifted more than 40 tons of soil in just 13 days using 10 hand sifting stations for up to 10 hours a day. The sifters proved invaluable in locating smaller pieces of the aircraft wreckage to assist the accident investigation board, said Hornback. Not only were 45th Space Wing services personnel impressed by the design, but it also amazed the Navy, Office of Armed Forces medical examiners and Air Force Services Agency morticians. Whenever I needed something for my team, all I had to do was call CES over the radio and it was done, said Rios. In the case of the sifters, the result could possibly be increased productivity and response capability for all Air Force emergency situations. The efforts of our CES partners were so great that we are providing the design and prototype model to the Air Force Institute of Technology for use in mortuary affairs training, said Hornback. We will also brief the recovery operation to all the services commanders around the globe during the annual services conference. Our goal is to have this as a standardized stock item for all SAR teams.

Although this may have been just another day at work for Sergeant Erb, his willingness to go the extra mile, and his can do attitude were definitely reflected during this crisis. His contribution to future search and recovery efforts may prove invaluable. I was proud to contribute in a big way without being at the actual crash site, said Erb. I was overwhelmed when they told me they wanted to put this piece of equipment in the Air Force inventory for search and recovery. Without those sifters this operation would have been a nightmare and would have taken forever. CE is always there for their customers and they do it with class, said Hornback. 2011

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Air Force Order of Battle  
Created: 14 Dec 2010  
Updated: 14 Jul 2016

#### Sources

Air Force Historical Research Agency. U.S. Air Force. Maxwell AFB, AL.  
Air Force News. Air Force Public Affairs Agency.