

349 CIVIL ENGINEER SQUADRON



MISSION

LINEAGE

349 Installations Squadron constituted, 8 Sep 1950

Activated in the Reserve, 11 Oct 1950

Ordered to Active Service, Apr 1951

Inactivated, 2 Apr 1951

Activated in the Reserve, 13 Jun 1952

Redesignated 349 Civil Engineering Squadron, 1 Jul 1960

Ordered to Active Service 28 Oct 1962

Relieved from Active Duty, 28 Nov 1962

Discontinued and inactivated, 11 Feb 1963

Activated in the Reserve, 15 Nov 1978

349 Civil Engineering Flight constituted 18 Jun 1976

Activated in the Reserve, 1 Jul 1976

Inactivated, 15 Nov 1978

349 Civil Engineering Squadron and 349 Civil Engineering Flight consolidated, 3 Oct 1984.

Consolidated unit designated 349 Civil Engineering Squadron

Redesignated 349 Civil Engineer Squadron, 1 Mar 1994

STATIONS

Travis AFB, CA, 15 Nov 1978

Hamilton AFB, CA, 11 Oct 1950-2 Apr 1951
Hamilton AFB, CA, 13 Jun 1952-11 Feb 1963
Travis AFB, CA, 1 Jul 1976

ASSIGNMENTS

349 Air Base Group, 11 Oct 1950-2 Apr 1951
349 Air Base Group, 13 Jun 1952-11 Feb 1963
349 Military Airlift Wing, 1 Jul 1976
349 Air Base (later, 349 Combat Support; 349 Support) Group, 1 Mar 1986
349 Mission Support Group

COMMANDERS



Lt Col Wayne M. Williams
Maj Cynthia A. Doolittle, 15 Oct 2011

HONORS

Service Streamers

Campaign Streamers

Armed Forces Expeditionary Streamers

Decorations

Force Outstanding Unit Awards
[1 Jul 1976]-30 Jun 1977
1 Jul 1992-30 Jun 1994
1 Jul 1994-15 Aug 1995
1 Jul 1996-30 Jun 1998

EMBLEM

MOTTO

OPERATIONS

Over the holiday season, the 349th Civil Engineer Squadron was very privileged to have receive one of the most modern and expensive gifts from the Headquarters Air Force Reserve Command office of Civil Engineers. The valuable Global Positioning System Surveying Equipment can cost more than \$100,000. Because of its cost, even some private surveyors find it difficult to own this type of modern equipment. What is GPS? Global Positioning System is a worldwide radio-navigation system formed from a constellation of 24 satellites and their ground stations. GPS survey system uses these "manmade stars" as reference points to calculate positions accurate to a matter of meters. In fact, with advanced forms of GPS you can make measurements to better than a centimeter! This modern equipment will enhance the 349th CES Engineering Section's capability to perform land surveying and mapping methods well into the 21st century. Certainly, this will propel the reservist to the same operational capability as our active duty partners.

In January some members from our unit along with our active duty counterparts attended a joint training course on how to use the GPS equipment. The class was taught by a certified training instructor from the civilian manufacturing company and assisted by Technical Sgt. Michael R. McComas, Noncommissioned Officer in Charge of the 60th CES Engineering and GeoBase Section. Sergeant McComas has had extensive experience using this type of GPS equipment while recently deployed in Iraq. Sergeant McComas reiterated the importance of this valuable training and the continued partnership with our reserve squadron. The week long class was held at the Base Education Center, along with the 349th CES facility

Last October, after completing 28 days of Combat Skills Training in Fort McCoy, Wis., nine of us from the 349th Civil Engineer Squadron were headed for different Areas of Responsibility in Iraq along with 550 other members of the 1st Expeditionary RED HORSE Group. The nine from Team Travis consisted of: seven heavy equipment operators, one structures craftsman, and me as an engineering assistant craftsman. We were mobilized in August as augmentees to the RED HORSE. Completing the CST was the first requirement on this six-month deployment. While at CST, we learned from our orders that in supporting the RED HORSE, we would be known as "ILO," or "In Lieu Of" the U.S. Army. In other words, we could provide combat support to the Army - to work outside the wire.

Thus in CST we learned to speak the Army language and their communication and management style. We lived in an Army Garrison. We didn't completely abandon our Air Force 349th members working with "RED HORSE" by Master Sgt. Donald Mascardo 349th Civil Engineer Squadron way of life; it enabled us to understand the Army in supporting their critical missions in the AOR. As we were trained by Army cadres, senior NCOs and some of the rising six attended leadership classes. Some went to Combat Life Saving classes, combat training, weapon's training, and other war critical life saving skills training in preparing for "ILO" tasking. Classes included Self-Aid Buddy Care, weapons crew familiarization, live fire training, Iraqi culture and familiarization, land navigation and map reading, foot patrol, convoy operations, how to identify Improvised Explosive Devices, base defense, how to enter and clear a room, how to handle a hostage detainee, ambush counter-attack training and more.

We have gone to all these training courses in just 28 days. And more importantly, we have learned how to work together - All 550 of us. The 1st ERHG is based at Balad Air Base and they

support the many Forward Operating Bases - the "Travis Nine" are spread-out. At Sather AB/Baghdad International Airport (BIAP), I'm deployed with one of the heavy equipment operators. There are a total of 55 of us here in our detachment – the 557th Expeditionary RED HORSE squadron. With RED HORSE, we are the planners, the engineers, and the builders. The RED HORSE has had a strong tradition since the Vietnam War, that is to make things happen – rapidly and readily - no doubt about that, indeed a "can do, will do" attitude. Our projects here includes drainage improvements, such as excavating retention ponds and installing drainage pipes, building a concrete cargo pad, and building K-Spans structures from scratch. I'm overseeing the Engineering Assistants Section – a diverse team of four with nearly 40 years of combined engineering and architectural experience.

We provide assistance in planning and project development, design engineering, construction surveying, and construction materials testing. RED HORSE BIAP just opened a new facility that housed our materials testing laboratory. This new state-of-the-art facility was not even in existence before our arrival in October. This is the first in the BIAP area and I'm proud to be part of building this "house." We provide AOR-wide support in construction quality assurance facility. We are equipped with materials testing equipment such as a concrete curing tank and a compression machine, a soil strength and bearing-capacity apparatus, gradation composition equipment, etc. My EA team is readily available and capable to handle any surveying job, from conventional to Global Positioning System (GPS) surveying methods. Computers are up-to-date with current engineering and surveying software.

Being deployed for the first time in my 19 years in the Reserve (with no active duty service), my civilian experience proves to be valuable on this assignment. Since my 'tech school days' in 1989, I have been employed eight years with a couple of (geotechnical) consulting engineering firms specializing in construction materials testing, then went on to work for the San Joaquin County Public Works Department as a construction inspector and contracts manager for more than seven years. What I'm currently doing here is like a review of my past 16 years of employment. It is refreshing. With Team Travis, the closest experience I had with the 349th CES was in 2003 when we spent three-weeks of annual tour in Belize, Central America. During that tour, we supported the U.S. Army during a humanitarian mission. There we lived inside an army base. As the head of the EA section, my team was tasked to "go outside the wire" to a nearby village to do site engineering for a two-story, 16-classroom building. On that project, we performed topographic survey, prepared the site plan and designed the foundation plan for the school building way ahead of the time allotted to us.

As I think about it, that experience practically has prepared me to be effective craftsman here at BIAP. As we are scheduled to work 12 hours/six days week, I also find time to volunteer teaching a college math course through our base education office for deployed Airmen wanting to take the College Level Examination Program (CLEP) test. It is a three day refresher class that meets two hours each day. I teach both day session and evening sessions. Six months is a long deployment not counting the one month we had spent at CST. We should be home in April. But that seems to so far away yet; by making the best of my deployment here, staying safe, combining my civilian skills with military skills, refreshing my engineering skills, mentoring EA and younger Airmen, and volunteering (as my commander here in BIAP said, a "noble cause") to teach CLEP class, all this and more should keep me busy until April.

USAF Unit Histories
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Sources

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