

## 505<sup>th</sup> COMBAT TRAINING SQUADRON



### **MISSION**

The 505th Combat Training Squadron is the Air Force's premier provider of command and control training for the operational level of warfare.

### **LINEAGE**

505<sup>th</sup> Exercise Control Squadron constituted, 8 Nov 1999

Activated, 15 Nov 1999

Redesignated 505<sup>th</sup> Combat Training Squadron, 18 Dec 2006

### **STATIONS**

Hurlburt Field, FL, 15 Nov 1999

### **ASSIGNMENTS**

Air Force Command and Control Training and Innovation Group, 15 Nov 1999

505<sup>th</sup> Distributed Warfare Group, 12 Mar 2004

### **COMMANDERS**

#### **HONORS**

##### **Service Streamers**

None

##### **Campaign Streamers**

None

##### **Armed Forces Expeditionary Streamers**

None

### **Decorations**

Air Force Outstanding Unit Award

1 Jun 2000-31 May 2002

1 Jun 2003-31 May 2005

[1 Jun 2005]-31 May 2006

### **EMBLEM**



505<sup>th</sup> Exercise Control Squadron emblem: on a disc Azure, in base a mullet charged with a torteau and entoured with an annulet Argent, issuing therefrom four lightning flashes arcing two to dexter and two to sinister and three concentric energy pulses magnified to chief all Or, in chief as many flight symbols diverging upward Silver Gray, all within a narrow border Black. Attached above the disc, a Gray scroll edged with a narrow Black border and inscribed "AGNOSCO ASPECTUS" in Black letters. Attached below the disc, a Gray scroll edged with a narrow Black border and inscribed "505 EXS" in Black letters. **SIGNIFICANCE:** Ultramarine blue and Air Force yellow are the Air Force colors. Blue alludes to the sky, the primary theater of Air Force operations. Yellow refers to the sun and the excellence required of Air Force personnel. The star represents the unit's primary mission of training numbered Air Force staffs and the victorious command and control training operations. The lightning bolts are for the interoperable, integrated and seamless information systems to ensure information dominance. The flight symbols allude to the USAF, joint and allied/coalition training audiences. The arches refer to the distributed nature of training. Approved on 5 May 2004.

### **MOTTO**

### **NICKNAME**

### **OPERATIONS**

4/5/2005 The first U.S. forces and coalition Joint Red Flag exercise concluded April 2. The two week joint exercise is considered one of the largest distributive exercise in the history of the

U.S. military with more than 10,000 participants in 44 different sites nationwide. Participants were stationed throughout the country. One of the major undertakings of the exercise was the integration of live, virtual and constructive technologies into one seamless picture, officials said. Live training refers to people and aircraft actually performing an exercise mission. Virtual training refers to crews participating in the exercise by using simulators, and constructive forces are computer-aided simulations controlling a wider span of forces playing out on a computer station. "The integration of live, virtual and constructive participants posed several challenges, but I believe we'll have a solution to the integration in the very near future. We attained about 90 percent of what we set out to accomplish..." said Lt. Col. James Murray, 12th Air Force project officer.

"Some items went extremely well, and we learned a great deal along the way." The total number of missions flown to combine this picture was immense, Colonel Murray said. "We flew an incredible number of sorties during the execution of this exercise," he said. "Of the 24,000 sorties flown, 3,500 to 4,000 were live combat training missions, 6,000 to 7,000 were flown as virtual sorties and 18,500 (were) constructive sorties. We really pushed the limits of the personnel and systems.

They each performed remarkably," he said. The simulation and coalition training of the exercise was also a great achievement, said Lt. Col. Mark Horn, 505th Exercise Control Squadron commander at Hurlburt Field, Fla. "Joint Red Flag was an unqualified success from the joint exercise control group perspective," Colonel Horn said. " This was the first large scale distributed exercise control event ever attempted from the 505th Command and Control Wing, including our sister service partners. Many lessons learned and takeaways will allow us to build a better (exercise) the next time around."

As with any major training exercise, there are ways to make the next Joint Red Flag better. "There are a number of items we can improve on now that we have completed this huge exercise," Colonel Murray said. "If I have to pick one item to improve on, it would be how we integrate the full training events and the venue-specific training. If we had done this a bit better during the first week of this exercise, we could have been totally successful.

"The smoothing of the flow of information among all participants, U.S. and coalition, is an area we plan to focus on in the future. We did a great job, and can look forward to only getting better," he said. "This has been a tremendous exercise and has allowed us to take the first of what I hope are many more strides toward fully joint and combined training events." The relationships formed with the Army, Marine Corps and Navy will streamline the process of including them in both joint and Air Force-focused exercises in the future, Colonel Horn said. Another vital and instrumental part of the exercise was the relationships formed with coalition allies, said Maj. Gen. Floyd C. Williams, Combined Forces Air and Space Component commander. The joint training achieved will have a direct impact on how wars are fought in the future.

Incidents of friendly fire will be reduced in the future thanks to the hands-on experience of training with those with coalition allies. "By working hand-in-hand with our allies, we will be saving many lives," he said. "By training together, we learn how to fight together, significantly reducing the cross-cultural learning curve and enabling us to field a more capable and lethal combined coalition force. "Our coalition allies did a great job. The steps taken here are giant

leaps in ensuring our continued relations with our allies carry on well into the future,” General Williams said.

They say the view from the top is always the best, and that’s exactly where crews from Tinker’s 960th and 970th Airborne Air Control Squadrons and 513th Air Control Group made their tactical home during Joint Red Flag 2005. More than 150 air and maintenance crews returned April 2 from the two-week exercise in the Nevada desert. More than 10,000 men and women from the United States Air Force, Army, Navy, Marine Corps and a collection of NATO countries participated in what’s called the most realistic combat simulation next to actual war. “The total number of missions flown to combine this picture was immense,” said Lt. Col. James Murray, 12th Air Force project officer. “We flew an incredible number of sorties during the execution of this exercise,” he said.

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Many lessons learned and takeaways will allow us to build a better [exercise] the next time around.” Along with the Air Force Reserve’s 970th Airborne Air Control Squadron, the “Thumpers” of the 513th Air Control Group and the “Vikings” of the 960th Airborne Air Control Squadron from Tinker played a large role in making Red Flag a training success. Known to fighters, bombers and tankers as call sign “Goliath,” E-3 Sentry crews faced daily “Davids” of intense command and control activity. Just like in actual war, Airborne Warning and Control System, or AWACS, aircraft are the first airborne and the last to return to base.

“This was a fully successful deployment and a great opportunity to demonstrate the capability and cooperation between the 513th ACG and 552nd ACW,” said Maj. Max Stitzer, 513th’s deputy commander for maintenance. “Maintenance personnel were highly competent and professional, and their performance, as evidenced by our achieving the highest sortie rate of all deployed forces, was truly exemplary. “This mix of active-duty and full-and part-time Reserve personnel demonstrates the way we operate on a daily basis. Our Air Force Reservists are highly experienced aircraft maintainers and some bring additional decades of experience to the table from the various civilian vocations and the additional education and training that they possess.” he continued.

As for the workload, “The whole set up [at Red Flag] is really training intensive,” said Maj. Randy Bristol, 960th AACS. “Here we can take off, be on the orbit in about 45 minutes, control 60 airplanes, then come back and debrief with all the exercise players in one room.” Everyone at JRF is considered a student and the objective is to make the simulation as hard as it can be for both ground and aircrews. Over the course of several days, as many as 90 aircraft launch in a two-hour period. Even from 30,000 feet with the Vegas Strip in the distance, most can’t mistake

the flurry of activity heading for the Nellis Range. "Learning the interoperability of the various systems was a challenge," said Maj. Andy Forstner, 970th AACS. "Dealing with a lot of aircraft and the new systems introduced this year it makes the flying periods interesting."

Red Flag lasts two weeks and every day participants learn. The idea is for everyone to learn how to work together with the different weapon systems and understand each others capabilities, said Maj. Forstner. Considered to be a state-of-the-art facility, the entire Nellis Range is covered with realistic threat simulators, including troops on the ground. An emerging mission for AWACS is the business of real-time, air-to-ground targeting in addition to air-to-air responsibilities. Red Flag is unique in that, with a fully operational Combined Air Operations Center on the field, participants can get threat and targeting data, then vector the "blue" aircraft to targets quickly. "That's one of the evolving capabilities of AWACS, and this is an ideal place to test it," said Maj. Bristol. Returning crews are now busy compiling all of the lessons learned and sharing them with the rest of the AWACS community. "The Red Flag learning curve is very steep," added Maj. Forstner. "This is the best training around for our crews." (April 8, 2005)