

## 711 HUMAN PERFORMANCE WING



### MISSION

The 711th Human Performance Wing (711 HPW), headquartered at Wright-Patterson Air Force Base in Ohio, is the first human-centric warfare wing to consolidate research, education and consultation under a single organization. Established in March 2008 under the Air Force Research Laboratory, the 711 HPW is comprised of the Human Effectiveness Directorate (RH), the United States Air Force School of Aerospace Medicine (USAFSAM) and the Human Systems Integration Directorate (HP).

The 711 HPW's mission is to advance human performance in air, space, and cyberspace through research, education, and consultation. The Wing supports the most critical Air Force resource – our operational military forces. The Wing's primary focus areas are aerospace medicine, human effectiveness science and technology, and human systems integration. In conjunction with the Naval Medical Research Unit – Dayton and surrounding universities and medical institutions, the 711 HPW functions as a Joint Department of Defense Center of Excellence for human performance sustainment and readiness, optimization, and enhancement.

The Wing employs 1,433 people, including 690 military and 743 civilian personnel. About 547 contractors also support the work of the Wing. The 711 HPW employs a broad range of occupational specialties, including science and engineering, occupational health and safety, medical professions, technicians, educators, and business operations and support. The Wing operates a program worth around \$335 million annually, including \$120 million for Human Effectiveness Directorate science and technology, \$110 million for Defense Health Programs, \$100 million from Human Effectiveness Directorate customers, and \$5 million from other medical customers.

The 711 HPW accomplishes its mission through three distinct but complementary mission units and a central staff located at Wright-Patterson Air Force Base, Ohio. In addition, the Wing includes about a dozen smaller operating locations within the United States and internationally.

## **LINEAGE**

711 Human Performance Wing

## **STATIONS**

Brooks City Base, TX

## **ASSIGNMENTS**

## **COMMANDERS**

Thomas S. Wells

BG (Dr.) Timothy T. Jex, Jun 2012

## **HONORS**

**Service Streamers**

**Campaign Streamers**

**Armed Forces Expeditionary Streamers**

## **Decorations**

## **EMBLEM**

Azure, on a pile bendwise Argent three lightning flashes Light Blue, overall in pale a rod Or entwined by a serpent Gules between in sinister chief two mullets and in dexter base one mullet all of the second; all within a diminished bordure Or. Attached below the shield, a White scroll edged with a narrow Yellow border and inscribed "711TH HUMAN PERFORMANCE WING" in Blue 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 three stars represent the unit's mission areas of aerospace medicine, science and technology, and human systems integration. The lightning bolts symbolize the unit's three core competencies: research, education and operational support, converging and ascending to enhance the warfighter's human performance. The three bars depict the realms where airpower operates – Air, Space and Cyberspace. The staff of Aesculapius portrays the Wing's unique capabilities in the life sciences, physical sciences and medical education.

## **MOTTO**

## **NICKNAME**

## **OPERATIONS**

3/26/2008 - WRIGHT-PATTERSON AIR FORCE BASE, Ohio (AFPN) - Officials at the Air Force Research Laboratory officially activated the 711th Human Performance Wing during a ceremony

at the Air Force Institute of Technology's Kenney Hall here March 25.

The new wing combines AFRL's Human Effectiveness Directorate with elements transitioning to Wright-Patterson AFB from the 311th Human Systems Wing at Brooks City-Base, Texas. These include the U.S. Air Force School of Aerospace Medicine, the Air Force Institute for Operational Health and the 311th Performance Enhancement Directorate.

Thomas S. Wells, a member of the senior executive service who was named director of the new wing Feb. 29, officially accepted command during a traditional military flag exchange.

Maj. Gen. Curtis M. Bedke, AFRL commander, was among those who spoke about the activation.

"We have a rare opportunity to consolidate, reorganize and revitalize one of the finest labs in the world for human performance research and aerospace medicine," General Bedke said. "Working together, I know we will do just that.

"Fortunately for us, we found the right guy to be the first wing director in Tom Wells," General Bedke said to a crowd of about 350. The general added that "integrating science and technology with medically oriented functions seems like a daunting task, but I know that the men and women of AFRL are ready to handle any challenges we encounter."

The Department of Defense 2005 Base Realignment and Closure Commission mandated that the 311th HSW functions from Brooks City-Base relocate to Wright-Patterson AFB. Also under BRAC law, the Human Effectiveness Directorate Warfighter Readiness Research Division in Mesa, Ariz., will join other Human Effectiveness Directorate divisions at Wright-Patterson AFB by 2011.

The 711th HPW is an organizational structure related to BRAC but not required by law. In conjunction with the Navy Aerospace Medical Research Laboratory - which is relocating to Wright-Patterson AFB from Naval Air Station Pensacola, Fla. -- and surrounding universities and medical institutions, the 711th HPW will function as a joint DOD center of excellence for human performance, operating in a university model of education and training, research and development, and clinical evaluation and consultation.

Air Force Chief of Staff Gen. T. Michael Moseley had formally approved the plan Jan. 20, capping the preparation phase of a three-phase Human Performance Wing implementation process. AFRL officials held concurrent ceremonies March 25 at Wright-Patterson AFB and Mesa to commemorate the event. A separate ceremony is scheduled for March 28 at Brooks City-Base. Under the new structure, the Air Force Institute for Operational Health at Brooks City-Base will deactivate and its functions will be absorbed into the U.S. Air Force School of Aerospace Medicine, and the Performance Enhancement Directorate will be renamed Human Systems Integration.

The 311th HSW will remain active at Brooks City-Base until the Air Force missions there have been relocated.

On a historical note, Air Force officials redesignated the inactive Harry G. Armstrong Aerospace Medical Research Laboratory, orAAMRL, as the 711th HPW and activated it as one of 10 entities now within AFRL The new wing's emblem is the AAMRL patch with wording revised to reflect the

merger of the Human Effectiveness Directorate science and technology mission with the aerospace medical and human systems integration missions.

Wright-Patt Gets New Facility for Med School, Research: Officials at Wright-Patterson AFB, Ohio, held a ribbon cutting ceremony Wednesday, opening the doors to the 711th Human Performance Wing's new 680,000 square-foot complex. The \$239 million facility will be home to the Air Force School of Aerospace Medicine, the Human Effectiveness Directorate, the Human Performance Integration Directorate, and the Naval Medical Research Unit-Dayton. The school relocated to Wright-Patt from Brooks City-Base in San Antonio as part of BRAC 2005. The new complex is named after deceased Maj. Gen. Harry Armstrong, the second Air Force surgeon general and a pioneer in the field of aerospace medicine. 2011

History buffs will note that the Air Force redesignated the inactive Harry G. Armstrong Aerospace Medical Research Laboratory (AAMRL) as the 711th HPW and activated it as one of ten entities now within AFRL. The new wing's emblem is the historic AAMRL patch with wording revised to reflect the merger of the RH science and technology mission with the aerospace medical and human systems integration missions.

The 711 HPW could eventually bring an additional 500 military, 350 civilian, and a corresponding number of contractor jobs to Wright-Patterson and the Dayton, Ohio area. In addition, USAFSAM will cycle more than 5,000 aerospace medicine students to the Dayton region yearly.

4/6/2011 - WRIGHT-PATTERSON AIR FORCE BASE, Ohio -- Altitude chamber training for future flight surgeons began here April 4, 2011, at the new 711th Human Performance Wing complex, becoming one of the latest United States Air Force School of Aerospace Medicine classes to transition from Brooks City-Base, Texas, as part of the Base Realignment and Closure. The altitude chamber simulates the effects of high altitude on the human body.

"This is a piece of training that all aviators must complete," said Lt. Col. Tony Wurmstein, chief of USAFSAM's Aerospace and Operational Physiology Branch. "It is essential to demonstrate for them what reduced pressure does to the body." One of the main effects of reduced pressure on the body is hypoxia, which is a state of oxygen deficiency in blood cells and tissues sufficient to cause performance impairment. Airman Christopher Lawrence, a physiology technician with USAFSAM's Aerospace and Operational Physiology Branch, says it is important for flight surgeons to experience hypoxia symptoms.

"We train flight surgeons in the altitude chamber so they know how to correct for problems that can occur during flight and be able to fly another day," he said. The altitude chamber is also used to show students the effect of high altitude on night vision. "We turn off the lights inside the chamber and conduct night vision demonstrations so the students can see firsthand how your night vision can be altered in the air compared with ground level," said Airman Lawrence. Two altitude chambers are in the 711 HPW complex and several more will be brought in to conduct high-altitude research. The altitude chambers will also be open to military personnel in the region for refresher training.

4/28/2011 - WRIGHT-PATTERSON AIR FORCE BASE, Ohio -- The 711th Human Performance Wing, including its three mission units, won the Air Force Outstanding Unit Award for exceptionally meritorious service of national and international significance from March 25, 2008 to March 24, 2010. The wing was recognized for a number of accomplishments, including successfully planning and leading the execution of the largest Base Realignment and Closure action, while establishing and integrating a new organization. In spite of the BRAC demands, the wing's mission units delivered superior support to their Department of Defense-wide customers. Each mission unit was singled out for technology and program accomplishments as well.

"The AFOUA is a direct reflection of the dedication, effort, and competency of our people," said Thomas Wells, 711 HPW director. "I am absolutely thrilled, and I thank everyone in the 711 HPW for all they do every day to make the 711 HPW an outstanding unit." The 711 HPW plans to hold a formal award presentation. All individuals assigned to the Wing staff and its mission units during any part of the two-year period earned AFOUA award recognition.

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The 711th Human Performance Wing at Wright Patterson AFB, Ohio, is beta-testing Google Glass for its possible applications in combat, reported VentureBeat. The goal is to help the military transition from heavy reliance on battlefield laptops to using smartphones, tablets, and "wearables" more in combat and intelligence missions. Potential Air Force uses for Google Glass include helping forward air controllers steer aircraft to their targets, search and rescue missions, and helping combat controllers communicate with aircraft and ground troops in a variety of operations. So far, the team is impressed with the ability to quickly access information, but software developer and civilian contractor Andres Calvo told the VenterBeat the glasses are "not a silver bullet for many of the Air Force's needs." Google Glass is a wearable computer that incorporates an optical head-mounted display. The computer itself is Android-powered and mounted to the side of a pair of glasses. It operates on voice command.

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Air Force Lineage and Honors

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Sources

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

The Institute of Heraldry. U.S. Army. Fort Belvoir, VA.

Air Force News. Air Force Public Affairs Agency.