

711th Human Performance Wing and USAF School of Aerospace Medicine

A Center of Excellence in
Aerospace Medicine

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Outline



- **BRAC Directive for an “Aerospace Medicine CoE”**
 - “University model”
- **711 Human Performance Wing (HPW) organization components**
 - Human Effectiveness Directorate
 - Human Performance Integration Directorate
 - United States Air Force School of Aerospace Medicine (USAFSAM)
- **HPW**
 - Scope
 - Vision
 - MILCON
- **Summary**



711th Human Performance Wing (HPW)



- **HPW implemented the 2005 BRAC Joint Cross Services Working Group guidance to create an Aerospace Medicine Center of Excellence at WPAFB**

- Operational consultation
- Education and training
- Human Performance R&D



- **HPW merged the following into a single organization under Air Force Research Laboratory:**

- Human Effectiveness Directorate (AFRL/RH)
 - USAF School of Aerospace Medicine (USAFSAM)
 - Air Force Institute for Operational Health (AFIOH)
 - Performance Enhancement Directorate (311th HSW/PE)
- } **USAFSAM**

- **NAMRL co-located, but retains Navy reporting chain**



WPAFB & Aerospace Medicine: The “University Model”



- Expeditionary Training
- Preventive Medicine Pipeline Training
- Flight Surgeon Training

Education / Training

- Expeditionary Readiness
- Occupational, Environmental, and Public Health
- Human Performance Assessment

Operational Consultation

Human Performance Wing

ASC Acquisition Wings

AFIT

Local Universities

AF Reserve & National Guard

Regional Medical Centers

Research

NAMRL

Private Sector

Miami Valley Region



Human Effectiveness Directorate



Addressing The Most Critical Air Force Resource

VISION: Decision Dominance

*“Anticipate – Influence –
Affect – Survive”*

MISSION: Lead Revolutionary
S&T for Superior Airman Cognition,
Readiness, Performance, and Survival

- Mission Effective Performance
- Effective Complex Human Systems
- Directed Energy Bioeffects
- Biosciences for Performance Enhancement and Protection
- Anticipate and Influence Behavior

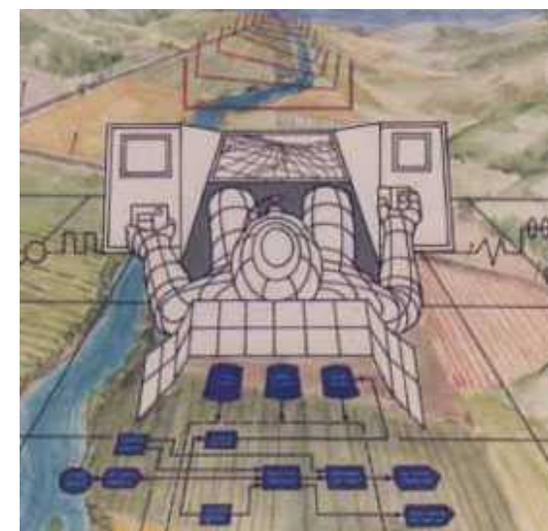
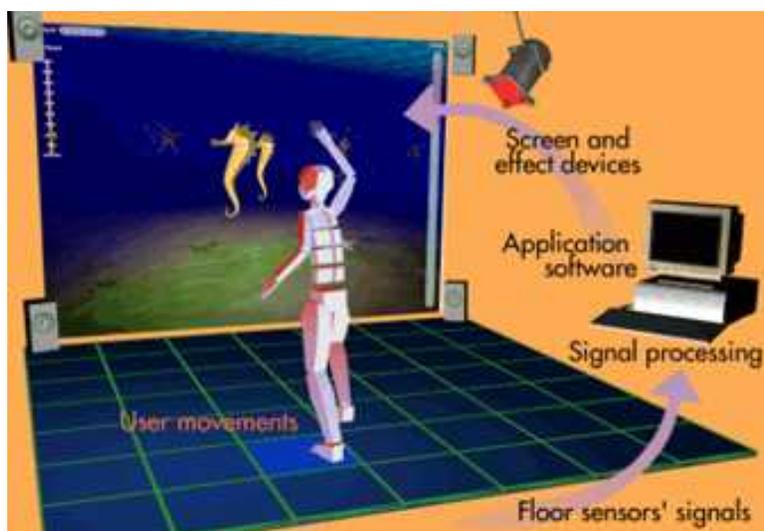




Human Performance Integration Directorate (HPW/HP)



Mission: Integrate human performance sustainment, enhancement, and optimization through the application of human systems integration





AFIOH and USAFSAM → USAFSAM



- **Vision: Dominant Airmen in air, space, and cyberspace**
- **Mission: Develop, Sustain, Optimize and Enhance Airman Performance Through Aeromedical Education, Training, Research and Consultation in Direct Support Of Aerospace and Cyberspace Operations**
- **Goal: Maintain world-class consultation, analysis, and response to all MAJCOMs, bases, MTFs, and Air Staff**
 - **Transitions are transparent to all customers**
 - **Aerospace medicine support is enhanced with integration of TA career fields working in the three “university model” domains**



Department of Aerospace Medicine (AM)



Academics, consulting, and research



- **Aeromedical Consult Service-Fitness to Fly Evaluations**
- **Initial, advanced, and graduate education and training for aerospace medicine personnel and other flight crews**
- **Specialty consultation and research in aerospace medicine, dental investigations, and hyperbaric medicine**
- **Education and training in aeromedical operations and aerospace physiology**



Department of International and Expeditionary Education and Training (IE)



Academics, consulting, and research

- **Maintain/sustain readiness skills**
 - **Clinical**
 - **Preventive, Occupational, and Environmental**
 - **Air Evacuation/Critical Care**
- **Oversee team expeditionary readiness training-**
 - **Focus: Austere and “first in theater” Operations**
- **Conduct aerospace medicine education and training for international medical personnel**
 - **Disaster response**
 - **Humanitarian and civic assistance**
 - **Expeditionary medical support in the international and deployed environment**





Department of Occupational and Environmental Health (OE)



Academics, consulting, and research



- **Health Hazard Assessment
Education, Training, and
Consultation**
- **Occupational Chemistry**
- **Industrial Hygiene
Consultation**
- **Radiation Health, Analysis,
& Consulting & AFRAT**
- **Exposure Risk Assessment
& Surveillance**
- **ESOH Service Center**



Department of Public Health and Preventive Medicine (PH)



Academics, consulting, and research

- PH education, training, and consultation**
- Epidemiology (clinical) Reference Lab**
- Applied Technology Center**
- Entomology**
- AF-wide Force Health Protection and Surveillance**
- Theater Epidemiology Team**
- DoD Influenza Surveillance Program**





Office of the Dean (CF)



- **Provide Guidance and Support to Ensure Academic Excellence**
- **Implement and Monitor USAFSAM Policies and Procedures**
 - **Student Affairs**
 - **Registrar**
 - **Learning Center**
 - **Testing**
 - **Course Evaluation**
 - **Accreditation**
 - **Faculty Qualification and Development**
 - **Course Development/Management**
 - **Community College of the Air Force (CCAF)**
 - **Continuing Medical Education**





Scope of HPW



- **Total Budget: \$300M (FY06)**
 - AFRL/RH: \$233M (includes outside funding)
 - USAFSAM: \$26M
 - AFIOH: \$39M
 - 311 HSW/PE: \$1M
- **Personnel: 1279 authorizations**
 - not including overhires, students, or contractors
- **Operations at 25 locations (Dets and OLs)**

\$66M



USAFSAM Manpower Mix



Core competencies produced from a diverse mix of professionals and technicians:

- Toxicologists
- Entomologists
- Epidemiologists
- Virologists
- Microbiologists
- Molecular Biologists
- Health Physicists
- Chemists
- Industrial Hygienists
- Critical Care Nurses
- Public Health Officers



- Audiologist
- Ergonomist
- Physiologists
- Preventive, Occupational, Aerospace, & Aeromedical Subspecialty MDs
- Environmental, Chemical, & Bioenvironmental Engineers
- Curriculum developers





MILCON

State-of-the-Art Facilities



- **HPW MILCON puts together in a single complex:**

- AFRL/RH
- USAFSAM
 - (AFIOH)
- 311th HSW/PE
- NAMRL



Aerial View from the Northeast

- **5 Buildings**

- almost 700,000 gross sq ft

- **Expected Building Occupancy Date: May 2011**





HPW Strategic Vision



VISION: WORLD LEADER FOR HUMAN PERFORMANCE

MISSION: DELIVER OPTIMIZED HUMAN INTEGRATION and PERFORMANCE FOR AIR, SPACE AND CYBERSPACE FORCES, THROUGH RESEARCH, EDUCATION, and OPERATIONAL SUPPORT

- **To create a Center of Excellence in Aerospace Medicine**
- **Co-locate human performance experts in research, education, operational evaluation, consultation and outreach**
- **Build state-of-the-art facilities, including new human centrifuge, research altitude chambers, simulators, laboratories, educational resources**
- **Plan movement of functions to eliminate or minimize disruption of production – transparent to customer**
- **Current mission execution/capabilities/collaboration enhanced by co-location**



BRAC Directed Move -- On Track



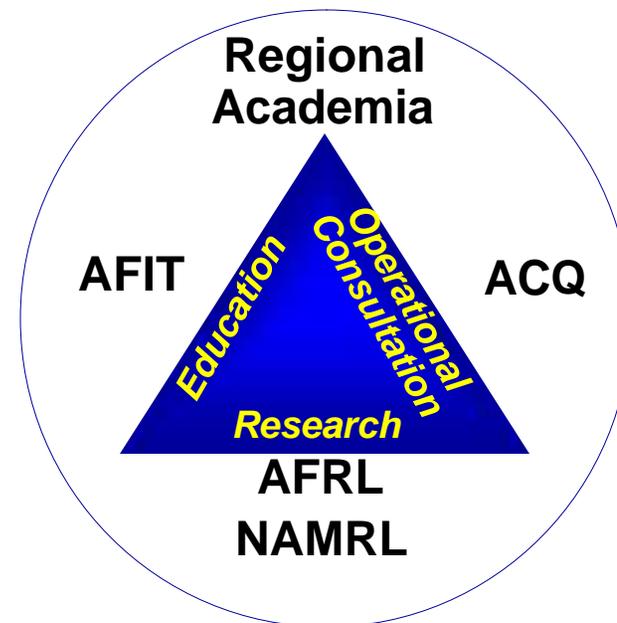
- **2006/7: Planning & preparation / BRAC offices stand up**
 - Site Activation Task Force, site surveys completed
 - Programming plans and initial budgeting completed
 - Implementation and construction planning completed
 - Concept of Operations for HPW developed / approved
- **2008: Org Change Request for HPW Approved**
 - Wing activation 25 Mar, USAFSAM transfer 28 Mar
 - MILCON contract award Apr; construction begins ~June
- **2010: Construction continues, limited relocation begins**
- **2011: Vacate Brooks buildings by May 2011**
 - Projected occupancy WPAFB buildings: May 2011
 - Construction and relocation complete by 15 Sep 11



HPW Summary



- **HPW – a great opportunity**
- **Now executing organization realignments**
- **HPW MILCON will bring like missions together**
- **Expect enhanced capabilities**
- **Continued excellent service**





Questions?





backups



Heraldry and Lineage for HPW traced from AAMRL

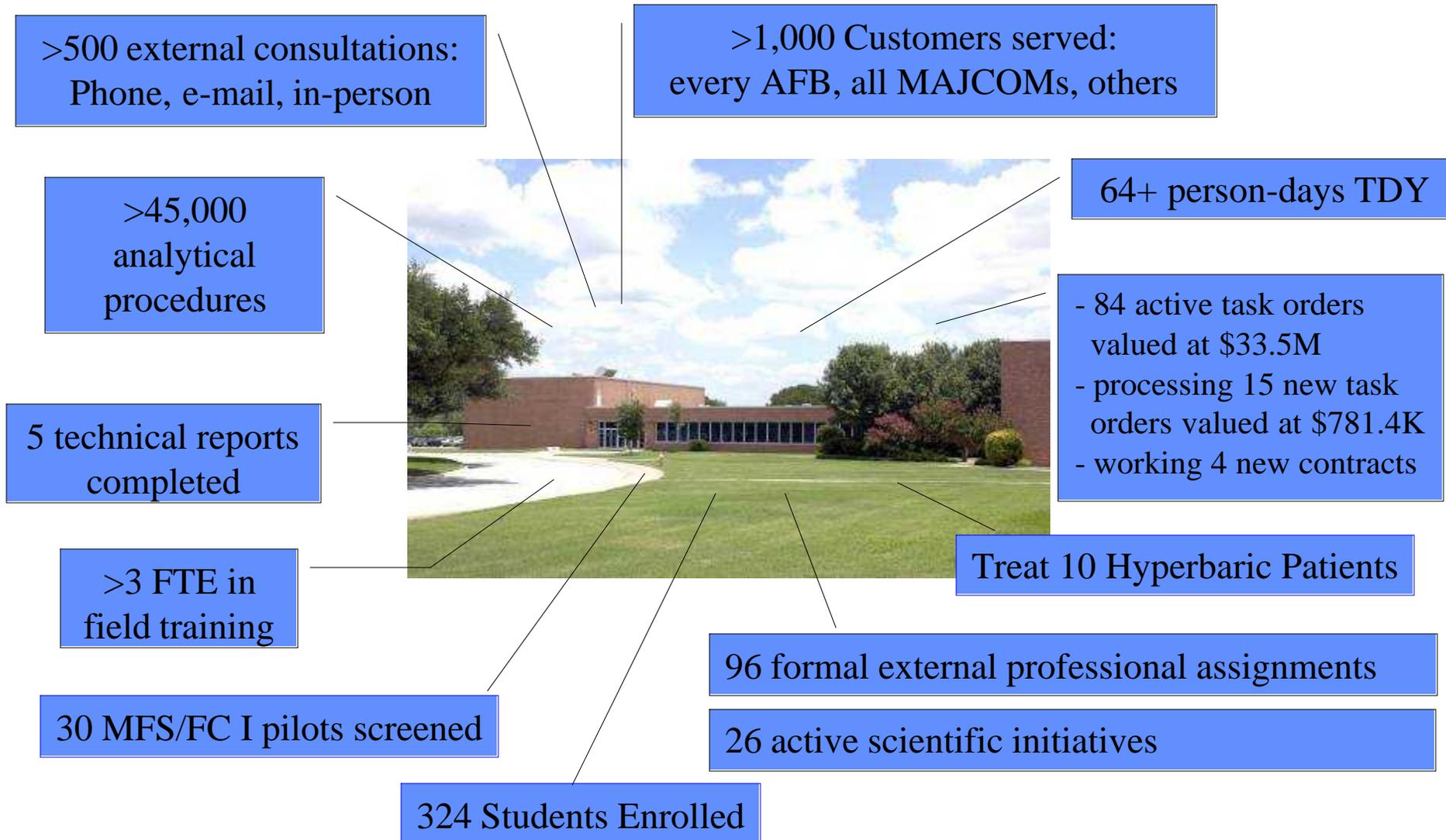


- **AF Aerospace Medical Research Laboratory (AAMRL) constituted 20 Aug 1979, activated 8 Sept 1979**
 - **AAMRL is the predecessor organization of the present RHC & RHP Divisions**
- **Redesignated Harry G. Armstrong Aerospace Medical Research Laboratory 1 Jan 1985**
- **Inactivated 13 Dec 1990**
- **AAMRL will be redesignated as the 711th Human Performance Wing**

The three stars represent the Human Performance Wing's primary mission areas of aerospace medicine, science and technology, and human systems integration. The lightning bolts symbolize the wing'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. The blue background symbolizes the limitless horizon of aerospace operations.



A typical week at USAFSAM . . .





HPW Leadership



- **711 HPW Director – Mr. Thomas Wells**
 - Vice Director – Col Rick Bachmann
- **711/RH Director – Mr Wendell Banks**
 - RHA – Col Dan Walker
 - RHC – Mr Dan Goddard
 - RHD – Dr Garrett Polhamus
 - RHP – Col Patricia Reilly
- **USAFSAM/CC – Col Chuck Fisher**
 - OE – Col Rich Ashworth
 - PH – Col Bill Courtney
 - AM – Col Randy Moore
 - IE – Col Nima Reavis
 - CF - TBD
- **711 HPW/HP – Col Lex Brown**