Volume 1, Issue 1

15 October 2001

Aerospace Physiology Newsletter

United States Air Force

Words From The Chief, Col Al Hartzell

It's been quite some time since we published a newsletter and I'm overjoyed to be writing this as part of my campaign to increase communication with each of you. As you know, we recently had our first Aerospace Physiology Corporate Board and our annual Utilization & Training Workshop. World events almost canceled those meetings but you will see later that we were quite productive. Before, I get into my view of the Aerospace Physiology career field, I would like to give you my perspective of the world events, a comparison with history, and what it was like that fateful day in September.

Nearly 60 years ago, the sun rose on a beautiful December Sunday morning in Hawaii as an innocent people went about their normal day. The Japanese struck hard and fast and plummeted us into World War II and a world that would be changed forever. The American people unified, raised their flags, volunteered to defend their country, and sent notice to the Japanese that the payback would be unlike anything the world had ever seen. The sleeping giant had been awakened. We kept that promise and the rest is history. Unfortunately, we often forget the lessons that history teaches us and complacency and apathy take over the national consciousness. In a way, it's very understandable. While growing up, I read about that dark day in December 1941, my parents gave me their perspective, my Dad told me his USMC war stories, but like most kids, to me it was something that happened a long time ago. It just didn't mean much to me and heck, I couldn't live without my Japanese made transistor radio, my Japanese made stereo system, and for the last 10 years I've been driving a Japanese made car and getting into the "Honda Habit." Although I love my Japanese products, I never forgot the stories from my parents and with the Cold War getting colder; I started thinking of a military career. As a teenager I saw that national consciousness turn with the Vietnam War and I wondered how we got into that mess but more importantly, I wondered how we could turn our backs on the men and women who were fighting for their country to help another country establish some little ideals called freedom, liberty, and democracy. It was my love for this country, and an appreciation for the freedom's I enjoy and how they were obtained, that finally led me to a military career. I've been in the Air Force for over 26 years. I missed out on Vietnam and that was probably a good thing but I saw all of the other actions from the mid 70s through Desert Storm. Most of them were brought to you "live" by CNN and even though I was in the military, that's how I experienced them. Can you imagine a 26-year military career with no action. A bit unusual don't you think? Still, I never felt that I needed a war to prove my value to the country or that I had to pay my dues somehow. Our job was to support the flyer. As you know, we have three very important missions: to train the flyers to keep them physiologically safe, the High Altitude Airdrop Mission Support (HAAMS) program, and our High Altitude Reconnaissance Mission (HARMs). These missions can either directly or indirectly put our people in harm's way but as a manager, I was never personally in danger. I never had an assignment overseas so the potential for being in a dangerous climate was pretty much null and void. But history does repeat itself. It can catch you off guard and one can find themselves in danger in the most unlikely of war zones. And, who among you would have thought that the war zone would be right here in the United States? So we were all fat, dumb, and happy going about our business but the bad guys decided to test the waters to see if we could be fooled by another sneak attack. All they did was to roll the clock forward by 60 years. Pearl Harbor is just a memory, a tourist site, and ironically, a new big budget film designed to commemorate the event. Once again we find ourselves enjoying another gorgeous morning only this time it was a Tuesday, the 11th of September, and I'm at Bolling AFB, soon to be part of the war zone.

The day started out as most of my days do. I got up at 5 AM, was in the gym by 6, and got to the office at 7:15. I did all of the usual things: small talk, read e-mail, made some phone calls, etc. Around 9:30 someone came down the hall and said we needed to get

Newsletter Introduction

This newsletter distributes guidance, provides instructional material, addresses important Aerospace Physiology program issues and provides a historical reference.

Please refer to this and past newsletters for information pertaining to policy changes and other guidance on our AP program. A large percentage of requests we receive by telephone on policy questions can be found in past newsletters.

Inside this issue:

to the conference room because a plane just smacked into the World Trade Center in New York City. Like many of you, I watched in horror and then couldn't believe my eyes as a second plane crashed into the other tower. The next thing I knew someone came running down the hall and told us to look out the window. I've got a great view and I can see some pretty awesome symbols of freedom from that window such as the Washington Monument, the Jefferson Memorial, the top of the Capitol, and right in the center is Reagan/National Airport. Right behind the airport stands the Pentagon, a symbol of our military strength and smoke was rising above that historical building and was billowing over towards Bolling AFB. Peter Jennings confirmed that the cause of the smoke was another apparent terrorist attack. This time the sneak attack came from a cowardly, and unknown, enemy. At least traditional enemies put the symbol of their country on the airplane because they were proud of their country and their cause. Instead, this invisible enemy, hijacked our planes, killed innocent people, and broke every known and accepted rule of war. Then we heard about another airplane crashing somewhere in Pennsylvania and of the now-known heroics of some of its passengers. Yep, I was finally in the war zone. Only this time, it wasn't one attack like Hawaii but several, and they were in my backyard. I immediately called my wife to tell her that I was ok and shortly thereafter we were evacuated to the outside. We soon realized that we were standing right next to the Defense Intelligence Agency and wisely decided to get away from that structure. We all knew the score and it was painfully clear that we were under attack. People were scared and were ducking with the sound of every passing jet in the sky. At one point, we all hit the ground when we were told that we had an inbound coming fast and low. It turned out to be an F-16 and the sight of that beautiful bird sent cheers into the air and at that moment I felt safe, but I knew that our world was about to change forever.

Up to that point, the new millennium was just like the old millennium. We had briefly worried about a computer glitch as we turned to the year 2000, but for the most part it was still 1999. But, in less than an hour, 2001 became this generation's 1941. This was our Pearl Harbor and this attack will forever define the start of the new millennium for many of us. As the smoke from the Pentagon continued to fill the skies, people began volunteering to cross the Potomac and to offer medical and rescue assistance to the victims but roads became impassable as DC began a self-evacuation for fear of further attack. Meanwhile, our own Surgeon General and one of our flight doc's were at the Pentagon when it was attacked. Fortunately, they survived and were busy trying to rescue those who weren't so fortunate. I saw some initial confusion but then I saw Air Force leadership rising to the occasion. We got things under control and we finally started to release our people at about 1:30 PM. I got tangled in the exodus of cars heading away from the city. Two hours later, I was home and watching the tube like the rest of the world. Like all of you, I showed up at work the next day to heightened security, a lot of tension, talk of war, and something I never thought I'd see in America…bunkers set up around my building. But along with all of that was a new sense of unification. Just like the aftermath of Pearl Harbor, we were united in our desire to strike back and we were united in our feelings for our country and for the friends, family, and countrymen that we lost in New York, Virginia, and Pennsylvania. American flags were being raised by nearly everyone and it was evident that the sleeping giant had once again been awakened.

The events of 11 September, 2001 ushered in a new era for the United States and I have no idea what that era will bring. Regardless of what it brings there are a few things that I experienced that day, a few things that I lost, and a few things that I learned. I guess you could say that I saw my first action although a river separated me from it. More importantly, I saw the American spirit rise higher than I have ever seen it. The nation poured out its love and support, while rescue workers literally gave their lives to rescue the victims of all of the attacks. I lost a few things (as we all did). One of them is time. This may seem trivial but think about it. We can't show up 30 minutes before a flight now. We have to leave for work 30 minutes earlier each day if you work on a military base or in a government facility. We have to deal with security measures getting on base that are wise, but they take a lot of time. But the most untimely loss was the time to be innocent. Our kids are faced with an uncertain future and are wondering just how serious this will get and if it will cost them their freedom. My nephew summed it up nicely. He's an assistant high school football coach and while everyone else was canceling games after the attack, his kids decided to play. When asked why they were playing when everyone else had canceled their games he replied that the kids had a meeting in the school and the underlying feeling was that all out war was about to happen and that they may never get to play another football game or spend another Friday night just being a teenager. So they played and for a night, they were kids again. We all lost our innocence that day and I'm sure that you can name other things that you lost that were precious to you. Finally, I learned a few things about myself that day. Family took on renewed importance and I spent hours on the phone telling my wife, children, parents, and siblings how much I loved them. Another thing that I did was to make a decision to stay in the Air Force for as long as I am needed. I was considering retirement but immediately put that on hold even before the stop-loss program was announced (many others in the career field and in the USAF did the same thing). Although I still might retire, I'm not actively looking for anything but if something lucrative comes along, I will make sure that the baton is passed appropriately. The last thing that I learned was a little something about my leadership and about this career field. I already knew that we had the best program and the best people in the USAF but when the senior leadership showed up in Colorado Springs, worked their tail off to provide a better program for our people, and even responded to a "real world" tasking while we were meeting, it was then that I knew that all the pettiness we've experienced recently pails in comparison to the great things we've done as a career field. I am proud to have had the opportunity to lead the outstanding men and women of the Aerospace Physiology career field. Thank you for your trust in my leadership and thank you for your support. In the following paragraphs, I will discuss what we accomplished at the meeting and where we are headed in the future. As I said earlier, this is a new era, with new challenges. Before the meeting, I asked you to read the book "Who Moved My Cheese?" Well, someone has moved the cheese, but the challenges we will face in the future shouldn't be dictated by a terrorist organization, nor should they be dictated by changes from within our own culture. We should decide our future and I want to assure you that your leadership is doing just that. Our programs are on solid ground and I am committed to seeing the successful completion of the reengineering plan and to setting a course for 2020 and beyond. To get there, we will have to go find the cheese. I think I know where it is, so let's go get it. Col H

AP UPDATE

The Aerospace Physiology (AP) leadership

met from 24-28 September in Colorado Springs and it was by far, one of the most productive meetings we've ever had. This meeting combined our annual Utilization & Training Workshop (U&TW) with the first meeting of our Aerospace Physiology Corporate Board (APCB). I came to the meeting with a game plan, but it was your senior officer and enlisted representatives who rallied to the challenges laid before them and they collectively built a new mission statement, identified our core competencies, developed a plan for future chamber closures, presented ways to improve communication within our career field, improve HPTT education and preparation, and improve professional development. All of this leading to the ultimate goal of establishing a vision for 2020 and beyond. Let me give you a synopsis of the changes from each meeting:

The U&TW: (all standardized curriculum course materials (PowerPoint slides and IG's) are to be ready by 15 Nov 01). Here are the major changes for the coming year:

1. Eliminate "Slightly Less & Slightly More" categories on the refresher course surveys.

2. Develop a standardized format for all instructor guides.

3. Add a requirement for inspector to observe/evaluate classroom instruction during CATS inspection to ensure training objectives are being met.

4. Develop/distribute "Operational Physiology" CD by Feb 02 to supplement refresher standardized curriculum.

5. Submit letter to USAF Safety Center Legal Office requesting release of safety mishaps/ information on CD.

6. Change three-hour minimum to four-hour minimum for TTB/TARF refresher academics.

7. Submit policy letter/guidance on teaching TTB/TARF Altitude Induced Threats block during chamber flight denitrogenation period.

8. Update AP Standardized Curriculum Website for 2002.

9. Implement "Panel Concept" for managing AP Professional Development, HPTT, and Aircrew Training.

The APCB

For as long as I can remember, we have had Aerospace Physiology Officers who served as the MAJCOM Coordinators and Senior Enlisted Technicians who served as the Functional Managers for our program within their respective commands. It became painfully clear to me that in most cases the MAJCOM was only vaguely aware of our presence and that calling ourselves the Command Coordinator had no meaning. Coupled with the fact that we were nearly voiceless at TAOS and other venues, I decided that we needed to rectify the misconceptions, the lack of recognition, and the communication problems that have plagued us for the past few years. The first fix was to establish an Aerospace Physiology Corporate Board (APCB). The APCB is an officially chartered function of our enterprise. The charter is simple and doesn't need to be included here but what it did was to make Team Aerospace take notice that we were changing our business practices and opening up our voice box so that we would be heard at the Team Aerospace Council. The APCB will meet 4 times a year (in person or via videoconference). The next function was to establish the board members. I drafted a letter for Gen Murray's signature and it was sent out to all of the MAJCOMs. The letter asked the MAJCOMs to designate the physiologist and technician who would serve as their respective consultants. I gave them a lot of names and each MAJCOM selected and notified their reps by letter. In most cases, they selected the people who are in place right now. This did a couple of things for us. First, it made the MAJCOM recognize us as their consultants. Secondly, it gives the consultants the ability to approach the MAJCOM on important issues and to have them sponsor you at functions requiring MAJCOM AP representation. The consultants who are not co-located at the MAJCOMs will need to increase their visibility and accountability but this should help us immensely with recognition and communication. All physiology issues will need to be reported back to the MAJCOM by the consultants (don't use the term coordinator anymore) and decisions made by the APCB must be sent to the TAC, and all action items will be tracked. I also think that this will help with the misconceptions about the AP program and what we have to offer the Air Force. Just the other day, Col Richardson and I were at a briefing and once again, we were hit in the face with the misconception that we have it easy, we have nothing to do, and that we can go home at 3 PM. This is an external misconception that has some basis in fact and that is our fault for allowing that to happen but before we can fix that misconception we need to look inward. Don't get me wrong. We have a great program but our infrastructure needs remodeling. Once we fix that (and the APCB is the first step), then I think the external misconceptions will fix themselves.

From an internal standpoint, the one thing I hear more than anything else is the uncertainty about our program. We're at war right now. Is there anything more uncertain than that? I am here to tell you that whoever is saying that they are going to cross-train, or get out because they don't like change, or because HPTT isn't going well yet, or because you don't want to fly or do HAAMs, then my reply to you is "Good Riddance." Part of the problem rests with the failure of our senior leadership to properly mentor our people. Mentoring is a "cradle to grave" concept but for some it means simply doing a feedback session. That's not enough and we all know it. Officers and Senior Enlisted must instill the Air Force core values and that means that they must apply them to our program as well. It starts in the APO and APA course. Why are we passing marginal people? Why are we bringing people in who don't want to perform all of the missions that we do? All I hear is "I don't want to fly," "I don't want to go to Beale," and "I don't want to do HAAMs," and other baloney. That's fine. Get rid of them because I want people who want to do the entire mission. If we don't have the buy-in at the beginning then we have failed Mentoring 101. Perhaps they don't understand the mission you say. OK! Here it is. The APCB officially developed a new mission statement to clarify this for everyone and it says

Design and execute proactive programs to successfully counter physiological and human performance threats, to enhance health and safety, and maximize war fighter readiness and combat effectiveness.

If you take the sentence apart you will see that it covers everything we do. We *design and execute programs to successfully counter physiological and human performance threats*.
Education and training is arguably our number one job and we design programs to counter the threats. This is also what an HPTT does. This is our HAAMS and HARMS missions. Why do we do this? Simply stated the reason why we do this is *to enhance health and safety* but more importantly, *to maximize*

readiness and combat effectiveness. This ties us in to the medical world and to the safety community, but most of all, it ties us into the AF readiness mission while emphasizing once again that we do all of this to enhance *combat effectiveness*. Any questions about our mission?

The next thing we did was to look at our skills/core competencies. If there was any doubt about what we do for the Air Force here it is in a nutshell:

1. Designs and Executes Threat Based Human Performance Education and Training

2. Conducts Human Systems Related Operational/Developmental Test and Evaluation (OT&E, DT&E)

3. Advocates Acquisition of Aircrew Life Support (ACLS) Systems.

4. Conducts Research, Exploits Technology, and Provides Consultation

5. Performs Mission Support (HAAMS, HARMS, HPTT, and Hyperbarics)

6. Investigates Aviation, Ground, and Weapons Human Factors Mishaps

7. Administers and Manages the Aerospace Physiology Program

8. Maintains and Operates Training Devices

That's it. This is what we do. This is our business and this is what needs to be stressed to all of our people whether an old timer or our new and prospective accessions. We need to stress that our people can be involved with any and all of our missions and that they will be required to either possess, or acquire, the necessary skills to perform those missions. So what we have is a new mission statement that reciprocates with our core competencies. A major accomplishment from this board that gives clear direction and extrapolates nicely into our wartime mission skills better known as the Readiness Skills Verification Program (RSVP). This will be clarified and expanded in the near future.

Another part of the infrastructure concerns our professional development. Again, using the "cradle to grave" concept, it is clear that we start things well but somewhere along the way we tend to lose our vector. For the most part, our courses are fine. Occasionally, we find a course that has lost its luster. That's why we have the U&TW for both the USAFSAM and AFI 11-403 courses. We follow this with our Curriculum and Training Standards program and this should be enough. We can always improve these functions but a critical part to this equation is the instructors teaching these courses and the lack of mentoring received in their development. I'm real concerned about the training of our HPTTs and I'm even more concerned when I hear about an HPTT going out the door and wondering what they are going to do. I'm concerned when I go to a personnel meeting and someone says "don't put that person in charge because they just don't have it as a leader or mentor." It's true that we developed an education and training plan and it identifies the right courses for our people **but it doesn't identify the right person for our courses**. I hope to fix this problem by the formation of special groups of people who have the experience and the desire to fix or improve our program. These groups are called PANELS and they are responsible to the APCB. I will be looking for both officer and enlisted membership on a panel (probably 4-6 people per panel). These people will address the issues and offer solutions/recommendations to the APCB. The PANELs should help to improve communication, and be an advocate for the respective area or our business. Although the details still need to be worked, the PANELs have been sanctioned by the APCB and should be operational by the end of the year. The PANELs are as follows:

The Professional Development Panel (personnel development, USAFSAM courses, etc)
The HPTT Panel (address all HPTT issues)
The Science & Technology Panel (addresses all tech issues)
The HAAMS Panel (addresses all HAAMS issues)
The HARMS Panel (addresses all HARMS issues)
The Hyperbarics Panel (addresses all Hyperbaric issues)
The Aircrew Training Panel (addresses all AFI 11-403 issues)

All of these changes are designed to improve our infrastructure. I am convinced that they will have positive effects on the quality of our program, the quality of the people in our program, and ultimately, on the perceptions about our program.

Your MAJCOM consultants should have a copy of the minutes from both meetings for your perusal. We discussed a lot of other topics at the meeting. They include: Chamber closures based on BCA and BRAC decisions, the development of Physiological Special Interest Items (PSI), a move towards more "threat-based" training, the incorporation of ACC's HPTT supplement within the next AFI 11-403 rewrite, sim-based hypoxia training, expanded human factor related mishap investigations, the use of mandatory slides within our courses, a move towards space physiology, the operational physiology reference guide, assignments, manpower, and other topics of interest.

Finally, I want to say just a few words about two things. First, "threat-based" training must be a reality. It is to some degree but I know that it is not universally done. The Aircrew Training Panel will take this on as their first order of business but the bottom line on this is very simple. All Refresher Training should be "threat-based." Basically, we need to identify the threat (not the definitions), give a specific mishap involving the threat, and then teach how to mitigate the threat. I will task the CATS inspection team to look at this specifically starting in calendar year 2002 and to brief the MTF commander concerning the chamber's (or HPTTs) compliance. The last thing that I will mention is about where I see us going (i.e. our vision).

The Air Force has developed their Vision 2020 and you will see reference to space platforms, directed energy, flying at higher altitudes, more night ops, and a bunch of other stuff that is right down our alley. The way is clear to me. We need to be opportunistic and step up to the plate. We need to develop a space physiology course of our own and expand our knowledge base in performance and exercise physiology. We need to enhance the training and development of our own people to prepare them for the HPTT role that is going to expand (count on it). We need to expand our role in night ops, directed energy, and other "hot" areas, AND we need to not forget the basics such as our educational programs and our expertise with oxygen equipment and other protective items that are the foundation of our program. I see a bright, and expanded role in the future. We aren't going away because nobody does what we do and no civilian is going to do what our deployed folks are doing right now in Afghanistan. These are scary times but they are also exciting times. Aerospace Physiology stepped out of the box with one foot with the HPTT program. Now it's time to step completely out of the box. However, let's not completely discard the box because it still has a lot of our stuff in it. Rather, let's pick up the box and carry it with us as we go looking for the cheese and as I pointed out before, I think I know where the cheese is. Col H

Words From The AFCFM, CMSgt Santos Navarrette Jr.

AIR FORCE CAREER FIELD MANAGER (AFCFM) ACKNOWLEDGEMENTS:

I've been on the job for over a three years and have thoroughly enjoyed the job. I want to start with publicly thanking the MAJCOM Functional Managers (MFMs) for their outstanding support in providing guidance to many important issues that affect the enlisted force. Without the support of the MFMs, my job would be a lot tougher than it needs to be. Also, I want to thank SMSgt Manuel Topete for reviving the Aerospace Physiology Newsletter. I have been working several issues such as changes to the enlisted end strength numbers, Career Field Education and Training Plan (CFETP), Trained Personnel Requirements (TPR), Medical Annual Planning, Programming, and Guidance (MAPPG), AFMAN 36-2108 (Airman Classification), Human Performance Training Teams (HPTTs), Job Inventory with the AF Occupational Measurement Squadron (AFOMS), and Selective Reenlistment Bonus (SRBs). These are all issue that affect you. Working these issues provided a lot of challenge for the senior enlisted leaders and myself.

ENLISTED MANPOWER AUTHORIZATIONS VERSUS ASSIGNED:

We are currently manned at 90% with 336 authorizations and 303 assigned as of 1 August 2001. The MAPPG for FY03 has 350 enlisted authorizations for a plus up of 34 from the previous years. The MAJCOM consultants and MFMs are projecting the MAPPG enlisted and officer authorizations for FY04 to include the HPTTs. We should hold steady at around 350 enlisted personnel. With the high promotion rates this year and the previous years, we have huge overages in MSgts, TSgts, and SSgts. We are manned at 151% in MSgts, 115% in TSgts, and 109% in SSgts. We are also 150% manned in chiefs. We do have a big deficit in the grades of SMSgt and SrA. We are manned at 62% for SMSgts and 37% in SrA. In the grades of A1C and below, we are 100% manned. We may end up on the retraining out list in the near future due to overages in the middle NCO grades.

RETENTION AND SRBS:

Retention has been a problem throughout the AF, AF Medical Service (AFMS), and AP community. A slight downward trend in all three zones in the AF, AFMS, and AP. For the past 20 months the retention rates were, Zone A applies to airmen with 21 months to 6 six years TIS, Zone B is 6 to 10 years TIS, and Zone C is 10 to 14 years TIS. In Zone A, the AF percentages were 53.7, AFMS 54.9, and AP 50. There is a SRB of .5% for in this zone for AP. The overall AF goal in Zone A is 55%. In Zone B, the AF percentages were 68.3, AFMS 67.2, and AP 83.3. There is a SRB of .5% in this zone of AP. The overall AF goal for Zone B is 75%. In Zone C, the AF percentages were AF 90.2, AFMS 88.2, and AP 75. There is no SRB in this Zone for AP. The overall AF goal for Zone C is 95%. I will continue to advocate SRBs in Zone A and B and will try for SRB in Zone C. There will be an review of SRBs in November and I will ask for an increase in Zone A, but with the percentage in Zone B being higher than the AF goal there is a possibility that the SRB in Zone B will be terminated. The latest data that I have is dated June 01 and it shows 100% retention rate in all zones for AP.

CFETP:

There is a new CFETP dated June 2001 that went out to the field in July 01. TSgt Crane made all the proposed changes that were made at the U&TW in 2000. I reviewed the CFEPT along with the MFMs and thought we had caught all the mistakes, but was informed of mistakes with the end product by members in the field. The big one is that the CFETP does not print the page numbers. There are other minor mistakes that TSgt Crane is fixing and hopefully the changes will posted on the new document in the near future to include page numbers on the CFETP, along with a new cover page. I will compile the changes and sent out a message for pen and ink changes to the existing document to include a new date for the document of Jun 2001 instead of January 2001. Please do not start over if you

have started transcribing from the old CFETP to the new one.

AFMAN 36-2108, AIRMAN CLASSIFICATION:

Proposed changes to AFMAN 36-2108 was submitted for approval by the USAF Classification personnel at AFPC. Some of the changes included adding HPTT verbiage to the specialty summary, human performance issues in the duties and responsibilities area, and completion of the enlisted human performance enhancement (EHPE) course as a prerequisite for the award of the 7-skill level. If the changes to AFMAN 36-2108 are approved, you will see it in the new manual in April 02. I am sure that the changes will be incorporated in the revision of the manual.

AEROSPACE PHYSIOLOGY APPRENTICE (APA) COURSE:

The APA course will change from 41 to 43 days effective with the next class starting 15 Oct – 17 Dec 01. We have embedded 16 hours of hyperbaric and 3 hours of full pressure suit information into the APA course. The intend is to provide the field with a fully rounded 3-level with an increased knowledge base of the AP business. The hyperbaric plans of instruction (POIs) will meet the needs of students PCSing to a base with a High Altitude Airdrop Mission Support (HAAMS) or hyperbaric program. The APA students will receive 12 hours of academics in hyperbaric and the other 4 hours will be dedicated to conducting a 60 feet orientation dive. We are currently only teaching 1 hour of pressure suits in the APA course, but will add 3 hours of academics teaching the effects of high altitude flight. The CCAF gives 17 semester hours of college credits for completing of the APA course. With the 2 days added to the course, I will have CCAF re-evaluate the course for increased CCAF credits. Additionally, CCAF awards 11 credits for completion of AP Craftsman, 5 credits for EHPE, and 1 credit for hyperbaric training courses. CCAF will be evaluating the Full Pressure Suit Introductory Course conducted by the Operating Location (OL) at Beale AFB in the very near future for possible CCAF credits. The APA courses dates for FY 02 are 15 Oct – 17 Dec 01, 7 Jan – 8 Mar 02, and 13 May – 12 Jul 02.

TRAINED PERSONNEL REQUIREMENTS (TRPs):

The TPR is a statement of gains to maintain programmed manning levels of an AFSC. We have significantly increased the TPR for FY 02 – 04. The TPR includes non-prior service (NPS) and retrainees into the programmed manning numbers needed in a particular AFSC. For the AP career field, we have a projected TPR of 75 for FY 02 that includes 60 NPS and 15 retrainees. The retrainee numbers are based on the need for SrA in the career field. For FY 03, the TPR are 45 NPS and 15 retrainees for a total of 60 with the same numbers for FY 04. I will be attending a TPR conference at Randolph AFB in late November to make any necessary adjustments to the TPR for FY 03. Three important things to remember with the TPR are that it is an equitable distribution of resources, it is not 100% manning of AFSCs, and it is based on the priority level of an AFSCs.

ENLISTED HUMAN PERFORMANCE ENHANCEMENT (EHPE):

The EHPE course provides AP technicians the formal training necessary to be productive HPTT members. The EHPE course explains the role of an AP operational support flyer assigned to a wing with multi-place aircraft, and how he/she can aid the primary agency by evaluating mission-specific human performance issues. Prerequisites for the EHPE course are: graduate of B3ABY4M071-000 course; graduate of an approved instructor course; PAFSC 4M071; and other items/activities outlined on the AF Form 623a dated Nov 99 which identifies EHPE requirements. The current course supervisor is MSgt Bean, but will be replaced by TSgt Sankeralli in the very near future. To date, we have had 42 graduates of the EHPE course. Remember that the EHPE course will be a requirement for the award of the 7-skill level when added to AFMAN 36-2108.

HUMAN PERFORMANCE TRAINING TEAMS (HPTTs):

We deployed our first HPTTs to USAFE in FY 00 and the second teams to PACAF in FY 01. We currently have HPTTs assigned to Lakenheath, Aviano, Spangdahlem, Ramstein, Eielson, Elmendorf, Misawa, Yokota, Osan, and Kunsan. Also, have a team assigned at Edwards AFB. The duties and responsibilities proposed to AFMAN 36-2108 state, "Provides consultation for all wing functional area human performance issues. Aids wing functional areas on evaluations, inspections, and surveys designed to eliminate mishap potentials, and serves as human performance consultant during mishap investigations." Also stated in the additions to AFMAN 36-2108 is, "Instructs flying and non-flying warfighters on the stresses and human performance implications of military aviation, space operations, and worldwide deployment environment. Evaluates mission-specific human performance issues as an Operational Support flyer." The following are mandatory qualifications for selection as a HPTT member: career airman; PAFSC 4M071; and graduate of the EHPE course. Officers will be assigned to the following HPTT CONUS locations in FY 02: Davis-Monthan, Dyess, Cannon, Grand Forks, Altus, Barksdale, Minot, Travis, Pope, and McConnell AFBs. We plan to send an enlisted NCO in FY 02 to Pope AFB. With any luck and with the closure of the APTF at Offutt, we should be able to send the enlisted NCOs to the CONUS bases mentioned above in FY 03.

APA GRADUATE FIELD EVALUATONS:

I've conducted Aerospace Physiology Apprentice (APA) graduate field evaluations at all of our APTFs since I took over the job in March 98. I interviewed the majority of APA graduates and their supervisors, and was thoroughly impressed with the personnel assigned. The main purpose to the APA graduate evaluations is to gather information on how the USAFSAM can better produce a 3-level to you in the field. I submit reports to the respective MAJCOM coordinators with my findings, major comments by the graduates, major comments by the supervisors, and my final comments on the field evaluation. I take the recommendations give to me by the graduates and supervisors and present them to the MFMs at the AP Utilization and Training Workshops (U&TWs). As a result several of my trips, we have incorporated numerous changes to the APA course. For example, we added an additional orientation chamber flight to FL 350 to the APA course, chamber reactor labs are conducted at FL 180 instead of GL, 16-hours of hyperbaric training, the Principles of Aerospace Physiology Instruction (PAPI) course presents a 45-minute lecture using the standardized curriculum. All of these changes came from recommendations from the graduates and their supervisors.

CUSTOM MASK PROGRAM:

The old Department of Aerospace Physiology and Human Performance had taken on

the development of the digital 12/P custom oxygen mask program which would replace the 5/P mask program at Wright-Patterson AFB. Due to nonsupport for funding by the USAFSAM, the mission of developing custom masks has returned to Wright-Patterson AFB. The old custom mask (MBU-5/P) will be replaced by the new MBU-12/P sometime in late April 02.

AFCFM and MFMs Conference:

The next MFM and senior managers' conference is planned for late summer 2002 and will be held if funding from USAFSAM is available. There many issues that need to be addressed such as: reviewing CFETP, 5-level CDCs, and APA/Craftsman/EHPE courses. If you have any issues that you would like addressed at the MFM/senior managers' conference, please forward them to your respective MFM.

PROMOTIONS:

Congratulations to the career field's newest MSgts, TSgts, and SSgts. We had a total of 12 MSgts, 16 TSgts, and 22 SSgts selected for promotion this year. Now is the time for you to plan for those top two grades of SMSgt and CMSgt. I want you to understand that you are the only one that can increase your opportunity for promotion to the two top enlisted grades. Our mid-level NCOs need to know the criticality of starting as SSgt and TSgt in building a credible history of demonstrating the total leadership/person concepts and not wait until they are a MSgt to fill the whole-person concept squares. Boards look at the whole-person concept as depicted in off-duty education, EPR front sides, EPR ratings, EPR endorsement levels, up and down trends, job progression, decorations, current responsibility, awards, and whole host of other things. It is imperative that you review your promotion data verification record prior to any board proceeding to ensure your record is not missing any important information that will keep you from being promotion eligible.

AP ANNUAL AWARD RECIPENTS:

It was another year of tough competition for the 2000 AF Aerospace Physiology Enlisted Award nominees. If you run across any of our winners, please take the time to congratulate them. The senior NCO of the Year was SMSgt Timothy Conley from Holloman AFB. The NCO of the Year was TSgt Timmis Winstanley from Offutt AFB**.** The Airman of the Year was A1C Brain Collins from Kadena AF. Again, congratulations to the 2000 AF AP Enlisted Award winners.

FINAL COMMENTS:

If you have any questions on assignments, overseas requirements, special duty, etc. please, give your MFMs the opportunity to answer your questions. If they can not provide you with the information, then give me a call or send an email. I'm never too busy to answer any questions, or try to find the answers to any questions that you all may have.

Words From The Newsletter Editor / Creator

First of all, I just want to thank everyone involved with writing the articles for our newest state-of-the-art Aerospace Physiology newsletter. Your help in getting these articles to me in a timely manner was critical to getting online. Thanks to your efforts everyone can access the newsletter at the USAFSAM web page.

I have worked very hard to try give you a quality product not seen before in previous editions. We now have a tremendous, powerful, and limitless means of communication. So please take advantage of this as much as possible.

One of the items that was discussed at the Aerospace Physiology Corporate Board was to standardize the newsletter.

Here are the results that we voted on:

1. The newsletter will be updated every six months.

2. The following will be standard agenda items for the next newsletter:

- Promotion/Awards
- Moves
- Hot Topics
- Lessons Learned

(**Please use these topics for the next letter**)

You may have noticed some of the pages do not have graphics or pictures, that's because I couldn't find any. In the future, if you want to insert pictures or even a video of any kind, just let me know, I can do it. The only slides that will stay the same are the ones identifying your MAJCOM or base (if you have better pictures we can change them too). So enjoy your reading and keep those articles coming. The next newsletter is scheduled for mid-March 2002.

SMSgt Manuel Topete
4M0X1 Functional Manger for AFMC
Brooks AFB, TX
DSN: 240-9010 COMM: (210) 536-9010

"Work as a team to be ready to deploy, deter and win, setting the standard in air supremacy."

Command Consultant
— Lt Col Charles Caulkins
Functional Manager
— CMSgt Dan Bowers

Langley AFB

Greetings from the Old Dominion! Many changes have taken place at the 1st Fighter Wing PTU since 1999. HPT is going well and we have formally attached a PTO to each of the fighter squadrons. They conduct NVG and mission/ threat specific training on a regular basis and are flying as much as possible. Capt Gibbs and 1Lt Mitchell have been providing excellent HPT support to their squadrons and are regular speakers at the Wing Quarterly safety briefings. The unit is staying active throughout the base by participating in the multiple exercises that led up to our ORI this past spring (the Wing received an excellent). Some of the major events that have taken place over the past 2 years include Lt Col Carroll PCS'ing to F.E. Warren as the AMDS CC. He was replaced by Lt Col McClain, who also served as the night EMEDS commander during our recent ORI. Before Lt Col McClain's PCS to Shaw AFB as the ADOS CC he was named the USAF Field Grade AP of 2000. Lt Col Caulkins was then multi-tasked as the ACC command coordinator/deputy squadron commander/flight commander. He is ably supported by Chief Bowers who serves as the ACC functional manager and the PTO's - Capt Gibbs, a Physician Assistant cross-trainee who joined the flight in June 2000 and 1Lt Mitchell. The flight rolls along with guidance from NCOIC MSgt Blackwell, who is also the acting First Sergeant. We expect 2Lt Kat Baerwald in September after finishing PTO school as a replacement for 1Lt Mitchell who leaves us to become the HPTT at Yokota AB, Japan. Other departures include the retirement of MSgt Mark Stanley in May 2001, and PCS'ing seven techs over the past 2 years to Beale AFB and Holloman AFB.

Our staff continues to shine throughout the Med Group with accolades too numerous to list. 2001 promotions include TSgt's

SHAW LINK -- The Public Web Site for SHAW Air Force Base SOUTH CAROLINA

Shaw AFB

Ops tempo at Shaw AFB is fast and furious. The 20th FW continues to support multiple taskings in South West Asia. The current calendar year contains an aggressive schedule which includes multiple ORE dates with an anticipated ORI early 2002.

The physiology flight, led by Flight Commander Major Greg Laffitte, is highly motivated and continues to provide a superior level of training classes. The chamber will now remain open with the anticipated eventual return to full strength manning over the next several months. Shaw AFB enjoys the unique relationship of having their physiologists attached to operational fighter squadrons. This arrangement helps with the professional development and mentorship of newly accessed physiology training officers to the career field. Each physiologist becomes a participating member of the squadron to which they are assigned and offers the additional service to their respective commander as that of the human performance expert which helps to expand our HPTT mission. They do enjoy the opportunity to experience the thrill of flight with their squadrons by participating in various sorties with the F-16DJ if the backseat is open. Captain Randy McCalip is enjoying life as the deployed physiologist to PSAB. We expect his return in early September when he will then PCS to Hurlburt Field. Captain Dan Roberts will be PCSing to Misawa in September. 2Lt Trish Harms will be finishing PTO school in September and will report back to Shaw.

We are looking forward to the arrival of MSgt DJ DeMuth and his family middle of August from Beale AFB. He will be replacing MSgt Cromley who retired in June.

Offutt AFB

Hello from the beautiful rolling cornfield of sun drenched Bellevue Nebraska. The Past few years have brought about many changes to the Offutt APF. Major Michaela Demboski recently PCSed to Hurlburt Field where she will be running the HAWC, and Capt Allen Leimenstoll took over the reigns as Flight Commander. Unfortunately that leaves him the only APO in the unit until Lt Tyndall completes the APO course in mid September. With all her prior AP technician experience she will undoubtedly be a great addition to our unit. Regrettably, we lost one of our finer instructors in Capt Mike Bursen who left us to begin medical school this fall. The good news is that he decided to join the reserves and will be helping us out whenever we need emergency classroom coverage. Our Superintendent MSgt Christopher Bridges who recently arrived from Edwards AFB of Nebraska decided to jump ship and is now putting out fires as the 55 AMDS superintendent. In his place has stepped the incomparable TSgt C.T. Winstanley ready to use his gunner experience to shoot down the hardest of challenges facing our unit; hopefully he won't misfire or shoot himself in the foot. If so, TSgt (homesteader) Felix Mitchell, Assistant NCOIC is more than up to the challenge.

In other noteworthy events the water is still being tested here at the unit too determine if it in fact does possess some unknown fertility enhancing substance. Five healthy babies were born to proud APF parents over the last year including Maj Demboski, Capt Bursen, SSgt Tracy Derby, SSgt Monica Desjardins and Sra David Boynton and their spouses. Needless to say I'll be drinking bottled water from now on.

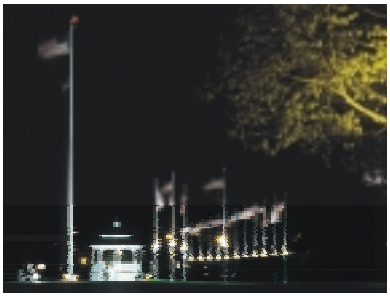
Once again the troops here at Offutt continue to shine. The following individuals were either selected for promotion or were promoted to their current rank during the last year. Major Demboski, MSgt (sel) Winstanley, SSgt Heather Tevebaugh, SSgt (sel) Boynton, Sra (sel) Geebio Gargard, A1C Jennifer Watson, and A1C Shara Davis. In addition, our outstanding crew continues to garner some of the most prestigious Air Force, Aerospace Physiology, Base and Unit level awards including: *Capt Leimenstoll : 55 AMDS CGO of the fourth quarter 2000, *TSgt Winstanley : 2000 ACC and Air Force Aerospace Physiology NCO of the Year; and the 55AMDS and 55 MDG NCO of the third quarter 2000, *SSgt Tevebaugh : 2000 ACC Aerospace Physiology Airman of the Year, and the John Levitow Award winner, Offutt AFB Leadership School, *AIC Gargard selection for SrA Below the Zone.

Despite the fact that our unit is slated for closure in 2003, we're still seeing increases in our training load, and thus have been and will continue to supply the world's best physiologic training until the day they turn the lights out and lock our building for the last time. Evidences of our continued commitment to excellence are reflected in the many commendable findings noted during our recent Aerospace Physiology Career Field Standardized Training and Curriculum and the HSI/ JCAHO inspections.

Due to the nature of the mission here at Offutt AFB, and more recently manning issues, we have done very little flying in the past year. One of my priorities as the new Flight Commander is to increase those opportunities by re-establishing our ties to the flying operations here at Offutt, the UH-60s at nearby Lincoln ANG Base, and the Advanced Airlift Tactics Training Center located in St Joseph, Missouri. Another priority will be to get out of the classroom and to begin the HPTT process. This proactive response will hopefully lead to a seamless transition when our unit closes, and help established the Physiology Officer and NCO as the human factors experts on this base. As an interesting aside, Offutt is slated to get the 747 Airborne Laser. This should provide another opportunity to apply our human factors expertise.

One last thing before we sign off. Several individuals in the unit will be competing in Air Force and DOD sponsored torture sessions. TSgt Winstanley and A1C Watson plan to run in the Air Force Marathon at Wright Patterson AFB in Sept, and Capt Leimenstoll, TSgt Winstanley, SrA Boynton and A1C Davis will be competing in the DOD Wilderness Challenge in the mountains of West Virginia in Oct. The Wilderness Challenge, for those of you who are not familiar with it, is a two-day competition that consists of mountain biking, whitewater rafting, kayaking, swimming, hiking, running, and then finishes with a paint ball contest. From all your friends at the Offutt AFB APF, have a safe and happy conclusion to 2001 .

Mission:
The 55th Wing is the largest and most diverse wing in Air Combat Command, executing worldwide reconnaissance, command and control, presidential support, treaty verification and airlift missions.



Holloman AFB

As with any physiology unit today, there has been a steady turn over of personnel going in many different directions. The unit was recognized as ACC and AF's nomination for the national 2000 Public Service Excellence Award in the government category. In March the centrifuge reached a significant milestone of training the 20,000th student. A great deal of credit goes to all personnel involved with the centrifuge program, both current and past. The training load continues to focus on the fighter pipeline including initial, qualification, and refresher centrifuge training. Both the WSO's from Pensacola and Sheppard UPT pilots have built days into their curriculum to include initial centrifuge training. The HAAMS program is also picking up with more taskings being directed toward Holloman and the team of MSgt Chavez, TSgt Johnson, TSgt Lucas, SSgt Sheerin, and SrA Bentley and Jones. The two day original and passenger class are becoming steadily more popular with the Fort Bliss contingent to the south. The centrifuge maintenance contract was released for competitive contact early in the year resulting in a new contract and significant expected savings over the next 3 years.

As we say "hasta" to many outstanding people (hope the other units realize what great assets you are getting!) we welcome in many new faces. Lt Col White passed the reins to Capt Alexander as he moved up to Kirtland and the safety center. The end of August Capt Alexander will be off to Nellis and the HPTT world while handing the reins to Maj Crook, arriving from Germany. Capt Holliday will be off to Pope and HPTT the end of November, while juggling the three kids with number four due in September. Lt Hansen joined the unit in June then quickly disappeared to Brooks for the PTO course. He is a prior life support guy and a wealth of enthusiasm. TSgt Lucas moved here in June and we consider ourselves darned lucky to have gotten him away from Langley. We think the HAAMS destinations may just improve a bit over Yuma. SSgt Doll joins us from a joint assignment. She has promised not to bring in her postal attitude as she was working postal service in England. TSgt Carson is the NCOIC of the HAWC. SrA Jones will be leaving way too soon for Kadena, but not before SrA DeLuze goes to Beale. SrA Brennan is our new life support tech, joining us from the OSS. Three new tech school graduates have joined the group, A1C Holverson, A1C Gardner, and Amn Palmer. SrA Oxner left for Beale along with TSgt Browne (do we see a Beale trend?). TSgt Denniston is making great strides as the first HPTT to Kunsan while TSgt (s) Acron is setting the standard at Misawa.

The unit is proud of the many accomplishments and recognition PTC personnel have received. Capt Alexander was named Squadron CGO of the year, TSgt (s) Acron was Squadron NCO of the year, and SSgt (s) Thomas was Squadron Airman of the year. Capt Briese was promoted to her current rank along with 1Lt Sherman. Lt Sherman is off to the desert the end of August until December. SMSgt (and we hope Chief as soon as possible) Conley led the way as SNCO of the year for physiology along with group SNCO of the quarter, squadron SNCO of the year. In recognition of his exceptional ability, he will be taking over as MDOS Squadron Super at a turbulent time, and will be moving up to Group Super…we are really going to miss him. SMSgt Conley was also 'promoted' to grandfather, toughest job of all! TSgt Johnson recently completed the NCO academy and SSgt Doll was selected as ADOS NCO of the quarter. SSgt Sheerin was identified as one of the outstanding junior leaders and asked to support the first term airman's center helping to influence young airman's transition to the AF. Just after his move to Misawa, TSgt (s) Acron was notified of his selection to TSgt. PTC was also thrilled to learn that the three SrA in ADOS selected for SSgt all came from PTC; congratulations to SSgt (s) Bentley, Jones, and Thomas. SSgt (s) Jones also completed the highly competitive Army free-fall school – now if he would just stop trying to jump out on every HAAMS mission he goes on. A1C Drake has stepped in as a vital asset in ops during this whole turn over of personnel.

HPPT In ACC

This summer the following HPTTs are standing up in ACC: Nellis (Capt Heather Alexander), Ellsworth Capt Dwayne Porter), Seymour-Johnson (Lt Sarah Jordan), Whiteman (Capt Nereyda Sevilla), and Mountain Home (Capt Bruce Christensen.

HQ ACC / DO Aerospace Physiology

HQ ACC/DO is located at Langley AFB and responsible for operational aspects of all combat air forces (CAF). The Training Support Squadron (TRSS) is a division within the Directorate of Operations. The TRSS manages training contracts throughout the CAF such as those that manage your local flight simulators, IRC instructors and FTU school instructors. The CAF CRM contract is also managed by this office. Our Training Development flight produces training products for all CAF weapon systems, many of which are available for your review. Want to learn more about weapon systems, check out the web site https://wwwmil.acc.af.mil/trss/Catalog/CW_catalog.htm and order a product. Our simulator flight manages all CAF flight and maintenance simulators used throughout the Air Force. As the DO's only assigned human factors (HF) consultant and only medic I stay quite busy consulting on issues across the spectrum.

1. **Operational Aerospace Physiology Reference Guide**: In order to help facilitate the HPTT process we are developing a CBT product which will capture a wealth of information on operational issues for our physiologists in the field. Briefings conducted by subject matter experts (SME), reference material, mishap reports, mishap briefings and a host of other stuff will be at your disposal. Look for version one later this year. If you have material to add please forward to my email.

2. **Reduced Oxygen Breathing Device**: The ROBD program is still in review. Phase I of the study was completed at Shaw AFB with outstanding success. Aviators rated it very well. Thanks to Capt Roberts for his fine effort. Phase II of the study will investigate the ROBD integrated into the F16 simulator (UTD) and should begin this fall. The study was slowed when we were required to get Human Use approval to proceed (an 8 month process). Maj Greg Laffitte will lead the phase II investigation at Shaw.

3. **CRM:** This office manages the CAF CRM contract currently contracted to CTI. As the deputy contract manager, I conduct site visits and insure contractor compliance. Working closely with LtCol Caulkins we built the ACC supp to 11-403 which defines your duties as an HPTT in ACC and outlines your participation in the CRM process.

4. **Simulators**: Your HF consultant is the product manager for a new F15E flight simulator currently in development. I am working real hard to have this device conduct NVG simulations as well. Look for a prototype next year. We are also investigating an NVG trainer for the F16 community, if I can find the money. HPTT's should take every opportunity to get involved with NVGs the threats are real and requests for help genuine. In addition I consult on the F22 simulators currently in development at L3. The majority of my time is spent working simulator issues.

5. **Safety**: ACC TRSS is often cited in mishap recommendations. New training or changes to simulators require our involvement. As the POC for mishap issues I address all mishaps staffed through ACC. In addition, I have conducted several mishap investigations myself.

6. **IRC Computer Based Training (CBT):** The Air National Guard received a waiver to conduct part of IRC through a CBT. I am developing the spatial D and landing illusion portion of this product. No push yet to use this for active duty aviators, but keep your eyes and ears open.

I keep current in operations through attachments with the 94th fighter squadron and Aerospace Physiology flight at Langley AFB. I can be contacted at mailto:**paul.gardetto@langley.af.mil** for more information or if you have information to add to our reference guide.

HAAMS

1. MISSIONS: Mission #'s from FY 2000 to August 2001:

Andrews	7
Edwards	8 (stopped HAAMS ops)
Fairchild	4
Holloman	12
Hurlburt Field	19
Kadena	10
Langley	17
Little Rock	19
Shaw	15
TOTALS	111 Missions 333 Sorties 125 Sorties at/ above FL180

2. AFI 11-409: The original 1 December 1999 version of AFI 11-409 posted on the AF Publication website had numerous editing, formatting and grammatical errors, this was corrected and is now updated on the website (the version is still dated 1 Dec 1999). Please update your publication library and download the most recent version.

3. TDY LOCATIONS: Our HAAMS teams continue to support all DoD and foreign military special operations teams. Recent overseas missions have been conducted in Australia, Guam, Germany, Hungary, Puerto Rico, Portugal and of course the standard CONUS locations.

Beale AFB

PROMOTIONS GALORE

The 9 PSPTS has enjoyed its fair share of promotees to SSgt, TSgt, and MSgt. Our percentages are much more in line with Air Force averages than in the past. We recently received even more good news. TSgt's Joe Dunteman and Brad Tucker (both first time eligible) were selected, out of cycle, for promotion to MSgt. SSgt Chris Laue was also selected under the Stripes for Exceptional Performers (STEP) for promotion to TSgt ! Congrats to all !

HOME IMPROVEMENTS

We have been living in a construction zone for some time now but additions and renovations are nearing completion. Our $3.5M wing addition was completed in Nov 00 and the $3.2M renovation will be completed in the fall of 02. The finished product will result in a 56,000 sq ft facility that will consolidate all squadron services. Check us out on our new and improved web page. You can find us at: wwwmil.beale.af.mil/units/9mdg/9pspts/index.htm

WHITE GLOVES

Beale under went an ORI (Phase 1) from 9-13 July. The results were EXCELLENT! 9th PSPTS plays an important role in the overall support of the U-2 mission and our superior performance during the ORI was duly noted. However, there's no rest for the weary, a Phase 2, an HSI, and Global Guardian are all scheduled for the near future.

CODE 43 VS CODE 50

Just to let you know. There may still be some confusion over how people are coded when they come to Beale. For the past few years people have been coded with a code 50. This meant they must move after 4 years on station. The new policy that is currently in place is to code individuals with a code 43. Under a code 43 the individual would have the option to move after 4 years on station but cannot stay past eight years. The move would not be mandatory at the four year point as with the code 50.

NEW NEIGHBORS

Global Hawk, an unmanned reconnaissance vehicle (the U-2 of the future), has been assigned to Beale. Plans are under way to make space for the new aircraft and it's support personnel. 40 new people will arrive at Beale this fall to start the transition. The first of 18 aircraft will start to arrive in 2002 with initial capacity to support limited operations in 2003. When fully operational, Global Hawk will bring an additional 918 personnel and more than 1,650 family members to Beale.

AIRCREW TRAINING FLIGHT

The CDC's are flying in the Aircrew Training Flight due to the recent acquisition of 5 new airmen. The new airmen will be assigned to aircrew training until they have finished their CDC's and 5 level requirements. Once all requirements are met, they will be enrolled in the full pressure suit OL course.

HOME SWEET HOME

To ensure that the squadron is more in line with the maintenance and AEF rotations, deployment length has been changed from 60 to 90 days. This in itself has created some growing pains considering that 25-36% of the squadron is deployed each quarter. However, the end result should lead to better communication with the maintenance troops while deployed, and more continuity back here at the house.

AROUND THE BASE

There have been a lot of improvements to the base as of late. New housing contractor (in place), road work (continuing), and a brand new fire station (under construction) are just a few new additions to an already outstanding base. The base recently captured the coveted ACC Eubanks Award for outstanding base services.

Command Consultant
— Col Kent Magnusson
Functional Manager
— CMSgt William Jennings

Air Education And Training Command

A lot has happened in AETC since the last newsletter. Here are a few of the highlights.

The Moody physiology unit is well on it's way to becoming operational and should be conducting full up training by this fall. As of now, Tyndall and Little Rock are both still open and conducting training. All the pilot and navigator training units are extremely busy and continue to struggle with manning issues. The trial period with Life Support and Survival Instructors assigned to physiology has concluded and we've decided to convert most of the positions back to 4MO's. Both specialties brought a wealth of information to the APTF's but due to privatization of Life Support in AETC, and a critical shortage of SERE Instructors, the functional managers decided to convert the positions back to 4M0's. We did keep one SERE instructor at Sheppard and one Life Support Tech at Moody. Moody is an ACC base with an AETC presence, so the LS technicians will be available. The SERE instructor at Sheppard will act as our subject matter expert for AETC. The T-6 Texan II aircraft is coming on line as a replacement for the aging T-37. The new trainer is being phased into the AETC inventory with Randolph taking delivery first, followed by Moody and Laughlin.

Here's what's going on at the AETC bases.

Randolph AFB

The Randolph APTF continues to conduct JSUNT classes as well as 11-403 refresher and FAA classes. Currently the Wing at Randolph trains instructor pilots, conducts IFF, and Advanced Instrument Refresher courses. The unit was involved at the ground level in the planning and organization of the new JAPTS CORE undergraduate pilot test course here at Randolph. The test class was conducted by the Randolph APTF with the parasail training conducted by the Laughlin APTF. The Electronic Warfare Officer course also returned from Pensacola, Florida back to Randolph, TX.

Current Issues:

- Proposal to move the Advanced Spatial Disorientation Demonstrator from Brooks to Randolph and incorporate it as a trainer in Advanced Instrument Course and PIT
  -- Will require Bldg renovation or addition if "High G" aircrew gym is to remain
- Proposed addition of Enlisted Aircrew Undergraduate Training (EAUC) program
  -- Increase in annual student load by up to 1,600
  -- Program relocation from Sheppard AFB to Lackland…training program would under Randolph APTF support/supervision with help from the Brooks Physiology unit.
- The Ejection Seat Trainer is programmed to move to Moody in September

Awards

Capt Duane Porter:
- 12 FTW CGO of the Quarter for Jan-Mar 2001

SSgt Lin Allen:
- Team Randolph NCO of the Quarter for Jan-Mar 2001
- 12 FTW NCO of the Quarter for Jan-Mar 2001

SSgt Felicita Sueiras-Martinez:
- 12 MDG NCO of the Quarter for Apr-Jun 2001
- 12 MDG Top-4 Scholarship Recipient

SSgt Jeannette Drake (1T170):
- 12 MDG NCO of the Year for 1999

SrA Jennifer Kernan:
- 12 ADS Airman of the Year for 1999

SrA Laurie Lauer:
- 12 ADS Airman of the Year for 2000

A1C Michelle Lapoint:
- 12 MDG Airman of the Quarter for Jan-Mar 2001

Promotions

TSgt Lorenzi promoted to MSgt
SSgt Hodge promoted to TSgt
A1C Kernan promoted to SrA below the zone
A1C Lauer promoted to SrA
A1C Nichols promoted to SrA
Amn Lapoint promoted to A1C
SSgt Drake selected for promotion to TSgt
SSgt Cook selected for promotion to TSgt

Individual Accomplishments

Lt Herbert-Gomez and A1C Lapoint completed the AF Combat Survival Course

Columbus AFB

We are moving ahead with a non-stop training schedule, still over 4400 students per year, which keeps everyone busy and on the go. From the glorious early summer morning Swing Landing Trainer and Parasail sessions to the Med Group keeping us gainfully employed with details, it's all fun. We are privileged to have high caliber personnel that are always willing to go above and beyond the call of duty. It has been noted throughout the Medical Group, and on base that PTU personnel are some of the most professional and knowledgeable individuals around, and that goes for this entire career field.

One of our biggest projects was to replace the carpet, which seemed to be as old as the Air Force. MSgt Buchanan spent many sleepless nights trying to figure out who would fund this upgrade. Fortunately, through extremely hard work, dedication and a lot of begging, it was finalized. Thank You Operations Group! In addition to the carpet, we were able to replace office furniture and classroom chairs. Whew! And, if that wasn't enough, SSgt Reeder (now Lieutenant Reeder) and SSgt Dacosta worked diligently with transportation, and ta da!, a new parasail truck was mysteriously delivered under a cloak of darkness in FY 00. Currently, Randolph AFB Fabrication Shop is building our new parasail equipment trailer, which shall be delivered in a few months.

Awards

Capt James M. Benson received the Joint NATO Ribbon
Capt James M. Benson received Distinguished Graduate from the EMFB Course
SrA Amber Honeycutt received an Achievement Medal
SrA Amber Honeycutt was awarded Honor Guard Member of the Quarter
SrA Tisha L. McCoy received the AF Achievement Medal
2Lt Lonnie J. Britton received the AF Commendation Medal first Oak Leaf Cluster A1C Cedric D. Flowers was selected Airman of the Quarter, Jul – Sep 99.
TSgt William S. Shirley was selected Distinguished Graduate at NCO Academy Operations Group!

Laughlin AFB

Greetings from the border! The Laughlin unit has enjoyed a super year. Between times boating on the lake, and hanging out in Mexico, Team Laughlin has been busy supporting the mission of the 47th Flying Training Wing. The year 2000 saw us face an ORI, along with a HSI. We were proud to be singled out for excellence by both inspection teams. Thanks to Lt Col Scully and Chief Jennings for sending us much needed reinforcements when our manning was down to 52 percent. The crew here continues to live by our wing motto "XL'ence, not our goal but our standard.

Some of the highlights of the past year were:

The much anticipated arrivals of Amn Paxton Hicks and Amn Chris Morlandt, who have settled in as valuable unit members.
The very recent arrival of TSgt Dora Caniglia from Brooks AFB. After only being here a week, she immediately enhanced our training operations.

A1C Becky Lederer, and A1C Leanna Jackson won Airman of the Quarter accolades.
SRA Justin Werlinger (our Life Support troop) was selected for promotion to SSgt..
SRA Nathan Kerbs was selected for Senior Airman Below the Zone, as well as being named the 47th Medical Group Airman of the Year.
SSgt Scott Parker graduating 7-level school at the top of his class, and completed Desert Survival School.
SSgt Eric Maye won NCO of the Quarter, and was selected for promotion to TSgt.
TSgt Jeff Walton, twice won NCO of the Quarter accolades.

1LT Lauren Eckert won CGO of the Quarter, and Best Instructor Pilot award.
1LT John Latimer was promoted to First Lieutenant, won CGO of the Quarter and was the 47th FTW nominee for AETC CGO AP of the Year.
Capt Todd Rock, was a Vigilant Look nominee and won 47th Medical Group CGO/Year.

The coming months should be just as exciting, with the T-6 transition coming on line, the constant upgrading of our local threats survival area, and the continued opportunities that the SUPT environment provides.
Until next year...

Little Rock AFB

Little Rock APU has undergone some major changes in the last two years:

The flight underwent a SAV and passed with flying colors:
SSgt Walters's unit library was identified as a benchmark for other APUs to follow. Our HAAMS mission is steadily increasing – We have 3 fully qualified members and 1 in training. We supported 15 HAAMS missions and accumulated over 260.0 flying hours. The unit had 2 UTCs but it has been reduced to 1.

The flight has taken a proactive approach at the wing and squadron levels providing flight safety briefs, ground safety briefs, Human Performance briefs, and has begun flying with the various assigned squadrons at Little Rock. We are now the POC for the Original Course Curriculum. We've begun offering Saturday classes to accommodate our local Guard unit. We're also conducting FAA training and Passenger training.

A TRPP was completed Aug 00 – Both Vacuum Pumps were replaced, the compressor upgraded, water chiller was upgraded, rectifier updated, and the parasite chamber was removed.

Moody AFB

Moody AFB

For those of you who do not really know what the Moody Aerospace Physiology unit's mission is, it is to "Familiarize the military flyer with the physical, physiological, and psychological stresses of modern aviation and provide the knowledge needed to successfully combat these threats."

The Moody AFB physiology unit advance stand-up team of Maj Wurmstein, 2Lt Bagby, MSgt Kepsel, and SSgt Couture has been in place for a year or more. MSgt Williams, SSgt Stewart, SSgt Channel, SrA Smith, A1C Mazza and A1C Domally have joined them to complete the current training team.

Our organization is the 479 Flying Training Group.. It is an AETC tenant organization assigned on an ACC installation. We are assigned to the 479th Training Support Squadron, a line-side function.

Our training consists primarily of the Joint Specialized Undergraduate Pilot Training (JSUPT) program for the Air Force's newest aircraft, the T-6A Texan II, Introduction to Fighter Fundamentals (IFF) for the AT-38C model. Unlike other IFF courses taught elsewhere, we also instruct all the life support blocks, and finally AFI 11-403 courses.

We have been conducting IFF, the Instrument Refresher Course (IRC) and providing AFI 11-403 course academics since Nov 00. The first JUSPT class is scheduled for Oct 01. We have also been providing manning assistance to Tyndall's chamber unit until they can get their manning back up since they have been slated to stay open.

The stand-up of the Moody AFB Aerospace Physiology unit's facilities and training equipment is progressing forward. We have had a few delays, which have us set back.

The Lateral Drift Trainer (LDT) was completed and accepted in mid-Jun. The LDT is used in place of the Swing Landing Trainer. It is similar to the one's used at both Fairchild's Survival School and NAS Pensacola. It incorporates into one unit the ability of forward momentum over a short distance to allow for a parachute-landing fall, 2 & 4-foot platforms and suspended harness training all under one roof.

The altitude chamber was delivered in June from the former Reese AFB chamber facility and placed into the still under construction chamber facility. The facility is scheduled to be completed mid-August and the DEPOT team is scheduled to arrive around the same time to modify and install the chamber. Additionally, the facility includes a bay for the MH-15 Live Fire Ejection seat. The seat should arrive and be in place September.

The main facility with the classrooms and offices has just been released under contract for renovation/ construction, 1 Aug 01 and a tentative completion date of Dec. Due to constraints with the Military Construction (MILCON) requirements the project has been delayed six months. When it is all said and done, we will have one classroom, office space, a student break area, new restroom facilities and a Fighter Aircrew Conditioning Test (FACT) room. The construction for the two additional classrooms and the renovation of the procedural seat training room is in a holding pattern for at least two years, once again due to MILCON restrictions.

We are currently all housed in and working out of a shack next to the flight line. Our equipment and trainers are scattered in different locations on the base, wherever we could find space to set them up.

The Parasail field training area is also undergoing a major renovation. The size of the field was determined inadequate to safely conduct parasail operations. Thanks to MSgt Buchanan and SSgt Evans from Columbus for assisting us in our testing the field. Currently, 150 acres of trees have been removed, and stumps are being pulled out and the area leveled and graded. Until the parasail training is completed we will conduct parasail operations along the far side of the flight line during non-flying operations.

Sheppard AFB

Awards, and Decorations:

Jan - Mar 00

SSgt Rodney Morris – awarded 82d AMDS NCO of the Quarter, Oct-Dec 99
SrA Lori McCarter – awarded 82d AMDS Amn of the Quarter, Oct-Dec 99
TSgt Samuel Colon – awarded 82d AMDS NCO of the Year, 1999
Capt David Welge – awarded Aerospace Physiology Officer of the Year, 1999

Apr – Jun 00

Capt Karl Ogilvie – 82d AMDS Company Grade officer of the Quarter
Capt Karl Ogilvie – presented Air Force Commendation Medal - Jul – Sep 00
MSgt James (Andy) Flower – presented Meritorious Service Medal (Sep 00)

Oct – Dec 00

Maj Jeremy Horn – presented Meritorious Service Medal (Sep 00)

2Lt Leslie Stewart – 82d AMDS Company Grade Officer of the 3rd Quarter
MSgt Robert Loughlin – 82d AMDS SNCO of the 3rd Quarter
A1C Lisa Tetrick – 82d AMDS Airman of the 3rd Quarter
2Lt Steve Dawson – 82d AMDS Company Grade Officer of the 4th Quarter
TSgt Glenn Keith - 82d AMDS NCO of the 4th Quarter
A1C Wyndi Roebuck - 82d AMDS Airman of the 4th Quarter

Jan – Mar 01

Capt. Karl Ogilvie – Company Grade Officer of the Year – 2000

Apr – Jun 01

2Lt Steve Dawson – 82d AMDS Company Grade officer of the Quarter
TSgt Samuel Colon – 82d AMDS NCO of the Quarter
SrA Chad Schulze – John L. Levitow Award (ALS Honor Graduate)
SrA Chad Schulze – ALS Leadership Award

Promotions

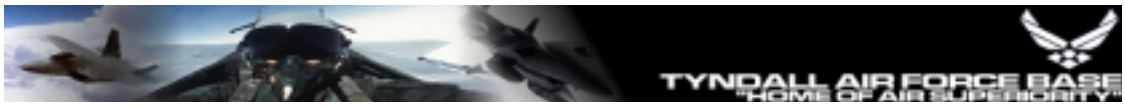
Capt Jeremy Horn – promoted to Maj. (Aug 00)
MSgt Flower – Promoted to current rank under STEP program (Laughlin AFB) (Feb 00)
SSgt Wildo Rosario – promoted to TSgt (Sep 00)
SSgt Rodeny Morris – selected for promotion to TSgt
SrA Lori Shackleford – promoted to SSgt (Oct 00)
SrA Chad Schulze – selected for promotion to SSgt
Amn Lisa Tetrick – promoted to A1C (Sep 00)

Noted Events

TSgt Glenn Keith recommended and approved as only SERE instructor assigned to aerospace physiology career field by SERE and AP CFM's (Sep 00)

Sheppard APTF now has a vacancy for a life support technician position (Jan 00)

Dr. John Pittner , contracted clinical psychologist, starts working in APTF. Sees student pilots for Basic Airsickness Management and Stress Management problems (Dec 00)



Tyndall AFB

YES, we are still here and YES we are **OPEN** for business! We won the fight and plan on being here for a long time to come. We have had major changes since our last newsletter, most, as a result of the planned closer.

Capt Phares, for some reason or another, almost killed herself competing in the Armed Forces Eco-Challenge. This years event took place in Alaska and her team finished in 8th place out of 24 teams!! Way to go! Although battered and worn, she returned in one piece.

Personnel changes. - SSgt Calla stole SSgt Aragon's dream assignment and went to Peterson. AFB. SMSgt King retired in Aug 00. SSgt Manley, SSgt(sel) Taylor and SrA Leguillow all are at Beale now and claim to be loving it there. We were lucky enough to replace all 4 of those individuals with 1. A1C Christina L. Tripi, straight from tech school. She has her hands full trying to fill the shoes of 4 individuals! SSgt Aragon is now trying to go to Brooks AFB, since he can't go to Peterson. MSgt Bain is hanging up his hat and finally calling it quits after 22 years of service. Maj Hagen is also bailing out, Nov 01, he has his heart set on one of those cushy airline pilot jobs.

At present time it looks like we will have an ANG pilot work with us part time as our rated officer. And we are looking forward to Lt Zeune's arrival in Sep 01, both straight from APO school. Like most places, we are hurting for enlisted bodies. If you would like to come to Tyndall and have a good attitude, we welcome you.

Our training load hasn't decreased and we are very busy. We are getting excellent support from the personnel at Moody AFB. That is esti-

mated to cease around Oct 01 when they come into their own. The personnel at Hurlburt Field, help a lot too. Without the support of both of those units we would have critical problems maintaining our training load.

We survived our first Standardized Curriculum Inspection and are scheduled for our 18 seat chamber modification/ TRPP in Sep - Oct 01. We are looking forward to having the latest state of the art equipment to improve our student training enhancement and would like to say thanks to all that gave input on setting it up (you know who you are).

Awards -
Medical Group received the Air Force Outstanding Unit Award for Jun 99 - Jun 00.
Capt Phares received an AFAM for her participation in an Aircraft Mishap Board
SSgt Aragon received an AFCM from his last base (Andrews)
Capt Phares received the Medical Group Company Grade Officer of the 2nd Quarter 2000
Capt Phares received the AETC Aerospace Physiological Officer of the Year 2000
SSgt Aragon received the ADS NCO of the 4th Quarter 1999
SrA Wymer received the ADS Airman of the 4th Quarter 1999
SrA Wymer received the ADS Airman of the Year 1999
TSgt Hakos received the AFCM for his short stay in Medical Readiness

Promotions -
MSgt Kohler was promoted in Aug 2000
SSgt Wymer was promoted in Sep 2000
TSgt Schmidt was selected for promotion to MSgt, estimated sew on Feb 2001

Vance AFB

Vance is probably the busiest physiological training unit in AETC. Each year we conduct 15 Joint Undergraduate Specialized Pilot Training classes with approximately 32 Air Force, Navy and Marine students in each class. In addition to 64 TTB and 16 TARF students each month, we train about 300 students in aircraft specific egress, parasailing, FACT, airsickness management, pre-acro, CRM II, and T-38/ T-1 transition classes. Although this is a busy and challenging assignment, the team works extremely well with each other and faces each day with enthusiasm.

Over the past few months we have watched some of our finest leave for new adventures. In May 01, TSgt Ken Dobbs and SrA Aaron Callan (1T1) left to become cadets for 6 weeks while attending Officer Training School. In order to stay with her husband, 2 Lt Sarah Jordon is now part of an HPTT stationed at Shaw AFB NC.

In July, 1 Lt Troy Faaborg departed for the University of Illinois to attend the Human Factors in Aviation Psychology AFIT course. Also in July, A1C Joesph Dias left to attend the Air Force Academy Prep School and SSgt Salem Channel went to grace the new unit at Moody AFB, GA with his presence. In August, SrA Sunny Siler will join the tech school training crew at Brooks AFB, TX. A final loss this year will be SrA Christopher Scott. He joined us less than a year ago, but will be returning to the Life Support world in Dec.

Although we lost some valuable team players we did gain a new NCOIC. In March, MSgt Brenda Smith joined us from Fairchild AFB and has quickly learned the AETC way of doing business. Also joining the team is A1C Kerri Quick. She is fresh from tech school and currently attending the First Term Airman Center but from what we have seen, she is ready to take on new challenges. Arriving from the schoolhouse in September, our newest HPTT officers (in training) will be 2Lt Miranda Hancock and 2Lt Eric Hendrickson

Big winners last year were TSgt Ken Dobbs who was selected as the AETC NCO of the Year and A1C Christienne DeLand was the AETC Airman of the Year. For the year 2001, our congratulations go to SSgt Salem Channel for his selection as the 71 FTW nomination for the Jaycee sponsored, Ten Outstanding Young Americans award. Our other award winners this year include: SrA Sunny Siler, 71 FTW Airman of the Quarter for Jan-Mar 01 and A1C Christienne DeLand, 71 FTW Airman of the Quarter for Apr-Jun 01.

Luke AFB

Maj Tom Morrison is at Luke AFB where he is working with courseware development and delivery for FACP, GRIM, AAMP, ORM and Specialized CRM courses. He has helped the ANG F-16 FTUs develop basic CRM courseware and has been assisting AFRL's Fly-by-Night training team as a platform instructor in their NVG Instructor course.

"Air Force flight begins with AFMC"

Command Consultant
— Col James Dooley
Functional Manager
— SMSgt Manuel Topete

Words From The AFMC Command Coordinator

Like all other MAJCOMs, AFMC has gone through many changes in the past two years. Among those changes, Aerospace Physiology Training Flights (APTF) have closed at Wright-Patterson AFB and at Edwards AFB, AFMC's first Human Performance Training Team (HPTT) was stood up at Edwards AFB, and the School of Aerospace Medicine at Brooks AFB TX has undergone extensive restructuring. What formerly was the Department of Aerospace Physiology (USAFSAM/FP) has been restructured into the new integrated "university model" of the School of Aerospace Medicine (USAFSAM).

Brooks AFB

USAF SCHOOL OF AEROSPACE MEDICINE (USAFSAM) Col Jim Dooley

As the result of USAFSAM-wide changes implemented by Col Rodger Vanderbeek (former USAFSAM/CC), several Aerospace Physiology officers and enlisted personnel are matrixed to other divisions in the Department of Aerospace Education and Training (USAFSAM/AE), while the core of the enlisted personnel and half of the officers of the former FP now make up what is USAFSAM's equivalent of an APTF (USAFSAM/AETU). At AETU, Lt Col Andy Self is Chief, Aerospace Physiology and Chief Santos Navarrette is the

4MOX Career Field Manager in the aerospace physiology training unit (USAFSAM/AETU) of USAFSAM's Training Division (USAFSAM/AET). Details of the AETU and the various AE Department-matrixed 43As and 4MOXs are provided elsewhere in this AFMC update.

4M051 Career Development Course CDC

MSgt John Bean

It has been approximately 2 years now since we implemented the 5 volume CDCs. While the reduction in volumes made it easier to the eyes, the information within has not changed too much. I appreciate all of those who are calling in with changes and updates that need to be made. It is vital that we work together as a team to stay updated on equipment and procedures changing in the field.

So what does the future hold for the course? One immediate change is our new writer/author for the career field; TSgt Frances Sims. Fran has joined us from Randolph, and had a previous assignment to Brooks. She is looking forward to future updates and working with all of you in providing the best course for our 3-levels.

Our biggest project will be the implementation of material related to Human Performance Training Teams (HPTTs). We will be adding information relating to human factors and human performance to better prepare our future team members. We will be working closely with those currently assigned to HPTTs in order to hit the correct areas.

Any suggestions or concerns are always welcome. Please feel free to contact myself or TSgt Sims @ DSN 240-3365.

7 Level Craftsman Course

MSgt John Bean

Well two years ago the talk was a 7 level CDC. So what's the word now? Well, it's not a CDC. As we prepared to write such an animal, the challenge became coming up with enough material that was not already in the 5 level CDCs. We just couldn't justify writing one.

We continue to conduct the residence course for 7 level training. The plan is for two courses to be conducted in FY 02, Feb 02 and Jul 02. We see these courses happening. Future course will depend on the line continuing to fund them.

One big change in the course is in the area of pre-requisites. The exportable course used for preparing each student has been replaced with an AF form 623a with specific instructions to be completed prior to the residence course. Why the change? I sent out a survey to graduates of the exportable course asking about its relevance/worth in preparing them for the residence course. While the exportable course did provide good knowledge in the area of human anatomy and physiology, it was overwhelmingly seen as of no benefit in preparing them for the residence course. I appreciate those who provided in-put to this survey. Your in-put was essential in making an educated decision.

As mentioned earlier, the future for the residence course is not in concrete. If it should go away, the plan is to combine parts of the Craftsman course academics and the EHPE course, producing an advanced course that will serve as a pre-requisite for your 7 level.

Enlisted Human Performance Enhancement Course

MSgt John Bean

We are still conducting two classes per year; Apr and Aug 02. We have had much success during these courses and it continues to be a good foundation for preparing NCOs for HPTTs. We have been able to bring in HPTT members from overseas to provide some real world insight to what is needed for future team members. We hope that this will be the standard for future classes. But as we all know its money that makes it happen.

As mentioned in the article concerning the Craftsman course, this course may become a prerequisite for receiving your 7-level. While this is still in the future, I would like to remind you that attendance of this course is not a marker for getting an HPTT assignment. HPTT assignments are still driven by the same things as any other assignment.

If interested in attending one of the courses please contact your command functional manager. We have a maximum of 12 for each class. Dates for the courses are 2-13 Apr 02 and 27 Aug -7 Sep 02.

Curriculum and Training Standards (CATS) Program

MSgt John Bean

As you may know, or may not, the "kinder, gentler" CATS program has replaced the old Stan-Eval program. "Why in the world?" , you may ask yourself, well Stan-Eval has always been associated with the flightline and can have a somewhat intimidating quality to it. Our Stan-Eval program was never intended to strike fear in the hearts of management and cause leave forms to mysteriously appear in admin boxes. It was always meant to be used for good, not for evil. It's here to make sure we are all on the same sheet of music for training our aircrew, and that the core of the academics presented is the same from unit to unit.

The change of the name represents exactly what we are looking for during these inspections; the use of standardized curriculum and keeping our unit personnel trained and up-to-date in their areas of expertise. It is also designed to ensure that those units who have added to their courses are sharing their expertise and innovations with all the rest. We also want to see the best out of each unit. The more we share "our best" the better we become as a career field.

With a change in name also comes a change in the checklist, but not just changing the name. The newest checklist can be accessed through the Brooks unit website http://wwwsam.brooks.af.mil/web/fp/apu2.htm.

This FY we inspected the following units: Beale, Columbus, Laughlin, Tyndall, Vance

Those not inspected this past FY will be targeted in FY 02.

HYPERBARIC MEDICINE DIVISION (USAFSAM/FEH) Col Jim Dooley

Six 4MOs also are assigned to the Hyperbaric Medicine Division (USAFSAM/FEH). Col Jim Dooley replaced Col Magnusson in March 2001 as the new Associate Dean, Aerospace Physiology. He serves as AFMC Command Coordinator for Aerospace Physiology and also is Chief, Hyperbaric Medicine Division (USAFSAM/FEH), replacing Col Jim Dixon who retired 31 July 2001. SMSgt Manuel Topete has recently been assigned to USAFSAM/FEH as Superintendent and AFMC 4MOX Functional Manager. FEH has a military staff of 18 military (7 aerospace physiology positions), three civilians, and four contractors. NOTE: The prior 4MOX Functional Manager, Chief John Kettinger, recently has been assigned to the IG team at Kirtland AFB, NM.

Col (Dr.) Jim Wright's Clinical Investigations Branch plans and conducts the division's research efforts. His FEH staff and Dr. Larry Krock (USAFSAM Chief Scientist) are preparing to initiate two major operational support protocols to study the therapeutic use of hyperbaric oxygen therapy (HBOT) for anthrax and for extreme blood loss. Col (Dr.) Robert Bertoldo, Chief, Clinical Operations Branch and AFMC/SG Hyperbaric Medicine Consultant, oversees daily operations and directs the Hyperbaric Medicine Fellowship program. Col (Dr.) Ben Zwart is Chief, Clinical Medicine Branch and Hyperbaric Medicine Consultant to the AF/SG. Combined, the three branch chiefs manage the annual treatment of over 150 patients, providing over 3,000 chamber dives and 3,500 wound care visits.

PERFORMANCE ENHANCEMENT DIVISION (USAFSAM/FEP), LtCol

"Provides leadership and consultation in hyperbaric medicine--spearheading research, education, and treatment in operational and clinical arenas during conflict or peace. The Hyperbaric Medicine Division delivers consultative expertise for the USAF and serves as the Department of Defense Lead Agent for Clinical Hyperbaric Medicine. Provides 24 hour worldwide telephone consultation for military operational requirements. Provides state of the art hyperbaric oxygen therapy to a defined beneficiary population and conducts medical research and clinical investigations to establish optimal treatment protocols. Responsible for introductory training programs through advanced fellowships in all aspects of hyperbaric medicine and related medical operations. It is charged to develop, test, and evaluate equipment and chamber technologies necessary to conduct hyperbaric medicine operations

Bruce Wright

Dr. Stephan Constable's Performance Enhancement Division (FEP) has been involved in a wide array of projects over the past year. For example, we were asked to provide technological support to AFOTEC and AETC during the operational flight tests of the new **T-6 Texan II** primary flying training aircraft. The environmental control system (ECS) of the new trainer was suspected to be inadequate to meet the cooling demands of summer flying training in the southern United States. The propeller driven T-6 has unique operating characteristics which subjects the instructor pilot and student pilot to more heat stress than even the T-37. Unlike the "Tweet", the T-6's canopy must be down and locked before engine start, during all ground operations, and must remain down until engine shut down. A "greenhouse" effect, along with heat soaking on the flight line, placed exceptional demands on the Environmental Control System (ECS) and the original system was subjectively reported as not cooling the cockpit adequately. A relatively inexpensive series of ground tests performed by our group during the summer of 2000 showed that cockpit temperatures, in addition to test subject head, skin, and core temperatures, were not staying within acceptable limits according to the ORD. A new ECS system with twice the cooling capacity and much greater air flow was designed, installed, and tested in a prototype aircraft by the summer of 2001. Initial results were very encouraging and the decision was made AFOTEC to build all new T-6's with the more capable ECS, and all existing aircraft will be modified to contain the new ECS over the next year or so.

Sonata*TM*. USAFSAM/FEP was tasked by AFMOA to perform a literature review and evaluation of the new sleep aid *Sonata*TM (zaleplon) on its use as an operational drug focused on its utility as a ground-based sleep aid. Approximately 150 scientific articles that were directly related to *Sonata* were acquired and reviewed in their entirety. We then assembled a Working Group of flight surgeons, neuropsychiatrists, and Ph.D.s from various disciplines to evaluate key review and content articles. We found that there was no evidence that *Sonata* should not be considered for individual, ground-based applications, provided that rigorous individual ground testing is accomplished under the supervision of a knowledgeable flight surgeon. There is, however, considerable unrest when one tries to apply the current literature to specific flying operational scenarios. Clearly, a more scientific laboratory investigation should be considered before translating these findings to "in-flight" scenarios. Additionally, the group felt strongly that much more information needed to be provided to the practicing flight surgeon in the areas of technical education and guidance.

COPE. The TARGET-Human Performance web site has been inactivated while it is being overhauled to comply with new web site guidelines. The new web site will likely be named: "Center for Operational Performance Enhancement" or "COPE." It will have user interface improvements as well as new information that many of you have requested along with links to the WebBoard and other frequently used sites. The estimated date for having the site functional again is early Jan 02, but much remains to be accomplished, so "please stand by."

Fatigue Countermeasures. We have been working with the Sustained Operations folks in AFRL/HEP to create a one-day course in Fatigue Countermeasures. The training has been presented at TAOS '01 as well as the new HPE course and trainee comments have been very helpful in helping us to refine the product to meet your needs. The training consists of a morning of academics followed by afternoon sessions where the software tools are introduced. Finally, the software tools are used by all students to evaluate the impact of fatigue on performance using various schedules.

Force Fitness. On the fitness side of the house, we published a State of the Art Report in Dec '00 on The Process of Physical Fitness Standards Development and we have been working with AFMOA on ways to promote and evaluate force fitness. Unfortunately we are short handed right now since Maj Neal Baumgartner retired at the end of May 01. He continues to support us on a part-time basis as a contractor, but no full-time replacement has been found yet.

HUMAN SYSTEMS PROGRAM OFFICE
(311 HSW/YACL)

Maj Dave Cohen was assigned to Brooks AFB this summer. He is Deputy Program Manager, Life Support Systems, Human Systems Program Office, Human Systems Wing (311 HSW/YACL), Brooks AFB, Texas. Dave manages the 60-person Life Support Integrated Product Team at three operating locations in the development, testing, and procurement of new life support capabilities and Air Force clothing. Programs include ejection system modifications, aircrew laser eye protection, integration of the F-22 life support ensemble, and fielding of new uniform materials. The current budget exceeds $200M. Prior to assuming this position in July 2001, Dave was an Air Force Intern at the Pentagon, most recently in the Secretary of the Air Force Action Group.

Recently, because of his spatial disorientation expertise, Dave was personally selected by the AFMC MAJCOM Coordinator as the human factors consultant to the Safety Investigation Board that investigated the Class A Mishap of an Edwards AFB F-16B.

DAVID COHEN, Maj, USAF, BSC
Deputy Program Manager, Life

Support Systems
311 HSW/YACL
7909 Lindbergh Drive
Brooks AFB, TX 78235-5218
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HYPERBARIC MEDICINE DIVISION

Operating Location (OL)
1. The OL was formally established at Beale AFB on 24 Dec 98. USAFSAM/FP is the OPR for the Full Pressure Suit Introductory Course (FPSIC) and assigned special duty "T" positions to personnel assigned to the OL. AFPC has assigned six personnel to the OL and will assign one more in the near future. The "T" positions are all special duty and advertised on the EQUAL PLUS listing. SMSgt Baldwin, TSgt (MSgt Select) Wickersham (1T171), SSgt Berge, SSgt Muhlecke, SSgt Boshers and SrA (SSgt Select) Apodaca make-up this USAFSAM cadre. The OL trained 26 students in CY 99 and 32 in CY00. The present year has brought some interesting changes to the OL as Beale's assignment availability code 50 was returned to a code 43.

2. The 9 PSPTS reduced their anticipated training needs as a result of the change in Beale's assignment availability code. Faced with the prospect of the OL deactivating, 9 PSPTS proposed that the OL pick-up some of their more advanced training. At Beale, most training needs are grouped into 4 tracks:

- U-2 Launch & Recovery Operations Track (The USAFSAM FPSIC meets this track training requirement)

- FPS Maintenance/Depot Track (Primarily Pressure Suit Maintenance)

- Survival Kit/O2 Track (Primarily Seat Kit & Oxygen Maintenance)

- Detachment Supervisor Track

3. The OL put together a preliminary schedule for both the FPS Maintenance/Depot and Survival Kit/O2 Tracks. The essential tasks listed in the OJT record for each track were used as a guide to build the schedule. The course is designed to bring the students to the certification level (3c learning level) on all tasks needed for deploying to an overseas detachment. To ensure appropriately trained students, 9 PSPTS supervisors performed all final certification on students immediately upon course completion. After eight months of preliminary track training, 11 students successfully navigated through our 5-week Maintenance/Depot course and 12 students successfully completed our 4-week Survival Kit/O2 course. In addition, 16 students completed the 9-week FPSIC thus far in CY01. With the addition of a new instructor position in CY 01, the OL plans on conducting a 2-week detachment supervisor's training course.

Air Force Research Laboratory

Working in AFRL is a unique and rewarding experience for anyone in our career field. One of the interesting factors is that it is the combination of civilian & military personnel working together to ensure that quality research is conducted. Our goal is to provide information and guidance to enhance human performance, develop quality protective equipment, and help to implement new protocols & procedures. Hopefully as an end result of our work we can help to reduce all classifications of mishaps. The research conducted at this facility has one purpose – to protect our aircrew from threats in the human performance arena.

Dr. Wes Baumgardner is the Chief for the Air Force Research Laboratory Human Effectiveness Directorate's Biodynamics and Protection Division. This division has three subgroups: Biodynamics and Acceleration Branch (HEPA), Flight Motion Effects (HEPM) and Protective Systems Research Branch (HEPR).

AFRL/HEP Aerospace Physiologists

LtCol Paul Fisher is the Deputy Chief of the Biodynamics and Protection Division and is responsible for the daily operations of the entire division.

LtCol Thomas Morgan is assigned to the Flight Motion Effects Branch (HEPM) and is the liaison between AFRL/HEP and the 311th Human Systems Wing concerning all life support equipment issues.

Maj Robert O'Connor is the Branch Chief for the Protective Systems Research Branch (HEPR).

Capt Julia Sundstrom, Chief of Altitude & Acceleration for HEPR.

Capt Rhodora Beckinger, who is assigned with HEPM's Warfighter Fatigue Countermeasures (WFC) Team.

I want to now give an overview of what "We" do here at AFRL/HEP and how "You" can act as the link the between the research world and our operational air force. You can call on us to assist you in obtaining information that is available and which directly concerns human performance issues, equipment to be implemented, protocols that may be altered or introduced, and guidance that can be provided by AFRL/HEP scientists for the benefit of "Your" aircrew!

Protective Systems Research Branch (HEPR)

HEPR is responsible for the daily operations of both the altitude and acceleration research conducted here at Brooks AFB, TX. Basically, you could say that we are the work force that gets it all done.

We support both altitude and acceleration working groups funded by the Air Force Research Lab on a variety of research projects. These Additional projects are requested and

directly financed by ACC, the Systems Program Office (SPO) of the 311th Human Systems Wing, Special Operations Command, NASA, and a variety of additional customers requiring 6.2 Applied Research (e.g. COMBAT EDGE thermal study for ACC) and 6.3 Advanced Development (e.g. ATAGS).

We have a great group here to include nine very competent and hardworking Aerospace Physiology Technicians. Our NCOIC of Altitude & Acceleration Operations is MSgt Charles "Mac" McGlothen. The unit is run and supported by our section NCOICs for Operations, Maintenance, Supply, and Administration & Scheduling. They are MSgt Stan Skou, TSgt Kevin "KJ" Johnson, TSgt Danny Robbinett, and TSgt Bill Tucker - respectively. Additional staff members include SSgt Danelia Chappell, SrA Amber Honeycutt, SrA Tara Hoffman, and A1C Leo Funchess.

Working with this group has been interesting and as the Chief of Altitude & Acceleration I have already learned to appreciate that what we do here at Brooks is vital to our aircrew's performance and safety in real world operations.

High Altitude Protection Research 1999-2001

The Altitude Research Group is headed by Dr. Andrew Pilmanis, who has over 30 years experience in altitude & diving decompression research. On his staff are Dr. Jim Webb, a former USAF pilot and USAFA instructor; Dr. Ulf Baldin, previously a professor with the Karolinska Institute in Sweden and the former Chief of the Royal Swedish Air Force Flight Medicine Clinic; and Ms. Heather Alexander, who is responsible for all the data collection for the research flights.

In 1996, the High Altitude Protection Research lab at Brooks AFB documented the significant increase in denitrogenation efficiency using exercise-enhanced preoxygenation (ASEM, July 96). This technique was transitioned to the U-2 program and was responsible for continuing one pilot's career (ASEM, August 00). The concept was also implemented into a new NASA EVA preoxygenation schedule, which was used for the first time in the July 01 shuttle mission. USSOCOM-funded research has defined the DCS risk for high altitude parachuting from 35,000 ft (ASEM, June 01), the effect of repeated exposures on DCS risk (ASEM in review), and the effect of post-exposure exercise on DCS (ASEM in review).

Currently, USSOCOM sponsored research is directed at DCS risk associated with the AC130 and the CV-22 aircraft. Based on previous research results (ASEM,April 98), the AFIs that permit unlimited exposure up to 25,000 ft are being modified defining zero-preoxygenation times for these altitudes. These limits are defined in a publication currently in review at ASEM.

Other research & publications from the group include: a review of over 10 years of research experience with respect to gender and DCS risk. The effect of different exercise modes while at altitude on DCS risk was defined (ASEM, Jan 99). The maximum altitude of 16,000 ft has been defined for in-flight denitrogenation (ASEM, July 00). The effectiveness of ground-level 100% oxygen use for DCS treatment has also been documented (ASEM, Feb 00). Studies on the risk of DCS for 40,000 ft exposures and for the effect of rapid rate of ascent are nearing completion. Also nearing completion is a NASA-funded study on the effect of using argon in place of nitrogen in the breathing gas since argon is present in the Mars atmosphere and could be extracted and used as the fire-retardant inert gas. Another NASA-funded study on the effect of weightlessness on DCS risk was completed last year (ASEM in review). Finally, the Altitude DCS Risk Assessment Computer (ADRAC) model and software have been completed and will be available in 2002 (SAFE Symposium Proceedings 99).

Oxygen Systems

Although there are no Aerospace Physiologists or AP Technicians directly assigned in this group it is still directly supported by all of us in HEPR. This group is headed by Mr. George Miller, an engineer with over 15 years of experience in R&D for all types of oxygen systems. His support staff include Mr. Nathan Dillion, with Veridian, and Mr. John Olhausen, with Wyle Lab Inc.

Oxygen Systems conducts research on gas generating systems, primarily On-Board Oxygen Generating Systems (OBOGS); conducts aircraft oxygen system safety-of-flight testing; and provides consultative support to the aircraft program offices, logistics centers, and industry. Some of the efforts being worked are described below. Solid Electrolyte Oxygen Separator (SEOS) produces pressurized oxygen directly from ambient air with the flip of a switch. These systems use a heated ceramic and electric power to separate oxygen from atmospheric air. SEOS systems have a wide range of potential military applications, such as an OBOGS for aeromedical evacuation, battlefield oxygen, deployed medical facilities, trickle charging of aircraft gaseous oxygen systems, and integrated oxygen generating systems for transport, fighter, bomber, and trainer aircraft. Although this technology is in its infancy, it may represent the future of oxygen generation equipment. Oxygen Systems is also working on an on-board system called TALON, which simultaneously produces oxygen for the aircrew and passengers and nitrogen for fuel tank fire suppression. The system uses state-of-the-art air distillation technology and is being designed for the C-17 aircraft. Oxygen Systems is presently preparing to test the CV-22 OBOGS. This testing is critical because the AF plans to fly this aircraft at higher altitudes and with more crewmembers than the Navy. Oxygen Systems recently tested the duration of the T-6A Bailout Bottle System (BBS) under simulated emergency conditions as a follow-on effort to the T-6A OBOGS safety-of-flight testing. AETC wanted to verify the published 10-minute duration given in the T.O. The published value was verified. Oxygen Systems has also designed and will help setup the new B-2 and B-1B OBOGS Depot Facility at Tinker AFB OK.

AFRL Chamber Automation Upgrades

As manpower here at Brooks becomes a more precious commodity, efforts have been made to more efficiently utilize the resources at hand. One of the methods that were pursued was to develop automated controls for some of the environmental chambers that the division used for research. The entire automation effort cost 25K and was completed solely by in-house personnel: Mr. Nathan Dillon, Mr. Tommy Miller, Mr. Victor Elizondo, and TSgt K.J. Johnson.

A single operator can now control the A5/6 chamber, which is used for equip-

ment testing. The automation of the chamber allows easy control of both sides of the chamber, the altitude of a large accumulator tank, the internal temperature of chamber A6, the temperature and pressure of the instrument air fed coming into chamber A6, and two flow controllers. All of the parameters can be set independently or can be synchronized by running a preprogrammed profile. This upgrade was the most demanding because the software that translates the user's input into instructions for the controllers had to be completely written from scratch.

E chamber (altitude & thermal) was the next chamber to be upgraded. E chamber was already automated, but the controllers, computer system and software were outdated and difficult to use. When the old control system became too unreliable, it was replaced with new controllers, a new computer, and software based on the software written for chamber A5/6. The E chamber controls included chamber altitude, chamber temperature, chamber humidity, inbleed airflow, inbleed air temperature and fan speed.

C Chamber is currently in the process of being upgraded. The controls for this chamber will only be for the main and midlock chamber altitudes. Since C chamber only had rudimentary automation capabilities, the upgrade requires more extensive hardware modifications such as the addition of three new pneumatic control valves and additional instrumentation. The software for this chamber will also be based on the software written for chamber A5/6.

Once all three-chamber control systems are completely online, the automated system will provide a simple but powerful interface that is consistent for all of the chambers. This will cut down on the amount of training that is required to operate the various chambers, and free up people to work on other items

Flight Motion Effects Branch (HEPM)

This group is headed by Dr. William Storm. He's has quite a busy with all the research conducted in acceleration, and fatigue countermeasures falling under his branch division.

Acceleration Research Group

Dr. Werchan heads the Acceleration Research Group. On his staff are Dr. Ulf Baldin, LtCol Tom Morgan, LtCol(Dr.) John Gibbons, LtCol(Dr.) Carol Ramsey, MSgt Mike Miller, Mr. Wayne Isdahl, Mr. Curtis White, and Mr. Jim Hartman.

The purpose of this group is to conduct research on aircrew life support equipment and to provide research, development, test and evaluation (RDT&E) for the equipment that will be implemented in our existing and future fighter aircraft.

The following sections are provided to provide an overall view of what research is conducted and information that is available for you to pass on to your operational aircrew.

F-22 Life Support Equipment, Compatibility Evaluation of Current USAF Life Support Equipment and F-22 Shipside G-protective Systems

Air Combat Command (ACC) requested that the 311 Human Systems Wing, Life Support Systems Program Office conduct evaluations to determine the compatibility of currently used USAF life support equipment with F-22 ship-side equipment. Consequently, the Biodynamics and Protection Division of the Human Effectiveness Directorate (AFRL/HEP) was asked to conduct manned centrifuge evaluations to assess the compatibility of the USAF man-side equipment (Advanced Technology Anti-G Suit and USAF Positive-Pressure Breathing for G PBG equipment) with the F-22 shipside equipment (Breathing Regulator, Anti-G valve and Onboard Oxygen Generating System). The centrifuge evaluation determined that the combined system provided good G-protection and that the USAF man-side equipment was compatible with the F-22 shipside equipment. Based on the success of the centrifuge evaluation, altitude, thermal and cockpit integration studies were also conducted to determine the overall compatibility of the current USAF equipment with the F-22.

Centrifuge Evaluation for Republic of Singapore Air Force (RSAF) F-5 Life Support Systems

Centrifuge evaluations were conducted to determine if proposed new and modified life support equipment worn by RSAF F-5 pilots was functional and compatible with the +Gz acceleration environment of the F-5 aircraft. The new or modified equipment included: 1) an integrated Life Preserver (LPU-33/P) and survival vest, 2) a back style parachute with a pistol (mockup), survival radio and strobe light attached to the parachute harness, a CSU-13B/P anti-G Suit with a survival knife attached to the calf, and a MBU-12/P oxygen mask with an anti-drown device. Four experienced AFRL/HEP centrifuge panel members were fitted with the new/modified equipment listed and exposed to an acceleration regimen consisting of a gradual onset (0.1 G/s) acceleration to +7.3Gz, rapid onset (6G/s) accelerations to 3, 4, 5, and 6 +Gz, and a 4.5 – 7.0 G SACM (Simulated Air Combat Maneuver) profile for a maximum of 3 +7 G peaks. Acceleration tolerance findings were normal for experienced subjects. Overall, the equipment was deemed satisfactory for use in the fighter aircraft acceleration environment.

Thermal Evaluation of COMBAT EDGE

In response to a request from Air Combat Command, AFRL/HEP examined whether COMBAT EDGE creates greater heat stress and dehydration than standard anti-G equipment. Some pilots have expressed concern that the vest is increasing their thermal burden. To determine if that concern is warranted, twelve subjects (including 6 fighter aircraft aircrew) completed centrifuge and climatic chamber exposures simulating flight operations during hot and humid days. On separate test days the subjects wore COMBAT EDGE or standard equipment. Thermal stress conditions consisted of walking on a level treadmill at 2.5 mph for 20 minutes during exposure to 95 °F temperature, radiant heat lamps, and 85% relative humidity. Test results showed there were no significant differences between COMBAT EDGE and standard gear with respect to increases in core or skin temperature, or loss of body weight (dehydration). COMBAT EDGE also produced better G protection than standard gear for one of the three G-profiles. No differences were found for the other two G-profiles. The principal investigators for the study concluded that thermal burden, as measured by body core and skin temperatures, was the same for COMBAT EDGE as for standard anti-G equipment.

Libelle Training Accomplished

Eight individuals were trained on the *Libelle* water-activated suit in preparation for in-flight demonstration of the system at Edwards AFB. The training and subsequent demonstration were funded by the AEF Battlelab at Mountain Home AFB. Designed by the Swiss firm LSI, *Libelle* is a snug-fit garment, which uses water channels traversing the arms, torso and legs to tension its fabric in simulation of water immersion. Participants included three test pilots, an ANG pilot, two pilot physicians, and two flight surgeons. Experienced individuals (specifically two test pilots, who had flown an earlier iteration of the suit) did well in the garment, satisfied their training objectives quickly, and returned to Edwards after

two days of training. Of the remaining six, four showed a definite learning curve and improved their performance through a week of daily exposures. The remaining two claimed little or no improvement and found it difficult or impossible to exceed 7.5 G at week's end. Overall, the training was successful and well received by participants.

Evaluation of Acceleration Effects on Photorefractive Keratectomy Results

Investigators from the USAF School of Aerospace Medicine's Ophthalmology Clinic and HEP's acceleration program continue to collaborate on a study investigating the effects of acceleration ($+G_Z$) on corneal topography and visual acuity at 6, 12, and 24 months after PRK has been performed on both eyes of study volunteers. The study, the "acceleration arm" (n=20) of a larger PRK study (n=100), has been initiated and is projected to be completed by 4QFY02. Once completed, a recommendation will be made to USAF/SG on the efficacy of the PRK procedure for aircrew.

The Warfighter Fatigue Countermeasures (WFC) Team

These key personnel are a part of Dr. Jay Miller heads this group and is supported by Dr. Doug Eddy, Dr. Gibbons, Dr. Ramsey, Lt Thiem and Capt Beckinger. This team the conducts research in the area of sustained operations and is tasked with conducting research and providing guidance on pharmacological and scheduling countermeasures for our front-line aircrew, maintainers and support personnel. The following information is a review of the research conducted by this group.

Dr. Douglas Eddy (NTI, INC.) heads one of the primary projects conducted by the WFC team. The team completed the second phase of data collection for an investigation of the relative effectiveness of two different sleep aids, Ambien and melatonin, for inducing sleep and for regulating subsequent human performance. The results of this study have high operational relevance for AEF, AFSOC, and AMC operations. In addition, this study will provide vital data for enhancing the WFC quantitative model of the effects of sleep deprivation and circadian rhythms on human performance.

For those of you who recently attended the HPE course (Aug 01) and asked the question "Who is Dr. Miller" – well here's a basic review of what he does for AFRL/HEPM, ACC, USAF Special Ops, and Aerospace Physiology.

He is involved in just about everything to do with fatigue and sustained operations to include countermeasures, scheduling software, crew duty regulations and guidance for maintainers.

He is a key player in all decisions that will be made by ACC/DRX concerning the in-flight use of the sleep aid, zaleplon (Sonata). Discussions have centered around investigating and achieving Air Force level policy regarding the use of hypnotics in flight to support long-range Global Strike missions.

He is also involved in the rewrite of Crew Rest Air Force Instruction and provided input to the revision of AFI 11-202, Chapter 9, "Crew Rest and Flight Duty Limitations" for the Air Force Flight Safety Agency (AFFSA/XOP).

In addition to assisting aircrew he was personally requested to provide Duty Shifts and Rest Guidance For AFMC Maintainers and contributed to the revision of AFI 21-101, Section 1.20, "Duty Shifts and Rest Periods" for maintainers AF-wide.

Fatigue Avoidance Scheduling Tool (FAST) & Fundamentals of Shiftwork Scheduling (FSWS) Manual

Finally, the WFC group has been helping with the development of the FAST software program and the FSWS manual. These tools are designed to assist commanders, aircrew, and schedulers by helping to quantitatively identify periods of error risk within specific work schedules, check for the buildup of cumulative fatigue associated with a specific work-sleep schedule, compare one schedule against another for periods of error risk, and make informed decisions concerning crew scheduling.
A Beta release of the FAST software & and copy of the FSWS manual were sent to unit representatives who were trained during the March 01 TAOS meeting. AFRL/HEPM will also send the program to those who attended the HPE course in August 01 - one per unit please. The idea was to give our APOs and technicians a chance to get familiar with the idea of fatigue scheduling and to assist us in modifying the software. Keep in mind that this is a tool that is under development and needs your input to ensure that it functions as advertised. We know it has bugs, but we're hoping that with your help we can make it an effective and operationally relevant scheduling countermeasure.

AFRL/HEPR New Accessions & Departing Personnel

Jan 01 Capt Sundstrom
Jun 01 MSgt Skou
Jun 01 SSgt Chappell
Sep 01 TSgt Tucker PCA
Jan 01 2Lt Fausch PCS to Beale
Apr 01 MSgt Baker PCS to Beale
Aug 01 TSgt Caniglia PCS to Laughlin

Awards & Promotions

Jan 01 SSgt Fausch NCO of the Quarter
Jan 01 MSgt Skou Meritorious Service Medal

Mar 01 SSgt Fausch promoted to 2Lt
Jun 01 TSgt Skou promoted to MSgt
Oct 01 SrA Honeycutt promoted to SSgt

AFRL/HEP Points of Contact

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Acceleration Research
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Fatigue Countermeasures
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Wright Patterson AFB

The APTF at Wright-Patterson closed, effective 30 June 1999. Personnel resources were lost to the manning reductions offered up by AFMC in 1999. The only remaining Aerospace Physiology personnel at W-PAFB are Col Rocky Calcote and Maj Glenn Hover of the Air Force Research Laboratory's Human Effectiveness Directorate (AFRL/HE) and TSgts Okey Ooten and Shawn Miller of the Custom Mask Shop (74th MDG). TSgt Miller is projected to report to Beale AFB in the Fall. Mr. Poole (contractor) also is assigned to the Custom Mask Shop.

AFRL/HE: Col Calcotte continues to function as Deputy to Mr. Jim Brinkley, Director, Human Effectiveness, but he is awaiting reassignment news – probably back to the Magic Kingdom in DC.

Leading the discovery, development, and integration of affordable warfighting technologies for our aerospace forces.

Maj Glenn Hover is Chief, Surgeon General Technologies (coded now as 43A- HQ command billet); his report follows:

Because this is a new type of job for the Aerospace Physiology career field, a blending Human Factors and Acquisition, I thought I could overview some of the job activities to help folks understand what AFRL does. First and foremost, AFRL is here to listen to warfighters and develop the future technologies that they ask for. Sometimes it takes longer than they would like, but things like Stealth didn't come along in just 5 years. Same goes for developing new technologies such as agile laser eye protection to respond to a wide array of future laser threats.

The job is a mix of staff work, operational interface with MAJCOM's, plus flying if you want it, and a constant learning and sight picture on how the big wheels turn in the AF to develop, get funding for and field new aerospace systems. Plus, the good things that come from positive changes in funding priorities towards the Air Force, Space and new technology. We are in a giant upswing with all the new emphasis items from the SecDef.

We as aerospace physiologists bring an operational expertise to the lab which they need and value. Plus, our expertise in HF, life support, aircraft mishaps, etc. is very valuable to assist the technology directorates with the development of their weapon systems – e.g., panoramic night vision goggles and some of the operational threats and requirements that are critical in its development.

Typical activities include:
-Interface with Battle labs for integration of technologies to CAF in support of JV 2010 (Precision Engagement, Global Strike, Time Critical Targeting (TCT))
--Examples: Libelle G-suit, Monafidil, 3-D audio with Tactile SA vest
-Work with HQ ACC, HQ AFSOC, AFMOA , etc and Surgeon General/SGX on identifying, prioritizing, and funding technologies in support of Human Weapon System (HWS) needs for CAF.
-- E.g., generate a Surgeon General "Letterman's Top Ten" list for MAJCOMS to promote Surgeon General related technologies for POM funding)
-Fly with operational squadrons in CAF to validate training needs and keep research focused on operational requirements
--Validate night NVG tactics being flown to ensure training and AFRL technology development is in line with warfighter needs
-Work with and educate USAFSAM/311 Human Systems Wing / Life Support SPO at Brooks AFB to transition technologies to warfighter
-Teach F-16 and C-141/ HQ AFMC Test Pilots the school house academics for TTB/TARF/ Combat Edge
-Work with HQ AFMC on mishap investigations
-Maintain professional/ proficiency training eg.- (EMEDS training, Instructor NVG course, JEFX, Top Knife, White House Leadership Workshops, etc)
-Primary Liaison to Human Effectiveness (HE) Technology Directorate at AFRL to promote key HWS technologies to user commands.
-Staff work in support of AFRL commander (Major General Paul Neilson) .. not too much of this

Examples of current high profile technology programs working at HQ AFRL in support of JV 2010 and related to our Human Weapon System needs:

-Panoramic Night Vision Goggles (PNVG)
-Agile Laser Eye Protection - Integrated with PNVG and future Strike Helmet 21/Joint Helmet-Mounted Cueing System)
-Hyperspectral Imagery (HSI) in support of Targeting Under Trees (TUT) and reducing kill chain time
-Distributed Mission Training & Night Vision Device Training
-Counterproliferation of NBC threats - Weapons development , Advanced Sensors and Decontamination procedures
-3-D audio and advanced hearing protection for JSF and F-22
-Agile Combat Support technologies - Logistics, Force Protection, Airfield Assessment, Air Inflatable shelters, DMT Information Technology, AEF Firefighting technology
-Sus Ops/Fatigue training and education.

Overall, the job entails a lot of travel and interfacing with the user commands and research directorates to ensure their needs are translated into effective technologies for both immediate and future AF requirements. In addition, participating in JEFX and RED FLAG type exercises and flying with the CAF adds credi-

bility to the technology development and the users love to see AFRL folks getting actively involved in ops to help improve technology and learn what their jobs are all about.

The Custom Mask Shop: The Custom Mask Shop (CMSS) at W-PAFB currently is developing the MBU-12/P mask for custom fit of USAF aircrew not properly fit by off-the-shelf mask sizes. Custom production of the MBU-20/P used with COMBAT EDGE is anticipated in the near future. TSgt (s) Ooten reports:

The CMSS is currently a three-man shop with Mr. Harold Pool, SSgt (TSgt Sel) Okey Ooten, and SSgt Shawn Miller producing specialized aviators breathing mask. A tremendous number of the 5/P custom masks continue to be produced each month.

Recently the new MBU-12/P-20/P *hybrid custom mask process* was transferred to the CMSS from Brooks AFB. The process has a ways to go to be fully operational. The CMSS is experiencing delays that we were not aware of until we started to produce the new mask such as: insufficient ventilation equipment (cited by Bioenvironmental Shop), the need for a pressure feed pot (used during degassing process), and proper mixing equipment. These issues are currently being worked with medical and base logistics personnel. We hope to purchase all equipment necessary to get the 12/P-20/P hybrid process up and running as soon as possible.

We are presently working on acquiring additional space in our building to separate the two processes. The old process produces a tremendous amount of dust and waste that could affect the quality of the new mask. We will continue to provide the same timely turnover rate on the 5/P system as in the past.

As fax and email are not the most reliable source of communication, it is imperative that we receive all requests in hardcopy letter form. Please make a note of our mailing address.

Custom Mask Shop
74th AMDS/SGPT
2290 Monahan Way
WPAFB OH 45433-7007

Wound Healing and Hyperbaric Medical Center

(WHHMC): The former W-PAFB Hyperbaric Treatment Facility has been civilianized. Under provisions of a Cooperative Research and Development Agreement (CRDA) with the Air Force, Kettering Medical Center (Dayton, OH) has taken over operations of the large multiplace chamber. OxyHeal, Inc. is the operational sub-contractor. Medical director of the facility is Dr. Paliti, and Mr. Mike Milligan is the operational chief. In addition to clinical operations, the WHHMC has initiated a clinical research protocol to test the efficacy of hyperbaric oxygen therapy in the treatment of cerebral palsy.

Although the USAF Hyperbaric Center (USAFSAM/FEH), Brooks AFB is not directly involved with WHHMC's clinical or research activities, as DoD Lead Agency for Hyperbaric Medicine, it will continue to monitor operations and provide staff assistance oversight, as needed. Military members at W-PAFB requiring hyperbaric medical treatment will continue to be treated in the Wound Healing and Hyperbaric Medical Center.

Warriors Supporting Warriors

Edwards AFB

The APTF at Edwards AFB closed, effective 30 June 2000. The 99S-2 hyperbaric chamber was transferred to DRMO in the summer of 1999. Although most of the Aerospace Physiology personnel were lost to manpower reductions or reassigned to other units, Capt Michele Kemeny and TSgt Shannon Ledgewood staffed AFMC's first Human Performance Training Team (HPTT). Capt Kemeny separated from the Air Force 31 May 01; Michelle did a great job and will be missed. TSgt Ledgewood reports the following:

HPTT. How do you explain to the members of the Air Force Flight Test Center that the chamber unit that has been active for over 42 years has closed and you are now the Human Performance Training Team (HPTT)? This was the first of many challenges we have faced as the first HPTT to be assigned to Edwards AFB. Needless to say the last year has been a lesson in the strategies of marketing. Armed with a mission statement and a list of subjects, we set off to spread the word. We spoke at meetings, Commander's Calls and First Sergeant's briefings, and even put articles in the base and local papers. I can't say that the phones rang off the hook, but we did find our way into many shops and squadrons. As time goes on, some doors continue to open, although some doors remain closed. *Heat stress*, *fatigue*, and *loss of situational awareness* are always hot topics, and if you can get a few of the right people interested, they usually jump at the chance to let you help their troops. Security Forces, Paramedic Ambulance Services, and Fuels have been just a few of our customers. Although our personnel continue to change with the addition of SSgt Kasey Moore-Ritchie in April, separation of Captain Michelle Kemeny in May, and the gain of 1Lt. Stacy Benedict in August, the beat goes on.

Command Coordinator's Notes:

TSgt Shannon Ledgewood is projected for assignment to Beale AFB in Sep/Oct 01.

1Lt Benedict and SSgt Moore-Ritchie appear to be AFMC's only HPTT, until additional manning authorizations are established at Hill AFB (388 FW/ACC), Tinker AFB (552 ACW/ACC), and/or Kirtland AFB (58 SOW/AETC).

Kadena Air Base
Okinawa Japan

Command Consultant
— Maj Rick Fofi
Functional Manager
— MSgt John Busby

Kadena AB

Greetings from Okinawa – " The Hawaii of Japan". As usual, the Kadena PTF has experienced some significant changes in personnel this summer. We had to say farewell to SMSgt Riddle (PCS to Sheppard) and MSgt Haenen (retired). In September, we will lose Capt Jim Allen to Kunsan and welcome Lt. Fontenot from the USAF Academy via an AFIT program. I (Major Rick Fofi) have rolled in from an AFIT sponsored leisure tour at UNLV to take Major Tuna Carlton's place as PTF commander and PACAF coordinator - indeed some big shoes to fill. Major Carlton initiated some very big projects for the PTF and now it will be my job to see them through to completion. Fortunately, I have inherited a very sharp flight of professionals to make sure it happens!

September will kick off a complete overhaul of our PTF facility including building renovation, new chamber pumps and office furniture, etc…We will shut down and move out for most of September and the first half of October (something about asbestos) thereafter we will attempt to work around the contractors until May '02, but we should have a real pretty place when all is said and done. During our down time and subsequent limited operating capacity, our plan is to direct our attention to the existing and soon to be fully deployed HPT teams.

It has been and will continue to be a particularly challenging task for the "first-in" HPTTs, especially for those NCO's who arrived ahead of their respective officers. For instance, I really get wrapped around the axle when I hear things like our HPTT NCO at Misawa AB is pulling records and greeting patients at flight medicine until the officer arrives this fall. It is my intention to provide all the support and guidance we can to ensure their success. We have budgeted several TDY's to visit and assist all of our HPTT sites in PACAF.

On the home front, since we won't have a place to call our own for a while, the mandate is that every healthy airman worth their salt get out and immerse themselves in all aspects of the Ops Group to include a healthy dose of flying. We have C-130's E-3A's F-15's and Helos taking off with "Space Available." It's a perfect a time to get some air under our butts (then jump if required and qualified)!

HAAMS

The Kadena HAAMS program is growing stronger everyday. We continue to make ourselves available to all user groups in PACAF through Long Range Tactical Coordination Conferences and sheer presence in their midst. Once a quarter we give a briefing at various locations throughout PACAF informing users and flyers of our capabilities, needs, and the product we offer. Jump qualified personnel also keep face time at a maximum by jumping with every group on island any time we can. FY 01 jump totals are 35, not too bad for only two jump qualified folks currently assigned.
HAAMS personnel teach all blocks of instruction for HAP Initial and Refresher courses. We have 3 folks qualified to teach the human performance blocks and 6 folks qualified to teach escape/crash survival and oxygen equipment/chamber lecture.
Our FY 01 travels have taken us to locations all over this part of the world; Guam on numerous occasions, Exmouth Australia, Nowra Australia, and Seoul and Osan AB Korea. We have trips planned to many more places this FY and next, but, you'll have to wait for info on those places after the fact.

We are continually working hard to upgrade folks and with increased user group requests plus intense local training, we should have a plethora of qualified personnel in the near future. We have two fully qualified folks due to arrive in Nov 01, SSgt Paez and SSgt(s) Jones. They certainly will add to our ability to meet any user group requests ANYTIME – ANYWHERE! AIRBORNE

HYPERBARICS

Our Hyperbaric Operations have been in full swing since the beginning of the dive season. We treated 12 patients for a total of 15 treatments. Although part of our mission is to support any altitude induced decompression sickness (DCS), whether it occurs from the altitude chamber or

the many different weapons systems we support, we are also here to treat any DCS related incident from U-2 flyers and Navy Deep Sea Divers. Now that I've given you the company line of what we do, ALL of our hyperbaric treatments this year have been in support of the local recreational scuba diving community. When we look back at all of these cases, stupidity played a large role…i.e.…" I didn't know that diving to over 100' consecutively three times without decompression stops would effect me!"… Now that you know the caliber of people we have been dealing with…we thought we'd let you know some of the things we've been doing to improve our operation and capabilities.

Our multi-million dollar fire suppression installation project has finally come to an end after two long years. We now have a better system (???) to combat a fire hazard, but drowning inside the chamber is more likely considering the water flow is equivalent to Niagara Falls.

We also don't mess around when it comes to hyperbaric training. The unit will hold the first ever hyperbaric training conference from 21 Aug 01 – 24 Aug 01. The hyperbaric conference will consist of the two-day hyperbaric training course conducted by Davis Hyperbaric Laboratory, and it will also have additional guest lecturers. This conference has attracted individuals from various backgrounds and locations…we are having participation from our sister services, local Okinawa dive shops, and even Taiwan representation.

HPPTs Around The Rim (PACAF)

KUNSAN

Since my arrival in February, I have found the Wolf pack, as we are more affectionately known, to be a fertile ground (so to speak) for the Human Performance Team Training (HPTT) mission. **History:** The 8 FW is an organization with a long history of high operations tempo and in need of what we have to offer. The norm for all personnel arriving at the Wolf pack, is to "hit-the-ground running." Kunsan believes in regularly practicing for war and "EXERCISES" are the name of this game. With this in mind, opportunities are abound to evaluate and enhance human performance. A small base in comparison to most, personnel arrive with little to no overlap. In some cases, individuals arrive a month after their predecessors departed; increasing the stress and learning curve for all new Wolf pack members. Add to this, most members are required to perform multiple jobs during their tours; increasing the human factor (mission imposed and self imposed stresses) issues. Over the past few months, my concentration has been on setting up shop, developing briefings and increasing awareness of the HPTT. Initially, networking became a primary focus and still is to ensure maximum integration.

From the Medical Group: An ORI in March and JCAHO/HSI in June had the 135 Medical Group personnel humping (so to speak) to excel and capture an "Excellent" rating for the ORI and a "Best-to-date," 96/94 score from JCAHO/HSI. We ROK! **HPTT Projects:** I am providing weekly briefings to all newcomers on circadian rhythm disruption, SA, MIS, SIS awareness issues and coping strategies. I am involved in assisting Wing Safety with human factors issues during mishap investigations by providing data collection, analysis, and reports. I've also integrated into the flying squadrons to assist in data collection and analysis of personal protective equipment (PPE) issues for maintenance personnel. I've provided briefings to organizations on human factors issues and have been steadily making progress in human performance training. I expect to increase my performance in October when Capt Allen arrives to complete our team. For now, I'm continuing to push forward and address human performance issues from any organization that requests my services. Business is picking up. **Wolf pack Pride:** Our mission is to "Defend the Base, Accept Follow-on Forces, and Take the Fight North," so we can turn our enemy into hair, teeth, and eyeballs. A creed all Wolf pack members take seriously.

TSGT Denniston

Greetings from the ROK! It's been an exciting 10 months here at the 1st ever HPTT remote! After a few minor challenges, the unit here is up, running, and stable. 1Lt Stacey Benedict (recently PCS to Edwards AFB CA) started the unit from scratch a little over 1 year ago. I myself arrived 2 months later. Since the beginning we have endeavored to ensure that HP issues endemic to a location like Osan (A.K.A. "The Tip of the Spear") have been addressed. We have completed 8 performance assessments at local units and squadrons, and have been met with high enthusiasm and keen interest from the places we've visited. 1Lt Benedict and I were also key participants in the PACAF directed A-10 Action Workout Team. We have also injected HP concerns into the Base Newcomer's Orientation (which we brief weekly) and the First Term Airman Center (focusing directly on self-imposed stresses).

Acting in a liaison capacity, we have been in close contact with everyone from the Wing Safety office, to the 5th RS PSD folks, to the life support sections of both fighter squadrons. We have also participated in 6 (count 'em – 6) major combat exercises, including 3 major inspections! We can tell you *all about* chem-gear!

Whew! There just isn't room in this newsletter to tell you all the things we've done here.

Around 15 Sep 2001 our new OIC, Capt Steven Anderson, should arrive alongside my replacement, TSgt(sel) Barry Cook, from Randolph AFB TX. Two weeks later, I should be departing the Korean peninsula for sunny San Antonio (Randolph AFB – A. K.A. Home). All in all, it's been a good assignment and an unparalleled learning experience.

SSgt Dave Edwards

"Maintain a state of rigid flexibility"

MSgt (Ret) Bill Hill

YAKOTA

Currently at Yokota I (SSgt Burriesce) am aiding with the 459th life support water and land survival training, I am also aiding the 36th life support shop if needed for mask and helmet inspections. I help the HAWC only if they really need me for MFIT (mandatory fitness training), maybe once a week. I have only been here two months, but have made several contacts with different units, all which are interested in a field assessment of their troops. None have called upon me yet. I am currently working on getting into the in processing briefing for all new personnel arriving in Japan, and give a five minute introduction to HPT. I am also assigned as a Wing Exercise Evaluation Team member evaluating primarily medical group personnel and functions. 1Lt Kacy Mitchell is not yet arrived on station but will be here the second week of September or so.

Yokota is a great assignment and the medical group loves us being here, It has been a little of an uphill battle at times. We seem to be winning here though. I have heard some of the war stories and I can guarantee that is not happening at Yokota. The commanders here love us and the training NCOs at the different squadrons are very interested in the HPT concept. When I finally have an officer here we will be able to go up the chain a little higher and really get the ball rolling. Being here a little over a couple months there is not a whole lot left to report. More to come later, hope this is decent enough.

SSgt Peter C. Burriesce
374 AMDS/SGPF

EIELSON

Do'eent'aa? (Hello, how are you? – Tanana Athabaskan Natives) I burst into this jaw-dropping beautiful state in mid-April, a state where mankind is still part of the food chain. 1Lt Lonnie Britton will soon follow, arriving in early September. Eielson's tongue-n-cheek motto, "…where the mission is fishing'" no longer applies today. This tiny base, carved from the forests around it, serves as a primary staging area to every Theater of Operations in the world. Our perch atop the planet has us geographically closer than any other Air Force Base. And the bustling pace means there's plenty to keep Eielson's first Human Performance Training Team busy, with three-quarters of the wing's populous deploying twice yearly. The unique stresses posed by the "land of the midnight sun" play havoc with circadian rhythms (for starters). So do the black winters, with sunlight greeting you a couple hours daily. And speaking of the winter wonderland, flying operations here don't stop until it's 40-below! Eielson's also the home of Cope Thunder, PACAF's premier joint-nation exercise, where aircrews the world over converge four times annually, attracted by 63,000 miles of flying space. The human performance arena finds a unique home here in the great white north, for those willing to tackle the challenges and exploit the opportunities.

CHERYL L. GORDON-JOHNSON, TSgt, USAF
NCOIC, Aerospace Physiology
Human Performance Training Team

"He's not THAT big!" - Captain Gibson, before Bullwinkle stood up, laid his ears back, and prepared to charge!

AAAHHH!!! The HPTT life in the arctic! You just have to love it! Between Eielson and ourselves, Alaska is a human factors nightmare! These two bases combined have the highest prescription rates (respectively) for Prozac in the Air Force! No! It's not just since the two HPTTs stood up either -- although some commanders may be upping their doses. It's that wacky thing called Seasonal Affective Disorder – a result of the extreme exposures to, and changes in, sunlight and darkness from winter to summer. Having been up here a year, I can tell you it is real, because I am absolutely crazy about Alaska and the things we are doing up here. Yes, it could be significantly better and we could be doing so much more, but others are very suspicious and extremely territorial. As with any situation, plenty bad jokes and large quantities of liquid hypoxia are helping to break down the barriers of resistance.

For those looking forward to setting up a HPTT, it's not easy and it's never-ending. It's like trying to sell snow cones to Alaskans in the winter. There are a lot of people that don't want us here and they want us to fail. Some think what we are trying to do is their job (which they aren't even doing anyway) and others absolutely object to our assistance because we are not "rated." It's a tough gig and can be very discouraging! I'm thinking about that Prozac prescription myself! But seriously, once you have your feet in the door, your "customers" see you around on a regular basis, and they know you really care and do want to help, then those walls of resistance DO start coming down. You won't be able to get in every door and you won't be able to solve everyone's problems. But, if you make just one small dent, it could be the difference between an incident and a mishap! The

funny thing is that you will probably never even know what a difference you have made at all. If you're lucky, one day, someone will pull you aside and tell you that they remembered something fairly insignificant you mentioned in a brief once upon a time and that what you said actually helped get them out of a sticky situation. Then it hits you! What you are doing is making a difference and all is good with the world! It's almost feels as good as saving a puppy from the pound! Well…maybe not quite that good, but it sure is close!

The Elmendorf HPTT sends its congratulations to all recent promotees and we look forward to many doses of liquid hypoxia in celebration of those raises! Let's keep the communication lines open and talk about the issues being confronted out there. Together, we might just be able to pull this whole thing off!!!

Yours in the Phyz Biz,
Boone

Daniel C. Gibson, Captain, USAF, BSC
Chief, Aerospace Physiology
Human Performance Training Team

Air Mobility Command

Command Consultant
— Col Susan Richardson
Functional Manager
— SMSgt Dave Pridgeon

I. Together, Andrews and Fairchild AFBs remain as one of Physiological Training's most productive 11-403 training units. Andrews topped the list with an average of 17 classes and 206 students trained each month. Fairchild teaches slightly less with an average of 18 classes a month and 116 students. Each unit has steadily increased their sphere of influence in the arena of Human Performance Training. Andrews has conducted over 40 briefings on CRM, IRC and miscellaneous other topics to various organizations on base. FAFB also has an energetic program. Their Unit personnel routinely attend wing flying safety briefings and brief major flying organizations on base about the HPTT program. They have also developed commander's call briefings and informational flyers that they distribute to local flying squadrons and to personnel being deployed.

II. In addition to 11-403 training, each unit supports a vigorous HAAMS program. During the past year, both units combined to support eleven missions, fly over 30 sorties, and log over 70 hours of flying time.

IV. Recent promotions:

Andrews AFB
TSgt Select: Michele Ward
SSgt Selects: Kenya Jameson, Mary Beers, and IbrahimConteh

Travis AFB:
SSgt Select: LaKebra Wilson

V. Deployments:

SrA Mary Beers from Andrews AFB deployed to Kuwait for 90 days to support 3rd Country National Escort Duty

VII. Decompression Sickness History:

During the last 15 months, AMC had 13 DCS cases; the highest rate for all physiological training units. Fairchild topped the chart with 9 cases and Andrews with 4. The following information provides a short synopsis of the more serious cases that were treated in local HBO facilities during the past calendar year.

AAFB:

17 Mar 00: Original training student completed Type I & II chamber flights with no incidents. Approximately 24 hours post chamber flight student reported upper & lower extremity joint pain. The patient reported to local flight surgeon and was transported to University of MD Baltimore, Hyperbaric unit. Patient was treated on treatment Table 6. All symptoms were resolved.

FAFB:

5 June 01: Skin manifestation DCS, tingling of fingers after type I and II chamber flights. Student treated with 100% O2 for two hours with IV solution and then released.

23 April 01: Central nervous system DCS on Inside observer after type II flight. IO reported significant headache and lightheadedness and numbness. He was treated downtown on a hyperbaric table VI.

15 March 01: Joint pain only DCS on student following Type IV chamber flight and then arial flight to McChord AFB. Student report pain in knees, elbows and tingling. Treated on a Table VI in Seattle.

6 February 01: Minor knee pain and pressure sensation, student reported to chamber 18 hours post exposure, was put on two hours of O2. Symptoms improved within one hour and were completed resolved after two hours.

29 January 01: Neurological DCS on student following an FAA type IV flight. Student reported heaviness in her arms and a bubbling sensation in her chest. Treated on a Table VI downtown where symptoms resolved.

POC:

David W. Pridgen, SMSgt
Andrews AFB, MD

ANDREWS AFB

HOME OF AIR FORCE ONE