

Born to Fly

As I read the “Retention Questions” article on p. 49 of the January 2017 issue of *Air Force Magazine*, I got to thinking. As far back as I can remember it seems the Air Force has gone through these swings of pilot shortages. I was not a flier but knew a lot of them. The one thing they all loved to do was fly. With the cutbacks in funds to fly, the flight crews are not getting to fly as much as they used to, and like to do, as well as stay current. Throwing bonuses at them to keep them in helps but I think giving them more flying time would really help.

The other problem is lack of people. Across the board our airmen and women are being forced to work long hours and are often gone on almost back-to-back deployments. I believe to a person they are willing to do the job. However it takes a toll on their personal and family life.

Congress needs to step up to the plate and fund not only the Air Force but all our military with the manpower and funds to do the job.

Col. Don Hengesh,
USAF (Ret.)
Petoskey, Mich.

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Insanity Redefined

Regarding “Empty Racks,” January 2017, p. 28, Mr. Tirpak had a section titled “There Oughta Be a Law.” I was Active Duty ’83-’09 and was in the medical equipment repair field. As I read that section I truly could not recall when we didn’t do the Continuing Resolution two-step debacle during my career; I figured it probably happened a few times but I was only remembering when CR affected us. It was a tooth-pulling few months trying to secure funds for needed TDYs, repair parts, one-time contracts, etc., to keep equipment running (which in turn impacted patient care). I did a search and found on Wikipedia it was worse than I thought! Only three times between 1983 and 2015 did the budget actually pass on time!

Now the same Congress that is supposed to pass budgets—its job—is punishing the Air Force (and other services), affecting morale and performance, by denying them budget increases due to a law Congress itself wrote! Their dereliction of their responsibility is in turn costing significant amounts of money by delaying new aircraft purchases, as well as delaying arrival time. It’s insane. They keep denying big dollar cost savings—I’m going to say it—[such as] retiring the A-10—then add insult to injury by not passing a budget, in turn costing the services even more money problems.

The saddest thing of all is most budgets get well past 95 percent completed before 1 October, then more than the amount of time that was spent getting there is wasted dragging their feet over stupid little concessions no one wants to give into. It reminds me of basic training back in 1983—if one smoker lit up in the bathroom at night, all 50 troops in the flight suffered the consequences. In this case it isn’t even the Air Force

smoking and causing the problem, yet the Air Force suffers the consequences.

Seems Congress are the inmates in control of the asylum. Its processes and lack of job performance give a whole new meaning to the definition of insanity.

SMSGt. Mark Cipriano,
USAF (Ret.)
Elyria, Ohio

German Know-How

Your recent article “Our German Scientists” [January, p. 71] brought to mind my own experience with one of these scientists during my first assignment as a second lieutenant, assigned to the Materials Lab at Wright-Patterson AFB [Ohio] in 1963.

The article rightly described the postwar efforts to obtain equipment, personnel, and documents from the defeated Third Reich. I was elated that I would have the privilege to work with a leading German scientist in the field of aerospace materials. As I came to learn, the depth of his knowledge and the application of such knowledge remain a tribute to the quality of his academic education. [Albrecht] Herzog told me many stories of the Volkenrode, Braunschweig, aeronautical lab where he served as an assistant director. Fortunately, as key to his nonpolitical stance, he never joined the Nazi Party. He did admit that party members did

Index to Advertisers

Avis.....	67
Boeing.....	Cover II, 5, 15
L3 Technologies.....	3
USAA.....	Cover III
Walgreens.....	Cover IV
Air Warfare Symposium.....	35
AFAPlanned Giving.....	67
AFA Vision Insurance.....	73
AFA Monthly Giving.....	75
Corporate Membership Spotlight.....	45
Hangar Store.....	79
Hotels.....	73

seem to advance to higher positions more rapidly, but he insisted he was a scientist, not a politician. However, that early decision to devote his life to scientific pursuits paid unexpected dividends, as he was selected as one of the Paperclip scientists.

He told me that initially, the Paperclip scientists were interned at Wright Field in barracks surrounded by barbed wire-topped chain-link fences similar to POW conditions. Their first assignments entailed reassembly and calibration of all captured scientific equipment, including translation of pertinent technical documents. Once the equipment and documentation were assembled, sister services and industry personnel were invited to inspect and review this Third Reich technology and to freely use any portions of these items to enhance their own product technology as desired. This was only a small example of how this technology lead was shared with American industry to capitalize on that five- to 10-year technology advantage developed by the Germans.

Importantly, we were not alone in this quest for the treasure trove of German advanced technology. The Russians also had lists of key personnel, equipment, and documents representing both government and industry.

Herzog told me one story that demonstrated the determination of the Russians to also benefit from the German technology. He related that postwar, there was a scarcity of key foodstuffs including meats. His wife learned that there was a limited supply of meat in an adjacent town. He left on his bicycle to try to obtain some small amount of meat. While he was gone, a Russian tank pulled up outside his house and a Russian officer demanded Herzog. His wife told the officer that her husband was away and she wasn't sure of when he would return. The Russian told her he would wait. As this was not the Russian sector, it wasn't legal to kidnap personnel in Allied sectors. (Recall that postwar, Germany was divided into four sectors, including US, French, British, and Russian.) His wife was terrified when he didn't return promptly and she thought the worst. After a time, the Russian officer, knowing about Allied patrol schedules, angrily departed. Soon afterwards, Herzog returned and told his wife that the butcher shop in the adjacent town ran out of meat, so he had to pedal to another town to get the needed supplies. She related the story of the near

kidnapping and how fortunate they were that he wasn't home.

Herzog shared other stories of how technology was appropriated by the Russians. The Zeiss optical works in Jena, Germany, was within the Russian zone. The Russians carefully reconstructed the entire Jena physical facility in Russia. All equipment and technical support personnel were transferred to Russia. Several years later, Russia won international awards for the quality of their optical systems for cameras. Perhaps this was proof of successful technology transfer.

I remember asking Herzog, "Why wasn't the Braunschweig facility bombed by the Allies during the war?" He confirmed what your article stated, namely that the Allies did not know of its existence nor its location. The facility was indeed safely located in the forest.

Once he was integrated into the Civil Service working for the Air Force, Herzog continued his studies of behavior of rapid heating of advanced turbine alloys. Publication of these studies earned him several top technology achievement awards.

Before my assignment to Wright-Patterson AFB, I worked with a small firm producing advanced fibers for potential use in high performance composite structures. A diligent division chief of the Advanced Metallurgical Studies Branch of the Air Force Material Lab interviewed me and told me he had a scientist who was also working with high-strength fibers. He introduced me to Herzog, a GS-15 senior scientist, and we became involved in these advanced composite materials. Herzog's research also focused on exploiting these advanced fibers with properties exceeding anything experienced with conventional materials. The challenge was exciting to utilize materials which were four times stiffer than steel and up to 10 times stronger.

I had the privilege to work with a man who had earned the respect of the Air Force scientific community and had achieved that senior scientist rank from a near-POW beginning at Wright Field. We spent several years investigating advanced composites. I remain humbled by the opportunity the Air Force gave me to support Herzog, a Paperclip scientist's research, and to share many fascinating stories. As a friend and mentor, his guidance will always remain the highlight of my technical career. That guidance enabled me to become a more effective Air Force



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officer. Honoring an earlier pledge to his wife, he retired back to Germany to an honorary professorship at his university in Aachen.

Col. Wendell Meyerer,
USAF (Ret.)
Longwood, Fla.

Rebecca Grant hit another home run with her article on the effort to find and get German scientists, and the technology they had developed, to the US after World War II. To my knowledge, this subject hasn't ever received a lot of attention. Most people know about Wernher von Braun and some of his contributions to the space program. But that was just the tip of the iceberg. Some of the concepts that these men brought with them, or developed after they came here, are still in use today. The two books referenced in the article, *Operation Paperclip* and *American Raiders*, should be interesting reading. Thanks again for the outstanding article!

CMSgt Bill Leistiko,
USAF (Ret.)
Wichita, Kan.

Two articles in the January 2017 issue of *Air Force Magazine*, "44 Hours" [p. 33] and "Our German Scientists," were quite interesting as far as they went. In both cases, I was struck by the omission of references to the human component in weapon systems. For the 44-hour missions, the Biobehavioral Performance Branch of the Air Force Research Laboratory (AFRL) at Brooks City-Base in San Antonio provided applied research and development (R&D) and real-time guidance to the crews executing the missions. We created the Fatigue Avoidance Scheduling Tool (FAST) quantitative software designed primarily to support the scheduling of aircrew premission sleep and in-flight naps for these missions. The software made calculations based upon personal sleep histories of individual crew members, geophysical daylight-darkness cues en route, scheduled in-flight refuelings and bombing runs, and quantitative data about predicted human circadian rhythms, sleep length, sleep quality, etc. Dr. William F. Storm traveled a number of times to Whiteman AFB, Mo., from Brooks to help plan specific missions.

Perhaps the foremost German scientist who worked for the Air Force

was Dr. Hubertus Strughold. Prior to suspicions being raised decades later about his WWII participation in Nazi experiments, Strughold in fact pioneered space medicine in this country and made numerous contributions to R&D concerning aviation physiology. His work is said to have allowed men to walk on the moon. The research library at Brooks City-Base was named after Strughold, and he had an office in that building into the 1980s. Brooks closed as an Air Force facility in 2011. Strughold's name is no longer honored. However, the fact that a German scientist made such a contribution could have been mentioned in the article, perhaps with the proverbial asterisk.

It is rare that engineers receive training in how the human operator functions in a human-machine system. Thus, while the machine side of the system may be amazingly functional and reliable, the human-machine interface may be appallingly bad. I saw this combination a number of times in 1987-89 as chief of the Human Factors Engineering Branch for the Air Force Flight Test Center at Edwards AFB [Calif.]. This is not just a USAF problem, but one that plagues system development in nonmilitary institutions and in our sister services.

The omission of a mention of the human component in these two articles was quite consistent with the organization of the R&D component of the USAF acquisition system. Within AFRL, only one directorate, the 711th Human Performance Wing, focuses on the human component, while seven directorates focus on hardware and software. Within the Air Force Office of Scientific Research (AFOSR), only a portion of one of four divisions, Chemistry and Biological Sciences, focuses on the human component. This organizational structure for R&D seems quite out of line with the phrase within the USAF vision statement that states, "The World's Greatest Air Force—Powered by *Airmen*, Fueled by Innovation" (emphasis added). Perhaps a somewhat greater focus on R&D and acquisition on the human component in weapon systems is justified.

James C. Miller
Buffalo, Wyo.

A Hairy Situation

I was amazed to see the photo of Capt. Krystle Duckett letting her hair

down on p. 61 of the January issue. ["B-1, Better Than Ever," p. 54]. Is the current philosophy to not enforce grooming standards in the aircraft? Just saying.

Lt. Col. Randy Rothe,
USAFR (Ret.)
Colorado Springs, Colo.

I've been retired for a couple of years so I checked the AFI to see if there had been a change in female hair grooming standards. Apparently not, so what's up with Captain Duckett's hair?

Maj. Gen. Brett Williams
USAF (Ret.)
Durham, N.C.

New Times, New Rules

Re: *Air Force Magazine's* January 2017 news item: "Air Force Sets Transgender Policy" ["Air Force World," p. 18]. I hope our new Defense Secretary, James Mattis, calls a halt to social engineering experiments that sacrifice discipline for diversity. The Air Force's transgender policy is a perfect example of this insanity.

The policy states that transgender troops must use "lodging, bathroom, and shower facilities" in accordance with their Military Personnel Data System gender marker both before and after their transition. Do they need gender-neutral foxholes in combat situations? The policy also forbids "a commander to deny medically necessary treatment to a transgender airman." Does this mean Uncle Sam pays for gender reassignment procedures? If so, can taxpayers claim a deduction for equipment replacement costs? Just asking. I assume this policy, set under former Defense Secretary Ashton Carter, also applies to the Army, Navy, and Marines. His successor must revoke it.

Former SECDEF Carter earlier said the Pentagon will consider easing standards for tattoos and physical fitness to attract a wider mix of recruits who don't meet current requirements. That's like saying: "Don't raise the bridge. Lower the water." If basic rules don't apply to everyone in uniform, then they apply to no one. If you lower standards for tattoos and fitness, what's next? Can Rastafarian recruits wear dreadlocks? Will Muslim troops be allowed to grow long beards? Can former street gang members sport gang tattoos and colors? If everyone

in uniform does their own thing, you have a mob, not a military. Sacrificing discipline on the altar of diversity threatens our nation's security by putting political correctness ahead of combat readiness. End it ASAP.

Richard Reif
Flushing, N.Y.

Hoover Praise

Your article on Bob Hoover brought back fond memories ["Air Force World: Bob Hoover, 1922-2016," p. 20]. While at the 198th Fighter Squadron in the Puerto Rico Air National Guard, Bob Hoover accepted our invitation to participate in our anniversary activity at the ANG base in San Juan. Bob flew in on his Aero Commander and asked me if he could fly one of our F-86Ds to familiarize himself with the local area. I was to be his wingman on takeoff but at the runway end he signaled me to take the lead. We flew around the area for about 40 minutes or so and went back to the air guard base at San Juan. When I parked my F-86D at the ramp the crew chief asked me if I had gone crazy. Seems like Bob Hoover did a couple of rolls right after takeoff and all thought it had been me. What a great guy. Had him for dinner at my home that evening and one of the pilots brought a guitar. Bob knew all the raunchy tunes. We had a great evening with a great pilot.

Maj. Gen. Orlando Llenza,
USAF (Ret.)
Pembroke Pines, Fla.

Fun With Restoration

I thoroughly enjoyed the article in a recent edition about how they restored a B-52 (Ghost Rider) from storage at the "Boneyard" and got it back to full operational status ["Air Force World: Ghost Rider Returns to Minot," December, p. 18]. Eight years in the dry desert air and proper storage had kept the aircraft in very good condition.

However, not to take anything away from the efforts of all personnel involved, how about restoring a crashed C-130 abandoned and buried in the ice at the South Pole for 17 years?

According to the website <http://www.southpolestation.com/trivia/history/321/digout.html>, a Navy LC-130 (called "321" for its call sign) crashed on Dec. 4, 1971. The LC-130 that arrived four days after the accident to rescue the crew and brought a Navy accident-investigation team. The team's evaluation was that the extensive damage

and remoteness of the site made recovery impossible. The airplane was abandoned after being stripped of instruments and other equipment that could be easily salvaged."

The website says that over the years over seven meters of ice and snow buried the aircraft. In 1986 it was decided to rescue the airplane. After a lot of effort, this was accomplished and on 10 January 1988 she flew again!

SMSGt. Dave Caron,
USAF (Ret)
Las Vegas, Nev.

ANG vs. AFRC

I was disappointed that *Air Force Magazine* editors recently passed up an opportunity for an "informable moment" in the January 2016 "Letters" [p.8].

In his letter, retired Col. Robert C. Lilljedahl asked, "What happened to

the Air National Guard as a major command?"

Colonel Lilljedahl noted that in the "Photochart of USAF Leadership" (September 2016) ANG director Lt. Gen. L. Scott Rice was included under the Air Staff rather than with majcom commanders.

The Air Force currently has 10 major commands, of which the ANG is not one. The ANG is "a state militia air reserve component (ARC) of the United States Air Force" and as such reports to the Air Staff. Operating under Title 10 USC all ANG units are operationally gained by an Active Duty major command.

The Air Force Reserve, which the colonel also mentioned in his letter, is both a majcom and an ARC.

Col. Bill Malec,
USAF (Ret.)
O'Fallon, Ill

Senior Staff Changes

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CHANGES: Brig. Gen. William T. **Cooley**, from Program Exec., Prgms. & Integration, Missile Defense Agency, Redstone Arsenal, Ala., to Cmdr., AFRL, AFMC, Wright-Patterson AFB, Ohio ... Brig. Gen. Michael A. **Guetein**, from Sr. Materiel Leader, Remote Systems Directorate, SMC, AFSPC, Los Angeles AFB, Calif., to Program Exec., Prgms. & Integration, Missile Defense Agency, Redstone Arsenal, Ala. ... Brig. Gen. Kevin B. **Kennedy**, from Dir., Cyberspace Ops. & Warfighting Integration, Office of Info. Dominance & CIO, OSAF, Pentagon, to Dep. CIO, C4 & Info. Infrastructure Capabilities, OSD, Pentagon.