### To Coin a Phrase

The article "Horner's Gulf War" [March, p. 22] was a great recap of the air war in Desert Storm and it brought back a lot of memories. Just one faux pas—the term "tank plinking" came from me! I was one of the F-111 fraggers there at Riyadh and I had to come up with a name for this type of mission. "Tank plinking" seemed to fit, as it was akin to plinking turtles in a pond with a .22 rifle. F-111s and F-15Es had practiced this tactic just before the air war began by overflying the border region and seeing if they could pick out the tank positions in their concealed "hides." To tell the truth, the thought of doing this for real and dropping 500-pound laser guided bombs (LGBs) seemed unrealistic, but when the mission became to attrit the Republican Guard tank strength before the ground war, "tank plinking" became the tactic.

General Schwarzkopf was not happy about the name as he considered it an affront to armor and we had to change the name for a couple of days, but then we went back to "tank plinking." This is probably what General Horner meant

when he said the name was his—he fought the three-star vs. four-star battle and won!

Lt. Col. Clifford R. Smith, USAF (Ret.) Olive Branch, Miss.

#### The Invisible Pilot

Thank you for a great F-22 article in the March 2016 issue ["Critical Ingredient in Short Supply," p. 16].

Having been a fighter pilot and fighter test pilot for over 20 years, when I retired from USAF I was employed by Lockheed Martin (then Lockheed) to work on the development of the F-22. This was during the '90s and early 2000s, and I eventually worked my way up to the director level as the chief of systems engineering. This was one of the most arduous and stressful periods of my life with no shortage of problems, all related to the big three: cost, schedule, or performance. After solving one problem, others always loomed, with no light at the end of the tunnel. There was very little reward other than another problem to solve, which was typical of all large development projects. Hundreds of people sacrificed through those years and the price was high, with the priorities and oversight sometimes overwhelming. Burnout was frequent and morale was always an issue. But we always kept our sights on the product with the fighter pilot in focus. And what a remarkable machine it is.

Thus the reward is in the product, and your article verified the truly magnificent F-22. After all the hardships, I am gratified knowing that the airplane is living up to the user's expectations, and its performance is validated in combat. We truly developed a fighter aircraft with the fighter pilot in mind: He is largely invisible and his situation awareness is comparable to a God's eye view of everything around him.

Thank you for your fine article which was a great reward for the hundreds who persevered during the difficult developmental years.

Lt. Col. Johnny Johnson, USAF (Ret.) Marietta, Ga.

#### **Bad Battle**

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however heroic, should never have been fought ["All Eyes on Khe Sanh," March, p. 60]. A single death for a useless piece of ground is never warranted.

Ronald Weinger Berkeley Heights, N.J.

#### Conventional B-2

I appreciated the "Airpower Classics" article on the B-2 in the March 2016 issue of Air Force Magazine [p. 76]. There were many of the people mentioned in the article with whom I was familiar. I was curious about Robert Dudney and Walter Boyne stating, "The B-2 was redesigned for conventional war." I was very familiar with the B-2 prior to my retirement after its first flight in 1989. The SAC program office worked diligently to assure that the basic capability for the integration of GPS into the B-2 bombing-navigation system was maintained so that a future GPS guided bomb could be employed. The SAC B-2 program office was the operational USAF sponsor for 1989's successful Eglin AFRL effort to demonstrate the feasibility of a GPS guided bomb, which was the forerunner of the JDAM's first combat employment mentioned in 1999 on Serb targets. The basic B-2 design was robust and had a conventional capability that facilitated the integration of the JDAM.

Col. Jack Hauser, USAF (Ret.) Chesterfield, Mo.

# **Red Tails**

I want to commend the Air Force Magazine editors for commemorating the achievements of the Tuskegee Airmen in its March 2016 issue with a large number of captioned photos, which included some very important facts and valuable statistics ["Red Tails," p.34]. I especially appreciate its addressing the persistent myth that on their bomber

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escort missions, the Tuskegee Airmen "never lost a bomber," when in fact at least 27 Tuskegee Airmen-escorted bombers were shot down by enemy aircraft. The feature also brought out the fact that there were no Tuskegee Airmen aces, which refutes another common myth.

There were a few mistakes, however, that I wanted to mention.

On p. 37, photo 7 shows a photo of Roscoe Brown with Marcellus Smith working on a P-51 Merlin engine, which implies that Brown was an aircraft mechanic. In fact, he was a pilot, one of only three Tuskegee Airmen to have shot down a German jet.

On p. 38, photo 6 caption states, "Tuskegee Airmen were among the first to engage with and shoot down German Me 262 fighters" but that is false. Tuskegee Airmen aerial victories over German Me-262 jets took place on 24 March 1945. The first US aerial victories over such jets took place as early as August 1944, and by 24 March 1945, US pilots in other units had already shot down 60 Me-262s.

Finally, on p. 40, the caption to photo 7 states, "No Tuskegee Airman deployed to the Pacific Theater" is not strictly true. Some black liaison pilots who trained at Tuskegee, who were also considered Tuskegee Airmen, did deploy to the Pacific during World War II. Please see the book *Two Steps From Glory* by Maj. Welton I. Taylor, which mentions some of the Tuskegee liaison pilots.

Daniel L. Haulman, Air Force Historical Research Agency Maxwell AFB, Ala.

I was struck by the impressive Tuskegee Airmen photo that introduced the "Red Tails" photo collage in your March 2016 magazine. I noted to my surprise that the aviators pictured were wearing "low quarters" in lieu of flight boots.

I enlisted the aid of the Air Force Historical Foundation in hopes of getting more information on their footwear.

The executive director provided two possible explanations. Either the photo was staged and flight suits were just donned impromptu for the picture or flight boots were not available since they weren't issued until pilots were in-theater.

He added that USAAF standard issue A6 flight boots, which came with an A7 felt liner shoe insert, were worn during combat operations. The A6/A7 combo



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was preferred by bomber and fighter aircrew due to the warmth the boots provided at high altitude. Unfortunately during parachute bailouts the boots had a tendency to fall off due to their loose fit and the high-speed shock of the parachute opening.

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

Really appreciated and enjoyed [the] article on the "Red Tails." As a member of the 376th Bomb Group in '44 and '45, the sight of those red-tailed P-51s is etched in my memory banks. To those "Red Tails" still living, thanks, guys!

Lindy Dragone Ludlow, Mass.

## **Hypersonic History**

"Hypersonic Weapons Come of Age" (March, p. 47) gave credit to Antonio Ferri for his "pioneering work" in scramjet testing. In 2012 I was asked by a former NATO Headquarters colleague, Brig. Gen. Arnaldo Ceccato (Italian Air Force, retired), to represent USAF at a centenary ceremony honoring Dr. Antonio Ferri. The event took place in the medieval city hall of Norcia, Italy.

For all jet engine aviation enthusiasts it may be interesting to know a little more of Ferri's life. There are several sources for his story which together make interesting reading. From 1937 Ferri had been doing research on high-speed aerodynamics at Guidonia, near Rome. His work in the area of supersonic wind tunnels was well-noted at the time. When the Germans occupied Rome in September 1943 he was able to destroy vital equipment at the Guidonia facility, taking some important research documents with him. He and his brother

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# Senior Staff Changes

#### **NOMINATIONS:**

To be Brigadier General: Mark A. Baird, Kenneth P. Ekman, Dennis Hunsicker, Clifford N. James, Scott M. Lockwood, Robert A. Meyer Jr., Paul D. Nelson, Bradley C. Saltzman, Andrea D. Tullos, Craig D. Wills.

To be ANG Lieutenant General: Leon S. Rice.

To be ANG Major General: Mark H. Berry, Gregory S. Champagne.

To be ANG Brigadier General: Tamhra L. Hutchins-Frye, James J. Keefe, Andrew E. Salas, Daniel J. Swain.

To be AFRC General: Joseph L. Lengyel.

To be AFRC Lieutenant General: Maryanne Miller.

To be AFRC Major General: Robert N. Polumbo.

CHANGES: Brig. Gen. Mitchel H. Butikofer, from Dir., C3 & Cyber Sys., TRANSCOM, Scott AFB, III., to Vice Cmdr., 24th AF, AFSPC, JBSA-Lackland, Texas ... Brig. Gen. (sel.) Angela M. Cadwell, from Exec. Officer to Dep. Cmdr., EUCOM, Stuttgart-Vaihingen, Germany, to Dir., C3 & Cyber Sys., TRANSCOM, Scott AFB, III. ... Brig. Gen. Christopher E. Craige, from Cmdr., 438th AEW, ACC, Kabul, Afghanistan, to Vice Cmdr., 3rd AF, USAFE, Ramstein AB, Germany ... Brig. Gen. (sel.) Alexus G. Grynkewich, from Chief, Integration & Planning, DCS, Strat. Plans & Rqmts., USAF, Pentagon, to Vice Dep. Dir., Nuclear, Homeland Defense, Current Ops., Jt. Staff, Pentagon ... Lt. Gen. Bradley A. Heithold, from Cmdr., AFSOC, Hurlburt Field, Fla., to Principal Dep. Dir., Cost Assessment & Prgm. Eval., OSD, Pentagon ... Brig. Gen. (sel.) Linda S. Hurry, from Cmdr., 635th Wg., AFMC, Scott AFB, III., to Dir., Expeditionary Spt., AF Instl. & Mission Spt. Center, JBSA-Lackland, Texas ... Brig. Gen. David J. Julazadeh, from Cmdr., 455th AEW, ACC, Bagram Airfield, Afghanistan, to Dep. Dir., Ops., CENTCOM, MacDill AFB, Fla. ... Brig. Gen. Kyle J. Kremer, from Exec. Officer to the Cmdr., TRANSCOM, Scott AFB, III., to Dir., Manpower & Personnel, Jt. Staff, Pentagon ... Brig. Gen. David A. Krumm, from Vice Cmdr., 5th AF, PACAF, Yokota AB, Japan, to Spec. Asst. to the C/S, USAF, Pentagon ... Gen. (sel.) Joseph L. Lengyel, from Vice Chief, Natl. Guard Bureau, Pentagon, to Chief, Natl. Guard Bureau, Pentagon ... Brig. Gen. Bruce H. Mc-Clintock, from Sr. Defense Official/Defense Attaché-Russia, EUCOM, DIA, US Embassy, Moscow, to Spec. Asst. to the Cmdr., AFSPC, Peterson AFB, Colo. ... Lt. Gen. (sel.) Maryanne Miller, from Dep. to the Chief of AF Reserve, USAF, Pentagon, to Chief, AF Reserve, USAF, Pentagon ... Brig. Gen. Thomas E. Murphy, from Vice Cmdr., 24th AF, AFSPC, JBSA-Lackland, Texas, to Dep. Dir., C4/Cyber, Jt. Staff, Pentagon ... Brig. Gen. Stephen W. Oliver Jr., from Dep. Dir., Strategy, Plans, & Prgms., AFRICOM, Stuttgart-Mohringen, Germany, to Vice Cmdr., USAF Expeditionary Center, AMC, JB McGuire-Dix-Lakehurst, N.J. ... Lt. Gen. (sel.) L. Scott Rice, from Adjutant General, Massachusetts Natl. Guard, Hanscom AFB, Mass., to Dir., ANG, Natl. Guard Bureau, Pentagon ... Brig. Gen. (sel.) Bradley C. Saltzman, from Exec. Officer, AFSPC, Peterson AFB, Colo., to Dir., Future Ops., DCS, Ops., USAF, Pentagon ... Brig. Gen. (sel.) James R. Sears Jr., from Dir., Assignments & Air Expeditionary Force Ops., AFPC, JBSA-Randolph, Texas, to Cmdr., 455th AEW, ACC, Bagram Airfield, Afghanistan ... Maj. Gen. (sel.) Bradley D. Spacy, from Dir., Expeditionary Spt., AF Instl. & Mission Spt. Center, AFMC, JBSA-Lackland, Texas, to Cmdr., AF Instl. & Mission Spt. Center, AFMC, JBSA-Lackland, Texas ... Brig. Gen. (sel.) Andrea D. Tullos, from 42nd ABW, AETC, Maxwell AFB, Ala., to Dir. of Security Forces, DCS, Log., Engineering, & Force Protection, USAF, Pentagon ... Brig. Gen. Mark E. Weatherington, from Dep. Dir., C4/ Cyber, Jt. Staff, Pentagon, to Dir., Cyberspace Ops., NORAD, NORTHCOM, Peterson AFB, Colo. Lt. Gen. Marshall B. Webb, from Cmdr., NATO Spec. Ops., SHAPE, Mons, Belgium, to Cmdr., AFSOC, Hurlburt Field, Fla. ... Maj. Gen. Scott D. West, from Cmdr., 9th Air & Space Expeditionary Task Force-Afghanistan, Kabul, Afghanistan, to Dir., Current Ops., DCS, Ops., USAF, Pentagon ... Brig. Gen. (sel.) Michael P. Winkler, from Cmdr., 354th FW, PACAF, Eielson AFB, Alaska, to Vice Cmdr., 5th AF, PACAF, Yokota AB, Japan.

SENIOR EXECUTIVE SERVICE CHANGES: Darlene J. Costello, to Principal Dep. Asst. Secy., Acq. & Log., OSAF, Pentagon ... Daniel S. Goddard, to Dir., Info., AFRL, AFMC, Rome, N.Y. ... Kelly D. Hammett, to Dir., Directed Energy, AFRL, AFMC, Kirtland AFB, N.M. ... Richard W. Lombardi, to Spec. Asst. for the Invisible Wounds Initiative, Office of the Undersecretary of the Air Force, Pentagon.

Giuseppe then organized partisans. In 1944 Antonio was sought out by the OSS as a significant scientist. He was subsequently brought to the United States where he continued his work at the Langley Research Center, Hampton, Va., making valuable contributions to resolving supersonic combustion prob-

lems for USAF fighter aircraft engines. Ferri was the author of "Elements of Supersonic Aerodynamics," published in 1949. His later contributions centered on hypersonic flight.

Lt. Col. Richard E. Buys, USAF (Ret.) Erie, Pa.