The Leadership of Charles A. Horner

The Man, the Fighter Pilot, and the Commander

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Abstract

General Charles A. Horner ledet den mest vellykkede luftkampanjen i moderne tid. Denne artikkelen analyserer den amerikanske luftsjefens lederskap under Gulfkrigen i 1991, Operasjon Ørkenstorm, mot kriteriene for militær profesjonalitet (faglig ekspertise og ansvarsbevissthet) og personlige kvaliteter (karakter og oppførsel). Artikkelen går gjennom Horners militære karriere med fokus på hans utvikling som menneske og viktige hendelser som preget hans lederstil. Dernest analyserer artikkelen Horners rolle i krigen som tidenes første Joint Force Air Component Commander (JFACC) med særskilt fokus på planleggingen og gjennomføringen av luftkampanjen. Artikkelen konkluderer at Horner hadde svært god innsikt i den luftmilitære profesjonen og at hans fremste lederegenskap var evne til å etablere og opprettholde gode personlige relasjoner. Først og fremst med sin egen sjef, General Norman Schwarzkopf, men også med de andre komponentsjefene, koalisjonspartnerne og underordnede. Horner var pragmatisk i sin beslutninger og delegerte både ansvar og oppdrag, men viktigst av alt, Horner evnet på en utmerket måte å få ulike mennesker fra ulike nasjoner og religioner til å samarbeide mot et felles militærstrategisk mål.

GENERAL CHARLES A. HORNER commanded the most successful air campaign in modern history. The Gulf War of 1991, Operation Desert Storm, was a master class in air warfare compared to any application of military force since the Second World War. It set new standards for what the public, politicians, and military leaders expected from airpower; it represented a new phase in the evolution of military operations, capabilities, and effectiveness.¹

30 years after that war, this article examines General Horner's command and leadership during Operation Desert Storm, assessed in the framework of two key components: professional mastery (expertise and sense of responsibility) and personal qualities (char-

acter and behavior).2 To convey an understanding of the man, the fighter pilot, and the commander, the article identifies the professional training, education, and personal experiences that Horner accumulated over the years before he was put to the test as the first U.S. wartime joint force air component commander (JFACC). The article next examines the essential role Horner played in Operation Desert Storm by focusing on the planning and the execution of the air campaign as a whole and its defining politico-military circumstances.3 It revisits the air campaign's achievements, and concludes with reflections on Horner's style of leadership and modus operandi, emphasizing the factors that made him a successful air commander. While relying on authoritative literature and in-depth analysis, this research also draws on years of correspondence and recent interviews with General Horner and others who served with him to add further insight into his professional acumen and personal convictions.

Born in Iowa – Made in the USAF

Charles Albert ('Chuck') Horner was born on 19 October 1936 in Davenport, Iowa. His father, Everett Gerald ('Ike') Horner, had fought in World War I; he then returned to Iowa and obtained a law degree. By the time Chuck Horner was born, his father had become a successful lawyer and the family was modestly wealthy. When the Second World War broke out Ike Horner volunteered to rejoin the Army, but at the behest of his wife, née Mildred Baker, did not deploy abroad; after the war he worked for the Veterans Administration, while Chuck Horner's mother had a job at the Des Moinesbased draft board.⁴

With both parents working, Chuck Horner spent considerable time with his 'stern but forgiving' grandparents, and recalled that they stressed the importance of faith, work, integrity, and duty: 'One thing I learned from my grandparents was not to lie'. 5 From third grade on he held various jobs as a newspaper boy and worked in gas stations and on farms: 'I was pretty much on my own as I left home before my parents got up and came home after they had gone to work and then worked after school coming home often after they had retired for the evening.'6 He had a good upbringing, with caring parents and three elder sisters (Margaret, Ellen, and Mary Lou), but 'I was a loner and I kind of raised myself'.7 He recalls that he was shy but very self-confident.

When Horner was in fourth grade, he had his first encounter with flying: his best friend's father took the two boys up in a Piper Cub airplane. Horner found it a wonderful experience. Like many boys in America's 'golden age' of aviation, he developed a fascination with aircraft, built model airplanes, and followed the exploits of famous aviators.

Horner graduated from Urbandale High School in 1954 and entered the University of Iowa. He devoted little time to his studies, but he found it natural to enroll in the Air Force Reserve Officers' Training Corps program. He quickly appreciated the discipline of military service, and after a few hours in a single-engine Ryan Navion and his first solo flight in an Aeron Champion he knew he wanted to be a pilot. He was commissioned as a second lieutenant in the United States Air Force (USAF) Reserve 13 June 1958, just before he graduated with a Bachelor of Arts degree, and married his high school sweetheart, Mary Jo Gitchell, on 22 December of that year in the Congregational Church in her hometown of Cresco, Iowa.

Horner's basic flying training was in the T-34, T-28, and the then-first-generation jet-powered T-33 ('T-Bird'). He did relatively well in his academic courses and excelled in the air. There was something about the independence, responsibility, and competitiveness of a pilot's life that thrilled him. Already at that early stage he decided: 'my goal in the Air Force was to fly fighters and make Major so I could retire with a pension'. The Air Force also offered him a ticket out of Iowa. He received his silver pilot wings from Laredo Air Force Base (AFB) in November 1959: 'Probably the proudest moment of my life, other than when I got married... It was the beginning of my life.'9

After pilot training Horner transitioned to the F-100 Super Sabre, the supreme supersonic fighter aircraft at the time. Assigned to

Luke AFB, he flew basic air-to-air and air-toground training missions with the F-100C on the Gila Bend shooting ranges. He became a skilled pilot and he worked hard, always testing the boundaries of his aircraft. His first operational assignment was flying the F-100D with the 492nd Tactical Fighter Squadron (TFS) at the 48th Tactical Fighter Wing (TFW), RAF Lakenheath, England. The primary mission was nuclear strike, with all its associated classroom teaching, training, and certification, but the secondary mission of conventional air-to-ground and air-to-air strikes consumed most of the flying hours. He arrived in November 1960 and it did not take long before he became a flight leader.

During the three-year tour First Lieutenant Horner had two narrow escapes: an emergency night landing in foggy conditions in East Anglia due to a hydraulic system failure, and, worse, a near-death experience during a deployment to Wheelus Air Base in Libya. Following a near-collision he almost crash-landed: as the F-100D flipped, snap-rolled, stalled, and stopped complying with his orders, heading towards the ground, he was convinced that he was going to die. Then he miraculously regained control of the aircraft by going into an extraordinary afterburner maneuver.

Every day of my life after that event has been a gift. I was killed in the desert in North Africa. I am dead. From then on I had no ambition in terms of what course my life was going to take. That was up to God to decide... So I gave up me... I was reborn...Why? He wanted me to do something... What? I do not know... Whatever it was, I let go of my life and everything else in 1962. Sure, I fall into passion and lust and smallness. I am still a human being. But when I really start getting upset about something, I just say 'Screw it', I am dead, it does not matter.¹⁰

Horner had grown up attending church on and off, but this dramatic 'out-of-body experience' at the age of 26 turned him into a 'deeply religious man'. He was convinced his life now revolved around 'what God wanted me to do, not what I wanted to do'.¹¹

In December 1963, now a captain with a regular commission, Horner was assigned to the 335th TFS, 4th TFW, at Seymour Johnson AFB, where he would convert to the F-105 Thunderchief, known more informally by its pilots as the Thud.

The Vietnam Experience

Horner received his first combat assignment in June 1965. It was a six-month tour with the 388th TFW to Korat Air Base in Thailand, as part of Operation Rolling Thunder - an air campaign that required flights deep into North Vietnam in the face of enemy surfaceto-air missiles (SAMs), anti-aircraft artillery (AAA), and Soviet-built MiG fighters. The Thud pilots at Korat used the names of trees for call signs and Horner's became 'Teak 1'.12 His first mission was to drop bombs on an oil refinery in Vinh, North Vietnam. Immediately after having 'serviced the target' he saw a 37 mm AAA cannon shell resembling 'an orange ball' pass directly beside his aircraft. He realized the enemy had tried to kill him, which strangely enough made him feel at ease. 'That sort of took the glamour out of war for me, but it did not take away the exhilaration, because I can tell you, there is nothing more exhilarating than being shot at and missed... I love combat. I hate war. I do not understand it, but that is the way it is'.13

Horner recalls that he was a naïve patriot when he arrived at Korat and soon became very disappointed in the way the pilots were allowed to operate, dropping napalm and iron bombs without a clear purpose. His 'Road to Damascus' moment was 24 July 1965, when they were sent for the first ever attack on a SAM site. After much back and forth they were instructed to fly at a low level, despite the myriad AAA guns defending the SA-2 destination, in F105s equipped with CBU-2 and napalm bombs. With the latter type of bombs, they were not allowed to fly faster than 375 knots; flying low and slow would make their F-105s even more vulnerable to the Vietnamese AAA. Horner managed to drop his bombs, but in the event the squadrons from Korat lost four jets and three pilots and the accompanying squadrons from Takhli lost two jets and two pilots. Post-strike reconnaissance film showed an untouched SAM site, and worse still, the site proved to be a fake; 'missiles had been built of telephone poles, with a dummy radar in the middle' 14

That night, as those of us who came home made ourselves gloriously drunk and loud, there burned a bitterness in me against the stupid generals who sent us in at low level, trying to sneak up on an enemy whom we had trained to be the world's best defense experts.¹⁵

After a few months in theater, having lost many of his comrades to enemy fire, a disillusioned Horner returned to the United States. He did not want to leave, but the rotation system gave him no choice. Shortly afterwards he returned to Seymour Johnson to decompress and await new orders, and while there he received an Air Medal for the attack on the fake SA-2 SAM site. He recalls that he was proud: 'nobody else in his wing who had entered the Air Force since the end of the Korean war over a decade earlier had one of those blue and yellow ribbons on his chest'.¹⁶

Horner was sent to Nellis AFB, 'Home of the Fighter Pilot', in December 1965 as

an instructor preparing both new and experienced pilots to fly the Thud in combat. Horner enjoyed teaching: he was very combative and was considered a 'good stick'. He found that fighter pilots had to prove themselves against their comrades every day, but that competitiveness also created team spirit, unity, and squadron cohesion. He admittedly performed best with the pilots who were aggressive and quick to learn; the slow and incompetent would suffer his verbal abuse. He was frustrated by the policy that instructors were not allowed to 'wash anyone out' of the program, even those who were clearly 'ham fists' or could not cope under pressure.¹⁷

Horner still had an itch for combat, volunteered to return to the Vietnam war, and embarked on a second tour to Korat in the spring of 1967, now flying a version of the F-105 specially configured as a Wild Weasel to attack enemy SAM sites. Vividly remembering the fatal attack against the SA-2 site almost two years earlier he arrived with an axe to grind. Horner flew both SAM suppression and night radar bombing missions in an area that contained more than 7,000 antiaircraft guns and 180 well-camouflaged SAM launchers.

The improved suppression of enemy air defense tactics were partially successful, but they were overshadowed by an increasing frustration as he experienced at first hand the problems that resulted from not having a single air component commander and a common air tasking order (ATO). The 'Route Package' system entailing separate 'geographical grids of responsibility' in North Vietnam was designed to ensure that the Air Force and the U.S. Navy could operate without having to coordinate their strikes. There was no overall strategic plan, which significantly undermined broader operational coherence and efficiency. At the tactical level, there was an unhealthy rivalry between the two F-105

squadrons deployed to Korat, one reporting to the Pacific Air Forces (PACAF) and the other to Tactical Air Command (TAC).

Horner realized that the U.S. political and military leadership judged 'success' by the number of sorties flown and bombs dropped. and by body counts, not by the combat effects each mission actually achieved. Moreover, pilots were restricted severely because politicians in Washington selected targets and imposed rules of engagement that put the pilots' lives at unnecessary risk. 18 Consequently, at times the pilots took matters into their own hands. When they saw a valid target, they would strike it, but report to higher headquarters that they had flown in accordance with orders but had missed the intended target. When they flew into places where they should not have been, areas officially designated as off-limits, they altered their flight records to show they had remained within authorized boundaries.

During his Vietnam tours, Horner developed a strong distaste for low-level flying, as it caused unnecessary losses; he came away with the conviction that 'low is nowhere to go'. ¹⁹ Eventually, 334 F-105Ds and F-105Fs with 353 crewmen in all were shot down in Southeast Asia, most of them by AAA. ²⁰

Horner returned to the United States after he had flown a total of III missions in his two Vietnam tours. Years later, following retirement, he made his frustrations publicly known:

Our generals were bad news. But later my bitterness grew to include the administration in Washington (the people who were ultimately responsible for the madness in Vietnam)... Shame on all of us. If I had to be a killer, I wanted to know why I was killing; and the facts did not match the rhetoric coming out of Washington.... To put it another way, I lied... I stripped myself of integrity. We lied about what we were doing

in North Vietnam. We lied about what targets we hit... We lied about where we flew... I learned that you cannot trust America.²¹

False reporting is always a serious matter in military operations, and from then on Horner dedicated his career to righting these kinds of wrongs. Horner's bad experience from the Vietnam War was the single greatest factor that shaped his leadership approach in 1990–1991.

From Captain to General

After Vietnam Horner returned to Nellis AFB, first as an F-105 instructor pilot and then as liaison officer to the Air Force Tactical Fighter Weapons Center. One of his tasks was to help convert a wing from F-105s to F-111s, an assignment he completed conscientiously, though somewhat reluctantly. Despite being categorized as a fighter, the F-111 was a bomber and Horner was not especially enthusiastic about these aircraft. His experience from Vietnam was that fighter aircraft were much more useful and flexible than bombers. Thus, in the intra-service rivalry at the time between SAC and TAC Horner became a staunch supporter of the latter organization.

Nellis AFB was special to Horner, both for assignments and for temporary duty travel, because there was constant air activity. In addition to normal flight training, the base hosted many 3–6-month unaccompanied deployments for various courses and certifications, a series of large-scale exercises, and classes at the Fighter Weapons School. Nellis was also perfect for rest and recreation, with Las Vegas precariously close. Horner recalls that they would get passes in the 1960s and 1970s to attend shows, complemented by free meals. Some of the aircrew would gamble, 'Craps and Blackjack being favorites', and if the trip took place on a Friday night after

extensive 'happy hour stags' it often lasted into the morning hours.²²

Horner enjoyed socializing, especially at the fighter squadron bar, and fit the stereotypical characterization of hard-swearing, hard-drinking, hard-charging fighter pilots who lived by the motto 'no guts, no glory'.23 Horner was in many ways a 'fighter pilot's fighter pilot': he seldom missed the opportunity to have fun, which included drinking games (preferring vodka or beer) with fellow airmen, and he always had a joke, anecdote, or story on hand - many in breach of what would now be termed 'political correctness'. Most people mature over time; those who served with Horner early on in his career would contend that he matured more than most.

Horner was promoted to major in June 1969 while serving at Nellis. After retirement, he noted that this was the most cherished promotion of his career because it meant he could stay in the Air Force for at least 22 years and retire with an adequate pension. Five months later, he joined the TAC planning staff at Langley AFB, Virginia, where he learned his first lessons regarding what it takes to be a staff officer and how to work successfully in a bureaucracy.

Horner received favorable officer fitness reports and was selected to attend Armed Forces Staff College in Norfolk (from January 1971 to January 1972). He enjoyed the school environment, both the writing of essays and the exchange of ideas and experiences. Horner also developed an appreciation for joint operations and, importantly, a good understanding of the Army mind-set. He even took on an extra workload and completed a master's degree in business administration at the College of William and Mary in Williamsburg. It took time away from the golf course, but he was willing to make the 'sacrifice'.

Horner joked that the higher-ups had 'punished' him for his 'time off at school' by next assigning him to the Pentagon; he believed that the last place a fighter pilot would want to be was in the 'five-faced labyrinth'. However, the assignment proved a rewarding experience since while there he became a member of the 'Fighter Mafia', a group of people working both inside and outside the Pentagon who strongly believed that the Air Force needed a low-cost, small, and agile fighter. This gave him a much-needed cause, and Horner became intimately involved in crafting inputs that ultimately led to the design of the multirole F-16 with its unprecedented aerial maneuvering capabilities.

While in the Pentagon Horner also figured prominently in developing the Air Force's highly successful 'Aggressor' program, which initially used the T-38 supersonic jet trainer and later the lightweight F-5E fighter to emulate the capabilities of the Soviet MiG-21 in dissimilar air-to-air combat training. That program later would become a key part of Red Flag, a simulated large-force combat training and exercise series conducted at regular intervals in the vast Nellis AFB range complex. Horner worked late nights improving fighter tactics and employment concepts, and he enjoyed bureaucratic fights, over how to sell an idea and get the funding, with colleagues such as the boundlessly creative, inspirational, and uncontrollable then-Major Richard 'Moody' Suter. On the home front, Horner was the proud father of three: Susan Ann (1962), John Patrick (1964), and Nancy Jo (1972).

The next promotion came as a surprise because Horner did not know he was even eligible.²⁴ He was promoted to lieutenant colonel in November 1973 and to colonel in February 1975, and was sent to the prestigious National War College (NWC) in June 1975. His time at the NWC opened

Horner's eyes to international relations and national policy, and to the role that military power played in them.²⁵ He also had two classmates whom he would encounter again during Operations Desert Shield and Desert Storm: Colin Powell, who would become Chairman of the Joint Chiefs of Staff; and John Yeosock, who would become commander of U.S. Central Command Army (ARCENT) and his roommate during the war.

Colonel Horner was delighted with his next assignment, June 1976: Deputy Commander for Operations of the 4th TFW at Seymour Johnson AFB. It meant that he would be flying the F-4E and would oversee the wing's squadrons during Red Flag exercises; he relished every opportunity to 'turn and burn'. It was during this assignment, however, that Horner experienced perhaps the lowest point in his career. He led a 'low-level checkout' at Hill AFB in which the aircraft encountered bad weather. He aborted the mission, but a follow-on F-4E continued for unknown reasons and crashed. Both the pilot and the weapon systems officer were killed instantly, and Horner was the one who found the bodies. Lieutenant General James V. Hartinger, the commander of TAC's 9th Air Force, singled out Horner for responsibility:

Hartinger accused me of murder... So I changed my attitude and accepted I failed to act when action was needed... I should have ordered the second element to abort the flight and climb when they were in the clear and not assume they would know what to do when they hit the bad weather. I was at fault; I should not have made the mistake of passive leadership... It was a bitter lesson but I had to swallow it. I accepted the harsh judgment that General Hartinger handed me, I accepted responsibility for the crew's death, and made a promise never to be passive again.²⁶

Horner concluded that if he was to take credit for successes under his command he also had to own up to the failures.²⁷ Over his next assignments, first as vice commander and then commander of a tactical training wing at Luke AFB, and subsequently as commander of a TFW at Nellis, Horner acquired ever more responsibilities.

After his stint as wing commander at Luke he had hoped for an operational F-15 assignment overseas, but in May 1980 he was instead directed to go to Nellis 'to fix' the troubled 474th TFW. The wing was scheduled to transition from F-4s to F-16s within a year; morale was low, productivity slow, and discipline had taken a blow. Horner took over as commander on a Friday evening, returned to Luke to arrange the move from Phoenix to Las Vegas, and was informed early Monday morning that an F-4D test pilot from his new wing had crashed and died. During the ensuing investigation Horner took full responsibility; he told the four-star general in charge that 'this accident was entirely my fault and we will never have another one'.28 Horner also instructed his airmen to lay out their 'dirty laundry knowing no excuse should be given.' Horner next made some unpopular changes in the wing to ensure that everyone understood that there was 'a new sheriff in town,'29 If an accident occurred or an inspection found flaws, he would report the truth without concern to his career. As a commander who had been scarred by Vietnam, Horner now lived by the rule that you report as things are, not as you wish they were.

During his period at Nellis he continued to fly as often as time allowed, including two weekends at Hill AFB, where he qualified for the F-16. He was amazed at the technological development that had led from the third-generation F-100, F-105, and F-4 to the fourth-generation F-15 and F-16. He

recalls that 'it was easy to look good in the F-16', and importantly, 'maintenance was revolutionary'.³⁰

Horner's efforts as a wing commander were highly appreciated by TAC's senior leaders, manifested by Horner's promotion to brigadier general and assignments as commander of the 833rd Air Division, Holloman AFB (August 1981-May 1983), the 23rd North American Aerospace Defense Command Region and Tactical Air Command Air Division, Tyndall AFB (May 1983-October 1983), and the Air Defense Weapons Center, Tyndall AFB (October 1983–May 1985). Few get a chance to command an air division, fewer still to command two. Importantly, along the way Horner developed a keen sense of responsibility for the pilots under his command and always felt deep pain over any injuries and loss of life.

The Influence of General Wilbur Creech

General Wilbur L. Creech assumed command of TAC in 1978. He became one of the most influential senior officers in the Air Force as fighter generals came to dominate the senior ranks. He was also the officer who would have the single greatest influence on Horner's professional development and the one who had selected him to command two wings followed by two air divisions.³¹ While the relationship may not have been a natural fit, at times opposites attract. According to James Kitfield's *Prodigal Soldiers*:

Where Creech was slim and ramrod straight, with never a hair out of place or a button seemingly unshined, Horner could somehow manage to appear rumpled even in freshly pressed blues. Though he was not proud of it, Horner also had to fight a sometimes losing battle to keep his temper in check.

Creech had never lost his temper in a room full of people in his entire life.³²

Not greatly impressed by Creech at first, Horner tried to avoid the TAC commander's attention, but he soon came to fully appreciate Creech's approach to leadership, which emphasized simple 'pass/fail' standards of conduct in four areas. Creech demanded that all subordinate TAC leaders staunchly refuse to countenance any manifestations of lying, displays of temper, abuse of position, or lapses in integrity.³³ Horner came to admire Creech's attention to detail, focus on pride in service, and the way he empowered squadrons to take responsibility for their own aircraft maintenance units, in the process giving each squadron a sense of identity, spirit, and purpose, along with a corporate stake in the fruits of its efforts.³⁴ Horner saw Creech as the heart and soul of the effort to rebuild the USAF after the disastrous war in Vietnam.

Creech also strongly influenced Horner's operational thinking. He insisted on operational readiness and realistic training even if this entailed an increased risk of accidents, and he instructed his commanders to measure results rather than simply activity.³⁵ Based on his own experience from Vietnam, Horner agreed with General Creech's characterization of low-altitude ingress as a manifestation of 'go-low disease'. In response, Creech insisted on giving priority to new tactics aimed at degrading enemy defenses.36 Through Creech and his personal experiences from Vietnam, Horner became utterly convinced of the need to designate a single air commander for any theater air campaign. Among the other key principles that Creech instilled in Horner was 'decentralized execution' - pushing decision-making authority as far down the chain of command as possible.

Creech was a strong believer in, and sponsor of, the Army's AirLand Battle Doctrine that put a premium on close air support (CAS). The doctrine dealt with airpower only at the tactical level, and the overarching concept was that airpower should support the ground commander's scheme of maneuver on the battlefield. Creech valued the emphasis on 'getting us back to our roots of supporting the Army' and conveyed that view to Horner.³⁷

Creech also insisted that it was crucial for a commander to get a feel for the daily lives of those serving throughout the wing, especially on the flight line. Horner took the advice and thereafter followed the rule of thumb that he would spend less than three hours behind his desk on any given day; however, much paperwork or however many meetings he had to attend, he would try to get out of the headquarters to talk to pilots, non-commissioned officers, and maintenance crews. 'I would pat them on the back and kick them in the ass'.³⁸

When General Robert D Russ assumed command of TAC he immediately appointed Horner to be his deputy chief of staff for plans and promoted him to major general. From May 1985 to March 1987 Horner planned, led, and conducted exercises, adapting the above-mentioned principles about decentralization to the situation at hand. These two years as a senior staff officer at TAC gave him immense insight into the full spectrum of air operations. He also worked closely with the Army at nearby Fort Monroe and attended joint field exercises as often as he could; this was something most air commanders avoided, but Horner liked being 'in the woods with the Army, Navy and Marine Corps practicing war',39 which gave him insight into the other Services' way of thinking. It also gave him inter-Service credibility.

It is worth noting that Horner was never a 'golden boy' for whom the path to promotion was preordained; on the contrary, he had to prove himself in every assignment. His early career was not extraordinary, and he had stayed in the rank of colonel over seven years, but by the early 1980s he had developed a reputation as a leader adept at fixing problems, and as a 'people person' who always managed to get the job done. This six-foottall, unpretentious, confident, rough-talking but seemingly low-key general, who always carried his own flight bag, was highly skilled at identifying and engaging many types of people and blending individuals into effective units that accomplished their assigned missions. He emphasized personal relations and tried to address the concerns of all those who served with him, as well as his superiors. Throughout his career, he had the ability to convince his superiors that he was doing what they wanted him to do. Horner operated selflessly, tirelessly, and without demanding fanfare; he followed the principle that you can do anything if you do not care who gets the credit. He considered his commanding officers important, not himself, and he seems always to have earned respect from those who served with him.

It is also worth noting that as a general, Horner stayed current in his F-15B and F-16, earning the respect of aircrews and keeping him trained and practiced in modern air combat.⁴⁰ He believed that as a combat commander he needed to maintain combat skills, so even when flying to an administrative meeting he would insist on including operational maneuvers. He had made sure that he flew as often as time allowed, and he was not shy about his ability even when he was into his fifties. Horner believed that what he had lost in 'eyesight and physical stamina, he made up for with experience and brains'.⁴¹ Horner was in many ways a

humble man but never modest about himself as a fighter pilot.

In March 1987 Horner was assigned as commander of 9th Air Force and of U.S. Central Command Air Forces (CENTAF), and was promoted to lieutenant general two months later. He was taken by 'total surprise' because he did not know he was considered for the position.⁴² As the head of 9th Air Force Horner was in charge of TAC's fighter wings east of the Mississippi River. As commander of CENTAF he was responsible for all air forces under Central Command (CENTCOM). The dual-hatted position and promotion signaled that he was highly respected by the USAF leadership, but under normal circumstances it might well have been his last active-duty assignment. However, the Iraqi invasion of Kuwait changed everything. From the CENTAF position he would have the opportunity to orchestrate the biggest multinational air campaign since Normandy, and to put into practice all that he had learned from Vietnam, Creech, and his various assignments as a student, pilot, staff officer, and commander.

CENTAF Commander

Between the time he assumed command of CENTAF in March 1987 and Iraq's invasion of Kuwait in August 1990, Lieutenant General Horner took several initiatives that bore fruit during Operations Desert Shield (to deter further Iraqi aggression and set the stage for offensive action) and Desert Storm (to liberate Kuwait). Most important, he made sure the commander of CENTAF would be CENTCOM's unified air commander, the JFACC.

General George Crist, then commanderin-chief of CENTCOM, had signed up to the concept of a JFACC in accordance with the Goldwater-Nichols Act of 1986 and, importantly, he agreed to have the commander of CENTAF as the single air commander despite objections by U.S. Marine Forces Central Command (MARCENT).⁴³ When General H. Norman Schwarzkopf replaced Crist in November 1988 Horner's first priority was to ensure that Schwarzkopf would continue that arrangement. Horner explained his reasoning when they met in February 1989 at Shaw AFB; Schwarzkopf immediately agreed to the continuation.⁴⁴ Schwarzkopf also concluded that he would take upon himself the dual role of CINC and land commander.

During the meeting Schwarzkopf confessed that he did not quite understand the doctrinal notion of CINCCENT 'apportioning air' while JFACC 'allocated it'. Horner explained that a better way to think about using airpower was in terms of objectives and target sets, not level of effort. The CINCCENT would explain his goals; the JFACC would then assign assets based on the mission and aircraft capabilities. Through these and other conversations Horner forged a solid professional relationship with Schwarzkopf from the beginning.

In November 1989 Schwarzkopf informed his command group that he was concerned about an increasingly self-assertive Saddam Hussein; he therefore directed that the scenario of CENTCOM's next exercise, Internal Look 90, would be to develop a military response to an Iraqi aggression into Saudi Arabia. Horner oversaw the development of a three-phased 'defend, delay, and attrit' approach, detailed in Operational Plan (OPLAN) 1002-90 and 'executed' in late July 1990. For the first phase, Horner insisted on using the existing Saudi Arabian air defense system and Saudi Arabian Airborne Warning and Control System (AWACS) aircraft:46 'it would also give us the framework for not

coming in like Americans tend to do and saying, "All right; you guys stand aside. I am going to tell you how to fight." A lesson from Vietnam'.⁴⁷

Horner also knew that such an arrangement would make it more difficult for the other Services to insist on having their own air space: 'I knew the Marine Corps would come in and try to carve out their own AOR [Area of Responsibility]; and the Navy would want to resist being in the ATO; and the Army would want to divide airpower up and assign it according to individual units'.48 If Iraq launched Scud missiles, Horner suggested using the Army's Patriot SAM to counter them, even though the Patriot was designed primarily as an anti-aircraft system. If Iraq used chemical weapons, Horner suggested that the blue force could retaliate against 'strategic targets',49 but that last resort scenario was never included in the exercise and thus not explored.

In order to delay Iraqi mechanized forces Horner proposed air interdiction: that is, cutting off supply lines and hampering reinforcement. In the final phase, CENTAF would support a counter-offensive with CAS, but the counter-attack would only commence after airpower had already destroyed significant portions of the Iraqi Army to allow a more favorable force-on-force ratio. ⁵⁰ Horner suggested a more efficient application of CAS, and used the term 'Push CAS' to describe the concept:

Push CAS amounted to programming airplanes over the battlefield 24 hours a day, as much air as I could generate; simply surge operations that we practice, and then I would put in place a command and control network that would allow me to divert it where it needed to go. If there was no divert requirement, no meeting engagement by tanks on tanks, then I would just continue that sortie, and it would go on and strike a valid target; go back and land, rearm, and go again, so I always had my air employed. I did not have the planes holding; I did not have the planes waiting, tasking or sitting on the ground idle.⁵¹

Preparing for War

CENTCOM was still digesting the results of Internal Look when Iraq invaded Kuwait on 2 August 1990 but Horner had mastered one of the first rules of leadership: gain the trust and respect of your boss. When the Air Force had suggested a new CENTAF commander in the spring of 1990, since Horner had been in the position for three years, Schwarzkopf made it clear that he wanted Horner to stay in place due to possible troubles in the region. When Schwarzkopf was instructed to go to Camp David on 4 August 1990 to brief President George H. W. Bush regarding military options, he brought Horner along. When Schwarzkopf was next ordered to go to Saudi Arabia with Secretary of Defense Richard B. Cheney to discuss military operations with King Fahd he took Horner with him. On 7 August Schwarzkopf designated Horner CENTCOM Forward while he went back to Tampa to sort out deployment issues. Schwarzkopf chose Horner on all these occasions because he found him loyal, trustworthy, and capable.

At Camp David, Horner presented a plan in which air operations could gain air superiority, interdict attacking Iraqi forces, and defend ports and rear areas. Horner's brief encounter with the President at Camp David gave him confidence in the political leadership: George H. W. Bush was determined that Iraq's aggression should not stand, he was adamant about having an international coalition prosecute the war rather than have the United States fight alone, and he expressed heartfelt caring about 'loss of life'. Horner

realized that President Bush was genuinely concerned not only about U.S. soldiers, but also the lives of Iraqi civilians: 'it guided everything we did from then on out, and it really paid off in the long term'.⁵²

When Operation Desert Shield commenced on 7 August, Horner was given the herculean task of setting up a coalition war command, establishing a deterrence posture to prevent Iraq from continuing the invasion into Saudi Arabia, and 'bedding down' hundreds of aircraft and thousands of soldiers. His planning guidance at the time was basically to operationalize President Bush's publicly stated objectives:

- Immediate, complete, and unconditional withdrawal of all Iraqi forces from Kuwait;
- Restoration of Kuwait's legitimate government;
- Security and stability of Saudi Arabia and the Persian Gulf; and
- Safety and protection of the lives of American citizens abroad.⁵³

Horner's cultural awareness helped him resolve many issues as CENTCOM Forward. Early on he issued a circular to all U.S. commanders, 'Awareness of Host-Nation Sensitivities'. He reminded the commanders that most Saudi government institutions were extensions of Islam and that Islam was a way of life, not just a religion. He observed that through unintentional misunderstandings Service personnel would at times offend the Saudis. Horner showed immense patience, sensitivity, politeness, and flexibility with the Saudi Arabian hosts. As an example, the Saudi Arabians were concerned about American women driving cars. Horner insisted that American women were a significant part of the U.S. military, that they were putting their lives on the line, and that they

would drive cars when necessary. However, responsive to the national customs and regulations, Horner assured the Saudis that they would only do so when on duty and in uniform. The Saudi Arabians accepted this view that when in uniform the female personnel were 'soldiers and not women'. ⁵⁴ Horner reflected 'When you find those solutions, you can make anything work.' ⁵⁵

He also made sure that CENTCOM Headquarters would be co-located with the Ministry of National Defense Headquarters, to lay the ground for a joint and combined headquarters. This took some persuasion, but Horner was adamant that the headquarters had to be integrated to the extent possible to avoid the military effort becoming the 'west and the rest'. ⁵⁶ Horner further arranged for the Saudis to receive CIA briefings and he dealt with them 'forthrightly and as equals'. ⁵⁷

Some of Horner's initial challenges came from representatives of the U.S. Navy and the Marines. When Vice Admiral Henry H. Mauz, U.S. Naval Forces Central Command (NAVCENT), suggested 'dividing Iraq up into sections, so the Air Force and the Navy could conduct their operations without getting in each other's way' Horner told him 'Hell no. I will retire before we try anything as stupid as that'.58 To Horner it was crucial that the Coalition have only one ATO; 'The ATO is the Joint Force Air Component Commander. That is the whole thing. Without the ATO, you do not have the JFACC. With the ATO, you do not have anything but a JFACC'.59 When Vice Admiral Stan Arthur replaced Mauz he gave Horner his full support, on the condition that naval aircraft used for fleet defense or for attacking targets that could threaten the carriers would be excused from Horner's ATO.

Lieutenant General Walter E. Boomer, the commander of MARCENT, stated that his view was that Horner would never 'command' Marine air but he would 'coordinate' air assets. 60 Horner told Boomer that 'the only thing that matters to me is that we all do the best we can to win this war... Everything else is bullshit. Service sniping, who owns what, all the rest is just crap'. 61 Horner showed pragmatism: as long as the Marines contributed airpower according to CINCCENT's overall guidance and those aircraft were part of 'his' ATO he knew the result would be good.

Horner also came to a reasonable understanding with Lieutenant General John Yeosock's ARCENT on fixed-wing aircraft but decided not to force the helicopters that operated inside the Fire Support Coordination Line (FSCL) to be part of the ATO, again showing pragmatism without compromising his overall philosophy for the campaign. Beyond this, helicopters flying less than 500 feet above the ground were exempt from direct JFACC control.⁶²

Over time, the four component commanders developed both a strong sense of personal camaraderie and a strong working relationship. ⁶³ Horner's ATO provided detailed direction for almost all Coalition fixed-wing sorties during both Desert Shield and Desert Storm, although it did not always impose tight control over these aircraft.

The Air Campaign Plan

When Schwarzkopf departed Saudi Arabia on 7 August, leaving Horner in charge in theater with no forces and no staff, he informed him that he would call the Joint Staff to request assistance in formulating a retaliation option, and have them help produce 'a list of strategic targets'. ⁶⁴ Horner strongly urged Schwarzkopf to reconsider involving the Pentagon because it could repeat a serious mistake of the Vietnam War when 'Washington picked the targets', but

Schwarzkopf promised that he would undertake preliminary work only and then hand the matter over to him.

Schwarzkopf next conferred with General Powell, who responded that the Joint Staff did not have the resources or competence to contribute to such a retaliation option. After that Schwarzkopf called the Air Staff. In a ten-minute conversation with General John M. Loh, the USAF Vice Chief of Staff, Schwarzkopf requested an air option in case Saddam Hussein did something heinous such as launch chemical weapons or murder hostages or U.S. embassy personnel. General Loh recalls that Schwarzkopf wanted a 'strategic air campaign', a 'retaliatory package' – something more than surgical tit-for-tat strikes.⁶⁵

Loh assigned the task of designing such a campaign to Colonel John A. Warden, a brilliant strategist, conceptual thinker, and airpower advocate. 66 Warden was the head of the Deputy Directorate for Warfighting Concepts, with one of the divisions that reported to him known as 'Checkmate'. 67 He had already started developing a strategic air campaign plan without a mandate; consequently, for Warden the task from Schwarzkopf on 8 August was 'a call from heaven' and he would make the most of it. 68

Warden did not think in terms of mere retaliation. He and his designated Checkmate team developed the genesis of a stand-alone, decisive strategic air plan, advocating precision attacks from the outset on the Iraqi leadership, command and control apparatus, a selection of electrical facilities, and key infrastructure in accordance with his Five Rings Model. ⁶⁹ Warden's proposal was in many ways an update of AWPD-1, the original plan for strategic operations developed by the Air War Planning Division in August 1941, and inspired by the Air Corps Tactical School (ACTS).

Warden's offensive, outcome-focused, and daring scheme for 'victory through airpower' stood in stark contrast to prevailing ground-centric AirLand Battle doctrine. newly updated contingency plans for the region, and standard Army and Air Force practice at the time. Warden planned on using USAF assets only, including F-117 aircraft.7° Warden suggested that partial destruction of a selection of key target-sets might achieve the desired result; moreover, total destruction might exceed what was desired or even needed. Warden's team stressed the use of precision-guided munitions and 'bombing for effect': they expected the impact of this bombing to devastate Iraqi's war effort. Warden called the campaign 'Instant Thunder' to identify it as the opposite of 'Rolling Thunder', which had proven such a disaster in Vietnam. Importantly, he suggested it as the main effort rather than a retaliation option.71

The proposed campaign plan that Warden presented on 10 August far exceeded Schwarzkopf's expectations, and the general was delighted with the fresh and forward-leaning thinking; exclaiming 'I love it'.72 Warden was instructed to develop further details of the plan and, after briefing General Powell the next day, to add attacks on the Republican Guard and the Iraqi Army. 73 The Chairman wanted 'smoking tanks' and the Republican Guard's political function and military potential made it a prime target for both strategic and tactical air operations. Powell also instructed Warden to include aircraft from the other Services and to add Tomahawk land attack missiles (TLAMs).

During Warden's second presentation, 17 August, Schwarzkopf was further enthused and came to the conclusion that he could use Instant Thunder both as an immediately executable retaliation option *and* as the initial portion of a larger offensive plan to liberate Kuwait.⁷⁴ Schwarzkopf decided on a four-phased air-centric war strategy: a strategic air campaign to establish air superiority over Iraq and incapacitate its regime; a subsequent air campaign to establish air superiority over Kuwait; a series of air strikes against Iraqi tanks, artillery, and troops in Kuwait; and, finally, a ground campaign that would secure the liberation of Kuwait.⁷⁵ Formally, they were known as:

- Phase I Strategic Air Campaign (Instant Thunder)
- Phase II Kuwait Air Campaign
- Phase III Ground Combat Power Attrition
- Phase IV Ground Attack.

Warden's interaction with Schwarzkopf is important, because it initiated a process that led to a game-changing strategy in which airpower would be the leading and dominating element in the war, rather than the war plan being built around a land or sea campaign. Schwarzkopf told Warden to go to Saudi Arabia to present the plan to Horner. Warden brought to the briefing those who had been most closely involved in the planning: Lieutenant Colonels David A. Deptula, Bernard E. Harvey, and Ronald Stanfill.

Warden's presentation to Horner on 20 August did not go well. Horner felt that Warden lectured him on basic airpower theory, had too much faith in strategic attacks, played down the importance of the ground forces, lacked operational depth, was difficult to reason with, and did not respond well to his questions. Horner thought Instant Thunder was too risky and unrealistic in its premise that airpower alone could have a decisive effect: 'the idea that air power was going to smash Iraq, and they were all going to give up and go home. Well, that is pure bull... Just as there is genius, there is

no common sense'.⁷⁶ He concluded that the plan 'contained elements of brilliance' because Warden 'had a way to rack and stack the targets so we could relate their importance to overall political objectives,' but it was 'only a partial answer.'⁷⁷ He sent the man back to the Pentagon after the two-hour session, but he kept the plan.⁷⁸

Horner's handling of Colonel Warden was not his finest moment; he was rude and condescending during the briefing. He overreacted because he wanted to send the message to the Air Staff that air campaign planning, including target selection, should take place in the theater, not in Washington. Whether the targets were selected in the Pentagon (as in this case) or the White House (as in the case of Vietnam) was to Horner a distinction that made no difference. He later noted 'If you want to know whether war is going to be successful or not, just ask where the targets are being picked. If they say "we picked them in Washington," get out of the country.'79

Horner, 'desperate to get the planning started before some other road show came into town with their visions', 80 decided that the right man to develop 'the larva into a butterfly' would be Brigadier General Buster C. Glosson, whom he knew and trusted.⁸¹ Horner assigned Glosson as head of the 'Special Planning Group', later referred to as the 'Black Hole' (and ultimately the 'Iraqi Targeting Cell'). Horner gave Glosson five days to develop an ATO, stating that he could start with a blank sheet of paper or use parts of the Instant Thunder briefing as he saw fit.82 Having consulted Deptula, whom Horner had asked to remain in theater after Colonel Warden's departure, Glosson decided to use Instant Thunder as his conceptual point of departure and selected Deptula to be his chief offensive planner.83

Schwarzkopf arrived in Rivadh 26 August, which meant that Horner could return to his CENTAF role and pay full attention to planning the air campaign, Glosson presented the updated version of the offensive air campaign plan to Horner that day under the title 'Instant Thunder Concept and Execution'. Horner was not amused and told him to get rid of the title and to use 'Offensive Campaign Plan I'.84 Glosson recalled that 'Horner could not stand the name. It blew all his circuit breakers'.85 He also noted that he had a hard time convincing Horner of the value of the F-117, which he and Deptula believed should be the 'backbone' of the strategic air campaign. After the briefing was modified the next day Horner approved the basis of the plan but remained convinced that the air campaign would eventually have to deal with Iraqi ground forces if Saddam Hussein was to withdraw from Kuwait.86

In hindsight, although the meeting between Horner and Warden represented a clash of views and personalities, their radically differing perspectives, when combined and carefully modified, created synergy that produced a better air campaign plan than either man alone would have formulated. Glosson and Deptula turned many of Warden's ideas into executable actions under overall guidance from Horner. Deptula was the only individual who participated in every stage of the planning and execution of the Desert Storm air campaign: from developing the concept of the original Instant Thunder plan to building the initial air attack plans that Horner presented to Schwarzkopf and the Master Attack Plan (MAP) for each day of the air campaign's execution. The MAP, created and developed by Deptula, became the principal vehicle for designing the structure of the air campaign.87 'It consisted of the sequence of attacks for a 24-hour period and included

the time on target, target number, target description, number and type of weapon system and supporting systems for each attack package.'88

Glosson and Deptula remember that Horner told them to stop using the term 'strategic' in their plans because he thought it was a misnomer with nuclear connotations, but they insisted on continuing to use the term. In typical fashion, Horner responded 'All right. Just do not use it very often';⁸⁹ he was not going to let doctrinal word splitting undermine the planning effort. As planning progressed, 'strategic' became a code word for independent outcome-determining air operations; that is, air attacks not related directly to ground operations.

Glosson and Deptula added specifics to the original Instant Thunder plan and Horner recalls that after late August 'that briefing never really changed, other than the details. The thrust of the briefing, the plan of the briefing, never changed'. 9° Schwarzkopf recalls in his biography, *It Does Not Take a Hero*, that he was very impressed when he received the updated air plan on 3 September:

Instant Thunder had been ready since early September. [Glosson] had expanded the retaliatory scheme of the Pentagon Air Staff into the best air campaign I had ever seen. It gave us a broad range of attack options and could be conducted as a stand-alone operation or as part of a larger war... I would also tell you that anyone who received a briefing on that plan came away very impressed with the significance of the plan... For the first time we had a capability to focus on military targets and avoid civilian areas.⁹¹

On 15 September General Powell informed the President that they had sufficient air forces in Saudi Arabia 'to execute and sustain an offensive strategic air campaign against Iraq, should he order one'.92 For the next few months, with added intelligence from Warden's Checkmate team in Washington and a growing number of aircraft available. Deptula spearheaded the efforts that generated plans and ATOs tailored to specific goals and targets.⁹³ In discussions with Horner, General Schwarzkopf concluded that he would not enter Phase IV, the ground war, until airpower had degraded Iraqi ground forces by 50 percent, which reflected an unprecedented confidence in airpower's ability to neutralize tanks and artillery. While Glosson, Warden, and Deptula believed the Coalition could liberate Kuwait without a ground war, Horner felt certain that Phase IV would be executed, if not out of military necessity then for Service-specific and political reasons.

Horner had great faith in his planners and saw no need to involve himself deeply in the details of the MAP and the ATO. When President Bush requested insights into the war plan, Horner sent Glosson to Washington to present the air portion on 10 and 11 October. General Powell found the air campaign plan bold, imaginative, and solid. Indeed, he was concerned that Glosson was too convincing: 'Be careful... I do not want the President to grab onto that air campaign as a solution to everything'.94 Undeterred, Glosson made a strong case and the White House was impressed. The senior civilian leadership praised the air campaign while Phase IV, the ground campaign, was strongly criticized. President Bush asked 'Why not do Phase I, II, and III and then stop?' Powell answered 'You've got to be ready to do Phase IV because your objectives won't be accomplished'.95 The 11 October briefing to the President was a defining point for Desert Storm; the offensive air campaign was approved and Schwarzkopf would be assigned a second corps to ensure a successful ground campaign.

In mid-December, to streamline the planning process, Horner reorganized CENTAF's air planning by combining the strategic 'Special Planning Group' with CENTAF's tactical air planners to form the Guidance, Apportionment and Tasking Division (GAT) in a newly created Directorate of Campaign Plans. From this time onward the Special Planning Group became the Iraqi Target Cell, responsible for the strategic air campaign, and the KTO Cell, responsible for the tactical air campaign. Horner placed the directorate under Glosson and designated him to command the 14th Air Division, composed of all USAF tactical fighter wings in the theater.

Horner was genuinely concerned with morale, and remembering General Creech's advice to get out of the office he visited many air units, troops and officers alike, during the build-up to Desert Storm. He flew his F-16, Lady Ashley, to various bases and he flew with allied pilots, but he recalls that 'the most productive time was with civil engineers, aircraft maintenance and bio-folks who guarded our food and drinks sources as well'.96 Horner emphasized personal relations and came across as a caring and approachable commander. When the TAC Commander, General Russ, directed Horner to start implementing a rotation policy for the air forces to avoid fatigue, Horner, reminded of Vietnam, protested vehemently. He was even willing to put his job on the line for this principle and ultimately prevailed.⁹⁷ 'My position was no rotation policy, here until victory became the slogan'.98 Horner was concerned that rotation causes forces to lose momentum and lose morale; indeed, he insisted that come war every aircraft and pilot should join in the action, because it is very demoralizing not to take part in the action when fellow airmen get the chance to participate.99

Various anecdotes illustrate facets of his personality. Glosson recalls that Horner refused to take an anthrax shot 'because not everybody is getting it'. 100 In another instance, when a Scud alarm went off and everybody put on their protective gear and ran to the basement, Horner remained in his seat, gas mask on the floor, refusing to take action because Lieutenant Colonel Abdullah al-Samdan, the Kuwaiti representative sitting next to him, did not have a mask. He did not do it to show bravery and recalls 'he was scared and I was stupid'; it just did not feel right to take advantage of protection his brother-in-arms lacked. When his son, John Patrick - now a captain in the USAF and an A-10 pilot assigned to 510th Fighter Squadron, RAF Bentwaters - pleaded to join the fight he told him: 'I will be proud for you to come, but I will not pull any strings for you to get orders'. 101

On 20 December, when Cheney, Under-Secretary of Defense Paul Wolfowitz and Powell visited the theater, Horner explained the four phases of the air campaign: Phase I (Strategic Air Campaign) would last six days; Phase II (Kuwait Air Campaign) would take one day; Phase III Battlefield Preparation, Part A (Republican Guard) would require five days and Part B (Iraqi Army) six days; and Phase IV (Ground Attack) would last 18 days. Horner presented a chart with time bars showing scalloped ends to indicate approximations and explained that Phase III estimates derived from computer calculations. 102 He said his own opinion was that they would need twelve days to destroy 50 percent of the regular Army and ten days to reach that level for the Republican Guard. 103 Horner did not want to overpromise because that might raise expectations too high and result in a perception that the actual campaign was under delivering.

Horner's last presentation of the air campaign plan to Schwarzkopf before the war started occurred on the afternoon of 15 Ianuary, When Deptula, who gave the briefing, outlined the first attack wave Schwarzkopf questioned why the Republican Guard was not being hammered from the outset. Deptula responded that they would come under attack near the end of the first 24-hour period, after air strikes had suppressed the SA-6 missile threat. Schwarzkopf 'exploded': 'you guys have lied to me... where are the B-52s?' Horner and Glosson explained that as soon as the air defenses were struck, the vulnerable B-52 would target the mechanized Tawakalna division. Schwarzkopf velled that he wanted the armored Hammurabi and Medina divisions attacked. Deptula recalled that Schwarzkopf 'went on and on, started velling and ranting and raving at General Horner', 104

After the 'chewing-out' Horner invited his boss to the office to allay his fears. He went through some of the charts again, re-emphasizing the rationale for which targets would be struck by which aircraft and the order of events. Schwarzkopf agreed to continue the planning without alterations and apologized for his reaction. Schwarzkopf was infamous for his quick temper, flaring up at his staff and going 'ballistic', but this was the only time his anger was directed at Horner.

Looking back, when Horner oversaw the planning and execution of Operation Desert Shield and Operation Desert Storm he had the advantage of having been commander of CENTAF for over three years. He knew the contingency plans and the locations of pre-positioned equipment, supplies, munitions, fuel, and air bases. He knew many of the key players, had experience from exercises in the region, and he had some insight into the Arab culture and mind-set. He had established solid relationships with his su-

periors, peers, and subordinates. While this gave him knowledge, it also gave him confidence to lead men and women into war.

The Air War Commander

U.N. Security Council Resolution 678, passed on 29 November 1990, threatened to expel the Iraqis from Kuwait, using 'all necessary means,' unless Iraq unconditionally withdrew its troops from Kuwait by midnight, 15 January 1991. When the deadline passed without Saddam Hussein showing any signs of withdrawing, President Bush instructed Schwarzkopf to begin Coalition operations at his convenience. Horner recalls that waiting for the war to start in the early hours of 17 January represented 'the worst minutes of my life'. 105 He had to rely on the untried technology of stealth against one of the world's most heavily defended cities, but the first night turned out to be a welcome relief; the F-117s succeeded in striking one target after the other with precision and without being detected. 106 As the campaign progressed, the F-117 became, arguably, the single most important combat aircraft of the air war. Horner recalls that 'the F-117 was a pleasant surprise, stealth worked'. 107

The air campaign as executed relied on five distinct types of air operations, each with its own goals. The first, *strategic attack*, would paralyze the Iraqi command and control apparatus and the regime's ability to pursue its political and military objectives. The second, *control of the air*, would ensure that air, sea, and ground operations could proceed at the place and time, and at the intensity, of the Coalition's choosing without significant interference from Iraq's armed forces. The third, *interdiction*, would deny Iraqi forces efficient use of transportation links, and thus halt timely delivery of food, water, and spare parts. The fourth, *direct*

force attack, would destroy large portions of Iraq's artillery, tanks, and armored personnel carriers in the field prior to engagements on the ground. Finally, airpower would fill its traditional role by providing any CAS that Coalition forces might need once the ground attack began.

Strategic Attack: Incapacitating the Iraqi Regime

During the first few days, the innovative precision attacks against the Iraqi regime in Baghdad, using stealth aircraft and cruise missiles, created unprecedented physical and psychological effects that rendered the Iraqi leadership in essence blind, deaf, and mute. The loss of electricity forced the Iraqis to use less reliable backup generators and thus vastly complicated military operations. The opening attacks denied Saddam Hussein any kind of military headquarters from which he could gather intelligence and command his forces. Attacks on leadership and communication facilities disrupted the Iraqi regime's 'central nervous system' and caused the regime untold inconvenience, consumed valuable spares, and demanded a high level of repair effort. Rather than operate a command center, Saddam Hussein would drive around, occasionally hold meetings in private homes and residential neighborhoods, and spend the night at places chosen ad hoc, often moving in the middle of night to avoid detection and predictability. In addition to fearing for their personal safety, many Ba'ath party members and government ministers were forced to relocate their headquarters to school buildings and to shift to less-than-reliable backup communications. 108

The strategic air campaign proved very successful, not least because it left the Iraqi leadership ineffective and only concerned about survival. Airpower in essence disman-

tled key portions of Iraq's political, military, and economic infrastructure without resorting to heavy bombers and with relatively few losses among both Coalition forces and Iraqi civilians. The attacks demonstrated to the Iraqi people that Saddam Hussein's regime was helpless. This achievement rested on technology, and on the synergy of increased bombing accuracy and decreased effectiveness of enemy defenses, but equally on the Warden-Deptula re-examination and reapplication of the traditional strategic bombing theory. While the planners made use of force packaging, the precision attack capability allowed them to employ smaller packages of strikes directed against multiple aim points in the same area, rather than a single large package directed against a single aim point. 109 Horner's team and the technology of the day thus offered the effects of mass without actually massing. Horner remarked midway through the campaign that he himself had 'underestimated the efficiency of modern air power'. 110

It is difficult to measure the true impact of the strategic air campaign, as indirect and second-order consequences may be as important as direct effects. The Intelligence Community did not have good measures of merit for 'effects-based operations', but what can be said with certainty is that the Iraqi leaders were denied the means to conduct any form of command.

Control of the Air: Suppression of the Iraqi Air Defense System

The complex centralized Iraqi command and control apparatus and Iraq's integrated air defense system had also become ineffective during the first week; it took only a few days for Coalition air attacks to dismantle national and regional control centers, missile batteries, AAA, and radar sites. The

Coalition fired 500 high-speed anti-radiation missiles (HARMs) during the first 24 hours of the war, with the result that Iraqi air defense operators quickly realized that their best chance of survival lay in keeping their SAM acquisition and tracking radars switched off.¹¹¹

Just as the air defenders learned that activating their radars meant inviting a deadly attack, the Iraqi pilots rapidly concluded that 'flying meant dying'. 112 As the Iraqis chose to keep their aircraft on the ground rather than fly, Coalition aircraft destroyed their hardened shelters with precision-guided munitions. From 23 January on, F-111Fs, capable of carrying four laser-guided bombs, served as the principal shelter-busters, delivering GBU-10s and GBU-24s. This was a new tactic. Horner had at first been skeptical about the forward-stored 2,000-pound bombs - the 500-pound bombs were the ones he needed against moving targets - but when applied in pairs these heavier bombs were able to penetrate hardened bunkers; the first made a hole that the second would go through. Horner found that 'they turned out to be magic'. 113 Horner also diverted F-117s from the strategic air campaign for this purpose. In the end F-117s and F-111Fs destroyed 375 of Iraq's 600 hardened shelters.

Saddam Hussein's decision on 26 January to send combat aircraft to sanctuary in Iran further illustrates the regime's desperation. ¹¹⁴ Over the next few days around 100 aircraft fled; most arriving safely and interned by the Iranian government, some ran out of fuel and crashed, and some were intercepted and shot down. In an early attempt to intercept these flights USAF aircraft entered forbidden Iranian airspace and shot down two MiG aircraft. Horner informed Schwarzkopf of the incursion immediately, defended his pilots, and prepared a letter of resignation in case the Pentagon lawyers would impose rules

of engagement to prevent such an incident from happening again. He believed that he owed it to all those who lost their lives in Vietnam 'to fall on his sword' and stand up against such potential micromanagement.¹¹⁵ Secretary Cheney informed Horner after the war that he had in fact received such recommendations, but told the Pentagon lawyers to ignore the issue with the comment 'they will know what to do in theater'.¹¹⁶

Having suppressed the Iraqi air defense system and rendered the Iraqi Air Force largely inoperable, the Coalition had achieved the basis from which it could mount systematic and sustained attacks from the medium-altitude environment of 10,000 to 15,000 feet against any target in Iraq without major risk to Coalition aircraft and pilots. ¹¹⁷ On 27 January, Schwarzkopf declared that the Coalition had secured air supremacy. The declaration characterized the Iraqi Air Force and its air defense system as no longer combat effective. ¹¹⁸

The Iraqi leader only had one weapon system that could cause havoc: the Scud missile, developed from the Nazis' World War II V-2s. As an immediate response to the Coalition's attack on Baghdad, Saddam Hussein ordered his missile commander to begin 'striking targets inside the criminal Zionist entity with the heaviest fire possible.'119 When the war started, Iraq launched eight missiles in quick succession at predesignated targets in Tel Aviv and Haifa. The Iraqi operational pattern of firing, moving, confirming new targets, reloading, and firing again from a position five to ten kilometers from the previous one became more efficient with every launch. The single greatest loss of Coalition forces occurred on the last day of the war, when a Scud hit a U.S. barracks in Dhahran, killing 25 Army Reservists.

The F-15E was effective in 'Scud busting' the fixed launch sites; the real problem

was mobile launchers, especially those fired from residential areas. Horner recalled that by war's end he had employed nearly every type of strike and reconnaissance aircraft to bring the Scud threat under control, but with scant evidence of success. After the war Horner reflected that he had underestimated the political and strategic dimensions of Scud attacks; he had thought of the Scud mostly in psychological and military terms. The Patriot batteries were partly successful, intercepting 70 percent of the Scuds launched at Saudi Arabia and 40 percent aimed at Israel, but perhaps more importantly the employment contributed to Israel staying out of the war. 120

Operations intended to gain and maintain control of the air accounted for 14 percent of the Coalition's total air-to-ground strikes. ¹²¹ Overall, the Coalition launched 1,270 strikes against SAM batteries, 2,990 against airfields, and 1,460 against Scud launchers. Iraq certainly had not anticipated the sheer mass of airpower, or that the 'interceptors would be neutralized in such a short period of time.' ¹²²

Interdiction: Depriving Iraqi Troops of Transportation, Food, and Water

As for the vast Iraqi Army and large parts of the Republican Guard, within three weeks a focused and systematic aerial bombing of tanks, artillery, and troops forced Iraqi soldiers into a defensive and helpless posture from which defeat was inevitable. Deprived of food and water, the Iraqi forces could neither retreat without being attacked from the air nor find sanctuary in their dug-in positions. Supply interdiction quickly achieved its primary purpose of degrading the readiness of the Iraqi military in Kuwait. Essential commodities failed to reach deployed troops in

quantities sufficient to maintain their combat capability. The Iraqi truck fleet was large enough to resupply the Kuwaiti Theater of Operations (KTO) despite air attacks on convoys and vehicle parking areas, but the attacks caused considerable problems in distribution even from nearby sources. Together with the bombing effort, the Coalition dropped millions of leaflets and used radio broadcasts to encourage Iraqi soldiers to lay down their arms. ¹²³

Prisoners of war later cited food shortages and scarcity in drinking water as a leading reason for low morale in their units. ¹²⁴ Some forces were virtually on the brink of starvation and dehydration, and the shortage of supplies in general was a major reason why several battalions surrendered after only minimal resistance. ¹²⁵ Several Iraqi generals captured during the military offensive stated that if the air campaign had continued for another two or three weeks, the Iraqi Army would have been forced to withdraw as a result of logistical strangulation. ¹²⁶

By 6 February, the Coalition had destroyed 22 of 24 critical highway bridges, a feat unparalleled in the airpower annals and one made possible entirely by precision-guided munitions. The effort consequently prevented the Iraqis from using the Baghdad-Basra railroad. 127 Denying transportation also made it very hard for Iraqi commanders to deliver orders. Lieutenant General Sultan Hasim, the Iraqi Deputy Army Chief of Staff, noted that while he was preparing the withdrawal of forces from Kuwait communication between Baghdad and Kuwait City was difficult 'because of the bombardment of roads and the destruction of [our] vehicles.'128 Iraqi staff officers later reported that even if they managed to reach their tactical headquarters, they often found no commanding officer present. As one Iraqi officer complained, 'When there is no company commander or a regimental commander or a brigade commander, then how can you carry out a withdrawal?'129

Direct Force Attack: Preparing the Battlefield

The Coalition directed two-thirds of its air-to-ground strikes in Operation Desert Storm against the 43 Iraqi divisions in the theater. Strikes against Iraqi armor and artillery were the most distinctive feature of this effort, but trucks and troops were also prominent targets. Most of the aircraft dropped unguided bombs and a variety of antiarmor and antipersonnel cluster munitions. Many targets in the theater were well suited for these weapons, especially storage areas and troop concentrations. ¹³⁰

The air planners divided Kuwait and southern Iraq into so-called 'kill boxes' (30 nautical miles on a side and further subdivided into four 15-by-15-mile squares) and assigned aircraft to eliminate as much of Iraq's weaponry and equipment as possible within each box. Unlike the planners of the strategic air campaign (the Iraqi Target Planning Cell), the planners in the KTO Cell did not usually designate individual targets. Instead, they employed force-on-force tactics: unless otherwise directed by an airborne controller or changing circumstances, a strike aircraft would hit targets of opportunity within its designated kill box.¹³¹

In the first week of February Horner and his men developed a new tactic that proved exceptionally effective against armored vehicles. They equipped F-IIIs with Pave Tack, an external pod combining an infrared sensor with a laser designator, and 500-pound GBU-I2 laser-guided bombs. The infrared avionics could identify tanks in the evening hours — because uneven heat dissipation would create a temperature gradient be-

tween metal hulls and the surrounding desert – and they could attack the armor with precision from safe, medium altitudes. The F-IIIS, augmented by F-I5ES and A-6S, destroyed hundreds of tanks and armored vehicles. Horner used the term 'tank-plinking' because he 'liked the idea that the tank was not invincible'.

When I started reporting these results to Schwarzkopf, he looked at me, and being an old army armor officer, he said, Chuck, you cannot call it tank-plinking, I order you to not call it tank-plinking, that is demeaning to the armor. I said, General Schwarzkopf, you do not know fighter pilots, if I order them to stop calling it tank-plinking, it will go down in history [as tank-plinking]. 132

Horner became increasingly fond of the F-III 'bombers' as the tank-plinkers extraordinaire. Iraqi tank crews had found that the tank was the safest place to be in the Iran-Iraq War, but now the most dangerous place to be and consequently they spent as little time as possible in tanks.

In total, Coalition aircraft dropped 23,430 bombs on Iraqi formations. ¹³³ The frontline infantry formations bore the brunt of the attacks and incurred the most physical and psychological damage, while the better trained and better equipped Republican Guard divisions farther from the front proved considerably more difficult to destroy. Besides, the ground commanders had insisted that Horner should give priority to frontline divisions rather than those in the rear area.

All of the precision targeting platforms – the F-117, F-111, A-6 and a few F-15s – relied on infrared imaging for laser guidance and they did well, but in after-action reports Iraqi prisoners spoke of dumb bombs randomly falling on and around them, inducing both a sense of helplessness and a desire to surrender. According to some prisoner of war

reports, the big, noisy B-52 had the greatest impact on their morale, with the A-10 coming in a close second. The air campaign, with its combination of 'smart' and 'dumb' bombs, left Iraqi units and formations on the brink of defeat and disintegration even before the Coalition ground offensive began.

Close Air Support: Completing the Victory

Schwarzkopf was very pleased with the progress of the air campaign and was reluctant to engage in a ground war until necessary, yet Horner recalls that he was 'under immense pressure to start the ground war before he did':

There were people briefing in the higher circles in Washington that the Iraqi Army was going to surrender, and there was not going to be a ground war. So you can imagine the phones 'Get the Army in the war or we will not have an Army after the war.'... Schwarzkopf fended everyone of those off. It beat up on him brutally... Schwarzkopf is a hero... because he did not want to spend a life unnecessarily of a single soldier. ¹³⁵

General Powell had convinced President Bush and Secretary of Defense Cheney that a ground attack into Kuwait was necessary to end the war and that they should start the attack sooner rather than later. On 24 February, after 38 days of air attacks, the ground campaign commenced. General Horner gave a message to all wing leadership and crew members:

The ground war has started. Our number one job is support of the ground forces. Close air support and air interdiction missions are not weather cancelled by some decision maker removed from the scene. The time has come for every flight lead to make every reasonable effort to attack the target and get his flight back home. Our

ground guys are depending on every sortie. From now on, it is up to every aviator to make it happen. ¹³⁶

As part of these preparations, Horner eliminated the medium-altitude restriction that he had imposed early in the war; a risk worth taking for 'the greater good' of saving soldiers. Horner intended to put maximum pressure on the Iraqi ground forces with every type of strike aircraft at his disposal, including those from the Navy, Marines, and Coalition partners.

The ground campaign depended on three preconditions, all of which rested on the effective use of airpower. The first was that airpower would allow the massive redeployment of Coalition forces to the far west, first by a substantial airlift of troops and supplies, and second by shielding the movement from Iraqi attacks. In fact, by mid-February the Coalition's XVIII Airborne Corps had repositioned more than 115,000 soldiers and 21,000 wheeled and 4,300 tracked vehicles over a distance of 500 kilometers west of their initial deployment. At the same time, the Coalition's heavy VII Corps shifted 140,000 soldiers and 32,000 wheeled and 6,600 tracked vehicles more than 200 kilometers to the west. 137 Air supremacy enabled the troops to move undetected and thus permitted operational surprise. Saddam Hussein remained convinced that the main attack would come straight into Kuwait and would be accompanied by a supporting amphibious attack. The Iraqi leadership never realized that the preparations for an amphibious landing were merely a deception by the Coalition.

As mentioned previously, the second precondition was that the air campaign would reduce Iraqi fighting power by 50 percent, ensuring that the Coalition could start the ground operation when it chose. By the time the Coalition ground forces were ready to cross into Kuwait on 24 February, air attacks had in fact reduced combat effectiveness in many enemy units below that 50 percent level.¹³⁸

The third precondition was that air assets would support the ground offensive proper, primarily with interdiction and deep strikes to prevent the Iraqis from concentrating their forces for counterattacks, and secondarily with CAS that would further smooth the Coalition advance. While interdiction and deep strikes occurred beyond the FSCL, Horner had presented the concept of Push CAS inside that line – that is, air attacks constantly on call at the ground commander's demand; Horner noted that 'Push CAS worked like a charm. In fact, it probably gave them more than they could handle'. 139

The Desert Storm air campaign experience contradicted most of the existing Air Force, Army, and Marine Corps doctrine at the time, which presented CAS as the most significant form of air attack. As it turned out, Coalition ground forces had very little need for CAS: airpower had pounded and degraded Iraqi ground troops for weeks, and in the four days of battle on the ground, CAS was not essential to accomplishing the mission given the lack of determined Iraqi resistance. Thus, Desert Storm included few 'troops in contact' situations that could serve as examples of how well CAS by fixed-wing aircraft and attack helicopters could be synchronized with the ground fire support system. 140

A Retrospective

By the end of 27 February Coalition forces controlled four-fifths of Kuwait's territory and had cut off virtually all routes of escape to Basra. ¹⁴¹ With the Iraqi forces withdrawn, destroyed, or captured, President Bush decided on the following morning to suspend

operations. Horner was proud and relieved to see the war end. His forces had been in the desert for months. They suffered from weariness and Horner knew it would inevitably lead to mistakes. The Coalition had accomplished its mission of liberating Kuwait; its goal was not to proceed on the ground to Baghdad to topple Saddam Hussein, There was no political consensus among the Arabs and the rest of the Coalition to continue into the Iraqi capital and Coalition forces were not prepared to fight in the cities. At the final staff meeting Horner offered his appreciation: 'You should have tremendous pride in your service, tremendous pride in your country, tremendous pride in mankind. We did what God wanted us to do. We really were magnificent. The world has never seen anything like it! Thank you'. 142

The war marked a new chapter in the records of history. The fighting on the ground unfolded without the fluctuating fortunes that normally mark major military campaigns because air operations – with more than 1,800 combat aircraft in action, roughly 110,000 flights recorded, and more than 90,000 tons of ordnance delivered - had decided the fate of the battle well before the ground offensive began. It took Coalition ground forces less than 100 hours to complete the victory against the world's fourth-largest military power, a testimony in itself to how competently airpower had 'prepared the battlefield'. Casualties on both sides were far lower than analysts had expected; the total loss of U.S. forces was 148 dead and 467 wounded while Coalition partners ended up with 99 dead and 434 wounded. The Coalition took more than 88,000 Iraqi prisoners of war, many of whom had surrendered without a fight, and thousands of Iraqi soldiers deserted despite the risk of execution by their own forces. Horner noted that even more important than destroying tanks and artillery, airpower had

devastated Iraqi morale, which enabled the Coalition ground forces to defeat the Iraqi Army so quickly.¹⁴³

Credible post-war analyses have estimated that Iraqi casualties were in the region of 700–1,000 dead and 3,000–7,000 wounded. The figures testify to the extent to which Coalition air strikes concentrated on equipment rather than people and the care that the Coalition took to avoid collateral damage. A longer ground campaign would have caused more casualties on both sides. In the end, the strategic air campaign, combined with the tactical air operations, which consumed 75 percent of the total air effort, constituted the decisive factor in the Coalition's victory.

Reflecting on 'what could have been done better' Horner singles out shortcomings in the intelligence system. In war 'all starts and ends with intelligence'; operators only know what they need to do based on intelligence, and only know what they have accomplished based on intelligence. The relationship between the Black Hole planners and the CENTAF intelligence staff was not the best; the former, led by Glosson, linked up directly to Rear Admiral J. M. McConnell, the J-2 of the Defense Intelligence Agency, to provide the intelligence support he needed. Glosson also spoke regularly with Colonel Warden's Checkmate team, which essentially had become an ad hoc fusion center for intelligence and operations with connections to the wider national intelligence services in Washington. By the time the war started, the Black Hole had become its own intelligence organization - it had its own intelligence sources and did its own targeting - while CENTAF intelligence worked with CENTCOM and its counterparts, NAVCENT, MARCENT, and ARCENT. Horner felt that this was suboptimal, but it could not be fixed mid-stream; the problem was systemic, that is, organizational, procedural, and technical.¹⁴⁵

Accuracy of intelligence estimates became the single most contentious issue during the air campaign, especially battlefield damage assessment (BDA). Horner would review BDA reports carefully every day, but he only found them useful when they indicated the effects of the air strikes and how the enemy 'will mutate as you move toward your desired goal'. 146 Horner knew that it did not really matter how many tanks, vehicles, trucks, and artillery pieces his forces destroyed; what mattered was to inflict so much damage that the Iragis could not fight coherently and effectively. This involved imponderables and uncertainties that the intelligence officers supporting Desert Storm did not grasp. 'The lesson for me was that we need to train our intelligence people how to function in the chaos of war, not to fear that which they do not know for certain. We have got to make them think about tomorrow, not yesterday.'147 Moreover, the Coalition's inability to neutralize Scuds, the air campaign's biggest operational disappointment, was the result of inadequate intelligence. Horner also recalls that their knowledge of the Iraqi nuclear, biological, and chemical (NBC) complex was poor at best.

Horner has observed that the biggest operational surprise to him during the air campaign was the Iraqi attack on al-Khafji, a deserted Saudi Arabian oil town ten kilometers south of the Kuwaiti border, on 29 January. Saddam Hussein's intention was to jumpstart a ground war by inflicting Coalition casualties. It did not take Horner long to scramble air forces for a counter-attack when Prince Khalid bin Sultan, Schwarzkopf's Saudi Arabian counterpart, took personal charge of the Saudi ground forces and telephoned Horner to ask for air support.

In the event, Coalition air forces executed a very successful counter-attack, not least thanks to a tactical innovation. The Joint Surveillance Target Attack Radar System (ISTARS), an experimental airborne radar intelligence system, could see objects moving on the ground, generating hundreds of targets that became subject to heavy Coalition bombing. 148 It was the first instance of CAS in the war and it came with a price: 13 Marines and four Saudi soldiers were killed. The action also resulted in the single greatest loss of Air Force personnel when an AC-130 gunship was shot down with its crew of fourteen. 149 In the end, the Air Force lost 20 people in Desert Storm, 14 of them in this AC-130.

Horner refers to al-Khafji as 'the most significant ground battle in the whole Gulf War'. 150

The battle of Khafji was a watershed event in several areas. First of all it showed that the Iraqi army was not invincible, second of all it showed that air power could defeat the army before it got to the battle, and third of all it showed that the Saudi army was very very capable and faced with a fight they could get the job done and they did. ¹⁵¹

One of the best accounts on the war, The Generals' War, substantiates that al-Khafji was a pivotal moment: Saddam Hussein realized for the first time that airpower could defeat his Army at night, on short notice and without a coordinated ground counterattack; that is, his strategy of attrition and casualties, outlasting the Americans, would not work. Consequently, all he could do was to salvage his most capable ground forces; he ordered the Republican Guard to prepare for retreat rather than sustained combat. 152 The lesson of al-Khafji: in the airpower era, two-dimensional surface forces are held hostage by three-dimensional aerial forces; moving armor are easy targets. 153

Horner has observed that the single most unfortunate incident during the war was the attack on the al-Firdos command and communication bunker on the night of 13-14 February. 'L30' was a legitimate military target - plenty of antennas, enclosed by high fences, topped with barbed wire, and marked as closed to the general public - but the planners were unaware that the local Iraqi commander had invited civilians to take shelter in the bunker. The attacks killed between 200 and 300 women and children. Horner would not have accepted the target had he known that it was used as a shelter. When he saw the dead bodies, he felt 'extreme sadness', but he was not going to blame his airmen or intelligence service: it was an honest mistake and he considered himself ultimately responsible. During the evening briefing Horner recalls that he told his planners:

Nobody needs to feel bad about the bunker incident in Baghdad, but we all should feel bad about the loss of life, anybody's life, because every life is precious. It does not matter whether it is an Iraqi soldier or kid in a bunker in Baghdad, we should feel bad about the loss of one of God's creatures. On the other hand, from a professional standpoint, we have nothing to be ashamed of. The mission was planned and executed flawlessly. The intelligence was as good as there is available. ¹⁵⁴

The attack drew much negative press, and on 14 February Schwarzkopf, at the behest of Powell, informed Horner that central Baghdad was 'off limits.' There was great dismay in the Iraqi Targeting Cell when Powell made the decision to, in effect, curtail the strategic attacks in Baghdad and elsewhere. Glosson was livid, arguing that the decision was akin to the kind of civilian meddling that had bedeviled the military in

Vietnam. Horner was not pleased with the restraining order but suggested that from an operational perspective it was not important because he believed his forces had more or less exhausted leadership targets by then and his main focus at this point in the war had shifted to Iraqi tanks.

The attack on the bunker coincided with the visit of Soviet Special Envoy Yevgeny Primakov to Baghdad, during which Primakov showed Soviet satellite images of the damage caused by airpower throughout Iraq. Saddam Hussein actively started to look for ways out of his predicament; on 16 February he offered to withdraw his forces from Kuwait, but his list of conditions was unacceptable to President Bush. 156 In retrospect, the ban on attacks against Baghdad gave Saddam Hussein reason to pause when continued attacks could have convinced him to look harder still at options for withdrawing prior to actual ground engagements. Upon Air Staff insistence, Secretary Cheney took it upon himself to have the bombing hold removed on 21 February. 157

One of Horner's greatest frustrations came late in the war, on 27 February, when the FSCL for both the XVIII Airborne Corps and the VII Armored Corps was set far ahead of their ground advances. Lieutenant General Gary Luck had set the former north of the Euphrates to enable Army gunships to operate without having to coordinate with the JFACC and ATO. The action helped rather than hindered the escape of Iraqi ground forces, because some of the Army's helicopters failed to reach the theater and Coalition attack aircraft were not allowed to strike the retreating troops. General Fredrick Franks put the VII Corps FSCL 50 miles beyond his forward positions, which also helped Iraqi units to retreat free of massive air strikes. Schwarzkopf, initially unaware of the change, ordered the FSCLs moved back when Horner

complained, but the Iraqis used those hours to the fullest. 158

After Desert Storm: Space Command

Horner stayed in theater a few more weeks to ensure an orderly re-deployment and returned to American soil in April 1991. Upon his return he received a hero's welcome and took part in the victory parade in Washington, D.C., and then later on Fifth Avenue in New York; the reception was very different from that accorded to troops returning from Vietnam.

Horner remained 9th Air Force and CENTAF Commander until June 1992, when he pinned on his fourth star and assumed leadership of the North American Aerospace Defense Command and U.S. Space Command. The position may not have been Horner's first choice, but he was delighted by the opportunity, not least because during his wartime experience, he had recognized space as 'the new frontier.' Horner's goal upon taking command was to get 'the tribe' to realize they were 'war fighters whose theater was above the atmosphere'. They had to look beyond physics to see how they could contribute to fighting in wars and to the defense of the nation.

Most of the space community thought of themselves as scientists, their orientation was on technology. They thought of themselves as builders and flyers of masterful spacecraft. They had trouble identifying themselves as part of the combat mission... I told them, 'You are all a bunch of nerds, a bunch of weenies, and a bunch of geeks. The only reason you exist is to fight wars'. I wanted to see some warrior spirit. The older guys hated me. The younger guys took to it like water. The next morning, when I went to my staff car, my license plate read

'GEEK-1'. I drove it that way for two-and-a-half years. 159

Reflecting on his career, 'If you enjoy doing something it is not work even if you get paid to do it. I never worked a day in my Air Force career'. 160 When Horner retired from the USAF on 1 October 1994, he and Mary Jo moved into a 'modest home' close to Blue Water Bay in the area of Niceville, Florida. A year later they moved into a 'less modest home' that would become their permanent address on the waterfront in Shalimar. Since retiring from the military Horner has been active as a defense consultant, a senior advisor to the USAF, and a strong advocate for defense investment in general, and aerospace power in particular. He co-authored Every Man a Tiger with Tom Clancy, published in 1999, and spent much of his time lecturing worldwide. More recently he took an active role in promoting a Desert Storm War Memorial in Washington, D.C., to symbolize how to conduct war as opposed to the Vietnam War Memorial close by, which should remind everyone how not to conduct war.

Reflections on Horner's leadership

General Schwarzkopf has referred to Horner's 'commanding presence, outstanding leadership, and warrior spirit' and Lt. Gen. Peter de la Billière, commander of the United Kingdom's forces, noted in his autobiography that Horner's 'professional ability was phenomenal' and that the air campaign was 'was nothing short of a masterpiece'. ¹⁶¹ Several aspects of General Horner's command of Desert Shield and Desert Storm warrant the attention of students of leadership, especially those aspects related to

professional mastery (expertise and responsibility) and personal qualities (characteristics and behavior).

Professional Mastery

Horner appreciated airpower as a means to achieve political ends rather than an end in itself. He had a solid grasp of President Bush's objectives and the role of airpower in the larger political-military scheme of maneuver. Horner had great operational, tactical, and technological insight. As a seasoned fighter pilot, he had detailed knowledge of aircraft, maintenance, and weapon systems. Horner had accumulated a total of 5,300 flying hours in the F-100, F-105, F-4, F-15, and F-16: a considerable number compared to his contemporaries. Moreover, he had flown III missions in two combat tours in Vietnam. He had worked on Red Flag, Blue Flag, Green Flag, and other exercise programs through the 1980s. He also had considerable command experience, and importantly, he had been the commander, 9th Air Force, and Commander, CENTAF for 3.5 years when Iraq invaded Kuwait. He therefore had detailed knowledge of his aircraft and the pilots. In short, he had spent his entire career practicing and preparing for aerial warfare.

As the result of his multifaceted professional career as a pilot, staff officer, and commander, Horner understood the military capabilities that were at the disposal of friend and foe alike and he had in-depth knowledge of weapon systems, the operational rhythm, and the linkages among personnel, intelligence, operations, logistics, planning, communications, and other fields of expertise. Horner had a solid grasp of the aerospace profession's roles and functions; that is, how to deliver airpower. He had the ability to bring people with different backgrounds

and expertise together, and the skillset to turn tactics, techniques, and procedures into coherent and sustainable air operations. Horner was flexible: before the war few had envisioned using A-10s against radar sites, F-111s against tanks, or B-52s against troops in foxholes. Horner was not a tactical and operational innovator per se, but he refined existing procedures and synthesized them to great effect. In addition to having specialized aerospace skills, he benefited from a broad liberal education at military colleges, including knowledge of international relations, military history, and social science.

It is worth noting that throughout his career, Horner emphasized 'I do not do doctrine'. He acknowledged that it is useful to have some documented codified experiences but warned against making studies too academic or using 'doctrine' to justify action that defies common sense. He did not consider himself the 'smartest guy in the room'; he encouraged his subordinates to speak their mind and he did not feel threatened by dissent, but he was suspicious of those who seemed intent on proving a theory or intellectualizing the obvious. 162 General McPeak has observed that Horner 'might not be what one thought of as the picture-perfect military officer, but he was comfortable inside his skin and sneaky smart. When it came to the mission and the people entrusted to him for its accomplishment, he was engaged, deeply serious, the opposites of frivolous.'163 According to General Russ 'Horner is a meat-and-potatoes guy. Horner is a warrior... He has the gut feel necessary to make tough decisions. I would trust him anywhere because of the way he operates'. 164

As an air commander, Horner had a sense of responsibility regarding 'the management of violence' – exercising violence on behalf of a Coalition of independent states. He had a killer instinct – the willingness to send men

and women into combat to take lives - but his actions remained within the bounds of prudent rules of engagement, self-restraint, and International Humanitarian Law. He applied airpower decisively and forcefully to win as quickly as possible, but also took every precaution possible to avoid unnecessary deaths, destruction, and collateral damage. Horner operated from a moral and an ethical baseline defined as much by unwritten norms as by any binding legal documents. For example, the air planners were well aware that the Rasheed Hotel and Babylon Hotel had fiber-optic coaxial cable nodes in the basements, but with foreign reporters living there it was never attacked. The famous statue of Saddam Hussein was not attacked because Pentagon lawyers argued it was a cultural monument. Horner made sure that they did not attack infrastructure too close to mosques and shrines. The planners also suspected that numerous schools and houses served as operational centers or residences for regime members, but they were very careful not to authorize attacks without confirmed reports of such uses.

Warden's Instant Thunder proposal was key to the success of the air campaign. Horner disagreed at first with many of its assumptions and openly rejected parts of the plan, but then gradually incorporated it into a larger offensive, thanks to Glosson and Deptula, and ultimately, he became a reluctant supporter. The world will never know if Horner would have insisted on devastating attacks against high-value targets in Baghdad from the opening moments of war had Schwarzkopf not already endorsed Warden's game-changing initiative. Horner, first and foremost an operational-tactical level commander and a premier tactical warrior aviator, was never fully comfortable with the 'strategic air campaign' concept and the notion that airpower could incapacitate or paralyze the Iraqi regime by

taking out its military headquarters and other leadership targets. His TAC background may have prevented him from developing an appreciation for a non-nuclear modern strategic application of airpower. A supreme commander needs to be able to engage in the 'contest of ideas', including a discourse on strategy, theory, and doctrine. ¹⁶⁵ If Horner had a weakness in the area of professional mastery, it was his aversion to fully exploring the cognitive domain of airpower.

Although Horner had little appetite for intellectual or academic discussions, he frequently set aside time to read and think throughout his career. Glosson recalls that he once caught Horner reading Carl von Clausewitz in the midst of war with 'specific sections highlighted'.

He would have these paperback novels stacked up on his desk, and anytime he was sitting in there reading, he always had one open and it was lying face down. So if anybody came in, he was always reading one of those novels. But he had another group of books that he spent at least as much time reading and thinking through. The one thing that Horner was able to do very well was keeping time to think! He insisted on having enough private time to think... and anytime that started to be infringed upon, he would change the structure to make sure that was accommodated. He would not admit that... but that is just Horner.166

Personal Qualities

Horner had an exceptional ability to develop good relations with people at all levels. Most important, Horner established a solid relationship with his boss, General Schwarzkopf, who was known to be a difficult man to work for. Schwarzkopf trusted Horner from the beginning, both for his airpower expertise and for his judgment in

general. Horner earned Schwarzkopf's trust by adapting to his personality: he knew that Schwarzkopf was 'extremely intelligent' and that he 'cared passionately' about the safety of troops, but also was 'enormously insecure', which resulted in Schwarzkopf's infamous rages. Horner always referred to the air campaign as Schwarzkopf's and not his own and made sure Schwarzkopf's agenda was his agenda: 'I was probably closer to him than anybody else. I was always very sure that I did not ever take him problems; I always took him solutions. He was very trusting with the Air Force... We met daily, and I would sometimes be the brunt of his prickly humor. I would just smile and politely give it back to him'. 167

Horner would always be physically present at Schwarzkopf's meetings, sitting on his right-hand side. Horner briefed his commander nightly on target selection. He was careful never to confront Schwarzkopf in public, only in his office or in private. Schwarzkopf, in turn, allowed dissent from Horner - a tolerance few if any other of Schwarzkopf's commanders experienced. The two made the most important decisions behind closed doors and not during the daily briefings. Horner became 'Schwarzkopf's whisperer', quietly and softly leading the CINC to understand and endorse the airpower perspective, while others in the command group were unable to convince Schwarzkopf of their viewpoints. This was Horner's trademark: throughout his career, he always made his bosses believe and trust him. This point cannot be emphasized strongly enough: under the stress of war and wide responsibility, commanders turn toward those they trust. Norm Schwarzkopf trusted Chuck Horner.

Horner also devoted considerable effort to fostering relationships with the U.S. Marines commander, the Navy commander, and the Army commander. Horner reflected: The four of us – Walt Boomer, Stan Arthur, John Yeosock, and myself – were like brothers. We would never try to do anything to one another... Such a relationship probably has never existed before and it probably won't exist in the future. The trust and respect we had for one another was unbelievable. This was a function of personality as much as a desire to get the job done... There was never distrust; there was nothing but absolute faith and confidence. ¹⁶⁸

It certainly helped that Horner believed in 'jointness' – all military services working together – and that he knew air-land integration quite well from his time at TAC. He also benefitted from the higher staff courses he had taken together with Army and Navy officers.

Horner also made sure that he had good relationships with his subordinates. He worked closely with Glosson and visited the planning cell every day, where he received an overview of that day's attack plan from Deptula, but he also made it a priority to speak with those outside the headquarters. He would insist on talking to men and women of all ranks, whether in their workspaces or in the dining room. Horner came across as a 'matter-of-fact,' informal, engaged, and serious commander who knew what he was doing. He often cleverly 'tested' people, confronting them with hypothetical circumstances to see how they would respond. If they 'passed' his test, they gained his trust. His downto-earth style and composure under stress helped his subordinates have confidence in their commander.

In addition to exhibiting operational acumen and tactical shrewdness, Horner in many ways acted as an 'intuitive commander'. He was good at reading and selecting people, providing general direction, and giving subordinates broad latitude to do their jobs, delegating authority as well

as responsibility. His single most important personnel decision was to select Brigadier General Glosson and Lieutenant Colonel Deptula as his key planners for the air offensive. Their determination, energy, and intellect, applied under Horner's oversight, ensured the air campaign plan had a strategic dimension that otherwise might have been significantly downplayed. Both officers recall that Horner never had their faith in the F-117s and precision strikes against regime essentials downtown Baghdad, but the dynamic pair prevailed because they took care of day-to-day operations. Glosson recalls that 'Horner is the type of commander that will give you a job to do, expect you to do it, and tell him if you need help. He will not micromanage you'. 169

I have often thought that probably no other person in uniform would have given me the freedom that he did. I do not think there is a parallel for that anywhere in the history of the USAF... He let me have unprecedented freedom to plan, and ultimately to command the fighters, and still keep the planning hat. It was unique. He had total confidence that I would do the right thing and, more impressive, the confidence in himself to delegate. 170

Perhaps the most significant aspect of Horner's command was his ability to work with Coalition partners. The Coalition eventually grew to include 38 nations, with 13 of them providing combat aircraft. Horner repeated long after the war that 'without the Coalition, there would have been no success'. ¹⁷¹ The art of consensus building is to give everyone a stake in the outcome and ensure that every partner can contribute to the campaign without compromising national sensitivities. Horner appreciated better than anyone that the Saudi Arabians were the glue that held the Coalition together. As

CENTCOM Forward and commander of CENTAF he worked hard to gain their trust.

Horner was acutely aware that as a Coalition commander he had to be sensitive to culture. It probably helped that he was himself a religious man. Horner has later revealed that he wanted to be a leader without giving the impression of wanting to be in charge.

I had to be especially sensitive in my approach to the contingents from the other nations in the Coalition. They expected me to lead, yet it was important for me to respect their inputs and concerns... I had to create the trust that would make them want to come to me for ideas, help, and coordination. And when putting together my guidance to U.S. airmen of all services, I had to make sure it was sound, not only for the sake of my own people, but for the sake of the Coalition partners... There were no secrets, no special friends; all of us were equal and important, regardless of service or nation. ¹⁷²

The Arab partners – Bahrain, Saudi Arabia, Kuwait, the United Arab Emirates – and others had officers in the planning team of different ranks, from lieutenant colonels to generals, but within the team they were treated as representatives of their sovereign countries and spoke with an equal voice regardless of rank. Creating this environment was not always easy, but Horner's objective was to develop a sense of team spirit with no secrets.

Horner deserves great credit for pulling together a Coalition force with combat aircraft from twelve countries – with different religions, different expectations, different geopolitical objectives, and different experiences – and directing them toward a common objective. ¹⁷³ He worked hard to create an environment of openness, respect, and trust. Horner led by a pragmatic approach focused

on 'unity of effort' rather than 'unity of command' in the doctrinal sense. In many ways his success came down to 'people skills' and his ability to establish relationships. Horner had a record of inspiring people and backing them up completely, a puckish and playful sense of humor that could help defuse tension, and an uncanny ability to detach himself emotionally from the problem at hand. He preferred personal interaction to leading from a distance and in the process, he succeeded in getting an enormously diverse group of airmen to work together, to share one aim, and to believe in him.

Wider Perspectives

Chuck Horner entered the USAF after the Korean War, served two tours in Vietnam, witnessed the decline of the U.S. military services in the 1970s, and contributed to the USAF reinventing itself in the 1980s and early 1990s. During the first term of the Reagan administration, programs for fighter modernization, stealth, all-day/all-weather capability, forward-looking infrared sensors, and precision munitions came to fruition; the resulting weapon systems, employed according to new concepts of operations, changed the character of war.

Chuck Horner was in many ways an 'unlikely general'; he did not start out with the ambition of achieving that rank and he recalls that he was 'always a bit embarrassed when being treated special as a General'. He welcomed promotions, reserved parking spaces, and certain privileges, because he had worked as hard as anyone. He did not object to 'the saluting and the calling to attention', because that is 'military courtesy', but he always felt a bit uneasy about pomp and splendor. ¹⁷⁴ He remained shy and confident throughout his career, and many of the decisions he made, especially when dealing with people, was based on 'gut feeling'

rather than fact sheets and formal checklists. He kept his informal style, wicked humor, and foul language throughout his various ranks or positions. Although he matured with age and experience, he never tried to change who he was.

General Horner was also a 'lucky general' in the sense that he found himself part of the 'Perfect Storm': the U.S. political leadership acted with clear and achievable objectives, the Iraqi leader was incompetent as a wartime commander, the Coalition forces were exceptionally well prepared and professional, the JFACC had all the air assets he could have hoped for and then some, and he was blessed with air planners who understood the strategic as well as the tactical application of airpower. In wars of the past, the commander had to manage shortages. In this one Horner enjoyed the management of riches; when General McPeak kept suggesting sending more aircraft Horner told him that 'he had run out of ramp space to park airplanes'.175

These favorable conditions do not detract from Horner's virtuoso leadership; he seized the moment and fit the situation perfectly. Horner was the man in charge, and he deserves every credit for his outstanding performance in commanding the air campaign. His execution of the campaign represents an exemplary case study of organization and management. In leading the campaign, he brought to bear a vast range of lessons and skills he had learnt and understood over years of experience. As the old saying goes, it is amazing how lucky you get when you work hard. The Gulf War Air Power Survey also noted that 'the JFACC did not play by the book, but it is by no means clear that playing by the book would have achieved more'.176

One of the most important factors in the Coalition's success was the clear chain of

command. Horner was the single point of contact for all aspects of air operations, and the understanding and trust between him and Schwarzkopf ensured that both worked toward the same objectives. Operation Desert Storm vindicated the 'single manager' concept for the command and control of joint air operations, something airmen had dreamed of since the days of Billy Mitchell. ¹⁷⁷ Horner succeeded because he insisted on this arrangement and was willing to make tradeoffs with senior officers in the other Services in order to avoid unnecessary conflicts over the JFACC's status and authority.

The JFACC structure proved exceptionally effective because of Horner's dedication to the commander's prime responsibility for gaining and maintaining air superiority from the outset, and the successful opening strikes laid the foundation for the rest of the campaign. During the first few days of the war, air attacks degraded the capabilities of the Iraqi air defenses to the point where the campaign could continue without significant Iraqi interference for as long as the Coalition wanted. 178 Success as IFACC also resulted from Horner's commitment to decentralized responsibility and authority and his ability to create and maintain productive professional and personal relationships with his boss, component commanders and subordinates on one hand, and Coalition partners in general and the Saudi Arabian host nation specifically on the other. For all these reasons, General Chuck Horner is one of the most outstanding operational-level air commanders since World War II.

The author is a colonel in the Royal Norwegian Air Force with a doctorate in history and international relations and serves at present as the Norwegian defense attaché in United Kingdom. He is a fellow of the RSAWS. 179

Official Biography, General Charles A Horner

Education

1958; Bachelor of Arts degree, University of Iowa, IA

1967; Squadron Officer School, Maxwell AFB, AL

1972; Master of Business Administration degree, College of William and Mary, Williamsburg, VA

1972; Armed Forces Staff College, Norfolk, VA

1974; Industrial College of the Armed Forces, Fort Lesley J. McNair, Washington, D.C.

1976; National War College, Fort Lesley J. McNair, Washington, D.C.

Assignments

October 1958–June 1959; student, officer preflight training, Spence AFB, GA

June 1959–October 1960; student, pilot training, Laredo AFB, TX

October–November 1960; student, F-100 combat crew training, Luke AFB, AZ, and Nellis AFB, NV

November 1960–December 1963; F-100 pilot, 492nd Tactical Fighter Squadron, RAF Station Lakenheath, England

December 1963–December 1965; F-105 pilot, 4th Tactical Fighter Wing, Seymour Johnson AFB, NC

June 1965–December 1965; temporary duty as F-105 pilot, 388th Tactical Fighter Wing, Korat Royal Thai Air Base, Thailand

December 1965–May 1967; F-105 instructor pilot, Nellis AFB, NV

May 1967–September 1967; F-105 Wild Weasel pilot, Korat Royal Thai Air Base, Thailand

September 1967–October 1969; F-105 instructor pilot, Nellis AFB, NV, then liaison officer, Air Force Tactical Fighter Weapons Center, Nellis AFB, NV

October 1969–January 1971; air operations staff officer, Office of the Deputy Chief of Staff for Plans, Headquarters Tactical Air Command, Langley AFB, VA

January 1971–January 1972; student, Armed Forces Staff College, Norfolk, VA

January 1972–August 1975; air operations officer; later, Chief of the Force Branch in the Office of the Deputy Chief of Staff for Operations, Headquarters U.S. Air Force, Washington, D.C.

August 1975–June 1976; student, National War College, Fort Lesley J. McNair, Washington, D.C.

June 1976–March 1979; Deputy Commander for Operations, 4th Tactical Fighter Wing, Seymour Johnson AFB, NC

March 1979–August 1979; Vice Commander, 58th Tactical Training Wing, Luke AFB, AZ

August 1979–May 1980; Commander, 405th Tactical Training Wing, Luke AFB, AZ

May 1980–August 1981; Commander, 474th TFW, Nellis AFB, NV

August 1981–May 1983; Commander, 833rd Air Division, Holloman AFB, NM

May 1983–October 1983; Commander, 23rd North American Aerospace Defense Command Region, and Tactical Air Command Air Division, Tyndall AFB, FL October 1983–May 1985; Commander, Air Force Air Defense Weapons Center, Tyndall AFB, FL

May 1985-March 1987; Deputy Chief of Staff for Plans, Headquarters Tactical Air Command, Langley AFB, VA

March 1987–June 1992; Commander, 9th Air Force, and Commander, U.S. Central Command Air Forces, Shaw AFB, SC

June 1992–October 1994; Commander in Chief, North American Aerospace Defense Command and U.S. Space Command; Commander, Air Force Space Command, Peterson AFB, CO

Flight Information

Rating; command pilot

Flight hours; more than 5,300

Aircraft flown; F-100, F-105, F-4, F-15, and F-16

Pilot wings from; Laredo AFB, TX

Effective Dates of Promotion

Second Lieutenant; 13 June 1958

First Lieutenant; 12 June 1960

Captain; 1 October 1963

Major; I June 1969

Lieutenant Colonel; 1 November 1973

Colonel; 1 February 1975

Brigadier General; 1 August 1982

Major General; 1 July 1985

Lieutenant General; 1 May 1987

General; 1 July 1992

Retired; 1 October 1994

Major Awards and Decorations

Distinguished Service Medal with oak leaf cluster

Silver Star with oak leaf cluster

Legion of Merit

Distinguished Flying Cross

Meritorious Service Medal with three oak leaf clusters

Air Medal with 10 oak leaf clusters

Air Force Commendation Medal with three oak leaf clusters

Combat Readiness Medal

National Defense Service Medal with bronze star

Armed Forces Expeditionary Medal with bronze star

Vietnam Service Medal with bronze star

Republic of Vietnam Campaign Medal

General Horner has been decorated with Canada's Meritorious Service Cross and honored by Bahrain, Kuwait, France, Pakistan, Saudi Arabia, and the United Arab Emirates.

Other Achievements

1991 U.S. News Trophy

1991 History of Aviation Award

1991 Maxwell A. Kriendler Memorial Award

1991 Aviation Achievement Award

1991 Air Force Order of the Sword

1991 Aviation Week and Space Technology's Aerospace Laureate

1992 National Veteran's Award

Notes

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