Fifteen years ago this month, the Gulf War upset prevailing assumptions about airpower and its relationship to the “AirLand Battle.”

A lineup of active duty and Air National Guard F-15s and F-16s flies over the burning oil fields of Kuwait. Airpower smashed Iraqi forces, disrupted Iraqi command and control, and destroyed Iraq’s ability to mount further aggression.
In the summer of 1990, Iraq was the best-armed state in the Arab world. Despite the increasingly bellicose behavior of the Iraqi leader, Saddam Hussein, the Pentagon, the State Department, and the Central Intelligence Agency did not see Iraq as an urgent problem.

Intelligence reports said that Iraq was “weary” from its long war in the 1980s with Iran and was not likely to attack its neighbors in Kuwait or Saudi Arabia. The assessment did not change appreciably when Saddam, in a televised speech on July 17, threatened to take military action against Kuwait. In late July, US Central Command featured Iraq—thinly disguised as “a country from the north”—in a command post wargame called Internal Look. The scenario was an Iraqi invasion of the Arabian peninsula. State Department officials complained on the grounds that Iraq was not an enemy.

The oil crises of the 1970s had demonstrated the importance of the Middle East, but US defense strategy regarded it as a military theater of secondary importance, after Europe and the Pacific.

US armed forces were focused on the end of the Cold War. The Berlin Wall had fallen in 1989, and both the Warsaw Pact and the Soviet Union were tottering. The defense budget and force structure had been cut deeply, and there were demands for further reductions. A sarcastic headline in the New York Daily News said, “Pentagon Needs a Few Good Enemies.”

The future looked particularly uncertain for the Air Force. Since its founding as a separate service in 1947, the Air Force’s prime mission had been to deter and counter the Soviet Union in the Cold War. For most of its history, the service had been dominated by Strategic Air Command. Within two years, SAC would cease to exist.

In the minds of many, the role of the tactical air forces was to support the Army in the “AirLand Battle.” In the Heritage Foundation’s Policy Review, Jeffrey Record, a noted defense analyst, asked whether the nation still needed an independent Air Force. His treatise was entitled, “Into the Wild Blue Yonder: Should We Abolish the Air Force?”

Bucking the trend, the Office of the Secretary of the Air Force in June 1990 published a white paper, “Global Reach—Global Power.” It described the maturation of “a truly revolutionary set of technologies” and said the United States had become “an aerospace nation.”

Sometimes, the white paper said, the Air Force would function in a subordinate role, but “to meet the needs of the joint force commander, we conduct independent, parallel, and supporting operations in conjunction with other service components.” It predicted that the “use of military forces will be primarily in sharp, powerful, short duration operations,” with airpower playing a strong and early part.

Desert Shield

Saddam invaded Kuwait on Aug. 2, 1990. It was not clear that he was going to stop there. Iraq had 63 ground divisions, 27 of them already in Kuwait and positioned to move south. He also had about 750 combat aircraft. If he could seize the adjacent Eastern Province of Saudi Arabia, he would, with his other holdings, control more than half of the
world’s oil. Saudi defense forces were not sufficient to stop him.

In Washington, President Bush said the invasion of Kuwait “will not stand” and demanded that Iraq withdraw from Kuwait. On Aug. 6, Saudi King Fahd accepted a US offer of assistance. On Aug. 8, the Gulf saw the arrival of the first US forces—a USAF C-141 carrying an airlift control element, closely followed by F-15s from Langley AFB, Va., and elements of the US Army’s 82nd Airborne Division.

The Pentagon announced that the name of the operation was Desert Shield. It would be conducted by US Central Command, which had grown out of the old Rapid Deployment Joint Task Force, formed in the wake of the Iranian hostage crisis and Soviet invasion of Afghanistan. CENTCOM’s area of responsibility was the Middle East, Southwest Asia, and Horn of Africa. It did not, however, include Israel, Lebanon, or Syria, which were watched over by the more prestigious US European Command.

The commander of CENTCOM was Army Gen. H. Norman Schwarzkopf. As a theater commander, he was empowered by the Goldwater-Nichols Act of 1986 to organize and employ his force as he saw fit, but the command had no forces of its own. On a day-to-day basis, CENTCOM consisted of a headquarters and planning staff in Tampa, Fla.

Schwarzkopf drew his Air Force component from 9th Air Force, headquartered at Shaw AFB, S.C. The commander, Lt. Gen. Charles A. Horner, was a hard-nosed fighter pilot who got along well with Schwarzkopf. Ninth Air Force was part of Tactical Air Command, but when Horner was acting in his capacity as commander of the CENTCOM Air Force component, he answered to Schwarzkopf, not to the Air Force.


Horner, as the senior officer, was designated as commander of CENTCOM Forward. That was one of several singular events that put the Gulf War on a different course than it might otherwise have taken.

AirLand Battle

The relationship of force components was supposedly settled in 1943, after the success of airpower in North Africa, when Army Field Manual 100-20 said that “land power and airpower are co-equal and interdependent forces; neither is an auxiliary of the other.”

However, Army ground forces never accepted that decision, and, in the 1980s, their side of the argument gained new strength with the AirLand Battle doctrine.

AirLand Battle acknowledged that the Army could not win without the Air Force, but said that airpower was fire support—always support—for the ground force. Tactical Air Command agreed.

Gen. Robert D. Russ, commander of TAC and acknowledged leader of Air Force fighter and attack forces, said, “Tactical aviators have two primary jobs—to provide air defense for the North American continent and support the Army in achieving its battlefield objectives.”

Air Force doctrine officials protested Before Schwarzkopf departed from Saudi Arabia, he told Horner he was going to ask the Pentagon to help plan a “strategic air campaign.” Horner was “furious” about this, Schwarzkopf recalled in his memoirs; the airman insisted that such planning was his job. However, Schwarzkopf noted, “I’d reminded him that, as my forward commander in Riyadh, he had his hands full and promised he could take over once the preliminary work was done.”

**AirLand Battle**

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that AirLand Battle was Army, not Air Force, doctrine. Their objections, however, were trumped by the differing opinion and enormous prestige of Bob Russ. Most of the fighter community shared his view.

OPLAN 1002, the off-the-shelf plan that CENTCOM used for the Internal Look exercise in 1990, was consistent with the AirLand Battle concept. In the scenario, airpower responded quickly to the invasion by the “country to the north,” but its task was to trade space for time and hold back the invaders until CENTCOM ground forces could get there to regain the initiative.

At the bottom of an Internal Look briefing slide, Horner had written, “Build a hose and point it where the ground commander sees that it’s needed.”

The plan did provide for “cross border” air strikes, but they were the final element of the campaign (rather than the first element, as would be the case in the actual Gulf War of 1991). CENTCOM would not have gone to war with a canned OPLAN, but it was an indication of the command’s emphasis on the ground battle.

Schwarzkopf’s August 1990 interest in a strategic air campaign was prompted not so much by his belief in airpower as by the paucity of ground force options. It would be almost two months before Schwarzkopf could be confident that his ground force could stop an enemy attack, much less drive the Iraqis from Kuwait.

Horner disliked talking about “strategic” and “tactical” operations. It was more useful, he believed, to think about offensive and defensive operations. Besides, said Tom Clancy—the co-author (with Horner) of the 1999 book Every Man a Tiger—a “strategic air campaign” was “Air Force code for use of airpower aimed at the heart of the enemy and not at his ground forces.” What Schwarzkopf wanted was an offensive air campaign.

Early plans in Desert Shield allocated Schwarzkopf one Army corps. His combat analysis group said that an offensive could succeed with a single corps only if an air campaign first inflicted 50 percent attrition on the enemy. (That attrition objective did not change when Schwarzkopf gained additional corps in November. By then, Intelligence was reporting a larger Iraqi force.)

**Instant Thunder**

“I called Colin Powell [Chairman of the Joint Chiefs of Staff] and asked that the Air Force put planners to work on a strategic bombing campaign, aimed at Iraq’s military, which would provide the retaliatory options we needed,’” Schwarzkopf said.

Schwarzkopf then called the Air Force. The Chief of Staff, Gen. Michael J. Dugan, was out of town, so he spoke with the vice chief, Gen. John Michael Loh, who said the Air Force would be glad to help. Loh notified Russ at TAC. According to interviews conducted later, Russ did not believe that Schwarzkopf was really that interested in Air Staff assistance, and he sent word to Chuck Horner that people in Washington were mucking about in his business.

Loh next called Air Force Plans and Operations. Here again, circumstances took a strong hand in events. Lt. Gen. Jimmie V. Adams, the deputy chief of staff for plans and operations, was on leave. Adams agreed with Russ’ views on airpower and on Air Staff planning of field operations.

Thus as it happened, the tasking from Loh went to the last person that Russ and Adams wanted to see involved: Col. John A. Warden III in the “Checkmate” planning division.

Warden did not subscribe to AirLand Battle. In 1988, he wrote a book, *The Air Campaign*, a treatise on the use of airpower at the operational level of war, where it could be either the primary or the supporting element in the strategy. Dugan, at the time the deputy chief of staff for plans and operations, had copies distributed to every officer on the Air Staff.

Not everyone shared Dugan’s enthusiasm for Warden and his theories. Warden’s detractors acknowledged that he was brilliant, but they also saw him as arrogant, headstrong, and inflexible.

Warden’s team moved fast. They pulled in extra hands, among them Lt. Col. David A. Deptula. Deptula, who was working in the Office of the Secretary of the Air Force, had been the principal author of “Global Reach-Global Power.” With Loh’s help, Warden also tapped rich sources of information in Air Force Intelligence and elsewhere in Washington.

Within days, Checkmate had sketched out a plan named Instant Thunder, under which Saddam Hussein’s forces supposedly would suffer “strategic paralysis.” Ground forces did not figure prominently in the plan. It basically prescribed a massive attack by 500 combat aircraft that would, in

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**Chronology**

1990

Aug. 2. Iraq invades Kuwait.


Aug. 7. USAF F-15 squadrons depart for Gulf. USS Independence carrier battle group arrives in Gulf of Oman, south of Persian Gulf.

Aug. 8. F-15s from 1st TFW and elements of 82nd Airborne Divi

Nov. 8. US sends 200,000 more troops for “offensive option.”

Nov. 29. UN authorizes force to eject Iraq from Kuwait.

1991


Jan. 15. UN deadline for Iraqi withdrawal passes.


Jan. 18. Iraq launches Scuds at Israel, Saudi Arabia.

Jan. 25. USAF opens attacks on Iraqi aircraft shelters.

Jan. 26. Iraqi aircraft begin fleeing to Iran.


Feb. 28. Cease-fire becomes effective at 8 a.m. (Kuwait time).
six to nine days, destroy Saddam’s ability to wage war. The Iraqi Army in Kuwait would not be struck unless it attempted to move forward.

Warden briefed his plan to Schwarzkopf on Aug. 10 and to Powell on Aug. 11. Both of them liked it, although they wanted it revised to give more attention to the Iraqi field Army. As Powell described it later in his memoirs, Warden proposed to “attack deep inside Iraq, knock out their command and control installations, transportation systems, production and storage facilities, and air defense networks.” Powell said he did not want Saddam to withdraw the invasion force. He wanted the invasion force destroyed.

The Air Staff kept TAC informed, but, at the direction of both Schwarzkopf and Dugan, it sought neither coordination with nor approval from TAC. Russ and his planners offered a different approach anyway: Instead of a sending a massive attack, send Saddam a message with a warning attack against selected targets, and then escalate only if that did not work. Adams had returned to Washington, but neither he nor Russ was able to deflect the Instant Thunder express.

On Aug. 17, Warden again briefed Schwarzkopf, who told him to take the plan to Horner in Riyadh, which he did on Aug. 20. The presentation in Riyadh, however, did not go well.

Warden’s briefing began with a presentation on history and philosophy. Horner, who had studied the Middle East for years, found the lecture patronizing and told Warden to move on. “I was getting a university academic teaching a 101 class,” Horner said in Every Man a Tiger. “At every question I asked that dealt with the Iraqi ground forces, he would dismiss my concerns as unimportant.”

Horner thought Warden had brought “outstanding targeting materials and attack options” but that his plan—focused on the deep-strike aspect of the air campaign—was too narrow for actual conduct of the war.

Horner sent Warden, who seemed certain Horner was “too stupid to grasp [Warden’s] central concept,” back to Washington, but asked other members of the Checkmate team to stay. Notable among those kept in Riyadh was Dave Deptula.

The Black Hole

Schwarzkopf arrived in Riyadh on Aug. 29 to take charge in person. Horner was thereafter free to concentrate on being the joint force air component commander, or JFACC, responsible for all of the airpower under the control of Central Command.

Horner recruited Brig. Gen. Buster C. Glosson as his chief planner and told him to “take the Checkmate effort and build an executable air campaign.” Glosson set up shop in the basement of the Royal Saudi Air Force headquarters building. This area came to be known as the “Black Hole,” both because of the secrecy and because the working hours were so long that people went in and were seldom seen coming out. Deptula was in charge of the entire offensive plan, including targets in and around Baghdad.

The Black Hole got regular inputs from Checkmate, which continued to tap valuable intelligence and information sources in Washington.

As noted by the Gulf War Air Power Survey after the war, there was no single document called the “air campaign plan.” It consisted of a general expression of purposes and expectations, the identification of four phases of action, and a detailed air tasking order.

On Aug. 25, Schwarzkopf briefed Powell on four sequential phases of the
plan for Desert Storm, which would eject the Iraqis from Kuwait:

1. Instant Thunder. For the time being, Schwarzkopf kept Warden’s term for the strategic air campaign.
2. Suppression of enemy air defenses.
3. Attrition of enemy forces by 50 percent, an enormous task, expected to be achieved by airpower.
4. The ground attack.

“It took weeks to build the first offensive air campaign plan,” Horner said. “Much of Warden’s work was in it, but it went far, far beyond his work.”

The original Instant Thunder plan had 84 targets. The air tasking order of Jan. 15, 1991, had 476 targets. As the war went on, targets were numbered in the thousands. Such a campaign would take longer, of course, than the six to nine days that had been estimated for Instant Thunder. Glosson’s plan also differed from Warden’s in that the Iraqi ground forces were hit the first day and every day thereafter until the end of the war.

Nevertheless, Instant Thunder had a strong and beneficial influence on the plan for Desert Storm. It bore no resemblance to AirLand Battle or Internal Look, in which air operations were subordinated to the ground force.

Glosson “had expanded the retaliatory scheme of the Pentagon Air Staff into the best air campaign I’d ever seen,” Schwarzkopf said. “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.” (Although Glosson led the effort, the architect of the air campaign was Deptula, who created both the attack strategy and the specific plan.)

Centralized control of airpower had been attempted in previous wars. It worked a little better in the Gulf, in part because of Horner’s leadership abilities. He cultivated a rough-and-ready image, but it was quickly obvious that he was smart, well-informed, and keenly attuned to building trust and teamwork.

As JFACC, Horner exercised his authority through the air tasking order, which was prepared by the crew in the Black Hole. Navy integration into the ATO was limited, mostly for technical reasons, and the Marine Corps resisted integration of air assets. The Marines referred to the JFACC as the joint force “air coordinator” instead of the “air component commander.”

Of the US combat aircraft in Desert Storm, 58 percent were from the Air Force, 27 percent from the Navy, and 15 percent from the Marine Corps.

As usual in war, the ground force commanders wanted more strikes on the enemy force directly in front of them, and they blamed Horner for not getting them. Actually, Horner was following directions from Schwarzkopf, who wanted the bombing emphasis on the elite Republican Guard units rather than on the regular Iraqi units strung out along the border. As he had demonstrated during the Instant Thunder briefings, Schwarzkopf also appreciated the need for strategic air strikes.

What the ground commanders wanted was AirLand Battle, but they were not going to get it.

A Line in the Sand

Later, after the war was over, the Iraqi forces were depicted as an easy mark, no real challenge for the superior US and coalition forces. That was not how Powell and many other planners saw it; they expected a violent clash of armies. Some prewar casualty estimates were as high as 45,000. Schwarzkopf himself predicted 5,000 casualties.

Iraq had the world’s sixth largest air force and fourth largest army. Some equipment was obsolete, but Iraq’s inventory also included such modern aircraft as Mirage F-1 fighters, Su-24 strike aircraft, and MiG-29 interceptors. The Soviet-built Scud surface-to-surface missiles were old but not without effect. The armored divisions had Soviet T72 tanks. The integrated Kari air defense system was formidable. (“Kari” was Iraq spelled backwards in French. The system was French-built.)

By January 1991, Saddam was face to face with a formidable international coalition. The United States and 38 other nations provided ground forces, and a total of 13 nations provided combat aircraft. The coalition had more than 1,000 fixed wing attack aircraft, 800 air defense fighters, and about 540,000 ground troops.


What Saddam wanted to do was lure the coalition into a ground war, where he was at less of a disadvantage. “If there is war, the coming battle will be the mother of all battles,” Saddam declared. “This battle has been ordained by God. ... And the great battle has been initiated, the mother of all battles, between the triumphant truth with the support of God and the evil pushed by Satan, which will be beaten eventually, God willing.”

The coalition’s strength was airpower. For a while, it was only airpower. In a telephone conference Oct. 6, Schwarzkopf told Powell that “as far as a ground offensive is concerned, we’ve still got nothing.”

Studying the deployment of the Iraqi Army, however, Schwarzkopf had an inspiration. The “Saddam Line” extended from the Persian Gulf west along the border of Kuwait and another 40 miles along the border of Iraq, about 175
The threat from Iraq’s Air Force was eliminated when the Iraqi airlift that had not been destroyed outright fled to Iran. Saddam attempted to bring on the “mother of all battles” at Khafji Jan. 29, but his attacking tank force was destroyed by airpower. After that, the Iraqi Army did not again take the initiative.

The air campaign rolled on for 38 days. According to the original plan, the attack was supposed to unfold in phases, first the strategic sorties, then air defense suppression, and finally strikes on the Iraqi field Army. Instead, the phases ran concurrently. The Iraqi Army was struck the first day, as were air defenses.

Airpower could have ground down the Iraqi force down further, but pressure had built to launch the ground phase of the war.

**Desert Storm**

In the early morning hours of Jan. 17, local time (it was Jan. 16 in the United States), Operation Desert Storm began. The results are widely known. By sunrise, Saddam’s command and control network no longer existed, and his ability to mount a coherent military response was gone.

Schwarzkopf’s ground forces were free to begin shifting west that evening.

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**The Final Push**

H-Hour for the ground offensive was 4 a.m., local time, on Feb. 24. Coalition ground forces struck powerfully, especially on the western flank in the Iraqi desert. Air strikes continued. Within a day, the Iraqis were in general retreat. Following their instructions from Schwarzkopf, though, soldiers and airmen continued to destroy as many enemy tanks as possible so they could not be used in some future conflict.

In a 45-minute battle on Feb. 27, the day before the cease-fire, US armor struck a Republican Guard division at Medina Ridge and destroyed 60 Iraqi T72 tanks.

The same day, some Republican Guard units escaped because a US Army corps commander set the fire support coordination line too far forward. To prevent accidental attack on his forces, the ground commander decided where to draw this line. Inside of it, all fires—including air strikes—required ground force approval. On Feb. 27, the corps commander extended the FSCIL north of the Euphrates in Iraq, far beyond the reach of his artillery or his need for ground force protection. For many hours, the Air Force was not permitted to strike the Iraqi convoys headed toward Baghdad.

It seemed at the time that none of this mattered too much. The outcome of the war was not in doubt, and the White House and the Pentagon were getting nervous about news reports of the so-called “turkey shoot” on the “Highway of Death” leading out of Kuwait.

Powell had not wanted the invasion force to escape, but television coverage, he said, made it look “as if we were engaged in slaughter for slaughter’s sake.” Perhaps it was time to stop.

US forces could have completed the destruction, but the coalition had formed to liberate Kuwait, not for regime change in Iraq, and the United States was not prepared to continue the war alone.

John H. Sununu, the White House
Chief of staff, suggested that the cease-fire take effect at 5 a.m. on Feb. 28. Stopping at that precise moment, he said, would make it possible to call the conflict “The Hundred Hour War.” Powell agreed. He talked with Schwarzkopf, who pointed out that it would also make it a “Five Day War.” Powell liked it. That, he said in his memoirs, “chipped one day off the famous victory of the Israelis over the Arab states in 1967.”

Thus, even before the war ended, people had begun to characterize it in ways that were greatly flawed. “The war did not last 100 hours,” Horner said. “The duration of the war—from mid-January to the end of February—was closer to a thousand hours.” The misconception was “maddening to coalition airmen, who bore such a large part of the burden of winning this war.”

The cease-fire was at 8 a.m. local time Feb. 28. The ground operation had lasted four days and four hours, somewhat short of the “Five Day War” formulation by Powell and Schwarzkopf.

Casualties had not reached the level of 45,000, or even of Schwarzkopf’s 5,000. The totals for the US forces were 148 dead and 467 wounded. The coalition allies had 99 dead, 434 wounded.

But neither the Army nor the Marines wanted to go to war that way again.” The debunkers of airpower might have pitched the argument that Desert Storm was an exception in the conduct of war, not a new precedent. Instead, they chose to deny what had happened.

One of the prominent deniers was retired Army Gen. Frederick J. Kroesen, former commander in chief of US Army, Europe. “The recent air campaign against Iraqi forces gained not a single one of the US or UN objectives in the Persian Gulf War,” said Kroesen. “Four days of land combat—aided immeasurably by the air campaign—achieved every goal and victory.”

The Association of the US Army said, “As the leading element of the [Gulf War] coalition, the United States Army decisively defeated the fourth largest field army in the world. ... It was the land force that provided the essential muscle to lead America’s coalition partners in the liberation of Kuwait, the decisive defeat of the Iraqi Army, and the restoration of stability in the Persian Gulf.”

For the next 15 years, the ground power lobby skipped no opportunity to accuse the Air Force of claiming too much credit for Desert Storm. However, the Army itself was not shy in making claims. For example, Army Vision 2010 said that land power made permanent “the otherwise transitory advantages achieved by air and naval forces.”

Regional wars in ensuing years generally followed the Gulf War pattern. Some theater commanders used airpower better than others, but none of them resurrected the AirLand Battle option. Operation Allied Force in 1999, which induced the surrender of the Milosevic regime in Serbia, was almost completely an airpower action. No ground forces were engaged.

The influence of the ground forces in Pentagon politics continued. For reasons that sometimes included practicality as well as conviction, most Air Force leaders have been restrained in their advocacy of airpower. In recent years, it has been fashionable to emphasize the Air Force’s commitment to supporting the nation’s ground forces.

In time of crisis, however, it has usually turned out that “Global Reach—Global Power” had it right. Airpower can be the supporting force in war. It can also be the supported force, or it can act independently. Field Manual 100-20 had it right, too. Airpower is not an auxiliary of land power.

The understanding of that is the strategic legacy of Desert Storm.