Nthe summer of 1990, as the Cold War was ending, the Air Force was still focused on the Soviet Union. Then, Saddam Hussein invaded Kuwait.

Operation Desert Storm, which began Jan. 16, 1991, lasted just 43 days. Though the conflict was not expected, it was a turning point in the way wars are fought—and marked the beginning of 25 years of uninterrupted combat for the Air Force.

Desert Storm served as a defining event for an entire generation of airmen, shaping "who we are and how we've gone through our Air Force career," Maj. Gen. Paul T. "PJ" Johnson said in an interview.

Before Saddam invaded and seized Kuwait, few airmen had even conceived of the idea that they might one day be flying from an airfield in Saudi Arabia into Kuwait to attack Iraqi ground forces, said Johnson, who would earn an Air Force Cross for his role in Desert Storm.

"We imagined a lot of things: Soviets, Russians, Warsaw Pact, Korea. We imagined a lot of things, but few of us imagined that," said Johnson, now the Air Force's director of operational capability requirements. "We were always prepared to start getting airplanes out of town on 24 hours' notice. ... We just thought it was going to be somewhere else to do something else."

## **USAF AS CENTERPIECE**

More than just a surprise, Desert Storm "was a seminal event that set the conditions for modern warfare," said retired Lt. Gen. David A. Deptula, who served as the principal attack planner for the coalition air campaign.

The conflict set the expectation for low casualties, "ensconced precision

in the application of force as a routine measure," and was the first time the US did joint and coalition planning in a serious way, explained Deptula, now the dean of AFA's Mitchell Institute for Aerospace Studies. It also was the first time in a major conflict where "airpower was the key force, or the centerpiece, in the strategy and execution of the war," Deptula told *Air Force Magazine*.

Johnson was an A-10 pilot and a captain with the 353rd Fighter Squadron, Myrtle Beach AFB, S.C., in summer 1990.

His squadron was "on pins and needles" wondering if they were going to deploy, Johnson recalled, but he was scheduled to go to the USAF Fighter Weapons School at Nellis AFB, Nev.

The day the unit got word that it would deploy, Johnson's commander pulled him into his office and said,



"We're going to Saudi Arabia and you're not."

"It killed me. It was awful," said Johnson, who completed weapons school and arrived in Saudi Arabia on Jan. 1, 1991. "My squadron mates then and ever since have given me infinite grief for missing all of the 'fun' of Desert Shield and showing up two weeks before the war."

Meanwhile, Deptula was working for a highly classified planning cell in Saudi Arabia, at first working 20-hour days on a plan that could be executed within five days. The constantly changing plan for the first 48 hours of the war was focused on "centers of gravity" that could be attacked all at once to cut Saddam off from the ability to command and control his forces.

After a few weeks, the planners realized that Saddam had stopped his movement in Kuwait and was not going to continue into Saudi Arabia, which gave the US more time to build up forces, Deptula said.

Shortly before the war began, Johnson said he had the opportunity to see the master air attack plan, complete with all the planned targets, assets assigned to those targets, and the time line.

"Iflipped through two or three pages and realized what was going to happen within the first hour, or the first 15 minutes, or the first five minutes. And I was struck by, 'Saddam Hussein has no idea what's about to happen to him,'" Johnson recalled.

"When Desert Storm began, we unleashed the military force. It was sequenced, it was timed, and it was 10s, Johnson said they were focused on attriting the Iraqi ground forces.

Now-retired Lt. Col. Edward Ballanco, then a Wild Weasel pilot and the chief of the weapons and tactics division for the 52nd Tactical Fighter Wing, deployed to Bahrain. From there, they could get to Kuwait quickly, without a lot of fuel.

Normally, the F-4G was configured with two wing fuel tanks, a centerline fuel tank, and two HARMs, he said, but the unit decided to configure the airplanes with four HARMs and just the centerline fuel tank.

"We had a target-rich environment early on," he said. During one flight, he fired four missiles in about a minuteand-a-half.

## In 1991, the Air Force unexpectedly changed direction and left the Cold War in the past.

constructed so that this would not be a gentle ramp up or an escalation. It was an unleashing of the coalition."

In the first 24 hours of Desert Storm, the coalition attacked more than 150 separate and discrete targets, more than the total number hit by all of Eighth Air Force in 1942 and 1943 combined, Deptula said. "By the time of Desert Storm, airpower technology had finally caught up with airpower theory," he noted. "What took over a thousand sorties and 9,000 bombs in World War II, we did in Desert Storm with one aircraft and one bomb."

The operational tempo was intense, remembered Johnson.

There were six A-10 squadrons at King Fahd Airport in Saudi Arabia, he said—about 145 of the airplanes on one airfield, plus Air Force Special Operations Command assets.

Johnson's squadron flew during the day, and pilots would fly two or three times per day, usually three hours at a time, he said.

But instead of close air support, which may have been expected of A-

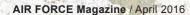
Johnson called the F-4G "one of the most potent forces we had in Desert Storm."

The aircraft could suppress enemy defenses by destroying SAM sites and antennae, and the Iraqis soon realized that turning on their radars was a recipe for disaster.

Often, just by monitoring communications, the Iraqis "could figure out when the Weasels were in the neighborhood. And when they were, they would not turn on their radars to find our aircraft. Self-preservation kicked in," Johnson said.

Ballanco said that after the war was over, an Army intelligence officer told the pilots that when soldiers moved into Iraq for the "100-hour ground war," Iraqi soldiers were surrendering left and right. The American soldiers noticed that one group of prisoners of war didn't have any radios with them, and the radios stored in the bunkers all had the batteries removed.

The POWs told the soldiers that they were afraid the HARMs could find them if they had the batteries in their radios, Ballanco said.



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Iraqi soldiers surrender to US marines on the third day of ground operations during Operation Desert Storm.

Still, the Wild Weasels couldn't be everywhere at once, Johnson said, and it was difficult to destroy the Iraqi SAM sites with anti-radiation missiles if they couldn't get them to come up on the radars. The coalition began sending F-4Gs to intimidate the SAMs to stay off the air. Meanwhile, jamming platforms went forward to jam any radar that did come up, and flights of A-10s got "up close and personal" to physically destroy the SAM sites.

Billy Harvey, then a major and an F-4G pilot stationed at Spangdahlem AB, Germany, had been in the Air Force since 1980 and never expected to deploy to combat. Before Saddam had invaded Kuwait, Harvey had been asked to put together a plan for a deployment to Turkey, where there was nothing but a runway.

It wasn't until the war began that Harvey's squadron, the 23rd Tactical Fighter Squadron, was given the deployment order and launched en masse to Incirlik AB, Turkey, from Germany.

Harvey ended up having to stay with

some of the aircraft at NAS Sigonella, Italy, for a few days while they were repaired, but immediately began flying four or five hours a day once he arrived in Turkey.

An F-4G was frequently tasked to fly with an F-16, he said, because though the F-16 could launch a HARM, the Viper was not as capable as it is today and benefitted by receiving information from the F-4G first.

## THE RODEO CLOWN

Generally, Harvey said, an F-4G and F-16 would go in first, playing the role of what he described as the suppressing "rodeo clown" between "the bull and the cowboy." Weasels and Vipers would be followed by striker forces to drop weapons on the target.

The aircraft, the training, the resources, and even the political attention given to the effort was unlike anything before or since, he said.

"We were at the top of our game," recalled Harvey, who is now retired. "We felt very confident, but I don't think we

ever got into the cocky side of things."

In addition to being a turning point in how wars are fought, Desert Storm was the first time the US saw the critical importance of space contributions to airpower, Johnson said. "Precision navigation and timing, GPS. That was the dawn of criticality of GPS to military operations."

Desert Storm also was the debut of the JSTARS aircraft, which gave the coalition the capability to see, track, and target, regardless of the time of day or weather, the precise movement of formations on the ground.

"We saw the ability to dynamically, with all of the attack sorties airborne, to detect, to characterize, and to target targets in the middle of battle," Johnson said.

And precision weapons, just starting to be used, changed everything.

"Since the beginning of combat airpower, the calculus had always been: How many airplanes does it take to destroy a target? We saw the beginning of the change in Desert Storm, and by





a single airplane destroy? That's not a minor tweak," Johnson noted.

Laser guided weapons have come a long way since Desert Storm, when precision weapons were only nine percent of munitions delivered, Deptula said, but stealth allowed the US to operate with near-impunity across the country.

"We spent the first 100 years of airpower ... trying to figure out how to deliver weapons and achieve target success, and we did. We arrived at the point in time at the end of the 20th century, where we could destroy any target, in any weather, day or night, rapidly and with precision, anywhere in the world," Deptula said.

and the nonstandard mission sets—like A-10s taking out SAM sites—are a testament to flexibility being the key to airpower, Johnson said.

Though the Air Force has seen constant combat ever since, Johnson said it is critical to remember that while the force has "been really busy with a particular kind of fight since 9/11," airmen must maintain other capabilities.

"Everything from humanitarian assistance to thermonuclear warfare" is still in the job jar, Johnson said.

The US must not "fall into the trap of assuming the next war is going to look like this war," he said. "And that's not a new challenge."

1. Two F-4s pass over Saudi Arabia during the buildup to Operation Desert Storm. 2. Then-Lt. Col. David Deptula (c) is briefed on operations during Desert Storm. Deptula was the principal attack planner for the coalition air campaign. 3. Paul Johnson, shown here as a brigadier general, was an A-10 pilot during Desert Storm. In the war, A-10s were focused on attriting the Iraqi forces, as opposed to providing close air support, their usual role. 4. A ground crew member signals the pilot of an A-10 at King Fahd Arpt., Saudi Arabia, during the buildup of forces and aircraft there in Desert Shield.