Long before the actual land invasion, Iraqi forces were taking a ferocious beating from the air.

The "War" Before the

YEAR ago, as Gulf War II was about to begin, another conflict in Iraq was already at its peak. US forces were engaged in a systematic but undeclared air campaign that set the stage for the coalition's rapid victory over Saddam Hussein's regime. And it, in turn, was aided by almost 12 years of combat air patrols in the Iraqi no-fly zones.

Unlike Operation Desert Storm in 1991, Operation Iraqi Freedom offi-

cially began (on March 20, 2003) with a ground campaign. Unofficially, a preparatory air campaign already had taken place. Since the end of the first Gulf War, the US and Britain had flown hundreds of thousands of combat and support sorties over Iraq in two no-fly zones that enforced UN resolutions. Air operations intensified greatly in the final months before the start of the ground war.

As Gen. T. Michael Moseley, the air boss for Iraqi Freedom and now

the Air Force vice chief of staff, explained in a wartime press conference, "We've been involved in Operation Northern Watch for well over 4,000 days ... [and] Operation Southern Watch for well over 3,800 days. ... We've certainly had more preparation, pre-hostilities, than perhaps some people realize."

A few days later, Gen. John P. Jumper, USAF Chief of Staff, expanded on Moseley's comments. He said, "We started our work in the air

e War

By Suzann Chapman, Editor

component back in June of last year [2002], and, between June and March, we actually flew about 4,000 sorties against the integrated air defense system in Iraq and against surface-to-air missiles and their command and control."

Jumper added, "By the time we got to March, we think that they were pretty much out of business."

Ironically, this early preparation of the battlefield was aided immeasurably by the near constant Iraqi

Early Action. Three operations—Northern Watch, Southern Watch, and the months-long, undeclared Southern Focus—helped produce a rapid coalition victory over Saddam Hussein's regime once the official war began. Here, an F-16CJ returns to Incirlik AB, Turkey, after an ONW mission.



Tactical Change. Under new rules of engagement, coalition aircraft such as this F-15E could respond to Iraqi attacks by striking command, control, and communications nodes as well as air defense radars and guns.

attacks on US and British aircraft patrolling the no-fly zones. Since 1992, Iraqi military forces had fired anti-aircraft artillery or surface-toair missiles during almost every coalition aircraft patrol. The aircrews returned fire—sometimes immediately, sometimes a few days later. Over the years, attacks outnumbered responses by a 10-to-one margin, according to Defense Secretary Donald H. Rumsfeld.

For most of the "pre-war" period, coalition aircrews routinely responded by targeting individual AAA or SAM sites. Occasionally, they would strike radar and communications facilities to weaken the Iraqi air defense capability overall. In summer 2002, however, air operations intensified dramatically.

The Tactics Change

Queried at a Sept. 16, 2002, press briefing about a perceived escalation in the number of coalition air strikes, Marine Gen. Peter Pace, the Joint Chiefs of Staff vice chairman, openly acknowledged that tactics had changed.

Pace explained that coalition forces had begun specifically targeting command and control and communications nodes. Pace said, "Instead of going at the specific radar that was involved, which can easily be moved between the time the missile was fired and the time we're able to counterstrike, they're picking on targets that are still part of that continuum of air defense but are not easily moved."

"I directed it [the change in tactics]," Rumsfeld said at the same briefing.

The new target set comprised all elements of the hostile Iraqi system, ranging from the AAA and SAMs themselves to support systems. The latter category included radars that helped gunners zero in on aircraft, communications links that connected those radars to the command and control nodes, and links between the command and control nodes.

Rumsfeld characterized earlier

responses against the mobile gun batteries as "only marginally effective," given that Iraq continued to attack coalition aircraft. The benefit, he said, was not "worth putting pilots at risk," so flight operations were changed so that coalition aircraft would sortie in less risky areas.

However, said Rumsfeld, further consideration led Pentagon leaders and theater commanders to see that "there was a way to make the costbenefit ratio make more sense." Coalition aircraft were sent back into the most risky areas but, explained Rumsfeld, with different orders. If attacked, they could strike more lucrative targets. Thus, said Rumsfeld, their responses "would give us a benefit that would merit the risks that were undertaken."

That was the thought process that led to a plan known as Operation Southern Focus. The air activity was designed to systematically degrade the Iraqi air defense system on a major scale.

Iraq had been attacking US and British aircraft since the coalition formed the two no-fly zones. Operation Southern Watch began on Aug. 26, 1992, and was designed to protect the Shiite population in southern Iraq from Saddam's repression. It was managed by US Central Command and covered territory from the 33rd parallel to the southern border of Iraq. (It had originally started at the 32nd parallel but was extended northward in 1996 in response to



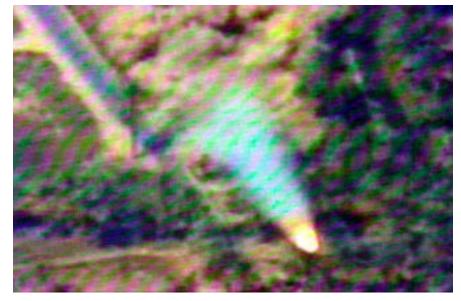
The Combat Watches. Over nearly 12 years, coalition aircraft, such as this USAF F-16CJ, flew more than 300,000 sorties in the two no-fly zones. "Every mission was a combat sortie," said Maj. Gen. Robin Scott.

continued Iraqi aggression). OSW covered 87,729 square miles and normally comprised more than 6,000 personnel and 150 aircraft, mostly in Saudi Arabia.

Operation Northern Watch, staged largely from Incirlik AB, Turkey, and run by US European Command, officially started on Jan. 1, 1997. However, it was actually much older. It was an outgrowth of the Operation Provide Comfort relief effort begun in 1991 when Saddam Hussein attacked Kurdish rebels in northern Iraq. ONW's normal complement was 1,400 personnel and 45 aircraft. It extended from the 36th parallel to the northern Iraq border and covered 16,871 square miles.

Together, the two no-fly zone op-





Bounty. These two images show a truck-mounted SAM unit tracking a coalition aircraft and then launching its missile. Saddam Hussein offered a reward for bringing down a coalition aircraft. It never happened.

erations sealed off the airspace over more than 62 percent of Iraqi territory. They were the focus of USAF's longest-ever steady state deployments.

Training a Generation

"Through the no-fly zones, we trained an entire generation of expeditionary warriors," remarked Maj. Gen. Robin E. Scott, who was cocommander for Northern Watch when the operation officially ended on May 1, 2003.

In 2002, an F-16 pilot was asked if he had ever flown an ONW patrol. "Are you kidding me?" he replied. "My whole career has been Operation Northern Watch and Southern Watch." According to EUCOM, the pilot had been deployed to ONW seven times and OSW three times. For many aircrews, maintainers, and support personnel, the story was much the same.

"Every mission was a combat sortie," said Scott. That "real combat flying," he explained, made the ONW and OSW operations "a step beyond Red Flag and the other Flag exercises." He added, "Squadrons deployed and joined a composite team, planned, patrolled, and responded when necessary to enemy threats."

US and British aircrews flew more than 300,000 sorties overall with no

losses. The vast scale of the operations "was impressive" long before the start, in summer 2002, of the concerted effort to suppress the Iraqi air defense system, said Anthony H. Cordesman, a senior defense analyst with the Center for Strategic and International Studies, in his study, "The Lessons of the Iraq War."

For years, US aircrews had flown over Iraqi terrain. Seasoned maintenance and support troops became expert at expeditionary operations.

The operations also afforded coalition forces the opportunity to build a comprehensive portfolio of intelligence on threats, targets, terrain features, and enemy tactics. Central Command planners were able to identify and study the strengths and weaknesses of Saddam's regime. (See "The Iraqi File," July 2003, p. 51.) In mid-2002, CENTCOM opened a highly concentrated effort to compile imagery from satellites, U-2 spy aircraft, and other intelligence sources. The data permitted planners to produce a grid map covering every square foot of Iraq.

In November 2002, Rear Adm. David A. Gove, a JCS spokesman, noted that coalition pilots in the nofly zones are "essentially flying combat missions. ... Any opportunity that they have to understand the capabilities and the layout of Iraqi air defense weapons systems is useful for their own experience base."

The Duels

In fact, the two no-fly zones were, from December 1998 onward, the

scenes of a long series of duels between US and British air forces and the Iraqi land-based air defenses, with occasional probes and challenges by Iraqi aircraft, said Cordesman. He continued: "The Iraqis lost all of these duels and suffered a steady attrition of their land-based defense capabilities. It must have also become apparent that the Iraqi Air Force could not successfully challenge US and British forces in air combat."

It must not have been apparent to Saddam Hussein, however. According to a January 1999 Iraqi news report, the dictator had offered a \$14,000 bounty to any unit that succeeded in shooting down an allied airplane and an additional \$2,800 reward to anyone who managed to capture a coalition pilot.

Saddam had ousted UN weapons inspectors in late 1998, and, in response, in mid-December 1998, President Clinton launched Operation Desert Fox, four days of air strikes that targeted suspected weapons of mass destruction sites, Republican Guard facilities, and air defense systems. After those strikes, the Iraqis became even more aggressive in their attacks on coalition aircraft.

Before Desert Fox, the coalition tended to confine its response to an Iraqi attack to the attack's immediate source. On Jan. 27, 1999, the Clinton Administration revised the rules of engagement (ROE), permitting US aircraft to target a wider range of Iraqi air defense systems and related installations. Pilots could not only defend themselves but also act to reduce the overall Iraqi air defense threat to coalition aircraft.

From 1999 onward, Iraq mounted more than 1,000 AAA attacks, launched 600 rockets, and fired some 60 SAMs. On Feb. 16, 2001, 24 US and British aircraft struck five Iraqi air defense command and control installations. The goal was to disrupt a fiber optic cable network that China was installing for the Iraqi military. On July 24, 2001, Iraqi forces fired a SAM at a U-2 spyplane, narrowly missing. After the 9/11 terrorist attacks in the US, there was a brief lull in Iraq's provocations. It lasted just two months. Iraq subsequently resumed full-throttle attacks.

In 2001, Iraq showed "a considerably more aggressive stance in trying to bring down a coalition aircraft," said Rear Adm. Craig R. Quigley, a Pentagon spokesman. The motivation, said Quigley, was the reward that Saddam offered on several occasions. "He is trying his darnedest to bring down a coalition aircraft," said Quigley.

Quigley added that the volume of



Experience. ONW and OSW provided experience for a generation of active and reserve air warriors, many of whom deployed numerous times. ANG MSgt. Walter Zaptin directs a KC-135 at Moron AB, Spain, for an ONW mission.



Building a Portfolio. In summer 2002, Air Force ISR assets, such as this U-2 flown by Maj. Jonathon Guertin, stepped up their efforts to develop a comprehensive catalog of threats, targets, terrain features, and enemy tactics.

fire was up throughout Northern and Southern Watch, as compared to the same period in the preceding year.

In the first nine months of 2002, Iraq fired upon OSW aircraft 206 times and ONW aircraft 200 times. The coalition responses to those 406 attacks numbered about 60. As the Iraqi attacks continued—according to CENTCOM, they totaled nearly 500 for all of 2002—the number of coalition responses rose to about 90 for the year.

Air Force Gen. Richard B. Myers, Chairman of the Joint Chiefs of Staff, reminded reporters at a Sept. 30, 2002, briefing that the Iraqi attacks were not limited to AAA and SAMs. Iraqi military aircraft, he said, were also "violating the no-fly zone airspace." Iraqi fighter aircraft flew into no-fly zone airspace about seven times between Jan. 1 and Sept. 20,

JSAF photo by SSgt. Pamela J. Farlin

said Myers. On Sept. 24, three Iraqi MiG-25s violated Operation Southern Watch airspace, flying deep into the no-fly zone area.

The Iraqi attacks continued unabated even after Saddam sent a letter to the United Nations inviting the weapons inspectors to return. Gove noted in an Oct. 11, 2002, briefing that Iraqi firings on coalition aircraft has risen to 122 since Sept. 16, when Saddam sent the letter to the UN. Of those 122 firings, 33 were against aircraft flying in Operation Northern Watch and 89 were against aircraft carrying out Operation Southern Watch.

Given the Opportunity

Meanwhile, Operation Southern Focus had begun in earnest. The coalition took every opportunity to respond to an Iraqi attack with strikes that would degrade Iraq's air defenses. When Saddam moved some surface-to-surface missile batteries to the Kuwait border in early 2003, those were deemed to be covered by the Southern Focus ROE, as well.

Retired Air Force Col. John A. Warden III, a Gulf War I planner, told the *Washington Post* in January 2003, "Anything that would need to be knocked out that is knocked out now saves some sorties once the war starts." He added, "I suspect some of the attacks are really just an intensification of the tit for tat that has gone on for a long time—but with some obvious value in the event of a war."

Pentagon officials maintained that coalition actions, though focused on a new target set, were the direct result of Iraqi attacks on coalition aircraft. "To the extent they keep shooting at our airplanes, … we keep engaging in response options," said Rumsfeld at a mid-September 2002 briefing. He added that, if those "response options are harmful to their air defense, which they are, then that's good."

Commenting about Southern Focus after the war, Moseley said, "If the Iraqi forces had stopped threatening or actually shooting at the aircraft, ... we would not have had to use force against any of the military targets."

According to the Air Force, coalition aircrews dropped 606 bombs on 391 targets during Southern Focus, which lasted from June 2002 to the March 20, 2003, start of Gulf War II.



Beyond Supremacy. Southern Focus led to air dominance. Iraq's air force did not come out during Iraqi Freedom and even buried some MiG-25s to try to save them. Coalition forces dug them up after the war.

At the peak of Iraqi attacks, Saddam's forces were firing more than a dozen missiles and rockets per day at coalition forces. On one day, Iraq fired 15 SAMs.

The pace of coalition responses picked up between March 1 and the March 20 start of the war. During that time, coalition pilots in the nofly zones flew 4,000 strike and support sorties. The flights not only cut down Iraqi radars, air defense guns, and fiber-optic links, but also enabled the coalition to map out the fiber-optic networks and wiring that provided the Iraqis centralized command and control. Surveillance aircraft, for example, carefully noted where there appeared to be any construction or repair of the air defense network.

The entire Southern Focus effort gave the coalition a clear advantage once ground troops crossed into Iraq and the air campaign "officially" began.

Just hours before the declared start of the war, Col. Gary L. Crowder, chief of Air Combat Command's strategy, concepts, and doctrine division, estimated that Saddam had, by that date, effectively ceded "about two-thirds of his airspace" to coalition forces. "We are starting off in a significantly better position as a consequence of the northern and southern no-fly zones, which will enable operations that might not otherwise have been able to commence."

After the fact, it was obvious that

Day 1 air dominance made it possible for the coalition to escalate the timetable for the ground attack and seize Iraqi oil fields on short notice. By April 5, Moseley could declare: "The preponderance of the Republican Guard divisions that were outside of Baghdad are now dead." As Air Force Secretary James G. Roche pointed out at the conclusion of the war, "During the entire campaign, the Iraqi Air Force didn't fly a single sortie against coalition forces."

At first, many airpower critics called attention to what they saw as the lack of a long air campaign as prelude to the war. Retired Gen. Merrill A. McPeak, a former Air Force Chief of Staff, knew the true story.

In a June 5, 2003, Washington Post article McPeak wrote: "It's incorrect to say that, unlike Desert Storm 12 years before, there was no independent air campaign in advance of the jump off of our ground forces from Kuwait." He continued, "Because of this aerial preparation, Iraq's air defenses stayed mostly silent, and our aircraft were able to begin reducing opposing ground forces immediately. Army and Marine Corps formations, judged by 'experts' to be much too small for the job, captured Baghdad in just 22 days and with comparatively light casualties. Not only did coalition airpower systematically disorganize Iraq's ground forces, it did so at small cost.'