

Operation Desert Storm

Bombing a Defenceless Country

At the beginning of Operation Desert Storm, there were 2,430 fixed-wing aircraft in theater, just more than one quarter of which belonged to non-US Coalition partners. Thirty-eight days later, G-Day, that number had grown by more than 350. Approximately 60 percent of all aircraft were shooters, producing a relatively high tooth-to-tail ratio in the theater. [1]

Operations against targets in Iraq began time on January 17 1991. The first aims were to win air supremacy and destroy central strategic targets.

Both air forces and air defence forces are highly reliant on radar for early-warning and fire control, and on communications for passing early-warning information and command-and-control decisions. [2]

The first targets included early warning and Ground-Controlled Interception radars, runways, C&C centres, communication facilities, and SAM launchers and support assets. Under heavy assault the Iraqi air defense proved to be ineffective.

The Air War

The 43-day air campaign against Iraq and Iraqi forces in Kuwait involved more than 2,780 US fixed-wing aircraft, which flew more than 112,000 individual sorties. To support this enormous undertaking, the USAF committed more than 1,300 aircraft (about half of the Coalition total), the USMC about 240 aircraft (about nine percent of the total), and Coalition partners more than 600 aircraft (about 25 percent of the total). The Navy deployed six aircraft carriers to the theater, with more than 400 aircraft, or about 16 percent of the Coalition total. [3]

Although the coalition did not claim air supremacy⁽¹⁾, until 28 January, the fact that in some 110,000 sorties flown, coalition combat losses totally only 39, and none in air combat, makes it clear that air superiority⁽²⁾, must have been won very early indeed. ... [4]

Of all sorties flown, 80% were claimed to be successful. That meant 20% of total sorties had to be aborted. Nearly half of total sorties were accounted for by fighter top-cover, in-flight refueling, post-strike reconnaissance, AWACS and other missions.

Air Force General Merrill McPeak reported, that only 6,520 tons of the total 88,500 tons were high precision guided weapons. "... and later in the campaign it was admitted that perhaps 15% of these did not perform as expected." [5] Their high costs determined use only for attacks on high priority targets.

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⁽¹⁾ when there is no opposing air force presence

⁽²⁾ when the opposing air force still has a presence, but can achieve little success

In all, 38 Iraqi planes are told to be shut down. The Iraqi air force made no real attempt to use its aircraft. These did not leave the hardened shelters, waiting for the moment to be flown out to Iran.

... In all, close to 140 aircraft flew to Iran. These included several MiG-29 and Su-24, as well as three Adnan AWACS planes and both civil and military transports. [6]

The Missile War

Unmanned TLAMs attacked high value targets day and night, helping deprive the Iraqi leadership of respite from attack, especially early in the air campaign. TLAMs were launched by surface warships and submarines at targets 450 to 700 miles away.

Two types of TLAM were used during Operation Desert Storm: The conventional missile with a unitary warhead (TLAM-C); and, a variant equipped with submunitions (TLAM-D). The TLAM-C delivered single, 1,000-lb warheads. The TLAM-D dispensed up to 166 armor-piercing, fragmentation, or incendiary bomblets in 24 packages.

By the war's end, the Navy had fired 288 TLAMs from 16 surface ships and two submarines - an important part of the air campaign. TLAM missions required no airborne aircraft support. [7]

Early on Friday 18 January, eight modified *Scud* missiles were fired into Israel ... The next day, both Israel and Saudi Arabia were attacked. ...

Throughout the war a total of 39 missiles were fired at Israel, mainly aimed at the Tel Aviv area, with some falling far short in central Israel and the West Bank. ... two ... missiles were fired at the Dimona nuclear weapon research station, but they were far off target and fell harmlessly into the Negev desert. No chemical warheads were used ... [8]

More than 40 missiles were launched against Saudi Arabia from southern Iraq. Their targets were mainly Riyadh and the Dharan area, but a small number were fired at Hafar al Batin, Bahrain and Qatar. The only really effective strike occurred on 25 February when a US Marine Corps barracks at Al-Khobar, near Dharan, was hit ...

In sharp contrast to the inaccuracy of the Iraqi modified *Scud* SSM, the US *Tomahawk* SLCM was immensely successful. Some 300 SLCM were fired during the war ... [9]

The *Scud* provided excellent propaganda for the US forces to continue their bombings over weeks against the whole industrial infrastructure of Iraq. Mobile missile launchers are hard to find and could be in any suitable large building. Only few of them could be destroyed. But the US-Allied ground forces got additional time to complete their acclimatization and in-theatre training, wait for the last units and deliver stores and ammunition.

References:

- [1] "Report to Congress on the Conduct of the Persian Gulf War", , chapter 6.1
- [2] "War in the Middle East", "The course of the war", Strategic Survey, 1990-1991, The International Institute for Strategic Studies, , page 68
- [3] "Report to Congress on the Conduct of the Persian Gulf War", , chapter 6.2
- [4] "War in the Middle East", "The course of the war", Strategic Survey, 1990-1991, The International Institute for Strategic Studies, , page 68/69
- [5] "War in the Middle East", "The course of the war", Strategic Survey, 1990-1991, The International Institute for Strategic Studies, , page 71
- [6] "War in the Middle East", "The course of the war", Strategic Survey, 1990-1991, The International Institute for Strategic Studies, , page 71
- [7] "Report to Congress on the Conduct of the Persian Gulf War", , chapter 6.3
- [8] "War in the Middle East", "The course of the war", Strategic Survey, 1990-1991, The International Institute for Strategic Studies, , page 72
- [9] "War in the Middle East", "The course of the war", Strategic Survey, 1990-1991, The International Institute for Strategic Studies, , page 73