

Patterns begin to emerge from the operational data.

“The crews who flew the bombers, fighters, and support aircraft carried out the most precise air campaign in history.” With those words, Defense Secretary William S. Cohen lauded the performance of US and Allied airpower in Operation Allied Force, NATO’s 78-day attack on the

Echoes From



This 2nd Air Expeditionary Group B-52H taxis at RAF Fairford, UK, after a bombing run during Operation Allied Force over Kosovo. The 2nd AEG included crews and aircraft from Barksdale AFB, La., and Minot AFB, N.D.

Yugoslavian regime's brutal offensive in Kosovo. The United States—and especially USAF—dominated the campaign, a fact made inevitable by America's near-monopoly on precision weapons. The attacks forced Belgrade to capitulate on June 9.

Allied Force



Chronology of Key 1999 Events

May 27. International Criminal Tribunal announces war crimes indictments against Milosevic and four other Serb officials.

June 3. Yugoslav officials accept NATO peace plan put forth by envoys from the European Union and Russia.

June 9. NATO and Yugoslavia sign accord outlining troop withdrawal from Kosovo.

June 10. Serb withdrawals begin, bombing suspended.

June 11. Russian troops make surprise move into Kosovo.

June 20. NATO declares formal end to war.

Jan. 16. More than 40 ethnic Albanians executed by Serbs are found in village of Racak in Kosovo. Massacre draws international condemnation.

Jan. 19. Gen. Wesley Clark, NATO commander, states his forces are prepared for action in Kosovo, if necessary.

Feb. 6. Peace talks to halt ethnic violence in Kosovo open in Rambouillet, France.

March 15. Ethnic-Albanian delegation in Paris agrees to accept Rambouillet autonomy deal, but Serbs refuse.

March 19. Peace talks adjourn in failure, and Serbian forces mass in and around Kosovo.

March 22. Shelling edges toward Pristina as Serbs step up hostilities.

March 24. NATO begins airstrikes against Yugoslavian targets.

March 27. Serbs shoot down USAF F-117 fighter; pilot rescued.

April 1. Serbian forces capture three US soldiers near the Yugoslavian-Macedonian border.

April 24. The conflict in Kosovo dominates NATO's 50th anniversary summit, held in Washington.

May 2. Belgrade releases three US soldiers to Jesse Jackson.

May 5. Two US Army AH-64 Apache helicopter pilots die in crash during training in Albania.

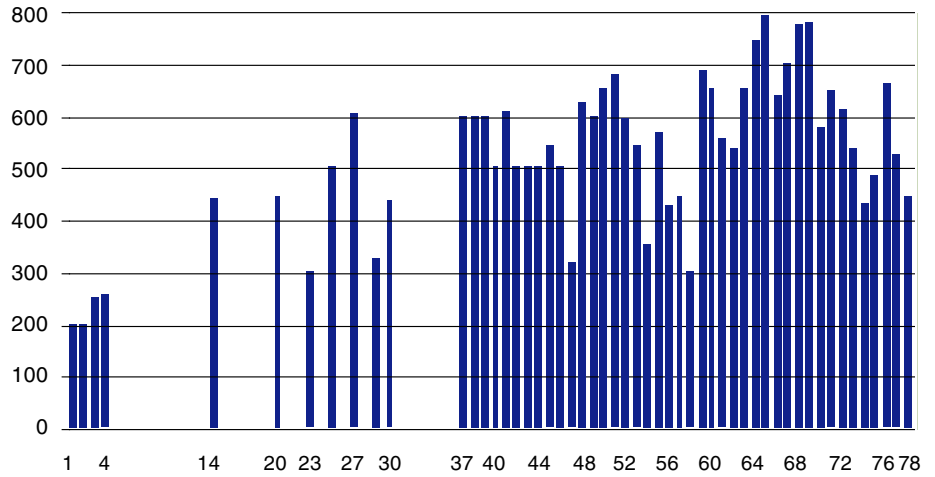
May 7. NATO bombs hit the Chinese Embassy in Belgrade.



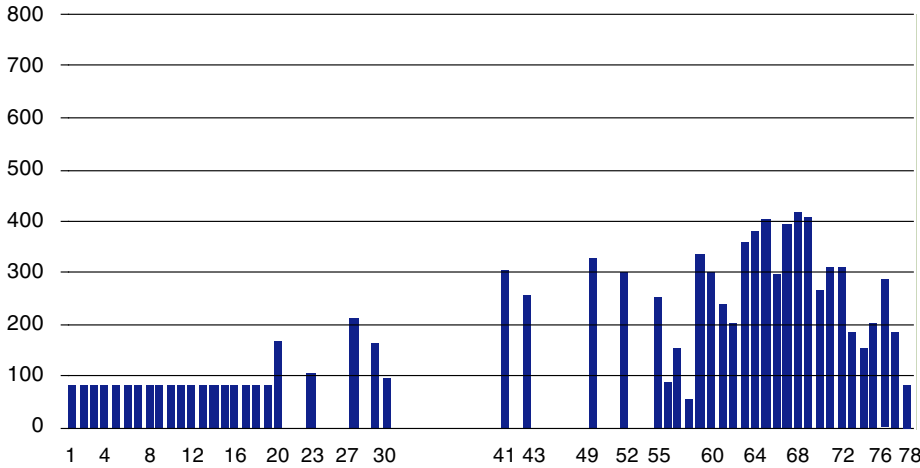
Sorties

In a bit more than 11 weeks, NATO forces flew about 35,000 sorties, of which about 10,000 were attack sorties. The first phase of the air war was tentative, featuring limited attacks and vague objectives. In time, NATO shifted gears and stepped up the daily number of sorties. By the end of the war, NATO strike aircraft were flying nearly 400 missions on some days. Information on sorties remains incomplete. Poor weather caused aborts of many missions on some days.

Total Sorties, March 24–June 9, By Day

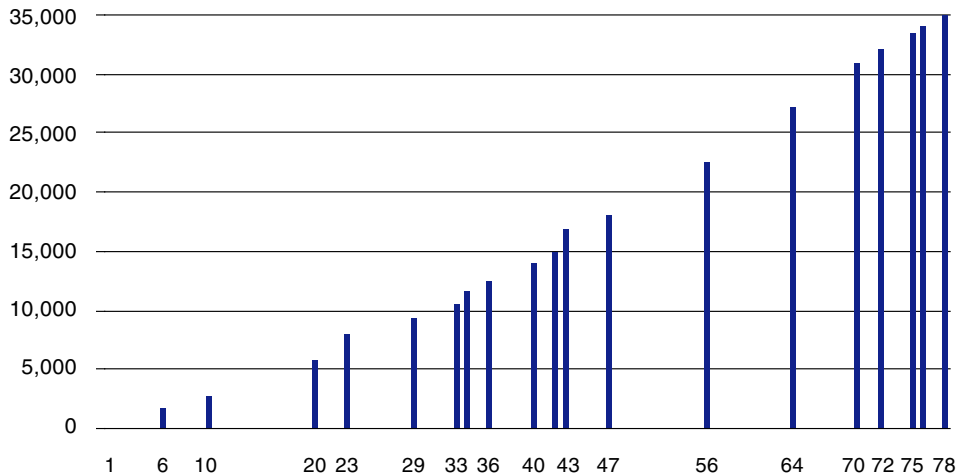


Strike and SEAD Sorties, By Day



The information on these pages is preliminary and drawn from several official sources, primarily NATO and Defense Department briefings presented almost daily during the war. Several different US and Alliance entities are conducting reviews, with sometimes significant variations in data.

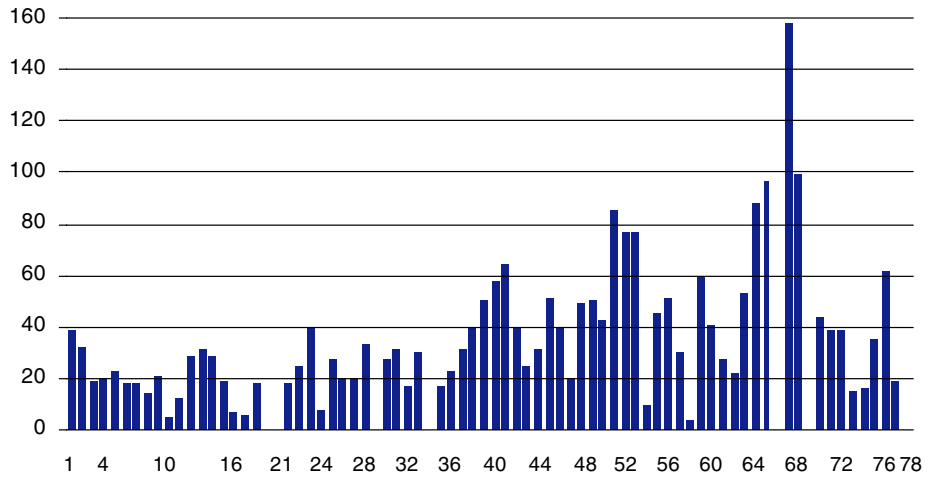
Total Sorties, Cumulative



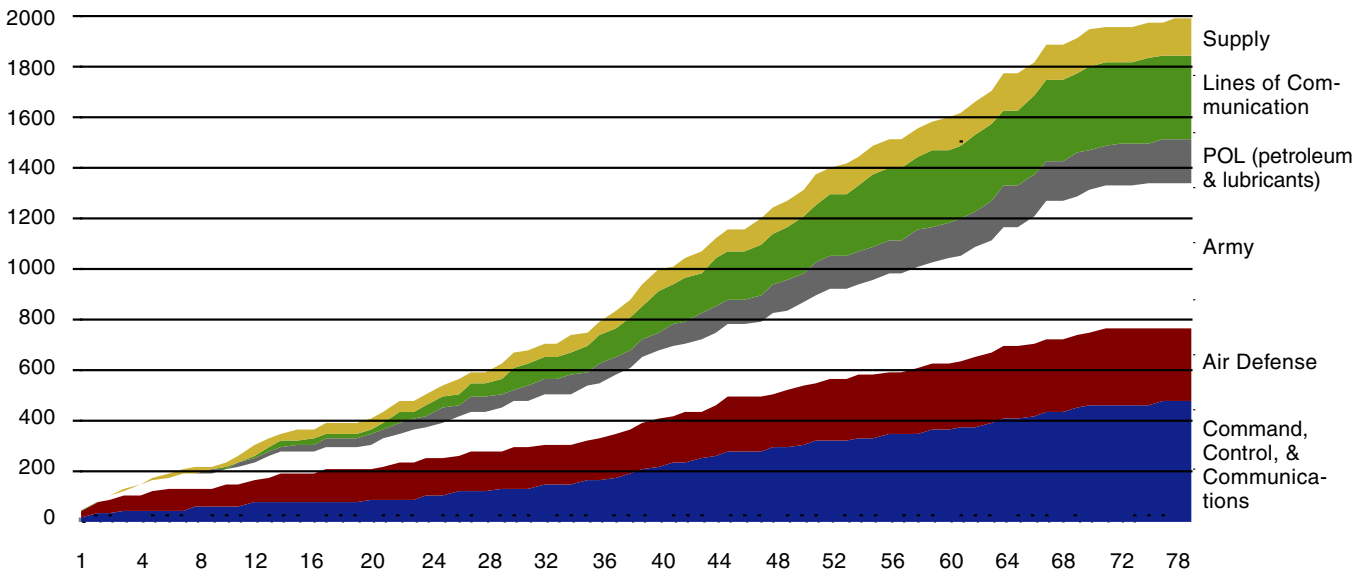
Targets Struck

NATO struck (and restruck) a variety of targets in Serbia, which were deemed "strategic" targets, and in Kosovo, which were considered "tactical." Some targets were hit by many different aircraft in a single raid. At first, NATO confined its attacks to a limited number of target groups. Day by day, the Alliance broadened the scope of its campaign. Strategic targets fell into six categories, as shown below.

Total Targets Struck and Restruck, By Day



Strategic Targets Struck and Restruck, Cumulative



A post-strike bomb damage assessment photo of the Pozega Petroleum Products Storage facility in Serbia shows that storage units were hit individually. There appears to be little, if any, damage apart from the storage tanks.



Mobile Military Targets

NATO encountered difficulty locating and destroying mobile systems. By the time the Allies suspended bombing operations, officials thought they had destroyed considerable amounts of artillery and armored vehicles and were starting to consistently hit Serbian tanks. Definitive numbers weren't yet determined. Numbers at right were provided by DoD on June 10 and subsequently confirmed by Army Gen. Wesley K. Clark, Supreme Allied Commander Europe.

Mobile Serbian Military Weapons

System	Number Destroyed	Percent of Total
Tanks	122	41%
Armored Personnel Carriers	222	33%
Artillery & mortars	454	50%

Air Defense System

NATO fairly quickly achieved air superiority, neutralizing the fighter and missile elements of Yugoslavia's integrated air defense system. Most of the time, the Serbs declined to turn on their tracking radars for fear of drawing an attack. Many systems remained in operation, however, and NATO remained wary until the end of the conflict. DoD said NATO pilots observed nearly 700 firings of SAMs, some of which could not be identified by type.

Air Defense Fighters

Component	Number Destroyed	Percent of Total
MiG-29 fighter	14	85%
MiG-21 fighter	24	35%

Surface-to-Air Missile Systems

Component	Number Destroyed	Percent of Total
SA-2 battalion	2	67%
SA-3 battalion	10	70%
SA-6 battery	3	10%

Yugoslav Air Defense Missile Attacks

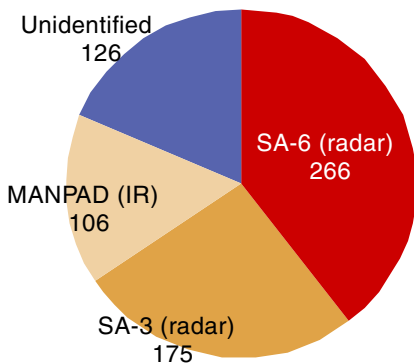


Photo by Gert Kromhout

Suppression of Enemy Air Defenses was the primary responsibility of F-16s like this one, armed with the HARM targeting system and AGM-88 missiles. This fighter shows a yellow star under its canopy—evidence of a MiG kill.

Defense Industry, Infrastructure

Attacks from the air took a heavy toll on military-related industry and lines of communications. Yugoslavia's refining industry virtually ceased to exist. The 3rd Army in Kosovo, responsible for the bulk of the atrocities, suffered the loss of 60 percent of its barracks, headquarters, storage sites, and other facilities. Power was turned off in as much as 80 percent of Serbia at a time.

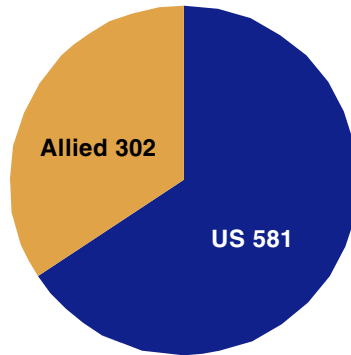
Defense Industry and Infrastructure

Component	Percent of Capacity Destroyed
Explosives production	50%
Ammunition production	65%
Aviation equipment assembly & repair	70%
Armored vehicle production & repair	40%
Petroleum refining	100%
1st Army facilities	35%
2nd Army facilities	20%
3rd Army facilities (Kosovo)	60%
Electric power	35%
Serbia-Kosovo road corridors	50%
Serbia-Kosovo rail corridors	100%

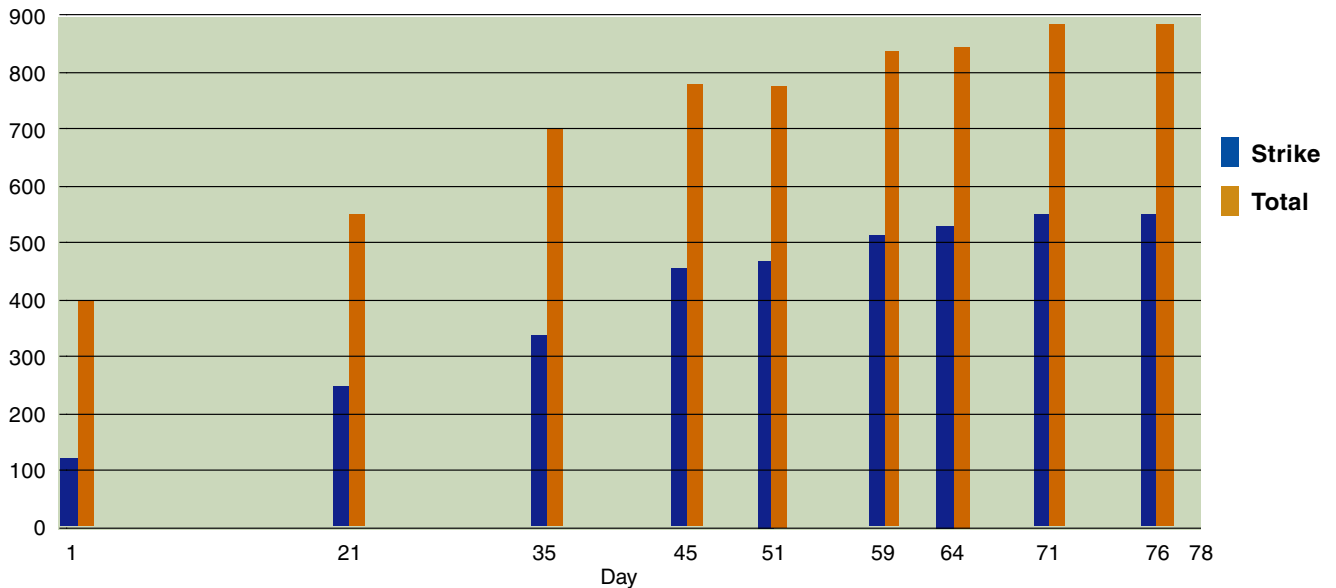
Aircraft Deployed

On March 24, the number of NATO aircraft committed to the air campaign numbered 400, of which 120 were strike aircraft. By the end of the war, the numbers were 883 and 550, respectively. US forces provided 581, or about 66 percent of the total. With the larger fleet, NATO commanders began to hit Serb assets with strikes from multiple directions and around the clock.

NATO Aircraft by Source



NATO Aircraft, Total and Strike



Aircraft Types Contributed

Country	Aircraft
US (Air Force)	A-10, AC-130, B-1B, B-2, B-52H, C-5, C-17, C-130, C-135, C-141, E-3B/C, E-8C, EC-130, F-15, F-15E, F-16, F-117, KC-10, KC-135, MC-130, MH-53J, MH-60G, Predator UAV, RC-135, U-2S
US (Other)	EA-6B (Navy), F-14 (Navy), F/A-18 (Navy and USMC), KC-130 (USMC), P-3C (Navy), Hunter UAV
Belgium	F-16
Britain	E-3D, GR-7, GR1, L-1011K, Tristar, VC-10, aircraft on HMS <i>Invincible</i>
Canada	CF-18
Denmark	F-16A
France	C-135F, C-160, E-3F, F1, Jaguar, Jag-A, Mirage 2000C/D, MIR-IVP, Puma SA-330, Horizon, UAV CL-289, UAV CR, aircraft on FS <i>Foch</i>
Germany	Tornado PA-200H/E, UAV CL289
Italy	AMX, Boeing 707T, F-104, PA2001, Tornado ADV, aircraft on ITS <i>Garibaldi</i>
Netherlands	F-16A, F-16AM, KDC-10
NATO Common	E-3A
Norway	F-16A
Portugal	F-16A
Spain	CASA, EF-18, KC-130,
Turkey	F-16, KC-135, TF-16C



USAF photo by TSgt. Brad Fallin

Thirteen NATO nations supplied aircraft for Operation Allied Force. One F-16 from the Netherlands, such as the one above, defeated a MiG in air combat. By the end of the operation, there were 550 strike aircraft out of some 883 participating.



USAF photo by SrA. Jeffrey Allen

A USAF KC-135 refuels an F-16 during Allied Force. Active, Air National Guard, and Air Force Reserve Command crews were kept busy refueling NATO aircraft throughout the operation.