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**US-TURKEY RELATIONS IN  
AN ERA OF GEOPOLITICAL  
CONFLICT**



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Page 5: Sweden's Foreign Minister Tobias Billstrom, Greece's Foreign Minister Giorgos Gerapetritis, NATO Secretary General Jens Stoltenberg, and Turkish Foreign Minister Hakan Fidan attend a NATO foreign ministers meeting at the Alliance's headquarters in Brussels, Belgium November 28, 2023. REUTERS/Yves Herman

Page 10: A Bayraktar Akinci unmanned combat aerial vehicle is exhibited at Teknofest aerospace and technology festival in Baku, Azerbaijan May 27, 2022. REUTERS/Aziz Karimov

Page 16: Photo by david hili on Unsplash

Page 22: Photo by Senior Airman Renan Arredondo

Page 26: Col. Thomas x. Hammes (Ret.), Senior Research Fellow at the National Strategic Studies, National Defense University, right, participates in a discussion with service members from U.S. Air Force and the Afghan National Army Air Corps about the development of the Air Corps over the last few years. Hammes visited the Air Corps base in Kabul, Afghanistan on April 21, 2010. (US Navy photo by Mass Communication Specialist 2nd Class David Quillen)

Page 30: Photo by Senior Airman Essence Myricks

# FOREWORD

By Rich Outzen & Can Kasapoglu

**T**he first half of 2024 has brought new energy and dynamics to U.S.-Turkish bilateral strategic ties, much—though not all—positive. The successful sequential approval of Swedish accession into NATO and Turkish acquisition of upgraded F16V air warfare deterrent restored a level of trust, albeit rooted in transactionalism, after nearly a decade of unarrested divergence and increasing mistrust. New hope in defense industrial cooperation has been embodied by new investments in the field including a significant new munitions collaboration in Texas. Turkish diplomatic reconciliations with a number of U.S. regional allies—Egypt, Greece, Saudi Arabia, and the UAE—have removed an additional source of friction while the war in Gaza has led to new tensions, and very divergent policies. This issue of *Defense Journal* provides a snapshot of several current dynamics in the strategic relationship at a critical time, approaching the NATO Summit in Washington. Enjoy!

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Rich Outzen & Can Kasapoglu are Co-managing editors, *Defense Journal by Atlantic Council IN TURKEY*.



**Rich Outzen**



**Can Kasapoglu**



# SWEDEN'S NATO ACCESSION: A TWENTY-MONTH SQUARE DANCE

By Rich Outzen

**S**quare dancing is a time-honored American folk tradition involving four couples, energetic movements with rotating partners, intricate footwork, and a good deal of hidden coordination. When done well, the outward effect is spirited and graceful, if subtly frantic. For the unskilled, there can be awkward collisions and slips, ending in a tumble. There is often a degree of muddling through, with flying elbows and a missed turn or two. The dance represents a multilateral coordination challenge, unlike, say, the passionate pairing of the tango or an exquisite variation by a solo ballerina.

NATO has just gone through something like a twenty-month square dance.

Shortly after Russia's February 2022 invasion of Ukraine, Sweden and Finland applied to join NATO. Turkey and Hungary delayed the Finns for nearly a year (March 2023), and the Swedes even longer (with Turkey approving accession in late January 2024 and Hungary approving in late February 2024). The twenty-month process was complicated, involving bargaining among multiple partners with common direction but conflicting agendas and styles: applicants (Sweden and Finland), ratifiers (Turkey and Hungary), facilitators (NATO leadership and the Biden administration), and would-be spoilers (Russia and the US Congress). With the process only recently concluded, some analysts erroneously attribute its drawn-out nature to one man—Turkish President Recep Tayyip Erdoğan—and his domestic political needs, personal business interests, and/or supposed Russophilia. Given an explicit Turkish criterion has been lax Swedish policies regarding the anti-Turkish *Partiya Karkaren Kurdistan* (Kurdish Workers' Party, or PKK), does this make sense? The real, if complicated, story of divergent interests nested within a mutually beneficial proposition—and the diplomatic choreography that ultimately reconciled them—deserves a more nuanced telling.

## Partners on the Square

Two partners in this dance, Finland and Sweden, functioned as leads. Their decision to apply stemmed from the Russian invasion of Ukraine. Abandoning traditions of armed neutrality centuries or decades in the making—Sweden and Finland, respectively—both sought security guarantees after Putin's menace toward neighbors had been made clear. Sweden brings strategically significant



territory, military forces, and defense industry into the Alliance. Finns have recent memory of fighting the Russians, and provide a strong anchor to limit Russian ambitions in the far north.

Turkey and Hungary dragged their feet, and NATO bylaws require unanimity. This caused significant grumbling in Washington and other Western capitals, where the Turkish rationale for nonapproval—toleration of PKK activities in both countries—was seen as exaggerated, and Hungary's objections as a mere echo of Erdoğan's. Whatever other motives Ankara and Budapest had—demanding defense industrial cooperation, muting human-rights criticism, and/or influencing Washington—the differential speed of accession for Finland and Sweden suggests the PKK factor at play for the latter (but really not the former) was no pretext. Turkish policy analysts, including Erdoğan's opposition, saw PKK recruitment, propaganda, and fundraising in Sweden as the crux of the matter, and believe delaying accession led to positive remedial steps by Sweden. Turkish parliamentarians considered Swedish implementation of the June 2022 Trilateral Memorandum alongside incentives from Brussels and Washington as central criteria for approval.

For NATO and the White House, bringing applicants and approvers into line was no simple hop, skip, and jump. NATO Secretary General Jens Stoltenberg conducted an intensive effort over the twenty months to reconcile Turkish concerns with those of the aspiring Nordic candidates. Stoltenberg praised Turkey after Finland's admission, and pressed in positive terms for the addition of Sweden, coaxing and cajoling Erdoğan and Hungary's Viktor Orbán at summits and in bilateral engagements. The Biden administration constructed a set of interlocking assurances that ended a *de facto* arms embargo on Turkey by the United States, Canada, and others; strengthened bilateral strategic dialogue; signaled intent to curtail a US partnership with a PKK-affiliated militia in Syria; and convinced Congress that F-16 sales to Turkey in exchange for Swedish accession was a sound deal.

Two parties on the periphery of the proverbial square made their presence felt too, each with incentive to trip the fancy footwork or stop the music altogether. One was Russia, which responded to the prospect of Finnish and Swedish NATO membership with threats of military escalation and the revival of dormant border disputes. Some commentators speculated that Erdoğan's delays were less about supposedly exaggerated PKK concerns than about currying favor with Putin—with Orbán's delay about pleasing both men. Moscow expressed its displeasure about NATO expansion early and often, undoubtedly doing what it could to exacerbate skepticism toward the Swedish bid, but failed in the end to stop accession.

The US Congress nearly undid the Biden administration's carefully constructed arrangement by hinting US arms sales to Turkey would not resume even if Ankara approved Sweden's entry. Not only Senator Robert Menendez, well known as Ankara's *bête noire*, but other key members of the House and Senate foreign affairs committees intimated that F-16s would only be approved after a broader set of behavioral modifications by the Turks. It took months of effort by the US ambassador to Turkey, Jeff Flake, and State Department officials to lobby Flake's former congressional colleagues, and soften their resistance by linking Turkish F-16s to the sale of F-35 fighters to neighboring Greece. These efforts finally paid off in the January 2024 decisions by Turkish and American legislators to approve Sweden's accession and Turkey's aircraft, respectively.



## Sweden and the PKK

Acknowledging the complexity of the Nordic accession story does not negate the role that Western policies toward the PKK played in Turkish calculus. Sweden has a complicated history regarding PKK presence and activities in the country. In the 1980s Sweden first banned, then tacitly accepted PKK presence. During the 1990s a significant number of Kurdish immigrants settled in Sweden, some with PKK sympathies, and took advantage of Sweden's liberal criminal and terror laws to conduct recruitment, propaganda, and fundraising activities on behalf of the organization. PKK founder Abdullah Öcalan considered the role of Europe, and Sweden in particular, as a crucial rear support base—a role which did not change after the United States and the European Union designated the group as a terrorist organization.

Sweden's tolerance—is it an affinity?—for the PKK movement deepened significantly with the rise of its Syrian affiliate, the People's Protection Units (aka the YPG), as the Western-supported ground force battling the Islamic State in Iraq and al-Sham (ISIS) in Syria. Social Democrat-led center-left coalitions in Sweden from 2014 to 2022 espoused “the Kurdish cause,” Swedish political leaders met with and feted YPG leaders, and the government provided funding for the group's de facto administration in northeast Syria. These actions created growing dissatisfaction in Ankara—and coincided with shifting Swedish views about NATO membership based on the war in Ukraine.

The tension between treating the PKK and its affiliates as Kurdish civil society groups and asking Turkey to approve Sweden's NATO application was taken seriously by the conservative government that assumed office in 2022. Building on proposals initially considered by the previous Social Democrat government, legal reforms were enacted to criminalize terror support activities on Swedish soil, whereas previously, membership and support were not indictable so long as no violent terror acts were carried out within Sweden. Those reforms took full effect in mid-2023, but Swedish officials have recognized that the problem runs deep and substantive progress will take time. There has been growing concern in Sweden about criminal, gang, and terror activities in Swedish cities, of which PKK activities form but a part. It is hardly surprising that PKK protests targeted the legal reforms, while agitating against Sweden's NATO bid itself.

## Sweden Changes Tune

In addition to the aforementioned constitutional reforms, diplomatic sources indicated that Sweden posted permanent security liaison staff in Ankara and provided Turkish officials regular access to security ministries in Stockholm, long-standing requests from the Turks. The new laws, if vigorously implemented, might resolve most of Ankara's concerns, though provocations blurring the line between incitement and free speech have convinced Swedish authorities that even more tightening is needed.

There has not been much in the way of actual arrests or deportations. PKK financier Yahya Gungor was convicted and ordered deported, but his expulsion was overturned on appeal. PKK sympathizer Mehmet Kokulu was extradited for drug offenses, largely because the Swedish court found little evidence of political activities. PKK activist Mahmut Tat was extradited in December 2022 for PKK membership, shortly after Swedish Foreign Minister Tobias Billström acknowledged the need to put

distance between his country and the terror organization. Billström later described PKK activities in Sweden as “quite wide-ranging.” Swedish accession negotiator Oscar Stenström conceded in early 2023 that “a non-negligible part of the funding of the organization emanates from Sweden.” As European Police (EUROPOL) reports have noted, PKK continues to raise money in Sweden via *kampanya*, a fundraising campaign that targets the Kurdish diaspora community, is referred to as a tax, and is alleged to involve harassment and extortion. Europol separately points to group members allegedly involved in “organised crime activities such as money laundering, racketeering, extortion and drug trafficking.”

Lack of trust in Sweden’s ability to deliver helps explain why Ankara required inducements from Washington and Brussels. Ömer Özkizilcik, an Ankara-based analyst, assessed that as a stand-alone proposition, Sweden’s counter-PKK enforcement was insufficient:

Sweden has taken steps, but they are not enough. We still see PKK supporters marching in Sweden with PKK flags. Sweden—unlike Germany, for example—has not banned PKK symbols. More importantly, the PKK network is still active and the Swedish law enforcement has to take strong action and dismantle it. The PKK network operates in a quadrangle between France, Belgium, Germany, and Sweden. In this quadrangle, Sweden is the most progressive democracy. Turkey hopes that Sweden will become a positive example for other European nations. Turkey may bomb and eliminate the PKK in Iraq and Syria, but in Europe, the fight against the PKK is diplomatic.

Therein lies a central logic of ultimate Turkish approval: demonstrating to other European countries that enforcing counterterror laws against the PKK is compatible with democratic governance.

Soner Cagaptay of the Washington Institute for Near East Policy has argued that the PKK itself took steps to delay or derail accession:

Turkey was about to finalize and ratify in October, and the day the Parliament came back into session the PKK carried out a terror attack in Ankara, making it politically impossible to ratify. The PKK wanted to delay ratification, which would result in F-16s for Türkiye and a reset in the US-Turkish relations. The PKK dimension is easy for analysts working at a distance to dismiss as Erdoğan grandstanding. But one thing about Erdoğan is that he’s very good at making what is good for Türkiye good for him. He doesn’t make these conflicts or concerns up—but he is very good at using them to boost his image.

## Squaring Up Anew

It can be tempting to oversimplify the accession affair or dismiss it as unnecessary, unseemly, or capricious—but to do so is to misread context, dynamics, and implications. Such a misread might also incline an observer to miss the significant potential openings the process has created for the Alliance, above and beyond the addition of two new members. Those members certainly are welcome in terms of the geographical and military dimensions of the Alliance.



Successful negotiation of Swedish accession required patience and creativity, given the low-trust environment prevailing in recent years between two of the main actors, the United States and Turkey. This might create a virtuous cycle, where other positive developments take root as a more conducive tone emerges. One possibility is broader defense industrial cooperation on new projects, as the first major US-Turkish arms deal in a generation gets off the ground. Another might be a more sustainable, and less hypocritical, approach by European countries toward criminal and terror-related activities in their urban centers, with Sweden as a test case. As NATO does a more complete job of accounting for the security concerns of a cornerstone member (Turkey) beyond the singular threat of Russia, intra-Alliance frictions should attenuate significantly. As with most dances, a degree of theater was involved—but where the couples go after the music stops may be more interesting than the show.

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# DRONES AND MORE: TURKISH DEFENSE COOPERATION TRENDS IN THE AIR

By Can Kasapoglu

**T**he Turkish defense technological and industrial base has reached a critical mass across certain segments. The successful trajectory of the unfolding projects manifests a new reality in the realm of air power. While the Bayraktar TB-2, aka the “flying Kalashnikov” by Baykar, has made most of the headlines, the Turkish drone program is not merely about that. Turkey has built a reputable edge in designing wide range of high-value assets.

In the drone warfare segment, Baykar’s unmanned combat aircraft Kizilelma and the company’s high-altitude drone equipped with high-end weapons, Akinci, as well as Turkish Aerospace Industries’ flying wing, stealthy unmanned combat aircraft Anka-3 loom large as some examples. Even more importantly, the Anka-3 and Kizilelma are designed to fly within the loyal wingman concept alongside manned aircraft, which is technically a sixth-generation tactical military aviation feature, presaging the future horizons of Turkish defense planning.

In the manned fighter jet segment, Kaan, formerly known as the Milli Muharip Uçak, presents interesting takeaways to grasp the Turkish defense industry’s international dynamics. In February 2024, Turkey’s indigenous, stealth combat aircraft, Kaan, conducted its maiden flight. Besides painting a shiny picture of the future of Turkish air power, Kaan also sheds light on some of the ongoing capability limitations of the nation’s defense technological and industrial base (DTIB). The first problem pertains to the jet’s power configuration. The initial batches, and the prototype of the aircraft, fly with the F-110 engines that power the F-16 fighter jet, illustrating a clear dependency.

With the rising trajectory and still-in-place limitations of the Turkish DTIB’s air power generation capacity, one has to answer two political-military questions pertaining to the nature of defense business: First, what kind of an arms exporter is Turkey to become considering its aerial assets? Will it follow a more reserved model, such as Germany? Or a more business-friendly one like France? Or, will it pursue more of a market disrupter role like China? Second, how will the nation’s foreign collaboration network take shape?

## Turkey's defense cooperation outlook

From a geopolitical standpoint, Turkey's success in unmanned aerial technologies has positioned it as a burgeoning drone-exporting nation within the transatlantic Alliance.

Indeed, Turkey's drone warfare success, at least in the headlines, started with the Bayraktar TB-2's combat record in Syria and Libya. Still, to grasp the Turkish drone warfare's defense diplomacy dimension, one has to know more about other operators of the drone.

Both in the second Nagorno-Karabakh War and the ongoing Russian full-scale invasion of Ukraine, the Turkish Bayraktar TB-2 has helped the operating countries, Azerbaijan and Ukraine, in the hard turning points of their respective quests. Having proven its combat performance, the TB-2 paved the way for a fruitful strategic collaboration with these nations. A series of cooperative production deals between the Turkish drone manufacturer Baykar, and Ukraine and Azerbaijan, respectively, stand out as important examples of such defense industry collaborations. More importantly, having capitalized on the TB-2's combat performance, Baykar established defense companies in Kyiv and Baku. But these are not one-way journeys. The engine collaboration for the Kizilelma drone with Kyiv, for example, has opened a new chapter in Ukrainian-Turkish military ties. At present, Ukraine also eyes engine deals for Turkey's manned combat aircraft segment.

In the manned aircraft segment, a careful assessment of Kaan's export portfolio would explain Turkey's defense diplomacy outlook for its advanced solutions. To keep the unit costs at manageable levels, Turkey needs to find lucrative deals to market the aircraft. Yet Kaan will enter an international market characterized by fierce competition. Therefore, transforming the Kaan into an attractive platform for clients seeking either enhanced fourth- or the more advanced fifth-generation fighter jets will be a critical priority, especially at a time when the F-35 dominates the Euro-Atlantic market and when other alternatives, such as the Rafale by Dassault Aviation of France and soon the South Korean KF-21 Boramae by Korea Aerospace Industries, are seeking to capture the remainder of the pie globally. SAAB's Gripen, on the other hand, is losing its market share. All in all, Paris and Seoul are aiming to increase their market share in critical arms industries, indicating that Turkey will also face heavy competition.

The Kaan could function as a geopolitical ledger that opens the path for new international partnerships. The combat aircraft will likely offer an effective solution to countries that cannot procure F-35s such as Pakistan or the Gulf Arab nations, due to a series of sensitive political impediments; though the latter may impinge on Seoul's interest in selling its new Boramae. Another natural target for Turkey's multirole combat solution would be militaries that want to replace their Soviet era-remnant arsenals with a defense ecosystem that is in line with NATO standards, such as the non-NATO former Soviet space, which has traditionally been Russia's markets. In this regard, Azerbaijan and Ukraine loom large as two particularly interesting potential operator nations as Kaan's export market slowly takes shape in the coming years.



## The geopolitical showdown ahead

From a defense economics standpoint, Turkey's serious air power projects, such as high-end drones and advanced manned aircraft, will also help the West to counterbalance its great power competitors in the international arms market. According to the Stockholm International Peace Research Institute, Moscow and Beijing constituted around 16 percent and 5.2 percent of the global arms exports between 2018 and 2022, respectively, although the former's share decreased following its stumbling invasion in Ukraine. Yet China continues to pose a real risk to the NATO members' overall weapons market presence in several regions.

China has already snatched up the Middle Eastern drone market amid a long absence of American solutions due to restrictions. Turkey's drone sales to the Gulf, and recently Egypt, offered a critical comeback to tackle the Chinese share in the unmanned aerial systems segment. In the coming years, China's potential presence in the Middle Eastern *manned* aircraft market will be among the highest priorities to track. The Kaan can offer some help in this respect.

Therefore, it is important to note that, unlike popular speculations in the Turkish press, the Kaan will not compete with the F-35 head-on. Instead, it will introduce an alternative, NATO-grade solution in the manned aircraft segment that can be delivered to the nations that cannot purchase the F-35. While it will directly compete with the combat aircraft of Russia and China, both Korea and France will join the contest. The million-dollar question, for now, is about who will dominate the Gulf manned aircraft market in the absence of F-35.

## Extending technology transfers in the drone warfare realm

Along with market opportunities, Turkey's limits in arms transfers and coproduction deals remain key to understanding how the nation's defense business will play out in the near term.

The Akinci is an interesting example, as it illustrates how the Turkish DTIB is evolving around high-end platforms. Akinci's weapon systems configuration, featuring Turkey's first aeroballistic missile, TRG-230-IHA, and a stand-off missile (SOM) baseline of cruise missiles, transforms the platform into a deep strike asset. The high-altitude long endurance (HALE) drone can also fly up to 40,000 feet (out of the engagement envelope of short-to-medium air defense systems). Looming large as one of the most capable platforms in the Turkish export portfolio, Akinci has started to leave a footprint in the international weapons market. In the summer of 2023, Baykar signed a historic export and coproduction deal with the state-owned Saudi Arabian Military Industries for local production and technology transfer. Roketsan and Aselsan, the primary manufacturers of the platform's critical weapon systems configuration and sensors, were also included in the deals.

Baykar's deal with the United Arab Emirates' Edge Group to arm the Bayraktar TB-2 with Emirati payloads in early 2024 is another notable example. The procurement package marked the first instance of a Turkish drone maker certifying foreign munitions to be integrated into its platforms.

Last, having monitored the Ukrainian military's successful TB-2 employment at the outset of the conflict, the TB-2 is also expanding its footprint in NATO markets. Following Poland, Romania has purchased the drone in a lucrative deal.

## Next up

During the Cold War, Turkey—a NATO nation standing up to more than twenty Soviet Red Army divisions—remained a decades-long net arms importer. Thus, perhaps the country's transformation into a key arms exporter, especially in advanced technologies such as drone warfare assets, has marked one of the most important developments in the Euro-Atlantic security affairs in the twenty-first century.

The Turkish model comes with successes and limitations. Turkey's shipyards are now capable of designing principal surface combatants, frigates, and corvettes. In the submarine segment, however, especially in air-independent propulsion systems, Turkey's needs foreign collaboration. Likewise, the Turkish defense industry can produce most of the land warfare solutions, albeit, the national tank program, Altay, still awaits its entry into the army's arsenal. The aerial systems segment is not a different one compared to the naval and land warfare segments. In the air, the Turkish aerial drone design and production prowess is one of the best in the international weapons market. The manned aircraft segment, nonetheless, is lagging behind. As to high-end systems, manned or unmanned, engine configuration will continue to be troublesome for years to come.

Turkey's calculus goes well beyond merely becoming an off-the-shelf arms supplier. Ankara aims to establish deep-rooted ties in the market nations while paving the way to bring those nations' capabilities to Turkey's DTIB when possible, as is the case with the Ukrainian industries. Drones are still pioneering the Turkish defense outreach in the air. The path of Kaan, as well as the unmanned combat aircraft/loyal wingman projects, Kizilelma and Anka-3, will determine the final trajectory of the nation's defense business outlook in the air.

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# TÜRKİYE AND THE RUSSIAN MILITARY THREAT TO NATO

By Yavuz Türkgenci

## A wounded bear still has claws

**R**ussia's military troubles in the initial stages of its expanded war against Ukraine in 2022 prompted a wave of military analysis describing the Russian military as far weaker than had been previously thought, and asking how the West got it so wrong. Two years into the war, though, Western analysts have again been surprised by how quickly Russia was able to overcome massive losses and rebuild and retool its forces—again raising the specter of outright Russian military victory. By dramatically increasing defense budgets, adapting to the lessons of the battlefield, and drawing on a defense-industrial alliance with China and Iran, Russia reconstituted its forces in a manner that threatens to destabilize Ukrainian defenses—and might have recovered enough capability to cause real concern about NATO defenses elsewhere.

This should prompt leaders in NATO capitals to ask whether the Alliance is currently capable of deterring or defeating Russia on the battlefield. It is no simple question. War is a matter not just of aggregate economic output, but also of national will, alliance cohesion, geography, and combat readiness. Over the past two years, Russia has learned important lessons from the war and has managed to partially transform its armed forces to meet the operational requirements of the digital age. Through the invasion, the Armed Forces of the Russian Federation have developed a strong—though costly—conventional warfighting capability and an established command structure. When critical capabilities—such as mobilization, medical evacuation and treatment, and the development of the defense industry—are factored in, the experience the Kremlin has gained from the Ukrainian battlefield could have critical implications for NATO's collective defense.

De facto alliances that have emerged alongside the war also carry important warning signs. Russia's collaboration with Iran and the contributions of China and North Korea to the Russian war effort are important harbingers of a new global security landscape. Compared to the World War II Axis or the former Warsaw Pact of Soviet times, this axis could pose a more effective and powerful threat to the West in relative terms. The resources and global power of the coalition in question are much greater than those of the former Soviet Union. It will be no simple matter to establish a balance of power with



such a grouping or deterrence against it. Among other things, it will require Alliance members to do more to leverage the growing strength of one of the Alliance's heavy hitters in economic and military affairs—Türkiye\* - than has been done to date.

## Global echoes of conflict

Although the Russian war against Ukraine is being waged in Eastern Europe, important developments in other areas of the world, such as Africa and the Middle East, can be linked to it. Military coups on the African continent bear Russian fingerprints and have led to a reduction in US and French access and military cooperation. The war in Gaza, in addition to being a humanitarian disaster, has led to a rise in anti-Israel and anti-Western sentiment, especially in the Global South, taking pressure off of Russia and benefiting China.

The defense of Ukraine has revealed significant gaps in the defense-industrial capabilities of the NATO Alliance, raising questions about its ability to mobilize for extended conventional conflicts. Crises such as China-Taiwan tensions and North Korea's missile tests cast a gloomy shadow over such conversations. Considering that some of the former security mechanisms, such as strategic arms-control agreements and the Treaty on Conventional Forces in Europe (CFE), are no longer in effect, the global threat environment for NATO is worsening at an alarming pace.

NATO has noticed the shifting environment, and has taken steps toward strengthening deterrence and a reliable global security architecture. War planners understand what might not always be obvious to the broader public in NATO nations—that to be effective, NATO's strategic and operational framework needs to fully integrate the evolving technical and military capabilities of all NATO members, including Türkiye. However, steps by NATO members that are also European Union (EU) members to keep non-EU members of the Alliance outside the EU Military and Defense Industry Structure indicates there might be a problem.

## Reforging and refocusing NATO

NATO, which during the Cold War focused on defense against in-area threats, has increasingly taken on a broader, and more global, mission set. This stance manifested itself regionally first, with intervention in the Balkans, then globally with interventions in Afghanistan and Libya. However, NATO's withdrawal from Afghanistan has created doubt about the organization's effectiveness and its global credibility. It is critical that NATO learn important lessons from these past crises, and especially from Russia's current war, and adapt its structure properly.

Following the strategic concept published in 2022, NATO is expected to review its command and force structures and defense planning system to adapt to the contemporary security situation. In this context, one of the most important issues NATO is working on is the effective use of digital-age technologies for defense purposes.

NATO's permanent and internationally manned command structure is an important force multiplier. Reviewing the NATO command structure in the coming period, with an approach based on the space-

land battle concept as well as the multidomain operation concept, will enable it to respond effectively to the needs of the age. In this digital era, big data (BD) and artificial intelligence (AI) have a significant impact on command-and-control (C2) activities. A C2 system based on the OODA (observe, orient, decide, act) loop approach and utilizing BD and AI has become an imminent necessity. Such a system will have significant impacts on software, hardware, and, more importantly, on the working procedures at headquarters. Staff officers and commanders should get used to working in a data-centric manner. Such an approach will have significant implications for NATO's command structure, both physically and in terms of working procedures. Naturally, accelerating the military decision-making cycle will be an important force multiplier.

NATO gained an important capability by establishing high-readiness, corps-level headquarters in its force structure. NATO may also review these headquarters and come up with new doctrines to meet contemporary requirements. Combined with AI-augmented C2 capabilities, manned and unmanned units could increase the effectiveness of these headquarters. The realization of commonly funded unmanned units may increase the effectiveness of the NATO force structure.

Defense planning should be another area of focus for future posturing. In NATO defense planning, especially in determining operational requirements, shifting from a capability-based approach to a threat- and technology-based approach would be appropriate and useful in guiding allied countries in preparing their forces. Because of the Cold War era, NATO is no stranger to a threat-based approach, and a similar approach can be tailored to today's security landscape. Additionally, more emphasis should be placed on harnessing technological resources to build military capabilities, integrating off-the-shelf products in this structure, and encouraging the design of future concepts and systems using digital engineering approaches. The defense planning system should also contribute to the establishment and maintenance of a decent Alliance-wide defense-technological industrial base (DTIB).

NATO has taken important measures to enhance deterrence and increase combat readiness on its eastern border. These measures could be reconsidered to include critical regions such as Africa. Naturally, the measures taken will not be the same as those on the eastern border. The modifications should account for the conditions and security needs of the particular regions.

## **Türkiye's past and potential contributions**

In her seventy-two years of membership, Türkiye has duly fulfilled all her obligations to NATO. Türkiye was a cornerstone of Western deterrence of Soviet aggression throughout the decades of the Cold War, and provided robust military and political contributions to NATO operations in Bosnia and Kosovo. In Afghanistan, Türkiye agreed to operate the airport in Kabul, which was crucial to the Alliance's mission. During the most critical period, it successfully assumed command of the International Security Assistance Force (ISAF) and fulfilled its responsibilities as a framework nation. More recently, Ankara successfully evacuated NATO personnel, as well as political and military staff, from the airport under highly challenging conditions and in coordination with allies. On several occasions, Türkiye responded immediately to NATO's requests for airborne warning, despite its own needs. Also, Türkiye's important contributions to missile defense are well known within the Alliance.



The Turkish Armed Forces (TAF) of the 2020s are an experienced and successful warfighting organization. The TAF has conducted operations in various parts of the world, particularly in Syria and Iraq. These operations cover a wide spectrum, from classical operations to peacekeeping, and include specialized missions in mountainous regions. The planning and conduct of operations in Libya, Syria, and the Caucasus all required considerable capacity and professionalism. Almost all of the missions conducted have been at the large-scale, strategic, or operational levels. The planning, preparation, execution, and replanning of these operations within the framework of subsequent operations require considerable professionalism. These operations faced different types of adversaries, geographical conditions, logistical challenges, and casualty risks, further demonstrating the TAF's flexibility and combat readiness.

The TAF is among the world's leading armies in the use of unmanned systems, especially unmanned aerial vehicles (UAVs). The Turkish defense industry and military services have reached an important level in the preparation of combat concepts, and the design, production, and use of unmanned systems. The experience gained in the field of UAVs has also led to important developments for unmanned sea vehicles (USVs) and unmanned ground vehicles (UGVs).

The Turkish Armed Forces continue their transition into the digital age. With a high level of combat readiness and significant defense-industry support, Ankara's improving military capabilities will continue to make important contributions to global security and NATO. Turkish defense-technological advances—combined with recent combat experience, strategically valuable geography, and militarily-relevant resources (especially industrial capabilities and manpower)—mean that Türkiye's potential future contributions to the Alliance are even more critical than those it has made in the past.

## Stumbling blocks

Unfortunately, for several reasons, NATO has not been able to utilize Türkiye's capacity sufficiently. One reason is the marginalization of Turkish threat perceptions by a number of Alliance members. This includes the attitude of certain members toward the Kurdish Workers' Party (PKK) and its Syrian branch known as the PYD. Naturally, Turks see the PKK as an existential threat, and Ankara expects its allies to stand on its side—but a number of allies support the group tacitly or, more directly, via its Syrian affiliate. Secondly, Ankara's stance on the Fethullah Terrorist Organization (FETO), which is blamed for the 2016 coup attempt against the Turkish government, is similarly met with a mixture of skepticism and disregard by some Alliance members. Even accounting for the fact that domestic views on the PKK and FETO in member countries vary significantly, the simple fact is that failing to respect an ally's threat perceptions—or, in some cases, actually strengthening the hand of those threats—undermines one of the pillars of Alliance cohesion.

Domestic political sentiment in NATO member countries sometimes creates resistance to supporting the Alliance, and Turkish public opinion is frequently targeted, and easily inflamed, through provocations involving religion. For example, burnings of the Quran in Sweden and Finland, two countries in the process of becoming new NATO members, crossed the line of unacceptability for Türkiye's predominantly Muslim population. From a military point of view, these incidents hold important lessons

and deeply impact NATO's cohesion and unity. They could cause significant damage to NATO's center of gravity—cohesion—which, in turn, could hurt the Alliance's overall operational readiness. It goes without saying that such events could cause much more significant results and leave NATO open to exploitation by an adversary during a crisis.

Lastly, defense-industrial restrictions and bans by some allies have also negatively affected Turkish, and thus NATO, combat readiness. Most recently, the denial of Istanbul's desired F-35 fighter jets and difficulties over the procurement of air-defense systems have had both positive and negative consequences. While the F-16V deal recently went through, the continued denial of systems such as F-35 fighter jets and the imposition of embargoes caused the Turkish defense industry to stand more firmly on its own feet, and these denials continue to hurt NATO's combat readiness level.

## Conclusion

The Russian war on Ukraine and other unfolding developments in global security point to the need for NATO to take important measures for the future that make it capable of responding to the security threats of the digital age. In this sense, it is important to both solidify the cohesion of NATO and make modifications that will facilitate sufficient use of the combat experience of the Turkish Armed Forces. Under this effort, a review of the TAF's role in NATO's victorious emergence from the Cold War would give useful insights for NATO's future posturing, combat readiness, and defense planning. It will not be enough for the Alliance's military and civilian officials to recognize the need for a better "Türkiye strategy" moving forward—the national governments in member states need to review past restrictions and actions in light of this need.

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Yavuz Türkgenci is a recently retired three-star general in the Turkish Armed Forces whose career spanned several offices, including western European Union and NATO posts and as the commandant of the Turkish Third Field Army. He holds a doctorate in security strategy design and management.

*\*This article refers to "Türkiye," the country name that the Turkish government and United Nations officially adopted in 2022.*

# THE F-16 DEAL IS AS GOOD FOR NATO AS IT IS FOR TURKEY

By Andrew Bernard

**T**he Biden administration's January approval and June contract finalization of the sale of forty new F-16 fighter jets to Turkey and the upgrade of nearly eighty of its F-16 airframes was most certainly celebrated in Ankara. After years of acrimony following Turkey's acquisition of the Russian S-400 air defense system and its subsequent expulsion from the US-led F-35 program, the inking of this deal represents a turn in the right direction in the US-Turkish relationship. NATO military planners in Europe also have reason to cheer Turkey's commitment to upgrade its fighter aircraft fleet on a large scale, even though it is not a purchase of fifth-generation F-35s.

For the Turkish Air Force, this F-16 acquisition brings familiarity and precedence that will make the integration of these aircraft nearly seamless—or at least an order of magnitude easier than onboarding an unfamiliar airframe. Turkey explored the option of acquiring Eurofighter Typhoon aircraft as a hedge against the possibility of the US F-16 deal falling through and is publicly keeping this option alive. New weapon systems bring countless changes, and not all of them are better. Pilots, technicians, and support personnel would all be starting from square one to learn a different airframe such as the Typhoon and its associated systems. Aircraft maintenance procedures and logistics processes would involve a steep learning curve. With the next generation F-16, Turkish Air Force personnel would instead be evolving and adapting their current (and deep) knowledge of the weapon system, adjusting to particularities of the newest version.

For NATO, such an ease of incorporating new and upgraded F-16s into the Turkish Air Force would be helpful, making the aircraft mission ready and available for NATO planning shortly after delivery. The scale of purchase that Turkey is pursuing should also please NATO air planners at Supreme Headquarters Allied Powers Europe (SHAPE) in Belgium and at NATO Air Command in Germany. With over 240 F-16s, the Turkish Air Force is already the largest NATO air arm—besides the United States—to employ the F-16. While the Turkish Air Force will likely retire some of their older jets upon obtaining the new F-16s, the rest of the fleet should remain in service for years to come.

## Force offering with teeth

This is, however, about more than the number of airframes. It's about Turkey upgrading such a large number to a high capability level, incorporating advanced active electronically scanned array radars,







modern electronic warfare suites, and updated data links among other equipment. This shows that Turkey is willing to modernize its F-16 with improved capabilities to make them more lethal and survivable against modern air threats. Air forces failing to upgrade their fleets risk relegating their air arms to irrelevancy, and that is not the case with Turkey.

These F-16s are needed for NATO missions. NATO air leaders are most concerned about fighting anti-access, area denial (A2AD) campaigns at the beginning of any conflict with a near-peer adversary in an attempt to gain air superiority—and the F-35 is perfect for this role. Nonetheless, there will be plenty of other NATO missions beyond A2AD, and the Turkish F-16s will be in a prime position to conduct those missions at scale. While European air forces are forecast to have more than 600 fifth-generation F-35s on the continent by 2030, there will still be hundreds of aircraft of other generations at NATO's disposal. As NATO air tacticians work to optimize the simultaneous integration of fourth- and fifth-generation aircraft in the same battlespace, Turkey's upgraded F-16s will be better postured to implement that integration due to the advanced avionics and sensors being included in the forty new F-16s and the nearly eighty receiving upgrades.

Just as important, if not more so, is the Turkish commitment to buy advanced weapons in large quantities for its F-16 fleet. The proposed sale includes nearly one thousand AIM-120 medium-range, radar-guided air-to-air missiles, over 400 AIM-9X short-range, infrared-guided air-to-air missiles, and a plethora of precision air-to-surface munitions to attack fixed and mobile targets. This is an important point for NATO planners, as it ensures that Turkey's force offering comes with teeth. Some nations acquire major weapon systems (aircraft, tanks, ships), but underinvest in munitions needed to employ the weapons systems—a hollow force, effectively eroding deterrence potential. This is not the case with Turkey, whose air force will be ready from day one with a credible fleet upon completion of the contract, reinforcing NATO's conventional air forces deterrent potential.

Beyond the equipment itself, Turkey is positioning itself to be the de facto leader of NATO F-16 users: a leadership role it should enthusiastically embrace with this new acquisition. Current and future NATO F-16 users in Europe include Belgium, Denmark, the Netherlands, Norway, Portugal, Greece, Turkey, Poland, Romania, Slovakia, and Bulgaria. Notably, the epicenter of NATO F-16 employment is shifting from northwest Europe to southeast Europe, as the nations of four of the five European Participating Air Forces (EPAF) have committed to the F-35 (Netherlands, Norway, Denmark, and Belgium). Portugal, the sole EPAF nation that has yet to commit to the F-35, intends to fly the F-16 for the foreseeable future while exploring a replacement aircraft.

For the next two decades, southeast Europe and the Black Sea region will be dominated by F-16 users. Romania acquired its first F-16s from Portugal, with more to come from Norway. Bulgaria's first F-16 Block 70 should take flight this year, and Slovakia is purchasing fourteen Block 70 F-16s as well. ("Block 70" refers to new F-16s produced in Greenville, South Carolina, while the "Viper Upgrade Program" allows older F-16s to be modernized to Block 70 standards. ) And while not currently a member of NATO, Ukraine is poised to start employing the F-16 soon. Given Turkey's long history of using the F-16, and the fact that this deal involves the same Block 70 version of F-16s that Slovakia and Bulgaria will have, the Turkish Air Force should step into this role and be a mentor among the NATO F-16 community. For example, the Turks should consider establishing an F-16 Block 70 Fighter Weapons Instructor Training

course, the same way the Dutch hosted the program for the EPAF community. NATO air forces would benefit greatly from a new generation of top-tier F-16 instructors and tacticians.

## Relationship renewal?

There are hurdles to overcome before all these advantages come to fruition. Lockheed Martin will need to clear its F-16 production backlog for Turkey to capitalize relatively quickly on this purchase, as will the various subcontractors and weapon producers. Nonetheless, should the United States and Turkey succeed in overcoming these challenges, this acquisition could open the way for a renewed defense-industrial relationship between the United States and Turkey at a strategic level.

It must be emphasized that Turkey's eventual support for Sweden's entry into the North Atlantic Alliance sealed the deal for this F-16 purchase, and it is in Ankara's best interest to continue to make common-sense decisions like this. The continued insistence on maintaining the S-400 system in its inventory will likely ensure Countering America's Adversaries Through Sanctions Act (CAATSA) implementation remains intact. The abandonment of the S-400 could start the process leading to a potential reentry into the F-35 program. There are other potential areas for defense industrial cooperation such as US participation in Turkish warship and submarine programs, or US subsystem co-development for some of Ankara's ambitious organic defense production efforts.

Additionally, some skeptics argue that Turkey has no intention of using its F-16s to deter Russia, preferring to employ them in counterinsurgency operations or balance against neighbors. This argument ignores that Turkey actively participates in both the NATO Defense Planning Process and Supreme Allied Commander Europe's (SACEUR) regional defense planning development as part of its Alliance commitments to defend NATO airspace. Turkey's air power contributions reinforce NATO's overall deterrence posture, leaving Moscow no choice but to look at NATO's defensive capabilities as a whole and not its parts.

Some analysts suggest this purchase is a wasted effort, given Turkey will acquire F-16s and not F-35s. Clearly, newer and upgraded F-16s are not F-35s. Nonetheless, this type of analysis is blind to the realities of the relationships involved. No amount of wishful thinking will bring the F-35 to Turkey immediately, as sovereign decisions by both parties are now "water under a bridge." Even if the US Congress approved F-35s for Turkey overnight (which is not going to happen soon), the process to get a single F-35 to Turkey is many, many years away. This new F-16 acquisition fills that gap, improving bilateral relations while providing quantifiable, fielded air power for national and NATO commitments on a realistic timeline. This is good for all parties involved.

In the short term, finalizing the F-16 deal reestablishes trust between Washington and Ankara, and gives a boost to NATO planners who will need to rely on Turkish forces to meet deterrence plans for the decade to come.

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# SMALL, SMART, MANY AND CHEAPER: COMPETITIVE ADAPTATION IN MODERN WARFARE

Defense Journal’s Rich Outzen spoke with T. X. Hammes, a nonresident senior fellow in the *Forward Defense* program of the Atlantic Council’s Scowcroft Center for Strategy and Security and a distinguished research fellow in the Center for Strategic Research at the Institute of National Security Studies of the US National Defense University, on January 26, 2024. The conversation is lightly edited for style.

**Defense Journal by Atlantic Council in Turkey (DJ):** Dr. Hammes, you’ve been tracking and predicting developments in drones, unmanned systems, and the changing nature of combined arms warfare for over a decade now. Looking back, what has surprised you and what has confirmed your early surmises in recent years?

**TXH:** From the beginning I expected that “small, smart, and many” could overcome “few and exquisite” by sheer numbers. The general trend has held, but what has surprised me—especially in Ukraine—has been how quickly users have adapted. For instance, Ukraine has employed carpenters to build drones made out of wood powered by outboard motors. It was undeterred by its lack of manufacturing facilities for advanced synthetic materials. These drones launch from a simple wheeled carriage but can achieve a range of 750 kilometers, and carry a fairly substantial payload. These very cheap systems are being used to attack oil facilities deep in Russia.

I suggested in 2016 that, in many cases, an unmanned aerial system (UAS) doesn’t necessarily have to deliver the explosive; it is enough to bring the detonator. Modern societies provide their own explosives and combustibles. Very small drones can do great damage by impacting with enough of a detonating charge to induce fuel, ammunition, or energy sources to explode. Large warheads are not required.

In 2016, the idea had little traction with senior [officers], but younger, field grade officers got it. Unfortunately, developing a concept and bending the procurement system are two very different things. We have the “iron triangle” of vested interests in procurement—defense contractors, the Pentagon, and Congress. Each is vested in keeping current systems and approaches for as long as possible. This is very difficult to change. Congressional reversal of the US Navy’s attempt to not refuel an aircraft carrier (the *Harry S. Truman*) in favor of devoting more resources to advanced strike





capabilities is an example of this. There are thousands of jobs in congressional districts engaged in military production: the Joint Strike Fighter (F-35) involves production in forty-five of the fifty states. Couple these economic incentives with the fact that military officers are inherently conservative as a group, and you see resistance to real or rapid change.

As always, warfare will include the adaption, counteradaption and counter-counteradaption cycle. The Turkish Bayraktar drones were a shock early in the war in Ukraine, but the Russians gradually got an air defense system together and effectively neutralized the Bayraktar. Today, the Turks are developing jet stealth systems like the US Valkyrie XQ58A. I don't know what the Turkish model will cost, but the Valkyrie is roughly \$4 million apiece. The F-35 costs nearly \$140 million each. With an expected operational lifespan of 8,000 hours, at \$30,000 per flight hour, the lifetime operations and maintenance (O&M) cost can exceed \$360 million per F-35. This gets to be real money over time. Further, with the current fleet-wide mission capable rate of just over 50 percent, you effectively need two aircraft (for \$720 million) to ensure one mission-capable aircraft. Current full-mission capable rates on the F-35 are 28 percent, so we're close to needing four to ensure one fully mission-capable aircraft. In essence you are spending \$1.4 billion for each full mission-capable F-35. You can have hundreds of XQ58As at that price. And the world will know where the F-35s are (few in number, operating in a world with pervasive surveillance). Keep in mind, these figures cover only O&M costs for F-35s. They do not cover the cost of pilot or maintenance personnel and training pipelines. Nor do they cover the cost of large fixed air bases and air defense for the facilities required to operate F-35s.

The Turks will likely develop an export version of their aircraft, and so we can see a world in which small, high-speed, deep-penetrating drones with a variety of onboard armaments and sensors will be available to almost anyone. Drones like these can operate up to 1,500 miles beyond launch points. And they do about the same as some of the advanced munitions fired by F-35s, such as the Joint Air-to-Surface Standoff Missile, or JASSM, at \$3 million a missile.

**DJ:** Some observers think that Russia is winning the drone war against Ukraine, including Eric Schmidt, whose recent *Foreign Affairs* article, "Ukraine Is Losing the Drone War," cited the effective pairing of drones for observation and strike (Orlans and Lancets). Do you agree?

**TXH:** Schmidt is right about Russia outproducing Ukraine in drones. But this does not translate directly to winning the conflict. I find it bizarre that some commentators essentially take the Russian side without critical comparison. This goes for commentators and in some cases political leaders. If you look at both Russian and Ukrainian sources, Ukraine continues to inflict three or four times as many casualties on attacking Russian forces: this is typically the case, an advantage to the defender.

With regards to UAS, both sides are training a lot of drone pilots. But as the war drags on, both Ukrainians and Russians are finding difficulty in recruiting for traditional combat arms. For instance, recent warehouse fires in Saint Petersburg and elsewhere in Russia reportedly stem from resistance to the forced roundup of conscripts for the war.

In the case of the *Foreign Affairs* article, title notwithstanding, the piece was not really about the drone competition—it was about industrial competition and the race to mass produce. The article

was right: it's an industrial competition. Ukraine can win and compete if the United States leans into it. But the Biden administration has been too reticent in providing advanced and long-range strike systems. The Kerch Strait Bridge should be down. And why are we demilitarizing MLRS [multiple launch rocket system] ammunition rather than allowing the Ukrainians to fire it in defense of their country? Domestic politics on both sides of the aisle has been working against us fully leaning into the defense industrial competition. The Russian production goal is two million UAS per year; they are not there yet. The Ukrainian goal is 100,000 per month. They are producing enough to pose a substantial long-range strike capability deep into Russia. Russia has already had to pull air defense systems back from Ukraine into its own territory to defend key sites.

In the Ukraine war, we are seeing early forms of largely autonomous UAS and swarm usage. After launch, some of these systems can be fully autonomous. If you launch tens of thousands per month, the requirement for autonomous guidance grows. It is far more complex than UAS usage in counterinsurgency or small wars.

**DJ:** Turning to the US military, have we adapted doctrine, organization, and employment to shift from drones as a counterterror platform to drones as an integral part of maneuver warfare?

**TXH:** The services are trying. The US Navy fielded Task Force 59 in the Persian Gulf as a way to deploy experimental unmanned technologies and designs. The US Fourth Fleet stood up an experimental task force. The Navy also deployed a four-ship squadron of unmanned systems in the Pacific—primarily as a sensor package. Following the Marine Corps FD2030 lead [Force Design 2030], the US Army has a Strategic Mid-range Fires program that includes small-signature trucks launching Tomahawks and other missiles up to and beyond 1,500 miles. In a major war against a near-peer competitor—say China—airfields and fixed installations will be heavily targeted, so distributed fires of this sort will be important. We can conceivably go to country X and buy native-style trucks, which will be very survivable due to blending in, and put these systems on them. The US Air Force is investing in unmanned combat vehicles as wingmen for F-35s or advanced bombers. But again, everyone will know where the advanced bombers live and stay. Containerized missiles based on commercial ships can saturate bomber airfields and kill low-density, high-cost assets on the ground.

In sum, we are seeing adaptation beginning across the forces, but procurement and advanced planning remain the big problems. Instead of \$360 million for one aircraft we should consider buying 360 \$1 million missiles in containers. These systems need a high level of autonomy and small crews. In the current environment, we need to focus resources on the weapons, not the delivery platforms. Low cost and expendable, primarily unmanned weapons will overwhelm the large, exquisite but few platforms of our current forces.

**DJ:** *Defense Journal* examines issues of common interest to the United States, Turkey, and NATO. Can I get your views on the Turkish experience with UAS, and how they've become a major player in production, export, and operational use of UAS?

**TXH:** Unmanned systems allow a country at very low cost to influence a conflict. With automated systems you can intervene regionally with lower human cost, and little risk of blowback. Turkey has

done this successfully. What will be interesting is when the other side starts countering with their own UASs. As these systems proliferate, what is to keep cheap launch trucks and boats from approaching striking range of Turkey? When everyone has long-range precision strike capability, and every modern society has highly combustible, energy-dense targets embedded in their society, security concepts have to adapt. Not just medium powers, but insurgent groups have the ability increasingly to conduct this type of operation. The Houthis proved this with the attack on Saudi oil facilities. There are massive geopolitical implications when everyone can strike at long range.

**DJ:** In most military technological fields there is a sort of dialectic or cat-and-mouse game between developers of offensive and defensive systems. Why the great lag in counter-UAS systems vis-à-vis the platforms themselves?

**TXH:** There is a lag. UASs present a very tough challenge. Many are very small and made of polymers, plastics, and wood, so they are very difficult to track and engage. That said, the electronic warfare (EW) systems of Russia and Ukraine have been very effective. But the counter-countermeasure has been more autonomy for the attack systems. We are seeing autonomous drones that carry EW jammers, and rely more on visual/optical IR [i.e., infrared] sensors. In the war in Karabagh, 70 percent of vehicle kills were achieved by drones or drone-fired munitions—and the Armenian side was not prepared. If you look at Reddit and other social media feeds covering the fighting in Ukraine, you can see absolutely terrifying videos of how UASs dominate the battlespace. UASs are hunting individual vehicles and soldiers. They can fly into buildings and turn corners in pursuit.

The game of competitive adaption has been a mixed bag. At one level, UAS have greatly strengthened tactical defense. Yet with increased methods of long-range strike, at the operational level, offensive capabilities are strengthened. Perhaps also strategically, as we see Ukraine going hard against the Russian oil industry.

We are starting to see the advent of counterdrone drones: drones that fly into other drones. It will be interesting to see how this further develops; we are likely to see a cheap version of the identify friend or foe (IFF) sensors carried on manned aircraft to protect drones operating over friendly forces, so you don't have your own killing your own. The innovation cycle in Ukraine is very short, with each side adapting rapidly, sometimes in a few days, to innovations by the other side. In fact, Ukrainian innovation with naval drones has pushed the Russian Black Sea fleet back significantly. In less than a year, starting from scratch, Ukraine developed unmanned surface vessels that hit several Russia ships and restored export shipping lanes for Ukrainian products.

There is a need now for better command and control nodes to consolidate information from pervasive drone sensors and get it to commanders. We have entered the era of pervasive intelligence for targeting; everyone will be visible and targetable, so everyone will have to keep moving.

My key advice for the United States and its friends is to get away from focusing on platforms and focus on weapons.





## DEFENSE JOURNAL BY ATLANTIC COUNCIL IN TURKEY INTERVIEW WITH GREGORY BLOOM

Gregory Bloom is a board director of the American Turkish Business Roundtable (ATBR), an initiative to strengthen bilateral cooperation in strategic business affairs between the US and Turkish private sectors. Bloom is a distinguished business and industry leader with an extensive record of thought leadership in print and broadcast media. He is also a senior advisor at the Atlantic Council's Scowcroft Center for Strategy and Security the chief operating officer of Jones Group International, which is involved in the ATBR as an initiative to deepen bilateral US-Turkish strategic cooperation.

**Defense Journal by Atlantic Council in Turkey (DJ):** ATBR is a fairly new enterprise but one with potentially big impact on US-Turkish strategic cooperation. Can you tell us a little about its mission and purpose?

**Bloom:** The American Turkish Business Roundtable, or ATBR, is a nonprofit organization with 501(c)(6) legal status in the United States with a singular purpose of promoting bilateral trade between the United States and Turkey. The organizers have deep experience with the US defense industrial base (DIB) and a related interest in energy infrastructure and energy security. Simply put, ATBR is an initiative to improve stability and advance the interests of the United States and its treaty allies through cooperation in defense and energy, where there are obvious synergies but also numerous roadblocks—thus the need for a forum to seek creative, mutually beneficial solutions to common challenges.

The ATBR is a priority for the Jones Group, a business run under the guidance of former Supreme Allied Commander Europe and former US National Security Advisor Gen. James Jones. Gen. Jones' time in NATO, and later as head of the American-Turkish Council, formed his understanding of Turkey as a defense and strategic partner for the United States—but also a potentially very important trade and economic partner. The Jones Group sees ATBR as a form of public-private partnership that enables cooperation in defense, energy, and trade.

**DJ:** If the focus is trade, how is this different from other commercial support groups, such as the US Chamber of Commerce and its Turkish counterpart?

**Bloom:** We focus on helping Turkish companies engage with potential US partners and seek areas of mutual benefit. This is a bit different from the mission of US trade promotion organizations, such as the US Chamber of Commerce, that promote the interests of US companies abroad. ATBR looks to collaborate and cooperate with other trade promotion organizations and strengthen the bilateral relationship. We are seeking synergies.

The Turkish DIB benefited in many ways from partnerships with US companies, including F-16 production over several decades and early development of the F-35, the contentious end of Turkish production for the F-35 notwithstanding. This demonstrated that the US and Turkish DIBs have a synergistic capacity in a number of areas. Partnerships and collaboration can benefit both sides. As we like to say, defense cooperation begins not on the battlefield but on the factory floor.

**DJ:** Defense industrial collaboration went into a deep freeze between 2010 and 2024. The approval of the F-16 deal and announcement of artillery ammunition coproduction in early 2024 seem like the opening of a new stage. Is defense cooperation now increasing in scope?

**Bloom:** We are engaged with a great number of defense sector producers in both Turkey and the United States; we, and those we talk with, see the current fragility of the US DIB as an urgent call for partners. Turkey has the ability and resources to be a great partner in this regard. US defense manufacturers focus on high-end but frequently expensive solutions—what we might call the few and exquisite. Turkish defense industry produces items at a lower price point but an effective level of performance—what we might call the many and adequate. In terms of defense strategy, there is a need for both.

**DJ:** If the need is obvious, why is there a need for an organization to facilitate? Won't the governmental or corporate organizations find opportunities for collaboration?

**Bloom:** This is not always a natural or easy strategic partnership, though it is one with great present and potential value. There are many differences in politics, strategic culture, and position that make this a thornier relationship on both sides than, say, the one between the United States and the United Kingdom. Given the number of complicating factors, private sector facilitation, especially from the US side, provides an important balancing and catalytic element to motivate both sides to overcome the known obstacles.

**DJ:** The hallmark of bilateral cooperation during the Cold War was defense, but ATBR focuses on energy as an important second pillar. Why?

**Bloom:** Energy policy is a central strand of statecraft. Strong partnership in geopolitical matters requires not just cooperation on defense but a common approach to stability—and energy matters as much as military or counterterrorism and counterintelligence for stability. Cooperation on energy makes the region more stable—in the case of the United States and Turkey, multiple regions. Washington and Ankara are both interested in energy flows from the Caucasus, through the Black Sea, Iraq, the Gulf, North Africa, the eastern Mediterranean. Energy policy is a key tool to incentivize partnerships and reconciliation—if we get this right with Turkey, the profits will be geopolitical and strategic, as well as economic.



**DJ:** Is the ATBR interested in areas beyond defense and energy?

**Bloom:** Our project is about connecting Turkish companies and US partners for mutually beneficial and strategically important projects. We've talked to both sides about minerals, heavy industry, construction, and tourism. But defense and energy are the most tangible projects that generate momentum for the others, and so they have been an early focus.

**DJ:** Given the turbulence in bilateral relations over the past fifteen years, is the private sector gun-shy or risk-averse? Is there an appetite on both sides for new initiatives?

**Bloom:** For certain, there is appetite on defense and energy. People who understand the limitations of the US DIB get the need for it. The “few and exquisite” combined in a package with “the many and adequate” in terms of price and sophistication is the *sine qua non* of warfare in the early twenty-first century. Tons of Turkish and US defense and industry experts see this, so we see an increasing desire for corporate cooperation. With the recent deal between Turkish Repkon and General Dynamics as an example, we find that when the private sector finds complementary solutions, the policy process becomes easier. Sometimes, bottoms-up works better than top-down in defense-industrial cooperation.

**DJ:** Final thoughts on what the ATBR might achieve in the defense sector?

**Bloom:** ATBR is chaired by Gen. Jones. Gen. Tod Wolters, another former SACEUR, is a board member. This shows that the most authoritative voices on transatlantic security consider the US-Turkish bilateral relationship as a critical component of security for those two countries but also for the Alliance as a whole. There is a parallel to the thinking behind the Abraham Accords—that trade and mutual interest can overcome frictions and disinclinations. The overriding logic of mutual benefit, operationalized by US and Turkish companies, will benefit the strategic interests of both countries.



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