

Not an Intellectual Exercise

Lessons from U.S.-Israeli Institutional Army Cooperation, 1973–1982

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When the Yom Kippur War broke out in October 1973, the U.S. Army Training and Doctrine Command (TRADOC) had existed for a mere three months. The TRADOC commander, Gen. William DePuy, sent his armor commandant, Maj. Gen. Donn Starry, and the XM1 tank program director, Brig. Gen. Bob Baer, to visit Israel and report on the war's implications. This marked the beginning of a long and in-depth series of U.S. Army visits intended to extract lessons from the war and the start of personal relationships between Starry and some of his Israel Defense Forces (IDF) colleagues, which would have a great impact on the U.S. Army in the coming years.

While there is some debate among historians about whether the Yom Kippur War changed or merely confirmed the doctrinal views of these Army leaders, there is no doubt that the conflict's lessons contributed to the development of the Active Defense doctrine in 1976, which evolved into the AirLand Battle doctrine, published in 1982. Beyond the doctrinal impact, the IDF's initial setbacks and ultimate victories in the

An Israeli tank unit forms for a counterattack 8 October 1973 against Syrian armor on the Golan Heights. (Photo by David Rubinger, Israel Government Press Office)



Golan Heights and the Sinai Peninsula captured the interest of a generation of U.S. Army officers emerging from Vietnam with a renewed focus on conventional warfare and the Soviet threat in Europe. Furthermore, the lessons of the Yom Kippur War are clearly visible in the “Big Five” weapons systems that emerged during a golden age of effective U.S. Army modernization.

devotes considerable resources to this effort, and Army senior leaders have made it clear that collaboration with allies and partners is a priority.³ The headquarters of geographic combatant commands and Army service component commands maintain robust staffs of military and civilian professionals who focus on exercises, combined training, and military-to-military engage-

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All of this is well known; Army leaders today often stress the foundational importance of TRADOC’s relations with the IDF (and rightly so) at bilateral events, and both professional historians and Command and General Staff College students have written much about DePuy and Starry and the development of AirLand Battle.¹ But less has been said about what this period of relations between the U.S. Army and the IDF represents as an example of military diplomacy. This article seeks to explore that topic and to examine its implications for present-day cooperation between the two armies.

The flurry of institutional and high-level personal contact between the two armies after the end of the Yom Kippur War was something unique, falling outside the usual categories of U.S. Army relations with allies and partners. Furthermore, the conditions of the mid-1970s have much in common with those of 2019, not only in the challenges that both armies face but also in their comparative strategic and institutional requirements. Present conditions call for a form of sustained, balanced collaboration focused on modernization, individual and collective training methods, and rapid exchange of battlefield lessons learned (as epitomized by the Starry Report and its aftermath).²

Context: U.S. Army International Engagement and the IDF

Before delving into U.S. military relations with Israel, a general look at how the U.S. Army conducts international engagement is in order. The Army

The Army headquarters holds staff talks with partner armies around the world, resulting in “agreed-to-actions” that meet both sides’ priorities.

In addition, the Army maintains a regionally specialized foreign area officer corps, which officers enter as senior captains or junior majors and serve in for the remainder of their careers. These officers receive language education, regional experience, and relevant postgraduate education before embarking on assignments, both in region and on staffs, that focus on cooperation with military partners. As field units and headquarters assimilate increasingly advanced technology, “interoperability”—the ability of allied armies to connect their systems and fight together—has become a key goal in the Army’s international engagement.

All of these aspects of military cooperation serve the U.S. Army-IDF relationship well. Army forces in Europe conduct a number of joint events or exercises with the IDF, particularly in the realm of air and missile defense, and annual IDF participation in multilateral exercises has been expanding from company to battalion size in the past two years. Senior leaders from both armies interact frequently, and working-level delegations conduct routine reciprocal visits to share tactics, techniques, and procedures in numerous fields. In addition to planned Army staff talks, which will open up opportunities with additional Army commands, the Future Battlefield Annual Talks provide a framework for annual cooperation between the IDF ground forces and TRADOC. Army

special operations and National Guard cooperation with Israeli partners is equally comprehensive.

Yet, even in comparison with today's robust engagement, the scope and depth of U.S.-Israeli institutional army cooperation from 1973 to 1982 stands apart. This is due in part to the historical conditions in which both armies found themselves. Both, whether they knew it or not, were at the end of an era and the dawn of a new one. The U.S. Army was emerging from a decade of counterinsurgency in Vietnam and thirty-three years of compulsory service. As its senior officers tried to build a new all-volunteer force in an environment of low public esteem for the military, they also had to reorient themselves to conventional warfare and the potential battlefields of Central Europe. For this fight, they had only their experience as junior officers in World War II to guide them, while field grade officers and below had little relevant experience at all. Their Warsaw Pact adversaries, in the meantime, presented a formidable threat in mid-intensity conflict.⁴ As aforementioned, TRADOC was established in the summer of 1973 to meet these challenges, and DePuy was its first commander.

The IDF, for its part, was coming to the end of its existential, mid-intensity wars with Arab armies, though that was not yet clear at the time. While the initial failures of the Yom Kippur War were obviously a shock to the IDF and Israeli society, the IDF's position as the most experienced of all Western-style armies in conventional warfare was beyond dispute.

Unprecedented Access: Starry's First Visits and Initial Lessons

The impetus for Starry and Baer's initial visit to Israel came from Chief of Staff of the Army Gen. Creighton Abrams, who thought the Yom Kippur War's lessons urgent enough that he redirected the two subordinate generals in the middle of a visit to the United Kingdom. As Starry recalled in an interview, Abrams not only requested the general lessons of the war but also specifically tied the visit to the war's potential impact on tank procurement decisions at senior levels in Washington, D.C.—not the last time that Israeli operational lessons would be employed to support endangered Army capability development efforts.⁵

The visit provided Starry his first encounters with Gen. Moshe "Musa" Peled, hero of the Golan Heights front and commander of the IDF Armor Corps, and

Gen. Israel Tal, founder of the Merkava tank program. Starry spent several days with Tal with a focus on the nascent Merkava, which was a Frankenstein's monster-like prototype thrown together from parts of various tanks at the time, as it fired test rounds into the Mediterranean Sea from Palmachim. Starry then spent several more days with Peled and the IDF Armor Corps before using the rest of the visit to walk the battlefields of the Golan Heights and the Sinai Peninsula with the battalion- to division-level commanders who had fought there.⁶

It is worth emphasizing that the level of access was extraordinary, even in light of Israeli gratitude for critical American assistance during the war. The IDF was presumably very busy consolidating its gains, rebuilding damaged units and equipment stocks, and reckoning with internal and national soul-searching about the war's lessons. Yet, with no immediate tangible benefit for them or their country, IDF commanders at every level found the time to present two relatively junior American generals with a cross-section of capability development, lessons learned, training methods, and battlefield analysis.

The many visits that followed, not only those of Starry and Baer, were also characterized by surprising depth and breadth of engagement. For example, when the U.S. Army Infantry School commandant and his deputy visited in December 1976 and February 1977, respectively, both met with IDF Chief of Staff Lt. Gen. Mordechai "Motta" Gur.⁷ Gur's willingness to meet with one- and two-star generals and to discuss antitank weapon systems, mechanized infantry training methods, and the appropriate number of soldiers in an infantry squad demonstrated the priority that the two armies placed on both institutional army concerns and bilateral cooperation. The IDF offered not only the highest levels of engagement but also surprisingly low ones, such as inviting the U.S. Army

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Infantry School deputy commandant to observe an armor company's live-fire exercise in its entirety.⁸ Visits to brigade-level exercises featured engagement at every level during tactical operations, allowing U.S. Army visitors to write exhaustive reports on IDF tactics, techniques, and procedures. The level of detail recorded says much about the U.S. Army's appetite for reforming its own training methods, equipment, and doctrine, and its enthusiasm for those of an allied army that had recently fought a mid-intensity war.

Starry, in his TRADOC analysis of the Yom Kippur War, was somewhat dismissive of the reports on IDF tactics, techniques, and procedures and wrote, "The height and breadth of information ... could be measured in kilometers, the depth of analysis in millimeters."⁹ He believed that the main doctrinal lessons were already clear in his report to Abrams after his first trip, but that many further trips and conversations with friends like Peled and Tal were necessary to elaborate on them and answer questions they raised.¹⁰ This included the density and lethality of the modern ground and air battlefields, the necessity of combined arms warfare, and the need for commanders to observe and disrupt the enemy's rear and deep echelons.

U.S.-Israeli Institutional Army Cooperation after 1973: Impact on the U.S. Army

Historians have debated whether the lessons of the war really transformed Starry and DePuy's understanding of modern warfare or simply served as ammunition to support conclusions they had already reached.¹¹ Starry himself wrote that he felt the war's lessons confirmed the path he was already on in developing the Army's new doctrine.¹² But for those examining the post-Yom Kippur War relationship from a security cooperation standpoint, this is beside the point. One measures the significance of cooperation between friendly institutional armies by the degree of actual impact on how each army trains and fights, not by the extent of the shift in generals' opinions.

What exactly was unique about all of this exchange and its influence on U.S. Army doctrine? The Army, after all, has been in continuous doctrinal dialogue with its NATO allies throughout the history of that alliance, and unlike its relations with the IDF, the U.S. Army actually writes and abides by combined doctrine with the German and British armies, which Starry also personally visited during his time.¹³ But, unlike the IDF, NATO allies lacked conventional combat experience, and they had



few lessons learned from conflicts relevant to the Soviet threat in Europe to impart to one another. It was the very difference between the U.S. Army and the IDF that made their collaboration from 1973 to 1982 so useful. In today's era of focus on interoperability, the IDF's status as a closely standing somewhat apart from the U.S. Army's likely operational scenarios is again apparent.

For the U.S. Army, the impact of the Yom Kippur War was particularly crucial for capstone doctrine. Starry described this succinctly in a 1976 letter: "It may interest you to know that most of the recent TRADOC literature was stimulated by my visit to Israel shortly after the war and subsequent work with the Israeli leaders."¹⁴ By the time DePuy presented his report, "Implications of the Middle East War on U.S. Army Tactics, Doctrine, and Systems," TRADOC had divided the actionable lessons into 162 recommendations, twenty of which were classified as "completed."¹⁵ The detail of this effort matched its scale, with DePuy emphasizing topics as diverse as non-flammable hydraulic fluid, ammunition storage below the turret, and battlefield cannibalization. It is unlikely that the modern U.S. Army has ever attempted to implement foreign lessons learned on a similar scale.

DePuy concluded his summary by reminding Army leaders that this effort was not a mere "intellectual exercise."¹⁶ He stressed that all of the Army's concepts and doctrine, capability development, and training efforts must link to the war's lessons. Again, for an Army not always known for studying its own campaigns (let alone those of others), this requirement to "crosswalk" force buildup efforts with lessons from a foreign war seems unique in the history of U.S. Army foreign relations.

The resulting capstone doctrine was Active Defense, followed by AirLand Battle, which became well known. But Starry and DePuy did not intend for the war's lessons to solely or even primarily influence doctrine.¹⁷ Israeli techniques for individual and collective training, which U.S. generals viewed as having been decisive in the IDF's victory while fighting outnumbered, were equally important.

Starry was not alone in this view. Brig. Gen. Paul F. Gorman, who served as TRADOC deputy chief of staff for training and later as commandant of the U.S. Army Infantry School, took part in intense engagement with the IDF in the mid-1970s and determined that training was the variable that had won the war. He studied the detailed data that the Israelis had on tank battles and examined Israeli tank commander and gunnery training. However, the level of detail went beyond mere exchanges of expertise and included TRADOC obtaining translations of Israeli training manuals, gunnery qualification tables, and armor exercise plans from crew to battalion level.¹⁸ (This is more akin to what partner nations receive today from the U.S. Army during foreign military sales—except that these exchanges were free between trusting partners.)

With this information, Gorman concluded that IDF armor training had not only been the decisive factor in those battles but also invalidated then fashionable theories about the overriding importance of numbers on the battlefield.¹⁹ This approach clearly linked operational success on the battlefield with institutional Army reforms, which were the ultimate objective of the Army generals' engagement with their IDF partners. DePuy wrote that when equally advanced weapons systems clashed on the battlefield, "courage, imagination, and the training of the commanders made the difference."²⁰

Influence on U.S. Army Materiel Modernization

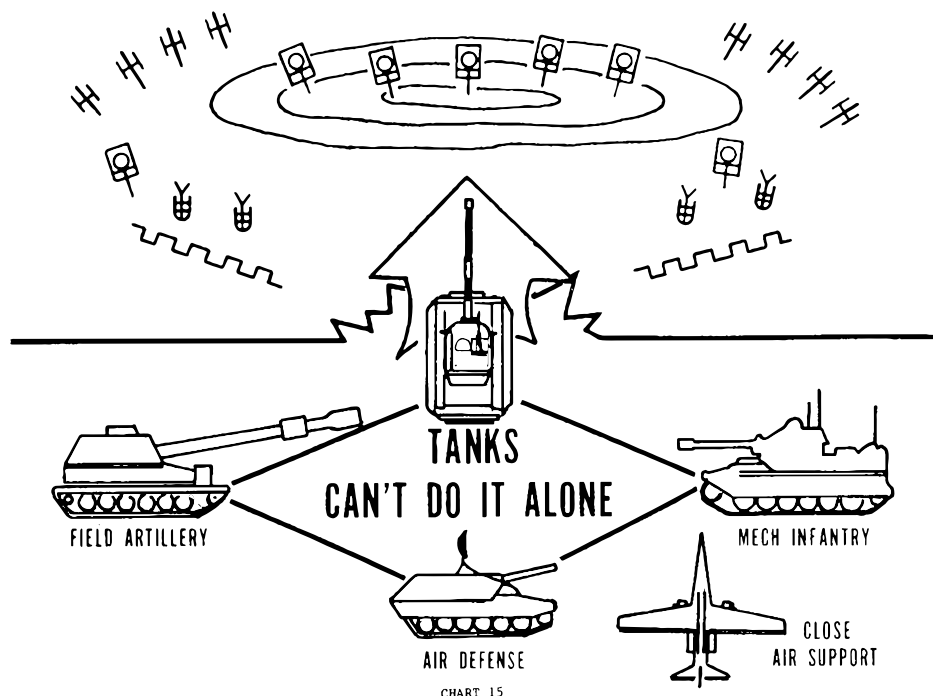
DePuy and Starry's efforts in the early days of TRADOC encompassed materiel modernization in addition to training and doctrine, and here as well, engagement with Israel had a unique influence. Both generals believed that concerns about the tank's obsolescence were overwrought and that the tank simply needed adequate combined arms support to enable its continued preeminence in ground combat. DePuy's "Implications of the Middle East War on U.S. Army Tactics, Doctrine, and Systems," a report on the ramifications of the Yom

Previous page: A destroyed Israeli (U.S.-made) M60 tank sits amongst the debris of other armor after an Israeli counterattack in the Sinai near the Suez Canal during the 1973 Yom Kippur War. In the initial crossing of the Suez by Egyptian forces, Israeli leaders assumed Egyptian soldiers would flee at the first sight of Israeli armor as they had in the 1967 war. However, Egyptian forces had studied Israeli tactics from the 1967 war and were well prepared to defend against the anticipated initial use of Israeli armor. This resulted in near catastrophe for Israeli forces in the early stages of the conflict, although Israel was eventually able to regain the initiative. (Photo courtesy of *Military Battles on the Egyptian Front* by Gammal Hammad via Wikimedia Commons)

Kippur War, included a chart depicting the tank's continued centrality, with air defense, mechanized infantry, close air support, and field artillery in support (see figure).²¹ This represented four of what would become the "Big Five": the Abrams main battle tank, the Bradley Fighting Vehicle, the Apache attack helicopter, and the Patriot air defense system. The unmentioned fifth capability, the Black Hawk helicopter, reflected Starry's views about rapid transport of troops around and between close and deep areas.²²

Beyond the Big Five, Starry explicitly linked the lessons of the war to the requirements that spurred the development of the Joint Surveillance and Target Attack Radar System and the Army Tactical Missile System as well.²³ The Army's simultaneous development of the Multiple Launch Rocket System transformed its capabilities in the fifth field listed on DePuy's chart: field artillery. This employment of a foreign ally's military lessons, as opposed to intelligence regarding foreign adversary capabilities, to win Pentagon procurement battles has few parallels in the Army's history.

Historians have criticized Starry and other officers for a selective and overly rosy portrayal of the IDF's performance in the war. For one thing, Starry focused heavily on the theater of war in the Golan Heights while paying less attention to the decisive front in the Sinai Peninsula. More broadly, the American generals' reports on the war's lessons paid scant attention to the IDF's many errors, including suffering surprise at its outset.²⁴ But this was a strategic failure, and TRADOC's interest in the war was not about strategy but rather tactics, campaigning, and modernization. What may look like a selective or dishonest analysis to a trained historian was, from Starry's perspective, a focus on what was important to the U.S. Army of the 1970s.



(Figure from William E. DePuy, "Implications of the Middle East War on U.S. Army Tactics, Doctrine, and Systems")

Figure. Tank's Continued Centrality Representing Four of the "Big Five"

In any case, Israeli failures were not entirely ignored. DePuy's "Implications of the Middle East War on U.S. Army Tactics, Doctrine, and Systems" described in detail the disastrous early counterattack in the northern Sinai Peninsula and used it to concede that unsupported armor was no longer viable on the modern battlefield.²⁵ It is no surprise that Starry and DePuy, like others, used the lessons of the war to push their own agenda for procurement and doctrine (as that is what military and bureaucratic leaders do). U.S. military leaders today are similarly selective in their approach to IDF doctrine and lessons. Counterinsurgency in the West Bank, for example, is simply of less interest to the U.S. Army's current and future concepts than what a "Gideon" brigade combat team might do in a campaign against Hezbollah and other Iranian proxies on the Lebanese and Syrian fronts.

The (Genuine) Importance of Relationships

An important characteristic of Starry's long collaboration with the IDF was his development of personal relationships. These are difficult to achieve between leaders

who change positions every two years. However, Starry managed to retain intense collaboration with Israel as a common thread throughout his years at the U.S. Army Armor School, V Corps, and as the head of TRADOC. Gens. Israel Tal and Moshe “Musa” Peled in particular became personal friends. Starry even shared internal frustrations with his Israeli counterparts, once writing to Col. Bruce Williams, the U.S. Army attaché in Israel, to convey his disappointment to Peled about the U.S. decision to cut funding for a new infantry fighting vehicle.²⁶ Thanks to these personal ties, the visits flowed in both directions. In one instance, in 1977, Peled happened to be touring the border line in Germany with Starry when a Soviet division-sized movement eluded U.S./NATO observation. This prompted Peled to lead a visit for U.S. Army V Corps staff to the Golan Heights battlefields focused on division/corps commander situational awareness.²⁷ These friendships not only had strategic impacts for Starry and the U.S. Army but also for Israel in the political realm, as in the case of Starry’s intervention with Secretary of State Alexander Haig regarding Israel’s worries about the warming U.S.-Egypt relationship.²⁸ Conversely, relationships greased the wheels of tactical-level cooperation when political considerations interfered. When American political sensitivities prevented U.S. Army visits to the Lebanon front in 1982, Starry’s friends in the IDF ensured that he received IDF primary sources on the war, which were even translated for him.²⁹ While vague praise for the importance of relationships is ubiquitous in international cooperation, the Starry era of IDF-U.S. Army cooperation laid bare its practical significance.

The beginning of the First Lebanon War marked an interesting end to this era of intensive cooperation related to mid-intensity conflict. When the war broke out, Starry was again the first U.S. military leader to rush to Israel, where his many longtime Israeli friends received him with the customary openness. However, U.S. political considerations prevented him from visiting the battlefields themselves, so IDF Chief of Staff Lt. Gen. Rafael “Rafael” Eitan brought IDF ground forces, air force, and intelligence senior leaders from the front to brief Starry on the key developments. In a letter to Chief of Staff of the Army Gen. E. C. Meyer, Starry complained that the Army was “fumbling” to mount an effective mission to gather lessons learned, just as it had in 1973–1974.³⁰ He recommended establishing a standing mechanism for lessons-learned missions to Israel.

Absent from Starry’s commentary on the visit was any acknowledgment that the nature of Israel’s wars was changing. It seems that he expected the First Lebanon War’s lessons to stem from the initial mid-intensity combat with Palestinian and Syrian forces and to center on tank design, the role of close air support, and so on—much like the Yom Kippur War. In reality, the IDF was facing a shift toward asymmetric warfare that would continue to this day.³¹ The U.S. Army would not face a similar shift until 2003, when twenty years of IDF lessons from Beirut, Nablus, and Jenin would suddenly become significant.

Lessons for U.S.-Israeli Institutional Army Cooperation Today

What does post-1973 U.S.-Israeli institutional army cooperation teach us today? There are a number of differences in the circumstances. Most importantly, the two armies are no longer preparing for the same type of enemy. As described in the “Land on the Horizon” concept for 2028, the IDF’s reference threat is a hybrid, nonstate adversary, although a capable one with a number of high-level capabilities. TRADOC Pamphlet 525-3-1, *The U.S. Army in Multi-Domain Operations 2028*, names near-peer state militaries as its reference threat.³² In addition, there is no similar experience gap between the two armies. Both have nearly twenty years of combat experience behind them in similar forms of warfare, although the IDF’s campaigns (with the exception of the Second Intifada) have been short and intense rather than drawn-out counterinsurgencies. This differs from 1973, when the IDF possessed unique experience in the type of war that the U.S. Army was preparing for. Finally, the U.S. Army is not undergoing changes as fundamental as those of the 1970s. There is no change to its accessions model, and levels of morale and professionalism bear no resemblance to those of the post-Vietnam Army.

That said, there is much in common between the two eras that is relevant to cooperation. The U.S. Army is again shifting its focus from asymmetric warfare to near-peer threats, and again senses that it has allowed peer adversaries to narrow capability gaps over the past ten to fifteen years. As in the mid-1970s, both armies believe they are on the brink of an increase in battlefield lethality, at least in the case of a major campaign against their respective reference threats. The IDF is again the first Western-style army with operational lessons learned from a number of technologies essential

to both armies' concepts, such as active protection and integrated air defense systems.

One thing that has changed is the speed and sophistication of the Israeli capability development process. Israel's development of the Iron Dome missile defense system or the Namer Infantry Fighting Vehicle in five years or fewer after the operational need became apparent would be unthinkable in the U.S. Army, which is why it has reorganized its modernization enterprise under the new Army Futures Command.³³ While Israel's small size and limited diversity of adversaries contribute to this phenomenon, the Army would do well to apply Starry-style rigor to *how* the IDF modernizes and not just to the resulting capabilities themselves.

There are additional striking parallels between the required capabilities that Starry and his colleagues gleaned from their Israeli counterparts in the 1970s and those that both sides are discussing today. DePuy's account of the overall challenge of combined arms lethality that the Yom Kippur War battlefield presented—including increasingly effective air-ground and ground-air fires—have a strong echo in the multi-domain “layers of stand-off” that the U.S. Army sees as its chief challenge today.³⁴ There were also specific mid-intensity sustainment capabilities that the U.S. Army had lost during its focus on Vietnam, such as battlefield cannibalization in an environment of high lethality for combat vehicles.³⁵ The parallel today is reconstitution and force regeneration, which the U.S. Army is reexamining for a multi-domain environment, and would likely be of interest to Israeli logistics officers in planning for another war in the north. In other cases, U.S. Army visitors to Israel in the 1970s actually witnessed the birth pangs of technologies, such as remotely controlled and autonomous systems, that are still central to the capability development discussions between the two allies today.³⁶ In reexamining this era of close cooperation, we see that what each side demanded of the other was not so different from today.

Conclusion: Armies that Learn Together

Few on either side of the relationship doubt that Israeli technology will be at the center of cooperation between the two militaries in the near future. Visits from U.S. Army senior leaders always include demonstrations of emerging technologies of interest, and the Army's acquisition of the IDF's Trophy Active

Protection System and Iron Dome missile defense system is likely a sign of more to come.

The post-Yom Kippur War cooperation—which occurred at a time when Israeli technology was far less advanced and was mainly noteworthy for its ingenious field expedient improvisations—teaches us the importance of exchanging lessons learned, and this must not be forgotten through overemphasis on materiel. Starry and his contemporaries learned much during their exchanges about battlefield lethality and the technical capabilities of Sagger antitank missiles and surface-to-air missiles, but they were equally interested in how the IDF Ground Forces Corps adjusted their doctrine, training, and tactics to confront those weapon systems. The IDF armor school and air defense school can play equally critical roles for the U.S. Army in the integration of the Trophy Active Protection System and Iron Dome missile defense system today.

Another lesson of the Starry era in regard to IDF-U.S. Army cooperation is the importance of an “on-demand” lessons-learned mechanism. As deep and fruitful as the cooperation was, Starry always felt that inertia and standard defense cooperation policies hindered rapid progress in integrating lessons learned. His complaints to Meyer during the First Lebanon War indicate that he considered even ten years of his own efforts to improve this problem ineffective.³⁷

The two armies have continued to pass lessons learned in both directions in the decades since. Recent examples include the IDF ground forces delegation that visited TRADOC centers of excellence in 2014 after Operation Protective Edge and U.S. briefings on the lessons of the Battles for Mosul and Raqqa at the Future Battlefield Annual Talks. Lessons learned from exercises, particularly those that test new concepts and capabilities, are another welcome topic during bilateral engagements. But Starry (as well as Peled and Tal) understood that while post-conflict briefings are valuable, walking the battlefields and engaging with combat leaders immediately after, or even during, the battles are more so. One option is a formal, agreed-upon rapid exchange of lessons learned. As much as neither side would like to see it, another Israeli campaign in the North would inevitably generate crucial lessons related to multi-domain operations and current U.S. Army gaps. Any escalation beyond the usual competition against U.S. forces



by adversaries in Europe, the Middle East, or the Pacific would hold similar interest for the IDF.

As for personal relationships, few officers possess the charisma of Starry or Peled. However, Starry's ability to maintain those links across various positions is a good model for others to follow. Longer duration and more thoughtful collaboration must overcome the reset caused by job rotations every one to two years. This is already visible in fields where the two armies cooperate on an extended basis (e.g., air defense). Thanks to combined exercises, many U.S. Army air defense officers acquire copious experience and contacts in Israel throughout their careers. When they visit as senior leaders, they often have years of close association with their Israeli Air Force counterparts and can address larger issues in a way that is immediately apparent. An increase in course attendance in both directions, which has been limited in recent years, would produce more of these relationships, as would the introduction of more opportunities for combined exercises, which is already underway. Starry's decade-long relationship with the IDF, which brought him from the Yom Kippur War to the First Lebanon War, exemplified what

Israeli Lt. Col. Nir Yogeve, movement control battalion commander (*right*), greets U.S. service members 7 February 2019 during exercise Juniper Falcon 19 at Hatzor Air Force Base in Israel. Juniper Falcon 19 is a bilateral exercise between U.S. European Command and the Israel Defense Forces that is designed to improve military relationships and increase interoperability between both nations' militaries. (Photo by Mass Communication Specialist 2nd Class Cody Hendrix, U.S. Navy)

long-duration relations between institutional armies can provide—the chance to watch another army fight, learn lessons, change, fight again, and learn again.

Those interested in determining what is most important in the U.S. Army-IDF relationship should look first at what is most unique. The United States is blessed with many close allies, including some who it expects to fight alongside it in any significant campaign, hence the focus on interoperability. It has partners who purchase American weapons systems, seek U.S. assistance in training officers and soldiers, and are eager to participate in combined exercises with the United States to promote regional security. The existing constructs for cooperation work well for such relationships. The unique, defining characteristic of the

U.S. Army-IDF partnership is two armies that learn together. They are unlikely to fight the same wars, and complicated regional dynamics make it a challenge to conduct large combined ground exercises relevant to both sides. But both armies have been uniquely open to the other's need to absorb lessons in preparation for the future. The

two armies innately trust one another to innovate while fighting, acknowledge mistakes, and put the whole weight of their genius and professionalism toward improvement before the next conflict strikes. The resulting exchange of knowledge is something neither army can expect in quite the same way from any other. ■

Notes

1. See Aaron J. Kaufman, "Continuity and Evolution: General Donn A. Starry and Doctrinal Change in the U.S. Army, 1974-1982" (monograph, Fort Leavenworth, KS: School of Advanced Military Studies, 2012).
2. For Starry's central conclusions from his visit to Israel, see Donn Starry, "TRADOC's Analysis of the Yom Kippur War, Jaffee Center Military Doctrine Joint Conference, Caesarea, Israel, 16 March 1999," in *Press On! Selected Works of General Donn A. Starry*, ed. Lewis Sorley, vol. I (Fort Leavenworth, KS: Combat Studies Institute, 2009).
3. Sydney J. Freedberg Jr., "Trump's Pick for Joint Chiefs Praises Allies, Kurds & Mattis Strategy," *Breaking Defense*, 16 January 2019, accessed 19 August 2019, <https://breakingdefense.com/2019/01/trumps-pick-for-joint-chiefs-praises-allies-kurds-mattis-strategy/>.
4. The Union of Soviet Socialist Republics (USSR), Albania, East Germany, Bulgaria, Romania, Hungary, Poland, and Czechoslovakia. At the time, Ukraine was part of the USSR. See Donn Starry, "Sergeants' Business: U.S. Army Sergeants Major Academy, Fort Bliss, Texas, 3 November 1977," in Sorley, *Press On!*, 1:489.
5. Donn Starry, "Desert Storm Lessons Learned: US Army Military History Institute Oral History Interview, Conducted by Lieutenant Colonel Douglas V. Johnson, Colonel Thomas Sweeney, and Colonel Douglas W. Craft, 18 September 1991," in *Press On! Selected Works of General Donn A. Starry*, ed. Lewis Sorley, vol. II (Fort Leavenworth, KS: Combat Studies Institute, 2009), 1225.
6. *Ibid.*
7. Willard Latham, memorandum, "Trip Report by the Commandant, U.S. Army Infantry School, 6-13 December 1976" (Washington, DC: Department of the Army, 15 February 1977), retrieved from U.S. Army Training and Doctrine Command (TRADOC) Historian Archives; Fred Mahaffey, memorandum, "Israel Visit by Assistant Commandant, USAIS, 5 to 11 February 1977" (Washington, DC: Department of the Army, 31 March 1977), retrieved from TRADOC Historian Archives.
8. Mahaffey, "Israel Visit," Appendix on Visit to Sinai, 2.
9. Donn Starry, "TRADOC's Analysis of the Yom Kippur War, Jaffee Center Military Doctrine Joint Conference, Caesarea, Israel, 16 March 1999," in Sorley, *Press On!*, 1:223.
10. *Ibid.*
11. Saul Bronfeld, "Fighting Outnumbered: The Impact of the Yom Kippur War on the U.S. Army," *The Journal of Military History* 71, no. 2 (April 2007): 465-98.
12. Interview with Donn Starry, in Sorley, *Press On!*, 2:1109.
13. Starry, "German-American Coordination: Letter to Lieutenant Colonel Samuel D. Wilder, Fort Monroe, Virginia, 23 August 1976," in Sorley, *Press On!*, 1:282; Starry, "US and Federal Republic of Germany Doctrine: Letter to Lieutenant General John R. Thurman, Deputy Commanding General, US Army Training and Doctrine Command, 27 September 1978," in Sorley, *Press On!*, 1:335.
14. Donn Starry, "Israeli Relationships: Letter to Lieutenant Colonel Michael D. Mahler, Fairfax, Virginia, 28 April 1976," in Sorley, *Press On!*, 1:280.
15. William DePuy, "Implications of the Middle East War on U.S. Army Tactics, Doctrine, and Systems" (military presentation, February 1975), 53, retrieved from TRADOC Archives.
16. *Ibid.*, 65.
17. For a detailed account of the development of both doctrines, see Aaron J. Kaufman, "Continuity and Evolution: General Donn A. Starry and Doctrinal Change in the U.S. Army, 1974-1982" (monograph, School of Advanced Military Studies, Fort Leavenworth, KS, 2012).
18. Brig. Gen. Paul F. Gorman also recommended that the Army should train a cadre of "master gunners," senior noncommissioned officers as experts on tank gunnery who would go out to every armor battalion and establish the highest standards. The program has since expanded to mechanized infantry gunnery for Bradleys and Strykers, and, in recent years, master gunners have traveled to Israel to test various advanced Israel Defense Forces (IDF) capabilities from a U.S. Army perspective.
19. Paul F. Gorman, "How to Win Outnumbered," sent as an enclosure to a letter to Donn A. Starry, 8 January 1974, box 2, folder 7, Donn A. Starry Collection, U.S. Army Heritage and Education Center.
20. DePuy, "Implications of the Middle East War on U.S. Army Tactics, Doctrine, and Systems," 50.
21. *Ibid.*, Chart 15.
22. Starry, "TRADOC's Analysis of the Yom Kippur War," in Sorley, *Press On!*, 1:223.
23. Starry, "Reflections," in Sorley, *Press On!*, 1:28.
24. Bronfeld, "Fighting Outnumbered," 481-82.
25. DePuy, "Implications of the Middle East War on U.S. Army Tactics, Doctrine, and Systems," 20-21.
26. Starry, "Infantry Fighting Vehicles: Message to Colonel Bruce Williams, United States Defense Attaché Office, Tel Aviv, Israel, 19 January 1978," in Sorley, *Press On!*, 1:242.
27. Starry, "Air Force: AirLand Battle: United States Air Force Oral History Program Interview Conducted by Dr. Harold R. Winton, 13 May 1995," Sorley, *Press On!*, 2:1285.
28. Starry, "Relations with Israel: Letter to Secretary of State Alexander M. Haig, Jr., 28 September 1981," in Sorley, *Press On!*, 2:933.
29. Starry, "Desert Storm Lessons Learned," 2:1224.
30. Starry, "Situations in Germany and Israel: Message to General E. C. Meyer, Army Chief of Staff, 30 November 1982," in Sorley, *Press On!*, 2:945.
31. Pierre Razoux, *Tsahal: Nouvelle histoire de l'armée israélienne* (Paris: Editions Perrin, 2006), 369-459.
32. U.S. Army Training and Doctrine Command (TRADOC) Pamphlet 525-3-1, *The U.S. Army in Multi-Domain Operations, 2028* (Fort Eustis, VA: TRADOC, December 2018), 6-7; "Land on the Horizon" is not publicly available, and the author has drawn information from multiple unclassified IDF briefings in 2018.
33. Israel Ministry of Defense's Tank Directorate and Directorate of Defense Research and Development, in discussions with author, 2018-2019.
34. DePuy, "Implications of the Middle East War on U.S. Army Tactics, Doctrine, and Systems," 25-28.
35. *Ibid.*, 54-57.
36. David Stefanye, memorandum, "Trip Report, Visit to Israel on 18-21 October 1976" (Washington, DC: Department of the Army, 2 November 1976), 13, retrieved from TRADOC Historian.
37. Starry, "Situations in Germany and Israel," in Sorley, *Press On!*, 2:945.