

To Offset Dangerous Iran Deal, Expedite KC-46As to Israel

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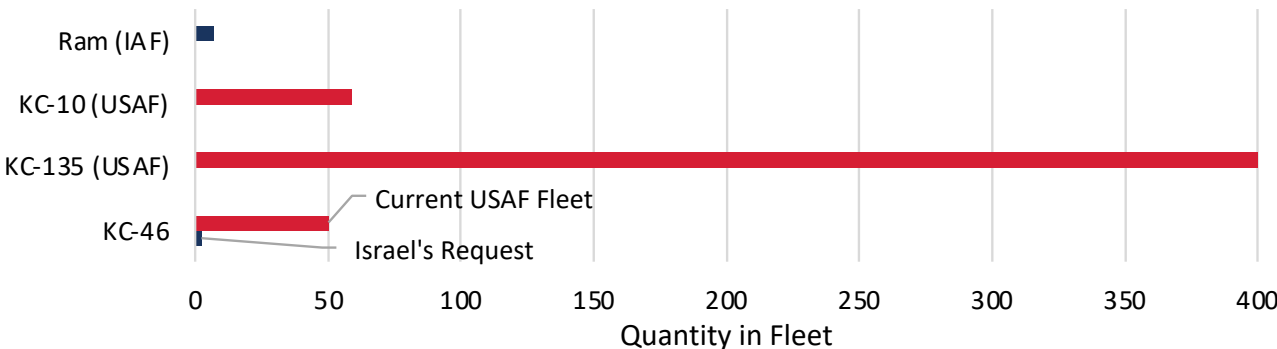
With the looming announcement of a new Iran nuclear deal that will likely pave the way for Tehran to acquire a nuclear weapons capability, it would advance U.S. national security interests to expedite delivery of weapons systems and platforms that Israel could use to prevent a nuclear Iran, as a last resort. Specifically, as JINSA has [recommended](#), the United States should immediately transfer to Israel two KC-46A Pegasus aerial refueling tankers.

Despite Israel already securing financing to acquire these platforms from the United States, the Biden administration has declined delivering them before 2024, at the earliest. The Biden administration’s opposition has stemmed from its desire to avoid upsetting Iran during nuclear negotiations. Once talks conclude—which are expected to yield a deal that endangers Israel and the stability of the Middle East—the Biden administration will no longer have a reason to deny its partner this vital military assistance. If the president does not act quickly and decisively to bolster Israeli military capabilities, Congress should act to encourage fast-track transfer to Israel of at least two KC-46As.

JINSA Known Capabilities of Aircraft Refueling Tankers

Aircraft	Range without cargo (miles)	Refueling time (min)	Number of aircraft it can simultaneously refuel	Refueling capacity (lbs.)
KC-46	7,350 and can be refueled to have global range	3 to 4	3	212,000
Boeing 707 (Ram)	3,000	Unknown	Unknown	Unknown
KC-135	1,500	30	2	180,000-200,000
KC-10	11,500 miles and can be refueled to extend range	11	2	356,000

JINSA USAF and IAF Refueling Tanker Fleets

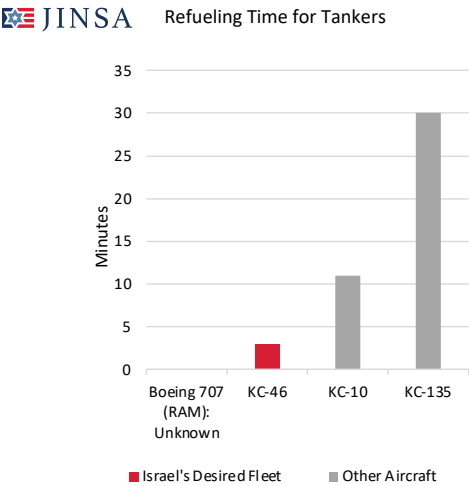
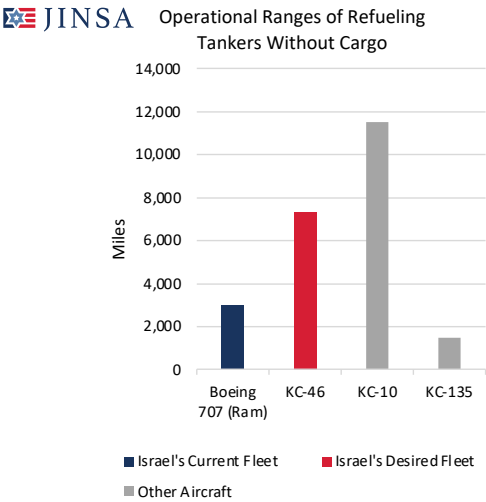


Israel Urgently Needs KC-46As to Counter Iran

As Iran moves toward becoming a [nuclear threshold state](#), Israel’s limited capacity to operate at range limits the credibility of its military option to prevent a nuclear Iran. This visible limitation degrades Israel’s deterrence against and, if necessary, ability to respond to an Iranian attempt to produce a nuclear weapon. Should Israel choose to strike, its attack aircraft will face a tradeoff between carrying more fuel to extend operations or larger payloads. Delivering more and larger payloads will require Israel’s aircraft to refuel to reach their targets and likely again to return home. While Israel has improved its ties with the UAE and Bahrain, these countries would likely not want to be directly involved in an Israeli attack against Iran due to their vulnerability to retaliation. Relying on foreign basing would also restrict Israel’s capability to act independent from regional partners, which is a core tenant of its national security doctrine. To give such an operation the greatest chance of success, Israel needs to upgrade its refueling capabilities.

Acquiring the KC-46A would significantly enhance Israel’s qualitative military edge (QME), which the U.S. Congress has [defined in law](#) as “the ability to counter and defeat any credible conventional military threat ... while sustaining minimal damages and casualties, through the use of superior military means...” In 2012, President Obama also made it [authoritative U.S. policy](#) to “do what it takes to preserve Israel’s qualitative military edge—because Israel must always have the ability to defend itself, by itself, against any threat.” Neither of Obama’s successors has retracted this political commitment. The highly advanced and largely autonomous KC-46A would boost Israel’s capability for long-range operations compared to its existing fleet of Ram tankers. Israel purposely tries to keep secret the size and capabilities of this fleet, which is adapted from a Boeing 707 but reportedly has [seven Ram tankers](#), which have an operational range of roughly 3,000 miles (using a Boeing 707 as a stand-in).

To confront the Iranian threat, Israel needs tankers that are [more reliable](#)—the Ram fleet was temporarily grounded in 2019 following an accident—with longer ranges, better defenses, and updated battlespace technologies. The KC-46A can operate for eleven to twelve hours carrying 212,000 pounds of transferable fuel and has wing air refueling pods that allow it to refuel three jets simultaneously, replenishing the fuel of each within three to four minutes. Additionally, the KC-46A is a modular aircraft built to include fuel cells under the floor, enabling it to carry cargo or soldiers without compromising the ability to refuel in the air. Unlike the roughly fifty-year old Ram that is passed its ideal operational lifespan, the KC-46A has cutting-edge defensive systems, such as ballistic armor, infrared countermeasures, radio frequency warnings, threat avoidance systems, and night vision. Reportedly, Israel wants to add its [electronic warfare countermeasures](#) as well.





Source: <https://www.boeing.com/defense/kc-46a-pegasus-tanker/>

USAF Refueling Needs for Indo-Pacific Operations

Due to these cutting-edge capabilities, the USAF is eager to replace its KC-135 Stratotanker and KC-10 Extender tankers quickly with KC-46As as it focuses on competition with China in the Indo-Pacific. There are nearly 400 KC-135 Stratotankers in service, which have a 1,500-mile range without cargo, can simultaneously refuel two aircraft, and can carry between 180-200,000 pounds of fuel, [depending on the model](#). The USAF had fifty-nine KC-10s as of June 2020 with plans to retire the fleet by 2024. With Boeing's current production rate of two KC-46As per month, the USAF will likely fulfill its request for 179 tankers in mid-2027. The KC-10 has a range of 4,400 miles with cargo or 11,500 miles without cargo but can also be refueled in the air like the KC-46A to extend its range and has a fuel capacity of 356,000 pounds. Compared to the KC-135 and KC-10, the KC-46A has [superior avionics](#) that provide better battlespace situational awareness, instead of relying on Airborne Warning And Control System (AWACS) or other command and control systems.

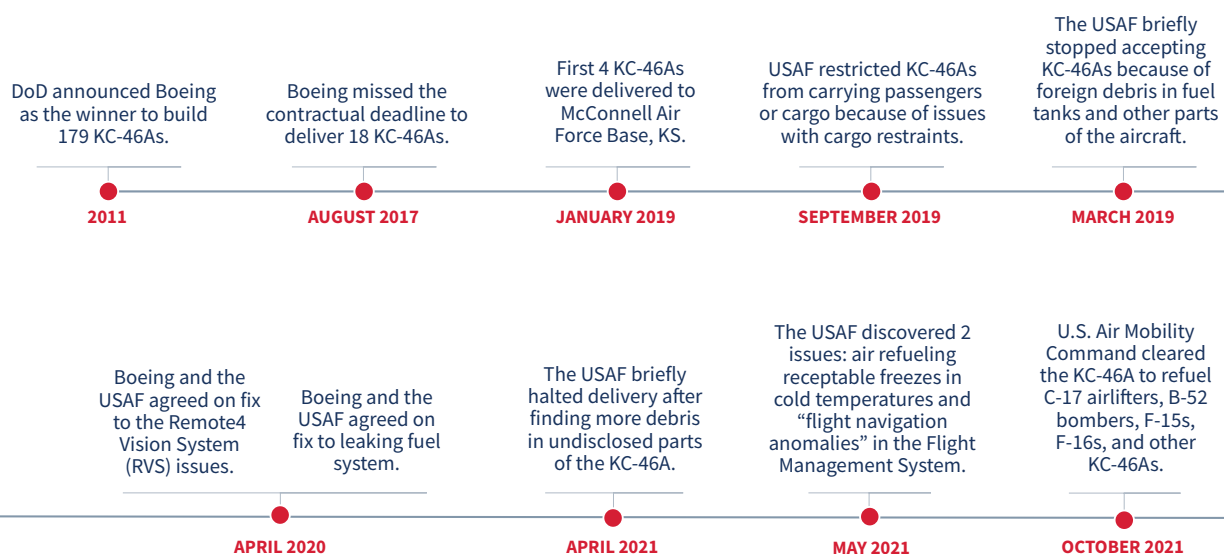
KC-46A Production Hiccups

The KC-46As initially faced critical technical difficulties that created a production backlog, which delayed USAF acquisition and use of the aircraft. In February 2021, USAF announced that it had [fixed](#) one of two serious operational and safety problems involving the Auxiliary Power Unit and downgraded its assessment of the severity for a third issue. In addition, there were since-resolved [technical issues](#) with the KC-46A's Remote Vision System (RVS) that prevents a clear visual of the boom connecting to another aircraft. In March 2021, USAF [suspended KC-46A deliveries](#) after discovering foreign debris in the tankers. After temporarily resuming deliveries, USAF briefly stopped accepting the aircraft when it found [more debris](#) in April 2021. Each of these delivery-delaying technical issues have been largely resolved. In May 2021, USAF discovered two [new](#)

[deficiencies](#) that still require solutions and temporarily delayed delivery. The first is a fuel frizzing problem where the drain tubes in the KC-46A's air refueling receptable, which remove water from the aircraft, can crack at temperatures below freezing. Also, the KC-46A's Flight Management System caused what Boeing called "[navigation anomalies](#)." In October 2021, U.S. Air Mobility Command [cleared the KC-46A](#) to refuel C-17 airlifters, B-52 bombers, F-15s, F-16s, and other KC-46As, but has not determined if it is safe to refuel F-22 and F-35 fighters and the B-2 bomber. Israelis with knowledge of the procurement process told the authors that the Israeli Air Force (IAF) has inspected this closely and is comfortable with Boeing's technical fixes. The United States and Israel have conducted aerial refueling for many years, overcoming the problem of fuel frizzing. Similarly, the Flight Management System is not a concern for Israel's operations of the KC-46A, since it will add its own avionics, as it typically does with the aircraft it purchases.

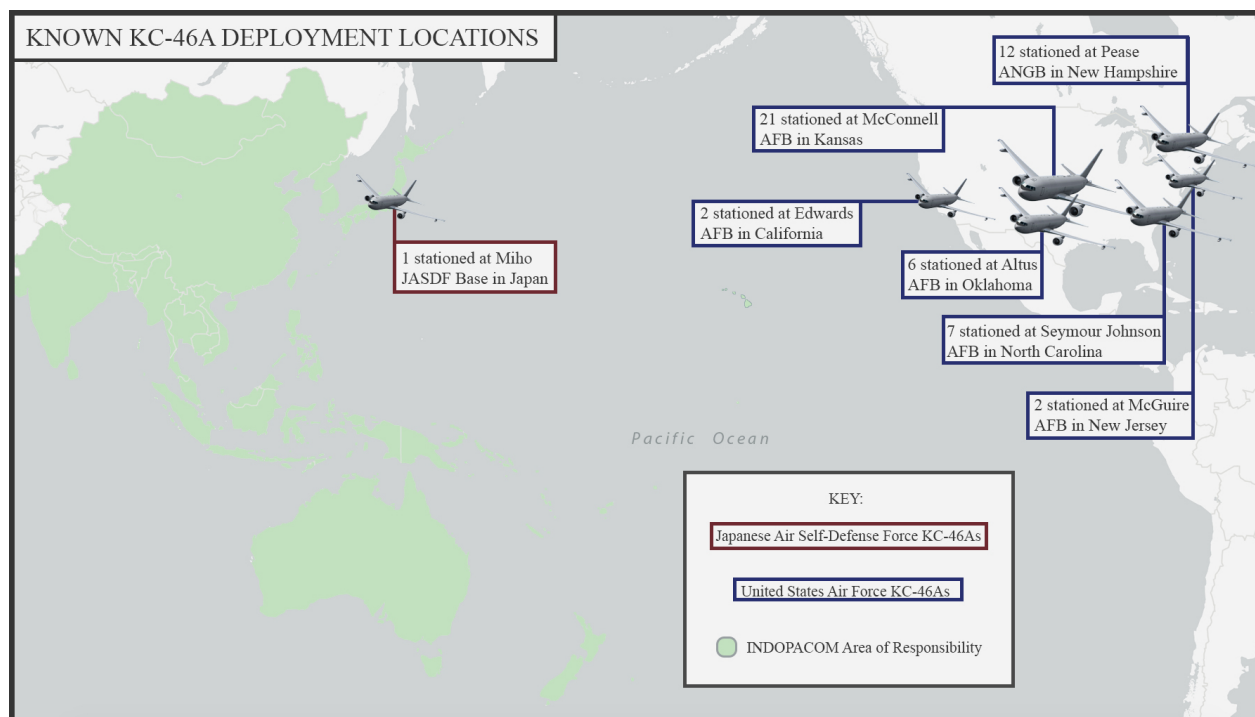


KC-46A Development Timeline



Finally On Track: KC-46A Production, Delivery, and Service

The U.S. military has already received at least 50 of a planned 179 KC-46A tankers. It expects to acquire roughly two KC-46As per month going forward, which is basically equivalent to Boeing's monthly production rate for the KC-46A. While the USAF wants KC-46s for strategic competition with China in the Indo-Pacific, the refueling tankers it acquired have initially deployed to bases in the United States, not a potential operational theater. The USAF has deployed twenty-one to [McConnell AFB, Kansas](#); twelve to [Pease ANGB, New Hampshire](#); seven to [Seymour Johnson AFB, North Carolina](#); six to [Altus AFB, Oklahoma](#); two to [McGuire AFB, New Jersey](#); and two to [Edwards AFB, California](#) (on loan from McConnell AFB). Additionally, Japan, the only country other than Israel seeking the KC-46A through foreign military sales, received its [first of four KC-46A aircraft](#) at the end of October 2021. Providing Japan with KC-46As is also likely part of the Pentagon's shift toward strategic competition with China, the same pacing threat that the USAF is acquiring these refueling tankers to face.



Israel's KC-46A Acquisition Process

The Israeli Ministry of Defense sent a formal [Letter of Request](#) in June 2019 to purchase two KC-46A Pegasus with the option to buy six more. On March 3, 2020, the U.S. Defense Security Cooperation Agency (DSCA) announced that the State Department had cleared Israel to buy a potential eight KC-46As as well as spoofing-resistant GPS receivers, radios, and support services for [\\$2.4 billion](#). In February 2021, Israel's Ministry of Defense signed a [letter of offer and acceptance](#) to purchase two KC-46As, shortly before the Israeli government took out loans to [move forward](#) its ability to pay for these platforms. Israeli Air Force Chief of Staff Brigadier General Nir Barkan [told Breaking Defense](#) in September 2021 that Israel asked to use some of USAF's KC-46A production slots to expedite transfer of the initial two KC-46As. When Israeli Defense Minister Benny Gantz reportedly requested accelerated delivery of the KC-46As at a December 2021 meeting with U.S. Defense Secretary Lloyd Austin III, Gantz was told the United States would work to improve the [production backlog](#). Currently there are [no public indications](#) that Israel would receive its first KC-46A any time before 2024.

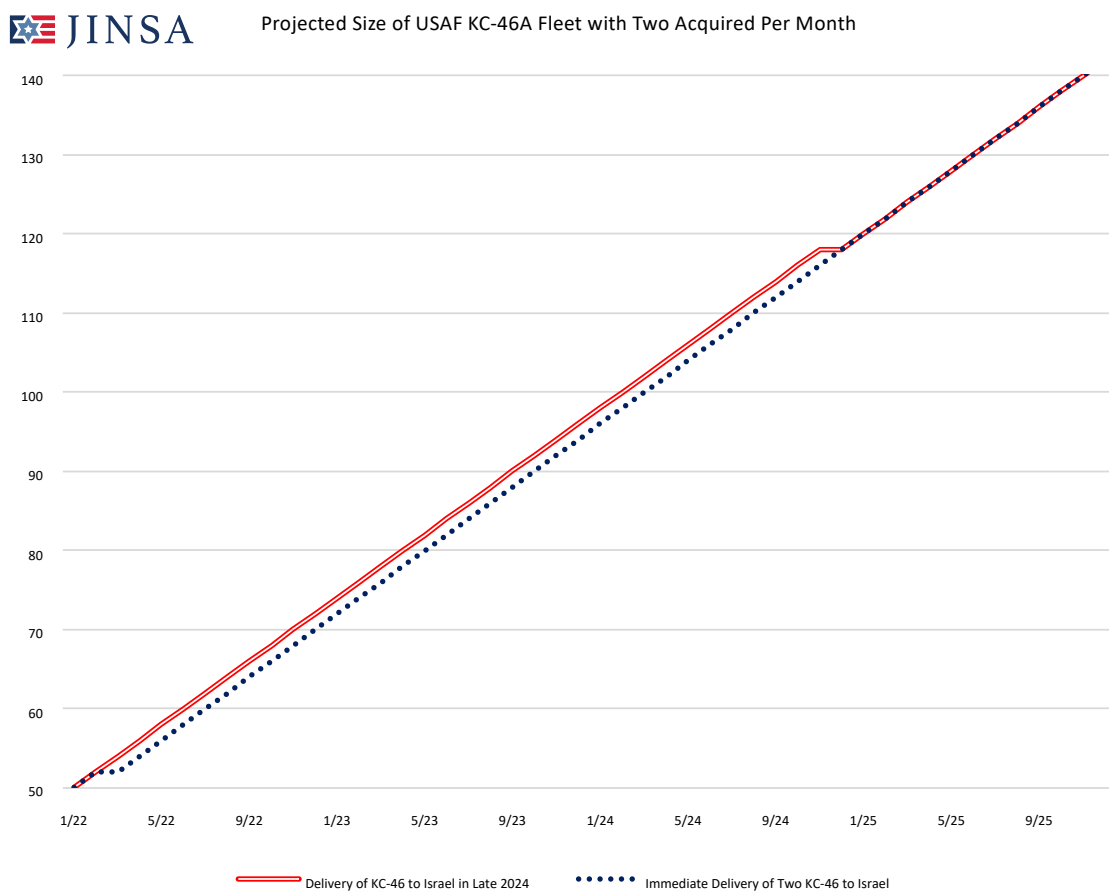
The Biden Administration Decision on Expediting KC-46A Delivery

After initial delays in Israel's acquisition of KC-46As due to physical problems with the aircraft and Israel's budgetary process, the current delay appears to be, in part, a political decision by the Biden administration as well as a desire to have as many refueling tankers deployable to the Indo-Pacific as possible. Israeli officials with knowledge of negotiations with the Pentagon told JINSA the holdup is intended to signal to Tehran that Washington is not prioritizing viable military alternatives to ongoing, open-ended nuclear negotiations in Vienna. According to an anonymous Israeli official who [spoke with Breaking Defense](#), "the U.S. effort to cool off the Israeli intention to act is portrayed by small delays and longer evaluation of Israeli requests."

Strategic Feasibility of Expediting KC-46A Delivery

Selling these tankers to Israel would enhance deterrence and diplomatic leverage against a shared U.S.-Israeli adversary, which is increasingly salient as Iran’s approach to nuclear weapons capability compounds the importance of [“Plan B”](#) alternatives should negotiations fail to reach an acceptable outcome—an outcome which seems increasingly probable. Given that Israel’s willingness, if need be, to counter Iran’s nuclear program militarily is widely perceived as more credible than that of the United States, transferring KC-46s would help ensure Israel has capabilities to match its intent, and thereby underscore that both Washington and Jerusalem are serious and ready to prevent a nuclear Iran. More generally, it would support Israeli contributions to collective defense in the Middle East—as DSCA [noted in 2020](#), “the proposed sale further supports the foreign policy and national security of the United States by allowing Israel to provide a redundant capability to U.S. assets within the region, potentially freeing U.S. assets for use elsewhere during times of war.” Furthermore, despite concerns about such transfers impacting U.S. readiness, USAF still has a large KC-135 fleet and has proven it can put its own needs momentarily on hold to strengthen a partner, as it did in mid-December 2021 when Japan took delivery of two KC-46As.

Nor is providing Israel with two expedited KC-46As likely to unduly set back the USAF’s acquisition of the new aircraft. As Senator Lindsey Graham (R-SC) [told reporters](#) on a recent trip to Israel, “two airplanes are not going to substantially change America’s ability to defend herself. [Yet, they] could dramatically change the equation here in the Middle East.” Since Boeing is currently delivering two KC-46As per month, delivering two KC-46As to Israel would only briefly affect the U.S. fleet. The two aircraft provided to Israel would only amount to roughly eight percent of the twenty-four total aircraft that come off Boeing’s production lines over the course of a year.



Recommendations

- The Biden administration should acknowledge that Iran's leadership can only be reliably compelled to abandon nuclear and regional aggression when it perceives a real threat of military action by the United States or Israel. The administration should therefore fast-track the delivery of two KC-46A Pegasus aircraft refueling tankers to Israel by swapping already acquired aircraft or USAF production orders in early 2022 to strengthen its negotiating leverage in Vienna.
- Congress should request an assessment on the availability of purchase or transfer of KC-46A refueling tankers to Israel. In hearings and meetings with White House, State Department, and Department of Defense officials, legislators should ask why the administration does not expedite delivery of the tankers to Israel given the pressing need for strengthening leverage and deterrence against Iran. Congressional hearings should include outside experts who can testify whether the United States can afford to expedite two KC-46As to Israel.