

BRING ON THE VENOM

Ben Gorski and Paul Gross climb aboard a USAF KC-135R to examine the vital role they played in the UK's Cobra Warrior exercise



Above: The KC-135 delivers critical fuel to a Norwegian F-35A Lightning II
Ben Gorski



Finland and Poland, to the skies over the UK for one of the most intensive training regimens in military aviation.

Setting the stage

Cobra Warrior 24-2, the second iteration of this year's biannual exercise, unfolded in September 2024 across several RAF bases, including RAF Waddington, RAF Coningsby and RAF Lakenheath. It involved a wide array of aircraft, ranging from the UK's Eurofighter Typhoons and F-35 Lightning IIs to the USAF's F-16 Fighting Falcons and KC-135 Stratotankers. The exercise aimed to simulate high-threat, high-tempo operations, requiring complex mission planning, co-ordination and real-time execution in contested airspace.

With increasing geopolitical tensions across Europe and beyond, Cobra Warrior has taken on heightened significance. For the pilots and crews participating, the exercise represents not just a training event but an opportunity to ensure that NATO partner nations can fight together should the need arise.

Interoperability at the core

USAF Captain Zach 'Smooth' Stiffler is one of the newer members of the 555th Fighter Squadron, stationed at Aviano in

Left: A KC-135 Stratotanker supports a flight of four USAF F-16s
Ben Gorski

As a Norwegian F-35A Lightning II carefully approaches the rear of a Boeing KC-135R Stratotanker, tension fills the air. The highly focused boom operator aboard the tanker meticulously maneuvers the 30ft boom toward the fighter jet's receptacle. Precision is paramount in this intricate dance between two cutting-edge machines and, within moments, the message "You are taking gas" echoes through the comms. Thousands of pounds of JP-8 jet fuel are delivered in minutes, ensuring the F-35A can stay airborne to complete its mission.

In an era of complex global security challenges, the need for seamless military co-operation among allied nations is more critical than ever. Multinational exercises such as Cobra Warrior provide a platform where air forces from around the world can come together to sharpen their skills and enhance their ability to operate jointly in combat scenarios.

Hosted by the RAF, Cobra Warrior is the UK's flagship air exercise, bringing together nations from across NATO and beyond to train in realistic, high-threat environments. In the fall of 2024, Cobra Warrior 24-2 brought USAF personnel from Aviano Air Base in Italy, alongside their counterparts from Norway, Canada,



Italy. Having recently completed his F-16 training at Holloman AFB in New Mexico, Cobra Warrior 2024 marks his first large-scale international exercise. Despite his relative inexperience, Stiffler recognizes the critical importance of interoperability for modern air forces: "For me, the biggest learning point has been seeing how closely we need to work with our allies. Whether it's Norway, Canada or Poland, we have to ensure that our tactics and technologies are in sync. That's the essence of interoperability."

Flying the F-16, Stiffler's role in Cobra Warrior primarily focuses on air superiority and strike missions: "The F-16, especially our Block 40 variant, is built for versatility. We've primarily been running escort and strike missions, ensuring that our allies' aircraft can complete their objectives safely."

USAF Captain William 'Van Gogh' Eris brings more experience to the table. With nearly seven years of service and

a background flying both the F-16 and F-35, Eris has seen firsthand the value of multinational exercises: "This is my first exercise flying the F-35 and what amazes me is how seamlessly it integrates with the other aircraft. We may come from different countries, but in the F-35, we're speaking the same language digitally, tactically and strategically."

For Eris, the presence of Norway's F-35s was particularly significant. Norway's F-35A variant, equipped with features like a brake parachute for icy landings, offers unique insights into how other air forces have adapted the platform to their operational needs: "Their jets are a little different, but when we're in the air, we're fully integrated. We're primarily tasked with SEAD (Suppression of Enemy Air Defenses), ensuring that the skies are safe for everyone to carry out their missions."

Mission planning

One of the hallmarks of Cobra Warrior is its focus on realistic and complex mission planning. Pilots and commanders from across the participating nations come together to develop operational plans that test their ability to work seamlessly in dynamic, contested environments. Stiffler said: "Mission planning at Cobra Warrior is no joke. A lot of the planning happens on the fly. We work closely with our British counterparts, but at the end of the day, it's up to us to integrate our skills and make sure we're executing the mission flawlessly."

Eris adds that the F-35's advanced systems, particularly its datalink, play a vital role in mission planning and execution: "The datalink allows us to share real-time information with other aircraft, which is critical for maintaining situational awareness during high-stakes missions. It's a game-changer for interoperability because it allows us to operate as a cohesive force, even when we're flying different platforms."

For US Captain Joe Knutson, a KC-135 instructor pilot from the 100th Air Refueling Wing, mission planning is



Above: The 'Holy Terror' nose art on the KC-135 Stratotanker
Ben Gorski

equally complex. Knutson's role is to ensure that the fighters involved in the exercise can stay in the air long enough to complete their missions: "From the tanker perspective, Cobra Warrior is a fantastic opportunity to refine our tactical capabilities. We're constantly adapting to the needs of the fighters we're refueling, whether it's an F-16, F-35, or even a B-52."

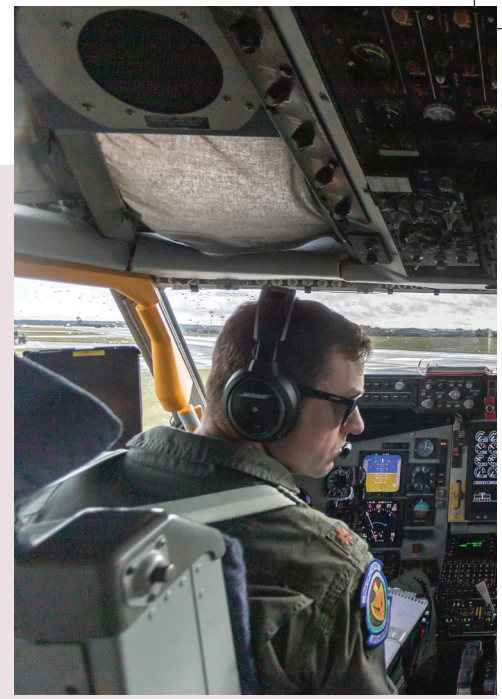
Knutson notes that the logistical challenges of refueling during an exercise like Cobra Warrior are significant: "It's not just about pumping gas. You've got to be on top of fuel management, weather conditions and airspace co-ordination, all while ensuring that the fighters are ready to rejoin the fight as soon as they've been refueled."

The unsung heroes

Mid-air refueling is a crucial enabler for modern air operations, extending the range and endurance of fighter jets and allowing them to stay on station for longer

Below: A KC-135 on the tarmac at RAF Mildenhall
USAF/Airman 1st Class Aidan Martinez





periods. The KC-135 Stratotankers from RAF Mildenhall were instrumental in Cobra Warrior 2024, refueling a wide range of aircraft: USAF F15s/F16s/F35s, British Eurofighter Typhoons EF20000, Polish F16s, Finnish F18s and Norwegian F35s. Airman First Class Alexander Robinson, a boom operator on a KC-135, has logged more than 400 hours of refueling missions since joining the USAF in 2020. He described the complexity of his role during large-scale exercises like Cobra Warrior: "Refueling is pretty straightforward in most cases, but when you're dealing with up to 50 jets in an exercise it gets a lot more challenging. When refueling stealth jets, you've got to be extremely precise. You can't afford to miss the receptacle or damage the jet's low-observable profile."

Knutson added that despite the age of the KC-135, which first entered service in 1957, it remains a reliable and effective platform for air refueling: "The KC-135 is a workhorse. We've made some upgrades over the years, like the high-speed boom, but it's still doing the job it was built to do. And it's doing it well."

High-stakes missions

In Cobra Warrior 2024, Suppression and Destruction of Enemy Air Defenses (SEAD) missions took center stage as the participating forces simulated operating in contested airspace where enemy surface-to-air missile (SAM) systems were a constant threat. The F-35, with its advanced electronic warfare systems and stealth capabilities, played a key role in these missions. Eris explained: "The F-35 is the perfect tool for SEAD. We can get close to enemy radar systems without being detected, and we've got the tools to disrupt their sensors and

communication networks. Once the threat is neutralized, our allies can move in and complete their missions."

While the F-35s focused on SEAD, the F-16s took on more traditional air superiority and strike roles, according to Stiffler: "We're running intercepts, escorting strike packages and taking out ground targets. It's a chance to put all our training to use in a high-pressure environment."

The social side of Cobra Warrior

Beyond the tactical and technical challenges, Cobra Warrior also provides a vital opportunity for pilots and crews to build personal and professional relationships with their international counterparts. These are essential for fostering trust and co-operation that are key to successful multinational operations. Stiffler said: "There's definitely a social aspect to Cobra Warrior. We spend time together outside of the cockpit, grabbing beers after a long day of flying. It's important because those personal connections build the trust we need when we're flying missions together."

Ayers agreed, emphasizing that the bonds formed during Cobra Warrior extend beyond the exercise itself: "When you're flying with someone from another country, you need to know that they've got your back. That trust carries over into real-world operations, where there's no room for uncertainty."

Knutson echoes these sentiments from a tanker perspective: "We may be refueling planes from different countries but, at the end of the day, we're all working to be ready when the stakes are high. We're building relationships that could one day save lives. We're not just refueling aircraft, we're building trust. Whether it's refueling

Above: USAF Captain Joe Knutson, a senior instructor pilot with the 100th Air Refueling Wing
Paul Gross

a Norwegian F-35 or a Polish F-16, those few moments in the air forge bonds. We may not speak the same language, but the mission comes first and Cobra Warrior strengthens that commitment."

Air refueling in modern warfare

Knutson provided a unique perspective on the importance of aerial refueling in exercises like Cobra Warrior: "Without tankers like the KC-135, these fighters wouldn't be able to operate as far from their home bases or stay airborne as long. Our job is to keep them in the fight. The KC-135 may be an older platform,

Below: USAF Captain Zach 'Smooth' Stiffler of the 555th FS out of Aviano Air Base in Italy prepares his gear for another mission
USAF





but it's still incredibly reliable. We've had to modernize certain aspects, like the boom, but the basic principles remain unchanged. We're a force multiplier, allowing our fighters to maintain a presence in contested airspace for as long as necessary."

One memorable moment during Cobra Warrior 2024 involved refueling an entire strike package in the midst of a

Above: USAF Majors Brian Fagan and Alexander Schultheis finish the preflight checks for a KC-135
Paul Gross

Above right: Definitely one of the most intense jobs in the USAF is the boom operator on a KC-135
Paul Gross

simulated contested zone: "We had to refuel not just the US F-16s, but also Norwegian F-35s and Canadian CF-18s. It was intense. Timing and precision were critical, because any delay could compromise the mission. But everyone executed flawlessly, showing just how integrated we've become."

Knutson's enthusiasm for the interoperability achieved at Cobra Warrior was evident: "There's nothing quite like seeing a Norwegian F-35 pull up for refueling, knowing that we're enabling them to complete their mission. It's a reminder that air power

today isn't just about individual nations, it's about alliances. When we refuel a jet from another country, we're fueling a united force, a coalition that can stand up to any threat."

Interoperability in action

Cobra Warrior 2024 was a resounding success in demonstrating the value of multinational air exercises. The collaboration between pilots, commanders and aircrew from the US, UK, Norway, Finland, Poland, Canada and other participating nations showcased how far NATO and its partners have come in terms of interoperability. Through complex mission planning, aerial refueling, SEAD operations and air superiority exercises, the participating forces honed their ability to work together in dynamic, high-threat environments.

For pilots like Stiffler and Eris, Cobra Warrior was more than just a chance to sharpen their skills it was also an opportunity to forge bonds of trust with their international counterparts, strengthening the cohesion of the NATO alliance. Eris said: "We may come from different backgrounds and fly different planes, but when we're in the air, we're one team. Cobra Warrior makes sure that, when the time comes, we'll be ready to fly together and win together."

For tanker pilots like Knutson, Cobra Warrior reinforced the critical role that air refueling plays in modern warfare: "It's not just about keeping planes in the air—it's about keeping the mission alive. When we refuel an allied jet, we're supporting a collective effort that transcends national borders. That's the real power of exercises like Cobra Warrior." **CAJ**

