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The deployment of CVN-69 USS *Dwight D. Eisenhower* as part of Carrier Strike Group 2 (CSG-2) was planned to be a deployment to the 6th Fleet area of operations in the Mediterranean Sea. However, with the events of October 7, 2023 in the Middle East, the Carrier Strike Group was directed to reposition to the 5th Fleet Area of operations.

The USS *Carney* (DDG-64), the first of the strike group's warships to enter the Red Sea from the Suez Canal on October 19, shot down land attack cruise missiles (LACM) and one-way attack (OWA) unmanned aerial vehicles (UAV) fired by the Iranian-backed Houthis in western Yemen (presumably aimed at Israel but close enough to *Carney* to warrant self-defense). Several CSG-2 destroyers remained in the

Red Sea and Gulf of Aden as the situation in the area remained volatile.

The *Eisenhower* (nicknamed 'IKE') operated in the Red Sea, Gulf of Aden, Gulf of Oman, and Arabian (Persian) Gulf but with the continued targeting of international merchant vessels by the Houthis, the IKE was ordered back to the area in mid-December. The embarked Carrier Air Wing THREE (CVW-3) 'Team Battle Axe' performed daily air surveillance missions together with Destroyer Squadron (DESRON) 22's surface ships to guarantee the safety of numerous commercial vessels transiting the international waterways route used by 15% of the world's shipping, as well as the Carrier Strike Group (CSG).

The opposing forces were mainly

**Right:** CDR Carl Ellsworth US Navy

**Far right:** For each mission the Growlers were equipped to allow them to be on station for a longer duration. This included the selection of missiles

**Below:** The Growlers' current jamming pods are equal to those used by their predecessor the EA-6B Prowler.  
**All photos:** Patrick Roegies



# ZAPPERS DOMINATE THE RED SEA

The Growlers of VAQ-130 'Zappers' have been embarked on USS *Dwight D. Eisenhower* during their deployment in the Red Sea. **Patrick Roegies** and **Ben Gorski** spoke to **CDR Carl Ellsworth** about the challenges they faced

using anti-ship ballistic missiles (ASBM) for the first time in history, anti-ship cruise missiles (ASCM), OWA UAVs, and unmanned surface vehicles (USV) as their primary weapons. This required a change in tactics for the squadrons assigned to the Carrier Air Wing (CVW), as conventional tactics involve countering of air to ground and air to air targets.

Throughout the deployment, Electronic Attack Squadron ONE THREE ZERO (VAQ-130), nicknamed the 'Zappers', were assigned to CVW-3. Led by CDR Carl Ellsworth, VAQ-130 operates the Boeing EA-18G Growler. This aircraft replaced the Northrop Grumman EA-6B Prowler as the United States' sole dedicated tactical electronic attack aircraft. The primary mission assigned to the Zappers is the Suppression of Enemy Air Defenses (SEAD). During the 2023-2024 deployment



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they were the first of two squadrons to employ an Advanced Anti-Radiation Guided Missile (AARGM) in combat. VAQ-130 was also the first Growler squadron in Navy history to score an air-to-air kill.

During their numerous combat sorties the aircraft assigned to CVW-3 embarked aboard USS *Dwight D. Eisenhower*, employed several weapons in combat and struck several assigned and valid military targets. The Zappers claimed their first air-to-air kill of the type against an Iranian-made KAS-04 hostile drone, which the Houthis were using. During the historic nine month-long cruise of the *Eisenhower*, the Zappers, CVW-3 and CSG-2 employed hundreds of missiles and other munitions against hostile targets in and around the Red Sea and ashore in

Houthi-controlled Yemen.

The VAQ-130 Zappers' EA-18G Growlers also used AGM-88E AARGM for the first time in combat while conducting their missions. One of these missions included a strike that is reported to have destroyed a Mill Mi-24/35 *Hind* gunship helicopter on the ground. Exact details concerning the first-ever EA-18G Growler air-to-air engagement and victory, which was confirmed in a recent Navy press release, remain classified. Several mission markings indicating the elimination of their assigned targets are visible on a number of aircraft.

**Challenging experience**

Commanding Officer of the Zappers, Carl Ellsworth, said: "My time here at VAQ-130 as the XO and the CO has been

**Above:** CDR Carl Ellsworth has been the VAQ-130's commanding officer during the deployment on IKE, motivating the team during a seven month period without a port call



**"WE WERE SET TO BE DEPLOYED TO US CENTRAL COMMAND (CENTCOM) FOR TWO MONTHS, JUST TO REMIND IRAN – AND EVEN CHINA – OF OUR PRESENCE AND REASSURE OUR ALLIES. OBVIOUSLY, EVENTS TAKING PLACE ON OCTOBER 7 IN ISRAEL CHANGED EVERYTHING."**

a great yet challenging experience. The Zappers returned from the previous cruise, which was a deployment at the height of the COVID-19 pandemic, in July 2021. Worldwide I believe only two carriers performed more than one COVID deployment, which were the deployments on CVN-69 USS *Dwight D. Eisenhower* and CVN-71 USS *Theodore Roosevelt*. The crew were essentially isolated during the entire duration and no traditional port calls were conducted during these deployments. When VAQ-130 returned, we were in a maintenance phase getting our aircraft ready for our next deployment which would eventually be the 2023-2024 deployment embarked at CVN-69 USS *Dwight D. Eisenhower* assigned to CVW-3.

"In the spring of 2022, we conducted some detachments including a Carrier Qualification (CQ) Training we performed to stay current on carrier landings. In June 2022 we participated in the Red Flag Alaska exercise and in August of 2022 were deployed to NAS Point Mugu to fire live AGM-88 High-speed Anti-Radiation Missiles (HARM). More training in Fallon and Key West officially kicked off workups, to include two month-long carrier detachments and Fallon again in the spring of 2023, which was when the wheels really started moving preparing for the IKE deployment.

"Overall, it wasn't really a different type of workup compared to any other electronic attack squadron's experience. And every time I had a sailor check in, with a map of the world in my office, I talked about what some of the other carriers were currently doing."

Ellsworth continued: "We anticipated preparing for a Mediterranean deployment where we would be working and training with our NATO allies and due to the Russian invasion of Ukraine,

**Left:** Two of the Zappers' aircraft on the *Eisenhower* flight deck presenting mission markings like the VFA-105 'Gunslingers' aircraft Modex 411 and the VFA-131 'Wildcats' aircraft Modex 302 at the back



probably perform some surveillance missions as well. For the first part of our planned deployment, we were set to be deployed to US Central Command (CENTCOM) for two months, just to remind Iran – and even China – of our presence and reassure our allies. Obviously, events taking place on October 7 in Israel changed everything.”

### Exhibiting flexibility

Following on from six weeks of CAW training at Fallon in March and April 2023, they performed a Composite Training Unit Exercise (COMPTUEX), a rehearsal each US Navy CSG performs as the final test before deployment. “We completed the COMPTUEX training between in July 2023 and then had about three months to continue preparing but also took a little bit of much-needed leave,” Ellsworth said.

“We were scheduled to leave on Friday 13, October 2023, which is pretty humorous given the superstition of that date. On October 7, Hamas attacked Israel and the general public thought we were deploying because of this escalation, which is not true as we were scheduled to deploy anyway. It did, however, change the entire course of our intended deployment schedule.”

Ellsworth explained: “In terms of what we trained for, it was no different than for any other squadron before deployment, and we were well trained and prepared. But in terms of what we’ve been doing out here, we’ve had develop new tactics specific to the threat and figure out how to deal with this new kind of warfare.”

### Adapting tactically

The primary mission of VAQ-130 is to ‘Dominate the electromagnetic spectrum to be decisively victorious in combat. Anytime. Anywhere.’ Ellsworth said: “Those



**Above:** Being high value assets, the Growlers were kept airborne for an extended time and missions could last six to eight hours. Modex 504 is pictured returning to the *Eisenhower* flight deck just before dark

last two words have certainly applied with our expeditionary detachment to Jordan. Starting this deployment we did not expect to be on station in the Red Sea and perform daily combat sorties. With the situation developing at a rapid tempo we were tasked to fulfill our mission embarked on *IKE* so we just started to work with what we knew.

“As always, our focus was primarily the suppression of enemy air defenses (SEAD) to protect people, platforms, and assets. To successfully fulfill this mission we were forced to redefine how to effectively use both the non-kinetic and kinetic capabilities at our disposal. The interesting thing about this deployment is that we have been employing a variety of kinetics more than any EA-18G Growler squadron

ever has. We’ve employed the AGM-88E AARGM and AIM-120C Advanced Medium-Range Air-to-Air Missile (AMRAAM), and we still use the ALQ-99 jamming pods.”

The ALQ-99 Tactical Jamming System (TJS) is an external carriage airborne electronic attack capability employed against radar and communications threats to protect friendly forces from being targeted. The EA-18G Growler can carry a substantial number of tactical jamming pods. The Next Generation Jammer (NGJ) will replace the current ALQ-99 pods and offer enhanced capabilities against threats. Some but not all Growler squadrons have been outfitted with them.

Ellsworth said: “We were fully engaged to protect our aircraft and the ships in

**Right:** Mission markings presented on Modex 502, showing the ‘kills’ on two ballistic missiles



**Below:** The Zappers line up during the Carrier Air Wing Training at NAS Fallon. The squadron had no idea what would unfold during their forthcoming deployment



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the CSG, including all allied ships and commercial vessels as they exercised their inherent right to sail in an international waterway. While the protection of aircraft was mainly those in the air wing, it also included coalition assets, both manned and unmanned. What we were doing during Operation Prosperity Guardian can be best summarized as 'supporting CVW-3 aircraft so they can best protect merchant vessels from malicious Houthi attacks as they transit the Bab el-Mandeb Strait, the southern Red Sea, and the Gulf of Aden'. But Growlers also utilized 'active self-defense' when prosecuting Houthi military threats, meaning if we can prosecute their military hardware today, it takes away their ability to target 'the good guys and gals' tomorrow."

This deployment proved at an early stage to be a new way of warfare with a lot of complexities experienced as the conflict progressed. Growler aircrew had to get their jets as fully mission capable as possible to maximize their time on station. Big wing air force tankers facilitated this and flying missions ranged anywhere from four to six hours.

"By maximizing that on station time, it offered us a wide variety of options and flexibility on how to respond once we detected a possible threat," Ellsworth explained. "Sometimes there may not be much going on during the mission and other times there was heck of a lot going on. In these cases it was all about the flexibility of the aircraft in the air, the systems and weapons they were carrying, and the aircrew methodically exhibiting patient determination while working through ROE [rules of engagement] to identify how to eliminate the threat while managing the risk to the participating assets.



"With just five aircraft in our squadron it is a challenging task as we have to respond to what the daily developments require us to do and having a Growler constantly airborne only enhances mission success. On each mission we'd only send up one or two at time, but with only five aircraft that is a daunting task. Thankfully we have some absolutely professional and motivated sailors on our maintenance team which makes it possible.

"Although the Red Sea is a relatively large area to cover, within that specific assigned area of operations we were a bit 'boxed in'. For an aircraft it is a fairly narrow area of operations. Though UAVs were slow, CVW-3 aircrew and the CSG still have to work together to find, fix, track, target, engage, and assess within a relatively short time span. There was often more than one out there and great care had to be taken to avoid targeting non-combatants. To our advantage,

**Above:** In the VAQ-130 Zappers' changing room – the callsigns of the pilots on their flight helmets

we were fortunate to have a lot of sensors in the CSG – and specifically on the Growler – scanning the entire area of operations."

## Sustaining dominance

Ellsworth had plenty of praise for the aircraft and for the entire crew. He said: "I am so impressed with our team but also the quality and reliability of the aircraft, including our operating systems.

"We've got an awesome team of maintainers and a very robust supply system as well. Logistically, if we have to replace a part, we're able to do it very quickly. This is different to when you're back home in maintenance phase where you might be a lower priority for parts and supplies. For our people out here with the high ambient temperatures, it's a strain, but our team has proven they can cope, with the right balance of attitude and rest."

**Below:** On our visit four out of five aircraft present on the flight deck were in a 'ready to go' condition – a remarkable achievement on an extended deployment involving daily combat missions



## Relentless tempo, resilient sailors

Ellsworth recalled: "After the change of command in May 2023 when I was given command of the Zappers, I brought a surviving Vietnam POW to the squadron who was held captive in North Vietnam for seven-and-a-half years. It wasn't just to hear an inspiring story that a former POW had to tell, but rather it had a purpose behind it. I had no idea this deployment was going to be the way that it was, but his message ended up being very appropriate for our situation.

"The message that he shared was that how he survived was down to what he referred to as 'long-term optimistic

realism'. He found himself in unspeakably awful conditions in a prison camp with torture and solitary confinement, and made the decision that he would survive. He was convinced he was going to make it out but he just didn't know when. He decided 'going forward I'm going to control what I can control... they can never take my free will away. They can take everything else away except for that.'"

Ellsworth continued: "I fully realize his experience is profoundly different from our own, but with multiple extensions, thinking you're going to be home by a certain time or and then that doesn't happen, it definitely plays tricks with your head and takes a certain amount of perseverance and resilience to keep showing up ready to perform your duty. This POW and his wife's story served as an inspiration that even if our job was tough, we knew others had it worse.

"That is, some people say, resilience. I love the term 'anti-fragile confidence' meaning you can get hit but you get back up on your feet and it actually makes you stronger. Knowing that with one day at a time, we'll get home eventually but we still have a mission that we have to do TODAY!

"There will always be some people who truly struggle with being out here, as with any combat scenario, but for the most part everyone crushed it. There's hardly any complaining and we remain focused on the task at hand. Many are young adults not long out of high school on their first deployment. The reward is the saving of lives and doing what is right. They're serving a purpose; they know what they need to do. They go out and do it with high efficiency and effectiveness. To me, one of the most rewarding experiences to witness is seeing our team rise to the challenge."

**"THIS DEPLOYMENT PROVED AT AN EARLY STAGE TO BE A NEW WAY OF WARFARE WITH A LOT OF COMPLEXITIES EXPERIENCED AS THE CONFLICT PROGRESSED. GROWLER AIRCREW HAD TO GET THEIR JETS AS FULLY MISSION CAPABLE AS POSSIBLE TO MAXIMIZE THEIR TIME ON STATION."**



**Above:** Flying around the clock missions placed a heavy burden on the pilots, aircraft and maintenance team

### Looking ahead

As for any new technologies on the horizon that will enhance the effectiveness of electronic warfare in the next couple of years, one is the Next Generation Jammer, the upgrade to the ALQ-99 Tactical Jamming System. It's been a long time coming but, as Ellsworth said: "It hit the fleet about a year ago and the simplest way to describe it is it does the job of the ALQ-99 jammer pod but better."

He continued: "Though this Air Wing is not equipped with the F-35C, we are still incredibly capable of fulfilling our mission. The best way I've heard it described is when Growlers are supporting a fourth generation aircraft it enhances their survivability, but when supporting a fifth generation aircraft the Growler enhances its lethality. Both the F-35C and F-22A are incredible assets, but we are able to help them become even more efficient,

effective, and, importantly, operate that much safer."

Summing up the deployment in a Navy news release, Ellsworth said: "I can't remember the last time the Navy had a more challenging deployment with a combination of multiple extensions, severely limited opportunities for R&R, and true combat not just for aviators, but the crew of the whole strike group as well, in the most kinetic action at sea since World War II."

The crew of the *Eisenhower* earned the Combat Action Ribbon for their actions during the deployment to the Middle East. The award is for sailors and Marines who actively participated in ground or surface action, and has rarely been issued since the 1991 Gulf War.

United States Secretary of the Navy, Carlos Del Toro, also approved the Air Medal for those with the 'Strike/Flight' designation for conducting sustained aerial operations in the region. **CAJ**

**Below:** Modex 503 launched off the *Eisenhower* deck for an early afternoon mission. As the configuration did not include the additional underwing fuel tanks the mission would be a short one

