



The A3D was used for conventional bombing during the Vietnam War initially, but withdrawn from that mission when the surface-to-air missile defenses became more prevalent. The photo was taken from the jump seat looking across the defensive ECM operator's position, which faced rearward. (Robert L. Lawson collection)

twice the cabin pressurization differential, which allowed flight at 40,000 feet without oxygen masks. These were the A3D-2P (RA-3B) for photoreconnaissance, the A3D-2Q (EA-3B) for electronic reconnaissance, and the A3D-2T for bombardier/navigator training.

As part of the 1962 redesignation process, the A3D-1 became the A-3A and the A3D-2, the A-3B. Although the A-3Bs were used to drop bombs and lay mines in the Vietnam War beginning in March 1965, the practice was discontinued in late 1966 after SAM installations became more prevalent. The Skywarriors were then assigned to vital supporting roles, first as a dedicated tanker. The designation KA-3B was assigned when the bombers went through the Naval Air Rework Facility at Alameda, California, to receive a semi-permanent tanker package. The KA-3 could transfer about 30,000 pounds of its 43,200 pounds fuel capacity and was deployed in three- to four-airplane detachments.

As the size and weight of avionics decreased, and the radar-aimed threats increased, individual aircraft were increasingly equipped with Electronic Support Measures (ESM) equipment. Initial applications were a simple warning of the reception of the emission of known



The A3D filled a vital supporting role as a tanker for fighters and bombers prior to ingress and after egress on strike missions in Vietnam. The bombardier/navigator has uncovered the periscope to view the proceedings. (Robert L. Lawson collection)



The realization of the Navy's late 1940s plan for a super carrier and a long-range atomic bomber are depicted here. Forrestal's first full deployment was made to the Mediterranean from January to July 1957. The air group included F3H-2Ns and FJ-3Ms for fighters and AD-6s, F9F-8Bs, and the A3D-1s for attack. Seven A3D-1s are on deck in this picture with FJ-3s on the axial-deck catapults standing ready. (National Archives 80-GK-22688)



The EKA-3B was the ultimate Vietnam strike support airplane, providing both tanking and jamming services. Note the anachronistic wire antennas still being used on a jet airplane. (Robert L. Lawson)

targeting radar. These became increasingly sophisticated so that they covered more frequencies and provided a directional indication of the threat. Ultimately, they would be capable of limited jamming or deception of the targeting radar to prevent the surface-to-air missile from homing. It was important, however, to not rely too heavily on ESM for self-protection.

When the Vietnam War began, enemy radar jamming was provided by detachments from VAW-33 and VAW-13 flying Douglas EA-1F Skyraiders. It quickly became apparent that the Skyraider was too vulnerable to fly over North Vietnam and its jammers, too low powered to fully protect strike aircraft from offshore. BuAer belatedly issued a requirement for a replacement. In the meantime, the solution was the EKA-3B TACOS—Tanker, Countermeasures, and Strike. The acronym didn't stick and the strike mission wasn't even possible after the conversion, but the Skywarrior was a godsend as a tanker and jammer.

The first five were created from A-3Bs. The next 34 were modifications of KA-3Bs. In addition to the tanker package, the modification added ECM antennas and avionics in pods on both sides of the fuselage, the bomb bay doors, and tip of the vertical fin. Another capability was electronic reconnaissance. The empty weight increased to almost 45,000 pounds with the addition of about two tons of additional avionics and antennas. Since the maximum landing weight

remained at 50,000 pounds, only 5,000 pounds of fuel could be onboard at recovery. As a tanker, the EKA-3B could give about 21,500 pounds of fuel.

VAW-13 received its first EKA-3B in May 1967. The first deployment was aboard *Ranger* (CVA-61) in November. Conversions were made at a fast pace, so within six months there were five three-plane detachments of Electric Whales at sea. The Forrestal-size ships would also have a two-plane detachment of KA-3Bs. The increasing emphasis on the mission resulted in more tactical electronic warfare squadrons being formed from the assets of the former heavy attack squadrons, with VAHs becoming VAQs.

The last EKA-3B detachment returned aboard *Oriskany* in May 1974. However, it was not the last Whale deployment. The electronic reconnaissance version, the EA-3B, flown by VQ-1, VQ-2, and VAQ-33, would continue to operate from the carriers. It was a conversion from the photographic reconnaissance RA-3Bs. A VQ-1 detachment therefore had the honor of the last Whale deployment, which ended in November 1987, with a flyoff from *Ranger*. It was a detachment from VQ-1 flying the electronic reconnaissance version, the EA-3B.

Heinemann said that if he had known that the atomic bomb was going to get smaller as soon as it did, the A3D would have been a lot smaller for the same range. In any event, his next airplane for the Navy took an atomic bomber to the other extreme.