THE FORGOTTEN Although never flown in combat by Americans,

Martin's Baltimore still emerged as one of the top Allied workhorses in the Mediterranean

By Martin Hill

y the spring of 1944, German troops on Crete and outlying islands were facing growing supply shortages. With air superiority largely in Allied hands, air transport was proving nearly impossible and sea transport hazardous. Nevertheless, in the early hours of June 1, a German convoy of four merchantmen protected by a destroyer, four armed auxiliaries and aircraft slipped out of the Greek port of Piraeus and headed for Crete. It immediately became a high-priority target.

Within hours, an attack force of 72 Allied bombers and fighter escorts began stalking the convoy. Representing squadrons from the British Royal Air Force (RAF), the Royal Australian Air Force (RAAF) and the South African Air Force (SAAF), the attack force included a variety of aircraft. Mustangs and Spitfires provided protective cover, joined by Wellingtons, Marauders and rocket-armed Beaufighters that made up part of the strike element. But the bulk of the force consisted of an American-made bomber few people remember today, the Martin A-30 Baltimore.

Variants of the Baltimore bomber played a major role in air operations throughout the Mediterranean. Designed in the late 1930s as a low-level attack bomber, it was largely a scaled-up version of the Glenn L. Martin Company's Model 167 Maryland then in use by the French air force. The Baltimore's 48½-foot-long fuselage was longer and much deeper than its predecessor's, but it retained the Maryland's narrow width, endowing the newer plane with a distinctive fish-like silhouette. Its 61-foot wingspan housed two beefy 1,600-hp Wright GR2600-A5B5 Double Cyclone engines that gave the Baltimore a top speed of more than 300 mph, meaning the bomber could often outrun enemy fighters. Cruising speed was 220 mph, with a service ceiling of 24,000 feet and a fully loaded bombing range of 950 miles. An auxiliary tank, designed to fit into

the bomb bay, could extend that range for ferrying or reconnaissance missions.

Called the Model 187 by Martin, the Baltimore briefly held the designation A-23 while it was being considered by the U.S. Army Air Corps. But the Americans favored Martin's B-26 Marauder and Douglas' A-20 Havoc (called the Boston by the British). The French purchased the Model 187 to replace its aging Marylands, and the bomber first experienced combat during the Battle of France.

A Martin A-30C in RAF markings undergoes acceptance testing prior to being ferried to Britain as part of the Lend-Lease program.

Once Paris capitulated, the French contract was subsumed by the British, who renamed their Model 187s after the city where they was built, Baltimore, Md. Aircrews simply called it the "Balt."

Later variants provided to the British under Lend-Lease would be designated A-30s by the U.S. Army Air Forces. This, however, was a technicality. Under Lend-Lease, only armaments in the U.S. inventory could be loaned to England. The A-30s were therefore delivered to the USAAF and then immediately transferred to the RAF. Eventually the Baltimore would see combat with almost every Allied air force in the Mediterranean—including the British, Australian, New Zealand, South African, Greek and Free French air forces, as well as the Italian Co-Belligerent Air Force, formed in southern Italy after Rome's surrender. But ironically it would never see active service in the USAAF.



The Baltimore's crew consisted of a pilot, a navigator-bombardier, a top turret gunner and a radio operator who doubled as a gunner. In an emergency, auxiliary flight controls in the Plexiglas-enclosed nose allowed the navigator-bombardier to fly the plane.

The Balt's main punch was its 2,000-pound bombload, but it also carried a powerful sting for aerial combat. Each wing held two forward-firing .303-inch Browning machine guns. The original Baltimore, the Mk. I, had another Browning on a flexible mount in an open cockpit just aft of the pilot. This was replaced in the Mk. III with a Boulton-Paul turret packing four .303-inch machine guns, which in turn was replaced in the Mk. IV by a Martin 250CE turret, with a twin .50-caliber mount.

The radio operator manned two machine guns on a flexible ventral mount in the Balt's aft-facing belly window. In addition to the R/O's guns, there were four fixed machine guns facing down and to the rear, operated by a foot pedal, to counter any fighters that flew under the ventral gunner's field of fire. In later models, all these weapons were replaced by .50-caliber guns.

Despite minor problems with early models, the Baltimore was well received by RAF pilots, who found it sturdy and easy to fly. One British test pilot wrote: "The aeroplane is nice to handle in all conditions of flight and at all loads. Its maneuverability is good and evasive action is easy. The aeroplane is extremely good on one engine; maintaining height with the greatest of ease on one engine even with the propeller of the 'dead' engine unfeathered."

Unfortunately, that only applied once the Balt got into the air. If the aircraft's powerful engines weren't perfectly synchronized during takeoffs and landings, it had a nasty habit of ground looping. More Baltimores, in fact, were damaged or lost to ground loops than to enemy action. Eventually a landing procedure was developed by which the pilot approached the airstrip at low power and gunned the engine only a few feet off the ground. Once the wheels touched down, power was reduced again.

Despite its ungainliness on the ground, the Baltimore became one of the Mediterranean's top workhorses. Arriving just as Field Marshal Erwin Rommel launched his 1942 offensive, two squadrons of Baltimores were thrown into the British defense of El Alamein. Flying in their original role as low-level attack bombers, the Balts suffered heavy casualties from groundfire and enemy fighters.

When bombing from a medium altitude with fighter escort, however, they became a potent ground support weapon, incurring relatively few casualties.

In that latter role, the Baltimores helped perfect RAF Air Marshal Arthur Tedder's concept of tactical carpet bombing. Nicknamed the "Tedder Bomb Carpet," this tactic involved a six-aircraft formation called a "box." Three boxes were formed into V-formations, or "vics." Two waves, each containing one vic, or 18 aircraft, would attack in succession from heights of 10,000 to 12,000 feet. The intent was to lay a tight bomb pattern as close as 800 yards from British lines. Protected by fighter escorts, Baltimores and Bostons bombed with such regularity and so few casualties that the Germans and Italians nicknamed the enemy formations the "Eighteen Imperturbables."

An RAF Balt pilot, speaking to workers at the Baltimore plant, described a carpet bombing attack this way: "An area some 400 feet wide and 1,200 yards long was enveloped in a great cloud of dust after the Baltimores dropped our bombs. A tremendous fire broke out and a black pillar of smoke rose to 1,000 feet. Aircraft on the



The crew of a Baltimore Mk. IV of No. 223 Squadron, based in Celone, Italy, returns from a mission on February 2, 1944.

ground and large store dumps were destroyed in this Baltimore show."

While squadrons of Baltimores were earning their bones tearing up the Afrika Korps, other Balt units were adapting their aircraft to hunt German shipping and U-boats in the Med and the Aegean Sea, and attacking enemy air bases on Crete and other islands. Here too Baltimore crews suffered teething pains. In June 1944, 16 Baltimores, including eight from RAAF No. 454 Squadron, were assigned to Operation Thesis, a raid to avenge the Nazis' execution of 100 civilians accused of assisting British commandos. Thesis involved a coordinated attack on German strongholds in Crete, beginning with a saturated

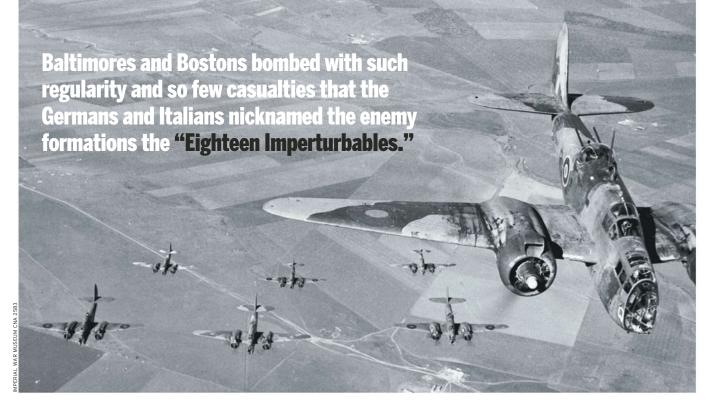
fighter sweep and followed by bomber attacks. It did not go well.

Coming in low behind the fighters, the Baltimores encountered concentrated anti-aircraft fire as they approached Suda Bay. "We were now under 100 feet and the ground fire was intense," 454's Squadron Leader Lionel Folkard recalled. "We had flown less than half way to the target before we suffered serious damage. My aircraft was the first to be hit. When I took stock, I found the port engine was on fire and I was wounded in the left leg, also my right arm was hanging by a shred, and I was losing a great deal of blood onto the cockpit floor."

Folkard crash-landed near Heraklion on a beach laced with land mines. Miraculously, he and his crew—all of them wounded—survived to become POWs. Others weren't so lucky. Of the eight 454 Squadron Baltimores on the raid, only two returned to base. Thirteen of the 32 Australian crewmen were killed. Nearly all the Baltimores on the raid sustained severe damage.

As in North Africa, the Baltimore moved away from low-level attacks to bombing from medium altitudes. The "Big Strike," as veterans of the June 1 convoy attack called it, was a classic example





Baltimore Mk. IVs of 223 Squadron fly in a "Tedder Bomb Carpet" box formation to strike a railway at Sulmona, Italy, in 1944.

of such an antishipping mission. Once the German convoy slipped out of port, Baltimore reconnaissance aircraft began stalking it, constantly reporting its position while dodging escorting fighters and flak from destroyers. It was approaching evening when the strike force finally intercepted the enemy ships. Marauders went in first, followed closely by the Baltimores.

"It was about 7 p.m. and still daylight when we attacked," said Squadron Leader George Gray, who had replaced Folkard at 454 Squadron. "We managed to straddle a merchant ship and the South African Baltimores another. The rocket Beaus had a go at the merchant ships and some of the rockets went straight through without damaging them significantly....There was a lot of flak from the destroyers, but we were high enough to get away with it."

The initial attack left one cargo ship sinking and two more burning, one of which sank later that night. The next day the same strike force again targeted the survivors, which by now had reached port. The sky was filled with flak from both shipboard and land batteries. Six Beaufighters were lost, while the Germans lost another merchant ship and a destroyer.

One German merchantman had initially escaped to sea, but it was caught with the help of radar-equipped Baltimores. This last ship was badly damaged by the bombers, and finally finished off by a British submarine.

With the fall of Axis North Africa in May 1943, the Baltimore squadrons moved on to see combat in Sicily and Italy. In those campaigns the squadrons continued to provide close ground support with the Tedder Bomb Carpet, but also developed a new tactic dubbed "intruder raids." These involved lone Balts, flying between 6,000 feet and the deck under the control of ground radar, intercepting and harassing enemy night movements. For this mission, the Baltimores were modified with new bombsights and racks for dropping illumination flares. The bombers' turret guns were also

recalibrated for ground strafing.

RAAF Pilot Officer Alf Warner, another member of 454 Squadron, described an attack on a bridge crossing the Adige River during April 1945: "The bridge was being used by the retreating Germans. As usual, we went in low using guns against the defenses on the bridge and skip bombing with 250-pounders....Having dropped half our bomb load, we pulled away, pilot and gunners having a whale of a time."

Baltimore squadrons chased the Germans the entire length of the Italian peninsula to the Po River. The 13th Hellenic Squadron, along with squadrons from Italy's Co-Belligerent 28th and 132nd groups, all equipped with Balts, flew missions in the Balkans in support of Marshal Tito's partisans in Yugoslavia and Italian troops fighting the Germans in Albania.

The end of the European war saw the quick dismantling of Baltimore squadrons. The last RAF Balts were used in Kenya for aerial mapping and insect control spraying until other aircraft replaced them in 1946.

For a time, the U.S. Navy used a Baltimore to test supersonic airfoils. That Balt was donated to the Baltimore Public Schools system, but neither it nor any of the other 1,574 Baltimores built by Martin survive today. Outside of a few memorials that have been established by former Baltimore squadron members, there are few reminders left of the Martin A-30 Baltimore. It is the forgotten bomber of WWII. \pm

Longtime writer and editor Martin Hill is a veteran of the U.S. Coast Guard and Navy reserves, and currently serves as a medical service corps officer in the California National Guard. For further reading, he recommends: Alamein to the Alps: 454 Squadron, RAAF 1941-1945, by Mark Lax (available for free download at 454-459squadrons.org. au/downloads.html); and Martin 187 Baltimore, by Tony O'Toole.