

A BLACKSHOE'S GRADUATION TEST ABOARD ANTIETAM

By Capt. George W. Folta, USN (Ret.)

Execute," a signalman aboard the destroyer *Aylwin* (DD 355) yelled as he watched the flag signal hoisted on *Yorktown* (CV 5). Immediately, the task force turned into the wind. We had to quickly land our planes aboard *Yorktown* and *Lexington* (CV 2) before any more enemy bombers appeared. We had safely survived an attack by aircraft out of Rabaul, New Britain, in the South Pacific. The date was February 1942.

Our fighter pilots had created havoc among the enemy bombers. One pilot shot down five Mitsubishi G4M "Bettys," becoming the first naval ace of WW II. The folks back home in Chicago, Ill., later named an airport after him. His name was Butch O'Hare.

Fortunately, none of our pilots were lost, but some of their planes had been damaged so badly that the tailhooks wouldn't catch the arresting wires on the flight deck. These planes had to crash into the "barrier," a screen of cables that would pop up from the flight deck. The barrier also protected other aircraft parked on the deck.

Crashing into a barrier could be devastating to the pilot and the plane. Surely, there must be a better way, and there was. But it took the Royal Navy to come up with the idea.

Years later, in 1953, I was Chief Engineer of the first, and at that time the only, "canted" deck aircraft carrier in the world, *Antietam* (CVA 36). We were in Portsmouth, England, to let the Royal Navy fly their fighter jets on and off an angled-deck carrier, because this brilliant idea originated with the British (see "Angled Flight Deck Inventor Dies," Jul-Aug 00, p. 46). Now, if the tailhook missed the arresting wires, the plane didn't have to crash into the barrier; the pilot just gunned the engine and came around for another try.

The day came for the first Royal Navy touch-and-go

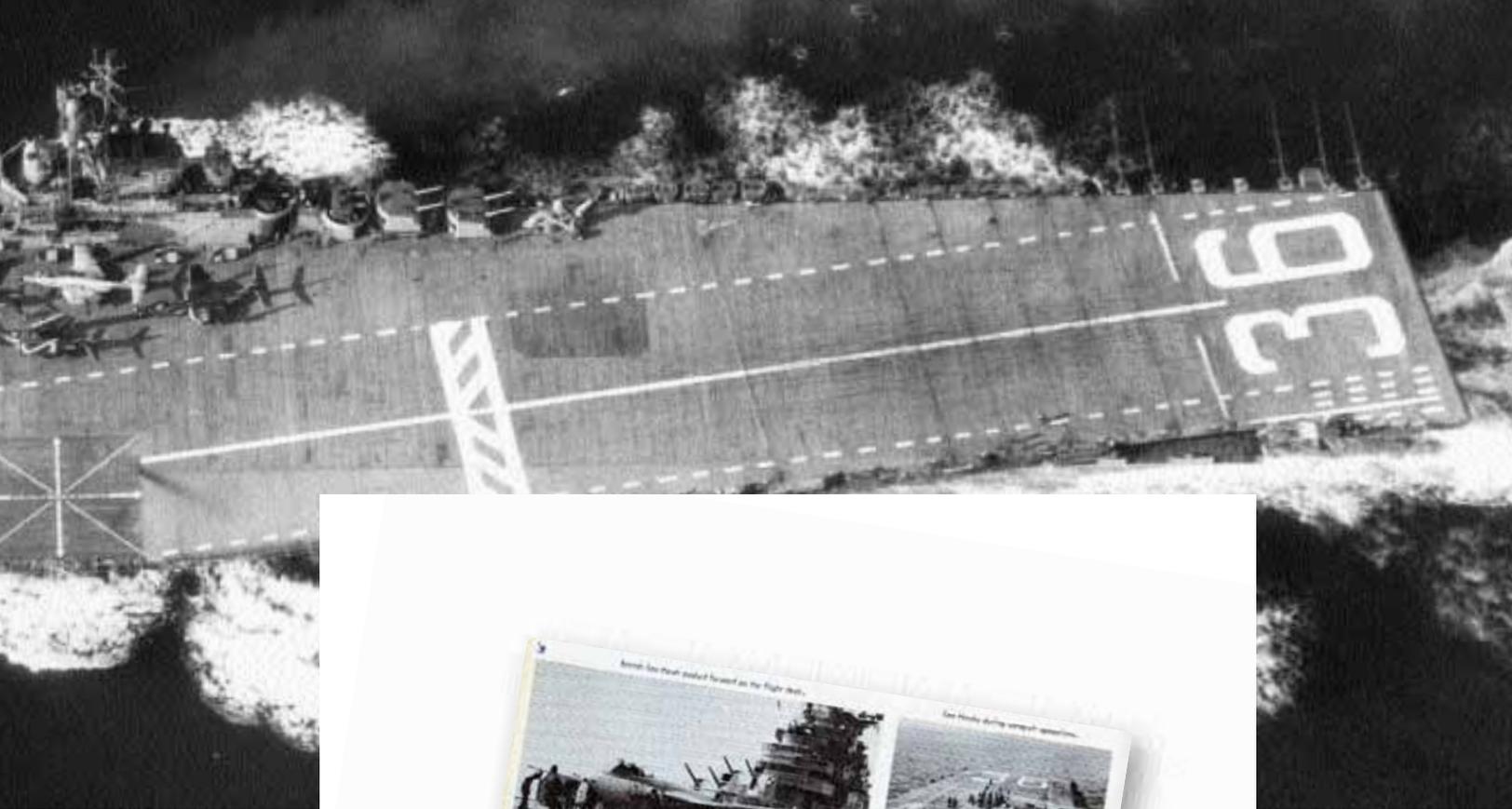
practice. It was a lovely day, but there was no natural wind. The sea was flat. In order to get the 30-knot wind over the flight deck required for landing and taking off jets, all of *Antietam's* eight boilers had to be "on the line." With those old boilers huffing and puffing, I offered a silent prayer that Murphy's Law would not apply. But, midway through the exercise, one of the two forced-draft blowers on one boiler locked up. We had to lower the fires on the boiler to keep from making smoke that would blind the pilots while landing, but by doing so the ship's speed was decreased.

After I explained the problem, the captain made the decision to send the Royal Navy jets to the beach. He then summoned me to the bridge, where I assured him the entire engineering force would work around the clock to find the trouble. "Chief, we are going to sea on Monday, and that blower had better be working," the captain said. "I don't want my command to be the laughing stock of the Royal Navy. This is your 'graduation test.' Do I make myself clear?"

"Yes, sir," I replied, fully aware that failure would result in something ominous.

We tore that blower down and found that an internal helical gear had broken. I was shaking after we learned that the gear was not on our spare parts list. We handed the ship's top machinist the blueprints and broken gear and asked him if he could make a replacement by Sunday morning. He took one look and said he couldn't make the helical cut. I was crushed. Would failure of my graduation test mean that I would get transferred? Almost as bad, I had my heart set on seeing Paris, France. Would I have to cancel my leave?

Early Saturday morning, I headed into Her Majesty's Dockyard in Portsmouth carrying a heavy heart, blueprints and



the broken gear. When I found the machine shop, I explained the problem and played up its importance to the Royal Navy. The men were all old, and even their tools looked ancient. The leading man examined the gear and blueprints, then called over a coworker. They must have spoken in Old English because I couldn't understand a word of their conversation. Finally, he turned to me and said, "Son, you come back this afternoon. We will have your gear for you. After all, we built a battleship in one year. We can certainly turn out a small gear in one day." I thought as I left, "A battleship in one year! Is the old man hallucinating?"

When I returned and looked at the gear, I saw my graduation test go down the drain. The gear was not helical. The old man put his hand on my shoulder and said, "Not to worry. This gear will work perfectly. It may be a little noisier, but your blower will never know the difference." How could he tell that by looking at the blueprints? At the Naval Academy I had done well in mechanical drawing, but it wasn't clear to me that a straight-cut gear would work.

We had no other choice, so we put the gear in the blower and, holding our collective breath, lit it off while we hid behind the boiler. It ran like a Swiss watch—and not a bit noisier.



Top, *Antietam* (CVA 36) underway in 1953. Above, this page from the carrier's 1952–1953 cruise book shows the purpose of the visit to England: to demonstrate the canted deck to the British and invite them to participate in flight operations.

On Monday morning, we put to sea with the Royal Navy jets. No smoke. The pilots were happy, the captain was happy and I was invited to watch the flight operations. I knew I had passed the test and would get to Paris!

Several mornings later before I was to go on leave, I returned to the machine shop to thank the people there. Under my arm I carried a large can of coffee and a framed picture of Royal Navy jets taking off from *Antietam*. The men were delighted and asked me to tarry over a cup of coffee. It was then that I asked the leading man, "By the way, what battleship did this dockyard build in one year?"

"The Dreadnought in 1906," he answered. I was in awe. These men had not only been the key to my passing my graduation test, but they had helped build the forerunner of WW I and WW II battle cruisers and battleships.

I passed around American cigarettes, and we had some more coffee while they regaled me with stories of building that great ship. Paris, not as important now, would have to wait. ✈

Later in his career, Capt. Folta commanded *John Hood* (DD 655) and *Monticello* (LSD 35). He retired from naval service in 1969.