

HMS Invincible Hosts U.S. Naval Aviation



By Buddy Joyce

Knowledgeable Naval Aviators have always recognized the strong contributions the British Royal Navy made to the development of maritime air power. In fact, several of the most important developments that accelerated the maturity of U.S. Naval Aviation had British origins. The British designed the first angled-deck carrier and the first steam catapult; and the AV-8 *Harrier*, originally designed and built in Britain, became the first operational vertical/short takeoff and landing (V/STOL) aircraft in the U.S. inventory.

Even with a common heritage in operations and technology, the two navies are today progressing along different developmental tracks. Therefore, training opportunities such as that presented by HMS *Invincible's* visit to the Virginia Capes in October 1997 allow British and U.S. aviation personnel to continue learning from each other's abilities and strategies.

One of three British carriers, *Invincible* and her sister ships form

the core of the Royal Navy's operational capability and the heart of the United Kingdom's defense strategy. *Invincible* performs her power projection mission with a crew of 1,200, including 10 percent women.

Unlike U.S. aircraft carriers, *Invincible* is equipped with a ski-jump ramp on the bow, which enables *Sea Harrier* V/STOL aircraft to launch with a heavier payload.

Invincible is capable of deploying a mix of 24 helicopters and V/STOL fighters, depending upon mission needs. On this voyage she carried six *Sea Harrier* FA.2 fighters from 800 Squadron. The *Sea Harrier*—similar to the U.S. Marine Corps' AV-8 *Harrier*—is used for strike and fleet air defense missions. Seven *Sea King* HAS.5/6 helicopters—similar to U.S. Navy SH-3H *Sea Kings*—from 814 Squadron were embarked; these helicopters are used for anti-submarine warfare, surveillance, over-the-horizon targeting relay, troop transport, search and rescue, casualty evacuation and vertical

replenishment. Three *Sea King* AEW.2 helicopters, comprising the "A" Flight of 824 Squadron, provide radar early warning with their powerful Searchwater radars. These helicopters are undergoing upgrades, including digital data links and improved computers.

While operating off the Virginia coast, *Invincible* hosted two AV-8B *Harrier* IIs from Marine Attack Squadron (VMA) 231, MCAS Cherry Point, N.C., and an SH-60B *Seahawk* from Helicopter Antisubmarine Squadron Light (HSL) 40, NS Mayport, Fla., for joint flight operations. After an overhead break, each AV-8B approached the ship from aft along the port side until abeam a numbered spot on *Invincible's* deck, then slipped overhead the landing spot sideways and slowly descended to a touchdown with a slight bounce, after which the wheels were chocked by flight deck handlers. Shortly thereafter, the *Harriers* were cleared for takeoff; each pilot positioned the nozzles of the Pegasus engine to 30 degrees



HMS Invincible

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Ship's company is inspected during the change of command for Commander Antisubmarine Warfare Striking Force/United Kingdom Task Group aboard HMS *Invincible* pier-side at Naval Base, Norfolk, Va., on 6 October 1997.



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HMS *Invincible*

downward deflection, released brakes and took off using the ski-jump. After several cycles, the *Harriers* were hot-refueled by the flight deck crew.

The joint flight operations provided a unique opportunity for U.S. flight crews to work with their British peers. *Invincible's* visit helped enhance the capabilities of both countries' Naval Aviation units in order for them to remain flexible defense forces. ✈

Mr. Joyce is an aviation photographer who resides in Virginia Beach, Va. Special thanks to Rick Burgess for his assistance with this article.

AV-8B *Harrier* CG 01 of VMA-231 was the first to land (right) and take off (opposite page) during U.S. flight operations aboard HMS *Invincible*. Below, an HSL-40 SH-60B *Seahawk* touches down while the Royal Fleet Auxiliary support ship *Fort Victoria* (A387) steams astern.

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The British *Sea Harrier* FA.2 fighter is used for strike and fleet air defense.

Left, three British *Sea King* AEW.2 helicopters comprise the 824 Squadron's "A" Flight; note the prominent early warning radar equipment. Right, this British *Sea King* HAS helicopter is "on the prow" in its antisubmarine warfare mission.



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