

# U.S. HAWKEYE CROSS DECKS ABOARD FRENCH CARRIER

By Cdr. Vince Bowers

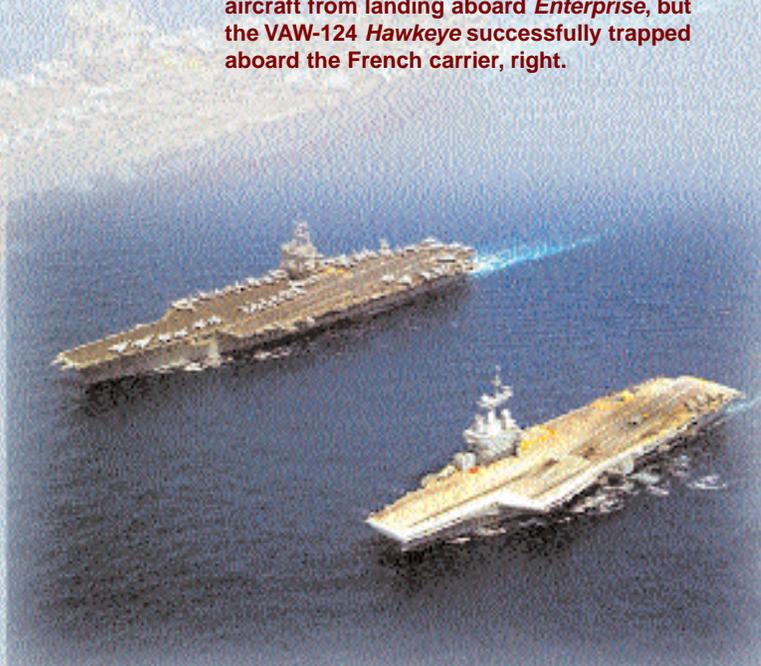
The concept of a U.S. and French E-2 cross-deck first arose during a meeting between French and Sixth Fleet naval officials in November 2000. The French had added the Northrop Grumman E-2C *Hawkeye* Group II aircraft to their naval air inventory in the late 1990s and commissioned the nuclear aircraft carrier *Charles De Gaulle* in September 2000. Since U.S. and French E-2s are practically the same, and the French operate E-2s from *De Gaulle* using U.S.-designed arresting gear and catapults, demonstrating a cross-deck capability could eventually lead to standard cross-deck operating procedures. *Enterprise* (CVN 65), scheduled to operate in the vicinity of *De Gaulle* in the Mediterranean for the May 2001 multinational exercise Trident D'Or, would be in a good position to attempt a cross-deck.

The ball started rolling slowly at first. A few emails and phone calls were exchanged in April to establish contacts and determine the feasibility of the evolution. The Sixth Fleet, French Naval Aviation headquarters, the E-2 desk at the Naval Air Systems Command (NAVAIR) and Carrier

Airborne Early Warning Squadron (VAW) 124, based at Norfolk, Va., all began researching aspects of the concept. With less than a month to plan, research and execute the cross-deck, the pace of coordination quickly ramped up.

Luckily, the similarities between equipment, procedures and techniques outweighed the differences. French E-2 aircrew personnel and landing signal officers (LSOs) receive much of their training in the U.S. and apply similar methods for E-2

**Below, the participation of *Enterprise* and *De Gaulle* in a multinational exercise set the stage for the cross-deck of U.S. and French E-2Cs. Mechanical problems kept the French aircraft from landing aboard *Enterprise*, but the VAW-124 *Hawkeye* successfully trapped aboard the French carrier, right.**



PH3 Doug Pearlman



PH1(AW)/NAC Martin Maddock

handling. The U.S.-built arresting gear on board *De Gaulle* uses the same settings as required for U.S. *Hawkeyes*, although *De Gaulle* has only three wires vice four found on U.S. carriers. *De Gaulle*'s two catapults are short and deliver slightly lower end speeds. The lens, although it has different waveoff and cut light locations, has the same number and color of glideslope cells and datum lights and is set to a standard 3.5-degree glideslope.

Flight deck crews on *De Gaulle* are identified by the same color jerseys as U.S. flight deck crews (with the exception of fuels personnel wearing red instead of purple), but the French do not wear float coats. In general, it seemed that landing on *De Gaulle* would be like landing on a U.S. carrier, but with a 41-foot shorter landing area. The French E-2 landing aboard *Enterprise* was considered to be little more than routine, because many French pilots are trained in the U.S. aboard large U.S. carriers using standard U.S. procedures.

Shortly after *Enterprise* pulled into the Mediterranean, VAW-124's executive officer and the air wing LSO from Carrier Air Wing (CVW) 8 were given the opportunity to view *De Gaulle* in action. They were flown aboard the French carrier in a Helicopter Antisubmarine Squadron (HS) 3 H-60 *Seahawk* to observe and discuss aircraft operations with *De Gaulle*'s air boss, LSO, aircraft handler, and catapult and arresting gear officers, as well as the French E-2 squadron's commanding officer and operations officer. Aside from a few technical details under review by NAVAIR and pending final Sixth Fleet approval, it looked like the cross-deck would be possible.

The day after the French carrier visit, and less than a week before the exchange operation window, message traffic ignited. Sixth Fleet granted approval pending NAVAIR concurrence. NAVAIR concurred pending additional information on the flight deck coefficient of friction and emitter profiles, and recommended a slightly reduced catapult end speed. *De Gaulle* provided the

additional information and agreed to the requested catapult restrictions. Finally, a date and time was chosen and last-minute procedural coordination was conducted over the telephone. The cross-deck would comprise one French and one U.S E-2 conducting two waveoffs for lens familiarity, two touch and goes, a trap, a catapult, a second trap followed by a hot refuel, and a catapult to return to base.

The cross-deck began in the morning on 23 May as an HS-3 *Seahawk* flew from *Enterprise* to *De Gaulle* carrying six VAW-124 maintenance personnel, a CVW-8 LSO and a photographer. All of these personnel conducted flight deck familiarization prior to the cross-deck evolution. The French E-2 experienced maintenance problems and unfortunately was unable to launch for the event, so the French maintenance personnel were not transported to CVN 65 as planned.



Lt. Ryan Youst

**Above, a pilot's-eye view of the approach to *De Gaulle*. Below, French deck crew members await the arrival of the VAW-124 *Hawkeye*.**



PH1(AW)/NAC Martin Maddock



**Left, the VAW-124 *Bear Aces* crew—from left to right, Ltjg. Jeff Gaydash, Cdr. Vince Bowhers, Lt. Ryan Yost, LCdr. Greg Barringer and LCdr. Terry Morris—perform a touch and go on board *De Gaulle*, above.**

VAW-124's *Hawkeye*, Bear 602, launched on schedule and proceeded to *De Gaulle*. It was a sunny day in the Mediterranean with 26 knots of wind over the deck. Once cleared into *De Gaulle* airspace, the E-2 contacted the tower and proceeded overhead at 5,000 feet to await the air boss's call-down. Under the guidance of the CVW-8 LSO operating with a French LSO backup, Bear 602 completed two waveoffs and two touch and goes.

The *Hawkeye* took the three wire on the first trap, and the aircraft rolled out to within 12 feet of the end of the angle—the deck was indeed a little tighter than a U.S. deck. Yellow shirts directed the aircraft to turn 180

degrees in the landing area with the wings spread and taxied her to the stern to refuel. Time limitations did not allow for a second trap, so the aircraft took 6,000 pounds of fuel, performed a cross-bleed start on the starboard engine and proceeded to the forward catapult. The pilot confirmed via radio with the French air boss that Bear 602's gross weight was 52,000 pounds, and the boss had the catapult set for launch. Although U.S. carriers normally use 10-degree flap settings for E-2s to provide a better single-engine end speed, the stroke and end speed characteristics of

*De Gaulle* required a 20-degree flap setting. The departure procedure was the same as U.S. Case I visual flight rules procedures, and the crew of Bear 602 headed back to *Enterprise* with the thrill of a Navy first and several digital photographs.

The successful conclusion of the cross-deck proved the capability to launch and recover U.S. E-2s aboard the French carrier and demonstrated their compatibility. Future cooperation is yet to be determined, but VAW-124's efforts have broken the ice, forming a path that other cross-decks can follow.

Cdr. Bowhers is VAW-124's Executive Officer.