

## The Air Wings

**E**nterprise and her crew were at their finest when her air wing came aboard. Her entire reason for being was to operate planes off the deck. Since the beginning of naval aviation the US Navy organized aircraft into squadrons, which belonged to an air group, which in turn belonged to the carrier to which they were assigned. They were designated

carrier air groups (CVG) from the 1930s to the early 1960s then, from December 20, 1963, as carrier air wings (CVW). Despite the change in nomenclature, the term for the air wing's skipper, Commander Air Group or CAG, remained the same: Big E's first CVG-1 skipper, Cmdr. George Tally, was known as "CAG-1" in 1962 and her last air wing



The background photo was taken during the shakedown cruise, February 5–April 8, 1962, with a photo montage added. The aircraft from 1 o'clock clockwise: F4H-1 Phantom II, AD-6 Skyraider, WF-1 Tracer, C-2 Trader, A3J-1 Vigilante, A-3 Skywarrior, A4D-2N Skyhawk, and F8U-1 Crusader. It is notable that the composite CVG-1 did not include the Skywarrior.

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Table 6.1

<i>Air Wing Deployments on USS Enterprise (CVA(N)/CVN-65)</i>			
<i>Group</i>	<i>Tail code</i>	<i>Cruise/Deployment</i>	<i>Date</i>
CVG-1/composite air group	AF/AK/AB/GL/GE/HU	Shakedown cruise, Caribbean Sea	January 12–April 8, 1962
CVG-6	AF	1st deployment, 1st Med cruise	August 3–October 11, 1962
CVG-6	AE	Caribbean/Cuban missile crisis/Cuba blockade cruise 2nd deployment, 2nd Med cruise 3rd deployment, 3rd Med cruise/Operation Sea Orbit	October 19–December 6, 1962 February 6–September 4, 1963 February 8–October 3, 1964
CVW-9	NG	4th deployment, 1st WESTPAC 5th deployment, 2nd WESTPAC 6th deployment, 3rd WESTPAC 7th deployment, 4th WESTPAC	October 26, 1965–June 21, 1966 November 19, 1966–July 6, 1967 January 3–July 18, 1968 January 6–July 2, 1969
CVW-14	NK	8th deployment, 5th WESTPAC 9th deployment, 6th WESTPAC 10th deployment, 7th WESTPAC 11th deployment, 8th WESTPAC 12th deployment, 9th WESTPAC	June 11, 1971–February 12, 1972 September 12, 1972–June 12, 1973 September 17, 1974–May 20, 1975 July 30, 1976–March 28, 1977 April 4–October 30, 1978
CVW-11	NH	13th deployment, 10th WESTPAC 14th deployment, 11th WESTPAC 15th deployment, 12th WESTPAC Northern Pacific (NORPAC) mini cruise, Com3rdFleet 16th deployment, 13th WESTPAC 17th deployment, 14th WESTPAC	September 1, 1982–April 28, 1983 May 30, 1984 to December 20, 1984 January 12–August 13, 1986 October 25–November 24, 1987 January 5–July 2, 1988 September 17, 1989–March 16, 1990
CVW-17	AA	18th deployment, 1st Med/Middle East cruise	June 28–December 20, 1996
CVW-3	AC	19th major deployment, 2nd Med/Middle East cruise	November 6, 1998–May 6, 1999
CVW-8	AJ	20th deployment, 3rd Med/Middle East cruise	April 25–November 10, 2001
CVW-1	AB	21st deployment, 4th Med/Middle East cruise Mini-surge cruise “Summer Pulse”, NorLant/Lant 22nd deployment, 5th Med/Middle East cruise 23rd deployment, 6th Med/Middle East cruise 24th deployment, 7th Med/Middle East cruise 25th deployment, 8th Med/Middle East cruise	October 1, 2003–February 29, 2004 June 3–July 23, 2004  May 2, 2006–November 18, 2006 July 7–December 19, 2007 January 13–July 15, 2011 March 11–November 4, 2012

skipper, CVW-1's Capt. Bob Boyer, was also known as “CAG-1” in 2012. Over the years the CAG job was allocated to a ranking captain rather than a commander, and the air wing truly came to be its own command. The CAG had become a commanding officer in parallel to the skipper of Big E, as opposed to

being under Big E's command. During the half-century of patrolling sea lanes, various CVGs and CVWs operated from Big E. It was fitting, however, that, as chance would have it, the same CVG-1/CVW-1 was to christen and farewell Big E from the fleet.

The very first carrier air groups were

closely attached to the carrier and were part of the carrier departmentally. By the time USS *Enterprise* (CVA(N)-65) came to being, the carrier air group had become an autonomous command that was developed, maintained, and trained separately from the ship, only coming together with the ship for combined operational training and deployment. Nonetheless, it was customary to team an air group with each carrier, and as a result a relationship developed between the ship crew and the air group crew. This usually worked out

naturally as an air group and carrier synchronized their training, operation, rest, and upkeep cycles. During *Enterprise's* operational career she was to have air groups nominally allocated in decade periods approximating with her operational periods between major refit overhauls and reactor refueling. The exceptions to this were at the very beginning and near the end: her first air group, CVG-1, was a composite group sailing with her for two months in early 1962 for her shakedown cruise; and following her major R/COH



This low bow-on view was also taken during the shakedown cruise in the Caribbean Sea. *Enterprise* operated nine squadrons under command of CAG-1, including VF-102 Diamondbacks flying the new F4H-1 Phantom fighter, six of which are parked in "rows" on the bow flight deck. Two of four ship-to-air communications antenna groups are seen here, at the corners of the flight deck on the bow, either side of the bridle catchers. They were removed prior to 1963 and Phasor 90 cones were placed around the island in 1964 for ship to air communications.

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in 1991–1995 Big E cycled through four air wings (see Table 6.1). *Enterprise* made 22 major overseas deployments and seven additional deployments, some of them shorter. These will be explained in the following chapters illustrating her deployment history.

## ***Enterprise's Air Wing Composition and Evolution***

### ***The 1960s***

The 1960s were steeped in the paranoia of the Cold War. *Enterprise* was an instrument in the US military's strategic use of Mutually Assured Destruction, MAD, whereby the possession of nuclear power and the implicit menace to use it against the Soviet Union, and vice versa, theoretically ensured deterrence of a nuclear war between the world's two superpowers. The first air groups on *Enterprise* represented her mission as a nuclear-capable platform able to deploy high-speed, long-range, nuclear-armed bombers toward the USSR from an undisclosed

location out at sea. Big E could rapidly and silently move in the oceans without detection and should Russian submarines, ships, and aircraft attempt to hunt her down she could apply sustained speed – possible due to her nuclear propulsion plants – to out-run adversaries. Failing that she could employ a capable combat air patrol to thwart aerial attack and her escorts could deal with submarine threats.

The air groups were composed of heavy attack (VAH) squadrons, incorporating the new A3J-1 (later designated A-5A) Vigilante, with long-range supersonic bombing capability. The ship and attack aircraft were ably protected by the new F4H-1 (later F-4B) Phantom II and the gun fighter F8U, later designated F-8E Crusader (the last fighter in the navy to incorporate guns – at that time – guns were, of course, added to F-14 and F/A-18). Light attack was provided by A-4 Skyhawks and A-1 Skyraiders, which deployed equally with nuclear strike capability.

The “air group” composition remained as such throughout the first half of the 1960s (see Table 6.2). After Big E's return from the “around-the-world cruise” there were changes to both form and function, due in part to evolution and in part to the war in Vietnam (see Table 6.3).

Big E was deployed to South East Asia over the nine years subsequent to her first refueling in 1965. She had been ordered by her government to take part in naval support of operations against North Vietnam. Her air wings, CVW-9 in the late 1960s and CVW-14 in the 1970s, modified their aircraft composition considerably in response to the demands made during this prolonged conflict. The attack squadrons changed from entirely A-4 Skyhawks in 1966, to

One of the new supersonic A3J-1 (A-5A) Vigilante heavy bombers, AF-704 (Bu. No. 149277), from VAH-7 Peacemakers, is directed forward to cat 1 for launch. Wings are extended and flaps already down for launch prior to hook-up to the catapult. Meanwhile the diminutive A4D-2N Skyhawk to the left is lined up for a shot off cat 2.

North American Aviation, courtesy of Roy Mills





*Enterprise's* first official cruise to the Mediterranean, August 3–October 11, 1962, during which CVG-6 was embarked and all aircraft were identified by the AF tail code. The air group was recorded AE following this deployment and renamed Air Wing Six (CVW-6) in 1964. Aircraft visible are the A3J-1 (later A-5A) Vigilante (center and left on cat 2), A4D-2N (later A-4C) Skyhawks on the port bow (left), and F4H-1 (later F-4B) Phantom fighters on starboard bow and cat 1 (right).

North American Aviation, courtesy of Roy Mills

Table 6.2

<i>Composition of Big E's air group (CVG-6)/wing (CVW-6) 1962–1965</i>		
<i>Aircraft mission type</i>	<i>Squadron prefix</i>	<i>Embarked aircraft model</i>
Fighter	VF	1 squadron F4H-1 Phantom II, redesignated F-4B December 1962 1 squadron F8U-1 Crusader, redesignated F-8E December 1962
Attack	VA	1 squadron AD-6 Skyraider, redesignated A-1H 3 squadrons A4D-2N Skyhawks, redesignated A-4C
Heavy Attack	VAH	1 squadron A3J-1 Vigilante, redesignated A-5A December 1962
Photoreconnaissance	VP	1 detachment F8U-1P Crusader, redesignated RF-8A
Airborne Early Warning	VAW	1 detachment WF-2 Tracker "Willy Fudd," redesignated E-1B
Electronic Warfare	VAQ	1 detachment EA-1F "Electric Spad," embarked 1963 providing Airborne ECM
Helicopter Utility	HU	A detachment was embarked as part of the ship rather than CVG, and flew a number of helos, including HUP-3, HU2K-1, UH25B, and by 1964 UH-2A Seasprite.

A-4s alongside improved, computerized A-6A Intruders. From 1969 onwards A-7 Corsairs replaced the venerable Skyhawk and joined with the A-6 in attack role. Heavy attack squadrons were now populated by the sizable A-3 Skywarrior, at this time deployed in aerial tanking and ELINT roles. The A-5A Vigilante, previously the VAH star of Big E's air wing, was from 1965 to 1979 deployed as a supersonic reconnaissance "platform," the RA-5C. The Vigilante embarked in

smaller numbers with this very important and specialized role, which was to support the newly installed IOIC. Air Wing Nine was the most modern CVW of the time, and remained at the cutting edge as new systems and aircraft types joined the fleet (see Table 6.3). A growing capability in AEW saw Big E's CVW-9 upgrade from the old WF-1 "Willy Fudd" (later E-1B) Tracer to the E-2A Hawkeye in 1966. Its successor, the E-2C, remained vital to Big E's CVW up to her last cruise

With CVG-6 aboard, Big E steams in 1962, at the beginning of 50 years of sea duty for her nation. This aerial view shows the same scene as above after the Sailors on parade disbanded.

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The aft flight deck on May 22, 1963. Big E was steaming in Mediterranean Sea, exercising with 6th Fleet and NATO units during her 2nd Med cruise. The deck was crammed with CVG-6 Skyhawks, Skyraiders, Crusaders, and the first generation AEW Tracers. The prop aircraft were spotted in a fashion reminiscent of CV-6 during World War II.

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Table 6.3

<i>Composition of Big E's air wing (CVW-9) 1965–1970</i>		
<i>Aircraft mission type</i>	<i>Squadron prefix</i>	<i>Embarked aircraft model</i>
Fighter	VF	2 squadrons F-4B Phantom, upgraded to F-4J in 1968
Attack	VA	4 squadrons A-4C Skyhawk in 1965–1966 cruise 1 squadron A-6A Intruder and 3 Squadrons A-4C 1967–1968 1 squadron A-6A Intruder and 2 Squadrons A-7B Corsair 1969
Heavy Attack	VAH	1 detachment A-3B Skywarrior, redesignated KA-3B in 1968
Photoreconnaissance	RVAH	1 squadron RA-5C Vigilante
Airborne Early Warning	VAW	1 detachment E-1B up to 1967 1 squadron E-2A from 1967
Electronic Warfare	VQ/VAQ	1 VAQ squadron EKA-3B / KA-3B from 1969
Helicopter Combat Support	HC	UH-2C Seasprite utility helicopter



*Enterprise* displayed Carrier Air Wing Six on June 30, 1964 just prior to Operation Sea Orbit. Spotted up forward are CVW-6's Fighters from VF-33 and VF-102. On the aft deck the "tip of the spear" was formed by Skyhawks from VA 66 and 76. The Radome toting Tracers were from VAW-12 Det 65 and the sizable Vigilantes were from VAH-7.

USN, photo PHC J. Williams

in 2012. The EW role was integrated into CVG-6 in 1963 and CVW-6 in 1967 in the Skyraider variant EA-1F and later in CVW-9 during her 1969 cruise with the EKA-3B version of the Skywarrior. The squadrons VAQ-130 Scorpions embarked in 1969 and in her next 1971 cruise VAQ-132 Zappers both flew this huge twin engine jet. It is noteworthy that VAQ-130 and -132 served again on Big E in 1996 and 1998 respectively, flying the EA-6B Prowler, which was the purpose-built EW airframe that made its debut on Big E as part of CVW-14 in 1972.

### *The 1970s*

This decade saw the end of the Vietnam War but a continuation of the Cold War. Big E returned to blue-water ops with most WESTPAC deployments, including a significant voyage in the Indian Ocean, where there was a Soviet presence building. This necessitated a refocus on *Enterprise* Battle Group/Task Force defense, facilitated by the the addition

of new, sophisticated fighters and anti-submarine aircraft. This next major evolution in Big E's air wing composition was in the early 1970s and heralded the addition of three new airframes to the CVW to provide the long-range air and submarine defense (see Table 6.4).

A massive leap in Big E's long-range fighter intercept capabilities was made with the replacement of the F-4J Phantom with the even more amazing F-14A Tomcat, in 1973. As Capt. Tissott noted in his *Command History* for that year:

From August through December several revisions to the Air Wing's complement of squadrons were made resulting in its becoming the most sophisticated and modern air wing within the Navy. With admission of HS-2 into the Air Wing on 6 August, *Enterprise* began the transition from the concept of a CVAN to that of a CVN. On 1 September the air striking arm of *Enterprise* was greatly enhanced with the introduction of the first two F-14 Squadrons, VF-1 and VF-2, who replaced VF-142 and VF-143. The last change to the Air Wing's complement was made on 4 December when VAQ-137, equipped with the new expanded jamming capability of the EA-6B, replaced VAQ-131.<sup>1</sup>

The Tomcat made its first operational deployment as part of CVW-14 on Big E in 1974. It showcased the advanced AN/AWG-9 radar and fire control system aligned with the advanced long-range air intercept missile, the AIM-54 Phoenix. CVW-14's E-2C Hawkeyes operating with Big E as an integrated air intercept control unit, proved a powerful combination, enabling very tight fleet defense against Soviet long-range bombers whose entire mission was to sink *Enterprise* and her escorting cruisers, destroyers, and frigates. Being a maiden



The Phabulous Phantom. Here NK-113 from VF-143, the Pukin' Dogs, flew from *Enterprise* as part of CVW-14 in 1971–1973. It was soon to be replaced by an even better fighter.

USN, Captain William H. Cracknell Collection (source WWHAM)

voyage, there were the usual wrinkles to iron out, and there was a major concern with the new Tomcats' engines. After a couple of crashes, fortunately with no life lost, the Tomcats on *Enterprise* were temporarily “grounded” while troubleshooting and corrections were made. When functioning, however, F-14s were not just fighters but an integrated system in Big E's combat systems, more so than the older Phantoms and Crusaders.

The other significant air wing improvement was the addition of ASW aircraft. This required that another module be installed in Big E's combat systems that effectively made the embarked aircraft a directly integrated sensor and proxy combat system of the ship. In many ways its development resulted from the “November” incident in January 1968 (see Chapter 8). US Navy commands were greatly unsettled by that incident and there was a review that led to the redesign of carrier roles and air wing composition. Where there had been

purpose-deployed anti-submarine carrier groups with their own ASW air wings, now every deployed “super” carrier must have its own ASW capability, for the hunting role left by previous anti-submarine carrier groups and to protect the carrier from attack from the silent Soviet threat. All of the anti-submarine carriers were World War II-vintage Essex-class (CVS) and all were decommissioned by 1975, leaving a gap to be filled. Initially a helicopter anti-submarine detachment joined CVW-14 in the 1972–1973 deployment, with a full squadron HS-2 in the 1974–1975 deployment that followed. A full ASW module was inserted into Big E's CIC, which facilitated the addition of the first fixed wing anti-submarine squadron on Big E when VS-29 Dragonfires joined CVW-14 in the 1976 cruise. It supported the helicopter and fixed wing ASW squadrons to properly function in coordination with their mother ship. Big E had evolved into a multi-purpose carrier, the CVN.



The F-14A Tomcat became a successful replacement of the F-4J Phantom. Here F-14B (upgrade) AC-101 from VF-32 is in the groove behind Enterprise in 1998.

Dave McKay



NK-611 Skywarrior EKA-3B, VAQ-130, during WESTPAC 1971–1972.

USN, Captain William H. Cracknell Collection (source WWHAM)