

BLACK LIONS and GREEN PHANTOMS

By STEPHEN RILEY

The problems of deck-spotting darkly painted airplanes, especially at night can easily be imagined from this photo. The two F-4G's of VF-213, in matte green finish, were part of an experimental camouflage project tried in 1966. Behind are the regular-finish F-4B's of VF-114 aboard the USS KITTY HAWK. (Photo - McDonnell Douglas D4C36469)



Insofar as the U.S. Navy is concerned, the F-4G Phantom is extinct, or almost so. We "Phantom Phanatics" though, know better. The experts in the Pentagon may have changed the designations all back to F-4B, but the BuNo's tell all and the G-Bird spotters know them by heart.

The first F-4G took flight from McDonnell's base at Lambert Field, St. Louis, back in 1963 and in less than three months the entire production run — 12 airplanes — had been flown. Thus, of more than 4,800 Phantoms, only a rare few bore the designation F-4G. There was no external indication that these differed from the F-4B's, but inside where it counted, the changes were important. The large No. 1 Fuel Cell, just behind the rear cockpit, was shaved along the upper forward edge to provide space for a two-way data link system. This reduced the fuel capacity of the airplane by about 600 pounds.

The concept of the data link system was not new; F-86L Interceptors utilized it from 1956 onward to operate in conjunction with the Semi-Automatic Ground Environment (SAGE) air defense system. The Navy envisioned, with the F-4G, a system enabling transmission of digital information from the ground, airborne, or shipboard tactical data system and vice versa. The individual airplane could then, for example, send information on its fuel supply, location, and the ordinance carried. The computer aboard the aircraft carrier could in return provide the airplane with data it might require for a particular mission. The system was also adaptable for the approach and landing mode when coming aboard a carrier. In fact, the data link system - the RCA

AN/ASW-21 — allowed an airplane to make fully "hands off" landings although this was rarely done in operational conditions. Ultimately, the decision was to incorporate some of the same equipment that proved successful in the F-4G's into future Phantoms, and even now F-4B's leaving the Navy Progressive Aircraft Refit (PAR) facilities have the No. 1 Fuel Cell modified to make way for the data link and automatic carrier landing system. The first F-4G, 150481, McDonnell c/n 269, made its first flight in 20 March 1963 with pilot Thomas S. Harris in the front cockpit and John J. Kiely as radar observer. It was delivered to the Navy on 29 May, and after several years' service with various units it was placed in storage. More recently it was brought out to serve as the chase plane for the Grumman F-14 program.

The remaining F-4G's came from the assembly line at regular intervals and the last one, 15064, made its first flight on 22 July 1963. Two of them, 150489 and 150625, were assigned to the Naval Air Test Center, Patuxent River, and the remaining ten went to VF-96 at NAS Miramar. VF-96 was deployed to a carrier a few weeks later, and the lot were placed in the temporary custody of VF-121, to await the arrival of VF-213, the "Black Lions."

VF-213 was then operating an earlier McDonnell product, The F3H-2N (F-3C) Demon, aboard USS HANCOCK with Carrier Air Wing 21 (CVW-21). The Black Lions returned to their shore station, NAS Miramar, in December 1963 and began converting to the F-4G's in early 1964, a training and evaluation period that lasted about 18 months.



A bureaucratic tangle within the Navy, in September 1964, created some designation havoc with the Black Lions, to the disgust of the maintenance personnel — and the delight of the markings enthusiasts. Photographs give ample evidence of the snafu, which went something like this:

VF-213 was advised that, during conversion to the F-4G it would be redesignated on 1 September as VF-116, and part of CVW-11, which actually did happen as far as the Squadron was concerned, but only for a brief period. This change would be in keeping with the practice at that time, of identifying West Coast squadrons with the Air Group or Carrier Air Wing to which they were assigned; e.g., all squadrons in CVW-11 would have the same first two digits as the Wing - VF-114, VF-115, VF-116, etc. However, this practice was discontinued at about the same time that the Black Lions were told to change to VF-116. The crews had already gotten to work stenciling all of the airplanes, new letterhead stationery had been ordered, and squadron patches were on the way.

Within a few days of the first notification to change, the Squadron was advised that the policy had again been revised; VF-116 was told it was still officially VF-213, and as far as the Defense Department computers knew, VF-116 had never existed.

The F-4G Squadron (and at this time a lot of people did not

VF-213's No. 103 in April 1965 as the Squadron was well into its re-equipment and training period, and prior to the switch in unit numbers. (Clay Jansson)

Below,

While in the transition period September 1964 this was No. 103, BuNo 150645, as a VF-116 airplane at NAS Miramar. VF-116 existed, in the Defense Dept. order, for only a few weeks, reverted to VF-213. The Squadron emblem was incomplete. (Harry Gann)

OPPOSITE PAGE

VF-213's airplane No. 105 returning from a mission in Spring 1966 to the KITTY HAWK. Replacement radome was oversprayed black on upper surface. (Lionel Paul)

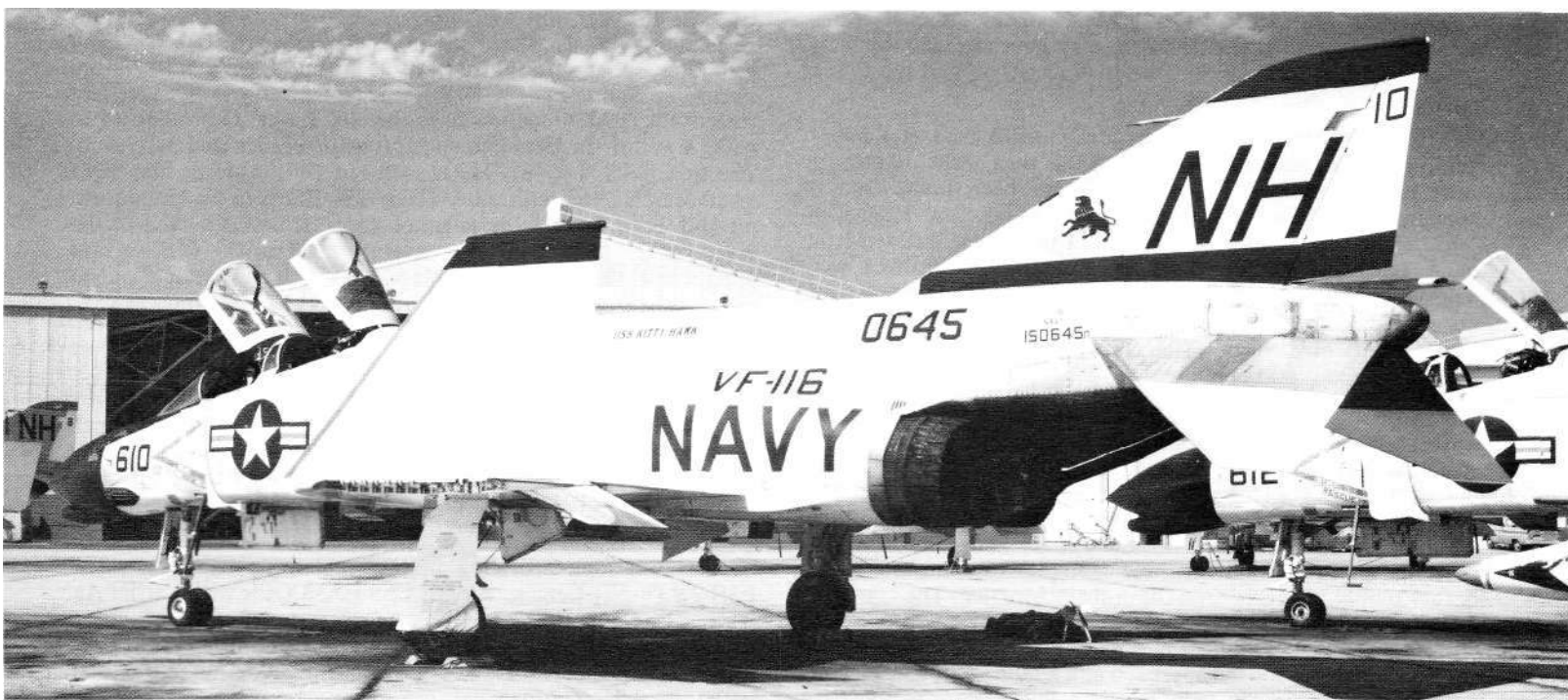
F-4G, 150642 now as Airplane No. 111 of VF-121, still in camouflage and recently returned from WestPac tour with VF-213 aboard the KITTY HAWK. The patchy paint job resulted from touching up the original green. Numeral 2 was on rudder, as airplane No. 102. (Clay Jansson)

know what else to call it) clenched its collective teeth and continued its training. VF-213 began its next deployment on 19 Oct. 1965 when it headed for the Tonkin Gulf aboard USS KITTY HAWK, with ten F-4G's and two F-4B's, 152257 and 152260.² The CO. was Cdr. W.R. O'Connell, and under him were 14 other pilots and a full complement of radar intercept officers.³

Beside first-time operational evaluation of the data link system the Black Lions performed the usual tasks of all Phantom squadrons aboard carriers stationed off Vietnam, primarily all-weather interception readiness, and attack missions. VF-213 and another squadron, VF-114, the "Aardvarks," aboard the KITTY HAWK carried out the most intensive attack missions performed to that date by Navy Phantoms.

An order was received by CVW-11 in March 1966, to the effect that half of the Wing's airplanes were to be given a new experimental camouflage paint on the upper surfaces. VF-213 was chosen to represent the carrier's Phantom force.⁴ Arrangements were made with Clark Air Force Base in the Philippines and ten F-4G's were flown there in the last two weeks of March for repainting. Two remaining F-4's were given the special paint aboard the KITTY HAWK while she lay anchored at Cubi Point.

The Navy obviously had something in mind, but the mechanics of the task may not have been strictly adhered to; some of the



airplanes received a semi-matte green finish (apparently FS595 Green 1/2 34102) but other evidence suggests that some received a two-tone scheme.⁵ Cdr. C.W. Sommers, former maintenance officer of VF-213, then with the Squadron, recalled that some received three shades of green. "The explanation was," he said, "that there simply was not enough paint in several shades and the Air Force ran out of paint as the project went along."⁶

A smaller-than-usual national marking was applied to each side of the F-4's just behind the intake; photos indicate the diameter was about 18 inches, slightly larger than those applied to the USAF Phantoms. The upper port wing surface carried a large national insignie, apparently the same as on other uncamouflaged F-4's. Apparently there were no national insignia on the under surfaces. Other markings applied:

- a. On the upper surface, centered on the inboard flaps, the last two digits of the airplane's number (within the squadron), painted white, about eight inches high.
- b. On the upper surfaces, about halfway between wing-fold line and the wingtip, the full three digits of the airplane's number (within the squadron), painted black, about 12 inches high.
- c. On the forward fuselage, both sides, above and slightly to the rear of the small inlets, the full three digits of the airplane's number (within the squadron), painted black with white border, about ten inches high.
- d. On the rear fuselage, both sides, below the tail fin, the airplane's type designation, e.g., F-4G, painted black about three inches high, and on a line below this, "NAVY" in the same size and color.
- e. On the tail fin, about 6 inches above the bottom, the full Bureau Number in black, about 8 inches high.
- f. Near the top of the rudder, the last, and sometimes last two, digits of the airplane's number (within the squadron) in white, about 8 inches high.
- g. Other markings such as the ejection triangles (which in some cases were yellow instead of the standard red), the red intake warnings, etc., appeared to be the same as in the standard markings scheme. No photographs have been discovered



showing the Squadron's tail code, "NH" on the fin of any green F-4 of VF-213.

The green Phantoms were ferried to Cubi Point for embarkation aboard the KITTY HAWK and the carrier left to continue its cruise on March 29, 1966. An F-4G, 150633, fell from the flight deck level to the pier accidentally, due to a faulty hoist fitting, and broke its back. It was written off the record in August.

VF-213's paint scheme was experimental, and as time wore on it was subject to variations between airplanes. For example, Cdr. Sommers noted that the last one, or last two, digits of the airplane's number (within the squadron) were initially painted black but were later changed to the white shown in photographs here, and the white-bordered nose numbers were changed to all-white.

A noticeable variation was in the radome color (and this applied to all Navy Phantoms, not only VF-213's). The F-4G's, when delivered to the Navy, had black radomes but those received from repair facilities were white. The Black Lions had both colors, and at least two of the Squadron's airplanes had radomes black on top and white on the bottom.⁷

Whatever their new colors, the Squadron soon found that the scheme, while beneficial for its camouflage, presented problems aboard ship. On a carrier — and particularly at night — there is





F-4G 150625 went to the Naval Air Test Center, Patuxent River, and later, with 150489, went aboard the USS AMERICA for carrier qualification trials in the Atlantic in November 1966. It later became chase plane for the Grumman F-14 program. (Photo — Terry Coxall)

little room for maneuvering and still less room for error. The dark airplanes were hazardous insofar as deck spotting was concerned. "It was the consensus of the Air Wing that it was effective 50 percent of the time and a deterrent the remaining 50 percent," said Cdr. Sommers.

Haze, clouds and smoke made spotting difficult, and though good for melding the airplane into the background, it was this poor visibility factor which prompted the Navy to eliminate the camouflage. Other units camouflaged were VA-85, VA-113, VA-115, and RVAH-13.

The KITTY HAWK returned to the States in June 1966 and VF-213 went back to its shore station, NAS Miramar, for the summer. During the recent tour the Squadron lost only one F-4G to combat action, 150645, shot down on 28 April, and one F-4B, 152257, the latter piloted by Cdr. Sommers, with RIO LCdr Bill Sullivan.⁸ Upon arrival at Miramar the F-4G's were dispersed to various units but each was sent through PAR at NAS North Island or MCAS Cherry Point for conversion to late-block, B-model configuration in keeping with Airframe Change 318 (AFC-318) order. The camouflage was removed shortly, though one airplane, 150642, retained it for a while when assigned to VF-121.

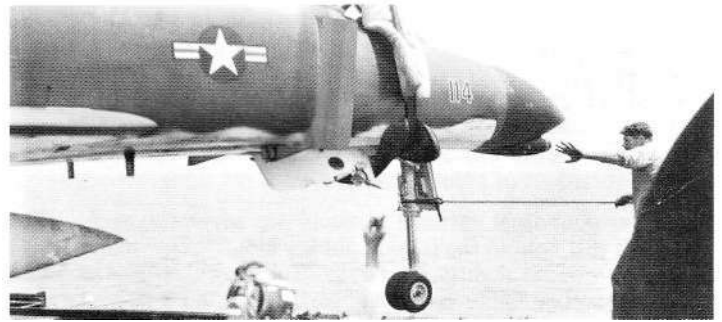
Former F-4G's can be recognized only by a slightly different opening above the two forward fuel cells, however, since by 1973 five had already been struck off strength, sighting of one of these is more unique than ever. But in today's world the Phantom is probably going to be in use for many years yet.

ACKNOWLEDGEMENTS

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NOTES AND REFERENCES.

1. Wagner, Ray. *The North American Sabre*. New York: Doubleday & Co.; 1963, pp. 130-131.
2. Paper strength of Navy fighter squadrons was usually 13 airplanes, varying in practice.
3. U.S. Navy OPNAV Form 5750-2 for VF-213, Oct. 1965 - June 1966.
4. Other aircraft types receiving the camouflage scheme included AH-1H/J's of VA-115, A-4C's of VA-113, RA-5C's of RVAH-13, and A-6A's of VA-85.
5. Maj. John M. Elliott, Armed Forces Museum Advisory Board, Washington D.C., reported that the Navy's Paint and Camouflage Office recalled the order to repaint the VF-213 airplanes. It was intended as a short-term camouflage applicable to a special project. The paint was soluble in gasoline.
6. Cdr. Sommers, recently CO. of VF-32, later with Staff Command, Carrier Division Four.
7. At the time there was strict provision against painting of radomes because it would affect radar effectiveness; how two-tone radomes appeared is one of those unofficial mysteries.
8. BuNo 152257 was crewed by Cdr. Sommers and his RIO, LCdr Bill Sullivan. They were hit by ground fire 18 May 1966 and ejected. The airplane exploded on contact in the jungle. Sullivan's back was broken.



Above, one of the F-4B's given the green paint scheme with VF-213 being hoisted back to the deck. Its engines "autoaccelerated" in landing aboard the KITTY HAWK and went over the edge of the deck onto the catwalk. It was flying the next day. (Photo - Cdr. C.W. Sommers USN)

F-4G Phantoms					
BuNo	MAC c/n	VF-213 sqdn.no.	First flight	Del. date (to VF-96)	Status
150481	269	101	3-20-63	5-29-63	Chase plane for Grumman F-14.
150484	272	102	4-11-63	7-9-63	VMFA-115, Rose Garden, as of August 1972.
150487	275	103	4-23-63	6-1-63	Stricken 18 Sept. 1972, VX-4, Pt. Mugu.
150489	277		4-18-63	6-24-63	Chase plane for Grumman F-14.
150492	280	104	5-1-63	7-3-63	VX-4, Pt. Mugu, as of July 1972.
150625	283		5-22-63	6-27-63	Ex-VMFA-312 to storage at cherry point as of March 1972.
150633	291	106	6-3-63	7-26-63	Stricken August 1966 from VF-213.
150636	294	107	6-5-63	7-18-63	Stricken Pet. 1971, VMFA-323 missile
150639	297	110	7-8-63	7-23-63	VMFA-323 as of August 1972.
150642	300	112	6-28-63	7-26-63	VF-101, NAS Oceana, April 1972, later NAS Patuxent River, March 1973.
150645	303	111	7-22-63	8-6-63	Stricken April 1966, combat SEA, VF-213.

*To Naval Air Test Center, Patuxent River.

F-4B Phantoms		
148406	?	Replacement airplane, received camouflage.
149428	113	Replacement for F-4G, 150633. Not camouflaged.
152257	?	To VF-213 Oct. 1965, stricken 18 May 1966, combat over SEA.
152260	114	Received camouflage. To VF-213 October 1965. Received camouflage.

9. He was awarded the DFC. Cdr. Sommers received the Silver Star.
9. Not all F-4G's may have been converted back to the F-4B configuration after return from WestPac in 1966. 150481 and 150489 were photographed at NAS Patuxent River in June 1970 and 150485, assigned to VX-4, was at NAS Miramar in June 1970, each with F-4G fuselage identifications. Ref. Maj. Jack D. Morris, USAF.
10. See also Letzter, George. "Phantom DeTails" (Part II), *JOURNAL of A.A.H.S.*, Vol. 15, No. 1, Spring 1970.

ABOUT THE AUTHOR

Stephen Riley, at the time of preparation of the accompanying article, was a journalist covering the troubles in Northern Ireland. He has since returned to Winnipeg. His introduction into the Society, in 1972, listed his chief interest as "research into the history of the Phantom." This is his first submittal to the *JOURNAL*, and his next will be on the USAF F-110A, forerunner of the F-4C, and one of the attempts at commonality of aircraft for the USAF and USN.