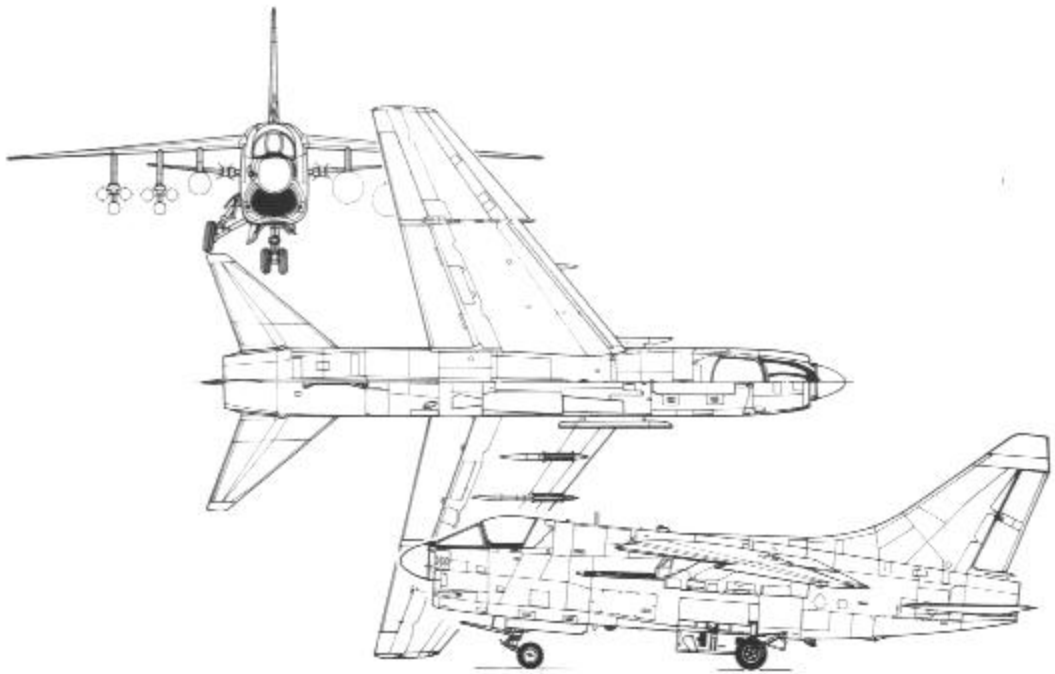
1022.

A-7 CORSAIR II in action

squadron/signal publications

AIRCRAFT NO. 22

A-7 CORSAIR II in action



by LOU DRENDEL

squadron/signal publications

Other "in Action" Titles

by Lou Drendel

Gunslingers in Action
A-7 Corsair II in Action
B-52 Stratofortress in Action
F-15 Eagle in Action
F-104 Starfighter in Action
F-14 Tomcat in Action
F-111 in Action
F-5 in Action
C-130 Hercules in Action
A-10 Warthog in Action
F-16 Fighting Falcon in Action
SR-71 Blackbird in Action

by Lou Drendel and Capt. Don Carson

F-106 Delta Dart in Action

1115 CROWLEY DRIVE, CARROLLTON, TEXAS 75011-5010

ISBN 0-89747-021-4

Photo Credits

US Navy
USAF
Ling - Temco - Vought
Norman E. Taylor
Bruce Tombecky
Ken Buchanan
Dr. J.G. Handelman
D. Kasulka
R. Hill
Charles Howes
Jerry Geer
Paul Stevens
Peter B. Lewis
F. Roos
S. Ohtaki
Bob LaBouy
Ben Knowles
Chuck DeVlaming
Harry Gann

If you have any photographs of the aircraft, armor, soldiers or ships of any nation, particularly wartime snapshots, why not share them with us and help make Squadron/Signal's books all the more interesting and complete in the future. Any photograph sent to us will be copied and the original returned. The donor will be fully credited for any photos used. Please send them to: Squadron/Signal Publications, Inc., 1115 Crowley Dr., Carrollton, TX 75011-5010.

A-7A Corsair II of VA-147 formates on F-4U-7 Corsair restored in Marines markings. (USN)

Introduction

The A-7 is the third Vought aircraft to carry the "Corsair" nom de guerre, and as such has amassed as many superlatives in it's time as the previous two did in their's.

The Corsair II was developed as a result of requirements which grew out of the Navy's Sea Based Strike Study, which was conducted by the Chief of Naval Operations in 1963. It had become obvious to the Navy that their current bantam weight bomber, the A-4 Skyhawk, would not be able to meet the forseeable operational requirements of the late sixties and seventies. The A-4 did not have the load-carrying capabilities, or the all-weather weapons delivery abilities that they were after and, though later modifications would improve the A-4 in both areas, it still falls far short of the Corsair II. The study had made clear the need for such an aircraft, but it had not gone much beyond that. It was obvious to the Navy that they could not afford the cost or the long lead time needed to develop the VAX (Experimental Attack Aircraft) which had been proposed in 1962. What they needed was designated VAL (Light Attack Aircraft), and it was suggested that four tried and proven designs be used as a starting point in the design of VAL. The four designs were: The A-4 Skyhawk, the A-6 Intruder, the F-J1 Fury, and the F-8 Crusader.

The A-7 may bear a family resemblance to the Crusader because of this early suggestion, but they are only superficial look-alikes. (If anyone dared call his mount a "Short Little Ugly F-----", an F-8 driver would probably be inspired to violent reaction, yet A-7 pilots cheerfully acknowledge the "SLUF" appelation.)

Early in the design competition, Vought divided their design engineers into two teams, who approached the problem in different ways. The basic F-8 layout was used as a starting point; but mission requirements quickly changed it in the following manner;

Weapons delivery techniques of the day demanded sub-sonic speeds over the target, so that extra cost of supersonic capability could be eliminated. Hence, no afterburner, and a shorter fuselage. The wing itself had to be stronger to carry more ordnance. This, plus available high-lift devices allowed the elimination of the variable position wing of the Crusader. Maintenance on the many "black boxes" would have to be made easy to shorten turn-around times, so they put them all in one spot in the fuselage. The Navy was staring down the barrel of a forced buy of the F-111B. The F-111B used the fatter TF-30 fanjet engine. The Secretary of Defense was fond of commonality, hence the A-7 would use the TF-30. The A-7 was going to require alot more cockpit instrumentation to perform it's mission than the F-8 needed for it's role. All these factors contributed to a wider fuselage.

The basic F-8 landing gear was retained, except for the addition of the nose-gear catapult launch bar. And, oh yes, the rear of the fuselage was squashed to allow more ground clearance on rotation.

Ever wonder why the rear of the vertical fin was chopped off? They did that to save space on the hangar deck. (The addition of the tail-mounted ECM antenna negated that, but by that time everyone had gotten used to the way it looked anyhow.) The last semblance of fighter-plane sleekness was ground off the A-7 with the shortening by six inches of it's pointed nose cone. The resulting bluntness makes it look more suited for the role of bludgeoning.

Getting back to family resemblances, the best feature from the F-8 design to be retained in the A-7 was the high wing. The high wing allows easier weapons loading and walk-around maintenance, with most access panels at waist height. It also permits shorter, simpler landing gear.

By the time the Vought engineers were done, they had designed an all-new airplane. The other competitors had submitted updated versions of their aircraft, but the Navy was far and away more impressed with Vought's efforts, and they were declared the winners of the competition in February of 1964.

Winning the competition, and a subsequent contract for production of three prototypes at a cost of twenty four million dollars, did not guarantee Vought a bed of roses. The Navy negotiated a tough contract, fraught with penalty clauses. Vought could be penalized up to four million dollars for failure to meet contract provisions such as delivery dates of the prototypes, max speed specifications, take-off and landing distances, catapult take-off speed, combat radius specifications, and maintenance hours per flight hour minimums. There were no provisions for bonus payments in the event that any of the above were exceeded. The only penalty assessed was for missing the guaranteed empty weight of 15,037 lbs. Rather than shave the structure to make the weight, Vought decided to pay up and retain the weight which would enhance the growth potential of the design.

The first flight of the A-7A was made on September 27, 1965. The test program continued, with the A-7 attaining or exceeding all of the design specifications. The first operational A-7A was delivered to VA-174, NAS Cecil Field, Florida, on October 14, 1966. The first line squadron to receive the A-7A was VA-147. They began receiving their Corsairs in September, 1967, and by December of that year had taken them into combat aboard the USS Ranger. From first flight to combat in the space of a little over two years was an amazing accomplishment for a modern aircraft, and it was a precursor of things to come for the Corsair II.

Full size mock-up of the A-7A as it appeared at the LTV plant in 1964. The F-8 nose cone was later eliminated as a space-saving measure. (USN)

Prototype A-7A loaded with inert bombs on MERs. The Corsair II airframe has a design life of 4,000 hours, and is stressed for 7 G's at combat weight. Some of the black boxes carried by early A-7's included; APN-153 Doppler radar, ASN-41 nav. computer, APN-141 radar altimeter, ASN-50 all-altitude reference, ARN-52 Tacan, APQ-116 forward looking radar, TPQ-10 tracking radar, APN-154 radar beacon, and the CP-741 weapons delivery computer. (USN)

A-7A at NATC Patuxent River for weapons delivery tests in 1968. It is shown with Aero 1D 300 gallon fuel tanks inboard, and LAU-3A rocket pods on TER's outboard. Corsair II is capable of carrying up to 15,000 lbs. on it's six hardpoints. A-7A,B,& C mount 20mm Mk 12 cannon, one on each side of intake. (USN)

The number 15 A-7A (BuNo 152658) performing the Corsair II Carrier Qualifications aboard USS America in November, 1966. Gross catapult weight for the A-7A is 38,000 lbs. Landing weight is 24,431 lbs.

The number five A-7A (BuNo 152648) as it appeared in 1970 during intra-service testing at Edwards AFB, Calif. (above) The number eleven A-7A (BuNo 152651) at NATC Patuxent River, Maryland during testing in 1968. Note "eight ball" on top of vertical fin. (below) (USN)

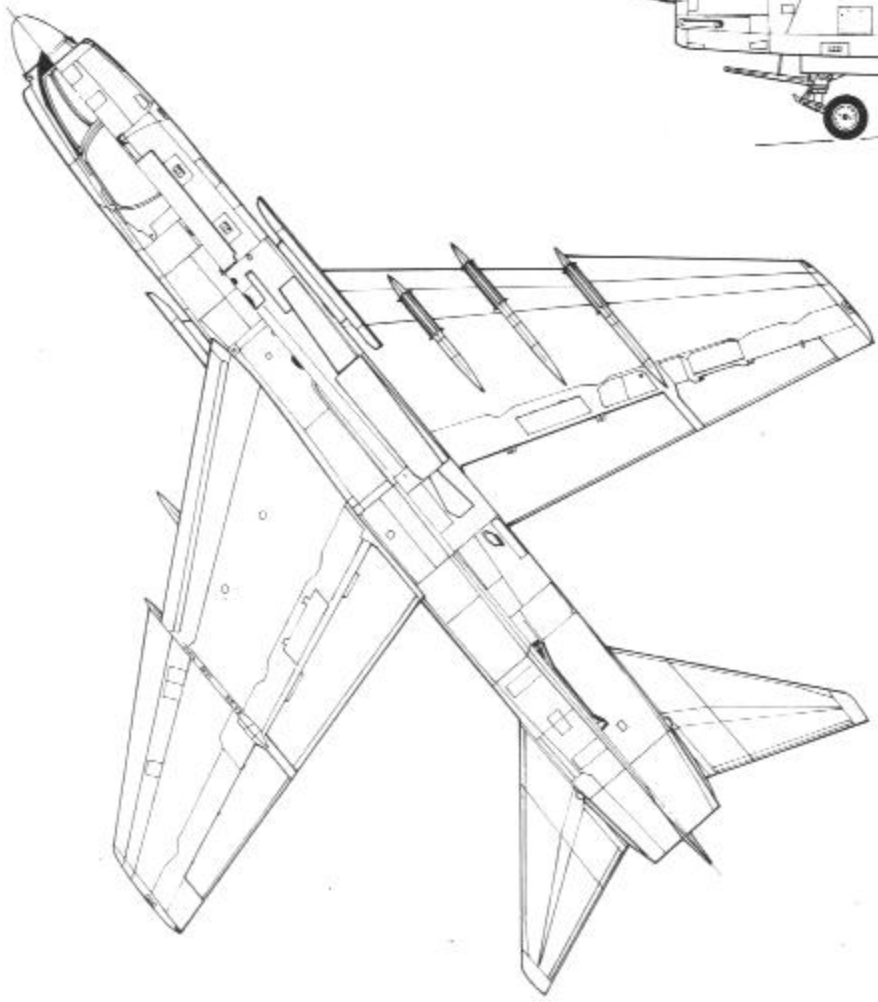
Building the A-7. Production lines at the LTV plant in Dallas,Texas. (Lou Drendel)

Early test model of the A-7D (AF SerNo 68-8222) during refueling tests over Alaska. Aircraft was flown by Major Robert Lilac, project officer from the 6510th Test Wing, Edwards AFB. First 16 "D" models retained the Navy probe and drogue refueling method. (USAF via Norman E. Taylor)

A-7D at Eglin AFB's Armament Development Test Center during weapons tests in 1971. Black outlined area on leading edge of vertical fin is VHF/Loran antenna. Tip of vertical fin carries UHF, Localizer antennas, and ECM Warning pod. (Norman E. Taylor)

The number 2 A-7D as it was decorated for firing tests at Edwards AFB. All markings removed at the conclusion of tests. (above, LTV) A-7D displays it's huge speed brake in the open position.(right, LTV) Major changes were made in the A-7D, which retained only 25% of basic A-7A components. Some of the changes made were in the area of "survivability", and included: Foam-lined fuel tanks, self-sealing fuel lines, additional system redundancy, and extensive boron carbide and steel armor plate. That was to protect the pilot if the enemy "got the range". To make sure that he doesn't, the A-7D carries both active and passive ECM gear.

A-7A Corsair II



A-7 Specifications

Wingspan: 38.73 feet Wingspan folded: 23.77 feet Overall length: 46.13 feet Internal fuel capacity: 1,496 gallons (A,B,C, & E) 1,425 gallons (D) Empty Weights: 15,037 lbs. (A) 19,259 lbs. (D) 18,546 lbs. (E) Max Speed: 607 knots (clean at sea level) Mach 0.92 at 23,000 feet Ferry range, Max fuel load: 2,871 miles. Combat radius full internal fuel, 15,000 lbs. ordnance: 620 miles.

A-7 Development

A-7A First of the line was powered by the P&W TF30-P6. 199 were built.

A-7B Same as "A" except powered by TF-30-P8, which increased thrust by 850 lbs. 196 built.

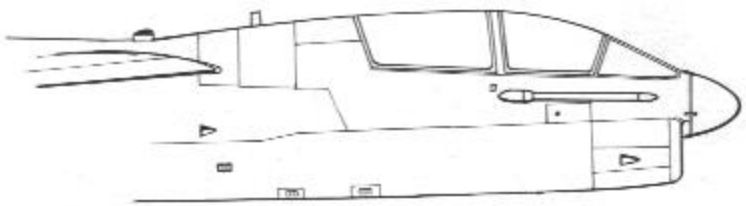
A-7C Originally intended as the designation for the two seat version, "C" was allocated the initial batch of A-7E's, which are powered by the TF-30-P8, when two seat version was delayed. 67 built.

A-7D Air Force version of the Corsair II. It is powered by the Allison built Rolls Royce TF-41-A-1 turbofan of 14,500 lb. thrust. Mounts one M-61 Vulcan 20mm six barrel cannon capable of 4,000-6,000 rounds per minute firing rate. First of the series to employ advanced avionics package, including head-up display. (HUD) 387 built through 1/74, with production continuing.

A-7E Navy version of the advanced Corsair, incorporates many of the features introduced on the A-7D. Powered by the TF-41-A-2 of 15,000 lbs. thrust, it has demonstrated a catapult launch weight capability of 42,000 lbs. 398 built through 1/74, with production continuing.

A-7G Two A-7D's were modified as sales demonstrators for Swiss Air Force trails against the Mirage Milan. Swiss declined purchase of either type, and A-7G did not go into production.

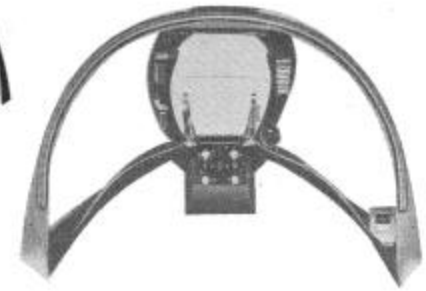
YA-7H Prototype of TA-7C. Navy has funded 4.9 million dollars for conversion of 40 A-7B's and 41 A-7C's to two-place trainer configuration. Performance figures are nearly identical to those of A-7E.

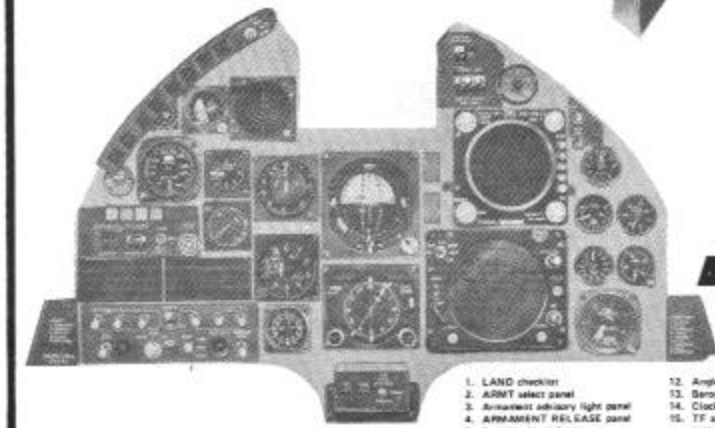


YA-7H

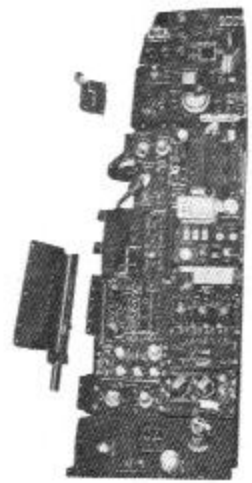
A-7 Cockpit Detail

1. WHEELS/FLAPS warning lights
2. Angle-of-attack approach indexer
3. Head-up display and controls
4. Threat lights
5. Standby compass
6. UHF frequency remote indicator

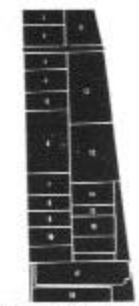




1. LAND checklist
2. ARMT select panel
3. Armament advisory light panel
4. ARMAMENT RELEASE panel
5. Speed brake indicator
6. Radar altimeter
7. Standby attitude indicator
8. RHAW lights indicator and CORRELATE switch
9. APR-36 threat analyzer
10. Vertical velocity indicator
11. Mach-airspeed indicator
12. Angle-of-attack indicator
13. Barometric altimeter
14. Clock
15. TF and LDG master function switches
16. HDG MODE switch
17. Horizontal situation indicator
18. Attitude director indicator
19. TERRAIN CLEARANCE and RANGE SET control
20. OIL QUAN indicator
21. Forward looking radar
22. FIRE warning light
23. MASTER CAUTION light
24. Projected map display
25. FUEL QUANTITY indicator
26. Tachometer
27. Turbine outlet temperature indicator
28. Pitot heat indicator
29. LOW ALT, MKR BCN lights
30. Oil pressure indicator
31. Turbine outlet pressure indicator
32. TAKE-OFF checklist



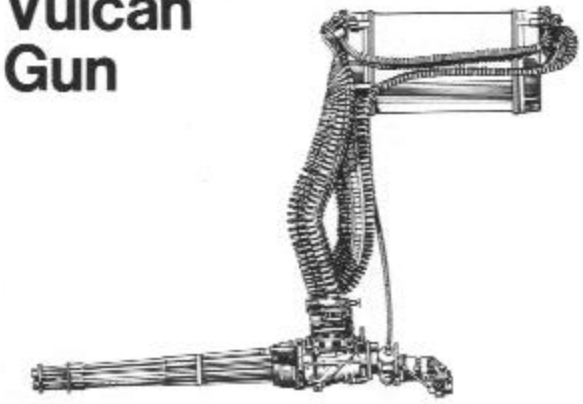
1. EMER POWER handle, Landing gear controls, Landing gear, flaps, and pitch and roll trim indicators
2. Generators, control selector panel
3. Fuel and emergency brake panel
4. Flap control
5. AFCS control panel
6. IFF panel
7. RHAW panel
8. Seat temperature panel
9. Pilot services panel
10. Throttle, fuel master, AR door, and rudder trim panel
11. RADAR control panel
12. UHF control panel
13. INTER control panel
14. ADF/Auxiliary UHF control panel
15. DOUBLE DATUM lockout switch
16. ALTERNATE FUEL FEED panel (on left longeron)
17. CANOPY JETTISON CONTROL HANDLE (on left longeron)



1. Hydraulic pressure indicators
2. Oxygen pressure and TRUE AIRSPEED indicators
3. DDP control panel
4. OXYGEN REGULATOR
5. ECM pod control panel
6. NAV WD control panel
7. TACAN control panel
8. ILS control panel
9. IMS control panel
10. Speech security control panel
11. HOOK control panel
12. ADVISORY and CAUTION lights panel
13. INT and EXT lights control panel
14. FM COMM control panel
15. RADAR BEACON control panel
16. AIR COND control panel
17. WINGFOLD
18. MAP CASE

Prototype YA-7H. The two place Corsair II was converted from an A-7E by LTV to demonstrate the feasibility of the configuration for training and/or combat. It is 500 lbs heavier and 3 feet longer than the "E" model. It is painted overall gloss white, with gold/brown band on vertical fin. YA-7H was also equipped with drag chute. Refueling probe was inoperable. (LTV & Trombecky)

Vulcan Gun



A-7 Squadrons

CAG A-7E of VA-12 at NAS Cecil Feild. Black anti-glare panel continued behind cockpit. White fin tip, black letters "AG" outlined in red as is squadron emblem. Rudder colors from top: Red, yellow , blue, orange, black, green, black. (Trombecky)

VA-15 A-7B at NAS Cecil Field. White verticle fin with black letters, edged in medium blue. Stars and fin trim also blue. (Ken Buchanan)

VA-22 A-7E at NAS Alameda in Sept., 1971. "Fighting Redcock" is red, trimmed in black. Fin band blue with white stars. Rudder bands red with blue stars. (F. Roos via N.E. Taylor)

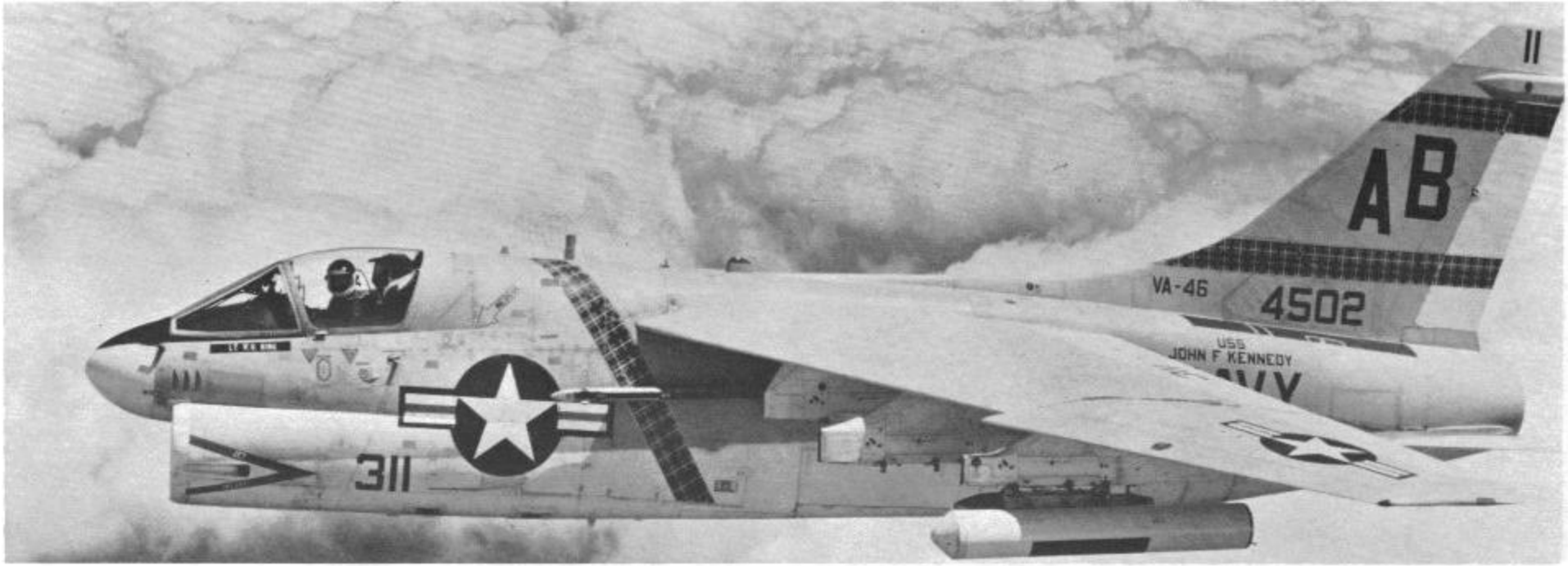
A-7B of VA-25 NAS Lemoore, 10/69. Green delta on fin, green nose and pilot name flash. Lettering and fuselage walkways black. (D. Kasulka via Taylor)

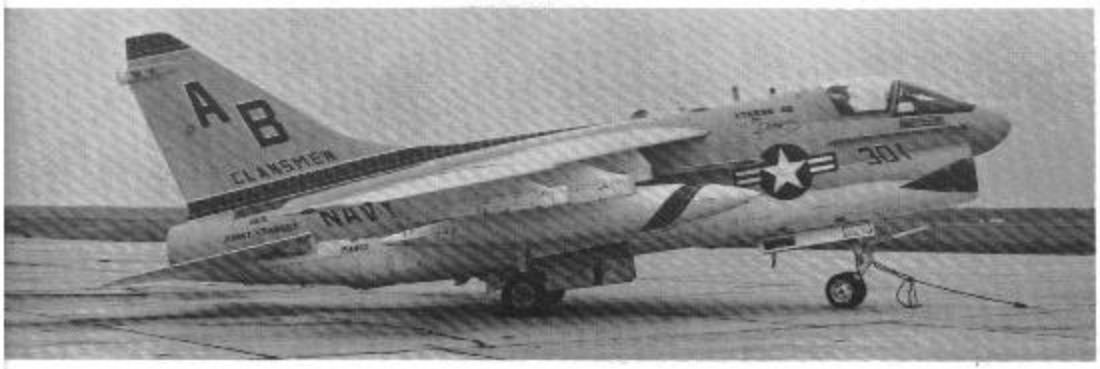
VA-25 A-7E as it appeared in 4/72. Green fin, red lightning flash, edged in yellow, yellow circle with black lettering. Green nose and name flash under cockpit. Grey "nuts" with black trim. (Bob LaBouy via Trombecky)

VA-25 A-7E as it appeared 10/73. This aircraft the subject of color profile on rear cover. (Trombecky)

VA-37 "Bulls" A-7A's. Blue fin cap, wing tips, and nose. CAG aircraft rudder diamonds are from the top: Red, yellow, blue, orange, green, dark blue, maroon, black, black. (Kasulka via Taylor above and Ken Buchanan below)

A-7E's of VA-27 "Royal Maces". Green trim on rudder and fin. Green mace head with red handle and black trim. Black outlined red bombs at leading edge of wing. (LTV)





VA-46 "Clansmen" variations: Top and two left photos show A-7B's with standard plaid strips of red with black and white stripes. CAG airplane rudder colors are from top: Red, yellow, blue, orange, green, black. Photo above is of aircraft which is the subject of centerfold painting and illustrates most recent markings. (LTV, J.G. Handelman, Bruce Trombecky, Ken Buchanan)

VA-56 A-7A at Misawa AB, Japan 11/73. "Champions" markings as follows; Yellow fin cap, wing tips, and boomerang. Dark blue trim on wingtips and ECM antenna as well as arrow on fin. Rudder strips are yellow over dark blue. Rudder stars dark blue. Black "NF" with yellow trim. Nose stripe yellow over dark blue, with black anti-glare panel. (Norman E. Taylor)

Earlier VA-56 markings (5/69) Red/Orange rudder and fin stripes with black stars and trim. (Kasulka via Taylor)

VA-66 "Mod Squad" A-7E's. Blue band on fin, with gold (metallic) Center, trimmed in black. Black "AG" edged in blue. Stripes on wingtops are same as those on fin, as is name badge on aircraft at left. Sharkmouth white teeth, with black center. (LTV and Ken Buchanan)

A-7B of VA-72 "Blue Hawks" at NAF Washington, D.C. 2/75. Fin cap, "AB", Blue Hawk, and stripes on forward fuselage are dark blue. Nose and center stripe white. Checkerboard in standard CAG colors. (Dr. J.G. Handelman)

Personalized dice markings on VA-72 A-7 at NAS Cecil Field, circa 4/71. (Ken Buchanan)

VA-81 "Sunliners" A-7E's (left) White fin cap, red delta, lightning bolt, and edging on "AA" & fin cap numbers. Small deltas are from top: Maroon, yellow, green, red, blue, black. (Ken Buchanan & J.G. Handelman) VA-82 "Marauders" A-7E (above)Blue eagle, Lightning bolt, tail band, and "AJ" edging.

VA-83 "Rampagers" A-7E's Blue fin cap and fuselage band. Band is trimmed in gold and black. Ram's head black and white with red eye. (Bruce Trom- becky & Ken Buchanan)

VA-86 "Sidewinders" A-7's. Photo at left illustrates early squadron markings. (this was the 19th A-7 to come off the production lines) Orange fin band and snake. (David Ostrowski via Paul Stevens) Photo right below shows the more literal snake illustration, which was basically red, black and white, with red rudder, white stars. (LTV) Right above shows most recent markings with red diamonds and fin stripe. (Ken Buchanan)

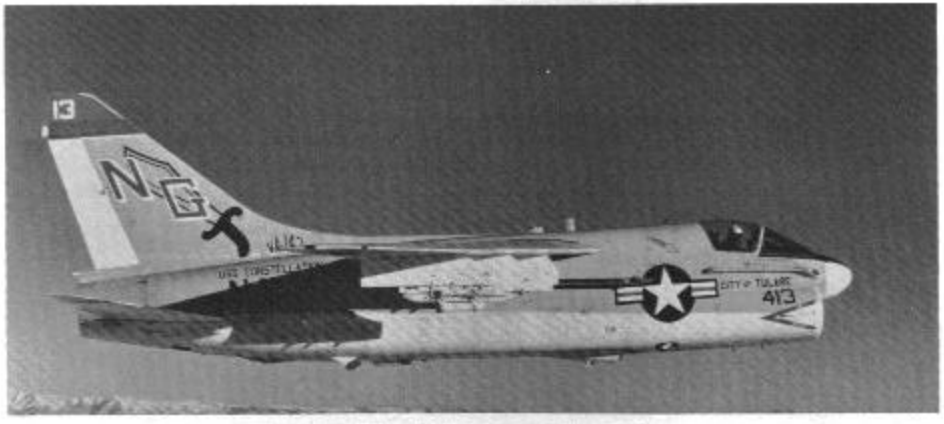
VA-87 "Golden Warriors" A-7's. Photos at top are most recent scheme. Red fin bands, "AE", headdress headband, and feather on tomahawk. Black stars, headdress, tomahawk, and "AE" trim. Names in gold. (J.G. Handelman) Right illustrates 1969 markings with blue fin bands and fuselage stripe. White nose, "Golden Warriors" in gold. (Ken Buchanan)

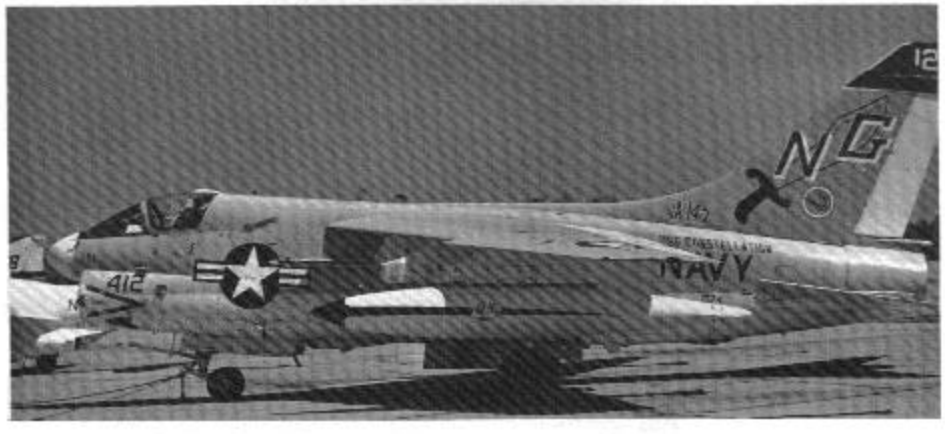
A-7A's of VA-93 "Blue Blazers" Blue fin and rudder stripes. Red fin flashes with blue arrowheads trimmed in red and white. Aircraft above is subject of cover painting. (Norman E. Taylor and Bruce Tombecky)

VA-97 "Warhawks" A-7A (left) and A-7E (right) illustrate subtle markings differences that occured with change of models. (Time periods 1970 and 1974, respectively) Fin flash is medium blue with white letters and stripes. (Peter B. Lewis via Paul Stevens & Dr. J.G. Handelman)

VA-105 "Gunslingers"(left above) carries CAG colors of: Red, yellow, blue, orange, green, brown.(LTV) VA-113 "Stingers" A-7E. Blue fin cap, "NE", and squadron designators. Black, white, and yellow bee, with red legs. "Stingers" black with yellow trim. (J.G. Handelman)

VA-125 A-7A. "Rough Raiders" are West Coast replacement training squadron. (J.G. Handelman)





VA-146 "Blue Diamonds" A-7A (above) carried light blue band with dark blue diamonds, yellow delta. (Duane Kasulka via N.E. Taylor) A-7E of same squadron (below) used same band, but had light blue "NG" outlined in black and yellow delta. (R. Hill)

Photos at left illustrate current scheme of the first squadron to operate the A-7, VA-147 "Argonauts". Red fin cap and "NG", black sword. Drop tank markings are also red. (LTV & J.G. Handelman)

VA-153 "Blue Tail Flies" A-7's have blue tails, white stripes. CAG airplane has four light blue stars ahead of emblem (what is it?) on fin. (Bruce Trombecky & Charles Howes)

VA-155 "Silver Foxes" A-7 has dark green fin stripes and "NM". (J.G. Handelman) VA-174 "Hell Razors" are the east coast A-7 RAG. Aircraft on right has black band with yellow diamonds. Left is CAG airplane & carries (from rear) green, blue, yellow, red diamonds. Legend under wing reads: "Commander Light Attack Wing One". Aircraft on facing page belongs to squadron CO. Yellow background to black "Hellrazor 1" flash colors are from top: red, yellow, blue, orange, green. Yellow diamonds, white fin cap. (Ken Buchanan)

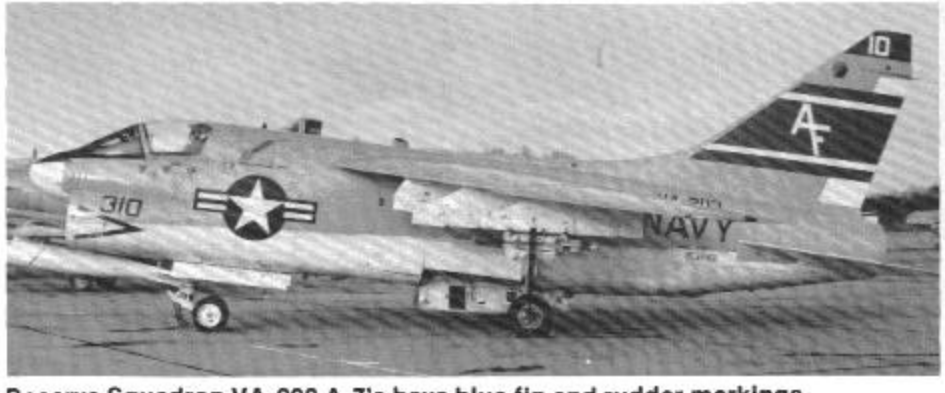
Harry Gann Photo


401
RAZOR
VA-174
8842
NAVY
401

Alternative finishes for VA-192 "Golden Dragons" A-7's. Gold tail markings and dragon on both. Photo at left circa 1973, photo at right from 1971. (Jerry Geer and Norman E. Taylor) Yet another scheme is illustrated in centerfold painting.

A-7E's of VA-195 "Dambusters". Green fin caps and fuselage stripes. CAG airplane has vari-colored eagle feathers, from top: black, yellow, black, blue, black, orange, black, red, black. Other aircraft have green and white eagle feathers.

VA-215 "Barn Owls" A-7's. 1972 markings (above) had green rudder marking, (CAG colors in aircraft in foreground were on ECM antenna) barn owl on fuselage and blue and red owl face on radome. 1973 markings (right) enlarged rudder marking and added red stars and a red stripe to fin. Photo below shows an alternative CAG markings scheme. (USN, Kasulka via Taylor, and Trombecky)



Reserve Squadron VA-203 A-7's have blue fin and rudder markings.

VA-94 "Shrikes" markings; Orange fin flash and shrike.

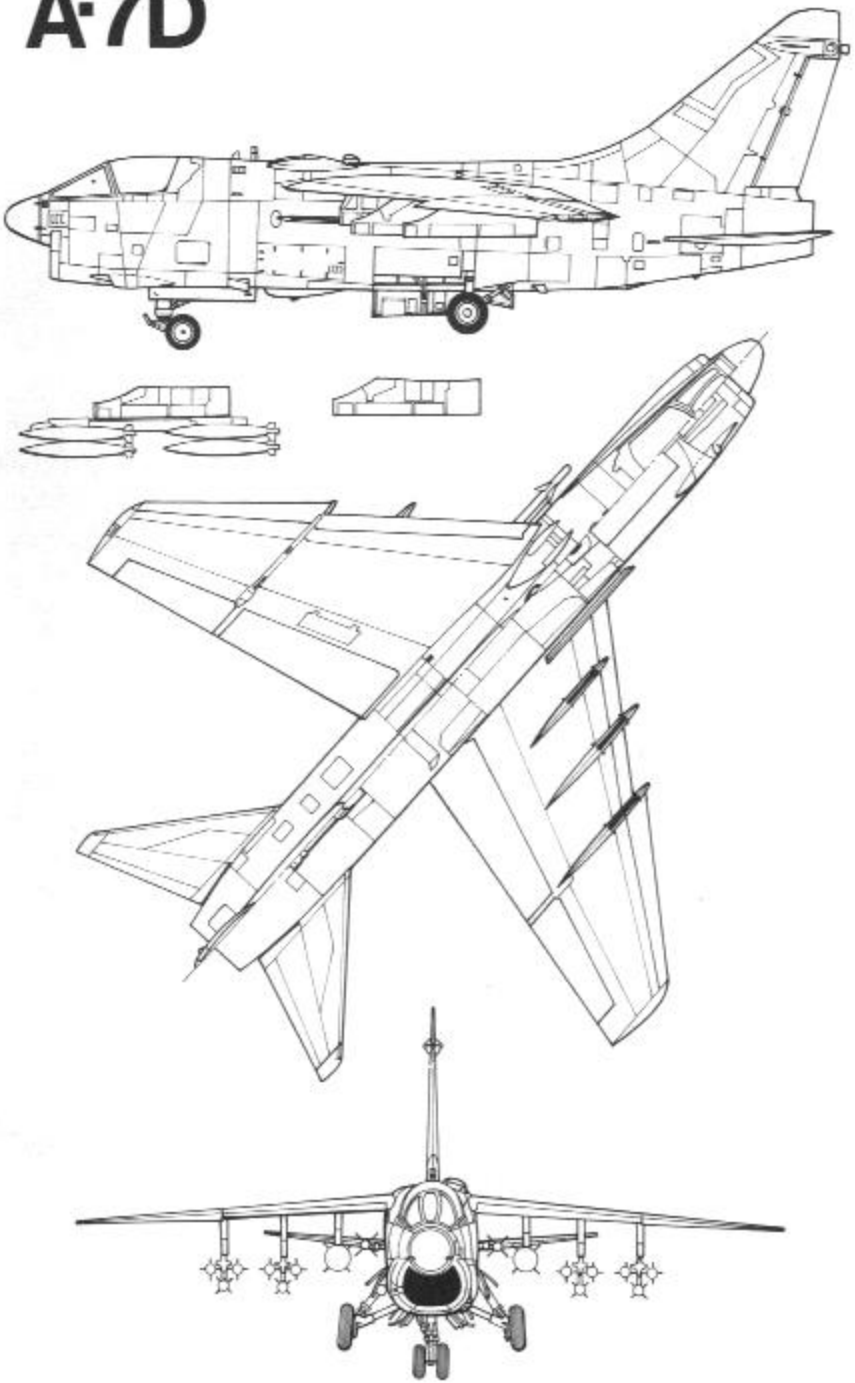
Squadron unknown...possibly VA-15 "Valions"

VA-304 "Fire Birds" are a reserve squadron. Tail markings are light blue. Note aircraft names on main gear doors. (J.G. Handelman)

Harry Gann Photo

Harry Gann Photo

A-7D



A-7B of VA-46 "Clansmen" approaching the USS JOHN F. KENNEDY for landing.

A-7B of VA-72 as it appeared at NAS Oceana, January, 1973. (Bruce Trombecky)

A-7E of VA-66 during a visit to NAS Glenview, Illinois. (Charles Howes)

Capt. Don Cornell in A-7D 71-354 (See color illustration on back cover) In the arming pits at Korat RTAFB, Thailand, December, 1972. F-105G Wild Weasels in the background. (Chuck deVlaming)

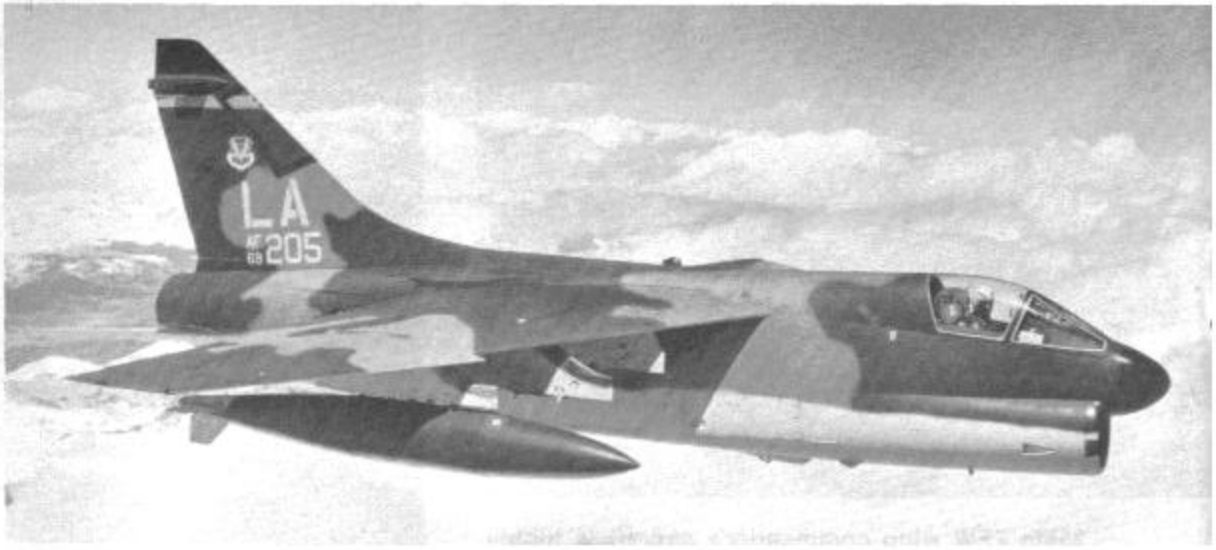
The same A-7D enroute to targets in North Vietnam. (Chuck deVlaming)

A-7E of VA-192 at the moment of launch from USS KITTY HAWK.

A view of the 355th TFW flight line at Davis Montham AFB, Arizona, taken from the control tower. (Jerry Geer) A-7D of the 355th (above right) Open access panels demonstrate waist-high maintenance capability. (Jerry Geer)

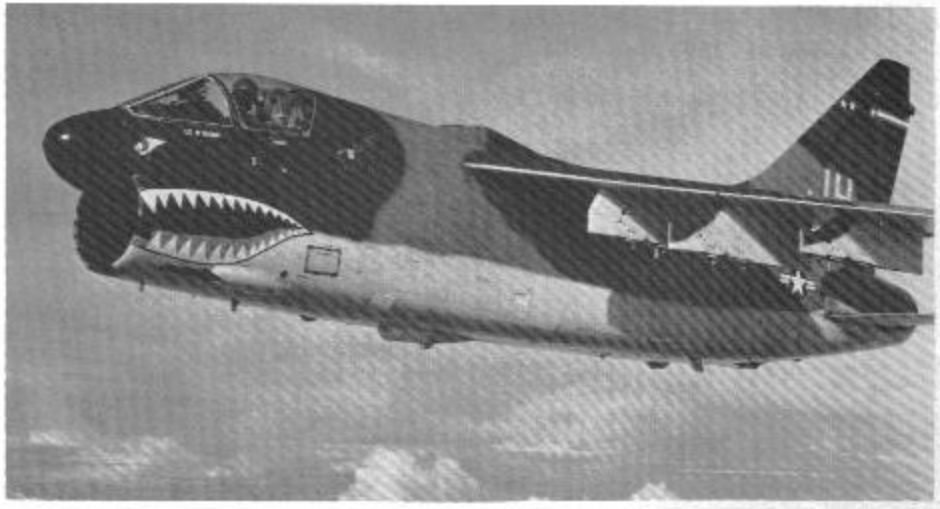
355th TFW wing commander's aircraft is highly polished. (above) (Jerry Geer) A-7D of 354th TFS, 355th TFW photographed at Kelly AFB, Texas February, 1972. (Norman E. Taylor)

A-7D of the 357th TFS, 355th TFW. (above) (Norman E. Taylor) Avionics bay of A-7D. (left) (Jerry Geer) A-7 has 35 access panels, 90% of which can be reached without use of aircraft stand. Engine change can be accomplished in 30 minutes.



SLUF of the 333rd TFS, 355th TFW. External fuel tanks can be carried on inboard or outboard wing pylons. (USAF)

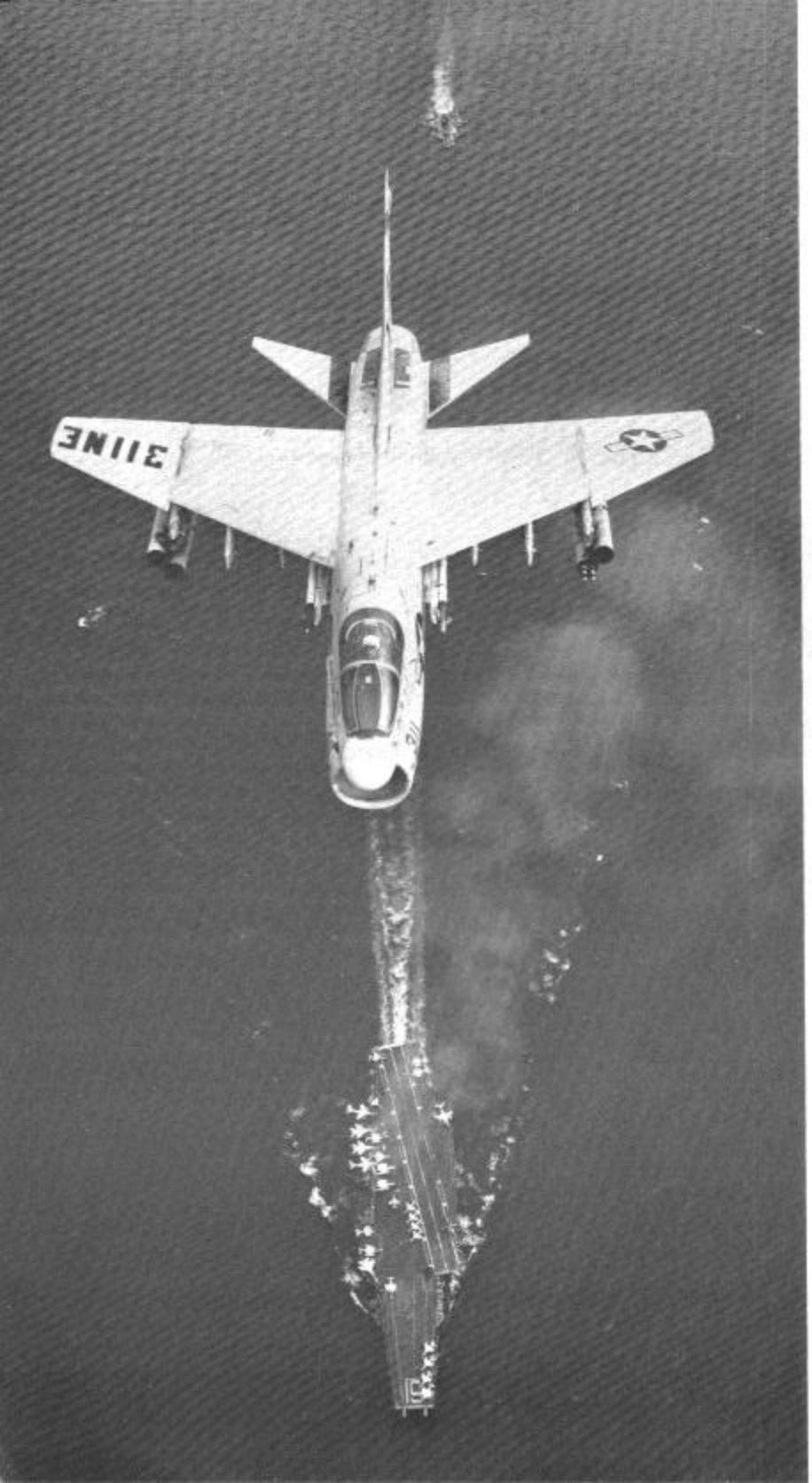
A-7D of the 355th TFS, 354th TFW, Myrtle Beach AFB, S.C. June, 1972. (Norman E. Taylor)



A-7D of the 3rd TFS, 388th TFW, out of Korat RTAFB, Thailand. The 3rd TFS was activated in March, 1973. Tail markings are white stars on a blue stripe, ahead of red and white stripes. Bulge on bottom of fuselage is antenna for Doppler Radar. (LTV)

A-7D of the 120th TFS, Colorado ANG, at Buckley Air National Guard Base, Colorado. June, 1974. (Ben Knowles via Norman E. Taylor)

A-7D of 188th TFS, New Mexico ANG, Kirtland AFB, N.M. June, 1974. A-7's are replacing the F-100 in ANG units. (Ben Knowles via Norman Taylor)



Combat

The Corsair II received it's baptism of fire on December 4, 1967, when VA-147, operating off of the USS RANGER, mounted attacks against North Vietnamese targets in the Vihn area. In the two months that VA-147 was on the line, they flew 1,400 combat sorties, and lost one A-7. The Ranger was diverted to the Sea of Japan late in January, 1968, in reaction to the North Korean seizing of the USS PUEBLO.

In the spring of 1968, VA-82 and VA-86, aboard the USS AMERICA, arrived on Yankee Station to add further to the Corsair II combat experience. The A-7 was employed in the full range of combat attack missions, including Close air support, RESCAP, armed reconnaissance, and Flak suppression.

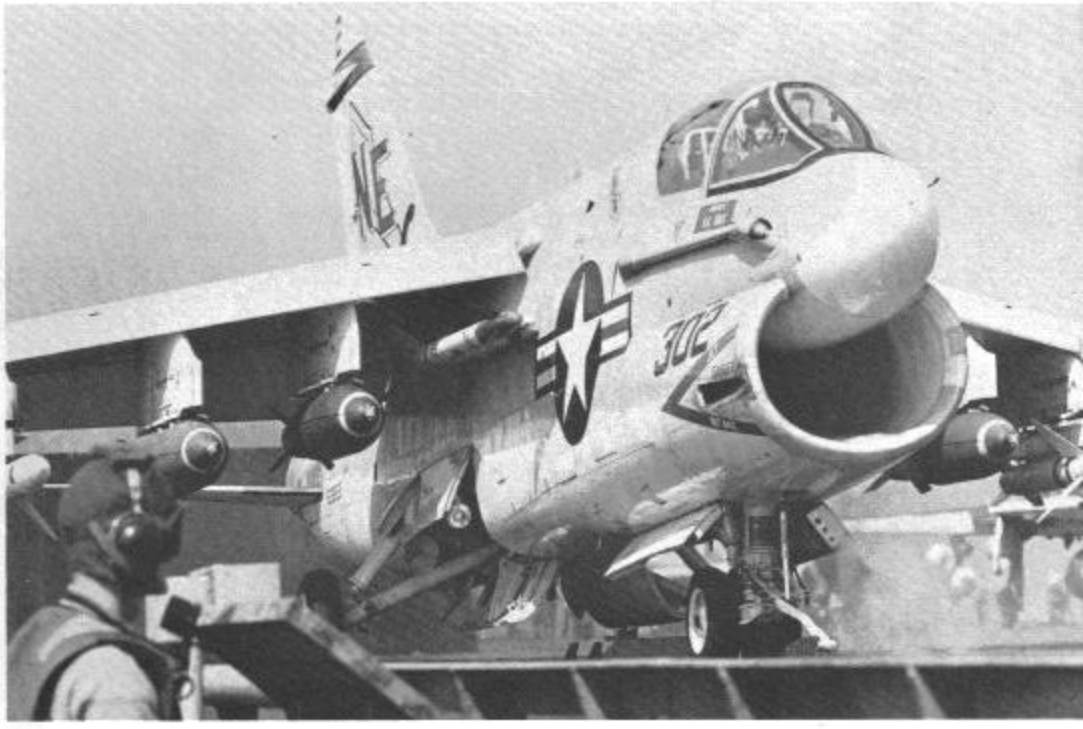
The A-7A impressed it's pilots quite favorably. Since it was designed to replace the A-4, and many of the pilots had previously flown the A-4, the Corsair II was most often compared to the Skyhawk. In it's initial combat evaluation, one of it's greatest assets turned out to be range. VA-147 seldom, if ever, used external tanks. Internal fuel was more than adequate to reach any target assigned with the ordnance carried. It's easy maintainability won the hearts of the mechanics, and the resultant higher levels of availability made mission scheduling easier for operations personnel.

The A-7 was not without problems though. It's low intake sucked up inordinate amounts of steam from the catapults, and tests had produced some compressor stalls. As a result, VA-147 Corsairs were limited to an external ordnance load of 8,000 lbs until fixes could be made. (Later A-7B's, which used the uprated TF-30-P8, did not have the same problem.) A disconcerting, though not serious, problem occured in the engine overheat warning light system. During bomb runs the engine would surge upon bomb release (due to the abrupt lightening of load) causing just enough heat increase to turn on the "hotlight". This is the worst possible moment to get a false indication of trouble, since the pilot naturally wants as much power as possible to take him out of the target area. Once the problem was recognized for what it was, a fix was instituted.

Perhaps the most notable aspect of the first A-7 combat deployments was it's high rate of survivability in the super-hostile North Vietnamese environment. This was acheived by the more advanced internal ECM equipment on the A-7. The eyeball-popping bomb dropping accuracy was yet to come, in the A-7D and E, but the first Corsairs gave promise of being the airplane the Navy had wanted for 30 years.

A-7A of VA-147 overflies USS Ranger in the Gulf of Tonkin. (left) Corsair II of VA-147 gets the two finger runup signal from the Catapult Officer aboard Ranger in the Gulf of Tonkin. (USN)

Major Charles McClarren, USAF, commanded detachment of 57th FWW, which evaluated the A-7 in combat aboard Ranger in project "Coronet Stallion". (USN)



A-7 of VA-147 loaded with CBUs and Shrikes for SAM suppression mission during Corsair II's initial combat deployment, January, 1968. (USN)

A-7 of VA-147 begins 250 foot trip down the number two catapult of USS Ranger. It is loaded with 12 500 lb. Snakeye bombs on MER's. (USN)

A-7E of VA-147 taxies to ramp after diverting to Phu Cat AB, RVN in October, 1970. VA-146 and VA-147 were first two operational A-7E squadrons. (Norman E. Taylor)

A-7A of VA-147 approaching the RANGER for landing with empty MERs. (above left) VA-82 A-7A leaves number two cat aboard USS AMERICA for a combat mission, October, 1968. (left) VA-86 A-7A is readied to launch from the USS Coral Sea, August, 1969. (USN)

SLUF in battle

The USAF decided to purchase the A-7 in 1965. This was no small compliment to the design, since the Air Force is not particularly fond of adapting Navy airplanes to it's purposes, and they were still smarting from Navy satisfaction at the success of the Air Force experience with the F-4 Phantom.

The Air Force version of the A-7 incorporated a lot of changes though, and the Air Force has never officially adopted the "Corsair II" name. Instead, they left it to their pilots to apply their own nicknames. As a result, Air Force A-7's are variously known as "Little Hummers" or as "SLUF's" (Short Little Ugly....ah.....Fellers).

The A-7 was the first sub-sonic fighter-type aircraft acquired by the Air Force in twenty years. It was tagged to replace the ageing F-100 Super Sabre. The USAF willingness to accept a sub-sonic replacement for the Hun was based on mission requirements. They reasoned that, since it would be performing the 100 mission, which at the time meant operating in a reasonably permissive environment, it would not need the high mach escape speeds of an F-4 or F-105. And it was cheap and quickly available. (Ironically, when the A-7D did go into combat, it was required to operate in many high-threat areas, and it turned out to have a much higher survivability than either the F-4 or the F-105. This was due to it's sophisticated systems, which allowed a pilot to take evasive action throughout the bomb run, while the on-board computer made constant corrections to the bomb-release point, and to the additional protective armor that the Air Force had specified to shield sensitive areas of the airframe and systems.)

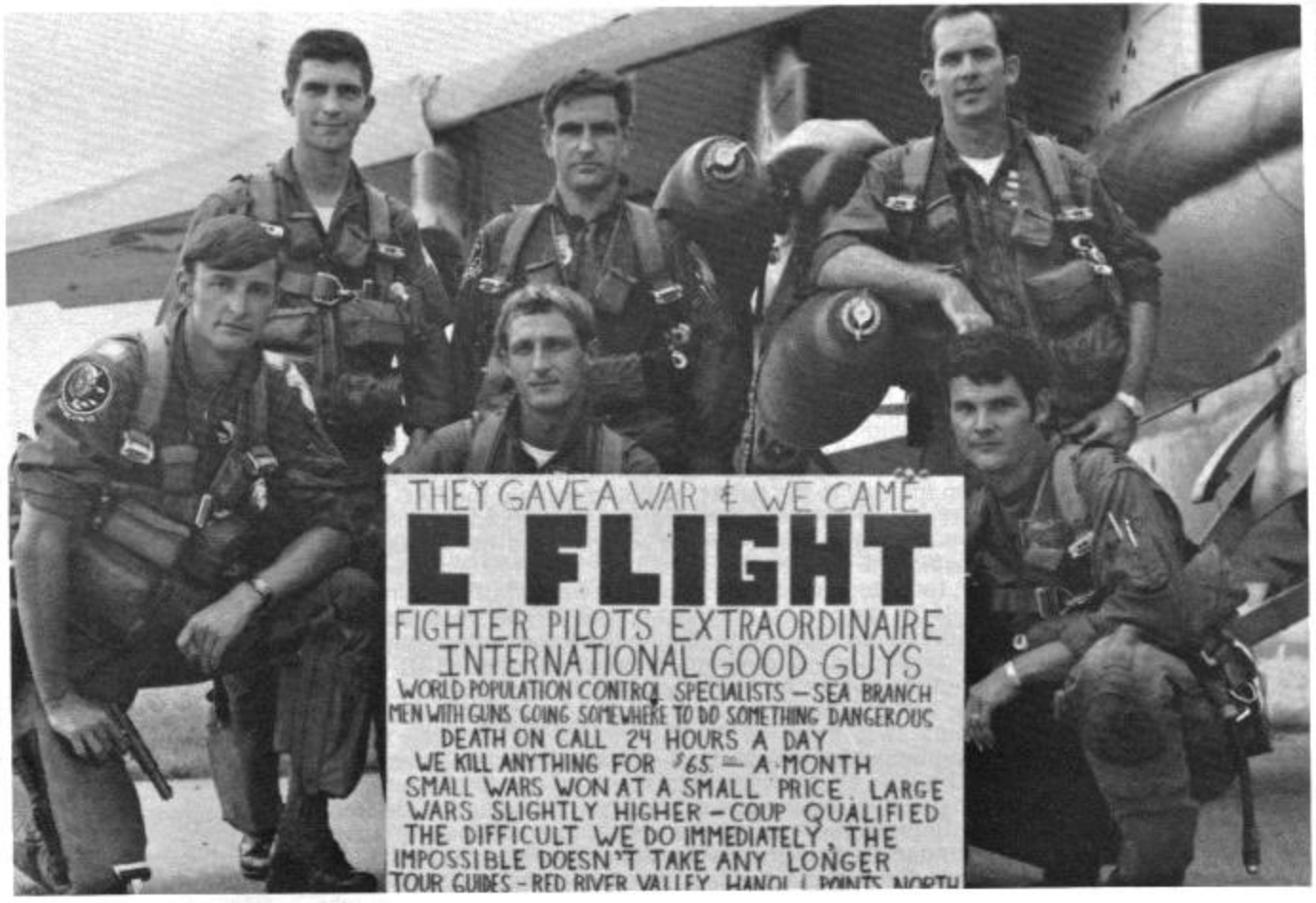
Since the A-7 was intended to replace the F-100, I asked Captain Don Cornell, who flew combat tours in both, to compare them. "As to a comparison of the A-7 versus the F-100 in combat, I'd have to say that the SLUF is the winner hands down. Notwithstanding the fact that I was a more experienced pilot when I flew combat in the A-7 than I was in the F-100, the A-7 was far more versatile and accurate than the F-100. This is not to badmouth the F-100, for my tour in the Hun was memorable, and I know what a tremendous contribution the Super Sabre made to the air war in Vietnam. But the fact is that the A-7 outdistances any other ground attack machine ever built!"

"As for specific comparisons; At Tuy Hoa in 1970, (F-100's) we carried a load of two external fuel tanks and usually either four Mark 82 500 lb. bombs, or four cans of Napalm. In the A-7, for the longer missions, we usually carried two external tanks and 10 Mark 82's. For shorter missions, the fuel tanks would be downloaded and we could carry 18 500 pounders. When we went out with a two ship, that was 36 bombs, which was a devastating load for just a couple of airplanes. Although Mk 82's were our usual load, we also frequently carried 1000 and 2000 pounders, finned Napalm, 2.75 inch rockets, and various types of CBU's. (Cluster Bomb

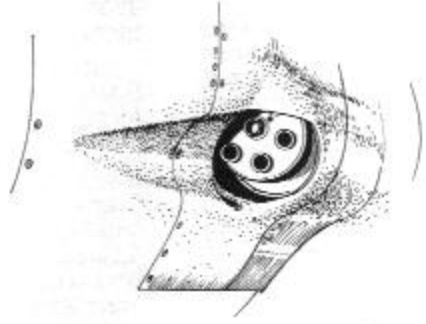
A-7D's of 354th TFW enroute to North Vietnamese targets during "Linebacker" campaign in December 1972. They are escorted by MIGCAP F-4 from the 432nd TRW. (USAF)

Units). So, as far as bomb load goes, with the A-7 we carried a larger variety, (which was not so much a function of the airplane as local planning) and as much as 450% more bomb load."

"Looking at range consideration, in the F-100 at Tuy Hoa we were pretty much restricted to Military regions I, II, III, plus the eastern portions of Cambodia, and the southern portions of Laos on unrefueled missions. In the A-7, working from Korat RTAFB, Thailand, there was no place in the whole area of hostilities that could not be reached unrefueled, except the northernmost parts of North Vietnam, above Hanoi. It wasn't a regular practice, but there were times when a flight would, say, take off from Korat for a target south of Saigon, be diverted to a target in Steel Tiger (the



Irreverent attitude of fighter pilots is exemplified by "C Flight" of the 353rd TFS "Green Demons". They took their mission....but not themselves...seriously. Black humor kept them going. Top row, left to right, Pat McAdoo, Arnie Clarke, Rock Massey. Bottom row, left to right, Chuck deVlaming, Ken Joyner, Don Cornell. Stickers (left) were prepared by wags in 354th, and further reflect fighter pilot humor.



D&E Vulcan Fairing

Speed Brake

southern area of Laos), then diverted again to the Plain of Jarres (northern Laos), expend there, then recover at Korat, all unrefueled. These flights could last three hours and cover a total distance of 1000 miles, a physical impossibility in the F-100."

"There are a lot of other comparisons that could be made: Old age versus brand new, vulnerability (I have no data on the respective vulnerabilities of the F-100 and the A-7, but I know that the SLUF took very few hits and flew to the highest threats.), abort rates, turn-around times, etc. etc., but I don't think I'm in a position to speak thoroughly in a limited space on them."

"What I can attest to is both the navigation and weapons delivery accuracy of the A-7. Through the use of the IBM digital computer, which is tied to a highly accurate inertial platform, a pilot could program in up to 9 destinations, then get range and bearing to them via a great circle route. He could keep track of his progress on the Projected Map Display (a fantastic instrument), plus move the map ahead if he wished, to get a sneak preview of the target area. On the way to the target, he could contact the FAC on one of two radios, an FM or a UHF. Once in the target area, he could choose to drop his ordnance singly, in pairs, or ripple as many as he wanted with whatever ground spacing he desired. By selecting "Visual Attack" (we have many other options, too, using radar, etc., but they weren't utilized in SEA), he would then fly so as to put an aiming symbol in the HUD (head-up display) on the desired target, designate that as the target with a button on the stick, then fly according to steering provided in the HUD, finally consenting with another button on the stick to let the computer decide when to release the bomb. The accuracy was phenomenal! I'm really not trying to take anything away from the F-100 or any of us that flew it. The Hun was a great bombing platform and we got to where we were pretty accurate. But with the A-7, we could go into any area and use any type of dive angle, airspeed (usually as fast as we could go), release altitude, etc., that we wanted to without worrying about establishing specific parameters. This is particularly important in high threat areas, where you must not stay wings level on final to the target, or you yourself become the target. This was a bitter pill to swallow for a lot of us former Hun drivers who could take full credit for any good bombs we dropped. (The corollary was that we had to take the blame for any bad bombs we dropped too, but you'd never get us to admit that we dropped bad bombs.) You can't argue with success. The mission was to drop bombs and destroy the target, and the A-7's ability to drop great bombs is unprecedented. It wasn't just more accurate than the F-100....It was better than any other weapons system designed to deliver ordnance!"

The mission that the 354th TFW expected to perform when they entered combat in late 1972 was what the A-7 had been designed to do.....close support of troops in contact. But by that time, the bulk of U.S. combat troops had been withdrawn, and they ended up with two entirely different missions. The first, interdiction, was no surprise. The second was a surprise, and there were many skeptics when the A-7's were assigned the role of replacing the venerable and respected A-1 in the SAR "Sandy" role. Within three weeks of receiving this assignment, the SLUF laid all doubts to rest. The following story first appeared in AIR FORCE MAGAZINE, in August, 1973. It was written by their Executive Editor, John L. Frisbee.

"On 16 November, 1972, an F-105 Wild Weasel had been hit by a SAM in the vicinity of Thanh Hoa, on the coast, some ninety miles south of Hanoi. The Weasel crew bailed out at about 11:00 PM, landing at the base of the first ridge line west of the city. The following day, three of the 354th Sandys

Captain Don Cornell, 353rd TFS, 354th TFW.

went up in very bad weather and got the survivors located, part way up the ridge line, but separated from each other.

A SAR force of about seventy-five aircraft was put together late that day and during the night by the Joint Rescue Coordination Center at Tan Son Nhut Air Base, near Saigon. It included F-105 Wild Weasels to suppress the SAMs around Thanh Hoa, F-4 "Wolf" FACs and F-4 Migcap aircraft, tankers, an HC-130 Kingbird (the mission coordinator) H-53 Jolly Green rescue Helicopters, A-7D's with smoke for screening purposes, and three 354th TFW Sandy's. Pickup was set for first light the following day, with takeoff for the Sandys at 0430.

Major Colin A. "Arnie" Clarke, who was operations officer of the 354th's SAR organization, led the Sandys. He has been awarded the Air Force Cross for his part in the show.

The Sandys rendezvoused with the Jolly Greens above a solid overcast along the Laos-North Vietnam border. While the Jollys held in orbit, Major Clarke and his wingmen worked east from the Plaine des Jarres in Laos, looking for a break in the overcast through which a chopper could let down. Approach from the Gulf of Tonkin seemed out of the question. The Thanh Hoa area was heavily defended by anti-aircraft guns and SAMs, while just north of the town was a MIG field.

Major Clarke told his wingmen to hold while he let down several times into narrow valleys, trusting to the accuracy of his Projected Map Display

Chuck deVlaming of the 353rd, poses with Mk 82 500 pounders on his A-7D prior to a mission.

and radar altimeter. Each time he broke out under very low ceilings, the valley proved too narrow to turn in, and ahead the clouds closed down over rises in the ground.

Giving up on the valleys, Clarke climbed up on top, flew east, and let down over the Gulf to see if there was any way to work a Jolly through the enemy defenses along the coast. There wasn't. He did get the survivors pinpointed and marked on his Projected Map Display so both men on the ground could be found immediately on return.

Clarke now went back over the Gulf, picked up his wingmen and the smoke-carrying A-7's, and took them in to see where the survivors were. The A-7's took several .51 caliber hits. But weather in the pick-up area had improved somewhat-----2,500 foot ceiling with lower broken clouds, rain, and three miles visibility. It was still too low for the supporting F-4's to use their delay-fuzed CBU antipersonnel bomblets against enemy gun positions. To the west, the only approach route for the choppers, it was still down in the valleys.

Everything pointed to an aborted mission. But Major Clarke "knew that the weather wouldn't be any better for days. The survivors couldn't last that long." Having been shot down himself on an earlier tour as an F-100 "Misty FAC", he knew that it was now or never.

Going back west again, Major Clarke let down on instruments in a valley wide enough to turn in. While he orbited just above the ground, one of the Jollys did a DF letdown on him, but ran low on fuel, climbed back through the clouds, and headed for home.

The mission was now six hours old.

Two more Jollys came up from Nakon Phanom and held while Clarke went out to a tanker for a rest and fuel. At that point, he set a pickup time for the SAR force. Going back west, he once more let down on instruments in a valley "wide enough to hold a two-G turn" and a chopper DFed down on his position---about forty five miles west of the survivors.

Flying ahead and doing 360 degree turns to stay with the chopper, Clarke led it to near the pickup area, where he told the Jolly to hold while he went in to get the survivors alerted and suppress fire from enemy guns.

Clarke now discovered a .51 caliber gun position on the ridge, just above one survivor, who was hiding in tall brush. "A guy could have thrown a hand grenade from the gun pits onto the survivor." He and his wingmen kept fire on the guns while the A-7 smoke birds laid down a screen.

By this time, there was a lot of lead flying around and a lot of chatter on the radio. The Jolly Green pilot decided to come in, unaware of the gun position close to one survivor. Miraculously, he made both pickups, then headed west, directly past the .51 gun pits.

Clarke made "a very low pass" on the guns to protect the Jolly and took a hit "by something that felt like 57mm". He lost all his systems and pulled up into the clouds "with what I hoped was wings level. About that time a SAM radar picked me up, and things didn't look too good." The SAM apparently didn't fire.

Clarke broke out on top, joined up with a couple of A-7s, and made an IFR landing at Da Nang, flying the wing of one A-7. Mission time: about nine hours.

The "57mm hit" turned out to have been a .51 caliber tracer that exploded one of his empty wing tanks, blowing in the side of the fuselage and bowing the underside of the wing."

A-7D of the 355th TFS, 354th TFW at Myrtle Beach AFB, S.C. June, 1972. The Navigation and Weapons Delivery System of the A-7D took five years and 167 million dollars to develope. (Norman E. Taylor)

354th TFW A-7D on the tanker during combat mission in 1972. (USAF)

SLUF rolling in with 6 CBU's. (Chuck deVlaming)

Wives of 356th TFS pilots rented a billboard to let Myrtle Beach know their sentiments upon homecoming of the squadron from SEA.

3rd TFS A-7D in the arming pits at Korat RTAFB, Thailand, prior to combat mission. Note that pilot keeps his hands out of the cockpit while arming crew removes safety pins. (greatly adding to their peace of mind.) (USAF)

SLUF moves in on a tanker of the Texas ANG. (LTV)

355th TFW A-7 on the tanker. With full external and internal fuel load, (2,625 gallons) A-7 has a range of 2,643 nautical miles. (LTV)

A-7D of the 57th FWW. Black and yellow checkerboard on tail. (LTV)

A-7 of the 355th TFW. (above) Self portrait of Major E.R. Skowron, of 57th FWW. A-7D of the 355th TFW flies his wing. (LTV) (right)

May, 1972: A VF-92 Phantom launches from the waist catapult of the USS CONSTELLATION as A-7's of VA-146 of VA-147 await their turns to launch from the forward cats. The A-7's are loaded for mining operations in the blockade of North Vietnamese ports. (USN)

A-7E of VA-146 being directed to the catapult aboard CVA-64 during April, 1972 operations against Viet Cong Forces. (USN)

A-7A of VA-146 aboard the USS ENTERPRISE during tune-up cruise in 1969. VA-215 Corsair II in background. (USN)

VA-146 A-7 pilot confers with his plane captain prior to combat mission over South Vietnam in the spring of 1972. (USN)

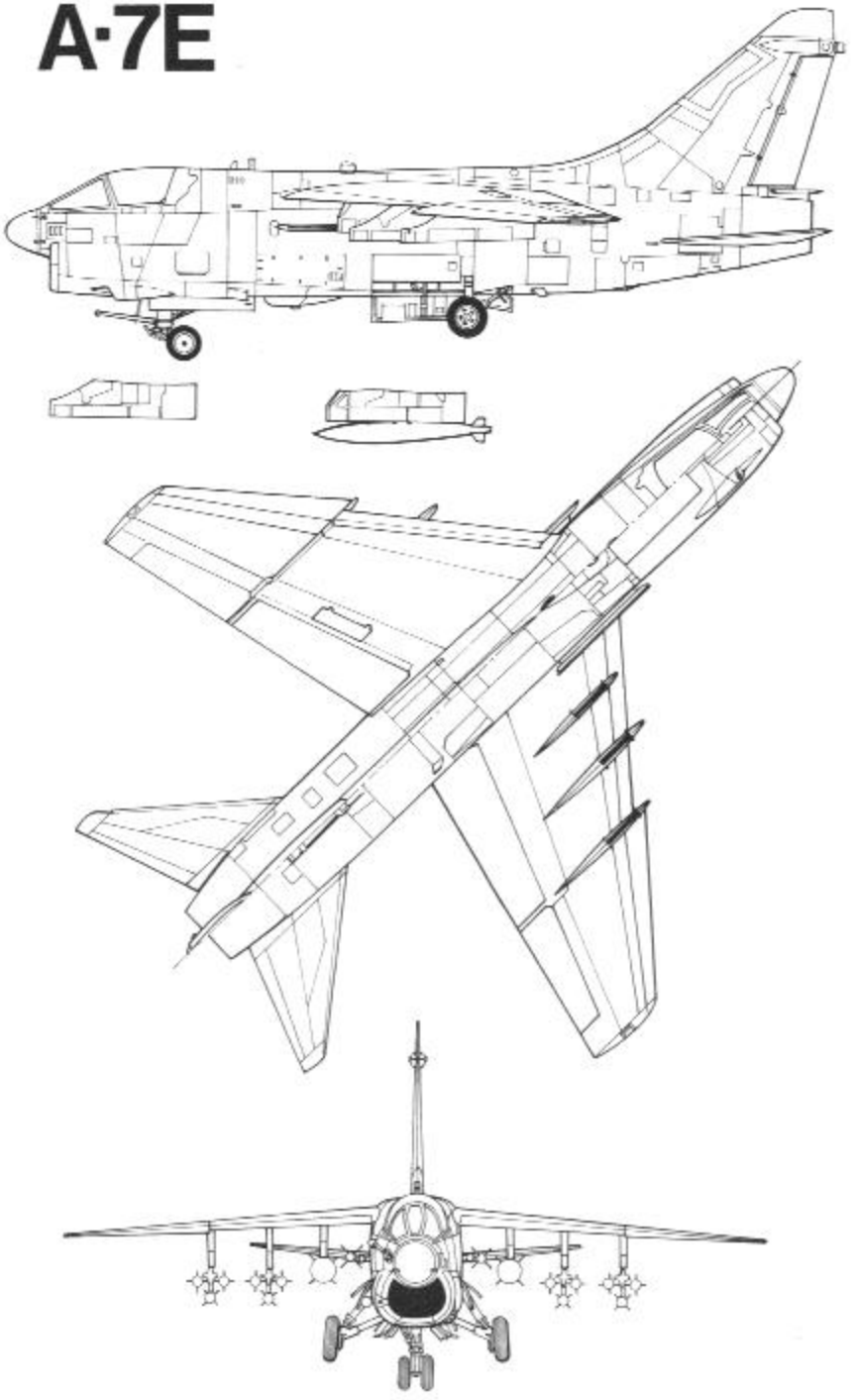
Ordnance handling crewmen bask in the warm sun of the South China Sea prior to loading bombs on attack aircraft for a strike against communist targets from CVA-64. (USN)

VA-27 A-7E returning to CVAN-65 after a strike on North Vietnam. It carries an unexpended Shrike missile on center pylon. (USN)

A-7E of VA-146 is recovered aboard USS AMERICA (CVA-66) after a 1970 combat mission. (USN)

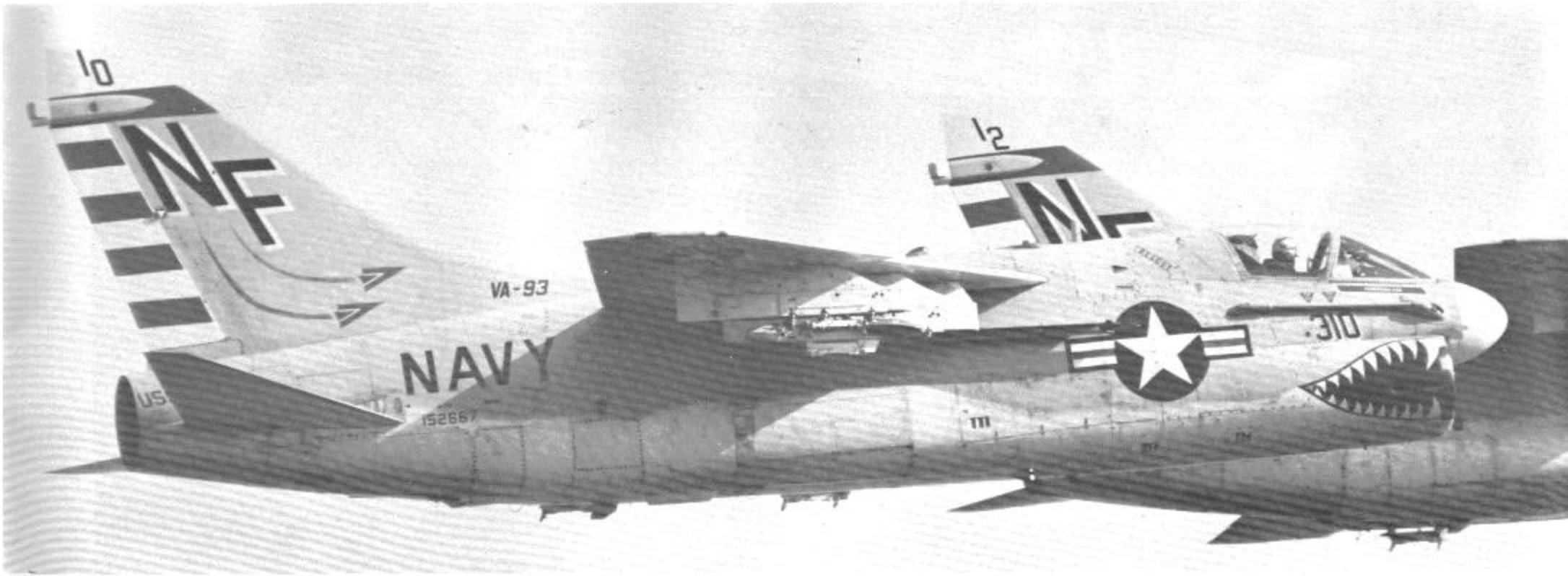
VA-27 Corsair II a split-second before it is launched from Constellation for a 1968 combat mission. Ordnance load consists of 10 500 lb. Snakeye bombs and a pair of Sidewinder AAM's. (USN)

A-7E



VA-147 CAG airplane formates on VA-165 Intruder in May, 1972 mission against North Vietnam. The A-7 is named for City of Olongapo, a small town adjacent to Naval Base at Subic Bay, Phillipines. (USN)

A-7A of VA-37 gets the launch signal from the catapult officer aboard the USS Kitty Hawk off the coast of California, November, 1968. (Author)

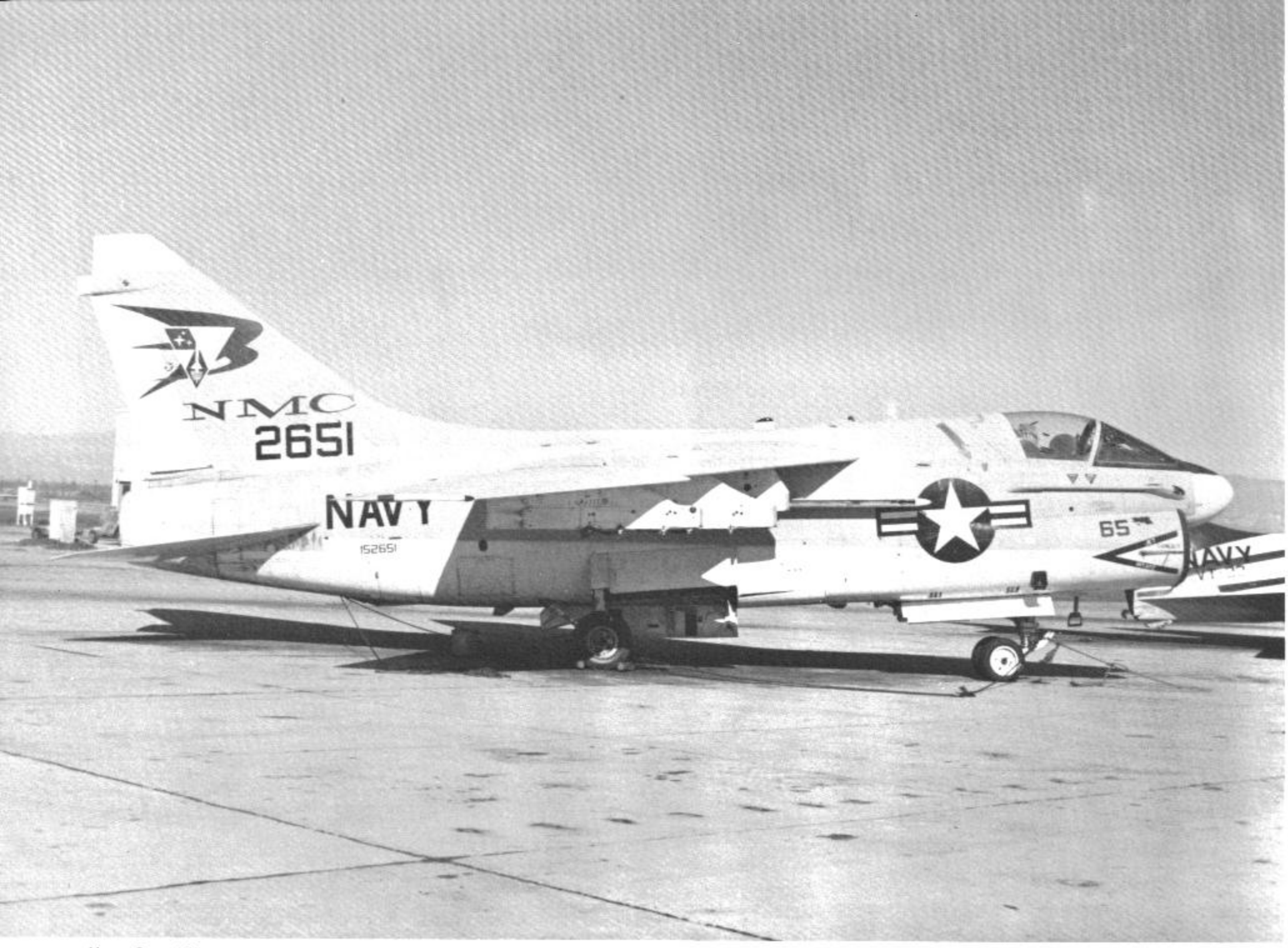


A-7A's of VA-93 off the USS MIDWAY formate over NAS Atsugi, Japan in November, 1973. (S. Ohtaki via Norman E. Taylor)

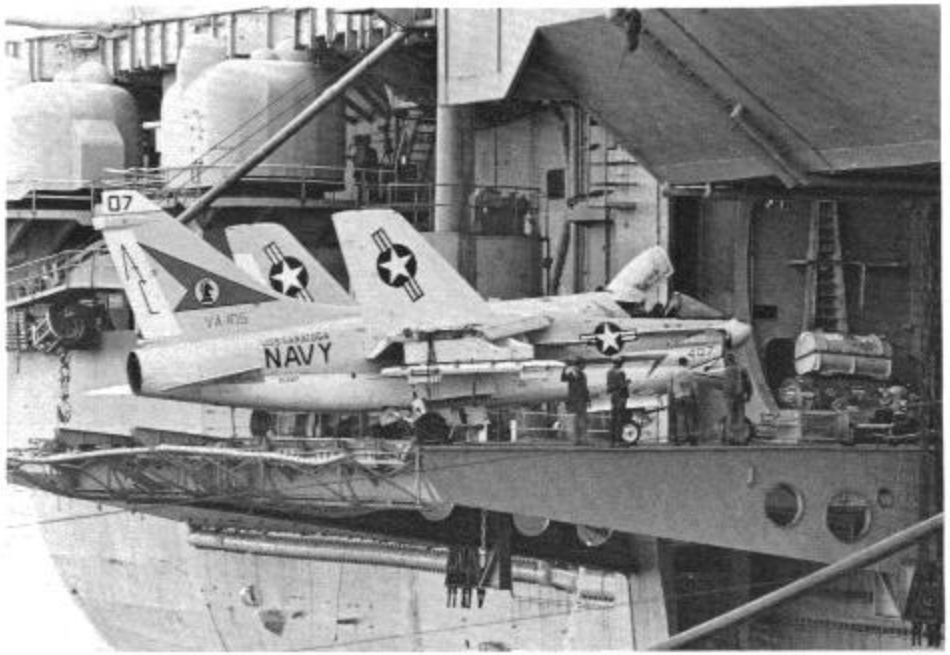
Harry Gann Photo

VA-72 A-7A awaits it's turn to launch as time-lapse photography catches the ghostly launch of an F-4B of VF-32. Twilight in the Mediterranean Sea, August, 1973. (USN)

VA-46 and VA-72 Corsairs line up on the number one cat aboard USS John F. Kennedy, as a Phantom of VF-32 launches from number two cat. (left) VA-72 A-7A approaching CVA-67 for recovery in the Med. (above) (USN)

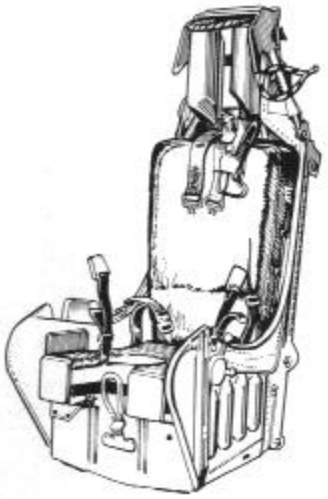


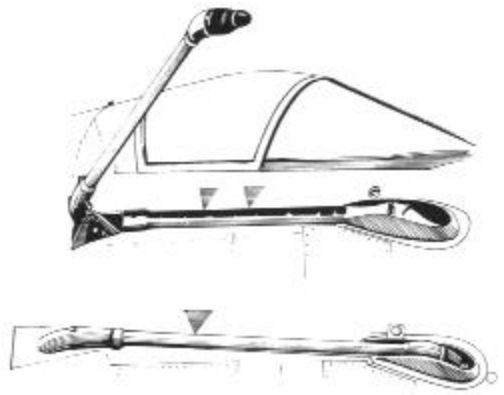
Harry Gann Photo



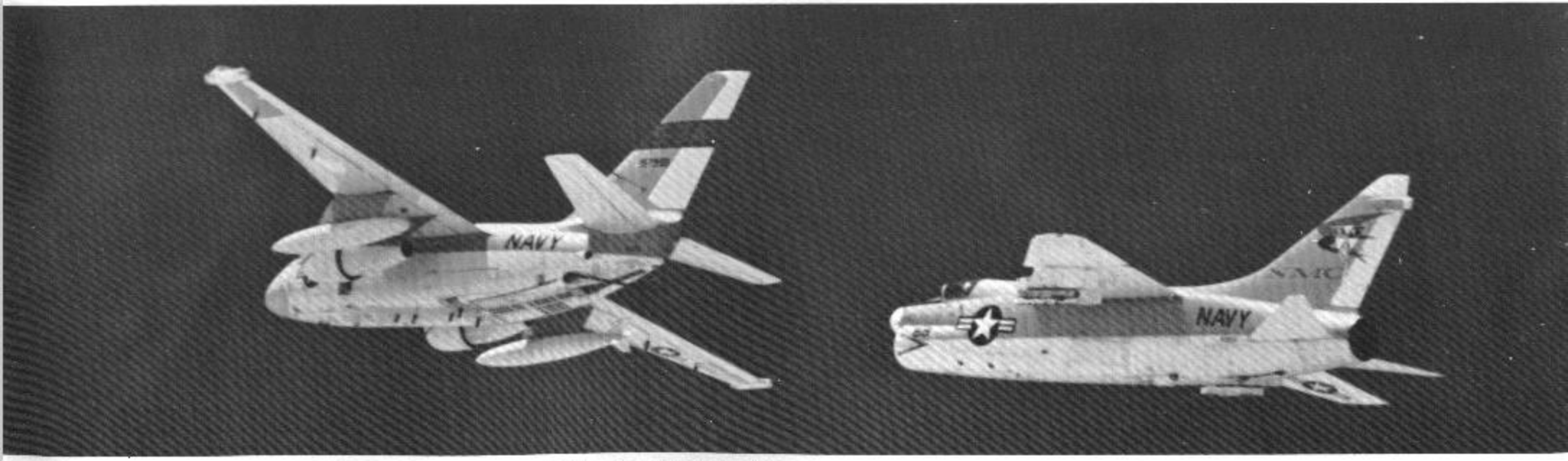
VA-105 Corsair enroute to the flight deck of USS SARATOGA aboard deck-edge elevator. (USN)

Ejection Seat



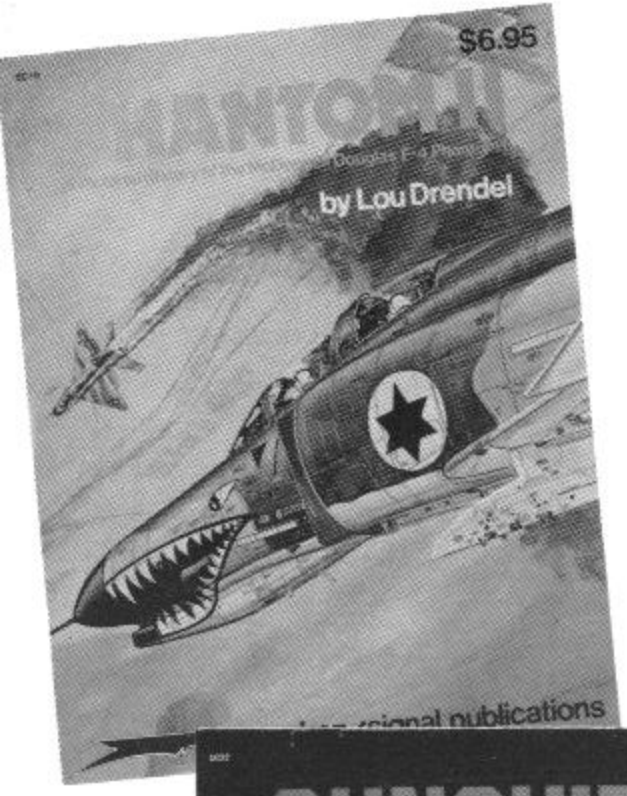


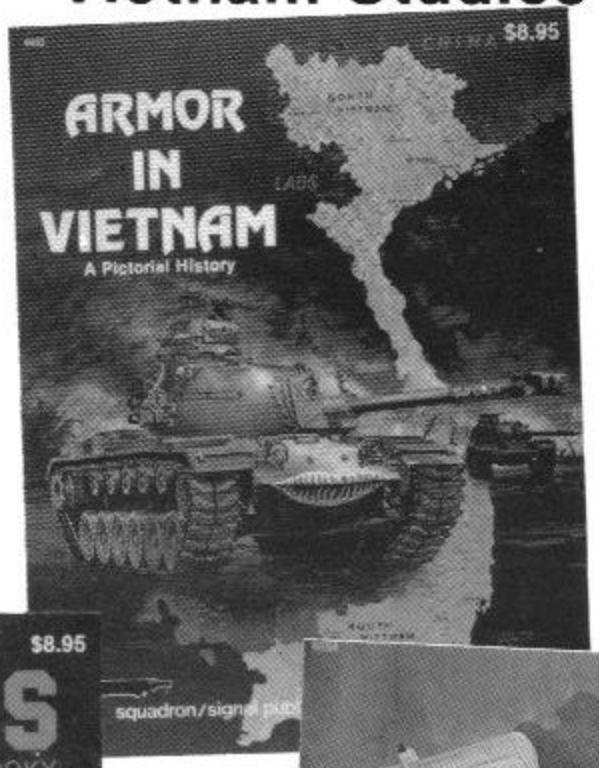
Navy Fuel Probe

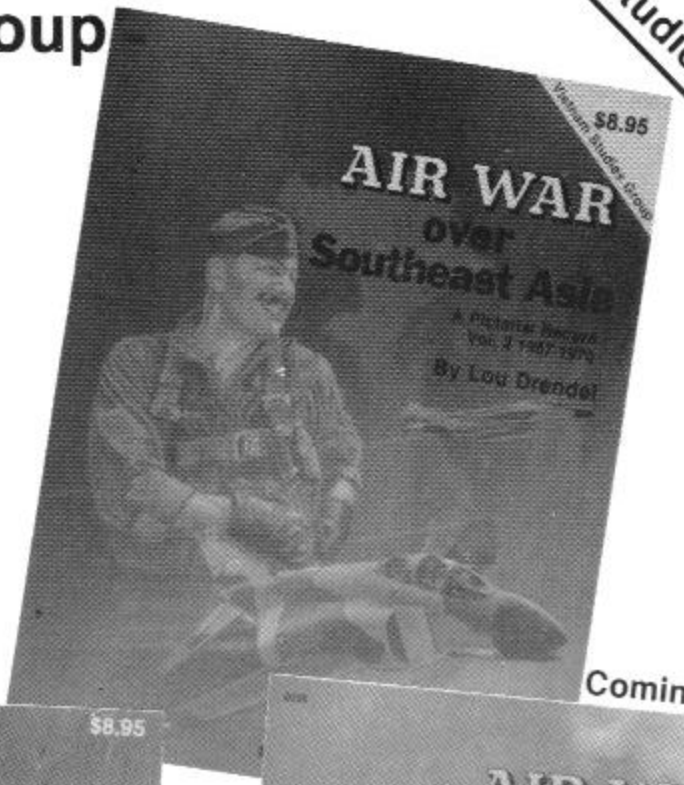


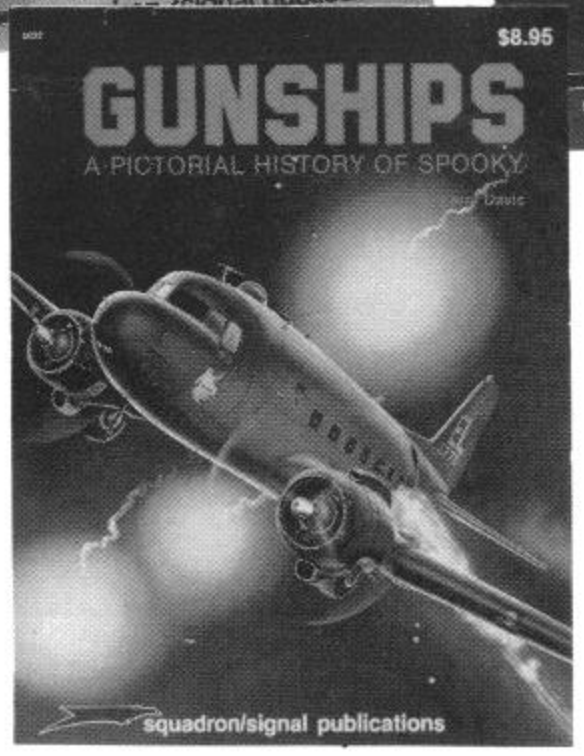
A-7A from the Naval Missile Center, Point Mugu, California, refuels from the Navy's newest fleet aircraft, the Lockheed S-3A. The two aircraft are representative of Naval Aviation into the 1980's. (USN)

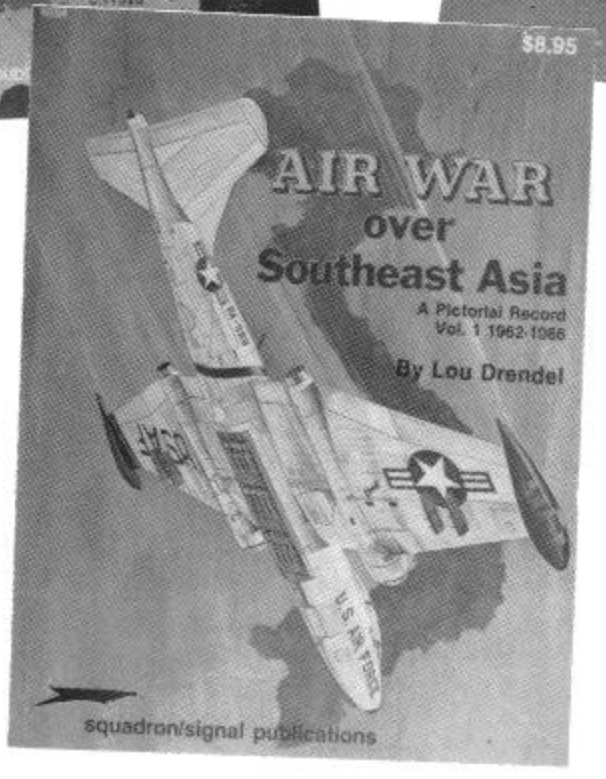
squadron/signal's
Vietnam Studies Group



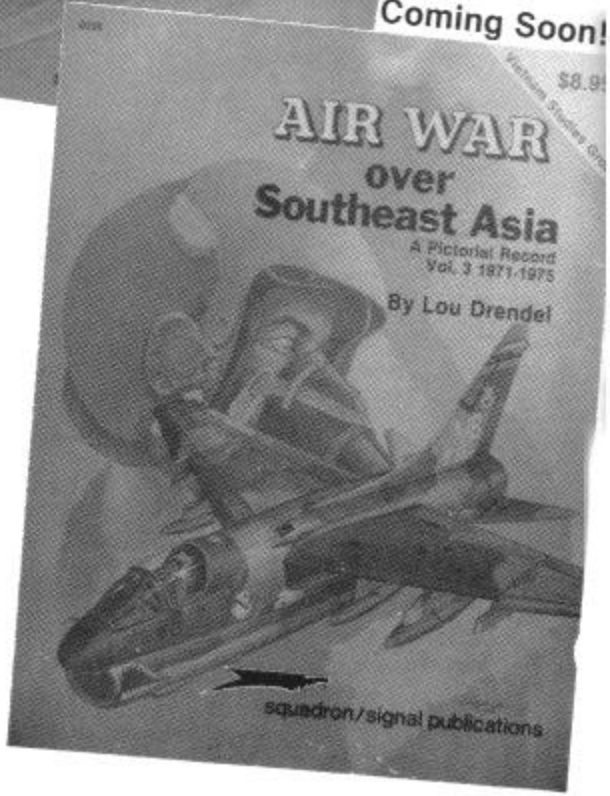




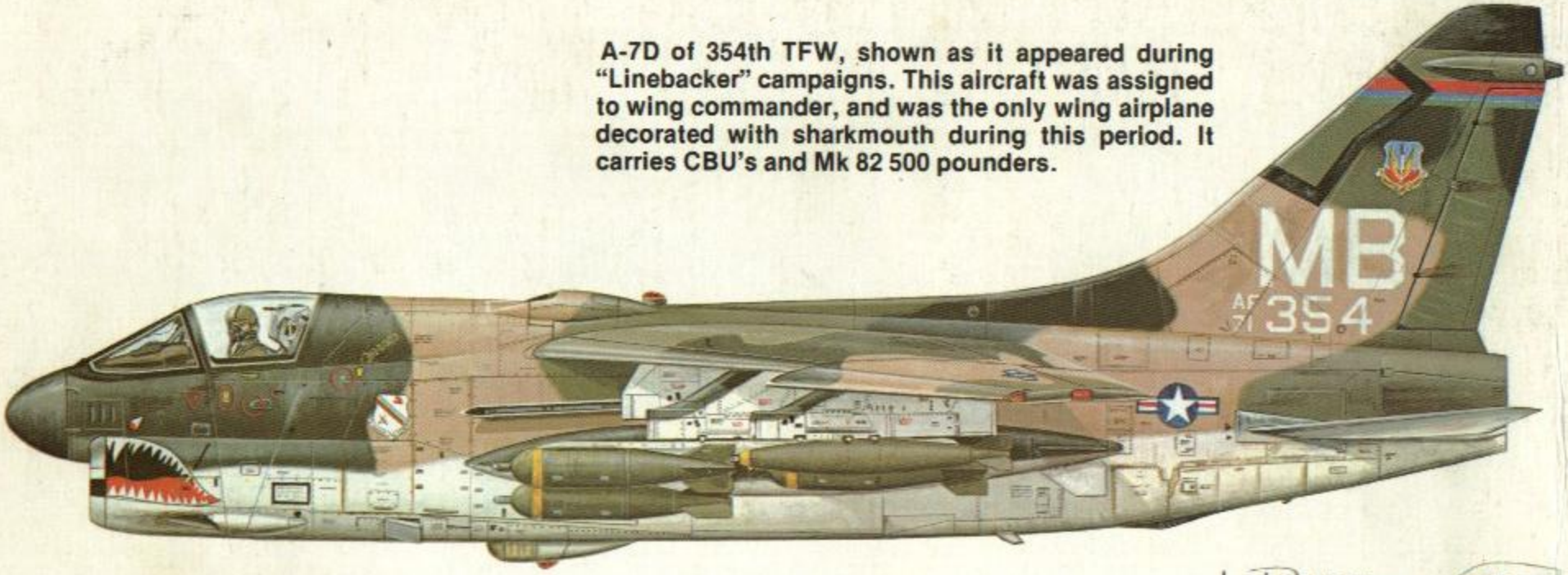




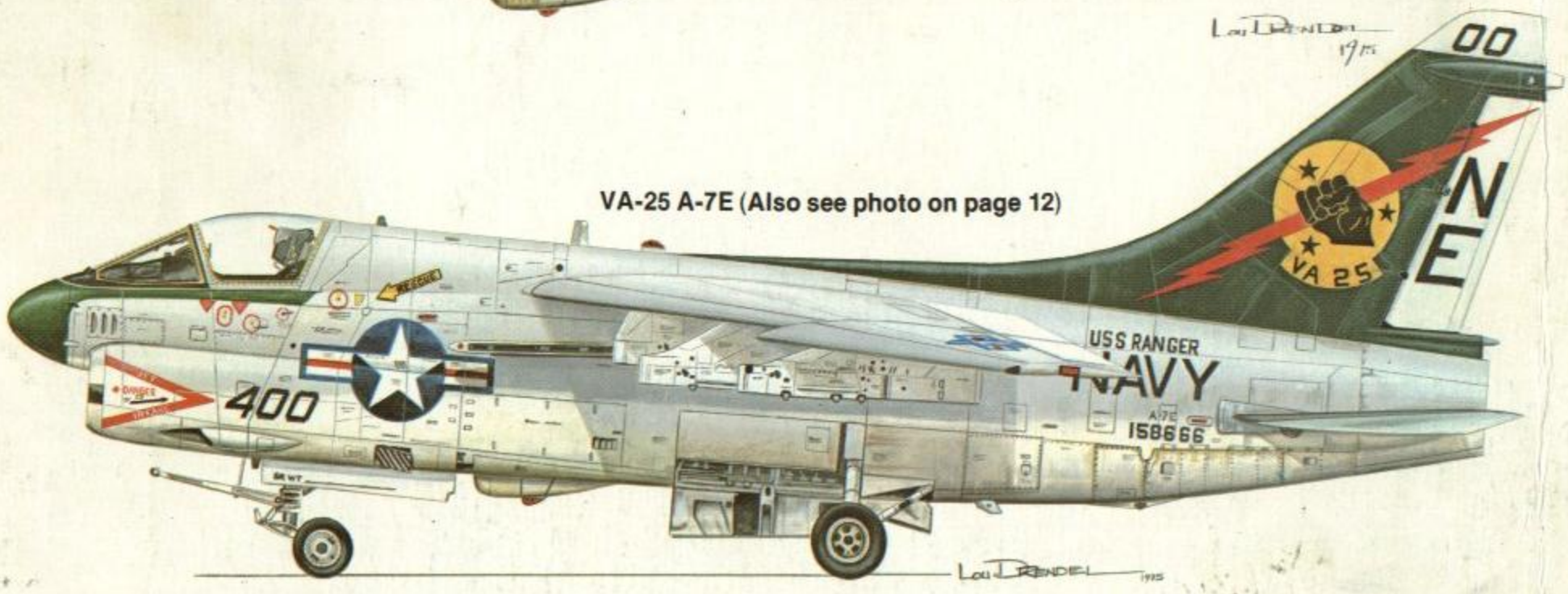
Coming Soon!



A-7D of 354th TFW, shown as it appeared during "Linebacker" campaigns. This aircraft was assigned to wing commander, and was the only wing airplane decorated with sharkmouth during this period. It carries CBU's and Mk 82 500 pounders.



VA-25 A-7E (Also see photo on page 12)



ISBN 0-89747-021-4