NAVAL AVIATION NEWS

Escape Systems and Survival

OCTOBER 1970
NavAir No. 00-75R-3

THE ATTACK CARRIER

'For the foreseeable future, the attack carrier will remain an indispensable element of American seapower. As the number of land bases available to our aircraft decreases, we shall need this mobile air base—a base capable of bringing air power to bear wherever it may be needed. . . . Our nation's great objective is the attainment of a secure peace for coming generations of Americans. To that objective we dedicate the USS Eisenhower (CVA-69).'

—Secretary of Defense Melvin R. Laird

NAVAL AVIATION NEWS

FIFTY-FIRST YEAR OF PUBLICATION

Vice Admiral Thomas F. Connolly
Deputy Chief of Naval Operations (Air)

FEATURES

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COVERS

While he was doing the feature on JEST, JOC Richard P. Benjamin took the cover photo of a student trying his hand at guiding a helicopter to his location. The back cover is one of a sequence taken by PH3 Bill Schuteker as a pilot ejected from an A-4E Skyhawk when it missed the arresting cable in an attempted landing aboard USS Independence (CVA-62).

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EDITOR'S CORNER

Now that the NANews staff has had a chance to adjust to new office spaces and has grown accustomed to the view from the eleventh floor, it seems an appropriate time to let our readers in on what goes into producing this magazine each month. Our editorial staff is not large — five people — so we've made it a policy to allow only one individual at a time to gaze out the windows. Even that is frowned on as deadline time approaches. However, that is really not a completely accurate estimate of the size of our staff.

Over the years, a small but fairly steady group of contributors has grown up. They are an excellent source of feature articles and photographic essays. Their only reward has been the satisfaction of seeing their work appear on our pages and having a byline crediting them for their effort. To these feature materials may be added the regular flow of news releases originating from high-level, Washington-based sources and from alert fleet PAO's. While sorting through the monthly deluge of cake cuttings and swearing-in ceremonies, we find many interesting or unusual items which we feel should be made known to our readers.

As the official publication of DCNO(Air), charged with keeping the Naval Aviation community informed about current developments in all areas pertinent to Navy flying, NANews strives to fulfill its assignment by not only passing along useful and interesting material from the top down, but by allowing all aviation-related activities to communicate with one another. To facilitate this we have often been tempted to start a classified column headed by the following ad:

> Help Wanted — Naval Aviation writer, no prev. expr. needed, should have valuable info to share with others in Nav Av field. Articles with large selection of photos desired. Contact NANews, 801 N. Randolph St., Arlington, Va. 22203.

We know that we are missing many worthwhile stories which have a wide range of interest because we too frequently hear about them through indirect sources, too late to use. With our relatively long lead time from planning to publication, it is imperative that news type items reach us as rapidly as possible. In addition, hundreds of valuable feature articles dealing with operations of Naval Aviation units or the support for those operations go untold simply because no one sits down to write about them.

Naval Aviation is a big organization. It is complex. No one individual can be expected to be intimately familiar with all its phases — but we should all have an interest and a basic knowledge of what other branches of the Naval Aviation community are doing and how they go about doing it. This we hope can be facilitated somewhat through the medium of NANews, and we therefore solicit our readers' assistance in this endeavor. In order to do its part, the NANEWS staff has been researching and now has in preparation a unique view of the Navy's role in, and contributions to, the nation's effort in Space. Our staff has talked with NASA officials, astronauts and Navy pioneers in the space field in preparing a full length special edition on the subject. We are quite proud of our effort and hope that it will prove interesting and useful to our readers.

As you have no doubt noticed, the magazine has taken on a slightly "new look" in recent months. The cover design has been altered somewhat in a move to brighten up its appearance. In doing so, we have departed from a pattern which was established in 1943. Inside, the news pages have been given a new format which we think will make them more readable and more interesting. The offset printing process which was adopted a few years ago has allowed us to present photographs in more attractive ways and has given us greater flexibility in producing more interesting page arrangements.

With this issue we have begun a new method of production. Most of the final paste-up for each page will now be done by the printer — giving our art director more time to devote to making our pages more attractive to our readers. This new contract will also introduce slightly different type faces which, though detectable only with close scrutiny, should produce a subtle change in appearance. We do not often receive reaction to these changes but you may be certain that we are most interested in hearing how they are received by our readers.

Not all the improvements that the staff has in mind have been implemented. And a great deal of discussion precedes each, with many being consigned to the dustbin before a few make their appearance. This is your magazine. The NANews staff would like to hear from you concerning any area you wish to discuss — subject matter you would like to see, special departments or deletion of them, format or use of photos. One area in which we would most assuredly like to receive more mail is that which brings good feature material with a fresh approach to a Naval Aviation subject which could stand a little more exposure, complete with a good selection of photos. So, keep those cards and letters coming, folks.

NAVAL AVIATION NEWS
1911 1970

Unitas XI Underway in South America

SAN JUAN, Puerto Rico – The second decade of inter-American naval cooperation began August 1 as ships from the United States, Colombia and Venezuela departed San Juan on *Unitas XI*, a combined naval exercise during which the U.S. units will circumnavigate South America.

During the 25,000-mile trip, air and naval elements from eight South American countries join the U.S. task group in combined training operations.

Each year since 1959, the U.S. Navy has conducted combined operations with eight major South American navies. No formal treaties govern the *Unitas* operations.

This year's exercise is under the command of Rear Admiral Herbert H. Anderson, Commander South Atlantic Force, U.S. Atlantic Fleet.

Rear Admiral M. Ortiga was task group commander of the Colombian units and Rear Admiral M. Benatuil was the Venezuelan task group commander.

Unitas XI is being conducted in the Atlantic and Pacific Oceans and the Caribbean Sea. Moving clockwise around South America, the U.S. units will transit the Strait of Magellan and the Panama Canal prior to their return to San Juan in December.

Units of the navies and air forces of Argentina, Brazil, Chile, Colombia, Ecuador, Peru, Uruguay and Venezuela will join the U.S. task group in both bilateral and multilateral operations.

U.S. Naval Aviation units participating in the exercise include Patrol Squadron 16 and VR-1.

A VP-16 Orion makes a pass over the destroyer Myles C. Fox during a naval power demonstration off the coast of Venezuela during a joint U.S.-South American exercise, Unitas XI.

Keel of Newest Nuclear Carrier Laid

NEWPORT NEWS, Va. – The keel of the Navy's newest aircraft carrier, the nuclear powered USS *Dwight D. Eisenhower* (CVAN-69), has been laid in ceremonies at the Newport News Naval Shipyard. Attending the ceremonies were the late president's widow, Mrs. Mamie Eisenhower; his grandson, David Eisenhower; Julie Nixon Eisenhower; Secretary of Defense Melvin Laird; Under Secretary of the Navy John Warner; Chairman of the Joint Chiefs of Staff, Admiral Thomas H. Moorer; Chief of Naval Operations Admiral Elmo Zumwalt; and Vice Admiral Hyman Rickover, Director of Naval Reactors.

Eisenhower's keel was laid next to her sister ship, USS *Nimitz* (CVAN-68), presently under construction. Like the *Nimitz*, *Eisenhower* will have an overall length of 1,092 feet, a displacement of approximately 94,400 tons and will be powered by a two-reactor nuclear plant.

The nuclear powered attack carrier is scheduled for launching late in 1973.

Good News

With the rising cost of nearly everything, we have some good news for our readers: the price of *Naval Aviation News* has gone down. Effective this issue, the cost of a year's subscription will be $5.00 ($1.25 additional for foreign mailing) or $.45 an issue. For those who have always wanted a personal copy of *NANews*, seize the moment – the mountain has, at long last, finally come to Mohammed.

CNO Announces Safety Award Winners

WASHINGTON, D. C. – The Chief of Naval Operations, Admiral Elmo Zumwalt, has announced the winners of the annual CNO Safety Awards and praised the "esprit de corps and continuing devotion to duty" of the winning squadrons. He also commended VMGR-252 for its third consecutive win, and VMGR-352, HMM-365 and HMM-764 for their second straight awards. In praising the double winners, Admiral Zumwalt stated that the respective squadrons "clearly show that safe as well as effective flight operations are compatible."

The winners for FY 1970 are:

NavAirLant: VF-103, VA-72, VA-85, VP-5, VS-28, HC-4, RVAH-3, VRC-40

NavAirPac: VF-142, VA-128, VA-215, VAQ-133, HS-4, VAW-113, VP-4, VA(L)-4

FMFPac: HMMT-302, VMCJ-1, VMGR-352, VMO-2

FMFLant: VMFA-251, HMM-365, VMGR-252

CNATra: VT-5, VT-28, VA-205, VP-68A2, HS-74, VR-1A3

4th MAW/MARTC: VMF-351, HMM-764

NORFOLK, Va. – The Chief of Naval Operations has announced the winners of the FY 1970 Admiral Flatley Awards.

Coral Sea (CVA-43) and *Independence* (CVA-62) were the attack carrier class winners. *Intrepid* (CVS-11) and *Guam* (LPH-9) won the ASW and assault ship categories, respectively.

The Admiral Flatley Memorial Awards are made annually to units displaying outstanding safety. They are awarded to two CVA's, one CVS and one LPH. The award consists of a citation by CNO and temporary custody of the trophy.

Celia was no lady, she was a hurricane. She struck Corpus Christi, Texas, in August with winds of 161 miles per hour and seven to eight inches of rain. Rear Admiral Billy D. Holder, CNAVanTra, surveys the damage to military housing, one of the hardest hit areas.

Inflight Refueling Reduces Test Costs

PATUXENT RIVER, Md. – The use of inflight refueling at the Naval Air Test Center has resulted in significant cost savings in structural demonstration tests on the Navy's newest version of the Grumman EA-6 *Intruder*.

Taking more than 17,000 pounds of fuel from an EKA-3B tanker assigned here temporarily from VAQ-130, NAS Alameda, Calif., the EA-6B completed more than half of the entire structural test program on its initial demonstration flight.

Additionally, an F-8 *Crusader* serving as chase airplane was refueled in flight enabling it to remain airborne throughout the demonstration.

The four-place EA-6B, designed to protect strike aircraft by tactical jamming of hostile radar installations, was airborne three hours and completed 14 of 21 points in the test. Each point must be executed with a gross airplane weight of 51,000 pounds or more. This normally requires landing and refueling after each point.

Commander D. D. Davison, EA-6B program manager on the NATC staff, reported that the inflight refueling operation was a complete success, producing savings in both time and money. As a result, a KA-3B will be assigned to NATC in the near future in support of test programs.

New Program for Dependents' Travel

WASHINGTON, D.C. – CNO has announced a new program designed to minimize the impact of extended absences on Navy personnel and their dependents. The program will facilitate dependents' travel to overseas areas frequented by deployed units and leave travel for active duty personnel stationed overseas. Charter air transportation will be arranged in conjunction with liberty periods scheduled for deployed units and during peak leave periods.

Participants will absorb all costs of charter transportation on a pro-rated basis. The reduced cost of air charter fares should provide an opportunity

for travel to overseas areas not previously within the financial capability of many Navy personnel and their dependents. Information will also be available on special rates for hotel accommodations, tours and other conveniences.

Priority for travel will be given first to dependents of personnel in units deployed overseas and then to active duty personnel stationed overseas. All other active duty and dependent personnel will be eligible on a space available basis. Applications will be accepted only as coordinated and forwarded by local commands to BuPers.

During the 1970 Christmas season, a pilot program, consisting of charter trips in both the Atlantic and Pacific areas, will be arranged.

Ride 'em cowboy! A 1st Force Recon Marine prepares to jump from his Bronco to a drop zone near Da Nang. OV-10A belongs to VMO-2 which just counted 30,000 combat hours.

Change of Command at CNAVanTra

CORPUS CHRISTI, Texas – In ceremonies held here recently, Rear Admiral Billy D. Holder relieved Rear Admiral Frederick C. Turner as Chief of Naval Air Advanced Training.

Among those attending the ceremonies was Vice Admiral Bernard M. Strean, Chief of Naval Air Training, who presented Rear Admiral Turner with the Legion of Merit.

During RAdm. Turner's tour, new safety achievements were reached, culminating with the FY 1970 safety performance of .72, a 26 percent improvement over the previous record. In addition, new training methods and policies improved efficiency and reduced the cost of training Naval Aviators.

Adm. Turner will become Assistant Chief of Naval Personnel for Personnel Distribution.

Adm. Holder came to Corpus from the staff of the Commandant 11ND in San Diego, Calif.

'Blue Angels' Seeking Enlisted Applicants

PENSACOLA, Fla. – The *Blue Angels*, Navy's Flight Demonstration Team, are seeking applicants in the rates/ratings of aviation structural mechanic and aviation electrician's mate. Specifically, they are looking for highly skilled AMS-1's, AMH-2's and AE-2's. All applicants should be fully qualified in the maintenance of the F-4J *Phantom* and it's support equipment.

Duty with the *Blues* is a two-year tour which counts as preferred sea duty or, neutral time. The team performs about 120 flight demonstrations each year in the United States and occasionally performs abroad. Team members can plan on traveling to approximately half of the locations.

Interested personnel should submit a letter of request to the Chief of Naval Personnel, via their commanding officer, and Commanding Officer, Headquarters Flag Unit, CNATra.

A-4 Replacement Squadron Designated

LEMOORE, Calif. – Attack Squadron 127 became the Navy's only A-4 replacement air wing squadron in ceremonies at this naval air station. The first of several A-4F *Skyhawks* has joined the squadrons TA-4F's.

VA-127, under Commander Loren M. Dierdorff, becomes the third replacement air wing squadron at Lemoore.

The squadron provides all-weather jet instrument training to light jet attack fleet replacement pilots and others in Naval Air Forces, Pacific. Additionally, VA-127 conducts jet transition and refresher training in the Pacific. The training will be augmented to include all types of training related to the A-4 *Skyhawk*.

LATWing-1 Gets New Commanding Officer

CECIL FIELD, Fla. – Captain J. B. Morin has assumed command of recently established Light Attack Wing One at this naval air station. The commissioning of LAtWing One also marked the disestablishment of Readiness Attack Carrier Air Wing Four (RCVW-4), a Cecil Field-based unit for the past 12 years.

The commissioning of LAtWing One signals a new era in light attack aviation in the Atlantic Fleet. Continuing modernization and the introduction of new attack aircraft into the Navy have resulted in the need for more effective management of air crew training.

While based at Cecil Field, light attack squadrons will receive standardized training from the wing, which will provide appropriate Atlantic Fleet attack carrier air wing commanders with skilled personnel needed to maintain aircraft.

Attack Squadrons 174 and 45, permanently shore based at Cecil Field, are under control of LAtWing One. Additionally, Attack Squadrons 12, 15, 37, 46, 66, 72, 81, 82, 83, 86, 87, 105 and 172 will be under wing control when ashore at Cecil Field.

GRAMPAW PETTIBONE

CVA-54, Where Are You?

The second tour lieutenant commander was assigned as flight leader for a two-plane, F-4B strike training mission from a deployed CVA. He and his lieutenant junior grade radar intercept officer were assigned aircraft Patrol Car 205. His wingman, another lieutenant junior grade, was in Patrol Car 213. The flight members assembled in the ready room at 0600 and were briefed for the mission over closed circuit television from the integrated operational intelligence center.

The brief was continued verbally by the flight leader and covered all requirements except for a weather alternate and divert, and lost radio or lost navigation aids procedures. (All flight members had previously been instructed in these standard procedures.)

Two minutes prior to manning aircraft, the crews were notified that their target weather was too low, and an alternate mission was assigned. Fuel load was ample (17,000 pounds) and the two *Phantoms* were launched at 0800. Patrol Car 213 reported no TACAN, an unreliable ADF and an intermittent UHF radio. Patrol Car 205 was a good aircraft with only a failed AJB-3 gyro.

The mission was conducted in a normal manner with the flight leaving the target area with 6,400 and 6,100 pounds of fuel remaining. Fuel management en route was sound; normal reserves remained for recovery.

As the two F-4's passed out to sea and turned toward the task force for recovery, the flight leader asked his RIO to tune in homeplate CVA TACAN. This the J.G. did, getting a lock on at the correct azimuth, but the range was about 100 miles too great. The pilot didn't request that the TACAN volume be turned up (in order to positively check the audio identification signal) and the RIO didn't do so on his own.

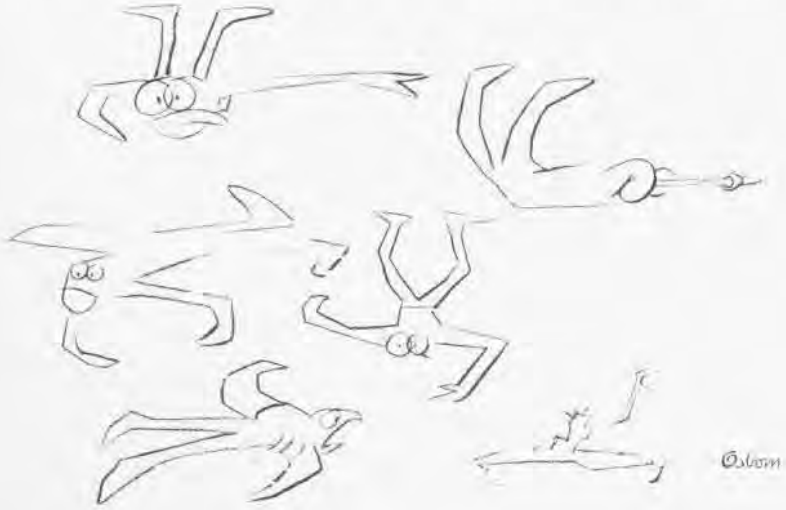
When the TACAN range read 100 miles, the pilot contacted the CVA strike radar controller. The controller acknowledged the call and advised that he held contacts on radar at 94 miles and that the ship's weather was 3,000 feet broken clouds, 1,500 feet scattered clouds with visibility ten miles plus. The lieutenant commander then requested an en route descent to the ship and was turned over to the marshal controller who was on a different console and radio frequency.

The marshal controller was informed that Patrol Cars 205 and 213, being passed to him for control were at about 160 degrees, 70 miles from the ship. When the flight leader checked in, he acknowledged that he held a good primary radar target at that position.

Without having positive radar contact, the controller cleared the Patrol Car flight for a Case II instrument penetration, when the flight leader indicated they were about 25 miles out. The two *Phantoms* lost all radio contact with the carrier passing 10,000 feet, entered the top of the overcast at 8,500 feet and finally broke out underneath at 300 feet with 1½ miles' visibility. Almost immediately they passed over a guided missile destroyer.

After completing a 360-degree turn and again passing over the DLG, the flight leader decided to climb back on top and try again. The flight broke out of the overcast at 8,000 feet and set up a holding pattern over the "ship." The flight leader switched to emergency IFF and guard channel. Fuel state was now 2,600 pounds. The CVA soon replied that a tanker was overhead at 2,000 feet with 2,000 pounds of fuel to give away. The lieutenant commander requested that the tanker be sent on top of the overcast to rendezvous, but the flight did not make contact.

Reaching a fuel state of 2,000 pounds, the lieutenant commander decided to make another TACAN approach. Again he passed over the DLG at about 500 feet, but there was no sign of the carrier. Patrol Car 213 sud-



ILLUSTRATED BY Osborn

denly called that he had land dead ahead at eight miles on his radar. The flight quickly turned back the other way. As the two forlorn *Phantoms* groped their way back on top of the overcast, again, the flight leader finally asked his RIO to cross-check another TACAN station. Podunk AFB came in loud and clear. He reset the CVA channel, which locked on at 150 degrees 102 miles, and the flight headed for the carrier.

Meanwhile the CVA had launched a fresh tanker which was being vectored at max speed toward the wayward flight. All too late, however, as Patrol Car 213 flamed out at 70 miles and the crew ejected. A few minutes later, Patrol Car 205's engines started to unwind and the flight leader and his RIO followed the other crew into the drink.

The SAR helicopter forces, previously alerted, soon picked the dripping ex-*Phantom Phlyers* from the sea and returned them to their lost carrier deck.

Grampaw Pettibone says:

Jumpin' Jehosophat! What in tarnation happened here? Ain't this really a comedy of errors. How complacent can you get? Just dug around in my hip pocket and there it was, that old habit I learnt in flight school – check all channels and frequencies twice and always listen for the ID signal. It's saved me more'n once. Too bad it wasn't around to save them. Twaren't just the flight crew sittin' fat'n happy, though. The carrier's air traffic control personnel blew the NATOPS manual wide open when they didn't make positive identification of the flight. Two controllers let that one slip by. Hope the CIC and CATC officers got jacked up a bit on their responsibilities in this little matter.

Afraid the flight leader just wasn't with it that day, either. He had to make two passes over the DLG, underneath the overcast at 300 feet, before he realized it really wasn't the plane guard destroyer behind the carrier, which was reporting 1,500 scattered and 10 miles' visibility – Tsk! Tsk!

Dubious Distinction

While at marshal, the veteran lieutenant experienced a utility hydraulic failure in his F-8 *Crusader*. He notified the ship and was advised to come aboard. He had been airborne for over 2½ hours on a double-cycle, night barrier combat air patrol and was just a little fatigued. When he dropped his hook, the hydraulic pressure came back up but continued to be erratic for the rest of the flight.

Thirty minutes later, he and his wingman started down the pipe for CCA's together. They separated at the 5,000-foot "platform," the lieutenant executing a 360-degree turn. He called the ball slightly high with 2,200 pounds of fuel. When the ball started to go higher, he increased his rate of descent and started to catch it just as the LSO radioed, "Okay, start catching it with power." Because he was still right of centerline, he made a correction. The nose started to drop and the LSO called for a little power, which the pilot gave the F-8, breaking the throttle out of automatic. Shortly thereafter, he stated that "things started feeling different – uncomfortable"; so he went to 100 percent power with the ball still high. It stayed there for a second and then the LSO started yelling for power and waveoff. As the lieutenant approached the ramp, he saw the ball go from high to center, to low, to red, to off the mirror, and he knew he would more than likely smack the ramp.

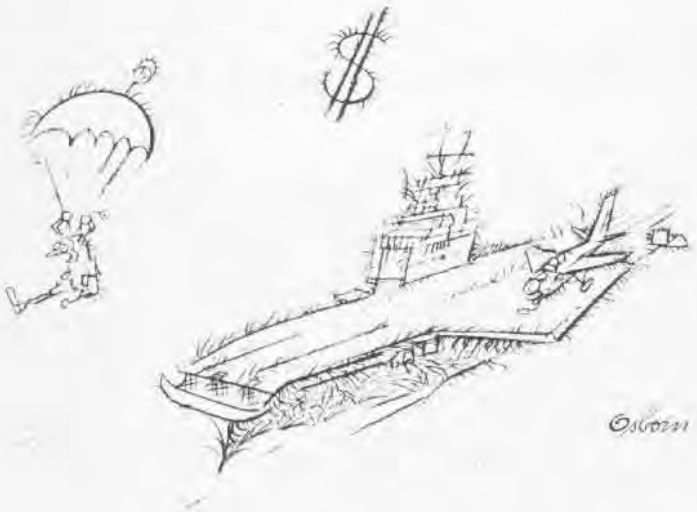
The *Crusader* did hit the ramp in the vicinity of its main landing gear and continued on up the deck. As the lieutenant reached for the face curtain, the aircraft rolled right about 10 or 15 degrees. Thinking he might eject right into the island structure, he hesitated but then, glancing in the rear view mirrors, saw the wing scraping along the flight deck and, knowing the F-8 would roll no further, positioned himself and pulled the curtain. The ejection was smooth and good. He saw the *Crusader*, on fire, pass beneath him and felt himself flying through the air, hoping everything would work as advertised. After what seemed an eternity, the chute opened, and he started to swing. He was about to inflate his life vest when, on his second oscillation, the bow of the ship loomed up beside him out of the darkness. He noticed that he was going to hit the front end of the ship, too. Bracing himself, he swung hard into the right side of the bow, thus gaining the dubious distinction of being the only pilot to hit both ends of the ship on the same night. He hit, facing into the ship, on his right leg, foot, and then his left foot. His hardhat was severely buffeted and he felt himself being dragged up and over something, then found himself lying on his back, supine in the bow safety net. Unable to release the Koch fittings of the parachute, he just relaxed and watched the burning airplane float by until somebody came out to rescue him.

Grampaw Pettibone says:

About the only way to have prevented this accident would have been "to have stood in bed." The exacting requirements of a night, F-8, double-cycle, small 27C carrier, pitching deck landing add up to ramp strike. Captain! Admiral! Is this trip really necessary?

What kinda work schedule is 12 hours on, 24 hours off, alternating day and night operations every other day. How can anyone sleep well?

Thank God for rocket seats. We can now save most of the pilots who hit the ramp. But, can we stand the dollar loss of the aircraft?



A TECHNICAL REPORT

Occasionally, *NANews* deserts its familiar ground and ventures into the realm of the technical. Such is the case with the following article. SAR and escape systems have always been of paramount importance to the Navy and, due to events in recent years, they seem to have become more important. The engineers and systems men of the Naval Air Systems Command and the Naval Air Development Center are creating "insurance" for those who may be downed. We wish to thank Mr. Terry Thomasson, senior engineer of the crew systems division, NavAirSysCom, his assistant, Mr. Steve Meeks, and Mr. W. A. Mawhinney of NADC Johnsville for their assistance in making this article possible.

OUT OF HAR

By Michael G. McDonell

Rolling in for the run, the sleek metal aircraft picks up ground fire. Nearing the target, the pilot feels his craft shudder violently, and the plane, so sensitive to his commands only a few moments before, becomes an unmanageable monster with its mind bent on self-destruction.

Figures on the ground, figures who had fled from the awesome winged specter, now look up at the smoking airplane anticipating its certain destruction and the equally certain death or capture of their tormentor, its pilot.

You could write your own ending to this narrative: the capture of an aviator and his subsequent death or interment at the hands of an enemy or, more remotely, miraculous and heroic rescue by a helicopter crew risking heavy gunfire to save the unlucky one.

The former ending seems all too familiar and the latter, while not uncommon, an accomplishment of sheer guts rather than the end result of a refined, predictable retrieval system.

M'S WAY

If the air action over North Vietnam can be used as an indicator, the number of airmen rescued has been disappointingly low. Studies of a one year period of air action in the North show that 68 percent of those shot down ejected within five minutes of being hit. One hundred percent of those pilots and crewmen who ejected within three minutes of being hit were captured and, of those who ejected within five miles of the hit, 70 percent were captured.

As previously pointed out, the rescues made by helicopter have been highly laudable, but the percentages speak for themselves. And for those who were unlucky enough to be shot down near urban areas or concentrations of enemy forces, rescue by helicopter was nearly impossible.

If the logical supposition is not to allow the pilot to touch down in hostile territory, then the logical solution is to reduce "time late" – the time required for a rescue vehicle to arrive after a pilot has been downed – and to get the pilot out.

Easier said than done. But something *is* being done. Aware of the problem, Navy search and rescue (SAR) engineers from NavAirSysCom and NADC Johnsville are trying to find a solution.

Several new rescue concepts are being developed. Some of the new ideas are as fantastic as the Martin Baker ejection seat would have been to a Naval Aviator of 30 years ago, yet all may become realities in the near future.

Basically, the new SAR systems fall into five technical categories: fast-fall hoist and rescue carrier, air-to-ground (fixed wing) retrieval, ground-to-air (propulsion) retrieval, air-to-air retrieval, air-to-air self rescue.

The fast-fall hoist, which should greatly enhance helicopter rescue capabilities, is presently being evaluated. While older model hoists have 200 feet of cable and a reel-in speed of 200 feet per minute (fpm) while hoisting two men, the fast-fall hoist is equipped with a 350-foot cable and can reel-in/reel-out at speeds up to 1,500 fmp – with a rescue penetrator. Reel-in speeds of 750 and 475 fpm have been made with two and three men, respectively.

An armored personnel carrier (two to three men) was originally conceived as a replacement for the jungle penetrator rescue device but, because of the weight of the armor, the idea was discarded. A fleet recommendation that the standard "V" ring be utilized on the torso harness in conjunction with the cable hook was adopted in place of the personnel carrier concept. When the V-ring is not available, the jungle penetrator, less the protective shield, will be utilized.

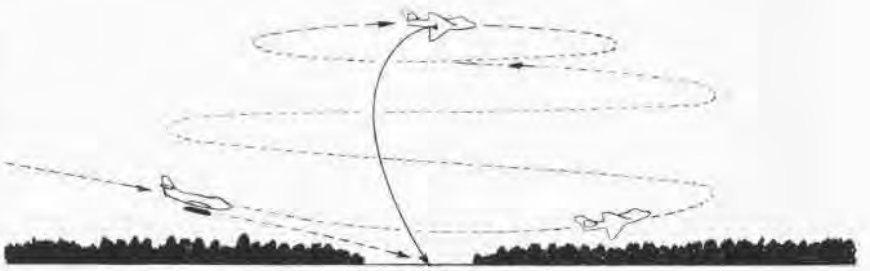


Figure 1

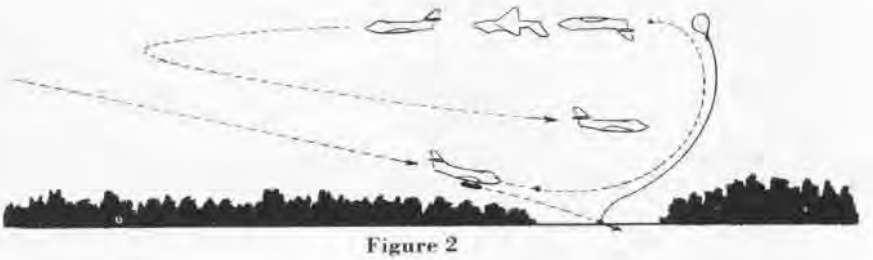


Figure 2

Several methods of rescuing a downed pilot, using fixed wing aircraft, have been studied. The first method utilizes the "circling line" technique: an A-4 *Skyhawk* with a 3,000-foot line attached to it was used to gather data on the line configuration (diameter and strength) and the combined characteristics of the line and the high performance aircraft. The flight evaluation revealed one major problem: the pilot could not adequately position or control the free end of the line. However, the line was stabilized by anchoring the free end to the ground. With the aircraft describing the maneuver shown in Figure 1, the rescuee attaches himself to the end of the line and is towed aloft.

Presently undergoing evaluation is a variation of the Fulton skyhook system. The skyhook ground station depicted in Figure 2 would be erected automatically. An appropriately equipped, on-scene aircraft is employed to engage the line and tow the hooked-up rescuee aloft. The value of this system is dependent upon the type of rescue aircraft capable of taking the man aboard.

There are, however, obvious limitations to the system: most notable are requirements for a clear retrieval area and the need for pinpoint accuracy when air-dropping equipment.

But the advantages seem to outweigh the disadvantages – during recent tests, using the conventional skyhook method and a specially configured C-130 (HC-130H), 100 successful retrievals were made in as many attempts.

Scheduled for service with the Marine Corps in January 1971, the AV-8A *Harrier* is being considered for an additional SAR mission. In this role, it would be equipped with one or two wing-mounted personnel rescue pods and, in tactical deployment, would accompany strike aircraft. As the group approaches the target area, the AV-8A would break off and fly to a predetermined loiter area – safely out of range of the target area but near enough to the route of egress so it would be available to pick up any downed aircrewmen. With the use of its V/STOL capabilities and dash speed, surface-to-surface recoveries should be greatly improved.

The third series of systems under evaluation are the ground-to-air (pro-

pulsion) self rescue devices.

This theory calls for the air drop of a levitating self-rescue device to the downed pilot by ResCap aircraft, which would be "loitering" in the area to minimize time late. Critical to this concept is the ability to pinpoint the location of the downed pilot and to make an accurate air drop. No less than 33 different methods have been proposed to raise the man from the surface – either to a waiting "snatch" aircraft or to a more secure area for eventual rescue.

The proposals include piston engines, prop-powered gliding parachutes, hot air balloons, and hydrogen peroxide driven rotors of various combinations and configurations. Two have been selected for further tests.

Mini-Copter, a small one-man helicopter, is one. Equipped with a tip jet propulsion system producing a high rate of climb, the Mini-Copter's flight characteristics were successfully demonstrated on a previous prototype. The device also has the necessary advantage of being collapsible and stowable, and it can be assembled rapidly.

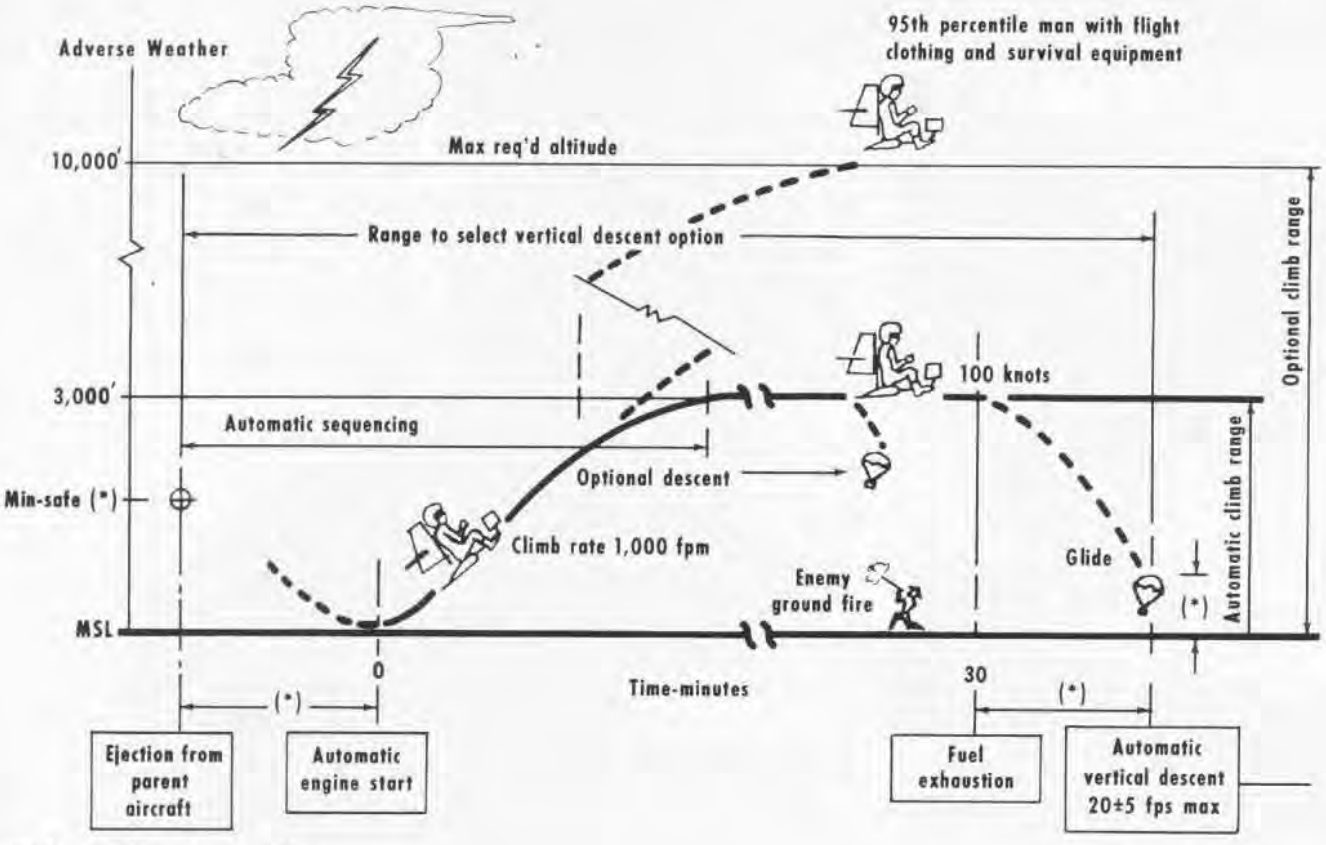
The second proposal, dubbed Tracers (turbine, rocket assist, canopied, escape rescue system), utilizes a tractor rocket which propels the rescuee, inside a lightweight capsule, to altitude where a "parawing" is deployed. A small turbine engine is started to provide flight at altitude.

The advantages of the Tracers are myriad. The tractor rocket provides a rapid ascent to safe altitude, and the capsule provides protection from foliage and the physiological effects of high ascent speeds and flight at altitude.

The Mini-Copter and the Tracer are considered highly feasible. They can be deployed and made operational quickly – and they reduce time late.

There seems to be only one drawback – the rescuee will have to touch down in enemy territory before he can

Mini-Copter is a candidate for possible future development. Performance requirements for Aercab are listed below.



(*) Proposal-dependent variables

Kaman Corporation's Aercab proposal is an autogyro. The self-rescue device features a telescopic, two-bladed rotor.

activate either of the two. But it is hoped the hostile environment retrieval problem can be answered by one of the following categories.

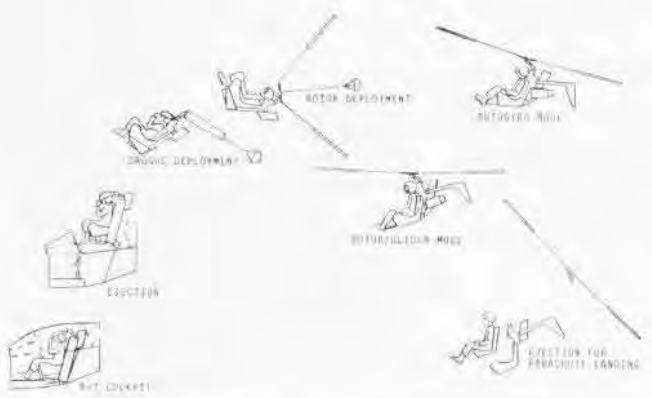
The air-to-air retrieval system, also known as mid-air recovery, or air-snatch, has two separate approaches in the development stage. The first, developed by the Air Force, was initially found to be unsatisfactory. A cargo aircraft would have limited success snatching a parachutist because of the rapid rate of fall, the required dash speed and the distance and altitude from the loiter to the snatch area. To alleviate the problem, hot air balloon systems were recommended to slow the descent and to permit climb and loiter at altitude for 30 minutes. The balloon systems would be integrated into the ejection seat, ram air inflated after ejection, and the air would be heated to provide buoyancy.

The Navy's theory of air-to-air retrieval also utilizes the "sky-snatch," but there the similarity ends. Instead of using a slow-moving cargo aircraft, the snatch plane would be the wingman. Equipped with Port (paravane offset retrieval technique), the wingman would carry a light buddy store housing a retrieval gear capable of both air-to-air and air-to-ground retrievals, engaging either target balloons or target parachutes. Once over friendly territory, the rescuee would return to earth by either auxiliary parachute, an HC-130H using the skyhook method, or air-to-air transfer to a C-130.

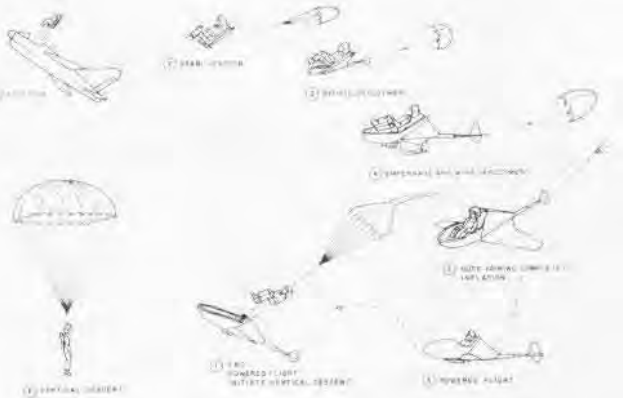
The ultimate answer to rescue problems would seem to be within the spectrum of air-to-air self rescue systems. The aircrew escape/rescue capability (Aercab) system overcomes both the problem of preventing the ejectee from landing on hostile ground and that of time late.

After ejection, a system built into the standard light weight ejection seat would, at the discretion of the user, allow him to "fly away" from hostile territory navigating his own craft.

The theory of the "flying ejection seat" attracted 18 bidders – all anxious to develop a variety of proposals that would conform to prerequisite performance objectives. These prerequisites include a range of 50 miles



Kaman Aercab Deployment Sequence



Stratos Western Aercab Deployment Sequence

at 100 knots, a capability of climbing as high as 10,000 feet, and a size stowable in the confines of the cockpits of an A-7 *Corsair* or an F-4 *Phantom* without any major modifications of the airframe. An added stipulation is that the operator must have the option to end the flight at any time and descend, as in the final descent, by parachute. The escape capability of current ejection seats will not be compromised by the addition of the Aercab option.

Four proposed Aercab vehicles are currently being tested and evaluated. Kaman Corporation has proposed a compact autogyro nicknamed Saver (stowable aircrew vehicle escape rotoseat) which features a 14-foot telescopic rotor, an engine, self-sealing tank, catapult thruster, sustainer rocket, and two vertical tails to provide stabilization.

The Stratos Western Division of the Fairchild Hiller Corporation has proposed a deployable fixed wing Aercab utilizing the Princeton Sailwing to provide lift. The craft contains a tail boom assembly consisting of three telescoping sections and a turbofan engine. Fuel bladders are located inside the hollow leading-edge wing spars. A dual catapult thruster is located at the back of the seat, and two sustainer rockets are on each side of the engine, underneath the seat. To reduce adverse effects on the crewmen and to reduce drag, an inflatable nose fairing is provided.

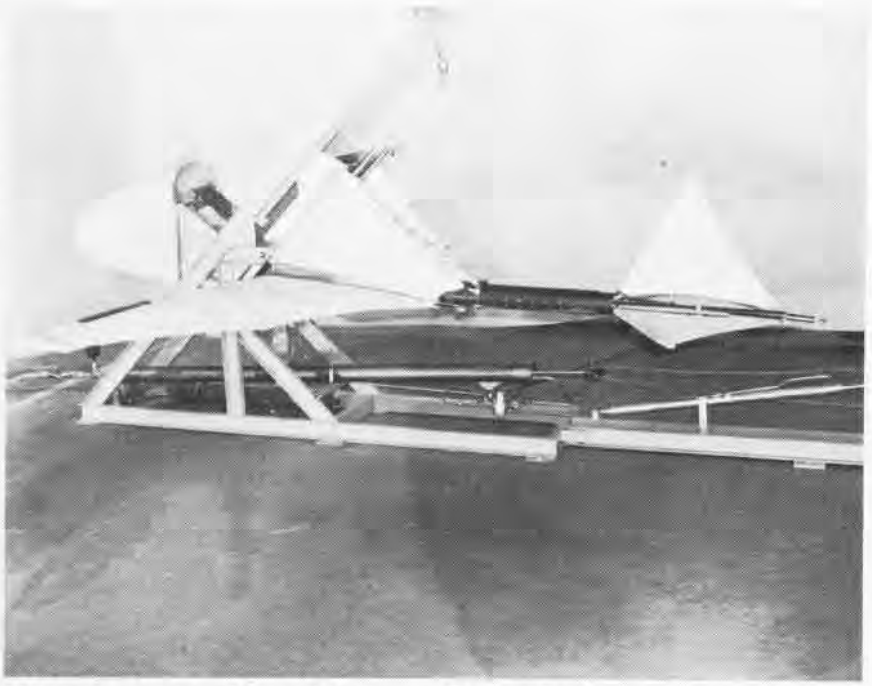
The third proposal is currently being investigated by the Air Force. Stensel Aero Engineering Corporation and Bell Aerospace Corporation have jointly prepared a conical nylon parawing propelled by a turbofan engine attached to the back of the ejection seat. Fuel cells are located on either side of the seat. The parawing is deployed with the pilot facing down. A drogue parachute stabilizes and slows the Aercab after ejection, putting the craft in the proper attitude in addition to spreading the parawing.

Joint Navy-Air Force evaluation is being made on Parons Corporation's proposal for an all metal rigid wing for an Aercab. Submitted after the other proposals had begun testing, the rigid wing is still in an early development and testing stage.

Somewhat afield of rescue systems, but no less critical to the pilot of a disabled aircraft is Escaper, an acronym that stands for emergency system of control allowing pilot escape and recovery. Formerly, when a dual-power-control hydraulic system failed, mostly because of battle damage, the pilot was forced to eject – whether over friendly or hostile territory. In recent years, backup systems have been developed to overcome this problem; however, since its incorporation into all types of aircraft is not feasible, an alternate system allows the pilot to leave the battle area and then eject.

The Escaper system consists of a pneumatically-operated mechanical lock that rigidly restrains the aircraft's longitudinal control surface in the event of a dual failure of the power-control hydraulic systems. Using this system, the pilot can control the pitch (power and flaps) of the aircraft and, while not allowing him to land, it will allow him to pick a suitable area in which to eject.

As long as manned aircraft are employed in hostile action, pilots and crewmen run the risk of being shot down and captured in enemy territory but, with the development of advanced rescue systems, more of them may be kept out of harm's way.



Flying ejection seat designed by Stratos Western Division utilizes the Princeton Sailwing and an inflatable nose fairing to reduce drag and to protect the pilot. The craft also features a telescoping tail boom assembly and a turbofan engine.

Parawing is being investigated by the Air Force. The Aercab is deployed with the pilot facing down.

JEST...

At JEST, students learn to get their water from trees and bamboo groves, thus avoiding enemy hangouts. At right, a student drinks from a water vine. Above, instructor AM1 Aubrey L. Parker demonstrates the use of a smoke flare.

By JOC Richard P. Benjamin

In a jungle environment much like that found in Southeast Asia, classes in survival are held every week for over 300 Navy, Army and Marine pilots and aircrewmen. The Navy's Jungle Environmental Survival Training School (JEST) at NAS Cubi Point, R.P., gives the men a real "feel" for the jungle.

Major emphasis is placed on short down time because, if a pilot is not captured immediately, his chances for a quick recovery are good.

In a nine-hour phase, the 21-man staff teaches the latest rescue techniques and the use of equipment used by all the services. Then, during a 24-hour phase, the students spend a night in the jungle learning to build grass shelters, make fires, pressure cookers, canteens and eating utensils — from bamboo stalks — and even how to get soap from a particular vine. And finally, with instructors along to help in case of trouble, the aviators are on their own for 48 hours.

Key to Survival

JEST...

An instructor shows a bamboo pressure cooker to LCdr. Ira D. Hozey, VAQ-135, right. Instructor PR1 Kenneth P. Harred gives pointers on the use of the signal mirror to Lt. Harold R. Brumager, HC-7, below. All students are required to take a ride on the most commonly used rescue device, the jungle penetrator, bottom center.

Key to Survival

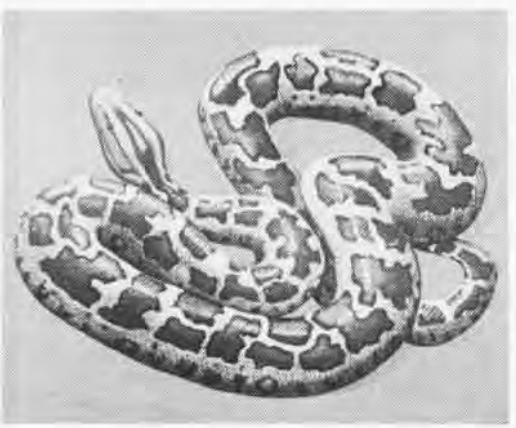
AB1 James E. Thomas, instructor, demonstrates improper way to wear a survivor's sling, showing students how easy it is for a person to fall off if he loses consciousness, left. Below another instructor demonstrates improper way to climb a rope ladder. Proper way is a side straddle — so the bottom won't go out from under you.

SOUTHEAST ASIAN WILDLIFE

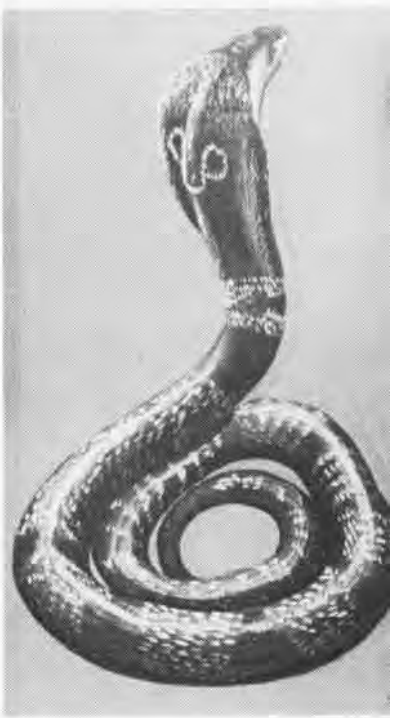
A new 54-card identification series on the wildlife of Southeast Asia has been distributed to fleet units to aid pilots and aircrewmen who may encounter survival situations in that area of the world.

The standard-size card deck illustrates one or more species of wildlife on the face of each card with pertinent information on the reverse. Data includes description of each, habitat, cautions and information on preparation of edible varieties. Categories covered in the series are: mammals, reptiles, amphibians, birds, insects, fish, shellfish and other invertebrates.

The set is produced by the Naval Training Device Center at Orlando, Fla., under the guidance of the scientific staff of the Smithsonian Institution. The full-color series is listed as Training Device 9B5. Initial deliveries of 20,000 sets began last spring.



Large heavy bodied snakes found in fresh water are edible. After being skinned and gutted, their flesh may be eaten raw, roasted or boiled. Their eggs may be prepared the same way. The deadly cobra reaches lengths of up to 15 feet. He goes to water to drink but is fast and slim, as opposed to the harmless, sluggish and edible water snake.

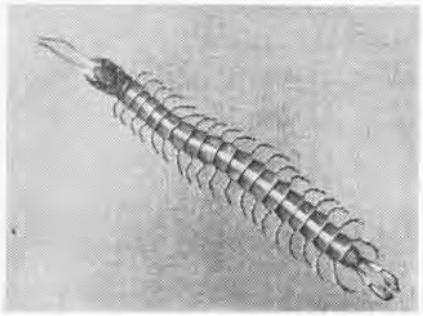


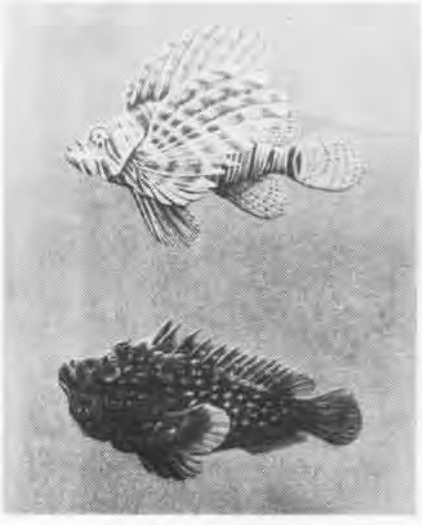
While much of the wildlife in Southeast Asia is small, timid and harmless, a wide variety of hazards await the unwary if he is not familiar with some of the dangerous species. Scorpions vary in size from 3 to 8 inches and in color from yellow to dull brown or black. Though found along trails and under logs, they often enter buildings and sometimes hide in clothing. Their sting causes intense pain and swelling. They are edible and may be roasted after removing the tail, legs and pincers. Centipedes are bad news — up to a foot long and yellow to brown in color. Their bite, while not deadly, causes great pain and slow healing infection.

While the card series gives no recipes for cooking large mammals, it recommends that all be given a wide berth. Elephant, water buffalo, tiger and bear, in addition to wild cattle, are to be found in SEAsia. All can be extremely dangerous, especially if they feel their young are threatened.

The waters of the area contain creatures which can cause injury and death. Fresh water streams, canals and swamps harbor leeches and crocodiles, while a wide range of dangers lurks in salt water. In addition to a number of fish whose flesh is poisonous, many others have venomous spines which can inflict painful to fatal stings. Stingrays, stonefish and sea urchins lying on the bottom near shore can cause serious injury. Sharks, barracuda and moray eels are found throughout the area, as is the venomous sea snake. Even the attractive textile cone shell can give a fatal sting along with several other colorful sea snails.

Though the series discusses many less dangerous denizens of the area, those shown here should be avoided if possible.





NAVAL AIRCRAFT

Far from sight of land, skimming over rough seas whose depth and darkness hide a possibly hostile submarine, ten men concentrate on instrument panels, scopes and detection devices as their P-3 *Orion* flies an ASW search pattern. This latest of a long line of Navy patrol planes is a quantum advance over its predecessors. Powered by four 4,500 eshp. constant-speed turboprop engines, swinging 13½-foot paddle-blade propellers, the *Orion* has an operational speed range of 150 to 380 knots and a ceiling of over 30,000 feet. For sea-level ASW work, two engines may be shut down to achieve increased time on station.

Crew efficiency is increased not only through improved equipment, but also by an improved environment. Instead of the cramped, confined spaces found in earlier patrol planes, the P-3 boasts 250 percent more floor area than the *Neptune*. It has a pressurized cabin, air conditioning, electrically heated floor panels, and plenty of stand-up and walk-around space. Controllable, polarized lighting reduces eye strain, and comfortable adjustable chairs cut crew fatigue.

The tactical coordinator (TACCO), along with sensor operators, monitors the plane's sophisticated electronic detection gear, including sonobuoys, radar, MAD and electronic countermeasure equipment. Navigation and position location are assisted by inertial and Doppler navigation systems, as well as tactical navigation devices used in the submarine contact area.

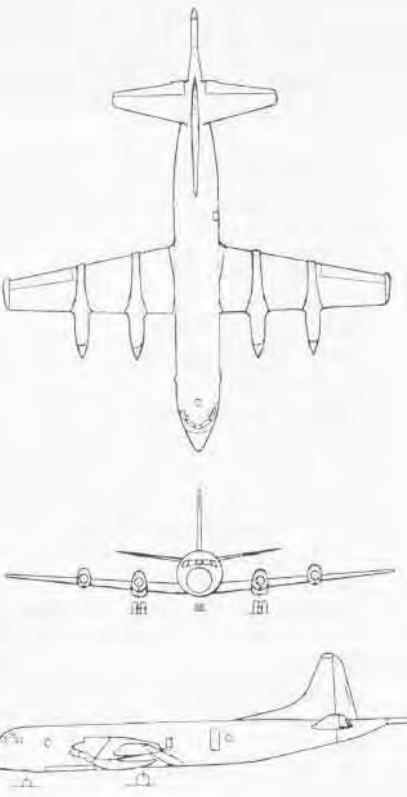
Armament available for ASW attacks include torpedoes, depth charges, bombs and rockets, which may be carried in the bomb bay or on underwing pylons. Pilot or TACCO may select and release weapons as the tactical situation requires. Status panels provide a continuous display of the weapons inventory available for use. A similar panel gives a visual reference to the search store's status.

The newest version, the P-3C, adds an airborne general purpose digital computer and new ASW sensors. The computer integrates all information necessary to detect, localize and kill an enemy sub. The P-3C's low light level TV (LLLTV) permits visual observation, at dusk and in starlight, of surface targets previously undetected by the human eye.

RION

P-3A P-3B P-3C

Length	116'10"
Height	33'8"
Wing Span	99'8"
Engine: P-3A	Allison T56-A-10W, 4,500 eshp.
P-3B/C	Allison T56-A-14, 4,600 eshp.
Maximum Speed	380 kts.
Cruise Speed	350 kts.
Loiter Speed at 1, 500 feet	203 kts.
Maximum Endurance:	
2 engines	17.2 hrs.
4 engines	12.3 hrs.
Maximum Mission Range	2,070 nm.
Ferry Range	4,830 nm.
Normal Crew	10



ON PATROL

with the Fleet Air Wings

Orion to West Coast

VP-31, NAS Moffett Field, received the West Coast's first P-3C recently.

The four-engine turbo-prop *Orion* was accepted by Rear Admiral C. S. Minter, Jr., Commander Fleet Air Wings, Pacific Fleet, from Lockheed Vice President and General Manager for Navy Programs, J. Fred Lashley, in a change-of-command ceremony in which Commander Richard S. Zeisel relieved Captain Karl J. Bernstein as commanding officer of the training squadron. Moffett Field is the headquarters for long-range patrol aircraft in the Pacific.

Relief Mission

In August, a VP-24 aircraft delivered 17 boxes of much needed clothing to Navy Relief at NAS Corpus Christi, Texas. The clothing was donated by the wives of Amphibious Squadron Six, Little Creek, Va.

The aircraft, under the command of LCdr. George W. Comstock, was met by the commanding officer of Corpus, Captain Robert F. Regan, the base chaplain, Commander Lucian R. Brasley, and a group from Navy Relief.

VP-24 is home based aboard NAS Patuxent River, Md.

VP-22's Record Hours

U.S. astronauts have made four round trips to the moon but Naval Aviators from NAS Barbers Point-based VP-22 feel they have outdone the spacemen. They have flown the equivalent of 72 round trips to the moon – without an accident.

Since the last accident by a squadron aircraft in 1954, the *Blue Geese* have flown more than 138,000 accident-free hours, or approximately 33,028,500 miles.

From 1954 until March 1964, the squadron flew P2V *Neptunes* for a total of 84,042.5 hours.

In 1964 the *Blue Geese* transitioned to the newer P-3A *Orions* and since then have flown an additional 54,066.7 hours.

In amassing these hours, VP-22 has flown from its home base and deployed sites which include Iwakuni, Japan; Adak, Alaska; Naha, Okinawa; Sangley Point, Philippines; U-Tapao, Thailand; Cam Ranh Bay, Vietnam; and from other Navy and Marine Corps air stations in the Pacific.

Lt. Jerry Tuvell recently took P-3A *Orion* QA-7, BuNo 140529, on a flight that put a new milestone on the record books: the first of its type, in the Pacific, to fly more than 7,000 hours.

Others in the crew were Lt. Rick Deegler, copilot; ADJ2 Ronald E. Robertson, flight engineer; AMS3 Douglas C. Gillet, aft observer/second mechanic; and ATRAN Joseph L. Markiewicz, radioman.

Riding High

Four members of VP-17, NAS Barbers Point, have created a name for themselves and their squadron with their crisp, precise performances as the squadron color guard at formal ceremonies.

Moving in strict cadence, the well trained unit has appeared at change-of-command ceremonies, unit inspections and awards celebrations at air stations throughout the Pacific.

Led by YN2 William C. Hicks who has served on the team since November 1967, the group includes AE2 Heumac C. Garcia, AMS3 Richard M. Evans, AME3 Sylvester R. Hobbs and PR3 Stanley L. Wright.

Crew members of VP-17 earned one of the highest overall grades in the Pacific patrol aviation fleet during their annual NATOPS testing.

With more than 130 members of the 350-man squadron taking the difficult closed-book exams for their respective crew positions, more than 86 percent passed both tests. This figure is more than 20 percent above the fleet average for all crew positions.

The highest scores were earned by the pilots, tactical coordinators and navigators. However, the enlisted sensor operators, flight engineers and observers provided great support with grades far superior to the fleet average. Particularly noteworthy were the averages of 90 percent posted by radar, *Julie* and *Jezebel* operators.

VP-49 Deployed to Iceland

When VP-49 departed for Iceland in July, it became the first P-3C squadron to deploy overseas. The squadron, under the command of Commander Robert W. Wisdom, conducts anti-submarine warfare, shipping surveillance and ice reconnaissance patrols. The increased capabilities of the *Orion's* new weapons system has added a valuable asset to the Atlantic Fleet's ASW force.

Skinny Dragons Home

The *Skinny Dragons* of VP-4 are back at Barbers Point having completed a six-month deployment to Adak, Alaska.

During their far northern duty, VP-4 crewmen logged more than 7,100 operational and training flight hours. In addition to airfields in Alaska, such as Shemya, Amchitka, King Salmon, Kodiak, Elmendorf and Eielson, the crews operated from bases in the Philippine Islands, Okinawa, Japan and Canada. During the last three months of the deployment, the squadron maintained a permanent detachment at NAS Agana, Guam.

During the deployment, the *Skinny Dragons* were named winners of two highly coveted Chief of Naval Operations awards: the Arnold J. Isbell, symbol of ASW excellent, and the CNO Aircraft Maintenance, for Pacific-based patrol squadrons.

The 300-man squadron is commanded by Commander John R. Emerson.

at Sea with the Carriers

PH3 Marshall E. Stanton

ATLANTIC FLEET

Intrepid (CVS-11)

When Boston developed its "Summerthing" — free concerts, mobile arts and crafts centers, street dances and barbecue suppers to supplement the recreational activities of the people of Boston and bring them closer together – *Intrepid* did her part.

CVS-11 assumed a role in the project through the "Boston Summer Boating Program," designed to shuttle children through Boston's historic harbor. The ship provided three 40-foot utility boats manned by enthusiastic and capable sailors.

Each day during the summer, CVS-11's small boats shuttled children and their counselors throughout Boston Harbor and sent "landing parties" of excited children ashore at both Thompson and Georges Islands.

Intrepid was recently named third place winner of the 1970 Ney Award for outstanding food service in the large mess afloat category.

Franklin D. Roosevelt (CVA-42)

Innovation marked the return trip of *FDR* from a seven-month Med cruise.

The 63,000-ton carrier moored at Norfolk to debark units of CVW-6 before starting the last lap of her trip home to Mayport.

Roosevelt, under the command of Captain H. S. Sellers, made a four-hour stop at Norfolk to save the cost of transporting her Virginia-based units from Florida and to give personnel taking leave a starting point closer to home.

For the 1,500 men of CVW-6, commanded by Captain T. S. Rogers, Jr., the Norfolk stop meant reunion with families and friends two days earlier than expected.

As the ship neared Norfolk, two former *Roosevelt* commanding officers flew via helo to welcome the carrier home from her 18th Med cruise. The former C.O.'s were Rear Admiral G. C. Talley, ComCarDiv-4, and Captain James O. Mayo, Chief of Staff, Commander Naval Air Force, U.S. Atlantic Fleet.

Also visiting the returning carrier were Vice Admiral Robert L. Townsend, Commander Naval Air Force, U.S. Atlantic Fleet, and Rear Admiral William B. Houser, ComCarDiv-2.

Rear Admiral Lawrence Hayworth, Jr., Commander Fleet Air Jacksonville, welcomed the *Roosevelt* home two days later.

While the stop at Norfolk was made

to save money and boost morale, a second innovation was initiated – to save lives: a Florida Highway patrol officer, Lt. Z. V. Smallwood, rode the ship across the Atlantic, giving a series of safe driving presentations to the 4,000 men aboard.

It was the first time an Atlantic coast ship had received personalized driver training. The practice of sending a highway patrolman to returning ships began about two years ago on the West Coast. It has resulted in a noticeable reduction in traffic accidents among servicemen who have been away from home on long cruises.

The seven-month tour of duty with the Sixth Fleet was *Roosevelt's* first major deployment since she completed an overhaul at the Norfolk Naval Shipyard last year.

During the 43,800-mile cruise, *FDR* and her men served as ambassadors of goodwill in the Greek ports of Athens, Thessaloniki and Rhodes; the Spanish ports of Barcelona and Palma; the Italian ports of Naples and Taranto; Cannes, France; and Valletta, Malta. More than 12,000 visitors toured the carrier during her in-port periods.

And somewhere through it all, her men found time to call the chart house 24,322 times to ask about the ship's position.

Operating in the North Atlantic, USS Wasp (CVS-18) approaches the fleet oiler Marias as the destroyer Forrest Sherman stands by.

Saratoga (CVA-60)

Command of *Saratoga* was passed during a change-of-command ceremony held as she cruised the Mediterranean.

After serving as *Sara's* commanding officer for 16 months, Captain Warren H. O'Neil relinquished command to Captain Dewitt L. Freeman.

Capt. Freeman came to CVA-60 from a tour of duty at the Bureau of Naval Personnel in Washington, D.C. Capt. O'Neil will assume duty there as aviation captain detailer.

A North Carolina college student touring Europe was in good condition aboard *Saratoga* after undergoing an emergency appendectomy performed in the ship's hospital.

Daniel F. Walker was flown to the carrier by helicopter in response to a call for medical aid. Walker, a senior at the University of North Carolina, developed abdominal pains while visiting Ios, a Greek island 200 miles southeast of Athens. Helicopter service from the island to Athens was not available, and it was almost three days before *Sara* came to the rescue.

The U.S. Embassy in Athens, notified of Walker's condition by telephone, contacted the Commander, U.S. Sixth Fleet who notified *Saratoga* of the emergency. A helicopter took off minutes after receiving the message, carrying the ship's medical officer the 60 miles to the island. In less than four hours, the student was undergoing treatment aboard the ship.

Wasp (CVS-18)

A double cake-cutting marked the 37,000th helicopter landing and the 90,000th arrested landing aboard CVS-18. Helicopter pilots Lts. A. Moder and Jim Puffer made the landing for HS-5, and S-2E pilots LCdr. Jeff Bailey and Lt. Dan Rumbley of VS-22 made the historic catch.

Home-ported at NAS Quonset Point, R.I., *Wasp* recently completed a four-month Atlantic deployment.

Lexington (CVT-16)

When Ltjg. Nile R. Kraft brought his T-2B *Buckeye* aboard *Lex* for his first carqual, he had an unusual spectator, Captain Elmer A. Kraft, USNR. The elder Kraft had made his first carqual on the same ship, 27 years before.

CVT-16 and the aircraft had changed considerably since 1943. The younger Kraft's jet trainer would be catapulted by steam instead of hydraulic pressure and an angled flight deck added the advantage of a second runway.

As the *Buckeye* touched down, Capt. Kraft said, "Beautiful! Right on the center line!" and Captain C. F. Fitton, *Lex's* C.O., added, "Got the number three wire, too!"

Twenty-seven years of Naval Aviation had been bridged.

Forrestal (CVA-59)

Forrestal and CVW-17 ended a seven-month deployment to the Mediterranean when they returned to Norfolk and were met by 3,000 of the crew's family and friends.

During the deployment, CVA-59 steamed 39,000 miles, visited six different ports in France, Spain, Italy, Greece and Malta, and was host to over 32,000 visitors.

Frequently joining with other ships for NATO operations, CVW-17 maintained a continuous state of readiness, making over 10,000 launches and recoveries.

Then the 78,000-ton carrier, commanded by Captain Charles F. Demmler, began a post-deployment availability at the Norfolk Naval Shipyard.

John F. Kennedy (CVA-67)

In their first rescue operation at sea, *JFK's* new HH-2D twin-engine *Seasprites* have proven themselves fully operational. The new *Deltas* got their first call when "man overboard" was reported.

The HH-2D, which replaces the single-engine UH-2A's and UH-2B's, was in the air within seven minutes

after the call and had the cold, but relieved, sailor safely within the confines of a Billy Pugh net, three minutes after takeoff.

LCdr. Donald T. McKloskey, who piloted the HH-2D on its first rescue mission, praised the new helo. "The twin-engine H-2 is a great improvement. It can operate under more severe weather conditions, carry more weight and is much more reliable. We consider it to be a real fine improvement. I know if I were a crewman, I'd sleep easier knowing it was around."

Kennedy is scheduled to deploy to WestPac this fall.

Oriskany (CVA-34)

When a group of first class petty officers from *Oriskany* – in Subic for a short stay – were looking for a way to help the people of Olongapo City, R.P., the Catholic chaplain at Cubi Point introduced them to Sister Pauline, director of the new Pope John XXIII Community Center, who was looking for help to ready the center.

"We didn't have a big bankroll to give, so we donated the next best thing – our labor," explained YN1 Fred Strohman, who engineered the project. The men donated two days of their liberty to clean up the facility. They corrected drainage problems, assembled dental facilities, renovated filing cabinets and painted the building.

CVA-34 is currently on her fifth combat cruise in Vietnamese waters.

PACIFIC FLEET

America (CVA-66)

CVA-66 matched her hull number in thousandth arrested landings when *Miss America* caught the number three wire for the 66,000th landing. The mail plane, was piloted on the historic landing by the ship's commanding officer, Captain Thomas B. Hayward. The twin-engine, propeller-driven aircraft has made more landings on *America* than any other plane.

The 66,000th landing came five years, three months and 19 days after *America's* first arrested landing was made in an A-4 *Skyhawk* piloted by Captain K. B. Austin, CVA-66's first executive officer.

Not long after *Miss America's* historic touchdown, Commander John R. C. Mitchell, C.O. of CVW-9, eased his F-4J *Phantom* aboard for his 400th arrested landing on the Seventh Fleet carrier. It is believed that is about 200 more than any other pilot.

It was August 1965, when Cdr. Mitchell made his first landing aboard while serving as executive officer of VF-33. Since being designated a Naval Aviator in 1953, Cdr. Mitchell has made 850 carrier landings, including those made aboard *America* during two previous cruises.

Shangri-La (CVA-38)

It was just like one of any of the more than 118,000 arrested landings aboard *Shangri-La* – until Ltjg. Bill Belden's right brake failed and his A-4E *Skyhawk* veered toward the water.

"When I approached the edge and saw my nose dip," recalled the VA-152 pilot, "I just closed my eyes and ejected."

On the flight deck, ABC Joe Hammond, realizing the jet's brakes had failed, rushed to the misdirected *Skyhawk*, grabbed the wing and attempted to straighten the aircraft.

"The jet was hanging on the catwalk when I heard an explosion. For a second, I thought I was a goner. Then I saw Belden fly out and I realized he had ejected."

Chief Hammond suffered a badly bruised right arm and a five-inch cut above the elbow when he was knocked to the deck by flying debris from the ejection seat.

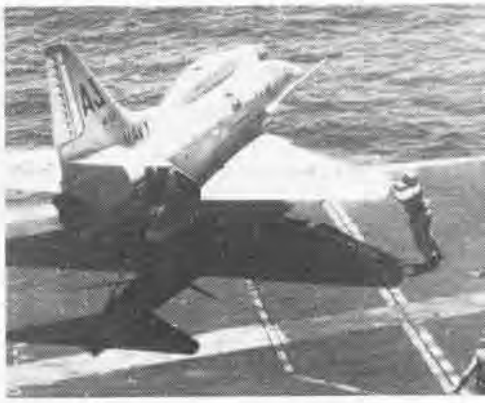
Seven decks above the flight deck, PH3 Keith Guthrie was on duty as backup for platt-camera. His job was to shoot reference pictures of all unusual happenings on the flight deck with his aerial camera.

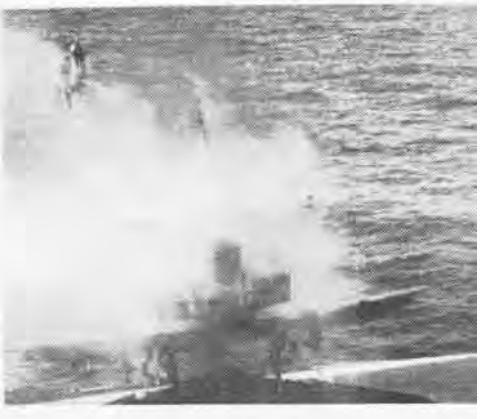
"I framed the plane, when I saw it veer off, and started shooting," said Guthrie. "Then I saw the canopy fly off. I waited, knowing the pilot was coming. He did and I shot. I knew I got the shot."

Belden landed approximately 100 yards from the carrier and was rescued, unharmed by an HC-2 helicopter crew.

The *Skyhawk* was recovered from the catwalk and flight operations continued.

Shangri-La is presently on a Western Pacific deployment.





Dilbert Dunker

By: PH1 Robert E. Woods and
PH2(DV) Charles K. Love (underwater)

The primary mission of the Aviation Physiology Training Division at NAS Miramar, Calif., is to teach fleet aviators from most of the fleet squadrons on the West Coast how to use survival equipment. The division also trains aircrewmen in the use of oxygen equipment and ejection seats, in aspects of high altitude physiology and in water survival.

The water survival course includes a parachute and cockpit checkout in an underwater environment. The Dilbert Dunker is the trainer which simulates ditching from an aircraft in the inverted position. It does not represent any one type of aircraft, and equipment used by the students is the same as is worn in any aircraft.

All aircrewmen must be trained in the Dilbert Dunker every two years. Last year, 413 student aircrewmen were trained at NAS Miramar.

Students in the photographs on these pages are aircrewmen candidates from Helicopter Support Squadron Five, NAS Imperial Beach, Calif.

THE SELECTED AIR RESERVE

Unique Recruiting Team

Brother teams are not uncommon in the Navy, but a brother recruiting team versed in all the Naval Aviation programs available is somewhat of a novelty. Such a team exists at NAS DALLAS where Lt. Charles W. Tidwell and YNC Fermon W. Tidwell work together to handle applicants interested in every type of program. Lt. Tidwell arranges for eligible young men to enter one of the officer aviation programs while his older brother, Chief Tidwell, guides other interested youths into the various enlisted programs.

Jax VR Aids Peru

Nearly 800 cubic feet of clothing and medical supplies gathered by Jacksonville area Jaycees were sped to Peru's earthquake victims recently when Reservists attached to VR-60F1 loaded 150 boxes into their C-118 *Liftmaster* and flew the load to Miami International Airport. There the materials were added to other relief supplies and flown to Peru by commercial airliner.

The NARTU JACKSONVILLE-based aircraft carried mostly clothing in its cargo; however, there were also 250,000 units of penicillin which had been donated by a local physician.

NARTD Pax River Commissioned

NARTU WASHINGTON extended its operations to NAS PATUXENT RIVER, Md., with the establishment of a NARTD there. The NARTD will host half of VP-71, a P-3A *Orion* patrol squadron; the other half is home-ported at NAS MOFFETT FIELD, Calif.

Manned by 98 active duty officers and men, the detachment will ensure that planes and equipment are ready for use by some 200 Reservists who will train there two weekends each month.

NARTD PATUXENT RIVER will have as neighbors aboard the air station, six active duty patrol squadrons. Commander Brian W. Smith has been appointed OinC of the new unit.

NAS Atlanta Takes 'Bear Trap'

The Chief of Naval Air Reserve Training has announced that NAS ATLANTA won the Bear Trap Trophy for FY '70. The trophy is awarded to the unit showing the greatest improvement in the field of aviation officer procurement. To win the trophy, Atlanta's recruiting department, led by LCdr. R. J. Davis, recruited 353 officer and enlisted veterans and 202 initial enlistments for the Selected Air Reserve program.

NAS Dallas Hosts NRA

More than 150 members of the Naval Reserve Association, representing 25 states and the District of Columbia, gathered at NAS DALLAS recently to propose a plan for best utilization of Naval Air Reservists' capabilities in the interest of national security. Welcoming the group on its first day was Captain J. E. Savage, commanding officer of the station. One of the highlights of the three-day session was a luncheon talk by Major James Rose, an Army special forces officer who spent five years as a prisoner of the Viet Cong.

NARTU North Island Established

Naval Air Reservists gained a new base of operations in August when a NARTU was established at NAS NORTH ISLAND, Calif. The Reserve facility will further accommodate the

DALLAS F-8 FINDS ITSELF IN STRANGE SURROUNDINGS DURING PARADE

large number of Selected Air Reservists living in the San Diego area with opportunities for the development and maintenance of their skills to meet modern Naval Aviation requirements.

Captain John G. Korecki, previously assigned to CNAResTra staff, commands the new activity. Eight Reserve units will be located at North Island, including a tactical control, three VS and three VAW squadrons, and an ASW augmentation unit.

Phantom II's of VF-22L1 line the ramp at NAS Los Alamitos, Calif. Squadron pilots and RIO's who continue to pile up readiness hours in the 1,600 mile per hour F-4, have accumulated over 3,000 missions in Vietnam, 302 Air Medals and eight DFC's. Unit members can claim two Migs shot down and six enemy patrol boats sunk during their active duty tours.

Vietnam ActDuTra

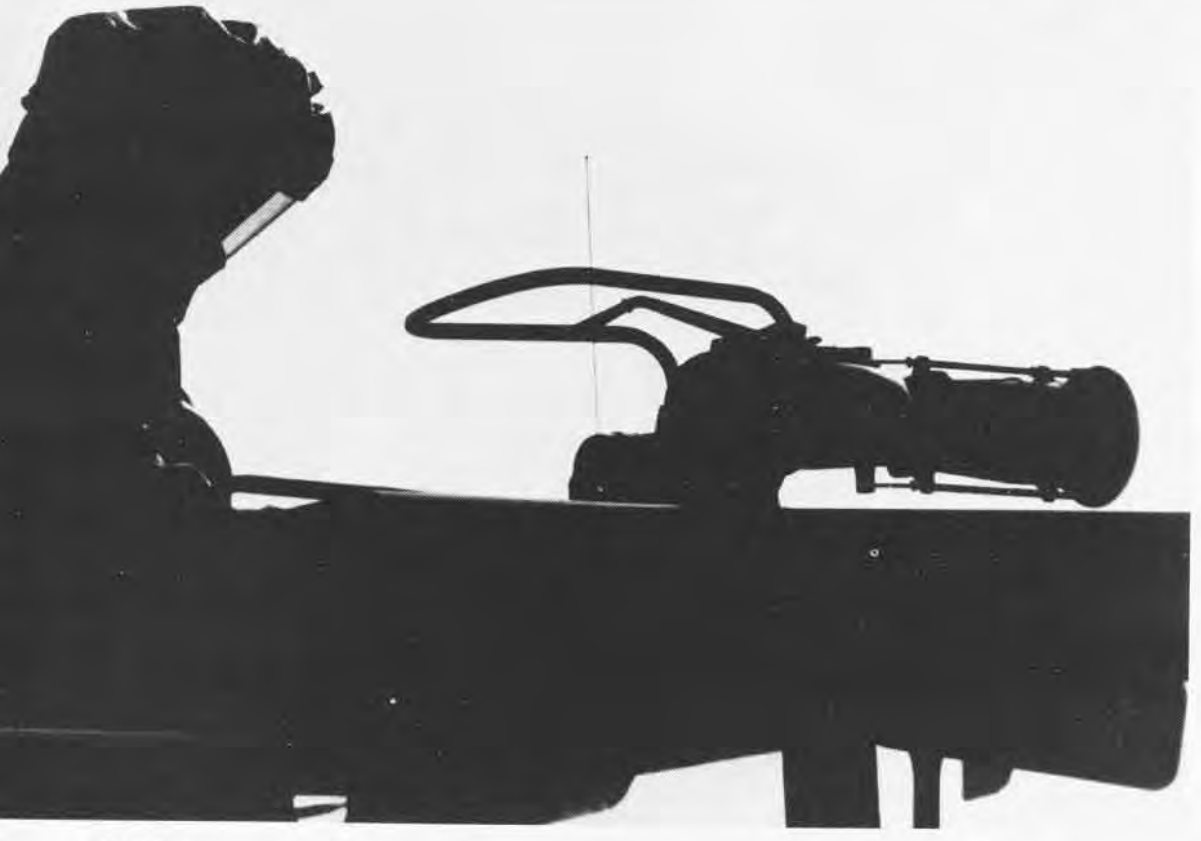
NARTU Jacksonville-based VR-60F2 got a firsthand view of Vietnam during its recent two weeks of active duty. Basing its operations from NAS Barbers Point, Hawaii, the squadron flew its C-118 *Liftmasters* on missions taking it all over the Pacific — Wake; Guam; Midway; Atsugi, Japan; and Cubi Point and Sangley Point in the Philippines. One stop, however, was particularly interesting to the crewmen — Da Nang, Vietnam. Squadron flights there carried mail, cargo and passengers.

HS-75 Makes Rescue

Hardly had HS-75 finished its commissioning cake-cutting when it was called upon to take part in a rescue. One of the squadron's SH-3A's, on an operational training mission that same day, received a call from the NAS Lakehurst tower directing it to the scene of an accident. A private plane carrying a pilot and nine parachutists had crashed near a local airport. While the SH-3 hovered over the treetops, AD1 A. J. Mazerolde was lowered to the ground. There he prepared one crash victim for hoisting into the helicopter and, while the man was being flown to a nearby hospital, remained at the crash site to assist the police.

NARTU Alameda's HS-85 recently completed a four-day cruise aboard Midway. The squadron provided plane guard services during carrier compatibility trials off San Diego.

PH3 Marshall E. Stanton



Cool It

Although, he hopes he will never be needed, this crewman is prepared to do just that. His job? Man the fog foam nozzle on one of Ranger's flight deck crash trucks.

PH1 Robert E. Woods

Take Ten

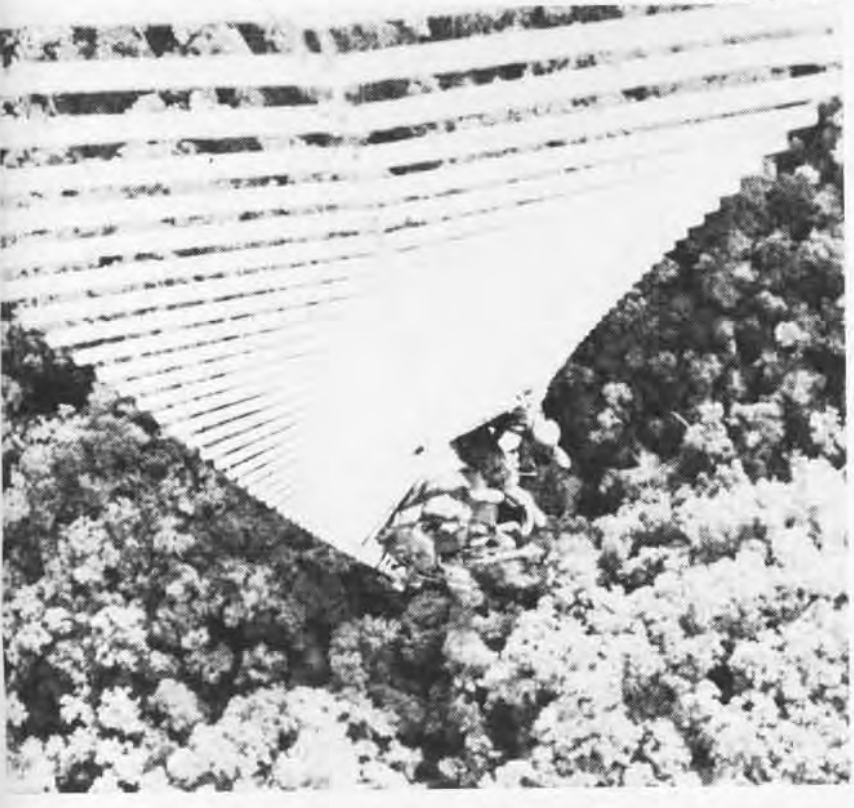
This member of a SEAL/Underwater Demolition Team seems to be taking it easy, but he is really jumping from an H-46 Sea Knight vertrep helo.

PHC R. E. Halcomb

Chow Up

A VAH-10 Skywarrior reels out its drogue toward the probe of a VA-52 Intruder as the KA-3B prepares to refuel the A-6A near NAS Whidbey Island, Wash.

Cpl. Doug Woods



Up, Up and Away

That is where these 1st Reconnaissance Battalion Marines are going as they grasp a rescue ladder lowered from a CH-46. The HMM-262 helo recently made the emergency extract west of Da Nang.

Altitude Record

AGAN Curt Massey, left, assists AG3 Kent Ledlow with a weather balloon launch from a carrier's flight deck. Meteorological information — pressure, temperature, humidity — obtained from radio equipment attached to the balloons is included in worldwide weather broadcasts.

Return Engagement

Dave Platt, with his replica of a WW II Dauntless SBD, is the only modeler to receive perfect scale points at a National Model Meet—in 1968. The same super-detailed radio controlled model performed at the 1970 Nationals at Glenview this summer.

NAVAL AVIATION NEWS

Marine Wins James Award

DA NANG, Vietnam – First Lieutenant Carl W. Monk, Jr., was awarded the Rear Admiral Thurston H. James Memorial Award during a ceremony at VMA(AW)-242.

The award which goes to the outstanding graduate of the Naval Flight Officers program was presented by Lieutenant Colonel Stan Lewis, squadron commander, on behalf of Vice Admiral B. N. Strean, CNATra.

Lt. Monk won the award while he was a flight student with VT-10 at Pensacola. Since his arrival in Vietnam in October 1969, he has completed 200 combat missions as an A-6A B/N.

CarDiv-16 Redesignated

QUONSET POINT, R. I. – On August 1, Carrier Division 16 was redesignated Antisubmarine Warfare Group Four.

As part of the Navy's consolidation of East Coast antisubmarine warfare units, Carrier Division 16 was shifted from Norfolk to Quonset Point in February 1970.

Commander, Antisubmarine Warfare Group Four is Rear Admiral J. Lloyd Abbot, Jr.

Simulation by Computer

BINGHAMTON, N. Y. – According to a General Electric release, a pilot, sitting in a mockup of an airplane cockpit, can now operate the controls and watch his changing environment – on a color television screen. Everything appears as if he were looking out the window of a real aircraft.

What is different about this simulation system is that the picture is generated entirely by computers – there are no television cameras, motion picture film or videotape. The scene changes in response to the way the pilot maneuvers his aircraft.

The Visual Environment Simulation System (VESS) was designed as a research tool and to demonstrate the possibilities of low cost computer-generated visual simulation.

The firm has built systems demonstrating the feasibility of computer-driven visual simulation for the National Aeronautics and Space Administration and the Office of Naval Research.

The system accepts inputs from any simulation system and generates an accurate, full color, true perspective, three dimensional view of the environment described. The scene content of the environment can vary to include all aspects of simulation – from spacecraft flight to automobile driving.

Changes for VMFA-513

CHERRY POINT, N.C. – Twenty-six years after it was originally designated, and five changes later, VMFA-513 will receive still another designation and another airplane.

Along with the new designation as VMA-513, the squadron lost all of its F-4 *Phantom II's* and a majority of its personnel.

The redesignation came about because of the Marine Corps' decision to adopt the new, versatile AV-8A *Harrier*. The first 12 *Harriers*, with their vertical and short takeoff and landing capability, open a new era for the squadron and the Marine Corps.

By the end of June, only a skeleton force of the squadron's complement of officers and men remained. Those who departed were reassigned to Marine installations throughout the 2nd MAW and WestPac.

The remaining cadre, a force of 27 Marines, stayed on to maintain the squadron's records and equipment until the squadron begins receiving a new contingent of personnel specially trained in the maintenance and operation of the new *Harrier*.

The *Phantom II's* were sent to various Navy and Marine squadrons throughout the country.

'Probable' for VA-55 Officer

LEMOORE, Calif. – At a recent NAAS Fallon, Nev., weapons deployment, Lt. Lee McTaggart, VA-55, acquired a probable first in Naval Aviation. During special weapons competitive exercises consisting of three different bomb deliveries, Lt. McTaggart, in an A-4F *Skyhawk*, scored three bull's-eyes: one each in lay down, low-angle loft and over-the-shoulder loft delivery maneuvers.

The *Warhorses* are presently undergoing training for their sixth combat cruise to Southeast Asia.

Massive Helo Lift

DA NANG, Vietnam – Helicopters of the 1st MAW, operating out of Marble Mountain Air Facility, recently participated in one of the largest allied operation in I Corps.

The joint air and ground operation, *Pickens Forest*, took place 30 miles southwest of Da Nang in the Que Son Mountains and Antenna Valley.

1st MAW helicopters kicked off the operation by inserting some 5,000 allied troops and 300 tons of supplies into 14 pre-selected landing zones during the first 72 hours of the operation.

Two battalions of the 1st Marine Division and nine battalions of the RVN Army re-occupied several old fire support bases and swept through the area, uncovering numerous enemy caches of food, arms and munitions.

Nearly 2,800 hours of flight time were chalked up by the 1st MAW as it transported some 22,000 troops and 1,500 tons of supplies while providing resupply and fire support during the first eight days of the operation.

New Test for P-3C

PATUXENT RIVER, Md. – The antisubmarine warfare branch of Weapons Systems Test has completed a high latitude test and evaluation of a P-3C in flight over the North Pole.

A board of inspection and survey team, led by LCdr. Tom McDowell, project officer, navigated the *Orion* from Patuxent River to Sondestrom AFB in southern Greenland, to Thule AFB in northern Greenland, and finally over the North Pole.

The flight culminated a test program which yielded navigation data concerning the effect of high latitudes on the aircraft's inertial and Doppler systems, and provided an evaluation of the *Orion's* navigational software.

Following the test phase at the North Pole, the first for the C version, the *Orion* flew to Iceland for a side-by-side comparison with two other aircraft radar systems used for ice reconnaissance and mapping in the Greenland/Iceland area.

November 10, 1775
to November 10, 1970 — 195 years.
Still faithful, still recruiting
with the same "Join the U.S. Marines."
And they still do.
From New Providence, Bahamas,
to I Corps, RVN —
the first and the latest —
the fight's the same.
"We don't start 'em," the Gunny says,
"we fight 'em and end 'em."
Afoot, afloat, and lately, aloft,
grunts, cannon-cockers, and airdales
among themselves,
Marines to the world.
An indelible bond and mark
that change their lives
whether they serve for three or thirty.
The look may change, but the feeling's the same.
If it's green, it's Marine,
and it's good.

195

PH3 Homer H. Paddock III

Cpl. Rocky L. Pearson

Filing aboard CH-53's in full combat gear, Marines begin a search and clear operation south of Da Nang. A Marine at evening colors somewhere in Vietnam, opposite page.

AND STILL FAITHFUL

Marine laden CH-46's head for an LPH, opposite. Young Vietnamese refugee is carried by members of the 7th Marines, below. Squadron Leader Graham Williams, RAF, arrives at Cherry Point in a Harrier. The 2nd MAW will receive the AV-8A V/STOL next year.

NAS BERMUDA

NAVY'S NEWEST

By LCdr. Paul Mullane
Photos by PH1 Bill Hamilton

Naval Aviation acquired a new air station on July 1 when Kindley AFB at Bermuda was transferred to Navy control. The airfield and the island are not new to Navy men. ASW patrol squadrons flying P-3's have been deploying regularly to Kindley AFB since 1963, and the Navy has operated aircraft from Bermuda since three PBY's of VP-53 arrived in November 1940 to extend the U.S. Neutrality Patrol further eastward from the Atlantic Coast.

By the time the United States entered World War II, Naval Operating Base Bermuda had been commissioned at the island's eastern end. From there, ships and aircraft ranged seaward to hunt down and attack enemy submarines and provide protective escort for trans-Atlantic convoys. The aircraft operating from NOB Bermuda during the war were seaplanes which utilized the clear and protected waters of Great Sound for their takeoffs and landings. Besides the PBY's, PBM and PB2Y patrol squadrons arrived to assist in the mid-Atlantic antisubmarine effort (*NANews*, May 1970, pp. 30,36).

As Naval Aviation was phased down following the end of hostilities, patrol aviation was withdrawn from Bermuda. The rise of communist belligerency and

Fuel truck returns to fuel farm for a refill during early morning servicing of Orions. Passing rain showers which mark this scene provide the island's main water supply.

the outbreak of the Korean War made it evident that additional antisubmarine forces were needed in the Atlantic to counter a growing Soviet submarine force. PBM's of VP-49 were the first ASW aircraft to return, arriving at NS Bermuda in 1951 to make it their home port. In 1956, they were joined by VP-45. By that time, both squadrons were equipped with P5M *Marlins*.

When seaplanes passed from Naval Aviation, the two squadrons departed from Bermuda and were replaced by VP-8's P-3A *Orions* deployed to Kindley AFB where the Air Force continued to play host to the Navy's ASW patrol squadrons as they rotated every four to six months.

Kindley's own beginnings also go back to WW II when the Army Air Corps needed a refueling base for its trans-Atlantic traffic. Originally named Fort Bell, the airfield itself was called Kindley Field. With the establishment of the USAF, the whole facility became Kindley AFB and operated under the jurisdiction of the Military Airlift Command. As Air Force requirements for the base diminished and its importance as a patrol aviation base grew with increasing Soviet naval activity, the Department of Defense approved its transfer to the Navy. A naval aircraft support detachment from NS Bermuda had been stationed aboard Kindley since *Orions* began operating from its runways, so the transition was much easier than it might have been.

NAS Bermuda is under the administrative command of Naval Air Force, U.S. Atlantic Fleet, and has the mission of operating facilities and providing services and material support for aviation activities and units of the Navy's operating forces, as well as other as-

Bermuda's governor, in plumed hat, looks on as Navy's newest air station is transferred from USAF, left. British and U.S. flags fly side by side in front of NAS administration building, above. VP-8 sailors try local means of transportation, below.

Former NS Bermuda, now annex to NAS, carries on several previous functions.

signed on-board units. Support facilities include a Marine barracks, a weather service environmental detachment, an underwater sound laboratory research detachment and a Coast Guard Loran monitor station. Some of these facilities have remained at the NAS annex – old NS Bermuda – at the eastern end of the island. The annex will continue to service Navy vessels and support activities still there.

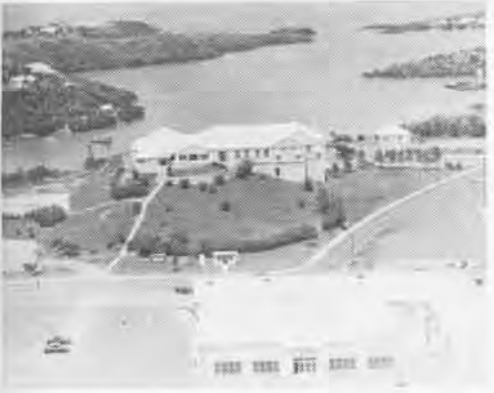
Kindley AFB became NAS Bermuda at a colorful transfer ceremony attended by a number of high ranking officials, including the Governor of Bermuda, Lord Martonmere; Secretary of the Air Force, Dr. Robert Seamans; the American Consul General; and Vice Admiral William Martin, Deputy CinCLant. Captain H. S. Herrick, commanding officer of the Navy's newest air station, in his opening remarks, pointed out that the Navy is ship oriented and that the naval air station could be likened to an aircraft carrier – with less confining space. Captain Herrick is familiar with the new facility since he has commanded the former Bermuda naval station for the past year and supervised the step-by-step move of departments to the air station. The new facility, in addition to being host to the rotating VP squadrons and other transient military aircraft, will continue to share its runways with Bermuda's civil airline terminal which services all commercial flights to the island.

Bermuda has proved a popular duty station with Navy men. The climate is mild, with a temperature range of 45 to 85 degrees and with rainfall distributed evenly throughout the year. Though only 22 square miles in area, Bermuda has plenty of coastline and many excellent beaches since it is composed of about 350 closely associated islands.

The seven largest are connected by causeways and bridges and are considered as one main island. Waters around the group abound in wahoo, tuna and marlin for the sports fisherman, and the coral reefs (the most northerly in the world) harbor many other varieties of sea life for the snorkeler and scuba diver. The crystal clear water also invites the underwater sightseer. Boating, waterskiing and sailing are also popular pastimes for Bermuda-based Navy men.

Ashore, a wide range of outdoor ac-

Members of a Bermuda-based Navy family set off to explore their new surroundings, far left. Historic Fort St. Catherine near NAS is a popular sightseeing attraction. Below, Officers Club overlooks Dolly's Bay. In foreground is air station passenger terminal. At right, airfield control tower and GCA radar rise above enlisted barracks and Navy exchange. Chief Petty Officers Club appears in upper right of the photograph.



tivities is available to occupy spare time – from golfing on one of the island's seven excellent courses to exploring its scenic caves, natural arches and bikini-dotted beaches. Most sailors get around by the island's most common means of transportation – the motorbike. Since the Bermuda speed limit is 20 mph, a sightseeing trip tends to be leisurely.

From an ASW point of view, the island has more important advantages than just good weather. Because the island is located 568 nautical miles east of Cape Hatteras, patrol flights originating from NAS Bermuda extend the range and time-on-station for *Orions* searching the mid-Atlantic on 10 or 12-hour ASW patrols. In addition to that advantage, the savings in operating costs are substantial when one considers that about four hours' fuel is saved by eliminating the extra en route time from CONUS to search area and return. The number of maintenance hours and frequency of repairs are also greatly reduced because of the decrease in unproductive flight time. As a result, NAS Bermuda should prove an important new facility for the Navy's antisubmarine forces.

Standing ready for antisubmarine patrol, four P-3's at NAS Bermuda are surrounded by scenic island beauty where Navy men find a variety of off-duty recreational activities.

Letters

'Relatively New'

"Young Professionals With a Purpose" (*NANews*, June 1970) stated, "Although the SerGrad program is relatively new, the concept of the program has been around for several years." If Ltjg. Gray's definition of "several years" is 26 years, he is very accurate because I was one of several "plowbacks" in Pensacola in 1944.

G. A. Everding, LCdr.
CNATechTra, Code 324
NAS Memphis (75)
Millington, Tenn. 38054

Aircraft Series

In reference to your request for reader suggestions as to aircraft to feature in future issues, I, for one, would very much like to see a story on the aircraft that never were mass produced. These would be the one of a kind or limited production versions of experimental aircraft.

I am thinking of aircraft like the F5F Grumman *Skyrocket*, Douglas A2D *Skyshark* and F5D *Skylancer*.

Other very interesting and not too well known aircraft from WW II and the postwar period might include the AM *Mauler*, F2G *Corsair*, SC-1 *Seahawk*, AF *Guardian* and the Ryan FR-1.

Keep up the fine work on your outstanding magazine — I've found it most informative and entertaining.

Donald A. Mohr, LCdr.
Qtrs 2104-E, Biddle Ave.
Philadelphia Naval Base, Pa. 19112

K-74

From extensive research for my almost completed history of blimps in WW II, let me say there is far more to the K-74 story (*NANews*, July, p. 40) than you would have room for.

The action of the blimp, K-74, with the U-134 was in the Straits of Florida and, as Captain Smith states, late on the night of July 18, 1943. The U-boat was en route to station off Havana to harass shipping. Ten days previously, while southeast of Bermuda, U-134's gunfire had damaged an attacking Navy patrol plane and eluded its depth bombs.

After tangling with K-74, the U-boat's skipper reported the Navy airship's attack on him by radio to Berlin. He had been damaged by the airship's bombs and cannon fire and described the damage. And instead of continuing toward Havana, U-134 headed northeasterly for home.

Late the night following the blimp's attack on her, U-134 was sighted in the midst of an electrical storm and eluded a six-bomb airplane attack. Weeks later, the U-boat was jumped on the high seas by planes from the jeep carrier *Croatan* and, in an engagement that lasted 55 minutes, escaped further damage and resumed her slow plod homeward. A few days later, however, British planes intercepted U-134 off the Bay of Biscay and sent her on her last dive. Her skipper didn't get home with his piece of airship fabric for his trophy room!

Despite the K-74 captain's first impressions that his depth charges may not have dropped from the blimp's 1921-vintage bomb release, exactly the opposite may well have been the case.

C. E. Rosendahl, VAdm., USN (Ret.)
Flag Point
Toms River, N.J. 08753

A Teenager Comments

Being a teenager myself and knowing people who use drugs, your article was deeply appreciated. I have seen what drugs have done to them, and I hope that people who are thinking about using drugs will read your article in the July issue.

I hope, in the future, you will have more articles on this most important and demanding issue.

C. Keith Lowes
111 Hayes Street
Warwick, R.I. 02886

Kudos

The article on Lt. Covin in the August 1970 issue of *NANews* was extremely interesting and is an excellent example of the type of recognition which should be given to outstanding officers and enlisted men.

W. S. Antle, Lt.
Retention Study Group
Center for Naval Analyses
1401 Wilson Boulevard
Arlington, Va. 22209

«*NANews* hopes to present a similar look into an aviation petty officer's professional and personal life in the Navy in a future issue.

Squeeze

In Grampaw Pettibone's March '70 write-up of a 1,053-mile, "squeeze the tanks," transcontinental flight by two F-4J *Phantoms*, one of which flamed out during idle descent and the other rolled out dry, one most significant and recurrent error is not even mentioned: *the flight should never have begun.*

GP notes that this flight, which was filed and cleared for a 2 plus 05 no-wind en route time and with 2 plus 30 fuel aboard, was furnished an average 75-knot headwind forecast upon filing.

The flight became an automatic emergency *from that moment on.*

Suggest you highlight repeatedly the responsibility of pilots, clearing officials and commanding officers alike to cancel out marginal flights before they pass the pencil-pushing stage.

W. A. Skon, Captain
Defense Communications Agency
Washington, D.C. 20305

« G.P. says: I agree with you 100%, although neither the accident board nor the flight leader would admit it. But the flight leader has since gone to bigger and better things.

One weakness in the system is that there is really no one who actually exercises supervisory control to prevent pilots from filing and taking off on missions which should never leave the ground. If the pilot has authority for the flight, he ends up making his own decisions from then on.

Naval Aviation Films

The following motion picture films are among the latest released by the Film Distribution Division, U.S. Naval Photographic Center.

MD-6962GQ (unclassified) *Armed Forces Information Film No. 198 — The People vs Pot.* The current position on the use of marijuana within the military establishment (30 minutes).

MN-10598A (unclassified) *Aircraft Parachute Flares* — A description of aircraft parachute flares and the necessary safety precautions (10.5 minutes).

MN-10598C (unclassified) *Aircraft Parachute Flares — Preparing the MK 45 Mod O for Dispenser Launch.* How to load the MK 45 into the SUU/44A parachute flare dispenser (12.5 minutes).

MN-10598D (unclassified) *Aircraft Parachute Flares — Preparing the MK 45 Mod O for External Carriage Launch.* How to load the MK 45 on external ejection racks (12.5 minutes).

MN-10598E (unclassified) *Aircraft Parachute Flares — Downloading the MK 45 Mod O from the SUU/44A* parachute flare dispenser and from the triple ejection rack (8.5 minutes).

MC-10964 (unclassified) *Hook, Line and Helo* — Various uses of helicopters in the Navy, and their unique capabilities in fleet and support operations (27.5 minutes).

Instructions for obtaining prints of newly released films are contained in OPNAV Instruction 1551.1E.

SQUADRON INSIGNIA

Tracing its origins back to 1942 and VP-201, Patrol Squadron Eight continues to guard against the menace of submarines. Led by Commander J. W. Shoemyer, the Patuxent River-based squadron recently returned from a five-month deployment in Bermuda.

NAVAL AVIATION

NEWS