

KAMMANN

Rotor Tips

NOVEMBER-DECEMBER, 1974



Season's Greetings

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Rotor Tips

John P. Serignese, Editor

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On The Cover

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Rotor Tips is published by the Customer Service Department, Kaman Aerospace Corporation, Bloomfield, Conn. 06002. The material presented is for informational purposes only and is not to be construed as authority for making changes in aircraft or equipment. This publication DOES NOT in any way supersede operational or maintenance directives set by the Armed Services.

HSL-34 Commissioned on East Coast

NAS NORFOLK, VA. . . . In ceremonies held 27 September 1974, Helicopter Anti-Submarine Squadron (Light) Thirty-Four (HSL-34) was established here. The Commanding Officer is Cdr Bruce W. Borgquist. Cdr Raymond L. Johnson is the Executive Officer.

The commissioning of Helicopter Anti-Submarine Squadron (Light) Thirty Four (HSL-34) brings to three the number of LAMPS designated squadrons of the Atlantic Fleet Naval Air Force. Cdr Bruce W. Borgquist assumed the duties as the unit's first Commanding Officer during official ceremonies conducted aboard the Norfolk Naval Air Station, where the new helicopter squadron will be home based.

The principal speaker for the occasion was RAdm S. L. Gravely, Jr., Commander, Cruiser Destroyer Group Two.

HSL-34, like its two sister squadrons HSL-30 and HSL-32, will be assigned under the Commander, Helicopter Sea Control Wing One. Its LAMPS helicopters will deploy individually as separate detachments aboard designated ships of the Atlantic Fleet Cruiser-Destroyer Force. LAMPS (Light Airborne Multi-Purpose System) helicopters offer a weapons system which provides extended Anti-Submarine and Anti-Ship Missile Defense coverage for its assigned ship or task force.

Since the various detachments must be almost totally self-sufficient, each is comprised of its own maintenance crew as well as pilots.

To perform the LAMPS mission, HSL-34 will fly the SH-2D/SH-2F model helicopter built by Kaman Aerospace Corporation. This aircraft, with a reputation for safety and smooth flight characteristics, assists the ship in submarine detection and classification by means of Sonobouy Launching, Signal Recording, and Data Link systems in addition to deployment of Magnetic Anomaly Detection equipment. The LAMPS H-2 can also carry torpedoes and is equipped with electronic ESM gear to detect and identify missile threats beyond the range of the ship's sensing equipment.



OPERATIONS . . . HSL-34 wasted no time in becoming operational. On the first working day following the commissioning, the new CO, Cdr Borgquist, right and NATOPS officer, Lt Jim Bailee, prepare for the squadron's "maiden" flight. Crewman during the historic flight was AW3 Fox.

Cdr Borgquist, HSL-34's Commanding Officer, is a 15-year veteran aviator, having received his aviator's wings and Navy commission in May of 1959. His first tour was with HS-2 where he participated in the Fleet introduction program and first deployment of the SH-3A helicopter. He served subsequently as an instructor in HS-10, and as an Aircraft Handling Officer onboard USS Princeton (LPH-5). In 1968 he was assigned to HA(L)-3 and served in Viet Nam as detachment officer-in-charge. After attending the Armed Forces Staff College, he was assigned as Project Officer at Naval Coastal Systems Laboratory, Panama City, Florida, where he was engaged in research and development of Airborne Mine-Countermeasures Equipment. Cdr Borgquist's last assignment prior to reporting to HSL-34, was with HM-12, where he served as maintenance officer and detachment officer-in-charge during the mine clearing operation in Haiphong, North Viet Nam.



HIGH LEVEL ASSIST . . . Capt Jensen, Commander Sea Control Wing One, right, assists as Cdr Borgquist, center, and Cdr Johnson start the traditional cake-cutting ceremony. Cdr Johnson reports to HSL-34 from a tour of duty on the staff of Chief of Naval personnel. (USN photos)



Cdr R.L. Johnson

Kaman Aerospace

President Murray

Honored in California

Mr. William R. Murray, president of Kaman Aerospace, was selected as the recipient of the prestigious General James H. Doolittle Award by the Society of Experimental Test Pilots at their annual symposium at Beverly Hills, California, September 28, 1974. The retired Air Force General and Mrs. Doolittle presented the award which recognized Mr. Murray for his experimental test flying and for "outstanding accomplishments in Aerospace technical management." He is one of the few test pilots to have achieved a top executive position in industry. Mr. Murray is the ninth recipient of the award. His wife, Marion, whom he said had shared his 32 years of flying experiences, was on the rostrum with him for the acceptance.

In accepting the honor from the famous aviation pioneer and his wife, Mr. Murray noted the award was made possible by a great many of his fellow Kaman test pilots, two of whom were on hand to witness the ceremony. He also paid tribute to those fellow test pilots who "had gone on."

In photo on left, Mr. and Mrs. Murray as they left the podium immediately after receiving the award. In photo on right, General and Mrs. Doolittle reveal their pleasure as Mr. Murray accepts the prize. Looking on is Robert M. Elder, 1974 Experimental Test Pilot Society President who officiated at the ceremonies.



THE GENERAL JAMES H. DOOLITTLE AWARD

Mr. Murray was a Navy fighter pilot and instructor pilot during World War II and later flew with the Connecticut Air National Guard. He has accrued more than 15,000 flight hours, including nearly 5,000 in fixed wing aircraft and over 10,000 in helicopters. While employed by Kaman and prior to his appointment as president, Mr. Murray has held positions of Test Pilot, Chief Test Pilot, Director of Flight Test, Vice President of Test Operations, and Executive Vice President. Mr. Murray has also recently been made a Vice President of The Kaman Corporation, the parent company. Mr. Murray was the first to flight test Kaman's unique and innovative intermeshing rotor used on the HH-43 "Huskie" and first to flight test the main rotor blade servo flap used on both the Huskie and the H-2 Seasprite aircraft. He was also the first to pilot a gas turbine and twin turbine helicopter, as Kaman led the industry in applying turbine power to vertical lift aircraft.



HSL-32

Change of Command Marks One Year Of Commissioned Service

In Change-of-Command ceremonies on 9 August, 1974, Cdr Ralph V. Buck, relieved Cdr William C. Powell, as Commanding Officer of HSL-32. This Change-of-Command marks the completion of one year of commissioned service as the first Atlantic Fleet squadron solely responsible for the execution of the Navy's vital LAMPS (Light Airborne Multi-Purpose Systems) mission. The LAMPS concept combines the primary missions of Anti-Submarine Warfare (ASW) and Anti-Ship Missile Defense (ASMD) in a small, versatile airframe (SH-2F built by KAMAN) which uniquely integrates the destroyer-type ship and helicopter into an extremely effective weapons system.



"All Present and Accounted For!" Crew of HSL-32 stand ready to receive orders from new CO. (USN photos)



Cdr W. Jones,
Executive Officer



Taking part in traditional cake-cutting ceremonies for the one-year-old squadron are, from left, Cdr Buck, Capt Jensen, Commander Sea Control Wing One, and Cdr Powell.

The squadron has averaged three detachments at-sea throughout the year, providing LAMPS support to our Naval Forces in the Caribbean, Atlantic and Mediterranean. These detachments, normally deployed with one helicopter, three officers, two aircrewmen and eight maintenance personnel, operate aboard small non-aviation ships which affords each man in the crew an opportunity to individually shoulder greater responsibility in maintaining a high degree of operational readiness.

In April of this year, the squadron provided four detachments to support tests of the Interim Sea Control Ship (ISCS) system. Additionally, the squadron effected a successful rescue of a civilian from the waters of Chesapeake Bay in November 1973, which prompted a message of appreciation from COMNAVAIRLANT. Participation in Fleet exercises during this past year has also brought squadron commendations from CNO, CINCLANT-FLY, COMCRUDESLANT, CHIEF MAAG NETHERLAND, several destroyer groups, and squadron and ship commanders.

The squadron has amassed over 3500 accident-free flight hours during the year with approximately 60% being accomplished at-sea. This safety record is indicative of LAMPS growing professionalism and successful integration of ship and helicopter in effectively performing its varied missions.



RAdm Green, left, Deputy Commander Naval Air Atlantic Sea Based Air Antisubmarine Warfare, guest speaker at the ceremonies, takes advantage of opportunity to present Cdr Powell with Navy Commendation Medal.



H-2 LAMPS 11TH

Integrated Logistics Support Management Conference

KAC President, William R. Murray welcoming conference attendees.

NOVEMBER 6-8, 1974



Cdr N. Newcomb, NAVAIRSYSCOM, at podium, addresses conferees while conference chairman Wayne Cerny, left, assistant chairman, Paul Cataldo, NAVAIR, and KAC LAMPS ILS Coordinator, Robert J. Myer look on.

The 11th LAMPS Integrated Logistic Support Management Team Conference was held November 6-8 at the Ramada Inn, East Windsor, Ct. Once again, conferees represented a unique cross-section of Fleet, Naval Air Systems Command, Support Activity and Navy Staff personnel from both the Air and Ship commands. Mr. Wayne Cerny, H-2 aircraft Assistant Program Manager, Logistics, chaired the conference. The three-day activities again provided the LAMPS principals with an opportunity to become informed as to the present status and future of the program. A brief summary of some of the items presented and/or discussed follow.

Mr. William R. Murray, President of Kaman Aerospace, welcomed all conferees on behalf of the company. He discussed the safety record of the SH-2F, noting that there have been no accidents in the first year and a half of service, and attributed this achievement primarily to the professionalism of the Fleet pilots and maintenance personnel.

Mr. Fred L. Smith, Chief of Test and Customer Service for Kaman, provided a status report on the new electrical system. He discussed the importance to the HSL squadrons of providing a TAC/NAV display consistent with mission requirements. Mr. Smith also detailed a new fuel quantity system for the SH-2F.

LCDR D. Smolnik, Chief, DCASO Bloomfield, welcomed attendees to the Eleventh SH-2 LAMPS ILSMT Conference and offered DCASO services as required.

Mr. Burden, Deputy Project Manager for LAMPS MK I, greeted all attendees for the Project Manager, CAPT R.M. Boh. Mr. Burden advised those present of the recent LAMPS reorganization in NAVAIR, the disestablishment of PM-15 and PMA-256, and the designation of PMA-266 as the LAMPS/SASI Project Office.

Mr. Burden explained that the Service Life Extension Program (SLEP) will now be processed under the Standard Depot Level Maintenance. The aircraft will be

scheduled for SDLM which will extend the service life for another six service tours. A tentative SDLM schedule and work plan was shown.

CDR Newcomb (PMA-266-5) related brief comments on his recent visit to the Mediterranean to discuss the first Multiship Deployment. He met with personnel from 3 of 4 LAMPS ships NAF Naples and COMFAIRMED.

The following points were noted:

- a. There was enthusiasm and good spirit among LAMPS personnel — Detachment, CO/XO and Supply. Pilots expressed a desire to do more than they have been called on to perform.
- b. Even though deployed together, the four LAMPS ships were rarely close to one another and therefore not able to provide as much mutual support as anticipated.

LCDR Jack Costello (COMNAVAIRLANT, Rotary Wing Class Desk Officer), gave a short talk on the three significant events which have occurred in AIRLANT since the last ILSMT, namely:

- a. Establishment of HSL-34 in Norfolk, Virginia on 27 September, 1974, under the command of Cdr Bruce Borgquist.
- b. Ground-breaking for an H-2 WST facility to be completed in April, 1975.
- c. Approval from the Assistant Secretary of Defense for LAMPS Interim Maintenance Hangar in Mayport, Florida, for HSL-36, which will be completed in September, 1975.

Cdr Myers (COMCRUDESLANT) presented the status report on LANTFLEET LAMPS, highlighting significant Fleet exercises, extended deployments and future operations. Proposed changes and incorporated improvements relating to LAMPS hardware and operating procedures were cited.



ILSMT Conference Chairman, Wayne Cerny, H-2 APML, NAVAIR, "setting the tone" for the conference.



Ships Interface Committee, chaired by I. Gendelman, NAVSEA.

LCDR R. M. Krol (U.S. Naval Safety Center, Code 311) presented the following brief to the conference:

A System Safety Survey of the LAMPS Weapons System was completed in September, 1972. Results of the surveys generated some 60 pages of message traffic that put forth 160 LAMPS SAFETY RECOMMENDATIONS (LAMPS SAFERECS). The status of each is monitored by Commander, Naval Safety Center.

Mr. I. Gendelman (NAVSEA, Code 0481L) presented an overview of the LAMPS MK I Ship modification summary as of 4 November 1974. The ultimate objective of the program was noted to provide the necessary shipboard capability which would result in LAMPS shipboard certification (LEVEL I, CLASS I). The basic shipboard capability relates to: Helo Facilities, Hangar Doors, Personnel Accommodations, Data Link, Acoustic Processor, Air Control, and Add-On VLA. This capability is provided during various ship availabilities in Naval Shipyards or in private shipyards under the cognizance of the Supervisor of Shipbuilding.

Mr. J.D. Dickinson (NASCREPLANT, Commercial Rework Office, ASCR-1431) presented an outline of the Periodic Depot Level Maintenance Specification, AR62-H-2. Following the presentation, Mr. Dickinson chaired a subcommittee on PDLM/ADR problems experienced by the operating activities.

Mr. Robert J. Myer, KAC LAMPS ILS Coordinator, provided highlights relating to the Contractor's program support responsibilities: Areas discussed were: Training/Trainers; Publications; Special Support Equipment and; Spares/Repair Parts.

Mr. Paul Cataldo, Assistant APML, provided a brief summary of H-2 Logistic Elements that have occurred since the Tenth ILSMT. Where applicable, these items were assigned for subcommittee action.

Conference Chairman, Wayne Cerny, briefed the attendees on items of concern collected during a recent NAVAIR visit to COMDESRON FOUR ships at Naples, Italy. Items of particular note included: the need for better indoctrination of ship's personnel prior to deployment; problems with POL initial supplies; the need for improvement in retrograde packaging; the need for spares and improved design for VLA components; problems with deck nonskid and other minor items. A number of items were referred to committee for action.

Mr. Carlton, PMA-266 Configuration Manager for LAMPS Mark I, related the status of the R & M ECP's to the conference attendees. A brief description was provided of the problems, solution for the problems, level-of-maintenance and the man-hours required to install the airframe change kits.



Spares/Repair Parts Committee, Co-chaired by R.P. Ardoline, NAVAIR and F.T. DiFonzo, ASO.



Training/Trainer Committee, chaired by R.E. Carter, NAVAIR.



Publications Committee, chaired by B.J. Johnson, NATSF.



GSE Committee, chaired by W.E. Landon, NAVAIR.



PDLM Committee, chaired by J.D. Dickinson, NASCREPLANT.



GSE Calibration Sub-Committee.

Imperial Beach Runners

Rank Among The Best

Trophies went to two NAS Imperial Beach runners in the recent Eleventh Naval District Cross-Country Championships. Ltjg Phil Camp, undergoing RAG Training at HS-10 prior to his assignment to HC-1, won first place in the Men's Open Division, and Ltjg Cathey Dykes of HSL-33 took second place in the Women's Division. Other participants included four more "Snakes" from HSL-33 and eight runners from HC-7.

The race was held at the Admiral Baker Park Golf Course with a field of 250 Navy and Marine Corps personnel participating. Ltjg Camp set a new record for the six mile course in the Men's Open Division. He ran the distance in 27 minutes 21 seconds, shaving almost four minutes off the old record of 31 minutes 19 seconds set by David Smith, NAS Miramar in 1973. Participants in the Women's Division ran three miles which was completed in 28 minutes by Ltjg Dykes.

Ltjg Dykes' running career began over a year ago under the tutelage of Cdr M. A. Belto, who initiated the aerobics program in HSL-31. Since her assignment to HSL-33, Ltjg Dukes has continued to participate in this program and has competed in two HSL-33 Squadron relay runs from NAS Imperial Beach to Tecate, Mexico.

Ltjg Camp has had an illustrious career in long distance running. He is recognized as a World Class Marathoner and Middle Distance runner. He has competed in 13 marathons (26 miles, 385 yards) with his best time being 2 hours 20 minutes. This equates to a pace of 5 minutes 20 seconds per mile, and places him as one of the top marathon runners in the United States; he is also considered the top runner in the U.S. Navy today.



Congratulations are in order as Dykes and Camp display their well-earned trophies. Both winners will be in the news again since Dykes has only been running for about one year and Camp has just begun to shatter existing speed records. (USN photo)

HSL-33 Receives Highest Safety Award

Imperial Beach based Navy helicopter squadron, Helicopter, Anti-Submarine Squadron (Light) Thirty-Three (HSL-33), has been honored by the Chief of Naval Operations with the Aviation Safety Award for fiscal year 1974. The award, presented annually by CNO, is considered to be the highest achievement in Naval aviation safety. Recipients are lauded for safety in all facets of operations, including flight, ground and environmental safety. HSL-33, a LAMPS squadron, is commanded by Cdr L. "L" Stoker, and is the first squadron in its category to receive the honor.

The LAMPS mission, which involves the Kaman SH-2D/F helicopter in small-deck ship operations, is acknowledged to be one of the most hazardous in the Navy. Safety is stressed in all aspects of squadron life and is considered by Cdr Stoker to be of primary emphasis. During fiscal 1974, HSL-33 flew over 4000 accident-free flight hours and accomplished over 2000 accident-free small deck landings, establishing a perfect safety record for the year.

HSL-33 also received the Commander, Naval Air Forces, Pacific award for safety achievement during the period. Competition for these awards is keen, and requires the utmost effort in safety mindedness by all Navy personnel. This Navy-wide attention to safety has made fiscal year 1974 the safest year in Pacific Fleet aviation history.



After accepting the Chief of Naval Operations Annual Safety Award, HSL-33's Commanding Officer and Executive Officer display the coveted plaques. While Cdr Stoker, left, holds the Aviation Safety Award, Cdr Huff displays the COMNAVAIRPAC Safety Award which was also presented to the safety-conscious "Snakes of HSL-33." (U.S. Navy photo)

Senior

Resident DCASO

Engineer Retires

Daniel Cardono, Senior Resident Engineer at the Defense Contractor Administration Services Office (DCASO), Kaman Aerospace Corporation, Bloomfield, Conn., retired on 16 August 1974. Dan completed 31 active years of dedicated service to his country. Originally from Riverside, R.I., Dan is the oldest of 11 children. He received a degree in electrical engineering from the University of Rhode Island in the 30's and, in the 50's, after serving in the US Air Force, Dan attended the University of London in London, England, majoring in mechanical engineering. While an officer in the 8th Air Force during World War II, Dan accomplished an independent design, fabrication, installation and subsequently, establishment of a school for an autopilot installed in the Link trainer. Dan is married, has one son and three grandchildren.

Cardono arrived at Kaman in 1958 as the local Navy Office Project Engineer on the H-2 helicopter. In 1965, he was given the responsibilities of Senior Engineer at DCASO, Kaman, as the Navy turned over administrative responsibility to the DCASO personnel. Dan held this position until he retired.

Kaman employees who have worked with Dan, speak of him as "a professional . . . quiet, softspoken and, when necessary, firm." Others say, "Dan seemed to have the ability to stay on top of everything while appearing to relax." Keeping up with the times or "staying on top" seems to be Dan's way. For example, one of his hobbies has been windmills and emergency sources of power, a rather timely subject. He intends to build a windmill near his home for electrical power to keep himself busy.



The man and the machine . . . Dan Cardono usually was seen in group photos at the completion of conferences such as a Progressive Aircraft Rework (PAR) Review or NATOPS Flight Manual Review, or some other detailed effort. Here Dan is seen extending a hand to the machine he was so involved with while at Kaman . . . the sophisticated SH-2F aircraft. (Ruggerio photos)



Cdr Smolnik presents Dan with his latest "Outstanding" award. The awards are made to Civil Service Employees who consistently exhibit qualities and effort extending above and beyond the normal routine of daily duty. (Dan has five "Outstandings" and many other awards too numerous to list here.) Most golfers will recognize the golf club Dan is holding as the Number 1 wood or driver. A true golf "fanatic," Dan is willing to tell anyone about the time he actually joined the ranks of those few golf-enthusiasts who made a hole in one!

A MAC First . . . 2nd Lt Upgraded to Aircraft Commander



UDORN ROYAL THAI AIR FORCE BASE, Thailand . . . In photo on left, Second Lieutenant Charles S. White, left, Detachment 5, 40th Aerospace Rescue and Recovery Squadron (ARRS) here, is congratulated by Major Fernand M. Espieu, Standardization Check Pilot for the 41st Aerospace Rescue and Recovery Wing (ARRW), Hickam AFB, Hawaii, upon completion of the recent flight upgrading him to aircraft commander. Lieutenant White, a native of Dallas, Texas, is the first 2nd Lt in Military Airlift Command's history to be upgraded to the position of aircraft commander. The 4-hour check ride in the HH-43F Huskie helicopter was conducted in the Udorn area. (U. S. Air Force Photo)

The Tech Writer's Dilemma

As has been well established in military circles, these are days of increasing system complexity and a relatively high rate of personnel turnover. To cope with this, all means at our disposal are being exploited to provide the required degree of expertise to ensure proper equipment operation and the necessary level of equipment availability. Much attention is being given to training innovations and newly developed technical publication preparation approaches; however, there are still basic problems needing priority attention.

One key area that must be treated is the age old need for better communications between the technical writer and the user. It is becoming increasingly apparent that more emphasis must be given to such an exchange. This would not only provide the necessary input to improve existing publications but obviously influence the writer to apply pertinent criteria to future publications.

Current technical publications specifications attempt to ensure delivery of optimum publications by requiring the performance of in-plant validations and user on-site verifications prior to initial delivery. This is definitely a positive step that goes a long way toward accomplishing the stated goal. However, as with any formalized system there are soft spots. The scope of most technical publications, especially those used at the operational levels, is too vast to review every task, requiring a sampling selection to be made. We ask ourselves, have we chosen those tasks that are apt to cause the most problems to the user? Are the skills of the validation/verification personnel truly representative of those most likely to be assigned to operate and maintain the equipment in the field? What about the environment? Will a task performed in a stable open hangar indicate what can be expected on a crowded, rolling ship? These are a few of the reasons, other than hardware changes, that require continuing technical publication upgrading.

Again such upgrading can only be satisfactorily accomplished with adequate communications between the writers and the users. This not only involves initial transmittal of the data by the contractor/customer publication agencies and reception of the data by the customer user agencies, but continuing feedback of concerns when encountered by the user for appropriate resolution.

Back to the tech writer and his personal problems with data preparation: essentially, each writer draws on his own experiences and his own basic knowledge as to how much

he feels it is necessary to say. Sometimes familiarity with a piece of equipment can work to the detriment of the writer. He may tend to gloss over data that someone less familiar with the equipment feels is essential for proper maintenance. In the same way, a person who is highly competent, technically, may do a poor job of writing, forgetting that the reader may not have the same basic knowledge of mechanics or electronics. On the other hand, a writer can bury a reader with detail that has little or no bearing on good maintenance procedures. He can discourage the good technician from using the tech data because of the time required to search through page after page of data with which he is already familiar in order to get to the problem.

And therein lies the DILEMMA. Where does the tech writer start? How much is it necessary to transmit? He must assume that the reader has had some training on the system or component and the related support equipment. Now, what else can he assume? If he tells the reader to remove a cover, is it necessary to tell him that six fasteners must be removed first? Must he tell him which wrench to use? What size or type of screwdriver? Is it enough to tell him what to do, is it necessary to tell him all the things that must not be done? Can he merely tell the reader to install the cover with gasket or must he tell him that it is necessary to place the gasket between the cover and the box? Can the writer let it go at that or must he also tell the reader not to place the gasket on top of the cover? Or not to put any sealant on the gasket? Now the cover must be secured. Can the writer say to secure the cover with bolts and nuts with a washer under each nut or must he say that it requires six bolts, six nuts and six washers? If he tells the reader to place a washer under each nut is it also necessary to tell him not to place a washer under the bolt head? Now, must the writer tell the reader which wrenches to use? In other words, where do you draw the line? It's quite a DILEMMA.

As stated above, each writer essentially draws on his own experience and his own basic knowledge. He attempts to provide sufficient information to make a clear point but yet not so much material as to make reading cumbersome. For some readers, the data will be inadequate . . . for others, it will be more than they need . . . for those in-between, presumably the majority of readers, the information will be sufficient to do the job and yet not so wordy as to make it boring.

YSH-2E Cognizant Officer Visits Kaman Facilities

LT TOM PAYNE, Naval Air Development Center (NADC), Warminster, accompanied his replacement, LCdr Art Nelson, on a recent visit to Kaman facilities in Bloomfield, Conn. Lt Payne is leaving the Navy to join the IBM Corporation. He will still be in contact with LAMPS personnel, however, because his new duties include involvement with the LAMPS Mark III Integration Program. LCdr Nelson will be cognizant officer for the NADC YSH-2E (Mark III development, H-2 S/R) Flight Test Program.

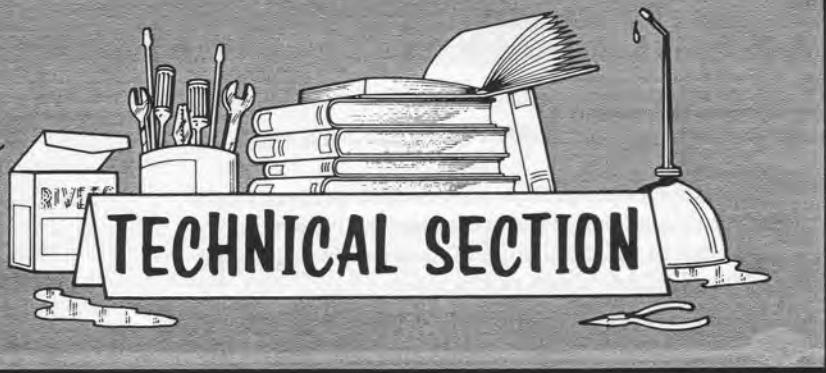
In photo on right, the Kaman visitors pause for a handshake and the cameraman. From left to right, Lt Payne, Jack Goodwin, Kaman Senior Marketing Representative, Dave Uitti, Kaman H-2 Project Engineer, and LCdr Nelson.



KAMAN

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The information contained here has been reviewed by Customer Service Department Engineering Personnel. The data is either in existing Official Publications or will be contained in forthcoming issues of those publications. The information supplied does not in any way supersede operation/maintenance directives established by cognizant authorities.

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MAIN ROTOR HUB RETIREMENT TIMES

The PMIC's (NAVAIR 01-260HCB-6) for UH-2C, HH-2D and SH-2D helicopters specify that the main rotor hub, P/N K613002-109, is to be retired at 500 hours when installed on UH-2C helicopters and at 1000 hours when installed on HH-2D or SH-2D helicopters. Many of these hubs, which were installed on UH-2A/B helicopters and were to be retired at 800 hours, are still in service. This means that a hub reaches fatigue life at 800 hours on A/B, or 500 hours on UH-2C, or 1000 hours on HH/SH-2D aircraft; it does not mean that after operating for 800 hours on A/B aircraft, a hub can be installed on an HH or SH-2D for an additional 200 hours until total time is 1000 hours. The easiest way to determine remaining operating life when switching hubs between models is as follows:

EXAMPLE:

Hub used for 534 hours on A/B. It has then accumulated 534 or 66% of its fatigue life and has 34% remaining.
800

If then installed on a UH-2C aircraft (500 hours retirement), it could operate 500 X 34% OR 170 hours on the UH-2C until it reached retirement time.

If it were to be installed on HH or SH-2D aircraft, it could operate 1000 X 34% OR 340 hours until reaching retirement time.

W. Wagemaker, Service Engineer

WHY DO SHOCK MOUNTS, P/N T44-AB-10 AND T44-AB-15, USED ON THE ALR-54 ANALYZER MOUNT FEEL "STIFF"?

The manufacturer of the T 44-AB-10 and the T44-AB-15 shock mounts reveals the mounts have a natural frequency of 25 cycles per second while most shock mounts (of equal weight rating) have a natural frequency of 7 cycles per second. Because of this difference, the mounts, in a static state, will feel much "stiffer" when compared with other mounts of the same weight rating.

N. Hankins, Service Engineer

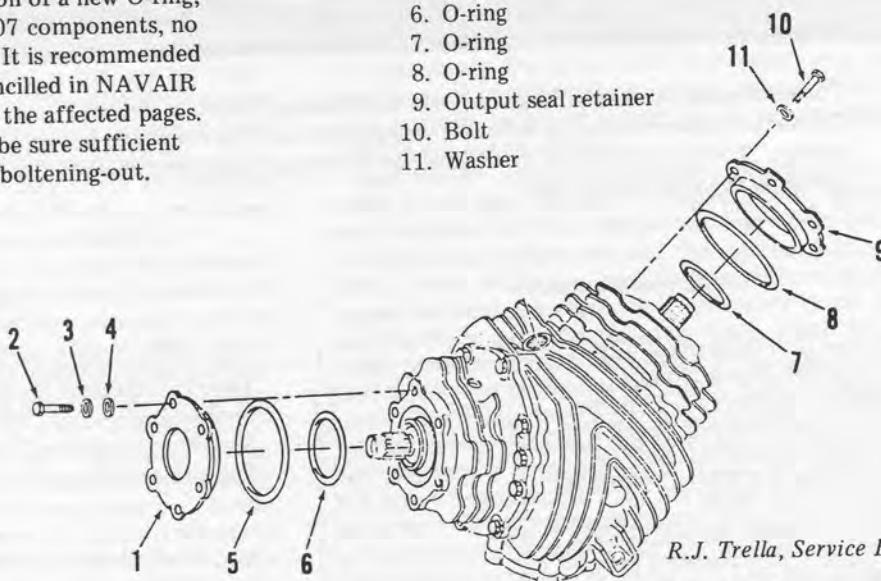
SERVICE ENGINEERS: Avionics, N.L. Hankins, J.M. Nenichka,
Mechanical, E.F. Noe, R.J. Trella, W.J. Wagemaker, H. Zubkoff

TECHNICAL SECTION

INTERMEDIATE GEARBOX OIL LEAKAGE H-2

Static oil leakage from intermediate gearbox retainers (items 1 and/or 9 in the accompanying illustration), may be due to the installation of incorrect O-rings, items 5 and/or 8. The correct part number is 238-17107. A recent change authorized substitution of a new O-ring, P/N MS9388-238, for the 238-17107 components, no other substitutions are authorized. It is recommended that the correct part number be pencilled in NAVAIR 01-260HCB-4-6, pending update of the affected pages. When installing bolts (2 and 10), be sure sufficient washers are added to preclude bolt bolting-out.

1. Input seal retainer
2. Bolt
3. Thin washer
4. Flat washer
5. O-ring
6. O-ring
7. O-ring
8. O-ring
9. Output seal retainer
10. Bolt
11. Washer



R.J. Trella, Service Engineer

CABIN HEAT/ENGINE BLEED CHECK VALVE

Failure of a check valve, P/N 1111-577098M1, in the cabin-heat/engine-bleed air lines (See NAVAIR 01-260HCB-4-5, Figure 6.) can result in an unscheduled engine change. The check valves prevent cross-ducting of combustion casing (cabin heat) bleed air from one engine to the other. Introduction of bleed air from one engine into the other, in the event of check valve failure, will disrupt the flow-path of primary cooling air between the combustion casing and the liner. Heat transfer from the liner to the case will then occur, creating a burned area on the case in the vicinity of the bleed air boss. Whenever combustion casing hot spots are detected, the associated cabin heat line check valve should be removed and inspected for failure of the one-way flapper. The valves are coded "CONSUMABLE" and, if defective, replacement will be required.

A defective check valve can also cause a "hung" start. Whenever a "cold hang-up" occurs on a start attempt, a visual inspection should be accomplished for evidence of a combustion case "HOT-SPOT."

Do not replace a "HOT-SPOT" rejected engine under the assumption that the problem is due to faulty fuel nozzles. The actual cause of the engine damage may well be a defective check valve, and, if left unchanged, the replacement engine could suffer identical damage within a few hours of installation. Therefore, before installing a replacement engine, inspect the check valve to be sure it will function properly.

Pending formal incorporation in applicable directives, the following suggestions may save a "HOT-SPOT" engine change.

1. Daily Inspection for evidence of hot spots: specifically note the area around the combustor case cabin-heat bleed air port. Early detection and corrective action can save the engine.
2. With one engine operating and the other shut down, check the combustor drain of the shut-down engine for air-flow. Air flowing from the combustor drain of the inoperative engine will be an indication that the check valve is open.
3. Check to determine if the gas generator on the shut-down engine is rotating. Air flowing into the combustion chamber, through an open check valve, may cause turbine motoring.
4. If a start "hang-up" occurs on the second engine, shut down both engines and reverse the start sequence. If a good start is obtained on the engine which previously "hung-up," a faulty check valve should be suspected.

H. Zubkoff, Service Engineer

KAMAN ROTOR TIPS

SUPPLY INFORMATION

by E.J. Cunningham, Spares Manager

FSN CONVERTED TO NSN

Effective 30 September, 1974, Federal Stock Numbers (FSN) changes to National Stock Numbers (NSN). The most obvious change will be the addition of two zeros to all existing numbers.

For Example: if the FSN is written as, 1234-567-8900
the NSN will be written as, 1234-00-567-8900.

Later, as new stock numbers are assigned, numbers will be placed in the spaces containing the zeros.

As of 30 September, all correspondence which required a FSN, must show an NSN, otherwise, unnecessary delays and/or rejections may result. Microfiche card decks have already or are now being converted to the NSN's.

REQUISITIONING H-2 WHEEL ASSEMBLIES

LAMPS ships, at present, do not have the maintenance capability necessary to buildup wheel assemblies. It is therefore very important, that detachments receive "BUILTUP" assemblies from supply. The proper procedure to use when ordering H-2 wheels is to order the wheel assembly by NSN: Main Wheel, P/N 9541591, NSN 2RH1630-795-2730BH; Tail Wheel, P/N 9533168, NSN 1RM1630-987-1809BH. In Document Identifier Block mark "AOE." In Remark Blocks, mark "REQUIRE BUILT-UP WHEEL AND TIRE ASSEMBLY." This request will alert the supply activity and a BUILTUP assembly will be issued.

LAMPS MAINTENANCE/SUPPLY TIPS

Lamps maintenance/supply personnel stationed aboard ships should become familiar with the term "Urgency of Need Designator." The Urgency of Need Designator (UND) is used to indicate to supply how urgent the maintenance material requirement is. When ordering, refer to the accompanying list and select the priority which best reflects the conditions. Do not assign a higher priority than necessary, otherwise, a delay could result.

Another supply code, the "Advice Code (2B)," can be used when ordering components limited to use on certain aircraft due to incorporation of Airframe Changes or requirements to use the item only in "ships-sets." For example, if an aircraft is equipped with four of the new main rotor blade servo flaps and a replacement is needed, the requisitioner should place the code "2B" in the advice code box on the requisitioning form (1348). According to NAVSUP Publication 437, advice code "2B" indicates: "Requested item only will suffice. Do not substitute/interchange." Therefore, when supply processes the request, only the desired part will be furnished. If the requisition does not contain the "2B" code, it is possible the wrong servo flap could be delivered to the requisitioner. Be sure to check the aircraft log book for inclusion of AFC's before deciding which part to requisition.

WHEN THIS CONDITION EXISTS

Aircraft NORS G (Cannot fly helo without part.)

Examples: tires, engines, blades.

Aircraft NORS N (Not fully equipped.)
Aircraft flyable but part required to restore vital system to operation.

Examples: MAD gear components, radar, ICS.

LAMPS work stoppage, aircraft flyable.
(Part required for aircraft maintenance or support not normally carried aboard ship.)
Examples: access covers, windows, forthcoming TBO maintenance requirements.

Packup replenishment. (Normal replacement of parts carried in packup.)

USE THIS CODE

ZM1

2

ZM2

2

ZM5

5

ZM6

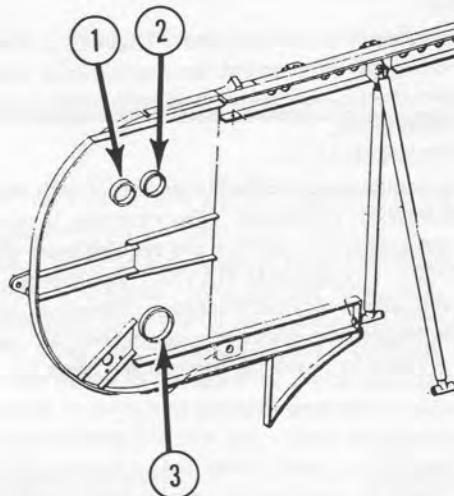
5

TECHNICAL SECTION

OIL LINE GROMMETS - NACELLE FRAME 216.0

Engine and speed reducer gearbox (SDG) oil line passage holes through nacelle frame at Station 216.0, require grommets to prevent chafing of the lines against the hole edges. (Refer to the accompanying illustration.)

The SDG breather hoses are routed through holes, item 1; the SDG oil-in hoses are routed through holes, item 3. Use grommet as listed on the illustration. The required grommets will be listed in the IPB under the SDG Oil Lines Installation. Passage holes, item 2, are used for the engine oil-return tubes, and use grommets as listed on the illustration. These part numbers will be listed under the Engine Oil Lines Installation. Plastic grommet, NAS557-32A is split to facilitate installation. The oil-resistant rubber grommet, MS35489-21 is not split when received, therefore, to install, split and trim 1/16-inch off one end in order to fit the hole.



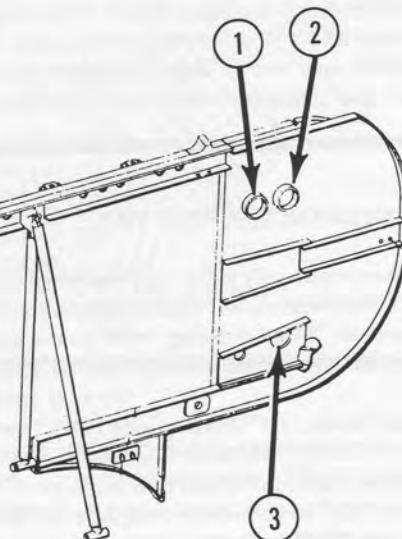
NACELLE FRAME STATION 216.0 (Just Forward of Engine Oil Tanks).

VIEW LOOKING FORWARD

- 1 and 2 - Grommet, Rubber, Hot Oil Resistant, P/N MS35489-21.
3 - Grommet, Plastic, Split, P/N NAS557-32A.

NOTE - To install the MS35489-21 grommets, split, and slightly trim off one end to fit the hole.

H. Zubkoff, Service Engineer



FLIGHT CONTROL ROD NOMINAL LENGTHS.

The following nominal lengths are provided in response to an inquiry from the field.

Cyclic control rod,
P/N K651050-609 20.94 inches between rodend centers.

Collective control rod,
P/N K652050-207 15.50 inches between rodend centers.

Q. WHEN REPLACING THE BEARINGS IN THE MAIN ROTOR BLADE L-CRANK ASSEMBLY ARMS, IS IT ACCEPTABLE TO STAKE RATHER THAN ROLL-SWAGE?

A. No. Bearings, P/N K659257-11 and -13 used in the L-crank assembly, P/N K659453, must be roll-swaged. These bearings were designed for roll-swage security and cannot be punch-staked in place, as the bearing material could break off locally and/or stress raisers could be inflicted on the crank which is a primary flight control.

W. Wagemaker, Service Engineering

TECHNICAL SECTION

Q. WHAT TYPES OF WINDSHIELD WASHER FLUID MAY BE USED ON THE H-2?

A. Acceptable windshield washer fluids which can be used on the H-2 are:

1. Inhibited Ethylene Glycol Antifreeze, Federal Specification, O-A-548.
2. Deicing/Defroster Fluid, MIL-A-8243B.
3. Denatured Ethyl Alcohol, MIL-A-6091.
4. Isopropyl Alcohol, MIL-F-5566.
5. Deicing/Defroster Fluid, O-D-00190.
6. Anti-icing Fluid, MIL-A-23051.

H. Zubkoff, Service Engineer

AUTOROTATION ROTOR SPEED ADJUSTMENT

Main rotor speed in autorotative flight is influenced by many factors, including airspeed, gross weight, outside air temperature (OAT), and collective stick position. Adjustment of the rotor cone will also affect rotor RPM as follows:

1. Main rotor blades, K611008-309; $\frac{1}{2}$ turn of the flap rod clevis will result in approximately three per cent change in rotor RPM.
2. Main rotor blades, K611670-1 and -3 (-101 type); $\frac{1}{2}$ turn of flap clevis rod will result in approximately five per cent change in rotor RPM.

W. Wagemaker, Service Engineer

Q. (APPLIES H-2) WHAT IS THE CORRECT PART NUMBER FOR THE RODEND INSTALLED ON THE UPPER END OF THE AZIMUTH-TO-HUB ROD, PART NUMBER K659027-5?

A. The only rodend authorized for use at the fixed end (upper) of the azimuth-to-hub (item 1 in accompanying illustration) is part number K101038-11 (FSN RM3120-816-8848BH). No substitutes are authorized because substitute items could cause binding due to interference/incorrect rod roll. Note that the K659027-5 azimuth rod assembly is applicable to pre- "101" rotor aircraft only (UH-2C, HH-2D, SH-2D).

- (1) K659027-5 Azimuth-to-Hub Rod Assembly
 (2) Main Transmission Assembly

Q. ARE H-2 ENGINE FUEL CONTROLS INTERCHANGEABLE BETWEEN ALL MODEL AIRCRAFT?

A. No. Fuel controls used on H-2 aircraft must be compatible with engine models not aircraft models. The following list will help determine which fuel control will function properly on engines used in H-2 aircraft.

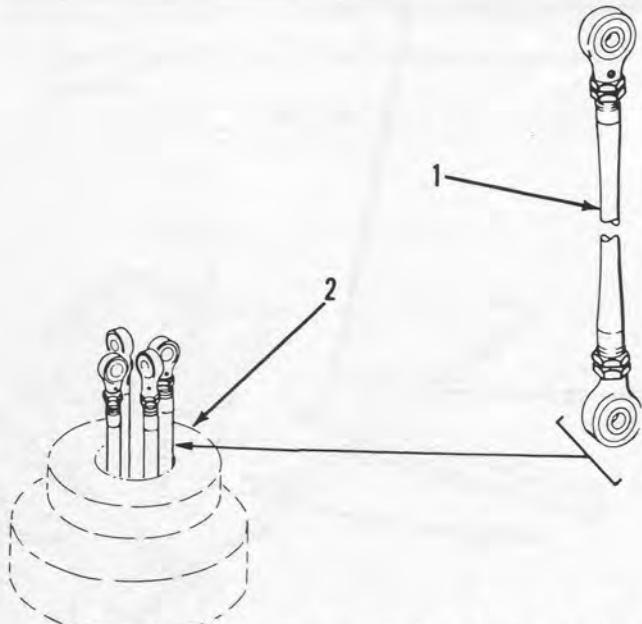
<u>T58-8B Engines</u>	<u>T58-8F Engines</u>
Fuel Control P/N	Fuel Control P/N
578000-9	578000-23
578000-8	578000-25A
578000-16A	578000-27
578000-10	578000-26
578000-11	580000-15A
578000-12	580000-13
578000-18A	580000-14
580000-10A	580000-15

H. Zubkoff, Service Engineer

Q. DO THE ROTARY TRACKING ACTUATORS INSTALLED ON THE "101" ROTOR SYSTEM TURN SLOWER THAN THOSE INSTALLED ON THE "STANDARD" H-2 ROTOR SYSTEM?

A. No. The same rotary tracking actuator, part number RD12-16-3 (FSN 2RQ1680-019-6124BH), is utilized on all H-2 aircraft and consequently turns at exactly the same speed. However, a difference can be observed between actuator operations on "standard" and "101" systems. While a relatively short cam movement in the standard rotor would induce a specific control input, greater cam movement is required to produce the same specific control input in the "101" system due to its improved stability and the larger eccentric cam.

W. Wagemaker, Service Engineer



W. J. Wagemaker, Service Engineer

TECHNICAL SECTION

BEARING INSTALLATION/SERVICING PRECAUTIONS

Two precautions should be observed when installing/servicing the pivot bearings used in the main rotor turret pitch control beams and the main rotor blade retention counter-weight crank assemblies. (See arrows in Photos A and B.)

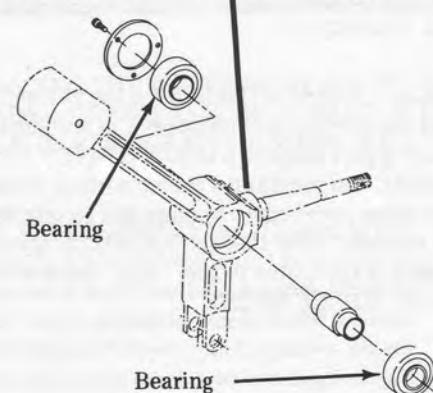
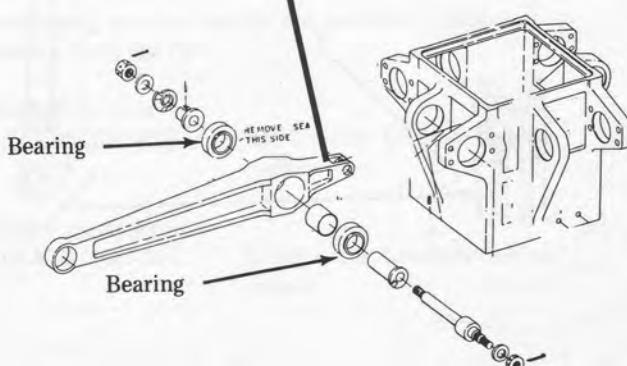
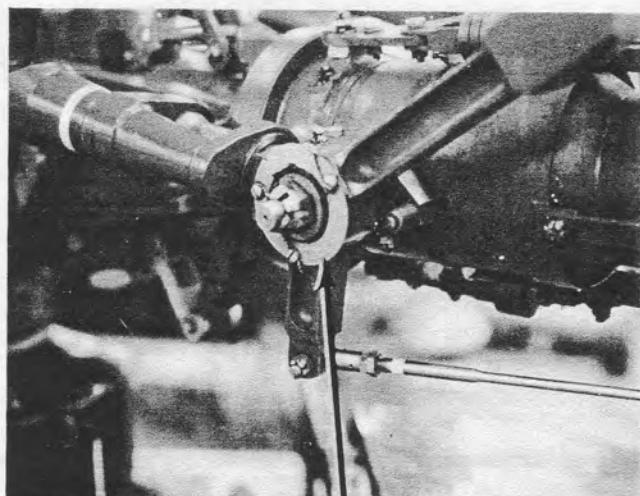
1. Prior to installation of a bearing, it is necessary to remove and discard the retaining ring and seal from one side of the bearing. When installed, the side without the seal and retaining ring MUST face inboard in order to allow grease to lube the bearings.

2. When lubricating these bearings, take care not to generate too much force with the grease gun. It is possible to dislodge the flexible seals on the outboard side of the bearings if excessive force is applied. Rapid, short strokes of the grease gun should be avoided, instead, use long strokes and pump slowly until new grease emerges. If seals do become dislodged, they should be reinstalled at next opportunity as extended operation without proper sealing may result in reduced bearing life due to moisture/dirt and contamination.

Photo A



Photo B



W. Wagemaker, Service Engineer

TECHNICAL SECTION

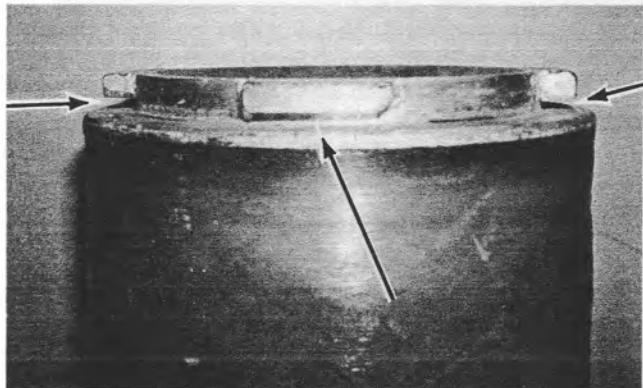
SONOBUOY LAUNCHER TUBE

BREECH LOCK SPRINGS

Several reports of bent or otherwise damaged sonobuoy breech lock springs revealed the following: Launcher tube breech caps (constructed of aluminum), are often damaged due to repeated contact with hard surfaces (like decks). When the launcher tube is installed and the tube is rotated to the lock position, the spring may hang-up on the damaged breech cap lugs and the end result will most probably be another damaged spring. Failure may occur after several locking actions or after only one or two actions following cap damage.

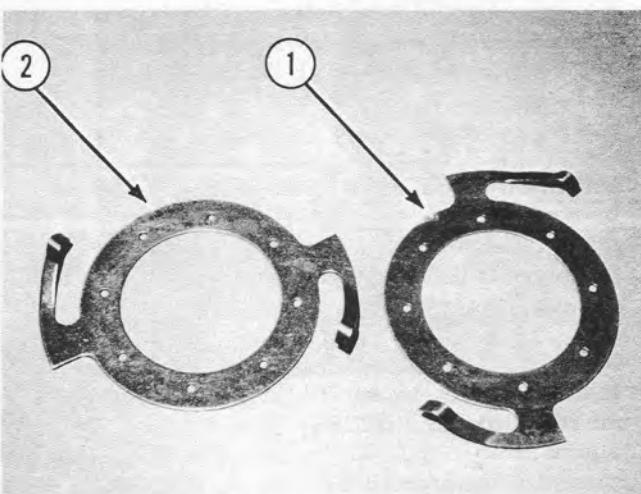
The best way to prevent this type of failure is to handle the tubes with care. Do not drop them, especially with breech caps down. Careful periodic inspection of breech caps for damaged lugs and for proper dimension as shown in Photo A will preclude spring damage.

Prior to installing new or replacement springs, check for the two dimensions listed on the accompanying illustration. Springs which do not conform should be rejected and UR'd. Note in Photos B and C, that two springs are used per installation (one -15 and one -17).



Clearance between the lugs and the breech cap body must be 0.140 ± 0.010 .

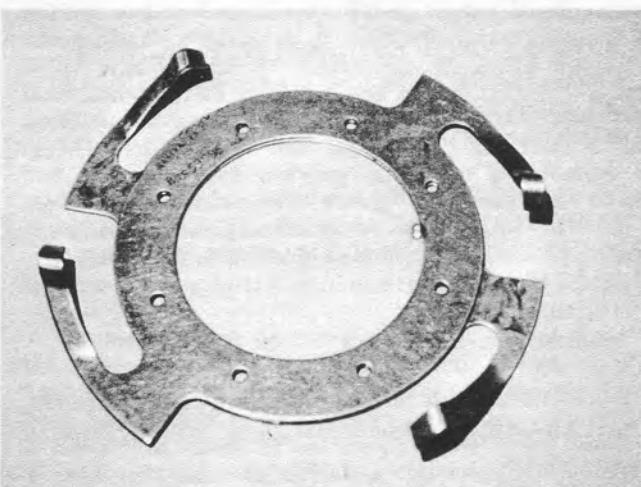
PHOTO A



1. K682765-15 spring

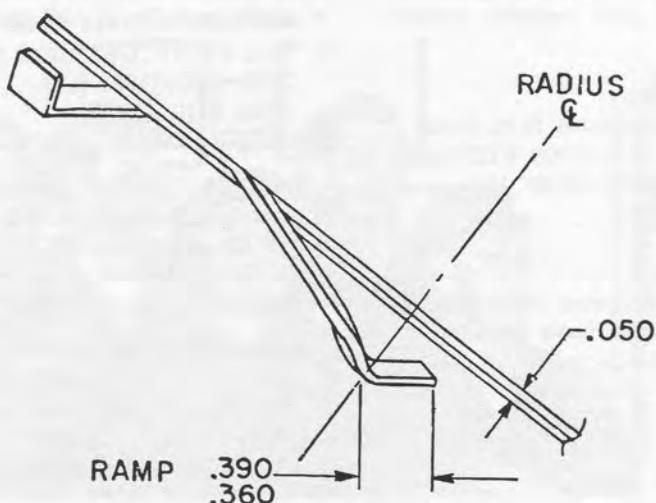
2. K682765-17 spring

PHOTO B



The -17 placed on top of the -15 simulating installed position.

PHOTO C



H. Zubkoff, Service Engineer

PUBLICATION INFORMATION

This list reflects latest manual changes and technical directives released to the field.

NAVAIR 01-260HCA-2-1 — Manual, Maintenance Instructions, Navy Models UH-2C/HH-2D/SH-2D/SH-2F Helicopters, GENERAL INFORMATION
15 February 1972
changed 1 November 1974

NAVAIR 01-260HCA-2-2 — Manual, Maintenance Instructions, Navy Models UH-2C/HH-2D/SH-2D/SH-2F Helicopters, AIRFRAME
30 November 1971
changed 1 November 1974

NAVAIR 01-260HCA-2-4.2 — Manual, Maintenance Instructions, Navy Models UH-2C/HH-2D/SH-2D/SH-2F Helicopters, ROTORS
1 April 1973
changed 1 November 1974

NAVAIR 01-260HCA-3 — Manual, STRUCTURAL REPAIR, Navy Models UH-2C/HH-2D/SH-2D/SH-2F Helicopters
1 August 1974

NAVAIR 01-260HCB-1F — NATOPS FUNCTIONAL CHECKFLIGHT CHECKLIST, Navy Models UH-2C/HH-2D/SH-2D/SH-2F Aircraft
1 December 1974

NAVAIR 01-260HCB-4-1 — Illustrated Parts Breakdown, NUMERICAL INDEX AND REFERENCE DESIGNATION INDEX, Navy Models UH-2C/HH-2D/SH-2D/SH-2F Helicopters
1 April 1973
changed 1 November 1974

NAVAIR 01-260HCB-4-2 — Illustrated Parts Breakdown, AIRFRAME, Navy Models UH-2C/HH-2D/SH-2D/SH-2F Helicopters
1 June 1967
changed 1 November 1974

NAVAIR 01-260HCB-4-3 — Illustrated Parts Breakdown, FLIGHT CONTROLS, Navy Models UH-2C/HH-2D/SH-2D/SH-2F Helicopters
1 June 1967
changed 1 December 1974

NAVAIR 01-260HCB-4-5 — Illustrated Parts Breakdown, POWER PLANT AND RELATED SYSTEMS, Navy Models UH-2C/HH-2D/SH-2D/SH-2F Helicopters
1 May 1969
changed 15 May 1974

NAVAIR 01-260HCB-4-6 — Illustrated Parts Breakdown, TRANSMISSION SYSTEM, Navy Models UH-2C/HH-2D/SH-2D/SH-2F Helicopters
1 June 1967
changed 15 May 1974

R. H. Chapdelaine, Manager, Service Publications
NAVAIR 01-260HCB-4-7 — Illustrated Parts Breakdown, ROTORS, Navy Models UH-2C/HH-2D/SH-2D/SH-2F Helicopters
1 April 1973
changed 1 December 1974

NAVAIR 01-260HCB-4-8 — Illustrated Parts Breakdown, RADIO AND ELECTRICAL, Navy Models UH-2C/HH-2D/SH-2D/SH-2F Helicopters
1 June 1967
changed 1 November 1974

NAVAIR 01-260HCB-4-9 — Illustrated Parts Breakdown, SPECIAL SUPPORT EQUIPMENT, Navy Models UH-2C/HH-2D/SH-2D/SH-2F Helicopters
1 June 1967
changed 1 November 1974

NAVAIR 01-260HCD-1 — NATOPS FLIGHT MANUAL, Navy Models SH-2D/SH-2F Helicopters
15 April 1974

NAVAIR 01-260HCD-1B — NATOPS PILOT'S POCKET CHECKLIST, SH-2D/SH-2F Helicopters
1 July 1973
changed 15 April 1974

NAVAIR 01-260HCD-1C — NATOPS AIRCREW MAN'S POCKET CHECKLIST, SH-2D/SH-2F Helicopters
15 April 1974

NAVAIR 03-40KAM-1 — Manual, Overhaul Instructions, FLIGHT CONTROL SYSTEM, Navy Models UH-2C/HH-2D/SH-2D/SH-2F Helicopters
15 November 1965
changed 1 November 1974

NAVAIR 03-95D-11 — Manual, Depot Maintenance Instructions, MAIN ROTOR SYSTEM, Navy Models UH-2C/HH-2D/SH-2D/SH-2F Helicopters
15 January 1966
changed 1 November 1974

NAVAIR 93-95D-14 — Manual, Overhaul Instructions, TAIL ROTOR GEARBOX ASSEMBLY, P/N K671302-1, -3, -5, -7; K671652-1, -3
1 May 1970
changed 1 December 1974

NAVAIR 03-95D-17 — Manual, Depot Maintenance Instructions, TAIL ROTOR BLADE AND GRIP ASSEMBLY, P/N K614001-201, -205, -207; K614701-1, -3
15 December 1972
changed 1 December 1974

NAVAIR 03-95D-30 — Manual, Overhaul Instructions, MAIN GEARBOX ASSEMBLY, P/N K671802-1, -3, -5, -7, -105, -107, -205, -207
15 November 1970
changed 15 February 1974

Det 12, 40 ARRS Receives Maintenance Awards



In photo on left above, Col Walter J. Riley, right, Vice Commander of the 41st Aerospace Rescue and Recovery Wing (ARRW), presents the "Best Detachment Level Maintenance Section Award" in the Aerospace Rescue and Recovery Service (ARRS) to TSgt Jacob W. Hacker of Det 12, 40 ARRS, U-Tapao Airfield, Thailand. TSgt Hacker was NCOIC of Quality Control for the unit during fiscal year, 1973, the period reflected by the award.

The March/April issue of Kaman Rotor Tips reported that Det 12, 40 ARRS, based at U-Tapao Airfield, Thailand, won the Aerospace Rescue and Recovery Service's 1973 Best Detachment Level Maintenance Section Award.

The award was based on inspection results from various levels, outstanding in-commission rates on the unit's aircraft, and the outstanding rescue support the unit provided to the Strategic Air Command during SEA operations. In photo on right above, Col Riley presents a trophy to SSgt Gary W. Brown, left. SSgt Brown was also a member of the crew which earned the coveted award. In addition, Brown was a crew chief on one of the unit's two Kaman HH-43F "Huskie" aircraft. Det 12 provided continuous, 24-hour 7-day/week coverage, never going non-operational during the period covered by the award . . . truly an outstanding record.

MSgt William N. Brooks, presently at Hill AFB, Utah, SMSgt Paul N. Koon, now at Robbins AFB, Ga., were maintenance superintendents and Lt Col Norman C. Buck was detachment Commanding Officer. Colonel Buck is

presently commander of the 301st OMS at Lockbourne AFB, Ohio.

The competition was among other detachment-size organizations with HH-43, H-1 and H-3 helicopters. The award was based on a number of factors, including NORS, NORM, and In-Commission Rates, Higher Headquarters Inspection Results and Staff Assistance Team visits.

The unit was never non-operational — the only Thailand based HH-43 unit that was always "ready" — and provided continuous 24-hour daily alert coverage. The maintenance section had the highest OR rate in SEA and never received a rating less than Satisfactory on over twenty inspections during the year from base, squadron and wing personnel.

The USAF photos shown here were taken during presentation of the trophy and were just recently made available.

The last issue of Kaman Rotor Tips reported some of the life-saving activities of Det 12, and, in keeping with Kaman's continuing award program, Scrolls of Honor have been presented to members of Det 12, 40th ARRS. A few of the recipients are shown in the photo below.

From left, Capt Hal Schwartz, Sgt Frederick Marshall, SSgt Gary Brown, Capt Chuck Gelatka, Sgt Michael Misiecwicki, and Maj John C. Flournoy. Those who received the award but are not shown in the photo are SSgt Norman Thomas, 1st Lt James Bizzell, TSgt Robert Willoughby, SSgt Gail Stokes, Capt Leslie Bear, MD, Capt Tommy Hilsman, MD, and Capt Adam Romeiser, MD.



A WRS Capabilities Proved

In

Hurricane "Carmen"

By Bill McLaughlin
Manager, Public Relations

On its first flight into a full-blown Atlantic hurricane — "Carmen" in the Gulf of Mexico, September 6-7 — the Kaman-developed Airborne Weather Reconnaissance System (AWRS) was instrumental in raising the hurricane warning to the Louisiana coast where the storm eventually came ashore.

The system also detected an increase in Carmen's forward speed, resulting in the issuance of the warning by the National Hurricane Center several hours earlier than had been contemplated.

The AWRS/Carmen flights generated a large volume of computerized statistical data on the storm structure which is still being analyzed by meteorologists and the Kaman AWRS team. The synoptic data from the flight — measuring and recording at five-second intervals more than a score of atmospheric values and aircraft motions — covers several hundred feet of paper printout and three large reels of magnetic tape.

More useable data is produced on a single AWRS mission than the entire 30-year history of aerial weather reconnaissance has produced to date, according to an Air Force spokesman. Availability of this data will enable meteorologists to formulate more reliable numerical models of storm structure which allow for variables yet to be encountered and measured, and thus will lead to improved forecasting.

AWRS has a one-of-a-kind inertial-Omega navigation system which is potentially the most accurate in existence. Where satellite coverage provides positional accuracies on storm centers of approximately 25 miles, and existing weather reconnaissance aircraft report positions with approximately 10-mile accuracies, the AWRS aircraft substantiated its Carmen fixes within two nautical miles. This accuracy will improve to one nautical mile when more low frequency Omega transmitters are operational next year.

While positional accuracy is important, AWRS measures other equally significant meteorological parameters such as wind velocity and atmospheric pressure. These parameters are important in locating the precise center of the storm as well as in forecasting its future. Where existing weather reconnaissance aircraft have accuracies within 12 knots of wind and six millibars of atmospheric pressure, the corresponding AWRS accuracies are one knot and 0.2 millibar.

The prototype AWRS aircraft, a Lockheed WC-130B Hercules, is assigned to the famed "Hurricane Hunters" of the 53rd Weather Reconnaissance Squadron, Air Weather Service, Military Airlift Command, based at Keesler AFB, Mississippi. Since its delivery for operational testing and evaluation last May, the system has had a busy season. It tracked tropical storm "Alma" across Venezuela and Colombia in early August, deployed to Arizona for five missions into Pacific hurricane "Maggie" off the Mexican Baja peninsula and returned to Mississippi in time for two flights into Carmen before that storm struck the delta region southwest of New Orleans. First detected by satellite photo, Carmen was tracked across the Caribbean to the Yucatan peninsula,



where it stalled for several days before turning north into the Gulf. By noon on Friday, September 6, it was centered 350 miles south of New Orleans, moving northward at seven miles an hour. A hurricane "watch" prevailed along the Gulf coast from Florida to Texas.

As it approached a landfall, Carmen was scouted by seven Air Force and eight Navy weather reconnaissance aircraft. With the storm approaching the coast, National Hurricane Center (NHC) required position reports at three-hour intervals, instead of the usual six-hour "fixes" taken when the storm was further out.

Launched from Gulfport, Mississippi, Municipal Airport at 5:45 P.M., the AWRS aircraft spent five hours in the storm, flying a criss-cross pattern through the eye at the 10,000-foot altitude. AWRS instrumentation automatically took continuous samples of temperature, pressure and dewpoint/humidity; measured and recorded wind speed and direction and aircraft motion and position information. All of this information was processed by on-board computers. The data was displayed digitally on the electronic readout, recorded on the medium speed printer and on magnetic tape.

To locate the storm center, the crew positioned the aircraft with maximum winds abeam and maximum drift angle registered on the display. Penetrating toward the relatively calm eye, wind speed built gradually to a peak of 125 miles an hour and then fell off dramatically to as low as one mile an hour. Because the penetrations were made at night, little could be seen inside the eye. Weather radar "painted" the circular eye wall clouds during orbits in the center.

Dropsondes were launched at key points. Dropsondes are parachute-borne cylindrical sensors which measure temperature, pressure and humidity as they fall toward the ocean's surface. The measurements are automatically radioed back to the aircraft, where they are recorded on paper tape. This data is also processed in the AWRS computer and factored into the meteorologist's reports.

Four firm "fixes" were made on Carmen's position and radioed with other vital meteorological data to the National Hurricane Center in Miami, by way of a communication link with MacDill Air Force Base, Florida. After submitting its final report, the AWRS crew was complimented by the National Hurricane Center for "an excellent mission." The Gulf coast bases had been evacuated because of Carmen's approach, forcing the AWRS crew to land at Little Rock, Arkansas AFB at 0230. The crew was airborne nearly nine hours. Shortly thereafter, at 0300 the NHC issued the hurricane "warning" for the Louisiana area where the storm struck on the evening of September 7. At about the time the storm effects were being felt, another crew again flew the AWRS aircraft into Carmen, duplicating and verifying the results of the first mission.

The AWRS aircraft deployed in early November on a one-month assignment to the typhoon belt in the Pacific to work with units of the 54th Weather Reconnaissance Squadron, the "Typhoon Chasers," based at Andersen AFB, Guam.



Missions of Mercy

One Four-Pound Save

On 13 October 1974, a call was received at the 11th U.S. Air Force Hospital requesting an emergency medevac for a 14-hour-old premature baby. The tiny rescuee, weighing only 4 pounds, was running a high fever. "Joker" was notified and Det 12, 40 ARRS, U-Tapao RTNA, Thailand, received flight clearance within 20 minutes. While arrangements were made by phone with the 5th Army Field Hospital in Bangkok to provide ambulance service from Don Mong Airport to Drommit Hospital, a slight delay was encountered due to a malfunction in the incubator. When the problem was resolved, Pedro and its crew, consisting of pilot, Capt Russell J. Spahr, copilot, 1st Lt Thomas W. Kemper, doctor, Maj Lin Ho, crewmen, SSgt Howard R. Sheets, and SSgt Gary W. Brown headed to Bangkok. Upon arrival, the tiny rescuee and his mother were swiftly transferred to the waiting ambulance. Dr. Ho, the attending physician on the flight, later stated that a "save" should be credited to Det 12.

Pensacola SAR Rescue

In a speedy 30-minute rescue recently, the Pensacola Florida SAR team medevaced an ill man. The Search and Rescue Coordination Center (SRCC) at Pensacola received an emergency call from Sherman Tower requesting a medevac. A member of the Summerdale crash crew, ABH3 S.J. Treadway at Naval Air Station Saufley (NASS) was suffering severe abdominal pains. The helo, crewed by Lt(jg) Raymond F. Haseltine, pilot, Lt(jg) Pierre N. Charbonnet, copilot, ADJ1 Thomas J. Kelley, 1st crewman, and HM2 John Fitch, proceeded to Summerdale, Alabama, about 19 miles away. When the ill man was aboard, the corpsman examined him and advised the pilot the patient should be taken to NASP hospital instead of NASS.

Lt Haseltine notified the SAR coordinator and vectored the aircraft back home. An uneventful landing was made and the patient was taken to the hospital in the waiting ambulance. The abdominal pains were later determined to be the effects of kidney stones.

Dirty Sally Struts Her Stuff For SecNav

by Lt(jg) M. Muetzel

In the month of September, Secretary of the Navy J. William Middendorf, II, visited units of the Sixth Fleet. One of the ships visited by SecNav and his official party was the USS Garcia, (HSL-32, Det 6) home deck of the H-2, affectionately nicknamed "Dirty Sally."

SecNav arrived by deck-to-deck transfer from USS Inchon, via her H-1's. AN Chuck Blackley chalked up a first for himself and the Garcia by performing as LSE for the Hueys. Dirty Sally then demonstrated her flight and LAMPS capabilities in a flyby and an actual Helicopter Inflight Refuel (HIFR) exercise. ADJ2 Jim Curry, ADJ3 Al Waggoner, and ATAN Jack Pauden handled the fuel lines. Following a tour of the ship, SecNav returned to the hangar to prepare for the best part of his visit.

AWAN Chris Peterson briefed the Secretary while Sally's crew, OINC Hank Lewandowski, Lt Ed Solder, and AWAN Wyatte DeLoache kept her engines running. Tight

Oceana SAR Det Aids USS Cunningham

While performing routine maintenance on their aircraft, the Oceana SAR det received word that their help was needed. A sailor aboard the USS Cunningham was suffering from an unknown infection and required immediate hospitalization. Det personnel pitched-in to complete the maintenance and the aircraft was speedily and carefully checked-out. After the maintenance test flight, the rescue crew, Lt Curtis W. Frandsen, pilot, Lt(jg) Peter Hoffoss, copilot, AE2 Ted Wicker, 1st crewman, and AN Dan Caudill boarded the aircraft and headed for the ship. As the helo approached, the USS Cunningham headed into the wind preparing for the transfer. The hoist was lowered and the patient, J. Alvarado (rank unknown) was lifted into the aircraft. Thirty minutes later, the patient was at the Portsmouth Naval Hospital.

CVT-16 SAR Det Rescues A4 Pilot

An A4 was shot from a catapult aboard the USS Lexington and, instead of becoming airborne, the aircraft fell to the sea, directly in the path of the huge carrier. Moments before the aircraft impacted with the water, the pilot ejected and was safely lowered by his parachute.

Meanwhile, a Kaman Seasprite helicopter, piloted by Lt(jg) T. Lee, and Copilot, Lt C. Hartwell, was in the air on Plane Guard duty. The rescuers saw the A4 heading toward the water even before their earphones crackled with the news of the mishap. As the helo crew readied themselves for the upcoming rescue, the helo pilots sped toward the downed airman. The first and immediate problem was whether the giant carrier was going to strike the man in the water. It seemed to the crew that the "Lex" veered at the last moment and, as the ship passed the pilot in the water, numerous life rings were thrown from the flight deck area. The survivor attempted to swim towards them.

Lt Lee brought the helo in low and allowed the "wet crewman" to enter the water to aid the pilot. The crewman, ADJAN Michael J. Peschl, approached the rescuee and reassured him all would be "OK" in a few minutes. Peschl determined the parachute was wrapped around the man's legs and he dove under water to free the airman. When ready, Peschl signaled the chopper to lower the rescue sling and both men were hoisted to safety. The helo was then ordered to retrieve the life rings remaining in the water. Hoist operator and 1st crewman on the flight was ADJ2 J. Mason.

scheduling precluded a lengthy examination of her exterior beauty, but the trip to the next tour stop, the USS Independence, provided an opportunity for the aircraft to "strut her stuff." Det Chief Al Adams escorted SecNav onto the flight deck, and AE2 Woody Woods, AE3 Lou Harris, and AMS3 Mac McQueen pulled the chains for the Secretary's first flight as sensor operator. "AWAA" Middendorf's introductory flight was the most successful operation of the day. Sally performed to perfection, smooth and easy, and gave the "new man" a comfortable feeling as he twirled all the knobs. No subs dared come near, but when SecNav was deposited on "Indy" he stepped to the deck with a clear idea of the many capabilities of LAMPS and the crews who make it happen.

(Editor's Note: With all the action going on, Lt Muetzel never did get an opportunity to see if Secretary Middendorf had signed his promotion papers!)

Det 5 Returns from WestPac

by Lt(jg) J. P. Denson

On October 18th, Helicopter Anti-Submarine Squadron (Light) Thirty-Three (HSL-33) Detachment Five returned from WestPac aboard the USS BRADLEY, DE 1041, after a successful deployment on the USS DAVIDSON, DE 1045. Flying the SH-2F "Seasprite," Det 5 scored an impressive number of firsts in their six and one-half month deployment. As a unit of the LAMPS/Destroyer Escort combination, Det 5 participated in nine anti-submarine warfare (ASW) exercises, including joint USN/Japanese; USN/Korean, and; USN/Taiwanese exercises. The exercises included one amphibious and several special operations. The result was more ASW involvement than any West Coast LAMPS detachment had ever before seen. Detachment 5 was also the first to complete Refresher Training and WestPac deployment on a Pearl Harbor based ship. Demonstrating the flexibility of LAMPS, Det 5 transferred its helicopter, maintenance supplies and personnel to a total of six different ships. Two of these transfers were to Service Force ships, an Ammunition Ship (AO) and an Oiler (AE) for ASW commitments. The last transfer was to the USS BRADLEY for operations and transit to CONUS.



In photo above, members of Det 5 pose with their bird. Kneeling, from left, ADJ1 Joe Lemon, ADJAN Tom Backora, AW3 Jeff Barnes, AW3 Kenny Waldrop, and AMH2 Jim Cowles. Standing, from left, Lt(jg) Jim Denson, Lt(jg) Dave Rannells (AOINC), AT2 John E. Johnson, AX1 Tom Stewart, AE1 Rollin Lee, AMCS Garnett Hassett, Lt(jg) Jerry Bickler, and Lt John Olmstead, OINC.

While deployed, Det 5 visited Yokosuka, Japan, Pusan and Chin Hae, Korea, Hong Kong, Subic Bay, R.P., and Kaoshiung, Taiwan.

We would like to express our special thanks to Kaman Tech Reps Don Lockridge, Ken Smith, and Lyle Bentley for their help and support during our stays at Det Cubi.

Imperial Iranian Airforce Personnel Earn Kaman Scrolls of Honor



WO G. H. Zeinali

Presented . . . "in recognition of outstanding pilot and crew performance while conducting a rescue or mission of mercy with a Kaman helicopter." Certainly, those words applied to the pilot and crew of the Imperial Iranian Airforce HH-43 helicopter which took part in a spectacular rescue at Mehrabad Airport, Iran. The Kaman Scroll was presented to copilot, WO A. Sayehbarg (no photo available), pilot, WO G.H. Zeinali, rescue crew-members, 2nd WO M. Shahsavar, MSgt A. Daliri, TSgt K.H. Hakimi, and MSgt K.H. Behashti. Also shown but not receiving a Scroll, is 1st Lt D. Djalalai, the aircraft Maintenance Officer. Members of the crew insist that part of the reason for their success is the excellent maintenance which is a direct result of Lt Djalalai's efforts.



Lt Djalalai

2nd WO Shahsavar



MSgt A. Daliri



TSgt K. H. Hakimi



MSgt K. H. Behashti



HSL-30

Change of Command Ceremonies

by Lt W. G. Harris,
HSL-30 PAO

NAS, Norfolk, Va.—In Change-of-Command ceremonies on 31 October, 1974, Cdr Wade J. Pharis relieved Cdr Daniel R. Bilicki as Commanding Officer of HSL-30. Although new to the LAMPS community, Cdr Pharis is well-versed in helicopter activities. His helo experience ranges from Fleet Introduction Programs (FIP) to Combat Search and Rescue (SAR). Cdr Pharis, previously CO of HS-3, reported to HSL-30 in June, 1974, for Replacement Air Group (RAG) training.

As he assumed command, Cdr Pharis exhibited his understanding of the LAMPS requirements:

"Our challenge is to nurture the fledgling LAMPS concept, to provide the Fleet with the highest quality replacement maintenance man, pilot, and aircrewman possible. In this respect, we are the "LAMPS LIGHTERS!" We must provide the Fleet with a strong flame if the concept is to survive. As we maintain the immediate objectives of safety, operational readiness, quality personnel retention, and personal professional development in mind, we are meeting that challenge."

HSL-30 utility detachment personnel fly, maintain and handle their own aircraft and function as the "Air Department" aboard the host ships. The squadron has been tasked to support the flagship of Commander Sixth Fleet, Commander Second Fleet, Commander Mideast Forces, and Commander Amphibious Forces, Atlantic Fleet. In addition, it provides services for contingency operations, special exercises, development projects, midshipman cruises and Coast and Geodetic Survey Operations. Detachments from the Squadron have served with the fleet in peacetime and combat on every ocean of the world. Squadron personnel represent a cross section of every type squadron in the aviation community. Many of them are combat-tested veterans and most have been specially trained for the squadron mission.

The Squadron Readiness Training Organization is operated by the Training Department and Fleet Readiness Aviation Maintenance Personnel (FRAMP) Department.



"I relieve you of Command." Cdr Pharis, right, and Cdr Bilicki.



Cdr W. R. Lang,
Executive Officer

These departments train Fleet replacement pilots, aircrewmen and maintenance personnel in the highly complex missions of LAMPS. Replacement pilots and aircrewmen attend a four-month course of instruction which includes 50 hours of flight time. In the classroom and in the air, they are instructed in ASW, ASMD, Sea/Air Rescue and Utility Tactics. Maintenance personnel are instructed in the skills that are required to maintain the aircraft aboard ship.

The Squadron trains and deploys in the H-2 Seasprite helicopter built by KAMAN Aerospace Corporation. The newest aircraft model in the Squadron inventory is the SH-2F. Like the SH-2D, it is configured for the LAMPS mission; but, the SH-2F has numerous mission upgrading changes. Some of the most significant changes are: a new rotor system, improved directional control, increased-power engines, and a reduced footprint landing gear which makes the aircraft ideal for use on the small ship environment.



The photos provide a candid look at HSL-30's Change-of-Command and after-ceremony "mingle." Note high school drill team, top right. The team performed at the ceremony and is only one of the community projects supported by HSL-30.



H-2 LAMPS Activities..

Update

by B. A. Goodale, Manager
Military Marketing

With LAMPS det deployments approaching their third anniversary in December 1974, a review is in order. Cognizant Navy agencies advise that LAMPS is an extremely successful program, greatly enhancing the weapons systems of the destroyers and escorts from which they operate. Both formal and informal reports indicate Kaman SH-2D's and SH-2F's are doing an outstanding job.

Through September, 38 detachments had deployed on long cruises, 21 of these from west coast squadrons and 17 from east coast squadrons. In addition, there have been many at-sea evaluation programs, as well as training and work-up cruises. The statistics reported here apply only to the long cruises.

The U.S. Navy now has a significant number of destroyers at the DLG-26 and DLGN-35 classes outfitted for LAMPS, in addition to destroyer escorts at the DE-1040, DE-1052 and DEG-1 classes. Many of these have participated in extended cruises to date . . . some more than once. Most long cruises last 5 or 6 months, with some dets deployed as long as 7 or 8 months. (Occasionally a LAMPS det will change to a different ship part way through a deployment period.) As of September 1973, all deployments have been with the SH-2F model. SH-2D's and SH-2F's have made nearly 6000 flights while deployed on long cruises, accumulating nearly 9000 flight hours, of which approximately 13 percent were at night. Six of the deployed detachments are home-based in HSL-32, Norfolk, Va.; 4 are based at HSL-33 and HSL-35 in Imperial Beach, California.

In March 1972, east coast squadron HC-4 and west coast squadron HC-5, were redesignated, HSL-30 and HSL-31, respectively, reflecting the new roles of these squadrons. As more LAMPS aircraft were delivered, additional squadrons were established. HSL-32 and HSL-33 were formed in mid-1973 at Norfolk and Imperial Beach, HSL-35 in January, 1974 at Imperial Beach, and HSL-34 in September, 1974 at Norfolk. Next July, HSL-37 is scheduled to be formed in Hawaii, with others to follow.

Through October 1974, the Navy has 58 SH-2F's and 16 SH-2D's in service, modified by Kaman from HH-2D's into the LAMPS configuration. By December 1975, 28 more SH-2F's will be delivered, for a total of 102, according to Owen Polleys, H-2/LAMPS Program Manager. Starting about 1976, as the aircraft return for their



scheduled overhaul, a thorough program, designed to extend service life, is planned. The Navy intends to continue using the SH-2F through 1985-1990. Kaman is now working with the Navy to effect several improvements in the MK-1 sensors and the aircraft. These improvements, which are generated from fleet experience, will further enhance mission capability and reliability. Changes recently introduced in the SH-2F, such as the new "101" rotor, the up-rated landing gear with its smaller footprint, and the higher power T58-8F engines, have gone a long way in this regard. The SH-2F is enjoying an excellent reputation in the fleet, and in Fiscal Year 1974 had the best safety record of any operational helicopter in the Navy, while utilized in one of the toughest environments. Credit for this is due mainly to the professional performance and enthusiasm of the detachment and ships personnel who have operated the system so successfully.

In order to operate safely in heavier seas and higher winds, the Navy will incorporate a new system on their ships called HST (Hauldown/Secure/Traverse) to guide the helicopter down to a spot on the deck, rapidly secure it, and traverse it in and out of the hangar. Final proposals were submitted to NAVAIR in October including one from Kaman which has attracted much interest in the past several months through presentations and demonstrations by Sam Seay, Project Engineer/Ship Systems, and John Anderson, Project Pilot. A decision is expected from the Navy this December.

Several international navies and air forces have expressed keen interest in the H-2 for their shipboard requirements and as a utility/gunship helicopter. This interest is promoted to a large degree by frequent visits of LAMPS ships to foreign ports, often occasioning demonstrations of the SH-2F.

The success of the SH-2F LAMPS program with its MK-I sensors has nurtured a follow-on sensor development called MK-III. The Naval Air Development Center in Warminster, Pa., is using two Kaman YSH-2E helicopters as test beds for this program.

Wayne Cerny, H-2 APML and ILSMT Conference Chairman Reassigned

Kaman Aerospace President, Mr. William R. Murray, left, presents KAC best wishes and special, "Off-To-A-New-Challenge" poster to Mr. C. Wayne Cerny, H-2 APML (Assistant Program Manager, Logistics), and ILSMT (Integrated Logistic Support Management Team) Conference Chairman for the last three years. Mr. Cerny has been reassigned to handle overseas logistics coordination for an Iranian helicopter program. Mr. Cerny, who started as an assistant APML early in the SH-2 program, later assumed complete program responsibility. During his tenure as APML, he was responsible for development of the LAMPS MK-1 support concept from the early deployment stages to the present including related commercial PDLM/Overhaul activities.



A WRS Maintenance Training at Kaman Facility

Recently, Air Force students attended Kaman for a factory Type 1 training course on the Airborne Weather Reconnaissance System (AWRS) Maintenance and Test Set (MTS) at the Kaman plant. The students received instruction in operation and maintenance of the sophisticated test set.

The MTS is a semi-automatic test module which is utilized at the Intermediate Maintenance Level (IMA) by Air Weather Service (AWS) personnel. When a faulty Line Replaceable Unit (LRU) is discovered, it is removed from the AWRS aircraft and returned to the shop for trouble shooting and repair.

by M. Fiaschetti,
AWRS ILS Manager

At the shop, Air Force Technicians connect the faulty LRU to the MTS. By following procedures in the applicable technical manual, trouble shooting to the module and/or card can then be accomplished. Since the MTS is computer controlled, the operator types in commands on a teletype keyboard, causing the computer to "interrogate" the faulty unit. After the interrogation, the computer then prints out its findings on the teletype unit. The test set was delivered to AWS with the AWRS aircraft early in June 1974.



In photo left above, Air Force students, reacting to a simulated malfunction in a unit, use the MTS keyboard to interrogate the suspected module. From left, MSgt Norman L. Swett, SSgt Patrick L. Gallegly, Sgt Norman C. Paine, SSgt Joe R. Walling, and TSgt James F. McQueen. In photo upper right, the students smile with satisfaction as the teletype identifies a faulty unit. From left, Juan J. Chavez, SSgt David G. Useforge, SSgt Marshall B. Wright, Tsgt Bruce A. Kibben, and MSgt Larry W. Magee. In lower photo, the entire group poses in front of the AWRS C-130 for a "Graduation Day" picture. From left, Chavez, Kibben, Wright, Useforge, Swett, Walling, McQueen, Gallegly, Paine, Magee, and Kaman instructor, Don Cronan. (Ruggerio photos)



Det CUBI



Det Cubi . . . Lt Gary A. Adler joins the ranks of those who have attained the coveted 1000-hour mark in UH-2 aircraft. In the photo on the right, Kaman Senior Tech Rep Don Alexander presents Lt Adler with an inscribed plaque to mark the occasion. (USN photo)



HSL-31

Change of Command Ceremonies

In ceremonies conducted at NALF Imperial Beach, California, on 20 September, 1974, Cdr Robert L. Barton relieved Cdr William E. Walker as Commanding Officer of Helicopter Anti-Submarine Squadron (Light) Thirty-One (HSL-31). Guest Speaker was RAdm James B. Stockdale, Commander, Anti-Submarine Warfare Wing, U.S. Pacific Fleet. Cdr Thomas C. Bartholomew is new Executive Officer for HSL-31.

Under Cdr Walker's direction, HSL-31 continued the successful training of pilots, aircrewmen, and maintenance personnel for duty with the Pacific Fleet's Light Airborne Multi-Purpose System (LAMPS) helicopter squadrons. It should be noted that HSL-31 was recently presented with a Commander Naval Air Force, U.S. Pacific Fleet, Safety Award for completing fiscal year 1974 with 5,363 accident-free flight hours. Cdr Walker has moved to Washington, D.C., where he has begun a tour of duty in the offices of the Chief of Naval Operations.

HSL-31's new skipper, Cdr Barton, returns to the San Diego area after serving as Safety Officer aboard the USS Constellation (CVA-64), still deployed in the Western Pacific. Cdr Barton was formerly CO of Helicopter Anti-Submarine Squadron Two (HS-2) and has served tours of duty with Helicopter Squadron Eight (HS-8), Training Squadron Twenty-Eight (VT-28), and the USS Iwo Jima (LPH-2).



Cdr T. C. Bartholomew,
Executive Officer



In photo above, Cdr Barton, left, starts the ceremonial cake-cutting with the aid of Cdr Walker. In photo below, Cdr Barton, at podium, addresses his new command as RAdm J. B. Stockdale and Cdr Walker listen.



HSL-30 Wins Hangar Bowl



The Annual, Norfolk, Va., Hangar Bowl was recently held "somewhere on the east coast." Unfortunately, we do not have a "play-by-play" of the actual game, nor do we have any of the action photos because, as we understand it, the material has been "lost." However, a Navy photographer was able to gather members of the winning team for their Championship portrait.

The winning team, made up of members from HSL-30, reported they "trounced" the team from HSL-32 by a score of 38 to zip. We have been informed HSL-32's team coach is making up the list of his Draft choices for next year's game.

In photo on the left, The Champs — standing, from left, AXAN Michael K. Bost, AO2 J. R. Rue, AO1 William A. Kremser, Jr., Lt William G. Berries, AN Prentice Cuffee, HSL-30's proud skipper, Cdr Wade J. Pharis, ADJAN Charles N. Lacroix, AWAN J. W. Larrett. Bending, on left, AA Jerome J. Porter and AX3 Thomas L. Smith. Kneeling, from left, AMH2 Michael Silvenac, AE3 Roy D. Garner, ADJ3 Robert E. Depoutot, AO1 Clyde L. Patterson and AX2 Andrew J. Tyshynsky.

Loose Ends



What is a talented artist doing in the Navy? ADJANT FRANCIS "GENE" DOUDNEY says he is very interested in mechanics, art is just a hobby with him.

Gene and his latest accomplishment are shown in photo on the left. The Kaman helicopter was carefully carved in the tile of HSL-34's quarterdeck. Using a knife and a razor blade, primitive tools by artists' standards, he completed his project in 3½ days of off-duty work.

Having had little formal training, Gene's artistic ability comes naturally. Among his projects was a sign four stories tall on a 25-story grain elevator in Lincoln, Nebraska. "That was the tallest painting I've ever done," he commented.

Wood has not escaped his touch either. He once spent an entire year constructing a cedar chest complete with hand-carved designs. "I can't just sit down and work on a project," he explained, "I have to be in the mood."

Gene's interest also extends to aviation. He not only flies model airplanes, but has about 100 pilot-hours in light aircraft. Gene has had a desire to fly since he was a child and would like to try helicopters next.

HSL-34 salutes ADJANT FRANCIS "GENE" DOUDNEY, one of its talented "PROFESSIONALS".

Cdr N. Newcomb, PMA 266, related the following true story at the recent ILSMT conference held at Kaman. Cdr Newcomb carefully avoided revealing the name of the ship and the detachment involved.

. . . Late last October, a LAMPS-type ship was steaming out of Naples when it suddenly went "dead in the water." Incredibly, the ship had somehow lost ALL power including emergency power and could not even call Port Services for a tow. After a bit of thought, the LAMPS SH-2 Kaman Seasprite helicopter was taken out of the hangar and positioned on deck.

The aircraft crew, utilizing the helo's battery, powered up its radio, spun the dials, and called Port Services to request a tow. When the tug arrived, the aircraft crew maintained radio contact and coordinated activities, and all this time the helo was securely tied down on the ship's landing pad . . . Now, that's what I call MULTIPURPOSE!

SURPRISE . . . On 15 January 1974, Cdr Jerry L. Vanatta assumed command of HSL-35 based at Imperial Beach, California. While the Commander busied himself with his new duties, his wife Bonnie was busily engaged in arranging a surprise for the new CO. Cdr Vanatta's surprise was the California license plate shown below.

. . . MEANWHILE . . . back at the ranch, er, back on the East Coast, sometime later, a new squadron, HSL-34, was commissioned. On 27 September 1974, Cdr Bruce Borgquist assumed command of HSL-34 at Norfolk, Virginia and promptly became the proud owner of the license plate shown below.

UNTIL they saw it here, neither CO was aware of the other's license plate. SURPRISE!



Greetings

DURING THIS HOLIDAY SEASON, much of our thoughts are with our friends . . . at home or in foreign lands, at sea, in the air, or in new and perhaps strange surroundings.

It is traditional that we extend to everyone our greetings, and yet, how does one express the warm feeling of appreciation and togetherness experienced each time we visit and talk with the people who "make it happen." All we can say is that we here at Kaman extend to all our friends throughout the world: "Holiday Greetings, Best Wishes, and Good Health for the upcoming year."



WILLIAM R. MURRAY, President
Kaman Aerospace Corporation