

CROSSWORD PUZZLE

Crossword puzzle grid with clues for Across and Down. Includes 'Answer to Previous Puzzle' and 'Distr. by United Feature Syndicate, Inc.'



GROUNDWORK FOR 'HARVEST'—Mrs. B. Arthur Breslow (standing, right), fashion show general chairman, meets with four ladies of China Lake's Catholic parish as they prepare the entries they will model at All Faith Chapel Sunday, Oct. 17.

SHOWBOAT 'Autumn Harvest' Gathers Fall Fashions At Chapel

"Autumn Harvest," a fashion show and luncheon, sponsored by the China Lake Chapter of the Church Militant (Catholic parish), will be held at 1 p.m. Sunday, October 17, in the East Wing of the Chapel.

COM Calendar

- FRIDAY: "HOW TO STUFF A WILD BIKINI" (93 Min.)
SATURDAY: "MATINEE" "EVERYTHING BUT THE TRUTH" (83 Min.)
SUNDAY-MONDAY: "THE GLORY GUYS" (112 Min.)
TUESDAY-WEDNESDAY: "MOZAMBIQUE" (98 Min.)
THURSDAY-FRIDAY: "SHE" (106 Min.)

Dental Health Tips Listed

(Continued from Page 2) tend to pack into tooth fissures and grooves, cookies, crackers and candies, for instance. These are your teeth's worst enemies. Nutrition Important Good nutrition is especially important in early childhood, when the teeth are still forming.



BHS STUDENTS TOP U.S. SCHOLARS—Ranking in the top two per cent of seniors in the United States according to their scores on the National Merit Qualifying Exams are nine Burroughs students.

Combined Federal Campaign Kickoff Oct. 15



Vol. XX, No. 40 Naval Ordnance Test Station, China Lake, California Fri., Oct. 8, 1965

RAdm. M. E. Dornin ComOpTevFor, Visits VX-5 Story and Pictures On Pages 4, 5

Raising of a big red, white and blue banner in Switzer Circle last week previewed the opening of NOTS 1966 fund-raising for charitable organizations.

The new concept in on-the-job charitable campaigns will be conducted at NOTS, from Oct. 15 through Oct. 29, Station Commander Capt. J. I. Hardy announced this week.

Called the Combined Federal Campaign, the "Once for All" drive will provide opportunity for federal and military people to combine in one contribution their support of three volunteer organizations that in the past have carried out separate fund-raising drives.

The 1966 Combined Federal Campaign will collect in one drive with one pledge contributions to the local United Fund, the National Health Agencies and the International Service Agencies.

All Federal employees in Indian Wells Valley will make their one-time contributions during the "Once For All" campaign. Participating in the Combined Federal Campaign locally will be NOTS personnel and staffs of the Ridgecrest and Inyokern post offices.

Although the CFC concept is new here, it was successfully tested last year in Washington and five field locations. Both civilians and servicemen expressed their liking for the combined fund-raising plan. Economy in collection costs to beneficiary agencies and to the government are added benefits derived from CFC.

Payroll Deduction Authorized A new way to pledge is offered. Payroll deduction is now authorized for federal employees to spread their gifts over a one-year period in lieu of one or two large payments. Those who wish may still elect the option of a single cash donation or pledge.

Annually about five million civilian employees and members of the Armed Forces throughout the world have raised over \$25 million in support of their three charitable drives. Even though these campaigns have been successful, civilians and servicemen expressed a strong desire for one campaign a year to raise money for all causes.

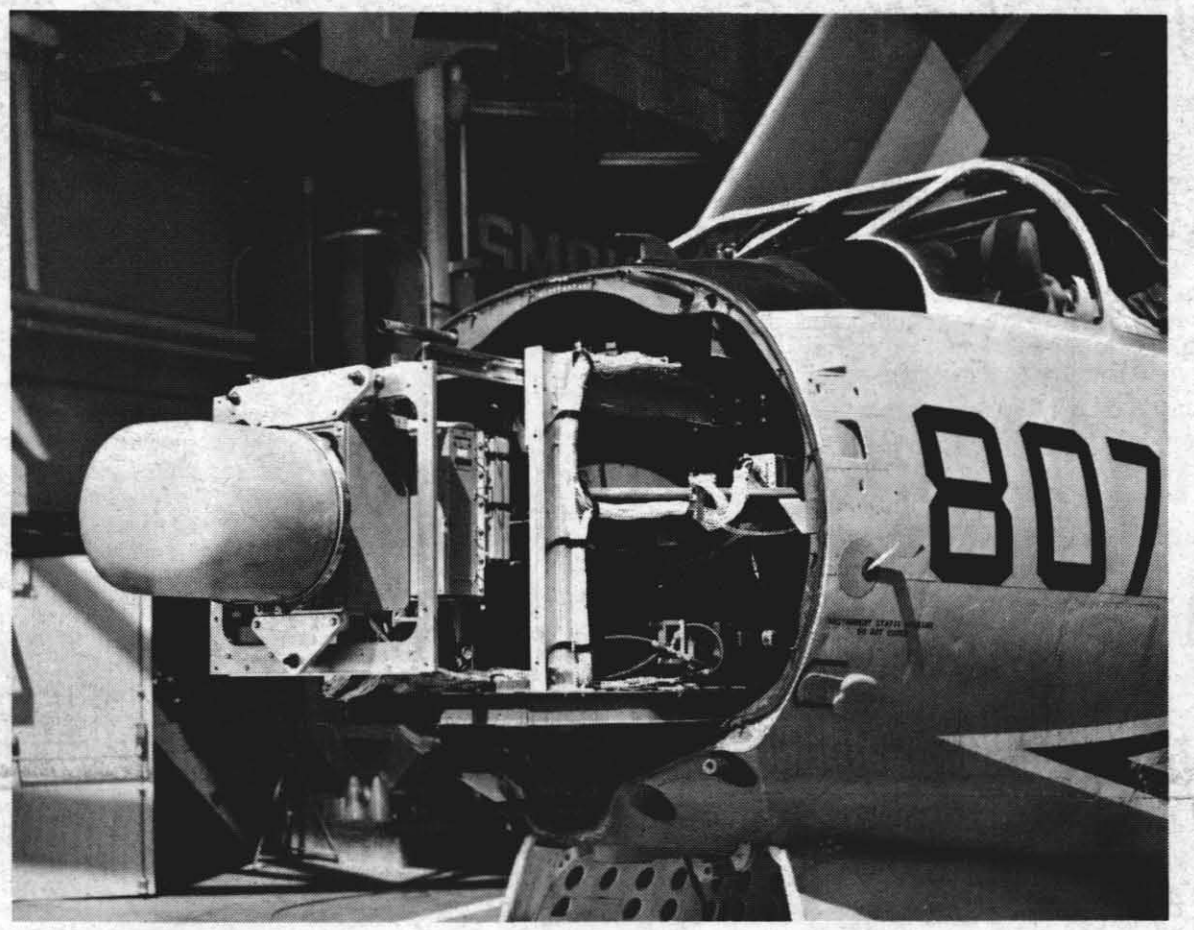
Surplus Sale Soars In Volume, Attendance

By 7 a.m. last Saturday crowds had started to gather for NOTS' first sale of government surplus property. By the time the day ended, an estimated three thousand people had come to Warehouse 14 to see what was going on.

Furniture proved to be the most popular commodity with technical books running a close second. Among single items included in the sale, big street lamp globes of glass or plastic intrigued the imagination of many people. At \$1.00 apiece, they were sold out early in the day. Even the display set up to show possible uses of the surplus headboards sold, books and all, to a single customer.

A festive air prevailed, with every one good-natured about the long waiting line to get into the store and a waiting line to check out purchases at the cash register. So busy were people in the Disposal Branch, that Supply Department Director Capt. P. W. Jeffrey and Material Officer

NOTS Evaluates Nation's First Microminiaturized Flying Radar



MICROMINIATURIZATION — The airborne XR-45 Multimode radar is shown installed in nose of former F3D light attack fighter. 200 hours of testing at NAF (82 in air) proved effectiveness of nation's first such system with micro circuitry.

Radar Gives Plane Low-Level Agility

Its name is the XR-45 Multimode Radar, and after six months of intensive ground and flight testing at NAF, this airborne radar system with microminiaturized circuits is the first of its kind in the United States.

The radar's functions tested out failure-free through 200 operating hours at NAF, of which 82 were flight hours in a TF10B jet.

According to Francis L. Guthleben, Aviation Ordnance Department electronics engineer and the project engineer, primary emphasis during the program was "automatic terrain following" (ATF) and air-to-ground ranging. The XR-45 was tested also for its "terrain avoidance/contour mapping" and simultaneous operational modes.

Hugging the Terrain "We began this project in March this year," says George Wright of AOD's Radar Branch, head of Attack Radar Section. "The purpose was to determine the reliability and ease of maintenance of this system."

"In its ATF mode," he explains, "the XR-45 safely guided its aircraft close to the deck over some very rugged

throughout Indian Wells Valley. Coordinating Committee Coordinating committee for Indian Wells Valley "Once For All" (Continued on Page 3)



KEY CAMPAIGN PERSONNEL — Department representatives who will coordinate collections for the Combined Federal Campaign pose with Capt. J. I. Hardy, ComNOTS. Front row (l-r) Capt. Hardy, co-chairmen John Simpson, Lcdr. Fred Elliott, and Ed Casaroli, Phyllis Hall, Sarah Leatherbury, Carolyn Kruse, Jim McGlothlin, general chairman. Second row (l-r) Bill Borgstadt, Ens. R. G. Cable, W. H. Broyles, Al Wacker, Pat Zemball, Terry Wiruth, Lt. D. C. Jordan. Back row (l-r) Fairall, Jim Baird, Quentin Dalton, Cecil Wade, Bill Maddux, Chief C. R. Garcia.

Form with fields for 'From', 'TO', and a 'PLACE STAMP HERE' box.



# Morris Dam Observes Twentieth Anniversary

## NOTS Pasadena

VIRGINIA E. LIBBY — EXT. 638

"Remember when . . ." was the conversational gambit at the Morris Dam 20th Anniversary luncheon last Friday, Oct. 1. Enthusiastic discussions covered many events that had taken place during the past 20 years since about 80 percent of the original CalTech group made the transition to Civil Service in October, 1945.

It all began when there was an urgent need for a more effective torpedo during World War II.

In 1942 the California Institute of Technology was selected to provide a nucleus of scientists and engineers for the improvements on the MK 13 which, at that time, was the only aircraft-launched torpedo available for Fleet service; and for research leading to the design and development of a new weapon.

Under contract to the Office of Scientific Research and Development, the "Morris Dam

Group" headed by Dr. F. Lindvall, set to work in a one-room office of the Astro-Physics Shop on the CalTech campus.

Their work focused on the development of test equipment to solve ballistic and structural water-entry problems, and out of these studies came significant improvements in the MK 13.

In addition to the Variable Angle Launcher which was completed in 1948, replacing the Fixed Angle Launcher inherited from CalTech, numerous new and improved research and development facilities including an underwater cableway and the propulsion pits have been constructed.

"Progress" has been our business and it is a tribute to those individuals who have contributed to the growth of NOTS as it stands today, thereby playing a major part in the defense of our nation.



DISCUSSING San Clemente Island with Capt. G. H. Lowe, Officer in Charge, NOTS Pasadena, Lt. C. W. Amick, Operations Officer, (l) points out Wilson Cove where he reported to NOTS in Aug. 1963.



CHOW LINE—The horn of plenty was indeed in evidence on the luncheon tables at the Morris Dam anniversary.



AN "OPEN AIR" PRESENTATION of Federal Service Pins is made to P808 Division employees by Cdr. H. H. Schleuning, Jr., Technical Officer (center) at the Morris Dam anniversary festivities last Friday. D. J. Wilcox, Head, UOD (l), looks on as letters of commendation and pins are presented to (left from Wilcox) D. A. Kunz, Division Head, N. E. Cornford, D. G. Hunt, R. A. Graf, C. E. Grandall, and C. E. Ballard. Cornford, Hunt, Grandall, and Ballard received both the 20-year Federal Service pin and the NOTS 20-year pin. Kunz and Graf had previously been awarded 20-year Federal Service pins and were presented with NOTS 20-year pins at the ceremonies.

## ESO DOINGS

The ESO sponsored Masquerade Party which will be held Friday, Oct. 29, is taking on all the color of a Mad Hatter's Tea Party (without the tea, of course).

Rumor has it that several P802 people are coming as torpedoes. Interesting, but hardly unique, as someone in P-8096 is trying to rent an 007 (James Bond) costume and personality.

The previous article mentioned that there would be dancing. This is true, but we don't want to give the idea that this party is for dancers only. There will be plenty of entertainment and fun things for non-dancers, too.

Remember that your friends from outside the NOTS family are welcome. So plan to join in on the mirth with hilarity befitting the occasion.

### Bowling Roundup

By Ray Hanson

Team No. 1 (10 wins, 2 losses) now leads the NOTS Wednesday night bowling league, followed closely by the Hunees, whose 9-3 record puts them in an admirable position for overtaking Team No. 1.

Team No. 1 personnel are Mary Bologna, Barb Ring, Jan Reeves, Ron Preston, and Bill Alberts.

To give an idea of how closely the league is matched, the next five places (3rd through 7th) are occupied by 10 deadlocked teams. That's right! Five ties below second place.

High scores for the third week are as follows: team series, Team No. 11, 2931; team game, Quiet Five, 1066; men's series, Hal Byall, 661; women's series, JoAnn Roesener, 638; men's game, Kent Osborn, 242; women's game, Marty Kirk, 226.

### PROMOTIONAL OPPORTUNITIES

To apply for vacancies, contact Nancy Reardon, Pasadena Personnel Division, Extension 492. A current SF-58 must be submitted when applying.

**Mechanical Engineer (General), GS-9 or GS-11; PD 24018; Code P80871** — Responsible for the operation, maintenance, and modification of the 1500 psi test tank facility at NOTS Pasadena; planning and performance of environmental testing, including the design and fabrication of special test fixtures.

**Engineering Technician, GS-11, PD 5P80092, Code P8083;** Duty Station: Long Beach. Test and evaluation of mechanical, electrical, and explosive ordnance systems at the Long Beach and San Clemente Island test ranges; planning, directing, and reporting assigned projects.

### Lt. Amick To Command USS Patapsco

Lt. Carl W. Amick leaves NOTS today for ComThirteen where he will assume command of the USS Patapsco (AOG-1) which is being reactivated for commissioning.

He will be relieved by Lt. H. G. Walker, Assistant Operations Officer since January, 1965.

Lt. Amick reported to NOTS in Aug. 1963 as Operations Officer on San Clemente Island, and became Operations Officer at the Annex in May, 1964. Previous to NOTS, he served two years as Engineering Officer aboard the USS Rogers (DD-876). He also served one year on the USS Hopewell (DD-681) and two years on the USS Estes (AGC-12).

He enlisted in the Navy in March 1949 and prior to attending Officer's Candidate School in Newport, Rhode Island, he was an Aviation Electronics Technician Chief. He received his commission in June 1958. He also attended

### Hail and Farewell

New Employees

Supply — Mary L. Fisher, Clerk Typist  
UOD — Shelley L. Houle, Clerk Typist; Robert H. Johnstone, Physicist; Robert C. Demange, Supv. Mechanical Engineer.

Terminations

UOD — Ruel Cameron, Supv. Budget Specialist  
Administration — Dennis Bradley, Guard.  
Supply — Florence O. Williamson, Purchasing Agent.

The greatest number of 18-hole rounds in a day is 14 plus 4 holes by Stanley Gard of Australia. His best round was 78 and his worst, 92.

# Launch Mission Safety, Board Members Named

The Station is giving full support to Mission Safety-70, an action program ordered by President Johnson by which the nation's largest employer, the Federal Government (2.5 million workers) is directed to cut Federal employee injury frequency rates by 30 per cent by the year 1970.

The reduction is to be figured using the 1963 accident rate as the base or 100 per cent; thus, a 30 per cent reduction would mean that by 1970 our accident rate would be 70 per cent of the 1963 rate.

### Five Member Board

A five-member Safety-70 Advisory Board for NOTS, appointed by the Commander, consists of Public Works Officer Capt. H. H. Hartman, Code 70, as chairman; NAF Aviation Safety Officer Lt. N. B. Nash, Code 18; Safety Department Head K. S. Skaar, Code 20, secretary; Propulsion Development Department Head Dr. G. W. Leonard, Code 45; and Engineering Dept. Head K. H. Booty, Code 55.

The board will review all facets of safety pertaining to the goal for NOTS, with attention to the possible reasons for excessive numbers of accidents, and will make recommendations to the Commander for action to reduce accidents.

### Second Front Opened

In launching the program, President Johnson opened another front on the War on Waste — waste of human resources, productive skills, and money. He pointed out that the incidence of job injuries among civilian employees has shown no over-all improvement in the last ten years, and that since 1954 the total direct costs of injuries has risen nearly 50 per cent.

In the last seven years more than 1,200 Federal workers died from job injuries; nearly 300,000 sustained disabling injuries; over 18.5 million man-days of potential production were lost; costs to the Federal Government amounted to \$1¼ billion.

### Proposed Action

With the inauguration of Mission Safety-70, the President ordered all Government agencies to report to him as to their safety programs and

plans, and called upon them to reduce accidents progressively in the next five years.

Achieving the goal involves a reduction of the all-Federal injury frequency rate from 8 to 5.5 disabling injuries per million man-hours of work exposure. Attainment of a 5.5 rate by 1970 would save approximately 200 lives, prevent nearly 45,000 disabling job injuries, avoid nearly 3 million man-days of lost time or production, and save nearly \$250 million in direct and indirect costs to the Government.

### Can It Be Done?

Yes, it can be done, Presidential safety advisors state. A 30 per cent reduction in the frequency of Federal worker injuries in the next five years is a sound, attainable goal. Already, 51 per cent of Federal civilian workers are employed in agencies whose rates are below the Safety-70 target of 5.5, and 14 of the 30 major Departments represented on the Federal Safety Council have in the past achieved rates at least 30 per cent below their current rate. If every agency exceeds or equals its best past record, Mission Safety-70 will succeed.

### Proved by Private Industry

Safety achievements in private industry also prove that safety records can be improved. Some outstanding records for reducing injury rates in industry are these: Crown Zellerbach Corporation, 54 per cent reduction in six years; Bell Telephone System, 80 per cent reduction in 30 years; U.S. Steel Corporation, 98 per cent reduction in 50 years, and Union Bag-Camp Paper Corporation, Savannah, Ga., 65 per cent reduction in three years.

In matters of safety the Federal Government should set an example, be a pacesetter, for all employees and workers — public and private, the President stated. This is the purpose of Mission Safety-70.



TECHNICIANS REVIEW PROSPECTS of XR-45 radar installed in nose of TF10B jet. Alfred B. Ferris (left), asst. project engineer from AOD, discusses nation's first micro-miniaturized airborne radar with Autonetics technician.

# Social Security Once-A-Year Appeal Rep. to Outline Retirement Pay Will Aid Less Fortunate

A representative from the Social Security Administration will be at the Community Center on Wednesday, Oct. 13, to answer questions on social security provisions, particularly those concerning the new annuity retirement benefits.

A special one-hour group session will be held starting at 8 a.m. to explain the recent amendment on retirement which allows employees who select to retire prior to Dec. 1, 1965 a 6.1 per cent increase in annuity benefits.

All employees contemplating retirement prior to Dec. 1 are encouraged to attend. Those who have definitely decided to retire should bring with them a copy of their birth certificate or other evidence of birth.

Employees should request permission from their supervisor to attend the session. Normally at the Community Center only until 11:30 a.m., the Social Security representative will extend his hours to accommodate employees who wish to consult him on social security matters.

## System Boasts New Antenna And Modulator

(Continued from Page 1)

terrain in its terrain avoidance/contour mapping mode, it displayed a picture of approaching terrain obstacles in both map-like and silhouette styles for the benefit of the pilot.

Developed by North American Aviation's Autonetics Division, the XR-45's advanced features include a Cassegrain-type antenna giving a high rate of data and a solid-state modulator design of about one-third the weight and one-fourth the volume of that used in previous systems.

In addition, the microminiaturized XR-45 tested uses plug-in modular design, easing servicing and replacement with standardized parts.

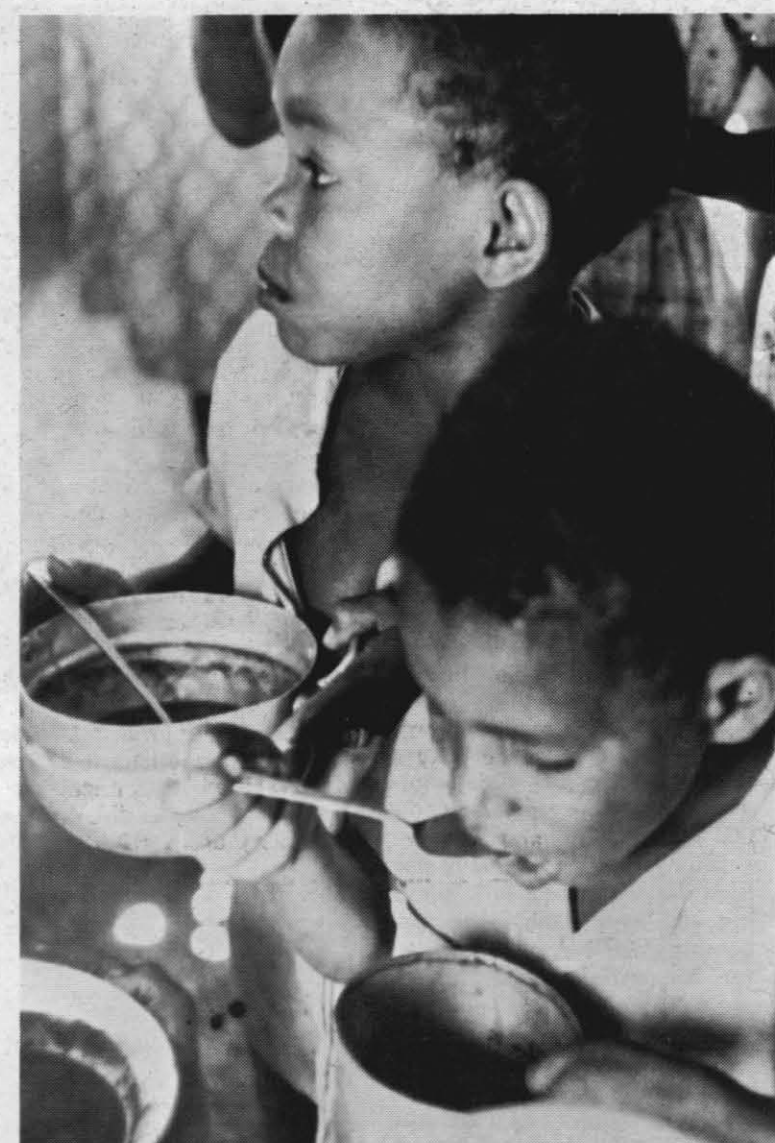
**Technician Goes Airborne**  
Riding watch on the control and instrument panel of the airborne XR-45, opposite the pilot on most flights was project engineer Francis "Red" Guthleben.

Keeping him company were two cameras. One of them, a "phototheater" camera, shot from over his head and made a record of the instrument panel's display of dials. Another pointed out ahead of the aircraft.

Red's assistant on the XR-45 project was Alfred B. Ferris, an electronics development technician.

### Educators' Special Starts Monday

A course entitled "Tests and Measurements" will begin Monday, Oct. 11, in Room C16 at Burroughs High School. Offered to all interested people by the UCLA extension, the course will be held Mondays and Wednesdays from 4 to 6 p.m.



HUNGRY CHILDREN such as these are fed throughout the world by agencies of CARE which is a participant in the Combined Federal Campaign. Give aid wholeheartedly.

## Federal Campaign Kickoff

(Continued from Page 1)

All campaign will include J. H. McGlothlin, Chairman; Capt. P. W. Jeffrey; A. B. Monson and W. E. Davis, all of NOTS. Local postmasters J. B. McKernan of Ridgecrest and Miriam Lyster of Inyokern will serve as committee members.

Others on the coordinating committee are Larry Thurm, Metal Trades Council Representative; Willie Harris, United Federation of Postal Clerks; and Frank H. Crawford, National Association of Letter Carriers, No. 4238. R. E. Brown of NOTS will serve as executive secretary for the coordinating committee. A vigorous campaign has been planned by this group.

### NOTS Co-Chairmen

Representing NOTS as co-chairmen of the Combined Federal Campaign are Edward D. Casaroli, John M. Simpson and LCDr. F. H. Elliott. Assisted by departmental keymen, they will handle solicitation and collection of "Once For All" funds on the Station.

### Four International Health Agencies

In the International Service Agencies are four groups that serve in foreign countries: CARE (Cooperative for American Relief Everywhere), Project HOPE (Health Opportunity for People Everywhere) which includes a hospital ship and land-based medical facilities, the American-Korean Foundation, and Radio Free Europe.

The Joint Crusade is designed to afford the donor opportunity to make his contribution "Once For All" to help the needy, sponsor research and promote self-help education wherever the need is — in Indian Wells Valley or around the world.

the American Red Cross, Desert Area Emergency Relief, Desert Area Family Counseling Service, IWV Council for Retarded Children, Joshua Tree Council of Girl Scouts of America, Kern County Council of the Boy Scouts of America, IWV Recreation Council, Salvation Army, Children's Hospital of Los Angeles, and the United Service Organization (USO).

### National Health Agencies

National Health Agencies that will receive "Once For All" funds are: American Cancer Society, American Heart Association, Crippled Children's Society, Muscular Dystrophy Association of America, National Association for Retarded Children, March of Dimes, and the National Multiple Sclerosis Society.

# RAdm. Dornin, ComOpTevFor, Pays Visit to Squadron VX-5

BY BUDD GOTT

Rear Admiral Marshall E. Dornin, Commander, Operational Test and Evaluation Force, paid his first official visit to China Lake and Air Development Squadron Five last week, since being named to his present post on June 18 of this year.

Headquartered at Norfolk, Va., the Admiral is making a tour of Squadrons and units under his command which in addition to VX-5 include VX-4 at Pt. Mugu, headed by Cdr. C. V. Merrell, VX-1 at Voca Chica, Keywest, Fla., and three detachments at New London, Conn., Norfolk, Va., and NAS Oceana, Virginia Beach, Va.

The Admiral is no stranger to the West Coast. Born in Berkeley, Calif., and a graduate of the Naval Academy Class of '30, he has served as Commander, Cruiser Destroyer Forces Pacific, and superintendent of the Naval Postgraduate School at Monterey.

During his two-day visit here he witnessed loft bombing and over-the-shoulder bombing delivery techniques for conventional and nuclear weapons by VX-5 pilots at Charlie Range.

In addition, he watched squadron pilots zoom through straffing, Zuni firings, and 2.75" FFAR launching demonstrations.

Following these events he was briefed on Charlie Range equipment operation by Duane Mack.

During his stay, in addition to briefings by squadron skipper Cdr. Don Loranger, the Admiral was briefed on projects by Cdr. George W. Myers, on special weapons by LCdr. Richard J. Schulte, on operations by LCdr. Ted L. Lloyd Jr., on maintenance by LCdr. George E. Russell, on SAM/SHRIKE missiles by Maj. James H. McGee, USMC, on medical by Lt. James E. Standerfer, and on personnel by Lt. Thomas F. Taylor.

An aerial tour of NOTS Coso Target Range with Cdr. Loranger in an NAF helicopter climaxed the Admiral's visit.



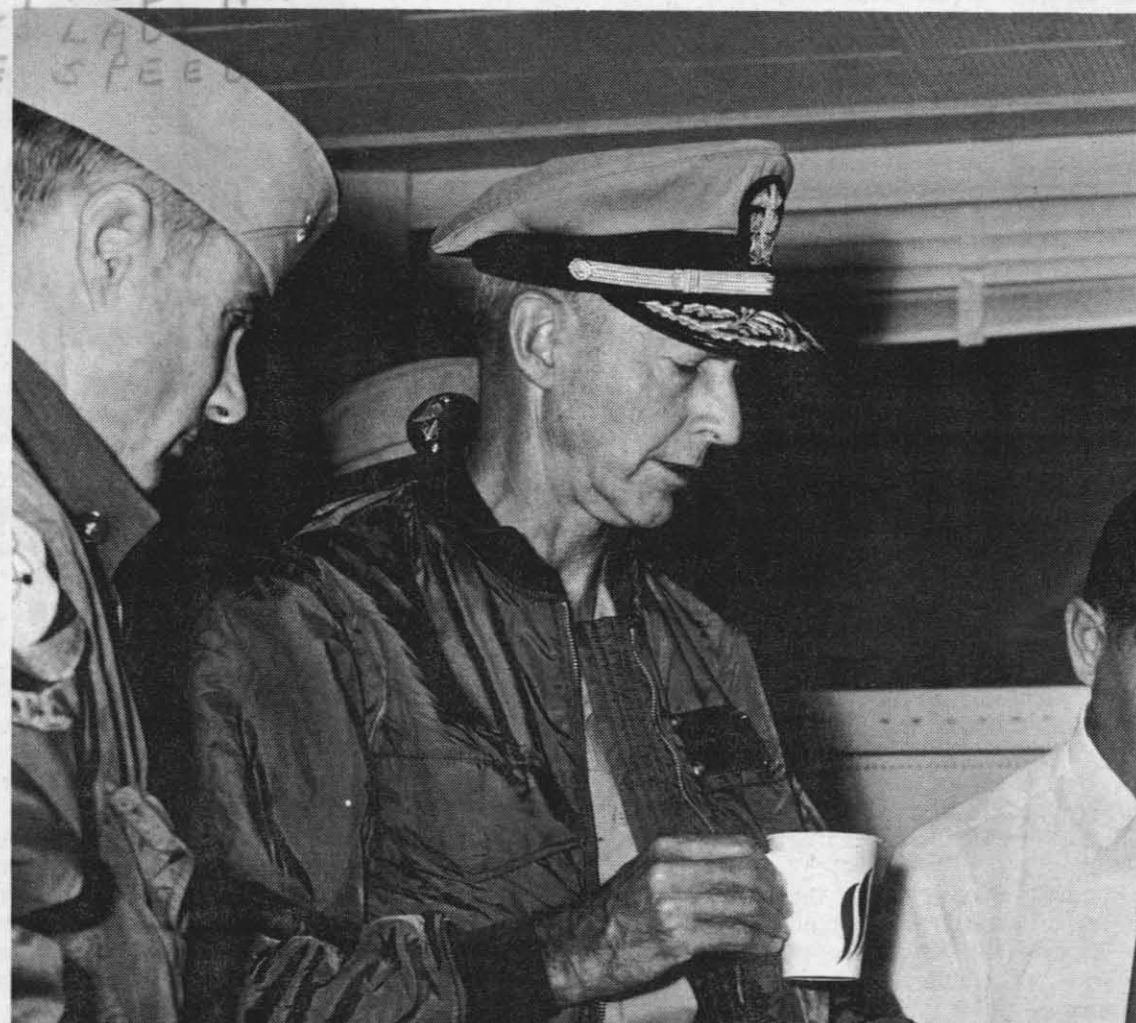
SNAKEYE, the NOTS-developed free-fall bomb, is explained to RAdm. Dornin by LCdr. Richard J. Schulte. VX-5 developed delivery tactics for the weapon.



RADM. MARSHALL E. DORNIN, Commander, Operational Test and Evaluation Force, surveys activities of VX-5 during his two-day tour here.

Photos By G. W. Burgess, PH2, and J. W. Rogers, PH2

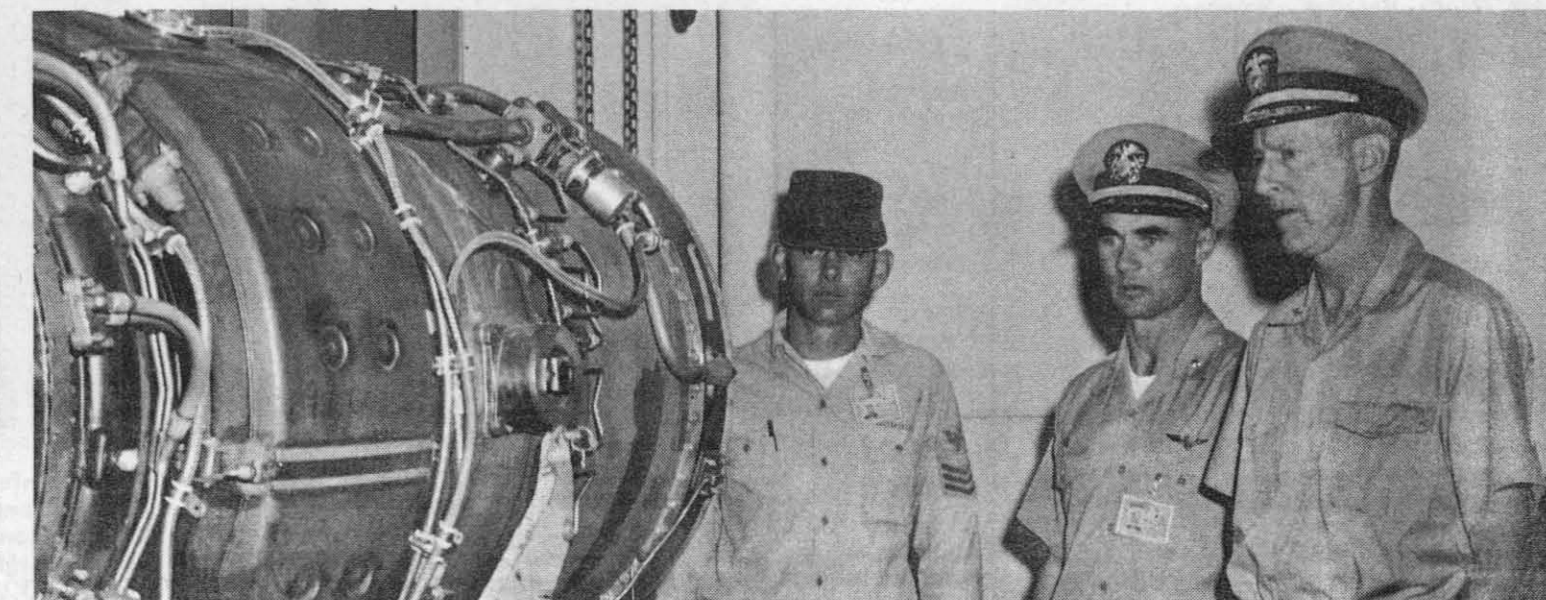
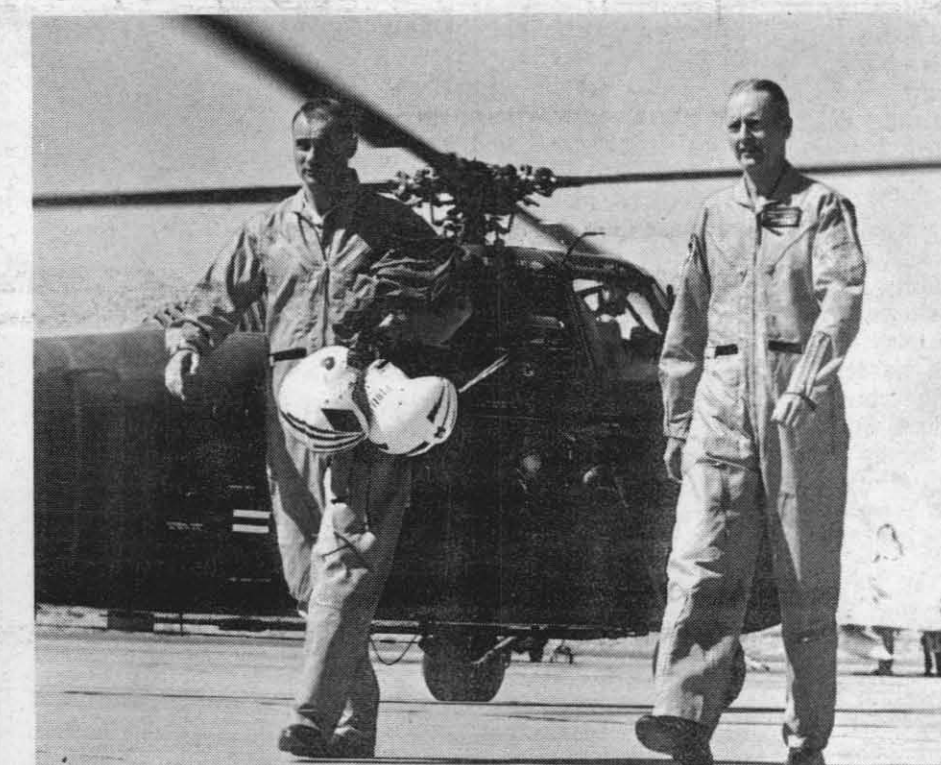
BACK FROM A HELO TOUR of Coso Target Range, RAdm. Dornin and Cdr. Loranger head for the ready room and a cup of coffee.



ROCKET POD carrying capacity and fire power on an A4 aircraft is detailed to RAdm. Dornin by VX-5's skipper Cdr. Don Loranger and asst. projects dir. LCdr. R. J. Schulte.



FIRST HAND VIEW of cockpit and instrumentation of a Douglas A4 "Skyhawk" is had by RAdm. Dornin during tour.



DURING INSPECTION of the Squadron's power plant on Pratt and Whitney J52-P6A power plant for a Douglas A4 "Skyhawk" by Clarence Osborn, ADJ1.



ACTUAL FLIGHT PATH of plane at Charlie Range during bomb delivery which is recorded on special graph paper is shown by Duane Mack to RAdm. Dornin and Cdr. Loranger. VX-5 pilots demonstrated loft bombing and over-the-shoulder bombing delivery techniques for conventional and nuclear weapons for the Admiral during his visit here. VX-5 is assigned the task of developing new delivery techniques for the Navy's growing arsenal of weapons. Charlie Range provides training ground for Fleet pilots.

XY PROFILE PLOTTER at Charlie Range is demonstrated and explained to RAdm. Dornin by Clyde Turbett. Instrument records flight path of plane during bomb delivery.