

Happy To Have You Aboard!

Welcome to China Lake!

Captain Charles Blenman, Jr., our Station Commander, extends to all visitors on this occasion, his hope that your stay here will be interesting, informative and enjoyable.

To help provide these elements, the map on this page has been designed to direct your interest in spectator events. The President's arrival, procession and departure will be highlights of the day. You may witness the arrival and departure at the Naval Air Facility, accessible from Sandquist Road.

The President's procession is scheduled to move up Blandy Street following his departure from Michelson Laboratory.

IT IS IMPORTANT THAT ALL SPECTATORS LINING BLANDY STREET FOR THE PROCESSION REMAIN BEHIND THE CURB.

Naval Air Facility static displays have been erected to help acquaint you with the Navy's most modern planes and weapons. Official guides are posted to provide answers to your questions.

Many roads leading to the Air Facility and to ranges will be closed at specific times and Security Officers will be on duty at road blocks. Station personnel who previously were permitted to watch rehearsal demonstrations along the access road will not be allowed there today.

Parking is limited. For this reason, it is suggested that you find suitable parking, leave your car there and use bus transportation as required.

No parking will be allowed on Lauritsen Rd. south of Blandy St., on Knox Rd. north of Blandy, nor anywhere on Blandy.

Shuttle bus service will transport you to and from the Naval Air Facility and other key points on the Station.

Thank you for coming to China Lake on the occasion of President Kennedy's visit here and our observance of the Twentieth anniversary of the China Lake Naval Ordnance Test Station, and our belated "Armed Forces Day" celebration.

THOUSANDS WELCOME PRESIDENT KENNEDY

Largest Crowd in NOTS' 20-Year History Expected

Visitors by the thousands—probably the largest crowd in the U. S. Naval Ordnance Test Station's 20-year history—poured through the gates today in hopes of getting a close look at President John F. Kennedy as he visits here for about 3½ hours.

It was "Open House," on orders of the Station's Commander, Capt. Charles Blenman, Jr., encompassing a three-fold celebration: that of the President's visit, the 20th anniversary of NOTS, and Armed Forces Day.

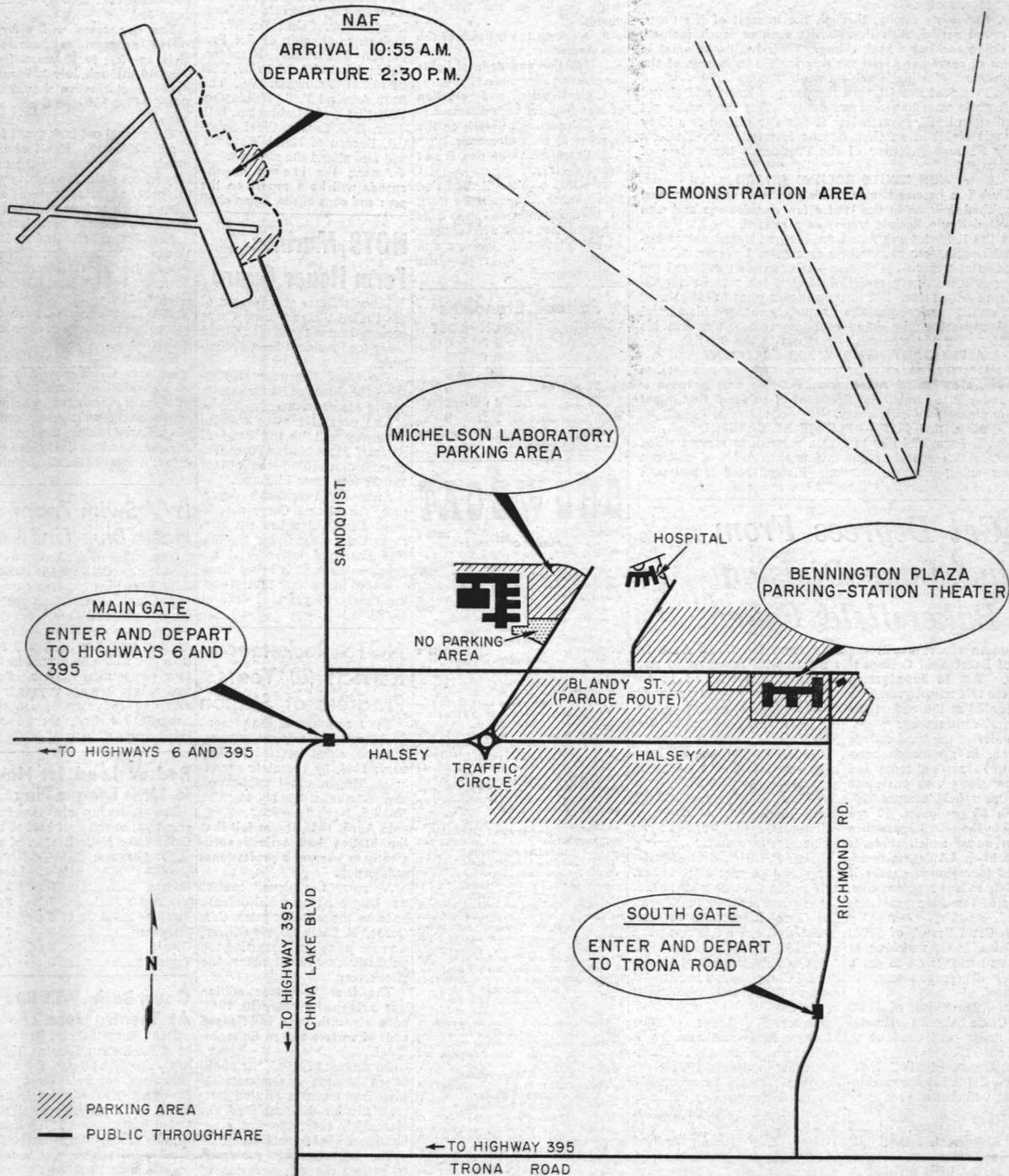
Arrives at 10:55 a.m. In holiday mood, residents from all over Southern California, but particularly San Bernardino and Kern counties, maneuvered for prescribed vantage points at the Naval Air Facility where the Chief Executive was to arrive at 10:55 a.m. by plane from Pt. Mugu.

Other visitors, who were unable to get to NAF before the roads were necessarily blocked to keep the way clear for the President's procession, moved into positions along Blandy St. from the Administration Bldg. to the Officers' Club so that they may see the Chief Executive and other dignitaries drive by later.

Upon arrival, Mr. Kennedy was to be greeted by Capt. Blenman and then be whisked out to the reviewing stand to witness the 50-minute aerial demonstration.

Public Not Allowed Only the President and his party and the press correspondents were to be allowed there. For security reasons the public is not permitted.

Following the demonstration, (Continued on page 3)



Official Greetings

On behalf of the China Lake community, it is our pleasure to extend to you, as our guests today, our heartiest "Welcome Aboard!"

We are deeply honored to have President John F. Kennedy pay us this visit, and it is a pleasure to have you join us in greeting him.

We trust that you will share with us, in return, the pride that we feel in marking our Twentieth Anniversary today, and our observance of Armed Forces Day.

The Open House events in which you are participating were designed for Armed Forces Day, traditionally celebrated in May. We have postponed this event this year to coincide with the visit of the Chief Executive of our nation.

You will have the opportunity to view many of the weapons produced by the Naval Ordnance Test Station during your stay at China Lake. The static display area at Michelson Laboratory contains some of the weapons used in actual combat. Others are in use today as major weapons in keeping peace throughout the world.

At the Naval Air Facility you will find a wide range of static aviation displays, including many of the U. S. Navy's most modern fighter craft.

Films of the weapons demonstration that is being presented for President Kennedy today will be shown at the Station Theater today from 1:30 p.m. until 4:30 p.m., and we invite you to view them.

What you will see and hear merely echoes the slogan of Armed Forces Day - - - a slogan that does not shed its impact for being delayed a few weeks - - - POWER FOR PEACE.

Thank you for visiting this unique facility of the Navy and the Bureau of Weapons, and again, from the Navy, and the Management team of NOTS, China Lake, "Welcome Aboard."



CAPT. CHARLES BLENMAN JR., USN
Commander, NOTS



DR. WM. B. McLEAN
Technical Director, NOTS



CHAPLAIN'S MESSAGE

Geologic And Spiritual Ages

By Chaplain R. F. Wicker, Jr.



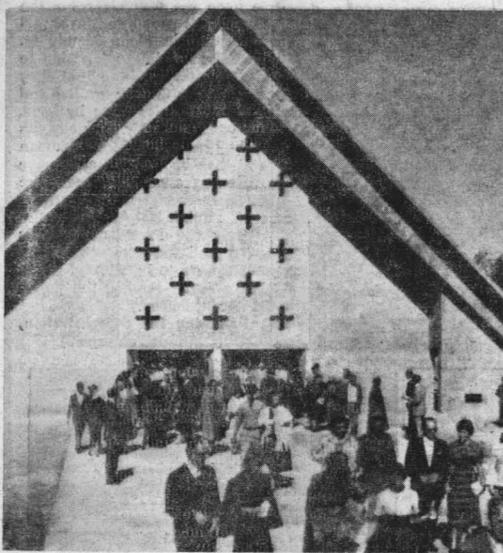
Geologists tell us that three of our national canyons represent three different geologic ages. Bryce Canyon is the youngest; only the soft surface sandstone has been worn away.

People are like that. Our spiritual age may be seen by the extent that suffering and trouble have worn away our pride, our possessiveness, and our littleness.

Some of us have had a pretty easy time of it, with little of the wearing away that comes from disappointment, grief, and pain. Others have felt only the average impact of the elements.

In any case this earthly clay is of little value. Indeed the more expendable we ourselves are, the more God can do in and through us.

Prayer: Heavenly Father, may we know that when we live for Thee, it really doesn't matter much what happens to us. Amen.



THE ALL FAITH CHAPEL where many Station families attend services. The Chapel was dedicated in 1957.

DIVINE SERVICES

Christian Service (Chapel Annex) Admin. Service—11 a.m. Sunday School—11 a.m. Protestant (All Faith Chapel) Admin. Service—8:30 and 11 a.m. Sunday School—9:30 a.m.; Groves and Richmond elementary schools.

The Rocketeer

Official Weekly Publication of the U. S. Naval Ordnance Test Station, China Lake, California. Captain Charles Blenman, Jr., USN Station Commander. "JIM" T. Bibby Public Information Officer. Jack G. Broward Editorial Advisor. Richard Greenberg Managing Editor. Budd Gator Editor. Chuck Mangold Special Services Athletic Director.

PROMOTIONAL OPPORTUNITIES

Present Station employees are encouraged to apply for the positions listed below. Applications should be accompanied by an up-to-date Form 58. The fact that positions are advertised here does not preclude the use of other means to fill these vacancies.

Mechanical, Chemical and Electronics Engineers, GS-13, Code 4004—Incumbent will perform reliability tasks in conjunction with conducting reliability programs. He will contribute specialties of his discipline for the reliability group. He will be working with other reliability engineers for training purposes.

Electronics Engineer, GS-12 or GS-13, Code 4932—Incumbent is responsible for the electronic design and development of sounding rocket payloads and instruments. He participates in advance program planning and systems design. When called upon he serves as a consultant for project engineers and conducts special studies on advanced electronic systems.

Electronic Engineer (Instrumentation), GS-9, PD 340953, Code 4652—The incumbent participates in the electronic design and the development of sounding rocket payloads and instruments. He conducts special studies leading to incorporation of advanced electronic systems into the payloads.

Clerk (INT), GS-9, PD 312014, Code 12—Duties of the position involves full responsibility as Custody Control Point for classified documents, full responsibility in preparing technical reports from rough draft material and transcribing from a dictating machine.

File applications for above positions with Mary Watts, Rm. 26, Personnel Bldg., phone 72723.

Clerk (Typist), GS-5, PD 155006, Code 5512—Serves as office receptionist, prepares routine reports and correspondence, files and performs general office-clerical duties.

Secretary (Sheno), GS-6, PD 235042, Code 55—As secretary to the Head and Associate Head, Engineering Department, acts as office receptionist, prepares notices and correspondence, obtains information for conferences and meetings, and performs other miscellaneous secretarial-clerical duties.

Secretary (Typing), GS-5 or 6, Code 75—As Secretary to the Head, Technical Information Department, acts as office receptionist, provides background material for conferences and meetings, records proceedings of such meetings. Screens incoming correspondence and assumes action on a proportionate amount, prepares outgoing correspondence, and performs other general secretarial-clerical duties.

File applications for above positions with Post Office, Rm. 31, Personnel Bldg., phone 71393. Deadline for applications is June 14.

Head, Test Mechanic (Exp. Electrical Equip.)—China Lake, Ann. No. NOTS-IV-70(63); \$7425.60, \$7737.60, \$8049.60 per annum. Applicants must be either Career or Career-Conditional employees of NOTS China Lake or Pasadena.

File Card Form NAVEKOS-4155-AB and Form 57 with Detached Representative, Board of Examiners, China Lake. Closing date June 24. Leadman (Ground Structures)—Barlow Ann. No. NIND-20-75 (63), \$7779.40, \$8122.00, \$8444.80 per annum. Applicants must be Career or Career-Conditional employees of Naval or Marine Corps activities in 11th Naval District.

File Card Form NAVEKOS-4155-AB and 4156-AB and Form 57 with Detached Representative, Board of U. S. Civil Service Examiners, U. S. Marine Corps Supply Center, Barrow, Calif. Closing date June 19.

The monthly meeting of the newly formed Rosary Altar Society was held Tuesday, May 28 in the East Wing of the All Faith Chapel.

Preceding the meeting, Father Costa conducted the installation of officers, reception of 46 members, Rosary and Benediction in the Blessed Sacrament Chapel. Receiving office were Mrs. Howard Fath, president; Mrs. James DeSanto, vice president; Mrs. John Klein, secretary; and Mrs. John Webber, treasurer.

Plans were made for the serving of a breakfast in the East Wing on Father's Day in honor of the fathers of the parish. Tickets are available from members.

Plans were also made for a reception honoring Rev. Edward Gilpatrick S. J. newly ordained priest. This reception will be held in the East Wing on June 23 following 5:30 p.m. Mass.

The next meeting will be July 2.

File Immediately For Graduate Record Exam

Students who wish to take the Graduate Record Exam at NOTS on July 6 must make applications immediately at the Education Office, Mich Lab, Room 1004.

This test is required for graduate status by UCLA and by other graduate schools as well.

'DESERT PHILOSOPHER'

Recalling the Boondock Days

By "POP" LOFINCK



Today this Base is honored by a visit by President Kennedy.

All this crowd—all this concentration of visiting VIPs—brings back contrasting memories of the 15 years I was a Security Patrol Officer in the boondocks impact area.

It was altogether fitting and proper that this area was chosen for the Bureau of Weapons testing range for all types of ordnance because it isn't good for anything else except cattle grazing—when there is enough rain and a few unprofitable little mines—which the Navy bought out.

FROM A ZERO BEGINNING

It is a satisfaction to see this NOTS China Lake Base evolve into probably the most outstanding and successful weapons development station of the Free World from a zero beginning.

Maybe it's tradition—it seems possible that weapons were being developed in this area 5000 years ago. If that sounds goofy—go look at the petroglyphs on the base.

During the 15 years I was a boondock Security Patrol Officer I lived in a cabin 40 miles north of the Main Gate—Junction Ranch.

About 10 of those years I was alone most of the time. Well, not quite alone—I had a .357 Magnum or a 45 with a 6-inch barrel and a carbine.

EASY TO SPOT TRESPASSERS

My job was to chase out trespassers, prospectors, hunters, rockhounds, etc., to keep them from getting hurt or learning too much.

It was not so difficult as it might seem. Every trespasser made tracks and kicked up dust. I would get on certain high points where I could view vast areas with my binoculars.

And I had contacts around the perimeter who would inform me about trespassers who had gone in or were going to go in.

I was never lonesome. During the day there would be frequent contacts with road builders—camera men or bomb disposal crews. At night I could meditate in sweet, silent solitude under this great expanse of bright stars unobscured by city lights. Or listen to the serenade of a coyote chorus. Or commune with my subconscious. Or read books or listen to the radio sometimes.

42 INCHES OF SNOW AT CABIN

I got snowed in for a week once. It was fun at first—I couldn't get out and no one could get in to bother me. But the novelty wears off. I love solitude—but I also love people. Half and half. I wouldn't make a good hermit.

Aerology told me on the radio the storm was coming—but I didn't believe it would keep snowing to 42 inches around the cabin. So I learned to believe what the weatherman said. They are right most of the time.

The coyotes were my friends. I used to shoot jackrabbits and leave them in the yard so my friends would have an easy meal. They knew my Jeep—would stop along the side of the road as I would pass by and talk to them.

STARTED WITH FOUR OFFICERS

In the beginning four Security Patrol Officers were required to cover the job on the north ranges.

One got sick and one quit at the Coso Hot Springs Ranger Station—and another on the north.

So I had a double ditch made along the west perimeter and north perimeter and gates put in the canyons. So I patrolled the entire perimeter and whole area alone from then on. The trick is to scrupulously avoid regular patrolling. Mix 'em up. A double ditch is more effective than a fence and much cheaper.

Two Range Patrol Officers now cover the area since I got transferred to the Public Information Office and the Rocketeer.

IT'S WORK WHEN YOU GET STUCK

I never had a wreck. I've been stuck a few times—in the mud or on a rock. In that case I don't think about the work involved. There is no other way out—so I just do it.

I always approached every trespasser in a manner that I would want to be approached—explaining the facts of hazards. Got their names and addresses. That usually worked out all right.

One time a trespasser gave me an argument about knowing a congressman. That gripes me. I said "I think you're bluffing. I don't think you know a congressman or you wouldn't be trying to take advantage of his friendship in such a crude manner. If I thought you did I'd take you in just to show him that Security is on the job." That civilized him right away.

Once I had to bring in several aliens. Ming moss pickers. I said, "You drive ahead and don't go too fast—I'll signal which way to turn and if I stop—you stop. So after a bit I stopped and they stopped—so I knew everything was under control.

FINDS FAMILY IN DANGER AREA

How foolish can people get. One day I saw tracks headed up a wash through an impact area of Mojave B—Randsburg Wash. There was a test going on—jets and an aerial target.

I had to wait till the firing was over before I could follow the tracks in.

There was a man with his wife and two daughters, working an old mine tunnel. He gave me an argument about having a right to be there because the mine had belonged to a friend who gave him permission to work it.

I said, "Did he give you permission to endanger your whole family? There was a test overhead this morning." He said, "When we hear a plane coming we go in the tunnel." I said, "Mister, when you hear a jet, it isn't coming. It's gone!"

RIM SHOTS

By BILL VALENTEEN



On this day of the President's visit to the United States Naval Ordnance Test Station, I'd like you to join me in thanking the efforts of the White House in furthering the world we know as sports.

Notable along these is the President's intervention in the squabble among amateur athletes that recently caused so much furor among our track and field friends.

With the appointment of General MacArthur as intermediary, the AAU-NCAA thing had partially resolved itself and is now well on its way toward what is at least a workable approach. Our representation in the Olympic Arena will be far more powerful because of these efforts, and we should see more satisfying results at that time.

NATIONAL PHYSICAL FITNESS PROGRAM

The President has also instituted a national physical fitness program which has served to keep us constantly mindful of our obligation to our own physical well being, regardless of whether we participate as athletes. With the appointment of such notable sports enthusiasts as Bud Wilkinson of Oklahoma, the program has made itself felt rather substantially in all areas of the country.

Mr. Kennedy's family, through the interest of the press, has inspired participation in activities such as touch football, water skiing and horse back riding. Their healthy interest in all forms of sport has paved the way for the expansion of the total spectrum of athletic achievement.

The President is a Harvard man, as you know, and played football while attending that university. This fact, while not so startling in itself, nevertheless allows a transition to a story which will highlight another famous Harvard man, Endicott Peabody III, now governor of the President's home state of Massachusetts.

WON KNUTE ROCKNE AWARD

"Chub," as he was known to his pals, was voted the most distinguished lineman in the land a few decades ago and won the coveted Knute Rockne trophy as a reward.

On the field, he was noted for his bulldogged determination and amazing strength. As a freshman, however, "Chub" weighed in at a mere 165 pounds—nature hadn't endowed the society youth with very much of what it takes to be an All-American football star. But in the summer prior to his gaining a berth on the varsity squad, he completely changed his normal physical appearance by doing exercises that would give his body the power and strength to compete in the Ivy line.

A PLEASANT MEMORY FOR PRESIDENT

Chub's story has a lot of outward meaning and lessons about life, etc., for all Americans. But the only purpose it serves today is to remind the President of an event that might give him pleasure by its memory.

SCHOOL'S OUT — PLEASE BE CAREFUL

Now, if I may, I'd like to take a moment to remind all of my readers that school is out this week. A lot of children will be running about on vacation. Please, those of you with cars, please drive carefully through the residential areas.

13 Get Degrees From China Lake Division Of Bakersfield College

Thirteen students will graduate from the China Lake Division of Bakersfield College this month with Associate of Arts degrees. The 13 June graduates bring to a total of 18 the AA degree this school year. Five were granted at the end of the Fall semester in January.

Graduates of the local college participate in graduation ceremonies in Bakersfield today and tomorrow along with graduates of the Bakersfield campus.

Of the 13 graduates, 10 are students in the NOTS apprentice program under which students may obtain an AA degree in addition to journeyman papers if they satisfy college requirements.

A list of the June graduates follows: Judith Carol Brand, of 207-B Ellis, China Lake, majoring in history and will go on to get a bachelor's degree and teach in high school.

Robert Allan Flood, of 412-C Nimitz, China Lake, a sheetmetal worker major, will continue to work for NOTS.

Edwin Guant, of 212-B Independence, China Lake, a machinist major, will continue his work at NOTS.

Gene G. Graham, of 329 Helena, Ridgecrest, a machinist major, will continue taking courses at the local division of the college.

Everett B. Hill, of 214-B

Little League Play Halted For Work on Diamonds

Start of the 1963 playing season for the Minor League Program of the China Lake Little League and resumption of play for the Major League has been delayed by league officials until the new baseball diamonds at Snackenburg Field have reached a reasonable stage of completion.

In a letter to all parents of China Lake Little League players, League President Bob Freedman revealed that this decision was reached by unanimous agreement of the 5 vice-presidents and the president of the league. In this letter, he stated that responsibility for performance of the work is being turned over to the fathers of the players.

Among the jobs listed for completion prior to the start of play are the following:

- 1. Completion of the Refreshment Stands on the two diamonds.
2. Work on the infields of the two diamonds.
3. Erection and tie-in of lights for the two diamonds.
4. Construction and erection of bleachers for each diamond.
5. Completion of work on the dugouts at both diamonds.
6. Completion of one Rest Room facility.

In addition to the items listed above, there is much more work to be accomplished and it is expected that work will continue on the diamonds evenings and weekends even after play has been resumed.

Softball Standings

Table with columns: TEAM, MERCHANTS, WON, LOST. Rows include Merchants (9-0), Staff (7-3), NAF (6-4), Public Works (6-4), NOTS (4-6), VX-5 (1-8).

SHOWBOAT

FRIDAY: "40 POUNDS OF TROUBLE" Tony Curtis, Suzanne Pleshette, Phil Silvers. "MERRY ANDREW" Danny Kaye. "THE NUTTY PROFESSOR" Jerry Lewis, Sheila Stevens. SATURDAY: "MATTINEE" "MERRY ANDREW" Danny Kaye. "THE NUTTY PROFESSOR" Jerry Lewis, Sheila Stevens. SUNDAY-MONDAY: "THE NUTTY PROFESSOR" Jerry Lewis, Sheila Stevens. TUESDAY-WEDNESDAY: "THE MONGOLS" Jack Palance, Anita Ekberg. THURSDAY-FRIDAY: "DONOVAN'S REEF" John Wayne, Lee Marvin.

Advisory Board to Meet Here Tuesday, Wednesday

Eight members of the Naval Ordnance Test Station Advisory Board are scheduled to convene here next Tuesday and Wednesday, June 11 and 12, bringing to most distinguished men of science, education and industry.

Capt. Charles Blenman jr., ComNOTS, and Dr. Wm. B. McLean, Technical Director, will host the group at the conference, the first of the Advisory Board this year.

Board members attending the two-day meet include Dr. Herbert L. Anderson, director of the Enrico Fermi Institute for Nuclear Studies, University of Chicago; Robert L. Biggers, management consultant of Bloomfield Hills, Mich.; Dr. N. E. Bradbury, director of the Los Alamos Scientific Laboratory, Los Alamos, N. M.; E. H. Heinemann, vice president of engineering, General Dynamics Corp., New York City; Frank Gard Jameson, vice president for plans, Douglas Aircraft Co., Aircraft Division, Long Beach, Calif.; Dr. W. H. Pickering, director of Jet Propulsion Laboratory, Pasadena, Calif.; Admiral A. M. Pride, USN (Ret.), of Arlington, Va., and Rear Admiral F. S. Withington, USN (Ret.), of Washington, D.C.

Completed plans for a 3 1/2 week day camp were revealed to the China Lake Day Nursery Association members, their families and friends at an outdoor pot luck dinner Monday evening, June 3rd.

The day camp will offer a varied program to boys and girls, age 2 1/2 to 10 years, from June 10 through July 3. Parents desiring information should call NOTS 71398 between 8 a.m. and noon.

The annual pot luck event featured a sidewalk exhibit of children's art, prepared by the nursery school staff. The display was to help acquaint parents and friends with artistic activities in which the children participate.

Among the items on the agenda will be a report on the pros and cons of the "open city".

NOTS Marines Form Honor Guard

Three officers and 64 men of the United States Marine Corps here will form the Honor Guard today for President John F. Kennedy.

The Chief Executive will inspect the Guard of Honor shortly before his departure.

Also present for the colorful ceremony will be the Band of Aircraft, Fleet Marine Force, Pacific, comprised of one officer and 32 men from El Toro.

After the President's departure, the Marine Corps detachment here will retire the Barracks Colors, signifying the Marine Barracks' last official appearance here. It is being disestablished in the near future, ending nearly 18 years of duty at NOTS.

NOTS Rocketeer Reflects 20 Years Progress of Station

The forerunner of the present Rocketeer was a typed, mimeographed sheet started in January, 1944, by volunteer secretaries. The informal publication was distributed weekly as "The N.O.T.S. News."

In April, 1945, it was felt that the Station had arrived sufficiently to warrant a professional publication.

A "name the paper" contest was held offering a \$25 defense bond as the winning prize. Cdr. Gordon N. Lantz, Supply Officer, won the prize for submitting the publication's present name, the "Rocketeer."

The first Rocketeer edition was published on May 10, 1945, once a month by a full-fledged staff of writers and an Editor-in-Chief.

On August 27, 1945, the publication became a semi-monthly periodical and was printed commercially for the first time. On March 12, 1948, the Rocketeer became a weekly publication.

The Rocketeer has continued to reflect the achievements of the Station and its people throughout the years.

Nursery School Tells Day Camp Plans at Picnic

Completed plans for a 3 1/2 week day camp were revealed to the China Lake Day Nursery Association members, their families and friends at an outdoor pot luck dinner Monday evening, June 3rd.

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IWW Swim Team Hosts Blue Fins

The Indian Wells Valley Swim Team will clash with the Bakersfield Blue Fins tomorrow morning at the Officer's Club pool at 9 a.m. Tomorrow's meet, the first of the season at home against a visiting team for IWW, will feature more than 40 events in the four competition strokes. Boys and girls in five age groups from seven to 16 years of age will compete for first, second and third place ribbons.

Summer staff appointments announced at the dinner included Mrs. Wallace Knoblauch, administrative assistant, who will supervise the summer day camp, Miss Karen Skaar, science instructor, and Miss Christine Leininger, who will teach swimming.

Redsox Lead 1st Half In Little League Play

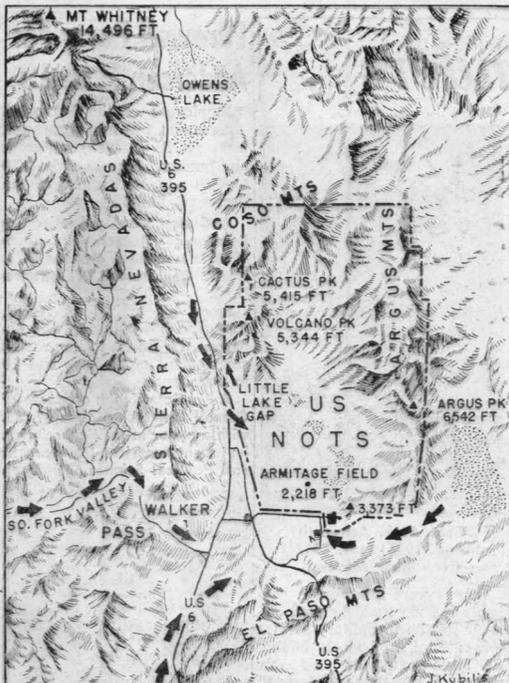
The following are the final standings at the first half of the China Lake Little League of the Major Leagues:

Count Basie Will Be At Theatre June 27

Don't Forget! Count Basie will be at the Station Theatre, Thursday, June 27, at 8 p.m. for a two-hour jazz concert. What with President Kennedy being here today, you'll probably recall that Count Basie played at the Inaugural Ball for the Chief Executive. Tickets for the concert here go on sale June 10 at the Community Center. Price is \$2.00. Seats are reserved.

Redsox Lead 1st Half In Little League Play

Table with columns: Team, Won, Lost. Rows include Redsox (8-2), Yankees (7-3), Pirates (6-4), Dodgers (3-7), Giants (3-7).



NOTS MAP—NOTS' 1,000 square miles area is located in Indian Wells Valley. The Valley is hemmed in by the Sierra Nevadas on the west, rising from 6,000 to 14,000 ft.; the Slate and Panamint Ranges to the east, which are above 11,000 ft.; and El Paso Range to the south, above 5,000 ft. NOTS enjoys 300 days of flying weather per year.

Once Arid Wilderness Now . . . NOTS - A Complete Community Of 12,000 in the Mojave Desert



BENNINGTON PLAZA, to the left of Blandy St. in this photo, has Commissary Store, Navy Exchange, theatre, library, and many other stores and shops. On the right side of the street is All Faith Chapel where many of 12,000 residents worship.



MICHELSON LABORATORY, where more than 1400 NOTS personnel work, is the focal point of the Station's test activity. Covering more than 10 acres, it is the largest, most completely equipped institution of its kind in the nation.



THE MATURANGO MUSEUM will be open today from 8:30 a.m. to 6 p.m. for the benefit of the thousands of visitors on Station, Ken Robinson, president of the Museum board of directors, announced. It will be closed, however, while President Kennedy's motorcade travels along Blandy St.

NOTS is not only a test station for naval ordnance, but a thriving community.

In 20 years it has grown from a handful of pioneer-like scientists, technicians and engineers to a population of 12,000.

At its inception, this land was empty and barren. Only an occasional prospector trekked through the windblown sand seeking a big strike. Tumbleweeds bounced amid the cacti, seemingly racing the speedy jackrabbit and hopping over the rattlesnake.

Now, despite its comparative isolation, the Station has 3200 family units — including those in the Wherry housing section — two apartment-type women's dormitories, four apartment-type men's dorms and six smaller type dorms for men, plus other units.

Row on row of trees now line the modern streets, and flower gardens enhance the homes. Air-conditioning provides comfort during the hot summer months.

On Station proper there are five schools in the China Lake Elementary School District — Richmond, Desert Park, Murray, Vieweg and Groves — with an enrollment of more than 2300 pupils. Approximately 1100 students attend Burroughs High School which technically is in Ridgecrest, immediately adjacent to the Station. In Ridgecrest and nearby Inyokern, where many NOTS personnel reside, are three elementary schools: James Monroe, Las Flores and Inyokern.

In Bennington Plaza is a complete shopping area: Commissary store, Navy Exchange store, movie and stage show theater, an indoor Olympic-size swimming pool, library, a dry cleaning establishment, pharmacy, shoe repair shop, beauty salon, barber shop and across the street a branch of the Bank of America.

Facing Bennington Plaza across Blandy st. is the All Faith Chapel where Protestant, Roman Catholic and Hebrew services are conducted. Christian Science services are held in the Chapel Annex and Unitarians meet in the Parish Hall.

Thus, NOTS is a complete community. In 20 years it has grown . . . in size, in productivity, in dedication and in faith.

Maturango Museum's First Six Months Reviewed

Between December 2, 1962, when the Maturango Museum was dedicated, and May 2, 1963, 2,458 visitors signed the Museum guest book. Ten foreign countries, 25 states, and 113 cities were represented. Total attendance has been considerably more than this figure, but only signed visitors were counted. Many school, scout troops, and club organizations also have scheduled special tours.

The Maturango Museum is a non-profit organization incorporated under the laws of the State of California. It was developed by and for the people of the Indian Wells Valley and is governed by a nine-member Board of Directors, elected by the members of the Museum Corporation. The President is in turn elected by the Board from their membership, serving for a period of one year. The current President is Ken Robinson.

Lectures, Field Trips
The illustrated lecture series, coordinated by George Silberberg, has been well attended and has covered a variety of topics. Last Fall Dr. Pierre St. Amand spoke on the Geology of this area; Sylvia Winslow showed slides and discussed Desert Wildflowers, and George Sutherland reminisced on old mines of the Mojave. This Spring Ken Robinson discussed the very old Bristle-Cone Pines found in the White Mountain area; Darwin Tieman traced the life cycle of an interesting family of Desert Glow Worms, one species of which bears his name; and Fay Couch presented her own fine series of slides on local Wildflowers. Further scheduled is an "Old Timer's Night" on Thursday, June 27, which will conclude the series.

Two highly interesting field trips were held recently. Featuring "Geology in Action," and led by Dr. Carl Austin, 30 Museum members visited Coso Hot Springs on May 11th. This trip was highlighted by the first publication of the Museum from the newly-formed Maturango Press, a 28-page illustrated brochure en-

titled, "Coso Hot Springs," written by the tour leader, Dr. Carl Austin. The publication covers the geology of the Devil's Kitchen area, Coso Hot Springs, and has a trip guide of all the prominent geologic features to be seen between the Museum and Coso Hot Springs.

The second tour focused on petroglyphs and was led by Duane Mack. Forty-five members toured the Renegade Canyon petroglyph area with great interest. The tour went on to old Coso Village and Upper Centennial Flats where more petroglyphs were viewed. Several obsidian arrowheads and other artifacts were found. The party returned by way of Mountain Springs Canyon where about two dozen wild burros were seen, including six with foals.

The next trip will center on paleontology and will provide fossil hunters with a good area for finds. This will occur in the early Fall and will be led by Dr. Roland von Huene.

Fund Raising Events
Three fund raising events have helped to finance the Museum. The first, the much enjoyed Antique Show, managed so ably by the women's organization, "The Friends of the Museum" netted over \$300. This show delighted a large number of visitors and all connected with it deserved a special note of sincere thanks from the Board of Directors.

Just concluded was a drawing for an oil painting of "Owen's Peak," donated by Maxine Booty, the artist. This event netted just over \$100, and the Board extends genuine appreciation to Mrs. Booty.

The third venture is the sale of booklets and brochures, including the first Maturango Press publication, Coso Hot Springs, which sells for 75 cents. Other booklets for sale at the Museum

are: "Indians of Death Valley," by Lydia Clements, "Desert Peaks," by the Sierra Club, and "The Indian Wells Valley Handbook," by the China Lake Chapter of the American Association of University Women.

Plan New Exhibits
This summer period will be used to install some new exhibits, including a window display of Indian artifacts found on San

Clemente Island, according to the Director, Rhea Blenman, and the Curator, Sylvia Winslow.

School or club groups are urged to make special appointments for Museum visits. These may be made by a telephone call to Marie St. Amand, NOTS extension 77743, who schedules for the Friends of the Museum, or Sylvia Winslow, NOTS extension 73681, Curator.

National, State and Local Dignitaries, Naval Leaders Aboard for 'Open House'

To See Great Aerial Power Demonstration

The most impressive array of national, state and local dignitaries ever assembled at the U.S. Naval Ordnance Test Station was scheduled to arrive here today for a demonstration of fleet air striking power and weapons research and development.

Present, besides the President of the United States, are Secretary of the Navy Fred Korth, Under Secretary of the Navy Paul Fay, General Maxwell Taylor, Chairman of the Joint Chiefs of Staff; Governor Edmund G. Brown, Senator Clair Engle, Senator Thomas Kuchel, Senator Richard Russell, Congressman Harlan Hagen, Chief of Naval Operations Admiral George Anderson.

Capt. Tazwell Shepard, Naval Aide to the President; Rear Admiral G. G. Burkley, Medical Aide; White House Press Secretary Pierre Salinger and several White House aides also are arriving with the Chief Executive.

Among other visiting Naval leaders are Admiral John H. Sides, Commander in Chief of the Pacific Fleet; Vice Admiral P. D. Stroop, Commander of Naval Air Forces, Pacific Fleet; and Vice Admiral R. T. S. Keith, Commander of the First Fleet.

General David Shoup, Commandant of the Marine Corps, and Rear Admiral William Blenman (Ret), Captain Blenman's brother, also are aboard.

It is fitting that they and other civilian and military leaders should be present, for they know that many of the weapons now at ready in the defense of this nation throughout the fleet and on stations throughout the world were conceived, researched and developed at this sprawling Mojave Desert installation.



SECRETARY OF THE NAVY FRED KORTH



GOV. EDMUND G. BROWN



SEN. CLAIR ENGLE



REP. HARLAN HAGEN

Air Show Movies at Theatre

Movies of the demonstration events to be witnessed by President Kennedy during his visit to the Naval Ordnance Test Station today, will be shown continuously from 1:30 to 4:30 p.m. at the Station Theatre to Station residents and visitors.

The special film was compiled here during two rehearsals.

Theatre passes will not be required for admittance to this special showing today.

Timetable of President's NOTS Visit

- 10:55 Arrives at NAF
- 11:15 Aerial Demonstration
- 12:05 Departs Demonstration Area
- 12:15 Arrives at Mich. Lab
- 12:45 Departs Michelson Lab for Blandy St. procession
- 12:55 Arrives No. 1 Enterprise Rd.
- 2:10 Departs for NAF
- 2:20 Remarks and Honors
- 2:30 Departs NAF

Aviation-Science Experts Are Air Power Narrators

A pair of Naval Aviators, both holders of doctorate degrees in the sciences, will narrate today's fleet carrier air power demonstrations for the President, his official party and some 250 members of the press.

Captain Carl O. Holmquist, the Station's Technical Officer and a Naval Academy graduate who earned his wings at Pensacola in 1945, will describe for the press the series of events as they unfold during this morning's air and research and development phases.

A Salt Lake City, Utah, native who won combat decorations following graduation from Annapolis early in World War II, Captain Holmquist earned his PhD in aeronautics at the California Institute of Technology.

Commander Joseph E. Schwager, Executive Officer of Air Development Squadron Five, one of the units participating in the demonstration, will narrate events which President Kennedy and those in his special reviewing stand will witness.

Also a Naval Academy graduate, the three-striper earned his master's degree in physics at the Massachusetts Institute of Technology in 1953, a doctorate degree in nuclear engineering in 1959 and a second doctorate degree in physics in 1960 both from the University of California, at Berkeley.

Commander Schwager worked extensively with Rear Admiral F. L. Ashworth, a former NOTS Commander, in the preliminary organization of the Navy's first heavy attack squadron, VC-5 in the fall of 1948.

He earned his Naval Aviator designation following graduation from Annapolis in 1944.



CAPT. C. O. HOLMQUIST
Technical Officer



CDR. J. E. SCHWAGER
VX-5 Executive Officer

Biggest Crowd For President

(Continued from Page 1)
The Presidential motorcade will travel to Michelson Laboratory to inspect an outdoor display of NOTS developed weapons and then to see two conference rooms of other weaponry models.

Blandy St. Procession
The procession then travels up Blandy St. The President will have lunch and rest at Capt. Blenman's home before returning to the Naval Air Facility to inspect the NOTS Marine Barracks Honor Guard and then depart for Los Angeles at 2:30 p.m.

Many of the visiting dignitaries will luncheon at the home occupied until recently by Capt. R. A. Davidson while other Station guests and the press correspondents have lunch at the Officers' Club.

Boy Scouts from the area will be manning refreshment stands in the NAF area and the main portion of the Station for the benefit of the general public.

TV Monitors Give JFK Better View

Two television monitors directly in front of him will allow President Kennedy to get a close-up view as well as a distant view of the aerial weapons demonstration today.



ADM. GEORGE ANDERSON
Chief of Naval Operations



ADM. JOHN H. SIDES
CinC, Pacific Fleet



VADM. R. T. S. KEITH
Commander, First Fleet



VADM. P. D. STROOP
ComNavAirPac

Department Heads of NOTS



Capt. J. A. Quense Executive Officer H. G. Wilson Assoc. Tech. Dir. Dr. G. S. Colladay Weapons Planning Dr. I. E. Highberg Test Dr. N. E. Ward Aviation Ordnance F. H. Knemeyer Weapons Dev. J. T. Bartling Propulsion Dev.



Dr. T. E. Phipps Research D. J. Wilcox Underwater Ordnance R. J. Bjorklund Central Staff K. S. Skaar Safety K. H. Booty Engineering R. W. Anderson Personnel K. H. Robinson Technical Information

The commander of NOTS, a senior naval officer, is responsible to the Chief of the Bureau of Naval Weapons for the Station's operation. In turn, a civilian technical director is responsible to the Station commander for all technical work of the Station.

Engineering Dept.

A design engineer with an idea, a slide rule and a drafting board, and a new weapon concept is born—but to help guide this new weapon from the initial drawing board stage to its acceptance and final use by the Fleet, the design engineer calls upon the production engineers and specialists from the Engineering Department.

A successful weapon must be producible in quantity and require a minimum of the nation's supply of critical materials and skills.

This producibility is an important concern of this department where talents and facilities are focused on adapting ideas and designs for ultimate full-scale production.

The department has five divisions with a personnel complement of 450 people. It operates tools and equipment valued in excess of \$5,000,000, expending annually \$4,000,000 on labor, materials and contracts.

Aviation Ordnance Dept.

Development of better missiles and armament-control systems is the mission of the Aviation Ordnance Department.

Paralleling its development

work, AOD carries out the equally important task of testing and evaluating the armament-control systems conceived and nurtured by its engineers and scientists.

To perform this function AOD operates and maintains a set of highly instrumented ranges. It also has its own data reduction and data analysis groups which specialize in the assessment and analysis of aircraft armament-control and missile flight-test data.

The most important function of this analysis work is to uncover sources of error, deficiencies in design, and manufacturing weaknesses.

Test Dept.

"One test is worth a thousand opinions." This maxim is especially true for ordnance work where the realm of unexplored phenomena is immense.

The development of modern weapons requires huge amounts of precise data on the performance of preliminary designs. First, it is necessary to find out quickly whether a new design works. Second, after an initial success it is necessary to prove through further tests that results can be duplicated.

Production models are put through their paces under exacting conditions paralleling in-service use.

Often these evaluation tests are conducted in close cooperation with the Fleet — another example of civilian-military teamwork.

Research

New weapon developments are forged from new ideas and new approaches to ordnance problems. One of the main sources of new weapon developments at NOTS is exploratory research in physics, chemistry, mathematics, oceanography, ballistics, and astronautics.

In addition, there are applied research programs aimed at improving warheads, explosives, detection devices, and other weapon components through the application of scientific knowledge to specific weapon problems.

Weapons

High on the NOTS agenda is the long-range planning of implements and strategies to meet changing weapon requirements. The Station has a Weapons Planning Group whose important task is to devise, study, and evaluate means of nullifying the strength and exploiting the weakness of any hostile power anywhere.

What kind of weapons will be needed in the next decade? How feasible is a specific new weapon system? What research and development should be undertaken to prepare for the future? These are some of the questions that civilian and military experts at NOTS help to answer through operations analysis and feasibility studies.

Propulsion Dept.

Another area where NOTS personnel have made outstanding contributions to development of modern rocketry is propulsion.

For example, equipment developed and techniques worked out for packaging and using storable liquid propellants for rocket motors have been adopted for mass production by Department of Defense contractors.

Methods of tailoring solid-propellant formulations for particular uses were pioneered and major breakthroughs made in compounding high-energy propellants.

Underwater Ordnance

NOTS Pasadena conducts development and tests of underwater ordnance items such as anti-submarine systems, torpedoes, and special missiles as Polaris, at Morris Dam, Long Beach, and San Clemente Island sea range.

Test Tracks

NOTS has three well-instrumented test tracks used for captive testing of ordnance items, for pre-accelerating rockets and guided missiles to simulate aircraft or shipboard launchings and for conducting terminal ballistics studies.

One of the three tracks, the 4.1-mile Supersonic Naval Ordnance Research Track (SNORT), is designed to make possible sustained runs with heavy carriage weights at velocities up to 3,500 feet per second.

Extensive electronic instrument systems in connection with these tracks make possible the collection of data required for the development and testing of ordnance items.

Aircraft Ranges

Considered as a group, the four aircraft ranges at NOTS represent some of the country's most complete facilities for developmental testing of aircraft ordnance and associated equipment such as armament-control systems. Also, the use of these well-instrumented ranges is valuable for developing tactics for using completed weapons systems.

Many of the special cameras and electronic instruments on the aircraft ranges and on other NOTS ranges, have been developed at the Station to meet the unusual requirements of developmental testing.

Randsburg Wash

The four permanent ranges of the Randsburg Wash Test Activities at NOTS have the most complete facilities in the United States for accurate fuze testing in an environment similar to tactical conditions.

It is the only place in the United States where full size airplanes as large as B-29 bombers may be suspended as high as 250 feet above the ground for use as targets in fuze tests.

These test ranges are located in an isolated 15-mile-long valley, 23 miles from Michelson Lab and the Station's administration building.

Space does not permit a complete recount of the valuable contributions made by other departments and groups to the NOTS mission.



Capt. B. L. McCreery Supply Cdr. C. W. Heck Com. Administration Cdr. J. A. McAllister Public Works (Actg.) LCdr. R. C. Clasen Security Maj. Maurice Rose Marines Cdr. R. B. Speaker Medical Capt. J. G. Chudzinski Dental

Past Station Commanders

20-Year History . . .

(Continued from Page 8) captive testing of ordnance items. SNORT recently gained further acclaim with the development of RAPEC (Rocket Assisted Personnel Ejection Catapult), the ejection seat capable of propelling pilots 225 feet into the



RAdm. W. G. Switzer (Ret.) Nov. 1947 - Sept. 1949

Capt. J. B. Sykes (Ret.) Aug. 1945 - Nov. 1947

air from their low-altitude flying craft, thus saving lives of jet pilots faced with low-altitude crash emergencies.

G-4 Range

G-4 Range, for high-speed terminal ballistic studies with rockets and similar ordnance,



Capt. W. V. R. Vieweg Sept. 1949 - Oct. 1952 (Deceased)

was opened in December, 1954, and in February, 1955, the move was completed from the temporary G-1 to the permanent G-1 Range, putting into operation one of the nation's most up-to-date and most completely instrumented ranges for guided missiles. The move to the permanent G-2 Range was completed in August.

During the last five years,



Capt. S. E. Burroughs Dec. 1943 - Aug. 1945 (Now RAdm. Retired)



of an employee's superior service.

Sidewinder became operational with the fleet in mid-1956, and has since been adopted by the U.S. Air Force.

Early in 1957, the Navy announced development of the 5" high-velocity missile, Zuni, which made obsolete the slower "Holy Moses," used in World War II and during the Korean conflict.

New Hanger

Ground-breaking ceremonies were held for the \$3,500,000 Naval Air Facility hangar on December 30, 1957. This is the largest construction project on the Station in the last nine years.

On February 14, 1958, RAT (Rocket-Assisted Torpedo) was unveiled. Developed by NOTS Pasadena personnel RAT greatly minimizes the effect of enemy submarines.

20-Year Growth

In twenty years, the Naval Ordnance Test Station has grown



Capt. D. B. Young Sept. 1953 - July 1955 (Deceased)

NOTS, concerned little with construction, has helped in the nation's giant strides toward more effective military weapons.

Mighty Mouse

In mid-1956, development of the 19-round Mighty Mouse Rocket Launcher was announced. Two military units joined NOTS during this year. The Marine Corps Guided Missile Test Unit was activated to test and evaluate selected missiles systems and components for the Corps and to assist NOTS in evaluation of the Terrier missile. MCGMTU continued the work begun by the 1st Terrier SAM Battalion.

VX-5 Arrives

Air Development Squadron 5 (VX-5), the Navy's top test squadron, arrived in July. C-Special



Capt. Paul D. Stroop Oct. 1952 - Aug. 1953 (Now Vice Admiral)

Test Range, known as Charlie Range, affords development of special weapon delivery techniques and general evaluation of ordnance items or components. It is here, at Charlie Range, that VX-5 has made themselves more well known than ever.

Also, in July, 1956, the first liquid-propelled rocket sled was fired at SNORT. Shortly before, a SNORT sled topped previous Station records with a 1,350 mile-per-hour run on July 6.

Sidewinder Developed Entirely developed at China Lake was Sidewinder, air-to-air guided missile, originally conceived by Dr. Wm. B. McLean, Technical Director, who, in December, 1956, received a \$25,000 superior accomplishment award, the highest award ever made by the Government in recognition



Capt. F. L. Ashworth Aug. 1955 - Sept. 1957 (Now Rear Admiral)

Others were Sidewinder, probably the most widely used air-to-air missile in military service today; Zuni, a 5.0-inch folding fin air-to-ground or air-to-air rocket; RAT, (Rocket Assisted Torpedo); ASROC, surface-launched antisubmarine weapon. In addition NOTS contributed to Polaris, Caleb, High-Hoe, Terasca, SLV (Soft Landing Vehicle); porpoise studies, and most recently the development of Shrike, an antiradar missile, and testing of Bullpup.



Capt. W. W. Hollister (Ret.) Sept. 1957 - June 1961

CAP Cadets Deliver Rocketeer Before Dawn

"Project Rocketeer" was launched before dawn today by cadets of the China Lake Civil Air Patrol Squadron 84, who responded to the call for house-to-house delivery of today's Rocketeer.

The operation, which enabled Station and Wherry residents to receive their paper before the Presidential visit today, was handled by twenty cadets and eight senior officers under the direction of Lt. Robert B. Thomas, squadron executive officer.

CAP cadets, commanded by Lt. Larry Miller, assembled at the Rocketeer office at 4 a.m. and immediately set forth to deliver some 8,000 of today's edition containing the program of events for President Kennedy's visit to NOTS.

Senior CAP personnel aiding in the "delivery project" by operating mobile radio communications units were Lt. Col. Fred L. Richards, Lt. Robert T. Downing, Lt. Ralph McClendon, WO Raoul, J. Landry, Sgt. Frank W. Peck, Sgt. Claude Harrell, and others.

Farewell Party For Anderson June 13

Employees of the Personnel Department will host a farewell party for R. W. (Bob) Anderson on Thursday, June 13, from 2:30 to 4:30 p.m. in Room 2 of the Personnel Building.

Anderson, who has headed the Personnel Department since 1946, is transferring to the U. S. Health Department, Washington D. C.

Since his arrival at NOTS, Anderson has witnessed the department's growth to its present complement of 55 here and 10 in Pasadena.

A Phi Beta Kappa graduate of Cornell University, class of '35, with a major in political science, he taught American Government and Political Science at Deep



R. W. ANDERSON

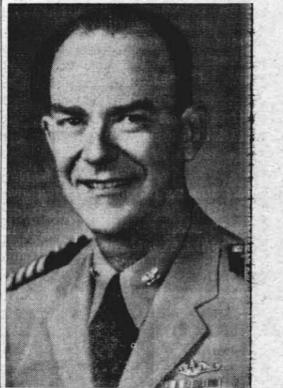
Springs College, Deep Springs, Calif., and at Cornell University. He later obtained his master's degree in public administration from Princeton University.

Special Assignments In 1956 he served for four months as a Navy member of the Staff of the Department of Defense Advisory Committee on Professional, Technical, and Managerial Personnel (Cordiner Committee) preparing recommendations to the Secretary of Defense which would attract and retain competent people.

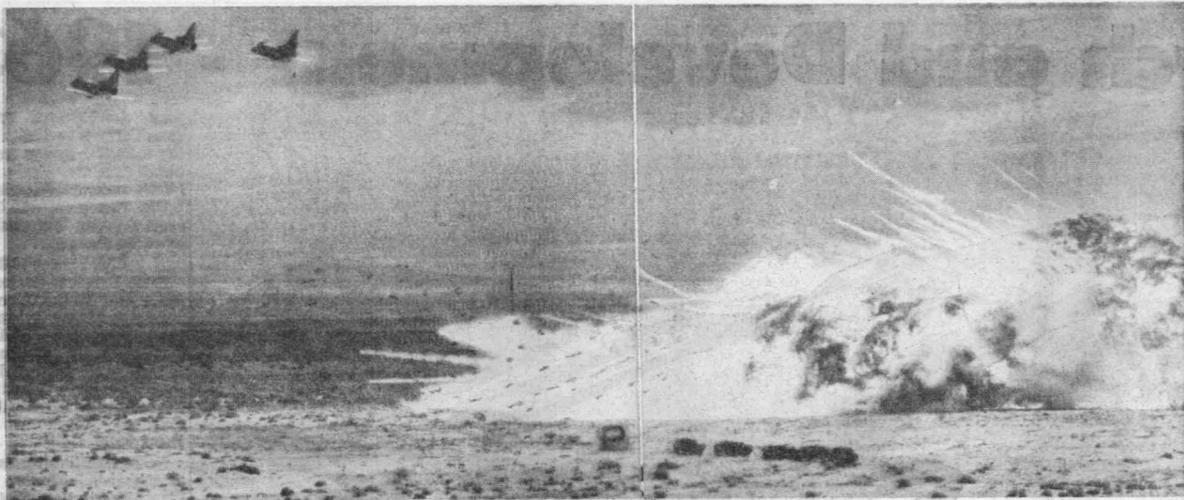
For this service he received a commendation from the Secretary of the Navy.

Other Activities Anderson has also been a member of the Station's Housing Board and served a tour as NOTS Liaison Officer in Washington.

O-in-C Pasadena



CAPT. E. I. MALONE is Officer-in-Charge of NOTS Pasadena. Besides the Foothill installation, also under his command are the Morris Dam Test Range, Long Beach Sea Range, a facility at Seal Beach, and the San Clemente Island Sea Range, where tests proved that the Polaris missile could be airborne after an underwater launching.



NAPALM STRIKE — Navy Skyhawks drop deadly napalm bombs in a low-level, 500-mile-per-hour attack, scorching the desert floor at China Lake test range. This is but one of the spectacular events observed by the President.

20-Year History . . .

(Continued from Page 7) as for service personnel.

Families first occupied single-family dwellings in the fall of 1944, and as more and more housing was completed, they were immediately occupied. Last Hill Duplexes were completed in 1952, with an additional 500 Capeharts in 1961.

With the vital, immediate construction now almost finished, testing operations assumed an amazing urgency. In March, 1954, the K-2 Range was opened for use in rocket terminal ballistics studies.

New Goals

Then, in April, the Naval Ordnance Test Station was established as an independent activity to carry out the research and development program of the Bureau of Ordnance.

Since 1945, there has been continuing stress on conducting a fully integrated weapon program, utilizing the best tools and most competent engineering and scientific personnel available. Because of this emphasis, NOTS has been able to make significant contributions to the nation's defense arsenal and has prepared itself to undertake increasingly more complex weapon development tasks.

Ground firings of aviation ordnance items was begun in mid-1945. About this time, too, the Salt Wells Pilot Plant was opened for experimental work in the field of explosives.

Marines Arrive

Marines, for security, came to

NOTS on July 17, and on July 31, the Station's allowance of Naval personnel was fixed at 149 officers and 1,838 enlisted men and women. Present strength of all military personnel is 150 officers and 1161 enlisted men.

The Marines will be disestablished throughout this month.

Real Community

The NOTS community began to be a real community. A nursery school was opened in August, 1945; shopping facilities at Bennington Plaza were nearly as complete as they are today; in 1947, the old theater building was remodeled to become a small chapel, utilized by all faiths until November, 1957, when the new \$350,000 All-Faith Chapel was dedicated.

Technical Director

In 1946 the Bureau of Ordnance approved an operational charter for NOTS stating the principle that directional control of the ordnance development programs would be the job of a civilian Technical Director. At the same time it provided for close collaboration by members of the military service and the civilian technical staff in providing guidelines for successful weapons programs.

Later that same year, B-4 Range was put into operation for captive ordnance testing.

Officially NOTS

China Lake became the official name of the NOTS community on January 16, 1948, when the Post Office Department designated it



ASROC (ANTISUBMARINE ROCKET), also developed at NOTS, is a supersonic missile that can be launched from surface ships either individually or in salvos of two to four at a time.

as the name of an independent post office and thereby ended the designation of the Station office as a branch of the Inyo-Kern Post Office. Home delivery of mail was begun in June.

A second major technical facility was dedicated in 1948—the Variable-Angle Launcher at the Pasadena Annex on May 7. This Launcher is a \$2,000,000 test facility for studying water-entry problems of torpedoes and other underwater missiles.

Station Advisory Board

The Station Advisory Board was activated in December, 1948 to provide counsel by outstanding scientists, industrialists, educators and administrators.

From 1948-1951 about 1000 family dwellings were added, as well as dormitories and trailer spaces to provide more housing for the ever increasing populace.

RAM Developed

The NOTS-developed RAM, an antitank rocket, was significantly utilized during the Korean conflict against enemy tanks. Fired from aircraft and capable of penetrating the heaviest armor, RAM was developed and delivered to Korea in only twenty-six days.

Two new ranges were added in 1951. One of them, T-Range, was opened in January for rocket proof firing. The other, K-3 Range, was opened in March for use in cross-wind rocket firings.

The Projectile Range, at Rands-

burg Wash, 25 miles southeast of the NOTS headquarters, was opened during ceremonies on May 16, 1952. This Range, covering 320 square miles and including countless test facilities, greatly broadened the scope of the test and evaluation work accomplished here.

Thompson Lab Opened

One of the few such facilities in the entire country was made available to NOTS technical people in 1953 with the opening of the Thompson Aeroballistics Laboratory, named for the Station's first Technical Director.

It provides for aerodynamic research and development work with models of rockets and other ordnance items. Authorized in 1945, the Lab was not dedicated until November, 1956, although its facilities had been in use for several years.

Television came to China Lake in 1953 upon completion of the Laurel Mountain Repeater Station, the only one of its kind in the nation. Community recreation activities were enhanced in 1954 with the completion of the new Community Center.

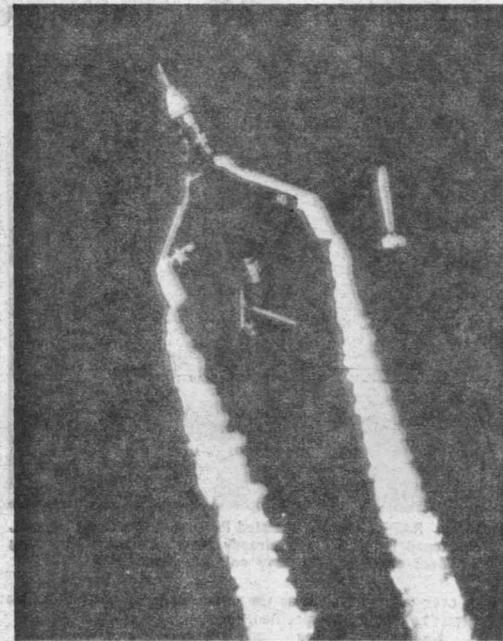
Dr. McLean Named

Dr. William B. McLean assumed responsibilities as the Station's Technical Director in April, 1954.

Completed in mid-1954 was the Supersonic Naval Ordnance Research Track—SNORT—used in

(Continued on Page 9)

Loft Bombing



LOFT BOMBING TECHNIQUE—This idea was devised here to permit pilots to get away safely after releasing their weapon. As the bomb is tossed to desired point of impact, the plane continues up and over in a backward loop, escaping the blast effect. Pilots call this the "idiot loop!"

NAF and VX-5 Pilots, Carrier Groups Team Up

Twelve jet pilots from NOTS Naval Air Facility, Comanded by Capt. Jack W. Hough, and 10 pilots and three crewmen from NOTS Air Development Squadron Five, skippered by Cdr. H. N. O'Connor, joined 27 pilots from Carrier Air Groups 11 and 16 to stage the range-blasting aerial demonstration today.

The NAF pilots are LCdr. A. L. Berthelson, Lt. D. F. Callahan, Lt. W. D. Jones, Lt. J. L. Kistler, Lt. E. P. McBride, Lt. J. M. Morgan, Lt. L. O. Peechatka, LCdr. C. W. Rochester, Cdr. J. A. Sickle, Lt. K. J. Sikes, Lt. A. L. Tambini and Lt. J. P. Thompson.

The VX-5 pilots and crewmen are LCdr. G. H. Palmer, Capt. R. R. Powell (USMC), Lt. R. L. Boyd, Lt. W. A. Barr, Lt. R. V. Rice, Lt. E. G. Borgardt, Lt. P. F. McCarthy and his crewman J. L. Pierce, PH1.

Major P. B. Montague (USMC), Capt. T. R. Brock (USAF), Cdr. C. H. Lindberg and his crewmen, Lt. E. E. Austin and A. P. Oberst, AQ2.

The pilots from VA 165 Group based at Moffet Field are Cdr. R. Houck, Cdr. L. L. Andrews, LCdr. W. S. Gett, III, LCdr. G. T. Pappas, Lt. L. H. Taylor, Lt. O. B. Pollock, Lt. (jg) A. L. Goldsmith, Lt. (jg) G. J. Mafort, Lt.



CAPT. J. W. HOUGH
CO, Naval Air Facility

CDR H. N. O'CONNOR
CO, AirDevRon Five

(jg) J. W. Wilson, Lt. (jg) P. S. Ferrentino, Lt. (jg) A. G. Harris-

on, and Lt. (jg) S. A. Pelszynski. The pilots from VA 163 and 164, both are based at Lemoore, are Cdr. M. D. Short, LCdr. H. T. S. Linn, Lt. (jg) C. H. Hubbard, and Lt. (jg) D. C. Clarke, Jr.,

(jg) J. A. Cade, Lt. (jg) W. R. McGowen, Cdr. C. A. Banks, Jr., LCdr. R. M. Netherland, Lt. E. D. Shropshire, Jr., Lt. H. C. North, Jr., Lt. (jg) H. C. Farley, Jr., Lt. (jg) R. M. Mulrooney, Lt. (jg) R. S. Linn, Lt. (jg) C. H. Hubbard, and Lt. (jg) M. D. Hewett, Lt.



DR. MARIAN E. HILLS



DR. MARGUERITE ROGERS



DR. JEAN M. BENNETT

Tops In Federal Service

NOTS' Women Scientists

Testifying to the fact that woman's place is no longer necessarily in the home, are several top-notch women of science who are working side by side with their male counterparts in their chosen fields.

Here at NOTS there are scores of such women, mathematicians, physicists, chemists, statisticians, and scores more in administrative and clerical fields.

Following is an account of just a few of these dedicated women.

Dr. MARGUERITE M. ROGERS

Dr. Marguerite M. Rogers, Head of the Air-To-Surface Weapons Division in the Weapons Development Department was a 1962 nominee for the Third Annual Federal Woman's Award, a government-wide program to spotlight top-caliber women in the Federal Service.

Dr. Rogers began her brilliant career in Seymour, Texas, where she graduated as valedictorian of her high school class. Graduating with honors in physics from Rice Institute in Houston, which she attended on a scholarship, she completed her work for her MA degree in 1938 and received her PhD in physics in 1940.

Dr. Rogers and her husband, Dr. Fred T. Rogers, who passed away in 1956, came to China Lake in 1949. In 1953, the

family, including five children, moved south where Dr. Rogers resumed her teaching profession at the University of South Carolina and Marguerite directed the science division at Columbia College.

Marguerite and her children returned to China Lake in 1957. Dr. Rogers is a member of Phi Beta Kappa, Sigma Xi (ReSA), The American Physical Society, and is listed in the Leaders of American Science.

Dr. JEAN M. BENNETT

A physicist in the Physical Optics Branch, Dr. Jean M. Bennett came to NOTS in 1956 as a research physicist in the Research Department. Her husband, Dr. H. E. Bennett is also a physicist in the Physical Optics Branch.

In 1960, Jean was commended for her research which led to improvement in the measurement of length with a comparator. Continuation of this work has since increased the speed and ease, through automation, with which the readings can be made.

A paper by Jean was published in the Journal of the Optical Society of America, reporting a precision about 10 times better than the usual precision associated with comparator measurements.

Jean received her PhD in phy-

sics from the Pennsylvania State University in 1955 and spent the following year at the Wright Air Development Center previous to joining NOTS.

The Bennetts are presently on a cruise to Alaska from Vancouver. They will then proceed to Lake Powell behind Glen Canyon Dam on the Arizona-Utah border.

Jean is currently completing a paper on "Precise Method for Measuring the Absolute Phase Change on Reflection."

DR. MARIAN E. HILLS

A comparative newcomer to NOTS, having arrived in 1961, Dr. Marian E. Hills is a physical chemist in the Inorganic Chemistry Branch of the Chemistry Division, Research Department.

She was first introduced to NOTS during summer employment here in 1960. Just previous to NOTS she was associated with the Colorado State University.

Born in Illinois, Marian received her AB from Illinois College, earned her MS at Oklahoma A&M, and completed work for her PhD at Oregon State College.

She is currently "growing" crystals of the alkali halides and looking at some of the optical properties.

Dr. Hills is a member of the American Chemical Society.

Squadrons Support NOTS' Vital Work

NAF's Role

Established to provide flight facilities and support for the aviation ordnance research, developmental, test, and evaluation programs of NOTS scientists, actual history of the Naval Air Facility dates back to the era when the Naval Ordnance Test Station itself was no more than an unlocated dream.

Commanding officer of NAF is a veteran naval aviator Capt. Jack W. Hough.

Supporting the testing and development of new weapons and weapons systems at NOTS, the Air Facility does virtually all of the flight testing of NOTS-developed items.

NAF Established

In a formal ceremony on May 30, 1945, Armitage Field was dedicated to the design, development and testing of aircraft weapons, and named in honor of John M. Armitage, USN, killed on one of their air firing tests of Tiny Tim.

A letter from the Secretary of the Navy, dated April 28, 1947, established the Naval Air Facility, Naval Ordnance Test Station, Inyokern, California, as a separate command under the military command and coordination of the Commanding Officer, Naval Ordnance Test Station, Inyokern, California and under the management control of the Bureau of Ordnance.

First Commanding Officer of NAF was Cdr. J. M. Elliott, USN, assuming duty May 5, 1947.

Maintenance personnel maintain approximately 20 different models of aircraft utilized by the Facility in their part of development of the nation's newest weapons.

Indicating future growth of the Station, and acceleration of the program of the Naval Air Facility is the \$3,500,000 hangar constructed in 1960.

VX-5's Role

Playing a key role in the Navy's weapons program is Air Development Squadron Five (VX-5).

Probably the Navy's top test squadron.

Information gained by these dedicated men with marks of oxygen masks on their faces is translated into the jargon of the fleet and becomes the bible of the carrier pilot.

Commanded by Cdr. H. N. O'Connor the squadron has approximately 30 officers and 200 enlisted men, including two Marine pilots and one Air Force exchange pilot.

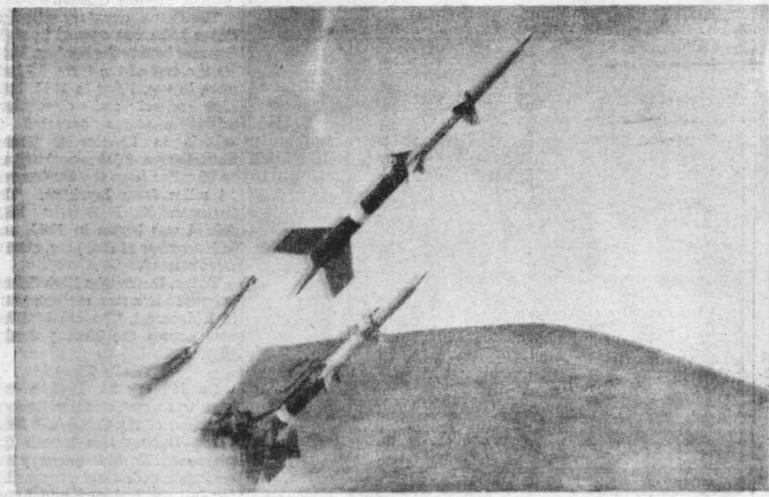
Under the logistic and operational control of the Commander, Naval Air Force Pacific Fleet and the technical control of the Commander, Operational Development Force VX-5 develops day and night and all-weather techniques for the delivery of special weapons by carrier-based airplanes.

VX-5 takes justifiable pride in having developed the loft bombing technique, the most effective technique yet devised which permits pilots to get away safely after releasing special weapons.

The maneuver involves a high-speed run-in toward the target, a pull-up at a pre-determined distance from the target, followed by an automatic bomb release at a prescribed angle, either low medium or high.

As the bomb is tossed toward the desired point of impact, the attack airplane continues up and over into a backward loop, recovering in the direction from which it came, and escaping the blast effect of the weapon.

VX-5 writes the instruction books for the Navy's hardware Exhaustive trials of new techniques by fleet-trained pilots develop the do's and don'ts of naval aviation.



THE TERRIER has two versions of guidance systems: beam-riding and homing. It is a supersonic surface-launched anti-aircraft missile of medium range, has solid propellant.

1943 - Twenty Years of Research and Development - 1963

Developed From Wasteland To Research Center

Prior to autumn, 1943, the area now within the boundaries of the Naval Ordnance Test Station was known only to the few hardy prospectors who traversed the Indian Wells Valley to and from their mines and to the 26 who bravely filed homestead claims. They subsequently raised crops which they couldn't sell because of the lack of adequate transportation between here and the nearest town, Mojave.

Conceived from World War II's vital need for rocket-powered weapons in which the United States trailed a poor fourth to Germany, Russia and England, the Navy's Office of Scientific Research and Development instituted such a program, administered until April, 1945 by the California Institute of Technology.

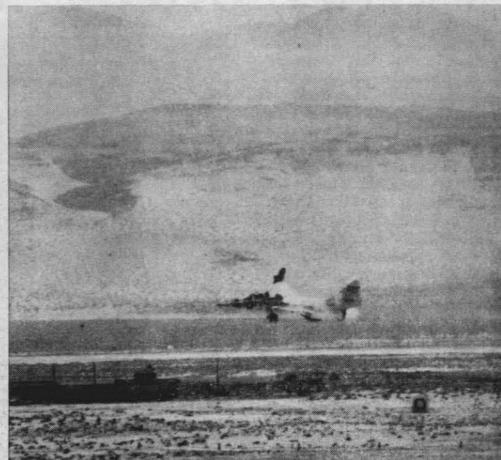
Dr. C. C. Lauritsen
The CalTech program was headed by Dr. C. C. Lauritsen, a World War II rocket specialist who returned to this country from England to assume responsibility for America's rocketry projects, upon request of the Government.

Serving primarily during the war years as an adjunct to CIT's rocket development and testing, the NOTS' mission was that of research, development and testing of weapons, with particular emphasis on aviation ordnance, and additionally, to furnish primary training in the use of these weapons.

Started at Goldstone
Development and testing undertaken by the Institute from 1939 to 1942 was accomplished in the populated Pasadena area. In 1942, CalTech's test operations were moved to Goldstone Dry Lake, near Barstow, where the first actual rocket firing was on July 2. A rocket-driven retroacting depth-charge, it was known as a "retro-bomb."

Goldstone's area soon proved inadequate, and on November 8, 1943, the Naval Ordnance Test Station, Inyokern, was established by directive of the Secretary of the Navy Frank Knox as an activity of the 11th Naval District under cognizance of the Bureau of Ordnance.

Nine hundred square miles of level and comparatively moun-



RAPEC EJECTION — An experimental dummy is ejected from a Navy Cougar in these sequence photos of one of the many demonstrations to be witnessed by President Kennedy today.



RAPEC (Rocket Assisted Personnel Ejection Catapult), developed by NOTS, has already been credited with saving the lives of about 100 Navy and Air Force pilots.

tainous desert were set aside for the permanent Navy rocket and related weapons research facility.

Most of this land was on public domain; a small part was owned by the State of California; another small parcel was under Army jurisdiction and an even smaller portion was privately owned by homesteaders.

Harvey Field
The portion under Army responsibility was the Inyokern Airport — Harvey Field — which later became the first actual operations point of the NOTS organization.

Arrangements were made to transfer or trade the unclaimed land to the Navy, and that under State or Army control was "traded." Privately owned acreage was condemned and subsequently purchased under the Second War Powers Act.

In November, 1944, 338 square miles of land was added to the original 900.

First Construction
The first construction was authorized in November, 1943, calling for \$160,000 for erection

of temporary housing at the air field and for an ordnance test area on the China Lake site, which was to include barracks, mess halls, storage facilities, shop buildings, recreation huts, dispensary, spotting towers and some roads.

By winter of 1943, the first rockets, 3.5" modifications of an English weapon, were fired from the dry bottom of China Lake on what is now "C" Range. These tests used the CIT high velocity aircraft rocket (HVAR) and were flown by F.A.W. Squadron 14, an experimental squadron assigned to the rocket development program.

Eight Quonset Huts
Still in its infancy, the Station, on February 29, 1944, was comprised of eight Quonset huts and the test ranges which were then being set up. Rocket development was speeding ahead.

The first permanent facilities were provided for, in contracts signed March 7, 1944, involving \$25,932,140. Fifteen months later this contract was terminated by the Government, 93% complete after an expenditure of \$54,952,

221, over twice as much as the contract had originally specified.

No Family Quarters
Several hundred specialized buildings, barracks, sewage disposal, telephone, electrical and water systems, runways and roads were provided. This construction project furnished facilities for about 8,000 persons (no family quarters) and included buildings still utilized today.

At the beginning of construction, no labor force was available; therefore, a nation-wide recruitment program was established. Some 4,500 workers traveled to NOTS via government-paid transportation, helping to swell the ranks of construction crews.

Turnover Tremendous
The turnover was tremendous—during the first year, over 24,000 people were hired, yet the maximum working at any time was 7,000.

Those hardy souls surviving the demoralizing effects of heat and the most primitive of civilized living accommodations laugh about the "old days" now. Says one, "There were three kinds of people—those coming,

those working and those leaving."

Kids Stayed With Grandma
Another states, "Unless you had your own trailer, you had no family. Wives lived in the women's quarters; husbands stayed in the men' dorms and the kids, well, they stayed with Grandma!"

A third old-timer tells of a sandstorm in mid-summer. Trenches for water, sewer and other lines were dug, and hundreds of acres had been scraped of vegetation. A hot wind came up, sweeping up tons of silt-like sand, filling trenches, and causing a cessation of all activity while all workers ran for protection, only to find their barracks just as sand-filled as the area outdoors.

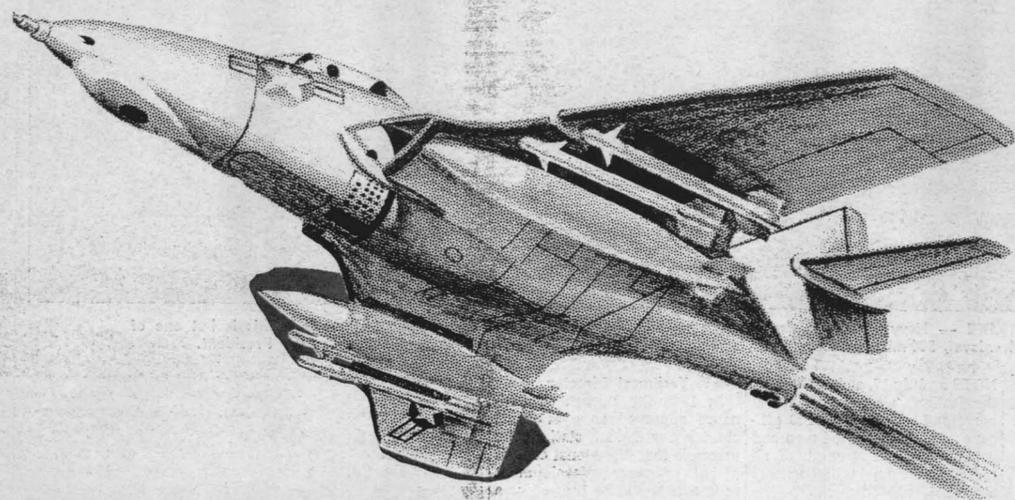
First Offices
First administrative offices of the embryonic Naval Ordnance Test Station was the Quonset hut at Harvey field, jointly occupied by Station Commander Capt. S. E. Burroughs, USN, and the Executive and Experimental Officers, as both living and working quarters.

Soon after the Station was established, a need was determined for technical aviation facilities and experiments. In December, 1943, Aviation Ordnance Development Group 1 was commissioned at Naval Air Station, San Diego, with LCdr. T.F. Pollock, USN, as Officer-in-Charge.

First Technical Group
The combined mission of the Group was to provide technical aviation facilities and equipment for development of aviation ordnance, to flight test such ordnance, armament an experimental projects and to provide aircraft utility services. First based at Harvey Field, the unit, eight months later, moved to their permanent facilities — Armitage Field—on the China Lake site.

In fulfillment of its secondary mission of training, NOTS' first two-weeks course covering instruction on the latest rockets, their fuzes and handling procedures began August 25, 1944. Studying the 5" HVAR ("Holy Moses") and the 11.75" AR ("Tiny Tim"), some 150 officer and enlisted personnel received training before the course was decommissioned in May 1945.

CalTech's work was primarily concerned with the development and testing of rockets, propellants and launchers. When it was later decided that the Station should become a permanent, highly developed facility of the Bureau of Ordnance, it was also determined that the Navy, in



THE SENSATIONAL SIDEWINDER MISSILES, which the President will see in action today, fit snugly in racks under wings of jet fighters. The Sidewinder is another weapons product of which this Station is justly proud.

added expense involved was repaid in a 5-minute span in 1953 when the nearby Bear Mountain Fault slipped, leaving neighboring Tehachapi and Arvin in shambles.

Presently housed in the gigantic laboratory are five departmental organizations of the Naval Ordnance Test Station. Among them is the Test Department whose major function is to develop the means for testing, and to test propellants, explosives and products of other Department's research and development efforts. The Aviation Ordnance Department, the Weapons Development Department, the Research Department and the Engineering Department also occupy the huge structure.

NOTS Pasadena
Pasadena, once the only facility in the United States devoted to Navy rocket, aviation ordnance and underwater weapons development, is now primarily concerned with underwater weapons, such as torpedoes, and the now famous Polaris, the submarine-to-land missile, proving for the Navy that the missile could be airborne after an underwater launching.

When the Navy took over weapons development operations from CalTech in 1945, the existing scattered groups were combined into the single unit of NOTS, under the direction of Dr. L.T.E. Thompson, who later became the first Technical Director of the Station.

Civil Service 1948
Some Pasadena projects were taken over by the General Tire and Rubber Company, under contract, and remained under jurisdiction of that company until 1948 when the 430 Pasadena personnel were transferred to Navy Civil Service. Personnel at the Pasadena Annex now number about 1000.

NOTS Pasadena consists today of the administrative Foothill Plant, Morris Dam Test Range, Long Beach Sea Range and the San Clemente Island Sea Range, all conducting research, developmental and test activity concerning all phases of underwater ordnance.

G-Ranges Developed
During late 1943 and early 1944, temporary G-1 and G-2 ranges, for ground firings of rockets, had been laid out, and the first rockets were fired on G-2 Range March 30, 1944. By the middle of April temporary towers had been constructed along the boundaries of the ranges so that spotting of impacts could begin, and on May 1, spotting actually began on G-1 Range. Permanent spotting towers replaced the temporary structures in December, 1944.

Launchers Added
Launchers, range buildings, and other test facilities were added at these temporary ranges to meet the Station's immediate needs. In the meantime, the permanent ranges were begun, and in 1945, the first testing for a guided missile program was undertaken with the result that G-1 Range became the area for testing of guided missiles rather than rockets.

By July, 1944, B-1 and B-2 Ranges were opened for Air-to-Ground firings of rockets.

Finally, after a year and a half of frenzied construction of buildings to carry out the mission of the Station, in 1944 and 1945, a number of homes were begun. In a short time, 1070 units—duplexes, apartment buildings, senior and junior officers' quarters, dormitories and prefabricated housing—rose to contain both construction people and scientists, engineers and other personnel engaged in rocket and missile development.

Schools Opened
The first elementary school at China Lake was opened in eight Quonset huts in September, 1944. By the end of the term, 13 huts were in use. Prior to 1944, both high school and elementary school students traveled to schools in Ridgecrest, Trona, Randsburg and Johannesburg, up to 26 miles from the Station and 34 miles from Inyokern. The Sherman E. Burroughs High School was begun in 1945, and in November of that year, classes were started.

Today, Burroughs High School is housed in a new modern plant in Ridgecrest. The old building now houses the Murray Junior High School.

Saltwells Plant
On January 30, 1945, a contract was negotiated for the construction of the Salt Wells Pilot Plant. During this month the permanent Naval Dispensary was commissioned, then responsible for full medical care and hospital care of both Civil Service and CalTech employees, as well

(Continued on Page 8)



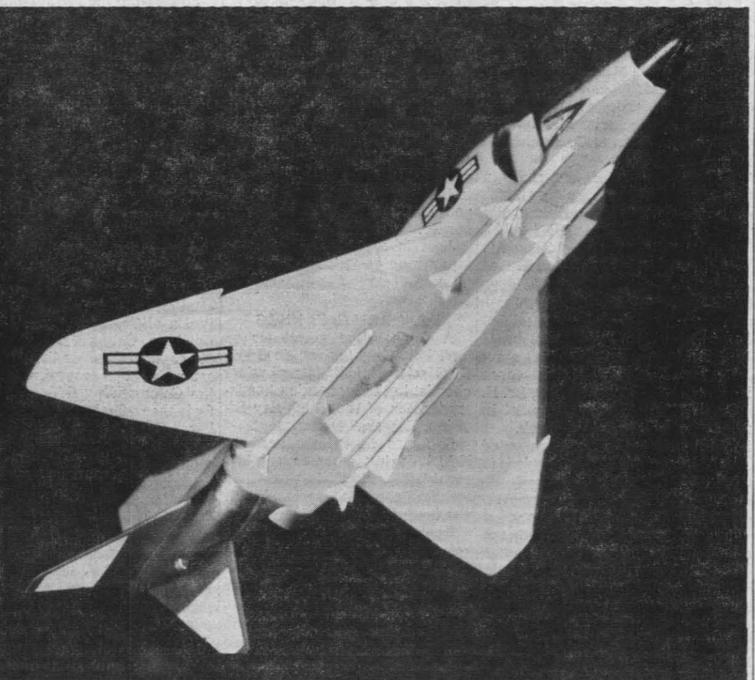
THE WORLD-FAMOUS POLARIS is the perfect example of NOTS teamwork. The efforts of personnel at China Lake, Pasadena and San Clemente Island made this project a resounding success. The Fleet ballistic missile is launched from a submerged submarine.

order to house the expected thousands of personnel needed, would virtually create a city.

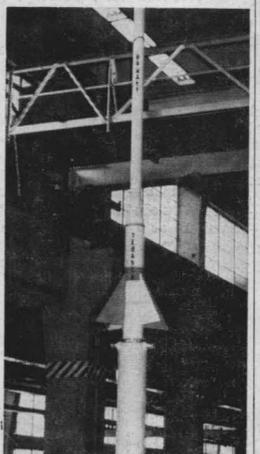
BuOrd Takes Over
Between April and October, 1945, the Station took over most of the CalTech projects, and homes, schools, shopping facilities, Michelson Lab and other permanent buildings rose to transform the desert outpost into a community with a single purpose—to provide weapons.

Michelson Lab
Its new concrete shining in the intense sunlight, Michelson Laboratory was dedicated May 8, 1948. It is the focal point of NOTS' test activity. Built at a cost of \$10,000,000, making this the largest, most completely equipped institution of its kind in this country.

It is composed of 16 units, joined in such a way as to minimize possible earthquake damage. The



CALEB AND SPARROW MISSILES — The NOTS-designed CALEB, nestling under the center of McDonnell F4H Phantom II fighter, can be launched from any point in the world accessible to Navy aircraft. Flanking it are four SPARROW air-to-air missiles.



TERASCA — Three rocket motors were taken "off the shelf" here to build this upper atmosphere research vehicle. Parts were used from TERRIER, ASROC and CAJUN.