

PARENTS DO THE HONORS—Awards and commissions are presented to three Civil Air Patrol Cadets of China Lake Squadron 84 after orders are read by Major Fred Richards (far right), squadron commander. Cadet Beverly Petersen (left panel) receives the CAP certificate of proficiency ribbon from her mother, Mrs. Walter Petersen. Cadet Richard Clodfelter (center panel) receives the insignia of 2nd Lt. from his mother, Mrs. Arthur Clodfelter, as Lt. W. O. Hamilton, senior CAP executive officer looks on. Cadet Joseph M. Shea, Jr. (right panel) receives the insignia of 2nd Lt. from his father, Cdr. Joseph M. Shea, SC, Associate Director of Supply, CAP Squadron 84 is composed of 44 members.

Rocket Controls...

(Continued from Page 1) ment since arriving here in 1950, and is presently Head, Missile Propulsion Division. Klein, a graduate of Northwestern University, has been at NOTS for six years, associated with weapons and propulsion development. His present position is as Supervisory Aircraft Rocket Powerplant Research Engineer in the Missile Propulsion Division of Propulsion Development.



WHAT IT'S ALL ABOUT—Members of the Navy Wives Club pause for the photographer during their recent tour of the Station. Picture was taken in the Thompson Aeroballistics Laboratory.

Rutkowski, Head, Engineering and Development Branch of Missile Propulsion, came to NOTS following graduation from the University of Minnesota in 1951 with a Bachelor's degree in Mechanical Engineering. He has since been associated with liquid propellant research and development.

NOTS Day-Class Program Starts; Eligibles Offered Six Courses

Registration for the Day-Class Program for the 1959 Spring semester will close January 30. Typewritten In-Servicemen Training Course Enrollment Authorization, Form 11ND NOTS 2750 (Rev. 11-57) should be submitted in behalf of each employee authorized to participate to Code 6541, Professional Development Program.

Classes to be offered are: Management 2, Management Practices. Instructor: A. T. Camp, Thursday, 8-10 a.m., Room 1001, Michelson Lab, 16 meetings, beginning February 12. Admission requirements: Confidential clearance, GS-11 or higher, departmental authorization. Science and Engineering 2B, Guidance and Control. Instructor: C. P. Smith, Tuesday, 8-10 a.m., Room 1001, Michelson Lab, 8 meetings, beginning February 9. Admission requirements: Confidential clearance, departmental authorization. Science and Engineering 5B, Instrumentation and Test Techniques. Instructor: F. M. Ashbrook, Monday, 8-10 a.m., Room 1001, Michelson Lab, 8 meetings, beginning February 9. Admission requirements: Confidential clearance, departmental authorization. Science and Engineering 6A, Terminal Ballistics. Instructor: M. E. Backman, Tuesday, 8-10 a.m., Room 1001, Michelson Lab, 8 meetings, beginning April 14. Admission requirements: Confidential clearance, departmental authorization.

Campaign...

(Continued from Page 1) the responsibility of conducting a thorough, sincere campaign of solicitation in accordance with the provisions of the Federal Fund Raising Policy . . . I am keenly interested in the success of the dedicated organizations participating in these campaigns. The campaigns should be warmly supported by every responsible employee of the Station, both military and civilian. Implementation of the drive will be through a keyman in each department or major organizational breakdown. The keyman in each department will select others who will distribute prepared collection envelopes, bringing the campaign to all personnel employed here.

China Lake Players To Plan Spring Play

The China Lake Players will hold a general meeting of the membership next Tuesday, January 27, at 8 p.m. in the Players' Hut, 81 Halsey Ave., to discuss the selection of a play for the Spring production. Any member may suggest a play for consideration, but should be prepared to give the number of cast members, the setting required and an outline of the plot. Plays suggested at earlier meetings of the group include "The Emperor's New Clothes," "Visit to a Small Planet," and "I-Am a Camera."



INTERNATIONAL THEME—At tomorrow's AAUW Tea these five Burroughs' girls, will, through their costumes, add international color to Anne Rebers' "Emily Post Around the World," lecture. Donations received are destined to add to the Association's fund for International Fellowship and Educational Grants, part of which makes up the annual scholarship made to a Burroughs girl. Shown (l. to r.) are: Donna Ward, Lynda Elder, Mary Robinson, Nancy Mitchell and Susan Cotner.

What's Doing IN RECREATION

By Jean Cone, Recreation Director

A week from tonight, Friday the 30th, will be a busy night at China Lake. At 8 p.m. in the Station Gym the famous Harlem Clowns will meet the NOTS All-Stars for some hilarious, crazy, mixed-up basketball. At 9 p.m. in the Community Center there will be dancing to the music of the "Philharmonics" with special entertainment by the "Commodores" quintet.

The "Commodores" versatility is renowned. Types of music they sing include pop, rock and roll, Westerns, spirituals, comedy, progressive, and operettas. All members do M.C. work, collectively they do impressions of all the major singing groups, and individually they each do several impressions of most of the top singing stars in show business. They recently competed and won on the "Arthur Godfrey Talent Scouts" show.

In addition to the Community Center, this famous quartet will be making other appearances on the Station. They will be at the CPO Club Saturday evening, the 31st, and at the RAFT and EM Club on Sunday night, February 1.

At the Community Center, those nine talented Airmen from Edwards, the "Philharmonics," will play for the Friday night's dance. No admission will be charged and reservations for groups of eight or more will be taken at the Community Center through the 29th.

Shot Gun and Rifle Check-Out There is a limited number of shot guns and 30.06 rifles available to be checked out by military personnel. To obtain one, come to the Special Services Office, Room 2, Second Deck, Housing Bldg., for a chit which must be signed by your Division Officer and the Special Services Officer. The Armory is open from 9 to 10 a.m. to issue this equipment.

Mammoth Ski Resort I understand that skiing at Mammoth is very good these days. If you are new in this area, Mammoth Mountain is one of the West's first-rate skiing slopes and can be reached by a side road off U.S. Highway 395 between Bishop and Leavening.

In addition to motels, chalets, and

NOTS Hobby Shop Will Sponsor New Model Railroaders

A proposal to form a Model Railroad Club, sponsored by NOTS Hobby Shop located next to the Station Greyhound Depot, has been announced by the Hobby Shop manager, Jack Cochran, AD1. The Hobby Shop has offered to furnish a separate room and the use of their equipment, plus tables, benches and some financial assistance to promote a successful operation.

Interested persons are invited to attend an organizational meeting at the Hobby Shop next Wednesday, January 28, at 7:30 p.m.

Physicist to Lecture on Magnetohydrodynamics

Beginning January 28, and extending through February 28, H. S. Green, Professor of Mathematical Physics, University of Adelaide, Australia, will conduct a series of lectures on magnetohydrodynamics daily at 10 a.m. The first meeting will be held in Room 1001, Michelson Laboratory, next Monday. Professor Green is an outstanding authority in this new field, as well as in the theory of fluids. He has authored numerous papers and has recently developed a theory of high frequency magnetohydrodynamics.

Unused Books Will Be Collected by Brownies

Members of Brownie Scout Troop No. 344, have launched a book collection drive. Books may be left at 58-B Dewey, China Lake, or pick-up arrangements for all kinds of unused books may be made by calling Ext. 74843 or Ext. 74364. Every kind of book will be collected by the Brownies.

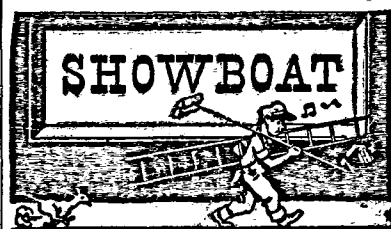
Jodges, a luxurious Mammoth Mountain Inn opened there last month. Among the Inn's facilities for guests are a heated swimming pool and a nursery where youngsters 3 to 7 are supervised in the daytime. For skiers there are two double chair lifts, three rope tows, and a ski school.

NOTS ON THE AIR KRKS (1240)

NOTS NEWS - 11:55 a.m. Broadcast directly from the Rocketeer office. Monday through Friday

KRCK (1360) China Lake Report - 7:05 a.m. Monday through Friday

China Lake Headlines - 12 Noon Monday through Friday



MATINEE Saturday and Sunday - 1 p.m. EVENING 6 and 8 p.m. daily

TODAY "A GOOD DAY FOR A HANGING" (85 Min.) Fred MacMurray, Magie Hayes (No synopsis available) SHORTS: "Willie the Kid" (7 Min.) "Football Highlights '58" (10 Min.)

SATURDAY MATINEE "ROGUES OF SHERWOOD FOREST" (80 Min.) John Derek SHORTS: "Leave Us Chase II" (7 Min.) "Wild Bill Hickok," Chapter No. 2 (18 Min.)

EVENING "DAVEY" (80 Min.) Harry Secombe, Ron Randall Story of a music-hall family act. Davey receives opportunity to audition for opera and if successful would result in breaking up the act. This sets up a rumpus within the family in their attempt to hold troupe together. Photography and color are exceptionally good. SHORTS: "Car of Tomorrow" (7 Min.) "Wonders of New Orleans" (19 Min.)

SUN.-MON. "THE GYPSY AND THE GENTLEMAN" (89 Min.) Keith Mitchell, Melinda Mercour (No synopsis available) SHORTS: "Termites from Mars" (7 Min.) "Roundup Land" (10 Min.)

TUES.-WED. "CAT ON A HOT TIN ROOF" (108 Min.) Elizabeth Taylor, Paul Newman, Burl Ives, Jack Carson Tennessee Williams' prize-winning tale of the day a Southern family finally faced the truth about each other makes an engrossing film. As "Maggie the Cow" Elizabeth Taylor delivers a stinging portrayal of a wife reeling under physical and verbal abuse but desperately fighting to hold her man. Burl Ives fills the screen with rumbling authority as "Big Daddy." SHORTS: "What's Sweepin'" (7 Min.)

THURS.-FRI. "MARDI GRAS" (108 Min.) Pat Boone, Christine Carere, Tommy Sands (No synopsis available) SHORTS: "Sportsman's Paradise" (10 Min.)

SATURDAY MATINEE "THE PALOMINO" (74 Min.) Jerome Courtland SHORTS: "Topsy Turkey" (7 Min.) "Wild Bill Hickok," Chapter No. 3 (18 Min.)

EVENING "MARK OF ZORRO" (93 Min.) Tyrone Power, Linda Darnell SHORTS: "Parrot Jungle" (7 Min.) "The Riveter" (7 Min.)

SUN.-MON. "GEISHA BOY" (97 Min.) Jerry Lewis, Marie McDonald Jerry Lewis runs the gamut of comedy endeavor in a Japanese setting in Technicolor. He gets all mixed up with a blonde and beautiful actress, has run-ins with the U.S. Air Force, and an emotional entanglement with a lovely Japanese girl and an enchanting Japanese youngster. SHORTS: "Safari City" (9 Min.)

Support Your FEDERAL CHARITIES CAMPAIGN Drive Begins January 26

Budd Gott, Editor

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Friday, January 23, 1959

TEMPERATURES Max. Min. Jan. 15 65 34 Jan. 16 68 36 Jan. 17 72 34 Jan. 18 67 36 Jan. 19 66 35 Jan. 20 53 35 Jan. 21 54 24

Credit Union Members Vote Five Percent Dividend for 1958

A dividend of 5 percent for the year 1958 was approved by the membership of NOTS Employees Federal Credit Union at its 11th annual meeting last Monday, January 19. This is the second successive year that the local Credit Union has declared a 5 percent dividend since it was granted its charter in November, 1947. Dividends will be posted by February 1, 1959.

Shareholders filled the Community Center to hear a report on the past year's business, to elect directors to the three governing units, and to declare the 5 percent dividend as recommended by the board of directors. Chairman of the meeting was Henry H. Wair, President of the Board of Directors. Members of the Board of Directors elected for two-year terms were: James Coogan; William Koontz; Lewis Radcliff; and Henry H. Wair.

Credit Committee members elected for two-year terms were: Berce Giles; Gordon Chantler; and Bill Giano. Elected to one-year terms were Dean Hewitt and Robert Wernagieris. Evelyn See was elected to a two-year term on the Supervisory Committee.

Selections of the nominating committee, consisting of Joe Doucette, chairman, Robert Holloway, and Gus Swiers, were unanimously approved by the members. No additional nominations were made from the floor.

The Operational Statement was mounted on a chart for the audience to study. It disclosed the gross income for 1958 to be \$93,750, with an operating expense of \$36,704. The Financial Statement showed the assets to be \$1,282,210. The actual membership is presently 3,643.

Winner of the \$25 bond door prize was Florence Vann. The \$10 share deposit was awarded to Attie Falk. Both military and civilian employees may utilize the Union.

New Rocket Engine Control Developed By Klein, Rutkowski, and Ordahl

Latest scientific advancement to be added to NOTS' accomplishments is the new rocket engine control, basically developed and tested by three members of the Propulsion Development Department, Marshall Klein, Douglas Ordahl, and Eugene Rutkowski. Static tests have demonstrated that some of the problems of flexibility of control of space vehicles may have been solved by the new method.

A lever, working forward and backward, controls the injector, a single moving part, which is solely responsible for missile control flexibility. Manually, or remotely controlled, the engine is capable of repeated starts and stops, acceleration, or deceleration from zero to full throttle, and course change by varying the direction of rocket thrust. The control method has been successfully statically tested at China Lake, beginning a year ago, and utilizes rocket motors varying from 250 to 10,000 pounds thrust. This rocket engine was made possible through NOTS' earlier developments in liquid propellants.

Pre-packaged Propellants A method of pre-packaged liquid fuels has been perfected permitting the unlimited storage of corrosive materials in containers ready for instant action. Many of the widely used cryogenic propellants (such as liquid Oxygen) demand a great deal of care in handling, stated Propulsion Development Department's D. Marshall Klein. They are difficult or impossible to store in closed containers for long periods of time. According to Klein, the new packaged liquid propellants permit instant readiness, thus avoiding the long count-downs associated with missiles using cryogenic fuels, and highly resistant to rough handling, thermal shock, or even gunfire, may be stored indefinitely.

Pre-packaging liquid propellants, as developed by China Lake Scientists, permits greater control during programming and launching the rocket or missile. Both of these programs have been conducted for the Navy's Bureau of Ordnance, Washington, D. C. The new pre-packaging principle has been adopted by private industry for production. NOTS' prepared films dealing with the "variable thrust control" have been shown on the three major television networks. Co-Developers Instrumental in the research and development of the new rocket control system were three Propulsion Development Department engineers, Marshall Klein, D. D. Ordahl and Eugene Rutkowski. None have been at NOTS for longer than eight years, and all have been directly associated with applied research or development of rockets or propellants during their work here.

Ordahl holds an MS degree in chemistry, and came to China Lake following research activity in the development of solid propellant rockets from 1942-45 and in the application of organic chemicals to industry from 1945-50. He has served as branch or division head of several sections of what is now Propulsion Development Department. (Continued on Page 4)

HERE GOES!—Single control lever starts or stops rocket engine developed here. The engine offers control over full power range necessary for operational movement of space vehicles. D. Marshall Klein (left) and Eugene V. Rutkowski state this engine, with proper guidance, could land a space vehicle on the moon without damage.

W. W. Hollister shows his pride in the ingenuity of NOTS' engineers in their search for procedural and operational simplicity.

Professional Players Present Unique Play

Dramatization of Alan Paton's "Cry, the Beloved Country," will be presented by the Bishop's Company to Indian Wells Valley residents tomorrow night at the All Faith Chapel, beginning at 8 p.m. The Bishop's Players, of Santa Barbara, California, currently on its fifth national tour and second international tour, was founded in 1952. Tomorrow's presentation is one of six carefully selected plays in the repertoire of the group.

Sponsored locally by the Indian Wells Valley Ministerial Fellowship, "Cry, the Beloved Country" is a drama of both dramatic and historic interest.

Candidates May Apply for Engineering Training Exam The State Board of Registration for Civil and Professional Engineers has set February 1, 1959, as the final filing date for the engineer-in-training examination to be conducted April 25. Henceforth, candidates for registration must pass the engineer-in-training examination before they will be eligible for assignment to the professional examination. The next professional exam is set for August 15. Applications for these examinations are available in the Education Office, Room 1004, Michelson Laboratory.

BuOrd Nominates J. T. Bartling For Sloan Fellowship Candidacy

James T. Bartling, Head of Surface Weapons Division, Weapons Development Department, and Station nominee for the 1959-60 Sloan Fellowship in the Massachusetts Institute of Technology Executive Development Program has been selected by the Bureau of Ordnance for consideration as a Navy Department candidate. Winning candidates will be announced early in April by a selection committee appointed by M.I.T.

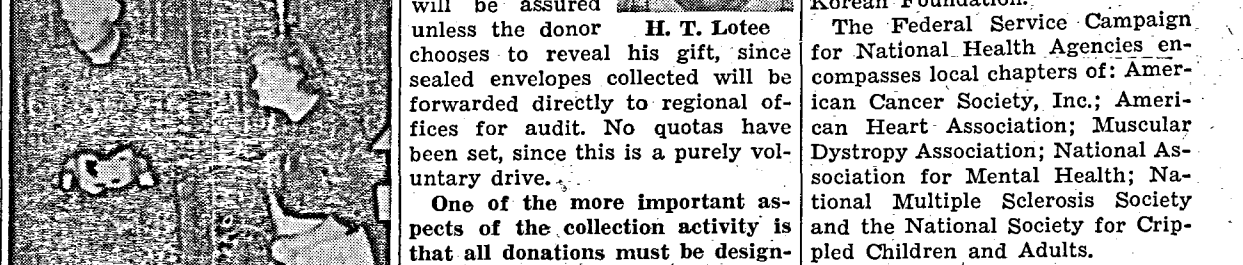
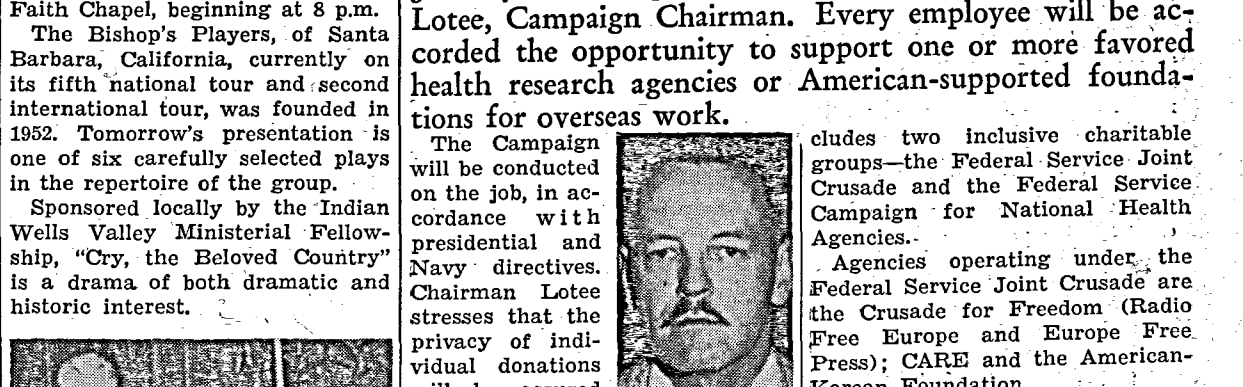
Chosen on the basis of his past performance and future potential, Bartling is responsible for one of the Navy's major programs in the field of surface-launched and anti-submarine weapons.

Sloan Fellowship The Sloan Fellowship Program of the Massachusetts Institute of Technology is designed for a small number of exceptionally able young men whose employers nominate them to the Program because they show marked promise of growth into major executive responsibilities.

These young executives, who are about one-fourth of the way along in their industrial careers, spend twelve months at M.I.T. studying in depth the fundamentals that underlie sound management action. A graduate of the University of Southern California, Bartling joined NOTS' Research Department in 1949 as a Mechanical Engineer.

THE BISHOP'S COMPANY—Two members of the cast of this unique play are pictured in a dramatic scene from one of the six plays being presented to audiences throughout the nation. "Cry, the Beloved Country," will be presented to Indian Wells Valleyites Saturday, January 24, at 8 p.m. in the All-Faith Chapel.

Herbert T. Lotze, Head, In-Servicemen Weapons Support Division, Engineering Department, was appointed Chairman of the 1959 Joint Charities Campaign by letter from Capt. W. W. Hollister, Station Commander. In the appointment letter, Capt. Hollister states, "The Station bears (Continued on Page 2)



J. T. Bartling

