

# CALTECH MEN IN NATIONAL DEFENSE

By JOHN E. SHIELD, '22

As compared with other like institutions, the Institute is quite young in years. Some of its Alumni have become, in the slightly more than twenty years of present general type of curriculum production, known and highly regarded in the fields of science and business. Their places in the military and naval forces of the United States may be not nearly so well known, even to the alumni themselves. Further than this, it appears that there is no statistical record on file of these activities which could in any sense be considered to be complete.

During the years 1919 to 1928 inclusive, the Institute curriculum contained in a military course of study, mandatory for the first two years, and optional in the last two. These courses were the Basic and Advanced Courses of the Reserve Officers Training Corps, administered by an officer of the Corps of Engineers, U. S. Army, as Professor of Military Science and Tactics. Graduates received commissions in the Corps of Engineers, Reserve. It has been possible to obtain the present activities and assignments of most of the graduates of that course who are located in this vicinity and who maintain their commissions, together with several who are assigned to other arms or services of the Army and Navy. It is hoped that all alumni, other than those mentioned, who are affiliated in any capacity with the Army, Navy or Marine Corps, Active, National Guard or Reserve, will send that information to the Editor of the Alumni Review, so as to complete the data the writer originally started to collect, and that it may be published in a subsequent issue.

Among the constituted Engineer units assigned territorially to the State of California, the following Regiments, Separate Battalions and Companies have former Tech men assigned to them. The 316th is the Engineer Regiment of the 91st Division, and the General Service Regiments, Separate Battalions, Camouflage Battalion and Independent Companies, are designated as Corps or Army units.

The 316th Engineers has headquarters in San Francisco and has commissioned personnel largely drawn from that area, with the following alumni at present assigned:

- 1st. Lt. Manley W. Edwards, '26
- 1st. Lt. Roscoe Gockley, '26
- 1st. Lt. Clifford C. Cawley, '32
- 2nd. Lt. Hubert A. Reeves, '22

The three General Service Regiments are the 349th, 385th, and 386th, of which the 385th is officered principally by officers in the San Francisco Bay area. In two of those are:

- 1st. Lt. K. B. Anderson, '24
- 1st. Lt. L. P. Stoker, '24

The 349th Engineer General Service Regiment has alumni assigned as follows:

- Capt. Glen M. Webster, '22
- Capt. James C. Krouser, '25

Capt. Theodore C. Combs, '27, who is also at present the President of the Los Angeles Post of the Society of American Military Engineers.

- 1st. Lt. Edward D. Lownes, '24
- 1st. Lt. Rolland A. Philleo, '27
- 1st. Lt. Otto F. Reinen, Jr., '28
- 1st. Lt. J. E. Joujon-Roche, '28
- 1st. Lt. James W. Dunham, '29

The 386th Engineer General Service Regiment is a Regular Army Inactive Unit (RAI) and has alumni assigned as follows:

- Capt. Douglas C. Mackenzie, '22
- 1st. Lt. A. Perry Banta, '28
- 1st. Lt. Douglas G. Kingman, '28
- 1st. Lt. Sidney T. Exley, '29
- 1st. Lt. Robert E. Rowley, Ex. '20

Of the Separate Battalions, the 49th is designated as a Regular Army Inactive Unit. It has the following alumni on its rolls:

- Capt. John E. Shield, '22
- Capt. Michael C. Brunner, '25
- 1st. Lt. Wm. H. Krelle, '27

The 444th Engineer Separate Battalion has Tech alumni representation of:

- 1st. Lt. R. Arthur Merrill, '25
- 1st. Lt. Vincent W. Rodgers, '27
- 1st. Lt. G. Austin Schroter, '28
- 1st. Lt. Allen W. Dunn, '29

- 2nd. Lt. John C. Monning, '33
- 2nd. Lt. David M. Whipp, '36

The 464th Engineer Separate Battalion has:

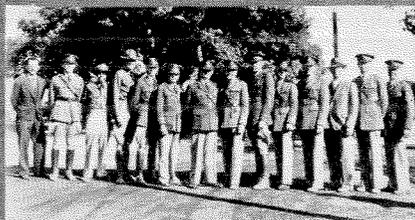
- Capt. Ben Benioff, '22
- Capt. R. A. Van Pelt, '23
- 1st. Lt. Harold D. Cronk, '25
- 1st. Lt. Rudolph C. Blankenburg, '27
- 2nd. Lt. Frank S. Hale, '27
- 2nd. Lt. Maxwell Burke, '28

In the 699th Engineer Separate Battalion we find only one Tech alumnus, 1st Lt. Walter B. Grimes, '29.

The newly organized 604th Engineer Battalion (Camouflage) is well populated in the following persons of Tech background:

- Capt. Oscar S. Larabee, '25
- Capt. Donald P. Barnes, '30
- 1st. Lt. Linne C. Larson, '22
- 1st. Lt. Ferdinand G. Gramatky, '28
- 1st. Lt. Laurence E. Lynn, '28
- 1st. Lt. Wm. H. Mohr, '29
- 2nd. Lt. Chas. K. Lewis, '31

The 971st Engineer Separate Battalion has only 1st Lt. Frank J. Malina, '35, to represent C.I.T.



Active duty training, Camp Ord, August, 1938

The 85th Engineer Depot Co. (RA1) has:

1st. Lt. Jay J. DeVoe, '22

The 399th Engineer Depot Co. has:

2nd. Lt. John A. Randall, '33

Other Engineer Reserve Officers are:

Lt. Douglas A. Stromsøe, '22

1st. Lt. Loren E. Blakeley, '23

1st. Lt. Albert M. Chapman, '24

Lt. William Altman, '27

Lt. James Boyd, '27

Lt. Mortimer D. Darling, '27

Lt. Roland W. Reynolds, '27

Lt. Frederick T. Schell, '27

1st. Lt. Thomas S. Southwick, '27

Lt. Wm. L. Olsen, '28

Lt. Ellwood H. Ross, '28

1st. Lt. Wm. L. Berry, '32

2nd. Lt. Frank H. Clough, Ex. '22

2nd. Lt. Edward R. Hess, '22

2nd. Lt. Frederick A. Maurer, '22

Lt. Clinton H. Stevenson, '36, (now in Baltimore, Md.).

The latter officers are on the inactive or unassigned lists or are assigned outside this vicinity.

2nd Lt. John H. Maxson, '27, is under orders of Chief of Engineers direct and has just served a tour of active duty with the Air Corps at March Field.

Those Institute alumni who are now endeavoring to qualify themselves for Reserve Commissions in the Engineers are the following who are termed as Candidates:

Patrick B. Lyons, '32

Oliver C. Dunbar, '35

Walford Swanson, '36

Practically all officers of the Reserve Corps are required to perform throughout each year a certain minimum amount

of "Inactive Status Training" in order to enable them to keep up to date in the required duties of their grade, with new developments in the art of war, or to qualify themselves for promotion to the next higher grade. In the Engineers, this is accomplished by attendance at and solving problems in eight monthly Conferences during the winter months, occasional field trips and problems, and, of course, the Army Extension Courses which are available to Reserve Officers of all Branches.

Summer Camps may be attended on the average once every two years and the number of the above attending at Camp Ord, California, this year was twenty-five.

In so far as may be determined, the Coast Artillery Corps is the next most active branch in point of numbers and in a Reserve capacity we find alumni in the 625th Coast Artillery Regiment, (Regular Army Inactive) which is a Harbor Defense unit having headquarters at San Diego, the 519th Coast Artillery Regiment (Anti-aircraft) and the 977th Coast Artillery Regiment (Anti-aircraft).

The 625th is commanded by Major Glen I. Miller Ex '23, with whom are Capt. Orrin H. Barnes, '26, and 1st. Lt. P. E. Parker, '26. Major Jackson Kendall, Ex '21, is in the 519th and 1st. Lt. Milton G. Sohn, Ex '23, is in the 977th. Major Smith Lee, '21, retains a commission on the inactive list of that Branch without assignment. Capt. Max B. Alcorn, '23, is assigned to L. A. Harbor Defense.

The Air Corps Reserve is undoubtedly peopled with many of the graduates of the past few years, whose names are not now available, but Capt. Donald F. Shugart, '22, is assigned to Squadron 91-D. 1st. Lt. Brian Sparks, '32, and 1st. Lt. J. Henry Gunning, Ex '27, are in the same branch.

Other Army Reserve Corps assignments are 2nd Lt. H. C. Sheffield, '25, who is with the 78th Quartermaster Battalion

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## NATIONAL DEFENSE

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(RAI), 1st. Lt. Fred S. Scott, '30, with the 329th Chemical Warfare Regiment, 2nd. Lt. William D. Hacker, '31, with the Ordnance Department, 2nd. Lt. Albert Creal, 13th Battalion, U. S. Marine Corps, Reserve.

The Regular Army has to our knowledge four former Tech men, two of whom attended the U. S. Military Academy at West Point after receiving degrees at C. I. T. They are 2nd. Lt. Wm. R. Shuler, '32, whose station is with the 6th Engineer Regiment at Fort Lewis, Washington, and 2nd. Lt. Gerard J. Forney, '33, who is in Scofield Barracks, Territory of Hawaii, and assigned to the 3rd Engineer Regiment. The other two are 1st. Lt. Kenneth R. Crosher, '28, who is in the Air Corps and stationed at Albrook Field, Corozal, Canal Zone, and Capt. Vernon P. Jaeger, Ex '27, who is a Chaplain stationed as last reported at Fort Riley, Kansas.

The Navy has at least two Tech men on active duty, Robert G. Fussell, '35, who is assigned as Aviation Cadet on the U. S. S. Salt Lake City, and Gordon J. Brakesman, Ex '33, with a similar assignment on the U.S.S. Chicago.

The Naval Reserve has Ensign Fred A. Wheeler, '29.

The names mentioned here probably will be added to in future issues of the Alumni Review, and its readers will then be able to get a fairly good idea of the former Tech men who are demonstrating their patriotism in a very practical way. It goes without saying that many of those whose names appear here are maintaining their Reserve commissions at a considerable personal sacrifice, and the Institute and its alumni can well be proud of their activities, particularly at this time, when many institutions of higher learning in this country have become identified as harboring those who actively sponsor anti-military doctrines. There is, too, some recompense to the individual in so participating in military activities, which includes the maintenance of good physical condition, a happy association with others of similar ideals and the knowledge of being an important unit in the armed forces of the nation if an emergency should arise.

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## GIGANTIC PUMP TO BE DEVELOPED

As a result of the success of hydraulic tests made for the Metropolitan Water District at the Cal Tech Laboratories, new and larger pumps for the Grand Coulee Project will not be manufactured until the designs have been thoroughly tested in Pasadena. Each pump will be designed to deliver 1600 sec. ft. to a height of 295 feet, and will require 60,000 H.P. for its operation. The flow from one pump will be as great as the total flow of the Colorado River Aqueduct. The tests will be directed by Dr. Theodor Von Karman, Prof. R. L. Daugherty, and Prof. R. T. Knapp. Donald P. Barnes, '29, engineer for the Bureau of Reclamation, will be the government representative on the campus.

## BATTERY REQUIREMENTS FOR TRAWLERS

An article on "Battery Requirements for Trawlers" by H. V. Ingersoll, '26, was published in the March issue of "Atlantic Fisherman." It is a study of the correct use of batteries in fishing boats, calling attention to the fact that the day is past when lighting alone determines the battery capacity. Result of an actual test run is shown. Herb is with The Electric Storage Battery Company (Exide) in Boston.

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## REDUCED LANDING SPEED STUDIED

Dr. Clark B. Millikan has been experimenting with slots cut in the wings of airplanes to increase the lift. The theory he is working on is that the lift is due to a vacuum on the top of the wing which breaks up at a certain point. By slotting the wings near this breakup point and correcting the turbulent condition he hopes to improve the lift obtainable, making it possible to land at lower speeds.

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## BELL LABORATORY RECORD HAS ARTICLE BY BIDWELL

In the July issue of the Bell Laboratory Record there is an article by C. H. Bidwell, '26, which will be of interest to those who knew him at the Institute. It is a description of a "Carrier Supply for Type K Systems." Since graduation he has been with the technical staff of the Bell Telephone Laboratories, recently working principally on carrier telephone equipment.

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## DR. CARL C. THOMAS PASSES

A heart attack on June 5 brought to a close the career of Dr. Carl C. Thomas. Dr. Thomas was an associate in Engineering Research at the Institute. He was a member of the first graduating class of Pasadena High School and a member of the first graduating class at Stanford University, although he later transferred to Cornell where he received his first degree. He became a member of the Cornell faculty and published the first book ever written on steam turbines. He was a former City Director of Pasadena. He will also be remembered long as organizer of the engineering department of Johns Hopkins University and as engineer with American International Shipbuilding Company during the World War for the construction of 100 ships.

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## IN MEMORIAM

Margaret Bell, aged 2½ years, daughter of Mr. and Mrs. Frank W. Bell ('28), succumbed to an intestinal disturbance on June 26, 1938.

John Capra, son of Mr. and Mrs. Frank Capra ('18), succumbed to an infection following a tonsilectomy. His death was on August 23.

Monte L. Mesenkop, 8, son of Mr. and Mrs. Louis Mesenkop ('27), drowned on August 6, 1938.

His many friends regret Howard Vesper's ('22), loss of his father who was killed in an automobile accident early in September.