

## "The North Atlantic Pact And The UN" Topic At Y Forum

### Dr. Dean McHenry Addresses Students

In the words of Dr. Dean E. McHenry, last Monday's Y Forum speaker, "The time has come, unfortunately, when we can better avoid war by stating our intentions in advance . . ."

Speaking on the topic, "The North Atlantic Pact and the United Nations," the dean of U.C.L.A.'s Division of Social Sciences spoke of the new regional agreement as a transitional security measure to secure world peace until the U.N. can take over this function.

Dr. McHenry began his talk with a brief sketch of the moves which led the U.S. into her present policy. After commenting briefly on preliminary moves all the way from the Fullbright Resolution to the signing of the Charter, he discussed at some length the successes and failures of the U. N. to date. He pointed out that the world has tended to overemphasize the peace securing duties of the organization, and to overlook the gains made in organizing various international social and economic groups whose work may be of far greater importance in achieving permanent peace.

Taking up the problem of peaceful settlement of disputes, the speaker pointed to the outstanding successes achieved by the U. N. in Palestine and Indonesia, and the results of U. N. (Continued on Page 6)

**McKINNEY CONTEST**  
Contestants' essays are due Monday, April 18, and should be submitted to Professor MacMinn, 212 Dabney Hall.

## Musical Analyses Proves Success

The first lecture in the Humanities Division Musical Analysis series set a standard which will be difficult to surpass. The general enthusiastic response seemed to indicate that this sort of presentation quite adequately meets the need and holds the interest of the Caltech audience.

**Lucid Approach**  
Mr. Wilbur Chnoweth presented the development of musical form in a singularly lucid and straight-forward manner. His clear-cut examples of form development added immeasurably to the exposition. Starting with the single note as the simplest unit of musical form, Mr. Chnoweth traced the evolution of form through the figure, motif, phrase, period, and finally through the rather extended use of the simple song form, touching on the (Continued on Page 6)\*

## Tit-Tat-Toe, Radar, Set At AIEE Meeting

Caltech will be the host for the annual electrical engineering meeting between Caltech and U.S.C. on Tuesday, April 19. The meeting will begin with a banquet at 6:30 p.m. at the Athenaeum. Student tickets for this steak dinner can be obtained at \$1.65 per at the electrical engineering office, 301 Kellogg.

**Student Papers**  
After the feast two papers will be presented by students of U.S.C. and another two from Caltech. Walt Hirschberg will talk on Topographic-Presentation Radar, and Bob Haufe will present a paper on his Automatic Tit-Tat-Toe Machine.

**Lee to Speak**  
On Monday, April 11, the student chapter of the American Institute of Electrical Engineers will meet in 155 Arms at 4 p.m. Those who attend will have the pleasure of hearing Everett S. Lee, national President of the A.I.E.E. Everett Lee at present is on an extensive tour of the United States. His talk should prove of interest to all engineers and especially to senior electrical engineers. Everyone is invited, of course.

## Christian Fellowship Features Beckwith

Mr. Paul Beckwith will be the guest speaker at the regular meeting of the Caltech Christian Fellowship tomorrow noon. Mr. Beckwith is a national representative of the Inter-Varsity Christian Fellowship, and will bring a message that is of interest to every Caltech student.

The meeting is Friday at 12:30, in 251 West Bridge. Everyone is welcome.

## Campus Calendar

- THURSDAY, APRIL 7—**  
1949 Arts and Crafts Show, till April 9, 101 and 102 Mudd  
12:00 Y Upperclass Lunch Club  
12:15 Throop Club Meeting  
7:15 Dancing Class in Club  
7:15 ASCIT Board of Directors Meeting in Lower Fleming
- FRIDAY, APRIL 8—**  
Class Elections  
1:30 Golf—Varsity vs. Santa Barbara at Santa Barbara  
4:30 Swimming—Varsity and Frosh vs. Redlands at PCC  
8:00 Track—Varsity vs. L. A. State and Loyola at LACC
- SATURDAY, APRIL 9—**  
1:30 Tennis—Varsity vs. Oxy at Oxy  
2:15 Baseball—Varsity vs. Whittier at Tournament Park  
2:15 Baseball—Frosh vs. Whittier at Whittier  
Black-Oxy Exchange  
Ricketts-Local girls exchange  
Fleming—Theater Party at the Playhouse
- SUNDAY, APRIL 10—**  
7:30 Caltech Musicale in Dabney Lounge
- MONDAY, APRIL 11—**  
4:15 Musical Analysis Lecture, Dabney Lounge
- TUESDAY, APRIL 12—**  
12:00 Y Frosh Lunch Club  
4:15 Baseball—Varsity vs. Pepperdine at Tournament Park
- WEDNESDAY, APRIL 13—**  
9:00 Glee Club in Club.

## Concert Series To Be Featured

A concert series of instrumentalists will be initiated next Sunday evening, April 10, by the Humanities' Music committee and by the Assembly and Lecture committee.

**No Charge**  
The concert, to be held at 7:30 p.m. in Dabney Hall Lounge, will be open at no charge to Caltech students, faculty, and the general public. Students are urged to come early, however, as the seating capacity is limited, and the concert is being given primarily for students.

**Instrumentalists**  
The group of four instrumentalists consist of a violinist, violist, clarinetist, and pianist, who are experienced in both ensemble and solo work in radio and movies. The concert will present both classical and contemporary works. Following is a program:

- Sonata for Clarinet and Piano—Handel**
- Sonata for Violin and Piano in F Major—Op. 24—Beethoven**
- First Sonata for Violin and Piano—Milhaud**
- INTERMISSION**
- Sonata No. 2 for Violin—Hindemith**
- Three pieces for Violin and Piano—Tansman**
- Trio for Clarinet, Viola, and Piano (K. 498)—Mozart**
- Second Concert**

Performers include: Robert Gross, violin; Sven Reheher, viola; Mitchell Lurie, clarinet; Leonard Stein, Piano.

The second concert of the series will be given the first Friday in May, same time and place by the New Art String Quartet.

## Elections Friday; ASCIT Chooses Class Officers, Editor of Big T

### Radio Round Table Needs Lower Class Oratory Students

The Radio Round-Table group is holding a special meeting tomorrow at 11:00 in the Y lounge to discuss plans and elect officers for the coming year.

At the present time the group is made up largely of graduating seniors and is in great need of lower-class representation.

All those interested in current affairs who would like to gain the experience of discussing these affairs on the radio are urged to attend tomorrow's meeting.

The programs are broadcast bi-weekly over station KPCC at 9:45 p.m. The next one will be heard this coming Wednesday evening, April 13. Part of tomorrow's meeting will be devoted to planning for this program.

The Radio Round-Table is sponsored by the Caltech Y, Prof. McCreery and Dean Eaton are its faculty advisors.

**Conger Peace Prize**  
All those who wish to compete for the Conger Peace Prize should have copies of their orations in the hands of Dr. Schutz by next Monday. The orations are to be eight minutes long and on the topic of world peace or industrial peace. First prize is \$50, second prize, \$25.

### Malanoski, Wright, and Goerke In Hot Race For Big T Editors Post

Once again the annual business of electing class officers is before the student body. Tomorrow elections will be held for the officers of next year's Sophomore, Junior, and Senior classes, in addition to the ASCIT office of Editor of the Big T.

The Editor of the Big T was not elected along with the regular ASCIT offices due to unforeseen difficulties, and so he will be elected in tomorrow's election. The candidates for the office are Jon Gorke, Tony Malanoski, and Bill Wright.

The class officers were nominated at class meetings last Monday.

### Civil Service Jobs Still Remain Open For Senior Civils

Many opportunities still exist throughout California for civil engineering graduates to enter State employment, according to the Recruitment Section of the State Personnel Board.

**Salary**  
Junior Civil Engineers start their careers at \$310 monthly, it was pointed out. No experience is required of those individuals presenting a degree in civil engineering from a recognized school. College seniors in their final semester are eligible to compete in the currently scheduled examinations.

**Successful Applicants**  
Successful applicants will be employed in any one of several State agencies, and gain valuable experience in furthering California's construction and highway program. These agencies include: the Division of Highways, the Bridge Department, the Division of Water Resources, and the Division of Architecture.

**Applications**  
Applications will be accepted through April 23, 1949, for the Civil Service Examination to be conducted May 14. Full details may be obtained from offices of the State Personnel Board located in Sacramento, San Francisco, and Los Angeles; or from the placement office on campus.

## IRE To Hold Election Of Chairman, Sec'y.

The Caltech student branch of the Institute of Radio Engineers will hold its annual meeting, for the election of officers for the coming school year, next Monday morning, April 11, at 11 a.m. in room 206 Dabney.

Nominations for the offices of Chairman and Secretary will be received by Walter Hirschberg and Al Thiele.

All I.R.E. members and others interested in membership are urged to attend, since plans for the forthcoming visit to the television transmitters on Mt. Wilson will also be discussed.

## Welcome Alumni . . .

The editors and the staff of the California Tech would like to take this opportunity of welcoming ex-Techmen, their families and friends back to the Institute in behalf of the student body, the faculty, and administration. The Twelfth annual Alumni Day is your day.

An entire day of lectures and field trips have been planned for you. These will help you to catch up with what the Institute has accomplished since you left.

But beyond these planned activities, we urge you to prowl around the campus, either on your own, or with the help of student guides. You may be surprised at some of the things that have happened to the old campus.

For the day, the campus is yours.

## Caltech Welcomes Its Graduates on 12th Annual Alumni Day

The twelfth annual Caltech Alumni Seminar will be held this Saturday, April 9. An all day program on campus for alumni and guests, and, in addition, a special program for the wives of alumni and guests, is planned.

**Addresses, Trip**  
The day will feature addresses by Caltech Professors, including Linus Pauling, Robert Langmuir, Oliver Wulf, Hunter Mead, W. D. Rannie, A. van Harreveld, Royal Sorensen, Robert Gray, Robert Sharp, and Robert Knapp. Highlighting the day will be a two-hour field trip to the Hydraulic Structures Laboratory in Azusa.

**DuBridge Talk**  
The program will be climaxed by a dinner at the Masonic Temple at which President DuBridge will speak. The annual Alumni Seminars are held in order to give ex-Tech men and their families an opportunity to revive old acquaintances as well as to give them an insight into the latest developments on campus through a well integrated day of seminars.

This year's seminar program is under the direction of Edison Hogue, '18, and George Whittworth '20. The committee members are R. C. Stone '28, John Gates '36, Wesley Hertenstein '25, Vito Vanoni '26, H. M. Worchester, Jr. '40, and James H. Keeley '31.

**Pauling Opens Day**  
Registration for the seminars will be held in Dabney Hall at

8:30. The morning program will begin at 9:00 with Linus Pauling speaking on "Scientific Work in Postwar Europe." Dr. Pauling will speak from personal experience on his recent European tours. At 10:00 the visitors have a choice of three seminars. Robert Langmuir will talk about new developments in nuclear physics, and the possibility of the construction of a 600 MEV synchro-

tron in Kellogg. Oliver Wulf will speak on the action of sunlight on earth's atmosphere and its relation to life on the earth. Hunter Mead will speak on the impact of psychology on American thinking highlighting the impact of psychology on moral, religion, and educational standards.

**Other Lectures**  
At 11:00 the visitors have another choice. W. D. Rannie will

talk on the gas turbine and its possibilities. A. van Harreveld will talk on the mechanism of nerve repair. Royal Sorensen will give an informative account on the first science mission to occupied Japan. At 12:00 Robert Gray will discuss the goals of industrial relations which he believes to be more than just industrial peace.

From 1:00 to 2:00 the alumni will eat lunch, the ladies in the Athenaeum and the men in the student houses.

**Glacier Talk**  
At 2:00 Robert Sharp will give an account of Alaskan Glacier Studies including his recent trip to Malaspina Glacier. From 2:50 to 3:05 Robert Knapp will give a preview of the field trip to the Guam model at Azusa, telling of the construction and operation of it. At 3:15 the visitors will tour out to Hydraulic Structures Lab at Azusa to witness the model in operation. There will also be a Musicale in Dabney Lounge during this period for those not going to Azusa.

5:30 to 6:30 will be the visiting hour and a lounge and bar have been reserved on the 5th floor of the Pasadena Athletic Club for those Alumni and Guests who would like to gather there.

At 6:45 everyone will have dinner at the Masonic Temple after which Dr. DuBridge will give his address. This will bring to a close a day of fond recollections and stirring memories of undergraduate days.

## ALUMNI DAY SCHEDULE

- 8:30—REGISTRATION—DABNEY HALL OF THE HUMANITIES.
- 9:00—Scientific Work in Postwar Europe  
—Prof. Linus Pauling.
- 10:00—A. New Developments in Nuclear Research  
—Robert V. Langmuir, Ph.D.  
B. The Action of Sunlight on the Earth's Atmosphere  
—Oliver R. Wulf, Ph.D.  
C. The Impact of Psychology of American Thinking  
—Prof. Hunter Mead.
- 11:00—A. The Gas Turbine and Its Possibilities  
—Prof. W. D. Rannie  
B. The Mechanism of Nerve Repair  
—Prof. A. van Harreveld.  
C. The First Science Mission to Occupied Japan  
—Prof. Royal W. Sorensen.
- 12:00—Goals of Industrial Relations  
—Prof. Robert D. Gray.
- 1:00—LUNCH Ladies—Athenaeum Men—Student Houses.
- 2:00—Alaskan Glacier Studies  
—Prof. R. P. Sharp.
- 2:50—Preview of the Field Trip to the Guam Model at Azusa.  
—Prof. Robert T. Knapp.
- 3:15—A. Field Trip to the Guam Model at Azusa.  
B. Musicale in Lounge of Dabney Hall of the Humanities.
- 5:30—Visiting Hour—Pasadena Athletic Club.
- 6:45—DINNER Masonic Temple  
Talk by President Lee A. DuBridge.

## Interview Schedule

**APRIL 8—**  
**FORD MOTOR COMPANY,** Dearborn, Michigan. Mr. David G. Marquardt, Supervisor, College Recruitment, Interviewer. BS or MS candidates in Engineering and Science interested in Ford Field Training Program. Must be 20-26 years old, upper one-quarter of class or on the average of a 2.7 grade point average.

**APRIL 8—**  
**LOCKHEED AIRCRAFT CORP.,** Burbank, California. Mr. Philip A. Colman, Chief Aerodynamics Engineer, Interviewer. MS and Prof. Aerodynamics Engineers and Aerodynamicists. No summer men.

**APRIL 11—**  
**NORTH AMERICAN AVIATION, INC.,** Inglewood, Calif. Dr. Wm. Bolly, Technical Director, Mr. F. A. Ford, in charge preliminary design, Mr. Dalve D. Myers, Asst. Chief Aero. Section, Interviewers. MS, Ae, & Ph.D. degree men in Aeronautics with 2.5 or over grade point average, interested in Aerodynamics and Design, or in Supersonic Aerodynamics from a research and development standpoint. 2.5 grade point waived for practical experience. Will also take students between BS & MS degrees who have had experience in industry or research.

Seniors or graduates in Ae and ME interested in Summer work may apply by mailing applications to office in Inglewood. No summer men on interview schedule, however.

**APRIL 11—**  
**TECHNICOLOR MOTION PICTURE CORPORATION,** Hollywood, Calif. Dr. L. M. Deering, Director of Research, Interviewer. Types desired as follows:  
PhD Chemist with major in organic chemistry. An interest or training in colloidal chemistry will also be valuable. His initial duties will be the undertaking of research in the field of synthetic polymers and dyes.

(Continued on Page 3)

# The California Tech

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**THURSDAY, APRIL 7**  
 Impresario "Overture"—Mozart  
 Boyd Neel and National Symphony Or-  
 chestra  
 Double Concerto in A Minor—Brahms  
 Georg Kulenkampff, Violinist  
 Enrico Mainardi, Violoncellist  
 Karl Schuricht and Orchestra of La  
 Suisse Romande  
 Midsummer Watch—Alfven  
 Nils Grevillius and Symphony Orchestra  
 of Stockholm Concert Society

**FRIDAY, APRIL 8**  
 Morning, Noon and Night in Vienna "Ov-  
 erture"—Suppe  
 Sir Thomas Beecham and London Phil-  
 harmonic Orchestra  
 Der Rosenkavalier "First Suite of Waltzes"  
 —Richard Strauss  
 Karl Rankl and London Philharmonic  
 Orchestra  
 The Three Corners Hat "Suites 1 and 2"  
 —Enrique Jorda and National Symphony  
 Orchestra

**SATURDAY, APRIL 9**  
 Overture on Greek Themes—Glazounov  
 Dimitri Mitropoulos and Minneapolis  
 Symphony Orchestra  
 Arias from Verdi Operas  
 Rigoletto "Pari Siam" and  
 "Cortigiana vi razza dannata"  
 The Masked Ball "Eri Tu"  
 Falstaff "Ford's Monologue"  
 Otello Credo  
 Il Trovatore "Il balen del suo sorriso"  
 Leonard Warren, Baritone with Orchestra  
 Hungarian Rhapsody No. 9 in E Flat Major  
 —Liszt  
 Arthur Fiedler and Boston "Pops"  
 Orchestra

**SUNDAY, APRIL 10**  
 Donna Diana "Overture"—Reznicek  
 Frederick Stock and Chicago Symphony  
 Orchestra  
 \*Symphony No. 1 in C Minor—Brahms  
 Wilhelm Furtwangler and Vienna Philhar-  
 monic Orchestra  
 \*Pavane for a Dead Princess—Ravel  
 Charles Munch and Paris Conservatory  
 Orchestra

**MONDAY, APRIL 11**  
 Rienzi "Overture"—Wagner  
 John Barbirolli and The Halle Orchestra  
 \*Symphony No. 4 in G Major—Dvorak  
 Bruno Walter and Philharmonic Sym-  
 phony Orchestra of New York  
 \*The Walk to Paradise Garden—Delius  
 John Barbirolli and The Halle Orchestra

**TUESDAY, APRIL 12**  
 \*Preciosa "Overture"—Weber  
 Eric Kleiber and Berlin Philharmonic  
 Orchestra  
 \*Symphony No. 36 in C Major "Linz"—  
 Mozart  
 Sir Thomas Beecham and London Phil-  
 harmonic Orchestra  
 Concerto No. 1 in C Major—Tarp  
 Egil Harder, Pianist  
 Svend Felumb and Copenhagen Philhar-  
 monic Orchestra

**WEDNESDAY, APRIL 13**  
 La Clemenza di Tito (Titus) "Overture"—  
 Mozart  
 Sir Thomas Beecham and London Phil-  
 harmonic Orchestra  
 \*Sonata No. 9 in A Major "Kreutzer"—  
 Beethoven  
 Yehudi Menuhin, Violinist  
 Hephzibah Menuhin, Pianist  
 Concerto Grosso in D Minor—Vivaldi  
 Serge Koussevitzky and Boston  
 Symphony Orchestra  
 \*By Request

**GAD!**  
 "Is there a factory on that  
 road?"  
 "No, that's Lover's Lane."  
 "Then why did that girl say  
 that she'd been through the mill  
 there?"

**OPEN PANEL DISCUSSION ON  
 THE THREAT OF MILITERISM TO  
 SCIENTIFIC THOUGHT**  
 at the  
**NEW FOUNDATIONS CONFERENCE**  
 OTHER PANELS: Philosophy and Psychology, History, Pol. Economy,  
 Physical Sciences, Graphic Arts  
 Sat. 9:30 A.M. April 9th  
 Park View Manor, 2200 W. 7th St., Los Angeles  
 Registration fee \$1.00

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# The ASCIT Treasury . . .

Feeling that the matter to be discussed is of vital concern to the men it represents, the board of directors of the A.S.C.I.T. has decided to present to the entire student body this report of a problem requiring the serious consideration of everyone in the corporation.

Our problem is a financial one, a question of dealing with the increasing difficulty of making present income meet the cost of the many services which are normally financed by student dues.

Nineteen years ago, the board of directors of the student body set fifteen dollars as the yearly figure for dues. That was during an era of comparatively low prices. Since that time, the Dollar has lost nearly half of its value, yet the contribution of the Techmen to his student activities has remained exactly the same. In 1935, a figure of this sort was calculated as a reasonable one with which to work in planning the numerous activities of the A.S.B. Today your board is, in effect, trying to make eight or nine dollars do the same work. This task is a difficult one, indeed.

At present, an approximate breakdown of ASCIT expenses per man is as follows:

Athletic Department	\$ 5.50
Big "T"	4.00
California Tech	1.50
Social affairs	1.50
Athletic and other awards	2.50
Misc. (Assemblies, etc.)	2.50
<b>Total</b>	<b>\$17.50</b>

The difference between the total shown and the individual's contribution is at present being made up by a grant from the Institute derived from Bookstore profits, the remainder of which go into a scholarship program. This year, the initial grant amounted to \$1700, with a later addition of \$850, but, in view of the pressing need for scholarship funds, the Institute has proposed an alternative scheme, a dividend of \$2.00 per undergraduate student, which amounts to a substantial reduction for the ASCIT, both because of the decrease in Institute support and an anticipated drop in enrollment for next year.

Our dues are among the lowest in the Southern California Conference. Only Occidental matches our low figure of fifteen dollars, and they receive a very large income from their cafeteria and bookstore. Furthermore, only Tech gives as large a list of returns on the money, notably, free dances.

Now, however, we appear to have reached the saturation point, and considerable restriction of ASCIT functions may be necessary. The crisis has been brought to a head by the sudden withering of sources of advertising revenue for the Big "T", an exigency probably the result of the present business recession. The Institute has generously agreed to make additional bookstore profits available to cover the deficit, but this can only be regarded as stopgap aid for the immediate situation, and not a measure to be construed as a precedent.

At least two alternative solutions appear as possible. First, a general cutback in ASCIT activity could be effected. This would entail reducing the size and quality of the Big "T", reducing the number of free social functions, eliminating the use of expensive professional talent for assemblies, and holding a tight rein on awards.

Secondly, an attempt could be made to increase income, either from increased dividends from bookstore profits, from an increase in dues, or both.

Considering the rapidly increasing demand for scholarship funds, the bookstore angle looks questionable, inasmuch as a sizable portion of scholarship money comes from this source. However, an increase of a single dollar per man would materially brighten the picture for the student body as a whole, while it would not put a serious dent in the student aid fund.

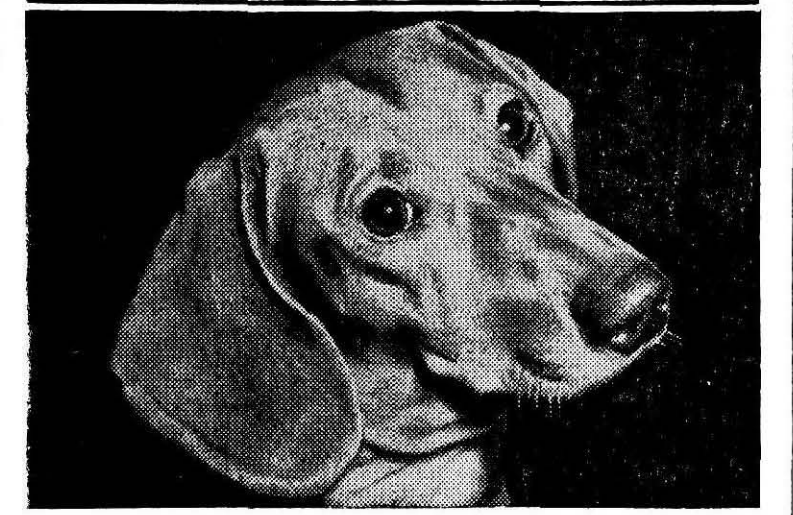
This \$1.00 increase in itself, nevertheless, could not solve the entire problem. The remaining alternative, an advance in ASCIT dues would then seem to be in order. A boost of one dollar per term coupled with a three dollar annual bookstore dividend would see us over the top for a long time to come. With a larger Institute grant, a dues raise might not be necessary at all; without any additional Institute help, the individual may find continued ASCIT activity more expensive by a bit more than a dollar.

These are the problems and the alternatives. Any dues revision will require a two-thirds vote in a special ASCIT election. Assuming that such a step becomes necessary to keep the corporation active in the interests and for the welfare of the men who comprise it, it behooves each member to think seriously on this issue, to discuss it with others similarly concerned, to weigh the possibilities carefully, and to form an intelligent opinion which he may bring to bear when and if a decision has to be made.

The Board solicits opinion of ASCIT men on this problem.

—RALPH LOVBERG.

**J. Paul Sheedy\* Switched to Wildroot Cream-Oil  
 Because He Flunked The Finger-Nail Test**



**POOR** old Sheedy had a hang dog look before he tried the Finger-Nail Test and switched to Wildroot Cream-Oil. Today—he's a blue ribbon winner. Regular use of Wildroot Cream-Oil now gives him a snappy, well-groomed look. No longer is he bothered by dryness and loose, ugly dandruff. He's out of the dog house for good with his girl friends. Why not dog trot down to your nearest drug store for a bottle or tube of non-alcoholic Wildroot Cream-Oil right now! And ask your barber for professional applications. You'll find that once you start using Wildroot Cream-Oil containing Lanolin, you're a gay dog in even the best society.

\* of 327 Burroughs Dr., Snyder, N. Y.  
 Wildroot Company, Inc., Buffalo 11, N. Y.

# CAMPUS BREWINS

## In Which We Beak

The Scripture falls into our hands now and again, and we naturally eye their gossip column, "Trivia" (a masterpiece of understatement) with an eye to discovering what yon vultures for culture consider to be of interest. Up till this week we had gleaned little of interest besides a few bits from the Golden Trashery, but now they have released upon the literary world the succinct observation that, "Life is just a wet noodle." It also shed some light on the purpose of said "Trivia," which we noted and compared to our aims in our favorite column. Their column is "Meant to be a review of the little 'fun's' (the quotes are theirs) things that happen everywhere on campus, and, therefore, it belongs to each and every one of you."

We found that we, too, report the campuses funnies (though perhaps with a little less whimsy), but we can hardly approve of this reckless openhandedness with the title to the column. Though we are always ready to libel one who isn't keeping up his blackmail payments, or persecute one who can't, by reason of our anonymity, answer (or chastise) us, we jealously retain our journalistic autocracy and invite the masses to keep their cotton-pickin' hands off our column.

Feeling somewhat relieved after our outburst of choler, we will wander on to the weekend's mighty excursions wherein we saw the strange metamorphosis of snakes to wolves and back.

**Loowow!**  
 The Luau, otherwise named Lay-out, came off with a resounding squish. Somewhat ill-planned (mostly with regard to weather arrangements), the Poi-PigPassion Party is still grudgingly admitted to have been a success, with hula-skirt bouquets to Sereno, Kam, and F. Astaire King, whose hula with Ruthie showed great hidden talent (King assures us . . .). Bowen extends public thanks to his fans for his part in the "entertainment"—he netted 87c.

Al Cohen was the happiest (lost) soul at the Lu. He had a really fine time, but probably wishes in retrospect that he could remember just what went on. But now, drooling readers, we

must regret relate the sad tales of lost morals, unlost chastity, etc., that accompanied the affair—much as is our sorrow at the task.

Early afternoon debauch was accredited to Dallas Peck and the dissolute Sue, whom, it is said, most of Fleming has given up to Peck's loving care. They arrived early, poked tentative heads out into the leaden air, and quickly adjourned back to the back seat of the vehicle, where they were observed madpassionizing while the blase couple in the front seat sat across from each other and discussed philosophy.

The weekly Quail-hunters trophy goes to Walquist, Hibbard, and Six for changing the diapers on three teen-agers from an Arcadia girls secondary school. They were refrigerated for their trouble, it seems. While on the subject, Shepard, still suffering the pangs of the unrequited, feasted on the charmse of a South-Pas P-T, having hence risen one level above the Great White Wall. Warren Waters, also with high school materiel of some long-standing, let us know that the heater in his car is working excellently—even the walls have ears, and they heard more that wasn't fit to print.

**More Loowow!**  
 Carl Otte has rejected Gloria (with some bitter words?) and was seen with a very torrid female with which he babbled sweet love in French and we left, cursing and frustrated.

Schuyler's betrothed must finally have learned the terrible truth about Tech and Fleming in particular, for she was seen energetically trying to push old B.S. off a cliff—charming couple! She also refuses to live in upper Alley One next year after they are married—unreasonable girl!

Not without pride, we lovingly present Stan Barnes as having whirred his way through the Luau with a minor wheel from S. Having dropped wheel Dorothy by the wayside, the mighty ellipsoid has taken up to meshing with a smaller wheel, reducing his gear ratio, you might say.

Peg, that sweet li'l gym teacher tolerated the evening with Chuck Walker, was strained to the elastic limit when an unhappy Kana-ka they were transporting home left 2 or 3 quarts of second-hand booze on the side of the car while

(Continued on Page 6)

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**An Editorial**

**The Caltech Method ...**

In the last issue of last term, we printed a critical essay on the "Caltech Method" by Bernard Shore. In this essay, a number of suggestions were made for improving the Caltech curriculum. However, we feel that the Caltech Method has been successful; we will attempt to show in what way.

In an attempt to discuss this problem, we are immediately reduced to another problem: What is the purpose of a college or university? In particular, what is the purpose of such an institution in regard to the under-graduate students?

Clearly, the primary purpose of any institution of higher learning is to prepare its students for their chosen occupation and for the contact which they must make with the "outside world." To do these things, the institution must train the students in the field of their choice, the subject on which they plan to base their life's work. This training must be of such a nature that the student will be prepared to excel in his field. It is realized that there are many students who will never rise above the mediocre stage, but this should not be the fault of their training. This training must be of such a nature that any student with talent can find in it all that he needs to become an expert in his field. The prerequisites for success must be given to each student.

In the actual teaching of any subject, the institution has to keep two things in mind. First, the preparation must be thorough, the subject must be covered fully and completely. Secondly, the student must be taught how to apply the knowledge he has learned.

Let us look now at how completely Caltech achieves these two aims. In the first respect, Caltech does an excellent job. A student graduating from Caltech has had complete training in his field. The intensive training at the Institute does however emphasize theory to the detriment of practice. This is a fault of the curriculum that has been pointed out quite often. Unfortunately however, in our opinion, it is almost impossible to add many more courses devoted to the application of knowledge. The only way that this could be done would be to drop other courses given at the Institute, or to increase the course to one of five year length.

Theoretical training must be maintained at a high level, hence no saving can be effected there. The possibility of adding another year to the course would appeal to no one. Hence the only thing left would be to slight other courses.

Students often claim that too much time spent on the humanities for the benefit derived, but we do not feel that this view is justified. Other courses get their share of complaints also; for example, the math majors are required to take a term of biology and the biology majors are required to take two years of mathematics. Both groups feel that they have been imposed upon. But is the time spent in these courses actually wasted? We think not.

The preparation necessary to insure success in any professional field passes beyond the stage of teaching the subject alone. A very good explanation of this fact is made by Norbert Wiener in his book "Cybernetics". In the introduction to this book he shows that important work in one field is often delayed by the unavailability of methods which have already become classical in another field. In this day of specialization of knowledge, it is impossible for any one man to become an expert in more than one field. In fact, in most fields it is impossible for any man to become an expert in any more than a single branch of his field. Hence, to make advancements in the most rapid manner possible, it is necessary that the experts in the various fields be able to get together and help each other with their problems.

For example, many people would think that the field of biology has nothing in common with higher mathematics or electronics. Actually however, there is a great need for mathematically trained biologists. If you don't believe this, take a look at the book on mathematical biophysics which is in the bookstore now. Some of the mathematical methods used in this book require much more than the two year course the biologists are required to take.

It wasn't too long ago that our own biology department faced the problem of building a stable audio oscillator. This turned out to be a difficult task, since there was almost no one among the biologists who had any knowledge of electronic equipment. The oscillator they decided to build was one of the most difficult they could have tried. If any of the biologists had had a good elementary training in vacuum tube circuits, or had even been able to discuss their problem with someone who had, their job would have been greatly simplified.

Have you ever heard of Boolean Algebra? It is the algebra of classes (or sets), and its generalization is lattice theory. The theory is mainly of interest to mathematicians, yet a simple form of it has applications in the field of electrical engineering. Boolean Algebra in a space consisting of only a single element makes relay circuit design a precise mathematical process.

The list of such examples could be carried out almost indefinitely. But the point is obvious. Successful men must be able to converse intelligently with men of other fields. They must be able to understand their language, to translate their problems into the field in which they are proficient, and likewise to translate them back. It is not necessary to become an expert in all fields, in fact it is almost impossible, yet to become really outstanding in his field, a man must have at least a working knowledge of the terminology of other fields. In fact, the more outside knowledge he has, the more likely he is become outstanding.

Still more important to the successful scientist or engineer is the ability to present his ideas forcefully and effectively to others. He must be able to express himself intelligently. He must be well read. The man they can't let out of his little hole for fear of the impression he would make on others will certainly never go far. A well rounded education in the humanities is not essential to success in all cases, but for most of us it makes things much easier.

The man who departs himself easily and makes a good impression on those around him will find that success almost seeks him.

In the above respects, we feel that Caltech has been doing a commendable job. The amount of material in fields outside of any given option is sufficient to give an elementary knowledge of these fields. Not much more could be given; the curriculum is quite crowded as it is. The amount of humanities studied at the Institute is sufficient to give most students the ability to converse easily with others and to form and present their ideas in an understandable manner.

Much of the above is, of course, personal opinion, and, as such, is open to question. We however do have outside information which throws a great deal of light on the merits of the Caltech Method.

The Steelman report gives Caltech the highest position among all major colleges and universities in the country in producing students who later attain Ph.D.'s in science. In this report, Caltech is listed as first, with 130 Ph.D.'s per thousand students (this is merely a comparative figure—the Ph.D.'s are in a ten year period while the students listed are on a one year basis). The second ranking school is Haverford with 103 per thousand. The only other technical school listed in the first forty-four places is M.I.T. which ranks tenth with 58 Ph.D.'s per thousand.

This means that Caltech produces students who wish to go on to do graduate work. But it means more than that. It means that Caltech produces students who are capable of doing graduate work.

A study has just been completed by Mr. Newton's office on the relative participation of college students in extra-curricular activities. A comparison was made between Caltech students and the students at a large state university located near a big city.

For the purpose of this comparison, a major activity was defined as an activity which affects the student body as a whole. Minor activities are conceived as affecting smaller sections of the student body—a class or a special interest group. Honor societies are defined here as purely scholastic groups; in this category there are none of the campus honorary societies in which student activities count for points. Fraternities, sororities and social clubs are not considered as activities.

The survey was compiled on the basis of the four year record of last year's graduating class as listed in the college annuals.

Here is the results of the survey:

	Eng. and Science Men of other School	Caltech
<b>A. Percentage in Activities</b>		
1. Per cent of class participating in major activities	4.6%	28.4%
2. Per cent of class participating in minor activities	53.8%	85.5%
3. Per cent of class participating in any activities	58.1%	87.7%
<b>B. Activities per student (total "participations" divided by number of students)</b>		
1. Number of major activities per student	.05	.55
2. Number of minor activities per student	.85	2.20
<b>C. Athletics</b>		
1. Per cent of class participating in intercollegiate athletics	9.2%	25.8%
2. Per cent of class participating in interhouse athletics (CIT)		24.2%
<b>D. Honor students (scholastic only; does not include honorary service organizations)</b>		
1. Per cent of class belonging to an honor society	12.3%	22.6%
2. Per cent of class belonging to an honor society and participating in major activities	2.3%	7.2%
3. Per cent of class belonging to an honor society and participating in minor activities	9.2%	20.6%
4. Per cent of class belonging to an honor society and participating in any activity	9.2%	21.1%
5. Per cent of class belonging to an honor society and participating in intercollegiate athletics	0%	15.4%
6. Per cent of class belonging to an honor society and participating in interhouse athletics (CIT)		5.2%

This survey does not show conclusively that Caltech students participate more eagerly. The results can be partially explained on the basis of there being more jobs to be done per student at Caltech. Yet this is no real objection. The men who come to Caltech have more of an opportunity surely, but this is all to their good. Interviewers are always glad to see men with high grades who have also been active. And look at Item D-5 above. That 0% cannot be explained away completely by that argument. Of course the larger school uses a much smaller percentage of its students in athletics, but it still seems that now and then an engineering or science student would make a good athlete.

The major conclusion that can be made from the above information is that Caltech students have a much greater opportunity. We feel that they use their opportunities well, both to increase their knowledge and to extend the range of their activities.

We invite comment.

—J.A.H.

**INTERVIEW SCHEDULE**

(Continued from Page 1)

BS and up in Chemical Engineering. Will assist in research on the synthesis of new dyes and other organic compounds both in the laboratory and pilot plant.

PHD Physicist with major in optics for research in field of special optics for motion picture and television equipment.

BS or MS in Electrical Engineering or Applied Physics. After training period this man is expected to undertake research and development in the field of motion picture sound and to work on other problems of an electrical or electronic nature.

PHD or equivalent in Electrical Engineering or Physics with minor in optics for research and development work in fields of electronics and television.

INTERNATIONAL BUSINESS MACHINES, Endicott, New York. Mr. E. C. Schroedel, Head, Institutional Dept., Interviewer. MS or PhD Degree Electrical Engineers or Physicists for Research in Electronics in Endicott, New York.

APRIL 12—RICHFIELD OIL CORPORATION, Los Angeles, California. Mr. T. F. Sullivan, Interviewer. BS and up Mechanical, Electrical and Civil Engineers to develop into Development and Production Engineers. No design work. No summer men.

APRIL 13—BAILEY METER COMPANY, Los Angeles, California. Mr. L. F. Richardson, Manager L. A. Office, Interviewer. Company manufactures automatic control and metering equipment instruments. Desires Mechanical Engineer for selling of this equipment, installation, supervision and maintenance, almost anywhere in the United States. (Sales and Service out in field). Training 6 mos. to 1 yr. in Cleveland, Ohio.

APRIL 14—BARNSDALL OIL COMPANY, Los Angeles, California, Producing Dept. Mr. O. Graybeal, Interviewer. BS or MS Mechanical or Chemical Engineers for training in Reservoir Engineering involving subsurface engineering, flow and thermodynamics of fluids in reservoirs. Men must have interest in scientific approach and particularly Mathematical analysis.



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### Who Dealt This Mess

By Carl Fox

The epar listed for this week's hand is for East-West to bid and make game. A short inspection will make it apparent that Three No Trump is the correct contract. Four Hearts can easily set one, even by mediocre defense.

S	N	9	3
H	J	10	6
D	A	10	4
C	8	8	3

S	7	5	2
H	10	7	10
D	8	10	7
C	10	7	4

S	K	8	6
H	9	8	6
D	9	8	6
C	10	7	4

West dealer. Both sides vulnerable.

There are several possible routes to Three No Trump, two of which are given here.

W	N	E	S
T	P	2	P
P	P	P	P

W	N	E	S
1	P	2	P
3	P	P	P

It would be poor bidding to reach Four Hearts. West, with his balanced hand, must propose No Trump, and East should agree.

Let's assume that the bidding proceeded as in the first example, West is Declarer at Three No Trump. North should, unquestionably, open the Spade Jack. This is where most Declarers go wrong, they take the Spade finesse and moan when it fails. The situation has been covered in an earlier column, the Ace must be played immediately to guard against the possibility of South holding the King. If North holds the King the Queen is a stopper anyhow.

Declarer then gains entry to his hand with a Club and tries the Heart finesse. South wins and should exit, say, with a Club. This argues that he holds the Spade King. Otherwise he would continue Spades to knock out the stopper. Then, if there is an entry to the North hand, the suit could be run when North gets in.

Consequently, when North gains the lead with the diamond Ace and leads Spades, dummy should duck. This allows both the nine and King to hold, but blocks the suit. The defense is now in the South hand, with no entry to the setting Spade trick in North. The rest of the tricks may be run by East-West without difficulty, making Three No Trump. The tricks lost were the Heart King, the Diamond Ace, and two Spades.

For next week we present one of the trickier hands of the tournament—

S	N	8	7	2
H	K	10	6	6
D	A	K	5	5
C	9	7	4	4

S	W
K	J
H	A
D	Q
C	A

S	10	6	4	3
H	9	5	4	3
D	8	6	2	2
C	8	6	2	2

East dealer. North-South vulnerable.

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### Ricketts Dance Set With Local Belles

Smiling Norm Schroeder promises girls galore for the Rowdies as Ricketts opens its spring social season this Saturday night with a local girls exchange dance.

The dance, to be held in Ricketts lounge, promises to be a gala affair.

#### Glamour

Glamorous beauties, all carefully selected for form, allure and personality-plus, have been invited to attend. Although a typical response was: "I'd love to come. Can I bring my boyfriend?" quite a turnout is expected.

#### Field Day

Ricketts spring social season should prove to be a great success with lots of variety provided by an exchange dance with Dorsey Hall to be held here soon followed by such highlights as: the annual Ricketts-Fleming Dinner Formal, a theater party, beach party, barn dance, house picnic, and a stag field day.

### Y's Doings

By Vern Edwards

The Y wound up its activities for the winter term when, on March 10, the new student execs for the coming year were elected.

#### Crichton Prexy

Heading the list of new officers is president Bob Crichton. Bob has served as both treasurer and secretary of the Y and has been the guiding light in many of its activities.

#### More Officers

Following him are Dick Libbey, vice-president, John Lewis, secretary, Joe Cain, Treasurer, and yours truly as publicity manager.

#### Difficulties

George Davenport was elected Regional Representative, but due to scholastic difficulties, he will be unable to carry out the office.

#### More Elections

Elections for the vacancy will be held tonight at Cabinet meeting. Nominees are Leo Baggerly, Dick Buck, and Pete Knoepfler. As usual, voting is open to all those that have an active interest in the Y program.

#### Cabinet Meet

The new Cabinet is meeting Sunday evening at Wes's home to talk over planning and programming for the coming year.

### Blacker Exchange With Oxy Saturday

Saturday evening Blacker will be host to girls from Haines, Orr and Erdman halls during an exchange dance. This promises to be another of the very successful exchanges with Oxy women.

In addition to dancing and refreshments the evening's entertainment will feature interviews with celebrities. Carl Hildabrand refuses to disclose the names of our visitors, but we can guess that he will be satisfied with none but the most sensational.

### Foreign Students To Study In U.S. Under New Army Program

The first large-scale Government program to bring students from former enemy countries to the United States as a part of the reconstruction effort in those areas will get under way immediately. This announcement was made last week by Donald J. Shank, vice-president of the Institute of International Education. The program is made possible under the terms of a contract signed last week between the Department of the Army and this Institute, providing funds set aside by Congress to assist nationals of Germany, Japan, and Austria to come to this country to study. The students will start arriving next fall for the academic year 1949-50.

It is hoped that arrangements can be made to bring a total of 300 students by September, Mr. Shank said. Of this number, 150 will be German, 100 Japanese, and 50 Austrian. Both graduates and undergraduates, they will come for one year, returning to their homelands at the end of that time. They will study in many academic fields.

It has been felt for some time by Government and Army officials that, if the democratic ideal is to be fostered in formerly totalitarian countries, opportuni-

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ties must be given to the young people who are their future leaders to broaden the contacts with the outside world that were so long denied them. Material reconstruction must be accompanied by re-education.

The students selected to come to the United States will be those who, it is believed, will be able to interpret American democracy to their fellow countrymen on their return home. They will all be screened for academic quali-

fications by civilian selection committees in each country, and for political affiliations by Military Government officials. Mr. Shank emphasized the point that none of these students (Continued on Page 6)

### Newsworthy Notes for Engineers...

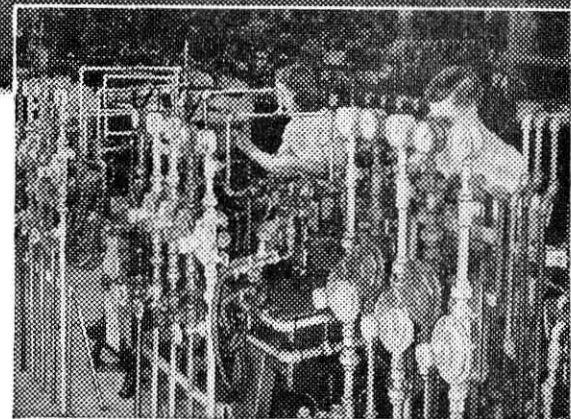


New electronics plant of Western Electric at Allentown, Pa.

## Complex job for Engineers

This new "controlled atmosphere" plant, which produces electronic equipment for your telephone service, posed many interesting problems for engineers at Western Electric—manufacturing unit of the Bell System:

For example, a speck of dust or a trace of perspiration may seriously impair the efficiency of vacuum tubes, thermistors, varistors and mercury switches manufactured here. To meet these



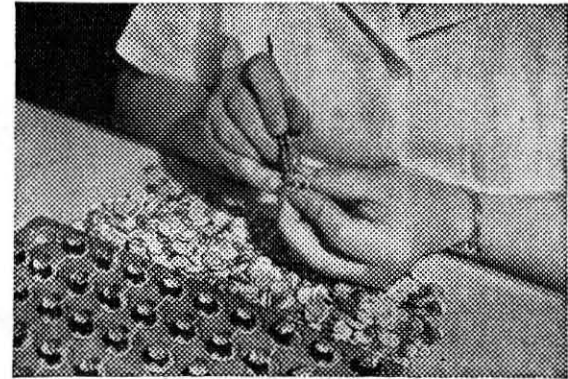
Over 40 miles of pipes deliver 13 needed services to working locations. These are hydrogen, oxygen, nitrogen, city gas, city water, deionized water, soft water, (cold, hot, cooling) high pressure air, low pressure air, process steam and condensate return.

problems, the new plant is completely air conditioned, with strict control of temperature and humidity—sealed except for doors, and slightly pressurized to keep out dust.

Other "musts" in planning included proper illumination for high precision work—a complex network of piping to deliver 13 needed services—a gas generating plant—a highly efficient chemical waste disposal system.

But beyond the problems solved in helping to design the plant itself, Western Electric engineers met many a challenge in working out highly efficient manufacturing layouts, machine design and production techniques to assure a steady flow of highest quality electronic devices of many types:

This new Western Electric Plant at Allentown is a measure of the ingenuity and thoroughness of Western Electric engineers—electrical, mechanical, industrial, civil, structural, chemical, metallurgical—who provide equipment that helps make Bell telephone service the best on earth:



Assembling miniature electron tubes—typical of the high precision work at Allentown—calls for finest lighting. It is provided by a scientifically designed system containing over 13,000 fluorescent tubes.

## Western Electric

A UNIT OF THE BELL SYSTEM SINCE 1882

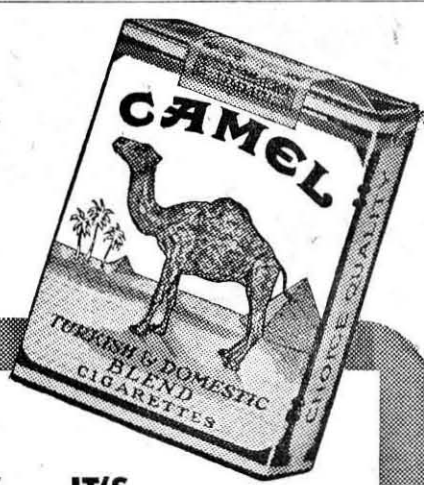


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# CAMELS

# Yearlings Win 8-7 In Close Game

## Wise's Bat Knocks Homer, Double, Single; Gray Strikes Out 13

The Caltech Frosh outslugged the Whittier Yearlings in a sea-sawing baseball game at Tournament Park last Saturday. After watching two well-placed Poet home runs drive in just enough runs in the visiting half of the ninth to overcome a four run Tech lead, the Beaverbats roared back in their half with two scores to win 8-7.

**Top Batters**  
Our frosh collected 13 hits and a team batting average of .325 off the pitching of Rod Burroughs. Bill Wise wielded the biggest bat, connecting for a homer, a double, and a single, while Al Habner, Deane Smith, and Mike Michaelson got two more blows apiece.

**Gray Good**  
Norm Gray looked mighty good on the mound, despite a sore arm, whiffing 13 Whittier batsmen. The arm did show, however, as he gave up seven walks and hit one batter. His batterymate, "Smitty" Smith, saved three potential Whittier tallies by breaking up as many enemy squeeze plays.

The Poet aggregation collected only eight hits in making their seven runs, but their pitcher, Burroughs, struck out 11 Tech frosh while walking 6.

The dramatic ninth inning began to get that way when, after an infield error and a hit put two Quakers on base, Burroughs' (Continued on Page 6)

### Talkin' It Over With The Goon

Last week was bank night at the Institute. It seems as if over the course of seven days the Hustler sent the boys into action in thirteen, count 'em, separate contests, with the Frosh outshining their older brothers.

Last weekend the little Beavers won their encounters in baseball over Whittier, tennis over Whittier, track and swimming over the Sagehens. While the Varsity could only manage to come up with swimming and tennis.

**Marcus**  
Not enough has been said about our ne waquatic tutor. Jim Marcus was recommended by just about every member of the Pasadena Athletic Club's championship swim squad. Jim, a powerful swimmer in his own right (440 free style, back and breast stroke, individual medley), has been one of the mainstays on the P.A.C. team, and has that certain knack with the

# Beaver Sports

## Reinke Runs 9.7 Century as Pomona Defeats Tech

A couple of Sagehens named Reinke and Welsh led a balanced Pomona track team to a 75% to 55% win over a Caltech team which didn't live up to expectations on a cold and windy field last Friday. Mr. Reinke won the two dashes in the fast times of 9.7 seconds and 21.4 seconds, while Welsh made life miserable for Tech's Dwight Schroeder as he just nosed him out in the high hurdles and the broad jump. Together with seconds in the dashes, Welsh picked up 16 points for the Sagehens to be the leading individual scorer.

The 20 point difference in the score is not a fair indication of the relative strength of the two teams, however, for as was pointed out, there were so many close finishes that a few breaks for the Beavers might have made a big difference in the score.

men which seems to bring victories.

## Libbey Shines As Swimmers Sink Sagehens 49-17

Last Friday's win over Pomona, 49-17, caused great excitement among the members of the swimming team. The victory itself wasn't too much of a surprise, but the individual performances indicated great things in store for the team. In winning the 220 and 100, Dick Libbey established marks better than any in the conference so far this year. Before this season is over he should establish at least one new conference mark and perhaps two.

The rest of the team also turned in very creditable performances despite the cold weather. The divers show more improvement than anyone else on the team. Under the guidance of Wheeler North they are learning new dives. We will have divers yet, even if it kills them.

In Thursday's meet with Redlands in the PCC pool at 4:30, both the Varsity and Frosh should repeat last Friday's victories.

# Netters In Key Victory over Poets

## Stone, Nobles Win Upset First Doubles Match, As Beavers Win 6-3

Caltech netmen downed Whittier last Friday by the score of 6 to 3 on the Poets' home courts. In a match characterized by many hard-fought sets, our boys came through when the chips were down to win every one of the five extra-set contests.

In the feature singles match, Tech's Sid Stone upset Claire Krueger, 6-3, 3-6, 6-3. Stone displayed fine tennis in outmaneuvering his tall opponent with consistently deep cross-court drives and

## Frosh Tennis Win Easily 9-0

The frosh tennis team won an easy victory from a rather spiritless Whittier team last Friday at Tournament Park. Rodger Baier, Tech's number one frosh player, secured a well earned victory over his opponent. All the other Tech men won easily giving them a perfect score of 9-0. The Frosh team got off to a slow start, suffering an 8-1 defeat to Redlands in the first conference match. Since then the team has improved and is showing lots of spirit. Ed Welch, holding down the number two spot, is playing very well and will soon be pushing Baier for the top position. The team will travel to Pomona next week for the third and what promises to be one of the toughest conference matches of the season.

### Frosh Sports Roundup By Leon Michaelson

It was a clean sweep for the Frosh. Yes, all four squads of those mad little men from Tech oiled the wheels of the class of '52 victory wagon to the tune of undisputed wins in baseball, track, tennis and swimming.

We hear that even the bunnies are becoming jealous of Frosh cindermen. A herd of Little Beavers out-galoped, out-threw, and out-jumped the flock of Pomona Sagechicks that they encountered Friday afternoon. The Frosh grossed 93 points while reluctantly allowing 38 to the visitors. How they finished: Mile relay won by Tech; Connor, Catterlin, Stewart, Cook. Broad jump: 1st, Kitching; 220: 1st, Paulson; Discus: 1st, Woody; Pole vault: 1st, McEwing; 2 mile: 1st, Pilkington; High jump, 1st (tie) Kitching; 880: 1st, Connor; Shot put: 1st, Woody; High hurdles: 1st, Stanaway; 100: 1st, Paulson; 440: 1st, Cook. We'll see much more of Frosh trackmen soon.

The little fish of the Institute out swam Pomona swimmers by

timely passing shots when his opponent rushed the net. After Stone piled up a 3-0 lead in the final set the outcome was no longer in doubt, as he maintained the pressure to run out the set.

Ed Alexander settled down after a shaky start to outsteady Dave Krueger in the second singles contest. Alexander appeared to strengthen as the match progressed and forced his tiring adversary into increasingly numerous errors. Sizzling volleys and decisive overhead smashes were displayed to abundance as Jack Martin downed Whittier's Clarence Hamilton by scores of 9-7, 7-5 in the fourth singles encounter. To round out Tech's singles victories, Jack Poindexter used his steady back court play to advantage in defeating his Whittier opponent by the close count of 6-3, 2-6, 6-4.

Larry Nobles teamed with Stone to upset the Poet top doubles duo of Claire and Dave Krueger, 3-6, 8-6, 6-4. Nobles' aggressive play combined with Stone's well-placed shots gained the victory after being behind in each of the last two sets. This match, the longest of the day, ended in almost complete darkness. Alexander and Martin clinched the Engineer triumph over the Poets with their doubles win over Tilton and Rouzer by the score of 6-4, 4-6, 6-3.

Next Saturday, April 9, the Beaver racqueteers will attempt to keep their slate clean when they travel to Oxy to oppose their traditional rivals from Eagle Rock.

Summary of Whittier match: Sid Stone (T) def. Claire Krueger, 6-3, 3-6, 6-3.

Ed Alexander (T) defeated Dave Krueger, 1-6, 6-3, 6-1.

Larry Tilton (W) def. Larry Nobles, 6-3, 10-8.

Jack Martin (T) def. Clarence Hamilton, 9-7, 7-5.

Jack Poindexter (T) def. Jerry Rouzer, 6-3, 2-6, 6-4.

Chuck Phillips (W) def. Dean Blanchard, 7-5, 6-2.

Stone-Nobles (T) def. Krueger-Krueger, 3-6, 8-6, 6-4.

Alexander-Martin (T) def. Tilton-Rouzer, 6-4, 4-6, 6-3.

Hamilton-Phillips (W) def. Thorne Butler-Don Schmid, 6-1, 6-2.

a rousing score of 18 to 13. CIT Frosh took the 300 yd. medley relay very easily with Weil in the back stroke, Cagle in the breast stroke and Barmore displaying freestyle. Results in the 50 yd. free find Cagle second and Barmore third. Von Herzen took second in the 100 yd. freestyle whil Barmore chalked up a third. Cagle wrapped up the afternoon by taking the 200 yd. breast stroke.

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**CAMPUS BREWINS**

(Continued from Page 2)

traveling at 50 per. Chuck and the Ricketts stirrup pump gallantly stepped in to remedy the situation when they arrived at the Athenaeum at 3:30 AM. She sold the contaminated car the next day.

Bradley was a green pea again; with his last flame still weeping over his Don Juan technique, der Brad was seen at Laguna over the weekend with his new west Schmipps schmeel. Wilcox saw her first but was left in B.B.'s boiling wake. Sob not, Wilcox—you can have her back soon. Shouldn't take long . . .

Those of us who look for such things may note that Newman, Stratton, and Dzendolet wrapped themselves in a blanket and strutted around cozily like a perambulating bunch of asparagus looking for a place to fall. We hope they found a secluded spot to fall.

Rube Mettler and date found room to consume 2/5 with another couple's assistance; Rube was lying contentedly in date's lap before the fireplace.

Most blatant functioning on the part of brother Moss who discarded his blind date to operate on someone else's—mad abandon was admirably displayed by the couple only a boulder's throw from the head of the chow line. Was it liquor or are they just naturally affectionate? Correct answers to this question will receive chrome-plated beer-strainers.

**In Which We Revel**

Blessed with more clement weather (a matter of no surprise, since Royce had guaranteed it), the Darbs journeyed off to Emerald Bay for their first Beach Party of the year. They had a good crowd—i.e., thirsty—who downed a keg of bock and otherwise disported themselves on the sand.

Bert Snider seems to have cultivated a worthwhile acquaintance with our neighbor behind the walls to the east (like Mecca!). We drop a bitter tear and an acid sneer and condemn our celibate brethren Brundin, Corbato, Hayward, Markoff, Picciotto, Royce, Stanaway, and Windsor for the escorting of lambs of the genus Schmippisia.

Hal Martin, Hickey, and MacKenzie were there with Mim and Mary Stuart, each male evidently having, by simple mathematics, 2/3 of a girl. Well, a piece of a date is better than none at all—or so they say.

Kariotis (the Greatest Greek) was without date until das Muehl arrived, but then he happily shared Sally. Sometime during the day a volley ball game, over a six-foot net, ensued, with Hal Tyson rapturously spiking the ball down onto his terrified female opponents across the net.

An interesting news item tells us that on the way home a rod was burned out in MacKenzie's car. It didn't seem necessary to us to say any more, but the item continues to say that by the ingenious device of filling his chankcase with SAE 300 asphalt, he was able to dull the horrible clatter so that he made it all the way back to Tech. Blanchard was there, flexing his muscles and bungling his volley ball shots.

Atlas Maidenswoon, himself.

Markoff and Beck presided over the cooking, using the light from their flaming frying pans to illuminate their culinary triumphs.

**In Which We Scoop Throop**

In spite of numerous statistical predictions to the contrary, the Throop exchange was a roaring success, the expected shortage of femmes being ably ameliorated through the noble and sacrificial efforts of Erickson, Cockel, George, Jennings, and guests. Though most of the guests were sober, the floor was twice waxed and many characters including Miller succeeded in falling gracefully at damsels' feet. The place was fairly teeming with such seldom-seen-snakes as Neverman, Cobb, Cook, Simmons, and Verdier, who confined themselves to the office and demanded beer—of which there was none.

Cockel declared the punch unfit for human consumption and proceeded with profane utterances to empty the contents of the punch bucket onto the spectators. The purgery of Cockel is responsible for providing the ladies with gardenias.

**Bouquets and Others**

Roommates Madden and Mudgett are currently hot in pursuit. Mudgett has thrown his new car into high gear with Helen, formerly Jug Johnson's drag, and has since not been heard muttering his favorite imprecation. Madden, after a frustrated wench-hunt at the Palladium last weekend (with Hendrickson), is now looking forward to an invitation of beer and TV at the cozy

boudoir of Pat, lovely cashier at Fisher's. Too bad TV isn't two-way broadcast and we are obliged to go back to window-peeping for our information (it strains the eyes, but it's all in the trade).

Fleming has awarded the Harrison Price award to Bennett for his outstanding manly qualities. With all deference to Dick, we tend to speculate on the method of choosing from the possible contestants for this coveted trophy, for we heard Vern Edwards complain that he had been unfairly discriminated against, for he hadn't been in training. In the opposite vein Mike ("I've been compromised!") Sellen succeeded to the purity wreath with a shining 92 percent. Speculation is open as to what Mike has done.

The Mutual Appreciation Society of the Skip-Inn is offering magnanimously a case of bock to the man who can write a rousing Tech beer song to the tune of Beethoven's Chorale. Winners will be judged by the PBAA, who will try out the composed efforts in their natural surroundings. Composers are seriously exhorted!

In closing, we note that President DuBridg, in his State of the Institute report, states that the morale of the student body is high. No comment made on the morals . . .

We wonder where he got his information. And wondering, we lovingly smash the typewriter and trundle off to the sack.

**NORTH ATLANTIC PACT**

(Continued from Page 1)

pressure in Greece and Iran as examples of what the U. N. can do. The failure of the organization in other cases he blames on several factors including the lack of a police force, the veto power, and Russian non-participation in international councils of all kinds.

Then Dr. McHenry considered several of the outstanding objections to the Pact which have been made. He pointed out that the pact's clause requiring the signatory nations to aid one another in case of aggression against any one of them, does not obviate the U. S. to enter a war (such a pledge would be unconstitutional), since each country must decide for itself what form this "aid" shall take.

In answer to those who claim that the pact is the wrong way to approach the Russian problem, Dean McHenry said that increased efforts to negotiate with the Russians should be made, but this regional agreement makes it possible for the U. S. to back up her negotiations with the type of authority Russia knows and understands.

The speaker expressed the belief that the North Atlantic Pact would help rather than hinder European recovery by providing a feeling of greater security; and in dealing with the question of the effect of the Pact on the U. N., Dr. McHenry said that the Pact is certainly a by-pass of the U. N. organization but that present conditions make this move necessary to insure peace in the world.

**ARMY PROGRAM**

(Continued from Page 4)

will displace Americans in colleges and universities. They will receive scholarships or fellowships set aside specifically for foreign nationals. Funds made available by the Army contract will supplement these grants, and the maintenance grants given by the schools, organizations, or individuals, in cases where they are inadequate to meet the students' needs.

The Institute of International Education will, under terms of the contract, be responsible for the entire administration of this particular Army program. It will secure tuition and maintenance scholarships for the students and arrange for their transportation while in this country. It will be charged with the reception and orientation of the students on their arrival. It will receive regular reports of the students' progress, and will make these reports available to the Army.

This is an experiment, Mr. Shank points out, and like all experiments its success will depend upon its reception and support. It is hoped that the public will participate to the greatest possible extent by inviting these students into their homes, giving them first-hand experience of the American way of life to take back to their fellow countrymen. Individuals, families, and groups are urged to help them get a fully rounded picture, not only in homes and schools, but in churches, clubs, political meetings, discussion groups, and all sorts of informal gatherings.

**MUSICAL ANALYSIS**

(Continued from Page 1)

more complex song forms and the sonata-allegro form.

Next Monday afternoon in Dabney Lounge, Mr. Chenoweth will continue this development with particular application to the Ninth Symphony of Beethoven.

Although the "Choral" symphony is difficult from the standpoint of form analysis, the discussion will prove to be most enlightening to anyone planning to attend the performance of the Ninth by the Los Angeles Philharmonic at the Civic Auditorium on April 14th, or at the Shrine in Los Angeles on April 13th.

**YEARLINGS WIN**

(Continued from Page 5)

homer brought his team within one run of the Little Beavers. Then a two-base error and a passed ball put another Poet on third, but he was out at the plate when Smith recovered another bad handle in time to nab him. But a free trip to first was followed by Causy's 4-sacker, and the lead was lost to the visitors.

The home section of the final frame began with a single by Michaelson. He stole second, and came in on John McCourt's single. Meanwhile, McCourt took second while the right fielder tried unsuccessfully to handle the ball. He went to third on a wild pitch and came in when the first baseman missed the throw from the Poet third-sacker off Dave Kouss's grounder.

**Score by Innings**

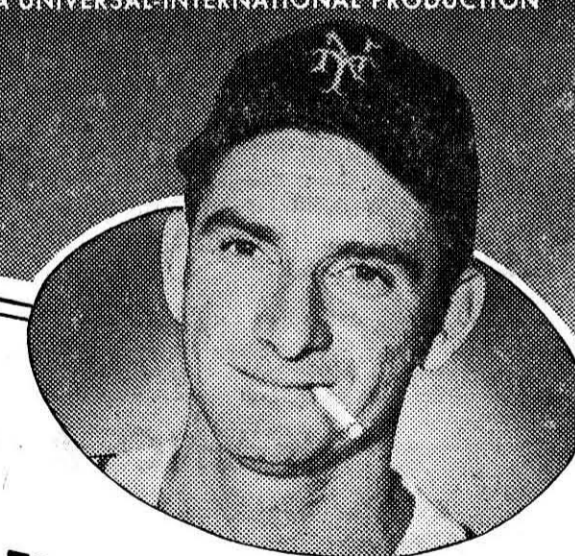
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