

Assembly Stars Nichols' Combo

A real treat is in store for jazz fans tomorrow morning, when "Red" Nichols and his Five Pennies will present an hour concert at 11:00 in Culbertson Hall.

Red and his boys were wildly acclaimed after their performance here last year, and everyone is looking forward to another fine concert for the "low-brows" of Caltech musical circles.

Red's father, a professor of music, taught him to play trumpet when he was three years old, and he gave his first public performance at the tender age of five, with the playing of "America." From then on he was in constant demand for vaudeville acts around his home town of Ogden, Utah.

Military Career

However, Red's father did not want him to become a professional musician, and he went to Culver Military Institute in In-



RED NICHOLS

diana on a scholarship to pursue a military career. But he soon found that the life of a soldier did not appeal to him, and he left school at 16 to form a small dance band known as the "Syn-copating Five."

This combo finally landed in New York City, and there he organized a band with Jimmy Dorsey. Soon after the "Five Pennies" burst upon the jazz scene, and the shifting personnel included such well-known band-leaders as Jimmy and Tommy Dorsey, Artie Shaw, Gene Krupa, and the late Glenn Miller.

In 1941, right after Pearl Harbor, Red and the Five Pennies disbanded, and their now-famous leader worked in defense industries for three years. After the war he started out again playing lead trumpet in studio orchestras, and he finally reorganized the Five Pennies, who have made successful tours and been starred at top night clubs.

This jazz concert should be a fine show for all popular music lovers, and no one should miss this chance to hear one of the old masters.

Caltech Fellowship To Discuss Bible's "Scientific Method"

The Caltech Christian Fellowship will discuss John, Chapter 7, next Tuesday and Thursday at 12:30 in 251 Bridge. This will be especially interesting to Tech students, since in this section of the Bible Christ seems to have advocated the experimental method.

Campus Calendar

THURSDAY, JANUARY 19
12:00 Throop Club Meeting (S.D.) at Covina High
12:00 Y Upper Class Lunch Club
7:15 ASCIT Board of Directors Meeting in Lower Fleming
7:45 Dancing Class in Culbertson

FRIDAY, JANUARY 20
11:00 Assembly—Red Nichols and His Five Pennies in Culbertson
6:45 Frosh Basketball vs. Pomona at Pomona
8:15 Varsity Basketball vs. Pomona at Pomona

SATURDAY, JANUARY 21
2:30 Frosh Basketball vs. Cal Poly (S.D.) at Covina High
7:30 Varsity Basketball vs. Cal Poly (S.D.) at P.C.C.

SUNDAY, JANUARY 22
7:30 Film Classic Series in Culbertson

MONDAY, JANUARY 23
5:30 California Tech Staff First Annual Clambake
7:30 Y Forum, 201 Bridge

TUESDAY, JANUARY 24
12:00 Y Frosh Lunch Club
7:15 Alumni Placement Lecture Series in Ricketts

WEDNESDAY, JANUARY 25
7:30 Orchestra Rehearsal in Culbertson
8:45 Glee Club in Culbertson

Seniors Select Class Gift

Senior President Stan Boicourt climbed into his cab last Friday at 11:00, pulled the throttle, and the senior class meeting was under way, amidst billows of smoke and flurries of snow.

Senior Gift

The senior class is proud to announce that it will leave the sum of \$500 dollars to the alumni fund which is to be used toward the construction of the new gymnasium. The seniors did not stipulate just which part of the gym they would donate.

The graduation announcements were voted upon. Jim Wilcox will take orders for the announcements and calling cards on the Olive Walk all this week. Tomorrow, Friday, is the last day that Seniors may order their announcements, so if you seniors haven't yet ordered, now is the time to do it.

Class Rings

Because of conflicting commencement times with Scripps, the commencement will be held at 4:30 in the afternoon on Friday, June 9.

Bill Haefliger announced that he is selling the senior class rings this year. Those seniors who wish to have the fabulous marginal utility of a senior ring see Bill in Room 65, Ricketts.

Darbs Curdle And Cuddle

Last Friday saw all Dabney hands at the Third Annual Milk Drinking Contest, which was also the occasion for an exchange dance with Browning Hall at Scripps. The halls were decorated in the spirit of the date, Friday the thirteenth, but this did not dismay the Dabney Crew team as they sallied forth for the contest.

At the sight of the milk, a visible shudder ran through the men. It is a sight which has struck panic into the hearts of weaker individuals. But, alas, not so the buxom Browning team, who were gayly tittering in light anticipation of the coming contest.

Two to One

But the men had yet more to fear, since due to the archaic rules of this ancient contest they

(Continued on Page 4)

Blacker Parties At Roller Rink

Those Blacker men whose sense of equilibrium had not been disrupted by the holiday festivities took their dates to the Moonlight Rollerway last Friday for a night of fun on wheels.

Tended by Dale Krause, the daring couples made their shimmering ways round and round the wooden oval. Several stags came along to join the fun, occasionally cutting in and leaving the hapless escort no support to clutch for stability during his erratic course.

Homecoming

When the rink closed at 11 the troops retired to Blacker lounge for refreshments and dancing, apparently none the worse for wear, although with due regard for truth it must be admitted that there was a line leading to each of the couches and to the easy chairs.

Barn Dance

On the 27th Blacker and Ricketts join forces for a soiree known as the "term's barn dance." The location of the pale amber oasis has not as yet been chosen, but the time-honored entertainment is being diligently prepared for, with all members of the cast vying to achieve perfection in their roles.

Sex Y Forum Topic Monday

How do you know you're in love? What part does sex play before and after marriage? How can we improve our prospects for a happy marriage? Mr. Roy Fairchild, the most popular seminar leader at Asilomar, will come to Tech next Monday, January 23rd, to speak on this interesting and important subject.

Authority

Happily married, and possessing one and seventeen-eighteenths children, Mr. Fairchild is an unquestioned authority on his subject. He is a former staff member of the Counseling Center at the University of Chicago and is now Presbyterian University pastor at U.S.C.

Remembered From Asilomar

However, thirty Techmen who spent their Christmas vacations at Asilomar have better reasons to welcome him, for they well remember his interesting and different technique. He approaches the subject frankly and in the students' viewpoint, and possesses a wonderful sense of humor. The demand was so great that he gave three extra talks at Asilomar.

Get the Word

The Caltech Y is very lucky to secure Mr. Fairchild's services, and if the demand is great, may sponsor a second talk of the same kind in its series of Monday night forums. So remember the true word will be liberally dispensed on next Monday night at 7:30 in 201 Bridge.

Air Force Film To Be Shown

Interviews will be given on the campus today to young men interested in a career as an officer in the United States Air Force. A film is to be presented at 4:30 p.m. in 155 Arms.

An Air Force officer team, composed of Capt. William A. Ham and Lt. Victor K. Shero during the next two days, will explain career opportunities, assist those interested in filling out application forms, and give qualifying examinations to those seeking Aviation Cadet Pilot or Navigator Training.

Qualified?

Students who meet the qualifications, it was explained, will have opportunities to begin the processing procedure so they will be ready to start training as soon as they finish college.

Qualified young men have opportunity to train as pilots, as navigators, or for nonflying duties.

ME-CE Occupants-To-Be Eagerly Eye Future Home

"Room for research and administrative facilities in the Civil and Mechanical Engineering divisions will be provided by the new engineering building," stated Mr. Hertenstein in an interview with a Tech reporter last Monday.

All of the Civil Engineering professors, with the exception of Dean Thomas and Professor Varney, will move into the new edifice. Representing the M. E.'s in the new section will be Drs. Clark and Hudson. Although Dr. Clark will keep his office in Throop Hall, his metallurgy research will be conducted in the new offices. Dr. Hudson is setting up a laboratory in which to study vibrations and their effects on structures.

New Features

Some of the important departments of the Civil Engineering division will include soil mechanics, the materials lab, the administrative offices, and classrooms. Large concrete walls, made expressly for structural analysis, can be accommodated in the specially prepared lab. Other parts of the 35,000 square feet of available space will be utilized by the soil mechanics and strength of materials lab, which

DuBridge Cites Dangers To Science In Annual Report

Tech Operetta Premiere Set

A world premiere of a comic opera, a satire of the physics division, will be presented on Feb. 10 at 8:00 p.m. in Culbertson Hall. "Spooks in the Basement" is the title of the forthcoming production.

The libretto and music were both written by John Scott Campbell, who is an electrical engineering and an engineering drafting instructor at the Institute.

Spooks

The plot of the musical centers around the love life of a janitor in the Physics Laboratory and a female calculus professor. The action takes place inside the Physics Laboratory, said lab having spooks in its basement.

A chorus of scientists, which apparently acts like the chorus of priests in Aida except in mocking the Physics Department, is also featured.

An all-star cast consisting of the Caltech Glee Club, soloists from the Pasadena Civic Chorus and the Caltech Orchestra will give the opera. The stage director is Mr. Linnard of the Pasadena Playhouse. Lauris Jones, director of the Caltech Orchestra and the Caltech Glee Club, will be the musical director of the opera.

Bio Club Views 'Phage Work

Bacteriophage will be the subject under discussion this Friday at 11:00 as members of the Biology club and others interested meet in the lab of Dr. Renato Dulbecco, room 112, Kerckhoff.

Here they will discuss with Dr. Dulbecco the significance of work in this field and view the material he has gathered in his investigations of the photo-activation of inactive bacteriophage.

This work has opened new avenues of inquiry and is generally considered to be of considerable significance in the solution of several biophysical problems. As usual, the discussion will be completely informal and will follow the interests of those present.

Progress In Research Programs, Finances, Student Life Also Evaluated

Basic scientific research is being threatened by the government policy of concentrating its support on military science, according to Caltech President Lee A. DuBridge, in the annual report issued last Sunday.

"A full year of normal, steady progress" in Caltech's extensive research program, student affairs, and other Institute activities, was also detailed by President DuBridge, department chairmen, and other officials, in the major portion of the report.

Dr. DuBridge stated that "Insofar as the federal government is concerned . . . support of science has been largely left to agencies whose primary functions are military, namely the National Military Establishment and the Atomic Energy Commission." This, he said, gives rise to two dangers:

Dangers

1. "When basic science competes for funds with weapon development projects . . . science is certain to lose out as budget restrictions become necessary;
2. "There is increasing pressure to extend to basic science the secrecy restrictions which necessarily pervade military weapon development programs."

Independent Financing

The two aforementioned dangers to basic science arising from government interest in science as a weapon-developer may be met "only as larger sources of private support for scientific research becomes available," according to Dr. DuBridge.

Controls Not Wanted

However, Dr. DuBridge made the point that Caltech and similar institutions do not want government subsidies "with the accompanying bureaucratic controls."

Even though many research enterprises at Caltech are being sponsored by the government, "It is a tragic misunderstanding to assume that the educational and research activities of the Institute are being, or are about to be financed largely by the Federal government," he warned. "Caltech undertakes only such government enterprises as are a proper part of its own program." In fact, he stated that "It would be dangerous in any case to have too large a segment of the Institute's research program dependent on government funds."

(Continued on Page 4)

Dramatists

The Drama Club will meet at 7:30 p.m., Monday night, January 23, in 102 Dabney.

Tech Rep Edged In C.E. Contest

Representing Caltech in the Annual Student Paper contest of the A. S. C. E., held on January 11 at Southern Cal, Jack Ottestad, who presented a discussion on pontoon bridges, narrowly missed a winning vote.

With a plurality of only 90 to 87, C. E. White, the contestant from S. C., gained the privilege of representing the section at the A. S. C. E.'s Western Conference in April. The difficulties involved in the construction and maintenance of the Alcan Highway was the topic of the winning talk.

Chapter Meeting

By challenging the Geology Division to another softball game, the Caltech chapter of the A. S. C. E. decided in a meeting last Monday evening to renew its traditional rivalry with this cocksure department.

Max Kreston, president of the group, led the passage of two other motions: the organization of two field trips, one probably including Lockheed Air Terminal; and the scheduling of a theater party near the end of this term.

Postponed for a later date was the movie on the construction of the Golden Gate Bridge, originally planned for this assembly.

Jilted Throopers Resort to Bowling

Finding that only one girl had signed up for last Friday's Exchange, and feeling that an Exchange with only one girl would present problems (!), Throop was forced to make another of its last minute cancellations. However this Saturday at 7:00 there will be bowling at the Pasadena Bowling Courts. The upper alleys have been reserved for the exclusive use of Throop Club. Members and their guests may bowl for two hours for only twenty-five cents each. There's no better deal in town. It's Stag or Drag, with dancing and refreshments in the lounge afterwards. See you there.

AIEE To Visit Telephone Co.

The AIEE has planned a Field Trip to the Telephone Company in Downtown Los Angeles, Friday January 20, 1950. Meet in Tournament Park parking lot at 1:00 p.m.

The trip includes a two hour inspection of facilities and a half hour movie, "Speeding Speech."

Members and non-members welcome. Sign up on list in lower Throop.

Interview Schedule

JAN. 18, 19 & 20—THE U. S. AIR FORCE
Interview team will be on campus. Bulletins are posted on various bulletin boards if you desire further information. Movie to be shown on the 19th in 155 Arms at 4:30 p.m.

JAN. 24, 25 & 26—DOUGLAS AIRCRAFT COMPANY, Santa Monica, California. Mr. C. C. La Vene, Engineering Division Employment Manager, Interviewer. MS degree men and up in Electrical, Aeronautical, Civil Engineering and Physics. BS degree and up in Mechanical and Chemical Engineering.

FEB. 15 & 16—SYLVANIA ELECTRIC PRODUCTS INC., New York, New York. Mr. H. L. Richardson, Director of Industrial Relations will interview BS and MS degree men in Electrical (Commun.), Mechanical, Chemical Engineering and Physics and Chemistry. Two or three PhD degree men in Chemistry also desired.

APRIL 24, 25 & 26—GENERAL MOTORS CORPORATION, Detroit, Michigan. Mr. Kenneth A. Meade, Interviewer. Details later.

All interviews take place in the placement office unless otherwise designated in announcement. Contact the placement secretary as soon as possible for definite appointment and application blanks—120 Throop Hall.

All application forms filled out for interview appointments should be completed and in the hands of the placement secretary two days before the date of each particular interview.

THE SQUARES' CIRCLE

Ed. Note:
This is a rare occasion when someone outside of Tech takes an interest in our affairs. The point made is undoubtedly applicable to most of us.

Dear B. K.:
In answer to your editorial, "Beak, Beak, Beak..." under a P.S. Anybody know of a good beak for an editorial next week? I submit the following:

Parents' sport is beaking, too! Mostly, about Caltech men's inability or desire to write letters home.

It is recognized that students are glad to be away from a domineering home influence. We admit we are glad to see boys become men (however—they can not say, "today, I am a man" until the legal age of twenty-one).

Parents are grateful to save pennies and dollars so our sons can go to college—yes to the ONLY COLLEGE, Caltech. The sum, compared to the national debt, is small: but in our budgets, it is as billions. Are Caltech men grateful for this?

We rejoice that there are many extra-curricular activities made available to make college interesting and fun.

Snaking? A good portion of one's time devoted to this pleasant pastime seems to be necessary if one is to get the most out of the Caltech education.

For a well rounded education, we believe Caltech men must engage in extra-curricular activities, athletics, snaking and writing that letter home each week. How about it?

A Mother

Who Dealt This Mess

BY CARL FOX

It is well known by most bridge players that there are 13 cards in each suit and in each original hand. But this knowledge is seldom put to use. Take a quick glance at the hand below. At the contract of Four Spades by South it appears that the Diamond suit is crucial. A finesse is required, with the odds 50-50 on whether or not you pick the right direction. But a good Declarer will find the one cast-iron way of making sure of the contract.

S Q932	N	S —
H A 10 76		H 82
D A 10 5		D Q87432
C A63		C J 10 942
S 10 854	N	S —
H AKQ93		H 82
D 9	W	E D Q87432
C Q85	S	C J 10 942
	S AKJ76	
	H J54	
	D KJ6	
	C K7	

South dealer, North-South vul.

The bidding went—

S	W	N	E
1S	2H	3S	P
4S	P	P	P

West opened the King, Queen, and Ace of Hearts in that order, East discarding the deuce of Clubs. West then shifted to a Club, the King winner. Declarer, with the opponents holding book, must win the remaining tricks.

Four rounds of Spades pulls the outstanding trumps and gives Declarer a fair count on (Continued on Page 4)

Potpourri

By Bob Crichton

Mr. and Mrs. Neville S. Long became parents of a baby boy, Donald Stewart, in Walla Walla, Washington. Neville was an R. A. of Fleming, several years ago.

The annual report of the Institute has been published, and the following is quoted from Dean Eaton's Report.

"A considerable concern was expressed in this body (the Student Faculty Relations Committee) over the disparity between the listed course load in certain courses and the greater number of hours actually required to complete the assignments. Investigations into this disparity are in progress, with the hope that recommendations for reduction, particularly in the matter of repetitive and duplicative problem assignments, can be made."

The day after the fire destroyed the electrical maintenance supply building, early this term, several papers printed stories to the effect that the fire had threatened the library, which contained hundreds of priceless documents. It was described as one of the oldest structures on the Caltech campus.

This was slightly confusing until I saw a sign on the old dorm that read, "OLD LIBRARY- 1890, A Monument to Early Culture Dear to the Memory of Many. Diamond Jubilee Celebration of Pasadena's Founding 1874 and California's Centennial 1849."

In the annual report, Dr. Gevurtz says that the greatest problem facing the Health Center is how best to approach student psychological problems.

Bob Smith, who has been taking some of the Big T group pictures, worked this summer taking pictures for the Santa Cruz Police Department. The sort of work that gave him practice for the campus was pictures of safe-cracking jobs, corpses and mugshots.

Dean Strong, in the annual report, said that the attrition rate among the freshmen is decreasing. Twenty-three men or 13 per cent of last year's frosh is the number which was involved. This loss of 23 is made up as follows: five formally failed scholastically; three withdrew to avoid scholastic failure; one withdrew for financial reasons; two withdrew to change vocation; four withdrew because of disaffection; one died; four reinstated to repeat work this year, and three are known to be planning to transfer elsewhere, but not yet formally withdrawn (vocational change).

CAMPUS BREWINS

Picking up our square crystal ball, we gaze therein to see who has been striving for nefarious recognition this week, and evaluating all circumstances, sort out those to whom we can award the same. Everybody's calling Thorne Butler a hero these days, but we, the little voice in the great babble, don't see why he has such a good eye on the basketball floor when he can't avoid hitting parked cars on a four-lane street: witness the little game of crinkle-fender he played last week. Speaking of cars, Brad Houser got his head swelled recently, when, driving his hoodless, paintless, beat up old Packard, in downtown Pasadena; some people from Ohio pulled alongside at a stoplight, and leaned out of the windows goggle-eyed, with exclamations such as "Gee, look at the REAL hot rod," "I'll bet it's really fast." (Ed. Note: Brad claims to have hit 27 in overdrive high.)

Last weekend was the one for exchanges, both girls' and dirty looks. Ricketts flung one Friday night with Oxy's Haines Hall. Archie "J. S." McEwing started the evening right by heading for

the hills when he discovered that his ex-girl friend from last year was attending. Expecting a mediocre turnout, the Rowdies were surprised when half of the Occidental female student body showed. An emergency drafting committee was formed and recruits assembled from many an obscure snake pit about the campus. To act as catalyst to the mix, the nametag gag was employed, using old proverbs split in half. Nobody had much trouble except the guy whose tag read "I'll be damned if—." The other half of the tag, which read appropriately, "—I can find my partner," had taken off early with someone else.

—Which brings us to Fleming's Friday Fiasco. Perpetrated by post cards, the dance was deluged with dubious damsels (this could get out of hand). Hartung's Neapolitan ex-girlfriend favored the troops with an appearance, and was entangled by Dallas Peck, Matzner, and a post-doctoral student named Michaelson, who had somehow wandered in on his way to Kerchoff. The latter was heard urging the lass to retreat

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with him to the laboratory, where he said he would show her some birds and bees. Peck, knowing full well the implication of this apparently innocent statement, donned his armor and carried off the prize. Matzner (Continued on Page 4)

The Evening Concert

KFAC 8-10 p.m.
Presented by the Southern California and Southern Counties Gas Companies

THURSDAY, JANUARY 19
Colas Breugnot—Overture, by Kabalevsky. NBC Symphony Orchestra conducted by Arturo Toscanini (5).
Symphony No. 5, by Shostakovich. The Cleveland Orchestra conducted by Artur Rodzinski (39).
Gyergy Sandor, Pianist.
Sonata in B Minor, by Liszt (24).
Variations and Fugue on a Mozart Theme, by Regner. Concertgebouw Orchestra of Amsterdam conducted by Edouard van Beinum (32).
English Folk Songs—Suite, by Vaughan Williams. Columbia Broadcasting Symphony conducted by Howard Barlow (12).

FRIDAY, JANUARY 20
Weekly Feature Concert—A Program of Liturgical Music

SATURDAY, JANUARY 21
Die Gotterdammerung (The Dusk of the Gods), by Wagner. Famous Soloists, London Symphony Orchestra conducted by Albert Coates. Berlin State Opera Orchestra conducted by Leo Blech.

MONDAY, JANUARY 23
Prelude to the Afternoon of a Faun, by Debussy. Boston Symphony Orchestra conducted by Serge Koussevitzky (10).
Symphony No. 3 in A Minor, by Rachmaninoff. The Philadelphia Orchestra conducted by Sergei Rachmaninoff (38).
Wilhelm Bachaus, Pianist.
Fantasia in C Major, by Schumann (28).
Italian Concerto in F Major, by Bach (12).

TUESDAY, JANUARY 24
Die Meistersinger—Overture, by Wagner. The Philadelphia Orchestra conducted by Leopold Stokowski (9).
Symphony No. 103 in Flat Major (Drumroll), by Haydn. The Halle Orchestra conducted by Leslie Heward (25).
Nathan Milstein, Violinist.
Sonata No. 8 in G Major for Violin and Piano, by Beethoven (16).
Sonata No. 24 in C Major for Violin and Piano (K. 296), by Mozart (14).
The Great Elphement, by Handel-Beecham. London Philharmonic Orchestra conducted by Sir Thomas Beecham (24).
Enigma Variations by Elgar. B.B.C. Symphony Orchestra conducted by Sir Adrian Boult (25).

WEDNESDAY, JANUARY 25
Don Giovanni—Overture, by Mozart. London Philharmonic Orchestra conducted by Sir Thomas Beecham (6).
Symphony No. 5 in B Minor (Pathétique), by Tchaikovsky. Berlin Philharmonic Orchestra conducted by Wilhelm Furtwangler (41).
Alexander Kipnis, Bass.
Selections from Boris Godounov, by Moussorgsky. Chorus and Orchestra conducted by Nicolai Berezovsky (42).
Les Deux Pigeons—Ballet Suite, by Messager. Royal Opera House Orchestra of Covent Garden conducted by Hugo Rignold (17).
Intermezzo—Entr'acte, by Richard Strauss. Royal Philharmonic Orchestra conducted by Sir Thomas Beecham (6).

Musical Masterpieces

KFAC 4-5 p.m. daily
2-5 p.m. Sunday
Presented by the Slavick Jewelry Company

THURSDAY, JANUARY 19
"Elverhoj" Overture—Kahlau. Johan Hye-Knudsen and Royal Chapel Orchestra
Concerto for Piano and Orchestra—Villalobos. Eileen Ballou, Pianist. Ernest Arnermet and Orchestra de la Suisse Romande
Merry Mount Suite—Hanson. Howard Hanson and Eastman-Rochester Symphony Orchestra

FRIDAY, JANUARY 20
"The Firebird" Suite—Stravinsky. Ernest Arnermet and London Philharmonic Orchestra
The Pines of Rome—Respighi. Eugene Ormandy and The Philadelphia Orchestra
La Favorita "Abridged"—Donizetti. Leonora—Giuseppina Zinetti. Fernando—Cristy Solari. Alfredo XI—Carmelo Maugeri. Baldassare—Corrado Zambelli. Ines—Ida Mannarini. Don Gasparo—Giuseppe Nessi. Lorenzo Molajoli and Chorus and Orchestra of La Scala
William Tell "Passo a sei"—Rossini. Arturo Toscanini and N.B.C. Symphony Orchestra

SUNDAY, JANUARY 22
"Idomeneo" Overture—Mozart. Boyd Neel and National Symphony Orchestra
Concerto for Oboe and Strings—Richard Strauss. Leon Goossens, Oboist. Alceo Galliera and The Philharmonia Orchestra
The Faithful Shepherd Suite—Handel-Beecham. Sir Thomas Beecham and London Philharmonic Orchestra

MONDAY, JANUARY 23
"Ruler of the Spirits" Overture—Weber. Walter Susskind and the Philharmonia Orchestra
Symphony No. 7 in A Major—Beethoven. Anatole Fistoulari and National Symphony Orchestra
Novelletta—Martucci. Willy Ferraro and Symphony Orchestra of Turin

TUESDAY, JANUARY 24
Feuersnot Love Scene—Richard Strauss. Sir Thomas Beecham and Royal Philharmonic Orchestra
Symphony No. 41 in C Major "Jupiter"—Mozart. Arturo Toscanini and N.B.C. Symphony Orchestra
Sonata No. 2 for Clarinet and Piano—Brahms. Benny Goodman, Clarinetist. Nadia Reisenberg, Pianist

WEDNESDAY, JANUARY 25
"Le Jeune Henri" Overture—Mehul. Albert Wolff and Lamoureux Orchestra of Paris
Concerto No. 1 in B Flat Minor—Tschajkovsky. Vladimir Horowitz, Pianist. Arturo Toscanini and N.B.C. Symphony Orchestra
Pohjola's Daughter—Sibelius. Serge Koussevitzky and Boston Symphony Orchestra
By Request

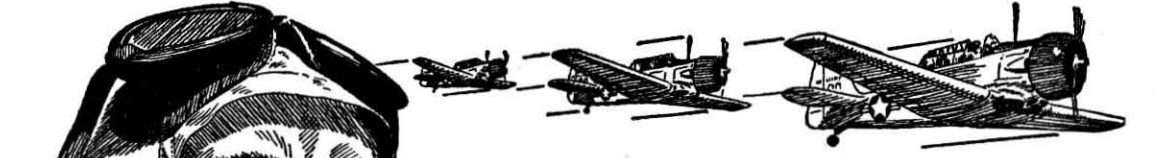
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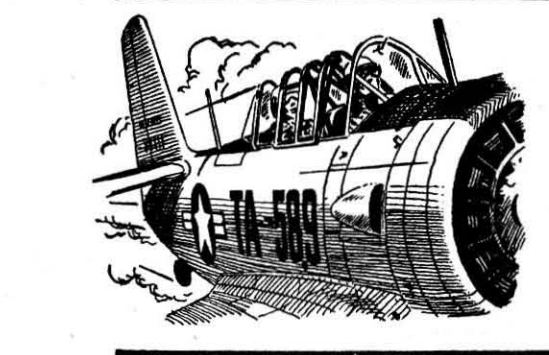


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AN AIR FORCE INTERVIEWING TEAM WILL BE HERE TO GIVE YOU FULL DETAILS

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(Time) 9 a.m. to 4 p.m.
(Place) 120 Throop Hall

Here's your opportunity to qualify for Aviation Cadet training. To be eligible, you must be single, between the ages of 20 and 26½, with at least two years of college and with high physical and moral qualifications.



Find out about the academic, military and flying training you'll get as an Aviation Cadet—either for pilot or navigator. If qualified, your papers will be processed so you can begin training after you finish college.

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SPEAKIN' SPORTS
with Mike

Next to Thorne Butler's brilliant display of basketball playing, it seems that one of the most important factors of Saturday night's game occurred after it was over. I am sure that I was not the only one who noticed Whittier's failure to give a yell for the team that outplayed them on the floor. Who knows, maybe the Poet cagers were too busy thinking up excuses for this, their fourth defeat at the hands of Tech.

Their main excuses may take the form of Thorne Butler, who hooked his way to a 24-point high scorer for the evening and to a greatly improved rebound aptness displayed by the entire Beaver squad. The predicted "back in shape" period after the holidays seems to have been an important factor in firing Coach Shy's troops to victory Saturday night.

Sideline

Now in the capacity of coaching Caltech's track team, Bert LaBrucherie apparently is having trouble keeping his eye off of a 1950 grid squad. I could have sworn that I saw men suited for track tossing around that elongated sphere and generally doing a little serious ball handling.

Spike Surprises

On the oval, Tech trackmen are at last beginning to overcome the early season stiffness. (Continued on Page 4)

Beaver Sports

Tech's Skiers Overrun Muir

Racing season for Caltech's ski team began last Sunday when our sledgers met a team from Muir College at Mt. Waterman. Tech skiers took the first four places in the two-run slalom.

Our team, chosen from a host of promising skiers, looked steady but a little ragged. With hard work we can expect the Caltech Ski Team to offer real competition for the other teams in the Far West Intercollegiate Ski Association and notably to the USC and UCLA teams.

How They Ran

Results of Sunday's race: (Combined times of two runs) 1st, Stanaway (Tech), 47.9; 2nd, Stranahan (Tech), 50.5; 3rd, Blom (Tech), 54.2; 4th, Jones (Tech), 56.4; 5th, Gonzales (Muir), 59.7; 6th, Warick (Muir), 60.2; 7th, Grey (Muir), 87.6; 8th, Mason (Tech), 88.4.

Team scores: (1st three men) Caltech, 143.0 seconds; Muir, 207.5 seconds.

The first general meeting of the Caltech Ski Club was held Tuesday with about 35 members and friends in attendance.

Warren Schlinger reported on the hut and gave a hint of what has already been done and discussed plans for the future. The idea of emblems and shoulder patches for the club was discussed and several tentative designs are expected to be returned from the manufacturers soon.

Hut Fees

A committee has been delegated to investigate the possible raise in the hut fees as a method for raising the money the club needs.

Dick Jones expressed the appreciation of the club for the wonderful furniture donated for the hut by the Caltech Woman's League.

Don't forget to check with the bulletin board in lower Throop for details of the Club's new ski school being run by Olly Gardner and Pete Price. An announcement will be made on the bulletin board every Thursday giving the exact day, time, and meeting place of the school.

Engineers Blast Poets, 49-35; Butler Stars With 24 Points

Tech Favored Over Pomona

With their first league victory safely salted away, Caltech's unpredictable varsity quintet will take the floor Friday night against the Pomona Sagehens. Last week's convincing win by the Beavers over Whittier indicates that the Hens will be given a run for their money.

Pomona Strong

While Pomona's perennial center Locke Olsen has finally graduated, the Sagehens have an able replacement in the 6-foot 5-inch person of Carl Wittenberg. Other starters for Pomona will probably be Essig and Cooper at the guard positions, and Welsh and Hamman at forwards.

Thus far, in league competition, Pomona has lost to Redlands but has taken games from Occidental and Whittier.

Need Win

Friday's game is important to the Beavers, as it will be an indication of how strong Tech is compared to Oxy. A decisive win over the Sagehens would make Caltech a major contender for the SCIC basketball crown.

Lineup

The probable starting lineup for the Beavers will include Thorne Butler at center, who, incidentally, will really have his work cut out against the 6-foot 5-inch Wittenberg; Patapoff and Libbey in the forward slots; Montgomery and Cox at the guard positions.

Game time is 8:15 with the Frosh preliminary at 6:45. Both games will be played on the Pomona hardwood.

In a last-minute interview with guard Jay Montgomery, he was quoted as saying, "If enough Tech rooters show up, I may break down and take a shot or two at the bucket."

This in itself is worth the jaunt to Pomona. Remember, game time is 8:15.

Capacity Crowd Watches Tech Top Whittier for First Time Since 1946

The Engineers showed Whittier's former conference champs how the game of basketball should be played last Saturday, at the same time taking them to the cleaners, 49-35. Caltech took an early 2 point lead and never lost it.

Thorne Butler was the big gun for the Beavers as he scored 48.979% of the Caltech points. He had his hook shot calibrated to the nearest inch till it seemed impossible that he could miss.

Frosh Sports Roundup by Perry Vartanian

As promised per last week, here's some poop on the Frosh track squad. To begin with, Coach LaBrucherie is experimenting with the "man vs. event" problem. As yet he has no pole vault, high jump or broad jump men. The running events, however, seem to be pretty well filled, and if the success of the Frosh in cross country this year is any indication of what our trackmen can do, we ought to be right up on top in the conference.

Man vs. Event

Following is a list of men out for Frosh track and their options. Sprinters: Pat Fazio, Jim LaTourrette, Jack Walker, quarter mile: Tom Stockebrand, Terry Thomas; hurdles: Jim Kliegel, Clair Veazey; half mile: Ed Stofel, Al Johnson; one and two mile: Dewey Marshall, Don Romine, Francis Scott, Hank Pollet, George Moore; field events (weights): Bob Kubick, Gene Muehlberger, Walt Pilant, Leon Vickman.

For the most part, meets will be in conjunction with those of the Varsity.

Basketball

Saturday, while the Varsity was smearing the Whittier Varsity, seven miles away a Frosh team from this same Whittier was doing likewise to our Frosh casabamen. Anyway, the score was 29-52.

High for Caltech was Stevens with 10, followed by Corporales with 8, Gee with 7, Patchen with 3 and Scott with 1.

eight contests this week, while second-place Throop won five, and Fleming won the remaining four. Throop Team 1 rolled top game and series of 579 and 1633 respectively. Current standings:

House	Won	Lost	Pct.	Ave.
Ricketts	60	20	.750	148
Throop	50	30	.625	144
Dabney	37	43	.462	128
Blacker	23	49	.320	129
Fleming	22	50	.306	130

Tech's special match with Woodbury College was postponed one week until this coming Sunday at 2 p.m. at the Pasadena Courts.

Egad!

Jane Russell may not have the most shapely figure in the movies but nobody can deny she's abreast of the times.

Our ability to make points wasn't the whole story, however. It was Cox and Montgomery at the guard positions who figuratively sat on the Poets and refused to let them shoot. Their ball-hawking broke up a lot of potential Whittier scoring. The Monk's solo dash in to grab the ball and score just at the Poets threw it in was the game's most spectacular play. It was by far the best defensive of the season.

Ball Handling

The Beaver team displayed excellent ball-handling and rebound work. Whittier time and again tried to intercept the ball "a la Montgomery", but were never able to get their hands on it. At the free throw line too, the Engineers proved superior, making 11 out of 15, while the Poets managed but 9 of their 16 tries. Whittier's defense wasn't very effective since Beaver casabamen had little trouble working the ball into position for a good shot.

Improved Bevos

To those who saw the Redlands game, the improvement the Engineers showed in all departments, ball-handling, re-

SCIC BASKETBALL STANDINGS

Redlands	3	0	1.000
Pomona	2	1	.667
Caltech	1	1	.500
Whittier	0	2	.000
Oxy	0	2	.000

bouncing, bringing the ball down the floor, shooting, was phenomenal. Since control of the ball is essential to a winning game, it is good to see a change for the better. An orchid to Coach Shy for bringing the team along so well.

Another promising sight was the depth we displayed against Whittier. The Poets seemed over-confident in showing their reserve power, when they started their second string. It took them a few minutes to get used to the idea that they were losing and then send their first string in. By then we had a 7 point lead, which was later increased with little difficulty.

Lineups:

(49) Caltech	Pos.	Whittier (35)
4 Bowen	F	Davis 2
2 Libby	F	Reeder 1
24 Butler	C	Hill
4 Cox	G	Konzelman 2
6 Montgomery	G	Krusz 2
Half-time score: Caltech 27, Whittier 5		
Scoring subs—Caltech: Patapoff 5, Gray 2, Sereno 2, Whittier: Reed 2, Craven 5, Ribb 2, Mason 2, Snyder 9, Pederson 8.		

Tennis, Softball Open IH New Year

Interhouse tennis got off to a rather damp start last week. Sunday afternoon saw the Big Red of Fleming represented by Ming Wong and Bob Wood going down before the mighty Blackerites, Fred Drury and Swaroop Bhanj Deo, by a 1-6, 6-3, 6-4 margin. The Dabney-Throop fray was postponed.

Softball

The Dabney Green continued in its winning ways Monday when it routed Ricketts by a score of 6-1 in softball. As you may recall, the Darbs copped the softball title last year without a single defeat. Following is the interhouse baseball schedule:

Thursday, Jan. 19—Ricketts vs. Blacker.
Monday, Jan. 23—Fleming vs. Throop.
Tuesday, Jan. 24—Dabney vs. Blacker.
Wednesday, Jan. 25—Ricketts vs. Fleming.
Thursday, Jan. 26—Blacker vs. Throop.
Monday, Jan. 30—Fleming vs. Dabney.
Tuesday, Jan. 31—Throop vs. Ricketts.

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Bowlers Run Wild In Scoring Monday

Highest scores of this year's Interhouse Bowling League were rolled this Monday by Woody Bratnobar of Throop as he set a new mark with a big 236 game, then added scores of 181 and 202 for a record 619 series. This is topped only by Ray Heggland's 624 mark, set in March, 1948. Other big scores this week were rolled by Carl Fox (R), 179-502; Jerry Matthews (T), 188-494; Win Soule (R), 178-490; and Duane Neverman (T), 184-455.

Ricketts Advance

League-leading Ricketts advanced by winning seven of its

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DuBRIDGE CITES DANGERS
(Continued from Page 1)

dent upon uncertain short term government contracts."
"The California Institute is determined to insure its independence through the building up of adequate resources of its own."
In line with this independent line of financing, and relying upon the support of citizens of the community, during the year the Institute's assets increased by \$1,372,374, mostly from gifts. Total assets are now \$43,738,517, according to the report. Total expenditures for the year were \$7,800,708.

Veterans Drop
Turning to student life, the 1949-50 enrollment has dropped to 1141 (graduate and undergraduate), which the annual report states, is close to the stable level at which the Institute has been aiming. A smaller proportion of the undergraduates are veterans, 39 per cent in 1949-50 as compared with 78 per cent in the preceding year.

This lower number of veterans (with consequent decreases in veteran's scholarship aid from the government) has raised the scholarship demand considerably. Many promising high school graduates, the report stated, were unable to attend Caltech because of financial difficulties. Dr. DuBridge emphasized the need for more freshman scholarships.

Fun Here Too
The recent survey comparing participation in extra-curricular activities at Caltech and at a large western state university was also cited by the president in his report. The survey (reprinted in last year's *California Tech*, and *Engineering and Science*) showed that a large proportion of Caltech men engaged in some form of extra-curricular activity, and that more social affairs were held at Caltech.

The report also stated that over 56% of the undergraduates engaged in intra-mural and intercollegiate sports during the 1949-50 year. This was 11% more than in the preceding year but still not up to the prewar level.

In commenting upon the student life, Dr. DuBridge said, "The Institute has always had the policy of providing opportunities for a well-rounded college life for all its students. Very few people realize, however, to what an unusual degree this goal has been achieved. Caltech students work hard—yes, but they have fun too."

Research Advances
The wide and varied research programs being carried on in the various departments were also reported upon.

The establishment of the Guggenheim Jet Propulsion Center, completion of the Earhart Plant

Research Laboratory, and the beginning of a four-year survey of the sky by the 48-inch Schmidt telescope at Palomar, were some of the high points of the research program listed.

Faculty
Two new department chairmen were installed during the year: Dr. Robert F. Bacher who now heads the Physics Division, and Dr. Hallet D. Smith, new chairman of the Division of Humanities. The election of two more Caltech faculty members to the National Academy of Sciences brings the total number of members of the Academy on the campus up to 27, the report noted. Nearly one out of sixteen members of the Academy is now a member of the Institute staff.

WHO DEALT THIS MESS

(Continued from Page 2)
the hand. He can count that West originally held five Hearts and four Spades. Of the remaining four cards, one is known to have been a Club. A lead to the Club Ace and the ruff, with the last trump, of a Club return served no purpose but to complete the count on West's hand. It is now complete—three Clubs and only one Diamond. Now a Diamond lead to the Diamond Ace on the board is perfectly safe. If West's singleton Diamond is the Queen, it will drop. If not, the Queen is in East's hand and will be finessed, in perfect safety, with the return lead—making four Spades. What a partner he is!

DARBS CURDLE

(Continued from Page 1)
were to drink two bottles of milk for each the girls drank. The evil of this black day fell on Dabney: they lost! Amidst sobbing and violent gestures of despair, the crowd then turned to the half-time activities, and heard once again renditions of Dorothy Shay-ish tales of young maidens gone astray.

Emotional Peak
The emotion reached a peak as Dabney's own alumnus, Dirty John Whittlesey, who is leaving to teach at the University of Nevada, was presented a touching "bon voyage!"* gift by some of his ardent Browning admirers.

There was, however, also a less serious side to the evening; exchanging with Browning. This was no mean task, thanks to Corbato's usual confusing mixers. But in spite of it, at the end of the evening, the Dabney men contentedly left the Haven of the White Walls, ready for another week at their books.
*—J. Allan Beek, Jr.

SPEAKIN' SPORTS

(Continued from Page 3)
nesses, and are shaping into a big bundle of surprises. What-da ya know, Art Miller has been seen sashaying about in a sweat-suit—what next?

GAD!

She: "There are lots of couples who don't neck in parked cars."
He: "Sure, the woods are full of them."

CAMPUS BREWINS

(Continued from Page 2)
could only be philosophic.
Katz picked up some femmes in South Pas, sorted out one only two years under thirty, attached himself to her at the dance and proceeded to give dirty looks to those who tried to cut in. In thus exercising his eyeballs he noticed that there was much other talent present; he hastily dumped Grandma on frosh Larry Starr (aged 17), and these two hit it off so well that they spent the rest of the evening together. She must have made quite an impression on him.

While the others were content to check the local gals, the Dabney "more gasoline than brains" Darbs felt the wanderlust, and wound up in the little white-walled whistle stop, circa 40 kilometers away in the direction of the rising sun. **TS** put the evening to good use by testing the pillows on the date room couches at full length. He was awakened on at least two separate occasions. Prominent local Scrippsophile, Pete Knoepfler, was the source of certain anxiety in one of the younger inmates. She confided to her partner, in shocked tones, "I saw Peter Knoepfler dancing cheek to cheek with a Scripps girl!" It is all very well for Peter to admire the girls in that region in

Those who know him well will be pleased to note that Rex Ragon spent his efforts on the wallflowers. This is indeed a changing world.

a platonic, intellectual manner, but when he seeks to implement his lust with the activities outlined above, we feel even this ladylike censure to be too mild.
The announcement was made at dinner Monday night that Royce's overcoat had been found—in one of the rooms at Scripps. His many (2) friends rallied loyally about him, and assured him that although it looked as though he was hopelessly compromised they would stick by him. Anyone knowing a GOOD lawyer—

Saturday night saw the basketball game wind up in most satisfactory fashion, except that Goerke's date was a little confused and kept cheering indiscriminately, no matter which team scored. A few kind, understanding words from Jon sufficed to close her up like a clam for the remainder of the evening.

Scorning the game, Ollie Gardner, "Fat" Fred Baily and "Thin" Carl Larson crashed the Altadena Country Club's Winter Dance. A pointer for those who wish to try this: leave your coats in the car.

Haber and Ludwig are eating free this weekend. Seems they made a bet with two Oxy gals that Caltech wouldn't lose to Oxy last weekend, and, sure enough, since there was no such game scheduled, Caltech didn't lose. The cads are collecting a couple of steak dinners.

Adv.—Will the person who gave me what I've got please take it back again now. I'm tired of it. S. Pardee.

The Darbs report a new atrocity by the neighboring Red Waiter's Union. Last Saturday the overflow was in Dabney, and the Fleming headwaiter went over to officiate. One of the Dabney citizens tried to move a chair without asking this high official's permission and was promptly apprehended and told to replace said chair. In the ensuing altercation, the chair was highly stressed in tension, and the visiting dictator was heard to assert, "Listen! I'm HEAD-WAITER here, and you have to do as I say. You want me to call the manager?" The EM proved to be slightly less bull-headed than the officer, and the chair was returned to its God-given position.

Monday night, when Pete Howell had called for the laundry, Dick McKinnon was cleaning out the pockets of his shirt, prior to dispatching it to be blanching, when he discovered one of Maxine's buttons in the front pocket. He lit up like a Christmas tree (sorry we're so late with that expression) and said, "BOY! That's smooching—I'm engaged."

All hands are still wondering if Ralph Stone is marooned in Canada with or without his girl. Only time and clement weather will bring the answer to this one.

Flash! Ralph Stone has returned, we are informed, as the Tech is going to press. For additional details, see Stone.

Adv.—For information concerning certain Asiatic diseases, see S. Pardee.

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