

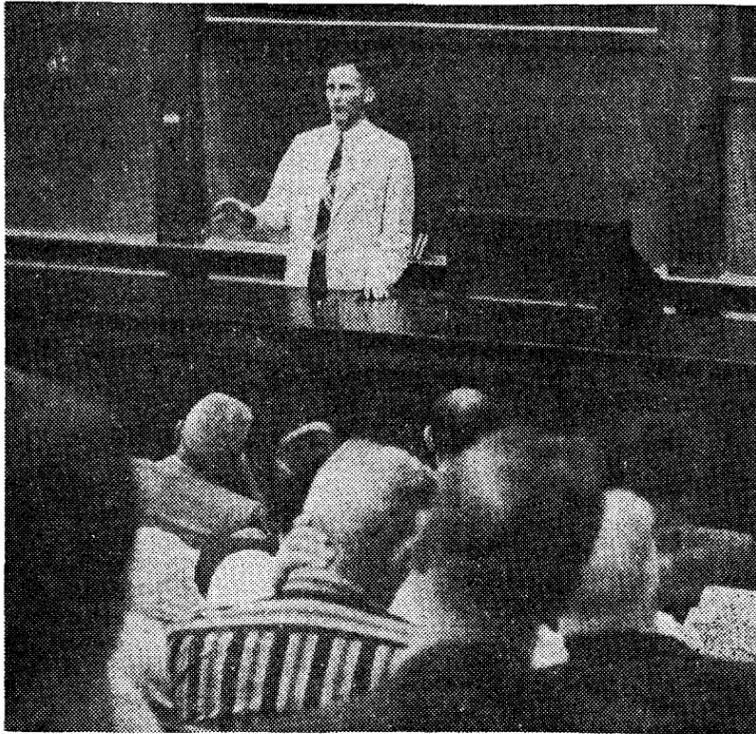
# The California Tech

California Institute of Technology

Volume LX.

Pasadena, California, Thursday, April 16, 1959

Number 24



DR. ALLEN SWEETZY addresses a standing-room only lecture hall during last Saturday's Alumni Day seminar. Fifteen hundred Tech alumni and families participated in the day's activities for the largest such event in the school's history.

## Ah So, Tech Is Ready For Model UN

Three months of preparation will be climaxed for 11 Techmen next week when the Ninth Pacific West Model United Nations convenes at SC.

Caltech will represent Japan in the committee meetings and plenary sessions which begin Wednesday afternoon and continue through Saturday.

Tom Jovin heads the delegation. Mike Milder, Pedro Bol-saitis, Tom Morton, Bill Bauer, Ken Dinwiddie and Doug Carmichael will participate on the General Assembly committees. Cleve Moler and Dave Nissen are delegates to the 11-nation Security Council.

Ken Scholtz and Roger Noll will argue their nuclear bomb-testing suit against the U.S. and the U.S.S.R. in the International Court of Justice.

World problems ranging from the Berlin question and use of outer space to refugees and technical assistance will be considered by the various UN organs. Resolutions concerning a number of the issues have already been submitted by the Tech-Japanese delegation.

Over a thousand students from colleges in eight western states will attend the four-day conference. SC has rented a downtown L.A. hotel to house the delegates.

Caltech represented both Japan and the United States in a southern California practice session held at Oxy last week end.

## Techniks Dig Beat Reverend

Rev. and Mrs. Pierre Delattre, Congregational missionaries to San Francisco Beatniks, will be here tomorrow on a YMCA sponsored visit. The Delattres operate the Bread and Wine Mission, which features poetry reading to jazz instead of church services, in San Francisco's North Beach section.

Delattre, who is a graduate of the University of Pennsylvania and the University of Chicago Divinity School, started his mission two years ago. He has written an unpublished novel and more than 100 published poems. His wife is a psychologist and actress.

From ten until noon tomorrow morning, the Delattres will have office hours in the Y lounge and will meet with the Man and Arts Commission at noon.

They will hold office hours in Ricketts guest suite from two until five and eat dinner at Ricketts. An open house at Wes Hershey's home for students and dates will follow.

## Associates Search For Tech Novelties

The Industrial Associates are planning a tea May 7 and would like a collection of humorous exhibits from students.

Any Techman with an idea for something that is easy to manipulate or that moves, thinks or squawks should contact Hugh Kieffer, Blacker.

## Blood Drive Next Wednesday

By Bob Koh

With less than a week to go, the campus blood drive is moving into high gear. The annual drive is set for Wednesday, April 22, from 1-5:30 p.m. in Dabney lounge.

Advantages received from a one-pint donation center around the Red Cross blood insurance program. A Caltech donor, after contributing one pint, can draw upon the Caltech group account

with the American Red Cross Blood Bank in unlimited quantities for the needs of himself and his family.

Appointments can be made for the convenience of the donor throughout Wednesday afternoon. All undergraduates, graduate students, faculty and employees are eligible as donors.

For the members of the student houses, chairmen of their

(Continued on page 5)

# Existentialist Will Herberg Plans Three-Day Tech Stay

Theologian Will Herberg arrives on campus Monday for a three-day round of lectures and informal discussions. His program includes two major evening addresses in Dabney lounge, lunch and dinner in the student houses, and meetings with faculty and grad students.

Herberg's Caltech stay is un-

der the auspices of the YMCA and is financed by a Danford Foundation grant.

A professional theologian, he has lectured and conducted seminars and discussions on religion, philosophy, and social studies at leading American universities and seminaries. Herberg has served as a psychiatry teacher and is known for his work as a research analyst for a large labor union.

He is currently Professor of Judaic Studies and Social Philosophy at Drew University.

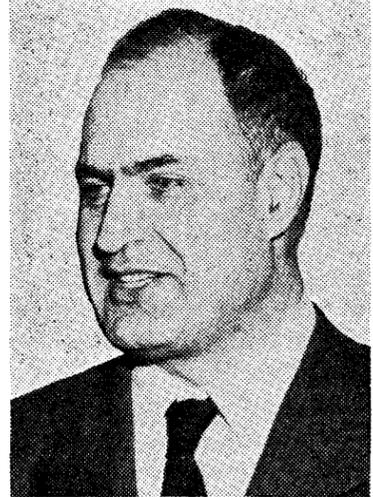
Although he teaches at a Protestant school, Herberg is an interpreter of the Jewish tradition in the modern world. His book, *Judaism and Modern Man: An Interpretation of Jewish Religion*, was called "a milestone in American religious thought" by theologian Reinhold Niebuhr.

He has edited *The Writings of Martin Buber* and *Four Existential Theologians* and written extensively for theological and secular journals. A lengthy essay *Protestant-Catholic-Jew* is an attempt by Herberg to "contribute to a better understanding of both religion and society in mid-twentieth century America."

Herberg believes that the America of diverse ethnic groups

is being replaced by a focus on the religious sects. "Not to be a Catholic, a Protestant, or a Jew today is, for increasing numbers of American people, not to be anything. To have a name and an identity, one must belong somewhere; and more and more one 'belongs' in America by belonging to a religious community."

But Herberg questions this



Will Herberg

move as superficial: "Is religion on the upswing, or are Americans merely giving a token vote of confidence to the power of faith and the need to 'belong'?"

Herberg opens his visit Monday with lunch at Dabney followed by a study group discussion in the Y lounge. He will eat dinner in Fleming and at 7:30 will speak on "Faith, History and Self-Understanding" in Dabney Hall lounge.

On Tuesday he will lunch at Throop club and then have office hours in the Ricketts guest suite. He will eat dinner in Ricketts and then speak in Dabney lounge on "Anxiety, Faith and the Courage to Be."

Wednesday morning he will meet with Dr. Mead's philosophy class, and eat lunch at Blacker. He will have office hours in the Ricketts guest suite in the afternoon and will dine with graduate students and wives.

Herberg closes his campus visit Wednesday night with an open house at the home of Dr. Jesse Greenstein, 2057 San Pasqual Street.

## By-Law Amendments Face Voters Tuesday

Two amendments to the ASCIT By-Laws have been proposed by the Board of Directors. These amendments will be voted upon by the student body at a special election on Tuesday, April 21.

As required by the By-Laws, there will also be a meeting of the Corporation to discuss the amendments; the meeting will also be held on Thursday at 11:00 a.m. in the Board room.

### Bauer Explains

According to Bill Bauer, ASCIT Secretary, the purpose of the amendments is to clarify election procedures in student body elections.

The first amendment will allow the BOD to establish election procedures for student body elections, as it now does for class elections. The present wording of the By-Laws provides only for a runoff election in case no candidate receives a majority on the first ballot.

### Laws Prove Inadequate

This has proved inadequate to deal with many of the situations that have arisen in actual practice, often resulting in a large number of runoffs. The proposed change allows the BOD to spell out in detail the proper procedure to be followed in all situations.

The second amendment was proposed upon the recommendation of the Board of Control, and it would eliminate the present

## Class Elections Set; Nominations Next Week

Nomination meetings for class elections will be held in house dining rooms about April 23, according to Bill Hilchey.

Elections are scheduled May 5.

By-Laws restriction that a Board of Control member cannot succeed himself in office.

### New Resolution Adopted

The experience of the BOC in this matter has been that the restriction serves no useful purpose, while it results in prohibiting qualified students from serving.

At the same time that the amendments were proposed, the Board adopted a new Resolution to the By-Laws, which details class election procedure. If the first by-law amendment is adopted, this procedure will also be used for student body elections.

See page 2 for full text of the proposals.

## Announcements

**BACCHANALS SEEK SINGERS**  
Singers, especially first tenors and basses, interested in singing for the Bacchanals, Caltech ensemble, should try out Monday night at 7:30 in Dabney Lounge.

### SHOP MEMBERS

The Student Shop will accept applications from qualified students until April 22. Application blanks are available from Jerry Siegel, Dabney, and Keith Taylor, Fleming.

### SAILING CLUB

The Sailing Club will elect officers tonight at 7:30 in 206 Engineering.

### CHEMISTRY MEETING

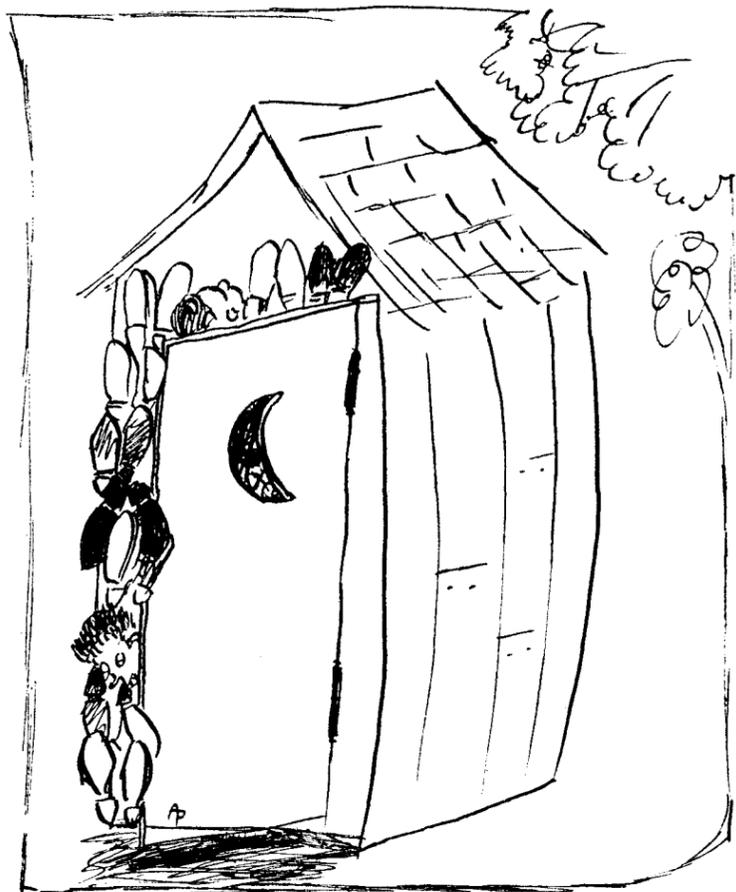
A meeting for frosh interested in the chemistry option will be held this afternoon at 4:00 in 22 Gates. The meeting will be followed by a tour of the chemistry laboratories.

## Big T Post Open; 86 Undergrads Apply For Camp

No applications have yet been filed for Big T editor. The deadline is set for next Monday. EPC and Big T business manager applications are also due then.

Eighty-six applications were filed for student camp counselors Monday night. About 30 will be chosen by an all-senior committee to be headed by Mike Godfrey. Sixteen applied for Ex-Comm, two for ASCIT Photo, two for election committee chairmen and two teams for Little T editors.

The BOC will accept applications for the vacant junior post through tomorrow.



Whaddaya mean, where's the phone?

## Editorial

# Joining The Crowd

A few days ago we received a letter from one of the observers on last week's Mobilgas Economy Run. We feel that some of the points he makes are worth passing on.

"Maybe I should roar with delight at the sight of a Tech man walking into an unattended airplane cockpit and pulling levers and pushing buttons. Maybe I should have sent half-eaten steaks back to the kitchen and ordered hot ones, just for the hell of running an expense account into the ground. Maybe it was just my underdeveloped sense of humor that kept me from yelling insults at my employers from the safety of a moving bus.

"Maybe I picked the wrong school. Last week I was convinced of it. It doesn't matter what the event. It could happen on any field trip—this, perchance was a paid job. Sure it's the minority that are clods, but by god, I was judged by that minority so many times last week that if I ever have to face another GP or USAC official again, I hope he's not aware I'm from CIT."

Our friend has touched on one of the real problems around this place. The Economy Run is apparently one pretty bad example. According to another observer, the 95 Techmen who made the trip acted as if the student houses had just temporarily been moved to Cedar City or Grand Junction.

We see one or two "grow-up" editorials every week in papers from other colleges, and this week we join the crowd.

Maybe the type of activity described is okay between Throop Hall and the Athenaeum, but anybody who stops and thinks for a second realizes that it just doesn't go when positions of responsibility and public contact are involved.

We could devote pages to describing Techmen's general lack of social awareness, but we all can think of prime examples.

The first place to start working towards improvement of this situation is obviously the student houses. Maybe it's juvenile to suggest that we need practice with the right social attitudes, but we've seen and heard of some pretty juvenile stunts recently.

One professor suggested that more student-faculty contact through house and ASCIT social activities, including invitations to some of the more sophisticated house events, would be a good idea. More effective use of house guest programs is another good idea.

We like to think that Caltech is not composed completely of bookworms and trolls, but the ways to prove this to the outside world do not include making asses of ourselves in public.

# By-Law Changes Proposed; Election Procedure Altered

These are the official texts of the proposed amendments to the ASCIT By-Laws, which will be voted upon next Tuesday. (See story, Page 1.)

**Article VIII. Sec. 2. ELECTIONS.** Nominees listed for the offices under Sec. 1 shall be voted upon by secret ballot during the latter part of the second term, at polling places established by the election committee. Election procedure will be the same as that established by the Board of Directors for other elections in the Resolutions to the By-Laws.

(The section now reads: Nominees listed for the offices under Sec. 1 shall be voted upon by secret ballot during the third week before the end of the second term, at polling places established by the Election Committee.)

(a) A majority of all votes cast shall constitute an election.

(b) In case no candidate receives a majority, a second election shall be called and the two candidates receiving the highest number of votes cast at the first election shall be the candidates at the second election.)

**Article XIII. Sec. 4. BOARD OF CONTROL.** Members of the Board of Control shall be elected by secret ballot during the regular class elections during the latter part of the third term. Two students will be elected from each class. Election procedure will be established by the Board of Directors in the Resolutions to the By-Laws.

(This section now reads: Members of the Board of Control shall be elected by secret ballots in class meetings during the latter part of the third term as follows: two students from each class. A student shall be ineligible to hold the office of Board of Control member as a class representative for two consecutive terms of office.)

This is the text of the changes in class election procedure passed by the BOD Monday night. If the proposed amendments are passed, this procedure will also apply to all elections.

**Section 1. Time and Place of Holding Elections.** Class elections will be held near the first day of May, at a time to be determined by the Board of Directors. The only exception to this is the election of freshman class officers for the second and third terms, which will take place at a time near the beginning of the second term, also to be determined by the Board of Directors.

**Section 2. Offices to Which One Person Is Elected.** For offices to which one man is to be elected, a majority of the votes correctly cast shall be necessary to elect, except as otherwise stated in this section.

(a) If no candidate receives a majority on the first ballot, there will be a runoff election.

(1) If there were five or fewer original candidates, the first runoff will be between the two who received the greater number of votes. In the event of a tie for second place, the runoff will be held among the three who re-

ceived the greater number of votes.

(2) If there were six or more original candidates, the first runoff will be held among the three who received the greater numbers of votes. In the event of a tie for third place, the runoff will be held among the four who received the greater number of votes.

(b) If no candidate is elected after the first runoff, there will be a second runoff.

(1) If there were three candidates in the first runoff, and in the first runoff no candidate received a majority, the second runoff will be held between the two candidates who received the greater numbers of votes in the first runoff election. In the event of a tie for the second position in the first runoff, the second runoff will be held among the same three candidates; and the candidate receiving the greatest number of votes in the second runoff will be declared elected.

(2) If there were four candidates in the first runoff, and in the first runoff no candidate received a majority, the second runoff will be held between the two candidates who received the greater numbers of votes in the first runoff election. In the event of a tie for the second position in the first runoff, the second runoff will be held among the three candidates who received the greater numbers of votes in the first runoff election; and the candidate receiving the greatest number of votes will be declared elected.

(c) All runoff elections will be held at a time and place to be determined by the Board of Directors.

**Section 3. Offices to Which Two Persons are Elected.** For offices to which two men are to be elected, a majority of one-half the votes correctly cast shall be sufficient to elect.

(a) Each voter may vote for two candidates.

(b) If only one candidate is elected on the first ballot, there will be a runoff election. For all runoff elections, the office will be considered the same as an office to which one man is to be elected and paragraphs (a) and (b) of Section 2 shall apply. For purposes of determining how many candidates may enter a runoff election, as specified under paragraphs (a) and (b) of Section 2, the candidates who be counted as an original canon on the first ballot shall not be counted as an original candidate for the office.

(c) If no candidate is elected on the first ballot, there will be a runoff election among the four candidates who received the greater number of votes. In the event of a tie for the fourth position, the first runoff will be held among the five candidates who received the greater number of votes.

(1) If only one candidate is elected on the first runoff, ensuing procedure will be the same as that described in Section 3, Paragraph (b).

(2) If five candidates qualify for the first runoff, and no candidate receives a majority in the second runoff, the second

runoff will be held among the three candidates receiving the greater numbers of votes in the first runoff. In the event of a tie for the third position, the second runoff will be held among the four candidates who received the greater numbers of votes in the second runoff. If only one candidate is elected on the second runoff, ensuing procedure will be the same as that described in Section 3, Paragraph (b).

**Section 4. Other Election Procedures.**

(a) No numerical results will be released for publication or to individuals other than members of the Board of Directors and of the Election Committee until the results of the final runoff are approved by the Board of Directors.

(b) The Secretary of the Corporation shall place in the official minutes a copy of every official corporation election ballot bearing the official results and certified by the Election Committee Chairman as the true and valid results.

(c) Absentee ballots shall be allowed in the case of class groups which are scheduled to be absent on the day of election. Notice to this effect must be filed with the Chairman of the Election Committee not fewer than (3) days prior to the election.

(d) Only candidates nominated according to the specified, publicized procedure and duly appearing on the ballot will be recognized as eligible for election.

(e) Each voter must sign the official register, in the presence of a member of the Election Committee, at the place of voting, before receiving a ballot.

(f) Balloting will take place from 10 o'clock a.m. until noon and from 1 o'clock p.m. until 4 o'clock p.m. in front of Dabney Hall and from immediately following the lunch period until 1 o'clock p.m. in each of the student houses and Throop Club. A member of the Election Committee shall be present at the voting place at all times during these periods.

(g) Ballot boxes will be opened only in the presence of at least two members of the Election Committee. Ballots for all contested offices will be counted twice; in the case of any discrepancy, further counts will be taken as determined by the Chairman of the Election Committee.

(h) Relevant election procedures will be fully publicized by the ASCIT Business Manager.

(i) The ASCIT Business Manager must approve all nominations procedures, which shall be submitted to him by the class presidents not less than one week before nominations are to be held.

(j) Any exceptional circumstances not dealt with in the By-Laws or the Resolutions will be resolved by the Chairman of the Election Committee in consultation with the Board of Directors.

## The California Tech

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**BRIGHT LIGHTS . . .  
COFFEE . . .  
. . . AND SHOES**



by griffen

**By Griffen**

Spring, as in ages past, is the time for great discoveries. It is a period of awakening; of enjoyment; of extended efforts on the part of the male to impress the sought-after. Rather regretfully, Los Angeles' spring is hardly different from its winter or fall, so the change is not so dramatic. However, L.A., surging metropolis that it is, has provided outlets for the bursting energies of the pent-up, neurotic student.

Undoubtedly, the most popular mode of expression is **Muscle Beach**, Santa Monica. Here, Technicians who have practiced karate and lifted weights all winter can step out onto the field of battle, thinly clad for freedom of movement, pick a worthy opponent, and adroitly kick a fine mist of weathered quartz into his face. The months of training are quickly put to use as the enraged bull-human charges. The karate student, nimbly using his well-trained feet, usually is quite badly crippled.

**Coffee Houses**

For the non-conformist set, the city has approximately fifty coffee houses (shoes are required). To run down the most popular of these: The **Ash Grove** has reopened, featuring "its own Barbara Dane," and last week, Blind Sonny Terry and Brownie McGee. It's in the 8200 block of Melrose Ave., and the admission is \$1.50 per person with no other charges, except the near necessity of ordering at least one drink (non-alcoholic). **Cosmo Alley** features the same type of intellectual entertainment, for a minimum of two drinks per, plus entertainment tax, which runs to about \$4 a couple. **Cosmo Alley** is, strangely enough, on Cosmo Street, which is one block up from Sunset and two west of Vine. Right around the corner from the **Alley** is the **Cosmo Lamp**, better known to many under its old name of the **International Club**. The prices vary from practically nothing during the week to a two drink minimum on weekends. Stan Wilson is now making the scene.

The **Renaissance Club**, featuring a consistently pleasant band on the modern order, is set down in a ravine on the south side of Sunset, four blocks east of the **Unicorn**, which is even harder to find. This places the **Renaissance** at about the 8500 block. The entrance is \$1.25 for non-members and \$1.00 for members. Here in Pasadena, the keen teens have a non-conformist-coffee house all their own—the **Dragonwyck**. On Fridays and Saturdays it features an interesting band (**Jazz Beat**, Feb. 26) and the cost is low: no minimum or cover. The entertainment is provided by thousands of high school girls, who, having no place to go, try subtly to pick up naive Techmen. The **Dragonwyck** is across the street from the **Academy** theater. Also in Pasadena—the **Gorgon's Head**. Comment: not worth putting shoes on for.

**Highly Sophisticated**

So much for coffee clubs. Highly more sophisticated is the legitimate theater. Of course, the prices are highly more sophisticated also. Try the **L.A. Times** for listings. The **Civic Auditorium**

has, each weekend, one or two interesting, worthwhile shows that don't run too high if you can stand the balcony. Besides being right here in Pasadena, it sometimes gives student discounts. This week—the **Kingston Trio** on Friday and bullfight movies no Saturday. Sunday, **Cat on a Hot Tin Roof** in Culbertson.

Old Oxy is in on the act too. Thursday, April 23, at Thorne Hall, Oxy is hosting Shelly Manne and Quintet and the **Firehouse Five Plus Two**. Tickets are \$1.50. You can buy them at the Graduate Manager's office at Pasadena or at Thorne Hall the Oxy or Ward Bowling Music in night of the performance.

From May 19th to the 30th the **Bolshoi Ballet** is going to be at the **Shrine Auditorium**. The reason that this is mentioned so early is that mail orders started

(Continued on page 5)

# Herberg: Everything Modern Man Has Touched Has Turned To Ashes . . .

By Bickel, Sampson & Klein

Will Herberg, the theologian who will be on campus next week, is a provocative thinker who classes himself as an existentialist.

With Sartre he shares the basic existentialist approach to life according to whose tenets reality cannot be grasped primarily by intellectual means. Thus existentialism protests vigorously against all views which tend to regard man as a thing that is an assortment of functions and reactions. Subjective truth, the existentialists say, is not only basically different but also far more important than objective truth. Finally, man is considered a fundamentally ambiguous being whose "freedom" is the cause of his abandonment and alienation from the world.

Herberg arrived at this viewpoint by looking at our imperilled society in which the meaning of existence has become an immediate question. "Everything modern man has touched has

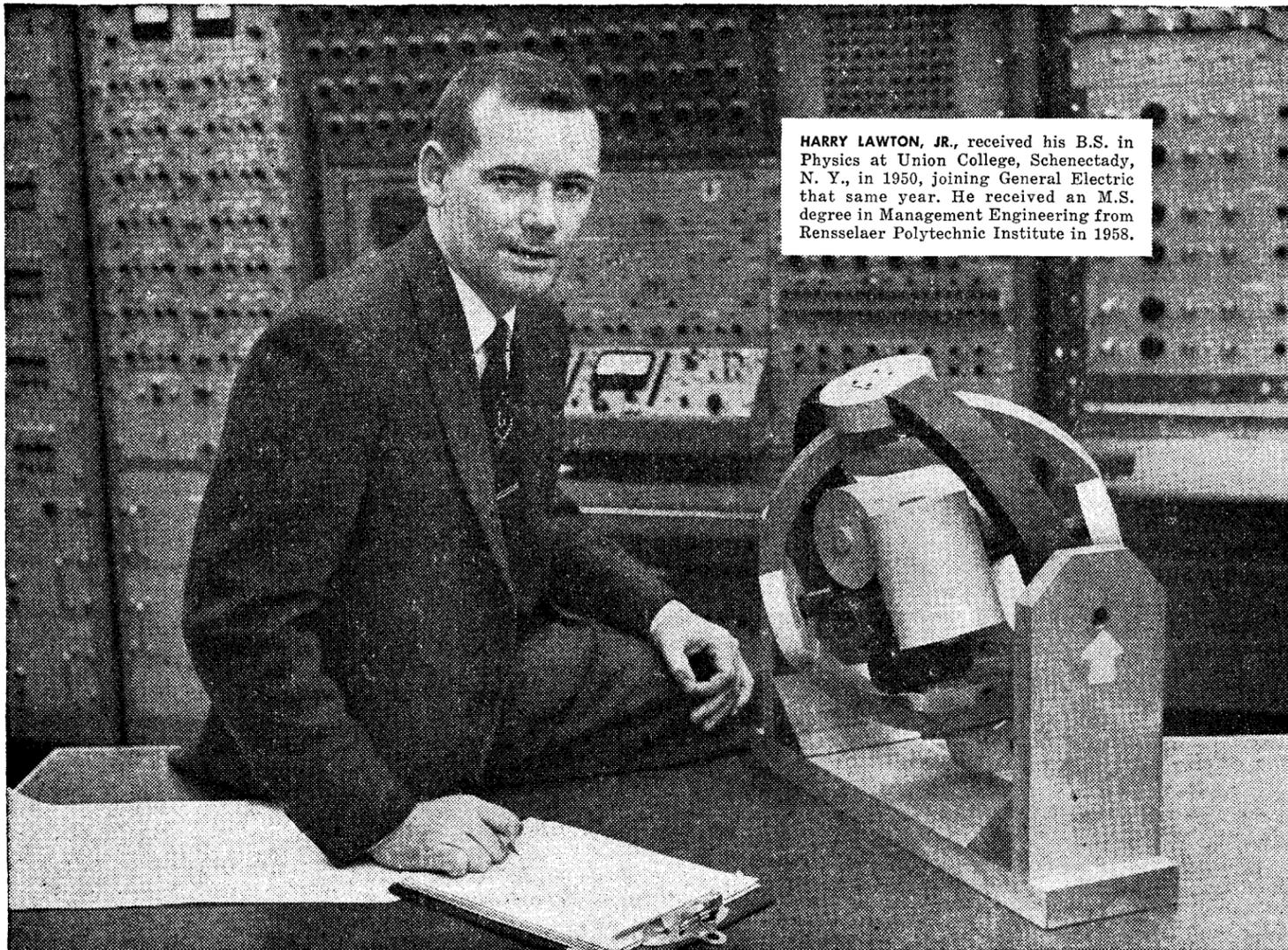
turned to ashes; every achievement of his has been transformed before his very eyes into a demonic force of destruction. His miracles of science and technology have led to industrial exploitation and to the construction of instruments of self-annihilation."

This plight is the result of man's attempt to make himself sufficient unto himself. "As long as we try to establish the meaning of existence within ourselves, we are bound to fail. Human existence is radically incomplete." Contributing factors to man's disregard of his own incompleteness, according to Herberg, are the pervading ideals of our time, relativism and scientism. "From this chaos there is no escape except breaking through the rational conditions of life and seeking completion in something beyond." Thus Herberg takes immediate issue with the "pseudo faiths" of the twentieth century, Marxism, nationalism, racism, and certain types of psychology. For "only from what is beyond life, only from

the transcendent source of life, can come the power to deliver us from our desperate plight. In more traditional language, only the God whom we know to be the Creator of heaven and earth, the Lord of life and history, can help us."

"There is no way of proving God, of deducing His existence or nature from the natural world of history. Neither science nor abstract reason nor mysticism can help us across the abyss. The abyss can be crossed in one way and in one way only—by the "leap of faith." It is a leap beyond experience, beyond science, beyond objective logic. Experience, science, philosophy can bring us to the edge of the precipice and point beyond; they cannot help us cross: only the decision of faith can do that."

We hope that in these few quotations from Herberg's works we have provided an insight into his primary concerns; an insight that is certain to be broadened and deepened in the addresses which he will shortly hold on campus.



HARRY LAWTON, JR., received his B.S. in Physics at Union College, Schenectady, N. Y., in 1950, joining General Electric that same year. He received an M.S. degree in Management Engineering from Rensselaer Polytechnic Institute in 1958.

## "Long-range programs are important — for both men and missiles"

"In a company dedicated to research and development, a young man's opportunities to learn more—to increase his technical skills—are almost unlimited," says 31-year-old Harry Lawton, Jr., a General Electric engineer engaged in the development of inertial guidance and fire-control systems for ballistic missiles. "And to maintain America's scientific leadership, we're going to need all the technical training and skills we can produce."

"An important aspect of my job at General Electric is the continuing opportunity to learn more. I've been able to continue my education in the company's Physics Program for college graduates. And I also have the advantage of association with top technical experts in my work. Opportunities like this have helped me realize that long-range programs are important—for both men and missiles."

Harry Lawton is one of several hundred technical graduates who are devoting their skills to the develop-

ment of 14 government missile projects to which General Electric is a major contributor. More and more our scientific progress and our national security depend on men like this—men who bring high qualifications to their work and who continue their quest for knowledge, both on and off the job.

General Electric believes that individual initiative and career growth are essential to America's continued technological leadership. To this end, the company encourages all of its employees—including more than 30,000 college graduates—to develop to their fullest capabilities by providing opportunities for increasing knowledge and working skills.

*Progress Is Our Most Important Product*

**GENERAL  ELECTRIC**

## Neil Sheely, Bill Mock Named New 'Tech' Business Managers

Neil Sheeley and Bill Mock were named co-business managers of the California Tech this week. They will succeed Howard Weisberg.

Stan Klein and Maury Genud were named as co-circulation managers to complete the new staff.

In addition to editor Cleve Moler, editorial board members include John Todoroff, news editor; Lance Taylor, assistant news editor; Marty Carnoy, feature editor, and Roger Noll, sports editor.

Included among semi-regular contributors are Tom Tisch, Tom Slobko, John Weaver, Dave Nis-

sen, Bob Koh, Doug Shakel, Carl Gottschall, Carl Rovainen, Geary Younce, Kerry Donovan, Brad Efron and Arny Perey.

## Pitzer Awarded Chem Fellowship

Russ Pitzer has been awarded a Leeds and Northrup Foundation fellowship in chemistry for the next school year, according to the National Academy of Sciences.

Pitzer is the second recipient of the fellowship and will use it for graduate study in chemistry at Harvard.

## Drill Team Places Third

The ROTC Drill Team captured third place in last week's Southern California sub-area Air Force drill competition, equaling last year's rating.

The competition was won by San Diego State, with UCLA finishing a close second, Occidental fourth, and Loyola fifth. Caltech's team of 21 cadets was commanded by Cadet M/Sgt. John Todoroff.

Tech's drill involved the use of M-1 rifles and was the subject of a temporary controversy over rule interpretation. The squad was eventually awarded the points that had originally been docked for the use of rifles.

## Jazz Beat

by Lloyd Kamins



**Sonny Side Up—Gillespie, Stitt, Rillins.**

**Verve MG V-8262 featuring: Dizzy Gillespie, trumpet; Sonny Stitt, Sonny Rillins, tenors; Ray Bryant, piano; Tom Bryant, bass; Charlie Persnip, drums.**

A record like this is a rarity, nowadays. I suppose I shouldn't complain about an abundance of jazz musicians and jazz interest, but things have gone too far. This seems to be a period in which there are a great amount of mediocre to good jazzmen putting out record after record. Of course, there are still some greats around, but they are usually putting out their own albums, and rarely pair up. On this album, every born man is good enough to rate first name on the liner notes.

### Gillespie Band Good

Gillespie has been doing a lot of work with his big band. The band is a good one, one of the best, but Diz doesn't get much chance to solo. It's refreshing, then, to hear him when he has essentially no limitations. With someone like Diz, it's difficult to say something like this . . . but he seems to be in better form than ever. Lately people have been complaining about the lack of variety of sound inherent in the trumpet. Diz dispels all this. He gets as much out of his horn as any tenor man, conveying a variety of moods and emotions at any tempo.

As good as Diz is — wonderful phrase that — the honors go to Stitt on this album. His tone has deepened and he's funkier, but he hasn't lost any of his fluidity. The lines, smooth and polished, but with meaning, simply ooze from the big horn, seemingly without conscious effort. I firmly believe that Stitt can do anything. He's as light as Getz, and as lyrical, and still he swings as much as Coltrane, or Woods and Donaldson, if you want to invade the alto field. Perhaps Coltrane is more exciting, certainly more vicious, but I still think that Stitt is currently heading the list of tenors.

The fours between Stitt and Rillins are not only excellent musically, but of interest geneologically. When I hear these two giants on tenor trading phrases, building upon each others lines, constructing and contrasting, I recall the days far back, when Prez and Hawkins were blowing. If you'll recall, Prez was first criticized for his soft, wispy, non-Hawkins tone and his smooth, melodic, non-Hawkins style.

### Basically Original

Rillins, though basically original, is quite similar to Hawk, in that he has an immense, lumbering sound, and a ferocious but ungainly attack. He sounds somewhat like a dangerous, but muscelbound bear. Stitt, though, is lean and angular. With superior control and organizations, he blows connected, logical, coherent lines. I suppose relaxation is the key word, but Stitt has not the utter abandon of Getz. Instead of two extremes, we have a case of two men thinking and expressing in essentially the same way, with differences enough to be significant and

noticeable, but not really relevant.

I had a rather enlightening experience while listening to this record in the company of a classical-minded friend. Although he liked and appreciated jazz, he was not able to distinguish Stitt from Rillins. To me there is an immense difference, and I couldn't quite comprehend. Later, I proved to be unable to distinguish between two renditions of a piano concerto, one that I am much taken with.

### Bit Educational

As I said, the whole bit was educational, because I saw that I was missing some of the most basic elements of classical music, while jazz initiates or dillitantes were missing the comparable qualities of jazz. Such a person hears that one horn is louder or fuller than another, but misses the nasal edge on the tone (Stitt), the depth in the middle register (Rillins), the ease in changing registers and playing large intervals (Stitt). Moreover, the subtler aspects of jazz, the actual form and composition of the extent of lyricism and the use of innate rhythm are completely missed. I imagine that the comparable situation exists for the neophyte listening to classical music.



### By John Berry

One of the surest things in the world is that people's tastes change, in drinks as well as in cars and music and the other obvious things. Witness the fact that such once-standards as the Gibson, the London Buck, the Gin and It, and Manhattan, and the Old Fashioned have fallen into disuse, though not disrepute, and new drinks, as for a time the Bullshot, have become popular.

This changing of tastes was really borne home to your writer recently. The occasion was the consumption of his first Bee's Knees in a year and a half. For the eight months ending June of 1957, this was his favorite way to use gin. Now, while he does not actively dislike it, he considers it a complete waste. However, in the hope that there is someone who may like it as he once did, he will pass it on.

### The Bee's Knees

1½ oz. Gin  
1 teaspoon Honey  
¼ lemon juice  
Shake well and strain into glass.

Your writer once liked them warm also, but he no longer recommends this.

One excellent but little-known drink, which is recommended without reservation, is the above-mentioned Gin and It.

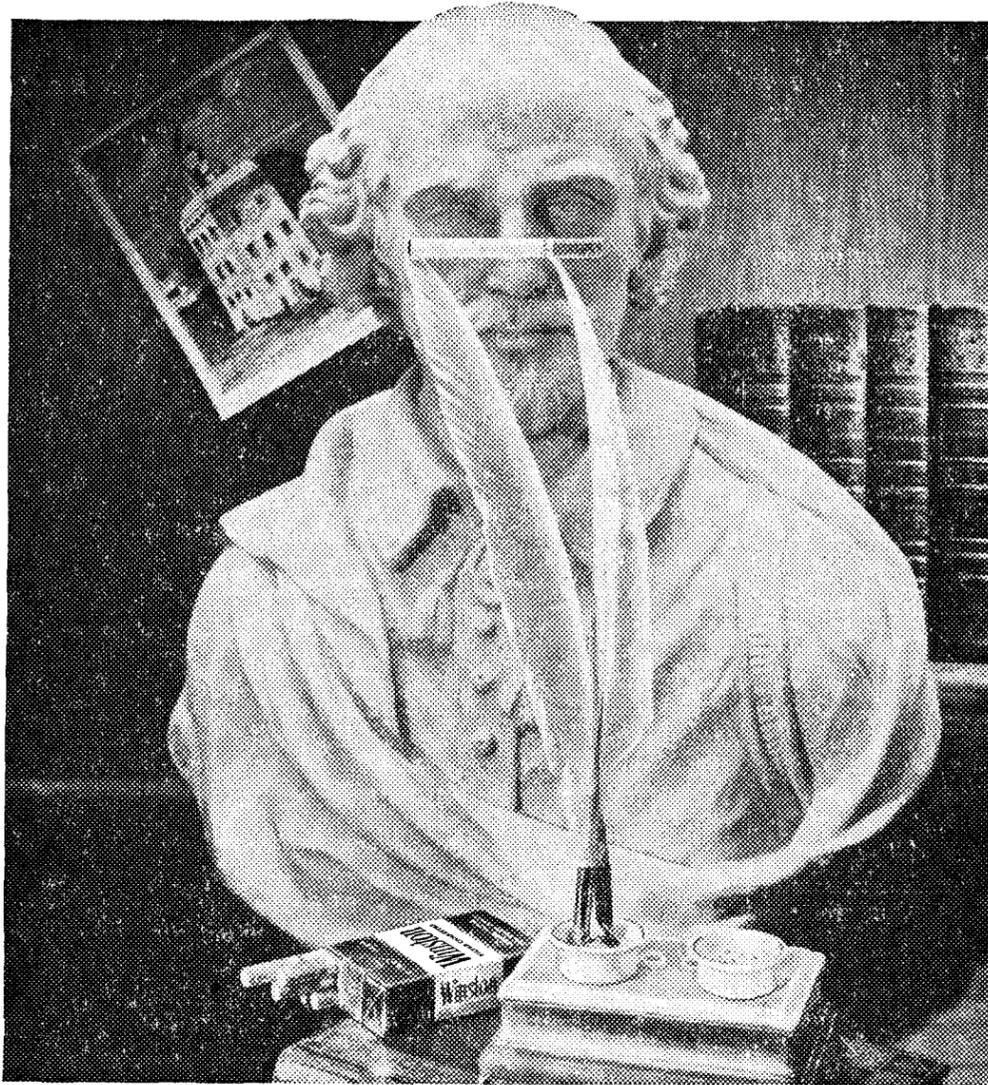
### The Gin and It

1 part Gin  
1 part Sweet Vermouth

Drink warm. Use imported Italian Vermouth: Martini and Rossi is both excellent and easily obtainable.

This one is above 55 proof and deceptively mild, so be careful of it. Those who say this is only an ultra-wet Martini are wrong. There is a definite qualitative difference.

*But soft! What taste from yonder* **FILTER-BLEND** . . .



## IT'S WHAT'S UP FRONT THAT COUNTS

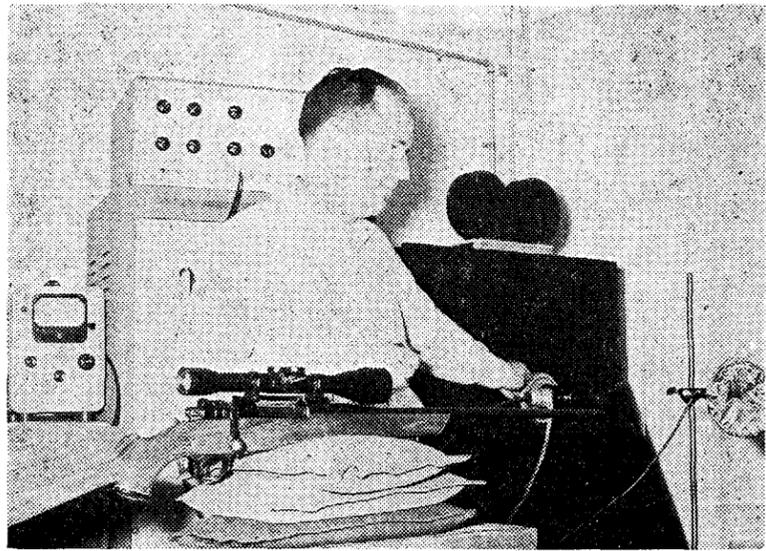
This filter, be it e'er so pure and white  
Must needs give flavor too, full clear and bright  
Else would the trusting smoker, filled with hope  
Again be dashed, dejected be . . . and mope.

And thus we come to Winston's obvious truth  
It's what's up front that counts — and 'tis, forsooth  
In that the fine tobaccos, in the end  
Are by exclusive process—Filter-Blend—  
Become the tastiest taste that e'er hath played  
Across your dancing taste-buds, man or maid!

Be ye not slow, therefore, to test the wit  
Of what we say: that Winston, friend, is *it*;  
For that with ev'ry smoke ye do delay  
Ye are not gath'ring rosebuds while ye may!

*"We are advertised by our loving friends..."*

KING HENRY VI, PART III, ACT V, SC. III



Dr. Al Ellis shoots bullets into jello, snapping results with high-speed camera.

## Ellis's High Speed Camera Studies Cavitation In Jello

By Tom Tisch

Dr. Al Ellis, Caltech professor of mechanical engineering, recently announced development of a high-speed camera, able to take more than 1,000,000 pictures a second.

Developed under the auspices of the Office of Naval Research, the camera is to be used primarily for cavitation studies. The camera has successfully taken pictures of tiny cavitation bubbles, high-speed impact strain waves, and exploding wires.

Ellis also foresees use for the camera in studying the behavior of so-called "plasmas."

At present, Ellis and Maitland Stewart, head photographer for Walt Disney, are engaged in studying effects resulting from the impact of a high-speed rifle bullet in a bowl of jello.

Jello, said Stewart, has the consistency of flesh. He hopes to gain information for a series of articles he is writing on guns and ammunition.

With the high-speed camera, pictures may be taken of the impact and resulting bullet expansion. Further studies with polarized light will give shock patterns set up in the jello.

### Shutter Is Key

The heart of the camera is the shutter system. The shutter consists of a Kerr cell and polaroid filter.

Light incident on the nitrobenzene in the Kerr cell is usually polarized so that it cannot

pass through the second filter and into the film chamber.

The application of a pulse of current to the Kerr cell, however, rotates the polarized light so that it can pass into the film chamber.

The Kerr cell can react in one billionth of a second so the present rate of one million pictures a second is not the limit.

The electronic circuitry for the Kerr cell was built under the watchful eye of Ellis. It includes strobe lighting circuitry and time delay features for the camera.

In order to expose the film at the necessary rate, a unique method is employed. The film is held stationary in a 30-inch diameter drum.

The incoming image is focused first on a mirror, and then on the film.

### He Went Thataway

The mirror is attached to a high-speed turbine. When the camera is in action, the mirror is turning at 100,000 r.p.m.

Each image then results in a separate picture.

In taking pictures, Ellis uses an automatically synchronized strobe light.

At present one flash of light lasting 200 micro-seconds provides enough light to expose 240 frames of 35mm film.

Ellis graduated from Tech in 1942 with a B.S. in electrical engineering. He continued at the Institute with graduate work in physics and engineering and received a Ph.D. in mechanical engineering in 1953.

In his undergraduate days, Ellis worked with Pickering in setting up the first electronics lab here at Tech.

## Details Revealed For Class Flings

Directions for reaching the Annandale Country Club, site of Saturday's Junior-Senior Prom, were released to the California Tech by senior vice-president Keith Brown: "Take the first turnoff, San Rafael Avenue, from the Colorado Freeway. Turn left at the stop sign an dthen turn right at the first street."

Brown promised an intermission featuring the Bacchanals, Caltech Glee Club octet.

Stan Sadjera, sophomore class president, said the dress for the Frosh-Soph Dance would be coats and ties for men and "dressy dress," other participants. There will be no flowers.

## New Hi-Fi Column

# The Tarnished Ear

By Pierre Sundborg

About 10 years ago some well-meaning soul, probably on Madison Avenue, put together two words, got one somewhat redundant phrase, and let the world know that "High Fidelity" was here. Soon the novelty was known as hi-fi and became a part of "Our Great American Heritage."

I don't intend to tell anyone what hi-fi is, or how good reproduction should be achieved. What I do intend, though, is to present some opinions, give a few technical reports on equipment, and in general try to present a picture of the state of hi-fi at Caltech.

Now, let's get down to business with a report on the B and O Stereodyne cartridge. This is a moving-iron (magnetic) stereo pickup manufactured in Denmark and imported by the Dynaco people.

Dynaco claims a frequency response of 30—15,000 cycles, plus or minus, 2 db. Y. In listening to this cartridge for two months,

I readily believe this claim. The bass response is solid, and probably extends below the 30 cycles with very little rolloff. The top limit of 15,000 is probably quite accurate, and rolloff seems to begin just beyond that.

Channel separation is in excess of 22 db throughout the audio spectrum. This may not sound so high as the figures claimed by other manufacturers. During the last Audio Show I pointed this out to a Dynaco engineer. His reply was that other manufacturers rated their channel separations only in the middle of the audio range, at frequencies near 1000 cps. He claimed that separation falls greatly in the high frequencies.

He said, for example, that Pickering claims channel separation of 25 db, measured near 1000 cycles. The separation at 15 kc., though fell to only 5 db. He claimed that Dynaco's 22 db. separation was measured at 15 kc, and was substantially higher near the middle of the spectrum. Maybe all this is good advertis-

ing material, but at least it bids the buyer beware.

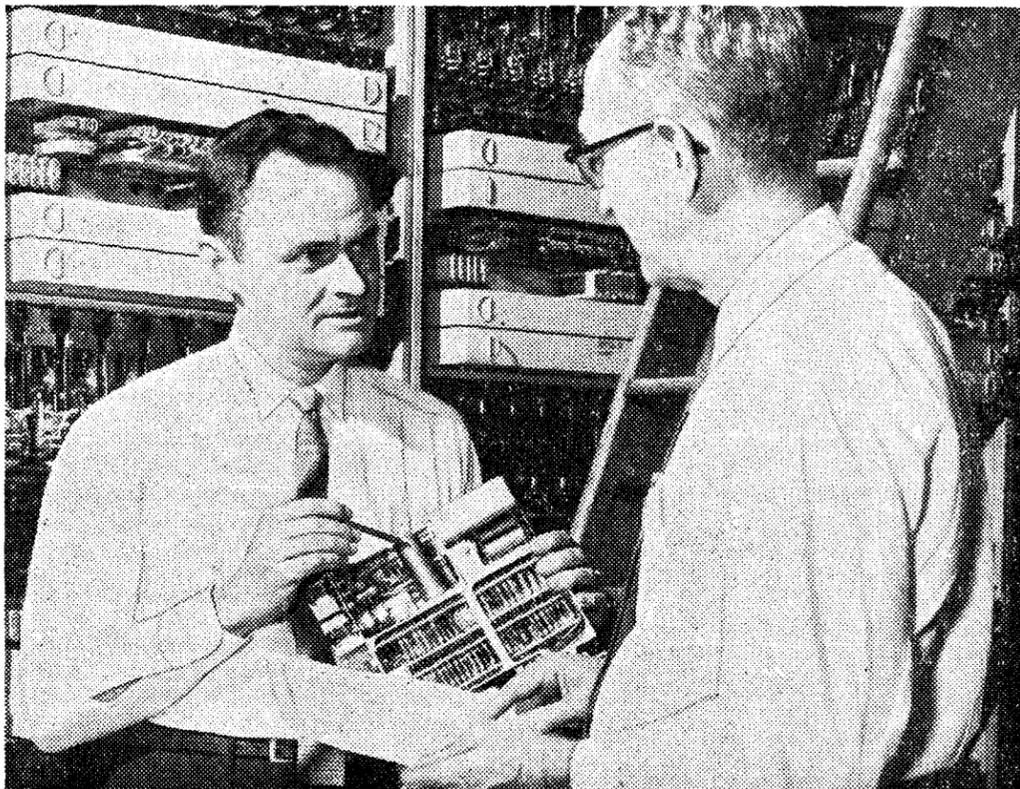
Compliance is rated at 55 millionths cm/ in all directions. The same engineer said that this is extremely good, in view of the fact that, unlike most cartridges, it is completely constant in all directions.

Specifications are fine, but listening is the acid test. How does it sound? To my ears, excellent. On monophonic records it has no peer. On stereo it is as good as any, with the possible exception of the Grado. The difference, if any, is small, especially in view of the \$20 price difference.

Bass response is solid. Organ and Westminster's large drum never had it so good. The highs are brilliant all the way up, although not nearly so pronounced as in the Pickering. Needle talk is low. Due to the mu-metal case, hum is literally non-existent.

Either Audio Associates or Hi-Fi House will part with one of these for a paltry \$29.50. For anyone on a somewhat limited budget, this cartridge presents an excellent answer for the important front end of a stereo system.

## A Campus-to-Career Case History



## "In my job, I get the variety and responsibility I wanted"

"Each new assignment brings me greater responsibility and more challenging work. I have the satisfying feeling that I'm getting ahead in management," says Charles F. Barefield, B.S.E.E., Alabama Polytechnic '56. "That's what I was looking for when I joined Southern Bell Telephone and Telegraph Company.

"Following three months of interdepartmental training, my next training step was as a supervisor in the Plant Department. My assignments were varied to give me experience in handling technical and supervisory situations. In June, 1957, within a year after joining the company, I was appointed Plant Foreman supervising a group of men responsible for telephone installation and maintenance at Auburn, Alabama."

Six months later—in January, 1958—Charlie became Transmission Supervisor in Birmingham. "This assignment involves responsibility for accepting newly installed systems, analyzing performance and recommending modifications for improvement," Charlie explains. "I work with the many different groups responsible for engineering, installation and operation of telephone circuits. These circuits range all the way from wires to microwave radio.

"I have been getting the variety and responsibility I looked for," Charlie says. And he sees a bright future ahead for himself and Southern Bell. "The telephone industry is growing fantastically and chances for advancement go along with growth," he points out.

Many young college men like Charles Barefield are finding interesting and rewarding careers with the Bell Telephone Companies. Check into the opportunities available for you. Talk with the Bell interviewer when he visits your campus. And read the Bell Telephone booklet on file in your Placement Office.



BELL TELEPHONE COMPANIES

## Griffen

(Continued from page 3)

Sunday, and tickets will soon be scarce. This is probably the best ballet company in the world, and they will be presenting Romeo and Juliet, Swan Lake, Giselle, and their new success, Stone Flower. Prices range from \$2 to \$12.50. For all the information about what ballets on what nights, and various seating possibilities, call the Hollywood Bowl Association at HOLLYWOOD 9-3151. Tell 'em Griffen sent ya.

## Blood Drive

(Continued from page 1)

respective house are Pedro Bol-saitis, Dabney; Bob Wax, Fleming, Clyde Zaidins, Blacker, and Les Hirst, Ricketts.

As in the past, minor release forms will be necessary for donors under the age of 21. This year, no witness' signature will be needed on the green release form.



## Poets Drop Beavers In Three Straight

The Caltech nine dropped three games to league leading Whittier last week. Whittier, who is undefeated going into the second half of the season, looked like a good bet to take the pennant.

In the first game, which was

## Varsity Bows While Frosh Thinclads Win

A sparkling display of versatility by frosh spiker Dean Gerber was the high point of Saturday's track meet, with Whittier hosting the Beaver varsity and frosh squads.

Gerber led the frosh to an easy victory by placing in seven events, good for a total of 24 points. Taking three firsts in the javelin, broad jump and high hurdles, Gerber entered all the field events plus the high and low hurdles.

Dick Klett, dependable dash man, broke the tape for a double win in the 100 and 220. Klett posted a 10.2 in the century and a 22.5 time in the 220 sprint.

Frank Marshall copped the low hurdles while Dick Tuft forsook his half-mile to grab a win in the quarter-mile and a second in the 220.

The varsity, in their meet, dropped a 77-53 decision. The Beaver relay squads didn't compete formally since Whittier didn't enter teams. The frosh relay men ran a practice race with the varsity.

Consistent placing by the visitors couldn't overcome a well-balanced Whittier offense. The Caltech squad exhibited a strong attack in the field events but a lack of strength, especially in the dashes, proved disastrous.

Ron Forbess posted a 22.7 clocking to finish a narrow second in the 220. The 440 was another close race with Steve Ahrens coming out on top by a step.

Veteran half-miler Tony Leonard turned in a 2:02 performance, far off his pace of last season, but good for a win. Ben Burke, who placed third in the 880, also took third place in the mile.

The two-mile saw Dennis Paul racking up a second-place showing.

A sweep of the javelin headed the powerful Beaver showing in the field events. Lannes Purnell slung the javelin 175 feet to come in ahead of Lanny Lewyn and Mike Engelberg.

In the shot, Russ Pitzer and Doug Stewart grabbed second and third spots, respectively. Stewart also placed third in the discuss behind Sid Leibevich's second.

Fred Newman placed in three events with third in the high hurdles.

Wiry John Weaver once again grabbed the pole vault, scaling 12 feet 6 inches with Al Laderman taking second place.

played Wednesday, April 8, pitcher John Price barely missed picking up his sixth win as he gave up a thriller in the 10th inning. The Techmen led up to the sixth inning when the Poets coupled two hits and five walks to pick up five runs. The walks were the deciding point as the Beavers tied Whittier in the hitting department. Price, Blake-more and Merrill each had two hits and Walsh slugged one to give Tech seven hits.

### Poets Win Two

Klepfer, the star Whittier pitcher who struck out 16 to win Wednesday's game, came back Saturday to strike out a phenomenal 20 Tech sluggers and pick up the first game of Saturday's double-header.

Tech pitcher Kaplan gave up 14 hits—six more than Klepfer. In the batting, Buzz Merrill hit a sizzling three for four, Blake-more picked up a triple and Walsh walloped a double to give Tech their four runs.

In the second game of the double-header, Whittier again won, this time, 5-2. The win went to Whittier's Balen, who didn't give up a single walk, while John Price picked up the loss.

### Walsh Leads Hitters

Walsh led Beaver hitting with two for three, with Pool, Sten-bit, Price and Merrill each picking up one. Walsh now has a .600 batting average and looks like a good choice for league batting champ.

The Techmen faced Whittier for the last time this season Wednesday. They meet Pomona Saturday. The Beavers promise to be stronger at the plate with Dale Parkhurst back for the first time since 1957.

### Beaver Sports

Thursday, April 16—

4:15—Swimming (varsity and frosh) at Redlands.

Friday, April 17—

1:30—Golf vs. Claremont-Mudd at Los Serranos.

Saturday, April 18—

1:00—Baseball (varsity) at Pomona (2).

1:30—Track (varsity & frosh) at Redlands.

1:30—Tennis (varsity) vs. Pomona, here.

1:30—Tennis (frosh) at Pomona.

2:00—Baseball (frosh) vs. Pomona, here.

Tuesday, April 21—

3:15—Tennis (varsity) vs. Pasadena College, here.

Wednesday, April 22:

3:00—Baseball (varsity) vs. San Fernando, here.

3:30—Baseball (frosh) vs. Pasadena College, at Brookside

### Interhouse Football

Thursday, April 16—Dabney vs. Ricketts.

Friday, April 17—Blacker vs. Fleming.

Monday, April 20 — Throop vs. Ricketts.

Tuesday, April 21—Dabney vs. Blacker.

Wednesday, April 22 — Ricketts vs. Fleming.

# Swimmers Roll Past Poets

Friday, Caltech defeated a tough conference foe, Whittier, 49-37. The meet was never close, and hopes remain high for a conference championship.

Caltech travels to Redlands Thursday to paddle against the underdogs in their own pool.

Gary Tibbetts continued to hold the limelight by this week capturing three first places. The sweetest victory was his specialty, the 440-yard freestyle, which he copped in record time of 5:02.3.

Senior Don Owings gave the Beavers another first place in the 200-yard breast stroke. Don came in a close second in the butterfly, and along with Erskine, Brown and Rony garnered a Caltech first in the 440-yard Medley Relay.

McLennan and Rony displayed top form in the diving, while Keith Brown and Tom Tisch furnished the remaining depth to insure victory with seconds and thirds, respectively.

The frosh, on the other hand, were edged by a 42-41 count. Caltech led most of the way in the seesaw meet, but the final event proved decisive for the visitors.

Lack of depth, a flaw which formerly the little Beavers have sufficiently overcome, finally caught up with the team to cost them the victory, although Bill Howard and Gary Turner were again impressive.

## Golf Team Defeats Cal Poly Handily

Sparked by front-line victories by Jerry Siegle and John Bard, the Caltech golf team bounced back from a 52-2 defeat at the hands of Oxy last Friday to defeat Cal Poly, 35-19. The match was played Monday.

Besides Siegle and Bard, Al Funda, Gary Ihler, Wes Shanks and Jim Sorensen shot for the Beavers.

The duffers face Claremont-Mudd next Friday. The CMC crew, being newly formed this year, is somewhat of an unknown quantity in relative strength, but they are expected to be pretty tough, according to golf team members.



Freshmen Bill Howard, one of the best of the frosh swimmers, splashes to finish line in last Saturday's meet. Frosh were nosed out, 42-41.

## As I See It

by Russ Pitzer

### Frosh Look Good

Two frosh teams are headed for very respectable records this spring. The frosh tennis team, led by Dick Hess and Cedron Jones, has beaten, and beaten decisively, both Pomona and Whittier. They have lost to Redlands in conference play, by the score of 9-0. But this should be considered with a grain of salt, for Redlands is in tennis like Occidental in track.

Oxy also downed the frosh, but the little Beavers had a man missing at the time. The frosh tennis men should finish third, and may finish as high as second in the conference.

The frosh swimming team has also performed well at times this year. Gary Turner has turned in backstroke times better than anyone on the varsity. Breaststroker Marshall Buck has been doing quite well, and will be a good replacement for Don Owings on next year's varsity.

Freestyle swimmer Gary Mitchell, butterflyer Bill Howard and breaststroke swimmer Bill Hoggan have also improved a lot under the Web Emery regime and are swimming very well.

Unfortunately the team lacks depth, and this has cost them two meets. The losses were to Redlands and Whittier. They also tied for first in the Redlands Relays, and stand a good chance to cop the conference championship.

Another frosh team that has shown potential, even though their record may not indicate it, is the baseball team. With one or two good pitchers, they could give most anyone a rough time. Coach Petersen points out that, with a little more depth, the frosh would be much better. Any frosh with baseball experience would be welcomed should he turn out.

### Tennis Tournaments

Tennis coach John Lamb is starting a new tournament this year. All men connected with Caltech or JPL are eligible. It is intended especially for professors, graduate students and employees.

There still are plenty of spots open for players in the novice tournament. Anyone interested in either of these tests should notify Coach Lamb this week.

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or for  
any date

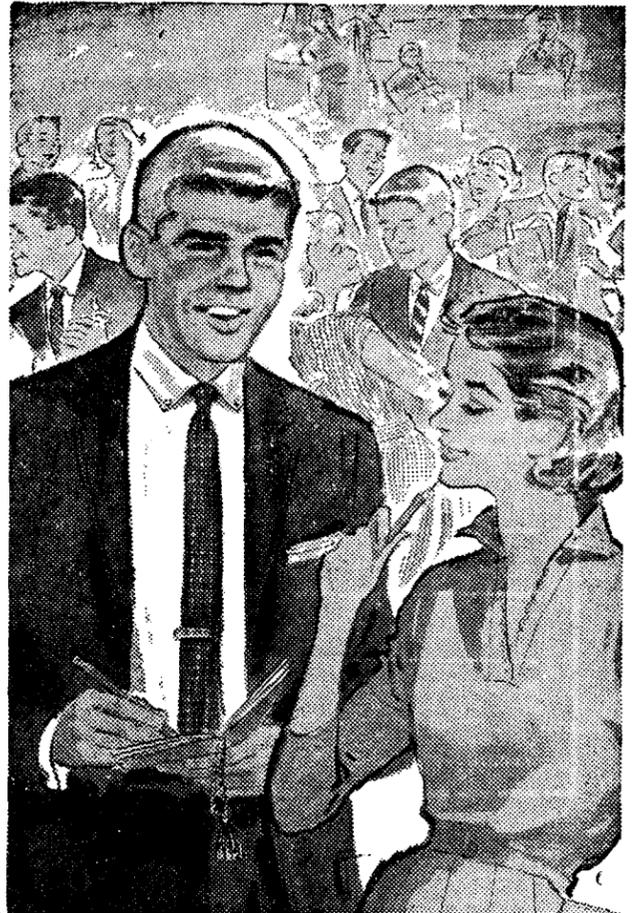
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**Interhouse**

**Throop Defeats Blacker; Dabney Gets Football Win**

In a Discobolus match played last Friday, Throop Club downed

Blacker House in football, 32-7. Tailback John Stene connected regularly with his receivers, notably Owens, to score every touchdown by the air lanes. The lone Blacker score was on a 15-yard run by Walt Johnson.

The next challenge will pit Throop against Dabney, the match to be played this week end. The Darbs challenged in tennis, volleyball and water polo.

Present trophy standings:

Flemming	18
Dabney	17
Blacker	6
Ricketts	5
Throop	4

Interhouse football began last Tuesday as Dabney downed Throop, 6-0. The only score of the game came in the second quarter on a pass from Jack Bass to Doug Christman. Hero of the game was John Munsen, who intercepted four passes for Dabney.

**Seniors Nab Interclass Track Meet**

The senior class took first place in the annual Interclass Track Meet held last Tuesday. The upperclassmen amassed a total of 61½ points, with five first places, to win the meet going away.

Their nearest competitors were the freshmen, who finished in second position with a total of 50½ points, also with five first place winners. The sophomores were third with 41 points, and the juniors were last with 10 points.

Top-point producer for the winners, and for the entire meet, was Fred Newman, who, with first place in the broad jump, a tie for first in the high jump, second in the low hurdles and third in the high hurdles, scored 14 points.

The only junior victory of the afternoon was turned in by Lannes Purnell in the javelin, who won, as expected, with a toss of 180 feet 9 inches.

The sophomore attack was led by wiry John Weaver, who combined an easy win in the pole vault with third places in the low hurdles and broad jump and a fourth place in the 100-yard dash to score 10 points.

Jim Klett and Dick Tuft were the freshmen heroes, both gaining two first places in their specialties. Klett won the 100-yard dash in 10.3, then came back to win the 220 in 22.7. Tuft scored his wins in the mile, in 4:51.5, and the 880-yard run, in 2:02.8.

John Price, senior hurdles ace, was able to walk away with victories in both the low and high hurdles. His times were 16.3 for the lows, and 26.8 for the highs.

The 440-yard dash, run in the time of 51.7, saw soph Bob Kell nip senior Tony Leonard at the tape for the win.

Although distance star Dick Tuft was forced to withdraw, the freshmen still pulled a victory out of the fire in the two-mile run. Bill Hassenzahl, with a strong last-lap kick, beat senior Dennis Paull in the time of 11:21.3.

In the remaining field events, senior Russ Pitzer won the shot with a heave of 39 feet 7¾ inches.

**Sailing Club Fifth In Two Regattas**

In a seven-way meet, held last Saturday, the Caltech Sailing Club finished fifth, scoring 25 points. Occidental College won the meet. Club president Tom Bowman skippered boat "A" for Caltech, while Nelson Byrne skippered boat "B". Crewmen at the meet were Dan Morrow, Dan Marks and Harold Stark.

Two weeks ago, the Caltech boatmen traveled to Berkeley, again pulling down fifth place with a score of 35, behind the winning University of California squad. Bowman and Byrne again led the Techmen, assisted by crewmen Keith Mathews, Doug McLane, Bob Moore and Dan Morrow.

Next Sunday the Beavers will sponsor a meet at the Los Angeles Yacht Club, with all members of the Southern Series collegiate sailing league expected to enter. At present the Beavers stand fourth in the league, behind Oxy, Pomona and Santa Barbara, and ahead of Cal Poly and Orange Coast.

**Frosh Baseballers Lose To Whittier**

The Caltech freshmen baseball squad went down to defeat last Saturday, bowing to visiting Whittier, 16-7, in a game marked with walks and errors for both sides. Missing their regular

pitcher, Ralph Palke, who is out with a broken ankle, and jlaying with a ten-man squad, the little Beavers fought a spirited but losing battle.

After giving up a quick run in the top of the first inning, the Beavers bounced back to knot the score in their half of the initial frame as John Arndt scored on a single by Hal Kurtz. But the poets went ahead to stay in the second inning, combining walks, errors and timely hit to push across five runs.

Brightest spot of the day for the losers was a tremendous home run by Kurtz, which sailed into the 'TP parking lot.

The Beavers' pitching chores were shared by John Arndt, the loser, Steven Heineman and southpaw Don Nisewanger, who pitched for the first time in his career.

Beaver hosts in first singles.

Next conference match for the Beaver squad is a Saturday tilt with Pomona on the home courts.

**Tennis Team Loses Match To Occidental**

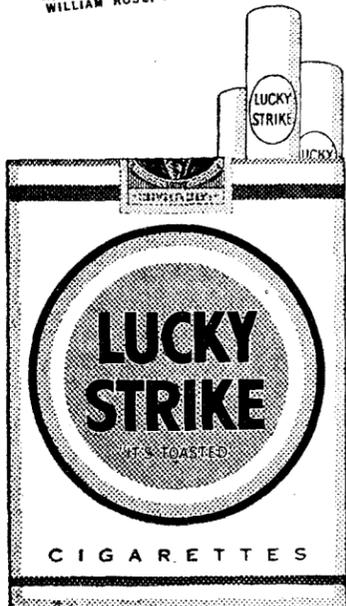
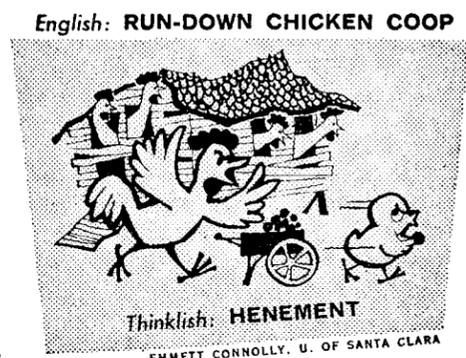
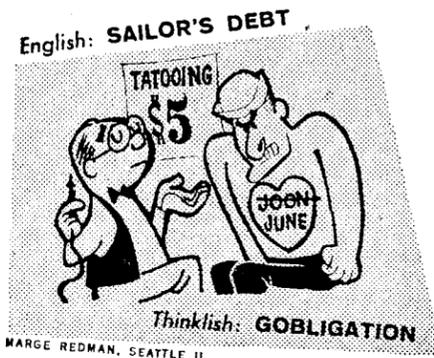
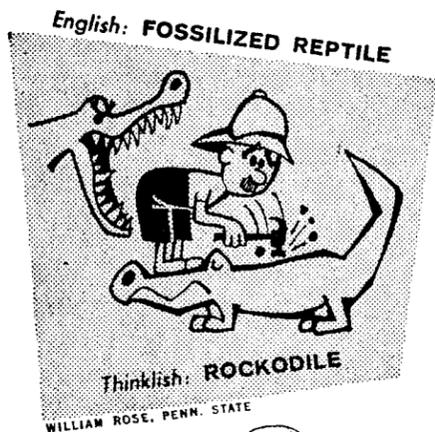
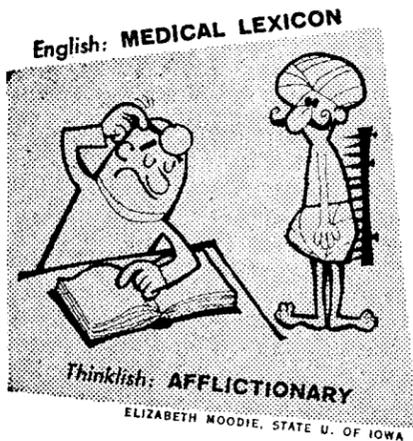
A surprising strong Oxy tennis team thoroughly whipped the Beaver netters by a lop-sided 8-1 score in Saturday's match on the Oxy courts.

Only win for the Techmen was a doubles victory by Frank Cormia and Carl Morris, in the first doubles bracket.

Best showing in the singles division was put up by Morris, who extended his opponent three sets before losing.

The frosh followed suit with a 7-2 defeat at the hands of the Oxy frosh. Dick Hess grabbed the only singles win for the

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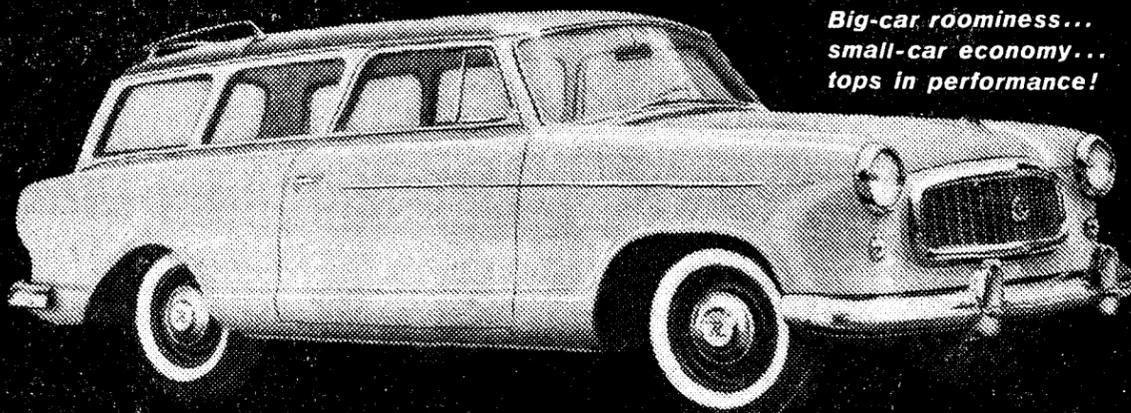
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### WIN A RAMBLER STATION WAGON!

**LIGHT UP AND LIVE IT UP!** 3 great cigarettes offer you 627 chances to win! So pick your pack—save the six wrappers—and get going! It's crossword puzzle fun and real smoking pleasure all the way!

**ENTER OFTEN—HAVE FUN—AND WIN!** But think carefully! This puzzle is not as easy as it looks. At first the DOWN and ACROSS clues may appear simple. There may appear to be more than one "right" answer. For example, the clue might read: "Many a coed will be given her best date's P- -N." Either "I" (PIN) or "E" (PEN) would seem to fit. But only *one* answer is apt and logical as decided by the judging staff, and therefore *correct*. Read the rules carefully. **ENTER AS OFTEN AS YOU WISH.** Good luck!

### 25 SECOND PRIZES:

COLUMBIA STEREOGRAPHIC HI-FI SETS

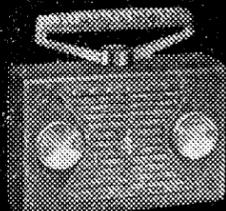
"Big Stereo" styled... engineered for the most exacting taste.



### 100 THIRD PRIZES:

EMERSON TRANSISTOR RADIOS

Packed with power... plays 1500 hrs. on 1 set of batteries



### 500 FOURTH PRIZES:

Cartons of America's finest cigarettes

#### RULES—PLEASE READ CAREFULLY

**1.** The College Puzzle Contest is open to college students and college faculty members except employees and their immediate families of Liggett & Myers and its advertising agencies.

**2.** Fill in all missing letters . . . print clearly. Use of obsolete, archaic, variant or foreign words prohibited. After you have completed the puzzle, send it along with six empty package wrappers of the same brand from L&M, Chesterfield or Oasis cigarettes (or one reasonable hand-drawn facsimile of a complete package wrapper of any one of the three brands) to: Liggett & Myers, P. O. Box 271, New York 46, N. Y. Enter as often as you wish, but be sure to enclose six package wrappers (or a facsimile) with each entry. Illegible entries will not be considered.

**3.** Entries must be postmarked by midnight, Friday, May 29, 1959 and received by midnight, Friday, June 5, 1959.

**4.** Entries will be judged by the Bruce-Richards Corporation, an independent judging organization, on the basis of logic and aptness of thought of solutions. In the event of ties, contestants will be required to complete in 25 words or less the following statement: "My favorite cigarette is (Chesterfield) (L&M) or (Oasis) because . . .". Entries will be judged on originality, aptness of thought and interest by the Bruce-Richards Corporation. Duplicate prizes will be awarded in event of final ties. Illegible entries will not be considered. By entering all entrants agree that the decision of the judges shall be final and binding.

**5.** Solutions must be the original work of the contestants submitting them. All entries become the property of Liggett & Myers and none will be returned.

**6.** Winners will be notified by mail as soon as possible after completion of the contest.

**7.** This contest is subject to all Federal, State and local laws and regulations.

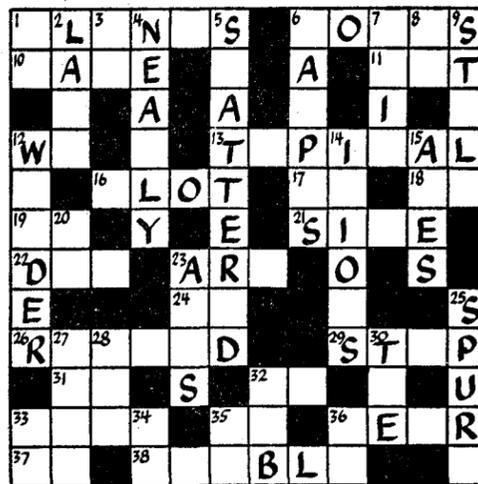
#### HURRY! ENTER NOW! CONTEST CLOSES MAY 29, 1959

##### CLUES ACROSS:

- These may indicate that a nation is prepared to wage war in the air.
- Some college students.
- When at . . . . ., Light up an Oasis.
- Sinking ship deserter.
- Plural pronoun.
- One expects . . . . . discussions in a sociology class.
- A student's careless . . . . . might annoy a short-story instructor.
- Initials of Uruguay and Denmark.
- Germanium (Chem.)
- Nova Scotia (Abbr.)
- It probably would count when you pick a horse to bet on.
- Sometimes a girl on a date must . . . . . into her pocketbook to help pay the tab.
- The muscle-builder's . . . . . may fascinate a poorly developed man.
- Chemical Engineer (Abbr.)
- Campers will probably be . . . . . by a forest fire.
- When starting a trip, tourists usually look forward to the first . . . . .
- At home.
- Literate in Arts (Abbr.)
- Familiar for faculty member.
- Associate in Arts (Abbr.)
- One could appear quite harmless at times.
- Reverse the first part of "L&M".
- What will soon appear in a bombed-out city.

##### CLUES DOWN:

- The beginning and end of pleasure.
- A rural . . . . . can be inviting to a vacationist.
- Second and third letters of OASIS.
- When one is . . . . . packed, it could be exasperating to remember a few articles that should be included.
- It would pay to be careful when glass is . . . . .
- Grounds to relax on with a mild CHESTERFIELD.
- Author . . . . . Ambler.
- District Attorney (Abbr.)
- A . . . . . from Paris should please the average woman.
- An inveterate traveler will . . . . . about distant lands.
- . . . . . are hard to study.
- Stone, Bronze and Iron . . . . .
- How Mexicans say, "Yes".
- All L&M cigarettes are " . . . . . high" in smoking pleasure.
- May be a decisive factor in winning a horse race.
- Initials of Oglethorpe, Iona, Rutgers and Emerson.
- United Nations Organization (Abbr.)
- Golf mound.
- Colloquial for place where the finest tobaccos are tested for L&M.
- Poet Laureate (Abbr.)
- Filter ends.
- What Abner might be called.
- Bachelor of Education degree.



#### PRINT CLEARLY! ENTER AS OFTEN AS YOU WISH

Mail to Liggett & Myers, P. O. Box 271, New York 46, New York. Be sure to attach six empty package wrappers of the same brand (or facsimile) from Chesterfield, L&M, or Oasis cigarettes.

Name \_\_\_\_\_

Address \_\_\_\_\_

College \_\_\_\_\_

This entry must be postmarked before midnight, May 29, 1959, and received at P. O. Box 271, New York 46, New York, by midnight, June 5, 1959.