

NEXT YEAR you'll go to the U.N. conference! Photo by Neches.

Techer Gone Bad

Frank Capra in the Arts

by Peter W. Beckman

Frank Capra, a self-confessed "Techer gone bad" spoke on "A Caltech Alumnus in the Arts" Monday evening in Beckman Auditorium. His subjects, the gleanings of fifty years in the film industry, ranged from "heavy stuff" about censorship and artistic responsibility, to humorous reminiscences of the problems and personalities he has encountered as a writer and director.

In the first part of his talk Capra pointed out the dichotomy that exists between the artistic and economic aspects of films. The primary purpose of a movie company is to make money, at the same time the movie maker himself should be interested in

creating an artistic statement that will have some esthetic value. It is in this region of conflict that films — some great artistic statements, some merely reflections of greed — are created.

Dollar Signs

Capra confessed that in the early part of his career he was only interested in the money. Then his film *It Happened One Night* swept the Oscars. This scared Capra, and he faked an illness to cover his fear that he would undoubtedly flop after such a success. Fortunately, someone had the gall to tell Capra to his face that this was plain cowardice, and since then Capra has had one commitment — to make movies that uplift the

Continued on Page Seven

News Briefs

Hertz Named Student Coordinator

Dr. Richard A. Hertz was appointed to the post of Coordinator of Student Affairs yesterday. This office will provide a link between the students and our dear administrative bureaucracy. Dr. Hertz, an Assistant Professor of Philosophy, has been at Caltech since 1968.

McGovern Group Meeting Tonight . . .

Students and faculty for McGovern will be meeting tonight at 9:00 p.m. in Clubroom I of Winnett Student Center. The main topics of discussion will center on canvassing in the community on April 29th and the formation of a Scientists and Engineers for McGovern branch on campus (this includes under-

grads, too.) In addition, bringing to campus speakers for McGovern or McGovern himself will be mentioned. This is an important meeting. Be sure to attend.

Wonder What's Stashed in Scotchman's Cove?

There will be a Scuba Club dive this Saturday, April 22, at Scotchman's Cove. Plan to be there at 8:00. Directions to Scotchman's Cove are posted in Winnett and on the bulletin board across from the swimming office.

Ellern Returns for Chem Six Encore

Next Monday, April 24, the Chem Six series continues with Jim Ellern, son of H. Ellern,

Student Help Needed

CEAC Recycling Center Open

by T. Rash

The Caltech Environmental Action Council's recycling center is back in existence. Over eight months ago, CEAC was forced to shut down its operations in the area behind Campbell Laboratory due to construction of the new biology building. In a way this was a blessing, as it gave CEAC an opportunity to abandon what could generously be called a reclamation dump and start from scratch.

The results can be seen in the Chester Avenue parking lot north of Steele and adjacent to Central Engineering Services. The prominent feature of the new recycling center is a large white shed designed by Phil Callahan, a graduate student in physics. The

building holds two large storage bins, one for newspaper and the other for glass. The center is presently concentrating on the collection of five materials: aluminum, computer paper and cards, glass and newspaper. It is open from seven in the morning to seven in the evening.

The new recycling center has needed improvements in cleanliness and efficiency but its success is dependent not on design but rather on people. CEAC strongly urges everyone at Caltech to participate in this recycling effort by bringing newspaper, aluminum cans, computer cards and paper, and glass with all metal removed to the center. If you're coming from off campus, take Del Mar Blvd. to

Chester Ave. and turn south. The first entrance to the Caltech parking lot on your left will get you to the center.

Help Needed

People are also needed to help keep the center running. If you are interested in contributing a few hours of your time every month, get in contact with one of the following persons: Dikran Antreasyan (Fleming), Randy Cassada (Kerckhoff), Dwight Carey (Ricketts), or Roger Greenburg (Blacker). Working at the center will give you the right to say where a proportionate amount of the money made by CEAC goes to, as long as it has something to do with ecology.

CEAC wishes to gratefully
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The CALIFORNIA Tech

Volume LXXIII

Pasadena, California, Thursday, April 20, 1972

Number 25

Stein Makes Waves On Judicial Circuit

Alan Stein, former *California Tech* Editor and discoverer of "Stein Waves" (see the April 6 issue of the *Tech*) pleaded innocent Monday to charges of refusing military induction. He claimed that he was a conscientious objector who had deliberately refused to apply for 1A-O status.

"I don't recognize that the government has the moral right to conscript me. They have no right to make me go out and kill," Stein explained.

At the arraignment U.S. Magistrate Nordin F. Blacker released Stein without bail and gave him permission to hitchhike to Michigan for a family wedding.

He must return by May first for his next court hearing.

'Three Ring Circus' Coming May 6

by Etaoin Schroedlu

Planning proceeds apace for the Y's "Three-Ring Circus," to take place May 6. The conference on "The Impact of Genetic Engineering on Society" is still contacting people to participate in the afternoon scenario seminars, in which hypothetical situations resulting from genetic and biomedical developments are to be presented and discussed in terms of their problems for society. The Y is trying to arrange for doctors, lawyers, and news media people present to participate in the scenarios, as well as geneticists and biologists from the Caltech faculty. Techers who are interested in participating or planning these seminars will be eagerly received at the Y.

Bread for Circuses

Also on May 6, the Y and EQL are co-sponsoring a conference on "Design for Public Lobbying" with a keynote address by John Gardner, Chairman

of Common Cause, the successful public interest lobby in Washington. Various California politicians and action group people will discuss several environmental issues in California, including a pro and con discussion of Proposition 9, the "Environment Initiative." These two programs will be supplemented by an appearance of the KABC Ombudsman unit, which wishes to inform itself on various issues covered by the two conferences, and may also offer its ombudsman service to interested Techers. Surveys offering undergrads the choice of topics were circulated in the Houses last week.

Old Roman Custom

For closer events, there is another Olive Walk Concert this week, tomorrow (Friday) at noon, featuring Ron Coden. Next Wednesday Carlos Moorhead, GOP candidate for Congress from this district, will be on campus for an OliveWalk Talk at 12:30.

McGovern Club Considers



Caltech students and faculty supporting Senator George McGovern for the Democratic Party's presidential nomination met in Winnett last Thursday night to discuss strategy. Plans include doorbell-ringing in local precincts prior to the upcoming California Primary and organization of a local chapter of Scientists for McGovern. (Photo and caption by A. J. Owens.)

China Films to Screen Sunday

Three documentaries from China are scheduled on the Caltech Chinese Students Association film series this Sunday, April 23, at 1:30 p.m. in the Baxter Lecture Hall. The films to be shown are (1) *Good News from Industry*, 10 minutes; (2) *Spring Comes to Our Land*, 20 minutes; and (3) *New Faces of China*, 60 minutes. Everyone is welcome. Donation: fifty cents.

Continued on Page Eight

the caltech forum

Dear Sirs,

I was happy to note the return of the Keck Laboratory sign to normal. Although the students at Caltech have long been known for their love of pranks, their choice of replacement for the sign was surely derogatory toward the large number of excellent Caltech students of Asian descent. As a member of the Caltech community, I would hope that in the future more care will be taken to insure that pranks are indeed harmless to all concerned.

—Kathleen Murphy

To the Ed:

"An abysmal lack of prudence" by "an uncouth outburst of slob."* Mr. Peisner, I question not only your grammar, but your content.

As the Glee Club Representative in Ricketts House, I would like to take issue with your letter. You make two fallacious assumptions. One is that Ricketts House is abominable in behavior and basically different from the normal Techer. The other is that "such behavior" in front of Worcester was wrong, and that they took offense.

The first assumption is purely opinion. There is not much to be said one way or another. I do not feel particularly different from the norm, and I believe the general opinion of Ricketts is not so bad, either. Regardless of this, however, I have taken personal offense to being called a *slob* in a public journal.

As to the second assumption, consider Worcester: a technical school, 2000 men and 80 women, mostly our ages — a group much like ourselves in situation. They requested dinner in the houses to see the students. In Ricketts they saw an honest picture. What happened? The waiter's chorus was a mark of deference, a recognition of the musical status of the guests — and it was stated at the time. One roll was thrown — illegally — and properly dealt with. The packets of sugar were directed primarily at me during my introduction of the men of Worcester. Were they insulted? I

talked to my three guests both before and after dinner, and they were most favorably impressed. They spoke of initiating these activities in their own fraternity houses.

Dear Mr. Peisner, David, if I may be so bold, the next time your ego is deflated a little, try not to cover up and strike back as you did here. A small amount of honesty is always worth a try.

Cordially,

Chris Harcourt
Glee Club Representative
Ricketts House

*from whom did we "slobs" burst?

To the editor:

Regarding last week's letter that I wrote, as well as Ms. Goldfarb's rebuttal, I would like to clarify my views.

I do not object to the admission policies of this school. I do not object to the admission of minorities. My letter was just to question the appropriateness of the original Throop Beat article. Taking figures out of context can be misleading. Let's have a full racial background breakdown, if we are going to have any at all.

And for Ms. Goldfarb, regarding her talk about Jews, please read the following. The minorities I mentioned (Chinese, Blacks, Chicanos) are all "non-white." The prejudice against non-white races is much greater than that against any white minority group. Ms. Goldfarb, I do consider Jews white.

Sincerely,
—Bill O'Meara
Ricketts House

Ed. note: That's very white of you, Bill.

Typist's note: Just as a trivial aside, the U.S. Government considers Orientals to be white, believe it or not. I remember seeing just the other day some Christian sect's newspaper actively advocating overt anti-Semitism — even hinting at violence. And, except for our government's faux pas several decades ago, how persecuted are Orientals? — Andrea Goldfarb

Troll's Note: Since my column started this flurry of letters, I hereby stick my oar into the murky waters. It seems that the issue of race, religion, creed, and national origin has become one of such great passions that even a casual reference to some such attribute of a person provokes outcry. Apparently, some feel that any mention of a person's group affiliations makes for a racist remark.

This seems incomprehensible to me. While some may regard a term such as "black" or "Chicano" or "Jew" as a racial epithet, others regard those terms as representative of groups they are proud to be affiliated with. Consequently, one should look beyond the words themselves and consider their intent.

It was not my intention to be in the least bit disparaging, only to describe an event which seems to be of great interest to our readers. In doing so, a reporter must perforce chose words with care, and in a case such as this no choice will be perfectly satisfactory. However, if there was any bias in hat reporting, it isn't in what Mr. O'Meara read into it.

I hope that we do not lose sight of our common humanity: this is far more important than whether Jews are whites or Orientals are a minority group. We are all in this mess of a world together. A major part of that mess comes from our long-standing tendency to subjugate other people for some minor difference of geographic origin or skin pigmentation. Unless we recognize this, our state will not improve.

—Phil Neches

Dear Sirs:

Regarding the letter from Dave Peisner, the members of Ricketts House would like to invite Dave to dinner any night for a Ricketts House apology.

—Alan Kleinsasser
and 68 members of
Ricketts House

Down the Tubes

Caltech Is Doing It Up In Brown(e)

by Etaoin Schroedlu

Due to underwhelming student interest, this issue of the *Tech* sees the proud inauguration of a new news and comment column, designed to supplement the material covered in my esteemed colleague millikan j troll's Throop Beat (or whatever it's being called these days).

A point of old business concerns the conference on Education for a World Community, which was held on campus last Saturday, and co-sponsored by Caltech's Office of Secondary School Relatins. In case you didn't know, that office consists of Lee Browne, and this conference was only one of several things that Lee has been doing lately which deserve our support and congratulations.

Browne is Beautiful!

Among his other activities, Lee Browne has taken over the follow-up on Caltech's special admissions, a thankless and necessary task. In 1970, when Caltech began the special admissions program for the underprivileged, around a dozen of these students showed up and found that, aside from a short summer remedial program, no special assistance programs had been designed for them; everybody at Caltech was assuming that somebody else would arrange it.

Since his arrival on campus, Lee Browne has taken over the co-ordination of assistance programs for the special admits, and has compiled an enviable record: of the 21 people in the program, from 1970 through this year, 12 are still with the Institute or on L.O.A., and all of the other nine have been placed at other colleges, by Lee Browne's office.

Brown(e)s: SALT & Pepper

As a result partly of Lee's work, the special admit students are by and large doing well here — several have G.P.A.s on the order of 3.0 or higher. (Incident-

ally, when the special admissions program was started in 1970, the Admissions Committee also expanded the number of students being admitted — against some opposition from elsewhere on campus — so no special admit is truly 'taking the place' of someone else who would have been admitted were it not for the program.)

So They Tell Me Dept.

Will public recognition never cease? The L.A. County Registrar has chosen Caltech to be a public polling place, both for the California Primary June 6 and the election in November. So all of you clever enough to register, as directed, will hardly have to get out of bed to vote June 6. Except that most of you will probably be going home by then. There's always something

Dr. Miller's office has been hard at work awarding scholarships to incoming freshmen. I suppose that we should be glad that there's any money left to give ... Lyman Bonner said, "There's absolutely nothing happening, and you can quote me!" Consider it done ... Coming up will be an interview with the new Dean, Dr. James Morgan. Anyone who has a question that they want to see Dr. Morgan answer in print is encouraged to submit it to me, soon.

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by Phil Frank



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The Third Wing

Paranoia and Vietnam



by Nick Smith

"Paranoia is a fear of unreal weirdos. Who has time for that when the world is being run by real weirdos?" —Dan O'Neil.

In case you haven't noticed, we're sort of at war again. For the last week, American warplanes have been bombing the two major ports of North Vietnam, Haiphong and Hanoi. In doing so, our planes have apparently damaged at least four ships belonging to the Soviet Union, as well as one belonging to East Germany. The bombing is the heaviest of the last four years. In addition, American planes are flying large numbers of direct support missions for the South Vietnamese forces, in order to prevent them from being overrun by a sudden attack last week.

What, you might well ask, has all of this to do with paranoia? Well, just look at it this way:

first, for most of the four year term of President Nixon, a slow withdrawal of troops from South Vietnam takes place. Next, he visits China, and opens the gates for new levels of diplomacy with the Communist Chinese, making the Russians rather nervous. American troop levels in Vietnam drop to a new low. The United States breaks off talks in Paris, as if finally realizing that no progress was being made. The North Vietnamese make a rather peculiar attack along a wide front. The United States starts dumping every available ton of bombs on the North Vietnamese. Haiphong is bombed at a time when there are only Russian ships in port and no Chinese ships. Russians send strongly worded official note of protest to Americans. American Secretary of State calls attack by North Vietnam blatant aggression.

more caltech forum

Regarding the letter from Dave Peisner, the members of Mr. Editor:

I would like to comment on a pair of interesting letters appearing in last week's issue of the Tech. I refer to the letters submitted by Mr. Peisner, of Page House, and Miss Goldfarb, of Dabney. The problem Miss Goldfarb refers to (though it is not the main point of her letter) is the history of anti-Semitism the Jewish people have suffered at the hands of the Gentiles. Mr. Peisner's touching story is an eloquent reminder of the healthy undercurrent of anti-Semitism that exists on this campus.

This may be a controversial point to make here, but history has shown this to be all for the good. How else does one explain the extraordinary productivity of

the Jewish people than that they stood up under the most trying conditions, and demonstrated time and time again that they are equals. How else would a Mendelssohn, or an Einstein, or a Golda Meir acquire the toughness to excel — just think, Einstein might have been a window-washer if he hadn't been persecuted. Someday Mr. Peisner will turn around and say, "Thank you, Ricketts House, for giving me something to struggle against."

—Klaus Engelhardt
Lloyd House

Dear Mr. Engelhardt,

Your sense of humor is such that I know not whether to laugh, cry, shriek, or be violently sick.

—Andrea Karen Goldfarb

Do you realize what usually comes out of a sequence like that? I was under the impression that cargo ships of non-combatants were not supposed to be fair game in an undeclared war. In fact, the United States used to use that sort of thing as an excuse for declaring war on the nation sinking random ships, like Germany or Spain.

Also, consider: the North Vietnamese made a bold a major assault in places that the South Vietnamese and Americans would have to defend. The only possible reaction to such an attack would be for the U.S. to become more heavily involved in the war for at least a short time. Are the North Vietnamese so suddenly stupid as to not realize this? Or is there a reason why they should want a strong American

reaction? Possibly the latter, if the reasoning was that the American public would object and demand a more rapid pullout of the rest of the American troops. Or, even more deviously, just suppose that the secret negotiations in Paris convinced the North Vietnamese that a sudden flagrant attack would incite the Americans to bomb Hanoi and Haiphong. Further, suppose that such an attack could be timed such that the bulk of the ships in the harbors were of Russian and other foreign origin. Suddenly, U.S. planes bomb a foreign cargo vessel. That sort of thing could get kind of sticky, diplomatically.

To be even more paranoid about the whole thing, do you realize that this entire round of

fighting is the perfect way out of the war for both sides, with minimal loss of face for all? Consider the reaction of the average American to the bombing. Some are convinced that the United States should immediately pull out, while others are even more convinced that we should go all out to win. If it turns out that the former are in the majority, Nixon would be able to pull out. If the latter are in the majority, the bombing only need continue until the Paris talks could be started again. From the North Vietnamese side, any strong pro-war feelings could be satisfied by this major offensive against the south.

All of the above would require at least some collusion between us and them, at a high

Continued on Page Eight

Fool Days Look Behind Busing Headlines

by Phil Neches

Lately the old, smelly diesel yellow schoolbus has made more headlines than almost any other mode of transport. The current presidential race has felt its impact; candidacies might just be made or broken by it. The learned justices of the nation's courts ponder its implications, and all through society its rumblings have of late involved more than just mufflers and pistons.

Busing school children had been with us for well over fifty years. The Detroit minions of Henry Ford and his cohorts not only put the country on wheels, but also rendered the one-room school only a memory of our grandparents. Consolidation of far-flung rural schools brought greater convenience, economy, and, one might hope, efficiency into America's schools.

Checked Career

The yellow school bus played a decisive role in allowing many Southern school districts to implement *Plessy vs. Ferguson*—with this transportation available,

"neighborhood schools" had little verisimilitude for blacks until very recently. With *Brown vs. Board of Education* in 1954, the Supreme Court set the yellow busses moving in the other direction — as tools of integration rather than guarantors of segregation.

The current situation seems to please no one, not even the bus manufacturers. "Forced busing" has evolved into the issue of the day, and a rather incendiary issue at that.

Pick a Side

At this point, one might mention that two particular types of busing have drawn most of the discussion. One, usually called "voluntary busing," has children bussed from one school to another at the parents' option. This usually means from a "target" or "Title I" (both euphemisms for "in a run-down neighborhood") school to a better school. Few parents want their children bussed the other way, which is understandable.

The other sort, which has drawn the wrath of a wide

spectrum of citizens, from the Wallacites to the Humphreyites, is "forced," a term usually applied to any scheme in which a substantial fraction of the children in the district are bussed to schools other than the one nearest them. Parental choice is limited at best in such arrangements.

Attack on All Sides

Forced busing has drawn attacks from both sides of the tracks. Reactionaries attack it as they have attacked any desegregation move. Radicals have attacked it for many of the same reasons as a great many "middle class" have: that the plan denies parental choice. Nobody seems to really favor the thing; unfortunately, many cities have not come up with anything better. Consequently, they are stuck with the battle of the bus.

For all of the heat the issue has generated, however, it is only the tip of the proverbial iceberg. The matter probably has not so much to do with race as with family background. Poor performance in school has a direct relationship to poverty — schools in affluent black neighborhoods score extremely well on standardized tests, while schools in poor white neighborhoods do extremely poorly.

All in the Family

Some opponents of busing (of either sort) claim that if a black family is the sort that will motivate its children to learn, they will learn equally well in the local "poor" school as well as in a school in an affluent white neighborhood. Possibly better, they claim (and some of these claimants are black, too), since the federal government has recently been pumping billions

Continued on Page Eight

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Apollo 16

in Detail

by Michael C. Malin

At approximately 12:40 p.m. PST, Thursday, April 20, 1972, the Apollo 16 lunar module, Orion, will touch down upon the lunar highland surface. The landing, next to the last of the U.S. manned lunar missions, will mark the beginning of an extensive 73 hour scientific expedition, highlighted by over 21 hours of surface exploration. In the following paragraphs, details of the mission plan will be presented to allow students, faculty and staff to knowledgeably follow the course of events. It is the intent of this article to provide in more detail information which may or may not be available from other media.

The Landing Site

The landing site for the Apollo 16 mission is the Descartes area of the moon. Descartes is located in a highlands region lying in the southeastern portion of the moon. The landing area of interest lies to the southwest of Mare Tranquillitatis, north of Descartes Crater, and several hundred kilometers west northwest of the crater Theophilus. The landing coordinates are 8 degrees, 59 minutes, 55 seconds S latitude, 15 degrees, 31 minutes, 12 seconds E longitude based upon Apollo 14 triangulation measurements. The Descartes region lies in the lunar southern highlands and is unique in that it is the highest topographic region on the near side of the moon. Since no recognizable gravity anomalies are associated with this region, this mountainous plateau apparently must extend to a great depth to be isostatic.

The lunar highlands appear to consist of three major types of deposits: (1) undivided pre-Imbrium materials and older degraded crater materials, (2) ejecta blankets composed of material ejected by the major basin-forming events, (e.g., Mare Imbrium formation) that are typified by the Apollo 14 Fra Mauro and Apollo 15 Apennine Mountains highlands areas, and (3) volcanic constructional materials that are exemplified by the Descartes highland region.

The Descartes region is an outstanding location to sample and study the petrochemistry of two volcanic units: The Cayley formation and the Kant plateau, of which separate and distinct portions are present.

Fresh craters of various sizes, also present within the landing area, allow sampling of these highland units to varying depths. The mounded floors of craters within the area, up to 1 kilometer in diameter, suggest that a lower layer of unknown origin has been penetrated.

The Cayley formation unit is highland plains material consisting mostly of smooth to undulating terrain probably resulting from fluid volcanic flow rock and pyroclastic detritus. This unit is the largest single identifiable rock unit on the near side of the moon (covering 7% of the near side) except for the mare regions. The Descartes Mountains (the edge of the Kant Plateau unit) are composed of hilly and furrowed highland plateau material that is probably the product of more viscous volcanic flow rock, pyroclastics, and their associated cones. This type of unit covers more than 4.3% of the near side surface. Four specific geological features will be investigated during the three extraveicular activities (EVA's): (1) Cayley Plains which include young, bright-rayed craters (North Ray, South Ray), (2) South Descartes Mountains (Stone Mountain), (3) North Descartes Mountains (Smokey Mountains), and (4) subdued craters and crater chains. The lunar module (LM) landing site is on a smooth phase of the Cayley formation, and so samples collected on EVA 1 and in the neighborhood of the Apollo Lunar Surface Experiments Package (ALSEP) should reflect its nature. Similarly, EVA 2 will collect samples from the South Descartes Mountains (Kant Plateau material) as well as from the ray material from beneath these units. EVA 3, which will explore the northern region of the landing site, will visit sites of North Descartes Mountain material, and North Ray Crater, where scarps and interior mounds reflect material present before the Cayley and Kant formations.

EVA 1

In the next three sections, a description of the activities of each EVA will be presented. To assist those who wish to follow along while watching the EVA's on television, time notations will be set apart by []. Times to be included are pacific standard time and elapsed time from EVA start. For example, "The lunar module pilot (LMP, Charles Duke) egresses soon after the commander (CDR, John Young). [4:42 p.m., 0:22.5 ET]". Times will be approximate, since a great deal is left to the discretion of the astronauts.

EVA 1 commences approximately four hours after touchdown at Descartes (at about 4:20 p.m., April 20). The crew has described the general lunar scene as they see it through the windows of the LM, gone through some systems checks, had a light snack and are prepared to embark on the first EVA.

EVA 1 features ALSEP deployment, and a geological-geophysical traverse west to Spook and Flag Craters

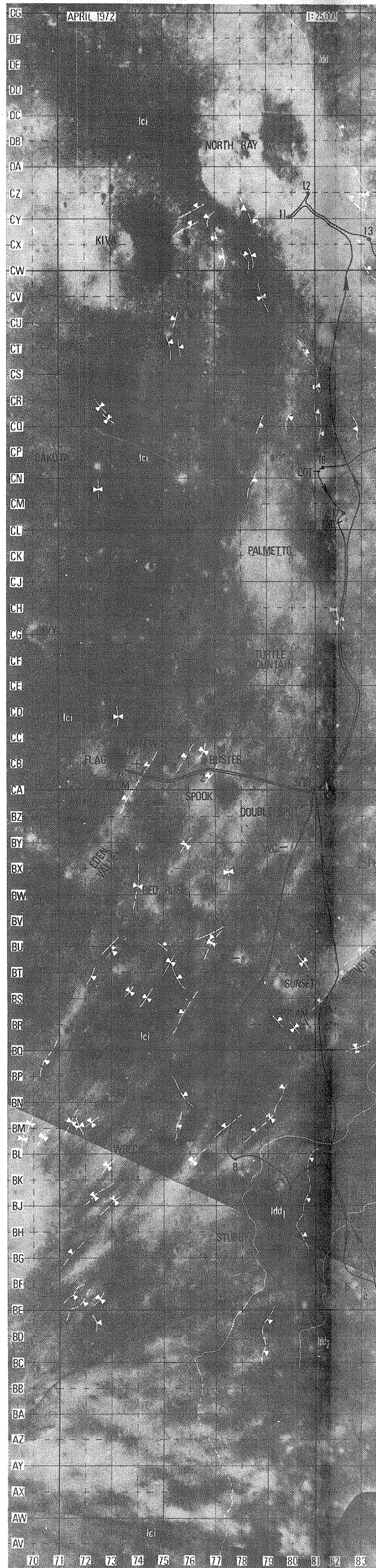
The CDR egresses first, bringing out a jettison bag filled with expended gear. This he drops, then pulls a lanyard to deploy the MESA (Modularized Equipment Stowage Assembly) and TV camera, and descends to the lunar surface. He has a bag of cameras and film magazines with him as he descends.

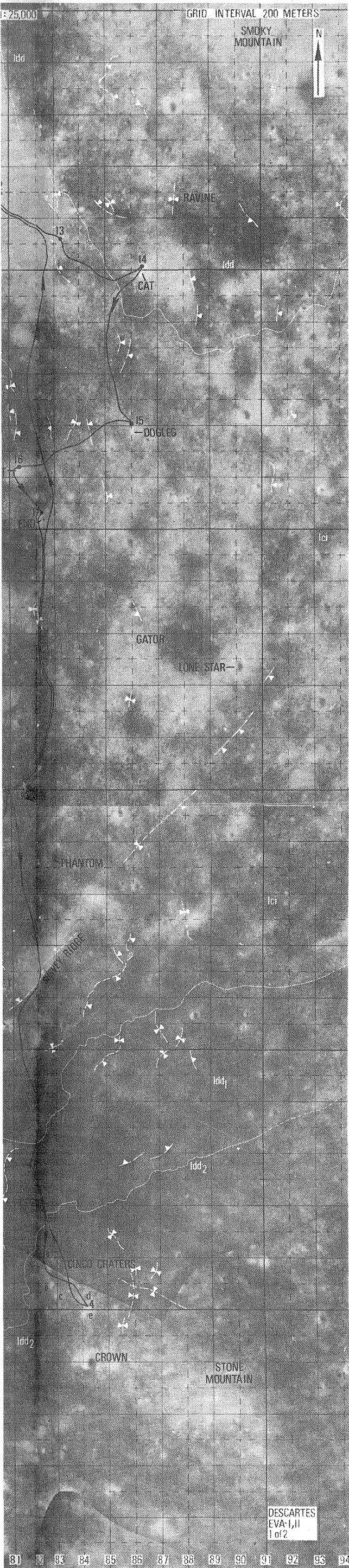
After a brief time of familiarization to the surface conditions, the CDR takes the color TV on its tripod to an area due west and facing the LM. The LMP egresses soon after the CDR. [4:42 p.m.; 0:22 ET]. After a brief surface familiarization, he unloads the lunar drill and its boring and coring equipment from the MESA. The two crewmen then tackle the Lunar Roving Vehicle (LRV) unloading and set up. [4:39 p.m.; 0:30 ET]. This is accomplished by: (1) removing the insulation blankets, (2) pulling a "D" ring to initiate foldout, (3) lowering LRV from storage bay with hand tape, rear first, (4) unfolding and locking the chassis and wheels, (5) lowering the front to the surface, and (6) disconnecting from the LM. The CDR does a systems checkout and takes a short spin around the LM to the vicinity of the MESA. The LMP performs a LM walkaround and photographic documentation of the LM as it is situated. [5:00 p.m.; 0:41 ET].

As soon as the CDR has satisfied himself that all is in order with the LRV, and has parked it by the MESA, he goes to the side of the LM known as Quad III (NE side if ladder leg is pointing west) and takes out the Far UV (Lyman-Alpha) Camera, essentially a Schmidt camera and spectrograph, which he sets up in the LM shadow near the LRV. The following are the targets to be photographed: Galactic Center, Earth Geocorona, N7317GP, N134, Geocorona-Bow Cloud, Lesser Magellanic Cloud, PAVO Group, A2634 Cluster, N1068 Cluster, Fornax Cluster, and the Cygnus Nebula.

The LMP has been busy during this period setting up the LRV communication and TV system. This comprises the LCRU (Lunar Communications Relay Unit) and the television camera and control unit. Following installation of the antenna, control of the TV switches to the mission control center. The LMP next unloads the magazines and maps, and configures the 70mm and 16mm cameras for the traverse. Finally, he takes a sample return container (SRC) from the MESA, opens it, and takes out a bag of sampling supplies, including core tubes, bags and other sampling equipment.

The CDR has been loading the LRV with geological supplies and tools, and now assists the LMP in completing the MESA chores. The LMP enters the LM to switch its power to low, and the crew deploys the flag. [5:40 p.m.; 1:20 ET] The two then proceeds to unload the ALSEP, with the LMP transferring the radioactive fuel capsule to the Radioisotope Thermoelectric Generator (RTG). After fueling the RTG, the LMP carries the ALSEP packages barbell fashion to the ALSEP deployment site, some 300 feet to the west of the LM. The CDR retargets the Far UV Camera (FUV) and configures the Cosmic Ray Detector





experiment for the remaining lunar surface stay time. This experiment, comprised of sheets of plastic, metals, and emulsions, is designed to study galactic and some solar cosmic ray phenomena. He then boards the LRV and drives to the ALSEP site, where he uses the LRV to mark off a 100 m line for deployment of the geophones. He drives the LRV back to the ALSEP site, parking southeast of the site. At that point, the two astronauts begin to set up the ALSEP. [6:07 p.m.; 1:47 ET]

In general, the CDR is responsible for deploying all experiments in ALSEP, except for the Heat Flow Experiment (HFE). The LMP takes care of the drilling operations and deployment of the HFE. The CDR deploys the Passive Seismic Experiment (PSE), the Active Seismic Experiment (ASE) and the Lunar Surface Magnetometer (LSM). The PSE is a sombrero-shaped package of seismographs which has been carried on all Apollo lunar landings to date. The ASE comprises three distinct parts: a mortar package which contains 4 grenades which are planned to be fired long after the crew leaves the surface; a thumper device which has 19 small charges (like dynamite caps) to induce local "quakes"; and an array of three geophones implanted along a 100 m distance, at spaces of 50 meters. The LSM is an array of magnetometers also flown on Apollo 12 and 15.

The LMP drills two bores, and implants a set of HFE thermocouple heater probes into each. The drill has been improved over the one used on Apollo 15. The bores and cores are longer, so fewer go into reaching the 2.5 meter depth. A new tool is used to connect and disconnect the drill and the cores and bores. Another new tool allows easier extraction of cores. The CDR has by now deployed the experiments and has set up the central station. As a team, the two astronauts deploy the geophones. After the phones are deployed, the CDR walks back along the line, firing the thumper at pre-determined 15-foot intervals. Following this the CDR sets up the mortar package, to be armed later. [thumper firing - 7:28 p.m.; 3:08 ET] The LMP, in the meanwhile, is drilling a 2.5 m core sample. Together, the crew dismantle the core, and prepare for a geological traverse. They do this by donning some tools and sample bags (they have special carriers on their life support packs). They then mount the LRV and proceed to Station 1, Flag Crater.

They arrive at station 1 at [8:35 p.m.; 4:15 ET] The station lasts 43 minutes, and is spent near Plum Crater on the SE lip of Flag Crater. The crew takes a rake/soil sample and does general documented sampling in this area. They then retrace their path to station 2, near Spook Crater. Here the LMP does geological tasks on his own, while the CDR makes a Lunar Portable Magnetometer reading. This device was carried on Apollo 14 and measures local magnetic fluxes. Following a 56 minute stay, the astronauts return to the ALSEP site, called for this traverse station 3. At station 3, a LRV maneuverability test is made, called the "Grand Prix". This consists of one crewman driving the LRV in a series of stops, starts, and accelerations, in road test fashion, while the other man makes a four minute movie of the proceedings. Then the CDR and LMP arm the mortar package and retrieve the drill core sample.

The crew return to the LM at [10:40 p.m.; 6:20 ET]. The LRV is parked and powered down. The CDR resets the FUV, and the LMP deploys the Solar Wind

Composition Experiment (SWCE). This is an aluminum and platinum windowshade on a pole used to collect particles of the solar wind. The two men unpack the LRV, pack away the samples collected, and ingress. Just prior to CDR ingress, he retargets the FUV once more. The EVA terminates at [11:20 p.m.; 7:00 ET].

EVA 2

EVA 2 begins with depressurization of the LM cabin [April 21 - 2:43 p.m.; 0:0 ET]. The CDR egresses first, bearing with him the equipment transfer bag, and activates the LRV TV system. As the LMP descends to the surface, the CDR resets the FUV. The two crewmen then load up their life support system tool carriers and the LRV for the traverse. Prior to departure, the FUV is again retargeted. The geological traverse begins at [3:33 p.m.; 0:50 ET]. The area to be explored is in the South Descartes Mountain Region, up the slope of Stone Mountain (Figures 1 and 4). About 1 1/4 hours will be spent at Stations 4 and 5 (Cinco Crater region). Procedures include a rake/soil sample, penetrometer tests, and a double core tube, besides general sampling. Station 6, the base of Stone Mountain, lasts 20 minutes, and begins at [5:53 p.m.; 3:10 ET]. Only general sampling is done at this site. After a 4 minute drive, the astronauts arrive at Stubby and BB Craters, for a 15 minute general sampling session. One hour will be spent at Station 8 investigating boulders and ray material from South Ray Crater. A large boulder will be selected for detailed

sampling. Sampling in this region will not only provide material derived from below the surface several kilometers away, but study of the length of exposure of these materials and materials of North Ray Crater will help to establish the rate of ray disappearance. A rake/soil sample and a double core will also be taken at this station. [6:39 p.m.; 3:56 ET] Two special sampling techniques (and tools) are employed at Station 9 [7:42 p.m.; 4:59 ET]: one designed to obtain soil samples from the surface and near subsurface and the other to obtain a single core sample which will be placed in a special vacuum container (CSVC) to insure a chemically ultra clean state. Twenty-five minutes are spent at this site. Station 10 is located halfway between the ALSEP and LM, and is the site of a series of penetrometer tests and a trench and core tube (double). This station lasts 33 minutes, and ends as the astronauts return to the LM for closeout. [9:03 p.m.; 6:20 ET] The two men carry out much the same packing procedure for the samples collected. Immediately after arrival at the LM, the CDR retargets the FUV, which he does again just prior to ingress. Ingress occurs at 131:52 into the mission. [9:43 p.m.; 7:00 ET]

EVA 3

EVA 3 is scheduled to begin at 2:16 p.m., April 22. The CDR egresses and immediately retargets the FUV. Both crewmen repeat many of the procedures of the previous EVA, and prepare for the last geologic traverse. About 45 minutes after depressurization, the CDR sets the FUV on another target, and the traverse to the Northern Descartes Mountain region, North Ray Crater and the Smokey Mountains is initiated (Figures 2, 5, and 6). After a ride of 44 minutes, the LRV arrives at Station 11, the South rim of North Ray Crater. Fifty-three minutes will be spent at this site. Experiments to be performed include polarimetric photographs of selected samples and boulders, and a general sampling of the crater rim. Station 12 is some 0.4 km away, to the northeast, still along the rim of North Ray. [4:42 p.m.; 2:26 ET] Stay time is 56 minutes, with rake/soil samples and general sampling occupying most of the time. Station 13 is a brief (10 minute) stop on the ejecta blanket of North Ray Crater. A large rock will be collected at this site. Ravine and Cat Craters are the site of Station 14. Lasting forty minutes, the region will be sampled by rake, and a double core will be driven. After an eleven minute ride, the crewmen will reach Dog Leg Crater, which will be the site of another LPM measurement. A 0.6 km ride brings the LRV to Station 17, on the rim of the subdual crater, Palmetto. [7:24 p.m.; 5:08 ET] A total of 39 minutes will be spent here, while a LPM measurement is made on the general vicinity, and another with a selected rock on the LPM sensor. Also, a rake/soil sample will be taken. The traverse terminates back at the LM at [8:21 p.m.; 6:05 ET]. The CDR selects a final target for the FUV, while the LMP clears the LRV of all returnable items and samples. The CDR retrieves the Cosmic Ray Experiment, and with the LMP, packs up the returning materials. The CDR then drives the LRV through another "Grand Prix" exercise and parks the LRV some 100 m east of the LM, where the TV will be able to view the LM liftoff. He then walks back to the LM, where the LMP has collected the SWCE, and packs it with the film magazines to be returned to earth. The crew takes a final 16mm movie of general mobility, modes of translation across the surface, and other activities to provide data on human capabilities in the 1/6 G lunar environment. After cleaning themselves off, the crew remove the film cassette from the Far UV Camera and place it with the other film magazines. The EVA terminates with repressurization at [9:16 p.m.; 7:00 ET]

Post EVA Information

The above paragraphs have included information about the Apollo 16 landing site and extravehicular activities. There remains one last event, the Lunar Module liftoff. This occurs on Sunday, April 23, 1972, at 1:39 p.m. This and other televised events are listed below:

APOLLO 16 TV SCHEDULE [All times PST]

Day	Time	Duration	Event
Sunday April 16	1:30 pm	0:19	Docking
Thursday April 20	4:19 pm	6:47	EVA-1
Friday April 21	3:04 pm	6:35	EVA-2
Saturday April 22	2:40 pm	8:04	EVA-3
Sunday April 23	12:02 noon	0:12	Equip Jett
Sunday April 23	1:24 pm	0:25	LM lift-off
Sunday April 23	3:16 pm	0:06	Rendezvous
Sunday April 23	3:40 pm	0:05	Docking
Wed. April 26	11:49 am	1:10	Transearth EVA

Duration in hours:minutes. Consult local papers for stations carrying these activities.



The Tech About Town

This week, I am going to be super-fancy and actually give you some details about the various clubs in the area, like admission prices and that sort of thing. Consider yourselves privileged.

ASH GROVE, at 8162 Melrose in Los Angeles, is featuring Bessie Jones and the Georgia Sea Islanders from the 25th through the 30th. Admission \$2.50, no age limit, no minimum.

DONTE'S, at 4269 Lanker-shim, is one of the major jazz clubs in the area. There is apparently no admission charge and no age limit or minimum, but drinks are \$1-1.50.

ICE HOUSE, at 24 N. Mentor, features Ron Coden, Terrea Lea and Gabe Kaplan until the 23rd. Admission \$1.50, no minimum or age limit, drinks from \$.40 to \$1.00.

McCABE'S GUITAR SHOP, at 3103 Pico Blvd. features Jim Kweskin on the 21st and 22nd, followed by Joyous Noise on the 28th and 29th. No age limit, admission \$2.50

PALOMINO, at 6907 Lanker-shim, is the country-western club of the bunch. Linda Ronstadt coming in May. 18 and over only, \$1.50 admission, drinks \$1.00 and up.

SHELLY'S MANNE HOLE is at 1608 N. Cahuenga. Les McCann is there from now until the 23rd, followed by Harry "Sweets" Edison until the 30th. No age limit, \$1-3.00 admission, drinks \$1.00 and up.

TROUBADOUR, at 9081 Santa Monica Blvd., is the location of Tod Rundgren and Ry Cooder until the 23rd, followed by either Mary Travers or Peter Yarrow, depending on which Troubadour listing you believe. Admission \$3-3.50 plus two drinks minimum per show (at \$.75-1.50 per drink), no age limit.

UNDER THE ICE HOUSE, at 234 S. Brand in Glendale, supposedly has a minimum age limit of guys 21, girls 18. They feature rock music and dancing. Admission \$1.00 on weekends, less on Mon-Thurs. Cheap drinks.

WHISKY A GO GO has Ashton, Gardner & Dyke until the 23rd, followed by Tower of

Power from the 26th through the 30th. 8902 Sunset, no age limit, drinks \$.50-1.25, but I have no idea what the admission charge is.

As far as concerts go, there are a lump of them. For example, **JOAN BAEZ** is at Pauley Pavilion on the 22nd. **LITTLE RICHARD** is at the Fox West Coast Theatre on the 20th, 21st and 22nd. **JOE COCKER** is at the Forum in Inglewood on the 23rd. **CANNED HEAT** and **COLD BLOOD** (a real natural if there ever was one) are at the Long Beach Auditorium on the 23rd. **VAN MORRISON** is at the Santa Monica Civic Aud on the 27th and 28th. **HOT TUNA** is at the Hollywood Palladium on the 28th. **PROCOL HARUM** is at Bridges Auditorium at Claremont on the 28th, along with **LEO KOTTKE**. **RICHIE HAVENS** is at the Fox West Coast Theatre in Long Beach on the 29th. Last but not least, **ROBERTA FLACK** and **DONNY HATHAWAY** appear at Pauley Pavilion on the 6th of May.

-Smithnick

CEAC

Continued from Page One

thank "all those who made this possible." Lyman Bonner, Hardy Martel, David Smith, the Y, GSC and ASCIT gave us invaluable (monetary) help. Stan Glidden, campus planner, stopped us from committing a remarkable number of blunders and showed us the right way to do things. Without these persons' and organizations' help and that of many others at Caltech, the recycling center would have remained nothing more than a dream.

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A Modest Proposal

by S. Craig Nelson
and Paul K. Mazaika

A flurry of interest has arisen over - use of the land now occupied by Throop Hall, an outmoded, crumbling reminder of the beginnings of the Institute, or, some say, a mute witness to 70 years of growth. Everyone realizes that Throop sticks up like a sore thumb in the middle of campus and spoils any hope for architectural integrity. More cogently, the recent earthquake has made Throop unsafe for occupation. Millikan may have swayed, tons of books may have cascaded down, but it didn't crack. Wags may say that those who lived by the book could easily have died by the book, but the solid fact remains that Millikan is safe, Throop not. Throop must go. We therefore propose that a slide be erected with Millikan as a launching point.

Obvious Benefits

The obvious benefit of this proposal is money. As graduate students, we are particularly aware of the financial crisis faced by the Institute. One who is not a graduate student with the specter of tuition looming in the future, can see traces of the crisis in the sacrifices of quality made in the furnishings, carpeting, paintings, and panelling in the new administrative offices. Anyone who has seen the Institute forced into these economies cannot doubt that even \$200,000 per year would be welcome. But at only \$1 per person, only 1000 people per day, only 365 days per year, the gross revenue from the Millikan Accelerator would be \$365,000 per year. Gross revenues might well exceed this estimate just as

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What of the drawbacks?

No one can seriously argue that Millikan should be only a library when the highest levels of Caltech administration have already realized that Millikan is a multi-use building. Nor can it be claimed that the loss of dignity outweighs increased revenues. An amusement park operating year-round will bring in far more money than was earned in the few days Millikan served as a locale for Mission Impossible (Van Daam) or the Sixth Sense. Neither of these TV shows could possibly have added or, it must be admitted, detracted from Caltech's stature as a scientific institution. Just as Tony Curtis can volunteer his time for the "I Quit Smoking" Campaign, just as young ladies of impeccable reputation can subject themselves to presentation balls for charity, so can Caltech wear a little grease paint for a worthy cause.

There are many subsidiary advantages to this proposal.

There would be a steady supply of tourists for Techers to feel superior to. Many of these tourists would be thrill-seeking teenie-boppers. The Millikan Accelerator could be used in the present tours of campus. The accelerator could be integrated into a badly-needed rapid transit system from Millikan to the various parts of campus, eliminating those frustrating minutes of waiting for an elevator. Finally, students needing money for educational expenses and graduates unable to find suitable employment could be employed in an Orange Julius stand situated at the terminus of the accelerator.

We welcome any criticisms in full knowledge that we have not the gift of foresight combined with respect for the past so necessary for campus planning, but we urge serious consideration of this proposal.

What's This? The Shadow Shakes

There will be no Totem news brief this week for reasons far too obscure to mention.

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Theodore Eliot Explains U.S. Policy To Techers

by Etaoin Schroedlu

History was made last week; a real-live, non-anonymous person emerged from the United States State Department and spent most of a day talking to Caltech professors and students about U.S. foreign policy. No earth-shaking changes in State Department policy are expected as a result of the day's activities, but Mr. Theodore Eliot, Executive Secretary to the Secretary of State, returned to Washington a tired and more informed man (on the content of student concern over America's foreign policy, at least).

Mr. Eliot's day at Caltech

began last Thursday when he met for a lunch discussion with several Caltech professors. Later in the afternoon the students got into the act, as a Winnett Center drop-in seminar and a dinner discussion gave Techers an opportunity to grill the visitor.

Well Done? Rare?

Student interest ranged over a wide variety of subjects, including the India-Pakistan-Bangladesh affair, general goals of American foreign policy, and Western Europe ("That's the first question I've had on Europe in two full days on college campuses," noted Mr. Eliot). Late in the evening discussion, a somewhat more intense exchange occurred over Viet Nam, as well.

During most of the discussions, the Techers seemed to find Eliot as unpatronizing, frank, and receptive as one could expect in a high Government official; at

one point, Eliot admitted that the U.S. policy on India last year had failed, since it was designed to prevent an invasion.

On the subject of Viet Nam, however, many of the persons present at the evening discussion felt that the previously-established communication vanished. Mr. Eliot, declining to consider himself an expert on the Viet Nam issues, tended to reiterate the tired old Washington propaganda of the last two decades, which did not impress many of his audience, some of whom disputed the official policies at length. When the discussion broke up, at 9:30 p.m., the Tech dissenters felt that perhaps something had been accomplished, although not as much as they had hoped for. "If we could have talked to him in private for a day or two, maybe we could have made a real

Capra Lecture

Continued from Page One

human spirit.

Bad Guys

According to Capra, censorship has always been a problem in the motion picture industry. In the beginning it revolved around the choice of the movie villain. If he were a foreign national, that country might ban all U.S. films in protest. Likewise, villainous cops, lawyers, or newspaper editors would cause howls of protest from policemen, the ABA, or the press.

To protect itself Hollywood created the Hayes Code of

impression," said one participant later. In lieu of that, however, the Eliot visit to campus was the next best thing.

self-censorship. This list of do's and don'ts was intended to protect the industry from other would-be censorship groups, but it ended up acting like "a lead pipe pounding on the head of artistic freedom."

Psychovillains

Since it was all but impossible to create realistic villains within the code, producers turned to ideas and conditions for conflict. War, poverty, facism, etc. became acceptable heavies, and the psychovillain was born.

This led to the non-hero of the fifties, the anti-hero of the sixties, and finally the "freedom binge" where everyone played chicken to see how far the movies could go.

The major result was a decline in the motion pictures industry. Attendance figures show that there are now only 20 million customers per week in the U.S.'s movie theatres compared with 100 million twenty years ago and 40 million five years ago.

Capra feels that the "censorship of the box office" will finally cure matters. People feel a hunger for quality, meaningful movies, and for economic reasons, if no others, these will drive out the shoddy, meaningless ones.

At the end of his talk Capra was given a standing ovation by the audience as a sign of appreciation for his talk and his career. Afterwards, a melange of scenes from his films was shown.

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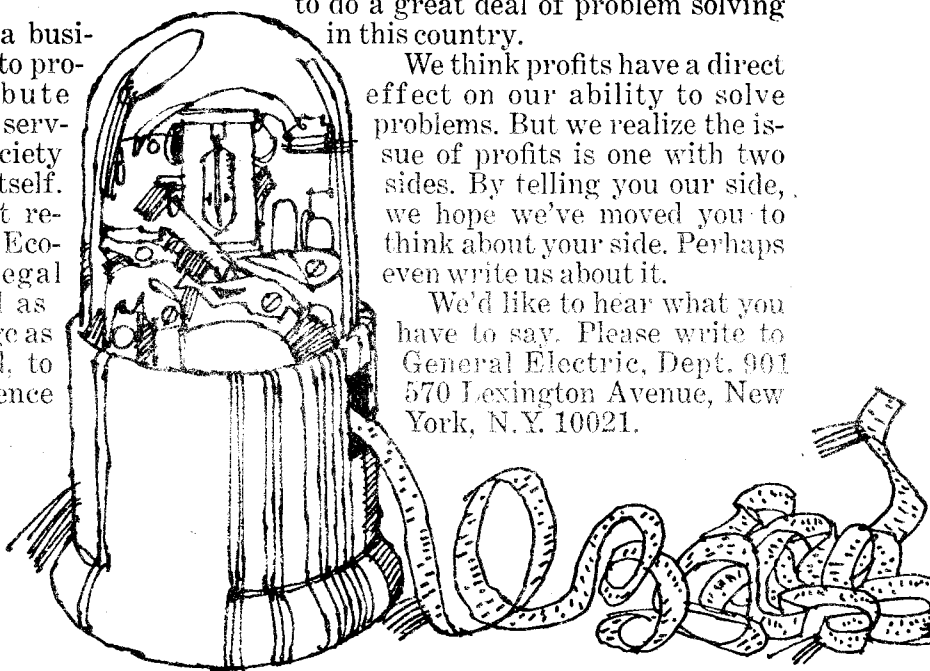
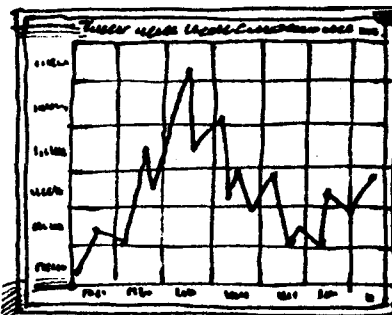
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"Raindrops Keep Falling . . ." But Beaver Streak Now Twelve Straight

by Gavin Claypool

The rain in Pomona fell mainly on the spumona — or at least on the Sagehens' baseball diamond, as they outlasted both the rain and the Caltech Beavers 3-0.

The top of the first inning ended with a start of a sudden downpour. Pomona left the field faster that time than anyone could recall. Five minutes later, when the infield tarps were all in

Buss Thy Neighbor

Continued from Page Three

into these low achievement schools. In L.A. the "poverty" schools get \$1000 per pupil per year, while the most "affluent" schools receive only \$700 per pupil per year. On the other hand, a better learning environment exists at those schools which, although they receive less money, receive better motivated children. To what extent these balance out no one can say with certainty.

The poverty cycle is all too familiar: poverty and ignorance breed more poverty and ignorance. When parents raise children to care little for their education, the resulting children will not learn in any school system: for much of life's attitudes have been set by five, before entering school at all.

No Help

So the problem goes much deeper: the roots of poverty are deep and tenacious, as we are discovering to our chagrin. A better education for all of our children? Sure. But that means a better family life all around, and that is something which simple money and legislation (that is, all available and reasonable means of persuasion and coercion) cannot bring into being.

My guess is that the way out lies through education, but due to the built-in resistances, the process will take a long time — likely as not a few generations. Some on the fringes have suggested drastic measures, ranging from deportation to involuntary population control; all such solutions raise the spectre of far greater loss of freedom than the yellow schoolbus ever will.

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place, the rain shut off like a switch had been thrown. The bottom of the inning was played, punctuated by lightning, and climaxed by a rain and hail shower that delayed the game for an hour.

Walt Smanski pitched well for the Beavers, although he suffered the loss. He went to a three-and-two count several times, but walked only two, while striking out six. Tom Howell had two hits to raise his season average to .400.

Saturday La Verne stopped the Techers twice, 14-1 and 7-0. Smanski powered the ball 378 feet for a home run in the first game.

Streaking

2.8 miles: L. Proudfoot 17:30

Referendum

Yes: 136 No: 49

The Third Wing

Continued from Page Three

governmental level, which is, as we all know, impossible. After all, our government wouldn't do anything in secret, would they? And anyway, there is an alternate explanation. It is entirely possible that the governments of the United States and North Vietnam are losing their collective judgment and are openly trying to start World War III. Is't that a comparatively cheering thought? I suppose war is better than paranoia in the short run. Paranoia gets in your way, but war can only kill you.

Tennis Squad Upsets Cross-Town Rival Occidental, 5-4

The Caltech varsity tennis team scored an upset on Thursday, April 13 when they defeated Oxy 5-4. The match went right down to the third set of third doubles where Bruce Eisenhart and Mo Nakatsui creamed their opponents 6-0.

Singles winners in the upset were Dave Dummit, Mo Nakatsui and Bruce Jacobsen. Dummit and Jacobsen also won in second doubles.

In other matches played since the spring break Caltech lost to Claremont-Mudd 8½ to ½ and to LaVerne 6½ to 2½.

Caltech 5, Oxy 4

Singles: Eisenhardt (O) d. Shellan (CIT) 6-1, 6-0. Matteson (O) d. Chow (CIT) 6-2, 6-4. Dummit (CIT) d. Kinard (O) 6-4, 2-6, 6-4. Nakatsui (CIT) d. Limberg (O) 6-3, 6-4. Jacobsen (CIT) d. Change (O) 6-4, 6-1. McQuillan (O) d. Eisenhart (CIT) 7-5, 6-1.

Doubles: Brenner-Eisenhardt (O) d. Shellan-Chow (CIT) 6-1, 6-3. Jacobsen-Dummit (CIT) d. Kinard-Matteson (O) 6-4, 6-4. Eisenhart-Nakatsui (CIT) d. Chang-Limberg (O) 7-5, 2-6, 6-0.

News Briefs

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RTD Discount Cards Available

Discounts of 40 to 50 percent are available for those who brave the wilds of the Los Angeles area on Real Time Devourers (RTD) buses. Full-time students under 21 years of age are eligible. Forms may be picked up in Dean Wood's office at 208 Dabney. The actual card, which costs fifty cents, is purchased at the PCC Student Bank (next to the bookstore).

But Their Ship Sank

Chapman Stops Techers, 80-65

by Bob Kieckhefer

Tech's distance runners and weight men did well against Chapman College last Saturday, but Chapman's depth in the sprints and jumping events dealt LaBrucherie's men an 80-65 loss. Chapman sprinters were lucky enough to win all the close races, providing them with the points needed for a meet victory.

Alan Kleinsasser led the team with victories in the mile and 880-yard runs, and anchored Tech's victorious mile relay team. Greg Griffin's first place in the two-mile run gave Tech a sweep of the distance events. Their only other victory on the track was Charlie Almquist's win in the 440-yard intermediate hurdles.

The shot put was the most gratifying event of the afternoon (for Tech rooters), as Doug Herbert, Monte Ragland, and Charles Thoele placed first, second, and third. This marked

the first time this season that a trio of Techers had swept all three places in an event. Thoele went on to win the javelin throw; soon afterward Herbert and Ragland placed first and second in the discus for Tech's last victory of the day.

Kleinsasser led the team with 11¼ points; Herbert was the next highest scorer with 10. For Tech sprinters it was a day of poor times and disputable judges' decisions, with the final score of the meet indicating that Chapman College did not go down with the *Queen Elizabeth*.

Hopefully, the track team will have better luck this Saturday, when they host Redlands and La Verne in a test of SCIAC competition. The meet starts at 1:30 — come on down and intimidate the judges (or give the team and become a judge — on-the-spot training is provided).

Forget About Midterms! Go to a Game

Friday, April 21		
1:00 p.m.	Golf	UC Santa Barbara Away
Saturday, April 22		
12:01 p.m.	Baseball	Pomona (doubleheader) Home
1:30 p.m.	Varsity Tennis	Redlands Away
1:30 p.m.	JV Tennis	Redlands Home
1:30 p.m.	Track	La Verne, Redlands Home
Monday, April 24		
7:00 a.m.	Golf	S.C.I.A.C. Tournament at Red Hill
Tuesday, April 25		
3:00 p.m.	Baseball	Claremont/Harvey Mudd Home
3:00 p.m.	Varsity Tennis	Cal State Dominguez Hills Home
Saturday, April 29		
12:01 p.m.	Baseball	Claremont/Harvey Mudd (2) Away
1:30 p.m.	Track	Whittier Home
April 27, 28, 29		
Ojai Tennis Tournament at Ojai		

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