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# THE NEW S

CITY COLLEGE OF NEW YORK

VOL. XXI — NO. 10

WEDNESDAY, MARCH 3, 1965

STUDENT FEES

## Riots Spur Collegians Protests Here Also

By CARL WEITZMAN

Last year's riots at Berkeley and in Harlem have culminated in the sporadic eruption of far left demonstrations at City College. Students protesting Central Intelligence Agency (CIA) recruitment on Campus picketed on the fourth floor of Finley Hall last week, befuddling interviewers and embarrassing job-seeking seniors.

On another front the arrest of City College student Elinor Goldstein for contempt of Court prompted a sit-in at Dr. Gallagher's office two weeks ago. The upshot of this demonstration has been the formation of a "Free Student Movement," which has even today staged the Student Government Office (at the invitation of S.G. president John Zippert) for its organizational meetings. This group charges that Miss Goldstein has been "witch-hunted" for her political activities on this campus only, irrelevant to her activities off campus. Officially, Miss Goldstein has been arrested on refusing, under subpoena, to testify against "friends" who had allegedly been involved in last summer's Harlem riots. The "Free-Movement" replies that, although the D.A. has extended immunity to Ellie, she is still liable to Federal prosecution on the basis of whatever information is

gathered from this Grand Jury Hearing.  
"Free Student Movement" clubs such as Progressive Labor, have flooded City College with reams of publicity (much of it unregistered) excoriating Dr. Gallagher for political cowardice, demanding Goldstein's release, and advocating immediate American disengagement from South Viet Nam. Relatively right-wing groups such as young Democrats and Young Conservatives have carried on publicity campaigns against these groups and their motives. On at least one occasion at a Student Council meeting President Zippert has condemned the Young Democrats as "Red-Baiters."

On November 18, Dr. Gallagher entered the fray in full force and charged after an impassioned speech decrying "eristic controversy" that these student protesters would destroy this University to gain their ends."

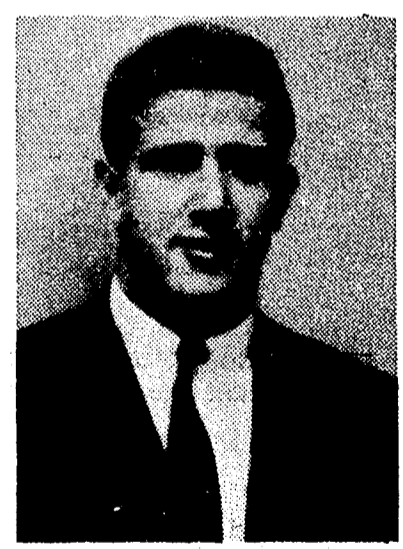
## Statistics Indicate New Trends

Employment statistics for last term's graduates have just been released by the Placement Office. These figures indicate some new trends in industrial hiring and salaries.

According to Mr. Charles K. Meyer, assistant Placement director, Aerospace is hiring less engineers than in previous years and private industry is hiring more than ever. The increase in employment in private industry is due to recent corporate tax cuts. The hiring situation of engineers, on the whole, is holding steady despite defense department cut-backs.

Civil Engineers are accepting more jobs with small private consulting firms and their salaries range from \$480 monthly to \$650 according to graduating averages. Average salaries of Civil Engineers have remained comparatively stable although there is a decrease in the top and bottom wage.

A comparison of this term's figures with those released last



MR. CHARLES MEYER

year shows a rise in average salaries in the entire engineering group.

June 1964 Employment Statistics				
Degrees	No.	Average Monthly Salary	High	Low
Chem E	54	600	665	520
CE	30	598	640	540
EE	151	612	700	542
ME	75	604	672	540
January 1965 Employment Statistics				
Chem E	10	641	700	610
CE	13	580	650	435
EE	44	632	745	576
ME	20	621	700	583

— Altman

**NOTICE TO STUDENTS**  
Those students interested in the College's work-study program may make an appointment to consult with Mr. Ernest Schnaebelle of the City College Placement Office, 423 Finley.

## Weitzman Announces Candidacy

Carl Weitzman, Councilman '65, today announced that he will seek the student body presidency. Weitzman, a senior, will run in opposition to Zippert's "off-campus" policies. Weitzman's basic criticism of the Zippert Administration has been its "exhibitionist concern with problems on other continents, and its demonstrated impotence to perform the services for this campus."

Other possible candidates, prominently mentioned are: John Zippert, incumbent President, Joel Glassman, Councilman and a Zippert "supporter," and Treasurer, Marty Kauffman. Marty is expected to announce his candidacy shortly.

## Rosenberg Asks Funds

Dr. Gustave G. Rosenberg, chairman of the Board of Higher Education, and Dr. Albert H. Bowker, chancellor of The City University of New York, appeared before the Board of Estimate and the Finance Committee of the City Council last Tuesday to ask for the adoption of the 1965-66 Executive Capital Budget as presented by Mayor Robert F. Wagner. The budget provides \$28,206,195 comprised of \$26,841,362 in city funds, \$1,334,000 in state funds, and \$30,833 in private funds.

The long range building program of the City University is geared to the Master Plan which has been adopted. The plan schedules the colleges to enroll about 54,000 day session students in the senior colleges in 1968 and 17,500 in the community colleges. The buildings required to accomplish this goal will cost an estimated \$240,000,000 some of which is already allocated.

Dr. Bowker said in his presentation, "The sums provided in the budget are a needed step toward the minimum facilities that will permit our professional and administrative staffs to perform the important functions that New York City and its university rightly demand of them."

Dr. Rosenberg said: "We now have 131,000 students in ten colleges. An eleventh college, the College of Police Science, will be open in September. But impressive as the progress of recent

(Continued on Page 2)

## Council Seeks To Bar Pickets

By RICHARD ROSENFELD

A protest seeking to bar all picketing within City College buildings has been lodged with the Administration by Tech Council.

In a letter addressed to President Gallagher the Tech Council sub-committee referred to the picketing incident which took place on Wednesday, February 24. At that time a group from the Youth Against War and Facism staged a protest in the corridor outside the Placement office in Finley Center. The group was protesting the presence of the Central Intelligence Agency which had interviewers to recruit students. At the same time a counter picket was staged by the Young Conservative Club.

The resulting noise and confusion caused many of the interviewers from other firms to cut short their stays.

The Tech Council letter stresses that incidents of this type infringe on the academic freedom of students not involved with either group. It asks that in the future the Administration should instruct Burns Guards that no

picketing of any sort be allowed within buildings on campus, but only out of doors.

Tech Council has received the unofficial backing of officials from the College Placement Office who were greatly disturbed about the effect of such incidents on representatives from industry.

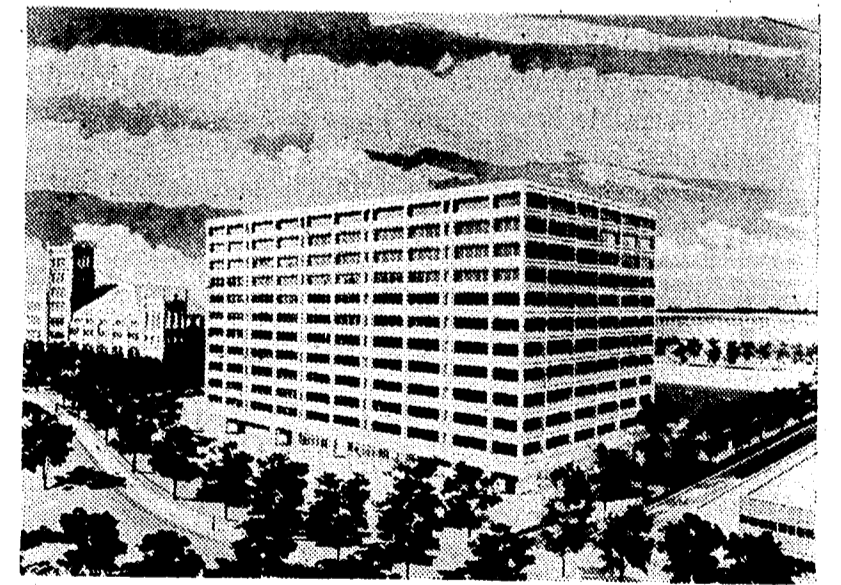
Council hopes by its action to get a clear statement on rules concerning picketing from President Gallagher.

The Tech Council sub-committee is headed by Robert Tutelman, past president of Pi Tau Sigma, the Mechanical Engineering honor society. The members are Clifford Tesser, Tech Council President, Rene Olivaris, President of Pi Tau Sigma, Eugene Weitz, President of IEEE, Richard Daniels, past President of Tau Beta Pi the National Engineering honor society, and Gerry Gelbwachs, President of Eta Kappa Nu the Electrical Engineering honor society.

## Science Complex: Glass Mammoth

By ARTHUR LANDSMAN  
News Analysis

Efficient planning for school expansion becomes more essential everyday, and may be defined in terms of flexibility, expandability, adaptability and convertability. These terms point up one prime factor, that a school must above all adequately serve the teaching needs of the present and future.



Architect's version of City College's projected science and physical education building.

Critical systems to judge architecture go back to Vitruvius, whose comment that architecture is an amalgamation of Function, construction method and esthetic pleasure, or in Sir Henry Wooten's terms, commodity, firmness and delight. These systems have served as valid criteria in the past, and have not yet been supplanted by better evaluative methods. With this in mind we may now

attempt an analysis of the first building to be constructed as part of the "Master Plan" for City College, the Science and Physical Education building.

Man is not a being unto himself, but is rather well integrated into his society, surroundings and environment. This being true it is analogous that a building lacking the mobility of humans is

(Continued on Page 4)



# TECH NEWS

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222

## The Good Old Days

By LEONARD SOLOMON

How many times have you been in a room in Shepard Hall muttering to yourself, "I wish it wasn't so hot," or "Why is it so cold?" You would think that this problem could be solved by installing good central ventilation. The fact is, Shepard Hall once did have this.

In the year 1906, Shepard Hall was completed with a central heating and central ventilation system. Actually, the system was quite simple. The main heating element, of course, was the common radiator. The second source of heat was in the ventilation unit. If you look around the walls in Shepard Hall you can see the grill work that led to the ventilation ducts. These ducts were connected to a pump that constantly circulated the air. There was also a system of coils that heated the moving air. There could never be an accumulation of smoke, say from cigarettes, because the air was constantly being filtered. If the air became too warm, the temperature could be lowered by individual thermostats in each room.

The next logical question is, "What happened to this Shangri-La?" This system was discontinued more than twenty years ago due to maintenance problems. Students, in regulating the heat, would break the thermostats. Checking the broken thermostats, maintenance men would find paperclips, sticks, and other oddities enmeshed in the mechanism. It is unfortunate that the students could not appreciate this convenience, and unfortunate that the college has, in many cases moved backward instead of forward.

## Budget . . .

(Continued from Page 1)

years has been, we have a difficult task before us.

This year the city took a giant step forward in construction at its colleges by providing a capital budget of \$45,000,000 — the largest in the history of the colleges of the City University. Almost all the projects we requested have been granted for the coming year or scheduled by the City Planning Commission for the next five-year period.

The 1965-66 Capital Budget now recommended by Mayor Wagner is about \$28.2 million. The city's share is about \$26.0 million. The state will provide about \$1.3 million as its share of community college construction.

This is a good budget. It takes an orderly and decisive bite out of our total program. But clearly we will have to spend additional sums in the following two years if we are to reach our goal. We feel a little like Marathon runners grasping a new torch every time around the calendar."

## GROW WITH A GROWING COMPANY

Brooklyn Union Gas, one of the leading companies in the dynamic gas industry, offers outstanding potential for individual growth. Our 35-week formal training program is designed to start new graduates on a career with our company.

If you will be a 1965 graduate in Engineering (civil, industrial, mechanical, electrical, chemical), Accounting, Mathematics or Business Administration, ask your Placement Office for a copy of "Launch Your Career with Brooklyn Union", and register for our campus interview date on March 10.

Good starting salaries, excellent working atmosphere in the great City of New York, many benefits including tuition aid up to 100 percent for students interested in furthering their education.



**THE BROOKLYN UNION GAS COMPANY**

195 Montague Street, Brooklyn, N. Y. 11201

## Dear Governor

The passage of the Free Tuition mandate yesterday by one House of the State Legislature, and its assured passage by the other, symbolizes the first milestone for Free Tuition in four years. Now begins a campaign to discourage Governor Rockefeller from vetoing the bill. If your parents care at all about keeping City College free, they should be advised to bombard the Governor's Mansion with tactful appeals to his good (political?) sense.

The address is: Governor Nelson A. Rockefeller  
Capitol Hill, Albany

## Problem: Pickets

With regard to the protest being lodged by Tech Council we find that we are wholly in accord with the sentiments voiced in their letter to President Gallagher.

Academic freedom is a multi-directional concept and vigilance must be maintained that in giving freedom to one group another does not suffer.

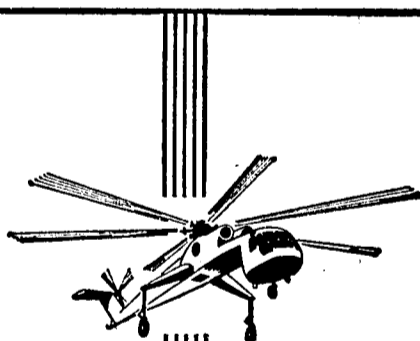
Indoor picketing at City College can do nothing but interfere with those attempting to conduct the various aspects of college life. In the instance last week, students seeking job interviews with engineering firms became the innocent victims of inconsiderate pickets. Ostensibly out to protest against the CIA, the picketing group forced interviewers from other industrial organizations to short change fellow students seeking employment.

We firmly believe in the right of any group to voice its opinion on campus. However we feel that when such action transcends sensible bounds and threatens the well being of others it must be stopped. We urge President Gallagher to follow the suggestion of Tech Council and forbid future picketing within City College buildings.

## Faculty On Asia

While leafing through the pages of the Sunday New York Times we came upon an ad sponsored by the University Committee to Protest the War in Vietnam. The ad took the form of an open letter to President Johnson and was signed and paid for by staff members from twenty colleges and universities in the New York - New Jersey area. Included in this list were the names of 42 teachers from City College.

We must express our agreement with the position taken by the University Committee, which is that the United States should seek on to end the war in Vietnam and the withdrawal of American troops, and our delight that faculty members from City College have taken the initiative to speak out against the government's policies. We only wish that the list of names could have been longer. It is the duty of educators, who are the intellectual leaders of our society, to make known their views on important issues, and particularly in times of crisis.



## Sikorsky Aircraft

ENGINEERING REPRESENTATIVES WILL BE ON CAMPUS  
TO GIVE SENIORS AND GRADUATES COMPLETE DETAILS ON

### ENGINEERING OPPORTUNITIES

WITH THE PIONEER AND LEADING MANUFACTURER  
OF VTOL AIRCRAFT

See your College Placement Office now  
for an appointment.

Monday, March 15

SIKORSKY AIRCRAFT, Stratford, Conn. ■ Division of United Aircraft Corp. ■ An Equal Opportunity Employer

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## Club Notes

### IEEE

IEEE will present representa-  
es of Bendix Corporation,  
M., and American Electric  
wer discussing job placement,  
Thursday 12:15 in S306. All are  
ited.

### MECHANICAL ENGINEERS

If you are a senior in the top  
of your class or a junior in  
the top 1/5 of your class you are  
eligible for membership in this  
honorary society. It gives the out-  
standing student an opportunity  
to serve school and community.  
The first meeting is today,  
March 3, at 5:15 p.m. in F440.

### HILLEL

First program in a series of  
lectures on "The Religious  
Thought Of Four Major Jewish  
Thinkers." Dr. Michael Wyscho-  
grad, Assistant Professor of Philo-  
C.C.N.Y. will speak on Martin  
Buber — the Pioneer in Exist-  
entialist Philosophy at Hillel  
House, 475 W. 140th Street at  
12:15 p.m.

### GOVERNMENT AND LAW SOCIETY

Government and Law Society  
presents: Dean Gerald A. Bilbride  
Assistant Dean of Brooklyn Law  
School Speaking on the Study of  
Law at Brooklyn Law College,  
Thursday, March 4, 12:30, Wag-  
ner 212.

## AIAA

The American Institute of  
Aeronautics and Astronautics  
(AIAA) is designed to appeal to  
students of different academic  
levels in a majority of the engi-  
neering disciplines (A knowledge  
of gas dynamics, for instance, is  
not necessary to enjoy the benefits  
offered by the Club.)

The student branch serves, pri-  
marily, as a liason between the  
student and industry. This term  
the Grumman Aircraft Engine-  
ring Corporation will send three  
speakers to address the group on  
a variety of subjects including the  
Apollo Lunar Landing Mission.  
A film series ranging the spec-  
trum of Engineering disciplines  
will also be shown during the  
semester.

A program is now in operation  
whereby upperclassmen apply  
their talents to personal projects.

The program is directed by Pro-  
fessor Menkes (ME Department)  
and is financed by the NSF. Stu-  
dents needn't necessarily be mem-  
bers of AIAA to participate in  
this program.)

The organization is a complete  
one in that it attempts to provide  
an activity or an interest to each  
of its members. It is in the best  
interests of students, lower class-  
men in particular, to come down  
and find out firsthand what the  
AIAA can do for them.

Schedule of AIAA primary  
events Spring Term 1965:

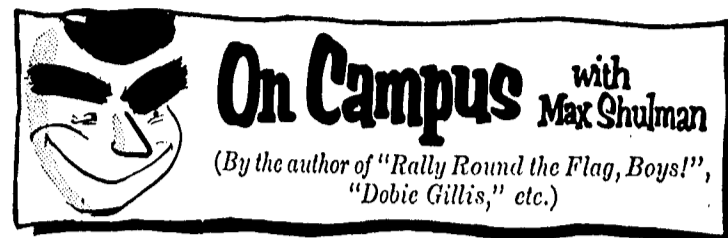
March 4—Speaker Mr. K. Leib,  
subject Lasers.

March 18 — Movie, 'Approach-  
ing the Speed of Sound.'

April 8 — Speaker Dr. C. P.  
Seitz, subject The Design of  
Training Equipment.

May 6 — Speaker Mr. J. M.  
Cook, subject The Apollo Lunar  
Landing Mission.

May 13 — Movie, Atoms for  
Space.



## ONCE MORE UNTO THE BREACH

Today I begin my eleventh year of writing this column in your  
campus newspaper.

I wasn't sure I'd be coming back this year. After a decade of  
doing this column, I had retreated to my country seat, tired but  
happy, to enjoy a nice long rest. But last night as I sat on my  
verandah, peaceful and serene, humming the largo from *A Long  
Day's Night* and warming my dog, a stranger suddenly appeared  
before me.

He was a tall, clean-limbed man, crinkly-eyed and crooked-  
grinned, stalwart and virile. "How do you do," he said. "My  
name is Stalwart Virile and I am with the Personna Stainless  
Steel Razor Blade people."

"Enchanted," I said. "Take off your homburg and sit down."  
I clapped my hands sharply. "Norman!" I called. "Another chair  
for Mr. Virile!"



"Another chair for Mr. Virile!"

Obediently my dog trotted away and returned directly with a  
fanback chair of Malayan rattan. He is the smartest dog in our  
block.

"I suppose you're wondering why I am here," said Mr. Virile,  
seating himself.

"Well, sir," I replied, my old eyes twinkling roguishly, "I'll  
wager you didn't come to read my meter."

You can imagine how we howled at that one!

"That's a doozy!" cried Mr. Virile, finally catching his breath.

"I must remember to tell it to Alice when I get home."

"Your wife?" I said.

"My father," he said.

"Oh," I said.

"But enough of wit and humor," he said. "Let us get down to  
business. How would you like to write a campus column for  
Personna Stainless Steel Razor Blades?"

"For money?" I said.

"Yes," he said.

"My hand, sir," I said and clasped his. Warmly he returned  
the pressure, and soft smiles played upon our lips, and our eyes  
were moist with the hint of tears, and we were silent, not trust-  
ing ourselves to speak.

"What will you write about in your campus column?" asked  
Mr. Virile when he was able to talk again.

"I will take up the burning issues that vex the American un-  
dergraduate!" I cried, bounding to my feet. "I will explore, with-  
out fear or favor, such explosive questions as 'Are roommates  
sinary?' and 'Should proctors be given a saliva test?' and  
'Should capital punishment for pledges be abolished?' and 'Can  
a student of 19 find happiness with an economics professor of 80?'"

"And will you also say a pleasant word from time to time about  
Personna Stainless Steel Razor Blades?" asked Mr. Virile.

"Sir," I said simply, "what other kind of word except pleasant  
could I possibly say about Personna Blades, which give me more  
luxury shaves than Beep-Beep or any other blade I might name?"

"Another of my products is Burma Shave," said Mr. Virile.  
"Can you find it in your heart to mention Burma Shave occa-  
sionally?"

"But of course!" I declared. "For is not Burma Shave the  
whisker-wiltingest lather in the land?"

"Yes," he admitted.

And then he shook my hand again and smiled bravely and  
was gone—a tall silhouette moving erectly into the setting sun.  
"Farewell, good tonsorialist!" I cried after him. "Aloha!"

And turned with a will to my typewriter.

© 1965, Max Shulman

\* \* \*

The makers of Personna® Blades and Burma Shave® are  
happy to bring you another season of Max Shulman's  
uncensored, uninhibited, and unpredictable column.  
We think you'll be happy too when you try our products.

## The Naval Oceanographic Office needs engineers as well as oceanographers for its long-range research program

The sharply-increased emphasis on finding ways of exploiting "inner space"  
has opened new and broadened opportunities involving the design, develop-  
ment, testing and evaluation of electronic, mechanical, electromechanical,  
and optical instruments and systems. Electronic engineers, mechanical  
engineers and engineering physicists carry out challenging assignments in  
modern laboratories, in managing systems development with industry, or con-  
ducting field experiments in ships, submarines and aircraft. So, when we  
speak of a long-range technical and scientific research/program, we speak of  
a massive effort over the course of years in these important areas:

1/ **General Oceanography**—the physical, biological, chemical, and geo-  
logical makeup of the oceans and ocean floor. Not only does this involve  
the study of waves, sea ice, tides and currents . . . but also the propagation  
of sound and sonar in the sea . . . the analysis of the sediments on the  
bottom as they might apply to undersea warfare . . . and biological reports  
on marine vegetation, animal life, and organisms with special regard to  
fouling and boring.

2/ **Geophysical & Geodetic Surveys**—on land and at sea. Analyses and  
measurements of gravity and magnetic fields to provide accurate positional  
data for the Navy (sites for missile range stations, air and marine naviga-  
tion aids, etc.)

3/ **Bathymetry**—use of new precision electronic depth and location tech-  
niques to accurately portray ocean floor. Survey ships the world over are  
probing the ocean depths in the deepest regions of the world to improve  
nautical charts, and enlarge scientific understanding of heretofore unknown  
environmental elements.

4/ **Oceanographic Instrumentation**—involving the latest principles of  
electronics, optics, and nucleonics, EE's and ME's initiate and carry out  
contractual systems programs with industry, and perform hydrodynamic  
studies leading to the design of components for instrumentation.

5/ **Information Processing**—through the use of computer systems. Pro-  
gramming of statistical, scientific and technical data such as Loran naviga-  
tional tables and survey coordinates . . . sea water densities . . . underwater  
sound velocities . . . dynamic depth and grid transformations.

6/ **Cartography**—including modern portrayals of charts, reports, and  
diagrams required for navigation by the Navy and Merchant Marine. Design-  
ing charts showing depths, contours of the ocean floor, channels and shoals,  
coastal topography, etc., with the aid of aerial photography and photogram-  
metric equipment.

From the foregoing it should be obvious that oceanographic research today  
and in the future offers a new horizon of opportunity for talents not ordinarily  
thought of as related. Among those talents needed immediately by the  
Oceanographic Office are Mathematicians, Physicists, Chemists, Meteorol-  
ogists, Cartographers, Geophysicists . . . and Engineers of all kinds (Civil,  
Electronic, Mechanical and General). Openings exist at all levels, from recent  
graduates to recognized authorities in the \$8945 to \$13,445 range, with the  
full benefits of Career Civil Service.

You must have your degree, and a  
U.S. Citizenship. Other than these  
"musts", you should be able to  
offer an applied research capability  
in your specialty, and a willingness  
to spend a reasonable amount of  
time on field work involving travel.

### ON-CAMPUS INTERVIEWS

Representatives from the Naval  
Oceanographic Office will be on  
campus Tues., March 9th, 1965,  
City College of New York. Con-  
tact your College Placement  
Officer to arrange an interview.

## U.S. Naval Oceanographic Office

SUITLAND, MARYLAND

(LOCATED JUST 7 MILES SOUTHEAST OF THE WHITE HOUSE)

AN EQUAL OPPORTUNITY EMPLOYER

## Mammoth . . .

(Continued from Page 1)

greater in its affects on its surroundings and in turn is more greatly affected by its environment.

The planned Science and Physical Education complex creates the impression of a great glass and concrete mammoth trying to bully its way onto the campus. It does not belong, it does not

relate to its surroundings, in scale nor in accent. The Gothic structures of City College have predominantly vertical lines with repeated pointed arches, seemingly tireless in their upward striving. The Science building has a basic horizontal emphasis giving the feeling that it is a stranger come to roost. Due to its large mass the Science building will assume the role of focal point on North Campus, the position now occupied by Shepard Hall.

Shepard serves as unifying force between the smaller Gothic structures on North Campus, the new Science building will destroy this relationship and create no new unity.

One of the main features of the new construction will be a plaza which will span Convent Ave. More than anything else this will serve to further separate the North and South Campuses by acting as an elevated buffer zone, establishing a third campus off by

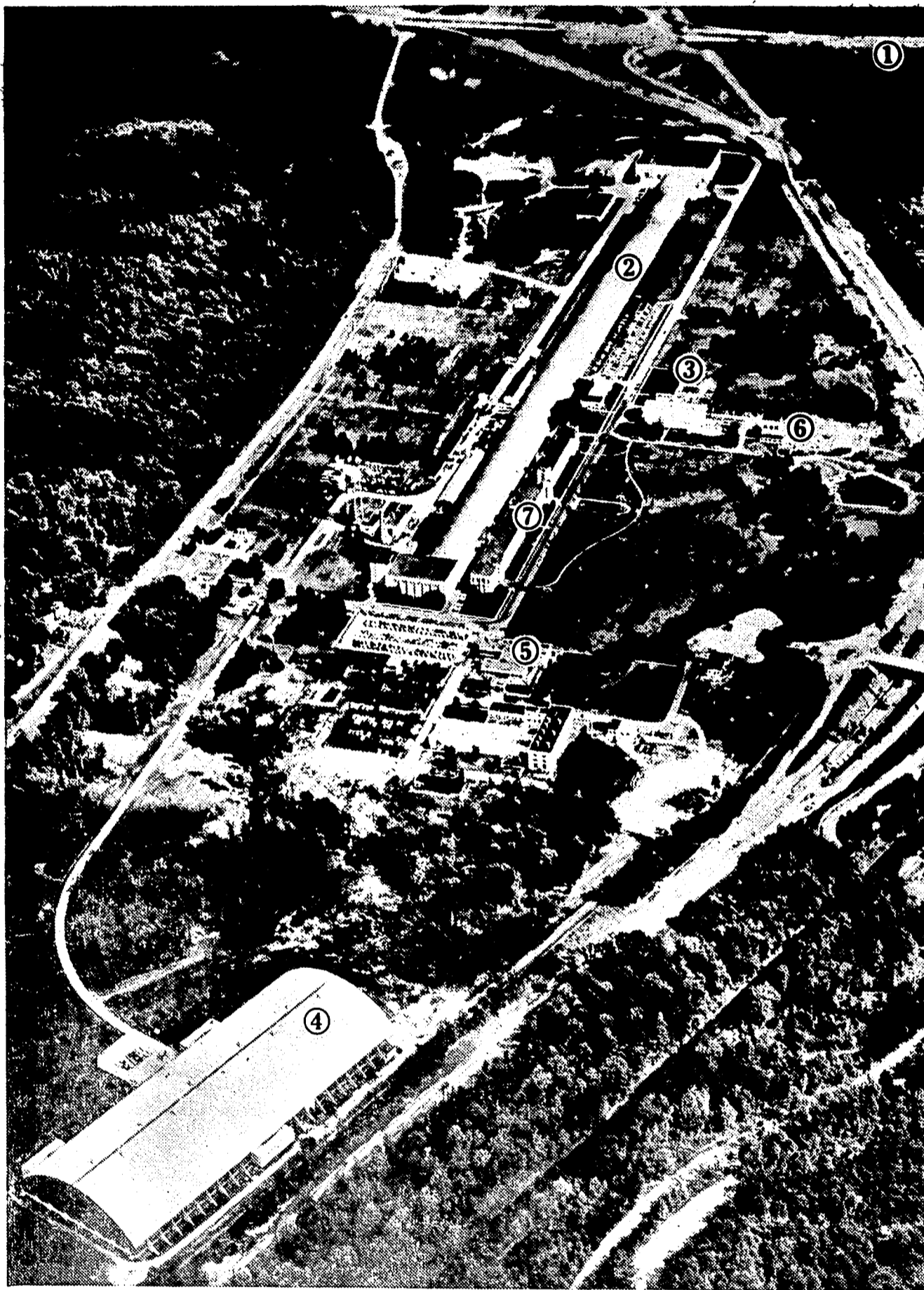
itself rather than a unifying element. A plaza requires human scale in order to fulfill its purpose, otherwise it becomes a vast open area dwarfing its users, expensive to build and functionally worthless. The huge plaza planned lacks this vital ingredient of scale.

In order to relate to its surroundings the building need not copy the pier buttresses, crockets and finials or any other portion of Shepard Hall, but its scale and

emphasis should harmonize,

The Science Building does late in its sterility to one other building on campus, the Administration Building, but it seems unlikely that any architect would set this as a goal.

As long as frugality is maintained as the only consideration in the physical expansion of City College we cannot hope for a beautiful campus. Certainly potential exists, but the possibilities are mighty.



**You are high over the Potomac River just 12 miles  
from the White House . . . and viewing 186 acres  
of extraordinary research activity**

Of course, from this height you can't see much detail, which makes the imposing expanse of the two main buildings all the more intriguing. Perhaps you can guess their functions, but it's also what you can't see (and this is summarized in the adjoining column) that makes the David Taylor Model Basin a completely unique fundamental and applied research organization — and a place you should seriously consider for your career as a professional scientist or engineer. As the Navy's advanced facility for research into submarine, surface ship, aircraft and missile design concepts, the Model Basin can offer the young graduate certain specific opportunities hard to find anywhere else.

1. Reach the \$10,000 to \$12,000 level WITHIN 4 YEARS.
2. Take graduate courses for advance degree with Navy help.
3. Gain diversified RDT & E experience with the best equipment and facilities of their kind.
4. Work on research projects of recognized national importance.
5. Attain recognized professional stature sooner, at which point a number of futures are available.

Watch for the David Taylor Model Basin interviewer when he visits your campus, or contact Mr. S. Di Maria directly for information.

**David Taylor Model Basin / U.S. Department of the Navy**  
Washington, D.C. 20007  
An Equal Opportunity Employer

① The Washington Circumferential Highway allows speedy access to best suburban communities in the District of Columbia, Maryland, and Northern Virginia.

② HYDROMECHANICS LABORATORY facilities include this High-Speed Towing Basin almost 3/5 OF A MILE LONG, 50 feet wide, and 20 feet deep. This Laboratory is concerned with speed, stability, control and seakeeping qualities of floating or submerged naval designs, and with fundamental naval hydrodynamics.

③ APPLIED MATHEMATICS LABORATORY facilities include the latest, largest computer systems, and feature the LARC, the IBM 7090, and a 1401. This is BuShips' primary computing facility, working on engineering, research logistics, and numerical methods. Work carried on here involves mathematic simulation of the life cycle of nuclear reactors; automatic calculation of ship lines; and applications of computers to management problems.

④ In this giant new Maneuvering and Seakeeping facility, both fixed and free-running models may be tested under any sea-state condition. You may also work with the High-Speed Phenomena Division at Langley Field, Virginia.

⑤ AERODYNAMICS LABORATORY facilities include several wind tunnels—ranging from subsonic through hypersonic at Mach 10—which are used to determine and improve static stability, control and heat transfer characteristics of helicopters, VTOL's, supersonic aircraft, missiles, etc. Air flow studies also involve bomb design, bridge structures, aircraft turbulence when approaching carriers, and other government and private problems.

⑥ The unique STRUCTURAL MECHANICS LABORATORY facilities at Carderock are the new pressure tanks which permit the study, by means of large structural models, of the hull structures for deep diving submarines and deep sea research vehicles to reach all ocean depths. Additional Structural Mechanics Laboratory facilities are scattered throughout the 186 acres, and include a tridimensional Static-Load Frame, a Pentagonal Test Pond, Explosion Pits, and a 600,000-Pound Universal Testing Machine. With these facilities, Laboratory scientists and engineers conduct studies aimed at improving the hull structure and increasing the resistance of the Navy's ships to enemy attack. This requires development of fundamental, theoretical approaches of load and response, and development of engineering solutions based on the increased understanding. A substantial portion of the ship protection research is carried out at the Underwater Explosions Research Division of this Laboratory located at Portsmouth, Virginia.

⑦ The ACOUSTICS AND VIBRATION LABORATORY was just established to intensify research and development of ships of improved detection capability, and reduced vibrations and underwater sound output. Fundamental and applied research in hydrodynamics, structural acoustics, mechanical vibrations, and signal processing are supplemented by conduct of acoustic and vibration trials, and development of acoustic and vibration instrumentation.

The OPERATIONS RESEARCH GROUP cannot be pinpointed as easily because it ranges over all the RDT&E activities at The Model Basin—hydrodynamics, structural mechanics, aerodynamics, and applied mathematics. Special applications today are in the fields of naval architecture, ship silencing, ship protection, and weapons effects . . . setting realistic performance goals for ships and submarines in view of probable environmental factors . . . handling special externally-generated projects that tie in with DTMB capabilities . . . and making recommendations to the Technical Director as to improving research methods and orientation.

To staff these five operating Laboratories, we are seeking college graduates with BS, MS, or PhD degrees in Aerospace, Electrical, Electronic, Mechanical or Structural Engineering; in Applied Mechanics, Mathematics, Physics, and Naval Architecture.

## INTERVIEWS

Representatives from The David Taylor Model Basin will hold On-Campus Interviews

**Tues., March 9th**

Please contact your College Placement Officer to arrange an appointment.