ANNUAL REPORT

of

GREGG M. SINCLAIR, President

UNIVERSITY OF HAWAII

JULY 1, 1953 TO JUNE 30, 1954
BOARD OF REGENTS, 1953-1954

J. GARNER ANTHONY

CLAYTON J. CHAMBERLIN, ex officio

HUNG WAI CHING

KATSUYUKI IZUMI

FRED K. LAM, SR.

JACK H. MIZUHA

RICHARD PENHALLOW

GREGG M. SINCLAIR, ex officio

PHILIP E. SPALDING, Chairman
UNIVERSITY OF HAWAII
HONOLULU 14, HAWAII

OFFICE OF THE PRESIDENT

To the Governor and the Legislature
of the Territory of Hawaii

Gentlemen:

I take pleasure in submitting to you my report as President
of the University of Hawaii for the fiscal year July 1, 1953, to
June 30, 1954, and a record of degrees, diplomas, and certifi-
cates conferred during the same period. Transmission of the
report directly to you has been authorized by the Board of Regents
of the University.

Respectfully,

[Signature]
GREGG M. SINCLAIR
Executive Officer, Board of Regents

December 1, 1954
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REPORT OF THE PRESIDENT

The people of the Territory are faced with a grave decision: Are their children and their children's children going to be offered the same college education that they themselves and their own parents were offered? The answer will be NO unless affirmative action is taken NOW.

The facts are these: 1) due to the high war-time birth rate, there is a nation-wide increase of young people of college age, and 2) the percentage of young people of college age who wish to go to college has increased.

This problem is so pressing throughout the nation that it will be made the principal topic of discussion at the 37th annual meeting of the American Council on Education in Chicago this fall. It heads the agenda as "Preparing to Meet the Rising Tide of Students." I will attend this meeting and will report any helpful suggestions which it might offer. Meantime, let me present the problem, which has been evident for a long time to us in education. The decision rests with the community.

TIME FOR DECISION

Here are the undeniable figures on population trends as they affect college enrollments throughout the nation. Since 1854 our college population has increased thirty-five times as fast as our total population.

In 1900 only 4 per cent of those eligible attended college.

In 1954 25 per cent of those eligible attended college.

By 1970 there will be an increase of 70 per cent in our population of college age. The college enrollment increase will be between 50 and 100 per cent.

These figures apply directly to Hawaii. High birth rates during World War II have filled grade-school classrooms to capacity. Fortunately, the territorial Department of Public Instruction anticipated this population pressure and was successful in making provisions in advance to handle it. If these students are not to be denied the higher education to which they are entitled, it now becomes the University's obligation to do likewise.

The war-born wave of high school graduates will first begin to apply for admission to our freshman class in the fall of 1957. From then on they will apply in increasing numbers as shown in the following table.

<table>
<thead>
<tr>
<th>Year</th>
<th>Hawaii's Population of College Age</th>
<th>Per Cent of Increase</th>
</tr>
</thead>
<tbody>
<tr>
<td>1955</td>
<td>32,700</td>
<td>6</td>
</tr>
<tr>
<td>1960</td>
<td>34,700</td>
<td>6</td>
</tr>
<tr>
<td>1965</td>
<td>46,600</td>
<td>42</td>
</tr>
<tr>
<td>1970</td>
<td>52,500</td>
<td>61</td>
</tr>
</tbody>
</table>
It is conservatively estimated that this increase in our college-age population will increase the University's registration as follows. Our figures are minimal, not taking into account the tendency for more and more high school students to go on to college.

<table>
<thead>
<tr>
<th>BIENNIAUM</th>
<th>REGISTRATION</th>
<th>PER CENT INCREASE</th>
</tr>
</thead>
<tbody>
<tr>
<td>1955-57</td>
<td>5,000</td>
<td></td>
</tr>
<tr>
<td>1957-59</td>
<td>5,250</td>
<td>5</td>
</tr>
<tr>
<td>1959-61</td>
<td>6,000</td>
<td>20</td>
</tr>
<tr>
<td>1961-63</td>
<td>7,000</td>
<td>40</td>
</tr>
<tr>
<td>1963-65</td>
<td>7,500</td>
<td>50</td>
</tr>
<tr>
<td>1965-67</td>
<td>7,750</td>
<td>55</td>
</tr>
</tbody>
</table>

WHAT STUDENTS WILL DEMAND

At present we manage to handle an enrollment which has doubled over a period of ten years only by using the sixty-two temporary, barracks-type buildings which crowd our campus. These buildings are not only unsightly but are disproportionately expensive to maintain. They must be replaced.

Moreover, by 1957, when the enrollment will begin its inevitable rise, the University will require not only a larger instructional staff but a building for general classroom instruction; a building for classroom work in engineering, mathematics, and physics; a health and physical education building; an agricultural building; a high school for Teachers College; and a residence hall for men. We have been promised the agricultural building since 1943.

These are the increased facilities which the Board of Regents and the administration of the University are obligated to request of the Legislature on behalf of the increased number of high school students who will be knocking on the doors of the Territory's only accredited institution of higher learning.

The Territory cannot afford to side-step this obligation to its youth. Some people have suggested that the problem would be solved if an increasingly large number of our high school graduates were to apply to mainland colleges. It is my duty to point out that this is a nation-wide emergency. Other universities will be as hard pressed as our own.

It is true, of course, that we are not equipped to provide professional training in pharmacy, dentistry, medicine, and law. Such training is too expensive to be borne by a population such as ours. However, during the year the University has sponsored many educational programs at no expense whatsoever to the Territory.

HARVARD ADVANCED MANAGEMENT COURSE

During the summer of 1954 the University sponsored an Advanced Management Program for business executives. Four courses were conducted by a staff from the Harvard Graduate School of Business Administration. The six-week session was held on Punahou School campus where fifty-eight businessmen from Hawaii, the Mainland, Australia, Arabia, and the Philippines spent a six-day week studying and discussing mutual problems. The objectives of the program were outlined by
Professor Edmund P. Learned at the ceremony at which certificates were awarded for completion of the course. He stated in part:

The purpose of the Advanced Management Program is to contribute to the supply of broad-gauged executives who will assume the role of top executives and make an effective contribution to an expanding domestic and world economy by running successful and profitable businesses—men filled with the spirit of enterprise, able to analyze risks and willing to take risks, men possessed of drive to overcome obstacles, and aware of their public obligations and of the public impact of their private decisions, as well as the meaning of public policy decisions on business. Such men conduct their operations so that the public regards them as good corporate citizens, their customers reward them with their patronage, their employees obtain profitable and satisfying employment, and their stockholders get a fair return for the risks they take and the capital they provide.

The enthusiasm with which the course was received has ensured its repetition next year. This program is conducted at no expense whatsoever to the taxpayer.

ORIENTATION OF FOREIGN STUDENTS

A second activity during the busy summer of 1954 was the Orientation Center for Foreign Students conducted by the University under the auspices of the Department of State and the Institute of International Education. The University is one of ten centers established throughout our country for foreign students about to undertake college study. The purpose of the centers is to acquaint the students with the American way of living through field trips in the community and formal classes in speech, English, government, social usages, and similar subjects.

The thirty-five students came from Thailand, Malaya, Indonesia, Viet Nam, Laos, Japan, Korea, and the Philippines. "We are the lucky ones," they stated, referring to the fact that many students had gone directly from their countries to mainland universities without benefit of the kind of program which is offered here in the tolerant atmosphere of Hawaii, among persons of like racial origin. This nationally and internationally important program was offered with the co-operation of far-sighted citizens of the community with no expense to local taxpayers.

RACE RELATIONS CONFERENCE

Also, during the summer of 1954 a Conference on Race Relations in World Perspective was held amid the relatively detached and tolerant atmosphere of our campus. This four-week session was conducted jointly by the University of Hawaii, the University of California, and the University of Chicago. It was financed by funds made available by the Ford Foundation and the McInerny Foundation.

Forty experts in race relations—sociologists, social anthropologists, social psychologists, political scientists, historians, economists—came from every corner of the world to review the state of scientific knowledge about race relations, to share such knowledge, and to formulate a framework for subsequent studies.

Sessions open to the public were well attended, filling our lecture hall to capacity. They included the following panels of conference specialists.
Fifty-eight executives take time off from mainland, foreign, and local businesses to discuss mutual problems at an intensive six-week Advanced Management Course conducted by staff members of the Harvard Graduate School of Business Administration under the auspices of the University.

Members of the conference in Race Relations in World Perspective discuss their countries' problems during a break in the intensive four-week session. Left to right they are: Albert H. Hourani, historian from Oxford, and P. Kodanda Rao, author from India.
Early in 1954 the Governor of the Territory joined with the Foreign Operations Administration in the establishment of an International Cooperation Center to orient Asian officials coming to our country and our officials going to theirs. Much of this work was done previously by College of Agriculture personnel, and one of their officers was detailed to administer this important work. As part of the program a coffee school is to be held at Kona. Representatives of Cuba, Puerto Rico, and
South and Central America will attend. This program is conducted without expense to the University.

OTHER PUBLIC EVENTS

"The New Administration and Its Problems" was the general topic of the 1953 Summer Session Lecture Series. The lecturers, all distinguished visiting faculty members, spoke on the following topics:

June 30  EISENHOWER'S FAR EASTERN POLICY

Graham H. Stuart
Professor of American Foreign Relations
School of Advanced Studies
Johns Hopkins University

July 7  EISENHOWER'S LOYAL OPPOSITION

Harold W. Bradley
Dean of the Claremont Graduate School
Claremont, California

July 14  SANE CITIZENSHIP IN A TROUBLED WORLD

John W. Dodds
Professor of English and Director
of Special Programs in Humanities
Stanford University

July 21  UNITY OF THE REPUBLICAN PARTY

Peter H. Odlegard
Professor of Political Science and Chairman
of the Department of Political Science
University of California

July 28  CAPITALISM'S ANSWER TO COMMUNISM

Louis M. Hacker
Dean of the School of General Studies
Columbia University

During the academic year, lecturers from the American Universities Field Staff and resident faculty members appeared in a series of public lectures entitled "Political Patterns Today."

The American Universities Field Staff, of which the University of Hawaii is one of the nine contributing members, sends scholars of outstanding background and scholarly achievement to various trouble spots in the world. After a year or more in the field, studying political, social, and cultural aspects of the life there, they return to give first-hand reports on the campuses of the member institutions.

This organization, which is only four years old, furnishes a distinctive approach to the problem of enlarging American understanding of the contemporary world.

The lecturers and their topics for the 1953-54 University Lectures were:

November 12  BLACK AFRICA IN REVOLT

Edwin S. Munger
American Universities Field Staff
December 10  **POLITICAL UPHEAVAL IN INDONESIA**
Boyd Compton
American Universities Field Staff

January 14  **PHILIPPINE ELECTIONS: THEIR SIGNIFICANCE**
Albert Ravenholt
American Universities Field Staff

February 11  **AMERICANS AS EUROPEANS SEE THEM**
Thomas D. Murphy
Associate Professor of History
University of Hawaii

March 11  **CRISIS IN IRAN**
E. A. Bayne
American Universities Field Staff

April 8  **SOCIALISM IN SCANDINAVIA**
Allan F. Saunders
Professor of Government
Chairman, Department of Government
University of Hawaii

Special occasions throughout the academic year were observed on the University campus by the following convocation programs:

December 10  **STATEHOOD FOR HAWAII**
Honorable Joseph R. Farrington
Delegate to Congress
(Phi Kappa Phi Awards Program)

February 16  **"MAN'S RIGHT TO KNOWLEDGE AND THE FREE USE THEREOF"**
Arthur Hays Sulzberger
Publisher, New York *Times*, and Chairman,
Columbia University Bicentennial Celebration
(Charter Day)

March 1  **RELIGIOUS EMPHASIS WEEK**

April 5  **WORLD STUDENT SERVICE FUND**

May 20  **STUDENT AWARDS**

June 16  **MEETING THE UNEXPECTED**
Alan Gregg
Vice-president, The Rockefeller Foundation
(Commencement Day)

**GIFTS AND GRANTS**

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<tr>
<th>DONOR</th>
<th>PURPOSE</th>
<th>AMOUNT</th>
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<tr>
<td>Kona Coffee Growers Association</td>
<td>E. Fukunaga's trip to mainland</td>
<td>$559.55</td>
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<tr>
<td>Samuel N. &amp; Mary Castle Foundation</td>
<td>Painting of Castle Memorial Hall</td>
<td>$1,000.00</td>
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<tr>
<td>Frear Eleemosynary Trust</td>
<td>FM Radio Station</td>
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<tr>
<td>G. N. Wilcox General Trust</td>
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<tr>
<td>McNerny Foundation</td>
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<td>$400.00</td>
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11
<table>
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<th>Organization</th>
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<td>ASUH</td>
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<tr>
<td>Alumni Association</td>
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<tr>
<td>Various</td>
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<td>406.85</td>
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<td>Dr. Harold L. Lyon</td>
<td>Upkeep of Manoa Arboretum</td>
<td>3,500.00</td>
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<tr>
<td>University Preschool PTA</td>
<td>Purchase of preschool equipment</td>
<td>165.00</td>
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<td>Henry Inn</td>
<td>Purchase of library books</td>
<td>163.75</td>
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<td>Gerald Wade</td>
<td>Same as above</td>
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<tr>
<td>McInerny Foundation</td>
<td>Training of apprentice for Press work</td>
<td>2,000.00</td>
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<tr>
<td>Mrs. Marjory Halford</td>
<td>Publication of Nine Doctors and God</td>
<td>500.00</td>
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<td>Juliette M. Atherton Trust</td>
<td>Same as above</td>
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<tr>
<td>F. C. Atherton Trust</td>
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<tr>
<td>McInerny Foundation</td>
<td>Henry Bess's trip to Manila</td>
<td>1,000.00</td>
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<td>Lewers &amp; Cooke, Ltd.</td>
<td>Same as above</td>
<td>100.00</td>
</tr>
<tr>
<td>Tropical Hardwoods Company</td>
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<td>100.00</td>
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<tr>
<td>American Factors, Ltd.</td>
<td>Same as above</td>
<td>200.00</td>
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<tr>
<td>Walter F. Dillingham</td>
<td>Frear Hall plaque</td>
<td>500.00</td>
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<td>Lucille Hodgins Estate</td>
<td>Toward Frear Hall</td>
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<td>Sugar Research Foundation</td>
<td>Poultry research</td>
<td>4,000.00</td>
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<td>Sugar Research Foundation</td>
<td>Morton Rosenberg's trip to Edinburgh</td>
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<td>Research Corporation</td>
<td>Research on strychnine</td>
<td>2,211.00</td>
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<td>Research Corporation</td>
<td>Research in chemistry</td>
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<td>Hawaiian Electric Company</td>
<td>Advanced Management Program</td>
<td>2,000.00</td>
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<td>Hawaiian Telephone Company</td>
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<td>2,000.00</td>
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<tr>
<td>Oahu Railway &amp; Land Company</td>
<td>Same as above</td>
<td>2,000.00</td>
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<tr>
<td>Castle &amp; Cooke, Ltd.</td>
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</tr>
<tr>
<td>Alexander &amp; Baldwin, Ltd.</td>
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<td>2,000.00</td>
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<tr>
<td>Rockefeller Foundation</td>
<td>Equipment and supplies for Marine Biology</td>
<td>2,500.00</td>
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<tr>
<td>Edwin W. Pauley</td>
<td>Conversion of buildings on Coconut Island</td>
<td>5,000.00</td>
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<tr>
<td>Beta Sigma Phi</td>
<td>Equipment for Speech Department</td>
<td>110.00</td>
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<td>Xi Delta Chapter, Beta Sigma Phi</td>
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<td>40.00</td>
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<td>Honolulu City Council, Beta Sigma Phi</td>
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<tr>
<td>Alpha Chapter, Beta Sigma Phi</td>
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<td>Zeta Chapter, Beta Sigma Phi</td>
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<tr>
<td>ASUH</td>
<td>Carnegie Music Library</td>
<td>250.00</td>
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<tr>
<td>Hemenway Hall BOG</td>
<td>Carnegie Music Library</td>
<td>250.00</td>
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<tr>
<td>Philip E. Spalding</td>
<td>Installation of lights in Administration Bldg.</td>
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<tr>
<td>Various</td>
<td>Legislative Reference Bureau pamphlets</td>
<td>12.40</td>
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<td>McInerny Foundation</td>
<td>Participation in American Universities</td>
<td></td>
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<tr>
<td></td>
<td>Field Staff program for 1953–54</td>
<td>1,500.00</td>
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<td>Samuel N. &amp; Mary Castle Foundation</td>
<td>Same as above</td>
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<td>Juliette M. Atherton Trust</td>
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<td>1,000.00</td>
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<td>Same as above</td>
<td>3,500.00</td>
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<tr>
<td>McInerny Foundation</td>
<td>Gustav Ecke's salary for 1953–54</td>
<td>7,368.00</td>
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<tr>
<td>McInerny Foundation</td>
<td>Gustav Ecke's salary for 1954–55</td>
<td>7,368.00</td>
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<tr>
<td>Edward W. Hazen Foundation</td>
<td>Toward publication of Philosophy East and West</td>
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<tr>
<td>Ford Foundation</td>
<td>Partial financing of Race Relations Conference</td>
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<td>Tuskegee Institute</td>
<td>Toward Race Relations Conference</td>
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<tr>
<td>Carnegie Corporation of New York</td>
<td>Program of Pacific Studies</td>
<td>20,000.00</td>
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<td>Juliette M. Atherton Trust</td>
<td>Human Relations Area Files</td>
<td>2,500.00</td>
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<tr>
<td>McInerny Foundation</td>
<td>Harold St. John's trip to Paris</td>
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</tr>
<tr>
<td>Janet B. Faye</td>
<td>Toward Das Fund</td>
<td>50.00</td>
</tr>
</tbody>
</table>
There were 120 scholarships, twenty-two more than during the previous year—an increase chiefly accountable to the establishment of the Hung Wo Ching scholarship and the doubling of those provided by the Territory in view of the raise in tuition. Of the 221 applications received, 101 were rejected. The 120 scholarships available consisted of forty-two territorial scholarships, nineteen regular tuition ones, and fifty-nine named scholarships.

New scholarships were: seven totaling $1,000 provided by Hung Wo Ching for worthy students needing financial help to continue their University work; three ASUH scholarships of $500 each awarded to stimulate participation in Associated Student activities; and two scholarships of $55 each provided by the University Music Club to encourage music activities on the campus and in the community.

The Li Foundation scholarship was again awarded. It provides a $5,000 fellowship and transportation for a University student to take graduate study.

Speech Department Chairman Elizabeth B. Carr assists foreign students to perfect their pronunciation.

James S. Miyake, counselor, advises two of the fifty-eight foreign students who come from eleven countries around the world.

<table>
<thead>
<tr>
<th>Hawaiian Sugar Planters' Association</th>
<th>Traveling expenses of 4-H Club members representing Hawaii at the National 4-H Club Camp</th>
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<tbody>
<tr>
<td>McInerny Foundation</td>
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<tr>
<td>Samuel N. &amp; Mary Castle Foundation</td>
<td>Same as above</td>
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<tr>
<td>Pacific Chemical &amp; Fertilizer Co.</td>
<td>Same as above</td>
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<td>Hawaiian Electric Company</td>
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<td>Bishop National Bank</td>
<td>4-H Club contest awards</td>
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<td>Same as above</td>
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</table>

SCHOLARSHIPS
RESEARCH

Last year I listed some 126 non-agricultural research projects. This year there are so many new activities to report that I am selecting from our many research projects only those which I think have popular appeal, particularly those which apply to Hawaii. They are:

1. Excavations to Determine Date of First Settlement of Hawaii and Nature of Culture
   Kenneth P. Emory and W. J. Bonk

2. Relocation of Bikini Marshallese
   Leonard E. Mason

3. Drift Voyages and Population Movements in the Pacific
   Saul H. Riesenber

4. Portraits of Kamehameha the Great
   Jean Charlot

5. Wood Sculpture of Pre-European Hawaii
   J. Halley Cox

6. Chinese Painting
   Gustav E. W. Ecke

7. Art and Chemistry
   Gustav E. W. Ecke, Leonora N. Bilger, and Claude F. Horan

8. Use of Local Materials in Pottery Making
   Claude F. Horan

9. Use of Local Fibers in Weaving
   Hester A. Robinson

10. Hawaiian-English Dictionary
    Samuel H. Elbert

11. Introduction to Japanese
    Norito Fujioka

12. Translation of the Poems of Kotomichi
    Yukuo Uyehara and Marjorie Sinclair

13. Effects of Low-grade Cane Sugar and B-grade Molasses on Intestinal Microflora of Hens
    O. A. Bushnell, Ralph S. Wiseman, and Morton M. Rosenberg

    Edward J. Britten

15. Hawaiian and Polynesian Plants
    Harold St. John

16. Influence of Enzymes on Hormones
    Leonora N. Bilger

17. Amino Acids in Tuna
    Harry Zeitlin

18. Economic Development Through Irrigation at Waimea, Hawaii
    Donald W. Bell

19. Tax Revision in Hawaii
    Robert M. Kamins

20. History of Labor in Hawaii
    Edwin C. Pendleton

21. Hawaiian Country
    A. Grove Day

22. Annotated Bibliography of Hawaiian Fiction
    Carleton Green

23. Charles Gordon Hopkins, Editor of the Polynesian
    Alfons L. Korn
24. Unpublished Letters of Lafcadio Hearn  
Daniel Stempel

25. Teaching French in Mainland Universities  
Dorothy B. Aspinwall

26. Translation of Chapter on Hawaii in Louis de Freycient's *Autour du Monde*  
Ella L. Embree

27. Government in Hawaii  
Norman Meller

28. Hawaii's Political Conventions  
Daniel W. Tuttle

29. History of Statehood for Hawaii  
Charles H. Hunter

30. *Ambassadors in Arms*, Socio-military History of Hawaii's 100th Infantry Battalion  
Thomas D. Murphy

31. America and Russia in the Pacific  
John Albert White

32. *Fruits of Hawaii*, revision  
Katherine B. Gruelle, Carey D. Miller, and Mary L. Bartow

33. Comparative Philosophy in World Perspective  
Charles A. Moore

34. Electrofishing  
Iwao Miyake and Walter R. Steiger

35. Reactions to Frustration in Interracial Situations  
W. Edgar Vinacke

36. Citizen Participation in a Mental Health Program in Hawaii  
Tom B. Coleman

37. Chinese Assimilation in Hawaii  
Ch'eng-K'un Cheng

38. Significance of the Wilder or Majors-Palakiko Case, A Study in Public Opinion  
Bernhard L. Hormann

39. *People of Hawaii*  
Andrew W. Lind

40. Sociology of Race Relations  
Clarence E. Glick

41. Characteristics of Hawaiian Pidgin English  
Elizabeth B. Carr

42. A Recorded Aid to Speech Improvement for Hawaii  
Anthony Holbrook and Wesley D. Hervey

43. Speech Improvement via Television  
Henrietta C. Krantz

44. An Historical Study of the Theatrical Productions in Honolulu, 1801-1898  
Lloyd R. Newcomer

45. Report on Teachers College Graduates Employed in the Secondary Schools  
Hubert V. Everly

46. Hawaiian Fish Fauna  
William A. Gosline

47. Effects of Chemicals on Fish  
Robert W. Hiatt, Donald C. Matthews, and John J. Naughton

48. Reaction of Tuna to Chemical Stimuli  
Albert L. Tester

49. Study of the Hermit Crab  
Donald C. Matthews

50. Section for *Insects of Micronesia*  
Leonard D. Tuthill
HUMAN RELATIONS AREA FILES

The Human Relations Area Files are a tremendous aid to research. Several years ago the University was honored by being invited to become a member of the File group consisting of fifteen other universities. The service consists of slips of paper on which appear quotations from writings on anthropological and related subjects. Some 175,000 such slips have been received in monthly installments. To date they cover some thirty cultural groups throughout the world. The coverage is being constantly extended.

The Files are in effect a research tool for professional research workers interested in cultural and cross-cultural analyses. As soon as the organization of these Files is completed, they will be thrown open to scientists. Eventually reports will be published which make use of this rich vein of information. These in turn will be valuable to individuals, businesses, and institutions concerned with cultural usages and human behavior.

PACIFIC ISLAND STUDIES

Research among the islands of the Pacific was stimulated by the Pacific Island Studies Committee. The Committee initiated a graduate course, Interdepartmental Seminar in Pacific Island Research, which offered an opportunity for the interchange of views between faculty members in different fields of study and served as an integrating course for candidates for master's degrees in this area. The course was attended by faculty members as well as graduate students and suggested a number of needed research projects.

The thesis proposals of two candidates working for the master's degree in Pacific Island Studies were approved. The subject of each concentrated three or more fields of study on the Pacific area. The Committee issued to some 400 mainland and foreign universities an announcement of the 1954-55 competition for the University of Hawaii Research Fellowship in Pacific Studies, processing sixteen applications and turning over certain of these, as agreed, to Yale University and the Bernice P. Bishop Museum, co-ordinating members of the Tri-Institutional Pacific Program.

As a result of its seminars and meetings, the Committee has developed a list of research projects for which funds will be requested of the Tri-Institutional executive committee, which handles Carnegie Corporation grants. These projects revolve around the social, political, and economic effect upon native populations of physical reallocation and of exposure to Western civilization and its educational programs.
An FM radio station was readied to take the air. The Graduate School had a record-breaking enrollment—651.

The College of Arts and Sciences conferred its first Bachelor of Fine Arts degree in Art.

A thousand people attended the off-campus clinics of the College of Agriculture.

The Hawaii Agricultural Experiment Station developed a new solo papaya strain and new Panama disease resistant banana varieties.

The Agricultural Engineering Department developed a lauhala stripper, a macadamia nut harvester, and a passion fruit juice extractor.

Eight thousand meetings and demonstrations conducted by the Agricultural Extension Service were attended by 172,000 persons.

4-H coffee seedling projects embarked upon a potential half-million dollar development.

The College of Business Administration made a survey for the proposed Insurance and Real Estate programs.

Nearly 500 social, religious, cultural, recreational, and fund-raising programs were approved by the Bureau of Student Activities.

Plans were completed for construction of the new library building.

All available files of Portuguese newspapers published in Hawaii between 1885 and 1927 were microfilmed.

The Legislative Reference Bureau made a survey of the use of public and private automobiles by government agencies.

The Hawaii Social Research Laboratory conducted studies on public nurses, war marriages, and population make-up.

A Summer Session film, Sun, Surf, and Study, was produced.

Pre-publication orders for Ambassadors in Arms broke all records at the Press.

The University Extension Division, enrolled 5,402 and issued its first Advanced Certificate in Public Administration.

Enrollment at the Hilo Branch increased fifty-nine per cent.

The Army ROTC graduated a record class.

The Aquarium completed its fiftieth year with prospects of moving into a new building soon.

The Hawaii Marine Laboratory at Coconut Island installed facilities for research associates.
Research, symbolized by the microscope, is the community's most profitable investment. It contributes to our economic prosperity by making us agriculturally more self-sufficient, by helping to solve some of the problems of local industry, by developing new industries, by reducing expensive imports such as feeds and fodder, and increasing profitable exports such as tropical fruits, foliage, flowers, and nuts.

Some of the day-in-and-day-out projects conducted by the University are suggested by the drawings to the left. They represent, top to bottom, inquiry into the culture of the early occupants of the Islands, use of pineapple bran as livestock feed, study of the tuna and tuna baitfish, development of the crop log to indicate the nutritional needs of growing sugar cane, experiments in feeding third-strike sugar and defibrinated bagasse to poultry, introduction of improved varieties of the macadamia nut, control of predatory insects, the breeding and feeding of high-grade cattle, the cultivation, processing, and marketing of tropical fruits and fruit juices, volcanological research.

The rich dividends of research are expressed not only in terms of cold cash but also in terms of human welfare, health, and happiness.

Not all research can be expressed in graphic terms, for much of it involves such intangible subjects as literature, psychology, philosophy, history, and sociology. These subjects deal with our cultural heritage. Their value is measured in terms of personal and national relations.
The University prepares our young men and women for useful service in the community. Some leave the campus fully trained. Others are given preliminary training only, for the Territory could not properly be expected to finance costly graduate schools of law, medicine, dentistry, and architecture, with their special libraries and expensive laboratories and equipment.

A few of the many vocations and professions are represented by the figures in the accompanying drawing. They are, clockwise, home economists, lawyers, secretaries, architects, nurses, doctors, teachers, agriculturists, recreational leaders, dental hygienists, marine biologists, office workers, engineers.

The community benefits from the training given these residents, both through the services they are prepared to render and the high level of income which their skills command.
FACULTIES

Dean Paul S. Bachman

Appointment of an Administrative Dean whose major responsibilities are in fiscal matters and physical facilities is an important change in the work of this office. Inauguration of a new system of revolving chairmanships for instructional programs on a three-year term basis, and the establishment of a Radio Office with a Director who will integrate the University's new FM Station with the AM and other radio activities are other beneficial changes in administrative organization.

It has been increasingly difficult for the Dean of Faculties to administer effectively the many and varied duties of the office. On July 1, 1954, an Administrative Dean is to assume primary responsibility for (1) fiscal matters, including the preparation and consolidation of annual and biennial budgets; (2) office and housing assignments; (3) auxiliary enterprises; (4) building and development programs; and (5) plant upkeep. At that time responsibilities of the Dean of Faculties will become primarily educational, including instructional research and extension programs.

Although the chairmen of the instructional departments have been appointed for one-year terms, it has been customary to reappoint the incumbent. This has resulted in a single member of a department being burdened with administrative duties to the detriment of his own teaching and research. The new system of three-year terms, followed by a period of ineligibility for three years, will correct this defect in our administrative organization. Since only one-third of the department chairmen will change each year, the problem of training new chairmen will be kept at a minimum.

During the current year the Regents authorized the establishment of a 10-watt FM Station, for which funds were secured through public subscription. In order to integrate this station with our AM and other radio activities, a Radio Office was made responsible for this new activity and provision was made to place the Radio Coordinator, a member of the Speech Department, in charge as Director. The Radio Editor from the Office of Publications and Information and a stenographer from the Speech Department had been transferred previously to this office. A Radio-TV Committee representing the various divisions and departments of the University concerned with radio work will determine general policies of the station.
STUDENT ENROLLMENT

During the academic year, student enrollment was almost identical with that of the previous year. The first semester registration (full-time student equivalent) was 3,986 as compared with 3,943 for the previous year. It is expected that student registration will remain fairly constant until 1957. After that time substantial yearly increases until 1967 will increase enrollment at least 50 per cent. This Office has attempted to estimate the number of additional classrooms, laboratories, and offices required. The estimate has served as a basis for determining building requirements for the future.

FACULTY TURNOVER

Resignations and non-renewal of contracts of full-time faculty members numbered twenty-three, the lowest since the academic year 1939-40, when the faculty was less than half its present size. The principal reason for resignations was a desire to return to the Mainland for personal or professional reasons. In securing replacements, we were able to employ faculty members whose qualifications from the point of view of education and experience were superior in eight instances and equal in all others.

FACULTY COMMITTEES

SALARY STUDY. This Office, assisted by the Steering Committee of the University Senate, and a small faculty committee of technical advisers, made a study of salaries paid at state-supported institutions to instructional, research, and extension personnel. Excellent coverage was obtained, only one state university failing to respond. As a result, a recommendation was made to the President that (1) salary adjustments be made between various types of services to bring us into line with mainland practices; and (2) that the minimum and maximum salaries for each grade in each category be adjusted so that our salaries would be at least $500 per year in excess of the average of state-supported institutions. Upon the recommendation of the President, the Regents adopted these proposals in principle, to be put into effect as rapidly as finances permit.

IMPROVEMENT OF TEACHING. Results of student ratings of faculty members indicate general satisfaction on the part of students with teaching methods, and methods for the evaluation of student performance. However, there was some indication that faculty members relied unduly on the lecture method, especially in advanced classes, and stressed primarily the accumulation of information in objective examinations.

It is the purpose of the classroom, laboratory, and examining processes to encourage analytical and constructive thinking as well as develop the student's facility in self-expression, both oral and written. The Dean of Faculties was appointed chairman of a faculty committee to examine the whole problem of effective teaching and to make recommendations for improvement.
SELECTION OF A PRESIDENT. The faculty greatly appreciate the invitation of the Board of Regents to select a faculty committee to work with the Regents in the selection of a new president to take office when President Sinclair reaches retirement age. The high degree of correlation between the Regents and the faculty committee in the evaluation of prospects indicates the identity of aims of both Regents and faculty with respect to the future of the University.

SUMMER SESSIONS

Attendance of the 1954 summer sessions broke all previous records as shown by statistics below:

Honolulu—six-week Session ........... 3,317
Honolulu—three-week Postsession .... 212
Hilo—six-week Session ............... 153
Hilo—three-week Postsession .......... 42
Maui—three-week Postsession ........ 29

Total .................................. 3,753

In addition, there were 187 registered in evening or off-campus classes conducted by the University Extension Division, fifty-eight in the Advanced Management Program, and forty-one in the Orientation Center for Foreign Students.

RESEARCH

The number and variety of research contracts with federal and territorial government agencies increased considerably. These contracts involve a number of administrative problems such as space, equipment, overhead, and satisfaction of contract obligations. If the present trend continues, it will be necessary to appoint an administrative official to handle these problems and to assume responsibility for the satisfactory performance and completion of such contracts.
Enrollment in the Graduate School was 651, highest in the University's history. There were 177 candidates for degrees, forty-one of whom received the degree of Master of Arts, and one the degree of Doctor of Philosophy.

The number of candidates for degrees and the number of advanced degrees awarded have remained approximately the same for the past few years.

ADVANCED DEGREES CONFERRED 1953–1954

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COLLEGE OF ARTS AND SCIENCES

Dean Willard Wilson

The College of Arts and Sciences, largest of the five Colleges, enrolled 1,677 students, a slight increase from the previous year. Thirty-one per cent of the College's 1954 graduates will continue academic work in graduate schools as indicated by survey. The College awarded its first Bachelor of Fine Arts degree in Art. Broadening this program to include the departments of Music and Theatre is under consideration. Men outnumber women in the college, and those specializing in the social sciences outnumber others three to one. In the major fields of study, Psychology ranks highest with juniors and seniors.

"Learning unimportant facts or failure to interpret significant ones is equally sterile," wrote Oliver C. Carmichael in one of his reports as president of the Carnegie Foundation. He said further, "Pursuit of truth is undoubtedly the highest function of the university, but that is not synonymous with scientific research. It refers to search for reality, for meaning, for ultimate answers—Truth is not arrived at through fact-gathering or the acquisition of knowledge alone, but through the discovery of meaning and the interpretation of knowledge."

Because the major responsibility for implementing this philosophy falls traditionally on the liberal arts college, the home of the humanities, we are constantly concerned with curriculum. Not only how subjects are taught, but what is taught is of basic interest to us. The fetish of intellectual objectivity, which in some ways has been the strength of American scientific development, may also become the major weakness of our nation if it produces merely irresponsible technicians without convictions.

This is not to say that we are propagandists; but Cicero once said, "Not to know what has happened before one was born is to remain always a child." It is our deep conviction that nuclear fissions and supersonic propulsion are dangerous toys in the hands of children.

Curriculum, as Christopher Morley once reminded us in Hawaii, originally meant, "A little wagon—a swift chariot." The curriculum or course of study developed for students in the liberal arts college of the University is merely our best current answer to the problem of arriving at a well-rounded education for the greatest number of people. It is a broad program of approach and can not be the same for each college or university.

REQUIREMENTS OF THE COLLEGE

A student in this College is required to take some work in each of the four great divisions of knowledge: the physical sciences, the biological sciences, the social sciences, and the humanities. Regardless of the major subject he has elected as a specialty, we try to make it impossible for him to go out into business, a profession, or another walk of life entirely ignorant of man's cultural as well as scientific back-
ground. Naturally, a few immature students and some badly educated graduates resist and resent this program.

SECONDARY SCHOOL PREPARATION. In the pursuit of this educational aim, there are many other peculiarly acute problems with which we wrestle. One of the most baffling is that of the uneven preparation given in various preparatory schools in such subjects as mathematics, chemistry and biology, history, and English composition. Some rural schools have inadequate laboratory facilities and an immature scholastic atmosphere. Some urban schools, on the other hand, because of excessive size and other factors, appear unable to hold students to the serious application needed for college preparation. Students from such schools, often of high potential, need encouragement and understanding when they are placed in academic competition with students better prepared and oriented toward college level work, although invariably the Senior Honors list, and the Phi Beta Kappa and Phi Kappa Phi elections include a percentage of students who have surmounted the difficulties of woefully weak preparation. Although we continue to be deeply concerned with the education of the forgotten man of American education, the brilliant student, we are constantly attempting by improving our advising system to uncover the potentially strong student who is failing merely because of faulty preparation. This is in part an answer to those who criticize us for spending too much time on poor students.

FUNCTIONS OF THE COLLEGE. Although the University of Hawaii began as a College of Agriculture and Mechanic Arts, it long ago moved from that narrow platform to the larger areas of education. The College of Arts and Sciences, usually designated liberal arts, enrolled 1,677 students in its various courses conducted by the professors of twenty-six major departments. The gradual decline from the high postwar enrollment has apparently stopped, since this figure is slightly larger than that of the preceding year. We anticipate a gradual increase in the next few years as the present heavy high school load begins to be felt. Numerically the College remains about twice as large as its next largest colleague in the five colleges of the University and continues to turn out well-prepared candidates for graduate professional schools of business, law, medicine and dentistry, social work and theology. In addition there are even larger groups of educated folk who go into the varied non-professional walks of life. A survey of 1954 graduates of the College indicated that about thirty-one per cent intend to do further academic work in graduate schools.

A very important function has been that of supplying Teachers College with additional students for their program in the sophomore year. At the end of the past year, for instance, we were able to transfer fifty-two highly qualified students in one batch to Teachers College—a fact that will enable them to increase their output substantially in the coming years when trained teachers are badly needed by the Department of Public Instruction.

We awarded our first Bachelor of Fine Arts degree in Art. We now have under discussion the possibility of broadening this program to include the departments of Music and of Theatre. A curriculum study group of the College is currently considering also the possibilities of interdepartmental courses which may strengthen our basic program.
LANGUAGE PROGRAM STRENGTHENED. Although in the past few years we have encouraged the introduction of new courses in the literatures of non-English countries, taught in translation, and at present offer such courses in Chinese literature, Japanese literature, the Russian novel, the Greek and Latin classics, we have no intention of forsaking a language requirement for the Bachelor of Arts degree. Contrary to general impressions, the foreign language program in American colleges and universities as a rule has been strengthened rather than weakened in the past decade. We regard this as appropriate at a time when the United States perforce is assuming strong partnership in affairs of the world. President Eisenhower last December stated to a group of educators, "I hope you will explore, as language scholars are peculiarly equipped to explore, the ways in which language study can be used to strengthen our own cultural heritage as well as to cultivate better understanding between our citizens and those of other countries." The President's brother, Milton S. Eisenhower, in a recent speech said: "There can be no doubt that more Americans ought to learn to speak Spanish, Portuguese, French, and other languages. Since the basis of all human cooperation is understanding, it follows that more people must develop knowledge of language which permits accurate communication." Although we follow the American pattern in language teaching in general, we feel it our particular duty and opportunity here to emphasize the Asian languages which are becoming increasingly important in our time. There is no doubt that our abysmal linguistic deficiencies in the last war cost the United States many men and millions of dollars. We can not afford the luxury of ignorance in the languages of Russia, Indonesia, and other Asian countries. Mrs. Dorothy Aspinwall, one of our teachers, is at present engaged in a mainland survey trip to various language teaching centers conducting a study which has been assisted by one of the national foundations and which we hope will improve our efficiency in language instruction in general.

ADMINISTRATIVE PROCEDURES

The Dean has continued his customary open door policy, and in addition to referring scores of students to our Bureau of Testing and Guidance, himself had in the neighborhood of 600 personal conferences with students on matters ranging in weightiness from the pressing need for a pair of new shoes to the ever-present worry concerning a decision on a life vocation or partner. Attempts were made to work out with department chairmen a system for assisting young students to select a major field more intelligently, and some progress was made in making more vocational counselling available.

STATISTICS AND TRENDS. In the major fields of study, Psychology still is favored with 123 students in the junior or senior year, closely trailed by Sociology with 108. As students understand, these "majors" are areas of concentrated interest, and do not qualify a graduate for professional work without further study. Some of the other favorite majors in order of preference are: Government, Chemistry, Zoology, History, English, Art, and Mathematics. We have at present about thirty-three students enrolled in Premedical and Predental curriculums of whom
President Sinclair congratulates community leaders on whom he conferred honorary degrees, while Rockefeller Foundation Vice-President Alan Gregg, commencement speaker, looks on. Left, is George Barati, musical director, Honolulu Symphony Orchestra, third from left, Charles F. Chillingworth, Chamber of Commerce executive.

probably six to eight annually go on to mainland professional schools. For some time our students have performed above the average in mainland medical schools, which would indicate that we are giving them adequate preparation.

Men still outnumber women in the College by about 200. Students electing to specialize in the social sciences still outnumber all others by about three to one, although majors in the physical and biological sciences are steadily increasing in numbers. Our academic performance, so far as one can judge from statistical data, is good and normal, with our freshmen averaging about 1.8 and our seniors 2.8 plus. About 200 students were dropped for scholarship reasons, most of them being freshmen. Though regrettable, this is not a severe or unusual loss, by sensible comparative standards, from 1,677 students.

Our administrative procedures, still flexible, have been streamlined greatly by the increasing use of IBM services. As we look up at the population wave cresting rapidly above us, we are confident that our feet are planted firmly, and we can continue to keep our heads above water.

The real quality of a school lies in its teachers, and it would be difficult to find in American universities a group of college teachers to surpass ours in youthful vigor of outlook, intellectual achievement, dedication to an ideal, and willingness to learn. That quality is even more important for teachers than for students.
COLLEGE OF APPLIED SCIENCE

Dean Wilfred J. Holmes

Capacity of the College's physical facilities has been reached, and this in large measure has caused its enrollment to remain static. The major field of Nursing showed an increase in enrollment, while enrollments decreased in Medical Technology and Recreation Leadership. Demand for the University's engineering graduates is greater than the supply. Expansion in this field depends upon provision of a new engineering building designed to take care of enrollment increases and the additional engineering curriculums in demand.

Although the College is unable to meet the demands for professional training in all of the areas for which it is responsible, the enrollment remained at the same level as the year before. This static situation is due largely to the fact that the capacity of our physical facilities has been reached. The increase in enrollment in Nursing was offset by a slight decline in Medical Technology and in Recreation Leadership.

ENROLLMENT STATISTICS FOR SECOND SEMESTER 1953-54

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<td>35</td>
<td>304</td>
</tr>
<tr>
<td>Prearchitecture</td>
<td>21</td>
<td>12</td>
<td></td>
<td></td>
<td>33</td>
</tr>
<tr>
<td>Medical Technology</td>
<td>19</td>
<td>16</td>
<td>17</td>
<td>15</td>
<td>67</td>
</tr>
<tr>
<td>Recreation Leadership</td>
<td>20</td>
<td>24</td>
<td>31</td>
<td>18</td>
<td>93</td>
</tr>
<tr>
<td>Nursing</td>
<td>33</td>
<td>28</td>
<td>9</td>
<td>1</td>
<td>71</td>
</tr>
<tr>
<td>Total</td>
<td>203</td>
<td>165</td>
<td>131</td>
<td>69</td>
<td>568</td>
</tr>
</tbody>
</table>

There was an encouraging improvement in scholarship. Dismissal for failure to meet academic standards was 11.8 per cent compared with 15 per cent the year before.

Prearchitecture. There were no significant changes in the Prearchitecture program.

Engineering. The enrollment was the same as in the previous year. We graduated thirty-five in Civil Engineering, which is a small class by recent standards. The demand for our engineering graduates, both locally and on the Mainland, continues to exceed the supply. The number who apply for engineering also continues to be greater than the number we can accommodate. With the completion of the Heat Power Laboratory we have utilized all available space for expansion. Our only recourse now is a new engineering building, designed to accommodate
the expected increase in enrollment and the demand for additional engineering curriculums. (See page 6.)

**MEDICAL TECHNOLOGY.** Enrollment in Medical Technology has decreased slightly. This program now graduates each year more medical technologists than the Territory can absorb. The national shortage of medical technologists, however, insures the fact that our graduates in Medical Technology have ample opportunity for mainland employment. The high standards of the program continue to be reflected by the gratifying reports of the uniform success of our students in the registry examinations of the American Society of Clinical Pathologists.

**NURSING.** The School of Nursing continues to grow as the first entering class progresses through the curriculum. Last year we had a sophomore class and a freshman class, and next year we will have a junior class as well in the basic nursing curriculum. Although the scholarship of the nursing students continues to be good, the attrition from other courses has been higher than expected.

The sophomore class last year spent approximately half time in clinical work in medical and surgical nursing at The Queen’s Hospital. Next year the clinical facilities of Tripler, Leahi, and Kauikeolani Children’s Hospitals will be utilized also. This method of offering all clinical instruction in nursing in affiliating hospitals presents many interesting problems, which the hospitals have been very co-operative in helping us solve.

In addition to the basic nursing program, we also have thirty registered nurses taking part-time work at the University of Hawaii.

**RECREATION LEADERSHIP.** There was a slight decline in enrollment in Recreation Leadership. A curriculum committee made an extensive study of the
curriculum in this field of study, a questionnaire circulating to all the graduates of the program. Many helpful suggestions were received, but general satisfaction with this course of study was almost universally expressed. As a result of the study, changes were made in the direction of requiring a broader foundation in general education, with additional work in art and music. The new curriculum will be put into effect in September, 1954.

TEACHERS COLLEGE

Dean Bruce E. White

Statistics for Teachers College show that few men are among the rapidly increasing undergraduate enrollment. The need for 350 to 400 teachers each year in the schools of Hawaii is far in excess of University graduates in this area. Inadequate high school facilities is the most serious problem in the University's laboratory schools. When a high school building is provided, the College estimates that 200 students can be graduated annually.

On the average for all grade levels there are twice as many applicants for admission to the University laboratory schools as there are vacancies.

TEACHERS COLLEGE has been increasing its output of trained teachers for the past decade, but demand also has been increasing.

More than 16,000 births were reported in the Territory for the year 1953, compared with 15,000 for 1952. Each year between 1947 and 1951, more than 14,000 children were born in the Territory. Prior to 1944 the figure was never greater than 12,000.

There is every indication that more births will be recorded for 1954 than for 1953. (See page 5.) Thus it appears obvious that for some time the demand for teachers will continue to increase. On the basis of current birth rates, the Department of Public Instruction estimates a need for between 350 and 400 teachers each year. When an adequate high school building is available, the output of Teachers College can reach a maximum of 200. Thus an emergency program producing as many as 100 additional teachers a year would leave opportunity for from 50 to 100 teachers from the Mainland.

A low percentage of males continues, with little indication of change from the situation of a year ago. There appears to be some tendency for the percentage of males to increase between the freshman and the senior years, in spite of the fact that a number of men are lost to Selective Service. The explanation lies in the fact that relatively more men than women are admitted to Teachers College as transfers. Efforts are being made to encourage more male students to enter Teachers College.

LABORATORY SCHOOLS. The second section was added to the tenth grade. An additional section of the eleventh grade is planned for 1954-55. In-
adequate facilities for the High School continues to be the most serious problem in the laboratory schools. Although prospects in this area are a little brighter, no real progress can be reported.

There is a great demand for admission of children to the laboratory schools, especially at the Preschool level, where applications outnumber vacancies about ten to one. In all levels there are twice as many applicants as vacancies.

**INTERN PROGRAM.** Intern centers were increased from twelve to fifteen. There was a proportional increase in the number of teachers being prepared. At least three more additional centers will be required during the biennium 1955-57. This expansion is necessary to provide intern experience for the rapidly increasing undergraduate enrollment in Teachers College.

### STUDENT ENROLLMENT DATA 1953-54

<table>
<thead>
<tr>
<th></th>
<th>Semester I</th>
<th></th>
<th></th>
<th>Semester II</th>
<th></th>
<th>Year*</th>
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<tbody>
<tr>
<td></td>
<td>M</td>
<td>F</td>
<td>TOTAL</td>
<td>M</td>
<td>F</td>
<td>TOTAL</td>
</tr>
<tr>
<td>Freshmen</td>
<td>14</td>
<td>123</td>
<td>137</td>
<td>14</td>
<td>128</td>
<td>142</td>
</tr>
<tr>
<td>Sophomores</td>
<td>19</td>
<td>137</td>
<td>156</td>
<td>18</td>
<td>138</td>
<td>156</td>
</tr>
<tr>
<td>Juniors</td>
<td>19</td>
<td>164</td>
<td>183</td>
<td>20</td>
<td>167</td>
<td>187</td>
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<tr>
<td>Seniors</td>
<td>20</td>
<td>138</td>
<td>158</td>
<td>16</td>
<td>120</td>
<td>136</td>
</tr>
<tr>
<td>Five-Year Diploma</td>
<td>25</td>
<td>92</td>
<td>117</td>
<td>18</td>
<td>60</td>
<td>78</td>
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<tr>
<td></td>
<td><strong>97</strong></td>
<td><strong>654</strong></td>
<td><strong>751</strong></td>
<td><strong>86</strong></td>
<td><strong>613</strong></td>
<td><strong>699</strong></td>
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<tr>
<td>Total Degree and</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Diploma Candidates</td>
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<td></td>
</tr>
<tr>
<td></td>
<td><strong>157</strong></td>
<td><strong>754</strong></td>
<td><strong>911</strong></td>
<td><strong>138</strong></td>
<td><strong>740</strong></td>
<td><strong>878</strong></td>
</tr>
</tbody>
</table>

* Year data include students registered for first or second semester only, and also those registered for both semesters, with no duplications.

## COLLEGE OF AGRICULTURE

**Dean Harold A. Wadsworth**

The value of Hawaii as an agricultural training center was emphasized by organization of the International Cooperation Center of Hawaii, a federal-territorial agency for the educational programs of the federal foreign aid program. Associate Director Y. Baron Goto of the College faculty was given leave of absence to become director of the Center.

Dean Harold A. Wadsworth and Professor Louis A. Henke were appointed
members of the territorial Soil Conservation Committee. 
The College held nine one- and two-day off campus short courses that reached 1,043 adults. 
The Home Economics Department awarded two Master of Science degrees and one five-year diploma in the field of Home Economics teaching in Adult Education.

THE THREE agricultural activities—teaching, experimental work, and agricultural extension—continue to operate smoothly and with increasing efficiency. Teachers for undergraduate instruction are selected on the basis of their competence; results of experimental work are made available promptly to Extension workers in the field; field workers have contact with the Experiment Station when new and pressing problems appear.

The trend toward reduced enrollment in Agriculture and Home Economics seems to have halted. Here are enrollment figures for undergraduate students for the last three years.

<table>
<thead>
<tr>
<th>STUDENTS REGISTERED AT OPENING OF SECOND SEMESTER</th>
</tr>
</thead>
<tbody>
<tr>
<td>CLASS</td>
</tr>
<tr>
<td>--------</td>
</tr>
<tr>
<td>Freshmen</td>
</tr>
<tr>
<td>Sophomores</td>
</tr>
<tr>
<td>Juniors</td>
</tr>
<tr>
<td>Seniors</td>
</tr>
<tr>
<td>Total</td>
</tr>
</tbody>
</table>

FIELDS OF UNDERGRADUATE SPECIALIZATION

Students in Agriculture may prepare for careers in vocational teaching, for work in the sugar and pineapple industries, for graduate work in such technical fields as genetics, horticulture, and soil science, or they may prepare for diversified crop production work in Hawaii.

Young women in Home Economics may major in Vocational Home Economics, Institutional Management, Foods and Nutrition, or General Home Economics.

The plan of providing permanent advisers for students in Agriculture and Home Economics continues to result in close relationships between members of the faculty and the student body. Advice with respect to courses and friendly counsel with respect to personal problems becomes increasingly effective as the student moves through his college life.

A new curriculum in Vocational Agriculture has been prepared and is waiting administrative approval. An expected reduction in the number of new jobs available in the Department of Public Instruction has resulted in a broadening of this program so that graduates will be eligible for other positions in the Territory.
Graduates in Technical Agriculture find ready acceptance in the Graduate School of the University as well as in mainland schools and colleges. Technical programs are offered in Animal Science, Poultry Science, Entomology, Soil Science, and Tropical Horticulture.

The program in Tropical Crop Production continues to supply men to the sugar and pineapple industries, as well as to the newer commercial agricultural enterprises. Due to an increasing number of adequately trained candidates for its assistant-in-training program, the Hawaiian Sugar Planters' Association has discontinued its program of undergraduate subsidies for men in this field.

General Agriculture continues to attract students interested in animal and small crop production. Many graduates in this program find employment in the fertilizer and insecticide industries and in plant inspection services. The generous scholarships of the Sears Roebuck Foundation provide needed help for worthy students in this program.

The following table gives the distribution of the graduates of 1953–54 among fields of specialization.

### 1953-54 GRADUATES BY FIELDS OF MAJOR INTEREST

<table>
<thead>
<tr>
<th>AGRICULTURE</th>
<th>GRADUATES</th>
<th>HOME ECONOMICS</th>
<th>GRADUATES</th>
</tr>
</thead>
<tbody>
<tr>
<td>Vocational Agriculture............</td>
<td>8</td>
<td>Vocational Home Economics.............</td>
<td>18</td>
</tr>
<tr>
<td>Technical Agriculture.............</td>
<td>5</td>
<td>Institutional Management..............</td>
<td>17</td>
</tr>
<tr>
<td>Tropical Crop Production.........</td>
<td>11</td>
<td>Foods and Nutrition...................</td>
<td>0</td>
</tr>
<tr>
<td>General Agriculture...............</td>
<td>6</td>
<td>General Home Economics...............</td>
<td>9</td>
</tr>
<tr>
<td>Total.....</td>
<td>30</td>
<td>Total..................................</td>
<td>44</td>
</tr>
</tbody>
</table>

### HOME ECONOMICS

Graduates in this department of the College continue to find ready acceptance in territorial activities which require training and aptitude in foods, home management, and teaching techniques. Forty-four students graduated in June, 1954. Fourteen of them received appointments for one year of dietetic training in mainland hospitals. There are ten who will continue in the fifth year of teacher training and internship in preparation for service in Vocational Home Economics in the territorial Department of Public Instruction. Other graduates have planned to continue work in Teachers College, or have received appointments in Agricultural Extension Service, College of Agriculture.

Our foreign student majoring in human nutrition received her Master of Science degree. Another advanced degree was awarded at the close of the summer session.

The year marked the beginning of the Department's responsibility for developing teachers in Adult Education in the field of Home Economics. One student completed requirements for a five-year diploma from Teachers College by teaching secondary classes, and an adult class, in Hale Hauoli, the teachers' cottage at Waipahu.

As is usual, projects directed toward the improvement of facilities in the Home
Economics building provided practical experience in housing and home furnishings. Students refurnished the student lounge, recovered chairs, and made draperies for the Home Economics dining room. New china and some additional equipment were purchased for class use and for the home management house.

Students in the Household Arts presented their annual Fashion Show to a community audience, modeling the dresses they had completed during the year.

The Home Economics Club continues to be active in campus and community activities. These included a tea for foreign students in connection with United Nations Day, and the collection of clothing for students in Doshisha University, Japan.

Members of the faculty have revised the text for Fruits of Hawaii. This is to be published as a book by the University Press.

COMMUNITY SERVICE

ADVISORY POSITIONS. Members of the agricultural faculty continue to participate in a variety of community activities. As a result of one of these activities the educational aspects of the federal foreign aid program have been centered in a new federal-territorial agency called the International Cooperation Center of Hawaii. Professor Y. Baron Goto has taken leave of absence to become director of the Center. Through this activity the unquestioned values of Hawaii as a training center can be fully utilized.

Many of the staff have been requisitioned for temporary advisory positions in connection with the Governor's aggressive policy of land subdivision for small farm ownership. Similar requests have been received from the Hawaii Irrigation Authority and the newly reorganized Territorial Planning Board.

The Soil Conservation District Act of 1947 specifies that two members of the

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*Thoma* n. Shaw and g. donald sherman, Hawaii Agricultural Experiment Station food technologist and chemist respectively, demonstrate use of the passion fruit centrifuge extractor.
College faculty shall serve as members of the Territory’s Soil Conservation Committee. Dean Harold A. Wadsworth and Professor Louis A. Henke are members of this committee. Two soil conservation districts were formed as a result of committee work.

Other community activities include the guidance of the Producers’ Information Exchange, participation in the planning and presentation of economic seminars promoted by the Department of Public Instruction and participation in the Land Commissioner’s planning for the agricultural use of land at Waimanalo.

OFF-CAMPUS INSTRUCTION

SHORT COURSES. One- or two-day field schools have become increasingly important parts of the College program. Nine short courses, each involving the resources of the College, were held with a total attendance of 1,043. The locations and dates of these schools are given in the following schedule.

1953 SHORT COURSES HELD BY COLLEGE OF AGRICULTURE

<table>
<thead>
<tr>
<th>SUBJECT</th>
<th>LENGTH</th>
<th>DATES</th>
<th>LOCATION</th>
<th>ATTENDANCE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cattle ranch management</td>
<td>2 days</td>
<td>Feb. 28, March 1</td>
<td>Kohala</td>
<td>30</td>
</tr>
<tr>
<td>Calf schools</td>
<td>2 days</td>
<td>Mar. 23, 24</td>
<td>Hilo</td>
<td>350</td>
</tr>
<tr>
<td>Ranchers school</td>
<td>2 days</td>
<td>Aug. 19, 20</td>
<td>Kamuela</td>
<td>60</td>
</tr>
<tr>
<td>Fruit and vegetable conference</td>
<td>2 days</td>
<td>July 10, 11</td>
<td>Campus</td>
<td>125</td>
</tr>
<tr>
<td>Poultry school</td>
<td>1 day</td>
<td>Sept. 14</td>
<td>Ewa</td>
<td>100</td>
</tr>
<tr>
<td>Egg clinic</td>
<td>1 day</td>
<td>Nov. 9</td>
<td>Campus</td>
<td>160</td>
</tr>
<tr>
<td>Pasture and soils</td>
<td>3 days</td>
<td>Nov. 12, 15</td>
<td>Kamuela</td>
<td>107</td>
</tr>
<tr>
<td>Egg clinic</td>
<td>1 day</td>
<td>Jan. 15</td>
<td>Hilo</td>
<td>40</td>
</tr>
<tr>
<td>Egg clinic</td>
<td>2 days</td>
<td>Apr. 22, 23</td>
<td>Haiku, Maui</td>
<td>71</td>
</tr>
</tbody>
</table>

HAWAII AGRICULTURAL EXPERIMENT STATION

Associate Director Louis A. Henke

Experiments in feeding sugar cane by-products to livestock show them to be good low-cost carbohydrate feed.

A popular inbred strain of solo papaya called Line 8 Solo was released to growers after four years of testing in Station orchards. Two Panama disease-resistant banana varieties, Lacatan and Monte Cristy, from the Caribbean area were released to growers forced to discontinue growing the Bluefield variety because of Panama disease.

Now in use is a new Station-designed lauhala processing machine which reduces cost of preparing leaves for weaving by about 50 per cent.
A centrifuge extractor built at the Station has aided the processing of passion fruit juice commercially.

Each year research at the Station brings in enough new income to the Territory to finance the Station's operation from the day it was established. These research programs are one of the special responsibilities of a Land-Grant College such as ours. They are part of an over-all program approved by the federal authorities which help finance them. Adapted to the particular needs of the Territory and carried out in co-operation with local groups, such as the Industrial Research Advisory Council and the Hawaiian Sugar Planters' Association, these programs affect the lives of everyone in the Territory by increasing local productivity so important to industrial prosperity and a favorable trade balance.

AGRICULTURAL ACTIVITIES

SUGAR CANE BY-PRODUCTS. Experiments in feeding sugar cane by-products to livestock continued. In one trial, twenty-three 652-pound steers averaged 3.02 pounds daily gain during a seventy-day finishing period when fed a ration containing 60 pounds "B" cane molasses, 20 pounds of bagasse pith, and 20 pounds of protein supplements. In a 140-day trial in which four different rations were tested, a mixture of 65 per cent final molasses, 10 per cent bagasse pith with needed protein supplements resulted in 1.95 pounds daily gain at a feed cost of 17.46 cents per pound of gain. These steers brought 23.28 cents per pound when sold.

Trials were conducted to determine how much cane molasses, a low-cost carbohydrate feed in Hawaii, could be economically fed to pigs. It was found that satisfactory gains were secured when pigs weighing 100 pounds or more were fed 40 per cent final molasses. Other trials showed that in general results were more satisfactory when cane molasses was used than when the sugar and mineral content of molasses was added to the conventional ration in the form of sucrose and chemicals.

In the case of poultry, test on feeding final molasses to day-old chicks determined that optimum levels of growth rate and cost of feed per pound of gain were obtained with concentrations of molasses ranging from 7.5 to 23.0 per cent of the total ration. In other studies it was found that laying pullets can be fed for twenty weeks on levels of molasses ranging from 6.8 to 13.6 per cent of the total ration without depressing performance and livability. Such a practice resulted in a decided increase in income over that of the control ration.

CROP LOG. The growth formula developed for sugar cane has been successfully used in predicting yields on one of the large plantations. The yields predicted one year prior to harvest for an entire crop of cane from more than 4,000 acres was within about 2 per cent of the actual yields—an average of 107.5 tons of cane per acre was predicted. The actual yield was 109.8 tons.

Further work on the crop log for coffee shows carbohydrate accumulation to be the major factor affecting yield of coffee. Sufficient carbohydrate in the tree is essential for prevention of a serious physiological disturbance resulting in "black
bean." The concentration of starch in the leaves was found to be a good index of carbohydrate balance. Early results from a large-scale fertilizer experiment at Kona Branch Station show that frequent applications of nitrogen fertilizer aid in maintaining a high level of potassium in trees during the harvest season. This practice should prove important in prevention of dieback and in minimizing the tendency for coffee trees to bear biennially.

Nutritional experiments on the macadamia being conducted in co-operation with a large commercial orchard showed significant growth responses to application of small amounts of magnesium.

**RANGE IMPROVEMENT.** Tests to prolong the life of fence posts showed that a combination of hot-and-cold creosote treatment has limited decay to less than 5 per cent over a four-year period.

Good progress was made in securing the participation of local ranchers in a co-operative study with other stations in the Western Region concerning the cost and feasibility of range improvement and range revegetation.

**NEW PLANT VARIETIES.** New forage plant introductions which show promise are Pangola grass, Carib grass, and a number of robust trailing legumes of the Desmodium genus.

A number of coffee varieties from Brazil have been introduced for trial, and new disease resistant types originating in South Africa and India are now in quarantine. These will be grown at the Kona Station where the yield and growth habits can be observed. They will be released to growers only after preliminary trials have been completed.

A number of promising macadamia types were selected in Australia and propagation wood transmitted to Hawaii in order that they may be tested under Hawaii conditions. These selections may contribute much to the future development of the industry in Hawaii.

Studies are underway to find superior guavas. After detailed observations of 620 plants, four were selected as outstanding. Seedling trees are being topworked with these and other selected types. In selecting types for propagation, emphasis has been placed on the processing quality and high vitamin content of the fruit. Similar studies are underway with the passion fruit. Seed and seedlings of four superior horticultural selections of the yellow passion fruit have been distributed to growers for yield and quality tests under diverse conditions.

A popular inbred strain of Solo papaya known as Line 8 Solo was released to growers during the year. This strain has been thoroughly tested in Station orchards for the past four years. The fruit of this strain is of a good quality and is smoother and tends to be more uniform in size and shape than many strains now being grown commercially.

Propagation material of two banana varieties, Lacatan and Monte Cristy, introduced into Hawaii from the Caribbean area in 1951 have been released to commercial growers for trial in areas in which Panama disease is forcing farmers to discontinue the growing of the Bluefield variety. These introduced bananas are resistant to Panama disease. If the fruits find ready acceptance in the retail market, these varieties will be valuable replacements in areas where the production of Bluefields is no longer possible.
A new lettuce variety, Anuenue, has been released to commercial vegetable growers. This variety, which possesses the excellent table quality of the standard Manoa variety, is resistant to tipburn and is slow to bolt.

Other studies have demonstrated for the first time the genetic relationships in the sweet potato between seven qualitatively and four quantitatively determined characters which are commercially important.

FLOWERS. The value of various materials as media for growing anthuriums was investigated. Coffee parchment gave best growth and production, followed by bagasse, macadamia nut hulls, leaf mold, taro peel, wood shavings, soil, black sand, and tree fern fiber.

Because hand weeding in commercial orchid culture is often difficult and time-consuming, studies have been directed to finding chemicals that will control weeds without injuring the crop. CMU at the rate of 5 to 6 milligrams per 4 to 6 inch pot was shown to effectively control weeds, especially *Oxalis comnicalata*, without exhibiting ill effects on orchid plants. A single application prevented the reinfestation by *Oxalis* for nearly a year.

Studies on the moisture requirements of vanda and dendrobium orchids in different potting media show that frequent watering resulted in the best growth.

INSECTS, PARASITES, AND DISEASES. Continued studies on the biological control of the oriental fruit fly point out the great importance of the egg-larval parasite, *Opinus oophilus* Fullaway, in bringing this pest under control. Ecological studies on the melon fly have provided further assurance of the soundness of the "border spraying" method in the control of this fly which is the most destructive pest of truck crops in Hawaii. Considerable progress was made on the taxonomic studies of fruit flies and other Hawaiian Diptera. Many thousands of specimens of Hawaiian flies were added to the Station collection and ten manuscripts on the taxonomy of flies were prepared during the year.

Newly designed experiments with the use of bacteria, fungi, and viruses to control certain insect pests have already shown considerable promise. The cabbage worm and diamond back moth were effectively controlled within two to three days after applying carefully selected bacterial spores as a spray.

The biology of the borer which has caused considerable damage to macadamia nuts was investigated and a practical technique developed for rearing the larvae in the insectary in sufficient numbers for use in insecticide tests.

In connection with the watercress survey, fresh water snails, *Pseudosuccinea columella*, were discovered for the first time in the Territory. These snails are the common carriers of liver flukes of cattle and sheep in continental United States. Experiments conducted during the year have shown that they are also suitable carriers of the local cattle liver fluke, *Fasciola gigantica*.

Approximately 370 specimens of plant diseases submitted by growers were diagnosed microscopically and by culturing methods.

The causal agents of papaya black spot and passion fruit brown spot were determined, and spray tests were initiated and are now in progress. Work on the panax ring-spot was concluded. It was shown that careful selection of propagation material can prevent this disease in large measure.
Results of experiments with orchid viruses show that these ultra-microscopic pathogens are very stable and have a wide range of host plants. These studies emphasize the necessity of destroying obviously diseased plants and practicing strict field sanitation.

Cercospora leaf spot of papaya responded well to the dithiocarbamate sprays. Bordeaux sprays were found to be extremely toxic to both papaya and passion fruit seedlings.

AGRICULTURAL MACHINERY. The work on the mechanized processing of lauhala was completed. This machine, designed and made by the Station, processes the leaf and cuts it into strips in one operation. The cost of preparing the leaves for weaving has been reduced by about 50 per cent.

A macadamia nut harvester utilizing vacuum pickup was tested in the shop and in the fields and found to be capable of greatly reducing hand labor in orchards adapted for use of machinery between rows. Several sizes of macadamia nut huskers were built and found to be efficient in removing the heavy husks from the nuts and the nuts from the trash.

The rapid rise and interest in the commercial growing and processing of passion fruit created a demand for efficient methods of extracting the juice and pulp from the rinds. A centrifugal extractor was built, and a limited amount of passion fruit juice is now being commercially processed with the aid of this extractor.

MARKET STUDIES

Research carried on in marketing processes was aimed primarily at a better understanding of the steps involved in moving agricultural commodities from the producer to the consumer.

FRUITS AND VEGETABLES. A study of the marketing of six vegetables in the Honolulu market indicated that the loss due to shrinkage and spoilage amounted to more than $300,000 in one year. These studies will serve as a basis for constructive actions in reducing these losses and in eliminating some of the multiple handling of produce by wholesalers.

Markets for Hawaiian products on the Mainland were investigated. From 1951 to 1953, exports of fresh pineapples increased from 562 to 2,419 tons; papayas from 156 to 388 tons. These are still relatively small quantities, but they show growth. Research of the Station contributed to this increased source of income for the Territory.

Guava nectar, prepared by procedures developed in the Food Processing Laboratory, is now being made by a commercial processor and sold in the Honolulu retail markets.

MEAT PREFERENCES AND PURCHASES. A detailed study was made of 1,066 families and forty-five restaurants in the Honolulu area to determine the quantities of meats of various kinds that were purchased, as well as preferences for local or mainland meats. This research will prove particularly useful to those producer and trade groups in Hawaii which are endeavoring to capture a larger part of the local market for meats.
OTHER MAJOR STUDIES

1. Continued soil mineralogy studies have greatly increased our knowledge of tropical soil weathering processes and revealed Hawaiian soils which have economic possibilities as a source of titanium and kaolin clay.

2. Results of experiments conducted show that much control over flowering of litchi in Hawaii can be effected by the practice of girdling the trunks or large branches of the trees.

3. A co-operative project on the improvement of beef cattle through the application of breeding methods involving five ranches on Hawaii gave evidence of ultimate results.

4. Continued studies on the use of koa haole as a roughage for cattle and sheep show favorable results.

5. The toxic constituent of creeping indigo has been established as betanitropropionic acid, an identification which verifies the findings of the Puerto Rico Station.

6. Napier feed meals compared favorably with mainland alfalfa meal as a component of a starter ration for chickens.

7. Tests on the vitamin values (carotene, thiamine, riboflavin, nicotinic acid, and ascorbic acid) of 300 samples of important foodstuffs grown and used in Hawaii continued.

8. A study was conducted of twenty mango varieties for fruit quality before and after freezing and storage and after a variety of treatments.

9. It has been definitely established that a strain of laboratory white rats obtained from the Navy Research Laboratory at Bethesda, Maryland, is much more susceptible to dental caries than the Hawaiian strain which has been inbred and maintained in the Station laboratory for more than twenty-five years.

10. In freezing studies of guava juice and puree, it was found that 75 to 90 per cent of the ascorbic acid was retained during freezing and storage at 0°F. for fifty-two weeks.

AGRICULTURAL EXTENSION SERVICE*

Acting Associate Director Joseph H. Boyd

More than 8,423 meetings and demonstrations were attended by 172,747 persons. Three hundred radio talks were given; 776 news stories appeared in newspapers throughout the Territory; feature articles appeared in local and national magazines; 58,936 copies of circulars and bulletins were issued; 1,879 educational films and film strips were shown; and more than 31,347 farms and homes visited.

A beef-steer round-up proved a great success; new grasses and legumes added

* The work reported was under the direction of Y. Baron Goto, Associate Director, who on May 28, 1954, went on leave without pay to become Director of the International Cooperation Center of Hawaii.
to the productiveness of Hawaii's pastures; a potential half-million dollar coffee development was started through 4-H seedling projects.

The Agricultural Extension Service is indebted to many individuals, groups, and institutions for assistance in bringing to the farmers and homemakers of Hawaii the findings of research, practical helps, and inspirational leadership. Success in bringing its program of social and economic advancement to thousands of Hawaii's farmers, growers, retailers, wholesalers, consumers, families, and community groups, would not have been possible without their cooperation.

CROP AND MARKETING SERVICE

The Agricultural Economics program introduced new marketing techniques of value to Hawaii growers, wholesalers, and retailers. Handling methods were improved. New and cheaper types of containers for air and surface transportation of produce were introduced and adopted.

Production Information Exchange. This organization provides for planning in both production and marketing of Hawaii's fruit and vegetable products, supplying information of expected demand, and creating mutual understanding among producers, trade groups, transportation agencies, and consumers. The program has resulted in bringing about a more uniform supply, minimizing losses during periods of glut, and improving trading practices in general.

Soil Conservation. Extension work in soil conservation is another important phase of our program. In addition to traditional practices carried on in contouring, mulching, fertilizing, green manuring, and rotating, emphasis was given to the best known combinations of grass species and fertilizer components for given soil types. This has resulted in an increased proportion of legumes in Hawaiian ranges which in turn increases the carrying capacity of the Territory's pasture land.

County agents, specialists, and research workers collaborated in the testing of soil samples for 1,200 farmers throughout the Territory. Water testing for salt content was a closely related activity. Another contribution of Extension work in soil conservation was the use of minor elements and lime on pasture land. It has demonstrated that the proper combinations and adequate applications will eliminate certain nutritional deficiencies of pasture plants, resulting in greater grass production and healthier cattle.

Extension personnel collaborated with soil conservation district directors in establishing and carrying out their programs. The Extension Soil Specialist assisted in the establishment of four soil conservation districts. There were thirty-three adult meetings held, attended by 1,700 people.

Territorial figures show that there have been 500 persons assisted in proper land use, more than 150 in water supply, storage, and distribution, 575 in irrigation, 235 in soil amendments, 429 in use of fertilizers, and another 346 in crop rotation.
practices. Specialists in pasture management and soil conservation have collaborated also in extensive land judging and evaluation programs. The work was done in connection with other governmental departments, such as the Hawaiian Homes Commission and the Land Commissioner’s office, in the opening up of new lands for homesteading and diversified farming.

POULTRY PROJECTS

PULLORUM PROJECT. Two significant projects were undertaken in poultry husbandry. The first, the Pullorum Control and Eradication Project, was carried out with the Commissioners of the Board of Agriculture and Forestry. During the breeding season 1953-54, 9,975 birds were tested on seventeen poultry farms. Of these ninety-one showed a positive reaction to the rapid whole blood agglutination test. Hawaii’s yearly import of baby chicks and hatching eggs from mainland breeders is valued at approximately $250,000. The Pullorum Control and Eradication Project was designed to help local breeders produce chicks free of this disease and thereby retain funds expended for mainland imports.

EGG CLINICS. The second project, a series of egg clinics held on Kauai, Oahu, Maui, and Hawaii, was carried on co-operatively with the Hawaii Agricultural Experiment Station and the territorial Board of Agriculture and Forestry. The purpose of the clinics was to inform local producers on management practices which affected the quality of market eggs. Discussions covered the parts and formation of the egg, factors affecting the quality of market eggs, and management practices on the farm affecting the quality of market eggs.

The Board of Agriculture and Forestry put on a candling demonstration at each egg clinic, during which stress was placed on the specifications for all grades of eggs on the Honolulu market. Total attendance was 611.

FEED PRODUCTION

IMPROVED PASTURES. Ranchers and livestock men were helped to solve problems that inhibited the development of more productive grazing lands. More than 275 farmers were assisted with production, 227 with improved varieties and strains, ninety-nine with the use of fertilizer, and others with insect and disease control, harvesting, storing and curing, and efficient work methods.

Extension helped solve Hawaii’s biggest livestock problem: the economical production of protein feed. This work included thirty-one species adaptability plots, ten herbicide demonstration plots, and five pasture irrigation demonstrations. A total of four hog ranges and five irrigated alfalfa plots were developed, 7,000 acres of scrubland was cleared, 3,000 acres of pasture land renovated, thirty-four agent training meetings held, and eight fertilization plots installed.

Approximately 10,000 acres of pasture land were renovated through the influence of the Extension program, thereby reducing the cost of production for both swine raisers and cattlemen and enabling farmers to supply a higher percentage of these products for the local market.
CROP IMPROVEMENTS

VEGETABLES. Profitable growth of celery on a commercial scale in low elevation was successfully demonstrated by the vegetable crops department. This has enabled local growers to produce quality celery in quantity sufficient for the Honolulu market, thus eliminating mainland imports.

Another significant activity in this field is the variety evaluation work. These demonstrations indicate the performance of numerous varieties under different growing conditions throughout the Territory. Sixty-five varieties of thirteen different vegetables were demonstrated for producer observation and use. Many improved varieties have been adopted, but among the most significant are the Yolo Wonder pepper and the wilt-resistant watermelon. The Yolo Wonder now comprises 90 per cent of the pepper production in the Islands. It is more resistant to virus diseases and has higher yield qualities than varieties formerly used. The use of wilt-resistant watermelon strains has preserved an industry for local producers which was rapidly disappearing because of disease losses.

As a routine activity, approximately 4,500 packets of various seeds produced by the Experiment Station’s vegetable crops department were distributed to farmers for production and trial purposes. Cuttings and other planting materials were furnished to growers.

Approximately 3,000 farmers were assisted with various phases of production, 1,400 in improved varieties and strains, 2,000 in the use of fertilizers, 2,600 in the control of insects, 2,100 in disease control, 1,378 in harvesting, storing and curing, and 450 in efficient work methods.

FRUITS. The demonstration of papaya strains and the increased use of home fruit production are the most important activities of the fruits program. Fifteen hundred packets of seed from the Experiment Station’s improved strains of papayas were distributed to growers. The quality of papayas, especially those for export has resulted. There were 774,000 pounds of papayas exported, an increase of 443,000 pounds. Fresh pineapple exports show an increase of 2 1/4 million pounds more than for 1953.

Economic interest in the development of passion fruit and guava production increased rapidly. The export potentialities of these crops have created large demands for planting materials and information on cultural practices. Agents and specialists have disseminated information available from the Experiment Station and other sources.

COFFEE. With high coffee prices stimulating interest in the expansion of coffee acreage, the Service conducted a continuous program of instruction and demonstration in sound cultural practices. Such phases as weed control, fertilization, pruning, planting methods, and harvesting received emphasis.

Approximately 1,200 persons were helped with production problems, 400 were reached with improved varieties and strains, 400 with the use of fertilizers, 600 with insect control, and 500 with disease control. There were 192 persons helped with problems in harvesting, storing, and curing, and 100 with efficient work methods. Specialists initiated twenty-three variety adaptability trials, completed four result demonstrations, two insect and disease control demonstrations, and other activities including fertilizer trials and agent training meetings.

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THE 4-H PROGRAM

The 4-H club program continued to make good headway with the assistance of 472 senior and 86 junior volunteer leaders. There were 269 clubs with a total membership of 3,810—1,614 boys and 2,196 girls. Agents conducted 119 training meetings for leaders and their assistants, who in turn gave 1,454 method demonstrations before 20,565 persons.

In addition 2,633 members were given training in judging, 2,262 in demonstrations, 556 in recreation leadership, and 371 in music; 1,022 members received training in money management, 729 in safety, 1,467 in health, 1,203 in citizenship, 869 in personality improvement, and 98 in conservation.

The 4-H Beef-Steer Round-Up and Sale held October 24, 1953, in the Andrews Theatre, University campus, was the first such event in the twenty-five-year history of the Service. The twenty-one steers came from Oahu and North Hawaii. They weighed 18,273 pounds and brought $7,979.19.

Results of the coffee seedling project are significant. The 225,000 coffee plants collected netted $1,200 to 4-H boys. They were used to plant 387 acres in new coffee orchards. At present price levels, estimated at $1,500 per acre, this acreage will bring upon maturity an additional $567,000 yearly income to the Territory.

BETTER HOME AND FAMILY LIFE

"Family Living—Hawaiian Style" theme for the year's home demonstration work provided a fresh approach for the program. There was close correlation of activities and programs at the county level and among the specialists. For example, in home planning, home furnishings, flower arrangement, landscaping, clothing and foods, and vegetable gardening, specialists and home and farm agents worked cooperatively in preparing circulars and leaders' guides, and presenting demonstrations for groups of both men and women.

There was a substantial increase in the number of volunteer local leaders. These leaders are trained in skills necessary for giving demonstrations and conducting the activities of their clubs and councils. They assume responsibility for presenting 50 to 90 per cent of club demonstrations given in their counties with the exception of Maui county where local leaders present all club demonstrations.

VISUAL AIDS

The visual aids department worked closely with all related territorial agencies. During the year 1,879 films were shown 3,963 times to audiences approximating 200,000 people. There were forty new films acquired on a permanent basis, 140 on loan, and twelve filmstrips added to the 300 in general use.

Pictures with or for stories were supplied for publicity and general information programs connected with the beef-steer round-up, the University Alumni Association, fairs, and special events. About 500 pictures were taken, and 400 news items totaled 2,500 column inches of newspaper space.
Proud 4-H'ers select reluctant gilts awarded them under the Sears Roebuck Swine Improvement program.

4-H Club delegates from Hawaii to the National 4-H Club Camp pause beneath Capitol dome during visit to Washington, D.C.
Forty-three per cent of Business Administration graduates were Accounting majors. Merchandising majors ranked second, and Personnel and Industrial Relations third. Specialization in insurance and real estate are planned but depend upon legislative support. There were 111 graduates, 20 per cent of whom were women, in the third graduating class since the College was founded in 1949.

The College has continued to make progress in meeting its primary objectives to train students for active participation in the business and industrial community and to provide a thorough understanding of the functions, structure, and objectives of the American business enterprise system.

We continued to review our course offerings and devoted substantial time and energy to preliminary review of proposed programs in Insurance and Real Estate. The Legislature approved our budget request during the last biennium to make exploratory efforts in these areas. We have also made some progress in the office management program by obtaining equipment, including typewriters and calculating machines, to permit more effective handling of our typing and business machines courses. We have received also a number of gifts and loans from business firms and individuals which have been of substantial assistance in carrying out this program. Community support has continued through interest in the program and placement of graduates.

The College graduated 111 men and women in June, the third class to graduate since the College was founded in 1949.

Total enrollment, exclusive of Summer Session and Extension, was 637. The freshmen class of 216 was largest; the sophomore class enrolled 168; the junior, 142; and the senior, 111. Male students predominated, accounting for 80 per cent of the total. The 20 per cent enrollment of women, however, indicates a substantial interest on their part for work opportunities in the business field.

Accounting specialization continued to be the most popular field. Forty-three per cent of the graduates were awarded degrees with majors in the Accounting curriculum. Merchandising accounted for 16 per cent, Finance 8 per cent, and Office Management 4 per cent.

These programs in Insurance and Real Estate are proposed:

<table>
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<tr>
<th>INSURANCE</th>
<th>REAL ESTATE</th>
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<tbody>
<tr>
<td>Principles</td>
<td>Fundamentals</td>
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<tr>
<td>Life</td>
<td>Land Economics</td>
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<tr>
<td>Group Pension Plans</td>
<td>Urban Land Utilization</td>
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<tr>
<td>Fire</td>
<td>Property Valuation</td>
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<tr>
<td>Marine</td>
<td>Principles and Problems of City Planning</td>
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<tr>
<td>Auto</td>
<td>Real Estate Appraisal</td>
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<tr>
<td>Liability</td>
<td>Real Estate Finance</td>
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<tr>
<td>Miscellaneous Casualty</td>
<td>Problems in Real Estate Brokerage</td>
</tr>
<tr>
<td>Bonding and Surety</td>
<td>Property Management</td>
</tr>
</tbody>
</table>
REQUIRED COURSES

Money and Banking
Statistics
Intermediate Accounting
Analysis of Financial Statements

Money and Banking
Statistics
Intermediate Accounting
Real Property Law (Negotiable Instruments)

A specialization in each of these two fields will be offered if the Legislature provides continued support for the program. The programs will meet the rather extensive insurance and real estate activities in the community.

Further development in the areas of International Trade, Air and Water Transportation, and Hotel Management is contemplated after the above programs are instituted and functioning well. With these additional programs the major community needs should be served. Development in each of these areas will have to be planned carefully and worked out so that costs are kept at a minimum, and the programs designed to meet community and business needs.

The Commerce Club issued its third directory of students graduated from the College. This year’s edition, enlarged and improved, received excellent community response. In behalf of the students and faculty, I extend thanks to the many business people who inquired about our students and found places for them with their companies. Continued co-operation should prove of mutual advantage.

STUDENT PERSONNEL

Acting Dean Edward T. White

Several developments in the Student Personnel program are important in the expansion of University services. Among them are the establishment of the Student Discipline Committee made up of the College Deans, the Student Personnel Dean, and a representative from each, the faculty and the student body; authorization of the student medical fee; completion of two Associated Students’ financed projects, lighting Andrews Theatre, and installation of a public address system; and establishment of three scholarships by Associated Students for leadership in student activities; and completed plans for more comprehensive survey of the employment of University graduates through the Joint Committee on Guidance and Employment of Youth.

STATISTICS SHOW that more University students were reached by the services of the Bureau of Testing and Guidance than ever before. Activities in this area for the year included:

<table>
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<tr>
<th>Activity</th>
<th>Number</th>
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<tbody>
<tr>
<td>Individual counseling contacts</td>
<td>2,394</td>
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<tr>
<td>Registration conferences</td>
<td>563</td>
</tr>
<tr>
<td>Withdrawal interviews</td>
<td>163</td>
</tr>
<tr>
<td>Psychological tests</td>
<td>272</td>
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<tr>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Total individual contacts</strong></td>
<td><strong>3,392</strong></td>
</tr>
</tbody>
</table>
Attendance at group tests ........................................ 303
Attendance at tests for mainland agencies ....................... 223
Attendance at group guidance sessions including foreign student orientation .................................................. 1,121

Total group contacts .............................................. 1,647
Total contacts .................................................. 5,039

In addition to the campus and community activities in which the Bureau regularly participated, two other projects were begun which are expected to result in improved guidance for University students. In the first, placement services of the University, the Bureau provided consultant and advisory assistance to the Job Placement Committee of the Associated Students which is making a study in this area. In the second, preparation for publication of Hawaiian Educational Field Descriptions, the Bureau collaborated with the Admissions Office and the Office of Publications and Information. The purpose of the publication is to assist students in planning their college curriculums.

Major responsibilities which the Bureau has begun and will continue are: Advisory assistance to students from foreign countries, physically handicapped students, and referrals from the College Deans, Committee on Scholastic Standing, and Office of Admissions; testing and guidance for freshmen in Home Economics, Nursing, and applicants for transfer to Teachers College; sponsorship of brief non-credit courses in study skills; administration of national professional tests, the Selective Service Qualification test, and tests for mainland schools; and annual survey of postgraduate plans of seniors.

FOREIGN STUDENTS

Enrollment of students from foreign nations is important to the University’s development as an educational center for the Pacific. During the past year fifty-eight foreign students representing thirteen foreign countries and the Trust Territory registered as full-time students. Of these, thirty-eight were undergraduates and twenty were graduates. The foreign students’ adviser arranged an orientation week for them and conducted orientation classes during the first semester.

Approval of the foreign students’ orientation course for credit under the Sociology Department, the setting aside of English 100 as a special course, and the continuation of the special speech course for foreign students are important steps forward in curriculum arrangement for them.

Special activities such as coffee hours honoring foreign students were well attended by faculty and students. Social programs given by the University YMCA, YWCA, and Cosmopolitan Club, and a special orientation program also served to integrate foreign students into the regular University program.

OFFICE OF ADMISSIONS

The quality of University work depends largely upon the careful selection of entering students. Selection is the responsibility of the Office of Admissions. For the fall semester, 1953, and the spring semester, 1954, 2,910 admission applications

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were received, and the college aptitude examinations were given forty-four times throughout the Territory. Applications represented roughly an increase of 250 over the 1953 figure, an increase chiefly due to the growth of the evening credit program.

Accepted students included:

1953 graduates of territorial high schools, public and private... 1,780
Graduates of mainland and foreign schools... 22
Adults, part-time and full-time... 531

Total accepted... 2,333

Tests for seniors in the territorial high schools were given in early spring and notifications were sent out on May 3. While students would like to be notified earlier about their admission status, the large number of applications makes this impossible. Colleges adhering to the College Board Plan have agreed on May 15 as their notification date. Rejected students were again encouraged to arrange interviews with the Director of Admissions to talk over their records and to get assistance in making alternate educational plans. About fifty availed themselves of this opportunity.

The Office of Admissions co-operated with Associated Students in sending public relations groups to territorial high schools. Such groups visited high schools on Maui and Kauai, and in Honolulu. The Director of Admissions participated in orientation programs in several of the city high schools, and, in general, reactions were favorable. If the University is to provide much needed precollege orientation, an increase in the number of such trips is indicated.

BUREAU OF STUDENT HOUSING AND PART-TIME EMPLOYMENT

It is the responsibility of the Bureau of Student Housing and Part-time Employment to help secure off-campus housing, and to act as an employment agency for part-time work. Approximately 75 per cent of the regular student population does part-time work in the course of the year. Inadequate dormitory facilities for men forces many students to live in off-campus housing.

Bureau of Student Housing arranged for visits of outside dormitory operators to University residence halls, planned visits to off-campus housing, and tried to establish closer relationships with dormitory operators. Room and board employment continued to be one of the most important services.

In an effort to help more students obtain part-time jobs, the Bureau worked on improving the employability of job seekers. The importance of such skills as typing, shorthand, and group work was emphasized, and fundamentals such as dress, speech, and techniques in applying for jobs were stressed. The Bureau also co-operated with the Job Research Committee of the Associated Students which has a sub-committee working on ways for students to increase their employability. The placement of graduates continues to be an exacting problem, and the need for a Placement Director more apparent than ever.
Summer session residents of Frear Hall are initiated into the intricacies of the hula.

BUREAU OF STUDENT ACTIVITIES

The Bureau of Student Activities supervises all student activities. The 484 programs approved for the year include social, religious, recreational, cultural, and fund-raising activities.

It is estimated that Hemenway Hall, the Union Building, was used by 250 students daily for informal social and recreational purposes. Organized groups scheduled 910 meetings, 110 of which were faculty and alumni sponsored. Approximately 39,580 persons were accommodated. There were 327 student meetings and events scheduled in other campus buildings.

Outstanding student activities include:

1. Development of a Religious Emphasis Week program on campus to stimulate understanding and appreciation of all religions. An interfaith program was financed by campus religious organizations, Associated Students, and grants from the Juliette M. Atherton Trust and the Samuel N. and Mary Castle Foundation.

2. Sponsorship of a letter-writing campaign to mainland universities and to United States senators on behalf of the statehood campaign, participation in the roll-signing activities of the Statehood Citizens’ Committee, and spirited discussion on the statehood delegation to Washington. Two students, Marilyn Mitsuo and William Thompson, III, accompanied the statehood delegation to the capital.

3. Transfer of student publications offices from a temporary structure into newly renovated space in Hemenway Hall.

4. Completion of a well-equipped poster workshop area by the Hemenway Hall Board of Governors which for the first time offers all student activities adequate facilities for creating publicity materials.

5. Presentation of colorful, high quality, student-sponsored events such as the Pan Pacific Festival, the Ka Palapala Beauty Pageant, and the Aloha Week program.
Most of these programs were offered in co-operation with the community and with the tourist industry and were well attended by the general public and parents of University students.

6. Sponsorship of many smaller special interest programs of fine quality to enrich college experiences. Outstanding among these were the Inter-Club Council Songfest, student talent show sponsored by the Hemenway Hall Board of Governors, the Christmas workshop, the Carnegie music hour, and several delightful Theatre-in-the-Round presentations.

7. Development of a well-received Summer Session activities program including tours, and cultural, recreational, and social events for fun and good fellowship and greater appreciation and understanding of Hawaii.

8. Provision for an orientation program at the beginning of each semester by which more than 1,200 new students were aided in adjusting to the University community.

**BUREAU OF STUDENT RESIDENCES**

The new residence hall for women was dedicated and named Frear Hall in honor of Mary Dillingham Frear, one of the builders of the University and intimate friend of generations of its students.

During the academic year an average of 115 students resided in Frear Hall. Hale Laulima, a co-operatively run dormitory, was fully occupied.

These residence halls provide excellent living conditions and the opportunity for day-to-day associations with students of different racial, social, and economic backgrounds. The women residents have established an enviable reputation for high scholastic standing, self-government, and leadership in campus activities.
Walter F. Dillingham unveils plaque dedicated to the memory of his sister, former regent Mary Dillingham Frear, from whom the new women's residence hall has been named.

The men's housing barracks were fully occupied and the need for campus housing for men students remains in pressing demand.

During Summer Session full residence facilities were in use, and many desiring residence had to be turned away.

COMMITTEE ON SCHOLASTIC STANDING

The Committee ratified dropping 473 students for academic failure; 427 others were officially advised that their work was not meeting graduation standards. It was necessary to place thirty-four students on grade point rule, and to continue 169 under its provisions; thirty-four students were restored to good standing. There were 233 applicants for readmission, of whom 205 were readmitted under academic probation.
By far the most noteworthy event was the completion of the plans for a new library building. Designed to provide space for about 600,000 volumes and 900 readers, it will have nearly twice the capacity of our present building. With the appropriation of $1,400,000 by the territorial legislature and the approval of architectural plans by the Department of Public Works, construction will be under way within a month.

It is expected that the building will be in operation by the beginning of the fall semester, 1955. It will relieve the present overcrowded condition of our library facilities but also promote more effective study and investigation by providing efficient arrangement and easy access to reading materials. In keeping with the aims of a liberal education, it is hoped, moreover, that the attractive and comfortable surroundings will invite reading for recreation and cultural growth.

According to a ruling by the Attorney General's office, none of the money appropriated may be used for equipping and furnishing the new building. Although as much as possible of the old furniture will be retained, it will not be sufficient to accommodate all of our students; nor can it all be adapted to the functions planned for the new library. This presents a problem that should be solved if possible within the coming year, before the building is opened for use.

DEPARTMENTAL ACCOMPLISHMENTS

ACQUISITIONS. Expenditures for books amounted to $30,264.00, with which the Library acquired 7,358 volumes. This is the smallest number reported since 1947 and indicates a continued imbalance between the rise in the cost of books and the increase in the appropriation for books. The University's student enrollment, faculty, and research activities are increasing every year; yet its library book collections, which are basic for successful teaching and investigation, have been steadily losing ground. The only corrective for this disturbing trend is a substantial increase in the amount of the funds appropriated for books.

Following are some of the most important acquisitions of the year:

Botanisk Tidsskrift, Copenhagen, 1866–1949.
British Foreign Office, *General Correspondence: Pacific Islands* (100 volumes of official records on microfilm).


Isaac Newton, *The Correspondence of Isaac Newton*, London, 1953–.


The acquisitions department put into effect two major improvements in procedure: the adoption of a multiple-copy order system, which reduces the number of typing operations and provides more complete and accessible records of book orders, and an arrangement with the University Business Office whereby the Library is now issued blocks of blank, presigned purchase orders and is permitted to prepare the vouchers authorizing payment for books. This eliminates requisitions and duplicated clerical work, speeds the placement of orders and the payment of bills, and improves control over book orders that are outstanding.

**CATALOGUING.** The cataloguing department processed a total of 10,846 volumes (including new titles, added copies, recatalogued volumes and volumes analyzed) and prepared 45,000 cards for the main catalogue. Despite this impressive accomplishment of the limited cataloguing staff, the Library now has a backlog of 1,400 uncatalogued volumes. An additional position for a clerk-typist in the GS-1 classification is hopefully recommended. This would make it possible to free the professional catalogue librarians of routine clerical and typing operations and thus to increase the output and efficiency of the department.

**CIRCULATION.** The circulation department reports that the Library has 5,657 registered borrowers, who during the year drew out 166,966 books (including books on reserve) and 33,839 periodicals—making a total circulation of 200,795. This is a substantial increase over last year's circulation of 176,558.

For the second year, the department continued its project of fumigating all books that show evidence of damage from borers. Each week about 600 volumes were fumigated by the University Plant Physiology Department, which is co-operating with the Library in this effort to check the damage to our books.

The most urgent need of the circulation department at present is a "shelf reader," a clerk whose work would be to keep the books in their proper numerical order on the shelves. Since the stacks are open to everyone, books are not always returned to their proper places; and a book that is out of place is, in effect, lost. Librarians at the circulation desk have little time to read shelves, and a clerk to perform that task would greatly improve the service and eliminate the cause of the complaint most frequently made about the Library.

**REFERENCE.** The collection of the reference department was increased by 382 volumes to a total of 8,101. The reference librarian answered or gave instruction on 1,937 reference problems, distributed among the following groups: students...
(1,372), faculty (96), off-campus organizations, business firms, and individuals (469). In the course of the year the librarian revised the pamphlet files and continued work on the preparation of a checklist of materials on Micronesia. This bibliography, which now comprises 5,020 classified entries on cards, is a valuable reference source for students and scholars requiring information on any subject pertaining to the Micronesian islands. It is hoped that within three years it will be ready for publication.

SPECIAL COLLECTIONS. The librarian of the Hawaiian collection accessioned and catalogued 807 volumes, making a total of 11,702. In addition, the collection contains over 10,000 pamphlets classified under subject headings. Circulation was 5,070. The librarian continued her project of borrowing and microfilming mainland university theses, government documents, special reports, labor surveys, and other materials that relate to Hawaii but are unobtainable by purchase. There is a constant effort being made to maintain the University collection on Hawaii as the most nearly complete in existence.

The Teachers College library added 186 new volumes and discarded 495 obsolete or worn out volumes, leaving a present total of 8,505 in the collection. The Teachers College librarian reports an unusually high circulation of 35,270 (including reserve books).

The Oriental collection added and catalogued 1,513 volumes and now has a total of 66,973 (not including a large collection of rare books and manuscripts on microfilm). Among the year’s most important acquisitions are a complete set of the Tao Tsang, a collection of the Taoist canons, and a set of Jinruigaku Zasshi, a Japanese anthropological journal dealing with the peoples of the Pacific area. Circulation for the year was 1,719. The curator of the collection continued his project of compiling a bibliography of periodical literature on China, which now contains about 16,000 entries on cards. During a leave of absence next semester, he will visit mainland libraries in order to complete the bibliography and enlist support for its publication.

The Government Documents collection contains the publications of the Federal Government and the bulletins of all state agricultural departments and experiment stations. Since the University Library is the Official Government depository for the Territory, most of these materials are sent to us without charge. The collection now contains 26,721 bound volumes and 218,000 unbound bulletins and pamphlets. These materials are used chiefly within the Library, since ordinarily they do not circulate except by permission of the librarian in charge.

The map collection and the collection of microfilm are housed together in one section of the Library and are under the supervision of one librarian. We now have a total collection of 31,909 maps (including duplicates), most of them received on a depository basis from the U. S. Army Map Service. The collection of microfilm has 647 titles, on 1,669 reels, which range from short scientific articles to long runs of the New York Times, the London Times, and other serials. The librarian in charge, working in co-operation with the chairman of the history department and the Hawaiian Historical Society, began a long-term project of microfilming the files of foreign language newspapers in Hawaii so as to bring them together and preserve them from loss through damage and decay. This year, all the available
files of Portuguese newspapers, dating from 1885 to 1927, were filmed. Since the entire project is extensive and costly, it will require additional financial aid before it can be finished.

GIFTS

Many friends of the University Library continued their support by giving books or money for the purchase of books. Among the donors the following should be given special mention:

Mrs. Richard A. Cooke gave a nine-volume holograph diary kept by Charles Warren Stoddard, the American author, during his stay in Hawaii during 1881–1882. This is the most interesting item in the Library’s collection of materials by and about Stoddard.

Mrs. Ella L. Embree gave a collection of standard works in anthropology and sociology, which was sent to the University’s branch at Hilo.

Mrs. Adelyn Godwin presented a collection of books containing excellent examples of the work of modern private presses.

Mr. Vincent Guntzer gave an extensive collection of early English drama in standard nineteenth century editions, all now out of print and many of them rare.

Mr. Penrose C. Morris presented a selection of standard works in general literature and philosophy.

Dr. and Mrs. Allan F. Saunders gave over a hundred volumes, chiefly in the field of anthropology.

Mr. Gerald Wade made a donation for the purchase of books on the Trust Territory islands.

Gratitude is expressed to many other friends listed below who each gave the Library one or more volumes:

412nd Regimental Combat Team
Mr. R. S. Adam
Allan Hancock Foundation
Mr. Riley H. Allen
Mr. Encarnacion Alzono
American Society of Civil Engineers, University of Hawaii Student Chapter
Mrs. Carl B. Andrews
Mr. William Andrews
Mr. Koji Ariyoshi
Dr. Fred E. Armstrong
Mr. Sidney Arnold
Mr. Donald Atten
Mrs. Frederick C. Bailey
Mr. R. J. Baker
The Bartlett Foundation
Mr. William Bell
Mr. Harlan F. Benner
Bernice Pauahi Bishop Museum
Beta Tau (Campus Chapter), Phi Delta Kappa
Mrs. Lillian C. Bickford
Professor Neal M. Bowers
Mr. P. I. Brissenden
Mrs. Myrtle S. Brodie
Dr. Philip Brooks
Mrs. Julia W. Brown
University of California
Mr. Garland H. Cannon, Jr.
Carnegie Corporation of New York
Carnegie Institute of Technology
Carnegie Institute of Washington
Dr. Walter Carter
Mrs. Alfred L. Castle
Catholic Library Society
Dr. Blake Clark
Dr. Robert W. Clopton
Columbia University Libraries
Professor Charles F. Congdon
Miss Agnes C. Conrad
Miss Genevieve B. Correa
Dr. Richard J. Coughlin
Counterattack
Reverend A. Olin Crownover
Mr. John E. Cummings
Mr. Preston Davis, Jr.
Drs. Otto and Isa Degener
Mr. Eugenio De Hostos
Dr. E. Lee Dorsett
Professor Samuel H. Elbert
Mr. Charles Farmer
Mrs. James H. Farmer
Professor Reuel Fick
Mr. William S. Fincke
Mr. N. P. Firgrove
Mrs. Lorraine Fitzsimmons
Mrs. Mavis S. M. Fong
Mr. Charles R. Frazier
Mr. Norito Fujioka
Mrs. Clarence Gasque
The Geological Society of America
Mr. Andrew Gerakas
Consul General of Germany
University of Glasgow
Mr. C. M. Goethe
Dr. William A. Gosline
Dr. Carleton Green
Mr. Richard A. Greer
Professor David F. Guillaume
Miss Charlotte Hall
Dr. Edward S. Handy
Professor Louis A. Henke
Miss Zoe Harris
Harvard University
Dr. D. Elmo Hardy
University of Hawaii Press
University of Hawaii Sociology Club
Hawaiian Marine Laboratory
Hawaiian Dredging Co.
Hawaiian Economic Service
Hawaiian Historical Society
Hawaiian Mission Children's Society
Hawaiian Pineapple Co., Ltd.
Hawaiian Sugar Planters' Association
Mr. Ward Hayes
Mrs. Colin J. Herrick
Mrs. Higgenson Hewitt
Dr. Robert W. Hiatt
Dr. Tyrus Hillway
Honolulu Academy of Arts
Honolulu County Medical Library
Honolulu Gas Co.
Miss Genevieve Hoe
Honolulu Police Department
Dr. Bernhard L. Hornmann
Mr. Jason Horn
Mr. Volney A. K. Howard
Mrs. Simes T. Hoyt
Human Relations Area Files
Dr. Siegbert Hummel
Hwa Kuo Publishing Co.
Dr. Judson L. Ihrig
Mr. Haruyoshi Ikawa
International Association of Personnel in Employment Security, Hawaii Chapter
International Longshoremen's and Warehousemen's Union
Iowa Academy of Science
Mrs. Thomas A. Jaggar
Professor Harold A. Jambor
Consul General of Japan
Dr. Philip C. Jessup
Mr. L. H. Jobe
Mrs. Florence H. Judd
Mrs. Alice M. Kauhane
Dr. Robert M. Kamins
Dean Arthur R. Keller
W. K. Kellogg Foundation
Mr. C. F. Kleinknecht
Mr. Edgar C. Knowlton, Jr.
Mrs. William H. Koenig
Dr. Whang-Kyng Koh
Korean Pacific Press
Samuel H. Kress Foundation
Miss Yayoi Kurita
Professor Ralph S. Kuykendall
Mr. C. H. Kwock
Kyoto University Library
Mr. Carney Landis
Legislative Reference Bureau
Mrs. Louise L. Lee
Leipzig Museum für Volkerkunde
Dr. Arthur Lerner
The Linguists' Club
Mr. John Lobotsky
Mr. Frank A. Lundy
Dr. Katharine Luomala
Mr. Gordon Macaulay
Mrs. Kenneth C. McAlister
Mrs. Earl McTaggart
University of Maine
Mr. Harold G. Manning
Dr. Arthur J. Marder
Professor Shelley M. Mark
Miss Bertha L. Martin
Professor Leonard E. Mason
Major Edgar J. Masters
Mr. William H. Meinecke
Professor Norman Meller
University of Michigan Botanical Gardens
Professor Carey D. Miller
Trustees of the Mitchell Library
Mrs. Charles A. Moore
Mr. Senchu Murano
Mrs. Bismarck S. Muraoka
Dr. Thomas D. Murphy
National Gallery of Art
University of Nebraska Library
Mr. John U. Nef
Dr. Daniel S. Noda
Professor Ben Norris
Miss Eleanor P. Noyé
Oahu Prison
Mr. C. C. Oh
Mr. Takuzo Ohta
Osaka City University
Pacific Oceanic Fishery Investigations
Dr. Harold S. Palmer
Pan American Union
Professor Irving O. Pecker
Dr. Edwin C. Pendleton
The Pennsylvania State College
Dr. Ogden D. Pinkerton
Professor Forrest R. Pitts
Mr. H. L. Powell
Dr. and Mrs. John E. Reinecke
Mr. Ernest L. Remits
Mrs. Elzie G. Reynolds

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STATISTICS

A summary of the year's statistics on the Library follows:

GROWTH IN NUMBER OF BOUND VOLUMES

<table>
<thead>
<tr>
<th>Description</th>
<th>Quantity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bound volumes added by purchase</td>
<td>7,358</td>
</tr>
<tr>
<td>Bound volumes added by government deposit</td>
<td>296</td>
</tr>
<tr>
<td>Bound volumes added by gift</td>
<td>1,243</td>
</tr>
<tr>
<td>Bound volumes added by binding</td>
<td>1,149</td>
</tr>
<tr>
<td>Total additions</td>
<td>10,046</td>
</tr>
<tr>
<td>Withdrawn</td>
<td>1,190</td>
</tr>
<tr>
<td>Net Increase</td>
<td>8,856</td>
</tr>
</tbody>
</table>

INVENTORY

<table>
<thead>
<tr>
<th>Description</th>
<th>Quantity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total number of bound volumes</td>
<td>247,310</td>
</tr>
<tr>
<td>Total number of unbound parts</td>
<td>641,029</td>
</tr>
<tr>
<td>Total number of microfilm titles (includes Oriental Library)</td>
<td>3,507</td>
</tr>
<tr>
<td>Total number of maps (duplicates included)</td>
<td>31,909</td>
</tr>
<tr>
<td>Number of current periodical titles received</td>
<td>3,906</td>
</tr>
</tbody>
</table>

CIRCULATION

<table>
<thead>
<tr>
<th>Description</th>
<th>Quantity</th>
</tr>
</thead>
<tbody>
<tr>
<td>General circulation</td>
<td>118,564</td>
</tr>
<tr>
<td>Reserve book circulation</td>
<td>82,231</td>
</tr>
<tr>
<td></td>
<td>200,795</td>
</tr>
</tbody>
</table>
LEGISLATIVE REFERENCE BUREAU

Director Norman Meller

The Bureau functions in several capacities: as a research arm of the legislative and executive branches of the territorial government; a legislative bill-drafting agency; secretariat for governmental committees; and reporter of governmental activities in Hawaii. The past fiscal year, including as it did a special legislative session as well as the normally heavier research load of an "off-session" year, was an active one in each of these areas.

MAJOR PROJECTS

AUTOMOBILE SURVEY. Among the 175 major requests worked upon was a survey of all publicly owned automobiles of the Territory and City and County of Honolulu, as well as of the private automobiles for whose use these governments make reimbursement. A report encompassing the findings of this study, which was required by legislative resolution, is now being prepared from data tabulated on the IBM equipment of the University. It will show the use made of automobiles in government service and the cost of operating public vehicles, both by components of cost and correlated with such factors as age of car and monthly mileage. This study should shed light on the questions faced by department heads in establishing administrative policy for automobile use and furnish a guide for fixing rates of compensation for the use of privately owned vehicles. University students, as part of their assignment in a course in Problems of Public Administration, originally participated in setting up this research project; subsequently six students gained research experience as well as income in assisting the Bureau in coding assembled data.

OTHER RESEARCH. Two other research projects resulted in printed reports. One developed the "Federal Limitations on the Territorial Taxing Power;" the other examined "Konohiki Fishing Rights." The seventh edition of the Directory of Agencies and Officers of the Territory of Hawaii, enlarged over the preceding edition and illustrated with pictures of the chief legislative and executive officers of the Territory was issued.

The Bureau served as research staff or secretariat for several committees appointed by the governor to investigate governmental problems and recommend action. One of these was the Advisory Committee on Taxation; another, the Advisory Committee on Government Organization (and several of its subcommittees); the third, the Management Study Committee; and the fourth, the Advisory Committee for an Auditorium. A continuing responsibility of the Bureau is to act as secretariat for the territorial Commission to Promote Uniform Legislation.

The large task of preparing for publication the Revised Laws of Hawaii, 1955, continued throughout the year. In this work the Bureau, its staff expanded by the temporary addition of a deputy attorney general, serves as secretariat to the Compilation Commission in revising the territorial statutes to reflect amendments and
other changes in territorial law made since 1943. The Compilation Commission is required to present the revision of the statutes in draft form to the 1955 legislative session.

As an official source of official reports on Hawaii, the Bureau prepared the annual report to the United Nations from Hawaii (which, as a non-self-governing Territory, it is required under the United Nations Charter and portions of the Governor’s report to the Department of the Interior. In addition, articles on Hawaii were written or revised for several encyclopedias and data on the territorial government supplied for publication by the Council of State Governments and other clearinghouses.

SERVICES. The Bureau continued to serve as an information center on governmental questions for local and mainland inquirers responding to hundreds of inquiries not recorded in the Bureau’s numbered series of major requests.

The Bureau has enjoyed close working relationships with the several territorial and county public agencies. It provided services to the Governor’s office, the offices of the Secretary of Hawaii and the Attorney General, the Statehood Commission, and practically all other staff agencies and line departments of the Territory. In the performance of its duties the Bureau has continued to receive full co-operation from the many offices from which it obtains data for its research reports.

Members of the research staff taught courses in the Department of Government and the Department of Economics as part of their duties in this off-session year. It is our confirmed belief that this combination of instruction and applied research enriches both activities.

HAWAII SOCIAL RESEARCH LABORATORY

Director Andrew W. Lind

The Conference on Race Relations in World Perspective (see page 7) gave special impetus to the activities of the Hawaii Social Research Laboratory. Hawaii was selected as the site for the conference because of the interesting and instructive example of effective interracial living which it affords. Members of the Laboratory, who originally conceived the Conference, comprised its Local Planning Board and were responsible for much of the preparatory work.

Through the Race Relations Conference, Hawaii and its University stimulated communication among scholars and administrators in the field of race relations around the world. Moreover, it insured a continuation of the sharing of insights and of factual knowledge through the establishment of an International Society for the Scientific Study of Race Relations. Two full-sized volumes are expected to emerge from the Conference—one incorporating the papers prepared by conference in advance of the Conference, and the other, summarizing its findings and interpreting their significance in relationship to the present world situation.

Considerable progress was made in analyzing population changes in Hawaii between 1850 and 1950. Titled “Hawaii’s People,” this study will be published by
the University of Hawaii Press in the fall. It affords the general public a 1954 version of Romanzo Adams' *Peoples of Hawaii*, which was last issued in 1933, and contains separate chapters on the territorial distribution, occupational movement, and assimilation of the various immigrant groups.

The study of long-term social trends within the Islands continued. Part-time student assistance was utilized in maintaining the clipping file of the four major Honolulu newspapers. This included the translation into English of significant items in the Japanese section of two of the language papers. A considerable body of research material gathered by student observers has been added to the files.

Requests for assistance on social research projects conducted by various agencies in the community received attention from members of the Laboratory staff. Pressure of teaching and administrative responsibilities prevented a follow-up of the survey of rent-control conducted during the summer of 1952 by Dr. Douglas S. Yamamura and others. Staff members have assisted in the orientation of professional personnel to the local social scene, including visiting newspaper editors, government officials, and the professional staff of the Territorial Hospital and the Department of Public Instruction.

A major service to the nursing profession and the general public was provided under the direction of Dr. Yamamura and a group of graduate students in the Department of Sociology when, early in the summer of 1953, the Laboratory was asked to conduct a study of the adjustment of nurses to the requirements of their profession. In the fall $1,400 was made available by the Commission on Nursing Education to pay for field work and secretarial assistance. During the spring of 1954, a pilot study of the nursing staff at Leahi Hospital was largely completed. Plans are now being formulated for a more extensive study of nurses throughout the Territory, financed with funds from mainland sources.

Dr. Yukiko Kimura, who conducted a special study of war-marriages involving Caucasians and Japanese under the auspices of the University of Chicago, applied certain hypotheses evolved from her mainland study to the analysis of war-time interracial marriages in Hawaii. She is adding to the substantial and significant researches in which Romanzo Adams pioneered a generation ago. A preliminary analysis has already been completed, and a report based upon case studies of the marital experience of fifty-five Caucasian and fifty-five Japanese war-brides is now being prepared for publication.
The University fielded the best basketball team in its history, doing well in an ambitious intercollegiate schedule. Boxing and baseball were part of the major sports program.
Financially, the athletic program ended the year well in the black. Due largely to good guarantees, the future, for the first time in many years, looks promising.
SERVICES of the Psychological Clinic followed the same pattern as that of recent years. The case load, as indicated in "total contacts" below, was negligibly higher than in the previous year.

### PSYCHOLOGICAL EXAMINATIONS

<table>
<thead>
<tr>
<th></th>
<th>1951-52</th>
<th>1952-53</th>
<th>1953-54</th>
</tr>
</thead>
<tbody>
<tr>
<td>Individuals examined</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>1,019</td>
<td>868</td>
<td>952</td>
</tr>
<tr>
<td>Female</td>
<td>570</td>
<td>482</td>
<td>446</td>
</tr>
<tr>
<td>Total individuals</td>
<td>1,589</td>
<td>1,350</td>
<td>1,398</td>
</tr>
<tr>
<td>Total contacts</td>
<td>2,157</td>
<td>2,043</td>
<td>2,084</td>
</tr>
<tr>
<td>Age groups</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>0-6</td>
<td>241</td>
<td>231</td>
<td>219</td>
</tr>
<tr>
<td>7-12</td>
<td>620</td>
<td>554</td>
<td>627</td>
</tr>
<tr>
<td>13-15</td>
<td>334</td>
<td>278</td>
<td>282</td>
</tr>
<tr>
<td>16-20</td>
<td>255</td>
<td>156</td>
<td>129</td>
</tr>
<tr>
<td>21-25</td>
<td>58</td>
<td>47</td>
<td>50</td>
</tr>
<tr>
<td>26-51 plus</td>
<td>81</td>
<td>84</td>
<td>91</td>
</tr>
<tr>
<td>Agencies</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Courts and correctional institutions</td>
<td>393</td>
<td>347</td>
<td>296</td>
</tr>
<tr>
<td>Educational institutions</td>
<td>667</td>
<td>561</td>
<td>629</td>
</tr>
<tr>
<td>Social agencies</td>
<td>203</td>
<td>153</td>
<td>162</td>
</tr>
<tr>
<td>Health agencies</td>
<td>239</td>
<td>215</td>
<td>198</td>
</tr>
<tr>
<td>Private and miscellaneous</td>
<td>87</td>
<td>71</td>
<td>113</td>
</tr>
</tbody>
</table>

Consultation service was provided in connection with an additional 440 individuals—an increase of 37 per cent. We are getting the same sex distribution noted in previous years—approximately 61 per cent male, 39 per cent female. Our service is primarily a service to children. More than 60 per cent of the case load is made up of children twelve years of age or younger; another 20 per cent, 13-15; only 10.1 per cent, twenty-one years and older. In mainland graduate training programs in clinical psychology the overwhelming emphasis is on work with adults. This clinic offers graduate students more numerous and more varied contacts with children than most universities are able to provide.

During the first semester it was possible to accept only three of the twelve graduate students applying for one of the clinical courses. The problem here is one of space rather than of personnel. Our teaching functions will remain limited so long as we remain in the present physical plant. Lack of adequate work space has also interfered with research.

University courses were offered by clinic staff on Maui, through the Extension Division, and on Hawaii in the Hilo Branch.
INDUSTRIAL RELATIONS CENTER

Director Harold S. Roberts

THE INDUSTRIAL RELATIONS CENTER, established in 1948, is continuing to carry out the basic objectives established by the Board of Regents. These objectives, supported by a five-point program, are: "To promote in the community a sound understanding of labor-management problems, labor-management techniques and policies; and to provide for labor, management, and the community, sources of information in the field of industrial relations."

AREAS OF WORK

TRAINING FOR INDUSTRIAL RELATIONS WORK. The curriculum in Personnel and Industrial Relations contains thirteen required courses covering the legal, economic, and practical aspects of labor-management relations. In addition, at least eight other courses are recommended as of practical value for majors in Personnel and Industrial Relations.

**REQUIRED COURSES**
- Bus 230 Industrial Safety and Health
- Bus 245 Time and Motion Study
- Bus 261 Collective Bargaining
- Bus 263 Personnel Management
- Bus 268 Employment Interviewing
- Bus 282 Business Statistics
- Econ 256 Money and Banking
- Econ 265 Government and Business
- Econ 281 Labor Problems
- Econ 282 American Trade Unionism
- Econ 283 Labor Legislation

**RECOMMENDED ELECTIVES**
- Econ 289 Arbitration of Grievances
- Econ 294 Research in Industrial Relations
- Bus 248 Wage Determination
- Bus 255 Analysis of Financial Statements
- Bus 256 Income Tax Problems
- Econ 287 Public Relations
- Econ 310 Seminar in Labor Problems
- Psyc 256 Industrial and Business Psychology
- Psyc 257 Principles of Counseling
- Psyc 258 Group Techniques of Guidance

In 1954, seventeen seniors who majored in Personnel and Industrial Relations graduated from the College. In the past year, labor organizations, as well as management, have asked for students trained in industrial relations.

INDUSTRIAL RELATIONS LIBRARY. The library has continued to add current materials on industrial relations; also a number of books and pamphlets have been received. The combined library and reading room now has seventeen filing cabinets and approximately 550 feet of shelf space.

We continue to receive substantial gifts of books, pamphlets, and newspapers. Among those who have contributed are the National Labor Relations Board, the United States Department of Labor, the territorial Department of Labor and Industrial Relations, labor organizations, and the Hawaii Employers Council. We also have substantial materials on the National War Labor Board. Further expansion of the Library and reference materials cannot be carried out without a research librarian to organize and catalogue the materials that we now have.

LIBRARY REFERENCE SERVICE. We have continued to add to our reference materials, but the lack of personnel has militated against making such materials available to the public.

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readily available. Requests for information from management, labor, and the public have been met.

PUBLIC LECTURES, CONFERENCES, AND DISCUSSION GROUPS. The faculty staff in industrial relations has given a number of lectures on various aspects of industrial relations during the year. We also participated in discussion and seminar groups.

RESEARCH STUDIES. The semi-monthly Industrial Relations Newsletter has been continued. From time to time, the Newsletter contains a list of current articles and books in the field. In March, 1953, the Center issued Chapter I of Essentials of Labor Arbitration. Professor Ferguson's Occasional Paper No. 60, "Substitutes for the Strike, An Appraisal," was published. A manuscript by A. Gerakas and E. C. Pendleton entitled "A Brief Survey of Arbitration in Hawaii" was filed with the Hawaiian collection of the University Library. The Center has two long-time research projects under way: (1) The history of labor in Hawaii, and (2) A comprehensive bibliography on the labor movement in Hawaii.

OFFICE OF PUBLICATIONS AND INFORMATION

Director Thomas Nickerson

The Office edited and produced the University's official publications, conducted its news bureau and information center, and performed other functions in the public relations program. The following tabulation indicates the extent of these activities.

EDITORIAL PRODUCTION

Edited
5 books
Completely edited: Ambassadors in Arms, Nine Doctors and God
120 agricultural Progress Reports
156 circulars, papers, notes, and leaflets
15 course descriptions (Extension Division)

Edited and Produced
1 moving picture film, Sun, Surf, and Study
4 books—Hawaiian Kingdom Vol. II, T'ao Ch'ien, Diversified Agriculture of Hawaii, Directory of Hydrobiological Laboratories and Personnel in North America
4 issues of Pacific Science quarterly
4 issues of Philosophy East and West quarterly
4 issues of Farm Science quarterly
4 issues of Volcano Letter
2 issues of house organ, "Mynah-gram"
4 issues of the "University Bulletin"—General Catalogue, Report of the President, Graduate School Announcement, Summer Session Announcement
18 booklets, including the Faculty Directory, Handbook for the Faculty, Statutes and By-laws, Harvard Advanced Management Course, and Occasional Papers
18 agricultural bulletins, circulars, and papers
35 invitations, programs, folders, and brochures
NEWS BUREAU PRODUCTION

736 news stories, features, and articles
1,213 versions
7,608 copies
18 Extension groups instructed in communications
16 student groups helped with publicity
1 issue of summer session news sheet
1 insert for Hawaii Travel News

INFORMATIONAL SERVICES

7,800 persons greeted by receptionist
8,580 telephone inquiries answered
520 persons conducted on campus tours
2,897 persons viewed the film, *Sun, Surf, and Study*
100,000 persons (estimate) viewed *Sun, Surf, and Study* over local and mainland TV stations
25 lectures arranged
8 University committees served on
41 radio, TV, moving picture, photographic, newspaper, magazine, and press bureau groups assisted in one or more projects
31 advertisements placed

The Director is keenly conscious of areas which require much more intensive activity than present facilities permit. One of these concerns University speakers. A speakers' bureau should be set up which in addition to handling requests for speakers, as the Office now does, makes an affirmative effort to acquaint all interested organizations throughout the Islands with the full extent of the University's speaker resources. Another area is that of campus tours. In addition to accommodating all groups which request campus tours, an aggressive campaign should be conducted to invite to the campus every high school and every other interested group in the Territory. It would, however, be a grave mistake to initiate either of these programs without sufficient personnel to insure its success.

UNIVERSITY OF HAWAII PRESS

Chairman Thomas Nickerson

AN INCREASING number of manuscripts of high quality was submitted to the Press for publication—due partly to the growing prestige of the Press, partly to the tendency of commercial printers to reject manuscripts of limited appeal in the face of rising printing costs, thereby throwing an additional burden on university presses. This resulted in publications of increased value and popular appeal and a doubling of receipts from sales.

The Press issued its first catalogue, had a publication selected for inclusion by the Western Books Exhibit, and was represented for the first time at the annual meeting of the Association of American University Presses held this year at Rye, New York. Marjorie Sinclair's and Lily Chang's translation of the *Poems of T'ao Ch'ien* was our first book to go into a second printing. Thomas D. Murphy's account of Hawaii's 100th Infantry Battalion, *Ambassadors in Arms*, amassed an impressive total of 1,700 prepublication orders. The Press, though understaffed, is thriving.
The books of the University of Hawaii increased in number and gained in importance to the Territory.

PACIFIC SCIENCE

Editor-in-Chief Leonard D. Tuthill

*Pacific Science* published thirty-four articles dealing with many phases of science covering varied sections of the Pacific area. The authors of these papers were located in Hawaii, mainland United States, Alaska, Australia, Japan, and Trinidad, British West Indies.

The total distribution stood at 546, of which 315 were exchanges and 231 paid subscriptions.

Beginning with the first number of volume 8 (January, 1954) the journal has appeared in a new cover which has been commented on favorably. The high point of the year to the editorial staff has been the publication of our first colored illustration, which appeared in the April number.

PHILOSOPHY EAST AND WEST

Editor Charles A. Moore

*Philosophy East and West* continues to maintain its position as an international scholarly journal in the field of East-West philosophy. Contributions of real merit have been received from representatives of all the great Oriental philosophical traditions, as well as from leading Westerners in the field. Scholarly standards have

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been rigidly maintained and also our unique policy of publishing articles only in
Oriental and comparative East-West philosophy, despite the receipt of many arti­
cles of merit in Western philosophy and in religion.

There has been a remarkable increase in subscriptions and sales. The journal
now handles 450 regular subscriptions. There were many individual sales; thirty-six
exchanges and forty-nine complimentary copies were given. We use the journal
in Philosophy 100 as a means of introducing our students to this important special
field in which the University makes its unique and most important contribution in
the general area of philosophy. Total copies published per issue at the present
time are 700.

The journal has faced two difficulties in connection with subscriptions. In the
first place, very few Orientals, even those who should obviously have the journal,
have been able to subscribe because of the cost. An effort is being made to obtain
sponsorship of a rather large number of subscriptions for Indian individuals and
libraries which cannot afford the journal from their own funds. The second difficulty
relates to the fact that relatively few libraries—119—subscribe to the journal. We
are now undertaking a campaign to improve this very important aspect of the sales
situation.

The journal is and will be self-supported—by subsidies from several foundations
—through January, 1956, that is, for five years. After that time we hope the Uni­
versity will assume the cost of production, which will be relatively small because
of the appreciably large number of sales.

UNIVERSITY EXTENSION DIVISION

Director Albert J. McKinney

The Division's total registration was 5,402, as follows:

<table>
<thead>
<tr>
<th>Credit Courses</th>
<th>Special Credit Courses</th>
<th>Non-Credit Courses</th>
<th>Correspondence Courses</th>
</tr>
</thead>
<tbody>
<tr>
<td>1,193</td>
<td>418</td>
<td>3,482</td>
<td>309</td>
</tr>
</tbody>
</table>

This was an increase of 416 over the previous year.

Students have indicated that they prefer to take credit courses on campus rather
than downtown. Accordingly, the downtown center was discontinued. This re­
sulted in a 9 per cent increase of on-campus credit courses—1,193 this year as
against 1,091 last. However, the Fort Shafter and Schofield courses were continued.

Special credit courses given in rural areas enrolled 418, an increase of seventy-one
over the previous year. Special credit courses were offered on each of the major
islands. These included Fire Insurance on Kauai and Auto Insurance on Maui and
Hawaii. On Oahu the Public Administration course continued to be popular. Six
Elementary Certificates were awarded and one Advanced Certificate, our first.
The University Extension Division reaches out into the community for instructors in various fields of learning. Allen Y. Shizumizu, C.P.A., Territorial Board of Accounting, is shown with some of his students in Elementary Accounting.

Enrollment in a television course in Shakespeare in co-operation with the University of California was disappointing.

Non-credit course offerings were carefully attuned to public demand. This tended to be in favor of vocational and avocational subjects rather than purely informational ones. Outstanding among these offerings were a course in Sewage and Water Pumping Stations which attracted sixty-five students, one in Purchasing, which enrolled fifty-three, and another, Insurance Credit, in which sixty-five registered. Reading for Speed and Understanding proved to be the most popular course of all, with an enrollment of 261.

Student response to a completely revised Correspondence Course program has been enthusiastic. Enrollment totaled 309.

Audio-visual equipment was used 219 times.

The Division offered photographic, printing, and audio-visual equipment services as follows:

**Photographic**
- Pictures taken: 3,302
- Contact prints made: 5,893
- Enlargements made: 1,326
- Slides made: 640

**Printing**
- Plates made: 507
- Envelopes printed: 26,832
- Press runs: 623,566
A class in Silk Screen Printing in the Extension Division evening program receives instruction in techniques of the process from James K. K. Park, Honolulu artist.

HILO BRANCH

Director Frank T. Inouye

The Branch continued to grow. Student enrollment for the fall semester was 129, an increase of forty-eight, or 59 per cent, over the previous year. Instead of the usual drop in the spring, enrollment rose to 132. Veterans taking advantage of GI benefits accounted for a significant part of this increase; the number of veterans enrolled rose from three in 1952-53 to twenty-four in 1953-54.

Arts and Sciences students composed more than half of the student body: sixty-seven for the fall semester and seventy for the spring. There was an increase of from nine to twelve students in Business Administration. Teachers College students numbered twenty-four in the fall and twenty-three in the spring. Applied Science students totaled fifteen in the first semester, fourteen in the second.

There was a corresponding increase in the summer session, 153 registering for nine courses in the six-week session alone—an increase of forty-nine over 1953—and forty for the postsession, against twenty-eight for 1953.

The pressure of enrollment increases forced the University to lease an additional 40 per cent of floor space from the trustees of the Hilo Boarding School, but the
inadequacies of the Lyman Hall building for college purposes were apparent. Safety, health, and use factors required entirely new and expanded facilities, which have been in the planning stage since the beginning of the year. Additional courses were also needed to meet the requirements of the increased student body, and the curriculum was enlarged accordingly.

Although student registration increased greatly, the Hilo Branch faculty did not. Three full-time staff members and eight part-time lecturers, with the aid of two professors who commuted from the Honolulu campus, taught fifty-eight lower-division courses for the year, an increase of fifteen over 1952–53. It was necessary to impose heavy loads upon these instructors.

Despite the pressure of enrollment increases, academic standards at the Hilo Branch remained high. Fourteen students made the Dean’s List, five freshmen were initiated into Phi Kappa Phi, and the overall grade-point-ratio for the student body was 2.25. Meanwhile only one transfer student from the Hilo Branch was dropped on the Manoa campus for academic reasons. A Hilo Branch freshman girl, Sumiko Kaneshiro, was the co-recipient of the coveted Charles Eugene Banks Memorial Prize.

ENROLLMENT TRENDS

A Department of Public Instruction poll taken of 2,983 students in the high schools on this island indicates that 156, or 5.2 per cent, plan to matriculate at the Hilo Branch. An additional 451 students, or 15.1 per cent, plan to attend either the University, Honolulu campus, or some mainland school.

The relatively stable high school enrollment on the Big Island is another cause for optimism. Nearly a thousand seniors graduate from these schools every year. The number coming to the Hilo Branch has shown a gradual but steady increase, which will be heightened as young men leave the military establishments.

*Architects' perspective of new Hilo Branch for which plans have been approved.*
# SUMMARY OF ENROLLMENT 1953-54

<table>
<thead>
<tr>
<th></th>
<th>FALL</th>
<th>SPRING</th>
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</thead>
<tbody>
<tr>
<td>Full-time students</td>
<td>115</td>
<td>119</td>
</tr>
<tr>
<td>Part-time students</td>
<td>14</td>
<td>13</td>
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<tr>
<td>Total</td>
<td>129</td>
<td>132</td>
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<tr>
<td>Extension Division students</td>
<td>16</td>
<td>19</td>
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<tr>
<td>Enrollment of full-time students by Classes</td>
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<td></td>
</tr>
<tr>
<td>Freshmen</td>
<td>90</td>
<td>92</td>
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<td>Sophomores</td>
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<td>27</td>
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<tr>
<td>Total</td>
<td>115</td>
<td>119</td>
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<tr>
<td>Enrollment of full-time students by Colleges</td>
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<tr>
<td>Arts and Sciences</td>
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<td>70</td>
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<td>Business Administration</td>
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<td>12</td>
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<tr>
<td>Teachers</td>
<td>24</td>
<td>23</td>
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<tr>
<td>Applied Science</td>
<td>15</td>
<td>14</td>
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<tr>
<td>Total</td>
<td>115</td>
<td>119</td>
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<table>
<thead>
<tr>
<th></th>
<th>SIX-WEEK</th>
<th>THREE-WEEK</th>
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<tbody>
<tr>
<td>Number of students</td>
<td>104</td>
<td>28</td>
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<tr>
<td>Number of courses offered</td>
<td>8</td>
<td>1</td>
</tr>
<tr>
<td>Number on staff</td>
<td>5</td>
<td>1</td>
</tr>
</tbody>
</table>

**SUMMER 1953**
- Number of students: 104
- Number of courses offered: 8
- Number on staff: 5

**SUMMER 1954**
- Number of students: 153
- Number of courses offered: 9
- Number on staff: 6

**Veterans Under GI Bill**
- P. L. 346: 5
- P. L. 550: 3

## COMMUNITY AND STUDENT ACTIVITIES

**COMMUNITY PROGRAMS.** Public relations with the community and with Big Island high schools included a lecture series, featuring professors from the Honolulu campus, Dean Willard Wilson, Dr. Carleton Green, and Mr. Kenneth Kingrey; talks by American Universities Field Staff members at Rotary meetings; addresses by the Director before various island groups; and participation by the Director and the staff in numerous community organizations. A puppet show featuring articles made by teachers taking summer session art courses played before over 600 children and adults at the County Library. Through these and other community activities, the Hilo Branch was able to increase the number of scholarships offered to its students from six to nine. They are: Beta Sigma Phi; Buddhist Friendship Society of Hilo (2); Hui Hanalike; Hilo High, class of 1943; Hilo
Women's Club; Territorial Young Buddhist Association convention; Territorial Scholarship; Zonta Club.

Visits to each of the island's high schools were made by the Director, accompanied by the Hilo Branch chorus, and an attempt was made to keep the seniors informed as to college possibilities and requirements.

STUDENT ACTIVITIES. Student activities increased in variety, form, and direction. A YMCA and a veterans' group were added to the growing list of student organizations. These groups established their own programs, while co-operating with the ASUH and AWS in the annual Ka Palapala Beauty Pageant, the Little Rainbow Christmas Dance, the Semester-Break Camp, and many other social and recreational programs.

An orientation camp for freshmen was held at the Volcano; the Hilo Branch chorus made a trip to the Maui high schools; the Christmas programs were presented before various island institutions and organizations; and the Hilo Branch basketball team went to Honolulu. A meeting between the local ASUH officers and a delegation of Manoa student officers resulted in the clearing away of much misunderstanding between the two campus organizations, and promised closer and deeper relationships in the future.

ARMY ROTC

Colonel Giles R. Carpenter

THE ARMY Reserve Officers Training Corps program in which 597 cadets are enrolled was marked by the following:

1. Eighty-two ROTC seniors were graduated and commissioned as second-lieutenants in the United States Army Reserve. This is the largest number of cadets in the history of the ROTC to be graduated at this University.

2. Army ROTC graduates from the University of Hawaii continued to distinguish themselves by attaining outstanding records at Military Service Schools on the Mainland. All achieved graduation standing in the upper fourth of their classes at the Artillery School, and in the upper third of their classes at the Infantry School.

3. As a result of the annual formal inspection conducted on 20-21 April, the Headquarters of the United States Army, Pacific, awarded the ROTC Instructor Detachment a "superior" rating for its general efficiency and conduct of training.

4. The decision was made to convert from the branch material program (Artillery and Infantry) to the new branch general program. Preliminary plans have been made to effect an orderly transition thereto.

Selective Service deferments were granted to cadets based on scholastic excellence. In mid-February, 1954, a board representing the military and academic faculty screened requests to determine which applicants were best qualified as potential reserve officers; those so qualified were then eligible for deferment from induction.
DEFERMENTS EFFECTIVE JUNE, 1954

<table>
<thead>
<tr>
<th>CLASS</th>
<th>ENROLLED</th>
<th>DEFERRED</th>
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<tbody>
<tr>
<td>Basic Course</td>
<td></td>
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<tr>
<td>Freshmen</td>
<td>226</td>
<td>112</td>
</tr>
<tr>
<td>Sophomores</td>
<td>168</td>
<td>58</td>
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<tr>
<td>Advanced Course</td>
<td></td>
<td></td>
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<tr>
<td>Juniors</td>
<td>72</td>
<td>72</td>
</tr>
<tr>
<td>Seniors</td>
<td>82</td>
<td>82</td>
</tr>
<tr>
<td>Totals</td>
<td>548</td>
<td>324</td>
</tr>
</tbody>
</table>

ACTIVITIES

REVIEWS. On separate occasions reviews were held for President Gregg M. Sinclair and the Deans of the University, Honorable Farrant L. Turner, Acting Governor of Hawaii, and Major General F. W. McKinney, Adjutant General of Hawaii. The cadets also participated in Charter Day ceremonies and in the annual Armed Forces Day Parade.

The year's activities culminated in the joint Army-Air Force ROTC Graduation Review held on May 18. At this ceremony eighty-two graduating Army cadets received their reserve officer commissions. Fourteen cadets were honored as Distinguished Military Graduates, the following four of whom accepted commissions in the Regular Army: John F. Lopes, Jr., Kenneth T. Okazaki, James T. Shiraishi, and Robert H. Tanimoto. The reviewing officer and guest speaker at the Graduation Parade was General Clark L. Ruffner, Commanding General, United States Army Forces in the Pacific.

AWARDS. Many awards were presented at formal ceremonies to deserving cadets. Foremost of these honors were those awarded to the outstanding cadets in each of the four classes: freshman, Grafton Jhung; sophomore, Herbert S. C. Lum; juniors, David M. Yamamoto and Arthur S. Peterson; seniors, Richard I. Fukumoto, Kenneth T. Okazaki, and Robert H. Tanimoto.

Two new awards were established. The first, a medal presented by the National Society of the Sons of the American Revolution to the cadet attaining the highest academic standing during the freshmen year in all courses, including ROTC, was awarded to Marvin K. L. Ching. The second, the Adna G. Clarke Trophy, donated by the Military Order of the Warrior of the Pacific and the ROTC seniors of the classes of 1954 and 1955 and awarded each year to the winner of the small bore rifle competition between alumni and cadets on Homecoming Day, was won by the ROTC cadets.

SUMMER CAMP. In June, seventy-five cadets of the junior class departed by military transport to attend summer camp on the Mainland, where they attended six weeks of practical training: fifty-three infantry cadets at Fort Lewis, Washington; twenty-two artillery cadets at Fort Sill, Oklahoma. At the close of camp the cadets had an opportunity to travel on the Mainland before returning by government
transportation to the Islands. As a guest of the Army, Dean Paul S. Bachman visited the cadets during this training period and had an opportunity to interview the cadets and to observe the methods of instruction employed at Fort Lewis, Washington.

AIR FORCE ROTC

Colonel William W. Jones

COMPARATIVE ENROLLMENT figures of the AFROTC courses are presented to show the attrition rates throughout the academic year. They are considered to be normal.

<table>
<thead>
<tr>
<th>Course</th>
<th>October 15, 1953</th>
<th>February 15, 1954</th>
<th>June 10, 1954</th>
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<tbody>
<tr>
<td>Air Science I</td>
<td>259</td>
<td>215</td>
<td>203</td>
</tr>
<tr>
<td>Air Science II</td>
<td>174</td>
<td>156</td>
<td>153</td>
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<tr>
<td>Air Science III</td>
<td>36</td>
<td>36</td>
<td>36</td>
</tr>
<tr>
<td>Air Science IV</td>
<td>80</td>
<td>65</td>
<td>15</td>
</tr>
<tr>
<td><strong>Totals</strong></td>
<td><strong>549</strong></td>
<td><strong>472</strong></td>
<td><strong>407</strong></td>
</tr>
</tbody>
</table>
Policy concerning the commissioning of Air Force ROTC graduates who have received their degrees was altered to reflect current needs of the Air Force. Vacancies existing for officers to fill administrative jobs were extremely limited. However, the Air Force has absorbed all officers who were qualified for either Pilot or Observer Training. A small percentage of our newly commissioned officers was also taken into the Weather Office Program for active duty, a program which offers additional college training at universities and colleges on the Mainland, at Air Force expense.

The Air Force, realizing its moral obligation to those University graduates who had completed AFROTC requirements but were unable to qualify for active duty spaces available, offered a commission in the National Guard or the opportunity to enlist for a two-year period, after which the AFROTC graduate could then apply for his commission.

The commissioning of graduates in the future appears to be geared to the active duty spaces available for junior officers, with a maximum stress placed on the procurement of officers for the flying training programs.

At the end of the academic year, the Air Force ROTC had sixty-nine freshmen, eighty-seven sophomores, and all juniors and seniors in the program in a deferred status from Selective Service. Although the percentage of freshmen could possibly be higher, it is felt that it is better for the student to receive a deferment after he has reached a "C" average in the University rather than issue a deferment and then have to cancel it due to low academic standing. This Department has no authority to re-defer a cadet once his deferment has been cancelled. Forty-nine graduates were commissioned as Reserve Officers in the Air Force and were called to active duty, or soon will be. Six graduates received commissions in the National Guard, and eleven have received certificates of completion, which after two years of active duty in enlisted status, makes them eligible to receive reserve commissions.
ACTIVITIES

REVIEWS. The Cadet Wing participated in parades and ceremonies which included the Annual Inspection Review on April 14; a review for President Sinclair and the Deans on April 28th; a review for General Maddux, the Commander of United States Air Forces, Pacific, on May 12; the joint Armed Forces Day Parade on May 15; and the Joint Graduation Parade on May 18.

AWARDS. Awards given at reviews throughout the year included the H. Gaylord Dillingham Award presented to Cadet Harry M. Konishi, the best sophomore accepted for the Advanced Course; the Air Force Association Award received by Herman W. P. Jarrett, most outstanding junior of the year; and the Wah Kau Kong Award presented to Squadron K commanded by Howard R. Tarleton as the most outstanding squadron. Other awards were the Reserve Officers Association Award to Herman W. P. Jarrett, most outstanding senior cadet who obtained the highest degree of proficiency; and the Star-Bulletin Award to Joseph M. Cullen, most outstanding Air Science I cadet. This Department awarded a medal to Kay S. Kimura, the outstanding Air Science II cadet.

SPORTS. The AFROTC sponsored competitive sports among the squadrons of the Cadet Wing. Awards to winning teams of the inter-squadron softball and volleyball tournaments were given. The AFROTC participates in rifle team competition and furnishes members to the University Rifle Team with the Army ROTC Unit. Rifle Team members are also presented with medals based on participation in the various rifle matches fired. Letters are also given by the Athletic Department for participation on the University Rifle Team.

SOCIALS. The University of Hawaii Chapter of the Arnold Air Society, an Air Force sponsored fraternal organization made up of members of the Advanced Course AFROTC, sponsored two Band Awards and conducted two picnics at Bellows Air Force Base for its members, as well as two formal dinner dances at Hickam Air Force Base.

The Joint Operations Ball held at Ft. Ruger on April 30 proved a huge success with a large turnout of both Army and Air Force Cadets.

SUMMER CAMPS. AFROTC Cadets were sent to two summer camps on the Mainland for a four-week training period. Thirty-one cadets attended the encampment at Mather Air Force Base, California, which was conducted for cadets who will enter the flying training programs upon graduation, and six cadets attended the camp at McClellan Air Force Base, conducted for those cadets who are pursuing courses in Engineering and allied fields and who are not physically qualified for flying training. Dean Willard Wilson visited the Mather Encampment as the University representative. Both encampments conducted a successful program and returning cadets have stated that they enjoyed both the encampment and their stay on the Mainland.
VETERANS' ADVISER

Adviser Edmund F. Spellacy

The Veterans' Adviser is charged with responsibility for two groups: the veteran student who has already served a tour of duty with the Armed Forces, and the student whose tour is yet to come and who is consequently subject to the Selective Service Law.

The steady decline in veteran registration reversed itself, registrations increasing somewhat in the first semester and appreciably so in the second. This was due to Public Law 550, better known as the Korean Bill. We predicted at the time of its passage in 1952 that its effects probably would not be felt until approximately September, 1953. This prediction has been borne out. Whereas in the year 1952-53 some 500 veterans attended the University each semester, last year 600 were enrolled in the first semester and nearly 700 in the second. An increase in the second semester is contrary to our usual experience.

This change was probably dictated by the necessity for the "550" veteran to begin his training promptly, else he would lose out altogether under those provisions of the law requiring him to commence study within two years following his date of discharge from active duty. Thus while the number of veterans under World War II legislation is steadily decreasing (most World War II veterans will be ineligible for further training after July, 1956), registration under Public Law 550 has increased five-fold since the program was first inaugurated. At that time, eighty men and women initiated programs of study under the terms of the statute, compared with nearly 400 now. During the first semester, World War II and Korean veterans numbered about the same, while in the second, the latter group was nearly twice the size of the former.

A newly formed Veterans Club on campus has shown energy and initiative in sponsoring both social events of interest to the veterans' group and projects of community worth in which the veterans as an organized unit take part.

As regards Selective Service, official forms were prepared on some 1,500 men students for use by the local boards. Particular attention was paid to those students who discontinued their registration at any time during the year and to those who reduced their credit load below twelve, the minimum required.
THE AQUARIUM

Director Spencer Tinker

The Aquarium has completed its fiftieth year of service to the people of the Territory and its thirty-fifth year as a part of the University.

It was visited by a total of 57,799 persons who paid $14,449.75 in admission fees. The attendance at the Aquarium was the thirteenth largest in the Aquarium’s history and the second most lucrative of those years during which an admission fee was charged.

OLD BUILDING

The physical plant. The old Aquarium building and its equipment, although old and worn out, operated in a satisfactory manner until the transition to the new building was completed. The staff kept the repairs to the old building and its equipment to a minimum. With the opening of the new building, the old Aquarium building will be vacated and all of the usable materials and equipment and its exhibits will be transferred to the new building.

The exhibits in the old Aquarium building remained about as in previous years. These exhibits consisted of Hawaiian marine forms, including fish, molluscs, echinoderms, and crustaceans, which were displayed in thirty-five large wall tanks. In addition the staff maintained a set of thirty-six fresh water tanks and five floor tanks in the lobby of the building.

The most interesting fish to be added to the exhibit was an electric eel from South America. It is regularly displayed in the Aquarium, but at the time of the annual exhibit of the Honolulu Aquarium Society it was placed with their exhibits for a week so that it could be seen by a larger number of persons. At this time it was attached to an oscilloscope so that the public could witness the electrical discharges of this fish.

As in previous years, the specimens to supply the Aquarium were obtained from local fishermen and by the Aquarium staff. Nearly all of them came from the areas along the southern and western shores of Oahu.

Public Education Activities. The Aquarium continued its program of illustrated lectures and movies in the community. The Director gave a total of thirty-one talks on marine life to schools, tourist groups, civic organizations, and youth groups.

As in previous years, the Aquarium continued to assist the local teachers in the collection, preservation, and identification of local fishes, molluscs, and other marine forms for use in the public schools.

The Director has assisted local schools and teachers in the preparation of sets of slides on marine subjects. Much of this work has been carried on in conjunction with work in the Teachers College.
A new and up-to-date Aquarium neared completion. It will take the place of the termite-riddled building which has served as the Waikiki branch of the University's undergraduate work in marine biology for thirty-five years.

The Aquarium continued its shipments of fish to the Steinhart Aquarium in San Francisco. This project has enabled that aquarium to maintain a limited display of Hawaiian fish in that city and is regarded as one of the Aquarium's contributions to Hawaii's tourist promotion program.

NEW BUILDING

Exactly fifty years after Honolulu's first Aquarium was opened (March, 1904) the people of Hawaii completed the construction of a second and larger Aquarium. This new Aquarium building was made possible by the work of many individuals and groups in the community and by the 1949 Territorial Legislature which authorized the issuance of bonds in the amount of $400,000.00 for this project. (Act 401. S. L., 1949)

The new building is without question one of the most beautiful buildings of its kind in the world, for it is artistically done and has a pleasant, natural, open setting facing the sea. It is of reinforced concrete construction throughout and is faced with coral stone upon the front and upon the side facing the courtyard.

The building was designed by Hart Wood and Edwin Weed and was built by the United Construction Company of Honolulu. Work began upon the building in January, 1953, and was completed in March, 1954, at which time the building was transferred to the University for administration.
THE EXHIBITS. The exhibits in the new Aquarium, as in the old, will be predominantly Hawaiian. At the outset approximately thirty of the five-foot tanks will be devoted to the display of the Hawaiian marine reef and shore fauna. Another ten will be devoted to the larger fresh water fishes which have been introduced and are now established in the ponds and streams of the Islands.

An exhibit of fresh water tropicals will be presented in eighteen tanks which are arranged in two series of nine tanks each. These fishes will be species which inhabit fresh water in various tropical countries of the world.

The large outdoor pool will be the exhibition pool for all of the marine animals which cannot be accommodated in the wall tanks within the building. Here will be on exhibit the larger fish, including the sharks and rays, turtles, and possibly porpoises, although it is still doubtful whether the latter will be able to accommodate themselves to this particular tank.

EDUCATIONAL FACILITIES. The new Aquarium building contains a small lecture room which will seat somewhat less than 100 persons. It is our plan to use this room for lectures to school groups at the time of their visit to the Aquarium. Here we plan to explain to island children the operation of the Aquarium and the manner in which we collect and care for the fish, and to show them slides and movies of Hawaii's fish, sea shells, and other aspects of aquatic life.

Already this lecture room has become the regular monthly meeting place of three adult educational or recreational groups—the Honolulu Aquarium Society, the Hawaiian Malacological (Sea Shell) Society, and the Hawaii Fish and Game Association. Later we plan to use this room for regular evening lectures on Hawaiian subjects for the tourists in Waikiki.

A small library room, measuring approximately twelve by fourteen feet, will provide a small public reading room for persons with a popular or scientific interest in marine life and other aquatic subjects. This library room is at present without books or magazines. However the Honolulu Aquarium Society and the Hawaiian Malacological Society are planning to devote a portion of their time and funds toward assembling a small collection of books and related materials in their respective fields of interest. The Aquarium plans eventually to call upon the community to help us in supplying the books which this reading room should have.

A small museum-type room, measuring seventeen by twenty-five feet, will feature those marine exhibits which are preserved or static. Into this room will go all of the types of Hawaiian and Pacific sea shells, corals, sea urchins, crustaceans, and related materials which the Aquarium is able to obtain. This room will serve to complement and to complete the live exhibits in the tanks by offering those exhibits which cannot be effectively displayed with the fish.

The new Aquarium, when it is finally in full operation, will undoubtedly be the most spectacular attraction in Waikiki. It should be a very potent force in our tourist advertising program and a real factor in luring visitors from afar to the Hawaiian Islands. For the local residents, the Aquarium will be a center of recreation, education, and inspiration.
ATTENDANCE AND RECEIPTS

<table>
<thead>
<tr>
<th>MONTH</th>
<th>ATTENDANCE</th>
<th>RECEIPTS</th>
<th>MONTH</th>
<th>ATTENDANCE</th>
<th>RECEIPTS</th>
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<td>July</td>
<td>6,230</td>
<td>$1,557.50</td>
<td>January</td>
<td>4,746</td>
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<tr>
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<td>6,007</td>
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<td>February</td>
<td>4,773</td>
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<tr>
<td>September</td>
<td>4,704</td>
<td>1,176.00</td>
<td>March</td>
<td>4,620</td>
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<tr>
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<td>4,357</td>
<td>1,089.25</td>
<td>April</td>
<td>5,016</td>
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<tr>
<td>November</td>
<td>3,985</td>
<td>996.25</td>
<td>May</td>
<td>4,554</td>
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<td>December</td>
<td>3,736</td>
<td>934.00</td>
<td>June</td>
<td>5,071</td>
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<td>29,019</td>
<td>$7,254.75</td>
<td>Totals</td>
<td>28,780</td>
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<td>Grand Totals</td>
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<td></td>
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<td>57,799</td>
<td>$14,449.75</td>
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HAWAII MARINE LABORATORY

Director Robert W. Hiatt

ACCOMPLISHMENTS included the completion of a Ph.D. thesis, the preparation of eleven others, the completion and sending to press of nineteen scientific papers, and the publication of twenty additional ones.

Active research grants totaled $38,697. Two special grants were received: $10,000 from the Rockefeller Foundation for equipment and supplies over a two-year period, and $5,000 from Edwin W. Pauley to assist with the construction of apartments for visiting associates. Four new apartments were completed. They will permit us to accept the applications of six visiting researchers during the summer of 1954, whereas lack of facilities prevented us from accepting any new ones during the previous summer. The many scientists who visited us were impressed with the work under way.

The new Waikiki Branch at the new Aquarium was completed. This provides us with a storeroom, three research rooms, and two much-needed laboratories for teaching. The smaller of these will be used for instruction in physiology, the larger for general marine courses in zoology and botany.
## STATISTICAL INFORMATION

### SUMMARY OF ENROLLMENT 1953–1954

**University Day and Evening Credit Courses**  
**Honolulu Campus, Hilo Branch, and Extension Centers**

<table>
<thead>
<tr>
<th>CANDIDATES FOR DEGREES AND DIPLOMAS</th>
<th>1ST SEMESTER</th>
<th>2ND SEMESTER</th>
<th>YEAR</th>
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<tbody>
<tr>
<td><strong>Graduate School</strong></td>
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<td></td>
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</tr>
<tr>
<td>Advanced Degree.</td>
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<td>181</td>
<td></td>
</tr>
<tr>
<td>5-Year Diploma</td>
<td>117</td>
<td>78</td>
<td></td>
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<td></td>
<td></td>
<td></td>
<td>310</td>
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<tr>
<td><strong>College of Arts and Sciences</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Seniors</td>
<td>287</td>
<td>216</td>
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<td>Juniors</td>
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<td>275</td>
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<tr>
<td>Sophomores</td>
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<td>Freshmen</td>
<td>639</td>
<td>588</td>
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<tr>
<td>Juniors</td>
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<tr>
<td>Sophomores</td>
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<td>Juniors</td>
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<tr>
<td>Sophomores</td>
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<td>156</td>
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<tr>
<td>Freshmen</td>
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<td>Juniors</td>
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<tr>
<td>Sophomores</td>
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<tr>
<td>Freshmen</td>
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<td><strong>College of Business Administration</strong></td>
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<td>Seniors</td>
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<tr>
<td>Juniors</td>
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<tr>
<td>Sophomores</td>
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<tr>
<td>Freshmen</td>
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84
<table>
<thead>
<tr>
<th></th>
<th>Honolulu Campus</th>
<th>Extension Centers</th>
<th>Total</th>
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<tbody>
<tr>
<td>Total Degree Candidates</td>
<td>3,869</td>
<td>3,664</td>
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<tr>
<td>Total Diploma Candidates</td>
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<td>Total Classified Students</td>
<td>3,986</td>
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<tr>
<td><strong>NOT CANDIDATES FOR UNIVERSITY DEGREES OR DIPLOMAS</strong></td>
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<tr>
<td>Graduates</td>
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<td>Professional Teaching Certificate</td>
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<td>Undergraduates</td>
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<td>Auditors</td>
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<td><strong>629</strong></td>
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<td>Total Students</td>
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<td>Honolulu Campus</td>
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<td>Extension Centers</td>
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<td>518</td>
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<td>Hilo Branch</td>
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<td>Duplicates</td>
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<tr>
<td>Grand Total</td>
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FINANCIAL STATEMENT FOR THE

INCOME—EXCLUDING PLANT FUNDS

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<tr>
<th>SOURCES</th>
<th>TOTAL EDUCATIONAL AND GENERAL INCOME</th>
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<tbody>
<tr>
<td>For educational purposes</td>
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<tr>
<td>Federal funds</td>
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<tr>
<td>Territorial appropriations</td>
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<tr>
<td>University sources</td>
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<tr>
<td>Student fees</td>
<td></td>
</tr>
<tr>
<td>Sale of services of departments</td>
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<tr>
<td>Gifts and grants</td>
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<tr>
<td>Miscellaneous</td>
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<td>$608,875.27</td>
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<table>
<thead>
<tr>
<th>EXPENDITURES—EXCLUDING PLANT IMPROVEMENTS</th>
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<tbody>
<tr>
<td>FOR EDUCATIONAL PURPOSES</td>
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<tr>
<td>Instruction and related activities</td>
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<tr>
<td>Organized research</td>
</tr>
<tr>
<td>Agricultural Extension Service</td>
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<tr>
<td>Library</td>
</tr>
<tr>
<td>Total for instruction and research</td>
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<tr>
<td>Administration and general expenses</td>
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<tr>
<td>Operation and maintenance of physical plant</td>
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<td>Public services</td>
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<tr>
<td>Total current University expenditures</td>
</tr>
<tr>
<td>Percentage</td>
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<tr>
<td>FOR NON-EDUCATIONAL PURPOSES</td>
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<td>Auxiliary enterprises</td>
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<td>Projects</td>
</tr>
<tr>
<td>Others</td>
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<tr>
<td>Total current expenditures</td>
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## FISCAL YEAR 1953-54

<table>
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<tr>
<th>Total</th>
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<td>$488,358.44</td>
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<td>1,144,096.86</td>
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<td>282,623.54</td>
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<table>
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<td>$501,329.81</td>
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<td>215,220.16</td>
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<td>176,663.52</td>
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<td><strong>$5,408,039.97</strong></td>
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<tr>
<td>715.16</td>
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<td>68,865.41</td>
<td>175,292.87</td>
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<tr>
<td><strong>$1,182,408.76</strong></td>
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<td>398,010.77</td>
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<td>15,217.90</td>
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<td><strong>$1,458,099.75</strong></td>
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<td>220,601.29</td>
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<tr>
<td>104,377.77</td>
<td>109,417.77</td>
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<td><strong>$2,278,781.87</strong></td>
<td><strong>$5,306,566.43</strong></td>
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David Bray, one of the last of the kahunas, officiates at ground-breaking ceremonies for new library building. Dean Wilfred J. Holmes wields the shovel.
CHANGES IN FACULTY AND STAFF

INSTRUCTIONAL STAFF

APPOINTMENTS

Ruth E. Allen, Assistant Professor of Classics
Floressita Badger, on exchange from City College of San Francisco
Martha F. Beamer, Assistant in Health and Physical Education (one semester only)
Robert M. Belt, Professor of Engineering (one semester only)
Josephine C. Blue, Instructor in Home Economics; Assistant Food Supervisor
Dorothy S. Brown, Instructor in English (Hilo Branch)
George I. Burkett, Instructor in European Languages
John E. Cavelti, Professor of Chemistry
Norman C. Chapman, Assistant Professor of Music
Arthur N. L. Chiu, Instructor in Engineering
Helen L. Cookingham, Assistant in Health and Physical Education
Ruth R. Craig, Assistant in Education
David H. Crowell, Assistant Professor of Psychology (transferred from Psychological Clinic)
Helen G. Disney, Instructor in Education (one semester only)
Leo A. Estel, Assistant Professor of Anthropology
Claude H. Ewing, Professor of Education
Raymond E. B. Fagan, Assistant Professor of Education
Norito Fujioka, Instructor in Japanese Language
Margaret C. Gillespie, Instructor in Education
Thomas H. Ige, Associate Professor of Economics and Business
Margaret A. Inouye, Instructor in Education
Wilma L. Johnson, Instructor in Education (one semester only)
Anne Wilson Jones, Instructor in Home Economics; Assistant Food Supervisor
Anna Kang, Instructor in Art (one semester only)
Dorothea J. L. Kilgore, Instructor in Speech (Hilo Branch)
LaPreal B. Loveless, Instructor in Home Economics; Assistant Food Supervisor
Howard J. Lucas, Visiting Professor of Chemistry
Shelley M. Mark, Assistant Professor of Economics
Virginia N. Miller, Instructor in English
Mary M. Murai, Assistant Professor of Home Economics
Elwood Murray, Visiting Professor of Speech
Oliver W. Nelson, Visiting Associate Professor of Speech
Helene L. Newbrand, Instructor in Speech
Fred S. Orcutt, Professor of Bacteriology
Jean Schellinger, Instructor in Education
Alice D. Scheuer, Instructor in English (one semester only)
Joseph W. Schmidt, Instructor in Education
Harvey Seifert, Exchange Professor of Religion
Alexander Spoehr, Professor of Anthropology (one semester only)
Walter R. Steiger, Assistant Professor of Physics
Angela C. Stempel, Instructor in Nursing
Elizabeth H. Sult, University Physician
Y. Hazel Tanji, Instructor in Dental Hygiene
Martin J. Vitousek, Instructor in Mathematics
LeRoy D. Weber, Instructor in Education
Mary J. Webster, Assistant Professor of Speech
H. William Weigand, Instructor in Education
Clifford F. Young, Assistant Professor of Engineering (Architecture)
RESIGNATIONS

Harry V. Ball, Instructor in Sociology
Marjorie B. Barkley, Instructor in Health and Physical Education
Ericka Braun, Instructor in Classics (Acting Chairman, Department of Classics)
John P. Browne, Jr., Instructor in Music
Garland H. Cannon, Instructor in English
Lucetta Gearhart, Instructor in Education
William E. Huntsberry, Instructor in English
Ann L. Hutchinson, Assistant in Education
Marjorie Jorgensen, Instructor in Home Economics; Assistant Food Supervisor
Dorothea J. L. Kilgore, Instructor in Speech (Hilo Branch)
Catherine E. Lang, Instructor in Education
Donald R. Leach, Instructor in Education
Masako Y. Lounsbury, Assistant Professor of Asiatic and Pacific Languages
Anne M. Morris, Instructor in Education
Helen E. Northen, Associate Professor of Social Work
Gloria O'Connell, Instructor in Home Economics; Assistant Food Supervisor
Ray O'Day, Jr., Assistant Professor of Engineering
Shigeo Okubo, Associate Professor of Engineering
Eleanor E. Ragon, Assistant Professor of Home Economics
James C. Shields, Instructor in English
Eloise Sifford, Instructor in Education
George F. Swenson, Instructor in Speech
Mary Ellen Williams, Instructor in Education

RETIREMENT

Muriel J. Bergstrom, Assistant Professor of English
Agnes C. Bickerton, Instructor in Dental Hygiene

LEAVES OF ABSENCE

John A. Easley, Instructor in Education
John B. Ferguson, Associate Professor of Economics and Business
Thomas H. Fujimura, Assistant Professor of English
Edgar C. Knowlton, Instructor in European Languages
Harue Oyama McVay, Instructor in Art
Saul H. Riesenberg, Assistant Professor of Anthropology
Jessie J. Sato, Instructor in Education and Home Economics
Helene H. Wong, Instructor in Speech

RETURN FROM LEAVES OF ABSENCE

Neal M. Bowers, Associate Professor of Geography
Donald I. Gustuson, Assistant Professor of Health and Physical Education
Kenneth Kingrey, Assistant Professor of Art
Curtis A. Manchester, Associate Professor of Geography
Kathleen W. Pierson, Instructor in Economics and Business
John A. White, Associate Professor of History
George K. Yamamoto, Instructor in Sociology

EXPIRATION OF CONTRACTS

Karleen U. Atebara, Instructor in Economics (Hilo Branch)
James H. Glasgow, Professor of Geography
Andrew A. Hoshijo, Instructor in Business
William H. Lyon, Instructor in Psychology
Richard Oberdorfer, Instructor in Mathematics and Physics
Forrest R. Pitts, Assistant Professor of Geography
Ruth A. Rich, Instructor in Mathematics
TERMINATION OF SERVICES

Helen L. Cookingham, Assistant in Health and Physical Education
John Naumu, Instructor in Health and Physical Education

VISITING PROFESSORS (SUMMER)

Anni Albers, Textile Weaver and Designer
Josef Albers, Chairman, Department of Design, Yale University
O. N. Allen, Professor of Bacteriology, University of Wisconsin
Robert G. Bernreuter, Professor of Psychology and Director, Psychology Clinic, Pennsylvania State College
Leo J. Brueckner, Professor of Education, University of Minnesota
Edward P. Coleman, Professor of Engineering, University of California at Los Angeles
Bingham Dai, Professor of Social Psychology, Duke University Medical School
Taraknath Das, Lecturer in History, Columbia University; Adjunct Professor of Public Affairs and Regional Studies, New York University
Ralph G. Eckert, Professor and Head of the Department of Child Development and Family Relations, University of Connecticut
Clifford S. Ford, Professor of Anthropology, Yale University
Clifford P. Froehlich, Associate Professor of Education, University of California
Pauline F. Hall, Lecturer in English, School of Business Administration, University of Michigan
Robert B. Hall, Professor of Geography and Director, Center for Japanese Studies, University of Michigan
Frederick Hard, Professor of English; President, Scripps College
Philip C. Jessup, Professor of International Law, Columbia University
Roy Ivan Johnson, Professor of Education and Director, Graduate Studies in Education, University of Denver
Walter Johnson, Professor of History, University of Chicago
Charles W. Lamden, Professor of Economics and Dean of Summer Sessions, San Diego State College
Shao Chang Lee, Head of Department of Foreign Studies, Michigan State College
Samuel Rubin, Professor and Head of the Department of Transportation, University of Southern California
Emery Stoops, Professor of Education, University of Southern California
Sam J. Wanous, Chairman, Department of Business Education, University of California at Los Angeles

RACE RELATIONS CONFERENCE PERSONNEL (SUMMER)

Georges Balandier, Professor, Institut d'Études Politiques, Seine, France
John A. Barnes, Reader in Anthropology, London School of Economics
Ralph L. Beals, Professor of Anthropology and Sociology, University of California
Herbert Blumer, Professor of Sociology and Chairman, Department of Sociology, University of California
Julius Herman Boeke, Professor of Eastern Economics, University of Leiden, Oegstgeest, Netherlands
Lloyd Braithwaite, Research Fellow, Institute of Social Research, University College of the West Indies, British West Indies
Leonard Broom, Sociologist, University of California
William O. Brown, Director, African Research and Studies Program, Boston University
Melvin Conant, Director, Pacific and Asian Affairs Council, Honolulu
Frank D. Dorey, Research Chairman, American University at Cairo, Cairo, Egypt.
A. P. Elkin, Professor of Anthropology, University of Sydney, Sydney, N. S. W.
E. Franklin Frazier, Professor and Head, Department of Sociology, Howard University
J. S. Furnivall, Adviser on Planning to Government of Burma, Rangoon, Burma

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Albert H. Hourani, Lecturer in Modern History of Near and Middle East, Magdalen College, Oxford, England

Everett C. Hughes, Professor of Sociology, University of Chicago

Chester L. Hunt, Acting Head, Department of Sociology, University of the Philippines

Harold R. Issacs, Writer and Research Associate, Center for International Studies, Massachusetts Institute of Technology

Lewis W. Jones, Director of Research, Tuskegee Institute

Senteza Kajubi, Graduate Student in Geography, University of Chicago

Walter J. Kolarz, Central Research Unit, British Broadcasting Corporation, London, England

Kenneth L. Little, Head, Department of Social Anthropology, Edinburgh University, Edinburgh, Scotland

Joseph D. Lohman, Consultant, Human Resources Research Office, George Washington University

Jitsuchi Masuoka, Professor of Sociology, Fisk University

Yuzuru Okada, Professor of Sociology and Anthropology, Tokyo Kyoiku University

N. J. J. Olivier, Professor of Native Law and Administration, University of Stellenbosch, Union of South Africa

Donald Pierson, Professor of Sociology and Social Anthropology, Escola de Sociologia e Politica, Sao Paulo, Brazil

P. Kodanda Rao, % The Indian Institute of Culture, Bangalore, India

Thomas S. Simey, Professor of Social Science, University of Liverpool, Liverpool, England

Alexander Spoehr, Director, Bishop Museum, Honolulu

Edgar T. Thompson, Professor of Sociology, Duke University

Absolem Vilakazi, Instructor in African Cultures, Kennedy School of Missions, Hartford Theological Seminary

Quintin A. Whyte, Director, South African Institute of Race Relations, Union of South Africa

PSYCHOLOGICAL AND PSYCHOPATHIC CLINIC

APPOINTMENTS

Ruth W. Iams, Junior Psychologist

Fred E. LaFon, Assistant Psychologist

Gloria Jo Ann Roberts, Junior Psychologist

LEAVES OF ABSENCE

M. Helena Klinkman, Assistant Psychologist

Gloria Jo Ann Roberts, Junior Psychologist

HAWAII AGRICULTURAL EXPERIMENT STATION

APPOINTMENTS

Edward J. Britten, Assistant Agronomist (transferred from Instruction)

Anson R. Cooke, Assistant Chemist

Mamoru Ishii, Assistant Plant Pathologist

Donald M. Kinch, Agricultural Engineer

Royoji Namba, Assistant Entomologist

Florence Pen, Junior Nutritionist

Charles W. Peters, Agricultural Economist

RESIGNATIONS

Rene Guillou, Agricultural Engineer

Wallace C. Mitchell, Junior Entomologist

Irwin M. Newell, Entomologist

Irwin L. Ottersen, Assistant in Chemistry

Charles W. Peters, Agricultural Economist
Samuel Price, Assistant Agronomist
Norman K. Roberts, Assistant Agricultural Economist
William B. Storey, Horticulturist

LEAVE OF ABSENCE

Joseph E. Alicata, Parasitologist

AGRICULTURAL EXTENSION SERVICE

APPOINTMENTS
William R. Fitzgerald, Assistant in Extension
Miller T. Hunter, County Agent, Senior Grade
Eloise L. Keller, County Agent
Eleanor A. Matsumoto, Assistant County Agent
Ellen I. Montgomery, Assistant in Extension
Beverly M. Myers, Assistant Specialist in Home Management and Home Furnishings
Lillian R. Schwartz, County Agent
Margaret Stuart, County Agent
Mitsuko Yamamoto, Assistant in Extension

RESIGNATIONS
Kikuye S. Kohashi, Assistant County Agent
Ellen I. Montgomery, Assistant in Extension
Irwin W. Rust, Associate Marketing Specialist
Maude O. Takahashi, Assistant County Agent
Alice P. Trimble, Supervisor of County Home Demonstration Work, Senior Grade

LEAVES OF ABSENCE

Baron Goto, Associate Director
John L. Stormont, Associate Specialist in 4-H Club Work
Rokuro Yamaguchi, Assistant County Agent

RETURN FROM LEAVE OF ABSENCE

Betty K. K. Zane, County Agent

RECLASSIFICATION

Fortunato G. Teho, Assistant Supervisor in Visual Aid

OFFICE OF STUDENT PERSONNEL

APPOINTMENTS
Christine V. Alford, Head Resident, Frear Hall
Susan Daniels, Program Counselor
Peggy H. Yorita, Assistant in Counseling

LEGISLATIVE REFERENCE BUREAU

APPOINTMENT
Margaret E. Holden, Junior Research Librarian

RESIGNATION
Margaret S. Irwin, Junior Research Librarian
SOCIAL RESEARCH LABORATORY

APPOINTMENT
Yukiko Kimura, Assistant in Research

RESIGNATION
Evelyn K. Yama, Assistant in Research

EXTENSION DIVISION

APPOINTMENT
Helen O. Irikura, Assistant in University Extension

RESIGNATION
Jay A. Morrison, Assistant Supervisor

DEGREES, DIPLOMAS, AND CERTIFICATES

HONORARY DEGREES
George Barati, Doctor of Music  Charles F. Chillingworth, Doctor of Laws

ACADEMIC DEGREES
DOCTOR OF PHILOSOPHY
Jit Singh Verma

MASTER OF ARTS
Frank Stephen Adams  John Forster
Ernest Andrade, Jr.  Margaret Zimmerman Freeman
Russell Anderson Apple  Nancy Oakley Hedemann
Clifford Ashby  Stephen Peter Souza
Martha Jane Cauvel  Louis Melvin Steed
Mary Dorita Clifford  Kathleen Elizabeth Sullivan
Jim Corey  Herbert Orville Tothill
Ann Koshel Davis  Beatrice Takiko Yamasaki

MASTER OF FINE ARTS
Edward Malcolm Brownlee  James Reive Lindsay Linn

MASTER OF SCIENCE
Vernon Elroy Callaway  Eugene Chen Seu
Edward Hing Loy Chun  Minoru Tamashiro
Elaine Mary Miatt  Kazuji Terada
Thomas Kanji Miwa  Ukio Urata
Kenneth Onna  Donald Philip Wilton
Clarence Satoru Yoshino

MASTER OF EDUCATION
Richard Howard Carlson
MASTER OF BUSINESS ADMINISTRATION
Hester Hideko Sakai

MASTER OF SOCIAL WORK
Mary Catherine Brannick
Vernon Chung Hoo Chang
Clarence Kenji Fukumae
Sally Howard Martin
Dick Utsuo Nagata
Paul Takeji Nakamura
Masaru Oshiro
David Shigeto Shimomura
Alfred Katsumi Suga
Myron Bennett Thompson

BACHELOR OF ARTS
Abe, Harold Keiichi
Agena, Jane Sueno
Akiyama, Wallace Y.
Amai, Robert Lin Sung
Andrade, Ruth Tsukiko Y.
Apiki, Sylvester Kawelo
Arakaki, Richard Buntoku
Arashiro, Harry Hideo
Bal, Patsy Yokoyama
Boyer, John Edward
Brown, Ronald Rulfs
Cagata, Hilda
Chang, Samuel Bung Kong
Charlock, Virginia Carmen
Chinen, Herbert Sukeichi
Ching, Laura Bow Yee
Chock, Eugene Yet Fun
Chock, Richard
Choy, George Wehiokina
Chung, Mabel Lum
Clyde, Lorna Bowen
Curammeng, Alfredo Lagazo
Dayton, Margot-Anne Isabelle
Easley, Genevieve Carlisle
Elliot, Douglas Floyd
Emery, Byron Elwyn
Endo, Joan Tsuyako
Eta, Chiki
Eyde, David Bruener
Fentriss, Kathryn Laune
Franklin, Alma Iwalani
Frank, Paul Sylvester
Freedman, Morris N.
Fujii, Walter Kaoru
Fujitani, James Yukio
Fukuda, Helen Hideko
Fukumoto, Richard Isamu
Fullaway, William Henry
Funai, Donald Kiyoshi
Goto, Patsy Setsuko
Habon, Felicidad
Hagihara, Grayson Hihuo
Haituku, Shigeru
Hansen, Adrienne Claire
Hayashida, Keiji
Higa, Alice Tokie
Higa, Blossom Miyoko
Higashino, Amy Emiko
Hirasa, Alice Kinue
Ho, Amona Kin
Ho, Donald Tai Loy
Ho, Erwin Michael Sau Won
Ho, Melvin Kwok Wah
Holden, Jayne Machida
Hunjiyo, Helen Yoshiko
Hunjiyo, Mitsue
Huse, John W. K.
Ichinose, William Nobuchi, Jr.
Ikeda, Chiyoki
Ikeda, Royden Sadaichi
Ing, Alvin Yee Fat
Iwasa, Junji
Izumi, Francis Masayuki
Johnson, Henry Sioux
Kadomoto, Kenneth Norio
Kagesa, Sam Jiro
Kahara, Yasuto
Kakazu, James Yukio
Kam, Gerald Wai Yee
Kaneshige, Thomas Minoru
Kaneshiro, Henry Yoshio
Kansakai, Sidney Isao
Kashinoki, Barbara L. S.
Katterman, Frank R. H.
Kauz, Herman Paul
Kawaguchi, Richard Hiroshi
Kawahara, Shoji
Kawara, Alice Chiyo
Kaya, George Kiyoshi
Kikuchi, George Kazuo
Kim, Bernice Kum Yuen
Kim, Bessie Bong Hee
Kim, Rose He Yon
Kimoto, Walter Iwao
Kimura, Shigeo
Kimura, Walter Wataru
Kinney, Rubellite Kawena
Kito, Amy Kaoru
Kiyabu, Masako
Kiyota, Mildred Minobu
Klopf, Donald William
Kobashigawa, Seikichi
Kobayashi, Hanako
Kohashi, Dorothy Inouye
Koki, Ethei Toyoko
Konishi, Walter Kenichi
Kono, Thomas Tomomi
Kuba, Helen Sachiko
Kuboji, Clara Mitsuko
Kubota, Mitsuru
Kuhns, Lawrence Emory
Moanauli
Kunihiro, Hanako
Kurashige, Milnes Chikao
Kurisu, Kiyohi
Kusunoki, Wilfred Hitoshi
Kuwabara, Walter Shizuka
Lau, Albert Kim Fat
Lau, Martin Hung Jan
Lau, Thomas Allan
Lee, Judith Piilani
Lee, Judith Pok Soon Shin
Lee, Mollie Mew Young
Lee, William Sun Kyo
Leong, Christina Woon Jing
Lindsey, Helen Lei Margaret
Little, John William
Llacuna, Epifanio Juan
Longfellow, Alice North
Lum, Mabel Kin Ming
Lum, Robert Yun Hoon
Manley, Elmer Edgar
Kaponookalani
Masuda, Harry Haruo
Maxson, Ethel Chung
McIlhenny, William
Whiting, III
Miller, Mary Marguerite
Minnick, John J.
Miyasato, Walter Kazuo
Miyashiro, Thomas Tatsuto
Mizuta, Florence Chizuko
Mori, Setsue
Mui, Thomas Lawrence
Mun, Martha Kam Wah
Murakami, Stanley T.
Naaman, Fuad A.
Nagamoto, Clarence T.
Nagasaki, Kiyoshi Larry
Nakai, Thomas Tsutomu
Nakaji, Ellen Takako
Nishihara, Kenneth Yoshio
Nishimoto, Hiroshi
Nishimura, Henry N.
Nishiioka, Richard Tero
Nose, Irene Sachiko
O'Donnell, Joseph John
Oishi, Jean Shizuko
Okada, Karen Sueko
Okamoto, Robert Tadashi
Okasaki, Edna Kogiku
Okino, Shuichi
Omorou, Richard Hajime
Oshiro, George Teruo
Ota, Arthur Hitoshi
Otsuka, Lorelei Tatsue
Ozawa, Theodore Y.
Park, Doris C. S.
Patria, Paul S.
Plaisance, Delphia Sarah
Poe, Lewis William
Sada, Gerald Kenichiro
Sakimoto, Mae Eiko
Sakurada, John
Sasaki, Dorothy Toshiie
Sasaki, Walter Yoshinori
Sayre, Connie Mera
Scollon, Richard Calvin, Jr.
Sequeira, Paul Patrick, Jr.
Serikawa, Frances S.
Shibuya, Judith Mieko
Shigekane, Herbert Yoichi
Shigematsu, Frances Kaoru
Shigeta, Hanako
Shigemasa, Takashi
Shintaku, Ethel Sachiko
Shirai, James Katsumasa
Shiroma, Amy
Shiroma, Steven Seiyu
Shon, Francis C. W.
Shun, Clara Kwee Fong
(Swin soars)
Singer, Elisabeth
(Swin soars)
Smith, Roger Morton
Soma, Kazue
Soon, Francis Harry
Sparaga, Albert
Sparks, Robert William
Sugano, Donald Masami
Sugano, Miyoko
Sutherland, Neil Stoner
(Tastashi, Hisako
(Takakashi, Jane Fumi
(Takata, Wallace Kazuo
Takayama, Hazel Haruko
Takehara, Jane Yoshie
Takei, Franklin Junji
Takushi, James Haruo
Tamanaha, Michiko
Tamaribuchi, Tame
Tanimoto, Robert Hideo
Tanji, Alice Sadako
Tanji, John Michio
Tanji, Kenneth Kazuo
Tatei, Frances Yoshiko
Tengan, Gladys Kiyoko
Tengan, Sumiko
Teslima, Olive Etsuko
Tongg, Ruddy Fajr, Jr.
Walker, Elizabeth Ann
Watanabe, George Masumi
Willis, Beverly A.
(Winn soars)
Wong, Carolyn Yuk Lin
Wong, Charles Koon Han
Wong, Elizabeth Beck Yong
Yamada, Agnes Akiko
Yamada, Grace Yoshiko
Yamada, Harriet Harue
Yamamoto, Eugene Homaru
Yamashita, Mieko Margaret
Yanagihashi, Minoru
Yang, Stephen Song Sum
Yin, Muriel Sau Quon
Yonaha, Lillian Sumie
Yonemura, Irene Keiko
Yorita, Harold Kazunori
Yoshino, Raymond Isao
Yoshitama, Jane Hatsumi
Young, Patricia Dere
Young, Ronald Nee Tai
Yuen, Anna Lee
Zane, Tenney Wo Cheong

BACHELOR OF FINE ARTS

Araki, Jean Yoshie

BACHELOR OF SCIENCE

(Civil Engineering—Medical Technology—Nursing—Recreation)

Arakawa, Edward Tatsuo
Aratani, Miyako
Atkinson William John, Jr.
Au, Lillian
Bal, Eugene, Jr.
Bevier, David Lowell
Chang, Elaine Mew Lin
Chun, Tit Mun
Chung, Raymond
Dang, Paul Wah Sung
Endo, Wallace Kenji
(Fon soars)
Funayama, Lillian Shieko
Hanabusa, Reginald M.
Harada, Edward Kiyoshi
Hirakawa, Jane Kiyomi
Hirota, Paul M.
Ho, Benjamin Kui Fong

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Ikeda, Fumiko Eleanor
Ikeda, Milton Harumi
Ishigo, Susumu
Iwamoto, Roy Masao
Kanehira, James Nobuaki
Kawamura, Florence Takako
Koike, Ezra Takeshi
Koike, Frances Sachiko
Kumada, Richard A.
Kunioka, Robert Tsugio
Lau, William Kwai Fong
Lee, Bertha Siu Jun
Lee, Mei Li
Lee, Richard Francis
Lim, Betty Ann Hai Yuen
Lum, Ezra Kwai Hin
Lum, Margaret Yue Tsin
Manliguis, Albert
Matsukawa, Sadao Joe
Miura, Evelyne Yuko
Miyahira, Wallace Shigeto
Mori, Kenneth Yoshio
Morimoto, Robert Atsushi
Nishimura, Bettie Teruko
Nishimura, George Hitoshi
Numa, Charles Sueki
Ochiai, Catherine Emiko
Okamura, Teruo
Pacheco, Eleanor Jane
Perry, August Pestana, Jr.
Rautenberg, Virginia A.
Saito, Takeyo
Sasaki, Ronald Tokio
Sato, May Miyoko
Shigemura, Akira
Shikuma, Takao
Shimabukuro, Stanley Seizun
Shiroma, Nora Natsuyo
Oshiro
Shishido, Michio
Sumida, Henry Mikio
Suzuki, Ellen Kazuko
Taguchi, Ben
Takakuwa, Hisako
Takeuchi, Katherine Hatsuiko
Tamura, Toshisada
Tanabe, John Leonard
Tanigawa, Barbara Ayako
Tarasawa, Harue
Testerman, Edison Lavren
Tong, Julia Moo Jean
Wakayama, Jack Haruso
Warase, Yoshiho
Wong, Sun Yet
Wozumi, James
Yamanaka, Stanley Masayuki
Yamasaki, Tomie
Yoshiyama, Albert Yoshito
Yoshiyama, Takeo

BACHELOR OF EDUCATION

Adaniya, Jane Mitsuko
Aoyama, Thelma Terumi
Arai, Hisako
Atakaki, Dorothy Nobuko
Arakawa, Annette Miyono
Asahina, Helen Yuriko
Asato, Clara Mineko
Bean, Robert Floyd
Bucy, Barbara Bee
Carroll, William T., Jr.
Chang, Lynette Y. C. Char
Chang, Margaret Kam Yow
Ching, Barbara Camhoe
Ching, Nellie Kam Chan
Chong, Patricia Kwai Lin
Chun, Barbara Jean Chew
Kwong
Curbow, Lenette Lorraine
Dodo, Dorcas Ayame
Ebesutani, Irene Midori
Ellis, Annette Keikilani
Fernandes, Margerie Cecille
Fuji, Frances Mitsue
Fujikawa, Edna Fusae
Fujimoto, Mary Matsue
Fujimoto, Michio
Fujioka, Carole Kinuko
Fujiita, George Yoshikazu
Fukuhara, Nora Yoshiho
Fukushige, Stuart Mamoru
Gaza, Grace Kiyoko
Goo, Anne Lenore Keanuenue
Gouveia, Mary Lou
Grider, Collyer Drake
Harada, Grace Setsuko
Harioka, Miharu
Hashimoto, Jean Mieko
Higa, Sumie Clara
Hii, Muriel Len Tai
Ho, Gwendolyn Mee Lai
Horinouchi, Alice Sachi
Ibara, Nobuko
Ikeda, Florence Harumi
Imai, Eileen Ayako
Inouchi, Betty Yasuko
Inoue, Joyce Setsuim
Ito, Georgia Ann Nobue
Itoha, Karen Eiko
Jakahi, Yukiko
Johnson, Ronald L.
Jorge, Patricia Leilani
Kakazu, Yoshiaki
Kamei, Ellen Emiko
Kashiwamura, Judith Keiko
Kawahara, Nancy Kiyoko
Kawai, Ruth Masayo
Kaya, Janet Shigeko
Kaya, Ruth Eiko
Koike, Leora Katsuho
Kojiri, Elaine Ching
Konishi, Keiko
Koseki, Jane Nobuko
Kotoshirudo, Nancy
Kurushige, James Tadashii
Kusumoto, Setsuko
Kuwada, Hajime
Lee, Barbara Hung Won
Lee, Marion Choy Sam
Lee, Shirley Anne Chun Tao
Leong, Alyce Kau Inn
Leong, Ethel
Lopes, John Freitas, Jr.
Marczynski, Barbara Johnson
Martin, Elena
Masuoka, Grace Tomiko
Matsui, Nobuko
Matsumoto, Florence Sachiko
Matsumura, Haruyo
McConnell, Marilyn Laur
Miguel, Florence
Miki, Michie
Miyanomoto, Uenice Aiko
Mond, Betty Chizuko
Morinaka, Dorothy Ayano
Moissman, Marilyn Annette
Mow, Vivian Toong Moi
Muraoka, Ellen Teruko
Muraoka, Nancy Sayoko
Nakamura, Mary Aiko
Nakatsuji, Katherine R.
Nishi, Ellen Toyoko
Obayashi, Sarah Sayoko
Odo, Masayuki
Ohnata, Helen K.
Okuma, Haruko Betty
Otsu, Edward Mitsuo
Price, Marie Adair
Rezents, Ernest Harold
Richards, Zaneta Hoooul
Rivera, Veronica Sales
Saiki, Kiichi
Saiki, Patsy Sumie
Sasano, Sueno Miyamoto
Sato, Betty Yoshiko
Sato, Jean Kazuko
Sevilla, Lucille
Shimazu, Terry Takeko
Shimogawa, Janet Hatsumi
Shiramizu, Jimmy Fujio
Shiroma, Suyeno
Soong, Eileen Marie
Sugahara, Minako
Sugimoto, Florence Sumie
Sugimoto, Pearl Kiyoko
Sumida, Jean Tsugiye
Sumimoto, Jean Mieko
Suyama, Lloyd Kiyoshi
Taka, Tomiko Takano
Tai, Elaine Markham
Taira, Minoru
Tajiri, Constance Mikiko
Takera, Jane Kinue
Taketa, Nancy M.
Tamura, Annie Tayeko
Tanaka, Florence Nobuko
Tanaka, Jean F. Sorayama
Tanaka, Mary Eiko
Tasaka, Thelma Hiroko
Tengan, Takie
Timbreza, Magdalena Benson

BACHELOR OF SCIENCE

(Agriculture—Home Economics)

Abe, Chieko
Apple, Margaret Frances Wilson
Arakawa, Junichi Henry
Asato, Morio
Auyong, Mary Kam Ngit
Chiang, Richard, Jr.
Chun, Annie Bo Ying
Chun, Phile Sung
Dang, Jane King
Fujimoto, Tatsuo
Hadano, Mae Sachiko
Hall, Edward P.
Hane, Clara Kinuyo
Hayashida, Woodrow Minoru
Hidani, Midori
Imura, Shizue
Ishihara, Lily Toshie
Kajiwara, Jonathan Takashi
Kam, Jennie Lee
Kaneko, Yoshiyuki
Kanekuni, Rokuchi
Kaneshiro, Ethel Kazuko
Kawahara, Theodore Tetsushi
Kayahara, May Sueko
Kikuta, Waichi
Kogachi, Shirley Yoneko
Kohatsu, Lilian Hideko
Lau, Daniel Kwai Min
Lee, Muriel Dung Moi
Maeda, Rieko
Maeshiro, Edith Teruko
Minami, Matsuyo
Miyahira, Elsie Toyoko
Miyashiro, Hiroko Helen
Morisada, Amy Hiroko
Murakami, Betsy Miyoko
Murphy, George Michael

(with honors)

Nagato, Eleanor Mieko
Nakamoto, Miyuki
Nishida, Keiko
Nishiguchi, Adeline Tsuyuko
Ogata, May Tamie
Okahara, Ruth Shigeyo
Okasako, Edward Yutaka
Osaki, Florence Tsuyako
Oshita, Richard Taichi
Oune, Kazue
Pang, Mea Chai
Rotheberg, Morton Sanford
Russell, James Arland

(with honors)

Saiki, Robert Hitoshi
Sakuma, John Masao
Sato, Helen
Sawa, Thomas Ritsuo
Sheets, Millard Owen, Jr.
Shiraishi, James Tokuchi
Shishido, Patsy Masaye
Shitanishi, Itsuyo
Shura, Alexander Glenn
Sparrow, Theodore Roosevelt, Jr.
Takahashi, Morio
Takai, Sadako
Tanigawa, Kaoru
Tokairin, Richard Kiyoshi
Ushiro, Shigeo
Uyeda, Betty Kimiyre
Wakugawa, Charlotte Harue
Yamaki, Edmund Isamu
Yamamoto, Blossom V. Y.
Yamamoto, Mitsuko
Yasumitsu, Esther Tetsuko
Yoshimatsu, Mae Midori
Yoshimura, Carol Kazuko
Yuen, Victoria

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BACHELOR OF BUSINESS ADMINISTRATION

Adachi, Shunji  
(with honors)
Adams, Edward Charles
Aichang, Kenneth Quan Yen
Araaki, Wayne Shinee
Baird, William Francis
Chalmers, Frederick William
Chang, Clarence Hoo Yuen
Chang, Wallace J. F.
Ching, Doris Kwai Lan
Chun, Albert Hoon Tong
Chur, Lester Robert
Dang, Eugene Lester Kwong

Yau
Endo, Richard Hisao  
(with honors)
Fong, Henry Kam Sing
Fong, Jack C. J.
Fong, Kenneth Kui Sing
Fong, Mavis Sam Moi
Fukuhara, Kenjo
Fukunaga, Thomas Iaru
Fukuoka, Eleanor Tomoko
Furukina, Kazumi
Garduque, Gabriel, Jr.
Hamamura, Douglas Takeshi
 Hamasaki, Dickey Tsuru
Harai, Patricia Kam Chin
Hataishi, Valentine Kenjiro
Hayashida, Walter Shigeru
Higuchi, Richard Masayasus
Hiramuro, Yaeko
Hiraayama, Hitoshi
Hui, Donald T. S.
Ho, Theodore Shui Choi
Horn, George Tai Sun
Ibara, Mary Elaine Harue
Ichikawa, George Susumu
Ichiyama, Edward Hiroshi

Idemoto, Albert Akira
Ikezaki, Lawrence Teruo
Iwamura, Richard Tadashi
Jarrett, Herman Walter
Jhung, Bryson
Kaneko, Doris Mutsum
Kaneshiro, Lawrence Junichi
Kano, Clarence Kiyoi
Kawachika, Thomas Takeharu
Kawamoto, Albert Yukio
Kim, Paul S. K.
Kinoshita, Tetsuo
Knaefler, James H.
Kobayashi, George Kaoru  
(with honors)
Kobayashi, Lawrence Hisato
Koike, Robert Susumu
Kokubun, Ernest Yasatoshi
Kurata, Mildred Yoshiko
Landgraf, August Ross
Lau, Merton Shao Chung
Lee, William Wai Cheung
Leong, Melvin Paul
Maeshiro, Clarence S.
Makishima, Lawrence Takao
Masumoto, Benjamin Tadashi
Matsumoto, Joyce Ayako
McCreery, Lew E.
McKillop, Alan Masao
Michihara, Harriet Chiharu
Mihara, Robert Kazuo
Miyahira, David Seijin
Miyamoto, Lily Takayo
Miyasato, Mildred Masako
Miyoshi, Kenneth Satoshi
Murata, Isamu
Nagata, Herbert Yoshimitsu  
(with honors)

Nakama, Charles Seiei
Nakamura, Leslie Katsumi
Nakao, Masato
Nishino, Richard Yoshiharu
Ogawa, Gladys Shigeko
Oishi, Masami
Okazaki, Kenneth Tadashi
Olds, James Clarence
Otsuka, Hope Eiko
Sato, Irving Katsumi
Sato, Rae Teruyo
Sato, Shigeru
Shimabukuro, Lawrence N.
Shimabukuro, Masachi
Shimaoka, Helene Ritsue
Shinagawa, Marilyn Yasuko
Shiroma, George Seitchi
Soltero, Albert Vincent
Steinhauser, Merelith Kair
Sunada, Thomas Mitsui
Suzuki, Mitsuo
Takakawa, Francis Satsuki
Takeuchi, Katherine Miyono
Tang, Walter Fun Wah
Tarleton, Howard Robert
Teraoawachi, Kenneth Hirosl
Toyofuku, George Hiroshi
Uejo, Roy Fumitoshi
Umemori, Tamotsu
Uyehara, Mitoshio
Vasper, Harvey
Vaughan, Frank
Watanabe, Tadashi
Yang, Herbert Morio
Yamada, Marion Miyoko
Yamamoto, Betty Terako
Yamamoto, Kazuo
Yee, Gareth S. N.
Young, Charles Sai-Chow

FIVE-YEAR DIPLOMA

Agpalsa, Elaine Esmeinia
Akaka, Daniel Kahikina
Aoki, Yoshiji
Asato, Rachel Ikuko
Baso, Mercedes
Blake, Arlene Kim
Carroll, William T., Jr.
Ching, Bertha Bicenta

Leimaala
Ching, Phyllis Rose
Chock, Thelma Lai Keam

Chun, Janet Kam How
Chun, Rita
Chun, Rose Ngir Heong
Fujikami, Doris Chizuko
Gascon, Helen Clinger
Gaynor, Frances A.
Goshi, Hisae
Harada, Tokio
Hayashi, Edward Takeshi
Hayashi, Gladys Sayoko
Hee, Ruth Yuen Heong

Higa, Noboru
Higaki, Herbert Etsuro
Hirakawa, Florence Kimura
Hiramuto, Hazel Aiko
Hui, Muriel Len Tai
Ho, Edward Y. T.
Honda, Madge Machiko
Hora, Mildred Fumie
Hotoke, Grace Sera
Ibara, June Hisayo
Imamoto, Lily Yurie
Imamura, Akira
In, Stella Lau
Ito, Yooko
Iwamoto, Miyoko
Jo, Jane Sadako
Johnson, Ronald
Kim, Evelyn Kui Mi
Ko, Young Yee
Kobayashi, Marjorie Fumiko
Kohatsu, Mitsue
Kojima, Amy Taeko
Kong, Edna Lin Kook
Kushimaejo, Gordon
Masamitsu
Lam, Annette Chun
Lee, Kyung Ok
Leong, Amy Jean
Lopez, Fumiko I.
Maeda, Yaeko
Martin, Mitsuko Oshiba
Martinez, Eleanor Jane
Masuda, Dorothy Yosie
McFarlane, Roberta Kaui
Mikami, Herbert Koji
Miller, James Waichiro
Miyasato, Kimiko
Mizuno, Robert Shigeru
Murakami, Betsy Miyoko
Murakami, Irene Kimiko
Nagata, Alice Uzumaki
Nakaji, Emiko
Niimi, Violet Tokie
Nishihara, Michie
Nitta, Marlene Misayo
Nooney, Mary Bryce
Onishita, Helen Kimiko
Onishi, Wallace Kaoru
Oshiro, Mavis Sachiko
Saclausa, John Michael
Sada, Edith Kazuko
Sakata, Betsy Mineko
Shingaki, Irene Tomi
Shintaku, Virginia Misao
Shiraki, Kimiyo
Shomura, Violet Haruko
Sonomura, Doris Aiko
Sueoka, Julia
Sugimoto, Chieko
Taise, Alice Takeko
Takayama, Amy Yamauchi
Takimoto, Elizabeth Sumiko
Tanaka, Shuichi
Taniguchi, Hazel Nakamne
Tom, May
Uchigashima, Margaret
Masako
Ueno, Gladys Fumie
Ushio, Kikuko
Wada, Tsukie
Watanabe, Frank Nobuto
Whitaker, Martha Jane
Yamaguchi, Dorothy Fumiyo
Yamaguchi, Elizabeth Etsuko
Yasaka, Setsue
Yoshizumi, Dorothy Yoko
Zane, Lawrence Far Heong