IN THIS ISSUE:

ALUMNI IN RESEARCH,

GOVERNMENT, AND

SPACE PROGRAMS.
CALENDAR (Continued)

May 9 Basecall, Albion, there, 2:00 p.m.
      Tennis, Albion College, here, 3:30 p.m.
      10 College Lecture, "The Image of Man in Contemporary Art," by Allen S. Weller, Dean of the
          School of Fine and Applied Arts, University of Illinois, 8:00 p.m., Stetson Chapel.
      10-12 WMIAA Archery, Tennis Tournament at Albion
      11 Tennis, Calvin College, here, 3:30 p.m.
      Golf, Olivet College, here, 1:30 p.m.
      12 Baseball, Hope College, here, 2:00 p.m.
      Track, Elmhurst Track Meet, there
      13 College Symphonette, 4:00 p.m., Stetson Chapel
      14 Golf, Calvin College, there, 1:00 p.m.
      15 Baseball, Olivet College, there, 2:00 p.m.
      Tennis, Alma College, there, 3:00 p.m.
      18-19 M.I.A.A. Tournament, Tennis and Golf, here
      19 M.I.A.A. Field Day
      22 Baseball, Central Michigan, here, 1:00 p.m.
      26 Women's Tennis: Quadrangular, MSU, WMU, Eastern, here
      27 College Vespers, Dean Lloyd J. Averill, 6:30 p.m.

June 9 Alumni Day
      Luncheon, Panel, Reception, Banquet
      10 Baccalaureate, 11:00 a.m., Stetson Chapel
      Commencement, 3:00 p.m., Campus Quadrangle

Your reservation card for the Commencement
activities will reach you later, but we want you to
know that, through connections with the Univer-
sity of Bonn, the College has secured Franz
Josef Strauss, West Germany's Minister of De-
fense, as Commencement speaker. Others to
receive honorary degrees are Dr. John D. Mont-
gomery '41, Director of the African Studies In-
stitute, Boston University, who will be the Alum-
ni Banquet speaker; Dr. Albert C. Outler, Pro-
Fessor of the Theology, SMU, who will deliver the
Baccalaureate sermon; and Eugene S. Thomas,
Principal of Kalamazoo's Central High School
and president of the National Association of
Secondary School Principals.

ALUMNI OFFICERS

Marshall H. Rutz '34, President
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KALAMAZOO COLLEGE
RESULTS AND PROSPECTS

By DR. WEIMER K. HICKS

In 1983, when our college historian records the highlights of the second quarter of our second century, he is certain to view the current period as an era of great change. In fact, momentous decisions are reached with such frequency that even those close to the scene have difficulty in keeping abreast with them. For this reason your President will devote his quarterly column to a mid-year review to supplement the more formal annual report printed each October.

What has happened since June? The Board of Trustees has, to be sure, launched a $15,000,000 Program for Academic Enrichment and a handful of friends have generously subscribed a third of the goal. But development funds and financial stability fail to reveal our primary concentration of the year. The vitality of an institution is reflected in the academic, and the major interests of the year have been focused upon the plans through which we maintain the liberal arts tradition. After two years of extensive study and planning, the College has ventured upon the first phase of its exciting program of year-around education through which we seek to increase efficiency, but even more to upgrade the quality of the intellectual life.

Last September, Kalamazoo transferred to a quarter system in which students carry only three subjects simultaneously. In the winter Alumnus, Dean Laurence Barrett expressed cautious optimism regarding the “three-three” plan. Students had labored more diligently than at any time within memory, as attested by a 60% jump in library checkouts and a marked improvement in quarterly grades.

Another quarter has come to an end. Again we find reason for satisfaction. Marks for the winter term were still higher than in the fall. Certain tight spots in which too much course material was crowded into the eleven-week period have been eased. Student concern ignited by heavy scholastic pressures seem less apparent. Meanwhile, both students and faculty are adjusting to the changes in teaching techniques which are implicit in the new program.

Meanwhile, all are projecting plans for 1962-63, when the vanguard of off-campus programs becomes effective. A final group of 22 juniors have been named foreign scholars to study abroad this summer. Approximately 85 sophomores will spend the fall and winter quarters overseas as a forerunner to the plan in which all qualified students will study abroad without extra cost. Secondary programs will be added in Aix-en-Provence and Muenster to supplement those sponsored in Caen and Bonn, respectively. The Spanish-speaking students will be accommodated in Madrid during the summer, but the fall contingency will be transferred to the University of Quito, Equador. English-speaking sections with limited enrollments will be introduced in Sierra Leone, Africa, and in Beirut, Lebanon. A handful of students with specific interests will be enrolled at universities within Great Britain.

During the coming year we will also begin on a selected basis the off-campus thesis or research quarter, which is the senior experience demanding the highest level of academic maturity. Approximately 50 seniors will be rusticated from the campus in either the fall or winter quarter to develop independent projects of an advanced nature.

In the area of experiential education, we can report that the directors of the career and service quarters have been appointed and their offices will open on May 1. Wallace Sikes, trained in cooperative education at Antioch College, will head the vocational exploration program. Dr. John W. Thomas, currently Executive Secretary of the Council for Social Progress of the Baptist denomination, will initiate the service program. Under the leadership of experienced personnel, these off-campus quarters promise to add significant enrichment to the educational opportunities.

Following the pilot year, the College will then move fully into a year-around operation with staggered off-campus periods. In July, 1963, the first summer quarter will begin, with enrollment drawn from those juniors who studied abroad, from sophomores who will have spent the previous spring in experiential education, and from incoming freshmen matriculating under the accelerated plan.

This brief report cannot reveal the magnitude of the current task, for the changes touch almost every facet of academic life. Faculty personnel, increased 20% this year, must be expanded by 33%. Freshmen classes must be screened with even greater care, for the Plan is predicted upon the admission of students with high competence and superior preparation. Teaching stations and office space and dormitory accommodations all pose problems as we look ahead to 1965, the year in which enrollment will have jumped 50% without appreciable increase in the number on campus simultaneously.

These are interesting days in which Kalamazoo seeks to give a realistic answer to the educational crisis which grips the nation. Today we look backwards with satisfaction and continue to face the future with confidence.
YOUR ALUMNI CANDIDATES

KENNETH J. BOEKELOO '47, Vice President and Comptroller of Michigan Bell Telephone Co. Began as a plant student in Kalamazoo and has held various positions with Michigan Bell since with the exception of 1952 to 1955 when he was on special assignment as an accountant with AT&T. Member, Detroit Board of Commerce, Economic Club, Grosse Ile Country Club. MORLAN J. GRANDBOIS '31. Marketing Coordinator, St. Regis Paper Co., NYC. Began his association with the paper industry more than 25 years ago with the Rex Paper Co. in Kalamazoo. In 1957, Director of the Forest Products Division of the Business and Defense Services Administration of the U.S. Dept. of Commerce. Was president of the Kalamazoo College Alumni Assn. in 1947. ROBERT E. HEERENS '38. Physician in Rockford, Ill. Currently president of the Chamber of Commerce, Winnebago County Board of Health, and Winnebago County TB Assn. Past president of Illinois Academy of General Practitioners. Public relations chairman of the Illinois State Medical Society. Was president of the Kalamazoo College student body. CHARLES E. GARRETT '42. Partner in the Garrett Insurance Agency. Director of the Industrial Finance Company Board. Immediate past president of the “K” Club and vice president of the Kalamazoo College Alumni Association. Former president of the Sherwoods and vice president of the Men’s Union. RICHARD A. LEMMER ’41. M.D., Johns Hopkins University, 1944. Surgeon in Kalamazoo since 1953. Was Chief Surgical Resident, Barnes Hospital, Washington University; Surgical Resident, Children’s Hospital, Harvard Medical School. Diplomat, Am. Board of Surgeons; Fellow, Am. College of Surgeons; Fellow, Academy of Pediatrics, Surgical Section. Director, Medical Education, Bronson Hospital. Was president of Centuries, on varsity football, basketball, and track teams which he now serves as doctor. NEIL K. PLANTEFABER ’47. Graduate of Harvard University Graduate School of Business Administration. Vice President of Sales for Kalamazoo Container Company. Currently president of the Kalamazoo Community Chest and member of the Board of Directors of the Chamber of Commerce. Member, Board of Directors of "K" Club. Was vice president of Kalamazoo Area Alumni Assn. Married to Rita Metzger ’49. RUTH SCHLOBOHM ANDERSON ’36. Honorary member, Kalamazoo Service Club. Member, Constance Brown Society Board, Mental Hygiene Board, Child Welfare League Board. Married to Donald T. Anderson ’33, Education Director, Children’s Charter of Juvenile Courts of Michigan. Son, David, a junior at the College. BETTY LIBBY HAAS ’41. President of Women’s Society of Christian Service of the Parchment Methodist Church. Activities center around school, community and church, Boy Scouts and Girl Scouts. Married to Richard G. Haas ’42, engineer at KVP-Sutherland. Son, Rick, a freshman at Kalamazoo College. JOAN ROBINSON BERGMAN ’50. Physical education teacher at Hillside Junior High School. Formerly taught at Plainwell and Portage. Long time member of the Kalamazoo Tennis and Badminton Clubs. Married to Fred Bergman ’51. LUCILLE HALLOCK BRENNER ’29. Member of the circulation department staff at the Kalamazoo Public Library. Member of AAUW, MEA, MLA, and Art Center. Married the late Marshall Brenner ’28. Daughter, Elizabeth, ’54 grad; son, Marshall ’55. IRENE GIDEON POLDERMAN ’43. Member of the Oakwood Junior High PTA Board and chairman of the Missionary Studybook Board, First Reformed Church. Married to Robert W. Polderman, Kalamazoo. MARILYN SHARP WEATHERBEE ’46. She has been active in PTA work serving as president of the Lake Center PTA, vice president of the Portage Area PTA Council, and secretary of the Portage Junior-Senior High PTA. Teaches kindergarten class of St. Barnabas’ Episcopal Church school. Married to L. J. Wetherbee, Jr., ’46. ROBERT H. ALDRICH ’33. Manager of the Otsego Branch of Hammond Machin­ery Builders, Inc. Treasurer, School Board of Parch­ment, and former mayor of the city of Parchment. He is a 33rd Mason. Past president of the Kalamazoo Engineering Society and the local Chapter of National Assn. of Purchasing Agents; past state director, Michigan Engineering Society. Married to Virginia Kibler ’35. Son, Jeff, a junior at the College. GEORGE F. CARTLAND ’24. Research Associate, The Upjohn Company. M.S., Kalamazoo College ’25; Ph.D., University of Chicago in biochemistry, ’27. Since 1927, on the Upjohn research staff serving as department head in Pharmacology, Endocrinology, and Antibiotics; Assistant Director of Research, 1950-1956; Director of Scientific Relations, 1957-1962. With Office of Scientific Research and Development, 1944. MAYNARD M. CONRAD ’36. Orthopaedic surgeon in Kalamazoo since 1948. Graduate of Northwestern University Medical School. Internship at Harper Hospital in Detroit and St. Luke’s Hospital in Chicago; Resident, Detroit Receiving Hospital. Post-graduate work, University of Illinois. Captain of “210” Fleet at Gull Lake. ROBERT A. EARLY ’43. In real estate and appraisal business since 1947. President, Kalamazoo Board of Realtors, and Executive Club. Vice President, Kalamazoo County Chamber of Commerce. Member, Kalamazoo County Tax Allocations Board, Michigan Real Estate Assn., National Assn. of Real Estate Boards.
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FOR THE EXECUTIVE COMMITTEE
CANCER—
SCIENTIFIC CHALLENGE

By RALPH W. MCKEE '34, M.A., '35

The peoples of the world have searched constantly for ways of prolonging their lives. Even the recording of the life-span of 969 years for Methuselah, mythical as it apparently is, has been of considerable note to peoples of all succeeding ages. Search for the “fountain of youth” by Ponce de León is further evidence of man’s desire for longevity.

Advances of science and medicine have resulted in better diets, miracle drugs, and surgical procedures which have extended life. Yet this greater number of years has raised new medical problems—new viruses, new diseases and new areas for scientific research. An outstanding example is cancer and its increasing incidence among the peoples of the world. Cancer is no longer a single disease but consists of over 300 types of tissue cell disorders, abnormal growth, yet many of these may be derived from the same primary disorder and, hopefully, may respond to the same solution.

More than two million people over the world, about one-quarter million Americans, die of cancer each year. Part of the reason for the high mortality is the fact that the early symptoms usually do not include pain, but may be more subtle manifestations (e.g., excessive bleeding, tiredness, slow healing of sores and wounds, etc.). We must not be too pessimistic at this point since it has been estimated that a sizable percentage of these people could have been saved had they understood their symptoms and consulted physicians earlier.

The observation that there are more cancer patients today than in years past can be attributed to more than an improvement in the techniques of diagnosis. The incidence of cancer actually is increasing. This is due to numerous factors as will be noted later, but very important among these are cigarette smoking and the inhalation of industrial and automobile waste products—smog. It is of considerable interest that in areas of Iceland where the people consume large quantities of smoked fish there is an extraordinarily high incidence of stomach cancer. Although England and Wales have nearly twice the incidence of lung cancer mortality as does the United States, we are very rapidly catching up.

Cancer, second in its killing and crippling power—heart disease being first—is now given more attention than any other medical problem. This disease,
at the present state of our knowledge, is considered to be the most complex of all diseases, probably because it involves growth, division and multiplication of cells, a process which involves life itself. As concerted as the efforts of scientists have been to solve the problem of cancer, no complete set of answers is available, and no cure is known for any one kind of cancer. However, new and improved methods for treating the malady are appearing and better and more understandable theories for the causes of the disease are developing. It is now abundantly evident that numerous kinds of trauma, horseback riding and pipe-smoking, and various tissue damaging agents, cigarette smoke, smog, numerous chemicals used in industry and agriculture, x-rays, ionizing radiations, and virus, are predisposing and causative agents for cancer. However, we have no substantial knowledge yet as to the exact chemical and physical mechanisms by which these agents act in their destructive process of producing abnormal acceleration of cell growth and multiplication. The most likely reason, indicated by our present knowledge, is damage to the life giving parts of tissue cells, the chromosomes (genes) of the cell nucleus, or to the synthesizing mechanisms (ribosomes) of the cell cytoplasm. The vital chemical components of genes and ribosomes which may be damaged are nucleic acids, deoxyribose nucleic acid (DNA) and ribose nucleic acid (RNA), respectively. Interestingly enough, viruses likewise are composed principally of DNA and RNA, accompanied by protein.

The major problems confronting scientists and physicians for the solution of the cancer question are: (1) how do these causative agents act and how can they be prevented from acting (cancer prevention); (2) once they have acted, how can we detect their early effects (early cancer detection); and (3) how can we stop and reverse the process (cancer treatment). These are the objectives for which thousands of man-days of effort and millions of dollars are being spent each year. However, let us not think that this is an all-out effort. This yearly expenditure is only a fraction of that employed for building one flat-top or for preparing one atomic bomb.

In this effort to find the answers to cancer, the University of California (Berkeley and Los Angeles) is playing a leading role — more than any other university or research organization in the world. The University of California, School of Medicine, Los Angeles, including several members of its Department of Physiological Chemistry (biochemistry) are sharing in this research endeavor. The studies in my laboratory include those on (1) the chemical composition of cancer cells, (2) the altered metabolism of cancer cells, (3) the in vitro (test tube) growth of Ehrlich carcinoma cells, (4) the effects of x-irradiation on normal and cancer cells and (5) the mechanisms of induced cancer immunity. It is believed that complete answers to these problems will eventually lead to the prevention and cure of cancer. A number of my students have contributed to these studies, including nine graduate students five of whom have received their Ph.D. degrees, one his M.S. degree, three presently working toward their doctorates, and six medical students, two high school students and a high school science teacher working summers.

The following are some of the results of these investigations carried out primarily on Ehrlich carcinoma cells:

(1.) A detailed pattern of inorganic components of this cancer cell were determined. Only small differences were observed from normal tissue cells, except for a much larger amount of phosphorus, an all important element in cell metabolism. The determination of these components has made it possible to carry on short term metabolic experiments, as well as long term in vitro culture (growth) experiments.

(2.) Numerous types of metabolic experiments have been carried out. This means that small organic molecules were measured at intervals of time to determine the rate of their utilization and thus the requirements of the cell. From such studies it was found that the cancer cell has an unusual type of metabolism. When the sugar, glucose, is added to the cancer cell its metabolism, unlike that of a normal cell, is shifted to a greater use of sugar and lesser use of oxygen. Such an alteration makes it possible for a cancer cell to thrive under unusual conditions.

(3.) From knowledge gained in the above described experiments it was possible for the first time to obtain in vitro growth of the Ehrlich carcinoma in a relatively unaltered and viable form. This means that further definitive metabolic studies can be made. In addition, if virus are a necessary ingredient of the cancer cell, this procedure will allow the possibility of producing large amounts of virus, enough for definitive biological and chemical studies showing the precise relationship between the virus and the cancer cell.

(4.) Recently, working collaboratively with our Department of Pathology, virus have been observed to be present in this carcinoma cell. The well-known electronmicroscope was employed in these observations. Thus we now have tools for further elaborative studies.

(5.) An additional and very interesting series of findings is that three different strains of mice have been made immune to three different kinds of cancer, a carcinoma and two different leukemia-like cells. This has been achieved by repeated injection of the x-irradiated cancer cells. Precise reasons for this effect are not known but experiments are under way at the present time in an attempt to get the answers. These x-
Not Perfect, Yet a Major Improvement over 1908

By GLENN S. ALLEN '36 and GARRY E. BROWN '51

With the Constitutional Convention now three-quarters through its actions on first reading, it is possible to forecast the general outlines of the new document. Still to come is a second and third reading at which time substantial shifts in position could occur but this is not anticipated. Before discussing the Convention in detail, let us draw a conclusion about the new document as a whole. Certainly it will not realize the high hopes and aspirations of the political scientists and idealists who carried the torch for constitutional revision. Likewise it will not be the total failure which its opponents predicted. Like most constitutions, it is the product of compromise between the rural-urban factions of the Republican Party and the labor oriented majority of the Democratic minority. This compromise does not result in a document of distinction, yet it is producing a more flexible framework of government in tune with the problems of today's society.

LEGISLATIVE APPORTIONMENT

Without a doubt the most hotly contested and most partisan issue to face the Convention has been, and is, the question of Legislative Apportionment. The reader will recall that the pre-Convention publicity pictured this question as the primary controversial issue, with the Democrats from the highly populous southeastern corner of the State advocating a "one man one vote" principle necessitating a strict population basis of selection of members of both Houses of the Legislature, whereas the Republicans whose strength lie primarily in the outstate area, demanded some factor other than population to be effectively represented in one House of the Legislature, that other factor being "area." "Area" as a factor for representation in the Legislature has been further explained as the giving of effective voice in the Legislature to the needs, problems and thinking of people in the less populous areas.

The issue has been joined at this Convention in accordance with the foregoing analysis. However, among Republicans there has been some disagreement as to the definition of "population" as it relates to the House of Representatives. A significant group of Republicans have felt that the House of Representatives should be based upon a strict population formula, whereas others believe the present principle of moiety should, possibly to a lesser degree, be continued. Likewise, there has been some disagreement as to the ex-
tent to which "area" should be reflected in the selection of members of the Senate.

Out of the general agreement which prevailed among Republicans on the fundamentals of the apportionment of the Legislature evolved the Committee Report which provides for a Senate consisting of not less than 36 nor more than 40 Senators to be elected from Senatorial Districts based 80% upon population and 20% on area. This Senate formula substantially retains the present Senatorial Districts outstate, but gives approximately 4 additional Senators to the Wayne County Metropolitan area. In fact, until 1970 the Senatorial Districts will remain the same, with the addition of a Senator to each Wayne, Oakland, Macomb and Genesse counties. The Committee Report provides for a House of Representatives of 110 members selected from Legislative areas containing at least 7/10 of 1% of the State's population. This 7/10 formula applies only to the setting up of 40 Legislative areas and the remaining 70 seats are distributed on the basis of equal proportions, the method presently used by the Federal Government to distribute Congressional seats among the States. The use of the method of equal proportions makes representation in the House more nearly on a straight population basis, and no moiety principle is involved except to the extent that only 7/10 of 1% of the population is required to set up a Legislative area and determine the first seat to be given to such Legislative areas.

A minority report was filed by the Democratic members of the Committee, which in essence provides for a straight population basis of selection of House members and a proportional representation formula for the Senate, which in effect amounts to a straight population voice in the Senate.

Reapportionment of the Senate and House of Representatives would take place every 10 years after each decennial census, and would be accomplished by a by-partisan Apportionment Commission, rather than by the Legislature.

OTHER MAJOR CHANGES

Other major changes which appear assured in the new Constitution and each representing a step towards better government are:

1. Fever Elections — Each April on the odd-numbered years, Michigan has elected its Township Supervisors, Superintendent of Public Instruction, Highway Commissioner and Regents of 3 major universities as well as the Board of Education. This election has always been lightly attended mainly because the people for the most part either did not know the candidates or were still weary from the preceding fall campaign. This election is now abolished and consolidated with the November election. The terms of Governor and the Senate have been increased to 4 years thus reducing the frequency of elections and the number of elective officials reduced by making the Superintendent of Public Instruction an appointee of the Governor and the Auditor General an appointee of the Legislature.

2. A Stronger Governor — Michigan’s first Constitution in 1835 established a strong executive, but both in 1850 and 1908 the Governor's power was diffused among a number of elective officials. The majority report recommends that the Governor appoint the Secretary of State, Attorney General, Highway Commissioner and Treasurer. A bitter floor fight is expected between a coalition of Democrats and rural Republicans who wish to preserve the status quo and the moderate Republicans with George Romney who favor an appointive system. As this article goes to press, a compromise has been reached between the two Republican factions under which the Secretary of State and Attorney General will continue to be elected but the Treasurer will be appointed by the Governor and the Highway Commissioner appointed by a by-partisan Highway Commission appointed by the Governor. The writers of this article were opposed to the package compromise but admit that had the issue reached the floor without the so-called compromise, all of the above officials would have remained elected. In this respect, the compromise was a decided improvement.

3. Home Rule for Counties — No longer will all of Michigan’s 83 counties be required to have the same structure of government. On a local option basis the electors of each county may elect their own charter commission and subject to limitations to be set by the Legislature may set up their own type of Board of Supervisors and decide whether to appoint or elect a Prosecuting Attorney, Sheriff, Clerk, Treasurer and Register of Deeds. Proponents of “true” county home rule were disappointed when a compromise was made giving the Legislature power to determine whether the county officers would be elected or appointed and limitations upon selection of the new Board of Supervisors. Nevertheless the Convention action is a major breakthrough for better local government.

4. Judicial Reform — Although there were great expectations about substantial change in the Judicial Article, it appears that the new Constitution as to this subject might well be the 1908 Constitution with only limited, but somewhat significant changes. The Supreme Court would consist of 9 Justices selected as they are now, by nominations at Party Conventions and statewide elections on a non-partisan basis. However, an incumbent could certify himself for election without getting the nomination of his Party, and others could file nominating petitions and thereby become candidates at such election. These latter two ideas are new. A more significant change with respect to the

(Continued on Page 19)
A 1939 KALAMAZOO GRADUATE is now a key figure in the operation of a $456 million dollar missile range. This range, the world's largest, is the Pacific Missile Range. It covers almost the entire width and breadth of the Pacific Ocean — from the ocean floor to an infinite distance in deep space.

It is in this Range where the "big birds" of missile fly — the Titan and Atlas. These missiles, triggered from west coast bases, streak thousands of miles to "down range" targets; also, in this Range, satellites are launched into polar orbits.

This Navy-managed Pacific Missile Range, newest of the three national ranges (Mid-continent Range at White Sands, N. Mex., and the Atlantic Missile Range, Cape Canaveral, Fla., are the other two) is in its fourth year of business. Today the Range has become an ocean-spanning instrumented network capable of supplying information on the launching, guidance, impact, and recovery of missiles and satellites.

PMR, with its headquarters at Point Mugu, Calif., has the mission of supporting missile and satellite programs for the Army, Navy, Air Force, National Aeronautics and Space Administration (NASA) and other agencies.

The major elements of this Range complex are divided into three categories. At the hard core of the Range — the headquarters — all the major functions of range safety, operations and support are concentrated. Next are the launching facilities at Point Mugu and Point Arguello, Calif., where missiles and satellites are launched.

And last, "down range" — from buildings and trailers perched on hot coral islands and from mountain tops, radars track the missiles and satellites as they pass overhead. Telemetry antennas follow their flights to receive valuable data from collecting devices within the flight vehicles. Hydrophones, sensitive enough to tell a whale from a porpoise, listen for missile impacts in the ocean. The directional data thus gathered is used to direct the recovery ships to the water impact scene to recover the capsules or missiles.

Controlling and coordinating this down range network of instrumentation sites and recovery ships falls on the shoulders of Navy Captain Stanley H. Lane. A 22-year career officer and aviator, Captain Lane has seen aviation grow from pre-World War II conventional aircraft to the jets of today. As a result of his aviation experience, the Navy Department assigned Captain Lane to the Pacific Missile Range headquarters. This assignment was made during the developmental stage of the Range, in early 1959.

During this tour Captain Lane was cited for his contributions in range operations, range planning and missile range safety. Additionally, his efforts were instrumental in the conversion and outfitting of the first Range recovery ships. Two World War II Victory class cargo ships, USNS Longview and USNS Sunnyvale, were transformed into mobile instrumentation stations. These ships are equipped with sophisticated electronic devices that track and receive telemetry data from earth orbiting satellites, record impacts of ballistic missiles, and provide Range instrumentation for the deep ocean areas of the Pacific. Landing platforms and hangers were also added to enable specialized helicopter/diver teams to operate at sea in connection with space package recovery tasks.

In July, 1959, when the ships were ready for sea and their "space age" mission, Captain Lane conducted their sea trials. After the "shake-down" cruises, he brought the ships to Hawaii — their new homeports. A month later, as the officer in tactical command of the recovery ships with their specialized recovery crews on board, the new vessels commenced the first of a long series of recovery missions. Shortly after the Hawaii basing of these ships, the USNS Longview made world history by recovering the first orbited satellite to return to earth — Discoverer XII.

For the past year, Captain Lane has commanded the Pacific Missile Range Facility, Hawaiian Area. This Facility, which serves as the "down range" headquarters for PMR, stretches over millions of square miles of the Pacific Ocean. From tiny islands and atolls...
where U. S. Marines battled for a foothold in the Pacific are now located ground electronic and instrumentation sites that sweep the vastness of space and the ocean depths.

The Hawaiian down range sites associated with this command include the Fleet Mobile Tracking complex at Barking Sands and the Kokee Tracking Station, both on the Island of Kauai. Barking Sands monitors fleet launched Regulus I guided missiles. The seven million dollar Kokee Tracking Station supports NASA's "Man In Space" project and is one of the key stations in the Mercury global network.

The PMR Facility, Hawaiian Area, is based aboard the U. S. Marine Corps Air Station, Kaneoeh Bay, Oahu. This headquarters houses a missile impact location station and a communications-control center.

South Point, on the Island of Hawaii, is PMR's deep space Tracking Station. Here, with a 60-foot diameter electronic receiving antenna, South Point commands and tracks space vehicles traveling millions of miles into space.

The mid-Pacific sites under Captain Lane's command include the satellite tracking and receiving stations at Christmas Island (1100 miles south of Hawaii), Tern Island (350 miles northwest of the down range headquarters), and Canton Island (1600 miles southwest of Hawaii). Canton is another station that primarily supports the Mercury program.

The most distant instrumentation site in this command lies on Japan Island of Eniwetok Atoll. This site, a missile impact location station, is linked with the Midway and Wake Island impact recordings sites.

At Captain Lane’s headquarters, a communications center, operated around-the-clock, interconnects PMR down range stations with the PMR headquarters, launching complexes, all military activities and many associated government activities. By linking PMR circuits with other space agencies, PMR Facility operations personnel can communicate with stations which encompass half the world, Japan to Washington, D.C.

Within this extensive command, Captain Lane has the task of providing scientific information and behavior patterns of missiles and space vehicles for ultimate reporting to the Range users.

Presently this down range command is actively engaged in supporting many space programs, such as the Air Force Discoverer project, which has been active on the Range since February, 1959; the Navy's navigational satellite Transit, and NASA’s Explorer series – VII, XI, and XII.

Another program supported by PMR, which had its first manned orbital flight on February 20, is the Mercury project. PMR sites at Canton Island, Kokee Tracking Station and Point Arguello all tracked and recorded Astronaut John H. Glenn’s flight. The Kokee and Point Arguello instrumentation stations are key sites in the world-wide Mercury network. These two stations have the command capability, in the event of an emergency, to fire the “braking rockets” that could bring the Astronaut back to earth.

As man penetrates further into space, PMR’s down range stations will play an increasing role.
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Donald R. Belcher* Harvey J. Bouck* Carrel W. Flewelling* Hal N. Kinney* Andrew Lenderink* Anna Puffer Lenderink* M. Elvira Pengelly* Earl I. Shock* Paul H. Todd, Sr.* Charles H. Walter

1910
*Gave last year
†Deceased

1911
Ruth Cooley Bigelow* Maibelle Geiger* Clarissa Alexander Morso* Lillian Krogen Walcott* Antta J. Walker* Fred C. Windoes*

1912

1913
Francis Clark Bowman* Else D. Davis* George K. Ferguson* Lucile Lester Idles* Elsie P. Kappen* Minerva Keis* Mary Munro Morris* Mabel Benson Ratcliffe* Donald K. Strickland* Pearl Reedy Tanis* Helen Crissman Thompson* Ethel Thomas Vernon* Percy Vernon* Henrietta Young Wolfe*

1914

1915

1916

1917
Lila B. Barclay* Marguerite Brockenson* Vernice Scudder Christenson* Everett DeRike* Elizabeth Stetson Fleugel* James B. Fleugel* DeGarmo Hickmott* Clare M. Jickling* Charles B. Knappen* Walter W. Lucasse* Mary Hallett Miller* Kenneth M. Payne* Louarine Polasky* Ruth Goss Ralston*

1918

1919

1920

1921

1922

1923

1924

1925
The class of 1914 tallied 75% participation for the honors of this category. The classes of 1903 and 1910 recorded 63%. Other classes exceeding the 50% mark were 1894, 1895, 1898, 1907, 1909, 1910, 1911, 1912, 1913, 1914, 1916, 1920, 1925, and 1944. Overall alumni participation reached 38%.
Bequests are a most significant consideration in the on-going program of an institution like Kalamazoo College. Far-reaching effects will accrue from the bequest of the late Frederick E. Walton, as a recent example. This Owosso friend willed $40,000 “for the purpose of educating the children of ministers of the Gospel, of any denomination, which scholarships shall be awarded on the basis of need, secondly for scholarship.”

The class of 1950 holds two honors in this year’s drive— for the largest number of donors (65) and for the largest number of new donors (28). There are 401 alumni on this year’s list who made a donation. A special note of appreciation was given recognizing 181 families who are new to the giving habit. To these and to all, the College extends its appreciation.

The purpose of educating the children of ministers of the Gospel, of any denomination, is of particular importance in the light of the recent decline in the number of students attending the College. At the present time, 1,300 students are enrolled, which compares with 2,000 a decade ago. The decline is attributed partly to the high cost of college education in the current college climate, partly to the exodus of students to other states for lower costs, yet partly to the trend of parents not to send their children to college at all in this era of high unemployment and inflation. Nevertheless, the College is operating on a $400,000 deficit this year and public support is essential if the College is to continue.

The class of 1950 has been active in seeking funds. They have approached alumni and friends and have made substantial contributions to the College. Their efforts have been appreciated and the College is grateful for their support. The class of 1950 has demonstrated a commitment to the education of ministers’ children and has set an example for others to follow.

The College extends its appreciation to all who have contributed to the College and to all who will contribute in the future. The College is grateful for the support of its alumni and friends and is committed to providing an excellent education for the children of ministers of the Gospel, of any denomination.
The $125,000 goal was exceeded, and total contributions were $131,610. Of this amount, alumni gifts reached nearly half—$64,997. The class of 1940, through the John Handelsman Memorial, gave the largest sum—$20,693. The class of 1927 was next with gifts of $41,98.
Virginia Stone, co-chairman of the "K" College Fair on July 28, urges you to make plans to come back for what should be a day of fun for the whole family. Cards returned thus far indicate it will be a real "Summer Homecoming"—even larger than two years ago!

Eugene T. Karnafel*  
Carl Keenen*  
Shirley Ind Keenen*  
Chester H. Loucks (Hon.)*  
Donald G. McBeth*  
G. Robert Miyagawa*  
Virginia O'Brien*  
Ruth Osterling*  
Barbara Brown Peterson  
John E. Peterson  
Jack R. Price  
Carol Postula Reverski*  
William R. Rogers  
Harold Rudolph*  
Jean Clapp Smith*  
C. Joseph Williamson*  
James S. Wilson*  
D. Keith Wright*  

1955  
Nancy Higdon Baum  
William G. Baum  
Donald R. Beaver*  
Jack A. Bowen*  
Marshall H. Brenner  
Patricia Corby Brown*  
Emerson W. Campbell  
Robert R. Casler*  
Robert L. Copeland*  
J. Robert Cramp*  
Don G. Davis*  
Donald H. Dayton  
Lawrence J. Dietzman  
Leland R. Doan (Hon.)*  
Sandra Barth DuPont*  
Gladys Lyon Fox*  
Stanley W. Glass, Jr.*  
Donna Houghtby Haymans  
Robert Haymans  
Donna Brenner Hess  
Howard J. Hirsch*  
Shirley Keeten Ingees*  
Teresa Hansen Johnson*  
David C. Kimball*  
David J. Larson*  
Kathleen Labers*  
Catherine Rutherford McCann*  
Daniel G. McFadden  
Elaine Johannson Mage*  
Susan Pirnie Miller*  
Jean Rogers Morgan*  
Judith H. Robertson*  
Mary June Beattie Rush*  
Charles L. Seifert*  
Evelyn J. Smith*  
Martha Hoard Smith*  
Don C. Steinheilber*  

Stephen E. Styers*  
Susan Laycock Williamson*  
John Wolfe*  

1956  
Richard J. Brown*  
Joan Story Copeland*  
Endrene Peterson Crampton*  
David O. Crane*  
Lois Friedman*  
Mary Lou Howell Crooks*  
Monica A. Evans*  
Jon Forslund*  
Gretchen Bah Frueh*  
John C. Frueh*  
Donald S. Gilmore (Hon.)*  
Norma Durham Grench*  
Thomas B. Hathaway*  
Flerette Kram Hershman*  
Ann Thompson Kimball*  
Joseph A. Meagher*  
David W. Moran*  
Marilyn Eck Morrell  
Carolyn Crossley Smith  
Donald C. Smith  
Donna B. Utley*  
Paul V. D'Amico*  
Angelo Vlahos*  
Marilyn Everett Wilson*  

1957  
Emma Dindom Bebee*  
Robert C. Bellinger*  
Sally Smith Robert*  
Betty L. Bonath*  
Glen Brown*  
Paul F. Coash*  
Barbara Crawford Cross  
Barbara McCabe Fowler  
James H. Fowler  
Charles J. Fox*  
Paul J. Hanson*  
Thomas D. Johnson*  
James B. LaRoy*  
Judith Lindberg LaRoy*  
Anne K. McGee*  
Nancy West Mann*  
Karen E. Peterson  
Beverly Nunn Price  
Katherine Hennig Restock*  
Douglas A. Rosenberger*  
P. Richard Taylor*  
Samuel F. Townsend  
Elizabeth Wenzel Vajda  
Shirley Martens Wheeling  
Laura Baker Wright*  
Dorothy I. Young*  

1958  
Lura Ann Addy  
Charlotte Loomis Aklakson  
Margaret Youngs Auklet  
Marcia Yoder Brown*  
Herman W. DeHoog*  
Richard C. Ehrle  
Larry S. Elrodge  
Carl F. Fink*  
Patricia Cooper Fink*  
Carol M. Goodnow*  
Macy Rose Ramsey Hanson*  
Marlene Crandell Hathaway*  
James K. Hightower*  
Carol Miller Holmes  
Sally I. Hunter*  
Garland E. Iyhar*  
Ruth A. Knoel*  
Carol Beall Leth*  
Thomas D. Leth*  
Sheldon B. Lublin*  
Charles M. Meeker  
Daniel S. Metzger  
William D. Perkins (M.A.)  
Millan S. Rakich*  
R. Gordon Reinel*  
Elizabeth Ashbolt Rosenberger*  
H. Keith Saylor*  
Erleen Billings Scannell*  
A. Bennett Schram*  
Jane Pressel Schultz  
Sally Seffter Styers*  
Fred Tivin  
Merrilyn Cigar Vaughan*  
Thomas Vaughan*  
Susan Bloomquist Warner  
C. Larry Werner*  
Ruth Sollitt Williamson*  
Robert H. Yuell*  

1959  
Keith A. Arnold*  
Kenneth H. Auklet  
Roger Robert  
Robert E. Drice*  
Jon M. Clapp*  
Richard L. Currie  
Karen Lake DeVos*  
Judith C. Dunham*  
Ingrid Brown Ehrle  
Lowell N. Eisen*  
Carmen Olson Erber*  
Alan G. Ferguson*  
Irving B. Field*  
David Fischer*  
Ann Fleisch*  
Frederick J. Gaisser*  
Philip B. Halsey  
David L. Higgs*  
Sharon Wiley Hightower*  
Julia F. Holmes*  
Waclaw Jedrzejewicz (Hon.)*  
Merrillyn VanZandt Krider  
Vernon H. Krider  
Mara Lacs*  
James C. Laidlaw  
C. Peter Lilly*  
Jane Gilmore Maloney*  
Ellen Brooks Miyagawa*  
Judith Vogel Munro*  
Allan M. Payson  
Robert Pixley  
Mary Ann Wise Ryder*  
Robert Rentel  
E. Yvonne Richardson  
Gerald C. Rothman  
Russell B. Scamehorn  
Barbara L. Simons*  
Robert W. Stark*  
Martha Stiltz  
Laura Heinrich Taylor*  
David H. Thornberry  
Robert W. Tyner  
William J. Venema  
Allison Groeppema Werner*  
William H. Western*  
Diane Dugas Worden*  
Leonard R. Worden*  

1960  
Dorothy Wendt Ackley  
Elisabeth Hayne Babcock  
Gary C. Babcock  
David C. Brown  
Gertrude DeHoog Brown  
James W. Cosner  
Rosemary Luther DeHoog  
Virginia Garnham Detzel*  
Susan Eichelberg*  
Mary Cross Field*  
Robert F. Haiduk  
Barbara Birchunen Higgs*  
Joanne Lent Hyames*  
Ann Wagner Inberbitzin  
Girts Kaupus  
Constance Metzger*  
Eleanor Helfen Miller*  
Kent B. Monroe  
L. Ann Faragher Padmos*  
Gayle Dowd Pixley  
Richard Schultz  
Susan Lewis Stowe*  
James K. Taylor  
Willard Thorp (Hon.)*  

John A. VanHaften  
John R. Veenastra*  
Virginia Philips Vincent  
William Vincent  
Nancy Votz  
Phyllis Watson  
Patricia A. Wentworth*  

1961  
D. Stuart Ackley  
William R. Bardauskas  
Ray Boylan  
Susan Wisger Brice*  
Judith H. Cooper*  
E. Joyce Coryell*  
Donald B. Crutkshank  
Nancy E. Ericson  
Charles E. Evans  
Mary Ellen Steketee Fischer  
Shirley Robbins Gary  
Margiana Rounell Gasteyer  
Mary M. Goss  
Robert E. Hader  
Frances E. Hansen  
Mary L. Hanson  
Henry D. Haynes  
Floyd L. Herald  
John N. Isewell  
Richard A. Jackson  
Lawrence B. InUnderbitzin  
Robert C. Kelly  
Sylvia Schaal Kelly  
Jori D. Labahn  
David W. Larson  
Mary J. Long  
Mary Murch McLean  
Francine Smith Meeker  
Gary L. Miller  
Beverly Castle Myers  
Mary Ojala  
Lester B. Overway  
David F. Pellegrrom  
Nancy F. Purdy  
Mary M. Raymond  
Gil Rogers  
D. W. Schneider*  
Linda Brennoman Schneider  
Marie A. Vermuelen  
Ellen R. Wells  
Najia Zedins  

1962  
Laurette M. Hankins*  
Suzyanne Horvatszky Howell  
John F. Michkovits  
Doreen Fitzgerald Rogers  
Sandra Lent Thornberry  

Congratulations to the most recent graduating class of 1961 which set a new record for number of donors for the first year’s donors’ list (41). Gain in other recent classes should be noted and commended — 1960 had 19 new gifts; 1959 — 19; 1958 — 16; 1957 — 13.
MOTIVATION IN LITERATURE:

The Way of All Flesh

By DR. WALTER W. WARING

NOTABLE AT THE TIME OF ITS PUBLICATION in 1903 for its sharp attacks on Victorian life, Samuel Butler's The Way of All Flesh has long since lost its power to shock. Today, its attacks upon religion, education, and family are of interest chiefly to the literary historian, but its method of motivation, once a novelty, has become a truism in the twentieth century.

Ernest Pontifex, a young man reared under strict Victorian discipline, educated with care, and encouraged into the clergy, reaches maturity without achieving wisdom, faith, or humanity. Brought before a court on the charge of attacking a young woman, he becomes the object of the magistrate's wonder and irony:

"Ernest Pontifex, yours is one of the most painful cases that I have ever had to deal with. You have been singularly favoured in your percentage and education. You have had before you the example of blameless parents, who doubtless instilled into you from childhood the enormity of the offence which by your own confession you have committed. You were sent to one of the best public schools in England . . . At Cambridge you were shielded from impurity by every obstacle which virtuous and vigilant authorities could devise . . . For the last four or five months you have been a clergyman . . . nevertheless, not only does it appear that your mind is as impure as though none of the influences to which I have referred had been brought to bear upon it, but it seems as though their only result had been this . . ."

The words of the magistrate express the consternation of a generation of Victorian parents who by their own standards had provided the best treatment possible for their sons and daughters. As did Ernest, the children responded to their education with indifference, to their faith with disdain, and to their parents with hate. The Victorians regarded the actions of the younger generation in anger or with a wagging of heads and a clicking of tongues. The mid-nineteenth century dream of a better world founded upon the enlightened doctrines of John Locke's theory of knowledge and Jeremy Bentham's utilitarianism faded in paradox: love begot hate; faith begot doubt; and education begot stupidity.

What is paradox to one generation, however, sometimes becomes principle to the next. Butler's reform took the following expression:

"A man should not only have his own way as far as possible, but he should only consort with things that are getting their own way in so far that they are at any rate comfortable."

To his contemporaries Butler's teaching was despicable, but in the day of Dr. Spock and "life-adjustment" education his statement sounds like something from the pen of an Ann Landers. Butler had hit upon psychological motivation. The "good old teachings," "spare the rod and spoil the child," "as the twig is bent, so the tree inclines," unaccountably had failed. Children became individuals complete with drives, emotions, wills, identities—everything, indeed, except experience and physical maturity.

Seen at last as an individual, the child is no longer motivated only by the forces that operate within society. His surest motivation comes from within, and what is within is value more surely than what is without. Butler places the internally motivated child in an externally motivated society. Ernest's system of values is not, of course, clear to himself at first. His response to music and his aptitude for carpentry are characteristics possessed by his great grandfather. Nothing in his environment values his individual qualities; therefore he is obsessed at first with his own worthlessness and later with the worthlessness of society.

On the other hand, his father and mother, his education and religion, force upon him conformance to a highly structured society, but fail to provide him with any way to relate his inner values to it. As a result, he becomes a lonely, frustrated individual. His actions are instinctive efforts at self preservation. When he becomes a clergyman, he does so in good faith, hoping to find a way in which he can relate himself to man and God. When he is sent to prison for his crime against society, he is freed by the very thing that was destroying him. His rejection by society releases him from the values that prevented him from developing his own. While in prison, he begins his self-development, which gives him the strength to reject society when he is released.
SPORTS

Kalamaazoo's basketball team compiled the best record in modern Hornet history this winter in gaining a share of the 1962 MIAA championship with Hope College. Coach Ray Steffen's team posted an 18-4 overall record and a 10-2 mark in the conference.

The Hornets won all six games in the first half of the league season, but then were upset by Olivet, 60-57, and beaten by Hope, 78-67. Hope had lost to Calvin and to Kalamazoo (61-60) in the first round, and after the Dutchmen won all of their remaining league games to clinch a share of the title, the pressure was on Kalamazoo as the Hornets finished their league season a few days later. In the season finale, Kalamazoo trounced Alma, 81-60, and a share of the league cage honors came to Kazoo for the first time in a dozen years.

Other than the two league defeats, losses were suffered at the hands of Elmhurst and Anderson in nonleague contests. Highlights of the season were a pair of close victories over Calvin's defending champions, 54-52, and 62-60. The Hornets also walloped Albion twice, 77-61, and 69-42, in games which were especially important in the all-sports trophy race.

Senior Gordon Rodwan was the squad's most valuable player, for obvious reasons. He led in scoring with 435 points, and in rebounding with 279 rebounds. Rodwan wound up his four-year career with 1,045 points, third in the all-time records behind the 1,252 scored by Gary Morrison (1954-57) and the 1,148 total posted by Manny Glasser (1950-54). Jon Lindenberg, another senior, was elected Captain for the season; he also was a fine rebounder with 187 rebounds and was regarded as one of the best defensive players in the league. Dave Southworth was the only other senior on the team.

Rodwan and Lindenberg were both honored as first team selections on the All-MIAA team, while Bob Morgan, junior guard, was given honorable mention.

Chuck Wood, a junior and the son of former Hornet star Dan Wood, was voted as most improved player. Other lettermen were Morgan, Jack Hulst, John Mason, Dale Southworth, Jim Harkema, and Jim Honell, all underclassmen.

The 18-4 record for the season marked only the third time in Kalamazoo history that a Hornet cage team had won as many as 18 games. The all-time record is held by the 1921-22 team which posted a 22-3 record. In 1920-21, Kalamazoo had an 18-9 record. No other team since that era had compiled such an outstanding record.

While the basketball team landed most of the headlines, another group of Hornet athletes were generating enthusiasm for a wrestling program. Under the coaching of George Acker, Kalamazoo fielded its first wrestling team in history, and the squad came through with victories over Adrian and Wayne State in a 2-4 season. Captain Jim Jahnke, a junior from Jackson, was the outstanding competitor, losing only once in six matches.

In the 1961-62 all-sports trophy race, Kalamazoo moved into first place at the end of the fall and winter sports season. The Hornets now have 28 points to 27 for Albion, and prospects of winning the trophy next spring look rather bright. Kalamazoo has title contenders in both tennis and golf, a better than average team in track, and an enthusiastic baseball team. Both the baseball and tennis teams will take southern trips, while the golfers will practice down south but will not compete in any dual meets.
CANCER (Continued from Page 7)

irradiated cancer cells are not killed but crippled and altered in some unknown fashion. From the fact that these cells contain virus one may speculate that a similar situation exists here as with the preparation of polio vaccine, namely, that polio virus are altered by chemical treatment and that repeated injection of this altered virus (antigen) causes a reaction within the body and production of a chemical (antibody) which controls growth of either the crippled virus or live virus.

The next logical steps for investigating these phenomena are: (1) the biochemical alterations produced by x-irradiation of the cancer cells; and (2) the biological nature of the type of immunity produced in these mice. Many questions are yet to be answered. Are the effects of x-irradiation on the cancer cells, per se, or on the virus that feed on the cell and alter its nature and chemical properties? Do the x-rays alter the nucleoproteins of the cell or of the virus so that they are more antigenic (thus producing antibodies)? Do the x-rays cause the production of a new antigenic protein? Can immunity be produced in some other way? Are the antibodies that are produced of the usual type that circulate in the blood and may be passed from an animal which has survived cancer to another as a protective measure; or are the antibodies attached to tissue cells, thus making it impossible to transmit the immunity? Are the antibodies that are produced of the gamma-globulin type and produced by stimulation of cells that normally synthesize these proteins or are they of a different type and require some other type of stimulation? Our present studies here indicate that at least two groups of blood proteins are increased in the immune mice. Are all of these important to the process of immunization in mice? Is there a cross immunization—that is, can immunization against one type of cancer cell protect the animal from other types of cancer? Is cancer hereditary? At present there is no strong evidence to indicate that it is, yet certain traits of the disease in laboratory animals indicate this possibility. A condition similar to a hereditary trait could be the result of DNA containing viruses attaching themselves to the DNA of the genes and tagging along when the cells divide.

The ultimate question is, can humans be immunized against cancer? From the research that has been done in many laboratories and hospitals across the country there is hope in this direction, too. In addition to the hopeful results coming from laboratory animal experimentation, there is evidence that people have a certain amount of natural immunity. This indication comes from two major types of experiments: (1) more than a hundred well documented cases of human cancer have been known to regress spontaneously; and (2) cancer transplanted from a cancerous individual to a normal one will not grow. What are the differences between these two people? The answer to this riddle no doubt will be valuable in the solution of the cancer problem. It is obvious that scientific investigation raises more new questions than it answers old ones. Yet this is a necessary part of the scientific approach and in the end will accumulate enough answers to solve problems. In the raising of new questions, we are led to new scientific horizons.

What are we as lay people and scientists to do about this dreaded disease, cancer? It is obvious that everyone must play his role. Cancer control is a matter not only of treatment but of prevention. The scientist must determine the nature of cancer, including methods of treatment and prevention, and these procedures must then be utilized by everyone. To accomplish this, the scientists' efforts must be doubled and redoubled. If half a battleship's worth isn't enough, then it must be one or two or ten. Although most people are no longer searching for a "fountain of youth" they are very desirous of a happy, disease-free "three score and ten years". All people should be interested in joining the search for the cup of the Holy Grail.

CONSTITUTION (Continued from Page 9)

Supreme Court is a provision which permits the Supreme Court to select retired judges to fill vacancies on the Supreme Court until the next general election, whereas the present Constitution provides for these vacancies to be filled by the Governor and then this appointee may run with an incumbency designation. It is felt that this latter change will tend to eliminate a present criticism to the effect that we have practically an appointive system by virtue of the fact that most of the members of the Court have been consistently re-elected with the benefit of the incumbency label, after having been appointed by the Governor.

An Intermediate Appellate Court has been approved by the Convention, which Appellate Court would consist of 9 judges, their selection to be determined by the Legislature. The necessity for an Appellate Court has been increased by inclusion in the Bill of Rights section of the Constitution of a provision for appeal as a matter of right in criminal cases.

No significant change is made in the jurisdiction or selection of judges of the Circuit and Probate Courts. Justices of the Peace no longer would have Constitutional status; however, a provision in the Judicial Article would permit the Legislature to establish such inferior courts as it deemed advisable, which could include magistrates or courts comparable to the present J.P. System. In the absence of Legislative action, Circuit Court Commissioners and J.P.'s would be abolished at the end of 5 years following the adoption of the Constitution.

(Continued on Next Page)
5. **The Income Tax and the Budget** — Contrary to some public opinion the Convention was not called to make legal a state income tax. Such a tax, if flat rate, has always been legal under the 1908 Constitution but considerable doubt exists as to the legality of a graduated tax. This doubt was resolved on first reading when the Convention voted to prohibit a graduated tax. In addition, the new Constitution requires revenue in each year to match appropriations. This will prevent the sorry practice of recent Legislatures which have voted annual expenditures without matching revenues.

**THE COMPROMISE**

Upon first reading, all ear-marked funds were retained but the 15 mill limitation was removed. In recent weeks the action on first reading was not acceptable to either the rural or urban factions of the Convention. In an effort to reach harmony on this issue, George Romney and former State Treasurer, D. Hale Brake, took the leadership to bring about a compromise which while retaining ear-marking nevertheless permitted considerable more flexibility, but at the same time reinstated the 15 mill limitation. As we send this to press, it now appears that the 15 mill limitation will become an 18 mill limitation on a local option basis. Thus it can be said that the "package deal" has been liberalized with many delegates voting their own convictions rather than being bound by premature caucus action.

**THE PEOPLE ULTIMATELY DECIDE**

When the Convention adjourns, the new document goes to a vote of the people. It is uncertain whether this will be in November, 1962, or April, 1963. If the Democratic Party should feel disappointment that its goal of "one man one vote" is not realized and decides to oppose a favorable vote, the new Constitution might be rejected. Or, if the rural Republican areas should feel that too strong an executive is established or reapportionment too adversely affects rural dominance, the Constitution may also fail. Certainly the Constitution will be in trouble if those idealist groups who carried the campaign for a Convention conclude that the document is too compromised.

**IN CONCLUSION**

The beloved Dr. Robert Cornell of Kalamazoo College used to say, "There are too many legislators in too many Houses with too many elections." The Convention will not fulfill all of Dr. Cornell's aspirations but it promises to satisfy some. In our opinion it rises high above similar Conventions in Missouri and New York and is on a par with New Jersey. Unless we make a bad mistake on second or third reading, we believe it deserves support.

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**Kalamazoo College**

**Quarterly Review**

**MADISON, WISC.**

Dr. Martin Shatzberger, member of the economics department and director of the Kalamazoo College Business and Industrial Management Center, met with Madison area alumni on Tuesday evening, March 6, at the Baptist Student Center of the University of Wisconsin. Betty Brown Barnes '45 and Richard Broholm '50 were in charge of the meeting.

**GRAND RAPIDS, MICH.**

The largest meeting ever held by the Grand Rapids Club took place on March 7. Appearing on the program which followed dinner at the Pantlind Hotel were Dr. Hicks and Ed Gemrich '26. Heading activities in Grand Rapids are Dave Byers '30, Club president, and officers Jon Forslund '56, Margaret Oakley Lamb '31, and Fred '49 and Marty (Jackson '50) Tholen.
CHICAGO, ILL.
A committee of alumni met with Marilyn Hinkle on March 30 to consider plans for the Chicago Club. An area division of alumni in Chicago and suburbs is now taking place with an eye toward "get-acquainted" parties in the respective areas, leading toward a large central meeting in the fall. Bob Simanton ’51 is taking over the leadership of this planning.

FORT WAYNE, INDIANAPOLIS, CINCINNATI
During the first week in April, Marilyn Hinkle met with alumni in Indiana and Ohio. Vern ’33 and Nita (Starke ’33) Gelow opened their home to alumni and friends in Fort Wayne on Monday evening, April 2. A meeting in Indianapolis was scheduled for Tuesday at the home of Harold and Mary (Pratt ’46) Nash, and on Wednesday evening, the Cincinnati group met at the home of Vic ’40 and Shirley (White ’45) Soukup. The latter meeting turned out, principally, to be a reunion of alumni within a college generation including Jack ’50 and Pat (Chrouch ’52) Sunderland, Bob ’51 and Anne (Davison ’52) Binhammer, Spence Burns ’50 and his wife, Gwen Schwartz Schlesinger ’51 and her husband; and the Jim Copelands ’51.

COMING MEETINGS
As this section of the Alumnus goes to press, meetings are scheduled for Flint on April 18 (Community Room of Flint Central High at 7:30 p.m.); Southwestern Michigan Alumni Club on April 19 (Berrien Hills Country Club at 7:00 p.m.); Jackson on April 24 (John George Hall at 7:30 p.m.); Detroit on May 12 (Huck’s Redford Inn at 7:30 p.m.); Philadelphia on May 24 (breakfast at 7:30 a.m., First Baptist Church); New York on May 24 (Overseas Press Club at 7:00 p.m.); and Washington, D.C. on May 27 at the Bay (’32) Chapmans’ home, 212 North Oak St., Falls Church, at 5:00 p.m.

CLASS OF 1894
The College’s oldest living alumnum, Dr. Charles Kurtz of Chicago, celebrated his 90th birthday on April 14. Congratulations!

CLASS OF 1906
Harley W. Anderson passed away in a Kalamazoo nursing home on February 7, following a seven-year illness. He had served as business manager and secretary of the Kalamazoo Public Schools for 37 years until his retirement in 1951. He then served as executive secretary of the Association of School Business Officials of the United States and Canada. Mr. Anderson was a past president of the Michigan Association of School Business Officials, the Kalamazoo Country Club, and the Kalamazoo Kiwanis Club. He is survived by his wife, and one son, Donald ’33.

CLASS OF 1908
The University of Wisconsin has named one of the new professorships being established for research the Vernon C. Finch Research Professorship and has converted his former office into the Finch Seminar Room. Dr. Finch, who died in 1959, was chairman of the Department of Geography at the University of Wisconsin from its inception in 1928 until 1945—and a senior advisor during the following years. Failing health forced him to retire from active teaching and in 1954 he was named Emeritus Professor. During the period of his active career, geography was undergoing rapid expansion in the colleges and universities in the United States and “the character of that development was influenced in no small part by his research, his writings, his teaching, and his personality.”

CLASS OF 1912
Samuel J. Lewis has been named to receive the 1962 Orthodontic Education and Research Foundation Award based on his achievements in orthodontic education and clinical practice.

CLASS OF 1914
Harvey P. Pettitt, who resigned as head of the department of mathematics at Marquette University in Milwaukee, Wis., after having held that position for 30 years, is continuing his teaching there.

CLASS OF 1924
Royal F. Dressel died in his home in Jackson, Michigan, on February 18, following a heart attack. After graduation in 1924, Mr. Dressel became a social science teacher at Jackson High School. The following year he became a social problems and history teacher and remained in that capacity until being named assistant principal in 1943. He was serving as assistant principal at the high school at the time of his death. Mr. Dressel was a member of the Kiwanis Club, the Jackson and the National Education Associations, headed the Council of Social Agencies in Jackson in 1943 and 1944, served as president of the joint Children’s Board and the Jackson branch of the Michigan Children’s Aid Society, and was active in the First Congregational Church of Jackson. He is survived by his wife, the former Lillian Drexel ’26; a daughter, Carol; three sons, Wayne ’50, Robert, and Royal, Jr.; and two brothers, Harold ’22, and Keith.

CLASS OF 1927
George W. Pardee died on March 12 in a Cadillac, Mich., hospital following surgery. Mr. Pardee served several churches in Michigan and at the time of his death he was pastor of the Methodist Church in Lake City.

CLASS OF 1931
We have just learned of the marriage of Mary Elizabeth Smith and James D. Good several months ago in Washington, D.C. Mr. Good is a graduate of South Carolina Law School.

CLASS OF 1932

CLASS OF 1934
Yvette Rogers Falk represented Kalamazoo College at the inauguration of Richard Franklin Rumphreys as president of The Cooper Union for the Advancement of Science and Art on February 12 in New York City.

CLASS OF 1935
Mary Constance Grose and Richard D. Cutting ‘22 were married on July 14, 1961, in St. Andrew’s Episcopal Chapel, Ann Arbor, Mich. Baxter Hathaway, an associate professor of English at Cornell University, has written a book, “The Age of Criticism:
The Late Renaissance in Italy," which was published by Cornell University Press in February. The book stresses five key concepts of the literary criticism of the Italian Renaissance—poetry as inspiration, poetry as a concrete-universal, poetry as a purgation, the poetic imagination, and the conflict between poetry as art and poetry as furor.

CLASS OF 1937
Sidney Katz represented Kalamazoo College at the inauguration of Joseph J. Copeland as president of Maryville College, Maryville, Tennessee, on October 28.

CLASS OF 1939
Kenneth Hinga is teacher of the adult blind at the Kalamazoo office of the Michigan Department of Social Welfare. He is teaching braille reading, handicrafts, and rehabilitation procedures. He is president of the Kalamazoo Federation for the Blind.

CLASS OF 1942
Joel W. Clay, who is a general surgeon and has resided in Menominee, Michigan, for the past eight years, has moved to Mt. Clemens, Michigan. He has been very active in civic and medical circles in Menominee and has been a member of the board of directors of the Michigan Division for the Blind.

CLASS OF 1943
Edward McAllister is executive secretary of Standard Accident Insurance Company of Detroit.

CLASS OF 1945
Patricia Wilson Vandenberg died of leukemia on March 4. She resided in Glendora, California, where her husband is a building contractor and they were part owners of an ice skating rink in Ontario, California. She is survived by her husband and four sons.

CLASS OF 1946
Thomas T. Sugihara has been promoted to full professor of chemistry at Clark University, Worcester, Mass. He has just returned from Europe where he has been conducting research in nuclear chemistry, primarily at the University of Oslo, Norway. He received a Guggenheim Fellowship and a Fulbright Traveling Grant to undertake studies of the effects of angular momentum and excitation energy in high-energy fission.

CLASS OF 1948
Jacqueline Buck Mallinson and her husband have just authored the 1962 edition of "A Bibliography of Reference Books for Elementary Science," published by the National Science Teachers Association. William L. Garbriech has been named development associate at Eli Lilly and Company, Indianapolis, Indiana. He is a member of the organic chemical development department and his work has included a unique synthesis of ergonovine and a method of producing esters of pyrmeric acid.

CLASS OF 1949
Jack Marlette has been basketball coach at Flint Northern High School for seven years. He went to Flint in 1949 as a social science instructor and head tennis coach. His team nearly provided the upset of the year in the Saginaw Valley and the state when it lost in the last seconds, 63-60, to Saginaw High, Michigan's No. 1-ranked Class A team. Fred Tholen is city manager of East Grand Rapids, Michigan.

CLASS OF 1950
Bill Campbell is city manager of Grandville, Michigan. Mr. and Mrs. Kenneth A. Youngs announce the birth of a son, John Rockwell, on February 28 in Kalamazoo. Robert L. Culp received his M.A. in guidance from Western Michigan University in January. Mr. and Mrs. Raymond S. Nahtman are the parents of a daughter born on March 2 in Kalamazoo. They reside in Allegan, Michigan.

CLASS OF 1951
Mr. and Mrs. John A. Dagg (Peggy Lindsay '52) announce the birth of a son, Jeff Kevin, on January 23 in Detroit. William H. Wheeler is instructor in the TV, Radio, and Film Department of Stephens College in Columbia, Mo. Mr. and Mrs. Robert T. Binhammer (Anne Davison '52) became parents of their third child, Jonathan Vary, on May 15, 1961, in Cincinnati, Ohio.

CLASS OF 1953
Harold T. Beattie is a registered representative at Wm. C. Roney & Company, a member firm of the New York Stock Exchange. He follows in the footsteps of his father, who has been an investment broker for 40 years. Mr. and Mrs. John Doyle are the parents of a son, Frederick John, born on January 20 in Kalamazoo.

CLASS OF 1954
Dr. and Mrs. John E. Peterson (Barbara Brown '54) announce the birth of a son, Eric Coleman, on February 24 in Kalamazoo. John is assistant professor of history at Kalamazoo College. Betty Brenner is assistant editor of "Crusader," the monthly publication of the American Baptist Convention and is living in Norristown, Pa. Mr. and Mrs. Jack R. Price (Beverly Nunn '57) announce the birth of their third son, William, on December 3, 1961, in Garden City, Michigan. Richard C. Fleming is assistant professor of biology at Olivet College, Olivet, Mich. He attended the University of Oklahoma last summer, and the summer before, Tulane University, where he was engaged in advanced studies in connection with National Science Foundation Summer Institutes. He and his wife now have three girls and a boy—the youngest, Agatha Anne, born on December 24, 1961. Mr. and Mrs. Eugene T. Karnapel announce the birth of their second daughter, Paula Denise, on June 18, 1961, in Madison, Indiana.

CLASS OF 1955
Shirley J. Boers and Dr. Howland A. Fowler announced their engagement on February 23. A May wedding is being planned by the couple. Shirley is presently employed as a systems representative by IBM Corp. Dr. Fowler is employed as a research physicist for the National Bureau of Standards, Washington, D.C. Margaret Wong-Hwang is living in Crystal Lake, Illinois, since her marriage last June, and is working in Chicago.

CLASS OF 1956
John and Gretchen (Bair '58) Fuhr are the parents of a baby girl, Carol Linda, born on January 15
in Frankfurt, Germany. John's tour in the Army was extended but they are now back in the States as of early April. Mr. and Mrs. Jon Forslund announce the birth of a son, Jon, Jr., on January 24 in Ada, Mich.

CLASS OF 1957
Charles J. Fox has been transferred to the cellulose and protein products sales group of the Hercules Powder Company in Wilmington, Delaware, from Harbor Beach, Michigan. Peggy Robb Olsen and her husband, Chris, have moved from Detroit to Plattsmouth, Nebraska, where Chris is stationed at Offutt Air Force Base.

CLASS OF 1958
Mr. and Mrs. George Pixley announce the birth of a son, Kevin Vale, on January 5 in Chicago. Ruth Knoll is director of a Community Chorus of about fifty voices in Hartford, Wisconsin. Mrs. and Mrs. Vincent Lannelli (JANE Schaafsma '56) are the parents of a daughter, Nancy Jean, born on November 16, 1961, in Benton Harbor, Michigan. Vince is now assistant branch manager of the Chicago branch of the Appliance Buyers Credit Corp., a finance subsidiary of the Whirlpool Corp., and he and family are now living in Oak Park, Ill. Mr. and Mrs. Howard B. Morrison (Marcia Johnston) are the parents of a daughter, Diane Lynette, born on February 2 in Kalamazoo. Doug Allen was featured in an article on orchid growers in Kalamazoo in the "Kalamazoo Gazette." He has more than 2,000 orchid plants, representing 25 genera, and has been growing orchids for 10 years. Mr. and Mrs. David Koeze (Carol Baken '60) announce the birth of their second son, Mark David, on October 13, 1961, in Grand Rapids.

CLASS OF 1959
Carol L. Schutz and Thomas H. Harding were married in St. Luke's Episcopal Church, Kalamazoo, on March 3. He is employed by Harding's Market in Southland Shopping Center, Kalamazoo. Tony LaScala is basketball coach at Owosso, Mich., St. Paul High School, where his team finished third in the nine-school Flint Area Parochial Conference. Jim Laidlaw served as vice president of the Medical School class of 1963 at the University of Michigan last year and is currently on the Student AMA Executive Council and was elected to be a member of Galens Honorary Medical Society. Martha Stiltz graduated from Boston School of Occupational Therapy on June 30, 1961, and wrote and passed the National Occupational Therapy Examination on the same day. She is now working in adult rehabilitation at Bird S. Coger Hospital, a city chronic disease hospital on Welfare Island, New York City. Mary C. Pixley is teaching fourth grade at Armada Elementary School, near Mt. Clemens, Mich., and is living in St. Clair Shores.

CLASS OF 1960
Tom Kreilick has taken a position with General Foods in Minneapolis, Minnesota. Mary Foree is teaching in the elementary grades in Hartford, Conn. Sharon R. Stanger and Douglas J. Perry announced their engagement on January 12. They will be married on September 15 in the First Baptist Church of Kalamazoo. Doug is a salesman with Bruce R. Perry, realtor. John P. Kuch entered the Army on January 16. Kent B. Mohnke received his master's degree in business and economics at Glenville State College, in Glenville, West Virginia. Claudia Hurley-Tommasi is living in Urbana, Ill., where her husband teaches English at the University of Illinois. Louise Ann Faragher and Martin Padnos were married on September 30, 1961, at the Faith Lutheran Church in Detroit. They are now living in St. Clair Shores, Mich. Donald S. McClure is teaching mathematics and English at Sparta High School, Sparta, Mich. Mr. and Mrs. James McCabe (Judith Pavla) are the parents of a son, Michael James, born on November 8, 1961, in LaGrange, Illinois. They have now moved to East Lansing, Michigan, where Jim is working on his Master's degree in economics.

CLASS OF 1961
Mr. and Mrs. William R. Leggett announce the birth of a son, Bret Richard, on December 18 in Kalamazoo. They reside in Broeson, Mich., where Bill is a teacher and coach. Grant O. Young is taking part in the Upjohn Company's Accounting Training Program and has been assigned to the Cost Accounting Unit of the Office and Finance Division as the first of several areas in which he will be working. He was previously Civil Defense Project Manager for the city of Kalamazoo. Mr. and Mrs. Gil Rogers (Doreen Fitzgerald '62) are the parents of a daughter, Jenny Lynne, born on January 12 in Saginaw, Michigan. Walter Ash is spending the current theater season as assistant director of the Junior Civic Theater in Kalamazoo. Gail L. Chisholm and Sidney W. Tiesenga '62 announced their engagement on March 8. Gall is attending Bronson Hospital School of Medical Technology in Kalamazoo, and Sid is attending the University of Michigan. An August wedding is planned. Miss Linda C. Knight and Orrin C. Shane, III, announced their plans for an August wedding in New Haven, Conn., on March 8. Orrin is an anthropology student at the University of Michigan.

CLASS OF 1962
Gayle A. Russell and Nicholas Kix, III, were married on January 24 in the Zion Lutheran Church, Kalamazoo. He is now doing graduate work at Western Michigan University.

GENERAL ITEMS
Ralph H. Young, former athletic director at Kalamazoo College, died at his home in East Lansing, Michigan, on January 23. K-College had phenomenal success under Ralph Young. His grid teams won 33 while losing 16, his cagers had a 98-38 mark and seven straight titles and his track squad won four MIAA crowns in five seasons. During his tenure here, the Hornets won 14 out of a possible 18 MIAA titles. Young's cagers twice lost in the national collegiate finals, to Montana State, 26-16, in 1917 and to Washington, 43-23, in 1922. After leaving Kalamazoo, he was director of athletics and coach at Michigan State University from 1923 to 1953. He saw his staff grow from two to two dozen, and the school from 2,000 students to 18,000. With Koute Rockne, Young founded the Central Collegiate Conference. And he was around to see Michigan State voted into the Big Ten after he had developed the MSU athletic plant into one of the finest in the midwest. Since 1956 he has served in the house of representatives of the legislature of the State of Michigan.
Dr. H. Lewis Batts ’43, executive director of the proposed Kalamazoo Nature Center, on leave from the College biology department, points out site on map to Center trustees, Harold B. Allen ’21, E. M. Hindert, (Dr. Batts), James S. Gilmore ’51, and Fred J. Nelson. They are currently conducting a building drive for $750,000 to construct and equip a building by Alden B. Dow. The community Nature Center has set aside a 300-acre “outdoor classroom” at Cooper’s Glen, established a $1,000,000 endowment, and is beginning a program in cooperation with the Kalamazoo Public Schools.

The first Achievement Day, sponsored by the Women’s Council, was held on April 14. Guests at a luncheon in their honor were Mary Miller Patton ’36, professor of English and Speech at the American University, Washington, D.C., and Elsie Herbold Froeschner ’35, biological and medical illustrator. The affair was designed to recognize outstanding alumnae and to give undergraduates an opportunity to meet and exchange ideas with them. Pictured above, viewing the citation awards, are Mrs. Stuart Irvine of the Women’s Council committee, Mrs. Patton, Mrs. Froeschner, Mrs. E. Gifford Upjohn, chairman, and Mrs. A. B. Hodgman, Women’s Council president.

Richard Meyerson ’49, co-chairman and “idea man” for the “K” College Fair on July 28, explores new innovations for this year’s event (One will be a country store!) at a committee meeting in Kalamazoo. From left, Meyerson; Knox Wicks ’29, finance chairman; Ada Folz who is co-chairman of imports with Eleanor Humphrey Pinkham ’48; and Eleanor Born Grabarek ’49 who is co-chairman of groups with Marian Hall Starbuck ’45.

President James W. Miller of Western Michigan University presents President Hicks with an honorary Doctor of Laws degree. The citation, in part: “Your distinguished record in academic administration is widely attested by national recognition. As president of one of the most outstanding liberal arts colleges in the country, you have dared to examine the traditional assumption of Academe, you have experimented boldly with new patterns of educational experience, you have fostered administrative reforms...”