The regular quarterly meeting of the Board of Regents of Western Kentucky State College was held on Wednesday, December 23, 1964, at 12:00 Noon, EST, in Room 16-B of the Kentucky Hotel in Louisville, Kentucky. The following members were present:

Dr. Harry M. Sparks
Mr. Bemis Lawrence
Mr. Hugh Poland
Dr. Gerald Edds
Dr. J. T. Gilbert

Absent were Mr. Douglas Keen and Mr. Maxey B. Harlin.

Also present were Dr. Kelly Thompson, President; Mr. Dero Downing, Dean of Business Affairs and Treasurer; and Miss Georgia Bates, Secretary of the Board.

Following luncheon, the Board went into business session. Chairman Sparks presided.

The meeting was opened with an invocation by Chairman Sparks.

The minutes of the meeting of October 30 were presented. Mr. Lawrence moved, with a second by Mr. Poland, that the minutes be adopted without a reading inasmuch as each member had previously been furnished a copy. The motion carried.

Copies of the Annual Audit for the fiscal year ended June 30, 1964, were presented and distributed. Following discussion, Dr. Gilbert made the motion that the Audit be approved. The motion was seconded by Mr. Poland; and upon roll call, the vote was as follows:

Aye: Sparks, Lawrence, Poland, Edds, Gilbert
Nay: None

President Thompson gave a report on preliminary planning for the new Administration Building. The breakdown of the total budget in the amount of $866,295.00 was submitted, and Mr. Lawrence moved for its approval. The motion was seconded by Mr. Poland; and upon roll call, the vote was as follows:

Aye: Sparks, Lawrence, Poland, Edds, Gilbert
Nay: None

The next item on the agenda was a report by Dr. Thompson on the allocation of $247,000.00 in State funds for the construction of a four-lane cut-off thoroughfare across the Western campus between Highways US 68 and US 31-W. He read the official letter of notification from Henry Ward,
Commissioner of the Department of Highways, dated December 2, 1964, which also stated that preliminary surveying of the extension of the four-lane facility through the Jonesville Urban Renewal area to Adams Street was being authorized.

A report from the Dean of the Faculty which outlined actions taken by three committees of the faculty was submitted by the President for the consideration of the Board. The full report, having been distributed to the members, follows in partially condensed form.

1. Actions taken by the Committee on Curriculum and Instruction:
   a. Approval of proposed 2-year terminal curriculum in data processing, leading to the Associate of Arts degree.
   b. Approval of proposed liberal arts minor in philosophy.
   c. Approval of the establishment of an affiliation with St. Mary's Hospital in Evansville, Indiana, to enable Western medical-technology students who desire to take their specialized training at St. Mary's Hospital.
   d. Approval of proposed pre-optometry curriculum.

2. Action taken by the Committee on Entrance, Credits, and Graduation:

   Approval of revisions in the practice of accepting transfer credits as follows:

   (1) All transfer students must have a grade average of "C" or better on the 4.0 system to be admitted. This would not preclude individual exceptions, based on the judgment of the Admissions Counselor or this Committee.

   (2) A grade, or grades, of "D" in basic Freshman English would not be acceptable for transfer.

   (3) A grade, or grades, of "D" in the major, minor, or area of concentration would not be acceptable for transfer.

   (4) A grade, or grades, of "D" in the professional Education requirements for teacher education would not be acceptable for transfer.

3. Action taken by the Committee on Graduate Instruction:

   Approval of proposed graduate program leading to the Degree of Master of Science in Engineering Physics, details of which follow:
Introduction and Explanation of the Need of this Type of Graduate Program.

From the early history of science and technology up to the present time, man has applied fundamental laws and principles of nature (without necessarily understanding them) to increase the use and control of available energy in his environment. In every advance in technology, however great or small, evidence of the process of education is abundant and ever present. This is especially true if one accepts Whitehead's definition, "Education is the acquisition of art of the utilization of knowledge." It is fair to say that every scientist, every engineer, every technician throughout history continued his education in some way after departing from the halls of learning.

Up until about 1940, the majority of the engineering profession and others related to industrial technology were able to become further educated with on-the-job experience and company-sponsored training. Hence, they maintained a degree of competence commensurate with the needs for creativity and productivity.

Recent discoveries and breakthroughs in fundamental science along with the decreasing time interval between a basic discovery and the applications thereof have brought about a significant change in the needs for continuing education in science and technology. As a direct result of competition and progress, a company must maintain the technical excellence of its products in order to survive. In a similar manner, the nation must maintain technical excellence in pursuing its national technical goals relating to military security, national projects, etc.

New knowledge along with refined applications of materials science have made it imperative that many technical people include additional formal education as a part of their continuing educational experience. The individual contributor has become obliged to stave off obsolescence by seeking further academic training. During recent years increasing numbers of young scientists and engineers have found it advisable to accept employment upon receipt of their Bachelors Degree and at the same time pursue graduate work toward a higher degree at local institutions or at special graduate training centers. The availability of graduate course work and degree opportunities has become an important factor in an individual's choice of geographic location. Many centers of technical activity throughout the country have had special graduate programs for industrial personnel for a number of years. This type of activity has
been greatly accentuated during the past ten years. The needs and demands for such educational opportunities at the graduate level have been rapidly moving into the less industrialized regions of the country.

In 1960, the Receiving Tube Department of the General Electric Company of Owensboro, Kentucky, which hires approximately 200 engineers, approached the University of Kentucky and Western Kentucky State College and asked them to give help to their professional people. The great need was for course work in fundamental physical science and applied mathematics. In particular, Modern Physics, Solid State Physics, Statistical Thermodynamics, and Electron Physics were most urgently needed. No significant steps were taken until late 1962, when the problem became so acute at Owensboro that the General Electric management along with individual engineers made vigorous and urgent requests to Western Kentucky State College for the development of a Masters Degree Program in Engineering Physics or related engineering sciences.

Western Kentucky State College responded by offering a course in Modern Physics for engineers the first semester of 1963-64 school year. Fifty engineers and scientists traveled approximately 150 miles each week by chartered bus to attend the class. A total of 40 completed the course. Subsequently, 29 industrial people have taken an off-campus graduate course in Applied Engineering Mathematics. Twenty-five of them are now taking a graduate level course in Quantum Mechanics. This number represents somewhat less than 10 per cent of the engineers in the region. With new industries arriving and new demands of competition for those already established industries, we expect a second wave of requests in 1966 or 1967, i.e. about the time the first wave begins receiving degrees if the program is approved.

Including Owensboro, there is at present a total of over 300 professional and technical people with college degrees working in industry and government in the West-Central region of Kentucky—west of Elizabethtown and east of Hopkinsville, Madisonville, and Henderson. A listing of numbers of industrial technical personnel by manufacturer is available. Although the program for these people would be very minor as a part of the total educational program at a regional college, it would appear to be a vital part for the following reasons:
(1) It will help prevent the serious problem of the drainage of trained manpower away from Kentucky by giving them a better opportunity to advance in this region by seeking local employment and continuing their education in this area.

(2) It will make it easier for industries to hire good young engineers, etc., who are interested in continuing their education in this area.

(3) It would aid the established industries to remain competitive with those near the centers of technological activity.

(4) The presence of sound quality programs of this type would serve as a selling point for the local region to encourage new industries to locate in the region.

(5) It will improve the balance of purposeful activities of a regional college and serve as a foundation for building a more sound over-all program in the sciences at both the undergraduate and graduate level.

(6) It should serve as a stimulus to focus attention upon and encourage young people in the region to consider graduate work in the sciences and engineering. A recent survey by Dr. Lloyd V. Berkner, conducted for the Southwest Research Institute in Dallas, Texas reveals that the presence of graduate educational opportunities correlates very highly with the percentage of the total population which pursues graduate work, even though those individuals involved do not necessarily attend graduate school in the immediate region.

(7) It will provide additional revenue for the operation of the multi-purpose college program.

Qualifications of Western Faculty.

Western Kentucky State College has unique faculty qualifications in the physical science area for this type of program. In addition to the earned doctorate degree in physics, chemistry, and mathematics (six in physics and chemistry, three in mathematics), the Physics Department faculty alone has more than 30 years of research and development experience in industrial and government laboratories, and the total, including mathematic would be between 40 and 50. In addition, another Physics Department staff member expects to receive his Ph. D. Degree within the next three months; and another member has completed all the course work for the Ph. D. Degree.
To date, a course in Modern Physics has been taught by Dr. Russell; a course in Applied Mathematics was taught by Mr. Stokes of the Mathematics Department; and a course in Quantum Mechanics is being taught currently by Dr. Russell.

Curriculum.

A listing of courses already developed and those in the process of being developed is submitted for your consideration in the development of the over-all curriculum and curriculum requirements. In reiteration of our discussions, it is my understanding that the curriculum will consist basically of 24 hours of academic course work plus 6 hours of thesis work with no thesis waiver option. Accordingly, a student would take at least 15 to 18 hours of course work in the physics area and 6 to 9 hours in mathematics and/or chemistry.

This program as outlined, which includes the thesis requirement, implies the continuing development of experimental laboratory programs in the engineering physics area. As you may recall, we recently put a research type of infra-red spectrometer in operation. We have a new shop and have added key equipment in the areas of electronics and acoustical physics. We have a few units of basic equipment in the nuclear physics area but not enough at the present time to support graduate projects. We expect to temporarily alleviate the need for more experimental facilities by assigning experimental problems which can be carried out on location in the industry employing the graduate student. For example, General Electric Company has in excess of $200,000 worth of laboratory research equipment at Owensboro, including an electron microscope, two mass spectrometers and optical emission spectrographs, an X-ray diffraction unit, high vacuum equipment, and a variety of electronic analytical instruments.

PROPOSED GRADUATE CURRICULUM IN ENGINEERING PHYSICS

PHYSICS DEPARTMENT

322. Theoretical Mechanics. Three hours.
351. Theoretical Electricity. Three hours.
372. Modern Physics Laboratory. Two hours.
381. Mathematical Physics. Three hours.
392. Nuclear Physics. Three hours.
*452. Quantum Mechanics. Three hours.
**461. Atomic and Molecular Physics. Three hours.**

**462. Solid State Physics. Three hours.**

**491-492. Thesis. Three hours each.**

**Materials Science.**

**Statistical Thermodynamics.**

MATHEMATICS DEPARTMENT


*441. Advanced Engineering Mathematics II. Three hours.

*442. Advanced Engineering Mathematics III. Three hours.

CHEMISTRY DEPARTMENT

315-316. Physical Chemistry. Four hours each.

* Courses already approved by the Graduate Committee.

** Courses to be submitted for approval by the Graduate Committee.

*** Courses which may be needed later.

Following full discussion and upon the recommendation of President Thompson, Mr. Lawrence moved for approval of the report in its entirety from the Dean of the Faculty. The motion was seconded by Dr. Gilbert; and upon roll call, the vote was as follows:

Aye: Sparks, Lawrence, Poland, Edds, Gilbert

Nay: None

After discussion, Mr. Poland moved adoption of the following Donee Resolution regarding the acquisition of surplus property from the Federal Government:

DONEE RESOLUTION

WHEREAS, Western Kentucky State College is a tax-supported college designated pursuant to State Law, and

WHEREAS, The property requested under authority of this Resolution, is usable and necessary in the State for education, public health, or Civil Defense purposes for which acquired, including research for any such purposes, and for no other purpose, and

WHEREAS, The property is required for use to fulfill an existing need and is not being acquired for any other use or purpose for use outside of the State or for sale, and

WHEREAS, Funds are available to pay the costs of care and handling incident to donation, including packaging, preparing for shipping and transporting such property, and
WHEREAS, The terms, conditions, and instructions imposed by the Federal Government and the Division of Surplus Property will be observed and fulfilled, and

WHEREAS, It is understood that the property acquired regardless of acquisition cost shall be on an "as is," "where is" basis, without warranty of any kind.

NOW, THEREFORE, IT IS HEREBY RESOLVED:

That L. T. Smith, Coordinator of Construction
Dero G. Downing, Dean of Business Affairs
Buddy Childress, Purchasing Agent
Owen Lawson, Physical Plant Administrator
H. B. Clark, Director of Buildings and Grounds
Claude Threlkeld, Landscape Services

are hereby authorized as representatives of Western Kentucky State College on behalf of the Board of Regents to sign any documents required by the Division of Surplus Property for the selection and receipt of donable surplus property from the Federal Government.

That a certified copy of the Resolution be filed with the Division of Surplus Property and the same shall remain in full force and effect until revoked by written notice.

The motion was seconded by Mr. Lawrence; and upon roll call, the vote was as follows:

Aye: Sparks, Lawrence, Poland, Edds, Gilbert
Nay: None

The following list of personnel changes and leaves of absence was presented and recommended by the President:

NEW PERSONNEL employed subsequent to adoption of 1964-65 Budget and Salary List on July 21, 1964:

<table>
<thead>
<tr>
<th>Name</th>
<th>Department</th>
<th>Annual Salary</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mr. Ronald Kramer</td>
<td>Economics</td>
<td>$6,000.00</td>
</tr>
<tr>
<td>Dr. David Cunningham</td>
<td>Education</td>
<td>8,400.00</td>
</tr>
<tr>
<td>Mr. James McKee</td>
<td>Education</td>
<td>8,400.00 (eff. December 1)</td>
</tr>
<tr>
<td>Mr. Neil G. Cohen</td>
<td>Finance and Accounting</td>
<td>6,000.00 (replaces Barbara Taylor, who resigned new appointment)</td>
</tr>
<tr>
<td>Mrs. Nina Bennett</td>
<td>Home Economics</td>
<td>3,006.00 (part time)</td>
</tr>
</tbody>
</table>
President Thompson then stated that Mr. Dee Gibson, an outstanding graduate of Western, had been employed on the preceding day (December 22) subject to approval by the Board, as Director of the enlarged Student Center and Coordinator of the Work-Study Program at an annual salary of $8,000.00, effective January 1, 1965. The group expressed its enthusiasm and whole-hearted approval of the employment of Mr. Gibson, who subsequently appeared before the board and, upon being welcomed to Western, graciously accepted the position.

The motion for official approval of personnel changes, as outlined above, was made by Mr. Lawrence and seconded by Dr. Edds. Upon roll call, the vote was as follows:

Aye: Sparks, Lawrence, Poland, Edds, Gilbert
Nay: None

A report from President Thompson followed and covered (1) the status of proposed plan for financial reorganization of the housing and dining facilities at Western, (2) new Classroom Building, (3) renovation and enlargement of Student Center, (4) new Library, (5) new Agricultural Pavilion, and (6)
development of master campus plan. In essence, all items were reported as "progressing and on schedule."

Dean Downing presented a map of the Barren River Reservoir and gave a report on proceedings in the proposed acquisition by the College of the "Bailey Point" site. The Board reiterated its interest in this project.

The next item of business was two recommendations from the President regarding the naming of two new buildings on the Western campus. He stated that there were so many people at Western who have devoted so many years of dedication to the College, two of whom are Miss Margie Helm, Director of Library Services, and Mr. Charles L. Taylor, former head of the Department of Agriculture.

Following his statement concerning the outstanding contributions of these two persons to the College and his recommendation that buildings be named in their honor, Mr. Lawrence moved that the new Library be named for Miss Margie Helm and that the new Agricultural Pavilion be called the Charles L. Taylor Agricultural Pavilion. The motion was seconded by Dr. Edds and carried unanimously. Mr. Lawrence suggested that the President telephone the two honorees and tell them of the action of the Board.

In other business, the Western Kentucky Hilltoppers and coaching staff were commended for their outstanding performance in the Ohio Valley Conference Basketball Tournament, which was in progress in Louisville. Noting that Western was experiencing a transition in its coaching staff, Mr. Lawrence stated that it was most appropriate and timely that congratulations and best wishes of the Board be extended to the players, coaching staff, Mr. E. A. Diddle, and Mr. Ted Hornback, and moved adoption of the following Resolution:

RESOLUTION

WHEREAS, Western Kentucky State College is being represented by a basketball team which demonstrates the great and wonderful spirit that has long been a tradition of the College in all worthwhile endeavors; and

WHEREAS, The dedicated effort, excellent attitude, and superior performance of the team are reflected in their play; and

WHEREAS, The performance of the team is indicative of the highest type of coaching and cooperative effort on the part of the coaching staff, Athletic Director, and Acting Athletic Director;

BE IT THEREFORE RESOLVED by the Board of Regents of Western Kentucky State College, in its meeting on December 23, 1964, that each member of the Basketball Team; Coaches Oldham, Rhodes, and Sydnor; Athletic Director Diddle; and Acting Athletic Director Hornback be hereby
extended a much deserved vote of commendation, continuing confidence and genuine appreciation, with best wishes for continued success during this season and in the years ahead.

The motion was seconded by Mr. Poland and carried unanimously. There being no further business, the meeting adjourned at 2:45 p.m.

[Signatures]

Chairman

Secretary