



ROYAL TECHNICAL COLLEGE  
OF EAST AFRICA

INCORPORATING THE GANDHI MEMORIAL ACADEMY

*Ceremonial Opening of  
The American Wing*

FRIDAY, MARCH 11th, 1960

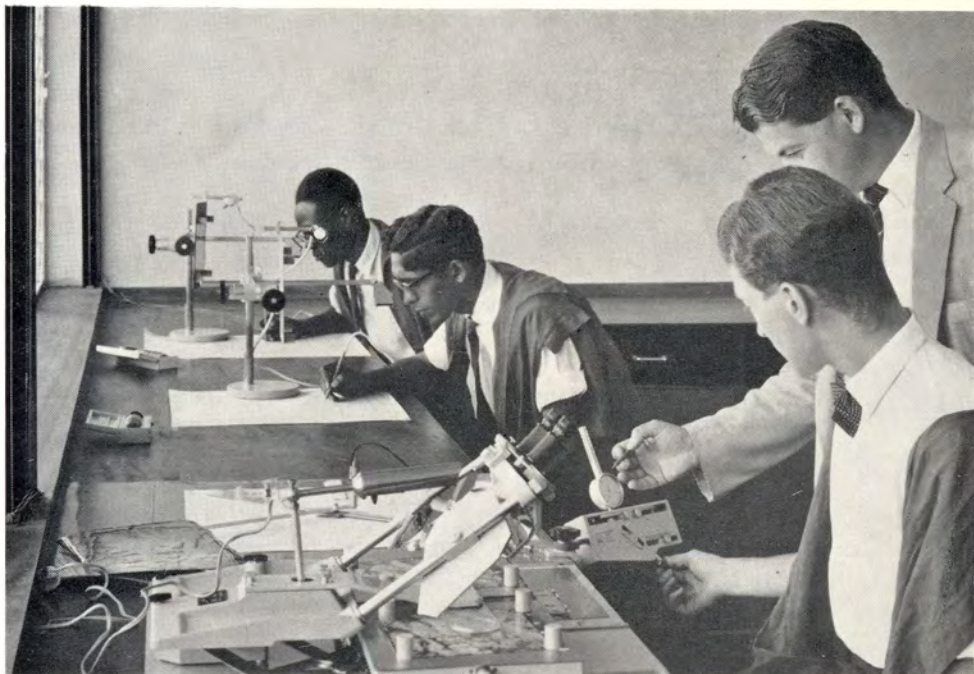
*20 hrs*

*12 hrs extension  
8 hrs  
30 hrs  
12*

THE ROYAL TECHNICAL COLLEGE OF EAST AFRICA  
INCORPORATING THE GANDHI MEMORIAL ACADEMY

*Order of Ceremony*

1. The Chairman of the Governing Council will invite His Excellency the Governor of Kenya, SIR PATRICK RENISON, K.C.M.G., to assume his office of Visitor to the Royal Technical College of East Africa.
2. The Principal will invite the Visitor to assume the Academic robe of his office. The Dean will offer the gown and the Registrar present the cap to His Excellency.
3. The Principal will invite the Visitor to open the American Wing and to address the guests on this occasion.
4. The United States Consul General, Charles D. Withers, Esq., will reply.
5. The Principal will invite the Visitor to lead the Academic Procession to the American Wing through Willoughby Hall and the Main Entrance.  
(All guests will proceed directly across Government Road from the exits on the north of Gloucester Hall.)
6. The Visitor will formally declare open the American Wing of the Royal Technical College by cutting the tape at the entrance.
7. The Visitor will tour the American Wing.  
(Guests will follow after a short interval.)
8. Refreshments in the College Refectory and Willoughby Hall in the Main College Building.



SURVEY STUDENTS AT WORK



ELECTRICAL LABORATORY

## THE AMERICAN WING OF THE FACULTY OF ENGINEERING

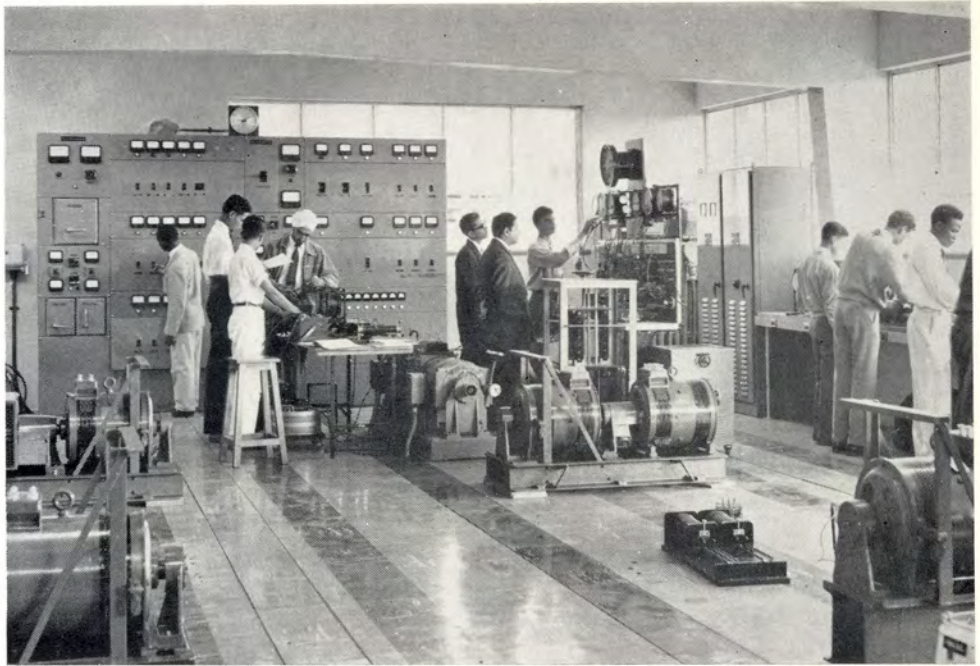
The American Wing building, which today has been formally opened, now stands as a perpetual memorial to the generosity and good-will of the United States of America. The building and the equipment which it will finally contain represent a magnificent grant of £156,190 dedicated to the peoples of East Africa and to the service of Higher Education in the fields of Engineering and Surveying.

The project originated in 1954, when the then United States Consul General in Nairobi made an approach to the Foreign Operations Administration of the United States of America on behalf of the College, then in its infancy. As a result of this approach, Dean Elmer C. Easton and Professor Maurice T. Ayers of the College of Engineering of Rutgers University, the State University of New Jersey, U.S.A., visited East Africa to determine how Rutgers College of Engineering might assist in developing the Faculty of Engineering of our College. "It was evident at this point," wrote Dean Easton, "that the most immediate need of the Royal Technical College was for advice regarding the planning of the curricula, the selection of books, and the selection of suitable laboratory equipment. It was also evident that Professor Ayers and I could not possibly carry out the work in all of its details by ourselves. We therefore decided to estimate the magnitude of the necessary aid with the understanding that the entire Engineering Faculty at Rutgers would later provide the detailed services."

In this way was born the liaison between the College and the College of Engineering of Rutgers University, which has had such happy and fruitful results. The building and equipment which now make up the American Wing project will do much towards providing for the peoples of East Africa the nucleus of a fine School of Engineering.

The American Wing was originally to be a two-storey building; but while it was under construction, application was made to the International Co-operation Administration of the United States of America for permission to add a third storey within the finances available for the total project. Agreement was reached, and an additional storey added to house the College Department of Surveying, in close proximity to Engineering.

At the present time, the building and its equipment are used for the training of Engineers and Surveyors preparing for examinations of the Institutions of Civil, Electrical and Mechanical Engineers, and of the Royal Institution of Chartered Surveyors, up to and including the final examinations of these bodies. The present Engineering Course is of five years (full time) duration, with a common first year and subsequent increasing specialisation (i.e. Civil, Electrical or Mechanical Engineering, as the student elects) during the last four years. The equipment would also be suitable for the experimental work forming part of the course for a university degree in certain fields of engineering.



ELECTRICAL MACHINES LABORATORY



ONE OF THE DRAWING OFFICES

In Surveying, five-year courses are at present being conducted in the Land and Quantity Surveying sections of the Royal Institution of Chartered Surveyors for the appropriate First, Intermediate and Final professional examinations.

The layout of the building is as follows:

- GROUND FLOOR: Laboratories for Standards and Metrology, Electrical Power and Machinery, Electronics, Telecommunications, Principles of Electricity and the theory of machines, administrative and staff offices, and a tutorial room.
- FIRST FLOOR: Well equipped Lecture Theatre, Faculty conference room, Faculty Library, lecture rooms, photographic darkroom, and laboratories for computation, X-ray diffraction and non-destructive testing.
- SECOND FLOOR: Drawing offices/lecture rooms, research rooms/staff offices, and laboratories for metallurgy and structural models.
- THIRD FLOOR: Houses Department of Survey, comprising lecture rooms, staff offices, drawing offices/lecture rooms and photogrammetry room.
- ROOF: Instrumentation room.

The main roof of the building has been designed to accommodate the equipment which might be required for such experimental projects as Solar radiation, examination of the characteristics of aerial arrays, and in general work which can most conveniently be performed out of doors. Three other flat roofs at different levels have also been provided, all possessing an appropriate electrical installation.

The experimental equipment purchased under the Grant (not all of which, however, is housed in the American Wing) covers the following fields:

- Computing (Mechanical and Analogue)
- Concrete Technology
- Engineering Drawing
- Dynamics
- Electrical Engineering
- Indicating apparatus for engine testing
- Fuel Technology
- Geology
- Fluid Mechanics
- Soil Mechanics
- Metallurgy
- Photography
- Surveying
- Photogrammetry
- Testing of materials
- Thermodynamics
- X-ray diffraction
- Workshop apparatus

Laboratory work and practice in the use of apparatus form an essential and integral part of the training of engineers and surveyors, and in this respect both the students and staff of the College are particularly fortunate in the range and quality of the equipment installed.

The Architects for the American Wing Building were Messrs. Jackson & Hill, Nairobi whilst Messrs. Armstrong & Duncan were the Quantity Surveyors. The main contractors were Messrs. Rehinsi & Co. To all of these the College is indebted.