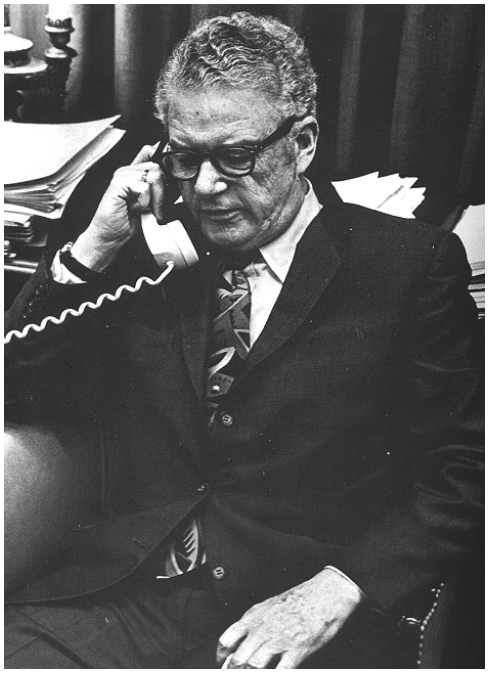
JAMES E. BOYD
ADMINISTRATION

Jim Boyd was first employed by Georgia Tech in 1935 as assistant professor of physics. After a leave of absence (1942-46) to serve in the Navy during World War II, he returned to Georgia Tech. The personal contacts Jim Boyd made while in the Navy and working with radar were very important to the growth of sponsored research at Georgia Tech after the War. On his return Jim Boyd went on to hold many administrative positions both at Georgia Tech and within the University System of Georgia.



JAMES E. BOYD
1972 BLUEPRINT

Maurice Long , former director of EES, writes as follows. *"On returning to Georgia Tech in 1946, Jim Boyd was active both within the physics department and the State Engineering Experiment Station(later renamed Engineering Experiment Station, and now Georgia Tech Research Institute). During 1946 Dr. Frank Lawrence of the Physics Department was Project Director at EES of an experimental microwave propagation project supported by the Army Air Corps. Jim Boyd served as Assistant Project Director. When Lawrence left Tech in 1947 for a position in industry, Boyd became project director. The project conducted long-range, line-of sight experiments between the Tech campus and Mount Oglethorpe, which is located in North Georgia. Those experiments employed microwave transmitters that radiated three frequencies and were atop the former physics building, and the receivers were atop the mountain. The project also simultaneously conducted atmospheric measurements for correlating propagation phenomenon with the effects of weather that the project measured from balloons and aircraft.*

Beginning in 1948 Jim Boyd served as Project Director of several Army, Navy, and Air Force supported research programs, early with the able assistance of Wallace J. Miller. Boyd and Miller had worked together in the Navy. Miller retired from the Navy as an Admiral, but unfortunately he died just a few years after joining EES. The Physics Division of EES was formed in 1950, with Boyd as its first head. In 1954 he was promoted to EES Assistant Director for Research, and Director of EES in 1957. Other key personnel in the early 19540's from the School of Physics included Drs. Vernon D. Crawford and J. Elmer Rhodes.

As already noted Jim Boyd attained the rank of Commander, U.S. Navy Reserve during WWII. By 1950 Jim Boyd had helped organize a U.S. Navy Research Reserve Unit in

Atlanta. The Unit met on the Georgia Tech campus, and the membership included USNR officers from Georgia Tech as well as the Greater Atlanta area. During the 1950's Jim Boyd was promoted to Captain in the Navy Reserves, and he headed the Navy Research Reserve Unit until about the time he moved to accept the Presidency Of West Georgia College."

Although Jim Boyd served Georgia Tech in many ways including Director of EES (now GTRI) and Acting President of Georgia

Tech, his greatest contributions may have been through his personal interactions and his development of a research environment at Georgia Tech. He had a keen appreciation of quality and was outstanding at evaluating people and their potential. He was one of the co-founders of Scientific Atlanta as a
direct research spin-off from Georgia Tech, This entrepreneurial spirit was important to the image of Georgia Tech today.

The career paths of Jim Boyd and Gerry Rosselot were intimately entwined. Gerry Rosselot had been appointed as Director of EES in 1941. In 1948 Cherry Emerson was appointed vice president under President Van Leer. A philosophical difference developed between Gerry Rosselot and Cherry Emerson. Both were strong personalities and a clash was probably inevitable. The major issue was the distribution of overhead from research projects. Cherry Emerson believed this overhead money should flow back to the academic units while Gerry Rosselot felt that the overhead needed to be spent in support of research. The arguments, though muted, continue to this day. At that time Jim Boyd was chief of the physical sciences division of EES and although supportive of Gerry Rosselot he was not sufficiently high on the administrative ladder to be personally impacted by the controversy. During the period when relations were strained, Jim Boyd along with Gerry Rosselot and others decided to form Scientific Atlanta. The motivation was that some of the sponsors of antenna research at EES wanted delivery of antenna systems. EES did not think it appropriate for Georgia Tech to get in the manufacturing business. Jim Boyd visited Glen Robinson at Oak Ridge and convinced him to return to Atlanta and accept a part time position with EES and at the same time start Scientific Atlanta. This was accomplished in 1952. Gerry Rosselot was the first president of the company. Shortly after it was started, Cherry Emerson took advantage of the situation to tell Gerry Rosselot to make a choice between Georgia Tech and Scientific Atlanta. Herschel Cudd relayed the same message to Glen Robinson.

Gerry Rosselot left For Bendix and Glen Robinson remained at Scientific Atlanta. Although Jim Boyd remained on the Board of Directors of Scientific Atlanta he retained his position with Georgia Tech as a well respected scholar and administrator.

JAMES E. BOYD
1947 BLUEPRINT

Jim Boyd had a good perspective for the directions of scientific research. He was convinced that Georgia Tech needed to broaden its research basis. Unlike many of the faculty he felt that EES was an integral and important part of Georgia Tech. In an article published in the IRE Transactions of Engineering Management in 1957 entitled "Research Center in an Institute of Technology," he addressed the following questions.
1) What is the place of a research center in an institute of technology?
2) How can a university research center help build a strong faculty and graduate school?
3) How can a university research center serve the faculty and students?
4) How can a university research center contribute to public welfare?

As noted from the above questions, Jim Boyd felt that research needed to be integrated with educational objectives. As a respected educator, scholar, entrepreneur and administrator, Jim Boyd was able to influence policies and decisions beyond his administrative realm. One area was in recruitment of faculty.
Jim took special interest in his students and followed them after they left Georgia Tech. If he felt they had particular strengths, he would frequently try to get them back to Georgia Tech. The situation with Glen Robinson we have already mentioned. Another situation was Earl McDaniel. Earl was an undergraduate physics student at Georgia Tech and then completed his PhD at the University of Michigan. Jim Boyd felt that EES needed a presence in nuclear physics and proceeded to recruit Earl McDaniel to join the staff. Now the unusual thing about this was that the Director of the School of Physics wanted nothing to do with Earl McDaniel. Yet Jim Boyd was able to offer him a position with EES and an Assistant Professorship in Physics. Exactly how he managed this offer with the endorsement of the Director of Physics is not known but stands today as a credit to Jim Boyd. Earl McDaniel went on to become Regent's Professor of Physics with an outstanding international reputation.

Another success was the recruitment of Ed Scheibner to initiate a program in surface physics in EES. Ed was a transfer physics student to Georgia Tech after World War II. He had worked with Jim Boyd on some special problems. Ed then left Georgia Tech and received his PhD from Illinois Tech. He assumed a position with Bell Labs and was at the forefront of some surface physics work when Jim Boyd enticed him to return to Georgia Tech. Jim Boyd had kept in contact with him over the years. He also received an academic title in physics although the faculty was not particularly interested in his area of research at the time of his appointment. With the support of Jim Boyd, Ed set up

a state of the art ultra high vacuum laboratory to study surfaces of materials. When the Baker Building was approved by the Board of Regents, Ed and his group had a major voice in the design and inclusion of clean room facilities. These were the first such facilities in the southeast and some of the first to be located at a University. Ed was also a credit to the perception of Jim Boyd. Ed copied his mentor Jim Boyd by involving undergraduates in research. Many of these undergraduates stayed at Georgia Tech to receive their PhD's. His students excelled in an industrial environment and are some of the most successful Georgia Tech graduates

The influence of Jim Boyd on the growth of Georgia Tech goes way beyond his personal contributions.

Jim Boyd was a leader in attempting to develop central facilities for research available to faculty, research scientists and engineers, and students. In 1955 he was appointed chairman of the Nuclear Science Committee by President Van Leer. One of the committees recommendations was the creation of a Radioisotopes Laboratory Facility. The building and facility was dedicated on January 7, 1959. The radioisotopes laboratory was established to receive, store and process radioactive materials. As Jim Boyd wrote, the Radioisotopes Laboratory Facility also provides:
1) Special student laboratories for neutron physics and radiochemistry,
2) Research laboratories for radiation chemistry, radiochemical separations, radioactivity measurements, etc.
3) A staff of specialists who will advise and assist with the solution of problems involving radioisotopes.

The committee also recommended a large research reactor. The Frank H. Neely Research Reactor was completed in 1963 and remained operational until 1996.

The vision and leadership of Jim Boyd took advantage of opportunities to position Georgia Tech for a primary role in graduate education and research. Centralized facilities have continued to play an important role. The Microelectronics Research Center, the Manufacturing Research Center, Georgia Center for Advanced Telecommunications Technology are additional examples of centralized facilities available to the Georgia Tech community.

Jim Boyd resigned his position as Director of the Engineering Experiment Station at Georgia Tech in 1961 and accepted the position of the third president of West Georgia College. He served in that position for ten years. In 1970, he accepted the newly created position of vice chancellor for academic development for the University System of Georgia. The appointment became effective when the new president of West Georgia was named in 1971.
Almost immediately after his appointment became effective, Arthur Hansen resigned as President of Georgia Tech. Jim Boyd was asked by Chancellor George Simpson to assume the position of Acting President of Georgia Tech during their search for a new president. He held the position from May of 1971 until March of 1972.

During his tenure as Acting President, Jim Boyd did not shirk hard decisions and both he and his wife Betty quickly endeared themselves to the students, faculty, alumni and other members of the Georgia Tech community.

In reflection, Howard Ector felt that Jim Boyd's leadership of the athletic association was a most important contribution. A time consuming and difficult personnel problem arose during his time as acting president. Bud Carson, the Georgia Tech football coach came under attack. Although the final outcome was that Bud Carson left Georgia Tech, Jim Boyd orchestrated the separation in a dignified and professional manner. Other people might have waited for the new president to take this type of distasteful action.

March 7, 1972
Atlanta Journal
Constitution

The Alumni in recognition of the contributions of Jim and Betty Boyd as Acting President and First Lady of Georgia Tech, honored them with a reception at the Capital City Club. Shown above are Dorothy and Polly Poole(President of the National Alumni Association) and Betty and Jim Boyd. The Boyds' were presented a picture of the Georgia Tech Campus as it appeared in 1914.

As can be seen from the description above, Jim Boyd had a varied professional career.

He was born July 18, 1906 in Tignall, Georgia.

He received his A.B. degree in mathematics from the University of Georgia in 1927.

He received his M.A. degree from Duke University in mathematics in 1928.

He served as Instructor in Physics at the University of Georgia from 1928-30.

He entered graduate school at Yale University in 1930.

He was a graduate assistant in physics at Yale from 1930-31 and a Loomis Fellow from 1931-33.

He received his PhD in physics from Yale University in 1933.

From 1933-35 he was head of the mathematics and science department at West Georgia College.

He joined Georgia Tech in 1935 as assistant professor of physics.

In 1942 he took leave of absence from his position as associate professor of physics to serve with the United States Navy.

From 1942-1945 he served as lieutenant and later lieutenant-commander in the Bureau of Ordnance. He was assigned to a research unit in radar.

From 1945-46 he was a commander in the Office of the Chief of Naval Operations doing work on radar and electronics.

He returned to Georgia Tech in 1946 and became professor of physics in 1948.

In 1950 he was made head of the physics division of the Engineering Experiment Station.

In 1954 he was appointed Assistant Director of Research at the Engineering Experiment Station.

Jim Boyd was named Director of the Engineering Experiment Station on July 1, 1957. He retained that position until he resigned to become President of West Georgia College in 1961.

Jim Boyd was married to Elizabeth Reynolds Cobb in 1935.

They had a daughter Betty Cobb Boyd and a son James Fortson Boyd.

James Emory Boyd died February 18, 1998 in Carrollton, Georgia.