TO ESTABLISH A COLLEGE IN 100 DAYS PRESENTED AN OPPORTUNITY TO TEST THE VALUE OF PROGRAMED ORGANIZATIONAL PROCEDURES USING PROGRAM PERFORMANCE EVALUATION AND REVIEW TECHNIQUE (PERT) UNDER ACTUAL OPERATIONAL CONDITIONS, NOT IN A SIMULATED THEORETICAL SITUATION. THROUGH THE AID OF THE PERT PLANNING SYSTEM, IT WAS DETERMINED THAT THERE WERE NINE MAJOR LINES OF ACTIVITIES AND ABOUT 300 EVENTS TO BE ACCOMPLISHED TO OPEN THE COLLEGE. THE ADMINISTRATION USED A TEAM APPROACH WHEREBY THE THREE MAIN ADMINISTRATORS WOULD FOCUS ATTENTION ON A MAJOR ACTIVITY, PLAN AND START ITS EVOLUTION, ASSIGN IT TO A STAFF MEMBER FOR COMPLETION, AND THEN INITIATE THE NEXT ACTIVITY. THE COLLEGE WAS BUILT AND ESTABLISHED IN 84 WORKING DAYS AFTER THE FIRST STAFF MEMBER REPORTED, AND OPENED ON SCHEDULE WITH 700 STUDENTS. THE REGULAR PERT SYSTEM WAS NOT USED BECAUSE THE COLLEGE HAD TO BE READY IN SUCH A SHORT PERIOD OF TIME—INSTEAD A SIMPLIFIED CHART TAKEN FROM THE MASTER CHART WAS USED. MANY OF THE ACTIVITIES AND EVENTS HAD TO BE ACCOMPLISHED OUT OF SEQUENCE AND ACCELERATED DUE TO THE LACK OF TIME TO CONTINUALLY UPDATE SUCH A COMPLICATED SYSTEM. THE PERT SYSTEM IS A VALUABLE AID IN THE PLANNING OF THE LOGICAL STEPS TO BE FOLLOWED—IT ENABLES A CONSTANT PROGRESS CHECK TO BE MADE AND IT GRAPHICALLY DEMONSTRATES BOTTLENECKS OR TIME LAGS IN THE SCHEDULE. THE COLLEGE WILL USE THE PERT SYSTEM MORE EXTENSIVELY IN THE PLANNING AND BUILDING OF ITS NEXT CAMPUS WHEN A MORE NORMAL TIME SCHEDULE IS POSSIBLE. (JL)
March 31, 1966

The U. S. Commissioner of Education
U. S. Office of Education
Department of Health, Education and Welfare
Washington, D. C.

Dear Sir:

According to the terms of the contract made between the U. S. Commissioner of Education and the Northern Virginia Technical College, I am transmitting the report of the pilot project entitled "Documenting and Evaluating the Steps in Establishing a Two Year College by Critical Path Methods."

The report which concerns Phase I of the project presents in narrative and graphic form the background for the establishment of the college, the steps in planning, constructing, equipping and furnishing the physical plant of the college, as well as those intellectual factors relevant to constructing a curriculum, detailing course content, writing a catalog and the securing of a faculty to instruct the first 500 students enrolled in the college September 20, 1965.

The critical path concerns itself with that period, of 100 days, during which the college emerged from abstraction to concrete reality. The particular character of the investigation indicated that PERT, Program Evaluation Review Technique, would be the method which would most readily lend itself to the presentation of the logical sequence of events involved in the establishment of a college within this brief span of time.

The narrative body of the report is followed by Master Chart No. I, the graphic representation of the creation of the college, and five sub charts of the major lines of activity from the master chart. Each flow chart plots the critical path of the events involved in the expenditures of energies by the college staff to achieve the completion of that particular area of work.

The report is respectfully submitted this 31st day of March, 1966.

Very truly yours,

Robert L. McKee
President
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ABSTRACT

I. PURPOSE

To document the steps in establishing a two-year technical college and to evaluate "PERT" as a planning tool for educators.

II. PROCEDURE

Through the aid of the "PERT" planning system, it was determined there were nine major lines of activities and some 300 events to be accomplished to open Northern Virginia Technical College. The Administration used a "team approach" whereby the three main administrators would focus attention on a major activity, plan and start its evolution, assign it to a staff member for completion, then initiate the next activity.

The major activities and events are as follows:

<table>
<thead>
<tr>
<th>Pert Coding</th>
<th>Man Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>0100 - Facilities</td>
<td>740</td>
</tr>
<tr>
<td>Time: 6/1 - 9/27/65</td>
<td></td>
</tr>
<tr>
<td>Select temporary campus; plan remodeling; bids; construction; inspections; opening building.</td>
<td></td>
</tr>
<tr>
<td>0200 - Equipment and Furniture</td>
<td>1620</td>
</tr>
<tr>
<td>Time: 6/1 - 9/27/65</td>
<td></td>
</tr>
<tr>
<td>Determine furniture, equipment, and supply needs; write bid specs; award contracts; purchase; receive, store and install.</td>
<td></td>
</tr>
<tr>
<td>0300 - Students</td>
<td>2325</td>
</tr>
<tr>
<td>Time: 5/17 - 9/20/65</td>
<td></td>
</tr>
<tr>
<td>Estimate numbers from survey; establish enrollment criteria; publish brochure; process inquiries and applications; counselling interviews; accept, reject applicants; individual scheduling; register students.</td>
<td></td>
</tr>
</tbody>
</table>
0400 - Personnel. Time - 5/17 - 9/27/65

Estimate faculty needed; determine administrative and clerical needs; interview applicants from local area, professional employment agency, temporary agency; select faculty, other personnel; prepare faculty pre-service training program, make final teaching assignments.

0500 - Budget. Time - 5/17 - 9/27/65

Determine state and local areas of budget; establish: purchase and payment policies; student payment plans; prepare and approve final budget.

0600 - Textbooks, library. Time - 6/15 - 10/26/65

Library plan; select furniture; book procurement procedures; prepare booklists; select and order textbooks; shelved books; open library.

0700 - Curriculum and Catalogue. Time - 5/17 - 8/18/65

Preliminary Curriculum; Advisory Committees; final curriculum outlines; rough draft catalogue; publish second brochure; departmental revisions; State and local Board approval; publish curriculum and catalogue.

0800 - Contractural Services. Time - 7/6 - 9/20/65

Janitorial Services: determine state and local expenses; bids; contracts. Food Services: allocate space; bids, contracts; health inspection.


Establish practices and criteria for funding; secure approval of state and local policies, operating procedures; and implementation.

TOTAL PLANNED MAN HOURS IN MAJOR ACTIVITIES ------------- 8000

Board meetings, general planning, trips ---------------------------- 2000

Little unknowns (such as over 7000 incoming telephone calls, amounting to about 1000 hours) ------------------------------- 5000

TOTAL MAN HOURS TO BUILD COLLEGE----------------------------- 15,000
BY FUNCTION THE 15,000 HOURS BREAKDOWN IS AS FOLLOWS:

<table>
<thead>
<tr>
<th>Function</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Administration</td>
<td>5,850</td>
</tr>
<tr>
<td>Faculty</td>
<td>3,530</td>
</tr>
<tr>
<td>Secretarial</td>
<td>3,120</td>
</tr>
<tr>
<td>Consultants</td>
<td>150</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>12,650</td>
</tr>
<tr>
<td>Overtime</td>
<td>2,350</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>15,000</td>
</tr>
</tbody>
</table>

III. RESULTS AND CONCLUSIONS

The results were: The College was built and established in 84 working days after the first staff member reported, and opened on schedule with 700 students (Full Time Equivalent).

The regular "PERT" system was not used because the college had to be ready in such a short period of time. Many of the activities and events had to be accomplished out of sequence and accelerated due to lack of time to continually update such a complicated system. A simplified chart taken from the Master Chart was used.

The "PERT" system is a valuable aid in the planning of the logical steps to be followed; it enables a constant progress check to be made; and it graphically demonstrates bottlenecks or time lags in the schedule. Because it will take place under a more normal time schedule, the College will use the "PERT" system more extensively in the planning and building of its next campus.
ACKNOWLEDGMENTS

While this report is limited to staff activities, it would be incomplete without an acknowledgment of the support and work of others which made the task of the staff possible, and the establishment of the college possible.

The work and efforts of the State Department of Technical Education and its Board went far beyond legal requirements. The extensive expenditure of energies by the local Board of Trustees and the efforts of the people in the local communities who were determined to have a college by September of 1965 helped to sustain the drive to accomplish the creation of the "100 Day" college.

1. The State Board of Technical Education.

The State Department of Technical Education and its Board, although new and in the process of being organized, spent much of their time working directly with the local college staff in the step-by-step procedures of establishing this new State college. Frequently when local action was necessary involving State policy immediate decisions were made by the Director, Department of Technical Education. In addition to their splendid cooperation and effort, other State agencies such as the State Purchasing Department which spent numerous hours expediting and processing equipment orders; and the Division of the Budget which expedited funding, merit commendation for their part in the creation of the college.

2. Local Board of Trustees.

The work of the citizens' groups in late 1964, and the efforts of the local Board of Trustees in early 1965 accomplished much of the necessary foundation work which enabled the President and his new staff to move rapidly into the
Acknowledgments - continued

detailed work of opening the college. During the summer, when critical decisions and actions were necessary, the local Board of Trustees met at least once every other week, and frequently meetings were held several times during a week.

3. Acknowledgment is made to the various County Boards of Supervisors, and City Councils whose devoted efforts helped assure the creation of a local college. A number of educators and local educational institutions contributed special time and talent to the establishment of the Northern Virginia Technical College.

4. Governor Harrison.

Governor Harrison in his dedication of the college on November 16, 1965, made plain the stature of the college as a full member of the community of institutions of higher learning. In his speech that evening, at a time when the college was midway in its first quarter of service to its communities, he said: "I delight in being a part of an historic occasion."

To these and to the countless others who helped translate a dream into reality by the creation of the Northern Virginia Technical College, the college acknowledges its debt of gratitude.
THE DOCUMENTATION OF STEPS TO ESTABLISH A TECHNICAL COLLEGE
and
THE EVALUATION OF "PERT" AS A PLANNING TOOL FOR EDUCATORS

INTRODUCTION

The proposal to establish the Northern Virginia Technical College in 100 days presented an opportunity to test the value of programmed organizational procedures using "PERT", one of the several formal systems of planning and scheduling as used in modern industry and business, under actual operational conditions, not in a simulated theoretical situation. The benefits from this experiment to communities facing similar problems prompted the application for a grant from the U.S. Office of Education to document the steps and procedures actually used in establishing a technical college.

The research project was tentatively approved in July, 1965. The report summarizes the results of the legislation authorizing the establishment of technical colleges by the 1964 Virginia General Assembly to the opening of the first college in the new statewide system. This Administrative report is mainly concerned with the period of time from June 1, 1965, when the President and his staff began the organization of the college, to the opening date of September 20, 1965.
I. PURPOSE OF THE REPORT

A. To test and evaluate the usefulness of a formal, structured system of program development and planning in the establishment of a technical college, following Program Review and Analysis Techniques ("PERT").

B. To prepare and publish a documented record of the findings resulting from this pilot program for the guidance of educators and concerned executives throughout the United States.

C. To improve the planning and programming phases of the establishment of the Northern Virginia Technical College, as a prototype college for the State of Virginia.

II. ACCOMPLISHMENTS

A. "Test and Evaluate the Usefulness of "PERT"... etc."

The basic elementary principles of planning, programming and review included in the "PERT" system were used in establishing the Northern Virginia Technical College. The detailed, automated features were not. The charting and periodic review procedure did help to flag time lags and bottlenecks and the staff energies were redirected accordingly.

The "100 Day" requirement and the very limited staff precluded the effective use of full-scale "PERT". A master chart and five sub charts were developed and followed. (Flow Charts Nos. 1-6). The usefulness of these "PERT" charts has been evaluated. (See Summary).
B. To Publish a Record of the Events in Opening a College, etc.

The more than 300 steps and procedures are recorded as they happened along with the 15,000 man hours it took to accomplish them. (See Section V - "Procedures in Establishing the College", also see Abstract and "PERT" charts in Appendices).

C. To Improve the Establishment of NVTC\(^1\) as a Prototype, etc.

The use of a modified form of "PERT", the Project Control System, was a factor in improving the initial planning and programming phases of NVTC. Its use in an expanded form will be followed in planning and programming the expansion of the College and other technical colleges in Virginia.

COMMUNITY AND STATE NEEDS LEADING TO ESTABLISHMENT OF COLLEGE

A. Community Needs for a Technical College

Throughout the United States a majority of the states provide for two years of post-high school education through a system of community colleges, junior colleges, or technical colleges. Virginia is among the few states which did not offer such an opportunity to their young people. The Northern Virginia area, which is one of the three most densely populated sections of the state, is a part of the complex of metropolitan communities with the nation's Capital\(^2\) as the central city. In contrast to other urban complexes, employment in this region is heavily dependent

1. NVTC = Northern Virginia Technical College

2. The metropolitan area of Washington, D.C. has one of the largest unmet educational needs in our nation.
upon the Federal Government and upon Research and Development industries. There is a constantly shrinking market for unskilled labor and a constantly expanding market for the skilled technician, craftsman and semi-professional worker. The greatest educational need was for a technical college to supply workers and technicians for the local labor market.

Junior/Community colleges are well-established throughout the nation, and will be as commonplace tomorrow as our high schools are today. However, in some Eastern states, such as Virginia, the true community college really has not been developed; consequently, it took considerable energies to inform the public. The creation of technical colleges is a new idea in the field of education not only to the State of Virginia, but to the nation. Despite several brochures and numerous newspaper articles, 80% of the general public was unaware of the existence of NVTC when it opened.

One question continually asked by the public was: "What is a Technical college?" The basic explanation given is as follows:

There are three general types of two-year colleges in the United States; the first is the Technical college, which is a post-high school institution, concentrating on occupational, technical, and semi-professional education, providing training for those directly entering the work force following their completion of the two-year Associate of Applied Science Degree.
The second is the Junior College which concentrates on general academic and liberal arts education the first two years of a four-year degree curriculum, and is designed for transfer of credits with the objective of obtaining a four-year Bachelor's Degree.

The third, the Community College, has a comprehensive program, which is a combination of the Technical College and Junior College programs, coordinated to meet the real educational needs of the community.

B. **Relations of College and State**

The Northern Virginia Technical College is accredited and governed by the Department of Technical Education of the State of Virginia. Although it has its own local Board of Trustees, responsible to the local communities, all policies relating to budget, finance and operational procedures are the prerogative of the State.

Since both the college and its state board were new, many policies, procedures and relationships were worked out during the formative period; others evolved as the college grew. The local board is responsible for buildings and site, and half the maintenance operation of the college; the state is responsible for and pays 100% of all instructional costs including teachers' salaries, all equipment and supplies, and 50% of the maintenance.

C. **Time Element**

The decision to establish NVTC in 100 days is the critical point in this project. The pressures of time dictated many policies and influenced major decisions. The original chart, followed in planning,
is basically a time-flow chart. Because of its size, it is impossible to reproduce this chart for inclusion in the report. The "PERT" flow charts, based on data processing programming and which represent events and activities (time required between events or work-in-progress) are included and numbered for reference.

Since 84 actual working days were available to accomplish the entire operation of establishing the two-year technical college, many time schedules had to be compressed and many operations had to be completed out of sequence.

The speed with which NVTC developed has earned for it the title of "Instant College". A more realistic time in which to build a two-year college, with existing and mature local and state systems, would be one to two years. The question may be asked: "Why was it necessary to attempt building the college in such a short period of time?" The two basic facts influencing the decision were:

1) There was a great deal of enthusiasm on the part of the local citizens who had waited so long for this type of educational service to be provided, that they could wait no longer and (2) The same 1964 General Assembly, which created the technical colleges had directed the appointment of a "Higher Education Study Commission" which would produce recommendations leading in 1966 to the passage of a bill establishing a statewide system of community colleges, and it was necessary to show there was a real need in Virginia for public-supported technical and community colleges.
IV. HISTORY AND IMAGE OF THE COLLEGE

A. Interest of the Community

Informal volunteer study groups were the first action bodies concerned with attempting to find solutions to the educational problems of Northern Virginia. Business, industrial and educational leaders were aware of vast unmet needs for skilled technicians and semi-professional workers. The fact that half the graduates of local high schools attended out-of-state institutions of higher learning indicated that the needs of the community were not being met by current educational practices. When the Virginia General Assembly in 1964 enacted legislation creating a system of technical colleges throughout the state, the local communities were prepared to take practical action to secure the first of such colleges for the Northern Virginia region.

It is possible to create a new college without the aid of a preliminary professional area survey, but it is recommended that communities considering such a task make use of some form of canvass of industry, population, present educational services and future growth projections, in order to determine the most urgent needs concerning both education and employment in the area.

The Northern Virginia Regional Planning and Economic Development Commission in December of 1964 directed the "Educational Research Services" of White Plains, New York, to produce a survey for the local communities. This survey, "Post-High School Educational Needs in Northern Virginia", completed in March of 1965,
provided the pro-tem Board of Trustees of the Northern Virginia Technical College with data needed in undertaking the establishment of the first two-year technical college in the state.

Information was secured from: census statistics, local high school seniors and parents, and local, state and federal governmental agencies and boards. Tables show: employment by major industries, occupational trends and estimates of future needs, present and projected population trends, actual and projected high school enrollments through 1980-81, enrollment in higher education data, present plans of high school seniors for higher education; projected desires of seniors for education and training in specific technological fields through 1970. A section of the report concerning educational needs of currently-employed citizens of the communities for full and part-time study determined the program offerings of the college's evening school of adult education.

B. Evolution of Board of Trustees and its Early Acts

Pursuant to legislation recommended by the Governor of Virginia and enacted by the General Assembly in the 1964 Session, the State is authorized and directed to establish a number of strategically-located two-year Technical Colleges to be governed by a newly-created State Board of Technical Education.

In November of 1964 a pro-tem Board of Trustees was appointed from Northern Virginia to study the feasibility of making application for the first college grant under the state law passed by the General Assembly in 1964. The representatives of this Board, who were appointed by the governing bodies of the seven political jurisdictions
of Northern Virginia: the counties of Arlington, Fairfax, Loudoun, Prince William, and the cities of Alexandria, Fairfax and Falls Church, made application to the State Department of Technical Education for the operation of a two-year technical college. These communities have a total population of approximately 800,000 with a projected growth to 2,500,000 in the next 25 years.

On February 3, 1965 the State Board of Technical Education approved Northern Virginia's application for the establishment of the first of the proposed system of technical colleges throughout the state.

In February and March the jurisdictions appointed a permanent Board to govern the college. On March 20th this Board set forth some of its policies, procedures and formed three major committees.

1. Operational budget and personnel
2. Sites and capital budget
3. Curriculum and community relations

On April 8 the Board of Trustees met with the counsellors from local high schools to review the survey, "Post-High School Education Needs in Northern Virginia" which concluded that 500 students might enroll in September 1965, and projected a student body of 5,000 by 1973, with an additional 30,000 students in part-time evening study. The Board and the counsellors concurred that these figures were realistic.

On April 29, the local Board, acting in conjunction with the state, appointed the President.
On May 1, the local and state boards approved the resolutions establishing proper legal basis for the receipt and disbursement of funds; these were approved by the Attorney General's office of the State of Virginia.

At the same time, it was determined the college would open September 20, 1965 to provide education for 500 students in the following occupational programs:

(1) Business Sciences and Procedures
(2) Data Processing Technology
(3) Engineering and Electronics Technology
(4) Mechanical and Craftsman Training
(5) Nursing and Health Sciences
(6) Police Sciences and Procedures
(7) Secretarial Sciences and Procedures

See Appendix F for the current programs of instruction and their enrollment.

On May 3, the Board announced the leasing of 50,000 square feet of space formerly occupied by an industrial research and manufacturing corporation. The building was to be remodelled to provide quarters for a college to serve 500 students the first year and 800 the second.

On May 15, a local architectural firm was retained to design and oversee the remodelling of the building.

On May 17, after serving on a part-time basis since his selection in April, the President reported for full-time duty to the temporary offices of the college at Fairfax City Hall, consisting of five rooms donated by the city of Fairfax, Virginia.
C. The First Campus

The first campus was built from "scratch" (having no staff, no telephone, no equipment or furniture, no buildings or land, no program, no students, and brand-new local and state boards), and within 100 days opened in temporary quarters on September 20, 1965, while the first of several envisioned, multi-million dollar campuses was being planned.

The College is located at 3443 S. Carlyn Spring Road, Bailey's Crossroads, Virginia, near the junction of Fairfax County, Arlington County and the City of Alexandria. Situated in a densely populated area, the College is accessible from the major traffic arteries of Virginia State Route 7 and Columbia Pike. Adequate parking for commuting students is provided at the building.

No expense was spared in equipping the laboratories, classrooms, and the library, so that depth instruction could be given and industrial processes simulated when necessary, to insure the most effective learning possible.

The instructional methods used in this job-centered education will simulate and emphasize materials and machines used in the various occupations. In addition to the special occupation courses, the College will offer related education courses to provide the student with basic math and scientific principles underlying his occupational objective. It also includes general education subjects to develop leadership and attitudes to aid the individual in becoming a better informed and more productive participant in his society.
The College, as envisioned in the Virginia statutes, will fulfill the educational requirements to meet the manpower needs of the community by offering technical and semi-professional programs at the college level, through full-time, part-time and evening programs. It will also provide a special educational service to present and future new industries in the Northern Virginia area.

To meet the challenge of an increasing technological society, the College, through the Continuing Education Program, will provide an opportunity to the employed worker and professional to continue development and improvement of his skills and abilities; or to retrain to meet his individual changing needs or those of the community.

All candidates for the Associate in Applied Science Degree must have a high school diploma or its equivalent. Placement examinations are required to determine the beginning level. To assure an opportunity for reasonable success, counseling is provided to determine individual programs.

A pre-technical program is available for those students who lack essential preparation, or who desire an extensive review to become adequately prepared to enter one of the regular technical programs leading to the Associate in Applied Science Degree.

Any person who can profit from the instruction, is 18 years of age, or a high school graduate, may enroll in a course.

The tuition costs per quarter are as follows:

<table>
<thead>
<tr>
<th>Category</th>
<th>Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>Northern Virginia Resident</td>
<td>$45.00</td>
</tr>
<tr>
<td>Other Virginia Resident</td>
<td>$75.00</td>
</tr>
<tr>
<td>Out-of-State Resident</td>
<td>$150.00</td>
</tr>
</tbody>
</table>
V. PROCEDURES IN ESTABLISHING THE COLLEGE

0100 Temporary Site and Building Modifications; Time: 6/1 - 9/27/65; 740 Man Hours

Because of strict time limits the Board of Trustees decided to seek a site with a building suitable for remodelling. Since all students would commute, it was essential the site be adjacent to the heaviest concentration of population and convenient to public transportation and major highways. The building would require 50,000 square feet to meet the needs of 500 students in technical programs and adequate parking space (at least a 1 to .7 student to car ratio). The site at Bailey's Crossroads met these qualifications.

Since the modification of the building's 50,000 square feet of space is recorded in the Master Chart (No. 1) in simple event, following event sequence, and involves only one part of a line and eleven blocks along the activity line it is not charted separately as are more complicated procedures. In explanation: The necessary steps in charting the remodelling are:

1) Approval of temporary site
2) Lease of temporary building
3) Determination of space requirements
4) Preparation of specifications and invitations to bid
5) Bids opened
6) Contract awarded
7) Begin remodelling
8) Inspection of building
9) Open for storage and student interviews
10) Remodelling completed

In actual practice the process was not so easily accomplished, since there were problems involving failure of the contractor to
fulfill a part of his contract. For another situation, with a less satisfactory building, the process would be more complicated.

The leased building was an enormous windowless structure, basically consisting of 5 "bays" of 10,000 square feet each, containing air conditioning and heating units ready for operation.

An architectural agreement was made on May 15, and on June 7 the plans were completed. The educational specifications for the building were communicated to the architect during a one and one-half hour telephone call. Preliminary drawings were completed four days later; and fourteen days following this, the working drawings were completed.

The floor plan and design were conceived with two main concepts in mind: (1) It was an impossibility to predict what subjects would be taught in the rooms in future years or for how long a period of time the college would occupy the building and (2) There was no time available for a detailed study to determine the exact courses to be taught in the Fall of 1965. Taking into consideration the pattern of the college's multi-campus operational plan, the rapid growth of the college, and changing technologies for which space would be needed, the solution seemed to be a general overall design providing flexibility to allow multi-purpose use of most rooms. (See Appendix E for floor plan).

The remodelling started July 1 and supposedly was to be completed September 1. It involved lowering ceilings, erecting dry wall partitioning, providing classrooms, labs, auditorium, snack bar,
administrative offices, a lobby, installing lighting fixtures, laying carpeting and hanging draperies. From Chart No. 1 it can be seen that the contract began on July 1 and was substantially completed by September 27, which allowed a full weekend to move all the instructional equipment and furniture into the building.

0200 Equipment and Furniture; Time: 6/1 - 9/27/65; 1620 Man Hours

Although on the Master Chart (No. 1) the securing of equipment and furniture appears to be a relatively simple matter, in actual practice this was, because of the tight time schedule, the most time-consuming and difficult operation involved in the establishment of the college. This is one area in which maximum energies were expended in an unsuccessful attempt to use a half-million dollars of 1964-65 fiscal funds which would revert to the Federal Government if not used in that fiscal year. There were 20 days in which to write specifications, receive bids, award contracts, obtain delivery of equipment, and process the paperwork. Most of the items were completed within the 20-day deadline, with the exception of the paperwork. The remainder of the equipment was ordered and delivered throughout the summer.

On July 1 a full-time person was assigned to the equipment and building readiness program. This involved determining needs, writing bid specifications, working with the State Purchasing Department, pressing suppliers for delivery, and placing equipment in the building along with working with the building contractor to ensure the building being properly remodelled and ready on time.
Equipment procedures normally fall into four major categories: 
(1) Determining needs (2) Ordering (3) Delivery and (4) Installation. 
Usually, the manpower energies would mainly be used in numbers 
1 and 2, but because of the college's special situation, the largest 
part of the available energies was expended on numbers 3 and 4, 
while number 1 (Determining need) was quickly based upon past 
experiences.

Furniture orders, which appear on Chart No. 2 in June, were 
not actually processed until the end of July. This in turn affected 
delivery, especially in the area of library furniture with its 
lengthy lead time of 120 days. The furnishing and equipping of a 
college is a critical area and one demanding tremendous attention 
to detail. Before any purchases of any kind are made, there should 
be established a definite procedure for purchasing, budgeting, fund-
ing, ordering, receiving, storing and distributing every item 
purchased.

0300 Students; Time: 5/17 - 9/20/65 2325 Man Hours

On May 24, the first brochure, which is enclosed in the pocket 
of this report, was conceived, designed, written, published, and 
delivered to 10,000 Senior high school students within 10 days.

On June 4, the first requests for enrollment were received. 
Approximately 400 students had requested applications and informa-
tion at that time (20 days after the formal announcement of the new 
college).
On June 10, the college distributed its first application blanks and announced the acceptance of the first two students.

On August 15, the counseling staff began interviews. About 3/4 of the students were automatically admitted to the college; their acceptance was based upon their high school records. The additional 1/4 of the applicants were asked to make appointments for counseling service for guidance in working out their educational programs. Typical of the many remarks by students during counseling sessions was: "Do you really mean I've been accepted by the college?"

In conducting the interviews with prospective students and a review of applications, it became apparent that a number of adults had applied as part-time students with a view towards pursuing their individual programs of study in the evening. An adequate number of potential evening students had applied to make it necessary to initiate an evening program earlier than had been planned. This decision was reinforced by the request of the Northern Virginia Apartment Owners Association that a special evening course for Apartment House Resident Managers be conducted.

Before and after the college opened, student interest and responsibility amazed the administration. Students formed committees to organize the activities typical of a new college: selection of school colors and emblem; newspaper and annual; student government; dances; and a basketball team.
The spirit and effort of the students to achieve excellence is exemplified by the basketball team, The Golden Eagles. Although they were late comers, with neither a coach nor gymnasium for practice when the first game of the season was played, the team won all regularly scheduled games, ending the season with an overall average of 107 points per game. One player averaged 47 points per game, making the team the top scorer among the small colleges in the nation.

The profits from the snack bar and bookstore are turned over to the Student Body Association to support student activities. This amount - about $500 per month - is not sufficient to provide adequately for a student body of 1,000 in its formative period. Next year, the college, at the request of the Student Body, will add $5.00 per quarter to the present $35.00 per quarter tuition fee to help support student activities.

While experiences of similar colleges indicate that the closer a student lives to a college, the more likely he is to attend, in the case of Northern Virginia Technical College, a commuter college, the percentages of the students are divided evenly among the following four driving distances:

- 25% within 10 minutes drive
- 25% " 20 " "
- 25% " 30 " "
- 25% over 30 " "

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The steps involved in securing personnel for the college involve so many "events" on the flow chart that a separate Chart (No. 3) is submitted for this area of operations. The following prerequisites must be assured: The President should be on duty, office space available, secretarial staff employed, and at least the initial members of the Advisory Committees should be appointed.

After personnel qualifications are established by these officials, and a rough draft of the curriculum is outlined, estimates concerning personnel requirements can be made (accurate estimates of numbers of faculty needed can be determined after rough figures are available from the admissions office, however, the community survey should make possible an estimation of the approximate number of entering students).

Recruitment of personnel at the college proceeded along two lines. When qualified people applied for administrative positions, or when such people were known to the President, they were employed immediately as consultants--some of these consultants later moved into permanent positions. The second source of qualified personnel came from the professional employment service, "The Personnel Management Service". The use of the services of this agency provided an efficient and time-saving means of finding qualified faculty. The agency did not employ the faculty--interviews in depth were vital and accounted for many man hours of work--one official devoted himself almost exclusively to this job for most of the summer.
On an average, sixteen man hours of staff time were used for the hiring of each faculty member.

The early secretarial staff was secured chiefly, through the efforts of an agency which supplies temporary help on a contract basis, some of whom were asked to remain with the college. The use of such an agency gave the college an opportunity to evaluate the employees' abilities to perform on the job.

Following Chart No. 3, having established the necessary pre-requisites in the first six events, personnel were obtained from three basic sources: 407 - local applicants; 408 - professional services applicants; 425 - employment agency. From the first two sources came the employment of two Deans, two Counsellors, and one or two Department Heads. The college, as a state-chartered institution, was required to be governed in staffing by the regulations of the State Department of Technical Education.

In such an accelerated hiring period (30 staff members in 30 days) with many immediate jobs to be performed, the basic philosophy was as follows: Administrators were initially hired as consultants. After knowledge of their capabilities through demonstration could be analyzed, they then received appropriate assignments. On June 6, seven consultants were hired to advise the college; during June most of the administrative staff was employed. The members of the small initial administrative group used a "team approach" and held daily one hour mid-morning meetings for general problem solving and "signal calling".

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The guiding philosophy in the employment of the instructional staff was: Experienced teachers are important, but knowledge of subject matter is more important, because it is not only better, but easier, to teach methodology than technology to new instructors.

In the early days, procedures were often affected by time and money. Budget procedures were unclear and qualified applicants, who were approved by the President, were sometimes lost to the college due to uncertainty in early hiring procedures, or to lack of funds to meet salary demands. The office of Registrar-Admissions appears on the chart under the date of September 10. Beginning June 7, this function was performed by a consultant, and later permanently assigned to another member of the staff on the above-mentioned date. This is also true of the President's Administrative Assistant, with final approval for this position being given on September 10.

The problems this college met in securing personnel were magnified by several conditions: First, the administrative staff was not available early enough to start determining personnel requirements and recruiting in the normal procedure; secondly, without firm curriculum decisions only general qualifications could be estimated; also, numbers needed could not be definitely computed. A firm salary schedule was not available until the middle of July.
The instructors' average salary ($8600 for 12 months employment) was competitive with a number of states, but was not competitive with the local public school salaries; however, the college was in a favorable location and situation for the attraction of personnel with excellent experience and educational qualifications; for example, the many government employees and retirees who become available for local employment either on a full-time or part-time basis.

Even though the college hiring period did not start until after the termination of the regular local hiring period for school personnel, the basic problem of NVTC was time to adequately process the large number of applicants received. The challenge of being a part of the establishment of a new two-year college and the spirit of the college were responsible for attracting many qualified applicants.

The following procedures were used in selecting and evaluating personnel:

a. One person was assigned full-time duty for the critical period.

b. A panel of three persons interviewed all applicants after initial screening.

c. Active recruitment to attract applicants, by telephone and by letter was practiced.

d. Review of qualifications of all applications received, including interviews of all applicants in the locality.

e. Private and public employment agencies were used extensively.
The evaluation and selection of the faculty continued from June 21 through September 1, when the faculty pre-service training period began. The permanent librarian was not employed until September 10 and was not available for service until September 27.

Among the most vital needs of the college very early in its existence was a Business Manager, to pay the bills; set up bookkeeping systems, manage local finances and advise the President and the Board of Trustees in current fiscal procedures. The early presence of the Dean of Occupational Education and the Department Heads would have enabled the curriculum and course descriptions to be prepared with greater dispatch. The presence of counsellors at an earlier date would have facilitated student guidance.

An Administrative Assistant to the President is necessary from the beginning, in order that the President be freed from purely administrative chores and be able to devote himself fully to other creative aspects of his job. Two additional critical early appointees should be (1) the Procurement Officer for equipment and (2) the Personnel Manager.

In the ideal situation, all matters relevant to monies, whether they refer to salaries, site, or space, should be determined at an early stage in the history of the college and the President should be free, within certain defined limits, to employ his required personnel as quickly as individuals are available. Under the best of circumstances, the staffing of a college will take a minimum of three months.
In summary, it should be noted that the new college staff had little prior teaching experience in this type of institution because: (1) There is a shortage of people having experience in technical institutes and two-year college education, particularly in the East, and (2) the NVTC hiring period took place after many teachers had already signed contracts for the coming academic year.

Meeting with little success in staffing the college with fully-experienced technical college teachers, it was decided intentionally to probe the problem of beginning a new technical college staffed with people to whom must be communicated philosophies, concepts and procedures in a brief time. The solution was to employ four lead administrators, each of whom had 20 years of appropriate experience. One of these administrators, the Dean of Instruction, was employed because of his wide experience in teacher education. He was assigned responsibility for pre-service and in-service teacher training programs for the staff of the college.

The college invited nationally-known technical educators to work with the staff, giving them insights into the philosophies underlying technical education at the college level and assisting them in the development of adequate outlines and lesson plans. The first 15 days of September were devoted to teacher training programs; the first half of each day was spent in formal sessions; and the second half in informal departmental meetings which implemented the suggestions of the consultants.
The instructors present the following profile: Two degrees, twelve years of occupational experience, five years of teaching, an average age of 43 years, and one-third of the faculty consists of retired government and military personnel.

A tribute to the faculty and the curriculum of the college is the fact that the drop-out rate during the first quarter (and apparently during the first year) was only about half that of the national rate.

0500 Budget; Time: 5/17 - 9/27/65; 160 Man Hours

On June 16, the local and State Boards approved an operating and equipment budget in excess of one million dollars, and containing $400,000 for equipment, needed to open the Bailey's Crossroads campus. Two months after the college opened, this budget was expanded by $300,000 for operational purposes to partially make up for the almost doubled enrollment. After the instructors had time to prepare additional equipment lists, and after arrangements had been made for 50% matching monies from the Federal Vocational Education Act, an additional $1,000,000 was added to capital expenditures, most of which was spent for equipment. These expenditures amounted to approximately $1,000 per student for operational expense and approximately $2,000 per student for equipment.

The rent for the building is $1.00 per square foot per year for the original 50,000 square feet. The remodelling cost for this space was a little over $2.00 per square foot.
The budget provided for an average instructor salary of $8600 with a range of $7200 - $12,000 for a 12 months contract. It provided that 1/3 of the faculty teach in the summer, 1/3 be free for curriculum development and 1/3 pursue educational and professional development at the expense of the college.

The building plans for the second campus call for 130 square feet per student at a total cost, including land and buildings, of $18.00 per square foot, which averages approximately $2400 per student.

For details of the budget, see Appendix A.

0600 Library, Textbooks; Time: 6/15 - 10/26/65; 660 Man Hours

The first step was to decide upon the basic aims and philosophy for the technical college library, estimate the length of time necessary to establish it, and how to proceed in relationship to the time available. The establishment of the college library appears on the Master Chart (No. 1) as a line of six events. The tremendous detail and the varied activities involved in this process necessitated the separate charting of the library, Chart No. 5. A library consultant was one of the early employees. Ideally, the permanent librarian should be available at least six months before the college opens.

Graphically, the course followed in establishing the library flows along four main lines of work in progress:

a. Selection and Purchase of Books

The acquisition of 10,000 volumes; with an additional 5,000 for each 500 students above the first 500-1,000; technical materials to comprise 70% of the total, the
remainder to be composed of reference books and a small general reading section.

The objective in June was to represent the following areas of the curriculum:

1. Mathematics
2. Instrumentation
3. Mechanical
4. Related Sciences
5. Physics
6. Social Sciences
7. Electronics

Periodicals relating to each area of the curriculum as well as those of general interest; top quality newspapers (N.Y. Times, etc.) and local papers were made available. If space and staff permit, audio-visual aids, equipment, etc., should be housed in the library.

A librarian with a Master's Degree in Library Science, and an Assistant with a Bachelor's Degree in Library Science, were employed as well as student aides to ensure adequate service.

Chart No. 5 lists the various relationships established and demonstrates the inter-relationship which developed between activities.

b. Selection of Professional Library Processor

The local processor's fee was $1.85 per book. While this may not be the ideal method of preparation of books for shelving, it is the only way when time and staff are at a premium. The processor received the first book from the publisher on August 9 and by October 8, 400
books were shelved. These events occur along the top line of Chart No. 5 and involve 12 activities; it is also one critical path which exceeded the time allotted - in other words, the chart shows classes beginning September 27 and the library not in operation until October 8. Since the college admitted only freshmen students, the use of the library during the early weeks was not a matter of critical importance.

c. Selection and Purchase of Furniture and Equipment

All furniture is completely moveable, and shelving arrangements are flexible. In an effort to use fiscal 1964-65 funds, initial bids were submitted to the state as early as June 21, but since it was impossible for suppliers to react to these deadlines favorably, the bids were awarded by the State on August 6. Lead time on library furniture is usually 120 days, and while some shelving was attached to the library walls before the college opened, the rest of the furniture was not delivered until November 1.

d. Procedure for Ordering Library Books

Because of the time element, the fact that instructors were not hired as yet, and the lengthy procedure usually encountered when ordering library books, the task would have been quite difficult without the aid of the U.S. Office of Education Technical Library Guide. This guide
shortened the procedure and made possible a realistic selection of books in advance of the employment of the librarian who would normally make recommendations concerning the purchase of books for the library based upon teachers' requests.

The booklist contained in the U.S. Office Guide was used by cutting and pasting by publisher, and the completed sheets were forwarded to the State Purchasing Officer for transmission to the publishers. This involved the consultant, one assistant, and several typists from July 21 to July 28 when the booklist was delivered to the State Department of Technical Education.

The establishment of the library required 53 man days; when the time of the processor is included as well as the hours when the assistant librarian became available; the figure is a total of 81 1/2 days.

0700 Curriculum and Catalogue; Time: 5/17 - 8/18/65; 950 Man Hours

A. Curriculum

Although on the Master Chart (No. 1), curriculum and catalogue appear as two separate lines of activity, in actual practice so many of the activities are inter-related and occur for the same reasons that the two activities appear on the same flow chart, Chart No. 4 (Each requires the same prerequisites which are charted vertically, left side Chart No. 4). In reality, the curriculum was determined by selecting large, safe areas of need which could be easily
documented, staffed and equipped in reference to the amount of time available to establish the catalogue.

On July 7, the meeting of the first Occupational Advisory Committee was called. The purpose of these committees is to assure that the educational program in the new college will be geared to the needs of the community.

Following the publication of this first curriculum outline, the staff prepared the outlines for the courses of study and detailed the subject matter materials which culminated in the publication of the catalogue on September 3. In addition, a second brochure was prepared concurrently with the catalogue and published on August 3. The activities and events concerned with the publication of information appear at the far left side of Chart No. 4.

Beginning early in June with event No. 719 on Chart No. 4, the following progression can be noted: Catalogues were requested from two-year technical institutes, two-year community colleges, four-year technical and liberal arts institutions; these, and the courses designed by the Office of Education for use in technical programs, were studied, duplicated, and compared with each other and with the college's outlines of projected courses of study. With these offerings by other colleges as a point of departure, the various courses to be offered were developed; the results were reviewed by the consultants, the Advisory Committees and the local and
The final result, after approval by the State Department of Technical Education, was the curriculum as it appears in the college catalogue.

It is estimated that over 430 man hours or 54 man days of work were needed to produce the curriculum and course descriptions. Of this time, 50 hours are the President's work on the first brochure and 80 hours, the Data Processing consultant's work on that particular course of study. Following Chart No. 4 from May 17 to September 27, the time needed for production of the curriculum was 430 man hours of work by the college staff, plus 520 hours of work on the survey of needs - 950 man hours or 118 man days of work.

The rough draft of the curriculum is the prerequisite for a number of other tasks: The establishment of personnel requirements in order for recruitment of personnel to begin; the production of copy for the catalogue; and student recruitment.

Deans and Department Heads, during the planning of the curriculum, could have considered the qualities desirable in the faculty responsible for administering the curriculum; decisions regarding the number of faculty members needed could have been made at an earlier date than was possible.

Since the curriculum will influence prospective students, the early availability of the catalogue or of printed copies of individual curricula would make possible a realistic estimate.
of the size and number of classes required for each course of study. In the creation of a college, establishment of an excellent and appropriate curriculum is a vital and complex process, and neither time nor effort should be spared in its early completion.

In view of the number of adult applicants for part-time (evening) courses, a modest evening program was initiated concurrently with the Fall Quarter Day program. The regular courses offered were selected from the first quarter curriculum and included: academic subjects; and technical subjects from the Data Processing, Secretarial Science and Business Science curricula.

The Executive Secretary of the Northern Virginia Apartment Owners Association and the Instructor prepared an outline of the curriculum planned for the special Apartment House Resident Managers Course and submitted it for review and approval.

B. Catalogue

The preparation of the catalogue flows directly from the construction and adoption of the curriculum; on Chart No. 4, event 729 (adoption of curriculum), leads into 717, the event including the revision of the catalogue prior to the President submitting the catalogue to the State Department for general approval; this is followed by delivery to the printer, receipt of the first galley proof and delivery of the catalogue itself from September 3 to September 7.
Along with the production of the final catalogue, a second brochure was worked on concurrently. This is shown at the far left of the chart as preceding the approval of the original dummy of the catalogue. This brochure, which was delivered August 3, served as a catalogue until the receipt of the formal catalogue one month later. A total of approximately 30 days elapsed time was used to design, write, and publish the catalogue; however, the bulk of the work was accomplished in two weekends with an approximate total of 85 man days of energy. It is recommended that, in addition to the catalogue, considerable information be made available to aid in the difficult task of informing the community about the new college and its programs.

0800 Contractual Services; Time: 7/6 - 9/20/65; 40 Man Hours

Food Service and Janitorial Service appear in two widely-separated areas on the Master Chart (No. 1), but for ease in study they have been combined in one flow chart (No. 6). Both services were secured through submission of bids, and required simple contract forms for their establishment in the college. The college also contracted for Secretarial Service, Employment Agency Service and Educational Consultant Service. These services appear under one of the other major events.

A. Food Service

Lacking both adequate space and type of facility for hot food in the new college, it was decided to use an automatic dispensing "snack bar", with tables and chairs in the large -33-
central assembly room, across the hall from the food service room.

Bids were invited from a number of automatic food service firms in the area. The firm selected agreed to take care of all costs involved in installing the machines and the carpentry, electrical and plumbing work connected with them. In addition, the firm guaranteed to provide a full-time attendant during school hours and agreed to secure the necessary permits from the Health Department.

Ten percent of the gross income from this operation comes to NVTC and is made available to the student activity fund.

Food service events appear at the top line of flow chart No. 6.

B. Janitorial Service

Bids for Janitorial Service were advertised on July 16 and six bids were received; the low bidder provided most of the services required under college specifications. The bid was awarded on September 1, 1965. The company employs students of the college on a part-time basis. Janitorial service events appear at the bottom line of flow chart No. 6.

0900 Policies and Operating Procedures; Time: 5/17 - 9/27/65; 200 Man Hour$^3$

The State and the college worked together to solve procedural problems involved in establishing a State system and building the first technical college simultaneously. Problems were compounded by multiple operations and the lack of precedents to follow.
Many difficulties encountered stemmed from the limitations imposed by time. Lack of time prevented the proper definition of clear, firm fiscal policies, procedures, and practices. The intricacies of Federal, State and local monies in funding an entirely new program, directed by an entirely new State Department of Technical Education, required extra energies from the local and state staffs.

Initially, the State policy decision was that State funds would pay all faculty and approved Administrative positions as well as one-half of the State salary scale for clerical personnel. The State is responsible for all instructional costs including supplies, equipment and instructional salaries. The local jurisdictions pay for land, rentals and for construction of buildings.

The sources of purely local funds for the first school year came from the seven jurisdictions by the following formula:

1/4 population
1/4 property values
1/2 count of Senior High School classes in each jurisdiction

For subsequent school years and projected capital outlay this formula was reversed by substituting enrollment in the college at a given time in the school year for high school seniors.

If action had been deferred until the most desirable fiscal relationships and systems had been effected, the opening of the college would have been considerably delayed. See Exhibit A, present operating budget.
VI. IMMEDIATE AND LONG-RANGE PLANNING

A. Immediate Planning

The response of the community to the offerings of the new technical college exceeded all expectations. The first quarter's enrollment of 200 above the anticipated 500 students, plus another 500 registrants for the Winter Quarter, made additions to the plant an urgent necessity. Before the January 4th Winter Quarter opening, 4 classrooms, 2 laboratories, a dark room, faculty offices, and a bookstore were designed and constructed in an additional "bay".

Every square inch of space is being utilized at present, and future planning points to immediate construction of additional facilities at the Bailey's Crossroads site.

The same Virginia General Assembly Session of 1964, which authorized the establishment of the Northern Virginia Technical College, also authorized the Governor to appoint a Commission on Higher Education, and directed the commission to "... undertake a comprehensive study and review of higher education, to be used as a basis for effective long-range planning as to objectives, needs and resources of public and private higher education in the Commonwealth of Virginia". The recommendations of this commission were broad and far-reaching; chief among them was the immediate establishment of a system of statewide comprehensive community colleges.
The bold new community college law enacted by the 1966 Virginia General Assembly will bring the seven two-year branches of the universities, the five post-high school area vocational schools and the present and proposed technical colleges under a new statewide community college system, requiring each institution to add appropriate programs making each a comprehensive community college, all under the control of a newly-constituted State Board of Community Colleges with direct appropriation from the General Assembly.

On July 1, 1966, NVTC, after one year of operation as a technical college, will become one of the community colleges to be established throughout the state, but will retain its major focus on occupational education. It is anticipating the application of 400 students for the academic transfer program, which this college will offer in September, 1966, in addition to those students already enrolled in their first year of study, most of whom will be returning as sophomores in the seven original technical curricula offered by the college. The provision of space for an expected enrollment of 1200 students in September 1966 at this campus, plus the creation of a new academic curriculum and the securing of a new faculty to administer it, are the immediate problems facing the college.

When the seven jurisdictions agreed to establish a two-year technical college for the Northern Virginia area, it was guaranteed that a permanent central campus would be selected, buildings erected, and the first students enrolled there in the Fall of 1967.

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The Board of Trustees, after one year of searching, surveying and studying twenty local sites, contracted to purchase in February 1966, for one million dollars, the 78-acre Pruitt tract near Annandale to become the first permanent campus. This site provides the qualities most necessary for a commuter campus: it is within an area of high density population, adjacent to several major highways and the Washington Capital Beltway, and has sufficient space to allow the construction of eight major buildings to house an eventual 4,000 full-time day students plus 8,000 part-time evening students, thereby making a total of 12,000 students attending this campus. It provides a delightful urban setting within 20 minutes drive from the city of Washington.

The Adult Evening Program, from its modest start of 135 students in September 1965, expanded during the Winter Quarter, 1966 with offerings from all occupational programs to a total of 540 students. A more thorough planning of the Evening Program for the Spring Quarter resulted in a balanced offering designed to meet the needs of individual adults. Where experience had indicated a decreased enrollment in adult programs in the Spring Quarter from the Winter Quarter, the college's enrollment actually increased to over 600 students.

B. Long-Range Planning

All of the seven jurisdictions concerned have currently indicated by acts of their governing bodies, their willingness to accept the indebtedness which the major long-range plans for the college involve. Plans are underway for the acquisition of three more sites for
construction of campuses which will more adequately serve the needs of the seven jurisdictions.

Looking ahead ten years, the local Board of Trustees envisions a cluster of five campuses, including the present so-called temporary site at Bailey's Crossroads, which because of its very nature will, in all probability, continue for many years as an adult education center.

The projected figures for the five campuses are:

Campus #1 (Bailey's Crossroads) --------- 1,000
Campus #2 (Central Campus)----------- 4,000
Campus #3 -------------------------- 1,000
Campus #4 -------------------------- 1,000
Campus #5 -------------------------- 1,000

In addition to the 8,000 full-time day students, who are expected to attend these campuses, there will probably be twice that number in the Evening School.

Present plans are to offer both technical and academic programs at the Bailey's Crossroads campus and at the Central Campus. With the development of a multi-campus college, it is probable that each campus will accent one of the major functions of a community college. The Bailey's Crossroads campus, because of its high concentration of population would logically be retained as a center of Adult Education; the Central Campus might become the Technical Branch; the Northern Campus the Liberal Arts; the Western Campus, devoted to large-scale machinery and construction projects; and the Southern Campus might accent the Vocational and Trade Programs.
Each campus will provide all four functions of a comprehensive community college, while accenting one of the above major functions.

VII. SUMMARY

According to the "PERT" chart, approximately 8,000 man hours were devoted to major events, plus another 2,000 hours of general planning, conferences and Board meetings. The remaining 5,000 hours, approximately 1/3 of the time, are typical of the many small, unplanned, time-consuming activities which are forgotten in most manpower projection needs.

If the approximate number of man hours of energy required to establish a college were doubled, a more realistic time projection would be attained.

Experience of NVTC indicates "PERT" provides an administrator with a check list of the 300 or more events to be accomplished in beginning a new two-year college.

Many of the events, the hours necessary to perform them and their sequence were altered from a normal situation because:

(1) The short period of time available to establish the college,
(2) The budget provided for a total of 400 students and almost twice that number were enrolled. (3) The student enrollment almost doubled again at the beginning of the second quarter. (4) Planning for technical and semi-professional programs during the first year of operations was the major factor involved in charting "events";

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however, uncharted man hour energies were expended in consideration of the possibility of adding an academic transfer program at the beginning of the second year of operation.

An analysis of this report indicates that at least one year of elapsed time is necessary from the time the President is appointed to the date of opening of the college, and a two-year period would be more practical. A major factor determining the one or two-year period of time is the means by which the physical housing is to be provided (temporary buildings versus new construction or the combination of these two ideas), the size of the initial enrollment, and the number of administrators hired in the beginning period.

A college anticipating an initial enrollment of 500 - 1,000 students should allot a minimum of one year of time for planning and provide at least 5 to 8 administrators plus an appropriate supporting staff.

Due to lack of time and to the fact that items would not be used during the first quarter of operation, 40% of the equipment for the college was not ordered until a later date; business machines and the computer were not installed until the second quarter.

Because of the lengthy planning time necessary in order to receive approval from the League of Nursing, the only planned program which did not materialize on schedule was the two-year Nursing program.
Because of the limited time available to organize instructional curricula from "scratch", several programs went through major revisions during the first two quarters of operation. This was accomplished by consulting nationally-recognized educational experts, and inviting them to spend two concentrated weeks with the staff in specific educational programs.

It is estimated that it requires 20,000 man hours of energy to create a new college. Northern Virginia Technical College had 10,000 man hours available; 15,000 were expended by the staff to open the college on time and solve the major problems. (See Appendix B for staff time and overtime). Relevant factors were high motivation, overtime, and the use of the modified "PERT" chart. (See Abstract for additional information).

In addition to Phase I of this research project, the college contemplates two additional phases. Phase II will be a study of the steps and procedures necessary to open a (hypothetical, theoretical) two-year college incorporating the experiences of Phase I, as well as the advice of administrators who have experienced similar situations. Phase III will test the validity of Phase II under real conditions when the second college campus is built. This campus will house 4,000 day students and have an ultimate evaluation of $10,000,000.
NORTHERN VIRGINIA TE
FURNITURE AND EQ
CHART NO. 2

1. Approval for college
   2/3
   5/3

2. Approval temp. site
   101
   5/3

3. Lease temp. bldg.
   102
   7/1

4. Prereq. comp.
   4/24
   5/21

5. Rough draft of Curric.
   5/17

6. Equip needs determ.
   202
   5/17

7. Furniture needs determ.
   201
   6/17

8. Approve remodel. plan
   103
   5/17

9. Space alloc. all facilities
   111
   6

10. Space
    6/18

11. 1st order Furniture
    203
NIA TECHNICAL COLLEGE
ND EQUIPMENT

K.J. RIPLEY
NORTHERN VIRGINIA FOOD SERVICE - J CHAR

110 Determine space requirements 5/17

103 Approve Remodel plan 6/21

111 Space alloc. all facilities 5/17

812 Advertise bids for food serv. 7/15

421 Pres. at work 5/17

802 Advertise Janitorial bids 7/16

803 Award Jan. contract 9/1

804 Jan. Serv. begins 9
ERN VIRGINIA TECHNICAL COLLEGE
FOOD SERVICE—JANITORIAL SERVICE
CHART NO. 6

812
Advertise bids for food serv.
7/15

814
Award contract to Castell
8/16

811
Food Service open
9/20

810
Health Dept. inspects food serv.
11/23

999
Classes begin
9/27

K.J. RIPLEY

SEC. 2
APPENDIX A

NORTHERN VIRGINIA TECHNICAL COLLEGE
Revised FY 65-66 Budget
5 November 1965

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* Training aids purchased included in classrooms
Revised FY 65-66 Budget

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<td>(-115,000.00)</td>
</tr>
</tbody>
</table>
## APPENDIX B

### EXPENDED ENERGIES

**STAFF TIME CHART TO OPEN SCHOOL FOR CLASSES,**

**September 27, 1965**

<table>
<thead>
<tr>
<th>Administration</th>
<th>Date of Employment</th>
<th>Man Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>McKee - President</td>
<td>5/17</td>
<td>744</td>
</tr>
<tr>
<td>Shuler - Dir. of Administration</td>
<td>6/1</td>
<td>656</td>
</tr>
<tr>
<td>Edmands - Registrar</td>
<td>7/29</td>
<td>328</td>
</tr>
<tr>
<td>Cannon - Dean, Day Program</td>
<td>9/18</td>
<td>40</td>
</tr>
<tr>
<td>Caraker - Counselor</td>
<td>9/1</td>
<td>135</td>
</tr>
<tr>
<td>Whitmer - Counselor</td>
<td>7/26</td>
<td>350</td>
</tr>
<tr>
<td>Brannan - Dir. Facilities</td>
<td>8/1</td>
<td>312</td>
</tr>
<tr>
<td>Lehman - Community Relations</td>
<td>6/1</td>
<td>656</td>
</tr>
<tr>
<td>Ripley - Research Assistant</td>
<td>6/15</td>
<td>576</td>
</tr>
<tr>
<td>Parks - Library Assistant</td>
<td>9/1</td>
<td>136</td>
</tr>
<tr>
<td>*Walker - Sec. to Board</td>
<td>4/1-8/15</td>
<td>297</td>
</tr>
<tr>
<td>*Parks, M. - Sec. to Walker</td>
<td>4/1-8/15</td>
<td>396</td>
</tr>
<tr>
<td>*Vickers - Business Mgr.</td>
<td>6/1-8/4</td>
<td>368</td>
</tr>
<tr>
<td>*Hieronymus - Research</td>
<td>6/1-8/13</td>
<td>424</td>
</tr>
<tr>
<td>*Shiflett - Accountant</td>
<td>7/12</td>
<td>432</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td></td>
<td>5850</td>
</tr>
</tbody>
</table>

### Department Heads

| Corcoran - Engr. Design               | 9/1                | 136       |
| Hill - Business Science               | 9/1                | 136       |
| Holt - Electronics                    | 9/1                | 136       |
| *McCandless - Data Processing         | 8/16               | 232       |
| Stahl - Secretarial Science           | 8/1                | 312       |
| Walpole - Police Science              | 9/1                | 136       |
| Zawacki - Mathematics                 | 9/1                | 136       |

### Faculty

| Allen                                 | 9/20               | 40        |
| Andrews                               | 9/15               | 64        |
| Bimstein                              | 9/1                | 136       |
| Cohen                                 | 9/1                | 136       |
| Coleman                               | 8/23               | 192       |
| Cordaro                               | 9/1                | 136       |
| Costello                              | 9/21               | 32        |
| Culkin                                | 9/15               | 64        |
| Darden (3/4 time)                     | 9/1                | 103       |
| Flynn                                 | 9/1                | 136       |
| Fowler                                | 8/15               | 232       |
Appendix B - continued

<table>
<thead>
<tr>
<th>Faculty</th>
<th>Date of Employment</th>
<th>Man Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kammire</td>
<td>9/20</td>
<td>40</td>
</tr>
<tr>
<td>Kibler</td>
<td>9/1</td>
<td>136</td>
</tr>
<tr>
<td>Koberg</td>
<td>9/1</td>
<td>136</td>
</tr>
<tr>
<td>Lesansky</td>
<td>9/1</td>
<td>136</td>
</tr>
<tr>
<td>Mays</td>
<td>9/20</td>
<td>40</td>
</tr>
<tr>
<td>Mitchell</td>
<td>9/1</td>
<td>136</td>
</tr>
<tr>
<td>Stemp</td>
<td>9/1</td>
<td>136</td>
</tr>
<tr>
<td>Tuhill</td>
<td>8/16</td>
<td>232</td>
</tr>
<tr>
<td>Young</td>
<td>9/20</td>
<td>40</td>
</tr>
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</table>

**TOTAL** 3530

<table>
<thead>
<tr>
<th>Secretarial - Clerical</th>
<th>Date of Employment</th>
<th>Man Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Peterson</td>
<td>6/1</td>
<td>656</td>
</tr>
<tr>
<td>Gordon</td>
<td>6/28</td>
<td>504</td>
</tr>
<tr>
<td>Hollen</td>
<td>8/1</td>
<td>312</td>
</tr>
<tr>
<td>Donnelly</td>
<td>9/1</td>
<td>136</td>
</tr>
<tr>
<td>*Hase</td>
<td>5/22-9/1</td>
<td>704</td>
</tr>
<tr>
<td>*Harris</td>
<td>6/5-9/1</td>
<td>488</td>
</tr>
<tr>
<td>*Stansberry</td>
<td>6/1-8/1 (1/2 time)</td>
<td>176</td>
</tr>
<tr>
<td>*Griffe</td>
<td>7/19-7/26</td>
<td>40</td>
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<tr>
<td>*Zachrison</td>
<td>7/15-8/15 (1/2 time)</td>
<td>88</td>
</tr>
<tr>
<td>*Gough</td>
<td>9/10-9/12</td>
<td>16</td>
</tr>
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</table>

**TOTAL** 3120

**TOTAL STAFF ENERGIES** 12,500

Consultants 150

Staff Overtime 2,350

GRAND TOTAL MAN HOURS TO OPEN COLLEGE 15,000

*No longer associated with the college and have been replaced by other personnel.

By the Second Quarter, the following additional personnel have been added:

17 Full-time faculty
45 Part-time faculty
2 Administrators
APPENDIX C

EXPLANATION OF TERMS USED IN PERT

PERT - Program Evaluation Review Technique - the computer management technique is used to keep track of the program, insuring that there are no bottlenecks and that the schedule will be met.

"PERT is a management control tool for defining, integrating and interrelating what must be done to accomplish the program on time.

PERT is a statistical technique - diagnostic and prognostic - for quantifying knowledge about the uncertainties faced in completing intellectual and physical activities essential for timely achievement of program deadlines. It is a technique for focusing management attention on danger signals that require remedial decisions, and on areas of effort for which 'trade-offs' in time, resources or technical performance might improve the capacity to meet major deadlines."

* There are three factors which influence the achievement of a deadline: 1. Time, 2. Resources, 3. Technical specifications.

Planners estimate the time needed for "activities" which will result in the completion of "events". In this context an event is a completed task, a point in time, and an activity is the time needed to progress from one event to the next. The line of activities connecting events

* PERT Lesson Handbook for Technicians, Dept. of Navy, Bureau of Naval Weapons
forms the network of the "flow chart" which diagrams the
interrelationships of events which must be completed in order
to achieve the end objective. (Six of these flow charts make up
a part of the report).

In preparing a flow chart the specific events (from a few
to many thousands depending upon the nature of the job under
study) which are necessary to attain a final objective are selected.
These events are represented on the flow chart by little boxes;
the lines flowing out of (from the right) and into (from the left)
the little boxes make up the network involved in PERTing any
piece of work.

In completing a highly technical project estimates for all
the activities between events are obtained from technical
personnel. Usually three estimates are suggested for each
activity: optimistic, pessimistic and most likely. In Northern
Virginia Technical College the staff estimated the probable time
needed for a job, assigned available energies and worked for that
deadline. Using somewhat modified PERT planning it was possible
to foresee certain bottle necks and re-assign energies from an
area where time was not such a critical factor.

Using PERT automated data processing, the current progress
of any part or all of the project may be obtained at any point in
time.
Other Management Systems in addition to PERT

Critical Path

A critical Path is that particular sequence of activities in a flow chart that comprises the most rigorous time constraint in the accomplishment of the end event. It is similar to PERT, but it differs in its procedures to identify estimated man hours needed to complete an activity.

1440 Project Control System

Provides for the planning, scheduling and control of construction projects through the use of the critical path method. The system can accept data from networks planned in either the arrow-diagramming or precedence-diagramming methods. Sequences of processing and system outputs are controlled by a system control card. Output reports include status listings, bar charts and management exception-type action reports.
APPENDIX D

ADDITIONS TO THE OPENING FALL EQUIPMENT BUDGET

NORTHERN VIRGINIA TECHNICAL COLLEGE

PROPOSAL FOR UTILIZATION OF VOCATIONAL FUNDS

BY 30 JUNE 1966

Amended Figures for Equipment

<table>
<thead>
<tr>
<th>Department</th>
<th>Amount</th>
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<tbody>
<tr>
<td>Learning Lab</td>
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<tr>
<td>Business Science</td>
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</tr>
<tr>
<td>Secretarial Science</td>
<td>$21,626.00</td>
</tr>
<tr>
<td>Engineering &amp; Drafting</td>
<td>$100,000.00</td>
</tr>
<tr>
<td>Electronics</td>
<td>$45,693.00</td>
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<tr>
<td>Data Processing</td>
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<tr>
<td>Auto Technology</td>
<td>$80,000.00</td>
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<tr>
<td>Nursing</td>
<td>$65,000.00</td>
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<tr>
<td>Physics</td>
<td>$21,669.00</td>
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<tr>
<td>Teachers' Desks</td>
<td>$5,350.00</td>
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<tr>
<td>Visual Aids</td>
<td>$10,700.00</td>
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<tr>
<td>Classroom Furniture</td>
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<td>Lockers</td>
<td>$3,250.00</td>
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<tr>
<td>Library</td>
<td>$5,000.00</td>
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<tr>
<td>Miscellaneous</td>
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<td><strong>Total</strong></td>
<td><strong>$916,089.00</strong></td>
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APPENDIX E

FLOOR PLAN OF REMODELLED FIRST CAMPUS
APPENDIX F

FULL TIME STUDENT ENROLLMENT

BY OCCUPATIONAL PROGRAMS

<table>
<thead>
<tr>
<th>PROGRAM</th>
<th>PROJECTED</th>
<th>ACTUAL</th>
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</thead>
<tbody>
<tr>
<td>Data Processing Technology</td>
<td>100</td>
<td>102</td>
</tr>
<tr>
<td>Secretarial Sciences &amp; Procedures</td>
<td>100</td>
<td>33</td>
</tr>
<tr>
<td>Engineering Design Technology</td>
<td>40</td>
<td>79</td>
</tr>
<tr>
<td>Electronics Technology</td>
<td>40</td>
<td>55</td>
</tr>
<tr>
<td>Police Science &amp; Procedures</td>
<td>40</td>
<td>38</td>
</tr>
<tr>
<td>Nursing &amp; Health Services</td>
<td>40</td>
<td>18</td>
</tr>
<tr>
<td>Mechanical &amp; Craftsman Training</td>
<td>40</td>
<td>34</td>
</tr>
<tr>
<td>(Drafting)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Business Science</td>
<td>100</td>
<td>112</td>
</tr>
<tr>
<td>Pre-technical</td>
<td>0</td>
<td>43</td>
</tr>
<tr>
<td>*General</td>
<td>0</td>
<td>19</td>
</tr>
</tbody>
</table>

500 533

*Not included in initial planned programs
Northern Virginia Technical College, which opened its doors on September 20, 1905, has a freshman enrollment of 704.

This fall, all across the country, new junior college presidents are taking up their responsibilities. Observers are fascinated by two questions: where do the new presidents come from, and what experience do they bring to their new jobs?

Robert L. McKee, president of Northern Virginia Technical College in Fairfax, Virginia, was formerly with the Technical Education Branch of the U.S. Office of Education. Prior to that he was director of vocational and technical education at Lower Columbia Junior College in Washington State and later he was Washington State supervisor of technical education. He was graduated from Oregon State University with a B.S. degree in 1958 and holds several certified licenses and ratings in technical occupations. President McKee says he was attracted to his new job by the challenge of beginning a new college in the Greater Washington, D.C. community. He said: "After working with the U.S. Office of Education in the field of technical education and gaining experience in post-high school occupational needs and programs throughout the country, I felt that in our nation's capital we should try to show, by example, what a totally balanced program of occupational education really is."

The initiative of a study of Northern Virginia educational needs Monday may lead to the dedication of an area technical college within the year. The study will also call for a projection of the estimated number of high school graduates and adults who will seek this type of training. Hamel had reported that 10 or 12 per cent of the high school graduates would elect to attend this college. The purpose of this scrapbook is to show by clippings from newspapers the growth of the college from an idea to reality. Page One describes the Technical College system as established by the Virginia General Assembly and the selection of the President by the Local Board of Trustees on September 20, 1905. The Northern Virginia Technical College is the first college under the law which was passed by the 1904 General Assembly and envisions the creation of more than 20 two-year colleges, bringing within commuting distance of every Virginian.

Virginia's political and educational leaders are to be very low cost, qualified, through education and training geared to the technological world, to enter the job field at a technician's level or to upgrade status through part time study.

This college offers an opportunity, at very low cost, to be very low cost, qualified, through education and training geared to the technological world, to enter the job field at a technician's level or to upgrade status through part time study.

The seven local governing bodies who committed to this cooperative enterprise, now, with college enrollments expanding, face the need to provide greater educational opportunities to the future.
Governor Harrison Dedicates 100-Day-Old College

Gov. Harrison will be speaker at Tech College

Oct. 16, 1965

Gov. Albertis S. Harrison Jr. will make the dedicatory speech at ceremonies to be held Nov. 16 at 8 p.m. at the one-month-old Northern Virginia Technical College, 3443 S. Carlyn Spring Road, Bailey’s Cross Roads.

Announcement of the governor’s acceptance of the invitation to speak was made at last night’s meeting of the two-year college’s board of trustees, while further discussion centered on site plans for a permanent college.

No public information as to final decision on a permanent location is possible now, pending further studies as to availability of property. Cecil W. Shuler, dean of students, said today.

Additional plans for dedication of the school at its temporary location in a warehouse converted into classrooms, auditorium, administrative suite and library will be announced later, Shuler said.

It is expected that area political figures, instrumental in securing Virginia Legislature passage of a bill to support junior technical colleges, will play major roles in the ceremony, as well as commissions and business groups which did preliminary work to establish the need and public support for the measure.

Barnard Joy Named Head of Tech College Board

SEC. 2

Support...
The study will also call for a projection of the estimated number of high school graduates and students who will seek technical training. Hamel had reported that 10 or 12 per cent of the high school graduates would elect to attend and seek an institution for technical education.

"We hopefully look forward to this kind of a college," Epstein said. "It represents Arlington, Fairfax, Loudoun Counties having provided a study in Northern Virginia educational possibilities, a study which was signed by the county superintendents of Mayfair and Prince William, and started on the school that was not possible years ago."

The Northwest Regional Planning and Economic Development Commission announced that state funds were now available for technical college projects. It was hoped to see at least two or more schools in the state by the middle of March.

The contract with Educational Research Services, Inc., to make the area survey was signed by Superintendent of Schools, in the name of the Virginia Commission.

The action, backed up by a substantial appropriation from the budget of the Virginia Commission, served as notice to the state that the region was interested in founding a technical college. Hamel said 14 areas in the state had shown some interest in gaining a technical training center.

He said that one half to three-quarters of a million dollars would be needed to start a school for technical college facilities. It was important that schools be started in population centers, he said.

Col. J. Fuller Gable stated that the area survey as "the greatest step forward that has happened in Northern Virginia. It seems to be a desire to move in the direction of establishing a technical college in order to meet the needs of the area."

The economic condition of Northern Virginia seems to be dependent largely on research industry rather than "manufacturers type" of industry. We need to develop technical skills for the research-oriented companies, he said.

THE TECHNICAL training school is envisioned as the first phase of a system that could eventually encompass a comprehensive junior college offering terminal and transfer credit programs. Mrs. Stone said. And more than one college in the area might be needed.

The Virginia Commission representatives included Charles B. Woodson, Jr., and Prince William Counties, and the cities of Alexandria, Fairfax, and Falls Church.
FAIRFAX — Dr. Barnard Joy, former Arlington School Board member, yesterday was elected permanent Chairman of the board of trustees of the Northern Virginia Technical College to open in September. The Prince William representative on the board, R. B. Hicks of Manassas, was asked to serve as vice-chairman for the coming year at a meeting held at W. T. Woodson High School.

In a series of actions defining more clearly the board's direction prior to the appointment of a president for the new college, the board voted approval "in principle" of a cost-sharing formula and outlined in more detail the limitations on site selection.

EARLIER in the evening the board held a dinner for guidance counselors from 29 high schools in the seven cooperating jurisdictions sponsoring the college. The board asked their views on curriculum and anticipated enrollment.

The counselors represented high schools from which, it is estimated, over 11,000 students will graduate this year. The majority of the counselors indicated that at least 5 per cent of each graduating class would be interested in attending the technical college this fall, providing the curriculum is announced before June 1.

The counselors were asked to review the records of two "approved" candidates forwarded by H&W's office.

The counselors said it would help them arouse student interest if they knew where the school would be located.

So far, according to reports from the site committee headed by R. B. Hicks, numerous potential sites for a permanent installation have been found, but very few sites for temporary quarters this fall. The committee asked for advice on financial limitations, space requirements and location preferences before it brings in a list of recommendations. The committee was asked to find quarters for 40 to 500 students with space of 2,000 to 4,000 square feet, and rental within $600.

The board approved in principle the formula for distribution of the cost among the participants as recommended by T. Marcus Gillespie of the finance committee.

Subject to modification, the formula calls for the assessment of each jurisdiction to be based on one-fourth the true tax evaluation, one-fourth on the estimated population figures, and one-half on the number of students enrolled from each area.

It was the committee's hope that this formula would equalize the costs among the four counties of Arlington, Loudoun, Fairfax and Prince William and cities of Alexandria, Fairfax and Falls Church.

Superintendent Robert Walker of the Fairfax City Schools was elected secretary to the board. Temporary offices are located in City Hall in Fairfax.

The board recommended the committee select a site within the population circle promising the most enrollment. This area was defined as western half of Arlington County overlapping into Fairfax County.

The offer of the use of the W. T. Woodson High School technical facilities after school hours on a temporary basis for the college in the only location publicly announced.

The Fairfax County School Board offered use of the school to the board on March 30.

Whether high school facilities would be acceptable to the State Board of Technical Education has not been determined.

Rhodes said the "image" of the technical college was an important consideration in getting the school off to a good start.

Since Northern Virginia was selected as a site for one of the first of the series of technical junior colleges to be established around the state, the seven participating cities and counties appointed nine members to serve on the permanent college board.

When the jurisdictions applied for the college, each pledged funds to cover one-third of the cost among the participants as recommended by the formula for distribution of the cost among the participants as recommended by T. Marcus Gillespie of the finance committee.

Among the major roles in the ceremony, will play major roles in the ceremony, as well as commissions and business groups which did preliminary work to establish the need and public support for the measure.
Fairfax Area Considered For First Tech College

By JACK CHAMBERLAIN Times Education Writer

RICHMOND—The new State Department of Technical Education, which wants about $17.5 million it wants to spend on technical colleges this year, and indications are the first tech college will be in Northern Virginia, probably in Fairfax County where land is available.

The deadline for local governments to apply for a tech college is today, and so far no applications have been received, but Dr. Dana B. Hamel, director of the department, says he is not worried.

Since the Board of Technical Education announced detailed plans and requirements for the network of tech colleges last month, interested localities have had little time to study the proposal, collect the data and submit applications, he said.

For more than a month the technical education department's office in Richmond has been flooded with telephone calls and letters asking for information, said Dr. Hamel, (and his secretary and her part-time help) have been shoveling out the information as fast as possible.

Thought there are no applications yet, there's no lack of interest, either. Dr. Hamel said he expects an avalanche of applications by midnight Wednesdays, he will have already gotten a few dozen letters of intent to apply after the deadline.

While he's not interviewing applicants for staff positions in the new department created by the General Assembly last year, Dr. Hamel is receiving comments from the sections of the state interested in a tech college or his office and meeting around the state.

But there are skeptics. Last week, Dr. Hamel spoke in Augusta County and assured education and government officials that tech colleges will not be "take overs" high school vocational education programs, such as those at the Valley Vocational-Technical School at Roanoke.

But he said recently the high school vocational-technical education programs, in many cases, if not for the ground for tech college students.

Instead of subordinating the role of high school vocational-technical education, technical colleges would increase its value and importance by giving accomplished graduates of the high school training an opportunity for college-level education.

There are hundreds of vocational-technical education programs in Virginia offered by the high schools, but Dr. Hamel pointed out that there are only three colleges in the state similar to the proposed technical college: Roanoke Technical Institute, operated by Virginia Tech in Blacksburg, and the technical department of Old Dominion College in Norfolk and Richmond Professional Institute.

The aim of the technical education board is to locate the first tech colleges where they are most needed and wanted. The Roanoke area, with Roanoke Technical Institute, has shown little interest in the applications received by the department this year.

This leaves Northern Virginia as the one of the first two or three tech colleges to be established this year will be in Fairfax County.

Dr. Hamel said such speculation is premature, but he would not rule out the possibility. He said the first tech college of the Department of Technical Education should be ready for students by next January at the technical colleges in Virginia, serving a 45-mile radius.

Tech Colleges Unrelated To High School Programs

The objectives of existing vocational-technical education programs in Virginia's high schools and the objectives of the proposed network of technical colleges—and the differences between them—are clearcut, Dr. Dana B. Hamel, director of the new State Department of Technical Education, believes.

A technical college, he says, is not for the high school dropout or for the youth with a high school diploma who can make the grade in college.

Technical-vocational programs usually are a part of the high school program where the student may take vocational courses toward his high school diploma, instead of academic studies, or where he attends academic classes for half a day and vocational classes for half the high school Distributive Education programs.

The technical colleges will be two-year colleges offering degrees certificates in technical fields. If Virginia institutes a comprehensive community college system, the tech colleges may become community colleges, according to the statement issued by the technical education board last month.

The college-level technical courses to be offered, the board says, "are designed primarily for the high school graduate to meet the increasing demand for semi-professional workers caused by the rapid development in modern industry, the engineering fields, in the medical and health fields, in agriculture, business, service and other fields."

Unlike those in the vocational and manpower training program, students at the tech colleges should "have a sound working knowledge of mathematics and the physical and biological sciences, and will need to be proficient in such subjects as report writing, human relations, contracts and specifications, psychology, economics and other areas."

The technical college idea, says Dr. Hamel, "will fill a gap between high school and the regular four-year college programs, but it will not replace vocational-technical education on the high school level for high school students, dropouts and adults seeking job training."
Williamstown, Aug. 28—Virginia’s new Board of Technical Education began mapping plans here for the state’s proposed system of post-high school technical institutions.

In its second meeting, the board met the newly appointed state director of technical education, Dr. Dana Hamel of Roanoke.

The board held its meeting concurrently with a legislative work conference of the Southern Regional Education Board at the Williamsburg Conference Center.

Hamel, director of the Roanoke Technical Institute, will begin his new job Tuesday in temporary office space in the State Capitol at Richmond.

Hamel said he will begin, as soon as possible, visiting other states to study what they have done in the field of technical schools and community colleges.

No timetable has been set up, but the technical education program definitely will be in operation during the present biennium, according to Eugene B. Sydnor Jr. of Richmond, board chairman.

The board was created by the General Assembly this year to supervise the establishment of a system of area technical schools in Virginia.
Consultant Assesses Changes

Technical Education Called 'Must'

BY DAVE BURTON

How important is technical education in this rapidly changing world?

"A state that doesn't have an adequate technical education program...is just going to lose out," says Dr. Lynn A. Emerson, a man considered a pioneer in the field.

Dr. Emerson said that states lacking such programs in the future will not be able to compete with other states or to keep what they have.

Dr. Emerson, consultant to the newly created State Board of Technical Education, was in Richmond this week to work with Dr. Dana Hamel, state director of technical education, and with the State Board of Technical Education.

In an interview, Dr. Emerson said the field with which he has been closely associated for years has undergone dramatic changes.

"When I started in it (technical education), a man could go into a job and expect it to be his career," Dr. Emerson said.

But today, he said, there are not many fields in which a person can expect one job to be his life-long livelihood.

Thus, Dr. Emerson has come to believe that one of the major tasks facing persons in technical education is not only to train people for one job but also to prepare them so that they will be ready for change.

Another difference in technical education mentioned by Dr. Emerson is the maturity level at which the subject is offered.

"The levels of programs by and large are rising, though," he said. "That means the programs of tomorrow will be partly on the high school level and partly on the post-high school level."

CONGRATULATIONS FOR VIRGINIA

Dr. Emerson, who has done consultant work in Virginia before, said he is "very interested" in what Virginia is doing in technical education.

"I think you're to be congratulated that the Governor and Legislature of Virginia are doing something in this field," Dr. Emerson said.

He went on to say that it is particularly encouraging to see this field moving ahead in technical-education programs.

"The Southeast is taking interest, though it isn't being taken in some of the states," Dr. Emerson said.

Dr. Emerson, described by his associates as a wizard in his field, said into this field.

His experience in technical education began in Minneapolis, where he started at the Institute in Minneapolis, then the country's first technical institute.

Dr. Emerson, professor of education at Cornell University, worked in technical education in the states, besides Virginia, in Arkansas, New York, North Carolina, and Rhode Island and Texas.

The educator, 74, also was State's Office of Education at his wife, Dr. Emily Emerson.
Virginia Outlines Plans For Technical Colleges

RICHMOND, Dec. 28 (AP) - The State Board of Technical Education announced today the details of a system of technical colleges to be set up in Virginia communities.

Chairman Eugene B. Sydnor Jr. said the Board will begin accepting applications immediately and said he hoped the first such colleges, authorized by the 1956 General Assembly, will be in operation before the end of 1958.

The Board said the State will pay nearly all of the costs of operating the colleges and that the localities will provide the land and buildings. State and local governing bodies will share on a 50-50 basis the cost of plant and equipment costs, including heat and power.

The Board said the colleges will offer courses designed to prepare individuals for entering into or progressing in employment in industrial and technical occupations in engineering and industrial technologies, medical and health technologies, agricultural, business, service technologies and other fields.

The Board estimated the curriculum will vary from short, special programs to train students in specific skills up to two-year associate degree programs in highly technical and scientific fields.

Hamel said ten areas have already expressed interest in securing technical colleges. He said the areas are Northern Virginia, Richmond-Petersburg-Elizabeth, Northern Virginia, Beekley-Hampton Roads, Prince William-Loudon counties, Lower Shenandoah (Charlottesville), South Boston-Harrison, South County, Franklin City, Cape Charles, and Charlottesville.

Dr. Hamel said he felt sure the same applications would be made before the February meeting.

The Board has an estimated $2,000,000 for distribution to communities for operation of the technical colleges during the 1958-59 biennium.

Under the policies announced yesterday, the board will pay nearly all the costs of operating the technical colleges but the localities must meet the cost of plant buildings.

The policies stated, will be exercised by the State Board of Technical Education in cooperation with nine-member local boards to be established for each college.

According to the Board, at least $2,000,000 for the 1956-57 biennium, the Board will pay the cost of student tuition.

As for finances, the Board said it will provide for full reimbursement of the professional and technical staffs of the courses and that it will purchase, install and maintain equipment for instruction and administrative use.

Central and industrial salaries and plant operational costs, including heat and power, will be paid for 50 per cent by the localities and 50 per cent by the Board.

Localities, the Board said, will be expected to provide funds necessary for the purchase of suitable land and for the erection, repair and replacement of buildings.

$7 Million Asked in Va. For Six Tech Colleges

RICHMOND, Aug. 18 (AP) - The State Board of Technical Education made a budget request today for $14,000,000 for the 1956-57 biennium.

Part of the funds would finance the establishment of six additional technical colleges, now being planned.

The total requested for $14,000,000 made by Dr. Dana B. Hamel included $9,010,000 for maintenance, operation and $5,000,000 for equipment.

Hamel said revenue from the technical colleges is expected to provide $1,152,000, leaving a net request of $12,852,000.

Nine technical colleges are geographically spread throughout the state and the wealth would be provided by Dr. Eugene B. Sydnor chairman of the Board.

Two other colleges already have been approved. They are the Chesterfield field and the Springfield Valley regional technical colleges.

The Board said the technical education program will provide technical training for high school graduates or persons at least 18 years of age who have completed at least two years of high school.

The board said the program will provide technical training for high school graduates or persons at least 18 years of age.
Technical College to
In Bailey’s Crossroads

Trustees to Lease
Old Melpar Plant

Final Contracts Let
For New Area College

Final contracts have been
let to prepare the new Northern
Virginia Technical College for
its first contingent of students
Sept. 20.

Robert L. McKee, college
president, hailed the coopera-
tion of the community, state
agencies and the new staff in
the establishment of the new
college.

"This process usually takes
about two years," said the
former Office of Education
program specialist who has set
up technical and community
colleges around the country as a
federal consultant and for the
State of Washington. "We’ve
had under 100 days."

Cities Great Need

McKee added that nowhere in
his travels had he found a
greater need for such a post-
high school facility in a major
population center.

Officials of the college, which
is expected to draw students
from a number of technical
colleges to be established in Virginia
under a state program designed
to train business and industry
workers for the Old Dominion, look for an
enrollment of around 500.

More than 450 applications
already have been received,
with the heaviest numbers
coming from Arlington and
Fairfax Counties among the
cooperating Northern Virginia
jurisdictions.

About 200 students have been
accepted. Other applicants are
cooperating with counselors about
their desired programs, courses of
study and other matters affecting final
decisions.

30 Percent Are Girls

Cecil Snyder, director of student
services, reported that
so far only 29 percent of
the applicants are girls.

The college was planned
for both men and women.

Unless more girls apply, some
intended courses may have to be
reconsidered.

Among courses of interest to
women are secretarial science,
office procedures and Art.

College-level courses in basic
subjects such as English,
economics, practical psychology,
mathematics and science will be
required in the program,
directed toward a degree in
association arts.

The facility is opening in a
converted electronics research
laboratory at 3443 South Carlyle
Spring Road, Bailey’s Crossroads.

The first of three en-
visioned campuses will open in
the next two years for some 1,500
students.

30,000 Enrollment

In five years, an enrollment
of more than 5,000 full-time
day students and 30,000 part-
time evening students is anticipated
at the three campuses.

The school will operate on a
four-quarter basis, with tuition
averaging $110 a month. The low
clusions will apply to full-time
students only.

The opportunity for students
to live at home, scholarships
and work-study programs
are being designed to keep economic hardships
at a minimum.

Tentative plans include offer-
ing courses in 56 subjects to
classroom graduates and
adults wishing to update work-
related skills.

A temporary personnel office
will be open six days a week at the
college building.

The college catalog will be ready late this
week.

Contracts Awarded

Recent contracts include one
with the General Maintenance
Contractors to provide for
a number of technical colleges
to be established in Virginia
under a state program designed
to train business and industry
workers for the Old Dominion.

The contracts are for
the college and a new type of occupational
program.

Looking over the college
in the building yesterday
was a member of the board.

New College Curriculum

The seven occupational fields
selected for course offerings were
based on the interest and
opportunity of the student.

The important message for the
students in the college announce-
ment is that for the first time
they will have the opportunity to
attend a low-intensity local insti-
tution to pursue an occupa-
tional field geared to college level.

UPON Completion of the two-
year program in any one of seven
occupational fields, an associate
of arts degree will be offered.

The programs will include work
in the humanities and general
education as well as technical
courses.

It will be possible for the
student to combine with his
occupational field the required
liberal studies courses for
four-year institution.

The number and courses to be of
the seven fields finite, McKee said.

By BETH SUNDBECK
FAIRFAX Staff Writer

FAIRFAX — By Friday of this
week 10,000 senior high school
students are expected
to receive official notice that
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College will be open for students
on Sept. 20.

Robert L. McKee, president of
the college, announced yesterday
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vocational programs to be offered
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being mailed to students.

Among those attending the
college are seniors in the college announce-
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OUTSTANDING courses in
the field of agriculture, business,
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McKee: To Pilot College

Walking into newly-created positions is not new to Robert Lyon McKee, the newly-appointed president of the Northern Virginia Technical College. He's been walking into experimental and fresh out-of-the-drawing-board jobs all his life.

The 41-year old McKee will assume his newest new position on May 17 as president of a two-year college still in the planning stages, but opening for the fall term.

The approach of the junior college is new, not only to the east, but to the whole country. "It will be the first institution in the country designed from its conception to full-scale as a college level occupational program," McKee said.

He distinguishes between the proposed "occupational program" and the strictly "vocational" or "technical" kinds of training built primarily around industrial needs for mechanics, craftsmen and technicians.

The emphasis in the Northern Virginia Technical College will be on "semi-professional training programs parallel to most of the professions we have today," McKee said. These include areas of public service and the "whole spectrum of the semi-professional occupation world."

McKee hopes this college one of three authorized by the state this year, can be an example for technical colleges around the country and for new ones yet to be created.

"Vocational education was described as the "stepchild" of education by a recent U. S. Office of Education publication."

For this new job cut to his measure McKee is leaving the Office of Education (he was the first man in the job) as special- ist in post-high school training. He left the state of Washington to come to the capital more than a year ago.

The Tall athletic-looking westerner has less than five months to make the college ready for students. Until Saturday there was no building, but the board of trustees brought the college closer to reality by approving the old Melpar plant for temporary quarters. It also approved major fields for occupational programs to be offered this fall.

McKee is stepping into the presi- dency supported by the board of trustees composed of representatives of the seven participating jurisdictions. This board controls the financial and political backing of the State of Virginia and "overwhelming public support of seven localities."

Just how McKee finally arrived in the category of an educator, he said he doesn't know, "except that along with my technical training, which came first, I was always

College to Locate Crossroads Plant

By REID SUNDQUIST
SUN Staff Writer

ARLINGTON — Plans approved by the Northern Virginia Technical College Board of Trustees Monday night will set in motion the face-lifting and conversion of the old Melpar Crossroads into a college.

Moving rapidly to have the Northern Virginia Technical College ready for opening on Sept. 23, the college board authorized the president and chairman to sign the lease for the building, to retain an architect firm, and to accept bids immediately.

The preliminary plans prepared by Victor B. Spector and William Peake, Falls Church architects, provide for classrooms, labs, offices, an auditorium and a library in the 40,000 square foot space. Half of the proposed facilities plans will be authorized before Sept. 20. Work on the remaining classrooms could be rushed to finish and if the enrollment exceeds the anticipated enrollment, Rueben Hicks, chairman of the building committee, said.

President Robert L. McKee and board chairman Barnard Joy are expected to sign the two-year lease shortly with the owner of the property, Irving Payne. The estimated cost of the building will be approximately $32,700, with rental of a little more than $1 a square foot.

McKee expressed his satisfaction with the flexibility of the architect's design and said it met with the projected needs for the school.

Completing the architect's plan for the entire building would accommodate 500 students. McKee said for the second year, the school could double its enrollment, as many as 1000 students.

Curriculum Announced

The seven occupational fields selected for course offerings were outlined on the basis of surveyings of area employment opportunities and student interest.

The important message for the three-month to two-year program is that for the first time, there will have the opportunity to find a low-cost vocational institution to pursue an occupation which McKee has geared to college level.

Upon completion of a two-year program in any one of seven fields, an associate degree will be offered.

The programs will include work in the humanities and general education as well as technical areas.

Upon completion of a two-year program in computer science and procedures, students may transfer to a four-year institution.

The number and extent of the courses to be offered in each of the seven fields is not yet definite, McKee said, but in general will include the following:

- Business science and procedures. For students looking toward employment with the emphasis in private business, this field will include business economics, commercial law, accounting, finance, principles of management.

- Secretarial science and procedures. A two-year program directed toward perfecting stenographic skills, the operation of office machines, record keeping.

- Data Processing Technology. Described by the brochure as the "fastest growing occupation today," the course will be offered by a large, fully-equipped data processing laboratory solving real business problems.

- Mechanical and craftsmen, aiming as one of the largest employment areas in industry, this field will include more advanced training, and offer machine tools, construction materials, mechanical skills, drafting, automotive mechanics, industrial welding and blueprint reading.
About 300 students have been accepted. Other applicants are being reviewed for the desired programs, courses of study and other admissions requirements.

In January, the plans for the new campus will be announced. The state will pay for equipment and its installation, and the state will provide maintenance and its operation.

The Northern Virginia Technical College already has 300 firm applications for fall enrollment, and President B. L. McKee told the Fairfax County Chamber of Commerce Board of Directors on Sept. 20 that the college will exceed the 500 available spaces by the Sept. 20 deadline.

When asked if the school would be able to take care of more than 500, he answered, "It would be extremely difficult to go over that number, and that enrolment will probably be a little lower."

"We will offer beginning courses in the winter session," he said, "so some of those who are unable to get in now can start then."

NnRILY ALL

"About 99 percent of those who are enrolled are this year's high school graduates," he said.

This fall, Mr. McKee pointed out, several other groups formed to change the lives of young men and women in the Northern Virginia area.

THE STATEOULD REQUIRE THAT LOCAL

"In order to win approval by the board, the proposal must show evidence of need, through a job survey, and an indication of interest on the part of industry and students.

Through the Northern Virginia Commission a New York firm has been engaged to make a survey of educational needs in the region. Late in December, Eric F. Robinson, consultant for the commission, said the work would be completed in three months. Some information and cost estimates will be available from the completed portion of his survey.

A SPECIAL delivery letter inviting the 60 state officials to Monday's meeting was signed by three people: Dean Trumbull, director of the Northern Virginia Center of the University of Virginia; Arlington Del. Kathryn Stone, and Walter Schilling, executive director of the Chamber. The letter said that other communities were interested in getting technical colleges and that "we believe this opportunity is too important to our young men and women, to our adult workers and to the economy of the area to let it slip through default.

The seven governmental jurisdictions represented in the Northern Virginia Commission have shared in the cost of the survey and would be contributing in full to a regional college. The even members are the cities of Falls Church, Alexandria and Fairfax and the counties of Loudoun, Arlington and Prince William.

By BETSY SUNQUIST

Arlington — Plans approved by the Northern Virginia Technical College board of Trustees Monday night will set in motion the face-lifting and conversion of the Madison plant in Bailey's Crossroads into a college. Moving rapidly to have the Technical College ready for opening on Sept. 20, the college board authorized the president and chairman to sign the legal agreements necessary to turn the building and surrounding land into the building and surrounding land into the new plant.

The preliminary plans approved by Victor R. Specter and William peak, Falls Church architects, provide for classrooms, labs, offices, an auditorium and a library in the 40,000-square-foot space. Half of the proposed facilities would be completed by September, and the remaining classrooms could be rushed to finish. The cost for the anticipated enrollment, Euben Hinds, chairman of the building committee, said, will be approximately $33,748, with room for an additional $1,000 more than a small square.

McKee expressed his satisfaction with the flexibility of the architect's design and its meeting with the projected needs for the school. The architect had completed the plan for the entire building and the board would go ahead with the construction of the building.

The seven occupational fields selected for course offerings were determined on the basis of survey findings of area employment opportunities and student interest.

The important message for the students was the commitment of the state to provide the first year's tuition and room and board costs for all students.

Interviews for 200 students had indicated an interest in the college by either writing or calling the temporary headquarters at the Fairfax City Hall.
The Northern Virginia Technical College is ready to begin its fall semester and President Robert L. McCollum told the Fairfax District Directors Tuesday that the number will exceed the 350 available spaces by the Sept. 20 deadline.

When asked if the school would be able to take care of more than the 500, he answered that it would be "impossible for the school to go over" that number, and that probably the enrollment will be a little smaller.

"We will offer beginning courses in the winter semester," he said, "so some of those who are unable to get in now can start then."

NEARLY ALL

"About 99 percent" of those who are enrolling are this year's high school graduates, he said.

This year, Mr. McCollum pointed out, several other groups of potential students have not been reached. These include high school graduates or dropouts who are just getting out of the service, those who wish to change their occupation, those who wish to get more training in their present field of work, and those who have been looking unsuccessfully for good jobs for some time.

During the presentation, Mr. McCollum gave a brief history of the school, and a report on what has been done to prepare for opening day next month.

The Northern Virginia Technical College is the third of three two-year institutions being founded by the state this year. It was authorized by the 1954 General Assembly.

THE SEVEN localities providing the funds for the college facility, both the temporary quarters and permanent campus, are the counties of Arlington, Fairfax, Loudoun and Prince William and the cities of Alexandria, Falls Church.

The two-year community college is for students who have passed the eleventh birthday or who have graduated from high school. Tuition will be $25 per month or $30 per semester. An additional $25 to $50 may be needed for books and materials, and the cost of transportation. The college is located near public transportation and has a large parking lot.

In addition, applications to serve on the teaching staff have been received ever since the board of trustees was set up. Applications are now being received by Robert Walker, secretary to the board, in Fairfax City Hall.
Technical College

By Applicant ‘Flooded’

June 4, 1945, by Peggy Richardson

FAIRFAX — Students anxious to enroll in the opening session of the Northern Virginia Technical College this fall have flooded Robert H. Walker’s office with requests for applications.

Walker, secretary to the College Board of Trustees, said yesterday that more than 200 students had written for application forms in the last two weeks.

“Most of the inquiries came from Arlington,” he said. “The number of interested Arlingtonians is more than fills Arlington’s quota of students for the new college scheduled to open September 10,” he said.

Walker said the number of students that could be accommodated this fall would have to be held to 200 because of space limitations at the temporary quarters.

Tentative enrollment quotas assigned to the seven jurisdictions participating in the college are Arlington, 125; Fairfax County, 150; Alexandria, 75; Falls Church, 30; Prince William County, 30; Fairfax City, 20, and Loudoun County, 20.

Walker said that he had received about 80 inquiries from Fairfax County students.

The inquiries indicate that interest is pretty evenly divided among the seven courses the college will be offering. He said that the two most popular would probably be the engineering electronics course and the data processing course.

PURPOSE AND OBJECTIVES OF THE COLLEGE

Purpose

The purpose of the college is to provide occupational education designed to train or retrain people in Northern Virginia for gainful employment in business and industry. The instructional methods used in this job-centered education will simulate and emphasize materials and machines used in the various occupations. In addition to the special occupation courses, the College will offer education courses to provide the student with basic math and scientific principles underlying their occupational objective. It also includes general education subjects to develop leadership and attitudes to aid the individual to be a better informed and more productive participant in our society.

ADMISSION REQUIREMENTS

General Requirements

All candidates for the Associate in Applied Science degree must have a high school diploma or its equivalent. Placement examinations will be required to determine their beginning level. To assure an opportunity for reasonable success, counseling will be provided to determine individual programs.

A pre-technical program is available for those students who lack essential preparation or who desire an extensive review to become adequately prepared to enter one of the regular technical programs leading to the Associate in Applied Science degree.

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The purpose of the college is to provide occupational education designed to train or retrain people in Northern Virginia for gainful employment in business and industry. The instructional methods used in this job-centered education will simulate and emphasize materials and machines used in the various occupations. In addition to the special occupation courses, the College will offer education courses to provide the student with basic math and scientific principles underlying their occupational objective. It also includes general education subjects to develop leadership and attitudes to aid the individual to be a better informed and more productive participant in our society.

ADMISSION REQUIREMENTS

General Requirements

All candidates for the Associate in Applied Science degree must have a high school diploma or its equivalent. Placement examinations will be required to determine their beginning level. To assure an opportunity for reasonable success, counseling will be provided to determine individual programs.

A pre-technical program is available for those students who lack essential preparation or who desire an extensive review to become adequately prepared to enter one of the regular technical programs leading to the Associate in Applied Science degree.
Find Chance Not Offered Elsewhere

By BETT SUNDQUIST
SUN Staff Writer

FAIRFAX CITY — The Northern Virginia Technical College has come along just at the right time for three June graduates, the first students to be enrolled at the school.

For them, the vocational college offers the kind of training they are unable to get elsewhere, as well as the opportunity to live at home.

THE EEO, twin brothers from Annandale and an Arlington girl, will graduate this week from high school. They have become the first students to be accepted to the vocational school that opens Sept. 19.

The announcement of their acceptance was made this week by Col. C. W. Schuler (ret.), consultant on admissions.

Enrollee Susan Bray, a Wakefield High School graduate, beamed happily. "It looks like my lucky break," she said.
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A pre-technical program is available for those students who lack essential preparation or who desire an extensive review to become adequately prepared to enter one of the regular technical programs leading to the Associate in Applied Science degree.

Any person who can profit from the instruction, is 18 years of age or a high school graduate, may enroll in a course.

Tuition:

Northern Virginia Technical College has been planned as a low tuition, commuter college in order to increase opportunities for many students. Tuition fees are established by the State Board of Technical Education.

Full Time:

Northern Virginia Resident ....$ 15.00 per month
45.00 per quarter
Other Virginia Resident .......... 25.00 per month
75.00 per quarter
Out of State Resident ............. 50.00 per month
150.00 per quarter

Part Time:

Northern Virginia Resident .... $ 3.00 per credit hr.
Other Virginia Resident .......... 5.00 per credit hr.
Out of State ...................... 10.00 per credit hr.

Books and Materials — Approximately $150.00 per year.
Northern Virginia Technical College has come along just at the right time for three June graduates, the first students to be enrolled at the school. For them, the vocational college offers the kind of training they are unable to get elsewhere, as well as the opportunity to live at home. The Trio, twin brothers from Annandale and an Arlington girl, will graduate this week at Bailey’s Crossroads High School. They have become the first students to be accepted to the vocational school that opens Sept. 20.

The announcement of their acceptance was made this week by Col. C. W. Schuler (ret.), consultant on admissions.

Enrollee Susan Bray, a Wakefield High School graduate, beamed happily. "It looks like my lucky break," she said.

The Trio: from left, Charles and William Shiffman and Barbara Warner.

Northern Virginia Technical College has received an excess of traffic citations.

COUNSELING BEGINS AT NEW TECHNICAL COLLEGE—During their interviews at the new institution for Northern Virginia, at Bailey’s Cross Roads, students Zane Murphy Jr., left, of 4111 N. Henderson St., and Edward Warner of 1123 N. Woodrow St., center, study a map of the area to find routes from their homes to the college with the aid of Keith Whiter, a counselor; and Mrs. Jane Lehmann of the college staff. All students will be commuting daily from their homes when the institution opens Sept. 20. All students will be commuting daily from their homes when the institution opens Sept. 20.
SCHOLARSHIP AWARDS were presented to George Mason College of Fairfax County and the Northern Virginia Technical College of Arlington by Mrs. Routh Robbins, president of Routh Robbins, Real Estate Corp. of Alexandria. These scholarships are awarded to worthy students already registered in these schools, who have a desire to continue their education but need financial assistance. Shown during the formal presentation ceremonies are (l. to r.) Dr. John C. Albohm, Alexandria Superintendents of Schools; Dean Gerald O. Comer, N. Va. Technical College; and Donald E. McNary Vice-president of the Corporation.

Recognizing that pupils attending college often have financial problems comparable to those of pre-admission students, Northern Virginia's Routh Robbins Real Estate Corp. established two scholarship funds this week for Northern Virginia colleges to provide assistance to such students. "We wanted to help out in an area where a real need existed, and we felt we wanted to do something different from the traditional type of award," Mrs. Routh Robbins, president of the corporation, remarked during formal presentation of the checks this week.

Recipients of the two $1,000 awards were George Mason College of Fairfax County and Northern Virginia Technical College of Arlington. Both institutes are newly established within the past two years. The scholarship funds will be administered by the colleges and awarded for the express purpose of retaining students meeting college criteria of grades but having financial difficulties which might prevent them from continuing their studies.

Dr. John C. Albohm, Superintendent of Schools of Alexandria, who made the arrangements for the scholarship awards, said growth thereafter will be "phenomenal."

Eric Rhodes, a consultant to the State Board, said that the college's permanent buildings should accommodate an initial enrollment of 1000 and be capable of expansion to accommodate 2500. By 1980, he said, a second technical college might be needed in Northern Virginia.

He added that he believes must contain and must be located on convenient sites. Rapid growth was predicted yesterday for the new Northern Virginia Technical College which may open as early as next September with an enrollment of 500 students.

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Fast Growth Predicted For New Tech College

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Mr. and Mrs. R. W. Barnett, chairman and secretary of the Economic Opportunity Program in Arlington County, said that the college's freshman class of 829 students is the largest in the state of Virginia, and second in total enrollment.

The college, which is one of the fastest growing colleges in the United States, also holds a record for having been established in the shortest period of time of any college in Virginia or the metropolitan area. The development of eight instruc-

Regional Technical College Sets Three Major Records; Looking For Permanent Site

Robert L. McKee, President of the Northern Virginia Technical College, reported to the Board of Trustees this week that the Admissions Office had registered 829 students, making this the largest freshman class of any of the 16 two-year colleges in the state of Virginia, and second in total enrollment.

Classes began for 524 full-time and 22 part-time day students, and for 283 evening students at 4 p.m., last Monday. This is one of the largest enrollments in technical and semi-professional courses in any college in the metropolitan area.

The trustees voted to ask the seven participating counties and cities for $100,000 to operate the school during fiscal year beginning July 1.

Improvements Being Made

President McKee reported that construction of a circular covered entrance-way is nearing completion, and that capacity enrollment has made necessary the remodelling of an additional 18,000 square feet of space, adjoining the present college facilities, to provide five more classrooms, a faculty lounge, faculty offices, book store, and storage area. A hallway has been extended and a door cut through to provide access to this new area.

The Northern Virginia Technical College serves a population of approximately 700,000 in an area which consists of the Counties of Arlington, Fairfax, Loudoun and Prince William, and the Cities of Alexandria, Fairfax and Falls Church. The college is situated at 3463 S. Carlyn Spring Rd., Bailey's Crossroads near the junction of Fairfax County, Arlington County, and the City of Alexandria, and is

Has Registered 829 Students

October 14, 1966

Virginia SUN
The Northern Virginia Technical College, the first institution of its kind in the state, has opened its doors in a remodeled building that formerly housed Merjaer Inc., at Bailey's Crossroads. By 1976, the college expects to accommodate 2,500 students.

Officials of the Northern Virginia Technical College, which is being established in the area to meet the needs of the region's growing population, said that full-time and part-time enrollment at the college was expected to reach 1,000 by the end of the first semester, and that total enrollment for the first year could reach 2,500.

The college, which was formally opened on October 1, was established by the Northern Virginia Regional Commission, which is a joint planning body of the six-county region. The college will offer courses in a variety of fields, including business, technology, and engineering.

The college's first president, Dr. Barnard Joy, said that the college was designed to meet the needs of the region's growing population, and that it would provide a wide range of courses to meet the needs of students of all ages and backgrounds.

The college's first classes were held in a building that was formerly used as a warehouse, and the college has plans to expand its facilities in the future.

The college's first classes were attended by a group of students who had been waiting for the college to open, and who were eager to get started on their education.

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Tech College Accepts
326 of 400 Applicants

AIRFAIX - The new Northern Virginia Technical College at Bailey's Crossroads recently opened its doors to students. The school, which opened in late August, has an initial enrollment of 524 full-time and 253 evening students.

The college, located at Bailey's Crossroads, serves a population of approximately 700,000 in an area which consists of the Counties of Arlington, Fairfax, Loudoun and Prince William, and the Cities of Alexandria, Fairfax and Falls Church. The college is situated at 3443 S. Carlyn Spring Rd., Bailey's Crossroads near the junction of Fairfax County, Arlington County, and the City of Alexandria, and is accessible from Rt. 7 and Columbia Pike.

Classes began for 524 full-time and 222 part-time day students, Sept. 27, and for 253 evening students at 4 p.m., last Monday. This is one of the largest enrollments in technical and semi-professional courses in any college in the metropolitan area.

The Northern Virginia Technical College, which is one of the fastest growing colleges in the United States, also holds a record for having established the shortest period of time of any college in Virginia or the metropolitan area.

The development of eight instructional programs, recruiting of faculty and staff, leasing and remodeling the central portion of the Payne Building at Bailey's Crossroads (which originally was occupied by Melpar), equipping labs and classrooms, and registering and scheduling 326 students, was accomplished within 100 days.

The trustees resolved to open the school next September if temporary quarters can be located and a college president hired in the next few weeks.

Classes are scheduled for 524 full-time and 222 part-time day students, Sept. 27, and for 253 evening students at 4 p.m., last Monday. This is one of the largest enrollments in technical and semi-professional courses in any college in the metropolitan area.

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Studies are now in progress to locate a site and develop preliminary plans for the first permanent buildings near the "center of population" of Northern Virginia.
Counseling Service

A counseling service is provided for a prospective student for the second quarter which begins Jan. 3 at the technical school. Miss Dorothy Caraker, David Strickler, looks over the courses offered as he considers the possibilities of the technical programs in data processing, engineering design, and electronics. Vocational and semi-professional study, as well as a pre-tech program are offered.

Official Meet Challenge Of 'In

By WARREN WILLIAMS
Staff Writer

There's a story in Northern Virginia that's worth the telling.

At least the United States Office of Education seems to think so.

And the staff of the Northern Virginia Technical College is willing to "tell all" for the sum of $7,400.

That's the amount of a contract which has already received preliminary approval by the federal office for describing the 100-day crash program which set 829 students on a part-time or two-year collision course with technical know-how.

Even the institution's strongest backers sometimes thought it couldn't be done in so short a time—quarters selected and remodeled, staff assembled during summer months, eight programs of instruction organized, students registered.

Yet the college opened on schedule Sept. 27 for day classes, night courses a week later, and Gov. Albertis S. Harrison Jr. will speak at dedication ceremonies Nov. 16 for the school whose president was named last May.

College officials believe the funds will be granted in December for the fact-finding study, recommendations—and most of all—pitfalls to be avoided.

One of the key suggestions, according to members at the Bailey's Cross Roads site, was to print a catalogue early in the game. It could save a lot of telephone and interview time.

Another recommendation probably will be to set up at the outset advisory committees of industry and business leaders whose job needs and potential opportunities for graduates are of utmost importance to the service which the school is to perform, President Robert McKee of Annandale.

The college, first of many authorized under a general Assembly law in 1964 and backed by state money to build a permanent college within two years, is preparing to add a thousand students a year from area jurisdictions which pledged student money to build a permanent college within two years to come, the college began pre-reg counseling Aug. 1 under two full-time guidance counselors and other staff assistance.

Appointments at the rate of nine-a-day.

COMPUTERS' CARS fill the parking lot in front of the college-converted warehouse at 940 S. Carlyn Spring Road where the Northern Virginia Technical College is sporting a new entryway—an octagonal kiosk which calls attention to the temporary headquarters of the state's first 2-year technical school under the administration of the State Board of Technical Education in Richmond. The institution's seven jurisdictions are represented by—Joy, chairman, Armand Prince William County; W. Futch, Robert W. Prince; J. Marcus Gillespie, Loudoun County; and others.

COMMUNICATIONS: A Boaid of Trustees appointed in November named McKee to the presidency in May, a tornado of activity which followed his appointment.

Whirlwind action followed, including a weekend when the skeleton staff worked around the clock, phones disconnected, to print the essential catalogue.

Largest already of the state's 2-year colleges preparing to add a thousand students a year to come, the college began pre-reg counseling Aug. 1 under two full-time guidance counselors and other staff assistance.
Technical College Makes History

DATA PROCESSING STUDENTS try their skill at the key punch machines in the department headed by Ben D. Candless Jr. of 3110 Mount Vernon Ave. The four students, foreground to back of room are Ronald Buckner of Alexandria; Bob Chapin, 6418 Berkshire Drive; Ken Leber, 3224 Wynford Drive, Fairfax; and Carol Denny, 8653 Victoria Road, Springfield.

Illegible Of 'Instant' Establishment

Ink in front of the college Spring Road where it is sporting a special attention to the first 2-year technical college's seven jurisdictions are represented on the board of trustees by Barnard Joy, chairman, Arlington; Rueben B. Hicks, vice chairman, Prince William County, Falls Church; Howard W. Putch, Robert W. Grow, William P. Ladson, Fairfax County; J. Marcus Gillespie, Alexandria; Charles S. Monroe, Loudoun County: and Merton S. Parsons, Fairfax City.

men rush to complete an additional 10,000 square feet of space to house five classrooms, faculty lounge and offices, book and storage areas.

McKee credits the "magic system" of the computerized Critical Path Method of planning as a boon to the speed of putting the school into operation.

The wealth of qualified applicants made the president's job—not the expected one of scouring the countryside for staff—but that of trying to screen them in the limited time.

Staff members were hired on a 12-month basis, he says, the plan being to keep a third teaching in summer school, a third working on curriculum development and the final third going back to higher schools of learning themselves to keep up with the rapid-fire technological changes.

Instructors now average 43 years of age, two degrees beyond high school, six years of formal education, five of teaching experience and 12 in industry.

New chapters get added to the technical college story each day—scholarships donated, the president's name and picture in the recent edition of the Junior College Journal and political candidates singing a song of its potential for encouraging new industry to come to the state.
DRAFTING STUDY, a one-year non-degree vocational program, is intended to train student John Sanders, right, of 306 N. Alfred St., for employment as a draftsman with engineers, private industry or civil service. At left is James Fowler, resident of 429 Summers Drive, instructor. Geometry, algebra and elementary trigonometry are included in the three-quarters' study in addition to social science, psychology of human relations and a "methods of manufacturing" engineering design study. Semi-professional programs in business science and procedures, police science and procedures, health sciences with work-study and secretarial sciences are also offered at the college.

FURRING STRIPS are available by part-time employees of the college who are shown as they strip down the packing crates which brought new drafting tables to the college.

BOOK STORE PURCHASES are made by Alexander Charles Sias, center, of 514 S. Pitt St., and Wilson 315 Buchanan St., from store attendants Robert A. Arlington. The college is located between Rte. 7 and Pike in Fairfax County at Bailey's Cross Roads.
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