OUR YEARS WERE FULL .......... Pg. 8

THE ACADEMICS WERE
EXTENSIVE ....................... Pg. 140

YET WE WERE ORGANIZED .... Pg. 160

OUR ATHLETIC ACHIEVEMENTS
WERE MANY ...................... Pg. 123

AND YET WE FOUND TIME
TO RELAX ....................... Pg. 150
During the night of January 19, 1961 it was snowing heavily. By daybreak sufficient snow had piled up to close NCE, to our delight. This was especially fortunate, for this was Inauguration Day and now we could witness the historic event on television. That day, we saw John F. Kennedy become our 35th President.

November 25, 1963 was a crisp autumn day, with not a cloud in the sky. Yet again NCE was closed, while its flag flew at halfmast. That day we witnessed the funeral of John F. Kennedy.

None of us will ever forget the shock, the disbelief of that first bulletin on Friday, November 22, when we were told that our President was dead. None of us will ever forget those sad four days, when all thoughts, save one, were forgotten.

Nor will we forget Kennedy, the man. The warm smile, the carefree hair, the familiar accent that prompted so many jokes. His strength and courage in days of crisis. His vision and dedication for a better world.

His memory will be with us through our lives. Let his inspiration guide us in our ways.
To Dr. Herman Estrin, our teacher and friend, who helped us through days of hardship and joy, advised us in our organization, guided us in the field of humanities, and inspired us with his unbounded energies do we dedicate this book.

Dr. Hermann Estrin instructs his students in the art of writing.
The Towne on the Passaic

In his quest for a western sea passage to India, Columbus stumbled across a vast continent that presented a formidable barrier between Europe and Asia. Yet men continued to believe that a western sea passage existed to the riches of Asia.

Searching for a northwest passage, Henry Hudson in September, 1609 entered the quiet waters of the Verrazano Sea with his ship the "Half Moon". The waters split in two and Hudson sent a party to explore the western branch.

The men, under the command of a John Coleman, came upon a quiet river, and land as "pleasant with Grasse and Flowers and Goody Trees as any they had seen, and very sweet Smells came from them." But the land was also claimed by Indians, who greeted the intruders with a rain of arrows. Coleman was mortally wounded and left upon the shore, while the rest retreated to their ship.

They were the first white men to gaze upon the land where now stands the industrial metropolis of Newark. But they came not to settle, and the land remained with the Indians for another half century.

The colony of New Jersey was established by England in 1664, and Philip Cartaret established his office at Elizabethtowne in August, 1665. Shortly thereafter he was approached by a delegation of Puritans from Milford, Connecticut who wished to settle in the new colony in search of freedom. Headed the group were Robert Treat and John Gregory.

Cartaret agreed to let them settle and gave them permission to select a site. After exploring numerous localities, including the Burlington and Philadelphia areas, the band found the lands north of Elizabethtowne to their liking. They sealed an agreement with Cartaret and returned to Milford to bring the rest of the colonists.

Thus in May, 1666, thirty families came up the Passaic river to their new home, with a combined wealth of about $64,000, which in those days was no small sum. But the Indians still inhabited the land and again did not greet the intruders with open arms. Treat noted that:

"No sooner was the company present got on the Place and landed some of their goods, than I with some others was by some of the Hackensack Indians warned off the ground and (they) seemed troubled and very angry that we landed any of our goods there tho' first we told them we had the governor's orders; but they replied that the land was theirs, and it was unpurchased, and thereafter we put our goods on board and acquainted the governor with the matter."

Treat had thought that the land had already been bought from the Indians by the governor and had a certificate that deeded the land to him. But apparently there had been a mixup and Cartaret refused to pay the Indians.

Treat went back to the Indians to negotiate a purchase. The agreement he reached with them gave the colonists an area of land bordered by the bay on the east, the Passaic on the north as far as Yantakah (Nutley), the Watchungs on the west and a river in the meadowlands to the south. For this the Indians received: 50 double hands of gunpowder, 100 bars of lead, 20 axes, 20 coats, 10 guns, 20 pistols, 10 kettles, 10 swords, 4 blankets, 4 barrels of beer, 10 pair of breeches, 50 knives, 20 hoes, 850 fathom wampum, 20 anker of liquor, and 10 trooper coats, all worth about $700. The Indians left peaceably and have not bothered the settlers since.

Each family was given five acres of land, as all shared in the cost of the purchase. Two streets, intersecting at right angles were laid at the center of the new settlement—Broad Street, which was an Indian trail, and Market Street, upon which a brook made its way from a hill to the meadows. Some 250 years later, the "four corners" were proclaimed the busiest in the world.

The next problem was to find a name for the settlement. At first the inhabitants referred to it as Pasayak Towne, and later called it New Milford, but finally they settled on "New Worke," which later became Newark. The name is derived from the English town of Newark-on-Trent, from which the settlement's first minister, the Rev. Abraham Pierson, had come.

The first church building was erected on Broad Street in 1669, serving both as the place of worship and the town's meeting center. Indeed, the church played the central role in the community, and, upon Pierson's demands, only members of the congregation were allowed to vote, hold office, or attain chief military positions. Pierson served as pastor for 23 years, but was dismissed in 1692 because of differences of views about church government, for the congregation could not agree with his strict policies. Pierson went on to become the first president of Yale in 1701.

The strict Presbyterian rules came to be questioned by a number of members, and matters came to a head in 1734, when Col. Josiah Ogden worked on Sunday in an attempt to save his crops from destruction. The church accused him of violating the sanctity of the Lord's day. The differences were too deep for conciliation, and Col. Ogden with a good number of followers established an episcopal congregation. The new congregation erected its first church building in 1743, and this structure was destroyed by a fire in the 1790's, save for a portion of its tower. A new church, the Trinity Cathedral, was erected on the same site, incorporating the original tower in 1810, and still stands today in Military Park. Newark's oldest remaining church, however, is "Old First" on Broad Street, built by the Presbyterian congregation in 1791.

During the colonial years, Newark continued to be primarily an agricultural community and its numbers increased at a steady rate. Its citizens generally were a prosperous and contented lot. Thus, when the Revolution came, a good number of them saw no reason for a break with England and remained loyal to the King. Yet others fervently supported the revolution, and consequently the 1,000 inhabitants found themselves split, with neighbors, friends, and even families on opposing sides.

As a result of the lack of unity, the welcome that was bestowed to Gen. Washington and his tired troops retreating from the forces of Cornwallis on Nov. 22, 1776 was not overwhelming. Whether the town's atmosphere was a contributing factor it cannot be said, but Thomas Paine began writing "The Crisis" in a Newark park, complaining about the "summer soldiers and sunshine patriots" that had deserted the American cause.

Washington and his troops remained in Newark some eight days. They left on Dec. 1st from the south at the same time that Cornwallis' advance troops were entering the town from the north. Cornwallis' slow pursuit gave Washington sufficient time to regroup his battered forces.
Consequently, he was able to launch his successful attack at Trenton on Christmas Eve.

Newark suffered heavily during the war. One passerby wrote that the “ravages committed by the British tyrant’s troops in these parts of the country are beyond description. . . . When I returned to this town, it looked more like a source of rain than a pleasant, well cultivated village.” Numerous raids, not only by British soldiers from New York, but also by robbers masquerading as soldiers, plagued the town. Today in Washington Park stands a marker where once the Newark Academy stood. The building was wantonly destroyed by the British on Jan. 25, 1780.

Yet when peace came it did not take long for Newark to recover. Its population increased rapidly and manufacturing trades were born and flourished. Shoemaking had been carried on in Newark since 1676 as a winter occupation, but the industry got into full swing in 1785 when Moses N. Combs launched his shoe-manufacturing enterprise. Within twenty years the town was known throughout the land for its fine quality of shoes, with one third of the population employed in this industry. Other industries during this period include carriage-making, coach lace, cider, and chairmaking.

Newark during this period was a great produce market for New York, whose population in 1800 numbered 70,000. Every market day dealers from New York came in large numbers to buy the butter, poultry and grain yields that the farmers from the surrounding area had brought in. But this trade was lost largely to Jersey City by 1811, and manufacture was increased to fill the void.

Newark drew craftsmen and inventors from other parts of the nation. Epharias Hensdale came in 1801 to launch Newark’s jewelry industry, establishing here the first factory in America devoted exclusively to the manufacture of jewelry. Over the years this industry has flourished, and today Newark’s jewelry ranks among the best in the world. Especially when it comes to gold products, the Newark label is taken as a mark of quality.

Seth Boyden, the “uncommercial inventor” came to Newark in 1815. In 1818 he invented the process for making patent leather, which added a great impetus to Newark’s already booming leather industry. Soon thereafter he discovered the process of making malleable iron and set up the first malleable iron industry in America. Later he turned to manufacturing locomotives and steam engines. From all this he did not seek to make profit, but in 1855 retired to live as a farmer, and even in this field produced a special breed of large strawberries.

One of the greatest agricultural developments—chemical fertilizer—was first developed by a Newark farmer. In 1847 James Jay Mapes produced a mixture that included superphosphate of lime, sulphate of ammonia, and Peruvian guano, and agriculture took a giant step forward.

Newark’s industrial development was further spurred by improvements in transportation facilities. The Morris Canal, opened in 1832, provided access to New Jersey’s hinterlands with their iron mines. In 1834, a railroad was opened between Newark and Jersey City, and in the following years other lines were added.

In that same year, Newark was made a port of entry, complete with its customs collector. At that time, 18 vessels traded between Newark and other ports, with whaling being one of the shipping industries.

In 1835, imports to Newark were $2.5 million, while exports were $8 million—quite a favorable balance of trade. Newark’s population influx during this period also was quite favorable, as the population doubled between 1830 and 1835, reaching nearly 20,000.

Newark no longer was a village—it was New Jersey’s leading manufacturing center. Therefore, it was decided to incorporate Newark as a city, and on February 29, 1836, the proposal was passed by a vote of 1870 to 325. At this time the town could boast 19 churches, 26 lawyers, 23 physicians, 4 newspapers, 18 inns and taverns, 3 drug stores, 3 banks and 3 insurance companies.

Newark’s financial enterprise began in 1804 with the formation of the Newark Banking and Insurance Company, which now is the National Newark & Essex Bank. The State Bank of Newark was established in 1812. Mutual Benefit and Life Insurance Company set out in 1845 without even having the $300 to pay for its charter, and the Prudential Insurance Company in 1875. Today Newark is a leading financial center, with the imposing offices of its financial institutions dominating Newark skyline.

Newark’s great population growth during the 1830’s was greatly the result of the influx of German and Irish immigrants. There was a sufficient number of Irishmen present to warrant a St. Patrick’s Day parade in 1834, which has become an annual Newark custom. The Irish also brought Catholicism to Newark and by 1848 had completed St. Patrick’s Cathedral on Central Ave. and Washington Street.

Borglum’s statue of Abraham Lincoln on the steps of the Essex County Court House, one of the most renowned statues of the President. Lincoln visited Newark as president-elect in 1861.
The Germans brought along their taste for beer and gave impetus to Newark's breweries. But it was a Scotsman, Peter Ballantine, who filled their demand. A brewery had been put into operation on High Street in 1803, to which Ballantine, an Albany merchant, sold malt. In 1837, the brewery, Newark, and the country experienced a heavy depression. The company was left in poor financial condition, but Ballantine nevertheless decided to take it over. Soon he was turning out his own brand of heavy, full-bodied beer which was a favorite with the Germans. Business picked up nicely, and in 1847 he expanded operations with a large plant on the Passaic River. Yet there was also demand for a lighter beer, which brought other enterprises into Newark, such as the Schalk Brothers, Hensler and Krueger, all of whom were Germans. As a matter of fact, the beer industry was so heavily staffed with Germans that the Newark Brewer's Association kept their minutes in German. Yet P. Ballantine and Sons continued to dominate the industry. Today, Ballantine operates the largest single brewery operation in the world and Newark is one of America's three leading brewing centers.

As the town's technology progressed, its citizens realized the need for advanced industrial education. Consequently the Newark Industrial Institute was established in 1850 to provide technical training for apprentices. Classes were held in the old Newark Academy on High and William Streets and in "Old First" Presbyterian Church on Broad Street. But the Civil War forced the young Institute to close its doors, as young men enlisted in the Union cause. It was not until 1881 that the project was revived with the founding of the Newark Technical School, which later developed into the Newark College of Engineering.

As a result of the war, Newark lost a prospering trade with the Southern states, who had provided a vast market for Newark's leather industry and other products. Newark was even labeled the "workshop of the South." But the Union army's demands more than amply made up for the loss, and the town's industry continued to thrive.

Fervor for the Union cause was high. When President-elect Lincoln passed through Newark on February 21, 1861 a crowd of 25,000 turned out to greet him, despite the deep snow that had blanketed the town during the night. And when Lincoln was assassinated in April 1965, Newark went into mourning. Life in the city came to a halt while a huge throng gathered in Military Park for funeral orations.

Newark's industry and population continued their growth after the war. By 1870 the population, boosted by an influx of Poles and Italians, numbered 105,000.

One of the newcomers in the 1870's was John Wesley Hyatt, who in 1873 brought with him his latest invention—celluloid, which he discovered in the search for a synthetic material to make billiard balls to meet the growing demand for the game.

He soon found that the material had other applications, and a new industry was created in Newark. In 1878, Hyatt developed the first injection molding machine, which he put to use in producing such articles as buckles, buttons, and handles.

Another enterprising young man, Edward Weston, came to Newark in 1875. Weston, who had come to this country from England in 1870 at the age of 20, had already revolutionized the electroplating industry, and was now bent on developing dynamos to replace the battery as the current generator in the electroplating process. He soon made a name for himself as an expert in this field as well, bringing about such improvements as laminated field iron and the field rheostat. Then he turned to pioneering in the lighting industry, first working on the development of arc lighting.

In 1878, Weston introduced arc lighting to Newark by installing free of charge an arc light at the corner of Washington and Market Streets, which naturally attracted great crowds. Newark went on to become the first city in America to contract for electrical street lighting. After producing numerous improvements on arc-lighting, such as automatic feed and copper-coated arcs, Weston turned his attention to incandescent lighting. Edison beat him to the perfection of a workable lamp, and put everyone else out of the business by patenting a lamp that consisted of an exhausted bulb into which wires were lead. However, Weston made one very important contribution to the field with his development of "Tamidine"—a fine, smooth-burning carbon material used for bulb filaments until replaced by tungsten.

Weston then went on to pioneer the electrical measurement industry. Vital to the perfection of accurate measurement instruments was the development of a permanent magnet, whose strength remained constant. But no such magnets were to be found until Weston conceived the idea of artificial "aging," which brought the magnet to a steady state in a short period. Weston also developed a zero-temperature coefficient alloy shunt material, equal to current-measuring instruments. The first portable voltmeter was completed by Weston's High Street laboratory in December, 1886. In March, 1888, the Weston Electrical Instrument Company was formed, and was soon swamped with orders for its products. The Weston Company has been a leader in the measuring industry ever since.

Another great Newark inventor was a man of the clergy. Working in the historical House of Prayer rectory, built in 1706, the Rev. Hannibal Goodwin perfected flexible film in 1887, thus making possible photographic film and the motion picture industry.

Newark's first intersection, the famous "four corners" of Broad and Market Streets that at one time was the busiest intersection in the world. Shown are scenes of the southeast corner in the 1850's, 1890's and 1950's.

From the original in the Newark Historical Society

Newark Association of Commerce and Industry
Newark's growth continued to soar, but a number of citizens now became concerned with the city's aesthetic aspects. In 1877, a Newarker wrote that "the city is yet unable to attract the eye of the visitor with a single imposing public building. It has no art gallery, no public statues, no monuments or fountains." Steps were taken to correct the situation, and within the next few decades a number of imposing public buildings arose, including the public library, which became one of the best in the nation, the museum, the county court house, city hall, federal building, and Sacred Heart Cathedral, among others.

Newark's construction in the business district saw an upward trend during the twenties, climaxed by the 34 story Raymond Commerce Building in 1930 and the 35 story National Newark and Essex Building in 1931.

Yet as these buildings rose, the country's economy crashed and Newark's boom came to a halt. Over 600 factories were forced to shut down, and the city did not begin to recover until the second world war. Newark has not ever fully recovered, and today business is actually declining. For after the war, Newark fell victim to the problems that was besetting many of America's cities; rising costs, rising traffic congestion, and the consequent movement of industry and the middle classes to the suburbs in search of more room and lower taxes. Also adding pressure were increased urban deterioration, growing juvenile delinquency, and race problems. This is compounded with a lack of revenue, for only one third of the city's land is taxable, resulting in a staggering tax rate.

But Newark has not lost hope. As a matter of fact it looks to the future with confidence, for already well under way is the plan for a "New Newark."

The project first took root when Mutual Benefit Life Insurance Company decided to remain in Newark instead of moving and erected its imposing glass and concrete structure in the Washington Park district. Other companies joined the trend, such as the development of the Prudential Plaza, and now new projects are in process or in the planning stages all over the city.

One of the most important is the development of the meadow lands. Newark hopes to drain this land, now unoccupied, and turn it into an industrial park.

Newark is in the heart of the metropolitan area, close to the nation's major industrial concentration. It is served by four railways, contains the world's largest trucking terminal and the largest bus transportation system. And it has Newark Airport and Port Newark. Newark Airport, one of the earliest airports in the world, and once the world's busiest airport, now is being greatly expanded by the Port of New York Authority. Able to handle jets, it is served by 11 major airlines, and in 1961 handled 2.9 million passenger and 127.9 million pounds of cargo. It is situated within minutes of the industrial district. Port Newark's facilities include a channel that is 7,000 feet long, 685 feet wide and 35 feet deep. In 1961, 1545 vessels representing 95 steamship lines used its facilities, handling 4.44 million tons of cargo. Another feature of importance to industry is Newark's excellent water supply system, which will be further increased with another reservoir constructed by the Passaic Valley Water Commission.

The educational picture is also looking up in Newark. It's three institutions of higher learning today contain an academic community of 15,000. Today these institutions are restricted in land, but for Newark College of Engineering and Rutgers Newark at least the picture will be changed within the next few years, as the downtown University Park project takes shape.

Newark today is the most commuted-to city in the world—its daytime population is increased 102%. A good many people would gladly forsake the commuting pains if they could have a reasonable place to live in the city and if they could look forward to some city life. The problem of course is to find people willing to invest in such projects, and it is hard to convince investors when a market cannot be guaranteed.

What Newark also needs is the support and faith of its citizens, both resident and commuter. And this includes the NCE student and alumnus. Too many of us shrug off Newark as a nuisance, not worth the bother to investigate, yet we tend to forget that NCE owes its birth and development to Newark; that the city contributes $100,000 annually to the college, and tends to lose a good bit of tax revenue by giving the college twenty acres of land in the downtown area.

Newark needs help. With support, it can overcome its present problems and become a showcase city. We can also help. We should help, for the city has helped us.
The great industrial growth of Newark throughout the first half of the nineteenth century prompted a number of its citizens to form a technical school to train its young men for the city's industries. As a result, the Newark Technical Institute was established in 1850 with the cooperation of such prominent leaders as Seth Boyden, Dr. S. H. Pennington, and James B. Conger, and with Governor Marcus L. Ward as the president.

For ten years the young school struggled along, holding classes at night in the old Newark Academy and the First Presbyterian Church. But then the Civil War broke out and Newark's young men enlisted in the Union cause. Consequently, the school was forced to close its doors.

As a result of the Civil War, new technological advances were made and the nation consequently became increasingly aware of the need for higher technical education. Adding impetus to the movement was the passage of the Morrill Act by Congress in 1862, which provided for the establishment of agricultural and mechanical arts colleges. An important by-product of the act was that it publicly gave industrial careers a professional status.

During this time, higher education was primarily concerned with law, medicine, the arts and sciences, literature and religion. To fill the new need, a number of institutions were founded, including Brooklyn Polytechnical Institute in 1854, Massachusetts Institute of Technology in 1861, Rose Polytechnical Institute in 1874, and Case Institute in 1880.

The movement to found a technical school in Newark was rekindled in the late 1870's, primarily by the Newark Board of Trade. Heading this movement was former Governor Marcus L. Ward, who had been president of the Newark Technical Institute. The Board of Trade submitted a bill to the state legislature for an institution that would be financed by both the city and state.

The bill was passed in 1881. On February 10, 1885, a Newark paper ran the following story:

"The technical school on West Park Street was opened last night and, notwithstanding the terrible storm, there was a large attendance. Eighty-eight students appeared and were assigned to classes, and there were already over one hundred names on the role. There was no speach-making or formal exercises of any kind. The pupils were simply introduced to Director Colton and the various instructors, and assigned to their classes."

A notable feature of the rented narrow three-story building was that it was lit by 36 electrical lamps, which could be separately controlled. This, in 1886, was quite an innovation. The electrical system, along with the power, was supplied free by Edward Weston's United States Electrical Light Company.

The stated purpose of the school was to "prepare students for entrance into the manual vocations either as apprentices or journeymen and to give supplemental instruction to those already in a trade or other manual vocation." The school was not intended to prepare students for college or professional school.
The original condition for admission was a diploma from grammar school, but since so many of the applicants did not possess this, but were nevertheless mature and sincere in their desire, this was dropped. The applicants did have to pass an examination in arithmetic, history, geography, and grammar. The first examination for admission was given to 150 applicants on Feb. 7, 1885. It consisted of 14 questions, some of which were the following:

What is the discount of a note for $500 payable in three months, at six percent?
What will it cost to plaster a room forty feet long, twenty feet wide and ten feet high, if plaster costs thirty cents a square yard?
What States, Territories, mountain ranges and large rivers would a person cross in going from New York to San Francisco in a straight line?
Write a letter or composition consisting of at least twelve lines, describing the place of business in which you are engaged.

Of the 150 examinees, 100 passed the test.

The new school's curriculum consisted of mathematics, physics, chemistry, English, and freehand drawing, with the emphasis on practical application. Laboratory work was not given, for it was felt that the students would gain sufficient experience from their daytime jobs.

Classes were held five nights a week, from 7:20 to 9:20, while generally the students worked from 7 a.m. to 5 p.m. It was a difficult undertaking, and consequently the mortality rate was high—of the 57 original members of the class of 1889, only six were graduated. Absences were strictly handled, with more than five resulting in the student being dropped.

The cramped quarters on West Park Street were rather insufficient and never intended as permanent quarters, thus, in February of 1890, Director Colton launched a campaign for a permanent building. Sufficient money had already been saved to buy land, and that March a plot on the corner of High Street and Summit Place, known as "Hedges Place," was purchased for $14,000. High Street at that time was a pleasant residential street, lined with trees and stately mansions.

The next problem was to raise funds for a building. By May 12, 1891, when the campaign officially got under way, three pledges, totaling $11,000 had been made by the brewers Ballantine and Krueger. The goal was $40,000, and $30,000 were needed to begin construction. By March, 1892, $22,840 had been raised; by November, 1894 this had only been increased to $23,218. Finally, on Jan. 5, 1896, the Newark city council found a surplus in the city's revenues and voted to give $5,000 to the school. After nearly five years, during which four of the subscribers had died, the goal of $30,000 was reached.

The cornerstone for the new building was laid on May 11, 1896. Classes began in the three-story brownstone on Jan. 4, 1897.

Along with the new building, two other changes took place in 1897. Matter of fact, 1897 is one of NCE's most significant years, for at that time it was changed from an all-men's school into a co-educational institution. That year, daytime classes were also begun.

There existed an agreement between the Technical School and the Essex County vocational schools that when the vocational schools entered courses into their curriculum that were given by NTS, the Technical School would eliminate these from its curriculum. Consequently, as the vocational schools evolved courses of a higher level, the level of NTS courses also became higher and approached the junior college level.

The first official effort exploring the possibilities of instituting college courses as part of the school curriculum is noted on November, 1916 when a meeting of the Board
of directors was called to discuss a proposed engineering program. The movement did not receive the whole-hearted support of the board, nor of the alumni, for a good many felt that the function of the school was to develop technicians. Dr. Allan Cullimore states in his history of the school that “A considerable number ... took the position that the school's function was to develop lieutenants of industry rather than captains; that the stress should be on techniques rather than strategy; and they hesitated to depart definitely from a philosophy which had been so successful in the training of technical personnel and staff at the operational level.”

In May, 1918, Dr. Colton, who was advancing in years, retired from his post, continuing on as Director Emeritus. Selected to replace him was Dr. Daniel Russell Hogdon, who was the head of the Science department at the Newark State Normal School and had previously taught at the University of Maine. Dr. Hogdon continued the campaign to establish a college program, maintaining that Newark, as an industrial center should be able to train its industrial leaders at home. Plans for the college program were prepared and submitted to the state board of education in the fall of 1918.

On January 7, 1919, the state granted Newark Technical School the right to give degrees in chemical, electrical and mechanical engineering. That fall, 23 students entered the day school to begin their college studies. Of these, 11 graduated in 1923. The addition of the college course was not intended to play down the role of the technical program, but rather complement it.

The new college began in 1919 under the name of Newark College of Technology, which in 1920 was changed to the College of Engineering of the Newark Technical School. In 1927 this was changed to The College of Engineering, Newark, N. J., and in 1930 finally became the Newark College of Engineering.

Dr. Hogdon remained with the school until January, 1920, when he took up the post of president of the Chicago Memorial Foundation University of Science. Selected as the new director was Allan R. Cullimore, an MIT graduate who was then serving as Dean of Engineering at the University of Delaware.

Dr. Cullimore bore both the office of Director of the Newark Technical School and Dean of the College of Engineering. At the time, the college only had 35 students, so the title of President was not considered necessary. Later, when the college enrollment had increased to 400, Dr. Cullimore's title was changed to President.

With its puritan foundings, Newark was a city that insisted upon hard work and a strong moral character. These criteria had been infused in the Technical School from its outset and continued to be stressed in the college. With the influence of Dr. Cullimore, this discipline was evolved into a regular part of the education and has resulted in an insistence upon “professionalism” that is unique.

One of the earliest methods used by the college in its professional development program was its co-operative system. The college curriculum spanned four years, with the first two years spent at the college and the last two divided between classroom work and practical experience in
industry on a year-round basis. Not only did the student supplement his income, but he also gained a working knowledge of industry and industrial relations as well as maturity prior to graduation. The program was discontinued in 1940 because increased academic work would have necessitated the curriculum to be expanded to five years. However, it remains today in modified form under the Professional Development summer employment program.

Also begun early in the history of the college was its counseling and rehabilitation program. Under Dr. Hogdon was established a relationship with the Veteran's Administration whereby the young college undertook to aid disabled veterans in rehabilitation. The work was carried through under Dr. Cullimore and eventually 500 veterans were aided. Thus, when World War II broke, NCE was ready to assist the government in retraining workers for war jobs and in placement of returning servicemen. 13,000 veterans were helped by the college.

Consequently, NCE established a counseling center in 1947 that continues to assist the community as well as its students.

From its contract with the government after World War I, the college obtained laboratory equipment that was badly needed to get the young institution on its way. At that time, the physical plant consisted of two buildings—in addition to the administrative and classroom building on High Street, a laboratory building had been erected in 1911 on the corner of Summit Place and Summit Street. The structure, built of heavily-reinforced concrete, was of factory-type construction, able to withstand the strains of lab work. The facilities were further expanded in 1924-25 with the purchase of land alongside the lab building on Summit Street. On the site was an apartment house that was at first operated by the school but then torn down to make room for an additional classroom building. Over the years, extensions were built onto the two structures, and today the entire system is interconnected.

The college’s enrollment continued to grow until by 1930 it stood at 370 students and 24 instructors. Enrollment in the Technical School had risen to 1800, and a Civil Engineering department was added to the college. In 1928 the program was expanded to make it possible for working persons to get a college education, and under the “Twilight Program” students could take their Junior and Senior year work in the evening.

In 1936, the college was accredited by the Middle States Association of Colleges and Secondary Schools in its courses on Civil, Mechanical and Electrical Engineering. The Chemical Engineering department did not deem it wise to go along with the changes recommended by the Association and did not receive its accreditation until later, without making the modifications. The department today is considered a leader in its field.

During the late thirties the college began offering a number of courses at the graduate level, and in April of 1940, a program was set up in cooperation with Stevens Institute whereby a student could take up to 14 graduate credits at NCE, completing the rest of his work at Stevens. By 1944, 138 students were enrolled in this program, with 18 graduate courses offered.

In 1946, NCE set up its own graduate program, offering degrees in Chemical, Electrical, Civil and Mechanical Engineering, yet the program with Stevens was continued until 1950. The graduate program was expanded up to the Doctorate level in 1961, when programs were set up for doctorate degrees in Electrical and Chemical Engineering. Also in 1961 the Department of Industrial Engineering was created, offering Bachelor and Master degrees in Industrial Engineering.

The Forties necessitated a further physical expansion, and since it was practically impossible to obtain more land, plans were considered for expansion on the present site. One plan envisioned the building of a skyscraper structure on the site of Weston Hall. The plan never materialized for a number of reasons. However, in 1948 NCE acquired the property of the old Newark Orphanage along with its stately structure built in 1865. The building was converted to house the administrative offices.

Dr. Allan Cullimore, who had guided the college through its formative years, retired in 1949, and was succeeded by Dr. Robert W. Van Houten, a graduate of the college. One of the new president's foremost problems was how to build on two acres of land where four buildings were already standing.

In 1954, NCE was appropriated three million dollars for two additional buildings under a public bond issue. Consequently, a modern six-story structure was erected right behind the Victorian Eberhadt Hall in 1958, and Weston Hall, the school's original structure was razed to make room for a seven-story building that was completed in 1960. In 1956 NCE also was donated a building farther north on High Street by Martin F. Tierman, which was converted into the Chemical and Civil Engineering Laboratory.

With the passage of the College Bond Issue in 1959, NCE was appropriated 7 million dollars for further expansion of the surrounding land. At the time of this writing, demolition of the surrounding buildings is in progress to make room for NCE’s 25 acre campus, which will contain a student union, a gymnasium, and academic building. A number of other buildings are also planned, including dormitories and a library. Thus, the future looks very promising for the college. Already established as one of the nation's foremost engineering schools, it continues to grow both in physical size and in academics. It has come a long way from the small building on West Park Street. Yet its principles remain the same—to make possible an education regardless of economic position for those who are willing to work for it.
Your editors' decision to devote this 1964 issue of *Nucleus* to Newark College of Engineering's history and to the history of the City in which the College was founded is very much in keeping with the statewide Tercentenary Celebration in which all our citizens are taking part.

It is an interesting history, in which the fortunes of NCE and the City and State which have always supported it are closely intertwined. Early citizens of Newark and New Jersey and later ones as well have contributed much to the development of your College, which today has a reputation for excellence representing the culmination of nearly eighty years of dedicated effort.

While it is good occasionally to look backward to the past that has created us, it is also important to look forward to the future that we ourselves must help to create—as engineers and as private citizens in a world growing more complex, and latently both more hopeful and more dangerous, than any that previous generations have experienced.

As engineers you will have to face up to the one inescapable fact that no matter how well prepared you are today as you start out on your several careers, within eight years your knowledge and many of your skills will have
become obsolete unless you continue to study with all the ability at your command. Continuing education for engineers in every field has become so basic to professional success that NCE is already finding itself involved in a whole new approach to this form of advanced study. As Alumni, you will hear more and more about NCE’s continuing education programs, which are being matched by similar programs in other engineering colleges all across the country.

As private citizens, I hope you will also accept the challenge of offering your skills and your services to your community, state and nation, wherever you may make your home; for our times call for this degree of dedication as much as for a high degree of engineering know-how.

May I wish for you and yours the very best that life can offer, in family happiness, in professional achievement, and in the other satisfactions that only the dedication I have suggested to you can bring.

All of us here at Newark College of Engineering, representing both the faculty and administration, will observe the development of your careers with interest and with pride, in the sure knowledge that you can and will be successful in every good thing you undertake to do.

Cordially yours,

ROBERT W. VAN HOUTEN
President

Dr. Van Houten presiding at one of the many N.C.E. functions.

Dr. Van Houten presenting the Edward F. Weston Distinguished Alumnus Award to Astronaut Walter M. Schirra, Jr.
DR. L. BRYCE ANDERSEN
Associate Dean of Engineering

Dr. L. Bryce Andersen has been appointed to the newly-created post of Assistant Dean of Engineering. He has been charged with a number of broad duties, including work on curriculum revisions, coordination of faculty research and instruction, and work in furthering the interdisciplinary character of NCE's graduate program. In addition to these administrative duties, Dr. Andersen will also teach within the fields of his specialties, chemical engineering and nuclear engineering.

DEAN WILLIAM HAZELL
Dean and Vice President

Dean Hazell received his B.S.E.E. from N.C.E. in 1930, and served as an engineering assistant with Diehl Manufacturing Co. for the following three years. He joined N.C.E. in 1933 as an assistant instructor in Physics and Mechanics in the evening technical school division. He became Associate Dean of Administration in 1950. He was appointed Vice President in 1959. Dean Hazell instituted N.C.E.'s instructor training program in 1954, and had charge of much of the operation and planning of faculty recruitment, curriculum revision, building construction, renovation and maintenance, and community services.
FRANK A. GRAMMER  
*Dean and Director of Admissions*

Dean Grammer performs the task of selecting applicants for admission to N.C.E. He has served in this position since 1950. He was an English professor and Dean of Students before undertaking his present duties. In recognition of his services to the school, he was granted an honorary degree of Master of Engineering Education in 1961.

SUMNER J. HOUSE  
*Dean of Students*

Dean House was graduated from Middlebury College in 1941 and received his M.A. degree from Columbia University in 1948. He then became an instructor at the University of Nebraska until 1952, when he became associated with Carroll College in Wisconsin. During World War II and the Korean Conflict, he saw active duty in the Marine Corps and is now a retired Colonel in the U.S.M.C. Reserves. As dean of Students, he started his career at N.C.E. in 1958. Since then, he has become Vice President of the Evening Students Personnel Administration and has served on commissions for the American College Personnel Association and The National Association of Student Personnel Administration.
DR. A. PEMBERTON JOHNSON  
*Director of the Counseling Center*

Dr. Johnson received his B.E. in Mechanical Engineering in 1932 from The Johns Hopkins University, followed by an M.S., Ph.D. from Purdue University. He joined the N.C.E. staff as a Counselor in 1955 and became the Director of the Counseling Center in 1960. During World War II Dr. Johnson achieved the rank of Major in the U.S. Army Air Force, where he was associated with the aviation psychology program.

DAVID H. MANGNALL  
*Registrar*

An Alumnus of N.C.E., Class of 1942, Mr. Mangnall was appointed Assistant to the Dean in 1946. He received his M.S. from Stevens Institute of Technology in 1949. During his career at N.C.E. Mr. Mangnall has served as Evening Supervisor, Coordinator of Special Courses, and Assistant Director of Evening Sessions. He became Registrar in 1958.

RICHARD BLANCHARD  
*Director of Public Relations*

Mr. Blanchard completed his undergraduate work at Union College in 1934 and received his M.A. in English Literature from Columbia University the following year. From 1936 to 1944, he taught English at Lyndon Normal School in Vermont, after which he held positions with Previews Inc., including that of Zone Manager. In 1952, he became Director of Public Relations at the college and has served on numerous committees for engineering education.
HERBERT S. SOUTAR
Business Manager

After receiving his Civil Engineering degree from Union College in 1925, Mr. Soutar joined the City Surveyor Title Guarantee and Trust Co. He served as Payroll Auditor of the Great American Indemnity Co. and as Supervising Auditor for six plants of Walter Kidde and Co. Mr. Soutar came to N.C.E. in 1950, where he has held the positions of Auditor, Accountant, and Bookkeeper. In 1956, he became the Business Manager of the college.

R. F. LEWIS
Plant Engineer

Mr. Lewis is charged with the task of supervising the ever-expanding facilities at N.C.E. He is also responsible for effecting the numerous changes in existing buildings. Mr. Lewis received a B.S. degree in Civil Engineering from N.C.E. in 1949, and he joined the administration in 1951.

DR. IRVING P. ORENS
Chairman of the Graduate Division

Dr. Orens has received degrees from the University of Virginia and Columbia University. He has held teaching positions at Clemson College and City College of New York and has done research work for the Underwater Sound Laboratory of the U.S. Navy. In 1946 Dr. Orens came to N.C.E. as an associate professor in Physics. Since 1950, Dr. Orens has been Chairman of our expanding Graduate Division.
PROFESSOR C. H. STEPHANS
Director of Relations with Industry and
Director of Special Courses Division

Professor Stephans received his B.S.E.E. from N.C.E. in 1932. Since then, he has been a member of the N.C.E. faculty. He has served as a professor in the Electrical Engineering Department and is Chairman of Personnel Relations Department. Presently, he is Director of Relations with Industry and Director of Special Courses, which he was instrumental in developing. In honor of his efforts in behalf of N.C.E., Professor Stephans was awarded an honorary degree of Master of Engineering Education in 1961.

EDWARD J. YAROSZ
Assistant Dean of Students

Dean Yarosz received his B.S. from Pennsylvania State University and his M.S. at Southern Illinois University. He became Assistant Dean of Students in 1961 and is in charge of all student activities. Among other services to the student body Dean Yarosz is advisor to the Student Council and advisor to the Class of 1967. He is active in helping to plan the facilities to be made a part of the newly planned Student Union building.

IRA A. TUMBLESON
Librarian

Mr. Tumbleson is a graduate of Nebraska State Teachers College and holds degrees in Library Science from the Universities of Illinois and Michigan. He has also taught evening classes in English here at the college between 1942 and 1945. Mr. Tumbleson is a member of the Engineering School Libraries Committee of the American Society for Engineering Education. In 1958 he served as chairman of that committee. Under Mr. Tumbleson's guidance, the N.C.E. Library has acquired many new volumes and modern quarters.
FACULTY

DAVID AARON • Ass't. Instructor in Phys. and Mech. B.A. Brooklyn Coll. 1939; M.A. Brooklyn Coll. 1952

HERBERT BARKAN • Professor in Math. B.A. Brooklyn Coll. 1944; M.A. Columbia Univ. 1945

FREDERICK W. BAU- DER • Professor in Chem. B.S. Worcester Polytechnic Inst. 1920; M.S. Stevens Inst. of Technology 1945

HERBERT BARKAN • Professor in Math. B.A. Brooklyn Coll. 1944; M.A. Columbia Univ. 1945

FREDERICK W. BAU- DER • Professor in Chem. B.S. Worcester Polytechnic Inst. 1920; M.S. Stevens Inst. of Technology 1945

MYRA BECKER • Instructor in English. B.A. Columbia Univ. 1958

HRACH BEDROSIAN • Special Lecturer of P.D.I.R. B.A. Rutgers Univ. 1951; M.S. City Coll. of New York 1953

ARMAND BERLINER • Ass't. Instructor of Math. B.A. Rutgers Univ. 1963

COLONEL MAURICE A. BERRY • Professor in Air Science. Chairman of Air Science Dept. B.S. New York Univ. 1947

CARL V. BERTSCH • Professor in Phys. B.S. Univ. of Michigan 1928; M.S. Univ. of Michigan 1931; Ph.D. Univ. of Michigan 1937

JAMES A. BRADLEY • Professor in Ch.E. B.A. Harvard Univ. 1914; M.A. Harvard Univ. 1920


PAUL L. CAMBRELENG • Professor in P.D.I.R. B.A. Dana Coll. 1935; M.A. Columbia Univ. 1946


CARL W. CARLSON • Assoc. Professor in Ch.E. B.A. Northland Coll. 1929; M.S. Univ. of Chicago 1936; Ph.D. Michigan State 1946

EDWIN COHEN • Ass't. Instructor in E.E.
WARREN H. CRATER • Assoc. Professor in Eng.
A.B. Lafayette Coll. 1942; A.M. Columbia Univ. 1946; B.D. Drew Univ. 1959

BRADFORD S. CURTIS • Special Lecturer in E.E.
B.S. Massachusetts Inst. of Technology 1916

GORDON I. DAHL • Instructor in Air Science.
B.S.M.E. Univ. of Washington in Seattle 1954

DONALD W. DICKEY • Assoc. Professor in E.E.
B.S.E.E. Pennsylvania State Coll. 1940; M.S.E.E. Columbia Univ. 1948

ANTHONY J. DI STEFANO • Instructor in Phys.
B.E.E. Polytechnic Inst. of Brooklyn 1956; M.A. Columbia Univ. 1959

HERBERT DUKS • Instructor in Eng.

MATTHEW J. DUIETS • Asst. Professor in E.G.
B.S. Newark Coll. of Engineering 1935; M.A. Seton Hall Univ. 1956

HERMAN A. ESTRIN • Professor in Eng., Exec. Associate of Eng. Dept. AB.
Drew Univ. 1937; A.M. Columbia Univ. 1942; Prof. Diploma Columbia Univ. 1950; Ed.D. Columbia Univ. 1954

JOEL EPSTEIN • Instructor of History.

FREDERICK P. FERNSLER • Assoc. Professor in Eng.
Ph.B. Muhlenberg Coll. 1929; M.A. Univ. of Pennsylvania 1941

RONALD J. FISCHER • Asst. Instructor in Math.
B.S.E.E., Newark Coll. of Engineering 1960

JAMES H. FITHIAN • Professor in Math.
A.B. Lafayette Coll. 1920; M.A. Brown Univ. 1924; M.A. Princeton Univ. 1926

ACHILLES E. FOSTER • Assoc. Professor in Math.
B.S. in Math. Univ. of Tennessee 1943; M.A. in Math. Univ. of Tennessee 1944; Ph.D. in Math. Univ. of Kentucky 1951

PHYLLIS FOX • Director, Computer Center.
B.A. Wellesley Coll. 1944; B.S. Univ. of Colorado 1948; M.S. Massachusetts Inst. of Technology 1949; Ph.D. Massachusetts Inst. of Technology 1954

MAJOR ROBERT FRUTH • Asst.'s Professor in Air Science.
B.S. Business Administration, Geneva Coll., Pa. 1949
JOSEPH JOFFEE • Professor in Ch.E., Ass't. Chair-
man of Ch.E. Dept. B.Sc. Newark Coll. of En-
gineering 1932; A.B. Columbia Univ. 1929; B.S.
Newark Coll. of Engineering 1956; A.M. Seton
Hall University 1962

ROBERT G. GOLDEN, JR. • Instructor in E.G.,
A.B. Little Rock Coll. 1952; B.S. Newark Coll. of En-
gineering 1956; A.M. Seton Hall University 1962

RICHARD GOODWILLIE • Administrative Ass't. to
Director of Counseling. A.B. Yale Univ. 1950; M.B. Yale
Univ. 1951

ROBERT GORDON • Instructor in Mng. Engineering.
B.E.E. New York Univ. 1952; M.S. Stevens Inst. of
Technology 1959

PAUL O. HOFFMAN • Professor in Phys., Chair-
man of Phys. Dept. B.S. M.E. Newark Coll. of En-
gineering 1933; A.M. in Math. Columbia Univ.
1938; Ph.D. New York Univ. 1950

JUI SHENG HSIEH • Assoc. Professor in M.E.
B.E.M.E. National Wu-Han
Univ. (China) 1943; M.S.
M.E. Univ. of Kentucky
1950; Ph.D.M.E. Ohio State
Univ. 1955

JOAN ILLIVICKY • Instructor in P.D.I.R. A.B.
Brooklyn College 1960

PAUL C. HAUSSER • Assoc. Professor in Health,
Phys. Ed. B.S.Ed. Panzer
Coll. 1950; M.A. Columbia
Univ. 1954

JOHN J. HAZINSKI • Asst. Instructor in Math.
A.B. Rutgers Univ. 1962

RAUL O. HOFFMAN • Professor in Phys., Chair-
man of Phys. Dept. B.S. M.E. Newark Coll. of En-
gineering 1933; A.M. in Math. Columbia Univ.
1938; Ph.D. New York Univ. 1950

JULIUS K. HARRIS • Instructor in Mng. Engineering.
B.E. New York Univ. 1952; M.S. Stevens Inst. of
Technology 1959

S. SGT. RICHARD S. KENNEDY • Instructor in Air Science.

ROBERT S. KETZNER • Instructor in E.G., B.S. In-
diana State Teachers Coll. 1953; M.S. Indiana State
Teachers Coll. 1960

KLAS R. KJELLBERG • Professor in Ch.E., Assoc.
Chairman of Ch.E. Dept. B.Sc. Newark Coll. of En-
gineering 1932; M.Sc. New
York Univ. 1936

ROBERT S. KETZNER • Instructor in E.G., B.S. In-
diana State Teachers Coll. 1953; M.S. Indiana State
Teachers Coll. 1960

DERAN HANESIAN • B.Chem.E. Cornell Univ.
1956; Ph.D. Cornell Univ.
1961

JOHN J. HAZINSKI • Asst. Instructor in Math.
A.B. Rutgers Univ. 1962
BERNARD T. KINGERY • Asst. Professor of Phys. B.S. Georgia Southern Coll. 1948; M.A. Columbia Univ. 1949

ROBERT P. KIRCHNER • Asst. Inst. in M.E. B.S.-M.E. Newark Coll. of Engineering 1962

CARL KONOVE • Assoc. Professor in Math. B.S.-Ch.E. Newark Coll. of Engineering 1937; M.A. in Math. Montclair State Coll. 1941


SAUL I. KREPS • Professor in Ch.E. B.S. City Coll. of New York 1937; M.S. Univ. of Illinois 1938; Ph.D. Univ. of Pennsylvania 1941; B.Ch.E. Polytechnic Inst. of Brooklyn 1948

LEON D. LANDSMAN • Instructor in Physics. B.A. Columbia Univ. 1951; M.A. Columbia Univ. 1956

CAROL LaPIERRE • Asst. Librarian. A.B. Adelphi Coll. 1947; M.S. Columbia Univ. 1951

MICHAEL J. La VERDA • Asst. Professor of I.E. B.B.A. in Accounting Upsala Coll. 1952; M.B.A. in Accounting Rutgers Univ. 1954

FREDRICK M. LAW • Asst. Professor in C.E. B.S.E. Princeton Univ. 1956; M.S.C.E. Newark Coll. of Engineering 1962

WILLIAM S. La LONDE, JR. • Professor in C.E., Chairman of C.E. Dept. B.S.C.E. Massachusetts Inst. of Technology 1923; M.S.-C.E. Univ. of Michigan 1938

FREDERICK G. LEHMAN • Assoc. Professor in C.E. B.C.E. City Coll. of New York 1938; M.S.C.E. Massachusetts Inst. of Technology 1939; Sc.D. Massachusetts Inst. of Technology 1960

NORMAN LEVINE • Asst. Instructor in Math. B.E.E. The Cooper Union 1959

MARTIN J. LEVY • Assoc. Professor in M.E. B.S.-M.E. Pennsylvania State Univ. 1947; M.S.M.E. Newark Coll. of Engineering 1956

NORMAN LI • Instructor in Chem. B.S. National Taiwan Univ. 1953; M.S. Wayne State Univ. 1957

MURRAY I. LIEB • Asst. Instructor in Math. B.S.-E.E. Newark Coll. of Engineering 1961

MICHAEL LIONE • Asst. Professor. B.A. in Math. and Chem. Univ. of Newark 1942; M.S. in Math. New York Univ. 1950; Cer. in Meteorological Engineering, New York Univ., 1943

NCE's "Mr. Publicity."
CAPTAIN ROBERT J. LUCAS • Ass’t. Professor in Air Science. B.S. United States Naval Academy 1953

SVERRE LYNGSTADT • Ass’t. Professor in Eng. B.A. Univ. of Oslo 1943; B.A. Univ. of Oslo 1946; M.A. Univ. of Washington 1949; Ph.D. New York Univ. 1960

MARCUS N. MAINARDI • Professor in Phys. B.S. C.E. Newark Coll. of Engineering 1933; M.A. Columbia Univ. 1939


ERWIN L. MALONE • Special Lecturer of P.D.I.R. M.E. Cornell Univ. 1917; Ph.D. Columbia Univ. 1957

RICHARD D. MANGASARIAN • Assoc. Professor in C.E. B.S.C.E. City Coll. of New York 1935; M.S.C.E. City Coll. of New York 1937

ROBERT R. MEOLA • Ass’t. Professor in E.E. B.S.E.E. Newark Coll. of Engineering 1946; M.S.E.E. Stevens Inst. of Technology 1949

IVAN METZGER • Ass’t. Professor in C.E. B.S. Newark Coll. of Engineering 1950; M.S. Massachusetts Inst. of Technology 1955; M.S. Newark Coll. of Engineering 1958

WALTER J. MICHELS • Assoc. Professor in M.E. B.S. Polytechnic Inst. of Brooklyn 1946; M.S. Polytechnic Inst. of Brooklyn 1953

JOHN MIHALASKY • Ass’t. Professor of I.E. B.S.M.E. Newark Coll. of Engineering 1951; M.S. Mgt.E. Newark Coll. of Engineering 1954; M.B.A. Rutgers 1956; M.S.I.E. New York Univ. 1960


PAUL MLADINEO • Special Lecturer in Ind. and Mgt. E. LL.D. Univ. of Zagkeb 1930

EDWARD J. MONAHAN • Ass’t. Instructor of C.E. B.S.C.E. Newark Coll. of Engineering 1958

ALAN I. MYTELKA • Instructor in Chem. B.S.-Ch.E Polytechnic Inst. of Brooklyn 1958; M.S.Ch.E. Newark Coll. of Engineering 1961

JAMES J. NAPIER • Assoc. Professor of Eng. A.B. Univ. of Pennsylvania 1949; A.M. Univ. of Pennsylvania 1950; Ph.D. Stevens Inst. of Pennsylvania 1959

WALTER J. NEIDHART • M.E. Stevens Inst. of Technology 1956; M.S. Stevens Inst. of Technology 1958; Ph.D. Stevens Inst. of Technology 1962

LEONARD NOYES • Special Lecturer in E.G. B.S. Rutgers Univ.

WALTER J. NEIDHART • M.E. Stevens Inst. of Technology 1956; M.S. Stevens Inst. of Technology 1958; Ph.D. Stevens Inst. of Technology 1962

LEONARD NOYES • Special Lecturer in E.G. B.S. Rutgers Univ.

Dr. Hoffman, as Chairman of the Department of Physics and Mechanics, is keenly aware of the value of basic research.
“Sir, Cadet Swanson returning from mission. I wish to report three MIG’s shot down, two probables, one Russian bomber, destroyed five train engines, and shot up four or five Navy Voodoo’s who were trying to cut in on my action.”
S./SGT. ROBERT WILLIAMS • Instructor in Air Science.

STANLEY B. WINTERS • Instructor of Eng.
B.A. Coll. of Wooster; M.A. Columbia Univ. 1948

KATHY J. TEKEL • Ass't. Instructor in Math.
B.A. Montclair State Coll. 1962


GEORGE B. THOM • Chairman of M.E. Dept.
B.A. Lehigh Univ. 1928; M.S. Lehigh Univ. 1932; M.A. Lehigh Univ. 1935

WILLIAM J. TROOP • Instructor in E.E. B.S.E.E.
Newark Coll. of Engineering 1963

CAPTAIN THOMAS J. STOLLE • Ass't. Professor in Air Science. B.S. United States Naval Academy 1952

ROBERT L. WACKER • Ass't. Professor of Eng.
B.S. Northwestern Univ. 1947; M.S. Columbia Univ. 1948

STEPHEN WEISS • Ass't. Instructor in Math.
B.A. Rutgers Univ. 1961

MONROE R. WELLER • Assoc. Professor in Phys.
A.B. Upsala Coll. 1935; M.A. Montclair State Coll. 1937


GEORGE B. THOM • Chairman of M.E. Dept.
B.A. Lehigh Univ. 1928; M.S. Lehigh Univ. 1932; M.A. Lehigh Univ. 1935

WILLIAM J. TROOP • Instructor in E.E. B.S.E.E.
Newark Coll. of Engineering 1963

CAPTAIN THOMAS J. STOLLE • Ass't. Professor in Air Science. B.S. United States Naval Academy 1952

ROBERT L. WACKER • Ass't. Professor of Eng.
B.S. Northwestern Univ. 1947; M.S. Columbia Univ. 1948

STEPHEN WEISS • Ass't. Instructor in Math.
B.A. Rutgers Univ. 1961

MONROE R. WELLER • Assoc. Professor in Phys.
A.B. Upsala Coll. 1935; M.A. Montclair State Coll. 1937

ROBERT L. WACKER • Ass't. Professor of Eng.
B.S. Northwestern Univ. 1947; M.S. Columbia Univ. 1948

STEPHEN WEISS • Ass't. Instructor in Math.
B.A. Rutgers Univ. 1961

MONROE R. WELLER • Assoc. Professor in Phys.
A.B. Upsala Coll. 1935; M.A. Montclair State Coll. 1937


GEORGE B. THOM • Chairman of M.E. Dept.
B.A. Lehigh Univ. 1928; M.S. Lehigh Univ. 1932; M.A. Lehigh Univ. 1935

WILLIAM J. TROOP • Instructor in E.E. B.S.E.E.
Newark Coll. of Engineering 1963

CAPTAIN THOMAS J. STOLLE • Ass't. Professor in Air Science. B.S. United States Naval Academy 1952

ROBERT L. WACKER • Ass't. Professor of Eng.
B.S. Northwestern Univ. 1947; M.S. Columbia Univ. 1948

STEPHEN WEISS • Ass't. Instructor in Math.
B.A. Rutgers Univ. 1961

MONROE R. WELLER • Assoc. Professor in Phys.
A.B. Upsala Coll. 1935; M.A. Montclair State Coll. 1937


GEORGE B. THOM • Chairman of M.E. Dept.
B.A. Lehigh Univ. 1928; M.S. Lehigh Univ. 1932; M.A. Lehigh Univ. 1935

WILLIAM J. TROOP • Instructor in E.E. B.S.E.E.
Newark Coll. of Engineering 1963

STANLEY B. WINTERS • Instructor of Eng.
B.A. Coll. of Worchester 1941; M.A. Columbia Univ. 1948

STEPHEN WEISS • Ass't. Instructor in Math.
B.A. Rutgers Univ. 1961

MONROE R. WELLER • Assoc. Professor in Phys.
A.B. Upsala Coll. 1935; M.A. Montclair State Coll. 1937

S./SGT. ROBERT WILLIAMS • Instructor in Air Science.

STANLEY B. WINTERS • Instructor of Eng.
B.A. Coll. of Worchester 1941; M.A. Columbia Univ. 1948

CARL WOLF • Instructor in Mgt. Engrg.
B.A. City Coll. of New York 1951; M.S.I.E. Columbia Univ. 1954

JAMES N. WISE • Ass't. Professor in Eng. B.A.
Coll. of Worchester 1941; M.A. Columbia Univ. 1948

CARL WOLF • Instructor in Mgt. Engrg.
B.A. City Coll. of New York 1951; M.S.I.E. Columbia Univ. 1954

S./SGT. ROBERT WILLIAMS • Instructor in Air Science.

“In here, I am the King.”
DonalD P. Yee • A.s't. Instructor in Math.  A.B.  Rutgers Univ. 1963

Paul P. Yeh • A.s't. Professor in E.E.  B.A.Sc.  Univ. of Toronto 1951;  M.S.E. Univ. of Pennsylvania 1960

Henry ZatSkis • Professor of Math., Chairman of Math. Dept.  B.S. in Phys. and Math.  Ohio State Univ. 1943;  M.S. in Phys. and Math.  Indiana Univ. 1944;  Ph.D. in Meteorological Phys.  Syracuse Univ. 1950

William C. Zegel • Instructor in Chem.  M.E. Stevens Inst. of Technology 1961;  M.S. Stevens Inst. of Technology 1962

Steven M. Zimmerman • Instructor in Mgt.  Engrg.  B.S.I.E.  Lehigh Univ. 1957;  M.S.I.E.  Columbia Univ. 1961

Dr. Mauro Zambuto adjusts a spectrometer in conjunction with Laser research undertaken at NCE.

Those Not Photographed . . .

Robert Edward Anderson • Professor in E.E., Exec. Associate of E.E.  Dept.  B.S.-E.E. Newark Coll. of Engineering 1939;  M.S.E.E. Univ. of New Hampshire 1948

Beda Angle • Special Lecturer in Eng.

Henry C. Ayoub • Instructor in E.E.  B.S.E.E. Alexandria Univ. 1947;  B.S.M.E. Alexandria Univ. 1948;  M.S.E.E. Newark Coll. of Engineering 1959

Robert E. Bannon • Assoc. Professor in M.E.  B.S.Ch.E.  Univ. of Notre Dame 1928;  S.M. Metallurgy Massachusetts Inst. of Technology 1930

Charles G. Barbaz • A.s't. Instructor in Ch.E.  B.S.  Newark Coll. of Engineering 1955;  M.S. Newark Coll. of Engineering 1957

Dhirajlal H. Bhatt • Instructor in E.E.

John A. Bishop • Professor in Chem.  B.S. Haverford Coll. 1929;  M.S. New York Univ. 1931

M. Lelyn Branin • Professor in Chem., Chairman of Chem. Dept.  B.S.  Dornell Univ. 1923;  A.M. Columbia Univ. 1930;  Ph.D. Univ. of Michigan 1934

Francis J. Burns • Professor in E.G., Chairman of E.G. Dept.

Vincent N. Cagnati • A.s't. Professor in Chemistry.

James E. Camp • Instructor in English.

Joseph Carluccio • A.s't. Professor in E.E.

Robert M. Casciano • Instructor in Ch.E.  B.S.Ch.E. Newark Coll. of Engineering 1959;  M.S. Newark Coll. of Engineering 1960

Dean D. Chapleau • Special Lecturer in F.D.I.R.  B.S.E.E. Union College 1918

Chung-Wei Chow • Instructor in E.E.  B.S.E.E. Chiao-Tung Univ. (China) 1947;  M.S.-E.E. Oregon State 1960

Matthew Ciesla • Instructor in Phys.  B.S.M.E. Newark Coll. of Engineering 1957;  M.S.M.E. Newark Coll. of Engineering 1959

Wayne I. Clements • A.s't. Professor in Phys.

Joseph F. Coyle • A.s't. Instructor in M.E.


Michael David Disko • A.s't. Instructor in C.E.  B.S.-C.E. Newark Coll. of Engineering 1959

John V. Doughton • A.s't. Instructor in M.E.  B.S.M.E. Rutgers Univ. 1959

Melvin L. Druin • A.s't. Instructor in Ch.E.

Charles H. Duursema • Assoc. Professor in Phys.  B.S.-M.E. Newark Coll. of Engineering 1933;  M.A. Montclair State College 1936

Lawrence Eisenberg • A.s't. Instructor in E.E.  B.S.-E.E. Fairleigh Dickinson Univ. 1960;  M.S. New York Univ. 1961

Frank N. Entwisle • Professor Emeritus in Phys.


Solomon Fishman • Professor in E.E.
Those Not Photographed . . .

JOSEPH M. FITZGERALD • Assoc. Professor in Chem., Exec. Associate of Chem. Dept. B.S. Seton Hall Univ. 1942; M.A. Montclair State Coll. 1950

MICHAEL FREDERICK • Assoc. Professor in Ch.E. B.S.Ch.E. Newark Coll. of Engineering 1931; M.S. New York Univ. 1938; Ph.D. Brooklyn Polytechnic Inst. 1961

RICHARD A. GAAL • Assoc. Professor in M.E.

BERNARD GEORGE • Instructor of Hist.

BERNARD A. GEORGE • Instructor in Eng. B.S. Seton Hall Univ. 1950; M.A. Seton Hall Univ. 1954

HAYDEN B. GOLDBERG • Instructor in Eng.

IRVING R. GOSTEIN • Assoc. Professor in I.E., Exec. Associate of I.E. Dept. B.S.M.E. Newark Coll. of Engineering 1939; M.S. Stevens Inst. of Technology 1947

PHILIP J. GORNET • Assoc. Instructor in M.E.

GERALD GRANIK • Assoc. Professor in Phys. B.S.M.E. Newark Coll. of Engineering 1950; M.S.M.E. Newark Coll. of Engineering 1954; M.S. Stevens Inst. of Technology 1958

WARREN GROVER • Assoc. Instructor of Hist.

JOHN J. HANUS • Assoc. Professor in Eng. B.A. Marietta Coll. 1950; M.A. Bradley Univ. 1952

GEORGE A. HAZELRIGG, JR. • Assoc. Instructor in M.E.

WAYNE C. HOFFMAN • Assoc. Instructor in Ind. Rel.

CHRISTIAN T. HOFFMAN, JR. • Assoc. Instructor in C.E. B.S. Newark Coll. of Engineering 1961

SHIH-MING HU • Instructor in Chem., B.S.Ch.E. National Taiwan Univ. 1955; M.C.E. Univ. of Louisville 1959

JAY ITTLESON • Instructor in E.E.

ROBERT M. JACOBS • Assoc. Professor in M.E. B.S.M.E. Bucknell Univ. 1944; M.S.M.E. Bucknell Univ. 1949

GERALD JAFFE • Instructor in M.E. B.S.M.E. City Coll. of New York 1947; M.S.M.E. City Coll. of New York 1954

WILLIAM J. JAFFE • Professor in Mgt. Engrg.

WILLIAM JORDAN • Professor in E.E. B.S.E.E. Univ. of Pennsylvania 1927; M.S. Stevens Inst. of Technology 1942

ROBERT E. KIEHL • Professor in Personnel Rel. Chairman of Professional Development and Industrial Relations Dept.

ROBERT E. KIEHL • Professor in P.D.I.R. B.A. Columbia Univ. 1931; M.A. Teachers Coll. 1947; Ph.D. Rutgers Univ. 1957

BORS KUHARETZ • Assoc. Professor in Phys. B.S. Columbia Univ. 1951; M.S. Columbia Univ. 1956

CHARLES J. KIERNAN • Associated Professor Emeritus

KWEI-PING SHEN KWEI • Assoc. Professor in Chem.

ANTHONY J. LORD • Assoc. Professor in I.R.

LAWRENCE E. LOVERIDGE • Assoc. Professor in Phys. B.S. Univ. of Oregon 1927; M.S. Univ. of California 1929; Ph.D. Univ. of California 1931


CHARLES L. MANTELL • Professor in Ch.E. Chairman of Ch.E. Dept. B.A. City Coll. of New York 1918; B.S. City Coll. of New York 1918; M.A. Columbia Univ. 1924; Ph.D. Columbia Univ. 1928

SAM G. MARX • Instructor in Math.

RICHARD MATULA • Assoc. Instructor in E.E.

JOHN E. MCCORMICK • Assoc. Professor in Ch.E.

WAYNE E. McGOVERN • Assoc. Instructor in Phys.

TERENCE J. MCGURN • B.S.-Ch.E. Newark Coll. of Engineering 1960

HENRY H. METZENHEIM • Comproller Emeritus

JOHN METZLER • Assoc. Professor in P.D.I.R. B.S. State Teachers Coll., Indiana 1947; M.Ed. Pennsylvania State Univ. 1951

RAJ P. MISRA • Research Professor in E.E.

ADEL MOHSEN • Assoc. Professor in E.E. B.S.E.E. Cairo Univ. 1948; M.S.E.E. Michigan Univ. 1951

EDWARD C. MOLINA • Adjunct Professor in Math. D.Sc. (Honorary) Newark Coll. of Engineering 1952

ALBERT J. MONACK • Assoc. Professor in Phys. B.S.Ch.E. West Virginia Univ. 1927; M.S. Univ. of Illinois 1929

EDWARD J. MONAHAM • Instructor in C.E.

PAUL E. NIELSEN • Professor in Phys., Exec. Associate of Phys. Dept. B.S.C.E. Univ. of Illinois 1927; M.S.C.E. Univ. of Illinois 1932

DAVID C. PEARCE • Instructor in M.E. B.S.M.E. Newark Coll. of Engineering 1956; M.S.M.E. Newark Coll. of Engineering 1958

JAMES C. PEET • Professor Emeritus in E.E.

JOHN K. REDMON • Ass't. Professor in E.E. B.S.M.E. Newark College of Engineering 1942; M.S. Stevens Inst. of Technology 1949

ISRAEL REFF • Associate Professor in Phys.

OTTO REISMAN • Instructor in Phys.

ROY J. RICCI • Ass't. Instructor in E.E. B.S.E.E. Newark Coll. of Engineering 1960

JOSEPH A. RICH • Professor in Mgt. E.

JAMES L. RIGASSIO • Assoc. Professor in I.E. B.S.M.E. Newark Coll. of Engineering 1948; M.S.M.E. Yale Univ. 1949

ERVINE M. RIPS • Assoc. Professor E.E. B.S.E.E. Massachusetts Inst. of Technology 1942; M.S.E.E. Carnegie Inst. of Technology 1947

ROBERT H. ROSE • Assoc. Professor in E.E.

FREDERICK A. RUSSELL • Professor in E.E., Chairman of E.E. Dept. B.S.E.E. Newark Coll. of Engineering 1936; M.S.-E.E. Newark Coll. of Engineering 1939; M.S. Stevens Inst. of Technology 1941; Sc.D. in Engineering, Columbia Univ. 1953

JEROME J. SALAMONE • Professor in Ch. E. B.Ch.E. City Coll. of New York 1942; M.Ch.E. City Coll. of New York 1947; Engr. Sc.D. New York Univ. 1954

WILLIAM SAVIN • Ass't. Instructor in Phys. B.S.E.E. Newark Coll. of Engineering 1960

LYMAN SENSEN • Instructor in Chem.

BRUCE A. SHEPHERD • Ass't. Instructor in M.E. B.S.M.E. Newark Coll. of Engineering 1960

OLIVER J. SIZELOVE • Professor in I.E., Chairman of I.E. Dept. B.S.E.E. Newark Coll. of Engineering 1934; M. Adm. E New York Univ. 1944

EUGENE STAMPER • Assoc. Professor in M.E. B.S.M.E. City Coll. of New York 1948; M.S.M.E. New York Univ. 1952

V. T. STEWART • Professor Emeritus in Ch.E.

JOSEPH J. STRANO • Ass't. Instructor in E.E. B.S.E.E. Newark Coll. of Engineering 1959; M.S.E.E. Newark Coll. of Engineering 1961

RALPH TAYLOR • Instructor in Phys.

ANTHONY C. TOMMASI • Instructor in Eng.

NISSIM M. TOWFIK • Ass't. Professor in Phys.

TEN-CHIN TSCHANG • Instructor in M.E.

PIN-SENG TSCHANG • Instructor in E.E.

IRA A. TUMBLESON • Librarian

HAROLD P. WASSON • Assoc. Professor in Math.

ROBERT WIDDOP • Professor Emeritus in M.E.

JOHN WIERZBICKI • Ass't. Instructor in Mgt. E.

GEORGE L. WILLIAMS • Assoc. Professor in Applied Mechanics.

CHARLES E. WILSON, JR. • Ass't. Professor in M.E.

JOSEPH WINSTON • Assoc. Professor in E.E.

LEO WITTES • Ass't. Professor in Applied Mechanics.

SAMUEL K. WORKMAN • Professor in Eng., Chairman of Dept. of Eng. and Human. Studies.

MAURO H. ZAMBUTO • Instructor in E.E.

LEO WITTES • Ass't. Professor in E.E.

WILLIAM C. ZEGEL • Instructor in Chem.

ALEXANDER M. ZIMMER • Ass't. Professor in Pers. Rel.

GEORGE ZIRNITE • Instructor in English.
BAYWAY REFINERY—Producing fuel to launch a million cars; a swift, automated process developed by the genius of Chemical Engineering.
KENNETH A. APOSTOLICO
AIChE 3, 4; ACS 3, 4; Tau Delta Phi 1, 2, 3, 4; IFC Athletic Chairman 3; Varsity Club 3, 4; Soccer 3, 4; Track, Captain 3, 4; Athletic Association 2, 3, 4; Intramural Sports 1, 2, 3, 4; Vector 2, 3; AFROTC Band 1, 2.
Small man, big sense of humor. Good athlete.

GEORGE P. BATCHER
AIChE; ACS.
Studious; witty; always ready for a laugh in class.

CHARLES C. BEDI
AIChE 3, 4; ACS 3, 4; Theta Chi 3, 4; Intramural Bowling 1, 2, 3, 4; Softball 1, 2.
A man with a hollow leg. Enjoys other people’s weddings.

CHARLES ARMBRUST
AIChE; ACS Secretary; Newman Club 1.
Sincere and studious.

MARVIN STEVEN BERMAN
AIChE; Class Council 1, 2.
Member of “James St. Gang”.
JOHN A. De HAAN

HERMAN F. DEJONG

He is quiet, dependable, and plays a lousy game of bridge.

BRIAN A. CARLEY

MURRAY O. CRAWFORD, JR.

AIChE 3, 4; ACS 4; Arnold Air Society 4; Dance Club 2, 3, 4; Distinguished Military Cadet 4; Highland Rifles Drill Team 1, 2, 3, 4; Cadet Aide to President NCE 3; ROTC 1, 2, 3, 4.

"Finally learned to play bridge."

CHARLES JAMES CONWAY

Phi Eta Sigma 1, 2, 3, 4; Omega Chi Epsilon 3, Treasurer 4; Tau Beta Pi 3, 4; AIChE 3, 4; ACS 3, Treasurer 4.

CHARLES JAMES CONWAY

AIChE; ACS.

He is quiet, dependable, and plays a lousy game of bridge.

JOHN A. De HAAN
D. A. DEPROSPERO

RICHARD DOLAN
AIChe 3, 4; Intramural Basketball 1, 2; Softball 1; ROTC Drill Team 1, 2, 3, 4.
Known around the campus as "Uncle Wiggley".

J. J. FEITER, JR.

ALBERT C. EMMENS
Omega Chi Epsilon, Vice President 3, 4; AIChe; ACS; Bridge Club; Tennis Team; Intramural Basketball 1, 2; Intramural Softball 2; Intramural Bowling 1, 2.
THOMAS GOLDA
AIChE; ACS; Intramural Basketball 1, 2, 3; Softball 1, 2; Bowling 1; Fencing 1.
Reserved.

BERNARD R. KATZ
AIChE; ACS; Radio Club 1, 2, 4; Audio Club 3; Motor and Sports Car Club 4.

GARY G. GARABRANDT

PATRICIA A. JASINSKI

CHARLES S. JACKSON

BERNARD R. KATZ
What a lab partner!
RAYMOND C. OLSEN

PAUL D. O'LENICK

STANLEY E. ZEITZ
Phi Eta Sigma 1, 2, 3, 4, Treasurer 3; Omega Chi Epsilon 3, National Representative 4; AIChE 3, Treasurer 4; ACS 3, 4; Sigma Pi; Intramural Basketball 1, 2; Bowling 2; Softball 1, 2, 3; Class Council Representative 1, 2, 3.

Smilin' redhead.

NICHOLAS PANAGIOTAKIS
AIChE; ACS.
"The Greek"; Chem bridge player.

EDWARD H. PAGE
ROY A. PETERS
AIChE 3, President 4; ACS 3, 4; Intramural Softball 3, 4; Tennis Team 4; Reactions Staff; Burnett Club 3, 4.
Helpful and understanding.

FRANCIS S. POJEDINEC

JOHN T. QUINN, JR.
AIChE 4, Secretary 3; Alpha Sigma Mu.

CHARLES K. POLLACK
Phi Eta Sigma 1, 2, 3, Historian 1; Omicron Delta Kappa 4; Who's Who 4; AIChE 3, 4; ACS 3, 4; Bridge Club 1, 3; Tau Delta Phi 1, 2, 3, 4, Historian 3, Editor 2; IFC 2, 3, President 4; Student Council Corresponding Secretary 3; Class Council 4; Intramural Director 1, 2.
Fast and fluent talker. BMOC.

CARL REPERSHER
ACS 4; Sigma Pi; Intramural Volleyball 1, 2; Chairman of the NCE Blood Bank Committee; Section Representative 2, 3, 4.

FREDERICK REUTER
AIChE 3, 4; Tennis Team, Business Manager 4; Varsity Club 4.
Thrives on all sports. A bridge player.
RICHARD M. RICCARDI
Pi Delta Epsilon 4; AIChE; ACS; Pi Kappa Phi; Vector Staff; Orbit Features Writer.
"Shades".

HENRY SCHLECKSER
Phi Eta Sigma; Omega Chi Epsilon; Tau Beta Pi; ACS; AIChE.
Gregarious, proud parent (twice).

MICHAEL G. SHELDRICK
AIChE 3, 4; ACS 3, 4; Reactions Editor.
The last of the "non-conformists".

JAMES RYAN
Phi Eta Sigma; Omega Chi Epsilon; AIChE; Kappa Omega Lambda; Burnett Club 3, 4.

MARGARET M. SHREEHAN
Sigma Chi Epsilon Sorority.
JOHN C. SUBELKA
AIChE 3, 4; Intramural Football 2; Softball 2; Motor and Sports Car Club 3, 4.
Pinochle player extraordinary.

RICHARD VALKO
AIChE 3, 4; Intramural Football 2; Softball 2; Motor and Sports Car Club 3, 4.
Pinochle player extraordinary.

CHARLES TRUSHELL
Honors Option Program; AIChE 3, 4; ACS 3, 4; Intramural Football 2; Art Editor of Reactions 4; Section Representative 4.
Ace pinochle player.

WILLIAM T. VREELAND
AIChE; Class Council; Burnett Club.
"Wee Willee".

ROBERT R. ZWACK
Tau Beta Pi; Omega Chi Epsilon; AIChE.
"Early Bird".

GERALD J. WYMBS
ACS; AIChE.
"Questions".
Those Not Photographed . . .

PAUL W. ALEIN
J. B. BRAUN
ANTHONY J. DEBARROS
N. J. DeBENEDICTIS
JOSEPH P. FERENZ
GENE GIRARD
AIChE; ACS; Fencing Team 1; Rifle Team 2, 3; Intramural Basketball 1, Baseball 1, 2, 3; Section Representative.

ROBERT J. GLEASON
JEROME H. HANOWITZ
AIChE; Intramural Softball and Basketball.

E. M. KELLEY
H. E. KIPP
RICHARD B. KLOPHAUS
H. J. PORTAR
L. TEAGNO
GEORGE WASHINGTON BRIDGE—A monument to Civil Engineering, combining beauty and strength.

Courtesy of Port of New York Authority
HENRY F. BRAY
Chi Epsilon 3, 4; ASME 3, 4; Secretary 3; Intramural Bowling 2; Softball 2.

RICHARD BURLAZZI
Chi Epsilon 3, Marshal 4; ASCE 3, Vice President 4; Intramural Basketball and Softball 1, 2, 3; Academic Honors 1, 2, 3; Honors Option 2, 3.

SAMUEL BERMANT
ASCE; Intramural Football and Basketball.

STUART COOPER
ASCE 4; Tau Epsilon Phi 1, 2, 3, 4. 
Stu has matured greatly during his college career.

MICHAEL CAROLAN
ASCE 3, Social Chairman 4; Sigma Pi 2, 3, 4; IFC Representative 3; Intramural Bowling 1, 2, 3, 4, Basketball 1, 2, 3, 4, Softball 1, 2, 3, 4, Volleyball 2, 3, 4, Flag Football 4; Treasurer Student Council 4; Section Representative 2, 3; Surveyor 4.

"Mr. Nice Guy" an interest in something besides himself and his engineering studies.
JOHN A. CYBURT, JR.
ASCE 3, 4; Tau Delta Phi 2, 3, 4; Varsity Bowling 2, 3, Captain 4; IFC Sports; Intramural Basketball 1, 2, 3, 4, Baseball 1, 2, 3, 4, Football 4, Tennis 3, 4, Bowling 1, Badminton 3, Volleyball 2, 3, Officiating Club; Section Representative 4; Nuclerus 4; Varsity Club 3, Treasurer 4; Athletic Association 3, 4.
Easy going, soft-spoken. A person with many friends.

PAUL C. DREYER
Class Council 1, 2, 3, Treasurer 4; Varsity Club 4; ASCE 3, Treasurer 4; Sigma Pi; Varsity Basketball 1, 2, 3, Co-Captain 4; Intramural Softball 1, 2, 3.
Big basketball star. Typical "good guy".

CHARLES E. DEFENDORF
ASCE 3, 4; Professional Development Program 2, 3; Section Representative.

ANDRE R. de MUINK
Chi Epsilon; ASCE; Tennis Team 2, 3, 4.
Holland's gift to the opposite sex.

ROLAND D. DORVAL
SAM ENGLEHART
ASCE; Intramural Bowling 2, 3, 4, Softball 2, 3, 4, Flag Football 4.
*Haunts card tables.*

EDWARD J. FOX
Arnold Air Society 4; Chi Epsilon 4; ASCE 3, 4; Iota Kappa Phi 3, 4; Class Council Representative 2.
*When there's a job to be done "Old Reliable Ed" is always there.*

JAY J. GILES
ASCE 4; Newman Club 1, 2, 3, 4; Intramural Basketball 1, 2, 3, 4, Bowling 2, 3, 4; Softball 2, 3, 4, Flag Football 4.
The only problem his wife will have is waking him up in the morning.

RICHARD J. GIANGERELLI
ASCE 3, 4. Representative; Intramural Baseball 2, Football 3, 4, Volleyball 2, 3, Basketball 2.
*Will give the shirt off his back to help a friend.*
EUGENE GOBBO
ASCE 3, 4; Iota Kappa Phi 2, 3, Treasurer 4; Intramural Bowling 1, 3, 4, Softball 1, 2, 3, 4, Football 4; IFC Basketball 3, 4; IFC Representative 3.

"Goose" is not just a joiner, he is a "doer".

JOHN GLASER
ASCE; Professional Societies Council, Vice President 4; Sigma Pi 1, 2, 3, 4; Rifle Team 1; Intramural Basketball 1, 2, 3, 4; Bowling 2, 3, 4; Volleyball 2, 3, Softball 2, 3, 4, Football 2, 3, 4; Tennis 3, 4; Dance Club 3; Interclub Council 4; Publicity Committee; Class Council Representative 1, 2, 3, 4; Intramural Council 4; Student Council Representative 4.

Mr. Confusion has that outlook which makes everyone feel at ease.

WILLIAM GOCELJAK
ASCE 3, 4.

Willy, serious but determined, a man of few words, outdoorsman.

ROBERT S. HOLLAND
ASCE 3, 4.

Bob thinks for himself.

DONALD R. GUARRIELLO
Chi Epsilon 4; ASCE 3, 4; Alpha Phi Delta 1, 2, 3, 4; Intramural Basketball 1, 2, Bowling 1, 2, 3, 4, Softball 2, 3; IFC Basketball 1, 2, 3.

How relaxed can you get?
HARRY A. IKE
ASCE 4; Iota Kappa Phi 2, 3, President 4; Intramural Football, Softball, Volleyball 1, 2, 3, 4; Ring Committee 3.
Future leader of men.

DAVID B. KELLER
Chi Epsilon Vice President; ASCE; Intramural Softball.

FRED H. KULHAWY
ASCE 3, 4; Intramural Bowling 1; Surveyor Staff 4.
"A serious worker during the week, a playboy on the weekend."

PHILIP KULINA JR.
ASCE 3, 4; Intramural Bowling, Baseball, Basketball, Badminton, Softball, Football.
Phil's main ambition is to be a pilot in Uncle Sam's Air Force.

CHARLE J. KUPPER, JR.
Alpha Sigma Phi.
"Personable".
JOHN C. KWAK
ASCE 3, 4; Soccer Team 1, 2.
...interests lie not only in engineering but also in the humanities and foreign affairs.

MATY LEWY
ASCE 3, 4; Intramural Softball, Basketball; Surveyor Staff; Volunteer Fireman, SBFD.
Maty enjoys the good life.

N. MACIEJEWICZ

WALTER LAWSON
ASCE.

FRANK E. LEHR
ASCE.
O. R. MACINTOSH
Chi Epsilon; ASCE.

PHILIP MALFETTONE
Chi Epsilon 3, 4; ASCE 3, 4; Varsity Baseball 3; Intramural Bowling 4.

JOHN MATONTI
ASCE; Intramural Softball, Volleyball.
"John is an extremely hard worker who always manages to figure out the technical angle to make things run smoothly."

FRANK MARUSKI
ASCE 4.
Sleep . . . what's that?

BRUCE R. MAY
ASCE 3, 4; Class Council 1, 2, 3; Intramural Basketball 1, Softball 2, 3.
Well dressed, quiet spoken—dangerous around women.
ARTHUR H. MIDDLETON, III
ASCE 3, 4; Intramural Basketball 1, 2, 3, 4, Bowling 2, 3, Softball 2, 3. "Bunker".

RODRIGO HERNAN POZO
ASCE 2, 3, 4; Phi Beta Tau 2, 3; Varsity Club 3, Secretary 4; Intramural Basketball 1, 2, 3, 4; Volleyball 1, 2, 3, Softball 3, 4; IFC Basketball 2, 3, 4; AFROTC 1, 2, 3, 4. "Rod is as friendly as they come."

DREW MOEHLAU
ASCE; Intramural Softball, Volleyball, Football; Surveyor Staff; Citizens Band "Bug". "Always willing to do that little extra that counts so very much."

ROBERT A. PETTIT
ASCE 4; Arnold Air Society 2, 3, 4; Chi Epsilon 4; Phi Beta Tau 2, Secretary 3, President 4; Honors Option 2, 3, Intramural Basketball 1, 2, 3, 4, Softball 2, 3, 4, Volleyball 2, 3, 4, Bowling 4. "His record speaks for him."

GEORGE SHEA
ASCE 3, 4. "He'll get it done right."

JAMES LEONARD QUINN
Chi Epsilon 3, 4; ASCE 3, 4.
DENNIS R. SYMONS

RONALD ST. LAURENT

CARL W. STEPHANUS
Chi Epsilon 3, 4; ASCE 3, 4; Inter-Club Council 3; Photography Club Secretary 1, President 2, Treasurer 3, 4; Student YM-YWCA Vice President 3; Student YM-YWCA Freshman Camp 2, 3, 4; Associate Editor of The Transit; Central Atlantic Area Student Council of YMCA.

THOMAS TEHVE
Chi Epsilon 3, 4; Tau Beta Pi 3, 4.
"One of the fortunate few who can attain good grades with a minimum of studying."

RANIER T. ZIMMERMANN
ASCE 2, 3, 4; Iota Kappa Phi 2, 3, 4; Intramural Bowling 2.

JAMES T. WEBB
Chi Epsilon; ASCE 3, 4; Class Council Representative 4.
Those Not Photographed...

N. F. BABBITT, JR.
W. M. BANIT
J. D. BIGDEN
R. A. CECERE
C. C. COOK
M. D. D'ALTIMIO
M. L. ELLENBOGEN
VITO FOSS SELLA
ASCE.
R. G. GRAY
P. HAVALA, JR
H. HEIN, JR.
J. W. KEEGAN
D. W. LESSACK
L. G. MARCELLO
W. E. MASSIAH
WILLIAM M. McMAHON
R. B. PALASITZ
C. W. PURSEL
J. M. SAMUELSON
C. L. SMONIG
F. E. SUTTER, JR.
W. W. WOOD, JR.
ITT "LABORATORY IN THE SKY"
—ITT’s landmark in Nutley sheds its light into the night, as its electrical engineers shed light upon the frontiers of communications.
AN "ANECHOIC CHAMBER"—The high frequency test facility of Lockheed Electronics.

Courtesy of Lockheed Electronics
LOUIS J. ADAMS
Bridge Club 3; Nucleus Staff 4; Book Store Committee 4; Warren Club 3, 4; Basketball 1; Intramural Basketball 2, 3, 4; Highland Rifles Precision, Trick Drill Team 1, 2, 3, 4.
Women will be your downfall. How are things in Charleston, Lou? “Speed typist of the Nucleus Staff.”

PETER ABRUZZESE
IEEE; Sigma Pi; Varsity Fencing; IFC Football; Honors Options; Newman Club; Dance Club; EE Junior Honors Group.
Peter is a modest guy with a thirst for knowledge coupled with a deep concern for his fellow students.

ERIC J. ADDEO
IEEE; Alpha Phi Omega 3, Second Vice-President 4; Audio Club; Radio Club; Section Representative 4.
Willing to tackle anything.

DAVID M. ALLEN
Sigma Pi.
A great fraternity man.

EUGENE AIMONE
IEEE; Audio Club.
Foresight and dependability are his virtues.
JOHN J. AMANN
IEEE 2; Intramural Bowling 1, 2, 4, Basketball 1, 2; Class Council 2; Nucleus Staff 4; ROTC 1, 2, 3, 4; Highland Rifles 1, 2, 3, 4; Warren Club 3, 4.
"Scholarship and Chevrolets are Big John's forte."

JOHN A. BAKA
IEEE; Intramural Softball, Basketball; Alpha Phi Omega 2, 3, 4, Secretary 4.
"Mr. Money Bags"; known for his Rochester trip.

ROBERT P. BERGDOLL

RAYMOND J. BECMER
Usually seen at the third floor bridge tables.

MICHAEL A. BASILEO
Abe Lincoln II.
JAMES BOYLE
Student Council 2, 3, President 4; Class Council 1, President 2; Omicron Delta Kappa 3, 4; Who's Who 3, 4; Nucleus Business Manager; Log NCE, Associate Editor 2, 3, 4; Professional Conduct Committee 3; Athletic Policy Board 3, 4; Freshman Orientation Committee 1, Chairman 2, 3; Student Center Planning Committee 1, 2, Chairman 3; Student Morale Committee 4; Intramural Basketball 1, 2, 3, 4, Official 2, 3; Newman Club 1, 2, 3, 4; Young Democrats 3, 4; AFROTC 1, 2, 3, 4; Distinguished Military Cadet; Highland Rifles Drill Team 1, 2, 3, 4; Warren Club 3, 4.

DONALD D. BURTIS
Omicron Delta Kappa, Vice President 4; Sigma Pi 1, 2, Vice President 3, 4; Fencing 1, 2, 3, Captain 4; Intramural Basketball 2; Varsity Club 3, 4; Newman Club 2; Athletic Association, Secretary 2, Vice President 3, President 4; Student Council Representative 2; Section Representative 1, 4; Student-Faculty Athletic Board 3, 4.

A gentleman with tremendous personality.

ANTHONY J. CAMPILLO
Tau Beta Pi 3, 4; Eta Kappa Nu 3, President 4; IEEE 4; Intramural Basketball 1, 2; Volleyball 1, 2; Softball 1; Class Representative 1; Chess Club Tourney Director 1, 2, President 3, 4; Honors Option Program 3, 4; E.E. Honors Program 3, 4.
Chess fiend.
MICHAEL N. CARDINAL
FRANK CARBIN
Newman Club 1, Recording Secretary 2, President 3, 4; Inter-Club Council Secretary 4; Intramural Basketball 1.
Outstanding vocabulary, has CRC Tables memorized.

PAUL CHUHNOV
Phi Eta Sigma; Eta Kappa Nu; IEEE 2, 3, Secretary 4; AIAA 3, 4.

JAMES W. CERULLI, JR.
Editor-in-Chief, Nucleus; Editor, Log NCE 2, 3, 4; Who's Who; AFROTC Distinguished Military Cadet; Class Council 1, Treasurer 2; Professional Conduct Committee 3, 4; Student Union Committee Chairman 4; Alpha Phi Delta 1, 2, 3, 4; Young Democrats Club; Intramural Basketball 2; Freshman Orientation Committee 2, 3; AFROTC Band 1, 2, 3, Commander 4; Warren Club 3, Membership Chairman 4; Orbit.

THOMAS J. CICCARELLI
Eta Kappa Nu; Tau Beta Pi.
"Owns the top of the curve."
ARTHUR P. CONNOLLY

A. DANIELS

RUSSELL E. COMPA
Honors Option Program 2; IEEE; Sigma Pi; Intramural Basketball Captain 1, 2, 3; IFC Softball; Section Representative 1, 2, 3; Newman Club 2, 3, 4.

LESTER T. COX, JR.
IEEE; Intramural Basketball 1, 2; Section Representative 2, 4; Ice Hockey Club 3, 4.

JAMES CONKLIN
Arnold Air Society; IEEE; Distinguished Military Cadet; Commandant of Cadets Award 3; Western Electric Scholarship; Academic Honors; Section Representative 1, 2; AFROTC Wing Commander 4; Intramural Council 2; Varsity Club.

"Straight Arrow". Can be recognized by the close haircut.

WILLIAM R. DADDIS
Tau Beta Pi 4; Kappa Omega Lambda 1, 2, 3, 4; Skiing.

"Noted Anglophile, collector of obscure factor."
GLENN A. DAVIDSON
IEEE; Glee Club 1, 2, 3, 4; Photo Club 3; Class Council 3.
"No, Glenn, there is no such thing as IR engineering."

WILLIAM B. DICKINSON
Phi Eta Sigma 1, 2, 3, 4; Arnold Air Society; Intramural Volleyball 1, 2, Tennis 3; AFROTC; Track 3.
Quiet but intelligent.

D. T. DEFINO

L. J. DUDASH

HUGH P. DOHERTY

LEON A. DAVIEAU
ROBERT W. DUSCHE
IEEE President 4; Alpha Sigma Mu, President 4; Class Council Representative 4.
Effervesces lively wit.

PATRICK J. DUGGAN
Class Representative 2; Newman Club 1, 2, 3, 4; Bridge Club 3; Intramural Basketball 1, 2, 3, 4; Arnold Air Society 3, 4.
"Voice of the 490th", the philosopher-engineer personified; with his sense of civic responsibility combined with his engineering ability will be a real asset to our society.

GEORGE C. EMO

PETER ENGLE
IEEE 1; SAE 1; Motor Club 1; Thursday Night Club.

FRANCIS DZUBECK
IEEE; Ski Club; Section Representative.
Conscientious worker with rare insight and perception.
JOSEPH W. FINK, JR.

WOLFGANG K. FISCHER
IEEE 1, 2, 3; Tau Beta Pi 3; Vice President 4; Eta Kappa Nu 3; Vice President 4; Skin Diving Club 1; Vector Staff.

Earned and deserved every one of his honors.

THOMAS C. ERWIN

BARRY N. FOGEL
IEEE; Honors Option Program; Intramural Basketball 2; Bridge Club 3.

ROBERT FUCETOLA
Arnold Air Society 2, 3, Treasurer 4; Sigma Pi 2, 3, Herald 4; Intramural Basketball 1, 2, 3, Baseball 1, 2, 3; IFC Football, Basketball, Baseball 1, 2, 3.

Will he catch Joe Quinn? Tune in next year.

JOSEPH W. FINK, JR.
MANUEL W. GARRIDO
IEEE; Baseball 1, 2, 3, 4; Soccer 2, 3, 4; Intramural Basketball 1, 2, 3, 4; Nucleus Staff; AFROTC Deputy Wing Commander; Distinguished Military Cadet; Outstanding Athlete Award at AFROTC Summer Camp.
Manny is the comedy relief of the ROTC electricals. Mr. Muscles is the only two sport varsity man in the senior class. NCE's second Wally Schirra.

ANTHONY GENTILE

A. E. FUERHERN

PETER GILMAN
Intramural Basketball; Newman Club; Class Representative.
Easy-going.

JOHN P. FORDE

THOMAS GILLESPIE
STUART K. GOLUB
IEEE; AIEE; IRE; Class Council Representative.
Never at a loss for a comment on the EE Department.

FRED GOLDSTEIN
Tau Beta Pi; Eta Kappa Nu; Phi Eta Sigma; Tau Epsilon Phi; IFC Football, Softball, Basketball; Intramurals.
Tau Epsilon Phi's outstanding basketball player. Tau Epsilon Phi hasn't won a game in 3 years, though.

ROBERT H. GASS

MARVIN GREIFF

ROGER L. GOUNAUD, JR.
Arnold Air Society 3, 4; IEEE 4; Kappa Omega Lambda 1, 2, 3, 4; Fencing 2; ROTC 1, 2, 3, 4.
The Laboratory Wizard who uses green ink.
GEORGE T. GOODENOW

RICHARD A. GUSTAFSON

KURT F. HAFNER
Honors Option 3, 4; IEEE; Chess Club 1, 2, 3, Vice President 4; Ping Pong Club 3, 4; Class Council Representative 4.

Careful and consistently accurate.

NEIL B. HILSEN
IEEE: Tau Delta Phi; IFC Football, Basketball, Softball 1, 2, 3, 4; NCE Golf Team 3; Intramural Bowling 1, 2, 3, 4, Basketball 1; Athletic Council 3.

“A natural all around athlete.”

L. G. HELLER

RAYMOND T. C. HSU
Orbit; Vector; Section Representative 2; Chess Club 1, 2, 3, President 4; Debating Club 2.

Well read, with background in literature, great chess player.
PETER C. HUNT
Glee Club 3, 4.
A great motorcyclist.

CAROLYN J. HULL

ANTHONY J. IPPOLITO
Varsity Baseball; Intramural Basketball 1, 2, 3, 4.

WILLIAM L. IVAN

ROBERT P. IRWIN
FRANK J. JAROSSY
Theta Chi; Intramural Bowling 2, 3, 4.

ALLEN KATZ
Eta Kappa Nu 3, 4; IEEE 1, 2; Tau Epsilon Phi 1, 2, Historian 3, 4; Radio Club 1, 2.

LAWRENCE KAWULA
AIEE; Section Representative 2.
Likes to help people, an electrical machine now.
S. E. KOSCIUK

JOHN R. KOBUS

WILLIAM KRUSZEWSKI
IEEE; SAE; Phi Beta Tau; Sports Car Club; Audio Club; Radio Club.

ROBERT E. LACROIX
Arnold Air Society; IEEE; AFROTC; Warren Club.
Basically easy going and good natured.

EDMOND J. La CROIX, JR.

NICOLAS LANNI
IEEE; Honors Option Program 1; Professional Development Program 1; Intramural Bowling.
Nick is to spend the rest of his life in a Machine's Lab.
FRANK J. LENGYEL JR.
IEEE; SAE 4; 10 Fathom Club 3, 4.
Morale booster to the class.

LAWRENCE J. LENART

DONALD W. LEVIN

S. G. LEWYCKY

ROBERT D. LIBBEY
PHILIP R. MAGALETTA
Eta Kappa Nu; IEEE; Honors Option.
A conscientious worker, with a gift of a good sense of humor. A dependable friend.

BARRY L. MARKS
IRE; AIEE; IEEE; Intramural Bowling, Basketball, Softball; Class Council Representative; Co-Chairman Junior Prom.
Cogenous but always with a wise crack.

PAUL E. MAGUIRE
IEEE; Intramurals; Newman Club; Photography Club.
Ambitious in his pursuit of homework.

ALLAN MARGULIES
Pi Delta Epsilon 3, President 4; Debating Club Secretary 3, Treasurer 4; Phi Beta Tau 2, 3, Corresponding Secretary 4; Orb 2, 3, Co-editor 4; Vector 2, 3, 4; Nucleus, Associate Editor 4; Who's Who.

JOSEPH RONALD MARTINCAGAVE
IEEE 3, 4; Alpha Phi Delta, Recording Secretary 1, 2, Treasurer 3, President 4; Intramural Basketball and Softball 1, 2; Interfraternity Sports 1, 2, 3, 4; U.S. Marine Corps Reservist.
APD is the most important thing to him.
D. P. McALCON

PAUL CHARLES MICHAELIS

JAMES K. McDONOUGH
Arnold Air Society 3, 4; Bowling Team 1, 2, Captain 3, 4; Bridge Club 3, 4; Motor and Sports Car Club 3, 4; Varsity Club 3, 4; Nucleus 4; Vector 4; Audio Club 3; Warren Club 3, 4; Who's Who 4; Class Representative 4; Honors Option Program 3, 4; Academic Honors 1, 3; ROTC 1, 2, 3, 4; Distinguished Military Cadet.

Limited in stature only.

JOHN R. McDONALD

FRANCIS W. McCURDY
SAE; IEEE; Phi Sigma Kappa.

Limited in stature only.
FRANK W. MILORDI  
Honors Option 3; IEEE; Intramural Basketball 1, 2, 3, Captain 4, Softball 1, 2, 3, Bowling 1, 2, 3.  
*Great potential.*

EDWARD MIKILITUS  
Eta Kappa Nu; Honors Option Program 2, 3, 4; Electrical Engineering Honors Program 3; IEEE 4; Intramural Basketball 1, 2, 3, Intramural Softball 1.

JOSEPH R. A. MICHALKO  
IEEE; SAE; Sigma Pi; Fencing 1; Motor and Sports Car Club 4; *Vector* Staff.  
*J.R.A. is a genuine connoisseur of wheels, wine, and women.*

VINCENT J. MORELLI  
IEEE; Theta Chi, Brother of the Year 3; IFC Bowling 4; Intramural Bowling 1, 2, 3, 4.  
*Gregarious man; Thursday night pool fiend.*

RAYMOND F. MORAN  
IEEE; Intramural Bowling 1.  
*A bridge and pinochle addict; Thursday Nite Club.*
VITALI MOSTOVOJ
Omicron Delta Kappa 3, 4; Pi Delta Epsilon 2, 3, Secretary 4; Who's Who 4; Phi Beta Tau 1, 2, 3, 4; New Jersey Collegiate Press Association President 4; Vector 1, News Editor 3, Editor-in-Chief 4; Orbit Assistant Editor 3; Cadet Editor 4; Chess Club President 2; Young Democrats 2, 3; Class Council 1.

"So busy that he's always 'Russian'."

RICHARD S. NIETUBICZ
Honors Option; IEEE; Alpha Phi Omega; 10 Fathom Swimming Club.

Rich is inexpendable in the lab.

EDGAR W. NIEWEG

ANNE O'NEILL
SWE; IEEE; Sigma Chi Epsilon 1, 2, Treasurer 3, 4; Newman Club, Province Delegate 1, 2, Vice President 3, 4; Class Council 4.

Quiet and thoughtful; active Newmanite.
GEORGE G. PAFFENROTH

PAUL H. PALMAROZZA
Phi Eta Sigma 1, 3, Historian 2; Omicron Delta Kappa 3, President 4; Sigma Pi 1, Assistant Treasurer 2, Treasurer 3, President 4; Newman Club 1, 2, 3, 4; Golf Club 1, 2, 3; Interclub Council President 2; Varsity Baseball 1, 2, 3, Captain 4; J.V. Soccer 2; Intramural Basketball and Bowling 1, 2, 3; Varsity Golf 3; Honor Option 2; Who’s Who 3, 4; Student Council Representative 2, Vice President 3; Professional Conduct Committee 4; Orientation Committee 3, 4.

“P". "A rare blend of talent and wild outrageous humor."

ALBERT LOUIS PAPP JR.
Pi Delta Epsilon 2, Treasurer 3, 4; Who’s Who; IEEE; AIAA Vice President 3, President 4; Professional Societies Council President 4; Vector 1, 2, Features Editor 3, Assistant Editor 4; Nucleus Literary Editor 4; Orbit 1, 2, Literary Editor 3; Publications Council President 4; Class Council Representative 2, 3; ROTC 1, 2, 3, 4.

A liberal humanitarian “Engineer.”

JOHN PATTERSON
Kappa Omega Lambda 1, 2, 3, 4. Quick-witted; skiing enthusiast.

GARY PALMA
IEEE; Intramural Basketball, Softball.
Sometimes cuts basketball to attend class.
NEIL PATT

GEORGE PETRUS
Academic Honors; IEEE Publicity Committee; Table Tennis Club Vice President.
George carries a big paddle.

EDWARD J. PETRAKAKAS

ROBERT JOHN PLATT
Eta Kappa Nu Recording Secretary 3, 4; Tau Beta Pi 4; IEEE 2, 3, 4; Intramural Basketball 1; EE Honors Program 3, 4; Honors Option 2, 3, 4.

FRANK K. PRICE
Intramural Baseball, Basketball; Section Representative.

GEORGE PETRUS

STAN PUKASH
Varsity Baseball 1, 2, 3, 4; Varsity Club 3, 4; Past President of "arc of the month" club.
Meeting in the lab.
FRED J. REISS

Indispensable in the lab; a quiet dominance.

DANIEL N. QUAGLIATO

Phi Eta Sigma; Tau Beta Pi 3, 4; Eta Kappa Nu 3, 4, Corresponding Secretary 4; IEEE; EE Honors Program; Intramural Basketball 1, 2, Softball 2; Newman Club 1, 2, 3, 4.

Dan is a big help to everyone.

WILLIAM C. ROBINSON

IEEE; Ping Pong Club.

Spent 4 years in USN—2nd Class Electronics Technician. You can usually find Bill playing at his pet diversion—ping pong.

JAY H. RIPPETOE

Phi Eta Sigma 2, 3, 4; Eta Kappa Nu 4; EE Honors Program 3; Honors Option Program 2; Chess Club 2, 3, 4; Judo Club 3.

"Rip" innovator, scrounger, unorthodox but efficient. Mathematics swings but those machines.

DAVID C. ROBERTS

"Indispensable in the lab; a quiet dominance."
PAUL ROSTEK
IEEE; Audio Club 3, 4.
Lively and gay. A good sport with a keen sense of humor.

RONALD J. ROSZKOWSKI
Phi Eta Sigma 1, 2, 3; Eta Kappa Nu 3, 4; Tau Beta Pi 3, 4; IEEE 4.
Will lend a helping hand when it is needed and he finds it hard to tell a friend no.

J. W. ROUNTREE

MANFRED ROXUTHAL
EDWARD ROWE
Phi Eta Sigma 1, 2, 3, 4; Tau Epsilon Phi 2, 3, House Manager 4; IFC Football 4; Class Council 2, 3, 4.

J. SCHILL

DAVID L. RUPPERT
IEEE.
Dave is quiet, considerate, and friendly. Dave is intelligent and well worth meeting.

ALBERT SAVAGE

EDWARD J. SCHLAMP
IEEE; Academic Honors.
HENRY J. SCHROEDER, JR.
Tau Beta Pi 3, 4; Eta Kappa Nu 3; Honor Society Representative 4; Phi Eta Sigma 1, 2, 3, 4; Kappa Omega Lambda 1, 2, 3, 4; Intramural Sports 1, 2; Skiing.
“Prime example of how to succeed without really trying.”

WILLIAM M. SEMBRAT
IEEE; Photo Club 1, 2; Thursday Night Club.

FRANK W. SENKEWICZ

JEROLD IRA SCHNEIDER
Phi Eta Sigma 1, 2, 3, 4; Omicron Delta Kappa 3, 4; Pi Delta Epsilon 3, 4; Eta Kappa Nu 3, 4; Who’s Who; AIEE; Table Tennis 3, 4; Varsity Club 4; Tau Delta Phi 1, Secretary 2, Treasurer 3; Varsity Fencing 2, 3; Interfraternity Football, Basketball; Honor Society Council 3, President 4; Publications Council Treasurer 3; Vector Business Manager 3; Sophomore of the Year 2.
Redheaded dynamo. Mr. Honor Society.

FRANK L. SCHOLTEN

R. J. SHISHILLA
DAVID A. SIEGINS
Arnold Air Society; AFROTC.
"Mr. Ford". A jovial happy-go-lucky sport.

JOEL S. SHRATER
Honors Option 3, 4; IEEE; Bridge Club 3.

ARTHUR LEON SIROTKIN
IEEE.
An engineer whose talents are in high demand; Julie wants him, Uncle Sam wants him . . .

FRANK P. SINCAGLIA, JR.
Tau Beta Pi; Eta Kappa Nu; Omicron Delta Kappa; Phi Eta Sigma President, Vice President; Sigma Pi, Vice President, Social Chairman; Intramural Basketball; Interclub Council President; Vector Staff; Section Representative; Interfraternity Football, Softball.
"Sinn".

MARK F. SLIFKIN
IEEE; Iota Kappa Phi 2, 3, Vice President 4; Bridge Club 2, President 3; Junior Varsity Baseball 1, Varsity 2; IFC Football, Basketball, Baseball 2, 3, 4; IFC Representative 4; Highland Rifles Drill Team 1, 2, 3, 4.
NEVER AT A LOSS FOR WORDS, OR A LOUSY JOKER.

NORMAN SLURZBERG
IEEE.

LESTER SLURZBERG
Never at a loss for words, or a lousy joke.

T. SPENCER

WILLIAM M. SPENCER
Tau Epsilon Phi; Class Council 1, 2.
MARC L. SPURR
IEEE 4; AIEE 2, 3; Tau Delta Phi 1, 2, 3, 4.
Talented musician.

KATHLEEN MARIA SUDOVAR
IEEE 4; SWE 4; Sigma Chi Epsilon Treasurer 2, Secretary 3, 4; Student Council Recording Secretary 3, Senior Class Recording Secretary 4; Student Union Committee Secretary 3; Class Council 1, 2; Glee Club 2, 3, 4; Ski Club 2.

FRANK E. SWIATEK

ARTHUR STALOFF
Student Council 2; IEEE; Bridge Club.

JOSEPH M. SULLIVAN
Professional Development Program 3; IEEE; Hockey Club.
"Full of blarney."

R. J. TALISH
KENNETH TENTARELLI
Tau Beta Pi; Eta Kappa Nu; Kappa Omega Lambda; Intramural Sports 1, 2; Skiing; Tennis.
"Ken has a corner on the EE talent market."

J. E. TERRACCIANO

LOUIS TORNILLO
IEEE; Academic Honors.
A veteran of 4 years in USAF in which he was a radio-radar mechanic. Lou came to us from Bell Labs. He would rather play golf than most anything else.

GENE TREMBLAY
Eta Kappa Nu 4; Honors Option Program 3; SAE Treasurer 4; IEEE; Theta Chi; Motor Club 3, 4; Newman Club 3, 4; Hockey Club 3, President 4; Section Representative 3, 4; Senior Class Social Committee.

RICHARD L. TURK
AFROTC.
An affable weight lifter and thorough believer in the 3BX.
CARMELO VASI

JOHN VEDRAL

RICHARD TWORKOSKI
IEEE; Sigma Pi 1, 2, 3, 4; Intramural Basketball 1, Softball 1; Senior Section Representative; Dance Club 2, 3; Photo Club 1.
Dick has a pleasant personality and is a common sense thinker.

MARTIN A. VALLENT
Honors Option 3, 4; IEEE; Intramural Bowling 1.
His love for math is surpassed only by his hate for machines.

ROBERT VOGT
IEEE.
"Theoretical thinker."

RICHARD TWORKOSKI
IEEE; Sigma Pi 1, 2, 3, 4; Intramural Basketball 1, Softball 1; Senior Section Representative; Dance Club 2, 3; Photo Club 1.
Dick has a pleasant personality and is a common sense thinker.
KENNETH R. WARREN
IEEE; Tennis Team; Chess Club; Section Representative 3, 4.
"The hot man in the Lab corner."

RICHARD VREELAND
ASAE; Bowling Team 1, 2; AF-ROTC; Section Representative.

P. C. WETHLY

RICHARD WILKINS
Sigma Pi 2, 3, 4; Varsity Club 2, 3; Vice President 4; Dance Club 4; Varsity Basketball 1, 2, 3, Captain 4; Intramural Basketball Official 3, 4; Class Council 2.
Steve Allen’s chief fan.

ALBERT E. WARNASH
JOSEPH E. ZALESKI

J. T. COLLINS

E. J. ZIDONIK

ROBERT ZLOTNICK
IEEE; Soccer 1, 2, 3, 4, All New Jersey, Penn and Delaware; Class Council 1; Varsity Club.

DAVID C. W. HOLLAND
Tau Delta Phi 2, 3, 4; Intramural Bowling 2, 3; IEEE 4.
"Big man with a big heart."
Those Not Photographed

J. J. BARLETTANO
W. L. BARRETT
E. C. BAUMAN JR.
R. A. BENEDICT
C. BRITZ
E. F. CAMERON
R. L. CARBONE
R. E. CARTWRIGHT
WILLIAM E. COX
ROBERT DAN BLEYKER
E. A. DOKUS
D. M. DOLACK
P. J. DOLAN, JR.
B. H. DORNBUSCH
T. J. DUFFY
J. A. FEIER
B. G. GEERTAMA
L. J. GINSBURG
F. T. GRAMPP
E. G. GRUTERS
WALTER J. HASCHEC
R. H. HAUSMAN
R. R. HORN
W. E. HOWER

D. J. HUGHES
A. P. HUNNEMANN, JR.
D. L. HUNT
J. L. JACKSON
G. P. JACOBY
M. J. JAKUBCZYK
ANTHONY C. KACZKA
R. F. KEINATH
V. KRUEGER
W. P. KUEBLER
J. P. LANDAUER
C. W. LARKIN
C. M. LEWIS
A. K. LOHSEN
P. J. MARSHALL
J. E. MAYES
J. P. McDONOUGH
P. A. McGOVERN
F. A. MENDEZ
L. J. MILLIGAN
C. A. MOHWINKEL, JR.
W. A. MOROS
R. H. MOSELEY
E. ORVATZ

A. E. PLANCHER
JOSEPH J. POOLE
D. A. PUGLISE
MATTHEW W. REISER
MARTAIN L. RIEGER
L. G. ROEMISCH
L. J. RUSSO JR.
A. R. SAFT
B. M. SAYMANSKI
W. J. SCHATZ
N. E. SCHOLER
A. SENKO
V. SOLIMENE
G. Y. SONODA
T. F. STAPLETON
E. W. SWEENEY
R. C. SWENSON
J. P. SZEP
B. D. TOTH
BORYS I UMYN
R. J. WAWRZONKIEWICZ
WAYNE J. WEINGAERTNER
J. WOLDMAN
INDUSTRIAL ENGINEERING

Students Engaged in Time and Motion Study—An integral part of Industrial Engineering.
BEN FRANCIS AULETTA
Honors Option 3; SAE President 4; IRE 2; AIE 2, 3, 4; SAM 2; Correspondence Secretary 3; Sigma Pi 1, 2; Intramural Sports; Vector 1, 2; Orbit 1, 2; Junior Class Council; Interclub Council; Photo Club 1, 4; President 2; Treasurer 3; Motor Club President 3; Forensic Society 3; Dance Club 1, 2, 3; Radio Club 3, 4.

ANDRE LOPE BELLO
AIE 3, 4; SAM 4; Academic Honors 3; Beta Theta Pi 1, 2; Skiing Club 2; Photography Club 4; Varsity Soccer 1, 2; Golf 4; Intramural Volleyball 3.
An admirer of the good life and a Latin lover.

L. CARL BELT
AIE 2, 3, 4; SAM 2; SAE 4; Theta Chi Secretary 3, 4; Section Representative 2, 4.
“Always has a smile even when everything is going wrong.”

JOEL CHEROFF
SAE; AIIE.
Man about town par excellence; hockey fan supreme.

ROBERT A. CERBONE
Varsity Club; J.V. Basketball 1, 2; Varsity Basketball 3; Varsity Baseball 1, 2, 3, 4; Intramural Basketball and Football 4.
“Soft spoken but lasting influence.”
GEORGE HENRY DE VOE
AIIE 2, 3, 4; Theta Chi 3, 4; Bookstore Committee 4.
*The official Jester of Theta Chi as well as one of the original founders.*

STUART DAVIS
Alpha Pi Mu 3, 4; Tau Epsilon Phi 1, 2, 3, President 4; Intramural Basketball, Baseball, Volleyball; Class Council 1, 2, 4; Interfraternity Council 1, 2, Secretary-Treasurer 3.
*Service to his fraternity.*

PETER G. CRISAFULLI
AIIE 4; SAM 2; Alpha Phi Delta 2, 3, 4; IFC Football 2, 3, 4; Student Morale Committee 3.
*"Great talker."*

RICHARD P. DIAMOND
SAM; AIIE: Academic Honors; Skiing Club 1, President 2; Outing Club 3, 4; Intramural Volleyball 3, 4.
*A very casual look at life.*

MYRON DOMARECKYJ
*"Excellent pianist."*
RONALD M. DOOLEY
Tau Beta Pi 4; Alpha Pi Mu 3, 4; AIIE 2, 3, 4; Lambda Chi Alpha; Intramural Basketball, Volleyball; Skiing Club 4.
Mixes successfully with all types of people.

WILLIAM F. ENGLEHARDT, JR.
AIIE 2, 3, 4; SAM 4; Theta Chi 3, 4; Intramural Basketball.

MICHAEL T. FERRIS
Alpha Pi Mu 3, 4; AIIE 2, 3, 4; SAM 2, 3; Theta Chi 3, 4; Intramural Volleyball, Basketball 3, 4, Football 4; Section Representative 4.
A fine sense of humor and usually the life of the party.

BRUCE D. GILBERT

GENE R. GYESKY
AIIE; Intramural Basketball, Baseball, Football; Golf Club; Newman Club; Ski Club; Class Council Representative 2.
"Never fails to present an argument in any subject."
JOSEPH J. JUNGUZZA, JR.
Tau Delta Phi 1, 2, 3, 4; Intramural Basketball, Volleyball; Basketball Team Manager 3.
Mr. Dependable who loves to play basketball—J4.

KENNETH F. HEIN
AIEE 1; AIIE 2, 3.
Ken possesses a stable, healthy nervous system; rare qualities at NCE.

EDWARD KUCHARSKI
Wrestling Team 1; Fencing Team 1; Gymnastics Team 1; Debating Team President 4; Vector Features Editor 3; Orbit 1, 2, 3, 4; Interclub Council 4;
"Ed, whatever you do in life; it will be different."

JAMES KELLY
Alpha Pi Mu 4; AIIE 2, 3, Secretary 4; SAM 2; Theta Chi 3, 4; Motor and Sports Car Club 3, 4.
"Big Jim".

JAMES J. LINDENFELSER
AIIE 2, President 3, 4; SAM 2, 3; Alpha Pi Mu 3, 4; Arnold Air Society 4; Omicron Delta Kappa 4; Who's Who 4; Tau Delta Phi 2, 3, 4; Intramural Basketball 1, 3, 4; Bowling 1, Football 4; Volleyball 3; IFC Basketball 2, 3, 4; Football 2, 3; Feedback Editor 4; Honors Option 3, 4.
An animated person with a sparkling personality.
ELLIOT OFSOWITZ
AIIE 3; SAM 1; Tau Epsilon Phi 4.
Elliot will brighten up any situation with his wit.

WILLIAM L. MASCHARKA
Vector 3, 4; Orbit 3, Business Manager 4.
A casual easy going type of "Engineer".

MICHAEL MORRIS
AIIE 3, 4; SAM 3, 4; Intramural Basketball 1, 2, Volleyball 1, 2, Bowling 3.
"The Original Packers Fan."

RONALD J. NITTOLI
Theta Chi, Intramural Football 4.
"Ron is serious minded, yet retains a sense of humor."

THOMAS M. McCANN
AIIE 2, 3, Treasurer 4; SAM 2, 3; Omicron Delta Kappa 3, Treasurer 4; Arnold Air Society 4; Pi Kappa Phi 1, 2, 4, President 3; Dance Club 3, 4, President 3; Varsity Club 2, 3, 4; Soccer 2; Who's Who 3, 4; Faculty-Student Athletic Committee 2; Faculty Committee on Professional Conduct 4; Student Council Social Committee 3; Professional Development Program 3, 4.
All around guy with self-confidence.

ELLIOIT OFSOWITZ
AIIE 3; SAM 1; Tau Epsilon Phi 4.
Elliot will brighten up any situation with his wit.
FRANK A. PIPOLI
AIIE 3, 4; SAM 3; Theta Chi 3, 4; Intramural Bowling 1, 2, 3, 4, Basketball 1, 3, Softball and Volleyball 3; Inter-fraternity Football and Softball. Practical joker.

JEFFREY W. ROSOFF
AIIE 3; SAM 2.
Jeff's philosophy is optimistic—he went into shock the second semester and hasn't fully recovered yet.

ARTHUR LEONARD STEINFIELD
AIIE 2, 3, 4; Theta Chi 3, 4.
“Friendly, reliable Art will give you the shirt off his back if you need it.”

STEPHEN C. PELLEGRINO
Alpha Pi Mu; AIIE; Intramural Basketball, Football.
"Success is a guy named Steve."

JOHN J. SOPKO JR.
Tau Beta Pi 3, 4; Arnold Air Society 3, 4; Alpha Pi Mu 3, 4; AIIE 2, 3, 4; Theta Chi 3, 4.
Talks a lot under the influence.
ROBERT TRONGONE
AIIE 2, 3, 4; SAM 2; Theta Chi 3, 4; Intramural Basketball 1; Class Council Representative 4.
Bob is an ideal "friend" to everybody.

JOHN J. WRIGHT

JOHN R. TUFANO
Alpha Pi Mu 3, 4; AIIE 2, 3, 4; Intramural Volleyball.
Jack is the elder statesman of the I.E.'s.

EMIL VATTER
AIIE 2, 4; SAM 2.

JOHN L. ZOZZARO
AIIE 2, 3, Vice President 4; SAM 2; Phi Eta Sigma 1, 2, 3, 4; Tau Beta Pi 3, Cataloger 4; Alpha Pi Mu 4; Omicron Delta Kappa 4; Theta Chi President 3, 4; Rod & Gun Club 3; Intramural Basketball, Football, Softball; Class President 4; Who's Who 4; Class Council 3; Student Moral Committee 4; Alumni Committee 4.
Integrity, congeniality, thoughtfulness, and sincerity.

E. G. HOLMBERG
(Not pictured)
MECHANICAL ENGINEERING

THROUGH THE CONCEPT AND DESIGN OF MECHANICAL ENGINEERS—One of New Jersey's largest power complexes.
CHARLES F. AMES
ASME 3, 4; Motor and Sports Car Club 3, 4; Intramural Sports 1, 2, 3, 4.
"Boundless Energy."

JOSEPH R. ANSTETT
ASME 2, 3, 4; Chess Club 2, 3, 4; Table Tennis Club 1, 2; Vice President 3; Bridge Club 2, 3, Treasurer 4.

JOHN F. BARRETT
ASME 3, 4; Theta Chi; Intramural Bowling 3, Football 4; IFC Softball 3, Football 4; Section Representative to Class Council 4; Social Committee Chairman for ASME 4.
"John's greatest assets are his quiet self assurance."

HARVEY BARON
ASME 2, 3, 4; Tau Delta Phi 1, 2; Secretary 3, President 4; Dance Club Treasurer 3, 4; Class Council 2, 4; Intramural Sports; Nucleus Advertising Manager; Steamlines Editor 4.

ALLEN ACKON

STEPHEN BELLOTTI
ASME; Steamlines Editor 4; Tau Delta Phi, Secretary 2, Vice President 3; Intramural Sports; Fencing Team 1.
DENNIS W. BERMANN
ASME 3, 4; Sigma Pi 1, 2; IFC Representative 3, 4; IFC Awards Committee Chairman 3; Rush Committee Chairman 4; Constitution Committee 4; Intramural Bowling 1, 2, 3, 4, Basketball 1, Volleyball 3, 4; Newman Club 1, 2, 3, 4; Dance Club 1, 2, Vice President 3, President 4; Section Representative 2; Social Committee Chairman; Ring Committee; Prom Committee Chairman 3; Freshman Orientation Committee 2, 4.
A regular “Ball of Fire with a receding hairline.”

JOHN F. BUTTERFIELD
Pi Tau Sigma; ASME 3, 4.
The grass is always greener in someone else’s yard.

RENE BOILLAT
ASME 3, 4; Iota Kappa Phi; IFC Sports, Bowling, Volleyball; Bridge.
One half of the “unbeatable” bridge team.

NORMAN W. BILLER
ASME 3, 4.

ANNE BOSHEK
Class Council 1, 2; Motor and Sports Car Club 4; Glee Club 1, 2, 3, 4; Sigma Chi Epsilon 1, 2, 3, 4.
Tea drinker with dangly earrings—long brown hair—opera fan—drives a Sherman tank.

HARRY J. BONFANTI
ASME 2, 3, 4; Pi Kappa Phi 1, 2; Treasurer 3, President 4; Inter-Fraternity Council 2, 3, 4; Newman Club 1; Interfraternity Sports 1, 2, 3, 4; Student Council Publicity Committee 3.
Enjoys parties.
PAUL M. CAFONE
ASME 3, 4; Alpha Phi Omega 2, Vice President 3, 4; Intramural Sports 1, 2; Class Council.
Great desire to be a successful engineer.

HUGH S. CARANO
ASME 3, 4; Theta Chi 3, 4; IFC Representative 3, 4.
"Hugo always with a smile and a greeting of 'Hi Dad'."

BARBARA ANNE CHADWICK
Pi Tau Sigma 4; ASME 4; Sigma Chi Epsilon Sorority; Commuter Club.
DANIEL W. CHOLISH
Phi Eta Sigma 2, 3; ASME; Sigma Pi 1, 2, 3, 4, House Chairman 1; Intramural Basketball 1, 2, 3, Baseball 1, 2, 3, 4; Volleyball 1, 2; Class Council Representative 2.
Likes to play practical jokes on his friends.

W. CHEPOLIS
Phi Eta Sigma 2, 3; ASME; Sigma Pi 1, 2, 3, 4, House Chairman 1; Intramural Basketball 1, 2, 3, Baseball 1, 2, 3, 4; Volleyball 1, 2; Class Council Representative 2.
Lab time is lunch time.

WALTER T. COLLINS
Phi Eta Sigma 1, 2, 3, 4; Pi Tau Sigma 3, 4; Interfraternity Council 1, 2, 3, 4; Class Council 3.

LOUIS W. CROMPTON, JR.
ASME 2, 3, 4; Steamlines 4; Pi Kappa Phi 2, 3, 4; Interfraternity Sports 2, 3, 4; Class Council 4.
Quick witted and humorous.

PETER A. CONFORTI
ASME 2, 3, 4; Pi Tau Sigma 4; Arnold Air Society 2, 3, 4; Alpha Phi Delta 1, 2, Vice President 3, 4; Class Council 1, 2.
Watcha got in the box Pete?

NICHOLAS J. CORBO
ASME 2, 4; Alpha Phi Delta 1, 2, Treasurer 3, Chaplain 4; Fencing Team 1; Interfraternity Council 1, 2, 3, 4; Class Council 3.
Corbsie hates to sleep.
IRVING COOPER

ROBERT F. DE CICCO
Tennis Team 1, 2, 3, Captain 4; AF-ROTC; Newman Club 1, 2, 3, Corresponding Secretary 4.

What a tennis player "Pancho".

V. R. CAMPBELL, JR.

JEFFREY L. DeFEO
ASME.
Always willing to give it a try.

ROBERT DIMSEY
ASME.
"One of the "Originals".

ROBERT C. DICKEY
Pi Tau Sigma; ASME.
Always in trouble with his partners and blaming it on them.
THOMAS J. DOLAN
ASME; Intramural Bowling 2, 3, 4; Intramural Flag Football and Softball 4.

ROBERT F. DONAHUE
ASME.

DANIEL W. DONLEY
ASME; IEEE.
Pennsylvania accent.

FRANK J. FARLEY
ASME 1, 2; Sigma Pi 1, 2, 3, 4.

HAROLD O. FICHTER
ASME 3, 4.
Quiet in appearance.

AUGUSTUS NORTON DRAKE
Avid fan of wide tie day—loves IR.
WILLIAM J. FRICKE

LAURENCE P. FROEHЛИCH

MATTHEW G. FISCHER
ASME
A little nonsense now and then is relished by the wisest men.

N. A. GERVAIS

HARRY GERRECKE
ASME; Intramural Basketball and Football; Class Council.
Spirited; enjoys night club life.
ANDREW J. GONOS
ASME 2, 3, 4; Arnold Air Society 2, 3, Commander 4; Flight Instruction Program 4.
Plans to make a career of the USAF as a pilot.

WILLIAM S. GREENWOOD
ASME Secretary 4; Pi Tau Sigma; Theta Chi; Honors Option.
“When he smiles he can’t stop.”

ROBERT T. GRACE
ASME; Section Representative; ASME Newsletter.

MELVIN R. GREEN
ASME.

JOHN F. GROHMAN
ASME; Alpha Phi Omega Vice President; Audio Club; Inter-Club Council; Campus Peace Corps Coordinator.
Hard working student.
JOHN C. GULICK, JR.

ROBERT F. GUYRE, JR.
ASME; Sigma Pi; Interfraternity Social Chairman; Intramural Bowling, Basketball, Softball; Interfraternity Football, Basketball, Softball; Class Council 4; Motor Club; Newman Club.

Bob is to be remembered for his cool and casual outlook on life.

PHILIP M. HAPEMAN
ASME; Theta Chi.

"A man who is sure of himself."

GEORGE E. HAROLD
ASME; Pi Tau Sigma; Christian Fellowship 2.

HOWARD J. HARDWICK
Alpha Phi Delta; Intramural and Interfraternity Basketball; Class Council 1, 2, 3.

ROBERT HARWOOD
ASME; SAE Vice Chairman 4; Motor and Sports Car Club Vice President 3, 4; Motor Club Racing Team 3, 4; Table Tennis 3; JV Fencing 1, Varsity 2, 3, 4; Student Council 1; Section Representative 4.

"An eternal optimist. Never caught without a solution."
DENNIS F. HAYES  
ASME 3, 4; Motor and Sports Car Club; Dance Club 3; Intramural Volleyball 1, 3, 4.  
"Gee Ed, I only had to take out thirty seven books to write that discussion."

STEPHEN J. ILLES  
Pi Tau Sigma, Treasurer; ASME Treasurer.

D. E. HERSHEY  

WILLIAM O. HAYS

LAWRENCE J. JOHNSON  
ASME 2, 3, 4.  
Gets his work done five minutes before class.

RICHARD N. JOHANSON  
ASME 4; Intramural Basketball 1; Bowling 1, 2.  
"Sax man extraordinare. Patron of Art and Sid’s."
ANTHONY WALTER KACZOR
ASME 3, 4; SAE 4; Theta Chi 3, 4; Intramural Bowling 1, Softball 3; Motor and Sports Car Club 3, 4, Rallymaster 4; Section Representative 4.
He is a hard worker. He is a friend to anyone in need of help.

THOMAS J. KENNEDY
ASME; Intramural Basketball 1, 2, 3, 4; Bowling 2, 3, 4, Softball 1, 2, 3, 4; Football 4.
He’s quiet, but look out girls!

RAYMOND L. KELLER
ASME; Intramural Basketball; Class Council 2.

JOHN J. KERKOWSKI, JR.
ASME 2.

L. C. KELLY

NICHOLAS W. KIRINCICH
ASME 2, 3, 4; Pi Kappa Phi 1, 2, 3, 4; Newman Club 1, 2, 3, 4; Interfraternity Sports 1, 2, 3, 4.
Jovial fraternity man.
FELIX KURAN
ASME; SAE; Table Tennis Club Treasurer 3, 4; Motor and Sports Car Club 3, 4.
*Fast talker, usually about sports cars.*

MICHAEL JOHN KOVACH
ASME 3, 4; Theta Chi; Class Council 4; Publicity Committee.
*Mike absolutely refuses to cut classes. Has been seen in the company of skunks and raccoons, a serious student that doesn't act like one.*

MICHAEL A. KUZMIAK
ASME; Intramural Basketball, Bowling 2, 3, 4, Softball 1, 2, 4, Football 4.

JOSEPH J. LAICO
Pi Tau Sigma Secretary 4; ASME; Theta Chi Vice President 4; Glee Club 1; Prom Committee 3, 4; Social Committee 3, 4; Section Representative 3; Student Council Representative from Senior Class 4.
*"Most natural engineer."*

WILLARD G. LACKEN
Sigma Pi.
WILLIAM R. LARSEN
ASME 4; Tau Delta Phi 1, 2, Secretary 3, Treasurer 4; Dance Club Secretary 4; Intramural Sports; Steamlines.
Always ready to lend a helping hand.

JOHN LEBER
ASME; Intramural Basketball 1, Bowling 1, Softball 1, Volleyball 3. Mr. Sports.

CARMEN R. LA SALLE
ASME, SAE; Theta Chi; Motor and Sports Car Club 3, President 4; Varsity Bowling 1, 3; Intramural Bowling 4; Section Representative 4; Nucleus 4.

OTTO J. LEOPOLD, JR
ASME 2.

PAUL LOMBARDI
ASME; Pi Tau Sigma; Motor and Sports Car Club 3. Dozes dramatically.
GEORGE LORIOT
Tau Epsilon Phi 1, 2, 3, 4; Motor and Sports Car Club 3, 4.
Magnetic personality; Ford hater; Raquette Lake summers.

HENRY F. LYON
ASME 4; Phi Beta Tau 1, 2, 3, 4; Intramural Bowling 1; J.V. Basketball Manager 2; Yacht Club 2; Athletic Association 2, Vice President 3; Class Council Representative 2, 4.

THOMAS MELANI
ASME; Alpha Phi Delta 3, 4, Secretary 2; Glee Club; Ping Pong Club; Intramural Baseball, Basketball, Football.
Quiet, unobtrusive personality.

VICTOR P. MERLO
Who's Who 3, 4; ASME; Sigma Pi First Counselor; Interfraternity Sports; President Junior Class; Vice President Sophomore Class; Student Council Representative; Class Council; Ring Committee Chairman.

WILLIAM J. MacCORMACK
ASME 2, 3, 4; ROTC 1, 2, 3, 4.
Hard worker when he does.

STUART W. McFADDEN
ASME 2, 3, 4; Arnold Air Society 4; ROTC 1, 2, 3, 4.
EG whiz kid; "wise guy".
LOUIS MIRANDY

DAVID G. MEYERS
Pi Tau Sigma 2; ASME 1; Delta Sigma Phi.

GEORGE W. NIECE
ASME 3, 4; Baseball 1.
Good engineer, but a lousy test taker.

JAMES M. O'CONNELL, JR.

KENNETH OEXLE
ASME; Newman Club 1, 2, 3, 4; Publicity Committee of Class Council 3; Vector 3, 4.
A quiet man with strong feelings.
JOHN PALATINI
Honors Option Program.

CHARLES J. OLIVEIRA
ASME 3, 4; Intramural Basketball 1, 2, 3, Softball 1, 2, Bowling 3.
"Strong and Silent."

JOHN M. PACHOLIK
ASME 3, 4; Glee Club 1, 2, 3, 4.

PETER ORTLEB
ASME 3, 4; Bowling; Bridge; Volleyball.
Other half of unbeatable bridge team. Famous for trips to New York, Baltimore, and Beach Haven.

WARREN A. ORTMANN

JOHN PALATINI
Honors Option Program.
BRENT S. PARRY
ASME 2, 3, 4; Motor and Sports Car Club.

K. A. POPPELE
Chess Club; Glee Club.

VINCENT POLIGNANO
Pi Tau Sigma; Sigma Tau Sigma; Douglas Collegians Vice President 3; Student Resident Adviser 4; Nucleus 3, 4; Vector 4; Orbit 4; ASME 4. Always in there giving his all for the Nucleus.

LARRY PERFETTO
Chess Club; Glee Club.

JOHN PUZIO
Pi Tau Sigma 4; ASME 4; Iota Kappa Phi 2, 3, Athletic Director 4.
KENNETH C. RIMER
Honors Option; ASME 3, 4.
Always trying to figure out how things work.

RICHARD QUARTARARO
ASME 2, 3, 4; Pi Tau Sigma 3, 4; Arnold Air Society 3, Operations Officer 4; Intramural Sports 1, 2; ROTC 1, 2, 3, 4.
You can tell when there’s a quiz by checking his attendance record.

HOWARD RESNICK

JAMES C. PAYNE

KENNETH C. RIMER
Honors Option; ASME 3, 4.
Always trying to figure out how things work.

RICHARD QUARTARARO
ASME 2, 3, 4; Pi Tau Sigma 3, 4; Arnold Air Society 3, Operations Officer 4; Intramural Sports 1, 2; ROTC 1, 2, 3, 4.
You can tell when there’s a quiz by checking his attendance record.

HOWARD RESNICK

JAMES C. PAYNE

KENNETH C. RIMER
Honors Option; ASME 3, 4.
Always trying to figure out how things work.

RICHARD QUARTARARO
ASME 2, 3, 4; Pi Tau Sigma 3, 4; Arnold Air Society 3, Operations Officer 4; Intramural Sports 1, 2; ROTC 1, 2, 3, 4.
You can tell when there’s a quiz by checking his attendance record.

HOWARD RESNICK

JAMES C. PAYNE

VINCENT ROSAMILIA
ASME.
Good card player.
MATTHEW ROVENDRO
Pi Tau Sigma Vice President 4; Honor Societies Council Treasurer 4; ASME; Honors Option.
"Matt is one of those few individuals among us who knows what he wants."

ROBERT JOHN SACHS
ASME 3, 4; Theta Chi; Motor and Sports Car Club 3; IFC Football 4; Vice President of Class of '64; Chairman of Social Committee.
"Smilin' Bob."

EDWARD D. SCHNEPEL
Honors Option 3; ASME Representative 3, 4; Sigma Pi 2, 3, 4; J.V. Baseball; Intramural Basketball; IFC Football, Basketball and Softball; Section Representative 1; Dance Club 3, 4.
Humor typifies "Schneps" best.

WALTER R. SCHERB, JR.

RICHARD U. SEELY
Pi Tau Sigma 3, President 4; Tau Beta Pi 3, Recording Secretary 4; Honor Societies Council Vice President 4; ASME 3, Vice Chairman 4; Honors Option.
Personal excellence is always a goal for Dick.
ROBERT C. SIELSKI
ASME; SAE; Intramural Volleyball and Softball; Ski Club Vice President 1, 2.

SAUL SCHIFF
Pi Tau Sigma; ASME; ASTME.
Likeable Saul rates as high with his classmates as he does in class ranking and is blessed with an extraordinary memory.

ROBERT D. SMITH
ASME; Intramural Basketball.

KENNETH SMOLEN
ASME; SAE; Intramural Sports.
Well liked; conscientious.

BARRY R. STARKE
ASME 3, 4 Section Representative.
LEO D. STILLITANO
ASME; Theta Chi.
"Biggest guy in the class. Impossible not to like him."

WALTER J. STOBB
Pi Tau Sigma; ASME.

FREDERICK PAUL STURIM
ASME 2, 3, 4; Phi Beta Tau 1, 2, 3, 4; IFC Representative 3; Rifle Team 1, Manager 2, Captain 3, 4; AFROTC Rifle Team 1, 2, 3, Commander 4; Varsity Club 3, President 4; Publicity Chairman IFC 3.

JAMES V. TAMBURRO
ASME 3, 4; Alpha Phi Delta Recording Secretary 3, 4, Corresponding Secretary 3, 4, Pledgemaster 4; IAE-STE Program, 1963; Section Representative.
Jim is able to overcome any object in his path, one way or the other.

JOHN TERCEK
ASME 3, 4; SAE 4; Intramural Bowling 1; Class Council 4; Publicity Committee 4; Tickets Committee 4; Social Committee 4; Nucleus 4; Motor and Sports Car Club 3, 4, Rally Master 3.
A lover of "sports cars" and his wife.
KENNETH T. TICE
ASME; Sigma Pi; Intramural Hockey; Interclub Council 3; Dance Club Treasurer 2; President 3; IFC Social Committee Chairman; Class Council 1, 2, 3; Nucleus 1, 2, 3; Ring Committee.

Friendly personality, good sense of humor and a mature individual.

LOUIS TROW
ASME; Intramural Bowling, Basketball; Football, Softball.

MARTIN USTIN
ASME; Tau Epsilon Phi 1, 2, 4, Chancellor 3; Intramural and Inter-fraternity Football, Basketball and Softball; Class Council 4.

LEONARD VAN GULICK
Phi Eta Sigma; Pi Tau Sigma; SAE; ASME; Class Council Representative 2.

"Leonard the Silent".

GERALD D. UTTRACHI
ASME; Pi Tau Sigma.
Nancy-Ann and Patsy.
CASIMER E. WALISLEWSKI

STANLEY M. WELLAND
ASME; Bowling; Intramural Bowling Captain 1; Motor and Sports Car Club 1; Class Council 1.

ANITA J. VENTZ
ASME 2, 3, 4; Junior Women's Advisor; Glee Club 1, 2, 3, 4; Motor and Sports Car Club 3, Secretary 4; Sigma Chi Epsilon 1, 2, President 3, 4; Class Council 1, 2, 3, 4; Senior Class Corresponding Secretary 4; Nucleus 3, 4; Who's Who 4.
Loves Wagnerian opera; drives Mercedes-Benz 190-SL.

MARTIN P. WIESS
ASME; Tau Epsilon Phi; Intramural Volleyball, Basketball; IFC Vice President.
You name it, he'll judge it.

RONALD C. WHITE
ASME; Pi Tau Sigma; Tau Epsilon Phi.
The Commandant's close companion.
EDWARD ARTHUR WILSON
ASME 3, 4; Intervarsity Christian Fellowship; Soccer 4.
"See you at the Apollo."

STANLEY A. WYSPIANSKI
ASME; SAE.
Stan has a quiet nature but at times he tends to be a worrier.

WARREN WYLLIE
ASME 4; SAE 4; Tau Delta Phi 2, 3, Steward 4.

GEORGE WITTMANN
ASME; Intramural Basketball 1, 2, 3, 4, Football 4.
"Are we going to the 'Park'?"

DAVID YELNER
IHOR ZAHAYKEVICH  
ASME 1, 2, 3, 4; Motorcycle Club.

SHELDON ZITTER  
ASME 4.

"Forever thinking of sports and still moaning about the Yankees."

Those Not Photographed . . .

W. H. ADELS  
E. L. ANDERSON  
W. H. ANGLE  
D. S. ANTRIM  
R. H. BENNETT  
ALDO BREDOLLO  
J. CARLUCCI  
H. S. CASSELL  
J. J. CHISELKA  
M. CIFRESE  
E. J. CORCORAN  
R. P. DEASONIER, JR  
F. R. DICKINSON, JR.  
A. DIVINCENSO  
M. F. DORFLINGER  
C. F. GABEL  
R. E. HARRISON  
R. R. HART  
AMBROSE A. HAUSER  
ASME 2, 3; SAE 4; Rifle Team 3; Motor and Sports Car Club 2, 3, 4; Newman Club 2, 3, 4; ROTC 1, 2, 3, 4.
W. HENDRY, JR.

W. JAKOB  
A. P. KLOTZMANN  
M. J. KOLASA  
R. T. KOUMARAS  
K. E. LIECHTY  
V. MARCILGER  
G. MATEY  
A. OPANOWICZ  
R. W. PAGANO  
A. ROMEL  
J. G. ROSANO, JR.  
K. B. RUSNELL  
F. T. SASSE  
D. M. SCALZA  
S. A. SCHRADER  
S. SNYDER  
A. J. SPITZNER  
A. P. STEVENSON  
D. STUART  
W. H. SUCKOW  
N. R. TAFURI  
G. S. TOBIAS  
W. E. TRAVERS  
FRANK PERETTI  
M. J. WALLASKY  
J. G. WEBER  
J. J. ZAFIAN, JR.  
R. ZODDA  
EDWARD C. ZONENBERG  
Alpha Phi Omega 1, 2, 3, 4; Newman Club 1, 2, 3, 4.
SPORTS
President
Donald Burtis
Vice President
Christopher Dowd
Secretary
Thomas Mulshine
Treasurer
Thomas Rawley
Publicity Chairman
George Simonson
Faculty Adviser
Professor Wasson

ATHLETIC ASSOCIATION COUNCIL

TENNIS
FRONT ROW: Captain Bob DeCicco, Mario DiMasi, Thomas Ruck, Fred Reuter.
BACK ROW: Coach Alex Bedrosian, Richard Wyant, James Flynn, Donald Kolibas.
For the first year since 1958 the NCE Tennis Team finished on the losing side of the ledger. Following a three season record of 20 wins and 7 losses the netmen face another rebuilding year in 1964. This year’s top performers should be No. 1 singles players James Flynn and Captain Bob DeCicco. These two players worked well last year and will team up to form the top doubles pair. In an effort to restore NCE to its previous prominence Coach Bedrosian will be devoting a good deal of time to the development of his younger players. Only time will tell.

SEASON RECORD FOR 1963

<table>
<thead>
<tr>
<th>Team</th>
<th>Wins</th>
<th>N.C.E. Wins</th>
</tr>
</thead>
<tbody>
<tr>
<td>Upsala</td>
<td>7</td>
<td>2</td>
</tr>
<tr>
<td>Jersey City</td>
<td>1</td>
<td>8</td>
</tr>
<tr>
<td>St. Peter’s</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Montclair State</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Stevens</td>
<td>9</td>
<td>0</td>
</tr>
<tr>
<td>Drew</td>
<td>8</td>
<td>1</td>
</tr>
<tr>
<td>Newark Rutgers</td>
<td>6</td>
<td>3</td>
</tr>
<tr>
<td>Seton Hall</td>
<td>7</td>
<td>2</td>
</tr>
<tr>
<td>Trenton State</td>
<td>9</td>
<td>0</td>
</tr>
</tbody>
</table>

Final Record: 3 Wins — 6 Losses

Captain Bob DeCicco makes hard overhead return.

Fred Reuter shows form necessary for an effective service.

Coach Alex Bedrosian flanked by Captain Bob DeCicco and player-manager Fred Reuter.
Judo—which is new to our campus—literally means the "gentle way." It is no longer confined to its homeland Japan, but is slowly establishing itself as a world and Olympic sport. The NCE team in its first year as a recognized varsity sport has made gracious and substantial steps to establish for itself a strong place in our ever growing athletic program.

As a sport Judo has a variety of rewards for its participants. In a sentence Judo can be explained as "maximum efficiency with minimum effort." Judo has much deeper meaning than just that. With Judo we have active competition, a chance to keep physically fit, a method of strengthening one's self confidence, learn self defense tactics and become proficient at a varsity sport which we can continue with after graduation.

Sophomore Ray Kasbariam, a member of last year's Judo club, was instrumental in organizing and maintaining the Judo team at its present high level. Kasbarian drummed up a great deal of interest among the students and with the help of the two professional instructors, Yoskesada Yonezuka and Yauso Osaki, developed an excellent team. Gene Sheninger and Pete Tafara were among the charter members this year and these three men have formed the nucleus of the team.

The varsity team is split up into four weight classes: light, middle heavy and open. The team is rather unique in that the season lasts for the entire school year and also at each match every man usually is able to fight.

Judo is a collegiate sport of the future and based upon this past year's performance NCE will be heard from.
JUDO — The Gentle Way

Preparation for battle . . . and then

Three of the outstanding performers—Pete Tafara, Gene Sheninger and Ray Kasbarian.
The baseball team at NCE has for some years bore the brunt of mediocrity. However, last year the team showed signs of coming into its own. The establishment of the Junior Varsity team has allowed more men to participate and develop.

This year, led by five seniors, Captain Paul Palmarozza, Manny Garrido, Bob Cerbonre, Tony Ippolito, and Stan Pukash, the team hopes to finish with a record well over .500. The team possesses a well balanced hitting attack and a solid defense. The big problem will be pitching where Ed Sieradzki and Don Carroll are the only proven hurlers.

Should the team overcome the many handicaps facing them including limited practice time and facilities they deserve a great deal of credit.
CAPTAIN PAUL PALMAROZZA
Second Base

SENIOR MEMBERS OF THE TEAM WHO HAVE BEEN TOGETHER THROUGH FOUR SEASONS OF VARSITY BASEBALL.

STAN PUKASH
Centerfield

BOB CERBONE
Leftfield

“MANNY” GARRIDO
Shortstop

TONY IPPOLITO
All Around
This season the Big Red cagers followed their usual pattern of starting slowly and finishing strong. The engineers lost four of their first five starts including 2 out of 3 at the Rochester Invitational Tournament. From then on they played well and finished with an 8 and 11 record. Included in this period were big victories over Monmouth and M.I.T. The team also lost close decisions to Jersey City State (2 points) and Upsala (4 points) in their late surge.

Defense has been the keynote for NCE this year. They have held 19 opponents to less than 60 points per game which ranks them among the top ten in the NAIA. The team featured a pressure-type man-to-man defense.

The possession-type offense features Co-Captain Wilkins in the backcourt. In addition to being selected to the All-Tech second team at the Rochester Tournament, Wilkins was named to the NAIA All-State first team by the New Jersey Sportswriters Association. Paul Dreyer, the other co-captain, was a big factor in the rebounding department. Rich Schroeder, our 6'4" pivot man consistently hit double figures in the final games.

This has been the first season since Prof. Fitzgerald began coaching the team that they have been under the .500 mark. However, this year’s schedule has been the toughest played by the team.

With the help of some promising underclassmen, hopes are high for next year’s season.

THE BIG RED 1963-64
CO-CAPTAIN RICHARD "SKIPPY" WILKINS
All-State

BASKETBALL

JUNIOR VARSITY

John Walsh lays it up and . . .

Chuck Gerard moves his man out of the way.
The Fencing Team once again enjoyed a successful intercollegiate season. Competing against some of the top schools in the east, the final season's record stood at 7 wins, 5 defeats. One of the major additions in the schedule was that of the U.S. Military Academy. From the performance of the team this year, the sportsmen believe that many other top schools in the east will soon be added to the schedule.

This year's team was a young one with only two seniors in the starting lineups. However, with constant fight and drive, which has been characteristic of Fencing here at N.C.E., the young team scored well as seen by the following. High points of the season were victories over the perennial rivals such as Stevens Tech, Newark Rutgers, and St. Peters.

All of the members have contributed not only in fencing ability, but also in their moral support. This year's graduation will see the loss of Captain Don Burtis from foil and Gary Garabrant from sabre.

This year also marked the first year of a Junior Varsity squad. Under the capable direction of former N.C.E. fencers Louis Devito and Andrew Dembicks, the team members gained valuable experience in informal matches. This year's outstanding men included Captain Don Burtis, foil; Gary Garabrant, sabre; and George Potoczniak, epee. With the training gained this year in competition, combined with the youth and ability of the remaining swordsmen, the departing seniors feel they are leaving the team in capable hands.
Captain Don Burtis, Coach Paul Haussner, Gary Garabrant.

Touché
A top contender for the NCE “Sportlight” in 1964, the Big Red Soccer Team greeted the year’s end with a 6 and 3 record. Captain John Rapsomanikus also gained fame when he was named to the All-American Collegiate Soccer team, an outstanding feat for a small college nestled in a big city.

Developing a team during a rebuilding year is no easy job and the slow start seemed to indicate big problems. However, 5 straight wins in the last of the season, including the defeat of title contender East Stroudsburg pointed towards another successful year.

The maturity and teamwork displayed by the young team was a credit to their hard work and desire. The members showing the most outstanding qualities include the four seniors on the team. Respectively, these were Captain John Rapsomanikus, Many Garrido, Rod Pozp, and Bob Zlotnick. Bob’s outstanding 1962 season netted him the coveted ALL AMERICAN recognition for that year.
Ray Skripus quick passes to Bob Zlotnick.

KEN APOSTOLICO
Halfback 3 Years

ROD POZO
Forward 4 Years

MANNY GARRIDO
Goalie 3 Years

Tom Rawley jayvee fights for ball.
The bowling team of 1963-64 has finally found the combination to win as did the squad of 1959-60 which was the last time NCE took the Eastern Conference Title. The first half was played at a .500 pace, but the team caught fire in December and has moved to within 3 games of the lead with 5 weeks to go.

This team has seasoned veterans and the spark of youth. Co-Captains Jim McDonough and John Cyburt have 4 and 3 years experience respectively. Paul Orosz and Mike Skurla have bowled for 3 and 2 years respectively while Charlie Pritzlaff and Dan Dvorak are the newcomers this year. Paul Orosz currently has high series with a 667 and Jim McDonough high game with a 265, while the team average is 910.

Even if this year doesn’t produce the Conference Title the future looks very good with four lettermen returning.
In the 1961-62 season the Track team was revitalized by the efforts of Coach Robert Swanson and Kenneth Apostolico. With a new constitution and some old equipment the track team drew a few applicants, the team participated in several A.A.U. Track and Field meets. During the following indoor season Captain Ken Apostolico won three medals in the 60 yard dash competition and Craig Wunderly, Jr-Captain, copped a medal in half-mile run.

The 1963-64 season has brought new faces and hope to the team. With a raft of new equipment and increased school participation the track team has scheduled colleges such as Montclair and Newark State. The team this year has about 25 men competing in varied track and field events.

As one of the newest clubs on campus, the NCE Hockey Club has successfully established its roots in the minds and spirits of the student body.

During the first year the club has faced numerous handicaps. All practices were held at the unbelievable hour of midnight on Fridays, yet the team was able to give an admirable showing against well established clubs within the area. The determination of the club has been noted by many prominent athletes and coaches.

Seniors Gene Tremblay, Captain; Les Cox, Tom Kennedy, and Ken Tice have had the drive to establish the team, and look forward to a club which will graduate to varsity status in the near future. Les Ginsburg and Ken Schroll round out this fabulous team.
The NCE Rifle Team, under the direction of Prof. Robert Ketzner and Captain Henry Proctor, USAF, has made great gains in the past year. Bolstered by the purchase of new equipment and the return of five experienced shooters, the team faired well in the Metropolitan Intercollegiate Rifle League. The league matches were held in the Sussex Ave. Armory under National Rifle rules. A fifty foot range was used with the Remington model 40X and Winchester model 52 rifles fired from prone, kneeling and off-hand (standing) positions.

Outstanding performers for this year’s team were Captain Fred Sturim, Kyle Russel and next year’s captain Bill Vandershoff.

Let's pretend they're EE profs.

NCE's big guns.
In this solitude we find a welcome rest and the chance to review our past in a new light...
The pressure changes in a venturi are so clear when displayed by a lab set-up.

Gee, Dad, it's a Wurlizer!

The electronic eyes of the engineer.
Laboratory research is at the heart of an engineering career. At NCE it is the bonding agent between a theoretical background that is fraught with the insecurity of conceptualism, and the firm grasp the engineer must obtain over the mass of data pertinent to his profession. If many memories of strange measuring procedures and even stranger results persist; they are surely balanced by those moments of truth when a wispy paper-idea becomes a reality in wire and glass tube, gears and whirring armatures.

The electrical machines laboratory was a rich learning experience, as long as you didn’t touch that field breaker.

Fran, that sounds like the recipe for Beef Stroganoff.

Carl Stephanus at the “pool.”
Students about to begin a tensile test are outlined against their equipment.

Ah, yes, the generalized machine.
Engineering ... the art and science involved in the utilization of the forces and materials of nature for the benefit of mankind. A proud doctrine, deeply entrenched in the rich history of NCE, has its roots here in the "lab."
Students found their brand of technology returned to them ten-fold with the installation of NCE's Computer Center, now under the able direction of Dr. Fox.

Many were the hours spent in Colton Hall, the old lab building at NCE. Here the "youngsters" get their first tastes of co-ordinated lectures and laboratories.
Just for an instant the solitude of the library is broken in a flurry of page turning, and then all is quiet again.

A firm sure hand that will find little difficulty in the transition from student to Engineer.
Many familiar structures were still to be seen in 1964.

Some disappeared . . .

And some new ones arrived!
This particular mammoth will remain dear to the hearts of all who attended NCE in 1964.

Brig Cabe, on the spot again, this time to record on film destruction on our campus corner. Later editorials were carried by the Vector in an effort to reduce this menace.

Newark's finest battle to save what will soon be destroyed.
The immediate area of the college has been in its time both farmland and industrial center. Now tired of both roles it is making room for a third, that of campus grounds. We all suffered through the inconveniences with the hope that new facilities would be ready in time for our use, but today we still stand slightly in awe of the change and anxious for its completion.

Growth of a college within a city in turmoil required many changes.

Okay, so you made it to Newark? Now what?
What makes you think I can't take her out of the harbor? They teach us all that stuff at NCE.

In our Junior year we were still indifferent to cares of the outside world, and the joy of the moment was so precious as to never be forgotten. As a class we have been subjected to a myriad of newness; from curricula to classrooms, and if an epitaph is ever attached to us, it should call us NCE's "New Frontiersmen."

Our class President during the "Golden Year," Vic Merlo.

He's about to find out what it's like to have real friends. Man Overboard.
When we held a dance, everyone came, including Dean and Mrs. Yarosz...

And from the expressions, I'd guess they were all having a good time...

And they stayed till it was all over. Watching the festivities at the boatride are Prof. and Mrs. Konove, and Prof. and Mrs. Shukur.
“This gym only looks small,” but Anita Ventz finds out it takes a lot of effort to transform it into the Stork Club.

Dance Club made those Friday nights seem a long way from Monday morning.
Christmas was a time of mixed emotions; seasonal cheer was tempered with the approach of the semester's end. In the S.A. Office a team of two direct Ray Hsu on where to put that last piece of tinsel.

Folksinging at NCE?—Why not, it's the medium of the hard suffering, and if that isn't us . . . .
Head of the Big Red Debators, Ed Kucharski.

Those majoring in Pinochle found all the action they wanted, and often had time left over to attend class.

And others found that with the basic essentials one could catch up on a phenomenal amount of work.

And a few were already caught up.
Our interests were as varied. . . .

As our experiences.

Which included that mad time of the year, when anything goes (as the underclassmen seem to have found out) — election time.

The Big Red's littlest Highlander may someday look back with sense of wonder that she was ever that small.
We have been assisted and counseled. . . .

. . . taught and cajoled.

We have seen examples.

And we have even made attempts on our own in a controlled atmosphere.
But it is now time to leave, and take with us a little knowledge, a soupcon of security, perhaps some wisdom and maturity, but most important an awareness of what life holds for us and the faith in ourselves to reach out and embrace it.
Providing an answer to those who ask “what they can do for their country” is a responsibility that rests squarely on the shoulders of ex-SAC crew commander, Col. Maurice A. Berry, and the members of the 490th AFROTC Detachment. This is especially difficult when the glamor of big industrial earnings is dangled in front of most graduates. The fact that many men from NCE have served, in spite of the temptation to pass their obligations to others, speaks well for these dedicated men.
The T-29 airborne navigation school is mastered by an NCE cadet at Summer Training Unit, Langley AFB, Virginia.

Numerous flights were made by AFROTC cadets to such exotic places as Miami Beach, Denver and Nellis AFB near Las Vegas. Here two seniors accompany Angel Flight members to a drill competition at the University of Maryland.

Cadet Major Riccardi instills discipline in a nervous Junior in Cadet Wing Headquarters.

Captain Robert J. Lucas, Commandant of Cadets, hurries to view his latest screen test.
As Student Council President, Jim Boyle carries a lion’s share of the responsibility in determining policies for the government of the student body.

Jim and Dean of Students, Sumner J. House have an informal meeting to discuss a current problem.

The "Man With The Money," S. C. Treasurer Mike Carolan, found himself in the midst of the great financial battles of '64.

Bill Barrett, Vice President, and President elect acts as parliamentarian for the 1964 Council.
John Zozzaro, Senior Class President, is representative of the maturity and awareness of life that is implied by the completion of a college education. It is these characteristics that industry will look for in the NCE Senior.

The task of advising a group of students requires someone of exceptional and diversified talents who must have a genuine interest in working with students coupled with a willingness to give freely of his time and experience. Four years ago the Class of '64 was extremely fortunate in having found such a man in Professor Monroe Weller.

His great desire to help and contribute has been an inspiration to us. And how can we ever forget his lasting patience and pleasant humor which made the road through N.C.E. so much easier.

Willingly and graciously he gave of himself to help us, to guide us, to encourage us. Professor Weller, we thank you!
INTERCLUB COUNCIL

The ICC is the representative of some 20 clubs at NCE, and as such provides much of the impetus to extra-curricular activities. 1964 has seen the revitalization of many dormant clubs, and the promise of a new campus will give the ICC the facilities it needs to grow with the college.

President: Robert Lutolf
Secretary: Frank Carbin

Alpha Phi Omega

President: Stephen Bistritz
Vice President: John Grohmann
Secretary: John Baka
Treasurer: John Caldwell

Chess Club

President: Ray Hsu
Vice President: Kurt Hafner
Treasurer: V. McGann

Christian Fellowship

President: Edward VanAlstine
Vice President: Gene Graher
Secretary: Larry Wild

Convocation Committee

Chairman: Pete Schkeeper
Dance Club

President          Dennis Berman
Vice President    Michael Carolan
Secretary         William Larsen
Treasurer         Harvey Baron

Debate Club

President          Edward Kucharski
Vice-President     Albert Papp

I.A.E.S.T.E.

Participants: John Kwak, Mat Lewy, James Tamburro.

Motor Club

President          Carmen LaSalle
Vice President     Rick Hayden
Secretary          Anita Ventz
Treasurer          Norman Gervais

Photo Club

President          John Denninger
Vice President     Charles Bazelmans
Recording Secretary Albert Papp
Treasurer          Marvin Cohen
Advisor            Professor Weller

Varsity Club

President          Fredrick Sturim
Vice President     Richard Wilkins
Secretary          Rodrigo Pozo
Treasurer          John Cyburt
Advisors           Professors Fitzgerald, Simon
American Chemical Society

President  Richard Mach  
Vice President  Matthew Cannizzo  
Secretary  Charles Conway  
Treasurer  Charles Armbrust  
Advisor  Dr. Kreps  

American Institute of Chemical Engineers

President  Roy Peters  
Vice President  Paul O'Lenick  
Recording Secretary  Matthew Cannizzo  
Treasurer  Stanley Zeitz  
Advisor  Dr. Salamone  

American Institute of Industrial Engineers

President  James Lindenfelser  
Vice President  John Zozzaro  
Secretary  Thomas McCann  
Treasurer  James Kelly  
Advisor  Prof. Goldstein  

The Professional Societies Council consists of the presidents of all the professional societies of the school. These presidents through a system of yearly rotation, become the officers of the Council. The purpose of the Professional Societies Council is to further the collective interests of the professional societies. This objective is accomplished primarily through the Council's membership on the Student Council.

President  Albert Papp  
Vice President  John Glaser  
Sec.-Treasurer  Matthew Rovendro  
Advisor  Professor Miller
American Society
of Mechanical Engineers

President Matthew Rovendro
Vice President Richard Seely
Secretary William Greenwood
Treasurer Steven Illes
Advisor Professor Jacobs

American Society of Civil Engineers

President John Glaser
Vice President Richard Burlazzi
Secretary Henry Bray
Treasurer Paul Dreyer
Soc. Chairman Michael Carolan
Advisor Professor Mangasarian

Institute of Electrical
and Electronics Engineers

Chairman Robert Dusche
Vice Chairman Donald Maciag
Secretary Paul Chuhnov
Treasurer Edward Morgan
Advisor Prof. Clements

Society of
Automotive Engineers

President Ben Auletta
Vice President Robert Harwood
Secretary Rick Hayden
Treasurer James Feidler
Advisor Professor Weller

American Institute of
Aeronautics and Astronautics

President Albert Papp
Vice President Klaus Steiner
Treasurer Jim Fischer
Advisor Professor Salamon
Overflowing crowd at I.F.C. dance held at Military Park Hotel during April when the Annual I.F.C. queen was selected.
This year the I.F.C. grew to great heights as they expanded to ten houses and entered into many new activities. Starting the year off, a successful rush program was ended with the Annual Frosh Blowout attended by every Freshman section. The following Friday night the I.F.C. ran its first carnival, which was enjoyed by all who attended.

The I.F.C. athletic program got off to a great start with touch football, followed by basketball, bowling (for the first year), and baseball. The second annual I.F.C. Greek Olympics was also a great success.

The I.F.C. Ball was held this year at the Military Park Hotel and as usual was the best and biggest dance at N.C.E.

This year the I.F.C. instituted a new constitution in accordance with its growth and enlarged scope of activities.

The officers for this year were: President—Charles Pollack; Vice President—Craig Rule; Secretary-Treasurer—Charles Brain; Publicity Chairman—Ronald Marks; Faculty Advisor—Dr. Stochaj.
A friendly social gathering at ARMANDS.

Alpha Phi Delta’s winning entry in this year’s Ugly Man contest, Sam Barresi.

The brothers run a Christmas party for the children of St. Michael Hospital in Newark.
The school year of 1963-1964 has seen a number of changes occur at 15 Burnett Street, location of Alpha Phi Delta’s Chapter House. The most noticeable change has been the increase in membership to an all time high. Three initiations were held this year, instead of two as in previous years.

House improvements have been made from top to bottom, including a remodeled and enlarged Chapter Room, with wood-paneled walls. The cellar has also fallen prey to the paint brush and the putty knife, as has the second and third floors. Accomodations for twelve resident brothers are now available, made necessary by the influx of new brothers.

On the social side, there’s hardly a Friday night that the House isn’t overflowing with people. Regular social affairs include the Barn Dance, Dinner Dance, Christmas Dance, the Alumni-Senior Banquet, Card Party, Parents’ Day and Alumni Night. The second Fall Pledge Class sponsored the annual Christmas Party for the children at St. Michael’s Hospital, with a pledge playing the fitting role of Santa Claus.

This year it was one of Beta Xi’s brothers, Sam Barresi, who was honored with the dubious distinction of being the Ugliest Man on Campus. He was let out of his cage just long enough to receive the trophy and growl at a few spectators.

1964 marks the fiftieth anniversary of the founding of Alpha Phi Delta, and Beta Xi Chapter will be going all out to take part in the festive celebration which will occur at the Annual Convention this summer.

---

IN MEMORIAM

A tribute to our late fellow student, who will always be our brother . . .

RICHARD F. LUKOWIAK
"An indication of the action seen by the brothers of Alpha Sigma Mu."

"Okay, so I'm no Fred Astaire!"

Several "Vets" get some necessary studying done during lunch hour.

The work doesn't stop at school, but is carried on in Alpha Sigs home.
This year marks the tenth anniversary of the founding of Alpha Sigma Mu, the college's only veteran fraternity. Bonded by the common experiences of active military duty, this closely-knit band of men pursue learning instead of learning pursuing. Dedicated to the principle of scholastic assistance to those members in distress, the "old men of the campus" have helped compensate for the gap in years between high school and college.

But scholastic achievement and outstanding grade point average are not the only tactical objectives of Alpha Sigma Mu. The academic calendar is strategically interspersed with social events such as cocktail and masquerade parties. Then too, there is the annual Dinner Dance where alumni from all over the country have the opportunity to renew old friendships and meet current members.

Alpha Sigma Mu will continue in the future, as it has over the past decade, to produce new men trained in leadership, dedicated to the high standards of engineering, and exposed, if only briefly, to the social atmosphere of college life.
"Hands Up"

Iota Kap's old house as it makes way for Rutgers expansion.

The "Horror of HIGH Street."
A relative newcomer to N.C.E.'s fraternal community, Iota Kappa Phi has made some enormous strides since its beginning in December, 1961. Having as their first fraternity house, a brick faced storefront, the brothers have since moved to an eleven room building directly across from Eberhardt Hall, but were forced to relinquish it in order to make room for the College expansion program. Their present location is a thirteen-room brick structure in what may soon be known as fraternity row.

In April, 1963, Iota Kappa Phi received the honor of becoming a voting member of the I.F.C. The brothers have enthusiastically engaged in numerous interfraternity activities, among which are I.F.C. football, softball, Greek Week competitions and an ugly man contest.

The establishment and growth of a new fraternity has come about as the result of hard work, determined spirit, and a genuine belief in the principles of fraternity. Iota Kappa Phi stands today looking toward a bright future, for if spirit and desire can produce such amazing growth, who can say what the future holds.
Within the past year, Phi Beta Tau has twice departed from the path that led it to the position of the oldest local fraternity on campus. Convinced that Tau Kappa Epsilon, the largest national fraternity, and Phi Beta Tau had the same basic goals of respect for the individual, the brothers petitioned for, and were accepted for, affiliation with Teke. To complement this spiritual growth, the chapter grew physically by moving to a new house which has sleeping quarters for the brothers.

As the membership and size of the house continue to grow, the chapter will continue to be among the leaders of the N.C.E. fraternities.

The officers for the past year were Robert A. Pettit, President; Charles Brain, Vice President; Robert Brady, Recording Secretary; Allan Margulies, Corresponding Secretary, and Rodrigo Pozo, Member at Large.
What do you mean we’re supposed to be in class?

Alumni and undergraduate brothers talk over old times at the Founders’ Day Dinner.

“What do you mean we’re supposed to be in class?”

Some of the brothers and their girls “cool it” at the Beatnick Party.
Beta Alpha Chapter of Pi Kappa Phi was chartered at Newark College of Engineering on May 29, 1948 from local Phi Sigma Omega fraternity. It is one of over fifty chapters located throughout the country. Since the fraternity's establishment at the college, Pi Kapps have made themselves conspicuous by being active in almost all of the school's activities.

Presently, Pi Kapp holds the Varsity Club Booster Award which we earned by having massive contingents at the varsity games and boisterously cheering on the home team. It is probable that we will keep the plaque since our cheering group is becoming larger and louder.

As was true in the past, our annual Founders' Day Dinner was a tremendous success. This affair allows the undergraduate and alumni brothers to talk fraternity and relive old times. This year, the dinner was held at Donahue's in Wayne.

On January 27, we held our annual party for the orphans at Saint Peter's Orphanage in Newark. This is one event which everyone looks forward to with great anticipation. It was obvious that the brothers enjoyed themselves as much as the youngsters.

Our biggest affair—the Rose Ball—will be held March 21 at Marconi's in Kearny. This is the primary social activity of the fraternity. Again alumni and undergraduates can renew old friendships, and the evening is highlighted by the introduction of the Rose Queen.

The social calendar this year included parties with a multiple of themes, ranging from a Beach Party to a Beatnick Party. Included was an extravagant New Year's Eve Party which no brother will ever forget. Added to this were a number of "open houses" which surely enhanced our standing as the "Friendly Fraternity."

Pi Kapp has been active in every IFC sports tournament. We made an enviable showing by placing second in the football tournament, and are presently tied for the championship in basketball. The brothers hope to cop the softball championship this year.

The last week in October saw the installation of this year's first pledge class which started with nineteen potential Pi Kapps. We believe they are the finest underclassmen in the school, and we hope to have an equally fine pledge class the second semester.

It has been a very busy year for Pi Kappa Phi, and the brothers are further encouraged to participate in as many of the college's social, professional, athletic, and service activities as possible.
"Lower, Frank, lower!"

"Sigma Pi's humble abode."

"Okay, Pledge, bring the hose!"

"The I.F.C. football champs."

"Lower, Frank, lower!"
Alpha Mu chapter of Sigma Pi Fraternity can once again look back proudly upon another year of success and achievement. For the second consecutive year, Alpha Mu was the recipient of the Outstanding Sigma Pi Chapter in the Middle Atlantic States Award.

This year was one of great change for Sigma Pi, as they finally moved into their new home and spent a great deal of time on interior decorating and in obtaining furnishings. Sigma Pi once again showed their prowess in athletics as they captured all four I.F.C. athletic trophies.

In the field of community service, Sigma Pi devoted its time and labor to such worthwhile endeavors as helping to renovate the United-Crippled Children's Hospital and the Mt. Carmel Guild. They also continued to run the N.C.E. Blood Bank and the car wash for the Newark News Fresh Air Fund.

Once again Sigma Pi was proud to count among its members many of our school leaders in scholarship, sports, and student activities. Sigma Pi continued its philosophy of support to the school, the community, and to the development of its members in the conduct of mature adult life.
"A day at the beach."

"The Tau Delt bus, loaded and ready for sport."

"You mean this party isn't chaperoned!"

"Two more Tau Delt men relinquish their pins."
TAU DELTA PHI

This has been a banner year for Tau Epsilon Chapter of Tau Delta Phi. After winning the Best Fraternity on Campus Award for the second consecutive year, Tau Epsilon then went up to the National Convention in September and was awarded the highest honor in Tau Delta Phi—the General Achievement Trophy for the outstanding Tau Delt chapter in the nation.

During the year Tau Delt has continued to improve their house by additional interior decorating and increased furnishings. Thirty new brothers were added to Tau Epsilon chapter this year to replace a large graduating class. This year Tau Delt also started a new tradition—an Annual Dinner Dance which was a great success.

Due to the advent of social dues, the parties at Tau Delt were greatly improved and the 170 couple New Year's Eve party highlighted a tremendously successful social season. As usual, Tau Delt was right up among the leaders in all IFC athletics while at the same time placing a large number of its members in key posts throughout the scope of student activities. The years to come hold a bright future for Tau Delt as it seeks to remain at the pinnacle it has reached.
"Music to redecorate by!"

"The fruits of a lung cancer experiment."
Expanding from a small store-front on Warren Street in 1963 to a beautiful and roomy house on High Street in 1964, Tau Epsilon Phi has grown to a position of great prestige at Newark College of Engineering.

Val Schrumpf, as Social Chairman, and Ron Marks, as Publicity Chairman, have both done splendid jobs as was evidenced by the highly successful I.F.C. Ball last spring.

Although Tau Epsilon Phi did not have the greatest of athletic teams this year, the brothers showed a great deal of spirit and proved to be more than worthy contenders on the football field and basketball court in the I.F.C. circuit. Our annual Brothers versus Pledges football game was a tremendous success at which our girl friends cheered; the brothers won, and everyone had a marvelous time.

On the home front, Tau Epsilon Phi is expanding into new vistas. We have initiated an annual Alumni Day affair and are in the process of formally chartering a national alumni organization. Our underlying thought is that fraternalism lasts for more than four years.

Under the capable leadership of Steve Budow, Tau Epsilon Phi has probably had the best social year of any fraternity on campus. The summer boasted memorable picnics and beach parties, and, once Dennie DalBraccio and his planning committee completed their house renovations, Tau Epsilon Phi started the school year off with the biggest and most unforgettable Cocktail Party in the history of this chapter.

Lastly, the brothers of Tau Epsilon Phi are always proud to serve the community in every way possible. At Eastertime, the brothers held a party for the children's ward of Newark City Hospital, while our pledges did a wonderful job lending a helping hand at St. Mary's Orphanage.
Bill Bodar and Don Tuite on our finishing second in the cigarette contest.

In private unwinding sessions a brother sometimes reverts to innate sub-mongolian instincts.

Matt Farley and guests at the Annual Christmas Party (Kid's).

Tau Lambda Chi's bartenders put their best bottle forward.
This year has been one of dynamic activity for young Tau Lambda Chi fraternity. In its first full year at N.C.E., the group nearly doubled its initial membership and moved into a large new house. The brothers put their best athletic foot forward in interfraternity council sports and carried home a few recognitions from the interfraternity council for the fraternity's continuing support and unofficial recognition from the rest of the school for its social program.
Mayor Addonizio presents the brothers of Theta Chi with plaque for their contribution to the Essex County Mental Health Association.

The officers of Theta Chi receive their charter at a banquet at the Robert Treat Hotel attended by Fraternity presidents and administration.

The "FLINTSTONES" at the annual Halloween costume party.

Brothers pitch in to help remodel Fraternity house at 17 Warren St.
On December 8, 1963, Theta Chi joined the N.C.E. fraternity group by installing Epsilon Psi chapter, formerly known as Kappa Delta Chi. Founded only a year ago, Theta Chi now has thirty-one brothers and a house in which its brothers live on Warren Street.

After being installed into the I.F.C. as a voting member, Theta Chi ran a Charity Mixer which netted over $300 for the Essex County Mental Health Association.

The officers for this year were: President—John Zozzaro; Vice President—Joseph J. Laico; Secretary—L. Carl Belt; Treasurer—Anthony Faranetta; Sergeant-at-Arms—Lee Stillitano; House Manager—Philip Hapeman; Faculty Advisor—Prof. Robert Gordan.
Sigma Chi Epsilon was established at NCE in 1960 following the large increase of the female population of the school. Its primary purpose was to create a focal point for social activities for the coeds of the college.

The organization is not yet affiliated with a national sorority or society, but future plans include the affiliation of the organization with the Society of Women Engineers. The name Sigma Chi Epsilon comes from the Greek letters SCE meaning the Society of Coed Engineers.

The sorority is now comprised of twenty members. Since the opening of school, nine freshmen girls were made members. There is no pledging period for new members, and any NCE coed is eligible to join.

As of the moment, the sorority does not own its own house. Meetings are held in the ladies’ lounge in Weston Hall. The advisor to the organization is Professor Swanson, who sees to it that all functions of the sorority run smoothly.

An annual event sponsored by Sigma Chi Epsilon is the Halloween Dance, the proceeds of which go to the United Appeal. This illustrates the fact that the organization has not overlooked community service, which is an important aspect in the operation of any such organization.

This year, the sorority held a Christmas Party on the last day of school before the holidays. The affair was a huge success, even though the lounge was overladen with party crashers.

At present, Sigma Chi Epsilon is in a state of growth, and in the future the organization will surely exert its influence on the social operation of NCE.

Sorority members collect money at the Halloween Dance.
Orbit Co-Editor, John Holusha, NCE's most opinionated observer, heads for his sizzling typewriter.

Bringing the flavor of good literary writing to the technical life of the NCE Engineer has proved to be an uphill battle for the Orbit Staff. They have steadfastly refused to color or disguise the poetic word in a technical cloak, and stand today as the last stronghold of pure writing for writings sake. The Big Red's magazine is a training ground and a learning experience for those interested in journalism. The fond hope of the editors is that the Orbit can keep the literary spark alive at NCE.

Holusha's partner reviews copy with Vince Polignano and P. C. Pres Al Papp.

When Dean Yarosz can spare her, Lil Heimke works hard at being Publications Favorite Secretary.
VITALI MOSTOVOJ, a driving force behind the "new" look in NCE Publications, has given up his position as Vector Editor in order to assume the vast job of directing the Nucleus Features Staff.

Vector Staff

Editor-in-Chief: Klaus Steiner
News Editor: Joe Greca
Features Editor: Tom Reinhart
Sports Editor: Sebastian Coglitore
Copy Editor: Bill Masharka
Photo Editor: Brig Cabe
Business Manager: George Dornbusch
Advisors: Dr. Herman Estrin, Mr. Richard Blanchard

With Magnitude and Direction—the Vector has risen to a unique position. The change from four to six columns was an exterior one, but the greater improvement lies in the content of the 1964 college newsheet. With the power of the New Jersey Scholastic Press Association firmly seated at NCE, it is small wonder that our news communication has an air of professionalism about it. And from a small room in Cullimore Hall extend ties that bind NCE students closer than they realize.

Former chief-newshound, Klaus Steiner, briefs his staff after taking over the reins of the Vector. Noted for "doubling in brass" are Al Margulies, Orbit Co-Editor; Vince Polignano, Art and Makeup Ass't to the Nucleus; Al Papp, President of the Publications Council; Klaus; and Rich Riccardi, Fraternity Editor for both the Nucleus and the Vector.
The "Newspaper man's—Newspaper man," Dr. Lloyd M. Felmy, has acted as the advisor to the 1964 Nucleus.

NUCLEUS STAFF

Editor-in-Chief                James Cerulli
Associate Editor              Joseph DiRienzo
Features Editor               Vitali Mostovoj
Copy Editor                   Charles Polack
Sports Editors                Paul Palmarrozza
Photography                   Beim Studios, Brig Cabe
Fraternity Editor             Richard Riccardi
Art and Layout                Vince Polignano
Anita Ventz

Business Manager              Jim Boyle
Circulation Manager           Manual Garrido

and a cast of thousands, including . . . James McDonough, Carman LaSalle, Anthony DeStefano, Al Margulies, Paul Wynne, etc.

"They're at it again Mr. Lewis!" Make-up night, and its Charles Pollack, Jim McDonough, Al Margulies, Joe DiRienzo, Rich Riccardi, Jim Boyle, Paul Palmarrozza, Photog Brig Cabe, and Tony De Stefano all at work. At once!

Candid Corner, where ideas are born, grow into print, and sometimes die.
### Phi Eta Sigma

**Council**

<table>
<thead>
<tr>
<th>Position</th>
<th>Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>Adviser</td>
<td>Prof. Anderson</td>
</tr>
<tr>
<td>Chairman</td>
<td>Jerold Schneider</td>
</tr>
<tr>
<td>Vice Chairman</td>
<td>Richard Seely</td>
</tr>
<tr>
<td>Secretary</td>
<td>William Diecks</td>
</tr>
<tr>
<td>Treasurer</td>
<td>Matthew Rovendro</td>
</tr>
</tbody>
</table>

### Chi Epsilon Omega Chi Epsilon

**Adviser**

<table>
<thead>
<tr>
<th>Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>Prof. Anderson</td>
</tr>
</tbody>
</table>

### Omega Chi Epsilon

**NATIONAL CIVIL ENGINEERING SOCIETY**

<table>
<thead>
<tr>
<th>Position</th>
<th>Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>Adviser</td>
<td>Prof. Robbins</td>
</tr>
<tr>
<td>President</td>
<td>R. Zolkiewicz</td>
</tr>
<tr>
<td>Vice-President</td>
<td>Charles Dursel</td>
</tr>
<tr>
<td>Secretary</td>
<td>Roland Dorval</td>
</tr>
<tr>
<td>Treasurer</td>
<td></td>
</tr>
</tbody>
</table>

### Chi Epsilon

**NATIONAL ELECTRICAL ENGINEERING HONOR SOCIETY**

<table>
<thead>
<tr>
<th>Position</th>
<th>Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>Adviser</td>
<td>Prof. Anderson</td>
</tr>
<tr>
<td>President</td>
<td>Anthony Campillo</td>
</tr>
<tr>
<td>Vice-President</td>
<td>William Fisher</td>
</tr>
<tr>
<td>Corresponding Secretary</td>
<td>Daniel Quagliato</td>
</tr>
<tr>
<td>Recording Secretary</td>
<td>R. Platt</td>
</tr>
<tr>
<td>Treasurer</td>
<td>Prof. Anderson</td>
</tr>
<tr>
<td>Bridge Secretary</td>
<td>Allen Katz</td>
</tr>
</tbody>
</table>

### Eta Kappa Nu

**NATIONAL CHEMICAL ENGINEERING HONOR SOCIETY**

<table>
<thead>
<tr>
<th>Position</th>
<th>Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>Adviser</td>
<td>Dr. Joffe</td>
</tr>
<tr>
<td>President</td>
<td>Robert Gleason</td>
</tr>
<tr>
<td>Vice-President</td>
<td>Albert Emmens</td>
</tr>
<tr>
<td>Corresponding Secretary</td>
<td>Henry Schleckser</td>
</tr>
<tr>
<td>Treasurer</td>
<td>Stanley Zeitz</td>
</tr>
<tr>
<td>National Representative</td>
<td></td>
</tr>
</tbody>
</table>

### Omicron Delta Kappa

**NATIONAL LEADERSHIP HONOR SOCIETY**

<table>
<thead>
<tr>
<th>Position</th>
<th>Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>Adviser</td>
<td>Dean Hazell</td>
</tr>
<tr>
<td>President</td>
<td>Paul Palmarozza</td>
</tr>
<tr>
<td>Vice-President</td>
<td>Donald Burtis</td>
</tr>
<tr>
<td>Secretary</td>
<td>Prof. Keables</td>
</tr>
<tr>
<td>Treasurer</td>
<td>Thomas McCann</td>
</tr>
</tbody>
</table>

### Phi Eta Sigma

**NATIONAL FRESHMAN HONORARY SOCIETY**

<table>
<thead>
<tr>
<th>Position</th>
<th>Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>Advisor</td>
<td>Prof. Poetz</td>
</tr>
<tr>
<td>President</td>
<td>William Diecks</td>
</tr>
<tr>
<td>Vice-President</td>
<td>John Rosinski</td>
</tr>
<tr>
<td>Treasurer</td>
<td>Thomas Popek</td>
</tr>
<tr>
<td>Secretary</td>
<td>Richard Garlick</td>
</tr>
<tr>
<td>Historian</td>
<td>Charles Fiduccia</td>
</tr>
</tbody>
</table>
**NATIONAL JOURNALISM SOCIETY**

- **Adviser**: Dr. Estrin
- **President**: Allan Margulies
- **Vice-President**: Klaus Steiner
- **Treasurer**: Albert Papp
- **Recording Secretary**: Vitali Mostovoj

**NATIONAL ENGINEERING HONOR SOCIETY**

- **Advisers**: Prof. Rose, Dr. Johnson, Mr. Monahan, Dr. Ramberg
- **President**: Dominic DeFino
- **Vice-President**: W. Fisher
- **Corresponding Secretary**: Fred Goldstein
- **Recording Secretary**: Robert Seely
- **Treasurer**: Dean Hazell
- **Cataloger**: John Zozzaro

**Who's Who**

**IN AMERICAN COLLEGES AND UNIVERSITIES**

**NATIONAL MECHANICAL ENGINEERING SOCIETY**

- **Adviser**: Prof. Miller
- **President**: Richard Seely
- **Vice-President**: Matthew Rovendro
- **Corresponding Secretary**: Walter Collins
- **Recording Secretary**: Joseph Laico
- **Treasurer**: Stephen Illes

**NATIONAL INDUSTRIAL ENGINEERING HONOR SOCIETY**

- **Advisers**: Prof. Rigassio, Dr. Jaffe, Prof. Sizelove
- **President**: James Kelly
- **Vice-President**: James Lindenfelser
- **Secretary**: John Sopko
- **Treasurer**: Jack Dusano

**Arnold Air Society**
Au Revoir, But We Hope Not Good-bye . . .

As members of the Class of 1964, NCE extends its warm congratulations to you for a job well done. The long years of undergraduate work are over and a promising career in engineering is about to start.

As you know, you are graduating at one of the most exciting times, technologically speaking, the world has ever seen. The dramatic advances now taking place on every front are offering challenges to engineering imagination and ingenuity that even ten years ago would have seemed remote in the extreme.

For this reason one of the biggest jobs you will face in common with all engineers will be that of keeping fresh and up-to-date in your thinking and continuously advanced in your knowledge of the latest materials and techniques.

You will learn, as doctors and lawyers had to learn long ago, that continuing education is absolutely essential to prevent obsolescence and to guarantee your effectiveness as an engineer—tomorrow, five years from now, or indeed, as long as you may work.

As alumni, many of you will have an opportunity to attend important advanced programs at the new Alumni Center soon to be built. Others of you will matriculate in a graduate program, at NCE or at some other institution.

All of you, NCE hopes, will seriously consider the fact that graduation is not an end but a beginning, in which your personal advancement and your further education will be closely intertwined.

With these thoughts in mind, NCE wishes each one of you Good Luck—and a rich and rewarding career!

NEWARK COLLEGE OF ENGINEERING
8,317
of us "oldtimers"
congratulate and welcome you.
We shall help you keep in touch
with knowledge and each other
over the years.

The NCE Alumni Association
Good Luck
to the
Graduates

THE
STUDENT COUNCIL

President ......................................................... Jim Boyle
Vice-President .................................................... Bill Barrett
Treasurer .......................................................... Mike Carolan
Recording Secretary .......................................... Peggy Berkery
Corresponding Secretary ................................. Kathie Sudovar
Compliments of the

HONOR SOCIETIES COUNCIL

President ................................................. Jerold I. Schneider
Vice-President ........................................ Richard Seely
Treasurer .................................................... Matthew Rovendro
Secretary .................................................. William Diecks

TAU BETA PI
National Engineering Honor Society

OMICRON DELTA KAPPA
National Leadership Honor Society

CHI EPSILON
National Civil Engineering Honor Society

ETA KAPPA NU
National Electrical Engineering Honor Society

OMEGA CHI EPSILON
National Chemical Engineering Honor Society

PI TAU SIGMA
National Mechanical Engineering Honor Society

ALPHA PI MU
Industrial Engineering Honor Society

PHI ETA SIGMA
National Freshman Honor Society

ARNOLD AIR SOCIETY
AFROTC Recognition Society

PI DELTA EPSILON
Literary Recognition Society
Compliments of the

Professional Societies Council

ACS
American Chemical Society

AIChE
American Institute of Chemical Engineers

AIIE
American Institute of Industrial Engineers

AIAA
American Institute of Aeronautics and Astronautics

ASCE
American Society of Civil Engineers

ASME
American Society of Mechanical Engineers

IEEE
Institute of Electrical and Electronics Engineers
Compliments of the

NCE
DANCE CLUB

Dennis Berman ......................................................... President
Mike Carolan .......................................................... Vice-President
William Larsen ......................................................... Secretary
Harvey Baron ........................................................... Treasurer

Dean Edward Yarosz ................................................. Advisor
CONGRATULATIONS
to the
CLASS OF 1964

BARTON PRESS, Inc.

138 WASHINGTON STREET
NEWARK 2, NEW JERSEY

BRAUN & CHAMBERLIN, Inc.
INDUSTRIAL PAINTING CONTRACTORS
— Established 1888 —

26 GLENWOOD AVENUE
ORANGE, N. J.

Compliments
of the

CLASS OF 1965
Compliments
of the
CLASS OF 1966

Compliments
of the
CLASS OF 1967
Congratulations
to the Class of 1964
from

JOSTEN’S
Manufacturers of
YOUR OFFICIAL CLASS RINGS

HENRY A. STEIN
P.O. BOX 38
Maplewood, N. J.
RE 1-4802
Sales Representative
Best Wishes

FIBRO CORPORATION
CLARK, NEW JERSEY

Phone: MA 3-1790-1
Since 1922

H. A. GREENE CO.
SPORTING GOODS

Finest Quality Athletic Equipment
at Very Reasonable Prices

—Outfitters: N.C.E. Athletic Teams—

28 HALSEY ST. (near Central Ave.)
NEWARK 2, N. J.
Compliments

of

BEIM

PHOTOGRAPHERS

IRVINGTON, NEW JERSEY
Laboratory apparatus • instruments • chemicals • glassware

GRABER - ROGG, Inc.
ENGINEERING - TOOLING
INJECTION MOLDING

750 COLFAX AVENUE
KENILWORTH, N. J.

GIBBS & COX, Inc.
NAVAL ARCHITECTS
and
MARINE ENGINEERS

NEW YORK

An Equal Opportunity Employer

CHAS. E. MAIER, Inc.
Signs Since 1895

BLACKBOARDS • BULLETINS
DISPLAYS

123 VAN BUREN STREET
NEWARK 5, N. J.
Congratulations...

The work you've done has been rewarding and the honor of graduation is now yours. May your efforts always be successful as you seek more education or enter the occupation of your choice.

Automatic Switch Co., FLORHAM PARK, NEW JERSEY

Located in an attractive setting in Florham Park, Automatic Switch Company is one of the nation's leading designers and manufacturers of Solenoid Valves and Electromagnetic • Electronic Control. The Company employs a high percentage of professional and technical personnel as well as skilled machinists, electricians, other craftsmen, and clerical help.
JOS. M. BYRNE CO.
—Serving the Public Since 1886—

A friendly office equipped and ready to serve you through an outstanding Insurance Organization plus a modern Travel Department offering a Highly Specialized Travel Service.

☆

828 BROAD STREET
NEWARK, N. J.
MArket 3-1740

15 EXCHANGE PL.
JERSEY CITY

36 NO. SUSSEX ST.
DOVER

WHEN YOU THINK OF PLASTICS, THINK OF . . .

Wilpet Tool & Manufacturing Co.

244 DUKES STREET • KEARNY, N. J.

Creative Injection Molded Plastic Packaging
Custom Injection Molding of All Plastics
Complete Moldmaking Facilities

William L. Niclaus, Pres.
N. C. E. '42
Best Wishes and Future Success
to the
1964 GRADUATING CLASS
of
NEWARK COLLEGE OF ENGINEERING
from
THE HOWARD SAVINGS INSTITUTION
NEWARK • SOUTH ORANGE • NORTH CALDWELL
NEW JERSEY

Insured by Federal Deposit Insurance Corporation

Compliments of
BREYER’S ICE CREAM