WILKES COLLEGE ALUMNUS

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Volume 9 Number 3

On the Cover

(Upper left) NASA Administrator, James E. Webb, is met at the Airport by Admiral Harold R. Stark, USN, Retired, and Dr. Farley. (Lower left) at the Farley Farm, members of the class enjoy their picnic as guests of the Farleys. (Upper right) Just before Baccalaureate, a group of seniors "fan the breeze". (Lower right) And, seniors probably discuss their four years at Wilkes.

Len Yoblonski took the photographs.

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THE STAFF

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ASSISTANT EDITOR	Kathleen O'Donnell
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ALUMNI NOTES	Felicia Perlick '63

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NASA ADMINISTRATOR FILLS TIGHT SCHEDULE

James E. Webb Speaks to Civic Leaders - Held Press Conference Prior to Commencement Address

NASA Administrator, James E. Webb's visit to Wilkes-Barre was primarily to fill an engagement as principal speaker at the 15th Commencement of the College. While they were not publicized, Mr. Webb had two additional appointments on his agenda. The first, to address a luncheon meeting at Hotel Sterling at noon, where 150 invited guests were waiting to hear him; and following the luncheon, to be interviewed at a press conference.

NASA's special Convair plane touched down at the Wilkes-Barre-Scranton Airport about 11:45 A.M. and was met by Admiral Harold R. Stark, USN, Ret., and Dr. Farley. Whisked to Hotel Sterling, Mr. Webb found an enthusiastic audience awaiting him.

His talk differed somewhat from the one he delivered in the gymnasium that night, although one would say it complemented the latter.

He told the business and professional men, bankers and industrialists that technology and science have created one-half the jobs in which our people are employed today.

In defining the space age, he said it is the era when man has invented an engine to reach out beyond the earth's atmosphere.

Although the United States has made tremendous progress during the last ten years, this was not always the case. After the Wright Brothers made their historic flight at Kitty Hawk, the United States paid little heed to aviation. As a result, both Germany and Russia outstripped us.

The meeting at the Sterling was called to excite interest in the proposed scientific research and graduate center, for which the Area Redevelopment Authority has allotted $400,000, provided the College matches it with $500,000. And Webb excited this interest.

He told the group in the next ten years, democratic society will be dependent on trained minds of a graduate level and that between 16 and 18 billions of dollars per year are now going into research and development; that those communities are wise which can attract some of this money.

Webb commented upon the growth of Wilkes College and mentioned that Wilkes recognizes the value of science in today's world of technology.

Touching upon air speed, he recalled in the last ten years, there has been an increase from 700 mph to 4,000 mph. The X-15 engine, he continued, has 57,000 pounds of thrust; the Atlas which carried John Glenn has 360,000 pounds of thrust, and today, there is an advanced flight vehicle which has 7,500,000 pounds of thrust.

The unifying thought which persisted throughout Webb's noon talk was the necessity of knowledge . . . knowledge, and more knowledge.

It would come, he said, from the institutions of higher learning.

In the Adams Room, outside the Crystal Ballroom, where the meeting was held, members of the press and representatives from three television stations and a score of radio stations were set up to interview the administrator of National Aeronautics and Space Administration. As he entered the room, and was introduced by the Public Relations Director of the College, lights blazed and cameras turned. In rapid fire, clipped sentences, Webb answered the questions fired at him, most of which were in relation to his noon-day talk. He answered each question in detail, developing the thought to completion.

Channels 28, 16, and 22 carried portions of the interview to viewers throughout Northeastern Pennsylvania, Radio Station WBAX carried Webb's address in its entirety from the gymnasium and all local radio stations carried some portion of the interview in addition to spot news developing from the visit of the NASA Administrator.

American Broadcasting Company beamed several news capsules coast-to-coast, high spots of his address, and the following day carried a summation on the daily "conference call" of ABC stations.

COMMENCEMENT ADDRESS

"Our New Science and Technology - Space For

By James Edwin Webb, Administrator

National Aeronautics and Space Administrat

It is a privilege to be here tonight to share with you an event which marks not so much the conclusion of one phase of your experience as it does the beginning of another.

The pleasure of ushering a group of alert and enthusiastic graduates into the world of opportunity which lies ahead is one which has come to many thousands of speakers since the process of formal education was first devised. Not all of my predecessors, however, have had the good fortune to perform this mission during an era which offered so much promise. Some of them, indeed, in more dismal periods of our national history, must have struggled mightily to find encouraging and stimulating thoughts with which to launch their listeners on new careers, or a continued search for knowledge.

You are emerging from your undergraduate experience in a time of challenge and opportunity which at least equals, if not exceeds, any other in man's laborious progress from primitive circumstances to the complex and highly developed society that we know today.

We live in a period of scientific progress which is providing us with new knowledge, new processes and new materials at an unprecedented rate. We are witnessing a leaping technology with which men are hard put to keep pace. Ideas which, a few years ago, were largely found in pulp paper fiction today form the core of scientific and technical publications. Predictions which seemed visionary and unrealistic only yesterday, are being fulfilled today at a pace which is outstripping the early hopes of the most optimistic authorities.

I recall a commencement address given at a western college in 1957, only five years ago — five years yesterday, to be exact — in which the speaker quoted a timetable for space exploration which had been drafted by a leader in the aeronautics industry.

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I recall a commencement address given at a western college in 1957, only five years ago -- five years yesterday, to be exact — in which the speaker quoted a timetable for space exploration which had been drafted by a leader in the aeronautics industry.

The business leader who was quoted was a man well-versed in the subject and deeply concerned with our future efforts in space. He predicted that within a dozen years — or about 1970 — a satellite would circle the earth and the moon.

About 1990, he went on, space science and technology would have advanced to the point of launching a space ship carrying human beings which would circle the earth for an extended period as a satellite, and then return safely.

And then, reaching far into the future, he suggested that shortly after the year 2000, men might take passage on a space ship which would land on the moon and return to the earth.

These seemed dramatic and far-reaching goals at the time, but we all know how conservative they have become in the intervening five years. In fact, both the originator of the predictions, and the commencement speaker who quoted them, are acutely aware today how conservative they were.

The man who created this timetable was James S. McDonnell, president of the firm which produced the Mercury spacecraft in which John Glenn and Scott Carpenter orbited the earth. The astronauts anticipated his schedule by almost 30 years.

The commencement speaker who quoted him was James E. Webb.

I tell this story on myself, because it illustrates so vividly the pace at which science and technology are moving in this 20th Century. Since becoming Administrator of the national civilian space effort, I have seen the fulfillment of the first two of these predictions, and find myself participating in an enterprise which will endeavor to accomplish the third — that of lunar landing and return — within this decade. If we achieve this goal recommended by President Kennedy, and established by the Congress, it again will be some 30 years in advance of the date which seemed probable as recently as five years ago.

For fifteen years, many graduation memoranda have been sent to members of the graduating class, the faculty and the administration. The contents and the agenda vary but little. Only the year and the students who receive them change. For this is the grand finale which climaxes four years of undergraduate work leading to a degree.

With official Commencement set for Monday, June 11, the "grand build-up" began with the proverbial class outing at Rummage's Grove, Hunlock Creek, the preceding Wednesday. ALUMNUS has endeavored to tell the Commencement story in its entirety with pictures, believing, as do the Chinese, that one picture is worth ten thousand words. Perhaps, the accompanying photographs will reverse Time for you and recall those last of your undergraduate days.

Rummage's Grove, South of Wilkes-Barre back of Hunlock Creek, over the years formed a haven for those undergraduates when schedules permit, like to "get away it all." It was here that the Class of convened for their class outing. Swimn games, dancing, barbecues and camarac formed the basis for the affair which got pre-commencement activities off to a sta

The geometric progression of accomplishment in scientific research and technology will be the dominant feature of your lives. Unlike most of your forebears, you will never have the opportunity to become fully adjusted to the world as you know it before you have thrust upon you, or before you help to discover and develop, new ideas, new methods, and new products which will change the way you live. We live in a world of change, and more than any other generation, have learned to accept it as a fact of life. This is in sharp contrast with the situation which prevailed during most of human experience.

About two thousands years before the birth of Christ, man had already invented the wheel, something unknown in nature, and the sled became the wagon. In time, hand carts became horse-drawn chariots. But after that development which greatly affected civilization, little technological progress was made until the time of George Washington. I read recently an interesting comparison of the situation of King Solomon with that of George Washington. Both men wore homespun clothing, both illuminated their houses with oil lamps, both heated with wood, both traveled in horse-drawn vehicles.

The period of human development which lay between King Solomon and George Washington covered almost 3,000 years. That between Washington and ourselves is hardly more than 150 years, but what a contrast in human progress.

Between the time of Washington and the beginning of our own century, a similiar situation prevailed.

When Charles Newbold, of Philadelphia, invented the cast iron plow in 1797, and decided to devote his life and fortune to it, he died believing that his life had been wasted. Except for Thomas Jefferson, and a few of his wealthy friends, farmers would have none of the iron plow, convinced that the iron poisoned the ground, or encouraged weeds to grow.

In 1825, when the British Parliament was debating the construction of a railroad between Liverpool and Manchester, many of the Members were convinced that no one would dare to ride such a fiendish device. It was asserted that travelors would sooner let themselves be *"blown away atop a gunpowder rocket than trust themselves to such a machine."* One wonders what those statesmen would say of Shepard, Grissom, Carpenter, or Glenn. Within our own century, science and technology began a rapid acceleration, but even this was most gradual until very recent years. For example, despite his own advanced thought in other fields, Edison almost buried the airplane, just after Kitty Hawk. He told reporters that the contraption could never have any practical value and would, at best, be nothing more than the toy of wealthy sportsmen.

It was almost 50 years from the Wright Brothers' flight until we learned to build an airplane that could fly faster than sound, at 700 miles per hour. But little more than a decade was required to go from that 700 miles an hour to 4,000 miles an hour in the X-15, and by 1959 we were reaching out beyond the earth's atmosphere with spacecraft which could travel up to 25,000 miles an hour – fast enough to overcome the earth's gravity and speed out into the solar system, never to return.

In 1939, Niels Bohr listed fifteen important reasons for his conviction that the atomic fission process would not have any practical application. Yet, in the same year, Albert Einstein wrote his now historic letter to President Roosevelt which read:

"Some recent work by E. Fermi and L. Szilard, which has been communicated to me in manuscript, leads me to expect that the element uranium may be turned into a new and important source of energy in the immediate future.

"This new phenomenon could also lead to the construction of bombs."

Even in the field of rocketry, despite the fact that the principle dates back more than 1,500 years, pioneers in the first half of our century encountered great skepticism and resistance. Dr. Robert Goddard, the father of the modern rocket, found little enthusiasm for his assertion that "It is difficult to say what is impossible, for the dream of yesterday is the hope of today and the reality of tomorrow." Rockets became the symbol to many of impractical ideas and grandiose schemes, and Goddard and other rocket pioneers inherited the mantle of ridicule worn by the Wrights, Langley, and the other airplane pioneers.

If you find the recollection of these facts startling, it is because most of us rarely stop to think how new everything which we call technology actually is.

Heinz Gartmann has suggested that this is because "in time as well as space there is a psychological effect which we may call foreshortening due to perspective. Events of the past millennia lying hundreds of years apart appear to us virtually contemporaneous."

Thus, to someone who is alive 4,000 years from now, in 5962, Aristotle, Leonardo da Vinci and Einstein will probably appear as belonging to the same period of human development. But what does all of this mean to you? How will it affect your lives and your careers? Let me state it again. *Change, and the rate of change, will be the dominant feature of your existence.*

Change means different things to different people. To some it means an uncomfortable uprooting of a settled existence. To others it may mean disillusionment and despair. To still others – and this is the group in which you can place yourselves – it means progress and opportunity.

This is a contrast, I know, which I scarcely need make in 1962 for an audience in this part of our country. Some of your families and friends have, I know, been victims of change. But just as the sons of wagonmakers found new careers in the manufacture of automobiles, so will the sons and daughters of Pennsylvania coal miners find opportunities in developments stemming from science and technology and the very large research and developr effort associated with it.

One of the problems of our highly developed science technology, and the automation which it is bringin business and industry, is that of finding an outlet fo human energy which new machines and power so have displaced.

When you consider that the energy embodied in one of matter corresponds to the normal annual outpu fourteen thousand human beings; when you view effects of automation on our requirements for hu energy, it is evident that man's own energy must be to use in new ways for the benefit of mankind.

The solution to this problem lies not in reducing number of hours in which we make a constructive tribution to human progress, and diverting human er to non-productive purposes. It lies rather in finding areas in which man can expend his energy for his benefit, and that of his fellow human beings.

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This is among the reasons why our present and future efforts in space are so important to all of us. Just as the United States government's first venture into scientific exploration – the Lewis and Clark expedition – led to the opening of the West and created a new frontier for the young people of that day, so are our government's activities in science and technology today opening a new frontier for our college graduates of this and the coming years.

The extent to which you and your contemporaries will benefit from this new science and technology, the extent to which you will participate in reaping the harvest of space research and exploration, will depend largely upon the extent to which you prepare yourselves to take advantage of it.

You have had the opportunity, during your elementary and secondary education, and during your four years of undergraduate work at Wilkes College, to lay the ground-

In the Crystal Ballroom of Hotel Sterling, the graduating class gathered for its dinner-dance. At the dinner, they heard Joseph Kanner, Psychology Instructor, spell out the fact that "determination makes the difference between victory and failure in life's pursuits." At the head table, seated, left to right: Barbara Pileggi, Joseph Shambe, Mrs. Farley, Dr. Farley, Jerome Krasa, Pauline Honeko, Dean Gertrude Doane, Dr. John Doane. Standing, David Edwards, Esther Link, Arthur Hoover, Mrs. George Ralston, Dean Ralston, Judy Butchko, "Skip" Davis, Lucille Thomas, Wayne Thomas, and Mr. Kanner.

Following the Commencement rehearsal at the gym and taking of the official class picture, "1962" enjoyed a buffet spread prepared by Bill Dennion, Commons steward. The area to the rear of Chase and Kirby Halls took on the general atmosphere of a garden fete.

Seated, left to right: Estelle Manos, trustee; Judy Butchko, secretary; R trustee. Standing, Wayne Thomas, treasurer; Rick Reese, trustee; Michae Joseph Shambe, president; Albert Kishel, trustee; "Bud" Menaker, vice

work for a career geared to the complex age in which you live. You have the opportunity, if you choose, to continue that education and acquire the more detailed and refined knowledge which graduate education can provide, or to venture immediately into fields of business and industrial activity which will provide you with the kind of experience which will enable you to cope with a fast-paced modern world.

In either event, the space age offers opportunity for you. You have space in which to grow.

I often feel that the more glamorous aspects of the space program — the dramatic features of manned space flight — have a tendency to overshadow the basic and fundamental purposes of the space effort in which we are engaged. Just as the moon has influenced the course of young lovers for centuries, so has the excitement of lunar exploration blinded many to the more immediate and far-reaching benefits and influences which the conquest of space will provide. Journeys into space and voyages to the moon are and will be thrilling human experiences. But we cannot all be astronauts.

A decade ago, when our present astronauts were test-flying the jet aircraft which were the parents or the grandparents of the jet passenger planes of today, few of us expected ever to share their experience. Yet millions have benefited from their activities, and contributed to the growth of the aeronautics industry as passengers, or in the design, construction, supply and maintenance of planes, or in the countless service industries which have developed because of them.

Similarly, it is unlikely that many persons alive today will have the opportunity to serve as astronauts, but it is certain that the knowledge gained in space research and technology will affect us all.

Today, a premium has been placed on knowledge, for man's survival depends upon how rapidly he accumulates knowledge concerning both his environment and himself, and how effectively he learns to use that knowledge. He no longer must fear change, for it is within his ability to influence the changes which are to come, and to determine whether the resources at his disposal will be used in the common victory of mankind, or abused in its ignominious surrender.

The missions of Shepard, Grissom, Glenn, and Carpenter were the product of years of research and development involving literally thousands of scientists and engineers with the training, the knowledge and the imagination to venture successfully into the unknown. Yet, complex as these missions were, and demanding on the talents of those responsible for the effort, Project Mercury and its spacecraft will, within this decade — perhaps within a year — become outmoded.

It will be followed, only next year, by Project Gemini, the next step in preparation for man's ventures further into space. The scientific and engineering brains of the Nation are already hard at work on this effort which will launch two objects into orbit, and then join them together as they circle the earth at 17,500 miles an hour. Among the things we will gain from this experience are a further knowledge of weightlessness and other problems of the space environment.

Subsequently, in Project Apollo, larger space vehicles whose height exceeds that of the Nation's Capitol will escape from earth orbit and rocket to the moon. First they will travel in manned circumlunar flight, and finally for lunar landing and return.

Meanwhile, scores of scientific satellites will be launched to orbit the earth, and numerous rockets will be dispatched to the far reaches of deep space. While answering questions which have perplexed men for centuries, they will accumulate information which will contribute significantly to our lives today.

Although still in its infancy, space exploration has already produced much new knowledge and many useful benefits for mankind.

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Their investigations may be defined in four major categories:

First, they investigate the region in the vicinity of the space vehicle.

Second, they study the earth by viewing it from above.

Third, they examine the radiation from the sun, planets, and stars before it passes through the earth's atmosphere.

Finally, they yield information which will facilitate the manned exploration of the moon and the planets.

The final category lies largely in the future, but much useful information has already been obtained from the first three. Because most of this knowledge is in the field of basic science, and highly technical, it has not received the popular attention accorded to manned space flight. Yet, this basic knowledge is the raw material on which a developing technology feeds, and consequently is of vital importance to all of us.

What have we learned from our scientific investigations in space?

In the first category which I have outlined, that of investigating the region traveled by space vehicles, we have the discovery, in 1958, of the Van Allen radiation belts, a region of charged particles which surrounds the earth. Significant discoveries in this first category have also been made in the measurement of magnetic fields, atmospheric density, micrometeorites, and the properties of the ionosphere. In the latter case, sounding rockets made it possible for the first time to measure directly the properties of the ionosphere, a region surrounding the earth that contains a high concentration of free electrons that reflects radio waves. Later satellite observations have made a continuing contribution to this knowledge.

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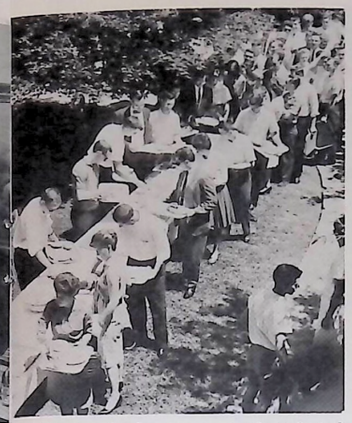
...m of Hotel Sterling, the ...ered for its dinner-dance. ... heard Joseph Kanner, ... spell out the fact that ... the difference between ... life's pursuits." At the ...ft to right: Barbara Pi... Mrs. Farley, Dr. Farley. ... Honeko, Dean Gertrude ...oanc. Standing, David ...k. Arthur Hoover, Mrs. ... Ralston, Judy Butchko. ... Thomas, Wayne Thomas.



Following the Commencement rehearsal at the gym and taking of the official class picture, "1962" enjoyed a buffet spread prepared by Bill Dennion, Commons steward. The area to the rear of Chase and Kirby Halls took on the general atmosphere of a garden fete.

Seated, left to right: Estelle Manos, trustee; Judy Butchko, secretary; Rachael Altavilla, trustee. Standing, Wayne Thomas, treasurer; Rick Reese, trustee; Michael Bianco, trustee; Joseph Shambe, president; Albert Kishel, trustee; "Bud" Menaker, vice president.

...eared to the complex age in which you ... opportunity, if you choose, to continue ... acquire the more detailed and refined ...raduate education can provide, or to ...y into fields of business and industrial ...provide you with the kind of experience ...ou to cope with a fast-paced modern

... space age offers opportunity for you. ...hich to grow.

... more glamorous aspects of the space ...atic features of manned space flight — ...overshadow the basic and fundamental ...ace effort in which we are engaged. ... has influenced the course of young ... so has the excitement of lunar ex... ...any to the more immediate and far... ...id influences which the conquest of ... Journeys into space and voyages to ... will be thrilling human experiences. ...e astronauts.

...n our present astronauts were test... ...raft which were the parents or the ... jet passenger planes of today, few of ... share their experience. Yet millions ... their activities, and contributed to ...eronautics industry as passengers, or ...ruction, supply and maintenance of ...ntless service industries which have ... them.

...kely that many persons alive today ...nity to serve as astronauts, but it is ...wledge gained in space research and ... us all.

... has been placed on knowledge, for ...ds upon how rapidly he accumulates ...g both his environment and himself, and how effectively he learns to use that knowledge. He no longer must fear change, for it is within his ability to influence the changes which are to come, and to determine whether the resources at his disposal will be used in the common victory of mankind, or abused in its ignominious surrender.

The missions of Shepard, Grissom, Glenn, and Carpenter were the product of years of research and development involving literally thousands of scientists and engineers with the training, the knowledge and the imagination to venture successfully into the unknown. Yet, complex as these missions were, and demanding on the talents of those responsible for the effort, Project Mercury and its spacecraft will, within this decade — perhaps within a year — become outmoded.

It will be followed, only next year, by Project Gemini, the next step in preparation for man's ventures further into space. The scientific and engineering brains of the Nation are already hard at work on this effort which will launch two objects into orbit, and then join them together as they circle the earth at 17,500 miles an hour. Among the things we will gain from this experience are a further knowledge of weightlessness and other problems of the space environment.

Subsequently, in Project Apollo, larger space vehicles whose height exceeds that of the Nation's Capitol will escape from earth orbit and rocket to the moon. First they will travel in manned circumlunar flight, and finally for lunar landing and return.

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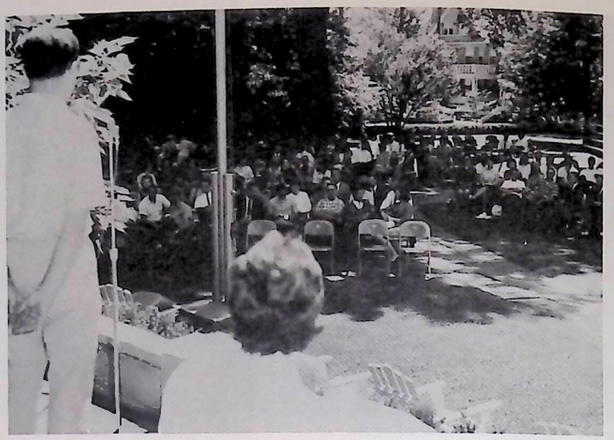
The star performers in the weather field have been the TIROS satellites, which, along with the Echo balloon, are probably the best known of our unmanned satellites. TIROS has provided thousands of photographs of the earth's cloud cover which have provided useful information not available from ground based meteorological stations which cover a relatively small percentage of the surface of the earth.

The broader coverage provided by TIROS has enabled meteorologists to discover and track hurricanes and typhoons before they were detected by ground stations. Hurricane Esther, for example, was spotted by TIROS three days before it was picked up by other means.

TIROS is also providing weather researchers with important facts regarding the mechanics of the transfer of the sun's energy to the earth; how much is absorbed, how much is reflected, and how the local weather is affected by the variations in the rate of absorption and reflection. The area of sun-earth relationships promises to be one of the most exciting and fruitful areas of space research, and is one on which we have made the most progress to date. Preliminary results hint at the interrelation that exists between the sun and what goes on in the earth's upper atmosphere, and scientists speculate that this effect eventually influences variations in our weather.

One objective of our scientific investigations is a more detailed, quantitative understanding of the physical phenomena involved. It has been predicted that some day in the future the understanding of this sun-earth interrelationship will have a direct impact upon our daily lives.

After the buffet, the class gathered for its last official meeting, when Joe Shambe, class president, addressed the group and conducted election of permanent officers and trustees.



Each graduating class looks for picnic at the Beaumont farm of where both Dr. and Mrs. Farle This year was no exception. One as many did.

We have also observed, from studying the orbit of the Echo balloon, the changes in the orbit caused by solar radiation pressure and by atmospheric density variations induced by solar flares.

Studies of Vanguard I, still in orbit after more than four years, have also enabled the solar physicist to deduce something about radiation pressure from the sun; the upper atmosphere physicist to derive the temperatures and composition of the atmosphere at extreme altitudes and the influence of the sun on these characteristics; and the geologist to make deductions about the earth's crust.

Geodetic work in our space research has been equally interesting. School children were long taught that Columbus proved, in 1492, that the world is round. Scientists have considered it an oblate spheroid. It remained for the geodetic measurements taken in Project Vanguard to indicate that Columbus was wrong, and that the earth is really slightly pear-shaped.

The third category of scientific investigation in space, that of studying the sun, planets, and stars from beyond the earth's atmosphere, has challenged many previously existing theories.

Data from such spacecraft as Pioneer V, Explorer X, and Explorer XII have produced information regarding solar flares which, while far from conclusive, is of great interest to those who are planning future manned space flight missions. The measurements taken are being used to design the protection which a man will need from exposure to energetic particles – electrons, protons, and neutrons – while traveling in space.

Our scientists believe that, at least for a trip to the moon, a man can be adequately protected from all but the most extreme events. One objective of our solar studies is to devise a way of predicting when a major event, or solar flare, will occur. If we succeed in this, manned space shots will be timed to avoid these events, as an aircraft would avoid a severe thunderstorm which turned up on its radar.

One of our satellites has produced information that casts doubt on some aspects of one of the major theories of the origin of the universe. This version of the theory, called the steady state theory, includes an assumption that matter and anti-matter are being created continuously in space at a slow rate.

If this aspect of the theory were correct, the physicists tell us that there would have to be a sort of static condition of gamma rays throughout space. The Explorer XI satellite, launched by NASA last year, carried instruments to detect gamma rays, and test this theory. But in nine hours of observation, the Explorer XI observed gamma ray messengers at a rate far below what would be expected if the steady state theory were correct; information which poses another new challenge for the scientists.

Observations from high altitude rockets of ultraviolet radiations from various stars have upset a previously existing theory and indicate that the rate of energy release from hot young stars is much lower than had been supposed. This rate of energy release is an indicator of the process of development of a star, and our experimental results seem to imply that our present theories of stellar evolution, or the life cycle of stars, is incorrect.

Dr. Harry Goett, Director of NASA's Goddard Space Flight Center, commented recently that this information had, in a sense, sent the astrophysicists back to their drawing boards, reminding him of a pertinent quotation:

"The terrible tragedy of science is the horrible murder of beautiful theories by ugly facts."

The satellite with which we have studied the sun is the Orbiting Solar Observatory, which was launched from Cape Canaveral last March 7, and during eleven weeks of nearly perfect operation transmitted almost 1,000 hours of scientific information on solar phenomena.

OSO observed and measured more than 75 solar flares and sub-flares, mapped the sky in gamma radiation, examined energetic particles in the lower Van Allen Region, monitored the sun in a broad region of X-ray and gamma radiation, and performed surface-erosion studies of various kinds of materials.

Before a malfunction occurred in the spin-control system of this satellite on May 22, OSO had transmitted useful information through 1,138 orbits. Its highly advanced sun-sensing instruments kept instruments pointed toward the sun through each of these orbits, even though they lost contact with the sun every time the satellite passed behind the earth. The degree of accuracy involved was equivalent to scoring unerring bull's-eyes with a rifle aimed at a 2½ foot balloon at a distance of one mile.

The benefits to basic science of our space program are only part of the story. The problems involved in launching vehicles and spacecraft beyond the earth's atmosphere are daily challenging the ingenuity of the Nation's scientists. Countless problems, associated with low temperatures, weightlessness, operation in a hard vacuum, extreme heat, weight and space limitations in spacecraft, are forcing scientists and engineers to search for new methods, new materials, new processes, new techniques of miniaturization.

The value of these discoveries is not limited to space research and technology. Many of them have practical applications in our daily lives, and are already having their effect on the way we live. It is from discoveries in this area that we may look forward to the establishment of many new industries, and of new products for manufacture by industries which already exist.

The scientific research and development required to achieve our national objectives in space will require the talents of young scientists and engineers in ever increasing numbers.

Despite the vast numbers who have been trained in recent years – and it is estimated that about nine-tenths of all the men and women who ever received formal training in science and engineering are still alive tod more will be needed. Our space program needs and chemists; electrical, structural, and mecha neers; mathematicians and statisticians; geol astronomers; biologists and those in many othe engineering, and professional disciplines to de new problems of the space environment.

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Despite the vast numbers who have been trained in recent years — and it is estimated that about nine-tenths of all the men and women who ever received formal training in science and engineering are still alive today — many more will be needed. Our space program needs physicists and chemists; electrical, structural, and mechanical engineers; mathematicians and statisticians; geologists and astronomers; biologists and those in many other scientific, engineering, and professional disciplines to deal with the new problems of the space environment.

The quantity and quality of the students educated by our elementary, secondary, undergraduate, and graduate schools now will determine, in large measure in future years, the excellence of our space program. I do not mean to imply that our schools, colleges, and universities should produce "space scientists" and "space engineers." It would be folly to concentrate on so-called "space science" at the expense of weakening our basic educational efforts in both the physical and social sciences.

Fortunately, this is not happening. It has been correctly said that space science is only science performed in space. The acceleration of research and development in the space field has heightened appreciation of the importance of research in other fields, as well, with an accompanying increase in expenditures for those purposes. Our space program, thus, is not being carried on at the expense of progress in other research fields, but actually has served as a stimulus for them. This is as it should be, for the program of space exploration must be an integral part of a balanced national effort in all fields of human knowledge. Our free society is dependent upon the successful integration of the new physical sciences and technologies into our political, economic, social, and educational, as well as national security systems.

While most students entering secondary schools and colleges are not thinking of careers in science and engineering, all students should acquire the understanding, appreciation, and knowledge required by professionals. They should, however, be sufficiently familiar with science, mathematics, and engineering to comprehend the increasingly technological environment in which we live.

At the Farley Farm, where the class occupied their leisure in devious ways, one could take time out to review the AMNICOLA which was delivered from the printer the previous day, reminisce as seniors do . . .

. . . or enjoy pleasantries with your hostess.

Mrs. Farley, together with her husband and Admiral Stark, watch the proceedings of the press conference.

Similarly, just as the non-scientist student should have a basic understanding of science and technology as they affect society, so should the science or engineering major be afforded the opportunity to develop an appreciation of the social sciences, arts, and humanities. Narrow concentration of study within any field of knowledge tends to beget a student and a person without the understanding required for a full and responsible life.

It is in this respect, perhaps, except for its vastly greater emphasis upon scientific and technical education, that the Soviet educational system differs in greatest degree from our own.

There is little in the educational system of the Soviet Union that corresponds to the American university liberal arts program. The extent of the orientation of Soviet higher education toward science and technology is measured by the fact that about 57 percent of all 1959 graduates at the bachelor degree level were in engineering, sciences, and selected applied science fields, compared with 24 percent in the United States. The professional instruction provided these graduates, although extensive in fundamentals of science and engineering, was found to be directed toward narrowly defined specialties with the main purpose of equipping the individual student to perform a specific job.

Yet, we should not minimize the fact that, with only half as many higher education graduates as the United States, the Soviet Union has a greater number of professionals in scientific, engineering, and other applied science fields, and the Soviet rate of growth in these fields is more than twice that of the United States.

While we produce about 90,000 engineering, science, and applied science graduates each year, the Soviet Union's production is currently 190,000. Projections indicate that during this decade the Soviet rate will reach 250,000 a year, more than twice the anticipated rate for the United States.

In advanced graduate education, the National Science Foundation reports that the Soviet production of candidate degree holders, roughly equivalent to the American Ph.D., is about the same, 8,500 per annum, as in the United States. But 75 percent of the degrees were awarded in the sciences and engineering, compared with 55 percent in our country.

Our colleges and universities, whether or not they offer it themselves, must continue to place more emphasis upon advanced study by college graduates and particularly upon graduate education in science and technology. To you, who are graduating today, graduate study offers a field of very large opportunity for important service and a full and rich life.

I would hope also that our colleges and universities, in increasing degree, would associate research activities and graduate education wherever possible. This creates problems, of course, for some great teachers are equally eminent research people, but other notable scientists have little to do with teaching.

Universities which receive grants or contracts from government and industry often assign research projects to eminent and capable scientists who occupy themselves fully with achieving desired technical objectives, leaving little or no time for teaching. Yet it must be said that in the long run it is dangerous to separate research in any field of knowledge entirely from education. Obviously, the objective should be the attainment of a truly scholarly environment of inquiry, learning, and teaching.

Nor does it take an M.I.T. or a California Institute of Technology to contribute toward such a goal. A college such as Wilkes, for example, has a great opportunity to contribute to the advancement of science, even though this contribution involves only the contribution of a single man or group, working on a single specific problem.

An ancient Chinese philosopher, expressing his hopes for the young people of his generation, stated them with profound simplicity. He said:

"May you live in interesting times."

Certainly this is one of the assets which is yours as you leave Wilkes College to face the uncertainties, the realities, and the opportunities of life in our contemporary society. You do live in interesting times.

But more than this — and unlike most of the descendants of that Chinese philosopher — you have the advantages of participating in these interesting times as Americans — a privilege which you must not underestimate or overlook. What being an American means in an age such as this was expressed with great clarity by President Kennedy in 1960, when he wrote:

"The American, by nature, is optimistic. mental, an inventor, and a builder who b when called upon to build greatly. Arou believe in himself, give him a great goal to b he will create the means to reach it. This t can character is our greatest national asse

On this graduation day you *have* a great goal May you also have the will to believe in y the imagination and the initiative to bene contribute to the age of science and technol we live.

Congratulations and good luck.

When Jim Webb landed at the Wilkes-Barre/Scranton Airport Monday, June 11, at 11:30 A.M., he w old friend, Admiral Harold R. Stark. Accompanied by Dr. Farley, the two welcomed the NASA Adm very busy and tight schedule. This lasted until 10:30 P.M., when Webb and his party took off again f capitol.

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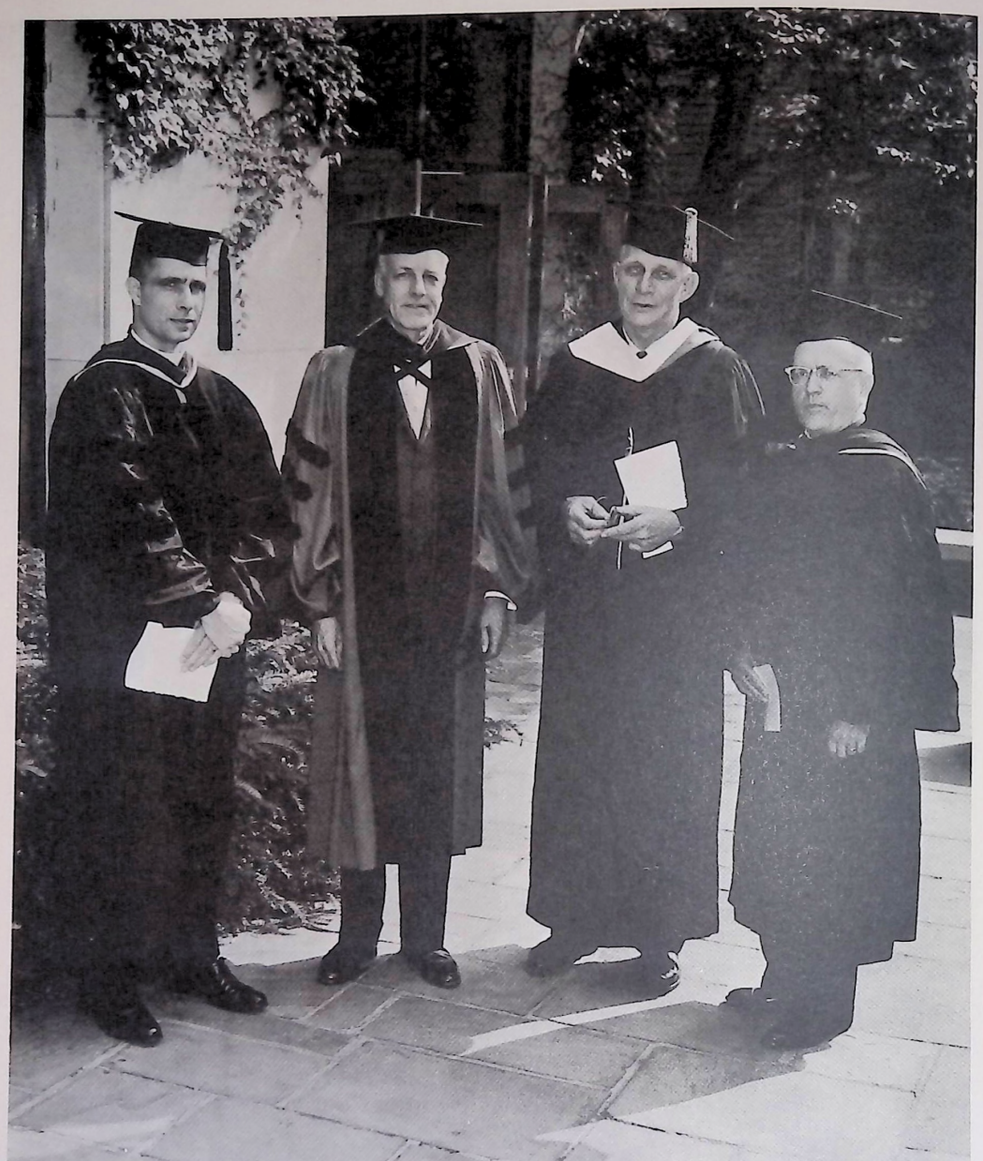
"The American, by nature, is optimistic. He is experimental, an inventor, and a builder who builds his best when called upon to build greatly. Arouse his will to believe in himself, give him a great goal to believe in, and he will create the means to reach it. This trait of American character is our greatest national asset."

On this graduation day you *have* a great goal to believe in. May you also have the will to believe in yourselves, and the imagination and the initiative to benefit from and contribute to the age of science and technology in which we live.

Congratulations and good luck.

When Jim Webb landed at the Wilkes-Barre/Scranton Airport Monday, June 11, at 11:30 A.M., he was met by an old friend, Admiral Harold R. Stark. Accompanied by Dr. Farley, the two welcomed the NASA Administrator to a very busy and tight schedule. This lasted until 10:30 P.M., when Webb and his party took off again for the nation's capitol.

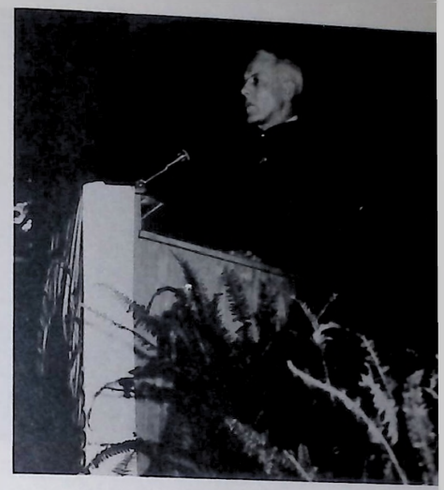


Baccalaureate exercises, Sunday, June 10, brought Dr. Julien A. Ripley, Associate Professor of Physics, to the platform in the gymnasium as principal speaker. Just before the ceremony got underway at 5 P.M., the graduating class gathered before the gym to form the procession. Above, baccalaureate principals pause for photographs. Left to right, Rev. Frank H. Jogwick, Dr. Julien A. Ripley, Dr. Farley, Rev. Burke Rivers, D.D.

Baccalaureate Address

WHEN GYROSCOPES GO HUNTING

Dr. Julien A. Ripley
Associate Professor of Physics
Wilkes College, Wilkes-Barre, Pa.



Dr. Farley, fellow-travellers of Wilkes College, and guests.

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Among some faculties there is a device by which the professors enable themselves to stay awake through these occasions. They form a betting pool on how many minutes the address will take. I thought for a time that here is my opportunity to rake in a fortune. But the Wilkes faculty is either too penurious or too clever.

I considered getting even with Dr. Farley by confining my address to one quick sentence, stolen from Bob Hope's recent comment when he was given an honorary degree at Georgetown University. "I am asked," said Hope "to give my advice to you who are about to go out into the world. It is very simple: Don't!"

I know it is expected that I should give you some kind of a message – a challenge to lift you – even if it should be happily forgotten in a day or two. Well, I have no message to give, just a few comments and a few questions to ask of you.

May I begin with some comments on this present point in history. Although many have been the periods in the past when times were such as "to try one's soul," there have been few so marked by a widespread sense of anxiety and despair. Many of the most powerful expressions in writing and drama reflect this sense of sickness, of nothingness at the center of existence: T. S. Eliot, Kafka, Albee, Ionesco, Sartre, to name but a few who have drawn devastating pictures devaluating man. A feeling of helplessness and despair is abroad in the world. Purpose and direction have been lost.

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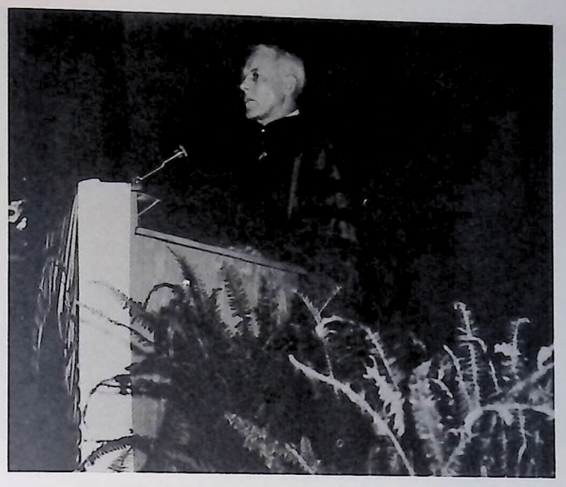
ate exercises, Sunday, June 10, brought Dr. Julien A. Ripley, Associate Professor of Physics, to the n the gymnasium as principal speaker. Just before the ceremony got underway at 5 P.M., the class gathered before the gym to form the procession. Above, baccalaureate principals pause for s. Left to right, Rev. Frank H. Jogwick, Dr. Julien A. Ripley, Dr. Farley, Rev. Burke Rivers, D.D.

Baccalaureate Address

WHEN GYROSCOPES GO HUNTING

Dr. Julien A. Ripley
Associate Professor of Physics
Wilkes College, Wilkes-Barre, Pa.



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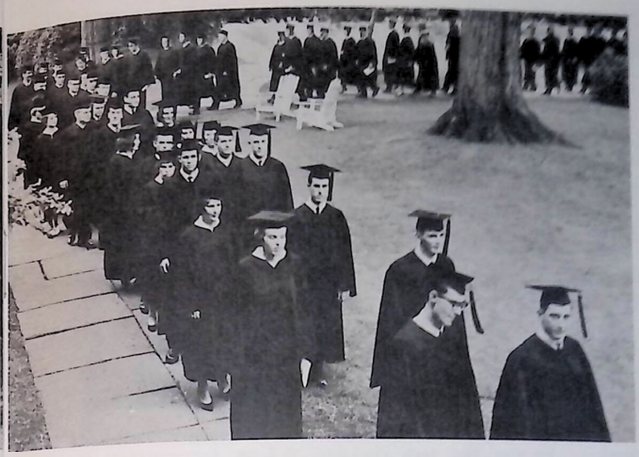
The diagnosis of this sense of despair has been undertaken by many and I shall pause to mention only three underlying reasons in order to give structure to the sequel of my thoughts.

First, there is the collapse of those bright hopes which arose with the 18th century rationalists and extended through the 19th century, arising out of the birth of modern science in the Renaissance. When Galileo and Newton found an order in nature that could be understood, they gave birth to this new hope. Nature at last could be understood – its basic structure could be discovered and made intelligible. The immutable laws of nature could be found. Surely the same method could be used to establish the natural laws of social organization. Optimistically, men approached the challenge. Our Declaration of Independence stemmed from this optimism: The phrase "the laws of nature and of nature's God" is central in that document. A new principle of government was established – government of, by, and for the people, created equal, independent, and rational. Progress could be assured by a social system, guaranteeing equality and freedom, and working through the principle of rational economic self-interest. The heavenly city could be established on earth.

Alas, the dream was not easily fulfilled. Squalor, ugliness, cruelty, and wretchedness continued. I shall not enter into any analysis of why the breakdown of the competitive and free society took place. But in the 20th century, we became convinced that the old economic and political order had to be overhauled. Furthermore, since Freud's discovery of the unconscious, we are now aware that men do not even behave rationally. If any social system is to work more will be required than a simple appeal to reason and self-interest. But a satisfactory system has not yet been developed.

The second element of our contemporary anxiety I need only mention, since we are all so profoundly aware of it – it is the present international situation with the possibility of nuclear war hanging over us, and a recognition that the old international diplomacies exemplified in Kipling's



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phrase: "taking up the White man's burden" has ended in massacre of women and children in Algiers. The old order is rejected, but a new international order has not come into being.

The third, and perhaps in the long run, the most important, although also the most indirect factor leading to a sense of insecurity finds its origin in the modern scientific revolution. It is a scientific revolution which is having as great an impact on the thinking and hence on social organization and values as did the Copernican revolution of four centuries ago. Darwin, Freud, and Einstein symbolize this revolution. Each has made us look further beyond appearances and question the nature of man's creation, the nature of man's inner self, and the nature of man's understanding of the physical universe in which he lives. I will attend only to the third of these.

You are all more or less familiar with Einstein's general conception. I wish to emphasize today one of the consequences which has brought about a significant reorientation of scientific thought. I have said that the scientists of the 18th and 19th centuries believed that there was a single, unique, intelligible structure to the universe. The work of the scientist was to find this and to approach closer and closer to the absolute truth. Find the basic propositions and the basic laws and these would constitute the absolute truth, reflecting the operation of God in the universe. Some of these basic propositions might indeed be quite complicated, such as Maxwell's equations of electromagnetism and might not be quite as self-evident as the earlier scientists hoped. But they were there — basic propositions and laws ruling the universe. All that was needed was to discover them.

As you know, the modern scientist is not so ambitious. He is still convinced that there is order in the universe, or he could not operate at all, but he is willing to recognize that any theory developed today is a tentative one and that there are alternative modes for describing the structure. It is possible, for example, that non-Euclidean geometry may form a better system for describing nature than the Euclidean geometry which our forefathers held up as an example of absolute, self-evident truth. There are no laws of science which are immutable. They are all subject to modification and reinterpretation.

What is the relationship between these observations on science and the problem of meaninglessness in our general thinking? Science and scientific thought does not continue on its path unrelated to other aspects of culture. If the doctrine of absolute truth is abandoned in science, so it has become abandoned in many other areas. This has its good side as well as its dangers. We are today much more tolerant of the basic beliefs of other cultures and their alternative theories of social organization than we were in the past. And many of us feel that just as the scientific laws of our forefathers must be continuously reinterpreted and re-evaluated, so likewise must our political traditions, our ethical standards, yes, even our religions. The God of Moses — stern, jealous, dominating — was once reinterpreted by Christ. The concept of God is being reinterpreted by modern men, such as Tillich or Schweitzer or the Pope. But this poses a dilemma. If absolute truth cannot be reached in science or ethics or religion, does that not raise the problem of whether there is any core of meaning to cling to, any certainty to grasp, any tradition to accept or to follow?

It would be quite absurd to propound an easy answer. I shall continue only to make some comments and suggest certain questions which you might pursue related, I hope, to what you have learned in college.

Allow me to use a very loose analogy — that which suggested my title, "While Gyroscopes Go Hunting." You are all familiar with servo-mechanisms, those intricate devices often involving gyroscopes, which serve to control and to guide planes, ships, or missiles. A course is set and the servo-mechanisms keep the travelling object on course. Often because of variations in the surroundings, the object deviates from its course; the mechanism then brings it back. In the operation, however, there are apt to be oscillations about the predetermined direction. These oscillations are termed "hunting" and are similar in a way to a hunting animal following the scent or spoor of the prey. The hunter in his search pursues his course but oscillates about it.

Our civilization is articulated in an extremely complicated fashion and requires certain mechanisms to preserve its continuity. Among these mechanisms are those of tradition, of laws, and of conventions. It is the responsibility of governments, schools, parents, and teachers to prevent the inevitable oscillations from becoming so violent or so unstable that society collapses. So much, so good! Now let us ask the two questions: Who maintains the mechanism and who determines the course or the goals? What is the individual's role in these determinations?

Some of you may play a *large* role in maintaining or even overhauling the mechanisms — in keeping the oscillations within proper bounds. All of you as citizens will play *some* role in this, since the proper working of this mechanism in a democracy depends upon the judgment of all mature citizens expressed in the polls or through public opinion.

But I wish to concentrate on the second problem. What determines the aim and the goal? This I feel is both a collective and individual responsibility equal in importance to that of maintaining the mechanism itself, although both are closely related and affect one another.

There is a tendency today to found our security on the mechanism alone and to think that if only we could choose the right experts and the right system, all would be well. We seek to find this security outside ourselves in the conventions, laws, authority of church, parent, or school, and in so doing our inner security and sense of human dignity are often lost.

While gyroscopes go hunting, you must find your own goals and thus become more aware of yourself and your own meaning. There are many aspects to this process of formulating and reformulating your goals
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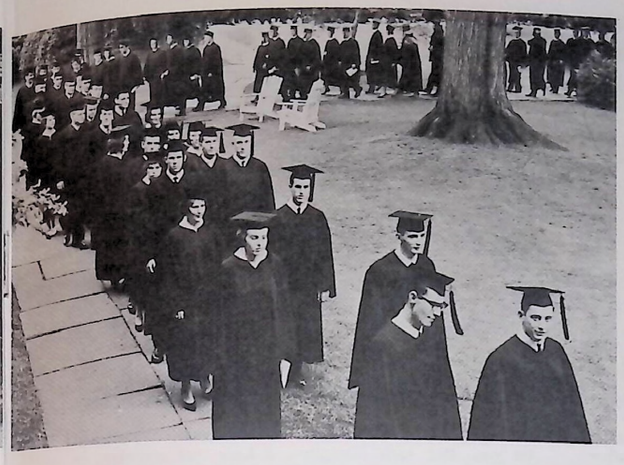

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While gyroscopes go hunting, you must find your own goals and thus become more aware of yourself and your own meaning. There are many aspects to this process of formulating and reformulating your goals and I can do little prescribing. But I mention one good starting point which I believe in, as I think do all of us who are members of this liberal arts college, namely, ask questions and continue to ask them and continue to wonder. If you cease to question and cease to wonder, it is likely that you will cease to be interested in your own meaning and become lost in mechanical routines.

Ask the large personal questions again and again: "What am I?" "What is man?" "What is God?" "What is meant by the good, the true, and the beautiful?" "Where am I going in life and why?"

Ask also the social questions: "In what sense are all men equal?" "What is meant by loving my brother?" "Does love of my country mean hatred of other countries?"

This is an age of the quick slogan and the catchword, the shortcuts to thinking. Note the word "image." We are told to keep the image of America clear. Are you or I or America nothing but a collection of shallow tricky mirrors reflecting what people would like to see? or only what we would like them to see?

And formulate your own answers on the basis of your own experience and thought, not just on the basis of slogans or of authority. Let go the familiar and the secure. In Goethe's words: "What thou hast inherited from thy fathers, acquire it to make it thine." It is not only up to the religious, political, and scientific leaders to ask questions and to formulate answers — it is up to you!

Make your choices for yourself. Kierkegaard has put it thus: "to venture causes anxiety, but not to venture is to lose one's self . . . and to venture in the highest sense is precisely to become conscious of one's self." You must, in other words, "dare disturb the universe" by asking questions continuously and seeking answers meaningful to you personally upon which you can act. Otherwise, you will end as did Mr. Prufrock saying "I should have been a pair of ragged claws scuttling across the floors of silent seas."

This year, the Alumni dance, honoring the graduates, was held in the American Legion Home on North River Street. Following Commencement, the Legion was packed with celebrants until 1 A.M. Above, left to right: Mrs. Anita Janerich, Mrs. Harry Hiscox, Albert Kishel, graduate of the year; Harry Hiscox, Russ Williams, Joseph Savitz, Don Eller, graduate of the year; Dr. Carl Urbanski, Nora Zahavy, Tel Aviv; Gordon Roberts.

I realize that many here will say this is dangerous advice. It is time to close ranks and obey the old tested authorities. Just last week at commencement exercises in a local college, the advice was given to the effect, do not expose yourself to the danger of losing your faith. And Billy Graham is touring the world rather pathetically, it seems to me, asking us to return without further question to the literal Biblical injunctions.

But I hold, as I believe many on this faculty do and legions of scholars and scientists, philosophers, and religious thinkers throughout history do, that to ask a question seriously is an act of affirmation. It implies the possibility of some answer, some guide to action. What is the scientific experiment but a question posed to nature? Every question is an appeal to experience in the broadest sense. It forces you to evaluate and extend your experience. A question can have a rational justification if you have a metaphysics which assures you there is meaningful experience to appeal to. It aims at a way of understanding and predicting the future, and this presupposes some basis of knowledge or some assumption that there is a future, subject to some kind of determinism.

To ask and to seek answers meaningful to you is an affirmative act which may cause some anxiety but this is better than finding a zero at the center of your life.

Of course, there exist temporary conflicts between the teachings of religious authorities, political authorities, scientific authorities, and the authority of group mores and conventions. Each must be continuously re-evaluated by you. But each discipline, if I am not mistaken, is based upon the conviction of some unity in the universe. Lest I appear to be too disrespectful of religious authorities, may I quote from Pope Pius XII's address to students at the University of Paris in 1953:

> "In your studies and scientific research, rest assured that no contradiction is possible between the certain truths of faith and established scientific facts. Nature, no less than revelation, proceeds from God, and God cannot contradict Himself."

As a student of science, I should have phrased this differently, but the essential meaning is clear, it is approval of a constant search for explanation and understanding of all nature, social, material, and spiritual.

"And the truth shall make you free" — not the absolute truth, not the truth handed down to you on a platter from authorities of your church, your government, your college, or your parents, but those tentative truths you develop inside yourself as you relate to others through your work and through your love. Buddha's last injunction was: "Believe nothing on hearsay. Do not believe in traditions because they are old, or in anything on the mere authority of myself or any other teacher." It is only thus, I believe, that while the gyroscopes go hunting, you will become aware of your own destiny and help in your small way to clarify the destiny of mankind.

WILKES COLLEGE

FALL SPORTS SCHEDULE

1962 FOOTBALL

Sat., Sept.	29	Moravian	Away	2:00 p.m.
Sat., Oct.	6	P.M.C.	Home	2:00 p.m.
Sat., Oct.	13	Ursinus (Homecoming)	Home	2:00 p.m.
Sat., Oct.	20	Drexel	Away	1:30 p.m.
Sat., Oct.	27	Juniata	Away	2:00 p.m.
Sat., Nov.	10	Haverford	Home	2:00 p.m.
Sat., Nov.	17	Wagner	Away	2:00 p.m.

All Home Events — Wilkes College Athletic Field

Meeting informally in Dennison Hall of the College, Wilkes College Alumni Association Execu made plans for activities during the coming scholastic year. Specifically discussed were annual scheduled for October 12 and 13.

Following a report of chapter activities by Gordon E. Roberts, Executive Alumni Secretary, the me journed until late August. Above, seated left to right: Gordon Roberts, Dr. Carl Urbanski, Busi association president; Dr. Herbert Oliver, Lloyd Davies. Standing, Attorney Eugene Roth, Leon Mrs. Anita Janerich, Attorney Gifford Cappellini, Millie Gittens, Attorney Hiscox.

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Sat., Nov. 10	Haverford	Home	2:00 p.m.
Sat., Nov. 17	Wagner	Away	2:00 p.m.

All Home Events – Wilkes College Athletic Field

1962 SOCCER

Sat. Sept. 22	Alumni	Home	2:00 p.m.
Wed., Sept. 26	Harpur	Away	4:00 p.m.
Sat., Sept. 29	Lycoming	Home	2:00 p.m.
Sat., Oct. 6	Lafayette	Home	10:00 a.m.
Wed., Oct. 10	Stevens	Home	3:30 p.m.
Sat., Oct. 13	Fairleigh-Dickinson (Homecoming)	Home	11:00 a.m.
Wed., Oct. 17	Gettysburg	Home	3:30 p.m.
Sat., Oct. 20	Hofstra	Away	2:00 p.m.
Wed., Oct. 24	Muhlenburg	Away	3:30 p.m.
Sat., Oct. 27	Wagner	Away	2:00 p.m.
Wed., Oct. 31	Susquehanna	Home	3:30 p.m.
Sat., Nov. 3	Rider	Away	2:00 p.m.
Wed., Nov. 7	East Stroudsburg	Away	2:00 p.m.
Sat., Nov. 10	Elizabethtown	Home	10:00 a.m.

All Home Events – Wilkes College Athletic Field

Meeting informally in Dennison Hall of the College, Wilkes College Alumni Association Executive Council made plans for activities during the coming scholastic year. Specifically discussed were annual Homecoming, scheduled for October 12 and 13.

Following a report of chapter activities by Gordon E. Roberts, Executive Alumni Secretary, the meeting was adiourned until late August. Above, seated left to right: Gordon Roberts, Dr. Carl Urbanski, Russell Williams, association president; Dr. Herbert Oliver, Lloyd Davies. Standing, Attorney Eugene Roth, Leanord Mulcahy, Mrs. Anita Janerich, Attorney Gifford Cappellini, Millie Gittens, Attorney Hiscox.

15th Annual Homecoming

Plans for the 15th Annual Homecoming of Wilkes College Alumni are nearing completion. Russell Williams, '50, President of our Association, and the Executive Committee have announced that all Homecoming activities will be held at the Host Motel in Wilkes-Barre. Spacious facilities and excellent parking accommodations are provided at the Host.

Committees appointed for Homecoming (October 12 - 13) are as follows: Attorney Eugene Roth, '57, General Chairman; Paul A. Klein, '60, and Attorney Gifford Cappellini, '45, Co-Chairmen.

Co-Chairmen for the Warm-up Party to be held in the Alexander Room of the Host Motel are: Dr. Carl Urbanski, '57, and Dr. Frank Gazda, '59.

Beverly Hiscox, '58, and Lloyd Davies, '47, are Co-Chairmen for the Annual Alumni Dance to be held Saturday evening in the spacious Dorian Room at the Host. The Judging Committee for dormitory displays is headed by T. R. Price, '56.

On Saturday evening, the classes of '37, '42, '47, '52, and '57 will hold a combined reunion dinner in the Alexander Room. Attorney John Doran, '57, will act as Toastmaster, and Dr. Farley and Mrs. Farley will be guests of the "reuning" classes.

Last year approximately 650 alumni returned to Wilkes for the Annual Homecoming. Each year, attendance at this annual event increases, and this year we are looking forward to a record turnout.

Plans for this year's Homecoming have been formulated well in advance so as to give all alumni an opportunity to reserve these dates and to plan to attend the festivities. Make your plans NOW! Bring a guest! Have a great time seeing and talking with your "ol pals."

Reservations from alumni from the "reuning" classes will be accepted as soon as final arrangements have been completed. Your Alumni Office will contact each member of these classes in late August. Plan to attend!

Wilkes College Theater Alumni will present a *Kum-Bak Musical* on Friday evening, October 12. Curtain time 8:15 p.m. Alumni who were active as students in the Theater are already rehearsing for the show which has as its setting - Wilkes College and the acquisition of a Fine Arts Building. From all reports, this *Kum-Bak Musical* should be a delightful show. Alumni are urged to attend and to support the Theater at Wilkes College.

Check the back cover of this "Alumnus" for more details about Homecoming, '62. See you on the 12th and 13th of October.

Friday - October 12

7:00 P.M.	Dormitory Displays	Campus
8:15 P.M.	Kum-Bak Musical	Chase Theater
9:30 P.M.	Warm-Up Party	Alexander Room, Host Motel

Saturday - October 13

11:00 A.M.	Soccer Wilkes vs. Fairleigh-Dickinson	Wilkes Athletic Field
2:00 P.M.	Football Wilkes vs. Ursinus	Wilkes Athletic Stadium
6:00 P.M.	Class Reunion Dinners '37, '42, '47 '52, '57	Alexander Room Host Motel
9:00 P.M.	Homecoming Dance	Dorian Room Host Motel

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