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On Saturday, November 15, the New York Alumni Chapter welcomed representatives from nine area College Chapters and from three Alumni Chapters to a Regional Visitation of Eta Kappa Nu. This year’s Visitation featured a Career Clinic which offered tips on job-seeking, resume writing and taking interviews. The program stressed an aggressive approach to job-hunting in a no growth economic environment and offered candid answers to questions one dares not ask the College Placement Coordinator. The first part of the program was based on material compiled by the American Institute of Aeronautics and Astronautics and by the Institute of Electrical and Electronics Engineers. The second part of the program presented a slide presentation developed by Larry Dvon of the American Electric Power Corporation.

The Regional Visitation was held at Pratt Institute in Brooklyn, New York. Special thanks is due to Prof. Arthur Seidman who made the on-site preparations and to the students of Pratt who prepared and served a buffet luncheon for the guest chapters.

Chapters represented at the Visitation were: City College of New York, Cooper Union, Drexel University, Manhattan College, Monmouth College, New Jersey Institute of Technology, Pratt Institute, Polytechnic of New York (merged with the New York University department of electrical engineering), Rutgers University, the American Electric Power Alumni Chapter (first corporate alumni chapter formed in 1975), the Philadelphia Alumni Chapter, and the New York Alumni Chapter. Unable to attend was the Columbia University Chapter.

This year’s program was so successful that a similar program is planned for the 1976 Regional Visitation to be held on Saturday, November 13, 1976. The 1976 Program will feature speakers from the technical recruiting staff on IBM.

In addition to the Career Clinic, reports on the activities of the Board of Directors, the various College Chapters and the Alumni Chapters were given by their representatives. There was also a very constructive exchange of information between the chapters and members in industry.

IDENTIFICATION: First Column: Barbara Zeman, President, Rutgers Chapter; Gabriel Padetti, President, Drexel Chapter; David Daut, New Jersey Inst. of Tech. Second Column: Richard Bernhardt, President, Cooper Union Chapter; James R. Johns, Monmouth College; Edward Lewis, Vice President, Manhattan College Chapter. Quane Gennaro, National Director and Visitation Officer; John O’Brien, Vice President, Polytechnic Inst. of N.Y.; Prof. Isadore Cogan, Philadelphia Alumni Chapter and Visitation Officer.
The National Board of Directors were hosts at an Award Luncheon held in the New York Hilton Hotel, on January 26th. Mr. Larry Dvon, Director of Engineering Manpower for the American Electric Power Service Corporation and Past President of Eta Kappa Nu was presented with the Distinguished Service Award of the Association. Dr. Bruce A. Eisenstein, Assistant Professor of Electrical Engineering at Drexel University was presented the Outstanding Electrical Engineering Professor Award. The award is sponsored by the Philadelphia Alumni Chapter but the nominations are made by the College Chapters. The selections were not made in time to extend invitations to the Honorable Mention winners and they will be honored at a later date. They are: Professor P. David Fisher, Associate Professor of Electrical Engineering, Michigan State University, Professor Keith R. Carver, Associate Professor of Electrical Engineering, New Mexico State University, and Professor Lee T. Todd, Assistant Professor of Electrical Engineering, University of Kentucky.

Chalmers Butler [left] President of Eta Kappa Nu, presents the Distinguished Service Award to Larry Dvon.
Careers in Electronics Research at IITRI

From discovery to application

IIT Research Institute, an independent research and development organization, offers a career environment which is professionally stimulating and personally rewarding. Located on the campus of the Illinois Institute of Technology in Chicago, we combine ample size and facilities with a small organization character that engenders individual creativity and recognition. The continuing education of staff members is strongly supported by a liberal policy of tuition reimbursement and by internally financed projects. Electronic Engineering graduates of superior accomplishment are invited to investigate openings in our current programs.

OUTSTANDING CHAPTERS

by ALAN LEFKOW
Committee Chairman

The Chapter Award Committee was pleased to announce that the winners in the 38th Annual Outstanding Chapter Awards competition were:

National Winner
Gamma Chi Chapter
New Mexico State University

Honorable Mention
Omega Chapter
Oklahoma State University
XI Chapter, Auburn University

These well-deserving chapters have been presented with engraved Award plaques in recognition of their exemplary programs for the 1974-1975 academic year. Eta Kappa Nu not only recognizes excellence in individual performance through acceptance into the organization initially, but also recognizes the performance of individuals working in concert as a college chapter. The role of the Chapter Award Committee is to decide which chapters, if any, have met the high levels of performance that have formed the basis for recognition as an Outstanding Chapter.

The vehicle for this determination is the chapter's annual report to National. At the conclusion of each academic year each chapter is asked to submit a report that describes as faithfully and completely as possible its programs and activities for the past year. Each report becomes an entry into the competition and forms the basis for judging the chapter. As can be expected, not all chapters submit a report, or, more importantly, submit one that does justice to the chapter. As a result, many otherwise well-deserving active chapters fail to obtain the special recognition because the Committee, obviously, can only judge from among those reports it has received. However, the Award is not automatically given each year. To be a National winner a chapter must not only stand out from its peers, but must also meet the established high standards of a National winning chapter. However, except for 1963-64 when a regional but no National winner was declared, there has been a National Outstanding Chapter Award winner in each year of the competition. When one looks at the large amount of student apathy so prevalent on campus today, it's significant to note that there has not been any corresponding interruption in the Award.

Generally, annual report preparation is left in the hands of the outgoing and new incoming chapter officers at the year's end. Ideally, their only job should be one of editing. Committee and activity chairmen should write a report of their activities immediately after their conclusion for eventual inclusion in the annual report. Copies of previously submitted reports should be kept on hand as guides for next year's report. Typically, the report is due about six months after the academic year's end (e.g., November 20th), which, in the Committee's view, should allow sufficient time for all those involved to complete it.

Although the report should cover all programs and accomplishments of the chapter, the Committee places greatest weight on activities of service to the chapter's department, school and community. While many activities by and for the chapter itself are important, they are, for the most part, internal affairs necessary in fulfilling basic chartered responsibilities as an Eta Kappa Nu chapter. Its activities beyond the basic running and perpetuation of the chapter that are more important when comparing chapters. And it is this outstanding and unselfish service to others that the Award Committee has always found prevalent in the winning chapters each year.

Because the report must constitute as a complete picture of the chapter, other aspects are also important. Good, clear writing is naturally an essential ingredient for a top-notch report. The contents should be well organized, logically presented, and neat in appearance. Photos and samples of work are also desirable assets. All told, the Committee considers all factors, weighing each one appropriately in deciding the winners.

From its traditions and long list of honorable winners, the Award Committee considers winning the Outstanding Chapter Award a prestigious accomplishment. The Committee hopes that each chapter will take the time and trouble to submit a worthwhile entry in the next Award competition, and wishes each success in carrying out their year's program.
THE DEATH OF CAPTAIN CHARON

by Miggs Pomeroy

The women composed no dirge for his funeral. He seemed to have no close relatives, and from the taciturn villagers one could elicit only vague and conflicting stories—some said he had slit a dozen throats in the civil war which ravaged Greece in the 1940's, others that he had killed no one but was nicknamed Charon (or sometimes Captain Death, for Charon, ferryman of the Styx, is death's emissary in these parts) because he had been condemned to death so many times himself. He spent twenty years in jail for his left-wing views, and was said to have risked his life to save escaped allied prisoners during the German occupation of Greece. He looked like a pirate and always wore the same pair of patched blue trousers, rolled up to the knee as though he were just about to push a boat off, though he never went out fishing like the other old men of the village. Those who knew him said he was a gently, kindly man, and the plucked, ascetic lines of his handsome face, embellished with a huge cavalry moustache, would break into a smile of unusual sweetness when he met a friend. Recently he spent his days sitting with his cronies in the café, in the deep shade of a mulberry tree, a glass of ouzo handy, his bare feet propped up on the railing. Perhaps he never tired of looking at the sea lapping at the perfect crescent of white sandy beach in front of him, the fishermen baiting their lines at the jetty, a string of donkeys being led off to water at the spring under the cypresses, or up, a mile or so behind the olive groves above the village, to the mountains where he had hidden and fought. They were almost as changeable as the sea itself—snow-covered in winter, dappled with sun and cloud or ablaze with wild flowers in the spring, and every evening at sunset baring their stony flanks to an orgy of pink and purple. He would also see the red gashes of soil where new roads have been cut to the villages high up the mountain, and the other which winds around the peninsula, opening up his spectacular part of Greece to the outside world.

The Peloponnese is about the size of Massachusetts, a varied land of flat fields bright with pumpkins and tomatoes, olive groves and vineyards, or rolling pastures patched with clumps of pine and cypress, and mountains. It is surrounded by a clean, though overfished, sea, reached by relatively uncluttered beaches or dramatic rocky coves ideal for mask and snorkel. There is no lack of classical sites: the palace of King Nestor who fought in the siege of Troy, the temple at Bassae, the Byzantine town of Mistra or the Venetian fort at Methone. The lovely ruins of Olympia, encroached by pines, emanate a joy which surely was born of the time when the Games lived up to their name. At the northeast corner Nero's brainchild, the Corinth Canal, snips the Peloponnese off from the rest of Greece, and at the southern tip of the central finger of land at Cape Matapan (on ancient times Tae-naros) is the entrance to Hades. This peninsula, the Mani, with its 8,000-foot backbone of the Taygetus mountains bred Captain Charon. These Maniots are a tough, independent tribe of men for whom the mountains were once a barrier against culture or Spartan invasion from the north and a refuge from seaborne marauders, whether they were Turks, Venetians, or pirates. The road is changing the land and the people, bringing amenities, visitors, and cultural pollution: Captain Charon's village, until recently a harmonious group of stone houses roofed with handmade tiles, has been marred by its first two-story balconied apartment block which looks like a kitchen cupboard with the drawers left open. Hotels are being planned. To us it seemed as though the death of this man who epitomized the originality of this part of Greece was an omen of change and standardization to come and each year we wonder if we can bear to go back. Each year we do and it is almost, but not quite, as beautiful as before.

Kalamata, the provincial capital at the head of the bay and the base of the peninsula, can harbor big ships. There are good shops, hotels, campsites and beaches, and a frequent air service to Athens.
In the old days before the road the Maniots would come here in their fishing boats if they needed a hospital, lawyer or something special for the house. Now they travel by bus — an erratic, devil-may-care service which bowls along the narrow mountain roads like a rhinoceros on a tightrope. There is one spot along the way where the driver will sometimes stop (as though his passengers needed any sobering lesson) to show them a hundred-foot cypress with a bundle of rags and scraps of metal at the bottom — all that remains of a small family car. Having made his already shaky passengers faint with compassion and vertigo, he tells them that the only casualty was one broken arm and a few scratches. Perhaps the driver of that car was distracted by the scenery. We felt we could hardly blame him — the backdrop of burnt-out mountains, here and there spilling red earth at the tips of a crazily inaccessible cave shelter, green-black rivers of cypress in the gullies, crumbling forts approached by winding stone staircases like flescues of plaited ribbon in the distance. Gargantuan rocks teetered on the hillside cracking with spiny plants, fat grasshoppers and cicadas, and a goat with a brass bell tinkling on her wooden collar. Shelters under a gnarled olive apparently rooted in granite. Not far from where the car smashed, the road crosses a deep ravine. Under the modern cement bridge is the lovely single arch of an old stone one and the remnants of one of the many original Mani roads built for travelling on foot or with donkeys — no more than pathways of stone fashioned in the steeper places into shallow sloping steps. Even in winter there is seldom water in the ravine now, but oleander sprouts through the polished, sun-bleached stones of the old river bed. It is so charitably hot in the ravine in the summer except where the old river turns seemingly to escape the sun or is narrow enough to shut it out altogether. Down here, in a cave where many a goatherd must have scooped away the afternoons, we found the fragile remains of a human skull.

One form of greeting in the Mani is to say "Where is Alexander the Great?" to which the reply is "He lives and relishes." Children are sung a lullaby about how Constantine will be recaptured from the infed Turk. Their heritage is a warlike one, and the proud spirit is still there, revealing itself in refreshing ways. We once asked a Greek friend what the army was like these days and he laughed, surprised: "No war," he asked him tentatively what he thought about the germ of terrorism. "Nothing," said the doctor. "We have no germ in Greece!" As soon as the child was old enough to run away from the house he could get up from the delivery table — she could go home now, said the doctor. "One day he'll be able to do the things his mother can do," she said, "but just had to, and I found I could." Once, to survive in the Mani, you had to be tough, and much is expected of her still. In the village they are at work early until late — in the house or in the fields, planting, digging, carrying, baking, sewing and mending the clothes. The weather is often not locked; even a band of gypsies is treated with kindness and offered clothing or olive oil. It was a fine day, and when these coastal dwellers had to be on the lookout for pirates. Many chose to retreat to the mountains where they built their villages near a spring or a patch of ground flat enough for crops. For centuries, these villages there are tiny churches, beautifully frescoed with primitive but captivating colors. They gather in clusters, chattering and boshing, the sea up to their necks, their hair-covered heads in the turquoise water. In the winter, especially after Christmas, it was a popular pastime and cold. Rain on their men are getting up a fierce down at the cafeneion, playing chess and backgammon or fiddling with their worry beads, the women would like a fireplace to huddle over, but there is probably none — in Captain Charon's village the only two chimneys poking out of the golden tiles have been built by foreigners.

Bananas and oranges grow in this sheltered climate, the juiciest figs, and cucumbers two feet long. Vegetable gardens are planted in the shade of the olives, mulberry and pomegranate trees. There are places where underground rivers run down through the limestone soil of the mountains, and here there is enough water for village wells. Some of the water escapes to the sea and bubbles out fifty yards or so from the shore, making sinister-looking sicks on the surface and icy currents to swim through as one peers apprehensively down into the shimmering grey green caverns. One river springs out in a rock pool so close to the sea that you can't believe it can be so sweet to drink, and cold enough to chill you into beer and watermelon. To such a place, a tiny bay with milky sand, eucalyptus shade and the splashed pink and reds of oleander blooms, Kakazaktsis, author of 'Zorba the Greek' came to ponder and to write. Here he could see the lighthearted wane he would describe in the book. On a grassy point, far out or the sun, and perhaps in the summer when strangers come, the frothless white wash, snow white, is tamed, when these coastal dwellers had to be on the lookout for pirates. Many chose to retreat to the mountains where they built their villages near a spring or a patch of ground flat enough for crops. For centuries, these villages there are tiny churches, beautifully frescoed with primitive but captivating colors. They gather in clusters, chattering and boshing, the sea up to their necks, their hair-covered heads in the turquoise water. In the winter, especially after Christmas, it was a popular pastime and cold. Rain on their men are getting up a fierce down at the cafeneion, playing chess and backgammon or fiddling with their worry beads, the women would like a fireplace to huddle over, but there is probably none — in Captain Charon's village the only two chimneys poking out of the golden tiles have been built by foreigners.
grapes and purple cascades of bougainvillea, one would like to be able to paint or draw; a fat old priest in the cassock and tall black hat of Orthodoxy, his profusely bearded face pale under the peaked roof of a dusty black umbrella, rides by on a tiny tottering donkey. He contrasts with the whitewashed — houses, walls, cement paths, pots of basil and geraniums — even the trunks of the scarlet oaks which have been sprayed with it. With eyes squinting against the brightness and the background hum of people chatting in a language one only vaguely understands, they may be discussing deterrents but one drowsily lets illusion make them talk of pirates or nymphs or the gods; this feels like the land of the lotus-eaters where it is always afternoon. This too is an illusion in this land which has been ploughed and planted and become a brand new country. Facing reality more squarely one sees that over the years whatever controls the grazing there are some too late; the goats have nibbled away too long at the roots which held the soil on the hillsides. Only the olive crop flourishes and in the wintertime the season lasts forever, or do the habits go out to pick. The sea, so lovely to swim in, has been so overfished that those as long as four hours out the boats usually come back with nothing but small fish left nothing more than half a pound.

Going on south towards the tip of the peninsula the mountains become even more arid, though there are a few patches of oaks, and gardens wherever there’s water. Apart from an occasional goat, donkey, pig or chickens, the people here seem to have nothing. There is practically no soil, water or shade. Dark-skinned faces are backlighted by the sun, the women are soiled as if just come back from permanent mourning, and ragged, crew-cut children skitter over the rocks, climbing from one cliff to the other cliff as the sea looks deeper, darker and vaguely menacing. The landscape is a sombre beauty and is dramatically punctuated by villages which are built entirely of towers. According to Leigh Fermor’s book ‘Mani’ these towers were built by refugees from Trikala in the central Peloponnese. They set up a millitarist feudal aristocracy in this barren land, and fought with their neighbours over space and grazing and whose tower would be tallest. No easy, pergola- shaded cisterns these, but gothic handsome shafts of stone, cut as though the sides of the mountains themselves had been geometrically clipped and pruned. Many of these towers are now abandoned, empty shells in rock gardens of prickly pear, a testimony to struggle and swagger, some of it perhaps five hundred years old, much of it late as the nineteenth century. At Pirgos Dirou, about half way down the western coast of the peninsula, there are a number of limestone caverns, some of which ticketholders may visit by boat complete with piped music and concealed lighting, but these hills are riddled with both unpeopled caves for the adventurous to discover and explore. There is one, which is inhabited by a band of Greeks who had British soldiers during the war, in which the tunnels are so narrow that you have to bend double and hold your arms up over your head — and who know how deeply they penetrate into the mountain; after a while, even with flashlight and candles, the heart quails. Like Ariadne leading Theseus out of the Cretan labyrinth, one could write a long string. Not far from this place was a headland dotted with fragments of flat arched huts where we found a beautifully shaped obsidian blade. Now the goats which kept the many flowers which grew in the arid, windswept plains, are called minotaur, bear or boar, or the fragments which were discarded by those ancient craftsmen. Or will they be called minotaur, bear or boar, or the fragments which were discarded by those ancient craftsmen. Or will they be called minotaur, bear or boar, or the fragments which were discarded by those ancient craftsmen. Or will they be called minotaur, bear or boar, or the fragments which were discarded by those ancient craftsmen. Or will they be called minotaur, bear or boar, or the fragments which were discarded by those ancient craftsmen. Or will they be called minotaur, bear or boar, or the fragments which were discarded by those ancient craftsmen.
debates and differences of opinion. As a result of some of these and other discussions in the 1935-1945 period a quiet movement was organized by several "interfraternity" groups to promote improved conditions within some of these student organizations. A cooperative group, first known as the National Committee on College Fraternities and Societies, experimentally functioned in the 1940's. This group was responsible for the definitions now endorsed by the ACCH whereby college social fraternities, professional fraternities, honor societies, and recognition organizations were clearly specified. These definitions have been promoted by the ACCH and included in some of the interfraternity publications. Unfortunately the implications of some of these definitions have not been universally implemented, especially in the areas of the recognition societies.

In 1944 the officers of the ACCH, Josiah J. Moore, Robert W. Bishopp, and Lawrence B. Guild, interjected themselves in making diplomatic approaches toward membership in the ACCH. Of these highly recognized honor societies that were functioning in the special colleges, three societies were selected for admission into membership in the ACCH. In a number of these cases it probably is true that their resignations were motivated by their indifference and failure to appoint delegates to the annual Council meetings. Ostensible reasons such as the costs involved and the lack of evidence of the values of membership seem to be only the excuses and not the real reasons for some resignations. In a few cases the admission into ACCH of competing (and presumably lesser) societies were the real reasons for leaving.

Growth of membership of societies in the ACCH since 1969 has been small; five societies have been admitted and two have resigned from membership. However there is considerable potential for the admission of more societies into the Association. Since the organization of the Association 11 member societies have withdrawn; surely some of them could again be brought back into the ACCH. There are about 10 additional societies that are well recognized as qualified for membership in our Association. Determined efforts on the part of the existing members of the Association should result in obtaining petitions for admission from some of these groups. There are perhaps 20 other so-called honor societies that might have their organizations improved until they would become logical candidates for possible admission into the ACCH.

We should mercifully ignore some other 150 student organization that are frequently referred to as "honorary." It is highly desirable that the designation should be replaced by the more appropriate term "recognition society." Every alert member who is familiar with the current honor society movement should be concerned about a number of problems that are hindering the success of our efforts. We must confess our inability to recruit and attract capable officer material to staff our central organizations. An alarmingly small number of our member societies have the financial resources, or the ability to develop them, that would enable our headquarters offices to engage professional staffs and to become equipped with modern office machinery. The solicitation of contributions from alumni members, the collection of realistic entrance fees and dues and the assistance from appropriate professional societies and foundations are few of the ACCH societies are attacking and solving.

The newly installed Theta Alpha Chapter of Eta Kappa Nu at Tulane University experienced historic New Orleans, March 13, 1976, after its induction ceremony in the Mary Hotel. The ceremony was held in a banquet room with a table (and presiding officer) to the left was left behind. It was a busy Friday night in the French Quarter and some of the participants were expertly delayed by the confused traffic from a St. Joseph's Day parade gaily promenading through the Vieux Carre streets.

When everyone finally arrived, they were seated at tables to sample some of New Orleans' famed cuisine. After one and a half hours of gastronomical delight, the induction dinner entered the adjoining room to prepare for the evening's event. Everything in order, the induction ceremony commenced. Induction committee members were: guest speaker Dr. William Klos, a past national president of HKN and present professor and head of the Department of Electrical Engineering at the University of Southwestern Louisiana; Dr. Robert Drake and Y. J. Seto, EEs professors at Tulane; Charles Hette, president of the new chapter, and Kirk Dameron, vice-president.

Dr. Klos presented the six faculty and twelve student inductees with their membership certificates while wives and dates looked on. He delivered an entertaining and informative speech to the Green Wave EE's and friends, interspersed with amusing anecdotes. His subjects ranged from the history of HKN to its related awards and opportunities, and even to Saint Peter and the Pearly Gates. Upon the conclusion of the ceremony, installed members relaxed, mingling among themselves in easy conversation. Plans for the remainder of the evening were discussed, and many members decided on a tryout at Pat O'Brien's piano bar. Others opted for a walk down good Bourbon Street with a few of them stopping off at Preservation Hall for some of that Dixieland jazz.

Whatever the choice of entertainment, the majority of the Theta Alphas, after drinking up New Orleans' nightlife, ended up at Cafe Du Monde for cafe au lait and beignets (coffee and doughnuts). A good ending to a good night.

From left to right: Nick Masmei — Secretary, Dr. William Klos — HKN National Past President, Charles Hette — President, Dr. Y. J. Seto — Faculty Adviser, Kirk Dameron — Vice President.
Altruism and the DESMISE OF NEW YORK CITY

The title of my talk is "Altruism and the Demise of New York City." A better title would have been "Altruism as the Cause of the Demise of New York City," but that phraseology is a little awkward. However, that is the theme I would like to develop in the next fifty or so minutes: that what is destroying New York City is the morality of altruism and nothing else.

FALSE EXPLANATIONS FOR NEW YORK CITY'S PROBLEMS

As an introduction to that, I would like to talk briefly about some of the things that are typically given as the cause of New York City's problems, which are not causes, which in fact have virtually nothing whatever to do with the problems New York City faces. My source here is an excellent article that appeared in the Wall Street Journal this fall when everything was running hot and heavy for the city, looking like it might be going into bankruptcy right away. This is called "New York Is a State of Mind." It is by Irving Kristol, who is Henry Luce Professor of Urban Values at New York University. An excellent article. He discusses some of the issues which are given as the cause of New York City's problems and he talks about why they are not.

The Unions

Certainly one of the problems New York has in terms of its financing, its funding, its financial situation, is the tremendous sum of money that is paid to the unions. In particular, we know very little about the problems with the pension funds. But that raises the question of why the unions have gotten such tremendous settlements from the city. And if you listen to the media, the answer you would have to come up with is that, for some reason, the unions are more belligerent or aggressive or acquisitive than unions in other cities. Kristol denies that. There is no evidence whatever that New York's unions are any more aggressive than unions elsewhere. As a matter of fact, Kristol says, the tremendous benefits the unions have received were given to the unions without any great pressure. They were simply handed to the unions by the political leaders of New York City as the progressive, liberal thing to do. There is a wonderful quotation here from Kristol that I would like to read because it kind of sets up the whole picture. He says: "I well recall meeting a municipal trade union leader who had just come from a final bargaining session. He was pale and ashen. 'Have things gone badly?' I inquired. 'Terrible,' he replied. 'They actually gave me everything I asked for! What in God's name am I going to do next year?'

Welfare Pressures

Another of the problems of the city is the welfare roles and the amount of money that is paid out in welfare. It is argued that the size of New York's welfare population makes it politically impossible for a politician to get elected without setting some means test on the welfare people, and that as a voting bloc they force irresponsible schemes on the politicians. Now that is garbage. As Kristol points out, welfare recipients vote notoriously infrequently. They are not a terrorific voting bloc and when they vote there is no indication that they vote consistently for one side rather than another, one party rather than another. The welfare population is not a coherent, solid, consistent group of people. It is a fluctuating body of people with people moving in and out all the time. Now no doubt there is a hard core somewhere, but most of the people on welfare are not there consistently, all the time.

We all hear phrases like: "there is going to be blood in the streets," "they will burn the city down," "they will tear down the buildings," etc., as threats. And generally it is implied that those are threats from the welfare people. But it is not the welfare recipients who talk about blood in the streets. As Kristol points out, after all, it is these persons, the people in the streets. That kind of language comes from the intellectual leaders of this city. It comes from the media and it comes from the politicians. It does not come from the poor.

Now New York is an old, industrial city. As an old, industrial city, it has problems, as many old, industrial cities in the country do. Industry and jobs moving out, erosion of the tax base. But other cities in the same type of situation do not face bankruptcy. That is uniquely New York City's problem.

Welfare Expenses

It is also argued that New York City pays all her welfare costs while other cities don't pay any. That is not true. New York pays one quarter of the total welfare expenses of the city. It is true that other cities in the country may not pay any, but that does not mean that the citizens who live in those cities do not pay for welfare. It simply means that it runs through a different channel. Instead of taxes being collected by the city and redistributed to the welfare population, the taxes are collected by the state and redistributed. It does not mean that the citizens of other cities escape that tax burden altogether.

Those are some of the more common explanations of the problems New York City has, and I do not want to deny that they may have some marginal impact. But it is not the story. Those are not the kinds of things that destroy a great city. The question is: what is going on here? Why is New York City being destroyed? And it is not true, by the way, although you might think so from the media, that we are out of the woods. The City is going to have to get back in the credit market in three years. When this loan runs out, and right now it does not look good.

THE IMPORTANCE OF IDEAS

The answer to what is really going on here is ideas. As a teacher and a professor, you may think I am biased in the importance I attach to ideas, but in my view virtually nothing else matters at all. Ideas determine the course of human history. Across the board, at every twist and turn, in all events, it is ideas that matter and hardly anything else at all. The reason for this is that it is what men believe is true and what men believe is right and what men believe is practical that determines what they will do, and none of those things is self-evident. What is true, right, and practical are things that have to be discovered. What men believe is practical, for example, depends on the theories they have accepted, explicitly and implicitly, of the kinds of things that are likely to be practical in reality. And what they believe is practical, or right, will determine what they decide to do.

History is simply the record of what men have done in the past. It reflects exactly what men believed would work or was right in the past, and that means that ideas determine the course of mankind's history. Nothing is more important than ideas and no group needs more desperately to grasp that than businessmen. Typically they have regarded ideas as the sphere of ivory tower philosophers and those ivory tower philosophers have turned around and are cutting in on those ideas which businessmen thought were unimportant.

ALTRUISM IN NEW YORK CITY

The dominant ideology of New York City is altruism. The more popular name for it today is the "do-gooder" ideology. If you're going to be generous and benevolent, the politics of good will toward one's fellow men. That particular ideology happens to be sweeping the globe. It is not unheard of in the rest of the country. But there is no question that New York is the country's intellectual leader. The trends are set. And when the country goes begins here, and it begins here because this is where the
ideas are focused on. This is where all the media for the communication of the idea is focused. As a result, the whole thing gets going. The morality of altruism has more power; more sway, more impact, and is roughly "helping others." They believe altruism simply means helping others: giving to charity, giving a dime to a beggar, helping a neighbor who is having a tough time, going to the movies, going out for a walk. It is not a big difference.

ALTRUISM MEANS "HELPING OTHERS"

Now, we are talking about that is attached to altruism, the way most people understand it in northern Europe. The word "altruism," as we use it, is roughly "helping others." They believe altruism simply means helping others: giving to charity, giving a dime to a beggar, helping a neighbor who is having a tough time, going to the movies, going out for a walk. It is not a big difference.

ALTRUISM MEANS SACRIFICE

"Helping others" is not an accurate description of altruism. Altruism means, according to the dictionary definition, the placing of interest of others above the interest in yourself. Altruism is the total absence of self-sacrifice.

The primary moral distinction between altruism and the usual moral code is that, in the usual moral code, you are to sacrifice for the sake of others. But in this moral code, how do you judge a man's moral character? Well, how is a man's moral character judged publicly in this culture? It is judged by: "What has he done for others." The more he has done for others, the more he has given up, the more he has surrendered for the sake of others, for the welfare of others, the higher is his moral character. This is the concept of sacrifice. "Sacrifice" is the key to the whole altruist moral code.

If I offered to give you a dollar in exchange for a penny, would you consider that a sacrifice? No, it would not be a sacrifice, of course. If on the other hand, for some reason, I told you that I was going to give you a dollar in exchange for a penny, that would be a sacrifice. A sacrifice means giving up anything that you value more for what you value less. Giving up things which are more important to you for things which are less important to you.

ALTRUISM MEANS ONLY "HELPING OTHERS"

To begin with, to act consistently on the altruist morality, you cannot just give to charity, you cannot give everything you have. If you are working to some extent for your wife, your family, for people who are important to you personally, people who are very personal to you, that is part of what is going on. If that is part of what you are working for, you are not fully moral as far as you are concerned.

Sacrifice is the Measure of Virtue

The more you give up on the altruist moral code the greater is your virtue. But if you keep anything for yourself, your virtue is less perfect. And the more extent to which you serve yourself, the extent to which you are interested in yourself, the extent to which you do not give up for others, the measure and the extent of your guilt.

Sacrifice and Choice

Life is a constant process of choosing, ideas are born, and they are thrown out because there is that problem everyday. There are two major categories in which those ideas are thrown out. Time — our time has to be allocated among a thousand varieties of activities. The second choice tonight of going to the cinema, going home, watching television, going out for a walk. You had to choose which of those you wanted to do. It is true, nobody can live that way, but you can live that way and you can choose yourself that way. Which is what altruism wants. Altruism is not a code for living, it is a code for dying. It is a code which holds up the goal of your life slow suicide by painful degrees, a life in which you progressively give up and surrender everything that you value and everything that is important to you. Death by slow suicide is the constant theme in that moral code. Path North York is following.

THE MEANING OF SACRIFICE

To really understand what altruism means in fact and in reality, as it actually operates in the real world, and the way people really understand it when the chips are down, we have to understand the concept of sacrifice. "Sacrifice" is the key to the whole altruist moral code.

If I offered to give you a dollar in exchange for a penny, would you consider that a sacrifice? No, it would not be a sacrifice, of course. If on the other hand, for some reason, I told you that I was going to give you a dollar in exchange for a penny, that would be a sacrifice. A sacrifice means giving up anything that you value more for what you value less. Giving up things which are more important to you for things which are less important to you.

Examples of Sacrifice

Now let's take some examples. Parents give up their children for altruism. They give up golf clubs, they give up all kinds of entertainment, in order to put money aside for their education. Is that a sacrifice? Is that a sacrifice of parents who would spend the uneducated and unprepared for life, who would really rather spend the money for vacations and have a good time. But for parents who value their children and care about their future and care about their lives, it is not a sacrifice. They are buying with their money what they think is in their child's best interest. A mother gives up her young child to go to college.

A mother gives up a new fur coat in order to have money to buy milk. A young girl, the money for the fur coat. No, she values the baby's life more than she values the fur coat. A mother gives up 50 savings to pay for her wife's operation, to save her life. It is a sacrifice of the morality of everything inside out. And more, the acceptance of the altruist moral code itself twists people's lives so that they end up not knowing what they value and what they don't value, and they do not know where to go.
Altruism’s Effect on the People of New York

The paradox for those who do not really understand altruism. New York City is the area of the country where altruism is most importantly in control. It absolutely dominates all of our cultural life, all of our communications, the media, everything. It is the unchallenged absolute of the city. It is the absolute of the nation. And at the same time, New Yorkers have the reputation of being cold, hard, wideawake, heartless people.

Now that is a very hard thing to prove statistically. I have to go by common observation and common instinct, but my impression is that it is correct. Things happen in this city that do not happen in any other city in the country. To prove that, you only need to go out and stop people on the streets. In Columbus, Ohio, and ask for directions. They do not jerk, they do not look at you suspiciously. They do not go away. They do not ignore you and walk on.

Last night, on one street, there was a story about an old man who had fallen down on one of those long escalators in the subway. He had a broken leg and was lying there in the street. All over. People, many people, stepped over him to get off, up the escalators, and on their way to the pubs they left him there, bleeding. In the Kity Genovese case, which is probably the most famous case, people would not take the trouble to lift the phone to call the police when somebody was being murdered outside their window. That is inhuman, I mean, that is really inhumane. And when you are talking about here are non-sacrificial actions. It is not a sacrifice to lift up the phone and make a call or to help an old man to his feet. Why do these things happen?

Altruism, SLAVERY, AND POWER LUST

Altruism is the basic philosophy of power lust. It is the root matter of course. It says that some men serving others is the moral ideal. Those who can must serve those who cannot. The competent serve the incompetent. Those who have power make others do their will without ability. Altruism makes this the official philosophy of the society.

Why do people advocate altruism? People who really know what altruism is. In those who can must serve those who cannot. You have to have power. The advocates of altruism are of self as a means of saying how rich they are to serve the poor. The one who will give the orders. That is the root motivating power behind the whole cultural movement toward altruism. Basically it is an issue of power.

Now, what all this got to do with New York City? In my view, they are not serving the city, they are serving the world, and a great city is not destroyed by the petty kinds of power that are of importance. We are given as the causes of New York City’s problems. The devastation of the city is not the fault of the city. It is the one who gives the orders. That is the root motivating power behind the whole cultural movement toward altruism. Basically it is an issue of power.

Altruism and Communism

You cannot fight an enemy if you share his basic philosophy and the United States today is without any leaders who can give us any moral opposition to the communists. Because on the altruist moral code, you see, the altruist does not have a meaning of power. It is the only way you can oppose communism and not oppose altruism.

Altruism and Collectivism

Altruism has its cultural effects and its cultural impacts, as we have seen, but the primary impact of altruism is on public policy. It is on what governments do and not on what kind of philosophy that rules the actions of government. Altruism is not a foreign policy. The modern equivalent would be “try to do better than me and I will blow your brains out.” And we have lots of regulations, particularly in the anilust laws, which are motivated by just that view of economic and social relationships. That is why we have the trusts or brotherhood or the competition and it is of the most terrible, terrible consequence that most people have accepted it as such.
THE SURVIVAL OF NEW YORK CITY

How long can a great city survive when the plundering of its cultural, social, political life are not only impossible, but also invidious on the part of the Mayor Beame on the cover of Time magazine holding a tin cup. It is exactly, exactly, represented the attitude that Mayor Beame and Governor Carey were projecting in their radio address. It was the attitude of the bum on the street corner who rattles his tin cup and asks for charity. "Have some money or else." What is he threatening you with? With moral condemnation. On the altruist moral code, he has the right to your funds and if you don't give them to him, you are guilty. That is exactly what Beame and Carey were telling the rest of the country. The future of the country that the rest of the country seemed to accept it.

THE IMPACT OF ALTRUISM ON SOCIAL POLICY

It's practical consequences can be seen most clearly today in the criminal justice system. We are all familiar with the_bleeding heart liberals who care more about the criminal than about the victim. Now it is not really an issue of being a bleeding heart. The question is, why don't their hearts ever bleed for the victim? Why do their hearts bleed exclusively for the criminal? Why is the criminal their only focus of concern? The only way to understand that kind of perversion is the altruist moral code. On the altruist code, lower values come before higher values - the criminal comes before the victim.

New York City is having budget cuts. What do they cut? They cut police, fire, sanitation, welfare, education, essential services that the working population of the city needs in order to survive. Did you ever think of the whole history of this crisis bear anybody suggest cutting welfare payments by a dollar a month, five dollars a month as a way of saving some money? No. On the altruist moral code, it is not an important, too important to sacrifice, police or fire or sanitation.

On the national level, Congress has become accustomed. That would certainly be good for New York City, for the country to give the funds to keep us afloat and living in the country and not having to work. That would be very necessary for the rest of the country. It would mean that the rest of the country had accepted the altruist moral code.

The only claim that New York City can make to funds from the rest of the country is that we need it. We need it! That is the only claim we have to make. Just recently, it was reported that the recognition of the altruist moral code of Mayor Beame on the cover of Time magazine holding a tin cup. It is exactly, exactly, represented the attitude that Mayor Beame and Governor Carey were projecting in their radio address. It was the attitude of the bum on the street corner who rattles his tin cup and asks for charity. "Have some money or else." What is he threatening you with? With moral condemnation. On the altruist moral code, he has the right to your funds and if you don't give them to him, you are guilty. That is exactly what Beame and Carey were telling the rest of the country.

THE SURVIVAL OF WESTERN CIVILIZATION

The real question is can the United States of America and western Europe survive? The answer to that is not on the morality of altruism. Altruism has the midas touch in reverse. It turns gold into lead. It is the reason why we are losing the cold war, why the retreat is turning into a rout. To save the world, to save this country, altruism is to be cast aside. Now that the days of altruism is not an end in itself and there is no way to destroy an idea without substituting a better idea.

AYN RAND AND OBJECTIVISM

We don't see that today. But to take that position really requires more than courage. It requires a depth of character. It requires more than the individual valuing himself; he has to know what he stands for. The answer to the question of the problems of the country and the whole world is what Rand's philosophy of Objectivism. I am an believer in her philosophy and everything I have said here tonight is my interpretation of her ideas.

She begins with the sacred, supreme value of the life of the individual human being. She holds that he has a right to live for his own sake and to pursue his own happiness as an end in itself. That he has a right to pursue his own happiness as an end in itself. That he has a right to his own life and to his own happiness. And on that basis, since reason is man's means of survival, she has derived a moral code, an entire system of ethics, which I think is the best for all, is the best for all.

Most of the members of Alpha Chapter worked on individual projects for the Illinois Engineering Open House (Revolution in Engineering) at the University of Illinois at 1976. Future engineers were provided with a plethora of textbooks used in the curriculum, and sponsored refreshments for the Open House. The Illinois State Electric Engineering Department won a major share of the Open House Awards.
A FIRESIDE CHAT
with Leon Zelby

APPLES AND ORANGES
of THE PROBLEM WITH
OVERSIMPLIFICATION

Since times immemorial, people have been making all kinds of personal
decisions with respect to all-
mentation, shelter, and, many
other types of activities. As
civilization progressed, interac-
tions among individuals grew pro-
gressively more complex, and so
did the criteria upon which par-
ticular decisions were made. The
reason for this is not difficult to
comprehend: many of the decisions
began to affect not only a particular
individual or risk-benefit, one factor
but also many other groups. And
as technology of transportation and
newly developed, spheres of influence of various decisions
became bigger and bigger.

In an attempt to estimate the
effects of some of the decisions,
and to facilitate their implementa-
tion, the marketplace substituted
reasonably uniform media of ex-
change for the barter system, a
step that in a greatly the develop-
ment of, and simplified economic
activity. Since about 200 years ago,
many aspects of the marketplace
became formalized, and in the
effort to compare different sec-
tors of activity, a standard unit
for valuation, a quantity that
presumably would make incom-
perable and comparable, gained prominence. Currency be-
came the common denominator, the
merchandise, into a system of val-
ranking of diverse socio-economic
activities in terms of price, in
terms of cost. At the turn of this
century studies of psychological and socio-
logical attributes of different seg-
ments of society developed a need
to evaluate and compare various
tools, performance, of achieve-
ment. In view of the statistical
nature of the studies, the presump-
tion was that some sort of average
might serve. And so it came to
pass that the statistical average
became the numeraire, the axiom
non of comparison of adjust-
ment, education, ability, literacy,

Since Fall of 1975, many aspects
of energy use and demand, for
now and for later, began to occupy
much of the nation. Socio-econom-
ic and technological implications
of energy use and availability began
to occupy many pages of print,
many hours of study, research,
debate, and argumentation in at-
ttempts at divining the most desir-
able, or at least a generally accept-
able, strategy. In the course of
these activities, including attempts at
establishing a criterion for com-
paring various strategies, a num-
ber of elements — old and new —
began to receive an increasing
amount of attention, and even gain
a level of prominence: net energy
analyses and net energy ratios;
second-law efficiency; risk-benefit
accounting; risk acceptability
studies; statistical analyses of po-
tential hazards; availability and re-
liability of resources and pro-
jects therefore, and so forth.

The determination of a suitable
energy policy for the nation (in the
world context) is extremely impor-
tant because the industrial (or post-
industrial, or technological) society
cannot exist without an adequate
energy supply. It is necessary,
therefore, to establish some sort of
valid criteria for the assessment of
relative merits of the various ener-
gy technologies and schemes not
only with respect to their techno-
logical efficacy and reliability but
also with respect to the impact
their adoption is likely to have
on the nation; on the individual;
on the world; on safety, economics,
life style, climate, etc. As a result of
substantial differences among
the various strategies, those in-
volved in energy policy decisions
need some suitable means of com-
parison, a factor common to all the
decisions. It may have been true
in Model A or T days, when there
was only one mode of travel, that
we made. But now, surely the type of
transmission, types of seats, ac-
necessary, color combination, enter
the process badly and make the
decision to buy. And so it is with purchases
of a TV or refrigerator, or clothes,
and so forth. Ultimately, it is,
that the dollar that changes hands,
but the specific price represents
only one of the factors. If it is
the only factor, we would all buy
gasoline at service stations where
it is cheapest. The fact that gas
stations with high prices still exist
implies the existence of additional
criteria. The existence of many
retail stores which sell brands that
can be purchased in discount stores
also cost much and weigh much.
With the factors besides price that play a
role in the many choices we make
daily. There is not a good indicator of the health of the economy — a position undoubtedly not shared by thereet
in the people, some one is
definitely less acceptable than the
other. Is cancer-caused death
equivalent to that caused by a
heart attack or a stroke? Do the
costs of hospitalization and the
monetary compensation for missed
work adequately describe the con-
squences of respiratory diseases
aggravated by air pollution?
Is one hour of anxiety worth half
as much as two hours? or a dollar
spent on food or medicine.

Quite simply, it seems to be that
the magnitude of the GNP alone
is inadequate as a description of the
well being of the nation. The
situations in which the econom-
cal averages alone are used for
comparisons, for determinations of
trend, or ratings are not mutually
different. It seems to me that
frequently such uses of averages
are not only inadequate, but mean-
ingless, and possibly even harmful.
What is the significance of compar-
ing the average of a bimodal distri-
bution with an average of a normal distribution?
What is the merit in assigning
significant differences to two aver-
ges whose separation is substan-
tially smaller than the standard
deviation? As in the case of the
dollar alone, the average alone is
not adequate. There are often
times even an incorrect measure.

Evaluation of energy processes
or strategies is not basically differ-
ent from that described in the
preceding examples either: net
energy, or net energy efficiency
itself is not sufficient as a measure
of superiority of one process over
another, and in some instances it
may even be misleading. In addi-
tion, a net energy ratio of one
process can be smaller than that
of another; the only, or seat rate
of the second could be lower than
that of the first. No different is the
situation for any other financial
methodology. Efficiency alone is used as a mea-
sure of quality of a given process.

Whether it is net energy, or lit-
rary, or risk-benefit, one factor
alone cannot fully describe a strat-
y, a policy, a scheme. Nor should
be used as the only, or seat rate
in the main, criterion of acceptability of a
proposed solution: an aspirin may
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ALPHA CHAPTER – University of Illinois Inspection Trip to Dele Remy Complex.

CHAPTERS

MUC CHAPTER, University of California in Berkeley – 1966 has been a year of revitalization for the MUC Chapter of Eta Kappa Nu at the University of California at Berkeley. Under the leadership of President Curtis Deane the chapter had the largest spring pledge class in many years (51 pledges) and campus recognition has increased tremendously.

The MUC Chapter has continued its traditional campus services which are administered by the departmental council. These include: a complete graduate student catalog library, compilation of a file of recent course final examinations, and the awarding, in conjunction with the University of California, of the Outstanding Teaching Assistant Award. The Society has also begun a number of new activities such as: the establishment of a "Job File" of Bay Area companies, participation in the Engineering Advising Center, organization of on and off campus tours, and organization of informal groups within the EE department.

Pledges are required to attend a Saturday to help as tour guides for "high school day" at Purdue. Awards became the item of interest to the Betas late in the spring as many hours were put into selecting a best pledge, best advisor, and best senior in electrical engineering at Purdue. These awards were presented at the annual banquet to a group of Betas and several other awards, such as a 27 pound "V'Nite" 27 pound copper plate given to the club treasurer. Reverend Joseph Wick spoke to the crowd of fifty on "The Therapy of Laughing", a "ser- mon" which he said was given as a response to the several other awards, such as a 27 pound copper plate given to the club treasurer. Reverend Joseph Wick spoke to the crowd of fifty students at Purdue. The Beta chapter is much more active than in the past years. The Betas have been much more active in the past years. The Betas have been much more active in the past years.

This year the BETA chapter is very active in the spring, during which time many hours were put into selecting a best pledge, best advisor, and best senior in electrical engineering at Purdue. These awards were presented at the annual banquet to a group of Betas and several other awards, such as a 27 pound copper plate given to the club treasurer. Reverend Joseph Wick spoke to the crowd of fifty students at Purdue. The Beta chapter is much more active than in the past years. The Betas have been much more active in the past years. The Betas have been much more active in the past years.

BETA PSI CHAPTER, University of Nebraska – The spring semester of 1976 began with a new slate of officers, introduction, and initiation of five new members. In connection with this, a pledge smoker and formal initiation ball were held. New officer duties included assisting with the organization of the annual Engineering Week activities. As part of Engineering Week, a welding competition was held at the Nebraska State Fairground. Beta Psi chapter to the electrical engineering display was set up at the University of Nebraska. This display included a slide show, an interactive display, and a display explaining the circuitry and operation of an electrical circuit. The display also included a slide show, an interactive display, and a display explaining the circuitry and operation of an electrical circuit.

The Beta Psi chapter would also like to thank all the undergraduates of our chapter as well as all the other chapters that have been so helpful in the past years.

by Rodney Brinker

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by Rodney Brinker
GAMMA ALPHA CHAPTER, Manhattan College — Our chapter has been very active this past academic year. At the beginning of the year the assistant dean of engineering requested that all the engineers and science students develop some sort of tutoring program among themselves to aid those students in the engineering curriculum who may need additional help. Old and new members alike of IKEN (who number in the majority as tutors) devoted a vast amount of time and energy to make the program a success.

An engineering department open house for high school students was held in December. Again members of IKEN were in the majority in helping to plan, develop, and run the whole program. Special thanks and congratulations go out to Timothy C. Pike, student and chairman of the open house committee, and to Dr. Robert Mauro, who planned and arranged for the participation of a large amount of student engineers and projects. Both these efforts contributed greatly in making open house day a great success.

Nine new members were inducted including two professional engineers and a member of our faculty in our department. At the reception the banquet was held at the South Seas Restaurant in Scarsdale, New York. A few of the highlights included spare ribs, lobster, barbecue shrimp, and pepper steak. A fabulous time was had by all of those who attended.

by Charles Boyle

DELTA THETA — Pratt Institute Children’s Hospital Visitiation.

DELTA THETA CHAPTER, Pratt Institute — Delta Theta Chapter of Pratt Institute visited the children’s section of the Children’s Hospital on Dec. 21, for the annual Christmas party. At the party, toys and candy were presented to the children by our “Santa Claus.”

In addition to the toys and candy, the children received a gift that many need most: Human Warmth. On April 15, Delta Theta Chapter will hold a special party to celebrate Easter.

Special thanks should be given to all of the generous people who gave their time and donations to make this important occasion possible. Arrangements between Pratt and Cumberland were taken care of by Dean Arthur H. Seidman of the Engineering School, who also serves as faculty advisor to I.K.N.

Students will be invited on April 15, and our gala banquet dinner for our new members will be held on April 30. Elections for new officers will take place on April 4.

by Harvey Ziegler

DELTA XI CHAPTER, Air Force Institute of Technology — Among the highlights of our recent activities here at Delta Xi Chapter at the Air Force Institute of Technology was a beer and cake get-together hosted jointly by us and Tau Beta Pi. The party was held after a busy week for both organizations among the student members of both organizations and the faculty. The informal atmosphere prompted numerous worthwhile discussions.

Eight outstanding new members were inducted in our fall initiation. Dr. Matthew Kabrisky of our EE department was the featured speaker at the banquet held at the Wright Patterson Air Force Base. Dr. K. L. S. Fairweather of the University of New South Wales, was the keynote speaker for the 1975 initiation.

Capt. Jerry Gobin was selected by the student members of Delta XI as the outstanding EE professor for 1975. He is known for his stimulating lectures and his rather challenging exams, as any of his students will attest.

We’ll be losing our faculty advisor Major Bob Reiman soon. He is currently sharpening up his Deutsch in anticipation of his forthcoming transfer to Germany. His able replacement will be Lt. Stan Robinson with a fresh PhD from MIT.

by Clayton V. Stewart

DELTA EPSILON CHAPTER, Ohio University — Delta Epsilon Chapter held annual elections on 3 May, 1975. Following this, the following weeks have been exciting with the upcoming election coming: Robert Chaffetz, President; William Haas, Vice-President; Marvin Blake, Recording Secretary; Terri Veaz, Treasurer; Robert Bailey, Corresponding Secretary. The new officers are elected for the period from May 1 to May 1 of the following year.

We would also like to announce that the Epsilon Chapter has been chosen to participate in the American Institute of Chemical Engineering Student Chapter. The new officers are elected for the period from May 1 to May 1 of the following year.

by Donald Seyler

ZETA DELTA CHAPTER, University of Texas at El Paso — Activities of the Zeta Delta Chapter for the 1975-76 academic year included the initiation of several new plans of action. A tutoring program for sophomore and junior level students was started and the initiation of an orientation and contact program at the ECE building during open house week at the University. Also sponsored for all interested students was a summer program at the University.

Presented by Dr. Michael Austin, Dean of Engineering, the program continued for nine weeks. The program’s objective was to provide an opportunity for the students to meet with the faculty and to exchange information.

by Robert Garcia

ZETA DELTA CHAPTER, Texas A&M University — Zeta Delta Chapter at Texas A&M, on the occasion of the initiation and annual banquet April 23, 1976. The initiation was held in the Kleberg Engineering Building, and the banquet was held in the Rudder Auditorium. Special guests included Douglas De, Be, Reymundo C. Ybarra, and Keith Pollock. Several of the other chapter members present included Roberto Garcia, Jr., Kenneth M. Riley, Vice-President Don Carden; Recording Secretary/Treasurer Alvin W. McCulley; Secretary/Treasurer Reymundo C. Ybarra; and Corresponding Secretary Keith Pollock.

by Robert Garcia

ZETA DELTA CHAPTER, University of Texas at El Paso — Activities of the Zeta Delta Chapter for the 1975-76 academic year included the initiation of several new plans of action. A tutoring program for sophomore and junior level students was started and the initiation of an orientation and contact program at the ECE building during open house week at the University. Also sponsored for all interested students was a summer program at the University.

Presented by Dr. Michael Austin, Dean of Engineering, the program continued for nine weeks. The program’s objective was to provide an opportunity for the students to meet with the faculty and to exchange information.

by Robert Garcia
THE VIKING MISSIONS

by Randolph Johnstone

The Viking Mission to Mars has been the principal scientific planetary exploration since the space program began a decade ago. Its main objective is the answer to the question: Is Earth the only life supporting planet in the universe? Our galaxy contains 100 billion stars, many of them surrounded by planets. Evidence that the basic chemicals of which Earth is composed are found throughout the universe. It has been proven that the ratio of these elements is consistent in our own solar system with the overall ratio generally observed throughout the universe, therefore, the most logical place around us in the search for extra-terrestrial life would be Mars.

Mars is dry, cold and less favorable than Earth for the support of life but on the other hand it is not totally hostile.

The Mariner Program of some years ago provided the logical steps in the exploration of Mars, just as Viking I and II were resting in the martian surface. Viking 1 landed on the Chryse Plain, Viking II on the Utopia region some 6400 kilometers away and further to the North.

Both vehicles are identical and have the ability to conduct a variety of experiments that hopefully will give us a better understanding of the development of Mars and in turn of Earth and the Solar System as a whole.

Two facsimile cameras are providing stereoscopic pictures both color and black and white for the purpose of reconnaissance and sample collector guidance. The cameras use mechanical scanning mirrors with singlepoint detectors. A single scan-line is imaged by nodding the mirror; the next line is formed by rotating the camera in azimuth and in this way the picture is built up. The resolution of the camera is several millimeters at close range and it degrades linearly with distance.

The orbiting unit of Viking I and II uses different types of cameras for mapping, selection of future landing sites and seasonal changes on the surface. The imaging system consists of two identical vidicon cameras each attached to a 475 mm optical telescope capable of providing contiguous swaths of high resolution coverage on a single orbital pass. The imaging data is acquired by alternately exposing and reading out the two cameras. The data is stored in magnetic tape for future playback to Earth. Since the JPL computer receives the pictures as arrays of numbers, subsequent images may be subtracted from each other numerically providing results with information such as fog density, concentration of carbon dioxide, visibility, etc.

All the data acquired by the lander and orbiter is transmitted to Earth via the S/X-bands and/or a UHF relay. The orbiter communication system consists of a low and high gain antenna and a relay antenna. The low gain antenna provides command coverage in any roll attitude throughout the mission. The high gain antenna consists of a paraboloidal reflector with a 147 cm diameter circular aperture and an S/X-band radiating feed. This system is used for transmitting and receiving S-band signals and transmitting X-band signals during orbital operations. Due to a temporary malfunction on
the power supply for the stabilizing gyro's on Viking II during separation of the lander, the high gain antenna lost its Earth tracking and directional, therefore the only means of communication was the low gain antenna. The high gain antenna is currently used for receiving UHF signals from the lander.

The high gain antenna boresight is adjustable in flight with a two-degrees of freedom drive mechanism. Dual frequency readout joints are used to provide the RF transmission across the hinge joints.

The lander can transmit data both directly to Earth, using an S-band or via the orbiter, using the UHF relay system. The high gain antenna is capable of being pointed to Earth through computer control.

Power requirements for the orbiter is provided by four solar panels at coordinate axes. Each panel is made out of two identical subpanels providing a 15.35 square meter array rated at 620 watts. Two 30 amp hour NiCd batteries are used to augment the solar array and serve as secondary source for off-sun operations. The lander is provided with two Radiotrace Thermoelectric Generators (RTG's) connected in series. For lander power requirements in excess of 57 watts NiCd rechargeable batteries are available. The batteries are charged by the RTG's when the lander requires less than 57 watts.

Now that Viking II is on the surface, Viking I has been put into a semiautomatic status. All efforts have been shifted to Viking II for comparison with those of Viking I. So far Martian "life", if any, has not been detected. Unexpected chemical reactions are puzzling scientists at this time; further investigations will be obtained from Viking II Laboratory. Nevertheless, great discoveries have been made as to soil chemical composition, temperatures both on top and below the surface, maritan weather has been charted and new problems dictated, but the main question remains to be answered does life exist? Did it ever? In the months to come both Vikings will provide us with the answer.

Another faulting activity which we implemented this year was an idea given to us by the University of Iowa. Their idea of a pizza party was modified by us into a giant unique Seafood Festival. The sea creatures were featured along with hamburgers and hotdogs for the landlubbers. Because our chapter has a very small budget, the student branch of I.F.E.E. was asked to foot the expenses.

A chapter scrapbook was started this year in which old pictures and articles were inserted. It is hoped that this will provide a source of ideas for future Eta Kappa Nu officers and members. by Art Stedlin

ZETA XI CHAPTER, Southeastern Mass. University. In reply to your letter on the activities this past semester of our chapter, the Zeta XI Chapter of Eta Kappa Nu was very inactive. The membership was low so activities were few. I am pleased to say, though, that with the turnover of officers and the influx of new members, I expect a good year coming up.

We have decided mainly to use the chapter as a service organization. We are currently trying to get an officer whereby we may tutor students in need, advise incoming freshmen, and give tours of our department to any interested people.

We hope to run some money making ventures to help pay for a banquet which we would like held once a year. I expect a good year and shall hope for the best.

by Steven A. Burns

ZETA PSI CHAPTER, Southern University. On February 27, 1976, the Zeta Psi Chapter of Eta Kappa Nu was installed at Southern University with the assistance of Dr. William Klos, Head of the Electrical Engineering Department at the University of Southern California, and the immediate past national president of Eta Kappa Nu.

The ceremony saw fourteen EE undergraduates and eight EE faculty members become charter members. The Dean of the College of Engineering, Mr. Q. Burrell, received the charter for the president of the university. The banquet following the initiation ceremony was highlighted by our guest speaker, Dr. William Klos whose topic was "Honor Society - The Profession and You."

The members elected chapter officers as follows: President, Willie E. Hires; Vice-President, Clyde Shavers; Recording Secretary, Ronald J. Richard; Bridge Correspondent, T. A. Brewster; Corresponding Secretary, Don S. Stewart; and Treasurer, Osdal M. Wilson. The faculty adviser for our chapter is Dr. James A. Anderson.

At our first meeting, we discussed plans for this semester and the following semester to include a series of technical presentations by members and guest speakers to the EE student body and faculty. The tentative schedule includes: computer programming techniques, electrical power systems, and the Electronic Circuit Analysis Program (ECAP).

by T. A. Brewster

The problem with the guy who talks too fast is that he often says something he hasn't thought of yet.

We like the philosophy of a concern which hands out a small card that reads: "We have no quarrel with those who sell for less; they should know what their stuff is worth."

The rich man employs a butler, a valet, a secretary, a laundress, a cook, and a housekeeper; the poor man just gets married.

Conference: A meeting where executives talk about the things they should be doing.

A man with determination can do more with a rusty screwdriver than a loafer will accomplish with all the tools in a machine shop.

The hardest thing about skating is the ice — when you come right down to it.

They tell of a golf player, so used to cheating that when he made a hole-in-one, he wrote down "zero."

Q: "April showers bring May flowers, but what do May flowers bring?"
A: "Pilgrims."

FUNNY, ISN'T IT? When the other fellow states his side of a question strongly, he's bullheaded. But when I state my side of a question strongly, I'm being firm.
When the other fellow overlooks a few of the rules of etiquette, he's rude. But when I skip a few of the rules, I'm original. When the other fellow does something that pleases the boss, he's polishing the brass. But when I do something that pleases the boss, that's cooperation.

When the other fellow gets ahead, he sure had the lucky breaks. But when I manage to get ahead, Man! Hard work did that! Funny, isn't it — or is it?

Two teenage youngsters went to the town clerk to ask for a wedding license. When they were refused because they were too young the boy asked "How about a learner's permit?"

A tennis Pro is a guy with a really Great Racket.

I've been told the xerox machine is a copy cat, the water cooler is all wet and our computer lies to strangers.

If you think you have someone eating out of your hand, better count your fingers regularly.

I got thru my annual physical very well. The only thing the doctor wants me to give up is a week's pay.

by Marcia Peterman
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