

11-12-1986

Avion 1986-11-12

Embry-Riddle Aeronautical University

Follow this and additional works at: <https://commons.erau.edu/avion>

Scholarly Commons Citation

Embry-Riddle Aeronautical University, "Avion 1986-11-12" (1986). *Avion*. 597.
<https://commons.erau.edu/avion/597>

This Book is brought to you for free and open access by the Newspapers at Scholarly Commons. It has been accepted for inclusion in Avion by an authorized administrator of Scholarly Commons. For more information, please contact commons@erau.edu.

It's a Small World....
International students host
day of activities at ERAU
Feature, page 6

This Week

- ☐ Varieties of boosters take payloads into space page 4
- ☐ Modified F-16 investigates unique concepts page 7



An Award-Winning Collegiate Newspaper

Volume 54, Issue 10 Embry-Riddle Aeronautical University, Daytona Beach, Florida November 12, 1986

Embry-Riddle wins Flight Team sweeps Regional Competition

By Steve Cagle
Avion Staff Reporter

The National Intercollegiate Flying Association (NIFA) Safety Convention (SAFECON) held at the Daytona Beach Regional Airport last week saw the competition dominated by the Embry-Riddle Precision Flight Team. The regional competition between Guilford Tech, Florida Institute of Technology, Middle Tennessee State University, Broward Community College, Miami Dade North, Auburn, and Embry-Riddle was held Thursday, Friday, and Saturday.

Embry-Riddle won all major awards in the competition by a decisive margin. Flight Team President Buck Wyndham expressed immense satisfaction at the performance of the team. The results were announced at the award banquet held at Pelican Bay Saturday evening. When the results were given out, Wyndham said, "You could have knocked me over with a feather!"

Embry Riddle won the overall ground and flying events as well as the award for Top Team. Another prestigious award captured by Riddle was the Safety Award. This award is given to the school which has the best documented safety program. The team's safety officer, Dan Ferracollo, presented the safety notebook to Bill Strauss, an FAA official from Orlando who noted on the score sheet, "(An) exceptional program and (it) should be used as a Master Guide for all other schools."

In addition to the team awards, Buck Wyndham and David Dodson finished first and second, respectively, in the Top Pilot competition. This award is given to the best overall pilot at the Flight Meet. Wyndham's placing qualifies him to try out for the United States Precision Flight Team which will travel to Poland next year for international competition.

In the individual events Embry-Riddle relied upon solid placings by team members in order to win the overall events. According to Head Coach Mike Wiggins, "It was a team effort." He added, "Everybody on campus has every right to be proud of how our school was represented."

In the power-off landing competition, Riddle was hampered by the landing performance of the Cessna 172 which tends to float before touching down. Many other schools use the C-152 which is easier to place precisely on landing. Even with the handicap, Doug Trent placed seventh out of thirty competitors.

According to Wiggins, there was a little more emphasis placed on the power-on landings in which Riddle would be able to do better with its C-172's. First place in the power-on landing event was captured by Buck Wyndham with Dave Dodson finishing third.

Three Riddle students placed in the top ten in the message drop event. Dropmasters Patricia Leon, Dan Ferracollo, and Philip Smith finished third, fourth, and second respectively. Buck Wyndham placed fourth and Dave Dodson finished second in the VFR navigation event.

The simulated Comprehensive Air Navigation (SCAN) event saw Dave Dodson finishing sixth and John Walsh in third. The results of the aircraft recognition were: Buck Wyndham - ninth, John Walsh third, John Wassong - second, and Steve Hadden - first.

The simulator event was won by Buck Wyndham with a score of 33 (low score wins). His closest competitor had a score of over 100. John Wassong placed fourth. The preflight event had Embry-Riddle students John Walsh and Dave Dodson finishing first and second, in an impromptu accuracy landing event for flight instructors, Riddle instructor John Stratechuk captured top honors.

Aeronautical Science Chairman Tom Connolly said that the key to this victory was the sacrifice and dedication on the part of the students involved with the Flight Team. He added, "I can't give enough credit to the staff," who worked to make not only the Flight Team a success but the Regional Meet a success as well.

See MEET, page 8



Chalk!!!!
Embry-Riddle Precision Flight Team Pilot and Team Captain calculate flying Association Regional Meet. The three day event began Thursday when Region IX teams such as F.I.T., and Auburn University arrived in Daytona.



Chalk!!!!
Embry-Riddle Precision Flight Team Pilot and Team Captain David Dodson picks up chalk dust by landing right on the 'power-on' precision landing target during the National Intercollegiate Flying Association Regional Meet. The three day event began Thursday when Region IX teams such as F.I.T., and Auburn University arrived in Daytona.

University still tuition dependent Most of revenue goes towards instruction costs

By John Gelsky

In a recent study, consultants hired by Embry-Riddle determined that the university spends more of its revenue on instruction than 12 comparable colleges and universities. It also showed ERAU continues to be tuition dependent and that until new sources of revenue are developed, tuition increases will be necessary if the university is to expand.

Every year, the Embry-Riddle Administration contracts Dr. John Minter and Associates to conduct a "financial ratio analysis" and to compare the university to twelve other private colleges. Based on private con-

trol, size of budget and the number of full-time equivalent students, Dr. Minter selected 12 private colleges as ERAU's peer group.

According to the data, in Fiscal Year 1986, Embry-Riddle spent more of its revenue on instruction than the median of the peer group — ERAU spent 46.3 percent while the median spent 42.2 percent.

The study also showed that ERAU spends more of its revenue on student services, institutional support and reserve accumulations. The peer group spends more revenue on research, public service academic support, plant maintenance, scholarships and debt retirement.

Additional conclusions of the analysis are that, for the present, Embry-Riddle continues to be dependent on tuition and fees. This revenue source is fully variable, meaning that the amount of revenue changes proportionately with increases or decreases in enrollment.

Many private institutions are severely financially crisis should their enrollments decline precipitously. ERAU has had stable enrollment growth during the past few years while many private universities have a declining enrollment.

To solve the problems associated with rising costs, the university is implementing a

variety of cost-saving programs, budget cuts and stepping up its efforts in fund raising to create new revenue streams. Annual unrestricted gifts for current operation and endowment income programs such as the new annual fund and the development of foundations and corporate support will make the university less dependent on tuition.

Dr. Minter was one of the early pioneers in developing ratio analysis and worked with Dr. Howard Bowen and the accounting firm of Fretz, Marwick and Mitchell, who established the standards in higher education financial management.

Advisement becomes mandatory for all Embry-Riddle students

By Ron McCann
Avion Staff Reporter

Last week, all Embry-Riddle students received a letter from R. Luther Reibig, Vice Chancellor of Academic Affairs. The letter said that it now mandatorily for all

an instructor in the student's degree program — such as an Air Science student with an adviser from Humanities — the adviser has been made aware of the student's degree program requirements.

Freshman and sophomores have been assigned advisers from

SGA goes to the movies

By J. Miguel Vidal
Avion Staff Reporter

Two weeks ago, the Student Government Association (SGA)



"Everybody on campus has every right to be proud of how our school was represented."

In the power-off landing competition, Riddle was hampered by the landing performance of the Cessna 172 which tends to float before touching down. Many other schools use the C-152 which is easier to place precisely on landing. Even with the handicap, Doug Trent placed seventh out of thirty competitors.

According to Wiggins, there was a little more emphasis placed on the power-on landings in which Riddle would be able to do better with its C-172's. First place in the power-on landing event was captured by Buck Wyndham with Dave Dodson finishing third.

Three Riddle students placed in the top ten in the message drop event. Dropmasters Patricia Leon, Dan Ferraccio, and Philip Smith finished tenth, fourth, and second respectively. Buck Wyndham placed fourth and Dave Dodson finished second in the VFR navigation event.

The Simulated Comprehensive Air Navigation (SCAN) event saw Dave Dodson finishing sixth and John Walsh in third. The results of the aircraft recognition were: Buck Wyndham - ninth, John Walsh - third, John Wassong - second, and Steve Haddad - first.

The simulator event was won by Buck Wyndham with a score of 33 (low score wins). His closest competitor had a score of over 100. John Wassong placed fourth. The preflight event had Embry-Riddle students John Walsh and Dave Dodson finishing first and second.

In an important accuracy landing event for flight instructors, Riddle instructor John Stratechuk captured top honors.

Aeronautical Science Chairman Tom Connolly said that the key to this victory was the sacrifice and dedication on the part of the students involved with the Flight Team. He added, "I can't give enough credit to the staff," who worked to make not only the Flight Team a success but the Regional Meet a success as well.

See MEET, page 8

David Dodson kicks up chalk dust by landing right on the 'power-on' precision landing target during the National Inter

event began Tuesday when Region IX Teams such as F.I.T. and Auburn University arrived in Daytona.

University still tuition dependent

Most of revenue goes towards instruction costs

By John Galsay

In a recent study, consultants hired by Embry-Riddle determined that the university spends more of its revenue on instruction than 12 comparable colleges and universities. It also showed ERAU continues to be tuition dependent and that until new sources of revenue are developed, tuition increases will be necessary if the university is to expand.

Every year, the Embry-Riddle Administration contracts Dr. John Minter and Associates to conduct a "financial ratio analyses" and to compare the university to twelve other private colleges. Based on private con-

trol, size of budget and the number of full-time equivalent students, Dr. Minter selected 12 private colleges as ERAU's peer group.

According to the data, in Fiscal Year 1986, Embry-Riddle spent more of its revenue on instruction than the median of the peer group — ERAU spent 46.5 percent while the median spent 42.2 percent.

The study also showed that ERAU spends more of its revenue on student services, institutional support and reserve accumulations. The peer group spends more revenue on research, public service academic support, plant maintenance, scholarships and debt retirement.

Additional conclusions of the analysis are that, for the present, Embry-Riddle continues to be dependent on tuition and fees. This revenue source is fully variable, meaning that the amount of revenue changes proportionately with increases or decreases in enrollment.

Many private institutions are highly tuition dependent and therefore more susceptible to severe financial crisis should their enrollments decline precipitously. ERAU has had stable enrollment growth during the past few years while many private universities have a declining enrollment.

To solve the problems associated with rising costs, the university is implementing a

variety of cost saving programs, budget cuts and stepping up its efforts in fund raising to create new revenue streams. Annual unrestricted gifts for current operations and endowment income programs such as the new annual fund and the development of foundations and corporate support will make the university less dependent on tuition.

Dr. Minter was one of the early pioneers in developing ratio analysis and worked with Dr. Howard Bowen and the accounting firm of Peat, Marwick and Mitchell who established the standards in higher education financial management.

SGA goes to the movies

By J. Miguel Vidal
Avlon Staff Reporter

Two weeks ago, the Student Government Association (SGA) began a video-rental service which offers students, faculty and staff VCR and video rentals at a low price.

According to Chris Seckinger, SGA Representative in charge of the project, the Student Government has a contract with Showtime Video to provide videotapes until the end of Dec. 1986. The rental cost of the videotapes, two dollars each, will be split between Showtime and the SGA. Seckinger also said that depending on the success of the program, the contract will be renewed — either with Showtime or other local companies.

See MOVIES, page 8



Aeron photo by Tim Haas

Bottoms up....

Last Friday saw the traffic circle roped-off and the creation of the perfect place for skate boarders to play. The wide open area

allowed these "land surfers" to take up jumping over obstacles — such as pick-up trucks — and showing off for the camera.

Advisement becomes mandatory for all Embry-Riddle students

By Ron McCann
Avlon Staff Reporter

Last week, all Embry-Riddle students received a letter from R. Luther Reisbig, Vice Chancellor of Academic Affairs. The letter said that it is now mandatory for all to be advised prior to advanced registration. According to Dean Reisbig, this Mandatory Advisement is not a new — there was mandatory advisement in the past but was not adhered to and became obsolete.

Mandatory advisement for all students was brought back to lower the matriculation rate of students leaving ERAU before graduating. It is intended that advisers not only insure the students take the correct course in the correct order, but also keep current with industry needs.

Faculty members have been assigned approximately twenty to forty students to advise. Although the adviser may not be

an instructor in the student's degree program — such as an Air Science student with an adviser from Humanities — the adviser has been made aware of the student's degree program requirements.

Freshman and sophomores have been assigned advisers from the Mathematics and Humanities Departments while juniors and seniors have advisers from their degree program. The system was set up in this way to insure that students closest degree completion meet all degree requirements.

It is the hope of Dean Reisbig that this will alleviate students scrambling at the last minute to complete required that have been put off until their senior year.

During registration advisers will be on hand to sign off students who must rearrange their schedule due to course sections being filled and new schedules having to be worked out.

Editorial

Auto registration — a must on campus

Each trimester, new meanings are applied to the term "Advanced registration." For a few fortunate students, this period of hopeful anticipation is they speed through the boxes on their way to acquiring the classes they have chosen. For many others, however, it is a time of anxiety and apprehension as they wade through the seemingly endless rivers of administrative "red tape" on their way to course selection.

Past efforts to alleviate much of the bureaucracy have proven futile, leaving a deep-rooted sense of animosity between the student and the university. In an apparent attempt to streamline the registration procedure for the coming trimester, the administration has imposed a mandatory advisement policy for every student enrolled at Embry-Riddle. The dictation of this requirement is said to be in the best interest of the student. This is questionable.

Under the soon-to-be-enforced regulation, no student may register for classes without consulting an appointed faculty adviser. This contrasts the former system which only mandated freshmen students, those with less than 24 ERAU credit hours completed, Engineering or AMT students to seek curricular advisement. Additionally, students with poor academic standing were referred to advisers for help. Once familiarized with the university's method of registration, students then could exercise the option of seeking guidance or not. This option no longer exists.

Administrative officials may feel that a mandatory advisement will preclude many scheduling conflicts and provide more consistent class enrollment in the future. Perhaps this may be the case, but at what expense? Logistically, the new forced advisement appears to be off to a shaky start at best. According to a growing number of students, they have received no notice other than the one from Dean Reisbig advising them as to whom they should report to for curricular advisement. Also, students in a one program often receive "advisement" from instructors in other programs who do not seem to know about the student's own program. Why?

ERAU has a well-trained, professional faculty whose purpose is ultimately to teach. Under the newly instigated policy, they must now divide their time between instructing the students and acting as academic counselors. By their own admission, not all faculty advisers feel that they can adequately assist the students with the professionalism they desire.

Perhaps the most important point, however, is the administration's apparent mistrust in a "responsible" Embry-Riddle student. A university which boasts of professional graduates now proposes to hand-walk and spoon-feed its toddlers throughout their college career. Are ERAU students so irresponsible that they cannot manage their own scheduling structures? It appears that the administration subscribes to this philosophy.

Rather than instigating such an overbearing policy upon faculty and students, perhaps school officials should concentrate its efforts on reducing the yearly clutter to better outline academic requirements — a recommended semester breakdown for each degree program with supplemental information on prerequisites and guidelines are helpful to students. Also, individuals would prosper from increased academic coordination and guidance during their first year at Embry-Riddle.

While the administration may believe it has the overall best interests of the students at heart, it does not. A majority of those attending ERAU are adults, and most even act as such; school officials must realize this. Iron-fisted policies such as this may provide short-term relief, but often they are only a temporary solution to a very real problem.



Letters to the Editor

Bad Idea

To the Editor:

Sir, I am writing in response to the Student Forum question "Would you be interested in having faculty evaluations published?"

I don't think that the faculty evaluations should be published, mainly because it would create a lot of problems. If there is a teacher with a poor evaluation, nobody will be willing to take a class that is taught by him. Also, if somebody will "get stuck" with such a teacher, there will be sure a bad atmosphere and comments like "no wonder everybody hates him."

On the other hand, if you "get lucky" and are in the easy teacher's class, thinking that there will be no problems, with the class, you might be really disappointed.

Another thing is that the evaluations are very subjective sometimes. For example, believe it or not, teachers sometimes are right saying that the more you

realize that it wouldn't do any good to know the Faculty Evaluations especially that they wouldn't probably want everybody to know their test results and all of the grades.

Jerry Smallski Box 1031

Division by Zero

To the Editor:

Whenever the question of why our campus has been cut into with no connecting road between the "Academic side" and the "Flight side," the Administration laughs and makes a comment about how we are too lazy to walk around campus. There are, however, some situations which will occur, where the connecting road will be sorely missed — emergencies requiring Embry-Riddle Security or Physical Plant. When an emergency occurs on campus, how much longer will it take for help to arrive?

Embry-Riddle Security needs easy access to all parts of campus, especially when accidents occur.

near. Due to the over-abundance of students that were allowed to enter the Fall 1986 term, many of us felt the crunch by being forced to rewrite our schedules several times, each time having it signed by our great adviser. Well, because of our great desire to become aviators at what was considered the best school of its kind, we put up with the run-around hoping that by the next trimester things would get better. They didn't! In fact, they only got worse! Maybe I am only a Freshman and do not understand the system, but I think it stinks! Advanced registration is supposedly based on the number of credit hours that one has.

When I entered this school in the fall, I had twelve credit hours due to the CLEP Tests. I understood that Freshman registration was based on Alphabetical order by last name so I put up with the hassle. Now that it is time for Spring trimester registration, I believe that because I have more credits than many other freshmen I should be allowed my privilege — especially since at the end of this trimester I will have the end of this trimester

William Dickinson Box 2131

Bad Idea

To the Editor:

Sir, I am writing in response to the Student Forum question "Would you be interested in having faculty evaluations published?"

I don't think that the faculty evaluations should be published, mainly because it would create a lot of problems. If there is a teacher with a poor evaluation, nobody will be willing to take a class that is taught by him. Also, if somebody will "get stuck" with such a teacher, there will be sure a bad atmosphere and comments like "no wonder everybody hates him."

On the other hand, if you "get lucky" and are in the easy teacher's class, thinking that there will be no problems, with the class, you might be really disappointed.

Another thing is that the evaluations are very subjective sometimes. For example, believe it or not, teachers sometimes are right saying that the more you

realize that it wouldn't do any good to know the Faculty Evaluations especially that they wouldn't probably want everybody to know their test results and all of the grades.

Jerry Smallski Box 1031

Division by Zero

To the Editor:

Whenever the question of why our campus has been cut into with no connecting road between the "Academic side" and the "Flight side," the Administration laughs and makes a comment about how we are too lazy to walk around campus. There are, however, some situations which will occur, where the connecting road will be sorely missed — emergencies requiring Embry-Riddle Security or Physical Plant. When an emergency occurs on campus, how much longer will it take for help to arrive?

Embry-Riddle Security needs easy access to all parts of campus, especially when accidents occur. The Physical Plant personnel would be needed if a pipe should burst, or if crucial equipment should fail. By the time Security or the Physical Plant could arrive at the flight area or the dur-

ities, expensive equipment could be ruined, and yes, lives could be lost.

You say it ok for security to jump crabs? How many times do you think a Ford Ranger or a Cutman could do that? No, in order to reach the flight area and the dormitories, ERAU vehicles must use Clyde Morris Boulevard and Catalina Avenue. Our vehicles have no sirens, or emergency flashing lights and they have no right to break speed limits or to interfere with traffic on those roads. Even when our security and physical plant vehicles follow the roads that exist on campus, they too will be slowed by those mega-speed bumps.

It's time for the Administration to stop laughing about having a campus split in two. So much has been said about how cutting down traffic on campus will make the campus so much safer. Maybe that depends on which side of campus you are located.

William Dickinson Box 2131

Out of Order

To the Editor:

As we all know the time for advanced registration is drawing

near. Due to the over-abundance of students that were allowed to enter the Fall 1986 term, many of us felt the crunch by being forced to rewrite our schedules several times, each time having it signed by our great adviser. Well, because of our great desire to become aviators at what was considered the best school of its kind, we put up with the run-around hoping that by the next trimester things would get better. They didn't! In fact, they only got worse! Maybe I am only a Freshman and do not understand the system, but I think it stinks! Advanced registration is supposedly based on the number of credit hours that one has.

When I entered this school in the fall, I had twelve credit hours due to the CLEP Tests. I understood that Freshman registration was based on Alphabetical order by last name so I put up with the hassle. Now that it is time for Spring trimester registration, I believe that because I have more credits than many other freshmen I should be allowed my privilege — especially since at the end of this trimester I will have the end of this trimester

Unfortunately no one in the Office of Registration and Records can assist. They seem to

See LETTER, page 3

Klyde Morris

Wes Oleszewski



Funded by the Students of Embry-Riddle 1986 the Avion Newspaper

- Editor-in-Chief: Mark Stern-Montagna;
- Production Manager: Bill Fisher;
- Business Manager: Richard Calvert;
- Advertising Manager: John Tromby;
- Diversions Editor: Tim Van Milligan;
- Lab Technician: Rich Gray;
- Avion Adviser: Dr. Roger Osterholm;

This week's staff: Pat Ballport, Tim Hoza, Jim Banks, Henry Betts, Ron McCann, Larry Silver and J. Miguel Vidal.

The opinions expressed in this newspaper are those of the majority of the staff of the Avion, and do not necessarily represent those of the university. Letters appearing in the Avion do not necessarily reflect the opinions of this newspaper or its staff. Letters submitted may be edited for brevity and will be printed provided they are not libelous. All letters must be accompanied by the signature of the writer. All names must be accompanied by the signature of the writer.

...and the administrative information on prerequisites and guidelines are helpful to students. Also, individuals would prosper from increased academic coordination and guidance during their first year at Embry-Riddle.

While the administration may believe it has the overall best interests of the students at heart, it does not. A majority of those attending ERAU are adults, and most even act as such; school officials must realize this. Iron-fisted policies such as this may provide short-term relief, but often they are only a temporary solution to a very real problem.

evaluations are very subjective sometimes. For example, believe it or not, teachers sometimes are right saying that the more you work, the more you get out of it, even though students, including myself, might not like it.

Finally, I feel that if those people had a little more time to think about the question, they would

Embry-Riddle Security needs easy access to all parts of campus, especially when accidents occur. The Physical Plant personnel would be needed if a pipe should burst, or if crucial equipment should fall. By the time Security or the Physical Plant could arrive at the flight area or the dor-

William Dickinson
Box 2131

Out of Order

To the Editor:

As we all know the time for advance registration is drawing

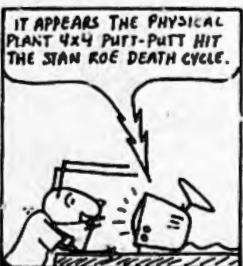
many other freshmen I should be allowed my privilege — especially since at the end of this trimester I will be considered a sophomore with 39 credits.

Unfortunately no one in the Office of Registration and Records can count! They seem to

See LETTER, page 3

Klyde Morris

Wes Oleszewski



Funded by the Students of Embry-Riddle
© 1986 the Avion Newspaper

Editor-in-Chief
Mark Stern-Montagny

News Editor John Getay	Production Manager Bill Fisher
Space Technology Editor Peter Merlin	Business Manager Richard Calvert
Aeronautics Editor: Brian Nicklas	Advertising Manager John Trombly
Photography Editor Rich Clarko	Diversions Editor Tim Van Milligan
Copy Editor Paul Novacek	Lab Technician Rich Grey
Sports Editor Allen Berg	Avion Adviser Dr. Roger Osterholm

This week's staff: Pat Bellport, Tim Haas, Jim Banks, Hendry Belts, Ron McCann, Larry Silver and J. Miguel Vidal.

The opinions expressed in this newspaper are those of the majority of the Editorial Board, and do not necessarily represent those of the university, the staff of the Avion, or the members of the student body.

Letters appearing in the Avion do not necessarily reflect the opinions of this newspaper or its staff. Letters submitted may be edited for brevity and may be printed provided they are not lewd, obscene, or libelous. Letter writers shall confine themselves to a single topic. All letters must be accompanied by the signature of the writer. Names may be withheld on request at the discretion of the Editor.

The Avion Editorial Board members are: Mark Stern-Montagny, Bill Fisher, Allen Berg, Richard Calvert, Brian Nicklas, John Getay, Pete Merlin, and Rich Clarko.

The Avion is an Associated Press member newspaper, and subscribes to the Campus News Digest and College Press Service. The Avion is a member of the Columbia Scholastic Press Association, Collego Media Advisers, and the Associated Collegiate Press.

The Avion is produced by a volunteer, student-journalist staff weekly throughout the academic year and bi-weekly throughout the summer. The Avion is funded through student government fees and advertising revenue.

This newspaper and its contents are protected under the copyright laws of the United States. No portion of this publication can be reproduced by any means without prior written consent of the Avion Newspaper.

Correspondence may be addressed to: The Avion, Embry-Riddle Aeronautical University, Regional Airport, Daytona Beach, Florida 32014. Phone: (904) 252-5561 Ext. 1082.

Student Forum

The Avion asks:
Would you be in favor of an on-campus "coffee shop/pub"?



Art Theodes - "If it was not in the U.C. and did not have an Epicure type of atmosphere, I'm in favor of it."



Lisa Yeager - "Yes, I think it's a great idea, we need a place to go."



Scott Marshall - "I think we should have some sort of pub or coffee shop, the Flight Deck is too crowded."



E.J. McDonald - "Yes, it would give people a place to socialize instead of going into the library."



Carlos Cifuentes - "Yes. It would give the students a place to get together."



Lois Macey - "We don't have a place on campus to go to socialize, I think having a coffee shop is a good idea."

BLOOM COUNTY

by Berke Breathed



LETTER

(continued from page 2)
I think I am only technically a Freshman and that I should

drop out. I know that many of you have jobs and the same needs as I do, and I sympathize with you. If you are enit:;d to advance registration you should get it. Riddie wonders why their retention rate was only half — 66.91 percent of first time students — for first time students from the Fall 1985 Trimester to Fall 1986. Well, I'll tell you the answer, students were tired of being, uh, messed over. They got sick of it and went home.

that they are allowing more students to enroll than there is room for just to make money. The instructors are then forced to have overloaded sections and work for mealy wages.

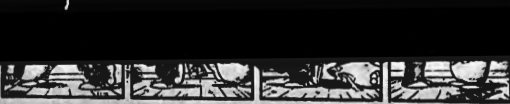
E.J. McDonald - "Yes, it would give people a place to socialize instead of going into the library."

Carlos Cifuentes - "Yes. It would give the students a place to get together."

Lois Macey - "We don't have a place on campus to go to socialize, I think having a coffee shop is a good idea."

AFROTC, Arnold Air Society sponsor food drive to assist Daytona's needy

C/Sgt. Toby Wheelchel AFROTC Writer



AFROTC, Arnold Air Society sponsor food drive to assist Daytona's needy

C/Sgt. Toby Wheelchel AFROTC Writer

The Air Force ROTC and Arnold Air Society are currently sponsoring a Food Drive to benefit the needy residents in Daytona area. With Thanks: a few weeks away a large supply of food is desperately needed. All proceeds will go to the Campus Ministry to be distributed to the Halifax Urban Ministries. All donations need to be non-perishable. Please, avoid any products that will "spoil" or become refrigerated. Traditional favorites such as canned cranberry sauce, corn, green beans and sweet potatoes or powdered mashed potatoes and milk are very much in demand. We, the students of ERAU, are very fortunate to have a wholesome meal provided at Thanksgiving. We can easily spread this good fortune with a simple donation of a few cans of food. Remember, even the smallest of donations quickly grow into an abundant supply of food.

LETTER

(continued from page 2)
I think I am only technically a Freshman and that I should register alphabetically again.

I have the canceled checks to prove that I paid both the \$100 acceptance fee and my tuition in full before my roommate did and he still gets to register before me. Many of you may be asking yourself why I should even care so much. Well, I must work two jobs to put myself through college. These jobs are dependent upon having blocks of time available and if I am forced to spread my classes out, I may very well have to give up my jobs and

that they are allowing more students to enroll than there is room for just to make money. The instructors are then forced to have overloaded sections and work for mealy wages.

I urge the officers of this university to spend a little less money on all the campus decorations and funnel your effort to places where they are needed like more staffing facilities for study groups and more classes with less students so there is no need for advanced registration.

I work in a very exclusive office and have access to some pretty impressive numbers. Riddie had more funds available to them in Fiscal 1986 to date than in any previous year. So, tell me why is there a limited number of sections open each tri and a limited number of slots in each? It's not the limited number of sections, but rather, the officers of this university are so money hungry

Name withheld upon request

New computers for library use

Hendry Betts
Avion Staff Reporter

The Jack R. Hunt Memorial Library is installing a computerized system for library services. Located in a specially constructed computer room near the circulation desk, the system includes two 300 mega-byte drives, a magnetic tape and streamer tape backup, terminals, light pens, and related software — costs approximately \$140,000 which includes the cost of terminal stations and work areas. Kathleen Cirro, Reference Services Manager, said the costs have been absorbed because, "The Edyth Bush Charitable Foundation gave a matching grant to cover the expense." When the system is online, the circulation module will allow the quicker check-out of materials as well as the

Daytona Gym

- ★ Steve Baker and female staff are on duty for personalized supervision
- ★ SPECIAL Men 1/2 price (Reg membership \$200, now only \$100)
- ★ SPECIAL Women 1/2 price on all memberships
- ★ Newly Expanded! over 540,000 in the latest of CAM machines have been added to our club.
- ★ Tanning beds now available

Daytona Gym
Bring this coupon in for 1 FREE workout

Centrally located downtown at:
242 S. Beach Street
Daytona Beach
253-8188

AMERICAN AVIATION SUPPLIES

Division of
NATIONAL CONSUMERS PRODUCTS, INC.
1118 Bellevue Road
Daytona Beach, FL 32014
904-255-2463

IBM COMPATIBLE TURBO XT COMPUTER SALE

4.77-8 Mhz Switchable CPU
256 K Expandable to 640 K Memory
Multi I/O board with Clock, Calendar
Serial Port, Parallel Port, & Game Port
One Teac 360 K DS/DD Floppy Disk Drive

Special For AVIATION WEEK
\$699

10% DISCOUNT ON ALL OUR AVIATION PRODUCTS

Orbital Inclinations



'Intro to Space' offered in Spring

James Banher
Avion Staff Reporter

Next spring the Air Science department will offer "Introduction to Space." (AS 195A 01 MW 1330-1450) I encourage all of you who have even a little interest in space to take this course and be introduced to our nation's space program.

The course description says that this course will be a survey of the major aspects of space flight including the history of the space program, space shuttle operations, and current and future scientific, commercial and military uses of space.

In 50 years or so this university will not be an aeronautical school, it will be only known for its aerospace activities. Perhaps we'll even have a residence center in Earth orbit. When your grandchildren are attending such a place, you will be able to tell them that you remember when the Embury-Riddle administration took that first bold step into the world of higher-space-education.

The enthusiasm for this course should be tempered with remembering the fact that there was once a space mechanics course for engineers. There is still a need for this course, and someone in that department should take the hint from Air Science and get that course restarted.

In fact, the management department could stand to investigate the economics of space travel, or perhaps AMT could learn how to make a malfunctioning satellite worth several million dollars again. Once these elective courses are offered, it would only be a matter of time before each program would have an area of concentration in space, and then, eventually, full four-year degree programs in Space Engineering or Space Management.

This will be the future — and students of the intro to space class, along with instructor Reeder, will be leading the way.

Atlas-Centaur 66 ready for launch

Booster maker has plans for future commercial launch endeavors

By Jim Banks
Avion Staff Reporter

Atlas-Centaur is scheduled for launch this month. The booster will carry a Navy FLTS-7COM payload into orbit. If the weather cooperates the rocket should put on a spectacular display for students watching from the Daytona Beach area.

A recent countdown test was performed in which the Atlas-Centaur was loaded with its liquid propellants, and all procedures short of an actual launch were rehearsed. The test went with out a hitch, clearing the way for next week's launch according to NASA spokesman George Diller.

This launch has been delayed several times since its originally planned launch date of last May which was scrubbed following the failure of a Delta booster minutes after liftoff in early May. The main engines of the Atlas and Delta are similar, causing NASA to postpone the Atlas launch until the Delta failure was completely understood.



An Atlas-E launches from Vandenberg Air Force Base.

Next week's mission will be the first for this type of vehicle since the shuttle accident last January. An Atlas-E booster was successfully launched from Vandenberg Air Force Base, Calif., September 17, and carried a NOAA-G weather satellite.

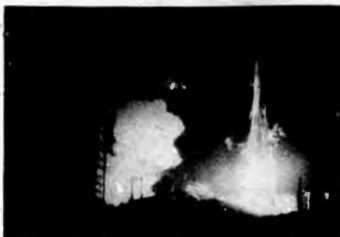
The last launch of this type booster was Atlas-Centaur 65 which successfully placed an INTELSAT communications satellite into orbit in September, 1981.

General Dynamics, makers of the Atlas-Centaur, have plans for future versions of this booster and would like to see a successful launch. Since President Reagan announced that commercial payloads would no longer fly on the Shuttle, private launch companies have been encouraged to take up the slack in the commercial satellite market.

L.R. Scherer reported at April's Space Congress in Cocoa Beach that General Dynamics is planning several new concepts of its basic Atlas-Centaur designs in order to meet a potential need for satellite launchers. The concepts for the new boosters were presented in a report which analyzed expendable launch vehicles as a complement to the Space Shuttle in light of the January tragedy.

Scherer, a General Dynamics Space Systems Division executive, would not commit in April to saying his company would market its own vehicles. He did say that when the Federal government lifts its heavily subsidized pricing policies for the shuttle, General Dynamics would do "what any prudent businessman would do."

General Dynamics plans call for new boosters capable of placing up to 20,000 pounds of payload into geosynchronous orbit.



Atlas-Centaur 65 launches from the Cape, Sept. 26, 1985, with an INTELSAT VA-F12 payload on board. This was the most recent Atlas-Centaur to have been launched.

Source: General Dynamics

Launch Vehicle	Performance (lb)		Status
	LEO	GEO	
A-Atlas E	3,000	N/A	Operational
B-Atlas H	4,400	N/A	Operational
C-Atlas G/Centaur	13,500	5,200	Operational
D-Titan 34D7/Centaur	40,000	20,000	In Development
E-Atlas K	9,500	3,500	Study Completed
F-Atlas/Centaur Super G	14,500	6,000	Study Completed

Labels A through F correspond to the launch vehicles in the table. The diagram shows various rocket configurations labeled A through F.

SATURDAY TALENT NITE

NOV. 15

DIETER TAEHN, JR. STARRING: YOUR FELLOW STUDENTS

8:30 PM IN THE U.C.

SPICURE DINER

ERAU

Coming This Week: TALENT NITE Starring your fellow Students! Sat. Nov. 15

Coming This Week: TALENT NITE Starring your fellow Students! Sat. Nov. 15

ing up to 20,000 pounds of payload into geosynchronous orbit.

E-Atlas K 9,500 3,500 Study Completed
F-Atlas/Centaur Super G 14,500 6,000 Study Completed

SATURDAY TALENT NITE

NOV. 15

DIETER TAEHN, JR. STARRING: YOUR FELLOW STUDENTS

8:30 PM IN THE U.C.

SPICURE DINER

ERAU

Coming This Week: TALENT NITE Starring your fellow Students! Sat. Nov. 15

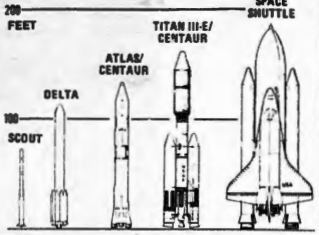
Coming This Week: TALENT NITE Starring your fellow Students! Sat. Nov. 15

ing up to 20,000 pounds of payload into geosynchronous orbit.

E-Atlas K 9,500 3,500 Study Completed
F-Atlas/Centaur Super G 14,500 6,000 Study Completed

A family picture...

NASA's current stable of launch vehicles are shown in this drawing: (From left) SCOUT — Used for very small payloads; DELTA — Used for payloads around 2,500 pounds; ATLAS-CENTAUR — Used for payloads around 5,000 pounds; TITAN 34-D7 — Soon to be Titan 4, a heavy lift vehicle; SPACE SHUTTLE — Manned vehicle for low orbit operations requiring manned presence.



Arianespace offers alternative to expendable launch vehicles

By Jim Banks
Avion Staff Reporter

A major competitor in the launch services industry, Arianespace was organized in 1980 as a privately owned and operated company in Europe. Its purpose is to market satellite launch services world wide, produce Ariane launch vehicles, and direct launch operations of the Ariane booster.

Arianespace came about after the European Space Agency developed the Ariane booster. It was determined that a private company should be formed by interested European manufacturers, banks, and governments. The private company is based in France, has offices in Washington, D.C. and Tokyo, and launches from its own launch complex in Kourou, French Guiana.

A truly world wide interest, Ariane boosters have flown 18 times placing 22 satellites into orbit. There are 5 types of Ariane boosters that have either flown or are in development.

Ariane 1 first flew in



The first Ariane lifts off from its launch complex in French Guiana, Dec. 12, 1979.

December, 1979. Ariane 1 is a three stage vehicle using storable liquid propellants in the first two stages, and cryogenic propellants (liquid oxygen and hydrogen) in

the third stage. The Ariane 1 is about 48 meters high, and could place 4000 pounds into geostationary transfer orbit.

Arianespace's first version of the Ariane has been retired following the launch of two satellites in February of this year.

The Ariane 2 and 3 boosters are identical except that the Ariane 3 adds two strap on solid rocket boosters to the first stage. The main body of the booster is derived from the Ariane 1, with stretched tanks and increased performance abilities. The Ariane 2 can put 4800 pounds into geostationary transfer orbit, and the Ariane 3 can lift 5730 pounds into the same orbit.

All Ariane launches to date have been of the first three varieties. Of 18 flights, there have been 4 failures. Two of these failures involved the third stage which is now undergoing extensive modifications. The next mission for Arianespace is scheduled for February, 1987, which will be an Ariane 3 booster.

See ARIANE, page 14

NASA's workhorse: Delta

McDonnell Douglas booster has impressive history

Delta is called the workhorse of the space program. This vehicle has successfully transported over 160 scientific, weather, communications and applications satellites into space.

These include the TIROS, Nimbus and ITOS weather observers; the Landsat Earth resources technology satellites; the early Trisat international communications satellites; and many explorer scientific spacecraft.

The latest success of the Delta was the September launch of a Si, static Defense Initiative payload. The next Delta launch is scheduled for February of next year.

First launched in May, 1960, with an Echo communications satellite on board, the Delta has been continuously upgraded over the years. Today it stands 116 feet tall. Its first stage is augmented by nine Castor IV strap-on solid propellant motors, six of which ignite at liftoff and three after the first six burn out 58 seconds into the flight.

The average first stage thrust with the main engine and six solid-propellant motors burning is 718,000 pounds. Delta has liquid fueled first and second stages and a solid propellant third stage. For most launches today, this third stage has been replaced by a Payload Assist Module (PAM) stage attached to the spacecraft.

The first stage of the Delta, built by McDonnell Douglas, is 74 feet in length and eight feet in diameter. The main engine, built by Rocketdyne, burns RP-1, a highly refined kerosene, and liquid oxygen. It produces about 205,000 pounds of thrust and burns for about 225 seconds.

The second stage, also built by McDonnell Douglas, is approximately 21 feet long and 5 1/2 inches in diameter. The main structure consists of two propellant tanks, one containing Ammonia 10 fuel, and the other the nitrogen tetroxide oxidizer. These tanks are separated by a single common bulkhead.

Delta's second stage uses a TR-201 main engine built by TRW, which produces 9,800 pounds of



Delta 179 is assembled on Pad 17-A at the Cape. After the main stage is stacked, nine Castor IV solid rocket boosters are added in three sets of three.

thrust and can burn for over 300 seconds. The engine can also be restarted in space which allows more varied mission operation.

The third stage PAM is also used on Space Shuttle launches. It boosts spacecraft from low earth orbit to higher orbits such as geostationary.

KSC Complex 39 continues active with wind tests

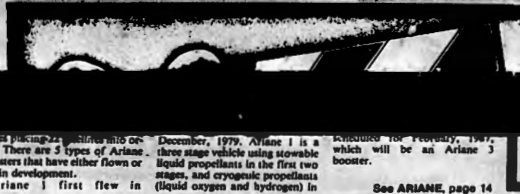
By Jim Banks
Avion Staff Reporter

At Pad B, where orbiter Atlantis sits, work is progressing to install wind instrumentation in the flame trench and mobile launch platform. These sensors will be used to prove the belief that no problem ex-

ists with hydrogen entrapment in the area beneath a Shuttle's main engines.

Engineers at the Cape believe that winds blowing through the flame trench is sufficient enough to disperse any residual hydrogen following an engine shut down. The Vandenberg facility uses flame ducts where the potential for this problem is greater.

Hydrogen entrapment occurs when the engines are shut down immediately after ignition and residual hydrogen gas is trapped in areas beneath the orbiter with a potential to explode. Such a problem is believed to exist at the shuttle



December, 1979, Ariane 1 is a three stage vehicle using storable liquid propellants in the first two stages, and cryogenic propellants (liquid oxygen and hydrogen) in

the third stage. The Ariane 1 is about 48 meters high, and could place 4000 pounds into geostationary transfer orbit.

The Ariane 2 and 3 boosters are identical except that the Ariane 3 adds two strap on solid rocket boosters to the first stage.

The main body of the booster is derived from the Ariane 1, with stretched tanks and increased performance abilities. The Ariane 2 can put 4800 pounds into geostationary transfer orbit, and the Ariane 3 can lift 5730 pounds into the same orbit.

See ARIANE, page 14

ists with hydrogen entrapment in the area beneath a Shuttle's main engines.

Engineers at the Cape believe that winds blowing through the flame trench is sufficient enough to disperse any residual hydrogen following an engine shut down.

The Vandenberg facility uses flame ducts where the potential for this problem is greater.

Hydrogen entrapment occurs when the engines are shut down immediately after ignition and residual hydrogen gas is trapped in areas beneath the orbiter with a potential to explode. Such a problem is believed to exist at the shuttle

SGA Video Rental

The sale you've been waiting for, starting with unbeatable savings and featuring superb selection!

- NO CLUB FEE
- NO DEPOSIT REQUIRED
- VIDEO RENTALS ONLY \$2.00 PER NIGHT OR WEEKEND
- VCR's AVAILABLE
- RENT FRIDAY - RETURN MONDAY

American Gigolo • An Officer And A Gentleman • Bachelor Party • Chinese Connection • Dragonslayer • Dune • Pretty In Pink • Best Defense • Flashdance • Meatballs • Mutant Razorback • Popeye • Rocky IV • 7 • Karate Kid • Red Dawn • The Aviator • Blue Thunder • Close Encounters • Sirpes • Reveny • Back to the Future • Star Trek: Search for Spock • Staying Alive • Joan Rivers and Friends • Teachers • The Pack • The Razor's Edge • White Nights • Trading Places • Super Girl • Uncanny Valley • Halloween • 48 Hours • Friday the 13th, Pt. II • Great Guy • Nightmare on Elm Street II • The Flamingo Kid • 2001 A Space Odyssey • 2010 The Year We Make Contact • The Keep • Exterminator II • Scanners • The Road Warrior • Footloose • National Lampoon's Vacation • The War of the Worlds • All of Me • Give My Regards to Broad Street • Purple Rain • Dreamscape • Return of the Jedi • The Warriors • Policy Academy II • Night of the Living Dead • The Groove Tube • Reefer Madness • The Losers • Amityville Horror • The Never Ending Story • The 13th Reunion • Attack of the Swamp Creature • Guardian of the Abyss • Creature • Gallagher: The Maudses • Pink Floyd: The Wall • Critters • Beverly Hills Cop • Invasion USA • Ladyhawk • Splash • Bolero • Richard Pryor • Mr. Mom • Breathless • For Your Eyes Only • A View To A Kill • The Best Of John Belushi • Miami Vice • The Delta Force • Missing In Action • Star Trek: The Motion Picture • Blazing Saddles • National Lampoon's Vacation • Wilson Quest • Mister Roberts • Risky Business • Groovies • Tuff Turf • Prizzi's Honor • Ganiganf At O.K. Corral • Mac • Giant • Bob Marley And The Wailers • Enter the Dragon • Helcat Female Mud Wrestlers • Protocol • Sun City • Ghostbusters • Missing In Action II • The Beginning • Power • Mad Max Beyond Thunder Dome • Commando • Rambo First Blood Pt. II • The Coca Cola Kid • Porky's II • The Terminator • Hercules • Special Effects • Silkwood • Desperately Seeking Susan • Gremlins • The Year Of Living Dangerously • The Pope Of Greenwich Village • John Lennon - Live In New York • Diner • Deal Of The Century • Caddy Shack • Fire Starter • Tom Petty - Pack Up The Plantation • Death Wish • St. Elmos Fire • Hey Vern - It's My Painly Album • The Seduction • Night Hawks • Jaws • Jaws II • Papillon • After The Fall Of New York • Cheech And Chong's Next Movie • The Blues Brothers • American Graffiti • Lassiter • Midway • Animal Crackers • Slip Shot • The Jerk • The House That Bled To Death • The Silent Scream • The Brain • Dynamic Chicken • Goonies • The Natural • The Toy • Christine • The Falcon And The Snowman • Monty Python And The Holy Grail • The Big Chill • Airplane • Spring Break • Silent Rage • Educating Rita • The Hunger • Midnight Express • The Right Stuff • The Breakfast Club • Attack Of The Killer Tomatoes • Jagged Edge • Code Of Silence • The Dark Crystal • Billy Jack • Don't Open The Door • Alien • Serpico • Black Sunday • The Shootist • The Graduate • The Sure Thing • Slumber Party Massacre • Charlots Of Fire • Volunteers • Superman • Pee-Wee's Big Adventure • American Anthem • Turf Dury

VCR's NOW AVAILABLE FOR RENTAL!

In The SGA Office
8:30-4:30 Mon.-Fri., Phone Ext. 1080

Foreign Students host International Day

Representatives from many nations gather for food, fun, festivities

By Sunil Patel and Fuzul Foad
Foreign Student Writers

The International students of Embry-Riddle Aeronautical University hosted this year's annual International Day '86 on Saturday, November 8, from noon to 6:00 pm at the University Center.

Mr. Robert L. Rockett, Dean of Student Affairs, kicked off the program with a general introduction. Following this, University President Kenneth L. Tallman welcomed the audience to the event saying, "The advent of aviation has drawn the world closer, and it is occasions like this that draw it even closer."

The on-stage entertainment was started with a parade of nations. People from each country represented on International Day took turns on stage introducing themselves and briefly discussing their countries in their own languages with the translation. Following the parade of nations,

the Turkish Folk Dancers from the University of Florida performed their routines. The Malaysian Instrumental by An-i Maris was a solo performance of the flute.

The Polynesian Dancers commanded everyone's attention with their eye-catching movements; in addition, they invited members from the audience

The main attraction for the day of festivities was the colorful booths which were themed *A Walk Around The World*. These booths represented countries from Singapore, Malaysia, Japan, India, Bangladesh, Jordan, Greece, Bahrain, Puerto Rico, Venezuela, West Indies, and Nigeria. Each booth displayed a sample of its cultural

These ranges from Puerto Rican rice and chicken to the "Sassy" platter from Malaysia.

There was an art exhibit displayed by a number of the promising International students. "Batik painting on silk" by Nardin Ahmad (Malaysia), Modern Art by Steve Sial (Uganda), and "Airplane Perspective" by Gregory (Greece).

Overall, this program was proclaimed to be a huge success. Mrs. Charlotte Skinner, former Director of the Foreign Students Service, noted "Fantastic! Fabulous! I can't believe it's grown so much. I liked the wonderful food. It's great that they had dancing in the program this year."

According to International Day coordinators, this event would not have been possible without the collective contribution of the many foreign students and the various school departments, especially the Foreign Students Services Office.

"The advent of aviation has drawn the world closer, and it is occasions like this that draw it even closer."

—Kenneth L. Tallman
ERAU President

to join in with them. Of course, there wasn't a shortage of volunteers.... There were also some impressive impromptu acts and group participations from Nigeria, Venezuela, Greece, and Puerto Rico.

and social atmosphere. There were samples of authentic cuisine from these respective countries which were available at a nominal price.

The 'local cuisine' is self-explanatory for each culture.



ERAU student, Amri Maris (top), performed a flute solo before a large audience. Later, a number of Polynesian dancers mesmerized many individuals in the crowd as well.



EAGLE FLIGHT CENTER

EAGLE FLIGHT CENTER

LOWEST RATES/LARGEST SELECTION

F.A.A. 141 Approved Flight School- ALL RATINGS

Rentals (Wet)	Per Hour	Rentals (Wet)	Per Hour
C150	\$27.00	Archer II (IFR, AIR, HSI)	\$52.00
C152	\$30.00	Mooney (Loaded, IFR)	\$55.00
C152 IFR (3).....	\$33.00	Saratoga SP (New, Loaded)	\$90.00
C152 Aerobat	\$33.00	Seminole (Twin)	\$110.00
C172's IFR (6)	\$44.00	Simulator (AST 300 S/E & M/E)	\$16.00
C172RG	\$55.00	Complete Aerobatic Course	\$399.00
Warriors (NEW).....	\$47.00	Beech Baron (Twin)	\$115.00
Seaplane (Lake Buccaneer) (Dual)	\$114.00	FAA Written Test (Given 7 Days/week) ..	\$15.00

Aircraft for sale
and leaseback



SEAPLANE RATINGS

Comm. SES add on \$499
ATP SES add on \$599
ATP SES & SEL add on \$699
ATP SES & SEL
& CFI Renewal \$799

Rent Eagle's
Aircraft to the
Bahamas &
Canada

AERO-SUPPLY inc.

Ray Ban Sunglasses	\$32.95	Store Hours 9 a.m. to 6 p.m. Mon - Fri 10 a.m. to 5 p.m. Sat.
Pathfinder (computer)	\$75.00	
Avstars (computer)	\$65.95	
Prostars (computer)	\$175.00	
Brief cases	\$34.95	
Flight Cases	\$9.45	
Posters	\$3.95	
Telex Headphones	\$24.95	
David Clark H10-80	\$259.95	
Mini-Mag Lite (flashlight)	\$13.95	
Foam Ear Plugs	\$.29/pair	Leather Flight Jackets Coming Next Week
Aviation Charts	Lowest Price. In Florida	
Books	Lowest Prices in Florida	

"AND 1000'S MORE ITEMS"

AERO-SUPPLY inc.

Super
Silver
Coupon

\$4.95 EAGLE, F15, F16, F14
T-Shirts

"On Daytona Beach Regional Airport"

1624 Bellevue Ave., Suite 103 • Daytona Beach, Florida 32014 • (904) 255-3456

1624 Bellevue Ave.
On Daytona Beach Regional Airport
(Just Off Clyde Morris - 1 Block South Of ERAU)

255-3456

Modified F-16 serves as 'hot' test vehicle

By Brian Nicklas

As time passes, aviation evolves. This has happened since the birth of manned flight over 200 years ago. Recently this evolution has sped up to keep pace with the computer revolution.

As computers have helped in the design process of aircraft and in their manufacture, now computers aid in the flying of everything from fighter aircraft to commercial airliners.

Currently flying is an aircraft which pushes both computer and aviation technologies to "the edge." This aircraft is the AFTI/F-16. Combining a General Dynamics F-16 Fighting Falcon with advanced computer hardware, an "software" under the Advanced Fighter Technology Integration (AFTI) program, the AFTI/F-16 is more than a unique air craft, as it tests many concepts as a flying laboratory.

Among the various advanced subsystems undergoing test on the AFTI/F-16 are digital flight controls, infrared sensor/tracker, a helmet mounted sight, interactive voice controls, a 360 degree radar altimeter and a digital terrain map.

The AFTI/F-16 differs on two previous programs—that of fly-by-wire control systems and of control configured vehicles.

Fly-by-wire controls had come under study in the early 1960's, when miniaturization of electronics became sound enough to warrant the development of such a system. By 1966, the concept had grown to the point where a B-47 Stratojet had a fly-by-wire control system added to its conventional control system. After 100 hours of flight test between 1967 and 1969 the program advanced to a YF-4E Phantom II test aircraft. The major difference between the two aircraft was that the YF-4E had its conventional control system removed. The Phantom was flown 84 times with a totally fly-by-wire system. These tests showed that the aircraft could be flown with less effort in a more precise manner.

Controlled Configured Vehicles (CCVs) also go back to the '60s, but where the changes to a fly-by-wire aircraft are not so apparent, changes to make an aircraft a CCV are. With the addition of canards, surfaces elsewhere, CCV's tend to be noticeable.

Early CCV tests were done on a B-52 Stratofortress, which flew 122 hours with nose-mounted canards. The B-52 studies were concerned less on maneuverability and more on "smoothing the ride," that is, reducing fatigue on both aircrews and airframes.

Lately CCV's tend to be noticeable.

Early CCV tests were done on a B-52 Stratofortress, which flew 122 hours with nose-mounted canards. The B-52 studies were concerned less on maneuverability and more on "smoothing the ride," that is, reducing fatigue on both aircrews and airframes.

Vertical Translation Altitude changes Altitude constant

Vertical Translation Altitude changes Altitude constant

Vertical Translation Altitude changes Altitude constant

Vertical Translation Altitude changes Altitude constant

Vertical Translation Altitude changes Altitude constant

Vertical Translation Altitude changes Altitude constant

Vertical Translation Altitude changes Altitude constant

Vertical Translation Altitude changes Altitude constant

Vertical Translation Altitude changes Altitude constant

Vertical Translation Altitude changes Altitude constant

Vertical Translation Altitude changes Altitude constant

Vertical Translation Altitude changes Altitude constant

Vertical Translation Altitude changes Altitude constant

Vertical Translation Altitude changes Altitude constant

Vertical Translation Altitude changes Altitude constant

Vertical Translation Altitude changes Altitude constant

Vertical Translation Altitude changes Altitude constant

Vertical Translation Altitude changes Altitude constant

Vertical Translation Altitude changes Altitude constant

Vertical Translation Altitude changes Altitude constant

Vertical Translation Altitude changes Altitude constant

Vertical Translation Altitude changes Altitude constant

Vertical Translation Altitude changes Altitude constant

Vertical Translation Altitude changes Altitude constant

Vertical Translation Altitude changes Altitude constant

Vertical Translation Altitude changes Altitude constant

Vertical Translation Altitude changes Altitude constant

Vertical Translation Altitude changes Altitude constant

Vertical Translation Altitude changes Altitude constant

Vertical Translation Altitude changes Altitude constant

Vertical Translation Altitude changes Altitude constant

Vertical Translation Altitude changes Altitude constant

Vertical Translation Altitude changes Altitude constant

Vertical Translation Altitude changes Altitude constant

Vertical Translation Altitude changes Altitude constant

Vertical Translation Altitude changes Altitude constant

Vertical Translation Altitude changes Altitude constant

Vertical Translation Altitude changes Altitude constant

Vertical Translation Altitude changes Altitude constant

Vertical Translation Altitude changes Altitude constant

Vertical Translation Altitude changes Altitude constant

Vertical Translation Altitude changes Altitude constant



The AFTI/F-16 is visibly different from a standard 'Fighting Falcon' as it has canards mounted on the engine air inlet, a saddleback containing additional avionics on the spine, and sensor/tracker pods (laid into the wing leading edge near the wing to fuselage interface. Additionally, the AFTI aircraft has external cameras, antennas, and attach points for a spin

chute. A modified pre-production F-16, the AFTI/F-16 follows up tests undertaken by the CCV (Control Configured Vehicle) YF-16, which was built from the second prototype YF-16. The United States Air Force, Navy, Army and NASA are working together with General Dynamics on the Advanced Fighter Technology Integration program at Wright-Patterson AFB.

Phase II testing combines the DFCS with the Automated Maneuvering and Attack System (AMAS). Begun in August 1984, a little more than one year after the completion of Phase I, these tests include the addition of a Westinghouse Forward Looking Infrared (FLIR) sensor/tracker pod on the right wing, joining the 20 mm cannon to the AMAS, improved cockpit displays including a film projection map and a digital terrain management and display system. Also added for Phase II are voice interactive systems, a helmet-mounted sight and a digital weapons interface.

The AMAS takes direction from the aircraft's Westinghouse APC-66 pulse-Doppler radar and FLIR pod, and depending on the degree of authority the pilot selects, the AMAS can either assist the pilot or fly the aircraft to the point where the pilot is more of a passenger.

Also linked to the AMAS is a 360 degree radar altimeter, which allows safer "high G" maneuvers down to 200 feet. The Head-Up Display (HUD) installed in the AFTI/F-16 is more advanced than the standard HUD in a Fighting Falcon, as the AFTI has a field of view of 15 degrees by 20 degrees as opposed to the normal 9 by 13 degree HUD. This increases the amount of information available to the pilot. This information can take the form of flight control, fire control, weapons, radar, FLIR or a combination of these as needed for the mission.

One of the many capabilities of the AMAS is Standard Avionics Integrated Fusing (SAIF). The SAIF system allows weapons to be

fused right before their release from the aircraft. Currently, most ordnance have their fuses pre-set on the ground before the aircraft departs on its mission. With SAIF, the weapons are fused for the parameters then needed at the time of their release. The aircraft can then be at a lower (or higher) altitude for weapons release than with pre-set ordnance.

The helmet mounted sight also is joined to the AMAS, in conjunction with the FLIR pod or radar. The pilot merely looks at the

Vertical Translation Altitude changes Altitude constant

Vertical Translation Altitude changes Altitude constant

Vertical Translation Altitude changes Altitude constant

Vertical Translation Altitude changes Altitude constant

Vertical Translation Altitude changes Altitude constant

Vertical Translation Altitude changes Altitude constant

Vertical Translation Altitude changes Altitude constant

Vertical Translation Altitude changes Altitude constant

Vertical Translation Altitude changes Altitude constant

Vertical Translation Altitude changes Altitude constant

Vertical Translation Altitude changes Altitude constant

Vertical Translation Altitude changes Altitude constant

Vertical Translation Altitude changes Altitude constant

Vertical Translation Altitude changes Altitude constant

Vertical Translation Altitude changes Altitude constant

Vertical Translation Altitude changes Altitude constant

Vertical Translation Altitude changes Altitude constant

Vertical Translation Altitude changes Altitude constant

Vertical Translation Altitude changes Altitude constant

Vertical Translation Altitude changes Altitude constant

Vertical Translation Altitude changes Altitude constant

include the addition of a Westinghouse Forward Looking Infrared (FLIR) sensor/tracker pod on the right wing, joining the 20 mm cannon to the AMAS, improved cockpit displays including a film projection map and a digital terrain management and display system.

Also added for Phase II are voice interactive systems, a helmet-mounted sight and a digital weapons interface.

The AMAS takes direction from the aircraft's Westinghouse APC-66 pulse-Doppler radar and FLIR pod, and depending on the degree of authority the pilot selects, the AMAS can either assist the pilot or fly the aircraft to the point where the pilot is more of a passenger.

Also linked to the AMAS is a 360 degree radar altimeter, which allows safer "high G" maneuvers down to 200 feet.

The Head-Up Display (HUD) installed in the AFTI/F-16 is more advanced than the standard HUD in a Fighting Falcon, as the AFTI has a field of view of 15 degrees by 20 degrees as opposed to the normal 9 by 13 degree HUD. This increases the amount of information available to the pilot. This information can take the form of flight control, fire control, weapons, radar, FLIR or a combination of these as needed for the mission.

One of the many capabilities of the AMAS is Standard Avionics Integrated Fusing (SAIF). The SAIF system allows weapons to be

parameters then needed at the time of their release. The aircraft can then be at a lower (or higher) altitude for weapons release than with pre-set ordnance.

The helmet mounted sight also is joined to the AMAS, in conjunction with the FLIR pod or radar. The pilot merely looks at the

Vertical Translation Altitude changes Altitude constant

Vertical Translation Altitude changes Altitude constant

Vertical Translation Altitude changes Altitude constant

Vertical Translation Altitude changes Altitude constant

Vertical Translation Altitude changes Altitude constant

Vertical Translation Altitude changes Altitude constant

Vertical Translation Altitude changes Altitude constant

Vertical Translation Altitude changes Altitude constant

Vertical Translation Altitude changes Altitude constant

Vertical Translation Altitude changes Altitude constant

Vertical Translation Altitude changes Altitude constant

Vertical Translation Altitude changes Altitude constant

Vertical Translation Altitude changes Altitude constant

Vertical Translation Altitude changes Altitude constant

Vertical Translation Altitude changes Altitude constant



This view of the AFTI/F-16 from a KC-135 aerial tanker aircraft shows the Forward Looking Infrared (FLIR) pod on the right wing, and a dummy aerodynamic load on the left.

Prescott develops stretch former for 'Pusher' plane

By Prescott Aeronautical Corporation

WICHITA, KS — Prescott Aeronautical Corporation has designed and built a special hydraulically-actuated stretch forming machine to pull and form leading edge skins for the Prescott Pusher kit-built aircraft, including the wings which measure 12 feet each in length.

"The machine is unique," said Board Chairman Linden Bell, "in that we're able to form ex-

since the company is not tied to vendor deliveries.

"Leading-edge dies are designed using Prescott's CAD/CAM (Computer-Aided Design and Computer-Aided Manufacturing) system," noted Bell. "This production method assures that all parts fit, since the CAD/CAM is accurate to eleven decimal places and beyond. Such accuracy and repeatability is possible only through computerization, adding to ease of assembly by builders."

Leading edge skins for Pusher



In 1974, the AF Flight Dynamics Laboratory under whose sponsorship all these studies took place, modified the fly-by-wire YF-4E into a CCV testbed. This aircraft completed about thirty flights in this role before being retired.

The next step in the genesis of the AFTI was the YF-16/CCV.

Using the first prototype YF-16, the aircraft's fly-by-wire system was modified to handle CCV flight. Canards were added to the engine inlet adjacent to the nose wheel, and changes were made to the cockpit to handle the aircraft in its new role. 87 flights and 125 hours later, the YF-16/CCV proved that a CCV aircraft was capable of more maneuverable and economical flight than a conventional aircraft.

With the success of the various test programs, it came time to test them all on one airframe. McDonnell Douglas proposed an F-15 test vehicle, while General Dynamics pushed for the selection of an F-16 as the testbed.

The contract, won by General Dynamics in December 1978, was for a development and demonstration aircraft for AFTI technologies. These technologies include triply redundant digital task-tailored controls, CCV modes of flight and advanced cockpit designs.

Using a pre-production F-16, which was returned to General Dynamics for modification in March 1980, AFTI trials started in July of 1982 as Phase I testing began.

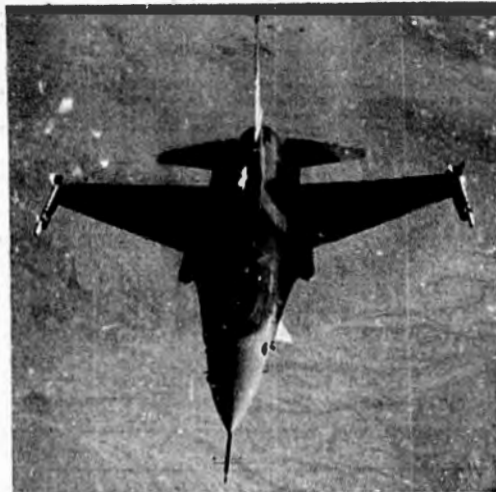
Phase I tests confirmed the Digital Flight Control System (DFCS) in conjunction with the CCV equipment of the aircraft, in which the AFTI/F-16 flies with "decoupled" motion.

Decoupled motion is when motion is separated from the usual motion of a flight maneuver. When a pilot of a conventional F-16 (or any other aircraft) wants to turn right, he rolls the plane into a right bank, pulls back on the yoke or stick to bring the nose around, and then rights the aircraft by rolling out of the bank. With the AFTI/F-16, the pilot applies the appropriate rudder control, and the nose swings right, changing the direction of flight, with no bank (wings level). The only problem with this type of flying is that the pilots of aircraft flying formation on the AFTI/F-16 during these maneuvers have no visual cues as to what the aircraft is doing.



Prescott Aeronautical Corporation photo

Prescott Aeronautical Corporation's newly developed stretch-former is put to work as hydraulic pressure moves the die upward to form a Pusher wing leading edge.



Air Force Flight Test Center photo by Cooper

This view of the AFTI/F-16 from a KC-135 aerial tanker aircraft shows the Forward Looking Infrared (FLIR) pod on the right wing, and a dummy aerodynamic load on the left.

Prescott develops stretch former for 'Pusher' plane

By Prescott Aeronautical Corporation

WICHITA, KS — Prescott Aeronautical Corporation has designed and built a special hydraulically-actuated stretch forming machine to pull and form leading edge skins for the Prescott Pusher kit-built aircraft, including the wings which measure 12 feet each in length.

"The machine is unique," said Board Chairman Linden Blue, "in that we're able to form extremely long parts — including the wing leading edges — as one-piece components instead of having to use shorter lengths which then would have to be joined."

The stretch form machine further expands the company's in-house capabilities, resulting in reduced cost for parts and adherence to delivery schedules

since the company is not tied to vendor deliveries.

"Leading-edge dies are designed using Prescott's CAD/CAM (Computer-Aided Design and Computer-Aided Manufacturing) system," noted Blue. "This production method assures that all parts fit, since the CAD/CAM is accurate to eleven decimal places and beyond. Such accuracy and repeatability is possible only through computerization, adding to ease of assembly by builders."

Leading edge skins for Pusher kits produced on the stretch form are of heat-treated aluminum. These include the rudder, horizontal and vertical stabilizers, and wings. Skins for other components, such as the elevator trim tab, elevator, ailerons and flaps are break-formed from pre-hardened 2034-T3 aluminum.

desired target. The computer makes the choice. The IR seeker or laser in the FLIR pod or the radar in the aircraft's nose then sight onto the target to provide ranging and acquisition information. This information can then be used for air-to-air work or air-to-ground use and help guide weaponry to target as required.

The voice systems are interactive, that is the pilot can receive "voice" responses to vocal queries to the computer. The pilot preloads a cassette with his voice commands so that the computer can recognize these commands.

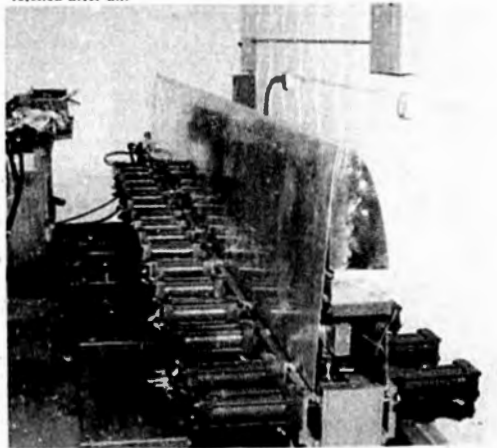
With voice commands, the pilot can select (but not fire) weapons, call up radio frequencies and perform navigation functions (among others). This allows the pilot to keep his eyes outside the aircraft during air combat maneuvering, and his hands on the controls. This speeds the reaction time of the pilot, and a reduced reaction time can mean the difference between victory or defeat in the combat area.

The use of a voice in the cockpit is not new, but the use of an interactive voice is. The F-15s and F-16s currently in use are equipped with voice warning systems for functions such as dangers of overstressing the airframe or engine.

The AFTI/F-16 has made 192 flights so far and the program currently has funding until January 1987. With all the various systems that it has tested, the only conclusion that can be made is that the program is highly successful. The various tests that have been made will undoubtedly appear again, however at that time they will more likely than not be on operational, rather than test, aircraft.

The civil aviation field will eventually see spin-offs from the program, all in the name of saving fuel, increasing passenger comfort and improving reliability and maintainability, while the military applications are sure to be seen soon.

Aircraft such as the National Aerospace Plane, the Air Force's proposed Advanced Technology Fighter and even aircraft already in use or under design will benefit from the advances made with the AFTI/F-16. But under a close look, one thought that comes to mind when studying the program is that the fictional aircraft that appear in such movies as "Firefox" or "Star Wars" may not be so far-fetched after all.



Prescott Aeronautical Corporation photo

The die has fully stretched the heat-treated aluminum, forming one of many pre-formed parts contained in a Prescott Pusher airplane kit.

Account of Spitfire's birth as told by an insider

By Brian Nicklas

Birth of a legend: The Spitfire by Jeffrey Quill, Smithsonian Institution Press, Washington, DC. 150 pages, \$22.50. B&W illustrations.

On the fifth of March, 1936, the prototype of what became the Spitfire fighter took to the air for the first time. As the fiftieth anniversary of Supermarine's aircraft is celebrated this year, a virtual parade of books has come out in commemoration. Jeffrey Quill's book should be placed at the top of the lists, as the insight provided by a Supermarine test pilot is irreplaceable.

Birth of a legend is a most appropriate title, as Quill traces the heritage and conception of the Spitfire, beginning with designer R. J. Mitchell's first work at Supermarine. Also covered are the various Schneider Trophy racers built by Supermarine, whose lines the Spitfire reflects. In fact, chapters are specifically devoted to the racers, and these act as themselves an interesting account of the development of high-speed aircraft in the U.S., Italy and Great Britain. Interwoven with the development of aerodynamics that the racers brought about, is the equally important changes wrought in powerplants. Also discussed are



This Supermarine Spitfire Mk. IX was recently loaned for display to the Experimental Aircraft Association by actor Cliff Robertson. The developmental and early history of the Spitfire is the subject of a new book from the Smithsonian.

the various flying boats that the Supermarine firm first became famous for.

But then what really brought about the Spitfire were the men who closely dealt with the project in various capacities. There are separate chapters to some of them, notably Joseph "Mutt" Summers, Supermarine's chief test pilot (and the first to fly the Spitfire) and Ernest Hives, who led the development of the Rolls-Royce Merlin engine which powered the Spitfire. But many pages are spent covering Supermarine's "father," R. J. Mitchell. Mitchell is recognized all over the world as one of the true greats of aero-design, and that the Spitfire managed to progress after his untimely death in the summer of 1937 is testimony to the qualities of the basic design.

Production of the Spitfire is covered in concise detail, showing how the decisions were made to produce the fighter at various plants in England. This includes the progressive changes that were made to the aircraft, under the guidance of Joseph Smith, who had taken over as Chief Designer after R. J. Mitchell's death. The book closes on a quick look at the aerial conflict over Dunkirk, and the Battle of Britain. Quill concludes with a comparison of the "Spit" with its allies and enemies, and this brings about some wonderful insight from someone who not only flew the Spitfire as a combat pilot, but as a test pilot as well. If you are looking for a book that gives detail on each and every detail on Supermarine's lovely little fighter, look elsewhere. If you are interested in how the Spitfire managed to progress after his untimely death in the summer of 1937 is testimony to the qualities of the basic design. Production of the Spitfire is covered in concise detail, showing how the decisions were made to produce the fighter at various plants in England. This includes

LIBRARY

(continued from page 3)
with a greater inventory control and automatic recording of overdue materials.

To provide a fast check-out to students, faculty, and staff, it will be necessary for everyone to complete a registration form and receive a unique barcode for their I.D. card which will enable them to check out library materials.

MEET

(continued from page 1)

Head Coach Mike Wiggins outlined the demanding schedule of training which was developed by the coaching staff of the Flight Team. He noted, "We learned a lot from the Nationals last year and applied that to developing the program for this year." According to Wiggins, the Flight Team will take time to relax and review their performance and then in January, begin preparing for the National Competition.

MOVIES

(continued from page 1)

The SGA video rental currently has 175 different tapes, covering an ample variety of movies ranging from comedy and horror to science fiction. "The only kind of movies that we do not have are X-rated due to university policies but, we are working on that," Mr. Seckinger commented. According to a source, when

Ms. Citro went on to say "The system is not online yet... but the terminals are a visible sign of things to come."

The system is scheduled to be completely online in the spring of 1987, but "come January or we will be online for circulation."

Once the system is fully implemented and tested, the students can, through terminals,

access the card catalog, materials in the vertical file, NASA and other documents that are not in the current card catalog.

When asked if various systems were researched, Kathleen Citro said, "We went through a detailed process of systems investigation... for what our needs are, we definitely have one of the top three systems."

be held in late April.

Wiggins and Connolly both mentioned several individuals whose hard work and dedication made the Flight Team a success. Team member George MacDox coordinated with the other participating schools and disseminated contest information to them. Bill Mason, Team Advisor, was responsible for staging all of the flying events at Daytona Beach which involved providing a smooth flow of par-

ticipating aircraft through the traffic pattern.

The competition ran so smoothly that there was additional time left over and a CFI landing event was added. Wynn-dham said, "There were too many people to mention who put in long hours on a variety of jobs and projects. The Flight Team really appreciates their hard work."

The competition ran so smoothly that there was additional time left over and a CFI landing event was added. Wynn-dham said, "There were too many people to mention who put in long hours on a variety of jobs and projects. The Flight Team really appreciates their hard work."

generating asset for the SGA." Mr. Seckinger stated. Other projects of this kind, where local companies are invited to invest in ERAU and to share their profits with the SGA, include the jukebox located in the University Center, and a proposal to place vending machines in the off-campus residence centers.

NOTICES

FAA Written Examination Schedules

Embry-Riddle will administer FAA P's and/or Instructor Written Examinations on the following dates:

Nov. 25	Time: 8:30 a.m. - 11:31
Nov. 22	See: 8:30 a.m. - 11:31

Experience Plus

- Did you...
 - Enter ERAU after a break of four years or more from academic studies?
 - Start College last?
 - Are you...
 - Getting together with others in your same situation?
 - Having the opportunity to form a new network of supportive friends?
 - Wanting to meet new people?

Leadership and Involvement award

The Student Government Assoc. is accepting nominees for the Leadership and Involvement Award for Dec. 1986 Graduation Class. The application will be available in the SGA Office on through Wednesday, Nov. 26. If you or someone you know has been heavily involved in fraternities, clubs or organizations on or off campus, as a leader or participant, you may be eligible for this award. The presentation of this award is made at the Friday Night Graduation Soc. Dec. 12, at the SGA President's Office.

Apply now!

Computer Science Majors

Computer Science Majors are urged to attend a meeting Friday, Nov. 21 from 1:30 to 2:35 p.m. in room C-415.

Information on enhancing your employment potential, career opportunities, co-op opportunities that help you pay for part of your education, and student loan society and professional organizations.

During the question and answer period, specific questions will be addressed.

Brothers of the Wind Charity Dance

Brothers of the Wind is having their first annual Feed the Hungry Dance Nov. 14 at 8:30 p.m. The admission to the dance will be a least two canned goods. The proceeds will go to the distributed throughout Volusia County. Brothers of the Wind would appreciate any aid help from other clubs and organizations.

Graduating Seniors

If a prospective employer requests an official transcript for a job interview, we must have a written request from you before that information can be released. Remember the official and unofficial transcripts require financial clearance. Official transcripts are \$2 per copy.

In accordance with the University policy, as stated in the Graduation Requirements section of the Embry-Riddle Aeronautical University Catalog, effective immediately all students will be required to have successfully completed all of the required courses and financial obligations before they will be allowed to participate in graduation ceremonies. This includes all degree required flight courses. A student's last flight course must be completed prior to the date and time that senior grades are due at the Office of Registration and Records in order for that student to participate in that graduation ceremony. Students completing any required courses (flight or academic) that have that time will be eligible to participate in the next graduation ceremony. Those students completing after the specified deadline will follow the schedule below for ceremony participation.

Term of Completion	Term of Ceremony Attendance
Spring	Summer
Summer	Fall
Fall	Spring

NOTICES

FAA Written Examination Schedules

Embry-Riddle will administer FAA P's and/or Instructor Written Examinations on the following dates:

Nov. 25	Time: 8:30 a.m. - 11:31
Nov. 22	See: 8:30 a.m. - 11:31

Experience Plus

- Did you...
 - Enter ERAU after a break of four years or more from academic studies?
 - Start College last?
 - Are you...
 - Getting together with others in your same situation?
 - Having the opportunity to form a new network of supportive friends?
 - Wanting to meet new people?

Leadership and Involvement award

The Student Government Assoc. is accepting nominees for the Leadership and Involvement Award for Dec. 1986 Graduation Class. The application will be available in the SGA Office on through Wednesday, Nov. 26. If you or someone you know has been heavily involved in fraternities, clubs or organizations on or off campus, as a leader or participant, you may be eligible for this award. The presentation of this award is made at the Friday Night Graduation Soc. Dec. 12, at the SGA President's Office.

Apply now!

Computer Science Majors

Computer Science Majors are urged to attend a meeting Friday, Nov. 21 from 1:30 to 2:35 p.m. in room C-415.

Information on enhancing your employment potential, career opportunities, co-op opportunities that help you pay for part of your education, and student loan society and professional organizations.

During the question and answer period, specific questions will be addressed.

Brothers of the Wind Charity Dance

Brothers of the Wind is having their first annual Feed the Hungry Dance Nov. 14 at 8:30 p.m. The admission to the dance will be a least two canned goods. The proceeds will go to the distributed throughout Volusia County. Brothers of the Wind would appreciate any aid help from other clubs and organizations.

of unallocated funds in the purchase four videotape recorders. Students and staff can now rent videotape players for four dollars per day during the week; ten dollars per weekend. "We think that the tape players will be a big money

to invest in ERAU and to share their profits with the SGA, include the jukebox located in the University Center, and a proposal to place vending machines in the off-campus residence centers.

ing from comedy and horror to science fiction. "The only kind of movies that we do not have are X-rated due to university policies but, we are working on that," Mr. Seckinger commented.

According to a source, when

ing from comedy and horror to science fiction. "The only kind of movies that we do not have are X-rated due to university policies but, we are working on that," Mr. Seckinger commented.

According to a source, when

PROFESSIONAL RESUME & WRITING SERVICE

15% Discount with Student I.D. Card

CALL 904-253-0125

NANCY D. HOYT CHIEF WRITER

140 S. Beach St. 404 INTERNATIONAL PLAZA DAYTONA BEACH, FL

ACE HOBBIES

One of the Largest selections of RADIO CONTROLLED

- Plastic Models - Trains
- Boats
- Dune Buggies - Cars
- Air Planes
- Art & Macrame Supplies

Across from Long John Silver's 2127 S. Ridgewood Ave. S. Daytona 321-9780

RIDDLE RIDER ROAD RALLY

Sunday November 16, 9:00 a.m. 150 Miles of scenic riding 5 Checkpoints

Best Hand Wins 1 Playing Card Per Point

ALSO PRIZES FOR:

- SAFFEST RIDER
- CLEANEST BIKE
- AND MORE...

Prizes on Display in U.C. Showcase

AIAA GLIDER CONTEST

Paper Range Balsa Range

Balsa Endurance

1:30 Thursday, November 24 in the University Center

Let's Celebrate

LEADER in HOME VIDEO ENTERTAINMENT

HOME VIDEO CENTER & RENTALS

E.R.A.U. Students Lifetime Membership Just \$15

If you don't have a VCR, get together with your buddies and rent one. VCR and 1 movie only \$10. Extra movies \$3 each.

Club rates: Monday - Thursday 10:00 a.m. - 8:00 p.m.

THE BOHEMIAN DELI & PUB

STUDENT SPECIAL

50¢ DRAFT

WITH VALID I.D. 25% OFF

ON ALL FOOD

- Did you...
 ● Enter ERAU after a break of four years or more from academic studies?
 ● Start College late?
 Are you...

- Getting together with others in your same situation?
 ● receiving tips in such areas as test taking, self management and stress reduction?
 ● Having the opportunity to form a new network of supportive friends?
 If yes, then attend Experience Plus — a new group which will meet Friday from 1:30 to 2:45 p.m. in the Faculty Staff Lounge. The group is open to all continuing students.
 Call Lyane Evans at ext. 1047 for additional information.

Information on enhancing your employment potential, career opportunities, co-op opportunities that help you pay for part of your education, and student honor society and professional organizations.

During the question and answer period, specific questions will be addressed.

Brothers of the Wind Charity Dance

Brothers of the Wind is having their first annual Feed the Hungry Dance Nov. 14 at 8:30 p.m. The admission to the dance will be at least two canned goods. The proceeds will go to the campus ministry and Father Murphy will deliver them to the Urban Ministry to be distributed throughout Volusia County. Brothers of the Wind would appreciate any and all help from other club and organizations.

Term of Completion
 Spring
 Summer
 Fall

Term of Ceremony Attendance
 Summer
 Fall
 Spring

See NOTICES, page 8

PROFESSIONAL RESUME & WRITING SERVICE

"America's Oldest and Largest"



15% Discount
 with Student I.D. Card

Job Resume
 Composition & Editing
 Speech Writing
 Interview Preparation
 Term Papers
 Thesis Preparation

CALL
 904-252-0125
 NANCY D. HOYT
 CHIEF WRITER

140 S. Beach St. 404
 INTERNATIONAL PLAZA
 DAYTONA BEACH, FL

ACE HOBBIES

One of the Largest selections of
RADIO CONTROLLED

- Plastic Models
- Dune Buggies
- Air Planes
- Art & Macrame Supplies
- Trains
- Boats
- Cars



Across from
 Long John Silver's
 2127 S. Ridgewood Ave.
 S. Daytona 761-9780

10% Discount to Students

RIDDLE RIDER ROAD RALLY

Sunday November 16, 9:00 a.m.
 150 Miles of scenic riding
 5 Checkpoints

Best Hand Wins 1 Playing Card Per Point

ALSO PRIZES FOR:

SAFEST RIDER
 CLEANEST BIKE
 AND MORE...



Prizes On Display In U.C. Showcase

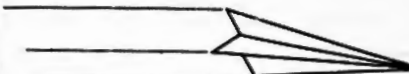
Starting at the Daytona Mall
 Finishing at the ERAU BBQ Pit

Proceeds to benefit
 Rider Education
 Scholarships

\$5 Registration Fee

AIAA

GLIDER CONTEST



Paper Range

Balsa Range

Balsa Endurance

1:30 Thursday, November 24 in the University Center

Let's Celebrate!

LEADER
 IN HOME
 VIDEO
 ENTERTAIN
 MENT

Network
 Video

HOME
 VIDEO
 SALES
 &
 RENTALS

E.R.A.U. Students
Lifetime Membership
Just \$15

If you don't have a VCR, get together with your buddies and rent one. VCR and 1 movie only \$10. Extra movies \$3 each.

Club rates: Monday - Thursday 1st tape \$3. extra movies \$1.99 each. Friday all movies \$3. Saturday 2 FOR 1 special, two movies for \$3.

Special student rate \$59 rents a movie a day. Call for details.

Over 2500 titles in stock. More Weekly!
 Open Mon. - Sat., 9 a.m. to 9 p.m. Closed Sunday.
 1132 Beville Road 257-3393

RIGHT NEXT TO PIC'N SAVE

CLUB MEMBERSHIPS ARE GOOD AT ANY NETWORK VIDEO LOCATION!

GOOD FOOD DELI SANDWICHES
THE BOHEMIAN
 DELI & PUB

**STUDENT
 SPECIAL**

50¢ DRAFT

WITH VALID I.D. **25% OFF** 5-10 p.m.

**ON ALL FOOD
 EVERY DAY**

11 a.m. to 10 p.m.

HOME OF THE
 CZECH BURGER
 AND PILSNER URQUEL

254-2714

1184 North Nova Rd.
 Between 3rd&6th St.

EVERYTHING FOR PICK-UP AND DELIVERY

ARMY ROTC

Army Reserve
Officer Training Corps

By CPT Laura L. Skimma
Army ROTC

Army personnel managers have been given the green light to move forward with a variety of new programs and policies involving Reserve Officer Training Corps. During a recent in-progress review of officer corps issues, Gen. John A. Wickham, Jr. Army chief of staff reaffirmed his earlier decisions regarding the phased implementation of the revised ROTC.

Some of the highlights of that program review include: approval of an incentive program for ROTC that would provide an annual educational allowance of \$1000-1400 to non-scholarship cadets enrolled in Military Science II-IV.

ΔΧ Delta Chi

By Chris Reilly
P. R. Chairman

Well, the term is almost over, and boy what a fun one. A bunch of brothers, pledges, and little sisters traveled to our University of Florida chapter. Everyone that went sure had a great time both days.

This weekend's party is a visit

One of the major challenges for college ROTC detachments will be to increase production at a time when the target population of college students is declining. Last year about 8000 Lieutenants were commissioned from ROTC. According to the Army times, "The Army expects that by 1990 its annual requirement will be 10,800. Most of the additional officers will be assigned to the reserve components."

A heavy welcome is extended to CPT Shoaf and MSG Gore who are new to the detachment this fall. CPT Ralph E. Shoaf (MSHII instructor, Historical Officer) came to ERAU from Co. A Infantry Group, USAITC, Ft. Benning, Georgia. CPT Shoaf's principal duty was Chief Mech

Committee. He obtained a bachelor degree in Police Administration at Eastern Kentucky University. His awards and decorations include the Army Service Ribbon, and Army Commendation Medal with 1st Oak Leaf Cluster.

MSG William F. Gore, Jr. (Assistant Adjutant General, Admin. NCO came from Co. A 2d Battalion SSB at Ft. Gordon, Georgia where he was a Senior Instructor. His awards and decorations include the Combat Infantry Badge, Republic of Vietnam Campaign Ribbon, Drill SGT Badge, Army Commendation Medal with 1st Oak Leaf Cluster, Army Achievement Medal, and Good Conduct (7th award).

yewed, this is your last chance.

We won our first football game of the tournament. Our hockey team is ready for the season and our bowling team holds steady at the number two spot. Also our little sisters have started up a flag football team to play other fraternity's little sisters. I'll keep you posted on that one.

to Alpha Phi sorority at Rollin College. Our pledges are still keeping pace and doing well. They have been working fund raisers at the Ocean Center for several concerts. Remember to get those interviews. On Nov. 24 there will be an individual question and answer period, this is the last one for the term so any brother who hasn't been inter-

on her wedding.

We continue to be active with fund raisers at the Ocean Center. The next concert that we will be working at will be Nov. 14, 15, and 16. Look out for us in the U.C. on the 19th and visit our Organ Donor Booth — you may even decide to donate!

The Theta Phi Alpha sister of the month is Nancy Gutierrez! She has been doing a lot of work

for the sorority and has kept things running smoothly here at home and with Nationals. Nancy enjoys being President of the sorority, even with all the work it means. Thanks, Nancy, for showing initiative and being so organized! She has been very busy with the sorority and is keeping decent grades in school.

Happy Birthday to Kim Harrington! It is on the 18th.

RIDDLE RIDERS

By Rick Fingers
Riders President

The third annual Riddle Rider road rally will be this Sunday, Nov. 16. The event will begin at the Daytona Mall at 9 a.m. with coffee and donuts and free motorcycle inspections. After 150 miles of scenic riding with five checkpoints, the run will lead to the ERAU BBQ pit for a cook-out and prize give-a-ways. Many prizes and services have been donated by local dealers and organizations; some of which are on display in the U.C. showcase today. All of the proceeds gathered from the five dollar registration fee will be donated to the Riddle Education Scholarship to benefit motorcycleists in the local area.

Last week's social was very revealing as Skiman sharpened his shoozooing techniques and Two Stroke got some tail. The nurse was there and she knew what boys liked.

The club went on its first camping trip this semester to Anastasia State Park near St. Augustine. There was plenty to offer at the park such as wind surfing, swimming, boating and even a sea turtle slide presentation, but most of the club decided to stay in the secluded camping area to enjoy some fire outdoor cooking and over six and a half pounds of beans. As the day went on the excitement began, there was Frisbee throwing, wine swirling, aerobic training, and spumilled a very unique wood carving.

ing. He also marked and designated club territory about every ten minutes. The club got a call from Chuck Lee, our Club founder, who sends a Hello to everyone. Chuck may be attending the road Rally on his new Harley Davidson Heritage softail.

The Road Rally is sure to be fun for all, so come out and enjoy a sea ride, great prizes and food and drink afterwards — all for a good cause. There is a meeting this Thursday, Nov. 13, at 7 p.m. in room E-601, everyone is welcome to attend. If there are any questions about the club or upcoming events, drop a note in the Riddle Rider box in the student activities office. Ride aware—show your care.

ΣΧ Sigma Chi

By Steve Avakian
Chapter Editor

The Sigma Chi/Red Cross blood drive held Oct. 30 and 31 yielded a total of 270 pints of blood. Thanks to all who donated blood. Your generous gift was greatly appreciated. A big thanks goes to Brother Bill Gutierrez for the great job he did in organizing this event, he spent

a good deal of his time to make sure it was a success, and it was.

The Sigma Chi/Brothers have passed their first review period and are on the road to becoming Brothers. There is still much more work to do and things to learn, but the Brothers have placed their confidence in these men to strive for their goal and are sure they will accomplish it with a

little persistence. The chapter is in the process of renovating the pool and are looking forward to completing it soon. A new pump, water lines, and resurfacing of the interior are just a few of the changes being made. The final touch will be the repainting of the Sigma Chi Badge on the bottom of the pool, which is what makes it totally unique.

ΘΦΑ Theta Phi Alpha

By Francesca Lewis
Chapter Editor

The Theta Phi Alpha sisters were happy to meet Julie Herr, a Theta Phi national officer who came to our last meeting and answered some of our questions. Our advisor, Linda Prince, was also our last meeting. She received a wedding present and congratulations from the sisters

on her wedding. We continue to be active with fund raisers at the Ocean Center. The next concert that we will be working at will be Nov. 14, 15, and 16. Look out for us in the U.C. on the 19th and visit our Organ Donor Booth — you may even decide to donate!

The Theta Phi Alpha sister of the month is Nancy Gutierrez! She has been doing a lot of work

for the sorority and has kept things running smoothly here at home and with Nationals. Nancy enjoys being President of the sorority, even with all the work it means. Thanks, Nancy, for showing initiative and being so organized! She has been very busy with the sorority and is keeping decent grades in school.

Happy Birthday to Kim Harrington! It is on the 18th.

Skydivers

By Tom Albert
Vice President

It's been a real exciting trimester for the Skydive club. Many a "case of refreshments" have been earned by students very actively pursuing the exciting sport of parachuting. Erik Aubin, who started skydiving this trimester is off stu-

dent status and will be allowed to participate in relative work with others after 3 solo jumps. Congratulations Erik!

There are many other students, such as Misao Mizuno, Jose Azastrue, Denver Mc'hane, John Gocinaki, Adam Weichin, Jack Ware and others who are well on their way to removing themselves from student status

and we are very glad they are working so hard.

The club officers are now working on getting the Riddle Skydiving club back into the Collegiate meet, which is held once a year. While next year's date is not official, the meet will be held in the nearby Skydive Detand drop

See DIVE, page 10

LA PALOMA

Happy Birthday to Kim Harrington! It is on the 18th.

Riddle's

Erik Aubin, who started skydiving this trimester is off student status and will be allowed to participate in relative work with others after 3 solo jumps. Congratulations Erik!

LA PALOMA FITNESS CENTER Inc.

FREE TRIAL WORKOUT

- Free weight area
- Complete all chrome training system
- Aerobic classes
- Electric exercise cycle
- Locker room and showers
- Juice and protein bar
- Specific conditioning for beginners and advanced
- Individual physical profile charts
- 4,000 sq ft workout area
- Outdoor deck on the roof

-HOURS-
Monday - Friday
9am to 9pm
Saturday
9am to 6pm

761-9090

Have Road → N
Highway


Located in rear of La Lomas at 228 S. Highway South Daytona

Membership can be frozen for vacation

Student discount rates

Daytona's newest facility

Co-Ed



Razzle's



Happy Hour Specials

Mon. **Music Night**
For Couples/Men & Women
Cash Prizes/Drinks Specials

Tue. **Ladies Night: Ladies Drink Free**
Guys: 1.00 Honey & Schnapps
W/d.

Free Champagne for Ladies All Night
Razzle's Introducing: the **AWAYING GAME**
Come in to participate or to watch!

Thu. **Up Stalk Contest**
150 Cash Prize
Compete for the Grand Prize
of an Alpha car and outfit
given away by Sponsors!

Fri. **TDFF Party 5-9**
Happy Hour Special Drinks and Free Buffet

Sat. **Party Night at Razzle's**

Sun. **V.I.P. Night**
Show your aard
Drink Free 9-11

611 Seabreeze Blvd

NAVAL

Naval Aviation Club

By Kelly Childs
Club Writer

With the Naval club's continuous flow of naval pilots coming to speak, we tend to forget another very important aspect of naval aviation, the naval flight officer. Either by choice or due to medical reasons a vast majority of naval aviators are channeled through the MFO pipeline. NFOs operate the tactical and communication systems aboard Navy aircraft. NFOs can train to become radar intercept officers, bombardier/navigation, tactical coordinators or airborne elec-

tronic warfare specialists. Similar to naval pilots, NFOs start basic training with AOCs. Their training consists of academic courses like visual and instrument navigation, computer systems, radar, and meteorology. They train in simulators and learn to navigate and operate different types of aircraft systems. They also receive about seven to ten hours of flight time where they use the basic navigation and tactical deployment skills.

From basic training they proceed to intermediate training in jets or props. There are no NFOs aboard helicopters. After they

they proceed to advance training. If they are selected for jets they are trained in airborne tactical data systems, radar intercept, tactical navigation, or overwater jet navigation. Those going on to props train to become intercept undergraduate navigators.

After successful completion of advanced training NFOs receive their wings. They then go through 26 weeks of fleet readiness training and go on their first operational tour. As most of us at ERAU survive to become pilots we must not overlook the NFOs. Without them we would have no Navy.

VETERANS

Veteran's Club

By Lisa Doyte
Club writer

Just when you thought all the politics and elections were over, there is one more to go! The exception is that these candidates won't be badmouthing each other to defame them (I hope). Yes club elections for 1987 officers will be held next week, Friday, Nov. 21, in the CPR. Any interested candidates should contact Bob A'Hearn at 761-6063 to ensure you qualify for office. You must attend the meeting to run, and you must attend to VOTE. All active members are eligible, and

there will be no absentee ballots.

However, there will be one more meeting before elections this Friday, Nov. 14, at a time and place to be announced. The decision has been made to hold the Christmas party at Treasure Island Inn. Due to the financial slump we have encountered this trimester (Regatta postponement), tickets will be sold for the party at \$10.00 apiece, but it is a member or guest. This is worth the ten-spot, especially since we must remember that the new board needs funds to begin next year.

before the revenue from the races. The Regatta committee met last Wednesday with city officials to finalize arrangements for holding the race in April. We are still looking for some co-sponsors, so if anybody has any ideas, please bring them to the attention of Bob or Debbie (above phone number). Some of us may not be able to enjoy it this term, but with all of the pitfalls, at least we will still have the traditional Ridge Regatta!

Please attend the meeting Friday!

Management Club

By Michael C. Lum
President

The Management Club is pleased to announce that Dr. Leonard Klingens, Vice President of Planning and Facilities at Eastern Airlines will speak to the club this Friday, Nov. 14, at 7:00 p.m. in room A-109. A reception will follow in the CPR where members will have the opportunity to speak to Mr. Klingens personally.

The topic of Mr. Klingens' discussion will be the projects he

coordinated at Eastern and the company's position in the industry since the takeover by Texas Air. Mr. Klingens will also speculate on the future of Eastern, given the takeover.

Many analysts believe Texas Air will operate Eastern as a separate subsidiary; as opposed to the consolidation of Continental and People's Express, also owned by Texas Air. Evidence of the Texas Air merger can already be seen. People's Express has dropped service from Newark to Miami and Ft. Myers, routes from which

it faced stiff competition from Eastern. Without the competition from People's Express, Texas Air will attain higher load factors, increasing its profitability on the routes.

The timetable project for the airport is coming along slower than expected. The delay is due to airline schedule changes that took place at the end of October. Flights in the timetable will be effective Dec. 15. If you would like to attend the meeting on Nov. 14, drop a note to Kris Koenig at box 6942.

AXA

Lambda Chi Alpha

By Geoff Waxman
Chapter Editor

AHP pledge interviews went by without a hitch; all the potential brothers performed well under pressure. Let's hope they can perform a little better during third and final interviews. Third interviews will be on Thursday the 13th of November.

AHP had its house opening on October 30th, and it was a great success. The mayor of Daytona and President Tallman cut the ribbon to our new house. Doc Horowitz has been a tremendous ally to us, and without him none of this would ever have taken place. We raise a glass of Chivas to him, and toast him for all the help. Maelz' too it's finished. Also present were Mr. Van Biber, Dr. Batty, Dr. Connolly, Dean Rockett, and Dean Kelly. The champagne was flowing, spirits were high, and everyone was as proud as can be. This house stands as a tribute to our great fraternity, and will help

propel us into an even greater future.

Halloween was a blast this year, as we held an all out party at the RHO house. The brothers who worked getting it all together did an excellent job, even if they didn't give out the large trophy. The driveway was full of original costumes, lanterns, and frolickers. Some of the more memorable outfits were: the plane checks, Spinks, the Flasher, the AVGOR, the Devil, the Wickel Witch, the Bloody Tourist, the Cave People, and the Gangster.

AHP Football won their first round in the football playoffs against the Dawgs 18-0. Regards to our Buddy Ernie, Delta Chi managed to ruin our flawless season with an 8-0 victory over us. The night as well enjoy one victory over us because there will be no repeat performances. Brother Dave wants it noted to Brother Dave that 'I am better than you'.

The NIFA party last weekend was a blast. Thanks to the AHP brothers from other chapters for their effort, and for making it a success. Getting together with brothers from around the nation is always an inspiration to do more for our fraternity as a whole, and helps strengthen our bond.

Notes of Interest: ERAU Flight Team did a super job at regionals and will clean up at Carbondale. Will Bon-Bon and EdM get back together-stay tuned. Tom Starkey did a great job organizing the races. Mudd pictures get washed out. Beta Alpha Pledge Class initiates new sidewalk project. Joe Pastina comes through with great shirts and stuff for the bro's. Shred is Reg Troll. Kissin' me Air Show happened. Deja-Vu has nothing going on in his brain. Five Brothers were initiated in a great way. Beta Alpha Pledge Class Board has a lot of dead weight on four pledges. Santa Claus is on the right track, and Deer Season is now officially open.

DIVE

(continued from page 9)
This will make it very easy for us to attend though we have a lot of hard work and preparation ahead of us to be eligible to attend this National event.
Other projects "on the fire" are a drop zone day, an "ACE" (All Collegiate Eightway) to consist of all Riddle students. A date

will be posted, come down and watch!
Soon the club will be acquiring altimeters, helmets, jumpsuits and when funds permit, a used rig to ease demand on the single rig the club has now. As mentioned above, money is a problem. For those of you who have not paid your dues...Please pay!

The doghouse sales have been going rather well. Though we still need help to keep the profits up. T-shirt designs are in the process of being finalized and we will be able to order them soon.
On a final note, Mr. Douglas (DC-3) is now back in Deland so let's get out there and Rock-N-Roll to altitude.

DINO'S PIZZA • FRESH DOUGH DAILY • DINO'S PIZZA • FAST DELIVERY • GREATEST!

Special Price


GREAT SUBS - FRESH DOUGH

Other Projects on the fire are a drop zone day, an "ACE" (All Collegiate Eightway) to consist of all Riddle students. A date will be posted, come down and watch!
Soon the club will be acquiring altimeters, helmets, jumpsuits and when funds permit, a used rig to ease demand on the single rig the club has now. As mentioned above, money is a problem. For those of you who have not paid your dues...Please pay!
The doghouse sales have been going rather well. Though we still need help to keep the profits up. T-shirt designs are in the process of being finalized and we will be able to order them soon.
On a final note, Mr. Douglas (DC-3) is now back in Deland so let's get out there and Rock-N-Roll to altitude.

DINO'S PIZZA • FRESH DOUGH DAILY • DINO'S PIZZA • FAST DELIVERY • GREATEST!

Special Price for E-RAU Students

Great Clips for great profiles.



FREE

shampoo service with \$7 haircut

Nobody else has your tools. And after you've had your hair done at Great Clips, nobody will look as fantastic as you either. Always a quality wet style out and blow-dry. And you never need an appointment (except for perms). So come on in.

Great Clips \$7

Nobody does you like we do:

Volusia Point

(Next to Mr. Gatti's)

255-7701

DINO'S PIZZA • FRESH DOUGH DAILY • DINO'S PIZZA • FAST DELIVERY • GREATEST!

GREAT SUBS - FRESH DOUGH

DINO'S DELIVERS



Dino's Pizza

Buy One Get One FREE

Any Large Two Item Pizza For \$10.95

Excluding Extra Cheese

Buy One Get One FREE

Any Small Two Item Pizza For \$7.45

1510 S. Ridgewood

255-0904

Coupon Good On Dine-In, Pickup or Delivery

Prices Do Not Include Tax or .80 Delivery Fee

DINO'S • GREATEST SUBS • FAST DELIVERY • DINO'S PIZZA • FAST DELIVERY •

DINO'S PIZZA • FRESH DOUGH DAILY • DINO'S PIZZA • FAST DELIVERY • GREATEST!

"Lost Presence of Mind"

A good lesson in safety and in common sense

Anonymous

Below is a letter I would like to share with all of you.

Dear Sir:

I am writing in response to your request for additional information in Block #3 of the accident reporting form. I put quote - LOST PRESENCE OF MIND - unquote as the cause of my accident. You said in your letter that I should explain more fully, and I trust that the following details will be sufficient.

I am a bricklayer by trade. On the day of the accident, I was working alone on the roof of a six story building. When I completed my work, I discovered that I had about 500 lbs. of bricks left over. Rather than carry the bricks down by hand, I decided to lower them in a barrel by using a pulley which fortunately was attached to the side of the building at the sixth floor.

Securing the rope at ground level, I went up to the roof, swung the barrel out, and loaded the brick into it. Then I went back to the ground and untied the rope, holding it tightly to insure a slow descent of the 500 lbs of bricks. You will note in block #11 of the accident reporting form that I weigh 135 lbs.

Due to my surprise at being jerked off the ground so suddenly, I Lost My Presence of Mind and forgot to let go of the rope. Needless to say, I proceeded at

a rather rapid rate up the side of the building.

In the vicinity of the third floor, I met the barrel coming down. This explains the fractured skull and broken collarbone.

Slowed only slightly, I continued my rapid ascent, not stopping until the fingers of my right hand were two-knuckles deep into the pulley.

Fortunately, by this time I had regained my Presence of Mind and was able to hold tightly to the rope in spite of my pain.

This encounter at the same time, however, the barrel of bricks hit the ground - and the bottom fell out of the barrel devoid of the weight of the bricks; The barrel now weighed approximately 50 lbs.

I refer you again to my weight in block #11. As you might imagine, I began a rapid descent down the side of the building.

In the vicinity of the third floor, I met the barrel coming up. This accounts for the two fractured ankles and the lacerations of my legs and lower body.

This encounter with the slowed me enough to lessen my injuries when I fell into the file of bricks, and fortunately, only three vertebrae were cracked.

I am sorry to report, however, that as I lay there on the bricks - in pain, unable to stand, and watching the empty barrel six stories above me - I again Lost Presence of Mind - I LET GO OF THE ROPE.

LET'S REMAIN SAFETY CONSCIOUS

"An Afternoon With Mozart" wins big

By Timothy Van Milligan

They say that Yogurt has more culture than Daytona Beach. "They" should have been at Daytona Beach Community College Sunday afternoon and heard the Daytona Beach Civic Orchestra. For a capacity audience at DBCC's Theater Center, "An afternoon of Mozart" was the title of the program presented by the Division of Cultural Arts and the Music Department of DBCC under combined forces of the Daytona Beach Civic Orchestra,

the Daytona Beach Choral Society, the Bethune-Cookman College Vocal Ensemble, and the Daytona Beach Community College Concert Choir.

The music presented was Mozart's Symphony, 18 in D, the "Prague," K.504 (1786) and Mass in C, the "Coronation," K. 317 (1779). The concert was a fact that the concert was held in the cramped Theater Center couldn't keep this music from reaching deep within the audience; there were no spectators.

The Civic Orchestra will not be performing again this trimester, but will be on Sunday, March 16, and again on Sunday, May 17. Both Concerts will begin at 3:00 p.m.

Performing soloists were: Mr. J. Louis Anolis (Soprano), Jane Christensen (Mezzo-soprano), John Keiper (Tenor), and William Hill (Bass). The Daytona Beach Civic Orchestra was under the direction of Norton Christerson, Conductor.

Cultural Programs offered by DBCC this trimester

THEATER

The Florida Theatre Company

November 12, 13, 14, 15, 16
Goddard Center and Theater Center

SETC screen audition, state theatre competition, twelve professional, community and educational productions. Workshops, lectures, and much more. Hosts: Dr. Kenneth Walker, Mel Hoerle.

Menotti's Amahl and the Night Visitors

December 12, 13, 14
Theater Center

The touching opera of the Christmas season. Conducted by Norton Christerson, staged by Pamela Wood, choreographed by Jessica Wood

The Madrigal Dinner

November 29, 30, December 5, 6
Goddard Center for the Arts

An evening of feasting and entertainment in the Medieval manner. During the dinner, madrigals will be sung, tumbling and juggl-

ing displayed in addition to authentic Renaissance dance. Strolling minstrels will be heard singing early ballads of the period, all dressed in ornate costumes of the 16th century.

MUSIC

DBCC Christmas Band Concert

Monday, Dec. 15 at 8:00 p.m.
Theater Center

Holiday program featuring combined ensembles under the direction of Douglas Peterson.

WHERE AM I?



WHERE AM I?



This picture was taken on the Daytona Beach Campus. It is of something or someone in plain view of the discerning eye. If you think you know what or where it is, you can win a free Subscription to the Avion. Entries must be placed in the contest box in the Avion office, and received by Friday at 5 p.m. In case of multiple correct answers, a winner will be drawn by the Avion photo editor.

Our congratulations go out to this week's winner, Jerry Chanin, who correctly identified the location of the Oct. 29 Where Am I photo, which was the chain link fence in front of the Engineering Building.



MATHEMATICS CORNER

By Dr. Shrinivas S. Dalal
Mathematics Department

Welcome to the second installment of the mathematics corner. This week we have three problems for you to solve and one mathematical curiosity to think about. Good luck on the problems, and if you want to see your name in print, get your answers in on time to the address written below. You'll also see the answers to the first mathematics corner and the names of the students who correctly answered them. Answers to this weeks problems should appear next week in the Avion.

Second Time Around

Write any three digit number. Now write a second time the same three digit number next to the original number to make a six digit number. Divide this six digit number by 13, then by 11 and lastly by 7. Bingo! You get your original number back. Investigate the mystery behind.

MATHEMATICS CORNER

By Dr. Shrinivas S. Dalal
Mathematics Department

Welcome to the second installment of the mathematics corner. This week we have three problems for you to solve and one mathematical curiosity to think about. Good luck on the problems, and if you want to see your name in print, get your answers in on time to the address written below. You'll also see the answers to the first mathematics corner and the names of the students who correctly answered them. Answers to this weeks problems should appear next week in the Avion.

Second Time Around

Write any three digit number. Now write a second time the same three digit number next to the original number to make a six digit number. Divide this six digit number by 13, then by 11 and lastly by 7. Bingo! You get your original number back. Investigate the mystery behind.

Submitted by:
Conway Tomlinson

On The Top Of The World



There is a large number of similar planes at airport A (see diagram). Each plane can travel a distance equal to half the circumference of the globe on a full tank of fuel. Any one of the planes can refuel any other of the planes instantly but must have enough fuel left over in order to make it back to airport A. The question is: What is the minimum number of planes needed so that one of the planes can circle the globe without stopping and all planes wind up safely at airport A?

Submitted by:
Prof. George Garhab

Solutions From Oct 29, 1986

Riddle of Riddle

One can easily develop the general formula. The number of ways = $2(2^n - 2)$. In this example $n = 4$ = the number of distinct letter in ERAU. Therefore, the number of ways when $n = 4$ is $2(2^4 - 2) = 28$

Correct Answers by: Heather Brown and Charles Shea

Green Green Grass

Area of the triangle = $\frac{1}{2}bh = \frac{1}{2}(100)(50/3)$
Area of the sector = $\frac{1}{2}r^2\theta = \frac{1}{2}(100)^2(\theta/3)$

DYNASTY

Empress Imelda V bought shoes at \$400 a pair, hats at \$500 each, dresses at \$4,000 each, and minks at \$5,000 each. She bought ten thousand items for Ten Million Dollars Cool. The number of dresses is twice the number of minks, and the empress buys minks always in multiples of hundred. How many of each kind did she buy?

Surf's Up

Submitted by Richard Swift
Based on an equation supplied by Mr. Glenn Grainer

Every true surfing enthusiast knows from experience that the following equation holds true:

$$(C_1 A_w / A_0)^2 = (C_2 V^2 A_0 / W - N) = 1$$

Where C_1 = Coefficient of static friction between feet and board
 C_2 = Coefficient based on plane angle and aspect ratio

DYNASTY

Empress Imelda V bought shoes at \$400 a pair, hats at \$500 each, dresses at \$4,000 each, and minks at \$5,000 each. She bought ten thousand items for Ten Million Dollars Cool. The number of dresses is twice the number of minks, and the empress buys minks always in multiples of hundred. How many of each kind did she buy?

Surf's Up

Submitted by Richard Swift
Based on an equation supplied by Mr. Glenn Grainer

Every true surfing enthusiast knows from experience that the following equation holds true:

$$(C_1 A_w / A_0)^2 = (C_2 V^2 A_0 / W - N) = 1$$

Where C_1 = Coefficient of static friction between feet and board
 C_2 = Coefficient based on plane angle and aspect ratio
 A_w = Wetted area at speed (ft²)
 A_0 = Original wetted area at standstill (ft²)
 V = Speed of board relative to water surface (ft/s)
 W = Weight of surfer (lb.)
 N = Ratio of board buoyancy to weight of surfer
 e = Euler's constant

Given that:

- $C_1 = 0.152$
- $C_2 = 0.062$
- $A_w = 3.0$ ft²
- $A_0 = 5.2$ ft²
- $V = 12$ mph
- $W = 165$ lb.

Find the buoyancy of the board.

Solutions

Send your Solutions on or before November 19, 1986 to: Mathematics Corner, Dr. Shrinivas S. Dalal, Mathematics Department, ERAU

Note: If you have some interesting or exciting ideas about mathematics, please send them to the above address. Your participation is highly appreciated.

I'm a Material Girl

Let X = number of earrings
Y = number of rings
Z = number of chains

$$X + Y + Z = 20$$

$$X/2 + 2Y + 3Z = 20$$

Solve these two equations by matrix method. You get

$$X = 14, Y = 5, \text{ and } Z = 1$$

Correct Answers by: Heather Brown, Becky Robertson, Charles Shea, Conway Tomlinson



This picture was taken on the Daytona Beach Campus. It is of something or someplace in plain view of the discerning eye. If you think you know what or where it is, you can win a free Subscription to the *Avion*. Entries must be placed in the contest box in the *Avion* office, and be received by Friday at 5 p.m. In case of multiple correct answers, a winner will be drawn by the *Avion* photo editor.

Our congratulations go out to this week's winner, Jerry Chanin, who correctly identified the location of the Oct. 29 Where am I photo, which was the chain link fence in front of the Engineering Building.



"In the Cockpit"
The *Avion*, Feb. 7, 1989

By Cam McQuaid
Cartoonist

Submitted by:
Conway Tomlinson

On The Top Of The World



There is a large number of similar planes at airport A (see diagram). Each plane can travel a distance equal to half the circumference of the globe on a full tank of fuel. Any one of the planes can refuel any other of the planes instantly but must have enough fuel left over in order to make it back to airport A. The question is: What is the minimum number of planes needed so that one of the planes can circle the globe without stopping and all planes wind up safely at airport A?

Submitted by:
Prof. George Gerbah

Solutions From Oct 28, 1986

Riddle of Riddle

One can easily develop the general formula.

$$\text{The number of ways} = 2(2^n - 2)$$

In this example $n = 4 =$ the number of distinct letter in ERAU. Therefore, the number of ways when $n = 4$ is

$$2(2^4 - 2) = 28$$

Correct Answers by: Heather Brown and Charles Shea

Green Green Grass

$$\text{Area of the triangle} = \frac{1}{2}bh = \frac{1}{2}(100)(50\sqrt{3})$$

$$\text{Area of the sector} = \frac{1}{2}r^2\theta = \frac{1}{2}(50)^2(\pi/3)$$

$$\therefore \frac{\text{Area of the Sector}}{\text{Area of the Triangle}} = \frac{\pi}{6\sqrt{3}} = 0.30 = 30\%$$

Correct Answers by: Jim Leventis, Charles Shea, and Conway Tomlinson.

Note: Jim's two solutions, one using algebra and the other using calculus, are excellent.

and aspect ratio

$$A_w = \text{Wetted area at speed (ft}^2\text{)}$$

$$A_o = \text{Original wetted area at stndstill (ft}^2\text{)}$$

$$V = \text{Speed of board relative to water surface (ft/s)}$$

$$W = \text{Weight of surfer (lb.)}$$

$$N = \text{Ratio of board buoyancy to weight of surfer}$$

$$e = \text{Euler's constant}$$

Given that:

$$C_d = 0.152$$

$$C_w = 0.062$$

$$A_w = 3.8 \text{ ft}^2$$

$$A_o = 5.2 \text{ ft}^2$$

$$W = 12 \text{ mph}$$

$$W = 165 \text{ lb.}$$

Find the buoyancy of the board.

Solutions

Send your Solutions on or before November 19, 1986

to: Mathematics Corner
Dr. Shrinivas S. Dalal
Mathematics Department
ERAU

Note: If you have some interesting or exciting ideas about mathematics, please send them to the above address. Your participation is highly appreciated.

I'm a Material Girl

Let $X =$ number of earrings

$Y =$ number of rings

$Z =$ number of chains

$$\therefore X + Y + Z = 20$$

$$X/2 + 2Y + 3Z = 20$$

Solve these two equations by matrix method. You get

$$X = 14, Y = 5, \text{ and } Z = 1$$

Correct Answers by: Heather Brown, Becky Robertson, Charles Shea, Conway Tomlinson

AERO-PLANE IDENTIFICATION

Our congratulation to last weeks winner, Gary Gladd who correctly identified the mystery aircraft as a Bell XP-83. Gary was the first person to correctly identify the aircraft, but thanks to all you others who also submitted your answers.

FOUND a delicious nest and chiseled bird's nest in my yard. I have a nest of 3 eggs. I have a nest of 3 eggs. I have a nest of 3 eggs.

WANT TO LEARN TO FLY? - Professional flight instructor available immediately. No waiting at a reasonable rate. Call 781-8887 and ask for Tod.

WANTED - Video tape of the Blue Angels in the music of Van Halen's Dream. VHS, call Mark at 253-9532 or 254-843 or 788-7185 after 6pm.

FOR SALE - Twin bed, dressing and trunk. Very good condition, barely been used. Asking \$75 a.o.c. Call Sue 254-2710 or box 3022.

FlightSafety International has Sealed openings for experienced FAA certified instructors. Applicants must have at least 2 yrs experience as pilot, 1000 solo flight hrs, and 500 hrs. instruction given.

FLIGHT INSTRUCTION - Private pilot, commercial pilot and multi-engine flight instruction. Detailed flight reviews and high performance checkouts. Large selection of aircraft available. Contact Greg Parisi at 767-4639.

EPICOT AND DISNEY WORLD - 1/2 price, no tickets, Saturdays and Sundays only. Groups of 3 or 4. Contact Dick Jones 9022.

Accommodations

BEACHSIDE NEAR BELLEAIR - In 1/2 bdrm home. \$300 month. 1 1/2 baths w/ furnished. Large yard, children's pool p.o.s. call 1173 or 253-6977.

TWO FEMALE ROOMMATES NEEDED - To share 2 bedrooms, 2 bath complete w/ pool, tennis courts, on Tudor 205. 6-ack and security guard. Only \$150 1/2 utilities. Deposit required. Rent at Available December 15. Contact Sue at 242-1676 or box 2321.

ROOMMATE WANTED - Male or female to share spacious 2 bedroom house with fireplace and jamaica. Located beach side, one block from Super-X (Ormond) Mall. Rent \$140 per month plus 1/2 utilities. Call 677-0111 or home phone in box 1071.

MALE OR FEMALE ROOMMATE NEEDED IMMEDIATELY - For a very roomy, clean house 1 block from the beach, water/river and air conditioning. Nice neighborhood. 5 miles from school. \$215/month plus 1/2 utilities. Call 253-9483.

ROOMMATE WANTED - Own room furnished with water and desk. 1 1/2 miles to school? 12 min drive to 10 mile hwy. \$414/1 room plus 1/2 utilities. 253-7863 or box 4142.

ROOM AVAILABLE - clean, quiet, bedroom room with bath. \$180 include utilities, kitchen and also sheets, pillow, blanket. \$100 security deposit. Pleasant place, very private, no smokers please. Call 253-9591.

ROOMMATE WANTED - 2 bedrooms, 1 1/2 furnished apartments. Located 4 miles from ERAU in good beachside location. Perfect for students will consider responsible male. Non-smoking please! \$200 month plus 1/2 utilities. No deposit no lease contract. See box 9022 or leave message at 254-2710.

FEMALE ROOMMATE WANTED - To share 2 bedrooms, 2 bath, and only 4 miles from school. \$139 per month plus 1/2 utilities. \$125 deposit required. Available December 15. Contact Sue at 242-1676 or box 2321.

MALE COMPANION - to share 1 norm apartment. Must be a clean person. Contact Jeff Anthony at box 1000.

WANTED - Summer work knowledge of HIP-ECI financial software, will pay top for his/her. Contact Mark at 788-5556 or box 2698.

WANTED - Video tape of the Blue Angels in the music of Van Halen, VHS, call Mark at 253-9532 or 254-843 or 788-7185 after 6pm.

WANTED - MA 112 rotor, 53 hour. Call 257-5410 ask for Bob or box 7203.

WANTED - We need a ride to the David Lee Roth concert Nov. 13 in Lakeland. We're willing to share expenses. Contact Dawn at 11 218, 214 or 118. From Dave or Jerry Bob.

F. CHILLD. I'd like to get to know you better. Give me a hint how I can do this, please. Some say to impress you. Write back! ME

THANKS for being a great friend and making up with me asking for stuff all the time. THANK, KIM

DEAR CHOPIS, Sorry you don't like playing games, but the shorts. BA BA

230 Z LADY, I must you more than "regular", as a matter of fact I love you. I'm looking forward to the next time we embrace under the sheets. SIGNED, CRAZY ABOUT YOU!

G-GRAFFE, How's the weather up there? Must be hell hot! I'm longer than most people's body. Long live Bama. ALPHA ETA BETA AHB

BILL B, Please clean the kitchen once a while and get rid of the ugly dishes. Don't talk about your business because it will work out.

BIF and Jay, Oh to see you're back to work! Things are well, no different here. Don't worry though, you both taught me well! Expect grad. April or August, dep. on powers still be. Keep in touch; Pat's not the only one that's interested. Solo Buzzard

ME, Did you hear that Steve White got fired from Disney World? Ask me later... The Rat

Franky, Thanksgiving and Christmas are coming so slow, I can't wait to go back to the REAL Florida summer! The KM

SUE, The show are left behind, maybe I can catch up. I'll pay for a "coupe" sometime. NIGEL

AHP PLEDGES, We'll find out if you know your location. You cannot hide. Realization is a Jewels: it will cause you GREAT humiliation and embarrassment. Swears are spoken with a new meaning: it is the 220 club know you know! Take breathers & take care of the "over" sides of different mothers will have to "uncover" your knowledge with the bear.

ROTS OF RUCK YOU! HORSE MEAT/DOG FOOD CANE! Lot of Love, THE NEW KIDS ON THE BLOCK

DEAR MELISSA, Do you remember High Winds 1 & 2? JUNE 6, 1990 T.V. Remember it a little. Be warned, I'm coming from behind. "STUSSY" T-shirt. Alpha Eta Beta

RETRACTION: Miss R.S. is no longer wanted due to inappropriate behavior by two whose girlfriends' in-trusts happen to be "K.S." AHB RM 239

RON, May a thousand very warm wishes pop out of your cake. Have a happy birthday and ENJOY! Luv, KIM

NOTICES

Revised Fall Seminar Schedule

- Dr. Dahl "Vedic Mathematics" November 14
Walter L. Smith of the University of N. Carolina "Branching Process—a model of the spread of rumors and disease." November 21
Dr. Pope "Organizational Behavior at ERAU" Postponed until Spring

Thanksgiving Break Hours

Joah R. Hunt Memorial Library
Wednesday, Nov. 26, 7:30 a.m. to 3 p.m.
Thursday and Friday, Nov. 27 and 28, CLOSED
Saturday and Sunday, Nov. 29 and 30, Regular Hours
PC Lab
The IBM PC Lab will be closed Thanksgiving day but will be open regular hours Friday, Saturday, and Sunday.

NOTICES

Revised Fall Seminar Schedule

- Dr. Dahl "Vedic Mathematics" November 14
Walter L. Smith of the University of N. Carolina "Branching Process—a model of the spread of rumors and disease." November 21
Dr. Pope "Organizational Behavior at ERAU" Postponed until Spring

Thanksgiving Break Hours

Joah R. Hunt Memorial Library
Wednesday, Nov. 26, 7:30 a.m. to 3 p.m.
Thursday and Friday, Nov. 27 and 28, CLOSED
Saturday and Sunday, Nov. 29 and 30, Regular Hours
PC Lab
The IBM PC Lab will be closed Thanksgiving day but will be open regular hours Friday, Saturday, and Sunday.

AMT Advisement

Advisement for the Spring 1987 Trimester will be from 10:30 a.m. to 3 p.m., Nov. 5-13 in the AMT Conference Room in P building on a first come, first served basis -- no appointments. Please have your registration forms completely filled out before submitting for signatures. Advisement is mandatory for all AMT students as well as students in other degree programs taking AMT courses. All students listed as AMT of those taking AMT courses must have an AMT adviser's signature on their registration forms or advanced registration will be denied. There will be no advisement or signatures after Nov. 13. If the program Chairman's assistance is required, all students must first see an advisor in the AMT conference room.

Students Anticipating April 1987 Graduation

April graduation applications are now being accepted in the Registration and Records Office for those students anticipating April degree completion. Each student will be given a preliminary graduation evaluation in order to help prepare for a smooth degree completion. Any adjustment to one's registration can be done during the open or regular add/drop period.

Personals

NE2, Herbie is unhappy, where's the cookie? Mr. Sluj

AMT Advisement

Advisement for the Spring 1987 Trimester will be from 10:30 a.m. to 3 p.m., Nov. 5-13 in the AMT Conference Room in P building on a first come, first served basis -- no appointments. Please have your registration forms completely filled out before submitting for signatures. Advisement is mandatory for all AMT students as well as students in other degree programs taking AMT courses. All students listed as AMT of those taking AMT courses must have an AMT adviser's signature on their registration forms or advanced registration will be denied. There will be no advisement or signatures after Nov. 13. If the program Chairman's assistance is required, all students must first see an advisor in the AMT conference room.

Students Anticipating April 1987 Graduation

April graduation applications are now being accepted in the Registration and Records Office for those students anticipating April degree completion. Each student will be given a preliminary graduation evaluation in order to help prepare for a smooth degree completion. Any adjustment to one's registration can be done during the open or regular add/drop period.

Career Center Events: Interviews

SBA Corporation - An air ambulance service based in Ft. Lauderdale, will be interviewing AMT Graduates on Nov. 17 in the Career Center. The position involves working on Lear 35 series jet aircraft, MU-2's, C-41's and helicopters. Co-op positions also available. Pan Am will be interviewing Airfares personnel Nov. 14. SIGN UP NOW!

Co-op Remainder

Don't miss an opportunity to gain valuable experience that could help you get a job when you graduate. The Career Center has outstanding co-op positions available for the Spring trimester with the following companies: FAA, Cessna, United Aircraft, GE, NASA, Parlat Aviation, Daytona Beach Regional Airport, Detroit Metro Airport.

Career Center Events: Interviews

SBA Corporation - An air ambulance service based in Ft. Lauderdale, will be interviewing AMT Graduates on Nov. 17 in the Career Center. The position involves working on Lear 35 series jet aircraft, MU-2's, C-41's and helicopters. Co-op positions also available. Pan Am will be interviewing Airfares personnel Nov. 14. SIGN UP NOW!

Co-op Remainder

Don't miss an opportunity to gain valuable experience that could help you get a job when you graduate. The Career Center has outstanding co-op positions available for the Spring trimester with the following companies: FAA, Cessna, United Aircraft, GE, NASA, Parlat Aviation, Daytona Beach Regional Airport, Detroit Metro Airport.

AIM HIGH PUT YOUR COLLEGE DEGREE TO WORK. Air Force Officer Training School is an excellent start to a challenging career as an Air Force Officer. We offer a great starting pay, medical care, 30 days of vacation with pay each year and management opportunities. Contact an Air Force recruiter. Find out what Officer Training School can mean for you. Call Tsgt Russ Hamer collect at (305) 826-0342. AIR FORCE

Clubs; Advertise in the AVION. Research Papers 14278 to choose from - all subjects. Call 800-351-0222. "Collegians" Make a date at THE OYSTER PUB Monday Nights 7-3 Choice Of Draft Beer 75¢

INTERESTED IN Compact Discs or Audio? Marketing? A Resume Builder? DIGITAL SOUND MARKET SERVICES. Needs ambitious college students to be campus representatives. Call 1-800-223-8434 or 1-214-828-2756 9 a.m. to 9 a.m.

BARNUM & BAGELS THE EAGLES NEST RESTAURANT AND VIDEO PUB. GIANT PIZZA MONDAY NIGHT EVENT 75¢ DRAFT (65° W/ER AU 1 D). Yorktowne \$2.00 DOWN PAYMENT

RESEARCH PAPERS 14278 to choose from - all subjects. Call 800-351-0222. "Collegians" Make a date at THE OYSTER PUB Monday Nights 7-3 Choice Of Draft Beer 75¢

Interested in Compact Discs or Audio? Marketing? A Resume Builder? Digital Sound Market Services. Needs ambitious college students to be campus representatives. Call 1-800-223-8434 or 1-214-828-2756 9 a.m. to 9 a.m.

PC Lab
The IBM PC Lab will be closed Thanksgiving day but will be open regular hours Friday, Saturday and Sunday.

All graduation applications are now being accepted for the November graduation. Records Office for those students anticipating April degree completion. Each student will be given a preliminary graduation evaluation in order to help prepare for a smooth degree completion. Any adjustment to one's registration can be done during the open or regular add/drop period.

AAU
Crumman
United Airline
UE

NASA
Palmer Aviation
Daytona Beach Regional Airport
Detroit Metro Airport

Apply for these positions now!

ARM NCM

PUT YOUR COLLEGE DEGREE TO WORK.

Air Force Officer Training School is an excellent start to a challenging career as an Air Force Officer. We offer great starting pay, medical care, 30 days of vacation with pay each year and management opportunities. Contact on Air Force recruiter. Find out what Officer Training School can mean for you. Call

TSgt Russ Hamer
collect at (305) 826-0342.

AIR FORCE

Clubs; Advertise in the AVION

INTERESTED IN

- Compact Discs or Audio?
- Marketing?
- A Resume Builder?

DIGITAL SOUND MARKET SERVICES

Needs ambitious college students to be campus representatives
Call 1-800-223-6434 or 1-219-626-2756

9 a.m. to 9 a.m.

BARNUM & BAGELS

THE EAGLES NEST

RESTAURANT AND VIDEO PUB

GIANT
1 Pound order of Homemade French Fries \$5.95

- * PIZZA
- * MONDAY NIGHT ENJOY 75¢ DRAFT (60' W/ERAU I.D.)
- * THE LATEST MOVIE RELEASES NIGHTLY * CHICKEN WINGS
- * GIANT SUBS & PITA SANDWICHES
- * SPORT SPECIALS * BUD & LITE ON DRAFT

BRING IN THIS AD FOR 1st DRAFT FREE (with any food order)

DART TOURNAMENT NOW BEING FORMED 252-0101

NOW OPEN SUNDAY

1584 S. Nova Rd., Daytona Beach
Beville & Nova Rd., Next to Winn Dixie
Video Equipment & Movies provided by NETWORK VIDEO

RESEARCH PAPERS

16,276 to choose from -- all subjects
Order Catalog Today with VISA/MC or C.O.D.
800-351-0222
*Call 013-477-6228
Or, north \$2.00 to: Research Associates
11322 Main Ave. #209-SN, Los Angeles, CA 90025
Custom research also available -- all levels

ONE PRICE \$51,900

- * 2 Bedrooms
- * 2 Baths
- * Pool
- * Furnished Model

\$2,600 DOWN PAYMENT

Yorktowne Villas

258-0200

PAYMENT LESS THAN \$400 MO.
OPEN 11 AM
CLOSING COSTS PAID

175 Yorktowne Dr.
off Beville 7/10 mile west of Clyde Morris

"Collegians"

Make a date at THE OYSTER PUB

Monday Nights 7-3

Choice Of Draft Beer

75¢
Valid I.D. Required

See all football action on two giant TV screens

Seabreeze & A1A - Daytona Beach

Avion Football Pool

Dash .700%	The Greek .725%
★ Chicago	at Atlanta
✓ Detroit	at Philly *
✓ Houston	at Pittsburg
★ Miami	at Buffalo
★ NY Giants	at Minnesota
★ New Orleans	at St. Louis
Seattle	at Cincinnati *
★ Tampa Bay	at Green Bay ✓
★ New England	at LA Rams
✓ Kansas City	at Denver *
Indianapolis	at NY Jets *
★ Dallas	at San Diego
★ Cleveland	at LA Raiders ✓

TIEBREAKER: Predict the score of any one game above. List teams with score.

NAME:
ERAU BOX:

To enter this weeks Avion football pool, cut out this entry form and circle who you think will win the matchups above.

Deadline for entries will be Friday, Nov. 14, at 3 p.m. Entries can be dropped in the campus mail slot or brought to the Avion Sports Box.

A winner will be selected by the next issue. Winners are selected on the basis of the number of correct answers made on the entry form. Should a tie occur, the winner will be selected by the most accurate prediction of any game listed.

For instance, a person who guessed a score of 24-20, would have a total of 44 points. If the game score was 23-24 (a total of 51 points) a difference of 7 points exists. The closest score will be considered the prediction which comes the closest to both teams points.

The winner will receive "The Student's Guide to Campus Life at ERAU" by Bill Myers. One entry per person. Remember to select a winner for every game.

This weeks winner is Tom Balho with 10 out of 13 correct

ner will be selected by the most accurate prediction of any game

This weeks winner is Tom Balho with 10 out of 13 correct

Lacrosse Club to do battle in Gainesville

By Eric White
President

The Lacrosse club will be attending the second annual Memorial Tournament, in Gainesville. This year the tournament will consist of six teams: Florida State, University of Florida, University of South Florida, Auburn, Georgia Tech, and Embury-Riddle University. The games will be played in Jamboree fashion; these are games that have only two halves and only 12 minutes per half. A regular game has four, fifteen minute quarters. Our team attended this tournament last year, finishing with a 2-2 record after two days of battle. This tournament, in which John Kirk won the MVP award, (I don't know why he won't play this year) was probably the best road trip we had last year; just ask Cam he'll tell you.

This years team, which started practicing late Sept., has come a long way. With an addition of a new goalie Brian McCarthy and returning outstanding goalie, Scott Schindler (when he stays in the net), the team will have no problem keeping the ball out of our goal. Our strongest point, the defense, has four returning starters and two outstanding new additions Rob and Mike D. Most



The ERAU Lacrosse club is getting ready for a big season. The season opens in Jan.

of our new players are occupying the midfield spot. These new people have come a long way with a lot of extra work on their own time. The team really misses Jim 'Boog' Powell, who along with returning highest goal scorer John Carone, controlled so many games last year. This year a lot of that pressure will depend

on our almost brand new attack consisting of, Rick, Andy, Regie, John and Eric.

The tournament trip is fully paid for by the club, much of it from our famous doughnut sales. We will be getting four rooms at the University Inn at Gainesville, but you should bring a pillow and

blanket in case you don't get the luxury of a bed. Those who still owe the club \$10 in dues will have to pay up before going.

Our official season will be starting Jan. 13 with a trip to Florida State, and end with the championship, twelve games later, in the beginning of April.

ARIANE

(continued from page 5)

Ariane 4 development began in 1982, and its first launch is now scheduled for June, 1987. The Ariane 4 booster incorporates another stretch of its first stage to carry more propellants, strengthened second and third stages similar to the Ariane 2 and 3, and an array of possible solid or liquid booster combinations to be added to the first stage. The booster can incorporate 2

to 4 liquid or solid strap on motors giving the booster the ability to place between 4190 and 9260 pounds into geostationary transfer orbit.

This choice of Ariane 4 configurations provides customers with exceptional flexibility, making it possible to adjust launcher payloads, and to maintain a high load factor with consequent

reduction of launch costs, according to an Arianespace release.

An Ariane 3 booster is under development which is powerful enough to put the European Space Agency's manned space shuttle Hermes into orbit. Other missions for the Ariane 3 will include placing various unmanned platforms and satellites into Earth orbit. The Ariane 3's first launch is due in the 1990's.

Deadlines
for all submissions to the Avion are Tuesday at 5:00 pm (a week and one day before publication). Deadlines for On-disk submissions is extended to the Wednesday prior to publication at 5:00 pm.

ner will be selected by the most accurate prediction of any game

This weeks winner is Tom Balho with 10 out of 13 correct

to 4 liquid or solid strap on motors giving the booster the ability to place between 4190 and 9260 pounds into geostationary transfer orbit.

This choice of Ariane 4 configurations provides customers with exceptional flexibility, making it possible to adjust launcher payloads, and to maintain a high load factor with consequent

reduction of launch costs, according to an Arianespace release.

to the Wednesday prior to publication at 5:00 pm.

South

As always, there is NEVER an admission fee for Riddle students!*

TUESDAY NIGHT IS COLLEGE AND FRATERNITY NIGHT AT 701 SOUTH MAX HEADROOM T-SHIRTS AND 16oz. ERAU BEER MUGS WILL BE GIVEN AWAY COME PARTY 701

Cleared for the approach!

MONDAY - ATTENTION DAYTONA'S HOTTEST DANCERS. 701 SOUTH IS LOOKING FOR YOU! MONDAY NIGHT IS HAWAIIAN TROPIC DANCE CONTEST NIGHT WITH FREE DRINKS FROM 9PM TO 12AM

TUESDAY - COLLEGE, FRAT AND NEW AGE MUSIC NIGHT! FREE ERAU 16oz. BEER MUG AT THE DOOR TO ALL STUDENTS WITH VALID ERAU ID! BRING MUG WITH YOU ANY NIGHT AND FILL IT WITH HEINEKEN DRAFT FOR A BUCK!

WEDNESDAY - 701 SOUTH PRESENTS MULTIPLE SCLEROSIS ROCK-A-LIKE NIGHT! LIP SYNC YOUR WAY TO STARDOM AND CASH PRIZES WHILE HELPING FIGHT MULTIPLE SCLEROSIS. LADIES DRINK FREE FROM 9PM TO 1:30PM.

FRIDAY - DRINK TWO FOR ONE DRINKS AND THROW PIES AT YOUR FAVORITE BAR EMPLOYEE! BUY A PIE FOR 5 BUCKS PROCEEDS TO HELP BATTLE MULTIPLE SCLEROSIS.

SATURDAY - TWO FOR ONE DRINKS!

SUNDAY - SUNDAY BLOODY SUNDAY: NEW WAVE PROGRESSIVE MUSIC 2 FOR 1 DRINKS AND HEINEKENS FOR A BUCK!

EVERY SUNDAY COMES SUNDAY BLOODY SUNDAY COME HEAR NEW WAVE PROGRESSIVE MUSIC COME DRINK HEINEKENS FOR A BUCK ALWAYS 2 FOR 1 DRINKS AT 701 SOUTH COME PARTY 701

701 South Atlantic Avenue, Daytona Beach

255-8431

*Except for...