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Embry-Riddle Aeronautical University

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Shuttle Landing at KSC Saturday

This Week's Features

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- Johnny Winter rocks Tampa Exhibition performance with a legend page 4
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AVION

An Award-Winning Collegiate Newspaper

Volume 48, Issue 6

Embry-Riddle Aeronautical University, Daytona Beach, Florida

October 10, 1984

Doten accepts provost slot, resigns A.F.

By Max Corneau

Eric Doten, formerly the Embry-Riddle Professor of Aerospace Studies assumed the duties of the Provost of the Daytona Beach campus Oct. 1.

Doten, who recently retired his Air Force commission after 23 years, is not new to E-RAU or the field of aviation education. He explained, "after I left Embry-Riddle in 1981, I finished at the War College and assumed an Air Staff position at the Pentagon. One of my biggest jobs at the Pentagon was overseeing Air Force training funds, as you see, I never got out of the educational arena."

Having recently realigned his career goals, Doten planned his Air Force retirement prior to hearing about the Daytona Provost position. "Along with my family, I evaluated my goals and we decided it was a good time to change careers. Not too long after my decision, I got a call from a friend who knew of my ties with the University. He said the

Provost job was open so I eagerly pursued the information."

As far as leadership is concerned, the Provost sees himself as a people oriented person who is not apt to make snap decisions. He commented, "I don't see

myself as the 'Great Santial' type of Colonel." In dealing with the overall campus structure, Doten is aware of the different management techniques required to accomplish the campus mission. "While the Physical Plant may be

very well-run on a line structure similar to that of the military, we couldn't have this in Academic Affairs. We would have a continuous riotous state. As Provost, I need to see and understand where all the people on the campus are coming from, not just the people who report to me."

Since he left the University in 1981, much has happened to Embry-Riddle. Doten explained his perceptions. "The physical appearance has drastically changed, the campus looks great. As far as people are concerned, I've seen many old faces who were just trying on their wings when I was here before. Now I see them as having grown in to their jobs. To the greatest extent, Student Affairs has come of age, they're dealing with the younger student population."

In fact, the Provost feels that the student body of E-RAU is overall younger than the one he left in 1981. "There are a lot more people here just out of high school. They're not here just to get

credentials; they want the best aviation education available. Because of the younger student body, the role of student affairs has increased. We must help the new students integrate into the Daytona Beach area, that's not too easy for someone 18 years old, 1000 miles from home."

Doten's immediate goals, "are personal orientation and education relative to the University. I need to get back in the saddle once again, and then be accepted by the University."

Since returning to E-RAU, Doten's impressions have been positive. Concerning the campus, he commented, "There's always a layer of stability in any organization...Deans Fogel, Rockett, and Chuck Fountain, Director of the Physical Plant have all pulled together to see the campus through a difficult period when several positions were vacant and they were unable to fully



Eric Doten

Avion photo by Matt Peters

See DOTEN, page 4

Record-setting crew launched

Historic spacewalk Thursday

By Jeff Guzzetti

Blessed by a smooth and punctual countdown, the Space Shuttle Challenger was successfully thrust into orbit last Friday at 7:03 a.m. Landing of Challenger is scheduled back at Kennedy Space Center Runway 33 this Saturday, Oct. 13, at 12:25 p.m.

The launch cast an intense orange ball of light against the

pre-dawn, cloud-covered horizon, causing a resemblance to the brilliance of the STS-8 night launch last year. Due to the northeasterly trajectory of the launch, area residence were afforded an excellent view of the Solid Rocket Booster separation that occurred 100 miles off the coast of Daytona Beach.

Challenger's record-setting seven person crew (five men and

two women) immediately went to work after a 219-mile orbital insertion. The payload doors were opened and the activation, checkout and deployment of the Earth Radiation Budget Satellite (ERBS) was achieved.

The ERBS is a 500 pound, 15-foot wide satellite that was released by the shuttle's mechanical arm under the control of Sally Ride. The satellite was then boosted into a permanent orbital altitude of 39 miles by on-board propulsion systems.

ERBS is expected to be operational for three to four years. Its mission is to provide observations of the Earth's radiation budget which will contribute to the comprehensive, long-term data base describing the energy balance which exists between the Sun, the earth, and space. This data will be very valuable in analyzing and forecasting such concepts like the Greenhouse Effect.

The following day, Saturday, Mission Specialist David Lee Smith began the first in a series of four hydrazine fuel transfers. This experiment involves transferring 80 pounds of very volatile hydrazine from one tank to another in order to simulate the refueling of a satellite's propulsion system.

See CHALLENGER, page 9

Entrance unsafe

By Alan E. Williams
Chief Justice, SGA

Many students have noted lately that there has been a large number of accidents at the entrance to Embry-Riddle on Clyde Morris Blvd. A contributing factor to almost all of these accidents has been the lack of a left turn signal in the northbound lane at the entrance.

Because of the concern that more students could become involved in accidents, the administration and the Student

Government Association have persuaded the State of Florida to install a left turn signal. But according to the state, the light cannot be installed until May 1985.

The Student Government believes that this date is too far away. Between now and May is the busiest time at Embry-Riddle. In the past week alone, two accidents in which at least one person was injured occurred.

In order to urge the state to build the traffic signal before

See CLYDE MORRIS, page 4

Ribbon-cutting soon

By Craig A. Pelleser
Avion Staff Reporter

Improvements to Clyde Morris Blvd. have recently included the construction of a bicycle lane. The bike path will extend from Beville Rd. to the south entrance of Mainland High School. The improvement will allow cyclists a five foot safety margin from the flow of traffic.

The bike lane project was the result of continuing efforts during the past 4 years by an E-RAU Committee, formed and coordinated by Tony Pinto and Randy Alexander.

Design features for the extension include the use of a new surface paving process to eliminate seams and ruts. Other features include an extra-wide path at E-RAU and at the Beville Road intersection.

This is to facilitate future plans for left hand protected turning phases in the upcoming fiscal year.

According to the Florida Department of Transportation, the Clyde Morris bike path will cost \$258,645.58, 75 percent of which will be funded by the federal government and 25 percent by the state of Florida.

The contractor for the project is Martin Paving Inc. of Daytona Beach and according to the chief estimator of Martin, Bill McKelvey, "The project should be completed by the October 13 deadline."

Plans are underway for an official opening ceremony during the weekend of October 27, according to Randy Alexander, an E-RAU alumnus.



Challenger successfully lifted-off into the early morning darkness. The count-down sign signals the end of another orbiter processing period.

Campus to observe U.N. Month

By Ellison Elliott
Avion Staff Reporter

"Our hope is for a time when all the people of the world can enjoy the blessings of personal liberty. But, I would like also to emphasize that our concern for protecting human rights is part of our concern for protecting the peace," stated President Reagan as he addressed the United Nations General Assembly late last month.

This is one of the prime concerns and objectives of Ms. Charlotte Skinner; not only on the international level, but on the local scene as well. Ms. Skinner is

the Director of Foreign Student Services (FSS) here at E-RAU.

"There should be need", stated Ms. Skinner, "to reach over not only to the international students on campus, but to the American students also." In accordance with her concern for a greater amount of student interaction considering the large percentage of cultural diversity found here at Embry-Riddle, Ms. Skinner, with the assistance of Dr. Carl Lippold, an E-RAU management Professor and former campus Provost, will be sponsoring an "International Day" in the University Center. The commemoration will include

exhibits not only from around the world, but from regional U.S. areas as well.

The event, pointed out Ms. Skinner, is in celebration of United Nations Month which is being observed October 1-26 nationwide. However, because of difficulties in the scheduling of the U.S., these activities are to be held in November at a date not yet specified.

Both Ms. Skinner and Dr. Lippold have expressed with enthusiasm the need for the American students to get involved. In the past, with few exceptions, participation has come mostly from international

students. "The event should not only involve foreign students", added Ms. Skinner, "...with the coming November election and the rich American past...I would think that our American students would have much to show and tell..." Ms. Skinner pointed out the need also for staff and faculty involvement; and extended an invitation for those interested to get in touch with her at the FSS office (ext. 1077).

In addition to the events that are planned here at E-RAU, there are also functions that may be of interest to students and

See U.N., page 4

Editorial

By Brian F. Finnegan

Half-asleep planning endangers students

Library construction has begun after literally years of administrative and student discussion. It almost seems unipatriotic to find fault with such an ambitious undertaking after such a lengthy planning period. But, the traffic problems which have manifested themselves as a result of construction-fence installation cannot be ignored.

Students entering the parking lot now have two-way traffic to deal with. There are no speed bumps to force the speed limit upon arriving and departing motorists and the stretch between the University Center and the end of the construction fence at times becomes something of a speedway.

A stop sign once existed at the intersection of the road between the U.C. and the ball field and the main road to the flight line, along the southern perimeter of the ball field. Now that the U.C./ball field road has been designated one-way, that stop sign has been removed. I guess our campus planners do not consider students enroute to and from classes to be traffic. This is ridiculous.

Unfortunately, this is not the worst of it. The two-way traffic situation between the ball field and the construction fence presents a very real threat to campus pedestrians. There is minimal space provided for two cars to pass each other, let alone for students to occupy some of this space. It is incredible that no one has been injured yet, although I have heard of several close calls. It appears that while the rerouting plans were being made, NOBODY THOUGHT ABOUT THE STUDENTS who have to use the facility. Unbelievable.

The third major flaw, which, as yet, has not proven fatal, is the hairpin right turn that departing eastbound motorists must make around the construction fence. Visibility through the fences is, practically speaking, nil for the driver. Unless he slows to a crawl prior to making this turn, oncoming traffic and pedestrians are in danger.

The solutions to these problems are not six new speed bumps and ten new signs warning of the dangers. Although a stop sign is definitely in order at the southeast corner of the ball field, fencing modifications are mandated.

The 50 or 60 yards of fencing separating the ball field from the new two-way thoroughfare should be removed, at least during the library construction stage. This will allow pedestrians to use the grass to navigate around the vehicular venturi which now exists. Also, the northwest corner of the construction fence should be removed and replaced with a 45 degree angle fence to improve driver visibility and to ease the fears of pedestrians attempting to negotiate the turn.

We are locked into the construction mode now. This is something that we have all anticipated and looked forward to for some time, but this does not mean that we must make safety sacrifices in the face of these changes. As time passes and motorists begin to take all these dangers for granted, awareness is sure to decrease. Unless we take measures to alleviate a traffic hazard which may prove to be more dangerous than the current problem at the Clyde Morris entrance to the university, people will be hurt.

In view of the mammoth efforts underway to raise the money necessary to build this new library, the last thing the university needs is a lawsuit because its planners were half asleep when it came to assuring the safety of the very people they were hired to consider.

President's Corner

I would like to welcome Joe Koch as our final selection for Student Administrative Council Representative. Chandu, a dorm representative and a Resident Assistant, is still investigating the Laundry room problem that has plagued Dorms I & II for the past few months. I will update you when more progress has been made.

The Student Administrative Council participated in the Riddle Regatta this past weekend and a good time was had by all. Also, this past weekend I met with all the division heads in planning for the SGA presentation to the Board of Trustees Members Oct. 19. We, the SGA, will have 1 1/2 hours to explain and provide what SGA really does for the students of this campus. This is a first-time event, and we are hoping to carry this on into the future.

Thomas M. Conard III
SGA President

the avion

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The opinions expressed in this newspaper are not necessarily those of the University at all the members of the Student Body. Letters appearing in THE AVION do not necessarily reflect the opinions of this newspaper or its staff. Copy submitted may be edited for brevity and may be printed provided it is not lewd, obscene, or libelous. All letters must be accompanied by the signature of the writer. Names may be withheld on request at the discretion of the Editor.

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LETTERS

SGA lauded

To the Editor:
Bravo SGA!
I don't know if you've noticed, but there seems to be an unmistakable spirit of corps pervading the campus of E-RAU. For one, I sense a feeling of renewed faith in the SGA as our student representatives. (My God, they really do care.) I feel somewhat qualified to comment on the situation, as I've been here for 160 credit hours and have seen 4 administrations come and go. Without a doubt, Tom Conard and his staff comprise the finest SGA we've had in a long time.

They care! The Entertainment Committee (a division of the SGA), headed by Dave Marler...

They asked for our vote as to what type of entertainment we want; very democratic. If you didn't vote, you really can't complain. We've got a big band for Octoberfest - nice job entertainment. They care! Kathy Novak and Laurie Ranfos (SAC) produced the biggest and best C & O Day I've seen. They care!

When you'd walked into the SGA office, you used to feel kind of

like you were intruding, interrupting something, not supposed to be there. I used to hate going in for a free coffee because it meant walking into the back room, past a bunch of people who looked at you like you were invading their privacy.

Now the coffee machine is out front, right inside the door where you don't have to pass anybody. But that doesn't matter anymore because when you walk in, people smile, even say hello, how ya doing; they care! I got a note in my box to see Arlen Bowen in the SGA office.

I thought, oh God, what'd I do? I went in and he said, "I'm your representative for the refund committee (I'd applied for a refund from the school) and I'm going before the council tomorrow for you. Tell me your story."

I thought to myself, wow man, he cares!

You can tell that the SGA cares because they are trying hard to show that they care. The SGA function used to seem like a secret organization, who took our \$15 and had wild parties and did stuff that was supposed to be good for us that we never knew about. But now, they even print in the Avion exactly what they're

doing and show us their books so we can see where our monies are going (see Presidents Corner and Student Administrative Council minutes - Avion 10-3).

The present SGA is a very progressive unit and I give a lot of credit to Tom Conard for bringing the SGA back to the students. All the divisions and SAC really are pulling for the students. This administration is finally one we can believe in. They've moved toward bringing back the camaraderie that prevailed when I first arrived in 1980.

Now, we must do our part to support them in their endeavors as they do us. Bravo SGA 1984-85!

Ray Casey
Box 5623

The SGA minutes are printed weekly in the Avion.

Nabbed

To the Editor:
Any student that has attended Riddle for more than a few weeks has undoubtedly come in contact with a Daytona police "officer." Last week students were given traffic citations for simply attempting to gain entrance into this Institution. Adding insult to injury, the Riddle

security staff is there aiding the cops, not the students. (Who pays their salaries anyway?)

"Park your car here, take a number, we will only hold you up an hour or so until we decide to get your ticket to you. Sure hope you didn't have an exam today, (slaps the cop on the back) Oh, and don't worry if you want to go to court and fight this, you will only have to miss a few days of school." The police officer says.

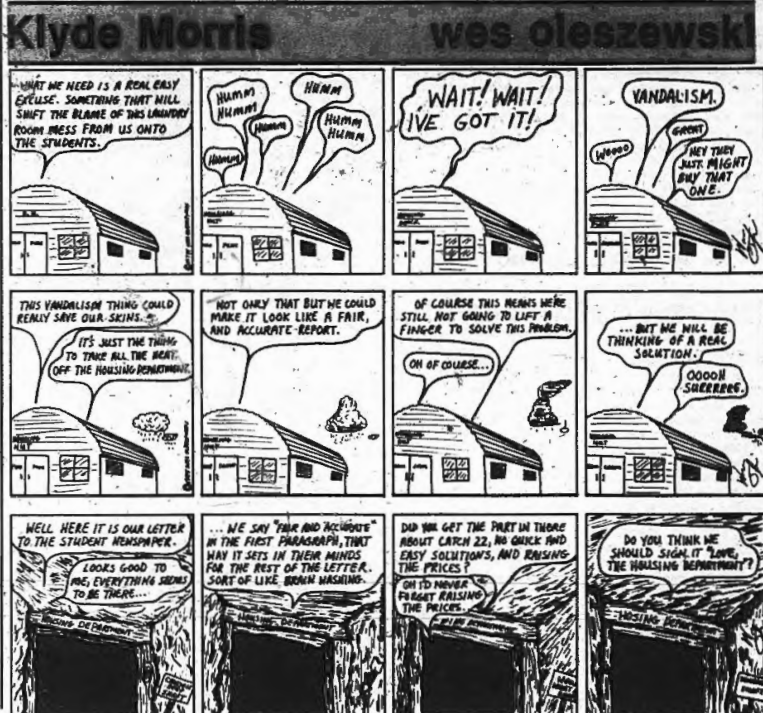
I'm sure the University will respond in the usual manner, that it is necessary and in the name of safety and will make us good little humans. Just as the tuition increase will actually save us money (never could figure that one out) and bring up our grades, and the outrageous graduation fee is for paperwork, and simple parking tickets really do need to be twenty bucks, (Riddle students are all wealthy) and...

Until the new term signal is installed in the spring, I wish the Daytona cops and the Riddle security would get off students backs.

Any other students interested in going to court contact,

Tedd Coates
Box 3056

This letter was edited for direction. -Ed.





Courts, estates and possession

IF YOU WIN A JUDGEMENT in small claims court, here is what you can do to collect your money: After a final judgement has been entered against the debtor, the court has the power to delay the execution of the judgement and allow the debtor an opportunity to make payment of the money due. If the debtor fails to make the necessary payments, the person who is owed money (creditor) can ask the court to have the judgement enforced. If necessary, the court entering the final judgement will direct the clerk to issue a writ of execution (i.e., writt order to enforce the judgement). After the execution has been issued and delivered to the sheriff, he will take goods (materials belongings) of debtor in the amount of the money judgement....

I AM A STUDENT here at school and in order to make money, I took a sales job on a commission basis for a company up north that makes moccasins. To date I have yet to receive one cent of my commission although I have sent in many paid orders that have been delivered. They won't respond to my correspondence. How can I collect? You can sue the company for commissions in your county. If you get a judgement against them, you must locate assets that could satisfy your judgement. By a special process of law, these would be sold to pay you the amount due. If the company has no assets in Florida, this process would be done out of state. . . .

I AM AWAY AT SCHOOL and am interested in knowing what I have coming to me in inheritance from my mother's and grandmother's estates. My father won't tell me anything. Both my mother and grandmother are deceased and I have seen some papers dealing with property and money that are to come to me. Is there any way I can find out what

is, rightfully mine? If you are considered an "interested party" in the estate of a decedent who died a resident of the State of Florida, you are entitled to make an inquiry as to the nature and extent of your inheritance, the nature and extent of the claims or obligations of the estate, and receive reports from the personal representative as to the progress of the probate administration. Probate records in Florida are matters of public record and if you present yourself at the clerk's office of the probate division of your local circuit court and describe the name of the decedent and, if possible, the file number of the estate, you will be allowed to review the entire probate file on request. In many of the smaller counties in Florida, this is a somewhat informal procedure and the clerk can give you much quicker service than in the larger counties where the numbers of probate are considerably higher and there are decedents with the same last name. Whatever information you can provide with regard to the en-

tire name of decedent, date of death and, if possible, file number, will greatly facilitate the clerk in helping you review the probate proceedings. This answer, of course, presupposes that the estate is pending and the file has not been closed and placed in storage. . . .

CAN THE PERSON WHO makes out a will designate an executor or executrix for the will who is not a relative? Any citizen of the U.S. and a resident of Florida, competent and of lawful age, may serve as personal representative. A nonresident cannot qualify unless he or she is related to the decedent. . . .

WHILE I WAS MARRIED, my dad loaned me \$500 to buy furniture. Since my divorce, I have tried to contact my ex-husband to get my possessions back, but he won't respond. How can I get my things back? In Florida, any person who has a right to the possession of particular property and whose personal property is wrongfully detained by any other person, may ask for a writ of replevin to

recover the personal property and any damages sustained by reason of the wrongful detention. A court order must be obtained authorizing the issuance of the writ. The complaint leading to the order must list a description of the property, its value and property of ownership, among other things required to safeguard the defendant's rights. Upon an acceptable complaint, the writ will then either be issued and the property seized or a hearing will be ordered to allow the defendant the right to show why the property shouldn't be taken. Under certain circumstances, either party

may be ordered to post a bond. Replevin proceedings may be brought without obtaining a writ or posting a bond if possession of the property is left with the defendant. A judgement for the plaintiff may instead of providing for the return of the property, order that the monetary value of the property be recovered as well as any damages for the wrongful detention and court costs. . . .

(Due to the complexity of the law, questions answered in this column are of a general nature and may not necessarily apply to a similar legal problem.)

Economic recovery leads to an increased number of internships

By Susan Skorupa

(CPS) Thanks to the economic recovery, the market for student interns seems to have reversed itself in the last few weeks.

A number of campuses around the country report businesses are offering more internships this

fall; and that the campus cooperative education offices are having a hard time finding enough students to satisfy the demand.

"Placement is up this semester, due to the turnaround in the

See Intern, page 14

December Graduates

Applications are being accepted in the Registration and Records Office for those students anticipating degree completion at the end of the FALL trimester. Students are required to fill out Graduation Applications and the Alumni Association forms no later than Friday, October 12, 1984. Please be advised that NO DIPLOMA will be ordered if this application form is not processed by the Registration and Records Office.

FAA Intern Program

There are many alternative career paths in the field of aviation. We would like to offer you the opportunity to explore one of them. There will be an air traffic control cooperative education/intern program beginning in January for the Spring/Sum A 1985 trimester. You will have the opportunity to actually work in the air traffic control environment.

STUDENT ELIGIBILITY

The student must:

- A. Be enrolled in a curriculum leading to a bachelor's degree in an approved major on a substantially full-time basis and have completed a minimum of 60 and not more than 90 of the total credits hours required for graduation.
 - B. Be enrolled in the educational institution's cooperative education/intern program.
 - C. Be recommended to the FAA by Embry-Riddle Aeronautical University. Submit an SF-171, personal qualification statement and a college transcript to the co-operative education program administrator.
 - D. Be a citizen of the United States or a native of a country which owes permanent allegiance to the United States (E.G., American Samoa).
 - E. Not be the son, daughter, adopted child or stepchild of an FAA employee.
 - F. Maintain at least a 2.25 overall grade point average on a 4.0 scale, a grade of C or above in all major fields of study and a record that is in all ways predictive of graduation.
 - G. Pass the air traffic control specialist written entrance examination and meet job-related physical and psychological requirements.
 - H. Satisfy security requirements (Must be met before starting second work period).
 - I. Be at an age such that he/she will be able to complete the requirements for appointment to a GS-2152-7 ATCS position prior to reaching his/her 31st birthday.
- FOR ADDITIONAL INFO, CONTACT THE CAREER CENTER, 2ND FLOOR IN U.C.

CO-OP orientations

STUDENTS INTERESTED IN SPRING OR SUMMER CO-OP, please attend one of the following orientations. Co-op orientations are held to inform students of the benefits and procedures of cooperative education. The orientation lasts about one-half hour, and should answer all your questions about co-op at Embry-Riddle Aeronautical University.

Attending one of these orientations is MANDATORY if you are interested in co-opping.

- OCT. 3 WED. 12:00 NOON
- OCT. 11 THU. 9:00 A.M.
- OCT. 16 TUE. 3:00 P.M.
- OCT. 22 MON. 2:30 P.M.
- NOV. 2 FRI. 11:00 A.M.
- NOV. 8 THU. 1:30 P.M.
- NOV. 12 MON. 2:00 P.M.

All orientations will be held in the Riddle Theater which is located in Building "C". See you there...

Spring '85 Graduates

We suggest that you fill out your Graduation Application for a PRELIMINARY GRADUATION EVALUATION. We will try to process as many as possible prior to the "ADVANCED REGISTRATION" for Spring '85.

FAA Written Examinations

Embry-Riddle Aeronautical University will administer FAA Pilot Written Examinations on the following:

- October 2, Tuesday, @900 - Faculty Lounge, U.C.
- October 9 & 16, Tuesday, @830 - Common Purpose Room, U.C.
- October 27, Saturday, @830 - H-113, H-107, GRW Complex

Students intending to take an FAA Pilot Written Examination are required to sign up in office D-200 or call extension 1307 prior to examination day.

At the time of the examination, each student must present a receipt for pilot exam fee, validated by the Cashier's Office; a Written Authorization Form signed by an appropriate Aeronautical Science Division Ground Instructor, or the failed results of a previous FAA Written Examination and present a personal identification in the form of an Airman Certificate, a driver's license, or other official document.

Explanation of application forms and procedures will be given at 0830. Immediately thereafter testing will commence and, unless prior arrangements have been made, late examinees will not be permitted to enter the examination area while testing is in progress.

ATC positions

Effective October 1 through October 31, 1984, the Office of Personnel Management (OPM) will accept applications for GS-2152-7, Air Traffic Control Specialist positions. Applications for all options will be accepted for enroute center, and flight service station. Announcement FAA/ATC-6 and applications are available in the Career Center.

Employee Retirement Benefits

A lecture will be held next Tuesday, October 9, 1984, at 8:30 p.m. in the U.C. The speaker will be Attorney John Norton, who will present the legal liabilities involved for organizations when sponsoring alcohol at their events.

This event is a part of National Alcohol Awareness Week being observed on campus October 8-14, 1984. Any club, fraternity or organization that anticipates having alcohol at an event is required to send a representative to this meeting.

Please submit the representative's name of your organization to the Student Activities Office by noon on Tuesday. Your participation in this event is greatly appreciated.

Thank You.

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On the turntable

Bruce Springsteen: very mellow music

By Todd Huffstokler

Well, I must say that I am happy to be back this trimester and am looking forward to reviewing more albums for you. The album that I have decided to review this week is Bruce Springsteen's "Born in the USA".

The music that Springsteen sings in this album is very relaxing and almost mellow. A large percentage of his songs include the use of tambourines which make his music very enjoyable. Most of Springsteen's songs seem

to tell a story and portray a sense of his Americanism. Several of his songs off his new album are of course smash-hits "Dancing in the dark", "Cover me", "Darlington county", and "I'm going down".

Springsteen's music video "Dancing in the dark" has become his recognition tremendously and has helped him sell over 2,000,000 copies of his new album.

Since Springsteen is back with the E. Street Band, his music has definitely better style and

rhythm. His last album "Nebraska" didn't do so well on the charts and that was probably because of the lacking of the E. Street Band.

"Born in the USA" is selling like mad, and the public has gone crazy over this album. Every concert that Springsteen has played at has been sold out, and with his energetic four and a half hour concert, he thrills the audience continuously. If any of you have ever been to a Springsteen concert, you know that he just about exhausts the audience with his

constant energetic music.

Springsteen's music in this new album sounds very much like the music in his "Born to Run" album. Springsteen has come a long way since he first started in the music business and he has his audience more enthralled now than he has ever before. The music on this album was very well mixed and recorded, and on a scale of 1 to 10, "Born in the USA" deserves a 10.

Albums courtesy Specs Records and Tapes.

Doten

(continued from page 1)
concentrate on their areas." On the administrative level, the Provost feels Dr. Ledwith has thus far done an excellent job acting as President.

The biggest project on his campus, the construction of the AIRLC, was addressed by the Provost. "The fund raising is an overall University function, however, most of the money will be raised in the Daytona Beach area. We've hired a group to spearhead this campaign and we expect to heavily involve Community Relations. Overall, I expect the fund raising to be overseen by the University while research relative to the Busch Grant won't involve much of this campus." (funds from the Edyth Busch foundation comprise a majority of initial AIRLC funds).

Clyde Morris

(continued from page 1)

May 1985, the Student Government Association is sponsoring a petition which will be sent to the Florida Department of Transportation. A table will be in the back of the University Center Monday thru Friday from 10 a.m. until 4 p.m.

All students are urged to sign this petition. Students are also urged to write letters to their local Florida Representatives and Senator.

Career Center interview schedule

OCT 17-18	Rockwell International El Segundo, California	AERONAUTICAL ENGINEERS U.S. Citizens only. Company orientation on October 17 at 8:00 a.m. in the FSL.
OCT 19	Marita Marietta Aerospace Denver, Colorado	COMPUTER SCIENCE AERONAUTICAL ENGINEERING Design and development of sophisticated missile & space systems. U.S. Citizens only.
OCT 23	Lockheed-Georgia Company Marietta, Georgia	ASSOCIATE AIRCRAFT ENGINEERS Requires a Bachelor of Science Degree in Aero Engineering. U.S. Citizens only.
OCT 25-26	Federal Aviation Admin. Eastern Region	ATC CO-OP/INTERM Information available in the Career Center. U.S. Citizens only.
OCT 29	Sverdrup Technology Tullahoma, Tennessee	AERONAUTICAL ENGINEERS U.S. Citizens only.
NOV 1	McDonnell Douglas Technical Services Company Kennedy Space Center, Florida	COMPUTER SCIENCE & AVIATION TECH/AVIONICS U.S. Citizens only.
NOV 1-2	McDonnell Douglas Corp. St. Louis, Missouri	AERONAUTICAL ENGINEERS U.S. Citizens only.

POSSIBLE UPCOMING INTERVIEWS

Cooperative Education:

AMERIJET, Fort Lauderdale, Florida
FEDERAL EXPRESS, Memphis, Tennessee
MONROE COUNTY MOSQUITO CONTROL, Marathon, Florida
PIPER AIRCRAFT COMPANY, Lakeland, Florida

Permanent Placement:

DYNETICS, INC., Huntsville, Alabama
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U.N.

(continued from page 1)

faculty/staff member alike.
The United Nations Association of the U.S.A. (UNA-USA), which maintains a chapter here in Daytona, has scheduled several newsworthy events this month. Mr. Austin Combs (Austin Combs Realty, D.B.), Chairman of the local UNA-USA chapter, confided that the keynote speaker for an upcoming Daytona Beach community forum will be former Prime Minister Edward Heath of Great Britain.

The forum, to be held Wednesday, Oct. 24 at the Desert Inn and Thursday, Oct. 25 at DBOC, will confront topics of world-wide importance. There will be no admission charge for the E-RAU community, however, advance tickets are necessary. Inquiries regarding ticket availability may be directed to the PSS office on campus.

Another point of interest is UNA-USA's state convention be-

ing held at the Treasure Island Inn Friday-Sunday, Oct. 26-28. Addressing the convention will be Dr. Carroll Cannon, the UNA-USA National Chairman, and his wife Dr. Nova Cannon, both of whom have lectured world-wide on topics of current World and Foreign affairs.

Also appearing at the three day convention will be a model U.N. General Assembly session that will elaborate on current disputes between world sovereigns (i.e., Arab-Israeli conflict; USSR-Afghanistan war; USA's Grenada Invasion, et al.). The model UN session consists of students from local high schools and colleges who meet periodically in debate/symposium format to discuss the issues. Ironically, Embry-Riddle, the largest local university, does not have a delegation.

Former U.S. Ambassador Robert Ryan, who also is an active UNA-USA member, expressed concern in the lack of interest on the collegiate level, commenting, "There are not as many (college level students) as I'd like to see. This is an area we'd like very much to expand on, particularly at Embry-Riddle." Ryan, who coincidentally was Assistant Secretary General to the UN (1972-77), suggested the possibility of "fielding" a small delegation in upcoming model UN sessions.

"Since Latin America is virtually exploding before our eyes and war seems inevitable, these model UN simulations offer a unique and timely opportunity for students to increase their understanding of this highly volatile part of the world. In addition students will be able to debate the issues and present solutions," stated a model UN syllabus.

For those interested, direct inquiries to Ms. Skinner in the PSS office or contact the Avion office in the U.C.

Steppen out...

Johnny Winter at Tampa's London Victory Club

Now on U.S. tour promoting his new blues album 'Guitar Slinger'



By Tony Photo

Beaumont, Texas holds little notoriety among most Americans. Located in the eastern most corner of the state, Beaumont is typical of the larger Texas towns of the west.

During the 1940's, Tommy Dorsey and Glen Miller were popular on the radio and their albums could be heard at the touch of any dial. The parents of a young albino boy named Johnny Winter were big band enthusiasts and had a record collection to match.

'Clarence was a dj at KJET, Beaumont's first and only black radio station...

Clarence Garlow didn't like to play big band on KJET; it wasn't his format for Beaumont's first and only black radio station. When he wasn't spinning blues during the day, Clarence was playing his T-Bone Walker style music in the evenings.

Johnny Winter worked in a music store and recognized Clarence Garlow's voice immediately - his French Cajun accent was common to the blacks of east Texas border towns. Johnny started to receive guidance from Garlow, and in the three years to follow, formed a band with his brother, Edgar Winter, and toured Texas as Johnny and the Jammers.

Johnny and the Jammers released their first single *Schoolboy Blues* when Johnny was only 15. From then on, if he wasn't in the studio, he was playing club gigs or sitting in with artists like B.B. King or Bobby 'Blue' Bland. He earned a reputation on the 'Chittlin' Circuit' as "that white boy from Texas who can really play!"

A brief attempt at the Chicago blues scene was fruitless and in their home state of Texas, plenty of radio play didn't seem to help either. Discouraged, Johnny turned towards England and the possibilities of moving the whole band over there. That was when an article in *Rolling Stone Magazine* changed all of that.

In December of 1968, there appeared in *Rolling Stone* magazine, a three page article entitled *Texas*. Two-and-a-half paragraphs dedicated to a musician "130-pound, crossed-eyed albino bluesman with long fleecy hair playing some of the gutsiest fluid blues guitar you have ever heard." That article touched off what is still considered to be the costliest bidding war in the history of record publishing.

Settling in for a long-term contract with CBS, Johnny cut five albums between 1968 and 1971 and made appearances at Woodstock, The Texas International Pop Festival and the Bath Festival in England. When the band broke up in 1972, he got his life together and started touring after the release of *Still Alive and Well* in 1973.

'About the only thing Edgar and I have in common is that we have the same parents... musically, we are in different directions'

In 1974, Johnny cut his first album for *Blue Sky* records and teamed up with Edgar Winter, Rick Derringer and Dan Hartman. After producing four albums for his idoli, Muddy Waters, it wasn't until his last album for *Blue Sky* in 1980 entitled, *Rasin' Cats*, that Johnny refocused on the blues, cutting raves from his mentor, Clarence Garlow and others.

"It was obvious that great blues were on the way out and people were saturating with it," he notes of his time with Rick Derringer. "I had complete control over the music but felt that it was time to experiment with some other stuff that we were doing."

"To tell you the truth," he confides, "I liked it for the time that I did it but was glad when it was over and get back to the straight blues."

Since his association with Muddy Waters, Johnny doesn't anticipate getting too far away from the blues. "I really hadn't felt that I had gotten the acceptance that I wanted and acclaim as a blues man until then."

"It doesn't expect to get too far from the blues out follows quickly. "That isn't to say that that I won't be doing rock. I still enjoy doing that!"

Having just returned from Europe, Johnny finds more reverence for the blues over there. "They definitely didn't grow up with it, are not familiar with it and it's more important to them." He believes that most people in the U.S. take the blues for granted or don't care about it. "A lot of the older guys who can't even make a living in the states" do real well over there," he concedes.

When questioned about what message if any he is trying to put across, Johnny retorts, "I'm just playin' my music man, you can take from it whatever you want. I think I'd be a preacher if I was trying to get a message across or a politician. I realize," he smiles, "not everybody in the world gets the same charge out of the blues that I do and that use to bother me."

'You never know, there is no formula for success... you just have to keep on playing and hope you are at the right place at the right time'

He takes a break and lights another cigarette; I look at his frail, tattooed body. He seldom looks you in the eye but when he does, an accommodating smile and mannerism allows one to totally absorb the genuine delivery of his conversation. "It makes me feel real good; I just love to play any kind of music. Whatever I can do to stay on out there and keep on boogin'," he concludes.

Last summer, Johnny participated in a Chicago Blues Festival and felt "wired" endorsing a salute to Muddy Waters. "It's kind of weird

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the twilight zone

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Army ROTC holds field training exercise briefing

By Cdt. Capt. Kevin D. Garner

Friday, September 28, Army ROTC held a pre-FTX (field training exercise) briefing at M-building. The senior level cadets taught classes to the MS 1,

2, and 3 level cadets. These classes included a compass and pace course taught by Cdt. Capt. Robert Ess. The cadets learned how to use a compass and shoot an azimuth correctly. A class on sand tables was taught by Cdt.

Capt. James Denien and David Davidson. This class entailed showing the junior level cadets how to relate geographical terrain features by building a simulated sand model of the area from a topographical map. Cdt. Capt.

George Homlich and Greg Oberst taught classes on ITT (individual tactical training). These techniques teach the cadet how to be a better soldier. These techniques included the low crawl, high crawl and three second rushes.

With hurricane Isadore in the area, the FTX to Ocala National Forest was postponed until Saturday morning.

These operations included a tactical road march, assembly area procedures, hasty fighting positions, emplacement and execution of an ambush, and recon patrols. All MSIII cadets were given leadership positions such as company commander, platoon leader, platoon sergeant and squad leader to prepare them for Advance Camp '85.

Night tactics included ambushing Cuban aggressors. Throughout the night, Cuban aggressors probed the perimeter trying to penetrate the defenses of the MS I, 2 and 3 cadets.

Sunday morning the cadets left Ocala National Forest and returned to E-RAU. A class was taught by Sergeant Peters on the assembly and disassembly of the M-16A1 rifle to all of the cadets. A lot of good training was accomplished and everyone had a good time.

Members sought for Eta Mu Sigma

By Steven Bailey

Eta Mu Sigma is an Honor Society for students in all management related degrees here at Embry-Riddle. Eta Mu Sigma's purpose is to recognize those individuals who have excelled in scholastic and leadership abilities in aviation management curriculum.

Senior with a minimum G.P.A. of 3.00, and 3)Be enrolled in a management related curriculum.

An orientation meeting for potential members and all present members will be held Wednesday, October 10, at 6:30 p.m. in room E-604. Applications for membership will be available at the meeting or through the Student Activities office located behind the Information Center in the U.C. Applicants may also drop a note to Box 2701 and an

application will be sent to you personally. Applications for new members must be in by Thursday, October 11, so don't delay, get on today!

Initiation for new members will consist of a wine and-chose party to be held at the President's Residence Friday, October 12. All new and present members are encouraged to attend for the awards presentation of Certifications and Honor pins. The popcorn sales at the movie "Caddy Shack" was a tremendous success. So good in fact, we are going to do it again Wednesday night, October 10, for the movie "The Right Stuff". Anybody interested in having fun and helping out the popcorn committee should contact Ray at 788-7379 by Wednesday. Lets get out there and make it happen again.

The Busch Gardens trip scheduled for October 20, has been moved to October 27.

'Airway Science' slated for Trustees meeting

By Richard Calvert
Avion Staff Reporter

Through the years, E-RAU has expanded its horizon, growing from a simple flight school to an intricate University with many areas of study. In addition to various Flight Programs, Aviation Maintenance, Engineering, and Aeronautical Studies (as well as many others) have established themselves firmly in the Riddle Curriculum.

covering several areas of concentration. These include such categories as Air Traffic Control, and Airway Computer Sciences. At present, all Airway Science courses offered through Riddle Fall under the Aeronautical Studies Degree. This presents a dilemma for many students who would like a more specific degree to pursue. Though a person may have all of the credentials to fulfill the FAA requirements for Airway Science Management (Air Traffic Control Specialist), under current E-RAU policy he is awarded the more general Aeronautical Studies degree.

Sciences degree be added to the ever-increasing list of E-RAU academic programs.

On Friday, October 19, the Board of Trustees will meet to discuss many of the leading University issues, one of which is the creation of the Airway Sciences degree. With the curriculum already well established, the feasibility of the endeavor could be a leading question before the board. The program appears to have the support of the FAA.

It devised the model curriculum from which the Airway Sciences degree was founded. In order to facilitate its efforts with the academic community, the FAA states, "The curriculum was designed to meet normal university academic and accreditation requirements...and to be attractive to students seeking careers in both Government and the aviation industry."

Upon completion of the Airway Sciences degree, students would qualify to fill positions at the GS-7 level in their specialized areas. The FAA is promoting the expansion of Airway Science in the academic community, and E-RAU has the opportunity to once again reaffirm its position as the leader in Aviation Education. It is a topic which rests in the hands of the Board of Trustees.

In light of this, the University is proposing that the Airway

FFLA convention slated for next week

By Suzanne Q. Corcoran

Foreign Students attending Embry-Riddle will have the opportunity to interact with other students from around the world at the State Convention of the Florida Foreign Language Association (FFLA). The meeting will take place at the Holiday Inn Surfside, October 18-20.

Participants are from many countries such as Jordan, Greece, Pakistan, Nigeria, Turkey, Kenya, Bermuda, and many others. It is both an honor and privilege to be asked to attend this important event. Ms. Teresa Healy, Director of International English Programs at E-RAU, and Dr. James Cunningham, Chairman of Humanities and Social Sciences at E-RAU, are sponsors of the event.

Think You've Got The "Right Stuff?"

Join the E-RAU Precision Flight Team and find out!

Practice - Wednesday night 1800 in H-120

First NIFA competition November 16-18; Melbourne, Florida

Participants in the convention are expected to wear their native costume and explain its significance. Topics for open discussion include individual attitudes toward cheating and fighting. Each student will also perform a TV commercial in his own language.

When questioned about the blues market for new players, Johnny quickly outlined his views. "There is certainly enough room; just keep on playing. You never know, there is no formula for success. You have to just keep playing and hope that you are at the right place at the right time."

He points towards Chicago as an example of the current scene. "Every time I go there, the blues guys that are there are bitchin' because there are so many blues people there. They are making \$19.00 or \$20.00 a night and nobody makes a cent."

Johnny Winter's name has become synonymous with the blues and his style synonymous as the Texas-tattoo he wears on his right shoulder. As that tattoo is a testament to where he came from, his latest album *Guitar Slinger* is more so of where he is going. After our conversation, I questioned one statement he made earlier - about his music having no message. I disagreed. To me, this latest release on Alligator Records says a lot. It says that Johnny Winter has taken another progressive step among all the recycling that is going on in an industry marked by many failures. It says that Johnny Winter, while just turning forty, is in fact capable of putting together a tour that still 'pucks the house', brings an audience to their feet and keeps them there until the final song. But what it doesn't say is that we've heard the last of him.

Int'l scholarship competition to be sponsored

By Suzanne Q. Corcoran

The third Annual Scholarship Essay Competition is sponsored by International Underwriters/Brokers, Inc., and is administered on-campus by Ms. Teresa Healy, Director of International English Programs at E-RAU. Only full-time foreign students are eligible. Essays are to be 1500 words or less, written on the following topic: "International students in the U.S.A. represent a wide range of knowledge, experience, and culture. Discuss specific steps which might be taken to better utilize international students as in the local community."

The contest will be held both on-campus and internationally with prizes to be awarded to the winning essays. To meet the deadline for the on-campus judging, contestants must submit their essays no later than November 9, 1984, to the Foreign Student Service office. For additional information, contact the Foreign Student Service office.

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ROA receives tremendous response

By Jeff Outlaw

This year's Reserves Officer Association has experienced a tremendous response to its membership drive. Our membership party, which was held Sept. 14, proved to be quite a success. We were all thrilled to see such a great turnout. Members from the

AFROT, AROTC, and PLC all joined in on the festivities. This gave everyone a chance to meet new friends and learn more about the ROA.

The Reserve Officers Association is a nationwide lobbying body, dedicated to serving the interests of active, reserve and retired officers. The ROA sub-

chapter at E-RAU attempts to bring together the members of all precommissioning programs. Through service activities to the community and school, a scholarship fund, social activities and fund raising, the ROA stimulates inter-service cooperation. Initiative and the development of managerial skills are

highly stressed among the members. ROA is an excellent way to have fun and learn what it takes to pull off a project.

Membership is open to any precommissioning program. For those of you who missed our first party, but are interested in becoming apart of the ROA, be sure to attend our next meeting

which is scheduled for October 23. We would like to see more new members participating in the great events we have planned for this trimester. Our schedule includes the Riddle Regatta, a pizza party, Aviation Awareness Day, a fantastic Halloween Party, Survival Day, and our Thanksgiving dinner. This year is sure to be one of the greatest ever for the ROA.

The ROA has also announced this year's officers. Our new officers are: President, Sandy Kriget; Vice-President, Robert

Lecky; Social Vice-President, Dave Brescia; Treasurer, Mark Hagen; Secretary, John Parker; Chaplain, David Shatunoff; Historian, Perry Elrup and Zenky; Director, Public Affairs, Paul Valenti and Jeff Outlaw.

If you would like more information about the ROA just contact one of our new officers or any member you may see wearing our red or blue T-shirt with the ROA emblem. Be sure that you find out what the ROA experience is all about.

Capt. Scribner to address students

By Craig A. Pellisier

The Management club had its first dinner meeting of the trimester Friday evening at the Treasure Island Inn. Due to the weather and impending storm, the guest speakers were unable to attend. Mr. Lamar Baker, regional representative for the

National Department of Transportation and Mr. Roger Meyer, representative of the FAA, had contacted the Management club late Friday afternoon to inform them of their inability to attend. However a substitute speaker was located.

Capt. Scribner, advisor to the president of DBCC, and ex-Pan

American Airlines Chief Sector Check Pilot, attended the meeting. He delivered an enthusiastic speech which seemed to be aimed at kindling the enthusiasm of aviation students. Scribner provided hints and advice for successful progression in a corporate structure. He also stressed the "importance of

maintaining and using the proper technical terms and language."

The Management club faculty advisor, Mr. Rudy Knabe, also spoke at the meeting. He mentioned the Management club's intention to create plans for a building on campus to house the club's office.

L-5 to hold dinner

By Jim Banke

The L-5 Aerospace Society will hold its first meeting for October tonight at 7:00 p.m. in room W-309. We will update the progress of the Shuttle flight and discuss plans for our November activities. We have a dinner planned for Friday, November 30 with Mr. Marc Bunker, of General Electric, as the guest speaker. Details of the dinner will be announced soon.

After we conclude with the

business, we will watch a slide presentation that highlights NASA's history of the manned space program. Following this, cake will be served in honor of our officer's birthdays all falling in October. Other surprises are in store for our officers so don't miss the fun.

If you are interested in the future of our space program, or if you just like birthday cake (supply is limited) you are welcome to join L-5 tonight. Hope to see you there!

Sigma Phi to observe in unique way

By Steve Taylor

The brothers of Sigma Phi Delta would like to offer congratulations to the following young men who have made the first big step in becoming an engineer by pledging the first and best fraternity on campus: Rawson Wood, Paul Arramboli, John Poole, Mark Baban, Jae Lee, Robert Calleno, Toni Williams, Shannon Murphy, Juan Carlos Arencibia, and Mar-

ty Dudeck. In addition, three more were initiated as pledges this past weekend. The pledge initiation held on Saturday, Sept. 29, was followed by another successful SPD party. This time a barbecue, highlighted by volleyball with ace faculty member Charles Bishop, a keg and good food.

The brothers by a unanimous vote, have decided to observe Alcohol Awareness Week in our own unique way, we will be very

aware of alcohol this week, and extremely aware of Alcohol this Friday. Along with this theme, the brothers would like to see the kill-a-keg remain intact. Prohibition was abolished by U.S. Constitution article 21 adopted in 1933. While there is a slight danger encountered while crossing Ridgewood, it should be pointed out that should a "Greektfest" be held at the barbecue pit at E-RAU, the number of people driving after consuming quan-

ties of alcohol would be much more dangerous. Like wise, having a party anywhere else is equally dangerous. The kill-a-keg is one of the only interfraternity functions that actually promotes interfraternity relations. Changing to a "Greektfest" would turn off many of the people who would otherwise attend. Also, having the party in the afternoon conflicts with many of the scheduled classes and no one here can afford to blow off classes.

Lambda Chi busy with activities and more

By Steve Williams

Lambda Chi Alpha has had a very busy couple of weeks. We began Friday night with the Interfraternity Council Cocktail Party. This event is what IFC is all about. Fraternal relations were better than we have ever seen. The brothers, associate members and pledges from every brotherhood conversed and became familiar with each other's organizations. This party proved once again to be a very positive event and it will be first on the agenda for many years to come.

Saturday night's Four-in-Lion concert, thanks to the Entertainment Committee led by associate member Dave Marler, was a blow-out. It's nice to see some first-rate entertainment on this campus. Assistance with security was provided in part by Lambda Chi members.

On Sunday, once again Lambda Chi showed its stuff on the playing field, and honorably lost 33-6. The spirit shown in this game, led by quarterback John Schulte, was a refreshing sight compared to the past weeks. Just wait until next week.

Monday was once again time to get down to business with another fine meeting with the presence of many new and interested faces. It definitely would not have been complete without brother Tavares' informative cat update. Finishing up with Al Witkowski's inspirational education session, the day was over.

Bob Flynn out did himself this week with his Bass-ackwards Party planned for Friday night. Nobody will be admitted without being fully clothed in backwards attire. Of course, once they are admitted they must proceed for

the remainder of the evening in an entirely backwards fashion.

On Saturday, Lambda Chi Alpha will test its all new High Performance Engineered Riddle Regatta Entry, dubbed the Speeding Lamb.

We would like to wish one big happy birthday to John Restaino, Steve Siedlarczyk, Treat West, Jim Formal, Fred Lass, John Sheese and Steve Williams, all of which have birthdays in October. As you have seen, members of Lambda Chi Alpha are seldom able to complain of boredom. The contribution of each and every member is significant. Come see what we can do for you. Be a part of the experience, the Lambda Chi Alpha experience. We meet on Monday at 8:00 p.m. in W-306.

CHESS TOURNAMENT
Saturday, Oct. 6, 9:30 a.m.
In Common Purpose Room

For More info, Contact
Jonathan Russel at
756-2310 or box 4063

Louis, who graduated with a B.S. in Aviation Administration, is presently working for People Express Airline in Newark, New Jersey.

Jeff Wolfe, who will be remembered to us as "Wolfe",

graduated with a B.S. in Aviation Management and an A.M.T. certificate. Jeff is now an engine overhaul specialist for General Electric in Cincinnati, Ohio.

John Boganski, who is holding an A.M.T. certificate, is now a flight engineer for Capital Air in New York. Bethany Ives is now at Lackland Air Force Base in San Antonio, Texas. She is now doing basic training and is going to trade school to become an Air-Traffic controller. Bethany hopes to then be stationed at Patrick Air Force Base where she will be a short distance from her brothers.

Mark Ryan, who graduated with a B.S. in Aviation Maintenance Management, is now an Eastern Sales Representative in New Haven, Connecticut. Jeff Williams, with a most impressive career, is now doing quality assurance work for the DC-KC10 program for McDonnell Douglas. With a B.S. in Aviation Maintenance Management, Jeff makes sure that everything in the making of DC-10's is up to quality. Michael Toth is now working for Butler Aviation in Louisville, Kentucky. Michael will be remembered as the "GQ" kid whose socks always matched his shirts.

These few past alumni are paving a bright future to the aviation world while giving present brothers an opportunity to look into the future towards their goals in the aviation industry.

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Delta Chi loses first game of tough intramural season

By David Blazar

Once again, it has been a busy week for Delta Chi brothers and pledges. We started the week with our first intramural football loss. Starting quarterback James Frownfelter was injured and taken out of the game on the first play. Even with this handicap, the brothers put up quite a battle. This disappointing game has inspired even more determination

from the Delta Chi Jets.

Pledge class Alpha Gamma recently elected their officers. They are: President, Bret 'J.' LaFrance; Vice-President, Mark Marshall; Secretary, John Murphy; Treasurer, Jim Balmukrovic. Other members of the pledge class include: Paul Brinkman, Louis Brooks, Thomas D'Aurizio, Jeffrey Dolan, John Lesone, George Lyman, Ramiro Montalor, Paul

Reed, Christopher Reilly, Louis Rodriguez and Eric Tisdale. They were initiated as pledges two weeks ago. The brothers would like to congratulate them and extend a hearty welcome. This past weekend the pledges completed their second educational seminar, which was directed by Andrew Schmidt, pledge counselor. Most pledges commented that it was an interesting and very informative seminar.

In the mean time, the brothers continue to maintain the Delta Chi tradition of academic excellence and community service.

Nominations for Who's Who Among Students in American Colleges and Universities' from Delta Chi are: James Brian Frownfelter III, Robert Wilby Denecke, Andrew Joseph Schmidt, Grafton Sherwood Kennedy III, and Geoffrey Craig Murray. Everyone is confident

they will all be selected. Geoff Murray and pledge Eric Tisdale were designated last week in Deland. They exercised their duties by registering dozens of voters between them. Good job men.

Alas, a little relaxation at the end of the week. A hat party engineered by Dave Hewson went

over well with everyone. All types of hats, from the cheapest to the trickiest were displayed by the brothers, pledges and their guests. This weekend, October 13, our Founders Day will be celebrated in grand style by brothers, pledges and alumni at the Treasure Island Inn.

Christian Fellowship to answer questions

By Dawn Keith

Marcie: "Well Edmond, what do you think about God?" Edmond: "I believe in God, but I haven't been to church much lately. I really should start going again." Marcie: "Wow! I can't see why you guys bother with that stuff. What really happened was your parents brain-washed you when you were kids, and now you believe in God." Edmond: "You know she's right. How do we know this God thing isn't just a big fancy? After all, the last words of the Bible were written two-thousand years ago."

Paul: "I can't believe you guys! I don't see how anybody can deny God. When I see a sunset or a thunderstorm, just the wonder of it makes me believe that there's a God." Marcie: "Well, has God spoken to you lately? Seriously though, I think some people take Christianity too literally." I think most of us have experienced a similar conversation with our peers. In fact, God and the meaning of life has always been a controversial subject. People who have lived many years before Christ, had questions we can identify with - Job 14:14 "If a man dies, shall he live again?" or Job 21:7 "Why do the wicked

live, become old, and are mighty in power?" Job 10:1 "And when the Queen of Sheba heard of the fame of Solomon concerning the name of the Lord, she came to prove him with hard questions." A major part of Jesus' ministry was spent answering skeptic questions; The disciples were always perplexed about different issues. Let me ask you a question. What good is a question without an answer? God's word also provides us with the answers, but many of us don't know where or how to look for them. Christian Fellowship Club is extending to you this opportunity to send us your questions concern-

ing God, the Bible, and how they apply to your life. We will base our answers on the Bible: In Proverbs 1:5 it says "A wise man will hear, and will increase learning; and a man of understanding shall attain unto wise counsels." Duet. 4:29 "But if from then on you shall seek the Lord your God, you shall find him, if you seek him with all your heart and with all your soul."

Please submit questions to Christian Fellowship c/o Dawn Keith, Box 6154. They will be answered in the next issue of the Avion.

SAM voices can be heard

By Steve Tierno

Have you ever felt that a college degree in just not important to help you land that important job after college? Perhaps you feel that some experience or contacts may help you "stand above" others competing for the same job.

Perhaps you would like to join an on-campus organization where your voice will be heard and where you can interact with others to increase your understanding of professional management. If this sounds interesting to you, then you should consider joining the Society for the Advancement of Management (SAM).

SAM was created in 1910 by the pioneer of scientific management, Mr. Frederick W. Taylor. Taylor got together with some of his colleagues, including Frank and Lillian Gilbreth. As a result, SAM has helped more than a million managers to become more effective in their jobs.

SAM gives one the opportunity to reconcile theory with actual

business practice by associating with the practicing manager, many of whom are members of the 70 Senior Chapters throughout the continent.

Here at the Embry-Riddle Chapter, we assist student members in learning the practice of professional management through interaction with faculty and practicing managers and by participation in chapter management.

We feel that by joining SAM, you will: (1) Learn more about the real world of business through actual meetings and conferences, (2) Be prepared for the transition from college to your first career position, (3) Hear carefully selected top experts teach you how to handle specific problems, (4) Learn management principles that may be applied to given situations in your personal life, (5) Gain an increased understanding of the practice of professional management, (6) Develop useful contacts for business and personal use, (7) Obtain an understanding of public speaking and begin to

develop conference leadership skills, and (8) Receive a head start in your management training.

In addition, there are some benefits exclusive to the E-RAU chapter of SAM. They include: (1) 15 percent discount on Budget Rent-a-car, (2) Incredible card from Day's Inn-Hotel, (3) Holiday Pay Less Rent-a-car discounts, (4) Members of the Passport Club, (5) Corporate Rate Program from Alamo Rent-a-car, (6) Members of the Executive Club, and (7) 5000 Free bonus points on Eastern Airlines Frequent Flyer program.

This semester, SAM has many activities planned, including an overnight trip to Miami International Airport and various interesting teachings from qualified experts. So why not get your career off to a flying start by joining SAM. Our next meeting will be on Wednesday, October 10 at 7:30 p.m. in B-303. If you have any questions or desire further information, please contact Deryck Nicholson, Box 6649 or Steve Tierno, Box 5490.

Sigma Chi starts season well

By Ted Sandoval

The Sigma Chi football team has been ranked as having the number 1 offense of the season thus far. The season has started off with a favorable record of 3 and 0 with the last two games scoring in the forty's range. Captain Joe Torch gives the majority of the credit not exclusively to his keen passing, but to his fine receivers for catching them. The defensive squad is doing equally as well even though they have not been credited as such. As the season progresses, the defense will surely be able to prove themselves as the number one ranked defense. The Sigma Chi player of the week is Bill Krebs, captain of the defensive squad, who solely intercepted two passes and ran both interceptions back for touchdowns in last week's game. The final score between Sigma Chi and Lambda Chi Alpha was 40-6.

Over the week, Sigma Chi had a very busy schedule of activities. The football hoodlum was enjoyed by all as everyone "square" danced the night away. We thank the "Alpha Z's", Alpha X-Delta Sorority from Stetson University, for coming down and having a grand of time with us. We look forward to hosting two other sororities from Stetson as well: the Phi Mu's and the Kappa Alpha Theta's. The Little Sister formal rush, directed by Bill Lower, had a successful turnout Saturday night. Bids will be given out shortly to these beautiful ladies. Sigma Chi also wishes to announce that Joe Orcutt, Ed Ahmed, John Statham, Dan Eberhardt, Carmine Repucci and Chris Thiel were added to the Alpha Eta pledge class. The Eta-Lota chapter wish these men the best of luck and a productive trimester as well.

Again, Sigma Chi reminds everyone about our annual blood

drive (Oct. 25-26) and the upcoming triathlon which will benefit the central Florida Diabetes Foundation. Please be generous and help support these worthy causes that we are so proud to sponsor.

AAS elects officers

By AAS 1LT, David Brescia

The Arnold Air Society pledges have formally embarked on their quest for membership with the election of pledge class officers.

The pledges elected to office are: President, Tom Meade; Vice-President, Bill Polite; Treasurer, Mark Sardelli; Secretary, Lynn Anderson. They now begin service projects,

Sigma Phi proud to announce new fraternity men

By Ron Zyzyucis

Sigma Phi is proud to announce that they have accepted nine good men to come and pledge with the hopes of becoming brothers of Embry-Riddle's newest Social Fraternity. These men have embarked on an interesting adventure which can only have a positive affect on the rest of their lives. Hopefully, at the conclusion of their eight-week pledge program, they will be able to walk away with their lives enriched and a little bit more exciting. So for the rest of you out there if you see a group of men walking through campus with their heads held a little higher and their smile a little wider you'll know that they are Beta Pledge Class of Sigma Phi Fraternity.

Sigma Phi has high hopes for their 1984 Flag Football Season after their impressive 2-0-1 start. This is a new team who this time last year couldn't win a single game. Sigma Phi's unbelievable success can be attributed to a "mass confusion" defense which has only allowed six points in three games, two of which were shutouts. Sigma Phi's defense is currently tied for the tops in the league. We are really looking forward to playing Alpha Eta Rho and Sigma Chi, who's teams are also talented.

Runners are moving out

On Saturday, September 29th, Embry-Riddle Running Club traveled to the University of Central Florida, in Orlando, to compete in the Threshold Run for the kids. Dave Walters, of Orlando, was the first of nine hundred competitors to finish the 3.1 mile course. Walters, running for the Athletic Attic, set a new course record of 14:37.

In the team competition E-RAU finished fourth narrowly edged out of third by Brevard Community College. Leading

Embry-Riddle was Jeff Steen who placed 40th overall in a time of 16:43. Close on his heels was Nick Sijanin who finished in 16:54, 47th overall. Also finishing for Embry-Riddle was Tom Waiserman in 19:46, 177th overall. Robert Glascock in 20:57, 229th overall, and Tim Walker in 25:13, 449th overall.

Proceeds of the event are donated to Threshold. Threshold is a program at U.C.F. for disabled children.

Computer Club to sponsor series of talks and tours

By Kathy Harris

There will be a Steam Blow-Off Session, Friday, October 12, at Dr. B.J.'s (across from the Speedway at the Holiday Inn) at 5:30 p.m. and we'll hold an informal meeting to elect officers.

Anyone interested in touring Southern Bell's and AT&T's Switch Rooms in Daytona, contact Cathy at 255-7706 or stop by room G-104. It is set for October 24 at 3:00 p.m. (Wednesday).

I want to thank everyone for the fabulous turnout for the presentation on October 3 by Mr. Doug Pearson; Jacksonville

Enroute ATC Center. He spoke on "Future Automation in ATC and Computers." Some topics covered were the past, present and future innovations in ATC and computers, such as the Flight Service Station consisting of automatic system monitoring, and A-D navigation among other things.

State of the art is here and now! Stop by and see Cathy if you'd like to take the FAA Written ATC Test, deadline for sign-up is October 31; applications must be post-marked by then. Testing should begin in late November.

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Arianespace to launch satellites

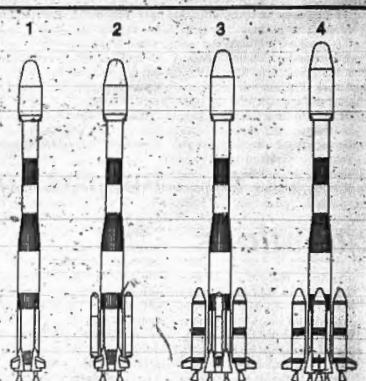
By Tim Van Milligan

On November 9, two satellites will be launched into earth orbit from the Guayana Space Center in Kourou, Guiana by Arianespace.

The Ariane 3 rocket will carry the Spacenet satellite owned by G.T.E. Spacenet, and the MARECS B2 satellite which is owned by the International Maritime Satellite Organization.

The Ariane rocket is operated by Arianespace Limited Company, which is a joint venture by 36 European manufacturers, 13 European banks, and the French Centre National d'Etudes Spatiales (CNES). These investors represent a total of 10 European countries: Belgium, Denmark, France, Germany, Italy, Netherlands, Spain, Sweden, Switzerland and the United Kingdom.

For a flat rate price of about \$25-30 million dollars for each satellite on a dual rocket launch, Arianespace offers its customers with complete set of services, covering all operations from the arrival of the satellite, to the actual injection into GEO (Geosynchronous transfer orbit), including positioning, spin-up and



The Ariane family of launch vehicles as numbered are: (1) The Ariane 2, which is an elongated, updated Ariane 1. (2) The Ariane 3, with two solid rocket boosters attached to a structurally strengthened Ariane 2. (3) This rocket will launch the two satellites on Nov. 9. (4) Two different versions of the Ariane 4, the first with two liquid- and two solid-rocket boosters, and the second with four liquid-fueled boosters.

separation tasks. Arianespace claims that with these Ariane rockets, they can place satellites in to more precise orbits than other launchers, namely the Space Shuttle.

The Ariane rockets, which Arianespace uses to launch satellites, can be modified to give a total of four different versions. The first stage of the Ariane rocket uses four Viking V engines, developing a thrust of 540,000 pounds at liftoff. The second stage uses one Viking IV engine which develops 158,700 pounds of thrust. The third stage is the first cryogenic stage developed in Europe, burning liquid hydrogen and liquid oxygen and producing 13,200 pounds of thrust from a HM7 engine.

The Ariane 2 rocket is an elongated Ariane rocket that also has updated thrust in each stage. The Ariane 3 rocket uses two solid strap-on boosters that develop 148,400 pounds of thrust each. The Ariane 4 uses liquid strap-on boosters, either with or without solid strap-on boosters to an elongated first stage. The first Ariane 4 will fly sometime in 1986.

The Aerospace Observer

'Star wars' not so far out

[Editor's Note: The following is a guest editorial from Avion reporter Pat McCarthy. Pat is extremely active as a reporter for the Space Technology desk and has a long history of keeping abreast of the aerospace industry.]

MAD - Mutual Assured Destruction. For thirty-nine years, the United States has based its defense on a "Balance of Terror." Each side so strong and so offensively over-armed that the other side doesn't dare risk attack for fear of massive retaliation. Both sides held hostage by the actions of their acknowledged enemy. Both sides offer their own populations as bargaining chips for the truth of the other.

The arms race has escalated to the point where many people have given up all hope of ever changing the philosophy of MAD. They feel resigned to an "inevitable" war. They refuse to acknowledge the possibility of an alternative.

But there is an alternative. In March 1983, the President proposed a "Strategic Defense Initiative"; the development of a Ballistic Missile Defense (BMD).

The popular media immediately slapped a label on the idea, the derisive "Star Wars" moniker. This left the general populace with the notion the BMD scheme was based on comic-book science fiction. Entrenched, narrow-minded politicians, diplomats, and academics immediately denounced the idea as technologically unfeasible. It is no longer.

The MAD concept is based on a 40 year-old axiom of "no defense, all offense." Both sides possess weapons of such awesome capability, neither is willing to back down. The stalemate of the Cold War has resulted. Increasing tensions and mistrust have made MAD a very risky policy. The possibility of a war erupting due to an accident or computer system failure is a very real threat, perhaps more so than the possibility of a true attack.

Some propose a nuclear freeze or nuclear disarmament as an alternative. This is wishful thinking. Treaties and verification would only work temporarily, if at all. History would repeat itself. One side might follow the rules, but the other might not, or might pretend to follow them. Trust among nations is too fragile a concept on which to stake the lives of millions.

The only viable alternative to Assured Destruction is Assured Survival. A system of space- and ground-based missile defense is becoming technologically practical. A layered "shield" of space-based lasers and particle beams, kinetic-energy kill weapons, and ground-based lasers and point defense systems could be built. And it could be effective enough to blunt a nuclear-missile attack.

In the past, the hurdles to develop such a system have been too great. But with the rapid growth of new technologies in defensive weapons, it has become possible to produce such a shield.

We now have available the computing power in small enough (and smart enough) packages to make anti-ICBM weapons possible. The laser beam and the requisite targeting and aiming technologies are available now, and these capabilities will only improve with time.

We can soon have an effective BMD in place. Both in-orbit (launched by heavy-lift launch vehicles now in the planning stages) and on the ground. It is now possible to remove the threat of MAD, once and for all.

The question is no longer, if we can do it, but only when we shall do it.

Paving the path to the Space Shuttle program

Lifting Bodies provided space research

By Brian Hopkins
Avion Staff Contributor

Before the current space shuttle fleet, before the test orbiter Enterprise, NASA and the Air Force studied maneuverable manned re-entry with aircraft known as Lifting Bodies. These craft took their name from the fact that the lift produced came from their fuselage rather than their wings.

Some of the aircraft involved included Martin's X-24A and X-24B, and Northrop's HL-10 and M2 series; the M2-F1, F2 and F3. All of these vehicles flew as part of American studies into spaceflight.

Early into the space program, it was decided that a reusable space vehicle would be needed for any long term involvement in space. NASA, the Air Force and private contractors all started to study various shapes and designs suitable for use.

One of the first designs to be approved was a NASA Ames

modified half-cone which was designated the M2. This was first tested in flight with a radio-controlled model in 1962. The success of this model encouraged NASA to build a manned glider in this shape.

In late 1962 and early 1963, the M2-F1 was built by the Salligance Corporation of America and NASA's Flight Research Center. The M2-F1 was unpowered and was towed to release altitude behind either a modified Pontiac or a NASA DC-3. The F1 served not only as an experimental aircraft in its own right, but also served as a checkout aircraft for all the lifting bodies which followed. Over 100 flights were completed in the M2-F1 before it was retired.

The success of the M2-F1 was so high that the go ahead was given for more complex ships. Northrop won a contract in June of 1964 to build two aircraft, the M2-F2 and the HL-10. The M2-F2 was the delivered first, and in the summer of 1966 made



This NASA/Northrop M2-F2 Lifting Body was flown from 1966 to 1967 and demonstrated the ability to make precision landings with a wingless reentry vehicle. This is the aircraft seen crashing in the beginning of "The Six Million Dollar Man."

its first flight when it was dropped from a NB-52 mothership. The F2 made a further 13 flights as an engineless craft, and was then grounded for installation of its powerplant. (This powerplant, the XLR-11, was used in the X-15 and the X-15 as well as the other lifting bodies.)

Soon after resumption of flight duties, the M2-F2 was in an accident that shook the lifting body program. On May 10, 1967, on its second flight after engine mating, the M2-F2 crashed on landing, severely injuring NASA

pilot Bruce Peterson. (This crash was shown regularly on TV as the introduction of "The Six Million Dollar Man" program.) Prior problems with handling pointed to the cause of the crash and NASA soon decided to rebuild and refine the M2-F2.

Although the aircraft looked to be in horrible shape, the structure was salvageable and in 1970 the vehicle reappeared as the M2-F3. The F3 had an additional vertical fin on the aircraft's centerline and a reaction jet control added to the M2-F2 design.

This revised ship flew in June 1970 and continued to explore wingless flight until December 1972.

The second design, from NASA Langley, was called the Horizontal Lander design 10 (HL-10) rolled out from Northrop in January 1966, making its first flight in December of that year. That flight was unsatisfactory from a controllability standpoint, so the HL-10 went back for a minor rework. The HL-10s next flight on March 15, 1968 was a great success, and the ship went

on to make a further 35 flights. These flights included many records for the program, including first supersonic flight, fastest flight of Mach 1.86 and highest flight made by a lifting body, one of just over 90,000 feet.

Perhaps the most notable area of research that the HL-10 worked in is that of landing techniques for the shuttle. Flights were made using various methods of landing approach, both powered and unpowered to determine what would be best for the orbiter. Pilots of the lifting bodies reached the conclusion during these tests that the higher workload during the landing cycle made a powered landing inadvisable.

The final aircraft of the lifting body trio, the X-24, was a joint USAF-Martin design. Initially flown as a test reentry vehicle launched from atop an Atlas booster, this design was called the XV-5D by Martin and the F-23 by the Air Force. Four of these seven-foot long bodies were built, but the program was so successful that only three were used.

On the basis of these high speed flight tests, Martin built the piloted version of the design, the XV-5D. This craft, which became known as the X-24A, was rolled out of the Martin plant in Maryland in July of 1967. Wind tunnel tests were undertaken as part of the standard pre-flight testing, and then the X-24 was delivered to the high desert of the Edwards AFB complex.

See LIFTING BODY, page 9

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The 99s - International Organization of Women Pilots will have an organizational meeting on Tuesday October 16, 1984 at 6:30 p.m. The meeting will be in room H107. If you are interested in becoming a member, or just want to find out more about the 99s - please attend. Anyone interested who cannot make the meeting, please contact Cindy Gruber - Ext. 1308

More than 400 companies represented

Atlanta hosts NBAA bonanza

By William Foulk

The National Business Aircraft Association (NBAA) held its 37th annual convention last week at the Georgia World Congress Center in downtown Atlanta. More than 400 aviation manufacturers and service organizations showed their wares in two convention halls and at Atlanta's Fulton County Airport.

The show was highlighted by over ten mock-ups of aircraft currently under development. The most noteworthy were the Falcon 900 and Gulfstream IV business jets. Although many helicopters were displayed in the huge convention center, the only flyable airplanes present were an immaculate W.W. II Grumman Hellcat displayed by Butter Aviation and the new Beechcraft Super Kingair 300.

During the three day convention Operations and Maintenance Seminars were conducted by the manufacturers.

Other meetings included a series of symposiums with the FAA on ATC and airport delays. FAA Administrator Donald Engen was present to discuss several new policies. In response to the FAA's efforts to reduce congestion and delays, NBAA introduced the FASST (File Around Saturated Sectors and Terminals) program which consists of procedures to help both the operator and the ATC system.

The Fulton County Airport had its share of congestion last week. The airport hosted a static display of over 50 aircraft. The most notable aircraft, was the Israeli Astra business jet. The Astra prototype, a rewinged version of the Westwind, recently flew coast to coast westbound at Mach 0.8 nonstop.

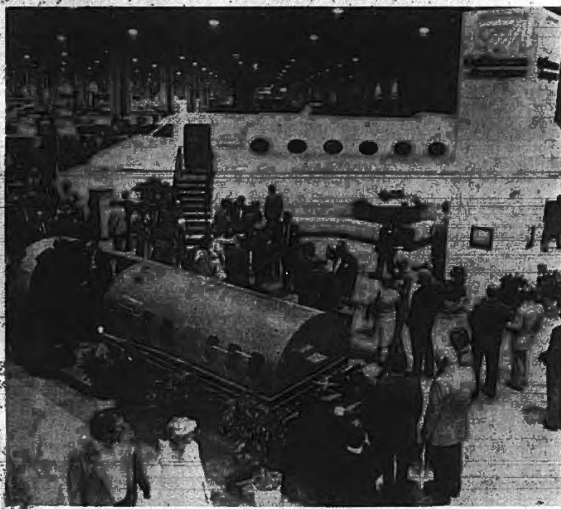
Although the general aviation market is down and many manufacturers have laid off workers, Learjet has suspended production indefinitely. A gradual improvement is expected over the next several years.



Sikorsky's sleek 8-76 executive helicopter is displayed next to its grandfather, the VS-300 which Igor Sikorsky first flew on September 14, 1939 (above).

Fulton County Airport hosted a static display of over 40 aircraft. More than 130 visiting business jets parked on a closed runway and clogged ramp areas (below).

Gulfstream Aerospace unveiled a mock-up of the Gulfstream IV executive jet and the single-jet Peregrine (right).



Lifting Body

(continued from page 8)

As initially flown, the X-24A was an unusual looking craft, not as sleek in design perhaps when compared to the other lifting bodies. But looks are not the way to judge an aircraft, least of all research aircraft. The 24A was a very profitable test vehicle, even though it was not a "creampuff" to fly. One major fault with the craft showed NASA engineers the importance of trim changes and resultant pitch angles.

The first flight, was made in April of 1969, as the X-24A was released from an NB-52 mother-ship. The 24A made a further 28 flights, contributing much to the lifting body program. The X-24's life did not end there however, the 24A evolved into the X-24B, a more efficient shape but one that bore enough similarity to its predecessor that the airframe was slipped over the basic structure of the X-24A.

This "new" craft returned to Edwards after rebuild by Martin,

and made its first flight in its new guise on August 1, 1973. The X-24B was the last lifting body to fly, and as the shuttle program and the lifting body programs

LIFTING BODY PILOTS

William Dana, NASA; Elmar Enevoldson, NASA; Jerauld Gentry, USAF; Peter Hoag, USAF; Michael Love, USAF; John Mankie, NASA; Thomas McMurtry, NASA; Bruce Peterson, NASA; Cecil Powell, USAF; Francis Scobee, USAF; Donald Sorlie, USAF; Milton Thompson, NASA; Charles Yeager, USAF.

(*now shuttle crew)

came closer together, the flights made in the 24B were flown closer to a shuttle landing profile. One important feat demonstrated during these final tests was the ability to land on a concrete run-

way within 500 feet of a pre-planned landing spot.

In late November of 1975, the X-24B made its final flight. This last flight was notable not only for being the end of a successful multitude of lifting body flights, but also in that it would be almost 9 years before another X-plane flight (the X-29A) would be scheduled. Some 2 years after the 36th and final flight of the X-24B, the shuttle Enterprise underwent flight testing at the Edwards/Dryden complex, flying down a path blazed in part by a collection of unsung heroes, the lifting bodies.

Next week in Space Technology:

- ▶ Challenger landing
- ▶ Space Van plan
- ▶ A-12 feature

Challenger

(continued from page 1)

Saturday's agenda also included the operation of the OSTA-3 (Office of Space and Terrestrial Application) payload, but problems arose which threatened the outcome of the experiment.

OSTA-3 is a pallet consisting of four experiments: the Shuttle Imaging Radar (SIR-B), Large Format Camera (LFC), Measurement of Air Pollution from Satellites (MAPS) and Feature Identification and Location Experiment (FILE). Two of the four experiments involved the use of steerable antennae, and both of these antennae failed to move when data were to be taken.

The situation was corrected on Sunday, however, when Commander Bob Crippen maneuvered the entire orbiter around so that the antennae would point toward the TDRS spacecraft (Tracking and Data

Relay Satellite). The frequency of the OSTA-3 data takes were then changed to Ku-band in order to be received by TDRS's Ku-band "ears" to be then sent to earth.

According to NASA, the present situation with OSTA-3 will allow about 75 percent of the originally planned data takes to be sent to earth. Because the antennae cannot be remotely retracted, however, the historic spacewalk involving Mission Specialist Kathy Sullivan will occur tomorrow at 11:00 a.m. instead of yesterday, so that the antennae can be manually retracted in order to be out of the way for the two astronauts.

This spacewalk will consist of the final hyrazine fuel transfer. Kathy Sullivan and the alternate Lettsma will don their spacesuits and proceed to the aft end of the payload bay where they will

remove a hydrazine servicing tool from a fuel supply tank and connect it to the ground fill panel, thus completing the fuel supply link.

Other activities of Mission 41-G include a series of ten experiments sponsored by Canada. Canadian Payload Specialist Marc Garneau. These experiments are divided into three categories: space technology, space science and life sciences.

If all goes well for Challenger during the next few days, and if Tropical Storm Josephine does not intervene, Mission 41-G will conclude with a landing back here on Runway 33 at Kennedy Space Center scheduled for 12:25 p.m. Saturday, Oct. 13. The alternate landing site is Edwards AFB.

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12th annual Riddle Regatta

This year the E-RAU Vets Club raised a record breaking sum for LIHles of the Field Day School.



Photo by Rich Gray



Photo by Rich Gray



Photo by Rich Gray

Above left; Dean Rookett takes a few moments to review one of the entries before the race begins. Above; Alpha Eta Rho races out of the water for the finish line in an effort to beat last years time. Above right; a lone entry looks a bit tired after it's all over.



Photo by Brian Finnegan



Photo by Scott Hoffmann



Photo by Brian Finnegan

Below left; Army ROTC Cadets make their grand entrance. Below; Vet's Club President Dave Sava and Regatta Organizer, Debbie Lemoine stand proudly next to the 1984 donations board.



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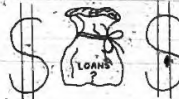
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Photo by Scott Featherstone

The Avion wishes to congratulate the Vets Club for this year's Regatta.

Left and right; Marine Corps' PLC and Army ROTC teams prepare for the race. The ongoing rivalry between these two military organizations adds excitement to each year's Regatta.



Photo by Brian Pennington

Far left; A crew entered in the Drinking Establishments special category enjoys the Regatta. Left; The Shark, last year's overall winner, finishes first in the individual category.



Photo by Scott Featherstone



Photo by Rob Gray

Below left; A Regatta entrant takes time out before the race for some air-guitar practice.

Below and right; The winning team, Spledi Shack, completes a near-perfect race.



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NASA: the early, days of rocket flight

By Jim Banke

When it comes to genius, NASA sure has a great history. The important, intelligent men who brought us to the moon, and who send the Space Shuttle into orbit and bring it back, are the "Descendants" of other geniuses who paved the way for man to fly in space.

Space travel was first created in the minds of such men as Johannes Kepler, Jules Verne, and H.G. Wells. They wrote of trips to the moon, Mars, and the stars. The stories these men dreamed up were important.

The Chinese were first to see rockets going into the air. The means of propulsion back in 220 B.C. was blackpowder. These simple rockets were nothing more than firecrackers, yet the principle of rocketry was off to a start. Isaac Newton defined this principle of rocketry in his third law (Every action has an equal opposite reaction). He said of this law, "This is the principle which will enable mankind in coming centuries to undertake flight to the stars."

It was at the beginning of this century that a trio of NASA's "descendants" brought rocketry to its modern development. The "Father of Space Travel" was a Russian, Konstantin Tsiolkovsky. He became deaf at an early age giving him incredible abilities to concentrate. He turned his thoughts to the stars and made some important findings: Only some form of propulsion based on Newton's third law would

work in space. Liquid fueled rockets would be necessary in the vacuum of space, this would also be more powerful than a solid rocket. Tsiolkovsky also envisioned the use of what he called a "Rocket Train", an early description of what we call staging a rocket. His contributions were important in giving others a base to start from.

The United States member of this trio was our own "Father of Modern Rocketry", Robert Goddard. Inspired by H.O. Wells' "War of the Worlds" Goddard dedicated his life to building a

rocket in space. Hermann Oberth of Germany. Oberth had read of trips to the moon and wanted to find a way to actually do it. He read of Goddard's work in 1922, and later produced the results of his own research in a writing entitled "Die Rakete zu den Planetenraumen". This writing told of flight in space by rockets and even proposes the world's first space station. Oberth worked very hard publicizing the importance of rocket research. He was once hired by a film company that wanted Oberth to design, build, and fly a rocket as

outside of Berlin in Kummerdorf. Hermann Oberth, as near as I can tell, is still alive in Germany telling others of the advances made in rocketry.

The 1930's saw the real advances in rocketry that led to the need for NASA in 1958. These developments occurred in an Oberth-inspired war-ravaged Germany. The rocket team at Kummerdorf quickly outgrew the base and a new site was selected that stood on the Baltic coast by a town called Penzance. It was in Penzance that all the pieces fell in place.

As World War II went on, a desperate Hitler turned to the team at Penzance for a weapon of vengeance. Hitler wanted a rocket capable of lifting a one ton warhead over 200 miles. The answer was the A-4, a rocket that the von Braun team had had on the drawing board but lacked the funds to proceed with. The world got to know this rocket better as the V-2. The V-2 was the key to the space age. The scientists and engineers at this rocket base learned many valuable concepts from the V-2. It was the first rocket to break the sound barrier and it displayed a crude guidance system. Many other things were tried but they kept learning from their mistakes. The German team dreamed of one day being able to launch their rockets not at people, but at the stars and planets.

The United States also had a dream. They wanted to get a hold of as much German rocket supplies and scientists as possible. If

we could capture the V-2 with our new atom bomb we would have some kind of ultimate weapon! As the war drew to a close, the responsibility of capturing these German prizes went to Colonel Holger N. Toftoy. His secret mission was to become known as Operation Paperclip.

As Paperclip was organized in the U.S., the German rocket team heard the Russian guns getting closer to Penzance each day. Von Braun and his men had to make a choice. They wanted to continue their work and they felt the Americans were more open to rocket research. After all, hadn't Robert Goddard been an American? They had also heard brutal stories of the Russian Front, and they also feared for their lives as rumors were present that said the S.S. would not allow any country access to Germany's rockets or men. The team decided to move west and meet the Americans. The story of their escape is enormous in its drama. (James Michener's book SPACE has an excellent account) On May 2, 1945, the Germans met and surrendered to the Americans.

During the 40's and early 50's the German rocket team found themselves working for the Army at the Redstone Arsenal in Alabama. They tested their rockets at White Sands, New Mexico, and eventually at Cape Canaveral. V-2's were improved, and other rockets were built. The Redstone, Viking, and Jupiter rockets were developed as well as many smaller rockets. The Germans wanted to build large rockets, but our nuclear bombs were getting smaller and lighter so no money was available. The Germans kept their ideas on the back burner as the world came upon a sudden change.

The United States in the 50's was in a technological war with the Russians. This eventually was known as the Cold War. We knew that as long as we were more advanced we were safe and no one would push the button. This is still known as deterrence. We had nothing to fear. In two years that was all to change.

On October 4, 1957, just over 27 years ago, the Soviet Union literally shook the world by placing in orbit the world's first artificial satellite. Sputnik 1 was quickly followed by Sputnik 2 occupied by the dog Laika, and in May of 1958 Sputnik 3 went up. This latest satellite weighed almost 3000 pounds. Russia clearly had better rockets than the U.S. If Russia can orbit 3000 pounds of payload, what size nuclear warheads can they lob onto our country? We had to show that we were as capable too and fast! The Navy thought they might have the answer in their Vanguard. The new media swarmed to Cape Canaveral as the missile flew with a small satellite

on top was readied for launch. In the full view of the world on live TV and radio, the Vanguard lifted off its launch pad a few feet and then blew up in a huge ball of flame. Realistically this was no big deal. Our rocketry was still very much in the experimental stage and this happened all the time. But not with all this media coverage. We became the laughing stock of the world, and Russia wondered if we were really a superpower after all.

The German team in Alabama had some success with their projects, but the United States did not entirely trust them. The Germans kept talking of a huge booster that could send men to the moon, and this kind of talk was not popular. After the disaster with Vanguard the government decided to take a chance with von Braun after von Braun had said, "Give me 90 days and some more money." (For something to that effect). Maybe his team could do it. Von Braun was a truly prepared genius. He had a Jupiter C rocket all set and "kept in the closet...just in case," at the Redstone Arsenal. On January 31, 1958, the Jupiter von Braun had kept in cold storage successfully carried Explorer 1 into orbit. Explorer 1 did more than just beep like Sputnik 1, it discovered a band of intense radiation that was thought to have existed. The belts of radiation were named for the man who had shot to do with the satellite at the Jet Propulsion Laboratory, James Van Allen.

The United States, greatly motivated with the success of Explorer, decided that we should have a national policy on space. We should form some sort of civilian agency that would oversee and deal with the important developments that must happen if we were to stay ahead (Catch up first!) of the Russians. In 1958 President Eisenhower signed the National Aeronautics and Space Act, created to promote the peaceful scientific exploration of space. Actually our new space agency was created in an atmosphere of fear, perhaps a little shame and in the determination that the U.S. will stay the worlds technological leader.

On October 1, 1958 NASA began official operations. NASA started big, taking over many organizations including the National Advisory Committee on Aeronautics. NACA had been around since before World War I and had been responsible for coordinating developments of all things aeronautical.

With this impressive team and many others NASA was willing and able to tackle a space program, but what should be done first? Once again, Russia provided the direction.

The United States member of this trio was our own "Father of Modern Rocketry" Robert Goddard.

Goddard dedicated his life to building a ship that might make the trip to Mars.

ship that might make the trip to Mars. Goddard saw the power in a liquid-fueled rocket, and on March 16, 1926 the world's first liquid-fueled rocket was successfully launched. It flew 41 feet high at 60 miles-per-hour. Goddard continued to advance in his research of rocketry gaining the moral support of Charles Lindbergh, and the financial support of the Guggenheim Foundation. By the time he died in 1945, Goddard had 214 patents dealing with modern rocket systems.

The last member of this trio is perhaps the most important. He

a publicity stunt for a picture called "Off to the Moon". The men he gathered to help him with this project included a young student named Werner von Braun. Although a mentor for the rocket war, Oberth realized "It would never fly. Too many changes were required to produce a flying model, and even in 1930, funding made the birds go by. The film company ran out of money and the project was cancelled. Oberth returned to his home town to teach and the rest of his team found themselves working for the German army

Internem" reports Keith Kirby, co-op ed director at Wichita State University. "For the first time, employers are calling us for students."

"We register about 2000 students yearly," adds Marilyn Perry of Brigham Young's co-op education office. "Sometimes there are more students than openings. But, while we still do some looking for positions, more and more companies are coming to us with positions. And placements are definitely up."

"The economic upswing also is providing an abundance of internships for North Texas State students, especially in "high tech" industries, says NTS program director Diane Altenloh. "Jobs are booming in this area," she maintains. "And we're close enough to Dallas/Fort Worth that we can place our students there, too."

And Illinois State University reports a growing number of employers are recruiting students from cooperative education, then hiring them upon graduation. "It's not guaranteed," explains Bill Kirp, engineering supervisor at Monsanto's East St.

Louis, Ill., plant, which takes on "two or three" engineering students a semester. "But we've hired quite a number of them." ISU's employer/student ration varies from day to day, says Dr. Marilyn Laurentz, head of the campus program. "But we're maintaining a pretty solid balance."

Not all colleges, of course, are doing as well in placing students through cooperative education programs, which place students in career-related positions with companies and allow them to earn academic credit, often while getting a salary. "In the last two semesters, the program has shown a decline," admits Lewis Hainlin of Drake University in Des Moines. Hainlin attributes a 10-to-12 percent drop in the number of students it places to the loss of a federal grant.

"There are lots of positions in insurance, accounting, management and communications," he laments, "but it's hard to find positions for liberal and fine arts students."

New state regulations plus a drop in the number of paid posi-

tions has cut student participation in Miami-Dade Community College's program by five percent this semester.

"Florida mandates certain tests before students can enter their junior year," explains Dr. Roger Wadsworth, co-op director. "Students need to take more courses to pass the tests, so they don't want to pay for co-op credits."

Still, the college generally has more students apply "than we can find meaningful jobs for," Wadsworth notes. "And even with all our extra recruiting this semester, we came out with a five percent drop."

The relatively few programs lagging now and those that dropped during the recent recession, have inspired the National Commission for Cooperative Education to attempt a campaign to improve them.

"The commission plans a multi-million dollar media blitz to rejuvenate depressed programs and establish new ones, reports Dr. John Dromgoole, the commission's research director. Dromgoole maintains co-op ed is growing, although the number

of colleges with programs has leveled off last year at about 900 from a 1981 high of 1017.

Inactive programs removed from the commission's list caused the decrease, he claims.

About 175,000 students participate in co-op ed yearly, he estimates. "The biggest problem is that about 80 percent of those students are enrolled in about 25 percent of the programs," he observes.

The commission hopes the ad campaign will double the number of "legitimate" participants by 1989.

While nationwide statistics for this year's co-op ed programs aren't out yet, a number of administrators believe the upswing already has begun.

Wichita State's Kirby thanks an emergence from "the depths of economic chaos" and his five-year-old program's "maturity" for the boom in internships.

Brigham Young's Perry notes her program has always fluctuated with the economy, and that a recent change in BYU's registration procedures also kept some students away.

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