

8-8-1984

## Avion 1984-08-08

Embry-Riddle Aeronautical University

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The award-winning newspaper  
of Embry Riddle

August 6, 1984  
Volume 47, Issue 8



AMT's newly refurbished Pitts Special waits while the SGA and Maintenance faculty

decide whether or not it will hang in the U.C.

Photos: photos by Lisa Roper

'Source of pride'

Entertainment Committee offers staff many personal rewards and benefits

By Brian F. Finnegan

With an eye to the future and a finger on the pulse of student desires, the Student Government Association's Entertainment Committee is driving toward new goals in on-campus student productions. As an integral part of achieving these goals, Entertainment Chairman, Dave Marler, feels that experienced planning, responsible booking of acts and a motivated staff are critical.

In his quest to learn the finer points of negotiating with talent prior to their appearance on campus, Marler, a Computer Science major, and Kathy Novak, the Director of Student Activities, attended the Contemporary Concert Management Production workshop during the second week of July.

"It was strictly a hands-on work session," said Novak of the Middle Tennessee University sponsored event held at Vanderbilt University in Nashville. "I feel responsible to the students to let them know what we accomplished there," said Marler. "I used their S.G.A. money to go there and bring back knowledge that will hopefully save them money in the future to put on better quality produc-

tions," Novak, who is also advisor to the Entertainment Committee and manager of the University Center, was sent to the workshop with money budgeted by the university.

The four-day workshop, held July 11-15, featured sessions in contract negotiation, talent selection and in methods of dealing with talent agents whose intentions may not be in the best interest of the university.

The sessions were broken down into areas dealing with large and small concerns. "Because we were fortunate enough to have two members present," noted Marler, "we were able to attend both sessions and compare our information later."

Marler said the Entertainment Committee is a "source of pride" for him. "We are one of the few organizations which put on campus shows that is almost entirely student staffed. We select all the acts which appear on campus and do all the preliminary negotiations. Many schools hire full-time staff whose only job is to organize entertainment." The Provost signs all contracts here and Novak is officially the contact person. Part of her job description is to be at all enter-

tainment functions on campus.

"I have a much better view of the whole industry than I did before," emphasized Marler, "but it's still a matter of experience. I'm trying to avoid the trial and error before we really get down and do a big concert. With Kathy's help and the help of the rest of the S.G.A., I think I'm ready to pull it off and present a good production."

Marler and Novak spoke at length of the dedication and motivation of the Entertainment staff. "Some people show up at 9 o'clock in the morning for a show that's at 7 o'clock the following night and spend, usually, the whole day here without any breaks. They're here three or four hours after the fact," said Novak. "They're will-

See Marler, page 2

'No safety hazard'

By Ali Saadeh

"If there is any concern for safety, I would be standing there with my hand in the air, holding the building up," commented a concerned Charles Fountain, Director of Business Administration.

The deterioration of the library academic complex columns is "purely cosmetic," says Fountain. "There is no safety hazard."

During a routine inspection of the E-RAU campus, Fountain noticed the initial signs of the deterioration. Fountain immediately contacted a structural engineer who offered to test the structure without charging the university a fee.

The reason for the deterioration was that the steel supports

Private shuttle ground school trains future pilots

By Jonathan Russell

Many of us would like to be astronauts piloting a spacecraft such as the shuttle. The possibility of doing something like this seems quite remote due mainly to the strict requirements for this position at NASA.

The American Society of Aerospace Pilots (ASAP) has seen that NASA has only a few dozen pilot astronauts and believes that this needs to be changed. The reason for this change is that ASAP believes by the 1988-94 time period there will be a demand for approximately 150 pilots in order to fill the need of commercial shuttle flights. In other words, ASAP wants to prepare the commercial industry to begin investing in space, spacecraft and the necessary personnel to operate these spacecraft. ASAP said that this pilot need could rise to the thousands by the year 2000 if industry responds.

The American Society of Aerospace Pilots, who heads ASAP as its National Chairman, is an airline pilot who, along with other members of ASAP, believes that the time to prepare for flying the shuttle is now. He said that as it presently stands, there are not enough qualified people for the kind of expansion that may be just around the corner. This is why ASAP has started its program to train people on flying the space shuttle. He said that ASAP would probably be expanding to train in other areas that are necessary for shuttle operation.

Currently there are about 1000 members in ASAP of which 100 are full members. 450 consist of general memberships and the other 450 comprise the student and pilot memberships.

ASAP offers different memberships depending upon a person's qualifications. Full membership is available to people

who possess an ATP or commercial pilot certificate with instrument and multi-engine ratings and 2000 hours total flight time. Of these 2000 hours, 1000 must be in high performance aircraft or piston engine aircraft over 12,500 pounds.

A full member must also enroll in ASAP's Basic Spaceflight Ground School and participate in society approved activities such as seminars and local chapter meetings. Koch stated that the 100 full members would comprise the first shuttle pilots.

Anyone wishing to get into this group should do so soon because there is a possibility that the standards would be raised in the future; the average number of hours that the people in this group have is about 10,000, according to Koch. ASAP still has 50 openings in this category for anyone who can meet the requirements.

Below this grouping is the associate membership category which is subdivided into three more categories of Pilot, General, and Student.

Associate member-pilot status is available to members who possess a private pilot license or better. These members may upgrade to full member status at a later time if the qualifications are met.

Associate member-general has no requirements except that the member have an interest in the development and application of the commercial use of space. A pilot license is not required for this membership.

Associate member-student is available to anyone enrolled as a full time student.

Membership dues for these categories are \$50 for full membership, \$25 for pilot and general membership and \$15 for student membership.

Once enrolled in ASAP, the opportunity is available to any and all members to enroll in the Space Education series of the Ground School. The Space Education Series is mainly a general overview which consists of tapes, textbooks and basic in-

See ASAP, page 3

Entrance problems to find resolve next May

By Craig A. Peltzler

Avion Staff Reporter  
The Florida Department of Transportation has recently responded to frequent requests from E-RAU for a more adequate traffic signal and left turning lane onto campus.

The signal, located at the E-RAU entrance and Clyde Morris Blvd. (State Road 483) has been a primary concern among students in recent years. The student's main complaint has been concerned with long traffic delays and safety hazards resulting from the lack of a left

turning lane.  
A letter from the Florida Dept. of Transportation, dated July 25, 1984 stated that "Plans are being prepared at this time for the reconstruction of a left turn lane on SR 483 at the University's entrance. The plans also will modify the existing signal operation to provide a protected left turn phase for North bound vehicles wishing to enter the driveway. The project is scheduled to be let in May 1985."

The state is also planning to widen the first 90 feet of the entrance to the university.

60 applications received for Daytona Provost slot

By Louis M. Kady

The Provost Search Committee will meet later this week with the task of interviewing the single candidate for Embry-Riddle's Daytona Beach-campus provost. At present time, the only information available about the candidate is that he is an individual who is now employed outside the University.

According to Dr. Jeffrey

Ledewitz, E-RAU's Interim President, the committee has reviewed 60 resumes since Dr. Carl Lippold resigned from the position last May. He furthered that 5 of the resumes submitted were from individuals already employed by E-RAU.

Dr. Ledewitz went on to say that at this point in time nothing

See PROVOST, page 2

LRC schedule moves to October

By William K. Harrod  
Avion Staff Reporter

Although a specific date has not yet been set, ground-breaking for the new Learning Resources Center is now forecasted for this upcoming October.

The Center will be built on the main parking lot just south-west of the existing LRC building; construction will consist of two phases.

Construction of the first phase will begin pending completion of the parking lot work in progress

adjacent to the Clyde Morris entrance.

Extensive planning, funded by the Bush Grant, is complete, except for minor details.

Phase I of the project plan has been aimed at making the first half as modern and sufficient as possible. Addressing available technology and foreseeable needs, the planning approach was also directed toward the preparation for the second half of the building and any changes which might accompany it.  
According to Judy Lysher,

Director of the LRC, Phase II construction is "contingent upon funding" but is speculated as taking place in about five years.

The new LRC, as suggested by the planning consultants, will utilize the latest technology such as video disks and replacement of the card catalog with computer files.

Called an "On-line, integrated library system", the files could be addressed by terminals outside as well as inside the LRC; these will provide availability data in addition to more content information

were too close to the surface of the construction, which enabled moisture to reach them. It then expanded the columns that the steel was occupying.

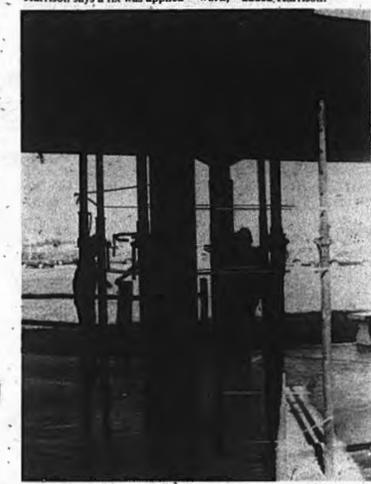
In addition, the structure was originally designed to carry a load heavier than it now holds, which justifies the lack of a safety hazard.

There are actually two main parts of the structure that have caused the concern: the columns and the capitals, which are the upper portion of the structure. The capital to the Southwest of the LRC was chosen for testing because it contained the major deterioration. The metal supports were required to facilitate the testing.

The structural engineer concluded from the tests that there

was very little erosion of the steel. "There is no implication of a structural problem at this point," says Dr. Jim Harrison, Physical Plant Director.

Harrison says a fix was applied



Despite its decaying appearance, this concrete column at E-RAU's academic complex has been determined to be 'weight-worthy.'

Photo: photo by Lou Kady

# Editorial Avion's sky is the limit

Embry-Riddle's Presidential Selection, the new Learning Resource Center, a new campus provost, a dangerous intersection....

As one will notice, much is happening these days in the way of news around campus and within the University as a whole. Needless to say, the staff members who strive hard to put out the Avion make every attempt to see that this news plus much more makes it to print. Other than straight news, there is an endless amount of other special, on-going features that could be covered in the newspaper: sports, entertainment, career opportunities, space shuttle launches, club events... as they like to say at Embry-Riddle, "The sky's the limit!"

Unfortunately, however, there is a limitation on how much news the Avion can bring to its readers. The reason for any lack of stories is our lack of staff members who are able to sacrifice some of their time to write stories and help in the overall paste-up of the newspaper.

Although it has been mentioned before, it doesn't hurt to remind everyone that the Avion is entirely student managed and operated. For the most part, the Avion's staff members volunteer their time without direct compensation or pay; they pay tuition, attend scheduled classes and have a better grasp on campus issues than most. It is time well spent.

Why do we do it?

One reason is that the SGA provides us an incentive budget which we use to reward ourselves with dinners and parties; but most of all our real reward comes from the pride and satisfaction we experience from putting together such a unique collegiate publication.

The potential for the Avion at the moment is overwhelming. There is a wealth of information that can be harnessed. Furthermore, a few dedicated staff members are looking into the possibility of obtaining state-of-the-art equipment so that we can process this information more efficiently and faster. However, without the help and energy offered by interested students, the Avion can only grow so far.

The solution for the staffing problem would, of course, be for more students to get involved in their newspaper. We feel that many more students would join the Avion if they were only invited.

With this in mind and our motivations based on seeing the preservation of student journalism at Embry-Riddle, we would like to invite everyone into our office in the University Center to check us out. We're more than just free white out.

Those who desire to join the Avion will quickly find themselves involved in writing, photography, advertising sales and/or page-rip. A point to remember is that no previous experience in any of those elements is required to join the ranks of our staff members; working on the newspaper should be and is a constant learning experience. Consequently, most of our staff members have been "home-grown!"

Another benefit to becoming an Avion staff member is getting the opportunity to attend Journalism conventions and other assorted workshops. At events such as this, the opportunity to learn is tremendous while pride is taken in representing a publication put together by non-journalism majors.

## President's corner

The final weeks have come, ending summer 1984 at E-RAU. SGA Activities have been very smooth this summer and we are looking for a great fall. The Fall Budgets are in thanks to the SUB Committee chaired by Matt Maranto, Vice-President.

This past Saturday, the Student Administrative Council (S.A.C.) met in revising its past constitution. Hours of work were put in hoping to better facilitate our operations for the upcoming year. We will be voting on it in late September and hope everyone will participate to get the required amount of votes.

The Weight room is drawing near completion as the equipment should be here in the next few weeks. A target date for ribbon cutting is scheduled for Sept. 13, 1984. The Weight room Committee is completing policies and operations for the room.

Before I close, I would like to personally thank the efforts provided by one of our representatives Milton Carro. He will be graduating within the next two weeks. His performance was outstanding in providing voluntary help to the SGA. Without the help of Milton and the other representatives, the SGA would not be able to serve our students to the fullest. Take care Milton and best of luck.

Thomas M. Conard III  
SGA President

## the avion

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NEWS EDITOR:

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The opinions expressed in this newspaper are not necessarily those of the University or 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 material may be edited for brevity and will 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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## Candidates withdraw from nomination

Board of Trustee members:

The Nominating Committee invited three candidates to visit Daytona Beach to see E-RAU operations, meet local Trustees, and interact with students, faculty, staff, and officers. All three candidates have withdrawn their names from the Presidential nomination. You may recall that, at the April meeting, Dr. Lee Thompson mentioned this might occur.

The Nominating Committee's search process during the past few months got the word out to the educational community that E-RAU's presidency was open. One Board member suggested that approach by contacting an individual whom he thought would be a good match with E-RAU's goals. This candidate turned out to be the leading contender. The Nominating Committee's consultant was impressed with the "fit" between individual and E-RAU. All of the E-RAU community - Board members, students, faculty, staff, and officers - found him highly qualified. The Board members who visited him saw his proven aviation track record. Enclosed is his letter of withdrawal from the Presidential candidacy.

The additional step of actively searching for a quality person needs to continue to be emphasized. This is commonly known as the job seeking the man. The approach was confirmed by the recruitment of the top level applicant. Therefore, by copy of this letter, I am requesting the Nominating Committee to continue augmenting the process by searching for an applicant.

In my estimation, it would be the consensus of the Board to continue the search, recognizing the difficulty of finding the highest possible quality leader for this unique aeronautical university.

William W. Spruance

impressive Board of Trustees has certainly confronted Diane and me with a challenging opportunity. E-RAU's entrepreneurial spirit and progressive approach to aviation education makes you truly unique in the country. We have been sincerely impressed by the caliber of people who make up the E-RAU family and the warm feelings you have conveyed to us. Your "can do" spirit, warm weather, lovely ocean, Daytona Beach, Epcot Center, Orlando, Kennedy Center, and fine people complement each other to form a wonderful environment.

During your brief visit to UND

you saw some of the challenges we are facing: the new Aerospace Center, Computer Science addition, Atmosphereium, helicopter program, Simulation Center, Morocco Project, NEKRAD, NASA, and other research endeavors. After days of contemplation, I feel, at least for the time being, I can be most productive here in developing the UND Aerospace programs to their full potential while completing some unfulfilled goals. Therefore, I respectfully request you withdraw my candidacy for President of E-RAU.

Although I can't join your

team officially, I sincerely hope the brief acquaintances made will become long term, close friendships. My allegiance to aviation education has always been a personal priority and I will openly share our ideas, successes, and failures with E-RAU. I am confident we can develop a permanent collaborative alliance between our institutions for the benefit of our students.

Best wishes and I'll look forward to helping your new president in any way I can.

Respectfully,  
John D. Odgaard  
Dean

## Embry-Riddle graduate receives praise

instrument refresher training, as I had not flown in about three months.

I made arrangements for the flight, utilizing my aircraft (a Piper Arrow), through a local FBO. All America Aviation of Smyrna, TN. They assigned one of their staff instructors, Mr. David Arthur, to make the trip with me and provide the required training.

During the flight, I learned that Mr. Arthur is one of your graduates. I wish to make a few comments about Mr. Arthur, and thought they should be directed to you. Mr. Arthur was at the airport earlier than planned (3:00 AM), had completed preflight of

the aircraft, obtained a detailed weather briefing and had the instrument flight plan on file. He was courteous, well dressed, friendly and ready to go. During the flight we encountered severe weather conditions which were not forecast and experienced equipment failure. Mr. Arthur's performance was outstanding in every aspect. He, in my opinion, is a well trained professional airman and I thought that you should be told. He is certainly a credit to Embry-Riddle, and the training you provide.

Yours truly,  
Robert W. Lynch, Jr.  
President, Barton ATC Inc.

## Provost (continued from page 1)

is definite about who the University selects as campus provost; more information will be available after the interview takes place.

The provost selection was

originally planned to parallel the selection of E-RAU's new president; however, due to the resignation of the three presidential finalists, the University had decided to go ahead and "fill that

position now." Members of the Provost Selection Committee include University officers Dianne Thompson, Paul Daly, Jack Fidel, Charles Williams and Dr. William Motzel.

## Marler (continued from page 1)

ing to do it," echoed Marler, "because they have the motivation. It's fun. It's great to work beside big name stars."

"Personally, I was attracted to Entertainment because I'm interested in sound. I've gotten more than my share of chances to

work with the best sound equipment in the country. It's been very rewarding for me."

"For a lot of people it's exercising a hobby," says Novak. "For people that are interested in music, what better way to practice that hobby than to get involv-

ed in the actual production of it?"

The Entertainment Committee is currently looking for new members who want to pursue their hobby on a grander scale. Interested students may inquire at the Student Activities office in the University Center.

## Klyde Morris



# Long face complimented with 'Butterfly' frames



**Satorial savvy:** Eyeglasses look best when their frames complement the shape of your face. For a long face: "Butterfly" frames that are wide and deep. (Triangular face (broad forehead and narrow chin): Rounded aviator frames. Round face: Square frames with a simple bridge. Square face: Frames with softly rounded bottoms. Oval face: Almost any shape...

**TV monitors:** Much better than TVs: The next time you go shopping for a new color television set, ask to see the "monitor-receivers" as well as the standard models. This new generation of video gear can give you a better television picture and make life

with video recorders, video players and computers simpler and more effective. Features to look for in monitors: Comb filter. This circuit, long a part of professional studio equipment, gives a sharper picture with truer colors. Separate video inputs for external program sources. By hooking up your VCR or disk player directly, rather than through the antenna terminals, you get a less distorted picture. You can also connect and disconnect outside components more easily. Separate audio output. This lets you play the sound portion of a video program through your stereo system. Multiple outlet for a stereo decoder. This will allow you to enjoy stereo-TV broadcasts when they begin in the U.S.

**Blood pressure:** A good breakfast can help prevent children from developing high blood pressure. Reason: Children who skip breakfast often compensate later in the day by eating salty snacks, which can lead to weight gain and hypertension...

**Prescription drugs** are a leading factor in automobile accidents: Worst hazard-

Psychotropic medications, including tranquilizers, sedatives, stimulants and antidepressants. These can both alter driver's judgement and make them sleepy. Also dangerous: Painkillers (especially codeine and other narcotics), muscle relaxants, ulcer drugs, heart medications, eye drops and over-the-counter antihistamines. Worst combination: Drugs and alcohol, which can intensify each other's effect. Ask your doctor about potential side effects of every drug you take. Take the first dose of a new one at home...

**Free help** is as close as your telephone: A government booklet lists 800 numbers you can call for advice, information and problem solving. "Direct Contacts for Consumers", Consumer Information Center, Pueblo, CO 81009, free...

**Auto efficiency:** A simple valve will cut fuel consumption by 20 percent and carbon monoxide emissions by almost half. It will also drop required octane ratings by 10-15 points and eliminate deposits that lead to engine knock, component wear and decreased efficiency. How it

works: Two screens pulverize drops of gasoline, leaving a perfectly blended gas-air mixture. Chrysler has licensed the valve and could be using it within a few years...

**Trouble? "Burn-in"** your computer by leaving it on for the first two weeks you own it. If there are any electrical problems, what will surface during this period (when the machine is under warranty). The good news: 80 percent of electrical circuits that survive a burn-in will last an estimated 500 years...

**Parental drive:** Wives in childless couples tend to be more competitive and career-oriented than their counterparts with children. But childless husbands are generally less competitive than fathers. Reason: Freed from hardscrabble pressure, they seek career satisfaction over higher salaries...

**Kids cost:** A typical upper-middle-class couple will spend about \$250,000 (including music lessons and a record collection) to raise their child to the age of 18 (before any college)...

**Streakers:** Stop windhead-wiper strokes by cleaning the blades with a soft tissue dipped in denatured alcohol. The alcohol removes contaminants that commonly cause streaking...

**Sauna bathing:** For only 15 minutes uses as many calories as a mile or two jogging. Even after you replace the water you've lost, a regular sauna program helps you lose weight. Reason: Working up a sweat acts to speed the body's metabolism...

**Tennis-elbow protection:** The principal physical difference between serious tennis players and their weekend-only counterparts is the strength of their racket-holding wrist and finger extensions. (All players have a stronger racket-holding arm.) Doing exercises to build up that extension will not only prevent tennis elbow-it might also improve your game. Sample exercise: Hold your arms and hands out in front of you, palms down, at shoulder height. Without moving your arms, tilt your fingers toward the ceiling. You will feel the wrist and finger extension muscles. Relax and repeat. Variation: Try

the exercise while/holding small bar bells...

**Sampling of Italian wines:** Most popular are Lambrusco and Soave, which are staples at most restaurants and cocktail parties. Sparkling wines: Ferrari Brut, made laboriously in the mode of champagne, \$16/bottle. Less expensive entry: Caviti's Brut, \$7. Good red wines: Barbera d'Asti and Barbera d'Alba. Both go well with robust foods. Top vintages: 1978, 1979, \$5-56. Barolo, the wine of kings, \$9-\$14. Ribisco, a full-bodied wine. Best years: 1971, 1975, and 1978, \$6 or slightly more...

**Tearless onions:** A specialty of the farms in and around Vidalia, GA. Known officially as Yellow Crescent Type II Hybrid, these Vidalia onions have as much sugar as an orange and can be eaten like an apple. (They do get hotter with age.) Sold primarily in the South, their fame is spreading to all parts of the country. Problems: Because they bruise easily, they need special handling. And their high sugar content means an average life in storage of only four to five months...

# ASAP looking for 'Space-minded' applicants

formation on space and is roomed to people who are more interested in space than they are in flying the shuttle.

The Ground School is for those people who are interested in the more technical aspects of ASAP and flying the shuttle. This program consists of ten different areas of study and is modeled after NASA's astronaut ground school. This ground school offers studies in spacecraft design, space navigation, orbital mechanics, technical theory, mission planning, spacecraft systems, avionics, payloads, data processing as well as an introduction to the program which explains the objectives of the course.

From here ASAP is planning to use a shuttle cockpit mock-up and purchase two simulators. Training in the mock-up is expected to last 300 hours. This phase will familiarize the student with the controls, their locations and other functions of the cockpit instruments.

The next phase will call for 400 hours of simulator training in what is known as a Part-Task simulator (PTS). PTS is a fixed base simulator that will give the trainee the necessary experience while keeping costs down. Koch said that this type of simulator will cost only \$250,000. From here it is hoped that a \$28,000,000 full simulator will be purchased that will cap off the students training with 40 more hours of training. At this point the student will have completed the training.

Koch said that ASAP would like to see an additional rating above ATP for pilots known as Aerospace pilot. He believes that ASAP may one day be the regulating agency for aerospace pilots and that the minimums required by ASAP will be adopted as the minimums for the Aerospace pilot rating.

Places to put the simulators and conduct any necessary train-

ing to operate this equipment. Koch said that 130 acres had been purchased in Titusville, Florida for this purpose. This area will house the simulator training plus it will have a convention center for meetings and a swimming pool for training in weightlessness. ASAP doesn't plan on becoming a college, but it does want to educate. Koch emphasized that it is not a business, but is a group of people who have a common interest in space.

Key members will be required to take all the training in the simulators. Koch estimates that this will cost \$150,000 per person not including the \$3,000 for the cost of ground school. Other members may also take the training but only up to the PTS.

At this point, some may be wondering who, besides NASA, is going to be needing pilots? Presently, NASA is the only organization that owns a manned space shuttle. However, that may not be for long.

A corporation by the name of Astrotech, along with one of its subsidiaries, is currently negotiating with NASA on the purchase of two or three of the space shuttles. According to Aviation Week and Space Technology, the original plan that Astrotech had was to purchase the next shuttle off of the assembly line. Due to the time it will take, it was decided to try and purchase one of the existing shuttles from NASA in order to get the business going. It is hoped that by the time the next shuttle comes off the assembly line business will be good enough for it to bring a profit. At least two shuttles are needed in order to protect against the loss of one or in case demand increases and a need for expansion results. If expansion increases greatly a third shuttle may be purchased.

While Astrotech would be the owner of the shuttle, NASA would still perform the launches. Astrotech feels that they will be able to provide a greater market due to their more aggressive marketing tactics. The cost of the shuttle is \$1.5 billion for the used model and \$2 billion for the one which Astrotech wants to buy off the assembly line. Astrotech hopes to purchase a shuttle by the end of 1984.

Another bright spot in ASAP's future could be President Reagan's pledge for private industry to get tax breaks and to have routine access to space and a suitable, reliable place to work there.

According to the Associated Press, Reagan made these commitments while at the celebration of the 15th anniversary of the first moon landing. During this

ceremony Reagan praised the space program for the advances it helped create in many other technical fields.

It appears that ASAP is right on time. If the administration and government are willing to support private enterprise in their commercialization of space and if the private sector is eager to enter into this field, then ASAP will, no doubt, be a large and necessary part to coordinate with. ASAP may very well be the organization that, like the FAA inside the atmosphere, will be responsible for regulating and promoting of aerospace development as well as supplying them with the much-needed manpower to make it work.

Anyone wishing to contact ASAP may by writing: 305 Remington Road, Suite 1, Schaumburg, Ill. 60195 - (503) 476-7878.

# Many passengers prefer MD-80

LONG BEACH, CALIF - A new passenger survey conducted by independent researchers again confirmed strong preferences for the McDonnell Douglas MD-80 twin-jet compared with competitive two and three-engine aircraft in its class.

Austrian Airlines' passengers on MD-80 flights in Europe and the Middle East were asked to rate aircraft in several areas involving noise and passenger comfort. Results showed 96 percent of the nearly 1,000 passengers surveyed found the MD-80 "appealing" overall.

The highest rating, "very appealing," was given by more than one third of the passengers surveyed. Among those on flights over three hours and first class passengers, the "very appealing" rating increased to 43 percent and 45 percent.

Flyers who were familiar with, and had opinions about, competitive aircraft were asked for comparisons. Results showed passengers preferred the MD-80 over the B727 by nearly three-to-one and by about four-to-one over the B737.

Items rated were takeoff and

cruise noise, takeoff and cruise ride quality, leg room, arm and shoulder room and carry-on luggage facilities. Other interior comfort features such as size, temperature, air quality and circulation, pressurization and cabin decor were included.

The strong MD-80 preferences are consistent with four earlier passenger surveys that showed MD-80 preferences by margins up to nearly eight-to-one over competitors. Two of these surveys were co-sponsored by McDonnell Douglas and U.S.

See MD-80, page 4

# Every Sunday

Campus Ministry Announces  
Catholic Masses 7 p.m. & 10 p.m.  
Common Purpose Room U.C.

## In Memoriam

E-RAU graduates,

### Heronica Blood (August '82)

and

### Kenneth Gonos (December '83)

died when their plane crashed  
near Saranac Lake, N.Y. on July 16, 1984

# Nautilus fitness center set to open

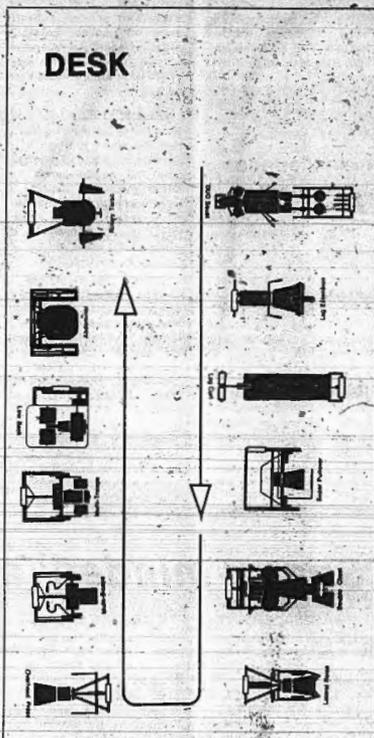
By Matt Maranto  
SGA Vice-President

Although it has yet to be officially named, the new fitness center, featuring Nautilus equipment, is set to open in September. Policies for its operations and maintenance are being drawn up by the Weight-room Committee, a joint committee composed of University staff and three members of the Student Advisory Council of the SGA. Dean Becky Robertson, chairperson of the committee, has commented that the committee's progress can be

attributed to the dedicated individuals who serve on it. The main reason Nautilus equipment was chosen is because of the principles it sets forth in order to achieve maximum fitness. Those principles are:

1. Train harder, but briefer
2. Exercise Progressively
3. Control the Resistance
4. Accentuate the Negative
5. Keep Accurate Records
6. Work harder muscles first

The center, which will be in Racquetball Court no. 5, will



The fitness center, featuring Nautilus equipment, will open this fall in racquetball court no. 5. The S.G.A. sponsored facility is expected to offer memberships for \$30-40 per trimester. The center will be student-staffed.

- house twelve brand new Nautilus machines. These are:
1. Doo Squat for lower torso and leg muscles
  2. Leg Extension for frontal thighs
  3. Leg Curl machine for hamstrings
  4. Super Pullover for the back
  5. Double Chest for chest, shoulders and arms
  6. Lateral raise machine for shoulders
  7. Overhead Press for deltoids and triceps

8. Multi-Biceps machine
  9. Multi-Triceps machine
  10. Lower Back
  11. Abdominal machine
  12. Rotary Torso for torso muscles
- The fitness center will have its operations, supervised by the Recreation Office and will be primarily managed by student assistants. Those interested in working in the fitness center should contact Student Employment for a job description and application.

## Vets play inmates

By Jonathan Russell

The Vets Club softball team was recently invited to play the inmates at the Tomoka Correctional Center. The Vets accepted the offer and arrived at 6:00 p.m. last Thursday in what was the latest of many community services they have performed.

Upon entry the players were warned to keep their wallets and money in a safe place and not to take any bets. After this they went to the playing field.

The Vets Club came into the game cold and subsequently lost in a 15-0 rout. In order to try and even the score, the Vets accepted a second challenge which resulted in a 19-1 loss for them. Despite these losses, the Vets managed to keep their sense of humor. After the first game they were asking for the inmates "B" team or, if possible, the girls' team.

The prison team was actually made of 4 of the 15 teams that the inmates have. These teams practice 6 days a week during time allotted given to them. The organizer of the softball team is

inmate James Kissinger and his assistant, inmate Allen Cleare, both of whom work in the prison warehouse handling supplies.

Kissinger said that his teams play in tournaments outside of the Correctional Center against "free" people. However, due to the seriousness of the charges that some of the inmates have been convicted of, he is unable to field his best players because they aren't allowed outside of the prison.

The Vets Club didn't win the games, but that wasn't the point of them going there to play. This club has been one of the most active and highly respected clubs on campus for many years, due mainly to involvement in important school and community activities. The softball game was an example of this.

Other examples include the annual Riddle regatta in which the proceeds go to local charity and food and clothing drives which support the campus ministry. They also play in the Easter Seals Softball tourney and Sponsor the Boy Scout Olympics.

## Dunmire: Chemistry is the central science

By Jean Snyder

"When I was studying, I never saw any course objectives. I went to a smaller college, and although I took some 40 hours of Chemistry, I only had two teachers. One of my teachers wrote one objective on the board: 'Learn Chemistry,' and that's exactly what we did." E-RAU's "head chemist," Robert B. Dunmire related this story as part of his philosophy of teaching. Dunmire is a 17-year veteran teacher of Embry-Riddle Aeronautical University, Daytona Beach Campus.

With this longevity comes many stories and memories of an Embry-Riddle just beginning to grow at the Daytona Campus.

Dunmire began teaching here in the Fall, 1967, in a temporary military building, since destroyed, located over by the airport, and near the present Daytona Beach Aviation. He was hired along with 6-8 "new" faculty members; among them was Dr. Elizabeth Nelson of the Humanities Department.

Mr. Dunmire is a chemist turned teacher and has helped E-RAU provide basic chemistry instruction for many years.

Between the years, 1967-1969, the classes and student services were housed in these temporary structures (T-Buildings) and in trailers. The Chemistry classes were on the second floor of this old building, and with the weight of benches, equipment and people, the floors of the second floor began to sag. Every day the floor creaked, and was located below the labs came running up to complain about leaking ceilings caused from plastic pipes that moved with the swaying floors.

Finally, in 1969, the Chemistry labs were able to move to the new "B" Building (now known as "W" Building).

Why, Chemistry? Although it is no longer mandatory for all students to take chemistry, many students do. Dunmire believes that students should learn chemistry for life. Not for an eight-hour day. "You work, you have kids, you get involved in the environment, in pollution. You can better judge these conditions by why such results occur." In aviation, Dunmire explains, engineers use metals for the skin of an airplane. The metals are to be light and aerodynamic and

strong. Then the rivets that hold the plane together must, because of chemistry, be of the same material. Gasolines, fuels, and the heat content of fuels must be understood. Plastics are used on seats and on other parts of the plane. E-RAU and the Chemistry Department want students to be conversant in the technical nature, though they may not design the chemical compounds themselves.

First, you need to understand Chemistry. Then you can better understand Biology, Physics and Math. According to Dunmire, "Chemistry is the Central Science."

Mr. Dunmire's background shows how involved he has been in the field of Chemistry. Among his many positions, both as a graduate assistant and a professor, were terms at Florida State University, the University of Florida, Pennsylvania State University and the Citadel (in South Carolina).

He was also a research chemist studying fluorocarbon, a compound which makes heat resistant piping and gauges for aircraft. He has helped with the early research into antihistamines in the late 1950's.

For a time, he helped in studying Spectra-Chemical Oil Analysis of aircraft engine oil, here at Embry-Riddle. Bearings in the crank case, for instance, slowly wear, leaving metal particles to sink to the bottom of the case. The analysis was made to predict how much longer the oil could be used, the effects of this metal-oil blend, and other research questions. However, with a full class-load, Mr. Dunmire finally had to step down from his laboratory studies.

Mr. Dunmire is a one-on-one teacher, believing that if students have questions, he should be available to answer them. He stays in the academic side, working for the students of E-RAU.

When asked if there had ever been an accident in the Chemistry Labs, he said "There have been no chemically related accidents, and only one unfortunate accident of a student who did not follow instructions and insisted on forcing a piece of glass into a plug - he ended up with the glass shards of the fuel-efficient twin-jets, helped launch the MD-80 program. By the end of 1983 the airline will have increased its MD-80 fleet to 12 aircraft. Austrian was the second airline to begin MD-80 service in 1980, and today has flown more than 62,000 hours with its MD-80 fleet.

# Cessna merges aircraft divisions

WICHITA, KANSAS In a move that company officials say will strengthen its manufacturing operations, Cessna Aircraft Company has announced the consolidation of its two aircraft divisions in Wichita.

Cessna President Bill Van Sant said the consolidation program "is the first step in a long-range operating plan that has been under development for several months." He said the move is designed to tie together long-range manufacturing and product plans which are now being developed.

"The comprehensive product plan will encompass exciting new

aircraft products, as well as the development of products in other areas of our company," Van Sant said. "Consolidating our aircraft divisions under one management group is just the beginning of several steps we will take to fully utilize all of our design and production resources."

Van Sant said the current Pawnee and Wallace operations will be considered production facilities in the Aircraft Division of the company rather than separate divisions.

The Pawnee Aircraft Division in southwest Wichita manufactures Cessna's single-engine air-

craft and the Crusader light twin, and includes a production facility at Strother Field near Winfield, Kansas. Production of Cessna's new Caravan II propjet utility aircraft also will be at the Pawnee facility.

The Wallace Aircraft Division is located at Wichita's Mid-Continent airport and produces the company's Citation and Conquest fanjet and propjet aircraft, and four piston twin-engine models.

An associate company, Reims Aviation in Reims, France, manufactures single-engine Cessna models and will produce the new Caravan II twin-propjet utility aircraft beginning early next year.

Van Sant told employees at the two Wichita divisions that the consolidation plan will

strengthen the company by reducing duplication of effort in many areas. "Centralizing the management and selected processes of all our aircraft manufacturing operations will make Cessna a much more efficient and productive company," he said.

Van Sant will serve as interim general manager of the aircraft manufacturing operations until a new manager is named.

He said the consolidation of some areas of the two divisions has begun and initial elements of the new organizational structure should be in place by July 1.

However, he added that "the consolidation program is a reorganization effort that will evolve slowly over an extended period of time as elements of the long-range manufacturing and product plans come together."

### Aero-plane identification

THE FIRST EXACT ANSWER presented to the AVION identifying this aircraft will win a free, one-trimester subscription to the AVION, sent anywhere they want. The Student Publications staff, previous winners, and their families are not eligible.

THE WINNERS for Summer B thus far: Ramiro Martinez, who correctly ID'd the Swedish FFVS J 22 on July 11. Daryl LaBlanc knew the aircraft on July 25, India's HAL HF-24 Marut. Congratulations to both gentlemen.

### UNCLE WALDO'S

SALOON - BILLARDS  
"DAYTONA'S FINEST BILLARD LOUNGE"

BEER - WINE - PIZZA  
Regulation Tables-Snooker-Coin Tables  
Electronic games-Foosball

### FREE POOL

One hour with this ad and E-RAU ID, from 11AM to 7PM  
Offer expires September 30, 1984

1/2 price pool for 2 couples on same table

OPEN 7 DAYS 11AM TO 3AM  
122 Valsale Avenue 252-3689

### MD-80

continued from page 3

airlines that fly MD-80s and competitive aircraft. They were conducted by independent researchers.

The third and fourth surveys were independently arranged by a major U.S. airline and by a South American air carrier, evaluating various types of aircraft before making an equipment purchase decision.

Factors contributing to the high MD-80 ratings in each case are the quietest interior of any jetliner, the personal coach features and roomlines.

Spacious five-abreast seating in economy class requires the MD-80 to be 80 percent full before any passenger needs to occupy the middle seat to occupy. In addition, seats and aisles in the MD-80 are wider than in competing aircraft that seat six abreast.

McDonnell Douglas designed a number of improvements into the MD-80 including a redesigned interior, new personal service units containing the oxygen, light and individual air vents for passengers, advanced cabin pressurization system, and liberal use of sound absorbing materials both within the passenger cabin and as part of the engine nacelles.

Austrian Airlines' orders for eight of the fuel-efficient twin-jets, helped launch the MD-80 program. By the end of 1983 the airline will have increased its MD-80 fleet to 12 aircraft. Austrian was the second airline to begin MD-80 service in 1980, and today has flown more than 62,000 hours with its MD-80 fleet.

autos for sale

'79 CHEVY CHEVETTE, Excellent condition...
'76 FIREBIRD: Power steering, power brakes...
'76 YAMAHA 500 VISION: Like new, shav...
'81 CHEVETTE LIFT BACK: Factory a/c, power steering...

'74 HONDA 450, 5400. Contact Ed. 767-2908
'81 HONDA GOLDWING INTERSTATE: 11,000 miles, hi/low/steer...
'80 MOTOCROSS: Moped, good condition...
'82 YAMAHA 500 VISION: Like new, shav...
'80 YAMAHA XS1100: Touring edition, new...

TRAILS TOWNHOME: 2 bdrm, 2 bath, furnished...
NON-SMOKERS: 3 rms for rent in a 3 bdrm, 2 bath, new house...
ROOMMATE WANTED: Need a clean and quiet person to share a mobile home...

MOVING OUT SALE: Night stand, \$15. Dressing \$10. Dinerette (Broyhill), \$360. New wood bed, \$200. Stereo equipment...
SPACE SAVER BED: Really two beds in one! Single sized bed folds out into a double...

DOUBLE BED W/HEADBOARD, night table and lamp, \$30. 12" B/W T.V., like new, \$45. Curtains, \$15. 1" B/W, off-white w/brown trim, \$35. Two 42" L, 48" W off white w/thermal backing, \$30. Call Ray, 767-2677 or Box 5059.

19" COLOR TV, Good cond. Asking \$125. Call Jackie, 677-4979.
GUILD ACOUSTIC GUITAR - MAKE II. With pick-up & hard shell case, \$150. Princeton Revue Amp w/cover, \$121. Guitar stand, \$5. Excellent condition! Cash please. Call 672-1711 before 8:15 AM or after 7:30 PM.
MONTGOMERY WARD B/W T.V.: 19" diag., very light. \$45. RCA B/W T.V.: 12" diag. \$40. Contact Rob, 258-0828 or Box 143.

SONY AM/FM STEREO RECEIVER: Solid state, 30 W KLH tunable by Carling, magazine subscription, \$10. 4 way speaker, 12" Waterproof headphones two 3 1/2" Tweeters, 2" mini speakers, built in Brilliance & speed dial, 100 W cap. \$194.15. Call Ed for Box 533, Columbia Heights or Box 1143.

Miscellaneous for sale

MISC. FOR SALE: Set of 4, steel belted tires, size P195 T0 R14, white letters and like new. Complete set - \$160. Contact Keith, 233-3366 after 6 PM, Box 5313. C. Compars at 5260 or up!

Classified Notice
The classifieds in this issue will not be automatically placed in the first issue of Fall 1984. If you want to place another classified in that issue, it must be renewed up in the Avlon/Phoenix office.

rooms for rent

ROOMMATE WANTED (1): No lease to sign, deposit of \$150. Clean, 3 bdrm, townhouse, 2 1/2 bath, 1 rm will be guest rm. Washer, dryer, dishwasher, frig, central cool, located 2 blocks south of Grand on Orchard St. Fair Oaks Condo's no. 24. \$210/month + 1/4 elec. Contact Brian, 677-3470 or 234-3000, Box 7244.

BEDROOM SET, includes double bed, dresser, bed board, all wooden desk w/chair, glass tables and lamps. Graduating senior and must sell. Call 756-2193, ask for Randy.

FOR SALE: King size waterbed, all parts included plus sheets, comforter - \$230.00. Office desk - \$60. Misc. (lamps, pictures, etc.) Call Brian, 677-3470 or 234-3000, Box 7344.

PEUGEOT 12-SPEED, many extras, like new \$200. 235-8284.
wanted
LOOKING FOR HELP, part-time job. Call Martin, 677-6419.

travel
Need ride to Washington DC-Maryland Area. Ready when you are. Contact Brian, Box 3394.
personals
Would this person(s) who contacted my wire spoke sport rims from my red 1979 T-Bird, SVG-232 (only), please return them: immediately! No questions asked, no charges prepaid. Please! Thank you, Mike
Dear Judy and Eddie Jr., Thank you for all your love, patience, and understanding. Now that I'm full with a little bit more, I love to support my half a sister more. I love you both, thank again. Ed Sr.

'76 CHEVY WAGON, incredibly dependable, holds 7 people and a dog of your comfort. Great beach bus. Best offer by Aug. 14 takes it! Box 3493.
'78 CHEVY VAN, Burgundy, excellent mechanical cond., carpeted interior. \$2300. Call Kris, 756-3577 or 232-2277.
'78 DODGE F-150, Superdial, full time 4x, new tires, 318, 4 cyl. POSOL, 200 lb w/ fog lights, 10 speed, AM/FM 8-track. Must sell, leaving state. \$2175. Call 233-3977, 9 PM-11 PM.

'70 MUSTANG, 302 eng, rust good 15mpg/19hwy, new alternator a/c regulator, new brakes & master cyl, new battery, new turbo mufflers, no dust. Need money, leaving town. Asking \$1100, negotiable. Box 5992 or 252-9248.
'77 BUICK REGAL, Sporty car w/PB, FM, AM-FM stereo cassette (Pioneer), high back buckets w/center console, electric sunroof and all other acc. New paint, grey metallic w/Landau roof and tinted glass. \$1995. Contact Keith, Box 5313 or 232-3366 after 6 PM.

COMPLETE R/C AIRPLANE: Kadet MK1 II, 4-ch operation. Complete with 450 40 engine, lower hobbler 4-ch radio w/3 servos. Fully assembled. Writeup photo book. Price \$300. Call Emilio, 761-9640 or Box 5204.
BRAND NEW SMITH & WESSON 459, Stainless steel 9mm automatic pistol. 60-yd, fired 10 times. Comes w/70-yd/100-yd 14 round magazine! Pachmayr grip. Uncle Mike's white holsters. Excellent cleaning kit and swade carrying case. Excellent for hard target. Applications, 1/2 year corrodes. If interested call 767-7067 after 6:30 or Box 5399.

20' CRAFTSMAN LAWNMOWER, 3 HP. \$23 obo. 232-9139.
QUEEN WATERBED, w/padded rails, tuck-a-liner, heater, and great head-board. \$140. Contact Bob 7185.
MOVING SALE: Must sell all. Living room, dining room, furniture, desk, shelves, plants, pots, and much more. Call 233-2863 after 5 PM, Box 6742.

STEREO SYSTEM: Pioneer 80 W system, w/ integrated amplifier, tuner, two cassette decks, turntable and bass reflex speakers. Need to sell. \$900. Call Keith, 232-3366 after 6 PM or Box 5313.
MUST SELL! Realistic Receiver - \$75. Receiver Turntable - \$90. Call Larry, 765-8193, negotiable.

14" COLOR T.V., Brand new, \$130 obo. Call 232-6221.
STEREO SYSTEM: Sanpro semi-auto turntable, Marantz cassette deck, Pioneer QX949 AM/FM receiver, 60 W/ch, 4 channel. All for \$225. Call Mike, 233-9132.
FOR SALE: Les Paul copy electric guitar - \$175. Last-6 string acoustic guitar - \$175. Muff Fuzz/Wah/Wah special effects peddle - \$125. Call John, 756-2736, Box 7765.

'82 HONDA PASSPORT: Misc condition, 478 miles. Red and white, 3 spd., 100 mpg. \$400 w/out. Call now, 677-8140 or Box 1227.
'82 HONDA MB-3: Cheap transportation, 30 mpg, good for intra-city mobility. \$230 obo. Call Al, 257-3461.

ROOM FOR RENT: 1 bdrm in a 4 bdrm house. Includes use of living rm, family rm, dining rm, kitchen, two car garage, gigantic back yd, 2 bedrooms. Must be a non-smoker, non-heavy drinker. Must see to appreciate. Only 5 miles from school just off of Clyde Morris in Port Orange. House is located in Willow Run subdivision. Call Mothe, 761-5062. \$175/mth. Includes util.

12-SPEED PUEBLOT: This bike is in showroom condition! Will sell for \$200! Paid \$320 new. Call Steve, 255-8284.
REMOTE CONTROL HELICOPTER, w/extra parts. Futaba 6 ch. 12 V motor, flight box, 2 gal of fuel. Less than 6 hours flying time. \$400. Call 672-2326.

WARDS TRASH COMPACTOR: Heavy-duty model, beige, like new cond. \$170. New Ken lists at \$450. Call even, 233-0778.
FOUR ORIGINAL TOYOTA 4 SPOKE aluminum mag wheels & four new tires. Replica of the new Supra's Colica GT5 wheels (1 yr. old). Call 258-1900 or Box 2163.

14" COLOR T.V., Brand new, \$130 obo. Call 232-6221.
STEREO SYSTEM: Sanpro semi-auto turntable, Marantz cassette deck, Pioneer QX949 AM/FM receiver, 60 W/ch, 4 channel. All for \$225. Call Mike, 233-9132.

My NEBOULE: Thanks for the invitation. Thank to Mr. and Mrs. D. Uno. Tell them I want to come up. I'll enjoy myself. Please sure you go back with PH. ANA BARRERIK YOUR ALIBABA

notices

UPDATE FOR GRADUATES

Party time: 6:00 PM - 9:00 PM or longer if money permits. (The club is open until 3:00 AM.)
Phone: Alex Tiki Inn, 2325 S. Atlantic
Date: August 16, 1984
Theme: Hawaiian Luau, wear Hawaiian shirts
Cost: \$1 - graduates, \$3 - guests (only 3 guests allowed)
Free drinks except imports!

GRADUATING SENIORS!!!

Project: Sign above grill area named "Flight Deck"
Hotel Accommodations: Listed in Student Activities Office
Just a reminder...
If a prospective employer requests an official transcript for a job interview, we must have a written request from you before that information can be released. Be sure to fill out a Transcript Request Form before leaving campus, for your convenience.

CARPOOL TO BUNNELL

Any students working in Bunnell who wish to form a car pool may sign-up in the Student Employment Office, August 8-15, between 8am - 5pm. All students are encouraged to apply regardless of whether or not they own a car.

CLOTHING DRIVE

Yets Club/Campus Ministries is holding a clothing drive Wed., Thurs. and Friday, August 8, 9, 10. We encourage all persons (senior's especially) to bring their used, clean clothes to the U.C. between 9am - 3pm. These items will be distributed to the needy by Father Morris. Thank you in advance...

FAA EXAMINATIONS

Embry-Riddle Aeronautical University will administer FAA Pilot Written Examinations on Tuesday, August 21 at 8:30 AM and Saturday, August 23 at 8:30 AM.
Students intending to take an FAA Pilot Written Examination are required to sign up in office D-200 or call Ext. 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 as personal identification an Airman Certificate, driver's license, or other official document.
Explanation of application forms and procedures will be given at 8:30am. Immediately thereafter, testing will commence and unless prior arrangements have been made, late examinees will not be permitted to enter the examining area while testing is in progress.

FLORIDA TUITION VOUCHERS

Florida Tuition Vouchers for Fall '84 are back down to \$375 according to the Florida Department of Education. If additional funds become available, they will make any necessary adjustments for the Spring '85 trimester.
The deadline date for filing a Florida Tuition Voucher application for the 1984-85 academic year is September 14, 1984. We will be billing the state on September 17, so it is very important to have the application to us by the established deadline date.

GUARANTEED STUDENT LOANS

The deadline date for submission of Spring-Summer GSL applications is October 1, 1984. Please have the application in our office by that date to allow ample time for processing and approval of your loan.
If you have an approval on your Guaranteed Student Loan for Fall-Spring 84-85, and do not receive notification of your loan check between the dates of September 6, and September 14, please contact the Financial Aid Office regarding an extension of payment.
Guaranteed Student Loan disbursement checks will not be available to students until late registration is over (Sept. 5). These checks will be disbursed through the Cashiers Office as usual. Notices of check arrival will be sent to student's mail boxes.

FINANCIAL AID AWARD NOTICES

All Financial Aid Award Notices must be signed and returned to our office before any aid will be credited to student accounts. Also, all requested information must be on file with us and correct before the aid is posted.
Financial Aid Awards will begin to be credited to student accounts starting September 10, 1984.

NDSL PROMISSORY NOTES

If you have been awarded a NDSL or REAL loan for Fall '84, you will be required to sign promissory notes before the funds will be credited to your account. Note will be sent to student mail boxes stating dates and times for signing.

FLY WITH THE NAVAL RESERVE
\$4000.00 IN EDUCATIONAL ASSISTANCE
PLUS PART-TIME INCOME
CONTACT YOUR NAVAL RESERVE S.A.M. REPRESENTATIVE
JOHN, TED, LAURIE, CALL COLLECT 904-772-3351

Hey Ace... Feel Lucky?
Lambda Chi Alpha's 3rd Annual Monte Carlo Night
New Date: Tuesday, Sept. 4, 1984
E-RAU University Center
Lambda Chi Alpha
AXA
The Fraternity of Honest Friendship

PHOENIX YEARBOOKS STILL AVAILABLE
The 1983 PHOENIX Yearbooks are still available for those students who did not receive theirs last year. The cost for the books now are only \$4.00 since we have only a few left and we are getting ready for the 1983-84 yearbook to arrive around the beginning of September.
You can't beat the price of a yearbook for only \$4.00, so please get yours now. You may purchase the 1982-83 and 1983-84 yearbooks in the SGA office near the copy machine. For those of you who have not paid for the new upcoming 84' book you can also do so in the SGA office.
For you SENIORS, this is your last chance to buy one and to pay for the mailing charge to have it sent to your permanent address. Hurry up people and buy one of these yearbooks full of memories that will last a lifetime.

# German Arado jet astounded Allies

By Brian Nicklas  
Avion Staff Historian

In the clear skies over the Normandy beaches during August 1944, a routine reconnaissance flight would be recognized as a history maker. This history maker, the German Arado Ar 234, had done two things that summer morning; it had completed its first operational flight and in so doing had made the world's first jet recon mission.

The Ar 234 was a sleek looking aircraft, with a tapered high wing mounted midway down the fuselage. The pilot sat in the extreme nose, with nothing in front of him save the main instrument panel and the control column. Flanking the slender fuselage and tucked underneath the wings were the powerplants, two Junkers Jumo 004 turbojets. The aircraft was equipped with the cycle gear which retracted into the fuselage.

In addition to its role as a recon aircraft, the Ar 234 was also used as a bomber. However, in this capacity it was somewhat hampered by its design. With the wheels of the Arado retracting into the fuselage, and fuel tanks

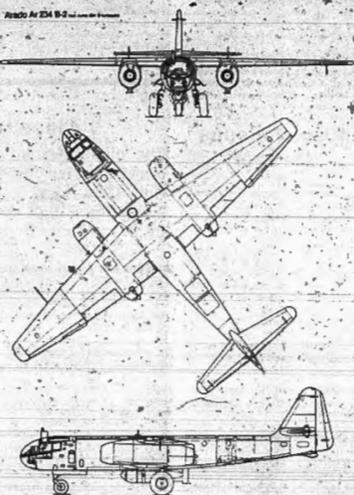
taking much of the other space, the 234's carried their bombs externally. This load was at most three bombs, one under each wing and one carried semi-recessed under the fuselage. Reconnaissance versions simply carried a pair of cameras, and these were mounted between the aft fuel cell and the empennage. The aircraft was apparently well liked, as it provided excellent visibility through the well glassed nose. This was supplemented in some cases by a rearview portscope.

The speed afforded by the clean, twin-engine design was another positive feature, one that allowed the Arado to out-run most of its predators. These engines, however, were also its weakest point.

Most of the losses of the 234 were due to engine problems more than anything else.

Initially planned to receive BMW turbojets, the Ar 234 was reengineered to take the Jumo 004s when the BMWs encountered developmental problems.

The Jumo engines were not trouble free themselves, and



work on a suitable replacement was ongoing. One hoped-for solution called for returning to the BMW 003 engine, but with plans for four powerplants instead of two.

This arrangement was tested, on two different airframes using two different designs. One aircraft carried the engines in separate nacelles, while the second carried the engines in pairs. On February 4, 1944 the latter Ar 234 flew for the first time, becoming the world's first four-engine jet aircraft. The system was put aside as the BMW's still had problems.

Most of the operational Ar 234's were powered by the Jumo 004 and they were aided on takeoff by rocket assistance. In order to overcome the problems at takeoff, the 234 was equipped with Water-rocket pods. These pods, after use, were jettisoned and recovered by parachute to be used again.

Another initial problem for the Arado (which was named the Blitz or Lightning) was the undercarriage. When first flown, the aircraft took off on a dolly and landed on hydraulic skids. This

arrangement was used to save weight and cut down on the complexity of the landing gear systems. The system was dropped because it caused nose headaches that it solved.

The Blitz had limited success, but this was due more to timing than to design. Like many other German projects, it was produced in limited numbers mainly as a result of Allied bombing. After the collapse of Germany in 1945, the Allies were interested in obtaining examples of this 400 mph aircraft.

As original airfields in Europe, the British and the Americans acquired a total of twelve Arados, with eight of these going to England. The U.S. services split their prizes; the U.S. Navy and Army Air Corps each received two aircraft.

While most of these were scrapped or destroyed, there is one remaining aircraft. The Arado turned it over to the National Air and Space Museum and it is currently in the NASM's Barber facility in Suitland, Maryland awaiting restoration. This Ar 234 is the sole survivor of this historic type.

## Jungle Book trip on the Oklawaha

By Mark Reeves

Riding just behind the lead boat, we felt confident as to our whereabouts. It wasn't until the lead car stopped and asked us for directions, that we became alarmed. Half the party voted to continue forward while the other half suggested we turn right. The votes indicated we proceed forward.

This was the start of what proved to be a rather eventful day of Eta Mu Sigma's overnight canoe trip. The ten person party left the K-Mart rendezvous and got underway at about 6:30 AM with enough supplies for 20 people.

We were on 40 West at a place called "Half Moon" when we got directions. These directions guided us down Route 88 where we were continuously confronted with craters consuming more than half the road. After a short conference around the "Road Closed" sign we decided to turn around and drive back via the weeds along the road.

Upon arrival at the Canoe Outpost (finally), we were quickly loaded onto our bus and transported 25 miles up the Oklawaha River to the boat landing. Some very strategic planning came into play when we tried to distribute Eta Mu's myriad of coolers and camping gear between 5 canoes.

Eventually the crews showed off and celebrated by tapping the

king of beer. No one realized at this time how fortunate they were to be having one.

While floating to one side so that the speed boats may pass, our biggest fear suddenly became a reality. It was as if someone hit the "Pure!" button on a blender. The closest power boat quickly accelerated while next to the canoe with the nearly virgin keg in it.

We all knew what was going to happen then. On the third oscillation of the canoe, the keg plunged 25 feet to the bottom of the river. Was the "Road Closed" sign going to be an example of what the rest of the trip would be like? Fortunately not.

Other power boats had witnessed the incident and were very helpful in retrieving our mangled treasure. The diving expedition was headed by Eta Mu's own version of Jacques Cousteau, Leo Berch. We were off and running again in one hour. Sitting comfortably on the bottom somewhere was the AM/FM cassette player.

After that we all worked earnestly to lower the C.O. in the keg canoe by keeping our cups full at all times. This marked the onset of what ended up being a safe and fun filled adventure.

We headed up stream towards Silver Springs first in hopes of seeing some wild monkey which allegedly make that portion of the river their home. We paddled

and drank vigorously, but got no place fast. We came upon the same power boats who rescued us earlier and wound up receiving a tow upstream from them. We were cited over their generosity, as an opposing current and relative inattention had greatly reduced our stamina by that time.

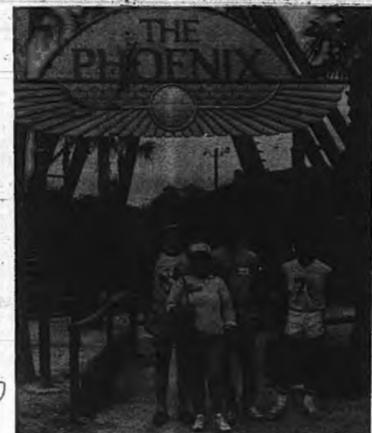
We never saw a wild monkey, though some Ms members began portraying "Jungle Book" characters. It was when Jacques Cousteau tipped his canoe over that we decided we had better start thinking about making it to the camp sight.

The convoy was eventually split, but luckily all managed to meet at the same campsite. Ms

members continued to use their public relations skills and obtain more 'tows' down the river to the campsite.

The fallout around the campsite the next morning led us to believe we had a great time the night before. We made quite a few friends there and plan on returning someday. The campgrounds were restored to their original condition and we set out on our last leg of the adventure.

Singing melodies from the car-by seventies we leisurely floated the rest of the way. The serenity of the Oklawaha will never be forgotten by those who have tasted her beauty.



## Yearbook staff attends workshop

By Jean Snyder

Three E-RAU Phoenix Yearbook staff members and their advisor participated in the statewide Taylor Publishing Company's Summer Yearbook Seminar coined "A Special Spirit".

The three-day workshop July 25-28, 1984, was held at the University of South Florida in Tampa and involved several hundred middle schools, high schools and colleges for intense training workshops and laboratory experiences. Through some 8-hours of workshops, 3-6 hours of seminars, 8-hours of "contest-level" hands-on design and development, E-RAU's students gained a great deal of knowledge and, according to all, were very excited about this Fall.

Why go to an intense workshop to learn about a yearbook? E-RAU's Phoenix Yearbook is designed to save the memories of students' experiences at E-RAU, Daytona Beach Campus. "A Yearbook never forgets...will you?" Students must develop skills in Advertising, Sales and Merchandising of our name and our book's learn basic skills in layout, all aspects of yearbook photography, graphics design, study the use of color, special effects, cover design and end-sheets; journalistic copy preparation, organization and more.

This was the first year that Phoenix members were able to attend, and for only \$110 per person the conference provided meals, living accommodations, packets of information, Special Spirit T-Shirts, and one-ticket each to Bush Gardens - used the last night of the Seminar.

Jose Miguel Vidal (from Mexico), Manuel Fernandez-Longo (Puerto Rico), and Monroe Yuda (New York) attended these

events. Their advisor is Jean Snyder, Publications Coordinator for Students Affairs.

To show their special spirit, and although they did not receive awards, the staff entered both the Photography and the Special Yearbook Design contests.

The students worked on the Yearbook Design entry for more than 7-hours. Each school received information about a fictitious school (name, size, type of community, etc.). All entries had to be on "official" rough draft layout sheets only.

Contest Level 3 was the one Phoenix staffers entered. This contest required the design of a cover, design of endsheets (the first pages just inside the front and back covers) and layouts for a nine-page opening section.

Much professionalism was shown in working on this contest entry. Manuel entered the Photography contest. A roll of 35-mm Color slide film was given each contestant and they were given a limited period of time to take award-winning efforts, using the newly acquired skills received in class. Manuel has already thought of ideas for next year's contest.

After all the work, the 2 and a half hours at Bush Gardens Amusement Park was much needed, and the "Phoenix" ride, the Python, and the Scorpion had them all "up" for anything.

After a special multi-colored slide show (showing all participants of Taylor's Seminar) and the awards ceremony, Saturday morning, Taylor Publishing Company's Special Spirit Summer Seminar was over. But the Phoenix Yearbook staff has just begun. LOOK OUT E-RAU. The Phoenix is rising and is ready for 1984 and 1985. Get that special spirit and GET YOUR PHOENIX YEARBOOK.

ing level, it didn't damage any vehicles. Several people retrieved the part and minutes later several lifeguards carried it off.

Chris Ives immediately flew back and landed at Mayport where the maintenance crew replaced it.

The Blue Angels finished performing that Saturday without Blue Angel No. 5. Because of the mishap, Andy Caputo, opposing solo, flew some patterns by each other. Blue Angel No. 5's aileron ripped off his Skyhawk A-4F as he pulled into a steep climb. Although the aileron landed on a condominium's top park-

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Find out about ...



The PHOENIX yearbook is a student organization which is in charge of transforming a year of studying at Embry-Riddle into a lifetime experience.

We need creative people interested in:

- Photography
- Cover and layout design
- Public relations
- Advertising
- Merchandising

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