

2-26-1992

Avion 1992-02-26 (B)

Embry-Riddle Aeronautical University

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

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

SPACE TECHNOLOGY

Inside Section

B

Aeronautica	B3
Classifieds	B8
Clubs	B4
Comics	B7
Diversions	B6
Mechanical Technology	B2
Notices	B5

ARIANESPACE will launch two communication satellites

By Joshua S. Mussaf
Space Technology Reporter

This evening, an Ariane 44 L launch vehicle will launch into space with two satellites aboard at 8:15 p.m., 6:15 p.m. local time. The French space agency and the commercial space corporation, Arianespace, will oversee the launch of the vehicle.

The 49th Ariane launch is to place the Superbird-B1 and Arabsat-1C satellites into a geostationary transfer orbit using the Ariane 44 L launch vehicle equipped with four liquid strapon boosters and the Ariane Dual Launch system. This will be the 21st launch of an Ariane 4 and the 11th in the Ariane 44 L configuration. The Ariane vehicle will be launched from the Ariane launch complex in Kourou, French Guiana in South America.

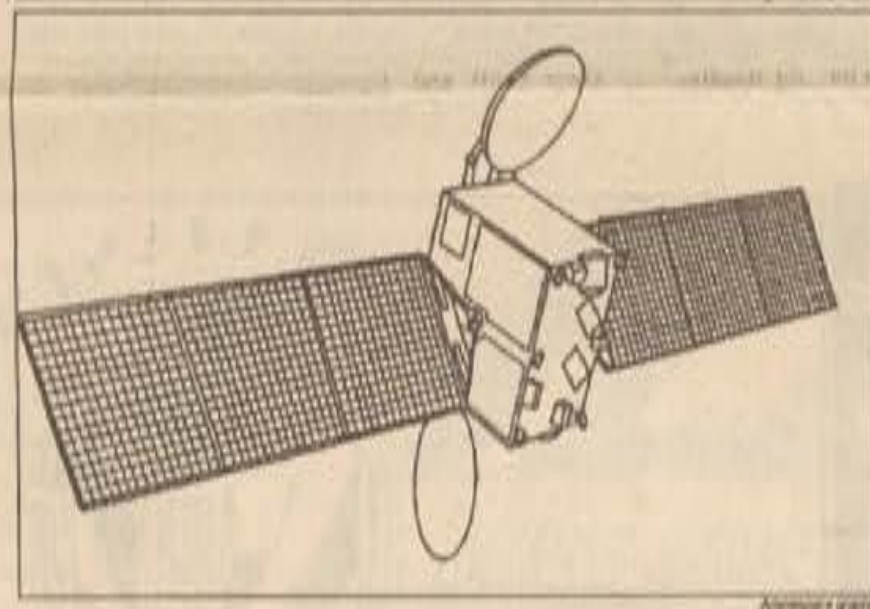
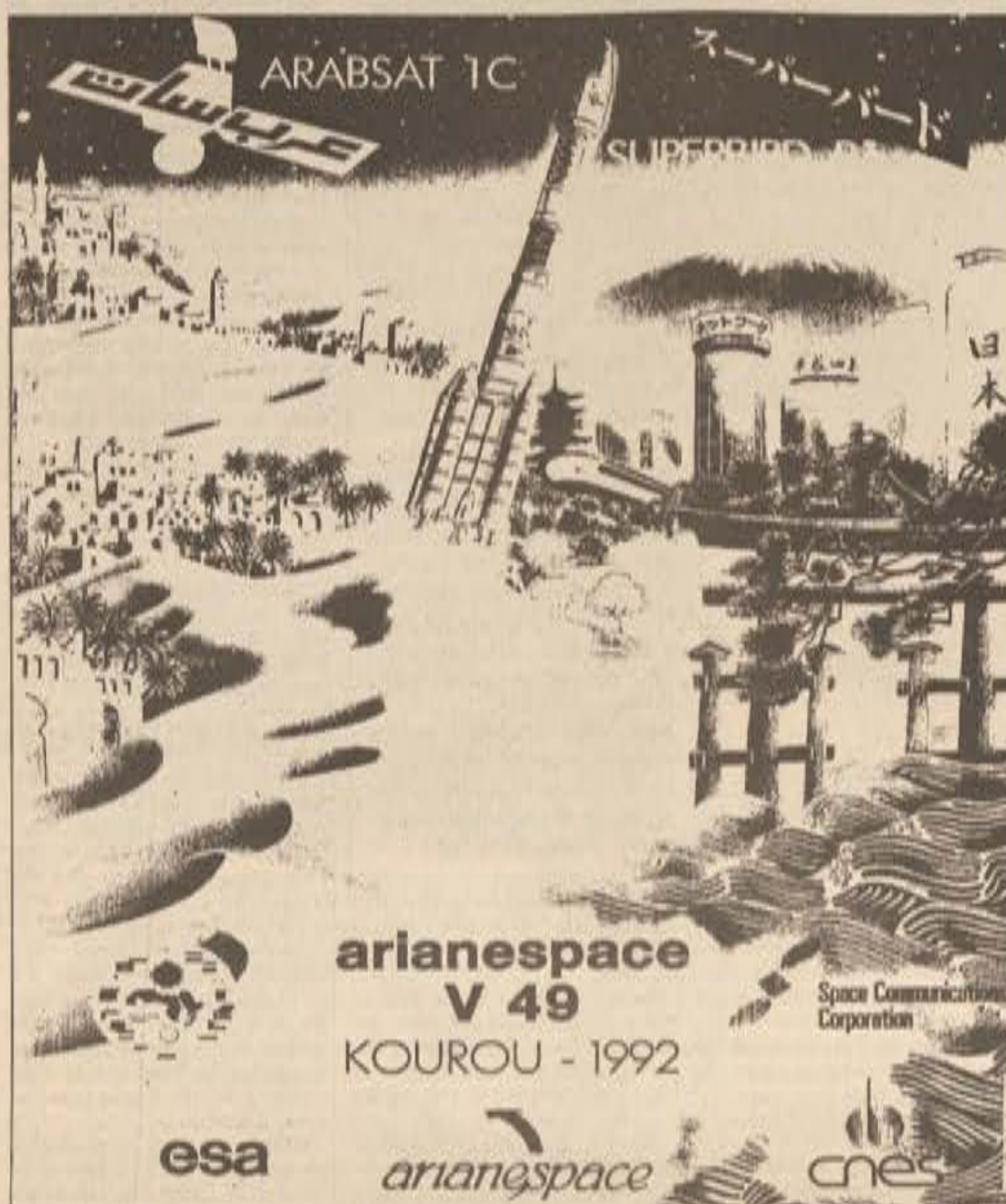
The Superbird-B1 satellite is the third spacecraft built for Space Communications Corporation of Japan. When fully operational, the satellite will provide Japan and the North Pacific region with high power coverage and flexible multi-band operation.

The Superbird-B1 satellite will separate from the Ariane vehicle 20 minutes, 23 seconds after launch. The first acquisition of data will be obtained approximately 40 minutes after liftoff. The satellite will be located in orbit at 162 degrees East, over the Pacific Ocean. It is designed for a nominal 10 year life span.

This is actually the third Superbird-B1 satellite, after two previous launch failures in 1990 and 1991. The first failure on Ariane flight 36 in February 1990 was attributed to human error.

The Arabsat-1C satellite is the third spacecraft of the Arabsat's first generation space segment delivered by Aerospatiale of France.

The satellite will provide telecommunications and television service for the 21 countries of the Arab League. The Arabsat-1C satellite will separate from the Ariane launch vehicle 25 minutes, 19 seconds after launch. The first acquisition of data from the satellite will be obtained about 31 minutes after liftoff. The satellite will be positioned in orbit 31 degrees East, over East Africa. The satellite has a seven year life span. The satellite will be able to carry 8,000 telephone circuits plus seven TV programs.



Arianespace launched the 49th mission of the Ariane commercial lift vehicle (top) from its launch site located in Kourou, French Guiana in South America. Ariane will launch the SUPERBIRD-B1 (left) and the ARABSAT-1C communications satellites during this mission. The mission will last for about 28 minutes, 10 seconds after liftoff.

Magnetic sail will allow efficient travel to Mars

By Ronald Hess
Space Technology Reporter

It is very conceivable that the next step in space exploration is interplanetary expeditions. Everyone is talking about going to Mars. The only problem is, how do we get there?

This is a very perplexing question, especially if thinking is limited to rocket propulsion techniques currently available or that will be in the near future. While other scientists are busy calculating thrust-to-weight ratios, fuel consumption and perspective launch window times for answers to interplanetary travel, scientists at Martin Marietta are turning their attention towards the past.

Martin's team of scientists have developed a technique for exploring our solar system much like the great explorers of the past once did, by sailing. The plan calls for discarding the fuel tanks for a more traditional method, riding the solar wind.

Narrow minds would have the world believe that there are no energy sources to tap from, thus the necessity for rocket fuel. But thanks to the constant nuclear fusion reactions occurring in the Sun, space is not so barren and empty.

The Sun constantly emits a stream of plasma outwards in all directions. This blowing solar 'wind' is a cloud of charged particles, mainly protons and electrons, which travel at a speed of 400 to 600 kilometers per second. The objective is to harness this ever-present wind and use it as propulsion, much like the sailing ships of the past. But here the analogy between past and future ends.

Blowing sails are replaced by a powerful magnetic field. When the particle wind smashes into the magnetic field, it exerts a pressure, driving the spacecraft forward, hence the crafts are called 'magsails.'

The magnetic field of the magsail may be created with today's technology. The major component is a superconducting cable. When an electric current is entered into the loop of superconducting cable, it will run indefinitely, continually charging the 'sail.'

One slight drawback that is easily overcome, is the fact that current superconductors only operate at temperatures close to absolute zero (zero Kelvin or -273 degrees Celsius). Fortunately, the ambient temperature of interstellar space is 2.7 Kelvin (approximately -270 degrees Celsius). The only problem

involves interplanetary space, which, at warmer temperatures, will require new high temperature superconductors.

Construction of magsails is quite simple. The only requirement is a loop of superconducting cable. Charging the loop will initiate the magnetic field causing the loop to take a rigid shape. The size of the loop determines the size of the sail.

The final appearance of the magsail is in the form of a wagon wheel. The hub consists of a spacecraft which can contain cargo or passengers. Radiating outwards from the ship are tethers which anchor the craft to the enormous cable loop.

Once the ship is deployed, speed and direction are regulated by the current through the cable. The greater the current, the larger the magnetic field, thus the greater the push through space.

When traveling to other planets, the magsail can travel to a point along the planet's orbit. The current can be readjusted so that the craft may achieve a circular orbit around the Sun.

Then the craft can wait in the orbit until the planet overtakes it. This reduces the necessity for projecting ballistic launch windows required for fueled flights.

Another significant benefit of the magsail is the protection it provides. The greatest concern scientists have for interplanetary travel is exposure to solar radiation. But the magnetic field of the magsail would shield its passengers from solar flares just as the Earth's magnetosphere shields us.

Another benefit of the use of magsails is cargo space. Many designs of spacecraft to be used for Mars missions are severely hampered by the amount of cargo space. For a magsail, space that is normally required for propellants may be replaced by additional cargo and supplies.

Magsails may seem feasible for inter-planetary and -stellar exploration, but they are not realistic for human travel to other solar systems. That is another bridge which will be crossed a lot further down the road.

But for today's spacefarers, it seems that the old ways might just be the best ways. Magsails seem the most practical method of traveling between the planets. Perhaps our children may explore other planets much like our forefathers explored other continents, by the wind.

Shuttle Commander to visit Embry-Riddle

By Nick Simatos
Assistant Professor AS, FT

On Tuesday, March 10, Embry-Riddle students will have a unique opportunity to hear a Space Shuttle Astronaut Commander speak. NASA Space Shuttle Commander, John Blaha, a Colonel in the U.S. Air Force, will speak to ERAU students, staff and faculty. The Student Government Association (SGA) sponsored event will be held at 8 p.m. in the John Paul Riddle Student Center.

Astronaut John Blaha will visit the ERAU campus at the invitation of the Aeronautical Science Department to introduce the new Space Studies minor and provide students with firsthand information about space, space flight and the astronaut corps from an astronaut's viewpoint. The visit will accent the International Space Year events at ERAU and across Florida, the United States and around the world.

Col. Blaha, who has logged 5,500 hours of flying time in 34 different aircraft, was selected as an astronaut in May 1980. He was assigned to the Space Shuttle ascent/entry development team, and led the design, development and integration of the Orbiter Head Up Display System.

In January 1985, he was assigned as the pilot of the STS-61H mission scheduled to launch in June 1986. Following the Challenger accident, he was assigned to the Orbiter Project Office, and made significant contributions to many Space Shuttle hardware modifications. During this period he also led the development of contingency abort procedures

which significantly improve crew survivability in the event of multiple main engine failures during ascent.

In February 1988, Col. Blaha was assigned as the pilot of STS-29. The five man crew launched on the Space Shuttle Discovery on March 13, 1989, and landed at Edwards Air Force Base on March 18, 1989. During this mission the crew deployed a Tracking and Data Relay Satellite, and performed eight scientific/medical experiments.

Col. Blaha also was the pilot on the crew of STS-33 which launched at night from Kennedy Space Center, Florida, on November 22, 1989, aboard the Space Shuttle Discovery. The five day mission carried Department of Defense and other secondary payloads.

More recently, Col. Blaha commanded the crew of STS-43 aboard the Orbiter Atlantis. The nine-day mission launched from the Kennedy Space Center, Florida, on August 2, 1991. During the flight crew members deployed the fifth Tracking and Data Relay Satellite (TDRS-E), in addition to conducting 32 physical, material and life science experiments, mostly relating to the Extended-Duration Orbiter and Space Station Freedom.

With the completion of this third space mission, Col. Blaha has logged over 453 hours in space. He also has recently been named as the "NASA Astronaut of the Year." Some of Col. Blaha's other honors include the Air Force Distinguished Flying Cross, the British Air Force Cross, the Vietnam Cross of

See Astronaut page B5...

SPACE UPDATE

February 20...

Marked the 30th anniversary of the first American to orbit the Earth. John Glenn orbited the Earth three times in the Mercury spacecraft named Friendship 7.

February 24...

At 5:29 p.m., a Delta II rocket lifted off from Cape Canaveral Air Force station carrying a Nav Star global positioning satellite into orbit.

February 27...

An ATLAS rocket is scheduled to lift off from the Cape Canaveral Air Force Station at 6:08 p.m.

NEW RECORD SET

While Atlantis was preparing for its next mission in March, a new record was set in the Vehicle Assembly Building (VAB). The record was for the amount of time needed to prepare a shuttle for launch. The new record is 35 days, beating the previous record of 60 days which was also set by Atlantis back in 1991.



Air Force Colonel John Blaha (above) will visit Embry-Riddle to introduce the Space Studies minor and provide students with first hand information about space, space flight and the astronaut corps. Col. Blaha was the pilot of STS-29, STS-33 and STS-43. He has logged over 453 hours in space.

Nissan engine powers the Pond Racer

By Jon Eichelberger
Mechanical Technology Editor

Robert Pond decided to save the historic old warbirds from the Reno Air Races by building a plane for the sole purpose of racing. He contracted Burt Rutan and Scaled Composite to develop a prototype that will race and hopefully win at Reno someday.

The powerplant for the Pond Racer needed to be powerful and have a substantial parts supply. The two engines need to produce a thousand horsepower each (two thousand horsepower is considered necessary to win at Reno), and Pond wanted the plane to have the advantage of availability of parts that the warbirds did not have.

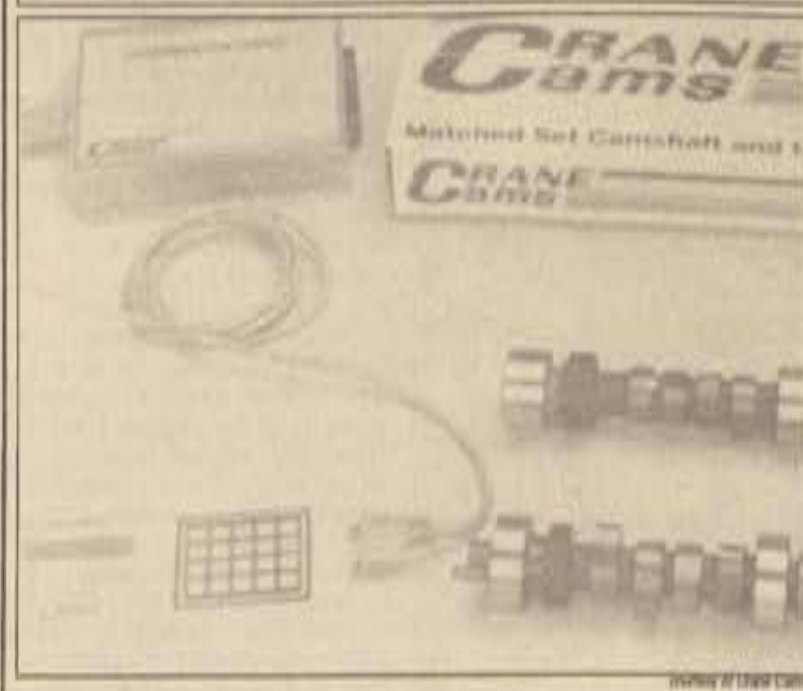
They picked Electramotive, a motorsport engine developer in Vista, California, to provide the engines and the gearboxes. They are a subsidiary of Nissan that provides engines for their GTP race cars that raced here in the 24 hour race.

They are the VG30 engines that are based on the Nissan block used in the 300ZX and Maxima. The engine is liquid-cooled with a single overhead cam, two valves per cylinder, and displaces 3.2 liters. The twin turbochargers boost the engine to 110 H.g. at 8000 r.p.m. to give the engines their thousand horsepower.

The race car version of these engines only hit 750 h.p. and only for short periods of time on long straightaways. At Reno, these engines will be running flat out for 15 minutes, so reliability is a big concern with the engines.

The engines are packed into a two foot diameter, five foot long nacelles. They are mounted to the airframe and the cowling skin are a load bearing part of the engine mounts.

It took a year to develop a gearbox that would bring the 8,000 r.p.m. to a propeller speed of 2,000 r.p.m. The four blade propellers are 80 inches in diameter and is a King Air prop modified by Harvell. The thin tips are designed to run at 98



Crane Cams headquarters here at Daytona Beach, is where all product development and production is done (above). They have a one hundred and fifty thousand foot production facility along with their marketing and product development. Crane Cams offers tours of their facilities on Tuesday and Thursday; call to make an appointment. The Interceptor (left) is the newest product offering from Crane, that offers the ability to modify fuel and spark timing on a car.

percent the speed of sound.

The engines are electronically controlled and takes into account temperature, pressure data and the inputs from the throttle and prop controls.

Then the computers choose the needed boost, and the duration and timing of the spark and injection, to get the most power out of the engine. Although, the computer does not monitor an important aspect the plane needs - air density.

The Pond Racer uses methanol fuel because it does not detonate. This allows the engines to run at the

high boost needed to generate the necessary horsepower. Methanol also burns over a wider range of mixtures, so excess methanol can be used to help cool the engine.

Problems have persisted with the Pond Racer. Methanol burns two times faster than does gasoline, meaning more weight is added for the additional fuel.

Methanol is also very corrosive; the structure had to be made with a special epoxy that could withstand this corrosiveness. Another problem was with the overheating of the engine because of it being compacted into

its small area. The cooling system is put to the test during the 15 minutes of racing.

When the Pond Racer went to Reno, the problems continued for Pond and Rutan. They were unable to finish a heat race because of engine problems that sent oil spilling onto the airframe.

More refinement is needed before the Pond Racer is a major competitor and can challenge the speed record of the Grumman Bearcat, *Rare Bear*, that reached 459 knots.

Crane Cams expands on the Ford EEC-IV system

By Jon Eichelberger
Mechanical Technology Editor

Crane Cams, whose office is located here in Daytona Beach, has introduced a new product for use with the Ford EEC-IV computer for the late model 5.0 liter V8. The Interceptor is an engine management system that does not replace, but works with the EEC-IV computer.

The Interceptor is placed between the engine management computer and the engine. It reads the inputs and outputs of the stock system without interference until the user modifies them. The EEC-IV is used as a base for the Interceptor to begin calibrations.

This is a different approach than other companies, who just replace the existing computer management system with their own. Then they spend hours calibrating a baseline for that specific engine type.

The Interceptor saves time because it uses the stock system as its base, and does not have to be changed for different vehicle combinations.

Modifications are made easily with the use of the control pad that has 20 keys and a display screen. Choose between changing fuel mixture or ignition timing, pick the

r.p.m. range, and then punch the keys necessary to increase or decrease what you are changing. These changes can be made while you are driving or after you have done some driving.

Several calibrations can be stored and recalled for later use, adding versatility to your car's performance. Calibrations that can range from maximum engine output to a more economical output can be recalled at the driver's discretion.

Engine operations can be monitored with the display panel, which shows r.p.m., spark timing, percentage of fuel available, throttle position, open or close loop, and fuel mixture - rich or lean. The engine monitor displays only in real time.

The Interceptor comes with a boost processor for engines with turbo or superchargers, along with a nitrous control unit and a adjustable rev limiter.

The Interceptor is now available for the 5.0 liter V8, but can be modified for other engines with a Ford EEC-IV computer; it's just a matter of changing to the different connections.

Crane Cams is also considering working on applications for GM engines. The Interceptor is retailing for \$625 and will be available soon.

Automotive news corner

Ford has formed a special vehicle team made up of car and truck enthusiasts, who will put together limited production cars and light trucks. This group will start with the Mustang, getting help from ASC and Roush Engineering.

Ford will give the performance Mustang a Cobra badge, which is a continuation of the late 70's Cobra Mustangs. The goal is a power increase to 275 hp with upgrades in suspension, tires and wheels. Ford expects 5,000 units to be produced and sold to dealers.

GM is rumored to be developing another GTO car. It is said to be based on the Grand Am, with exterior styling upgrades. The engine may be the 3.4 liter V6, that once fitted in would be a potent combination.

Mazda, who has long been suc-

cessful in IMSA GTU racing, has put together a GTP car for this season. They were unable to get the car together for the Rolex 24 hour race, but got the car done Friday and was able to race at Miami last Sunday.

The RX-792P race car is powered by the same rotary engine that won at Le Mans and produces 625 h.p. The body is small compared to other GTP cars. Mazda has had 11 in IMSA GTU/GTO Manufacturers' Championships in 12 years, and is expected continued success in GTP.

Chrysler has finally introduced their new Jeep Grand Cherokee. The Cherokee is 7.5 inches longer and comes with the same 4.0 liter engine. Major refinements went to the Jeep's suspension and chassis. The Cherokee will range from \$19,000-\$27,000.

RIVER BREEZE RESTAURANT

HOME OF 75¢ BREAKFAST • LUNCH SPECIALS DAILY

NOW OPEN 24 HOURS

ALL-U-CAN-EAT \$8.95
CRAB LEGS
SHRIMP • STEAK • B-B-Q RIBS
INCLUDES: SALAD, MASHED POTATOES OR FRIES, GARLIC TOAST

175 RIDGEWOOD AVE., HOLLY HILL • 253-5377



1500 BEVILLE ROAD
DAYTONA
257-2200

OPEN 7 DAYS A WEEK
MON.-THURS. 8AM-10PM
FRI.-SAT. 8AM-11PM
SUN. 10AM-10PM

LARRY'S COUPON

\$.50 Off
Medium
Sub-ERAU

NOT VALID WITH SUB CARD
Expires 3/1/92

February Special

Medium
Animal,
Chips, Drink,
\$3.95

LARRY'S COUPON

\$1.00 Off
Large
Sub-ERAU

NOT VALID WITH SUB CARD
Expires 3/1/92

PhilAir Flight Training



Coming Soon
IFR C-152

Professional Flight Training at Economical Prices.

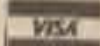
Multi-Engine
PA34-200 Seneca
\$99/hour wet
50 hour block \$4,750
100 hour block \$8,500

Aircraft hangared on
Daytona Beach Airport

Single Engine
C-172 XP
195 hp constant speed
prop full digital IFR
\$55/hour wet



Phil Herron
HANGAR (904) 253-9222 OFFICE (904) 248-4793



COMEDY SHOW With BERTICE BERRY

Voted 1991 College & University Comedian of the Year

FRIDAY, FEB. 28

8 PM

In the Student Center

Free Refreshments After the Show

Don't Miss the Fun!

Boeing makes major job cuts

SEATTLE (AP) - The Boeing Co. is cutting about 8,000 jobs this year but its chief executive says the aerospace giant remains healthy.

Boeing said Wednesday that 6,500 jobs would be eliminated in the Seattle area and another 1,500 at its plant in Wichita, Kan. The jobs will be eliminated through attrition and an unspecified number of layoffs.

Frank Shrontz, chairman and chief executive officer, said the cuts are not as drastic as those announced by many other companies during the recession, "so we're still basically bullish."

The reductions will include everyone from production workers to managers and cover all areas of operations, including commercial airplanes, defense and space, and computer services, according to Boeing spokesman Russ Young.

The long-term outlook for Boeing's defense businesses is uncertain, but prospects are good for its commercial side, Shrontz said. Building commercial jetliners accounts for 80 percent of Boeing's work.

The company said the job cuts are necessary following the cancellation of missile contracts by the Bush administration, the government's scaling back of the B-2 Stealth bomber program and changes in the market for commercial aircraft.

Last fall, the Bush administration cancelled three missile programs for which Boeing had contracts: the SRAM II short-range attack missile, the rail garrison basing program for the Peacekeeper ICBM, and the hard mobile launcher for the Midgetman missile. Boeing is also a major subcontractor to Northrop on the B-2, employing 8,000 people to build the outboard wings and fuselage.

The company has said it will lower production rates for its 737 commercial jets by one-third next October from 21 planes a month to 14 because of reduced demand for the twin-engine short-haul jet.

Economists said Boeing's numbers are bad news because each Boeing job is indirectly tied to three non-Boeing jobs.

A new approach



The Navy and the Air Force have recently received new aircraft for their respective training programs. The aircraft featured in the following pictures is the new T-45ts. The trainer is built in St. Louis by McDonnell Douglas. The picture at the top depicts the trainer in a trial landing on an aircraft carrier. The pictures to the left and at the bottom show the Goshawk at the rollout in the plant in St. Louis. The T-45 is going to be delivered to the Naval Air Station at Kingston, Texas, after being tested at the Naval Air Test Center. The Goshawk is a light jet engine aircraft that will be used in the Navy's new training system, or T-45ts. The system is a fully integrated system with full contracted logistic help.

Navy accepts new trainer

ST. LOUIS, Jan. 23, 1992 — McDonnell Aircraft Co. today rolled out the first U.S. Navy T-45A Goshawk jet trainer built in St. Louis.

As the first production aircraft to incorporate a number of key improvements, the aircraft represents a significant milestone for the T-45 Training System (T45TS) program. Following a short test period at the Naval Air Test Center in Patuxent River, Md., the aircraft will be delivered to Naval Air Station Kingsville, Texas, where the other elements of the T45TS are already in place.

"It is with great pride in the team that we offer this aircraft to the U.S. Navy as the first of what we are confident will be a fleet of superb airplanes to train our pilots well into the 21st century," said Robert H. Susie Jr., McDonnell Aircraft T45TS vice president and general manager, at the rollout ceremony.

"The T-45A Goshawk is now going to be the challenge that every Navy student in the strike pipeline must meet before he can wear the Navy wings of gold," said Capt. Richard E. Koehler, Navy program manager for the T45TS, after accepting it. "The Goshawk is truly representative of the highly sophisticated aircraft present in the fleet today. . . and, when coupled with its ground training system, will produce pilots second to none. Navy representatives attending the rollout ceremony included Undersecretary of the Navy J. Daniel Howard, Chief of Naval Education and Training Vice Adm. John Fetterman and Commander of Naval Air Systems Command Vice Adm. William Bowes. Also on hand were members of the British Parliament and Embassy. Major portions of the T-45A, a derivative of the British Aerospace Hawk, are manufactured in Great Britain.

The T45TS is the Navy's first totally integrated training system, combining computer-based academics, simulators, trainer aircraft, a Training Integration System and contractor logistic support. Training of the initial cadre of instructor pilots is currently under way at Kingsville, with the first student class set to begin in January 1993.

Current Navy requirements call for 268 aircraft, to be based at NAS Kingsville and at Naval Air Station Meridian, Miss. The T45TS system also includes 24 simulators, 34 computer-based instructional systems, three Training Integration Systems and 200 associated computer terminals at the two training bases.

The T-45A rolled out today is a substantially strengthened aircraft designed to withstand the rigors of undergraduate naval flight training. Following initial developmental testing/operational testing of the aircraft in 1988, the Navy had identified key areas which required improvement. Those changes, incorporated into the aircraft rolled out today, were developed and tested over the past three years. They include a movable slatted wing to improve stall performance, a more powerful engine, and improvements to the speed brake, longitudinal control and lateral/directional stability systems. The company completed testing of the improvements in late 1990 and the Navy validated the changes in early 1991. By December 1991, the T-45 underwent initial carrier suitability testing aboard the USS Kennedy. A Navy operational evaluation is set to begin in the fall of 1992.

The T45TS program is currently staffed by approximately 1,400 McDonnell Douglas employees. Production rates stand at 12 per year, with a capacity for 48 aircraft per year. To date, the Navy has funded 36 production aircraft in addition to two development aircraft. McDonnell Douglas is prime contractor for the T45TS. British Aerospace serves as principal subcontractor for airframes. Rolls-Royce supplies the Adour 871 engine and Hughes Training provides the simulator.

Initially, the T-45A was built at Douglas Aircraft Co. in California. The program was transferred to McDonnell Aircraft in St. Louis during 1990 as part of a corporate-wide effort to conciliate large-airframe transport business at Douglas Aircraft and small-airframe tactical and training aircraft at McDonnell Aircraft. The first four T-45A aircraft delivered to the Navy through 1990 were built at Douglas Aircraft.

Multi-Engine Instrument

\$695.00

Guaranteed
3 Days



**ATP or FEX
Written Prep
\$195.00**

Includes
Immediate Results



Airline Transport Professionals

Multi-Engine Aeroline

\$55.00 Hr. Wet

With completion of the following:

Aircraft checkout

- Flight simulator training
- Seminole aircraft check out
- Computer flight plan review
- Crew resource management
- FAR review

All for only:

\$350.00

Multi-Engine Instructor

\$695.00

Guaranteed
3 Days

Call

800-ALL-ATPS

Offered in
Daytona

ATP

Flight Rating

\$695.00

Guaranteed
3 Days

Arnold Air Society

By John S. Eubanks III

Public Relations Writer

The Arnold Air Society is a professional organization that is affiliated with the Air Force Association. The Gill Robb Wilson Squadron is located here at Embry-Riddle Air Force ROTC Detachment.

This semester AAS is once again participating in a variety of community projects.

Friday, members cooked and served lunch to the homeless people of the community and on Saturday we took to the road, cleaning our own section of I-95 in our Adopt-A-

SAA

By Eric Stevens

Section editor

The last SAA meeting was an informative one for all.

Our president briefly went over the SAA convention for those of us who were not able to attend. Those who did attend had a great time and brought back a huge amount of information.

One item that was mentioned was that Embry-Riddle might be able to host a future SAA convention. This is something that all in the club would like to see and we are hoping for the best.

Additionally our delegates received the spirit and lip-synch awards while at the convention. Congratulations goes to all the delegates who represented us so well.

Lou Nemeth, chairman of Alumni Relations, also spoke to members at the meeting. He is promoting the Mentor program here at Embry-Riddle. This program matches students with an alumni in their related field.

The student is then able to discuss future career goals with the alumni and receive guidance in career decisions. Although new at this school, the Mentor program has been a huge success at other schools.

Another speaker at the meeting was Steve Nordlund of the Alumni Relations office. He showed some extremely humorous overhead graphs about the convention. The correlation between the lack of sleep and amount of beverages consumed on Saturday night was especially interesting.

Steve also gave us a presentation about what the Alumni Association did. It was an informative presentation and we thank Steve for taking the time to share the information with us.

Our club meetings are every Tuesday in the Spruance Hall boardroom. The club collects no dues. The only requirement is that you attend three consecutive meetings.

All are welcome to our meetings and we hope to see everybody there. See you at the meeting!

WPB

By Stephanie Perkins

Club Writer

ATTENTION ALL LADIES: I hope you have seen the Programming Board in action.

During 60s week, our contribution was face painting and handing out messages during lunch time. On Valentine's Day, candy was passed out to among the women in the U.C.

This past Saturday we shopped at Altamonte Springs Mall and had a lot of fun.

AHP

By Jason Piper

Public Relations

This past week has seen some changes in AHP. Some of these changes good, others bad.

The good news first. Brother Pat Mack received his Commercial pilot's license. Congratulations Pat!

On a sadder note, Brother Tom Mullarkey has left the university and gone home to pursue other avenues. We will all miss him.

Hopefully he will be back for rit-

Highway project.

This weekend members will host this year's Area Conclave. It is during this time that Squadrons from different colleges and universities in the Southeast region come together for committee meetings and a grand time.

All the hard work is almost over. Let's have a great time with members in the Area.

To all pledges the society wishes you the best of luck with the remaining weeks.

We look forward to seeing you at forums.

SAA

By Sam Albrecht

President

Welcome Back! What a weekend!

I can't remember when we have had more fun, learned so much, and made so many new friends (Craig, we can all count to five!).

As a result of the seminars our eighteen delegates attended, we are planning to host many new and exciting events our campus has never seen before.

Congratulations goes to "The Riddle RunArounds," the group that was "too sexy" and won the lip-synch contest (the repeat performance at 3 a.m. Saturday morning in the hotel room was even better!).

I can't even begin to express how proud I am of our delegates who blew away the heavily favored competition from Appalachian State University, East Carolina University, and University of Florida to win the coveted spirit award (YAAAAA!!!!!!).

Everyone came back with a renewed sense of pride about our club and our University.

We are ready to finish up a great semester to what has been an outstanding year.

Its only 360 days until the next conference, which will be held at the University of Florida. We can hardly wait!

If you are not yet a member of our club and this weekend sounded pretty good; and you would like to be involved with Homecoming, Skyfest, Christmas parties, Youth Motivator, Mentor Program, Alumni Association, campus life and making friends, then this club is for you!

If these things don't sound exciting, please don't attend our meetings every Tuesday at 5:30 p.m. in the Spruance Hall boardroom (206C).

This space intentionally left blank

This Wednesday, February 26 we will be having a guest speaker.

Upcoming Events:
Mini-golf - March 7th (first ten people free).

Women in Aviation Week - March 9 - 13.

Women's Retreat - March 14.

Bowling, Rollerskating

Watch out for our flyers and notices in your mailbox.

If you have any questions please contact me at Box #8543.

ual.

The pledges are doing well in their studies. There car wash was a big success. Excellent Job!

All who attended the IPC gathering this weekend had a good time.

Thanks to all who helped make it such an enjoyable night.

This weekend a trip to F.I.T. is planned. We're going to party with our brothers down there.

The joint pledge classes are planning a clam bake and beach party for us. Should be a blast.

ΣΧ

By Peter A. Zaccagnin

Chapter Writer

So long Vinnie. No more kegs? Not! Joe the pressure is on for another outstanding party this weekend.

We are all confident that it will be another successful journey into the world of debauchery.

Lambda Chi-we would like to thank all of you for being you. We

Scat Chat

Welcome back to SCAT CHAT. Thanks to all those who joined this semester making this the largest SCAT sign-up thus far, with almost 80 members.

Also accomplished were the sign-up for the Delta trip to Atlanta, the PT-6 engine run-up, volunteers for the race, and recycling bin helpers.

We wish to welcome aboard the new treasurer, Jerry Cox and the new Secretary, Roland Moorhead.

These positions were filled at the last meeting and thanks to all who participated in the voting.

Upcoming events: Keep an eye

appreciate the time and effort that you put into everything that you do.

Congratulations to Toby on another addition to the ever expanding fleet, a G35 V-tail Bonanza.

Still no word on the multi-engine pursuit.

Do not forget this weekend is not only the party but on Sunday we all need to be at DAB for the G-III flight at 9:00a.m.

Acid rain is falling.

out for the new aluminum recycling bins to be placed near the AMT buildings this semester.

Our meeting took place February 24, (Monday), at 7p.m. in Room A-109. Guest speaker Bob Robbins joined us for an interesting evening of slides and his personal experiences in aviation.

Mr. Robbins was an engineer for Boeing and also participated in the XB47 project as a Test Pilot.

TECH QUESTION: When is the use of anti-tear strips recommended, and where should they be placed. (AC 43.13-1A)

Clubs Policy

- ➔ All articles must be type-written, double spaced or on disk format (unformatted in Word Star or Microsoft Word).
- ➔ Deadline for submission of all club material is Wednesday at 5 p.m., one week prior to publication.
- ➔ Photos may be submitted with club articles.
- ➔ All submitted material becomes property of the Avion with the exception of disks.
- ➔ The Avion reserves the right to edit all submitted copy.
- ➔ For more information stop by or call the Avion office at (904) 226-6079.

CFC

By Dennis Martinez

Club Writer

There are times when we wonder why the Lord lets bad things happen in our lives.

We've all had problems that seem unbearable, and most students can relate to this question.

Is it because of a balance of good and evil that must be maintained?

Or perhaps God can't be everywhere at once?

Don't believe these answers any farther than you can throw an elephant!

The problems we face happen unexpectedly most of time, and many small events can cause serious concerns when we deal with them as a whole.

The Lord loves us and doesn't cause these things to happen. But instead of intervening or preventing our problems from occurring, he allows us to grow by experiencing them.

Teenagers who's parents won't let them ride their bikes out of the yard, hold their hands when they cross the street, and won't let them go out with friends because they might get hurt will despise their

ΔΧ

By Startlbertfast

Standby Writer

Well, for a third week I'm writing the article. This might not seem like such a bad idea but I was only at the beach party in physical form.

Anyway, I, as always will follow through with another commitment.

Besides the kidnapping of myself and brother Lush, the weekend was incredible.

I would like to personally thank the Thetas for a time well had, and for cleaning up the debris on the beach afterwards.

Disco will be busy this weekend because he will be carefully removing every molecule of sand from his tires so he can return it to the dunes.

Jessica, well he just said NO.

The amazing Karnoff brothers

parents for their protectiveness. Isn't it better for parents to let the children grow by experiencing their own lives?

Like a parent, the Lord lets us make our own decisions. And when we fail, and ask, Him for help. He picks us up with open arms.

We're not children anymore, and being a teenager is a memory for many of us. But the Lord still watches, and when we ask, he supports us.

So the next time our problems become so great that we ask "Why is this happening?".....Don't blame it on the Lord, but instead, give it to Him, and let Him carry you!

This Saturday, Feb. 29, the CFC will be honored with Mr. Joe Hurston speaking at 6:30pm in the Student Conference Room across from the information desk in the Student Center.

Mr. Hurston is the president of Air Mobile Ministries, a missionary aviation establishment in Titusville.

He's flown all over the world, and will have some very enlightening stories to tell.

It should be interesting, so please join us.

Snacks will be served.

amazed us with their death defying leaps through the bonfire. Believe it or not Syaco is the Mad dog of the '90s.

The hawaiian party was a success upon success. The girls had a great time and the house didn't burn down. Which of course is always a benefit.

Wally was in town again but refused to stay for the evening festivities. Although he did state that when the alumni come, he will party with us.

Speaking of alumni, it seems like every weekend is alumni weekend. If only national could see us now.

Except for the hogging, fairings and rain, the weekend was pretty good.

Phrase of the week: "I've got friends in low places..."

Flight Team

By Robert Bitzer

Flight team writer

"Hey Biff! Aren't you on the Eagles Flight Team?"

"Why, yes I am," Biff replies with confidence.

"Well just what do you do at these competitions that you make such a big deal about?"

Biff takes the poor, uninformed wretch aside and explains to him what happens at competition.

But did you know that 9 of every 10 students at ERAU have never seen the team in action?

Ok, so I didn't do research on it but, come October 27-31, the Eagles Flight Team will be hosting Regional Competition in DeLand. So mark it on your calendar, it will be a week to remember.

And speaking of calendars, that's right folks, February is National Congratulate Everyone on the Flight Team Month!

In keeping with the spirit of

ΣΠ

By Jack Snyder

Public Writer

Well boys the past social with the Thetas was a huge success. My stock in Anheuser-Busch is on the rise, thank you for the support.

Dino, you are everyone's all-American, no matter how big she is she just can't handle you, and remember if you can't put a helmet on the soldier, wear a flannel, at least you'll feel safe.

Discovery and Bruiser managed to show their support of the Great American Smoke-out. Thank God they didn't get near that groovy disco ball, I can't believe the things we do for women.

A reminder to the brotherhood, Sundays at Houligan's where the beer and the wings are cheap and if you value your life you'll stay away from House while he's feeding.

As historian of the fraternity I've taken another poll of the Brothers. The question at hand was Careers ten years from the present. The results were as follows:

Senior Class Council

By Robert S. Damsky

Council Reporter

Another brilliant session of the Senior Class Council met again at 6:30 p.m. in A-201 on 2/19/92.

The Faculty and Staff committee had nothing enlightening to report at the time. The Fund Raising committee reported that we had successfully raised \$2,455 by parking cars during the Daytona 500.

In an effort to raise even more, it was suggested that selling novelty items could be pursued. Interest was shown in selling squeeze bottles for \$2 each.

T-Shirt designs must be submitted by March 13. Any and all ideas are welcome and should be left in Bill's box in the Student Activities office.

Keep an eye out for banners and ads for the T-Shirt design contest! The illustrious Party committee has decided that the theme for the party

ΘΦΑ

By Erica Watt

Public Relations

Well, yet another week has come and gone for the Theta Phi bunch.

We all are feeling pretty damn good after pulling off our "secret mission" this past Friday night.

The first thing that needs to be done is to thank Coppertone for heading and planning the whole event. Oh and of course her side kick, Babs! We appreciate the cooperation from all the fraternities, hope there are no hard feelings.

Special thanks to Dean for help-

things, I'd like to announce that congratulations are in order for all the new members: Bob Taylor, Robbie Palasz, Richard Jefferies, Jeff Dwyer, Walter Tuttle, James Dunbar and Kellene Gaetaniello! Welcome aboard!

I hope everyone had a great time at the barbecue last Saturday, thanks to David Kvech who go out to David Kvech who arranged the event.

Also, kudos to Kevin Sheppard for arranging Mr. Cooper's safety briefing last night. And finally, the Loening Committee members deserve credit for the enormous amount of time and effort they've put in to finishing up the first half of the Loening Book.

As you can see, this has been a busy week for the team. Keep up the great work and it'll pay off at Nationals.

Biff and I will be back next week where the topic will be "Golf Shirts! Golf Shirts! Golf Shirts!"

Until then...

1. A homemaker for Jenn.
2. Restoring Mustangs and teaching a driving school specializing in curb avoidance.
3. A representative to the State of Kansas for the NRA.
4. A proctologist.
5. A hit man for the Mafia.
6. A personal tattoo consultant for a major heavy metal band.
7. Proprietor of a sushi bar.
8. A photographer for CLUB or a child psychologist.
9. Probably dead or even more constipated.
10. A park ranger in Jellystone National Park.
11. A Roadie for Bob and Doug McKenzie in the Great White North
12. Founder of an AA chapter in Kentucky.
13. A Pontiac Dealer, a provider of Ponches for all.

My apologies for those missed in the survey. And now for the weekly word unscramble.

This brother needs only chew, beer, and occasionally Depend undergarments to survive: HCRUL.

will be Mardi Gras. The party will be held on April 23, 1992, from 8p.m. to 1 p.m.

There is a list of family attractions and discounts for the families of the graduating seniors in the works. If anyone has any suggestions, please address them to Steve Paik's box. Suggestions are also being taken for the senior class project.

A couple ideas that were brought up are a large globe for the library and getting the parts or all of a Boeing 727-100. Any other brainchilds should be addressed to Bill's box.

A get well card for Lorie Ranfos was signed by all members of the Council and we wish her a speedy recovery.

The next exciting episode of the Senior Class Council will be Feb. 26, 1992 in A-201 at 6:30 p.m.!

Same Bill time; same Bill channel.

ing us and an extra special thanks to our hostages: Sunny Patel, Robbie Wetzig, Todd Weber, Scott Curli, Ernie Nyoz, Bill Tallman and Boyd Kelly. You guys were a riot!!!

Thanks to everyone who bought flowers on Valentines Day, it was a great success. Working the 500 once again proved to be a big pain in the @\$!!!

We are all thrilled it's over. Reminder: Lil sis day is next Friday.

Have a fantastic week everyone and don't do anything I wouldn't do!

Once there was a way for them to show their talents to the world.

Some believed it perished...

But now, once again there will be

Creations

The literary magazine of Embry-Riddle

Creations

Embry-Riddle's literary magazine

Because talent is nothing to waste.

The arts should be shared in every university. Submissions are being looked for now! Please bring or send your work—poetry or photographs, drawings or essays—to the Avion office and place them in the Creations drop box.

Don't delay!

Your submissions will prove that Embry-Riddle has well-rounded students and employees.

Campus connection

Make new friends with similar interests all over the country! Learn about life on a different campus! Meet fellow athletes, Greeks and artists from other universities! Make contacts with people that you can work with in the future!

LET CAMPUS CONNECTION MAKE IT EASY FOR YOU!

CAMPUS CONNECTION is a student-run nationwide collegiate pen pal club. Our goal is to match students across the country with other students that have similar interests (major, team sport, fraternity, club, etc.)

CAMPUS CONNECTION also offers a "Location Search" for students who are thinking about transferring to another campus and would like to correspond with people from that campus. This service is a great benefit for junior college and high school students. All schools in the United States are included in this service. We will give you the names of 2 - 3 people from the college you requested who are most compatible with your application. The students that you will be given have expressed an interest in corresponding with students considering attending their campus.

CAMPUS CONNECTION is looking for students to be a Big Brother/Sister to our "Location Search" students. As a participant of this program, you will get paid for each student we match you with.

For information and an application, please call or send a self-addressed stamped envelope to:

CAMPUS CONNECTION
P.O. Box 2607
Turlock, California 95380
(209) 571-7990

Choose not to abuse ... your body!

Wednesday, March 4, 1992
11:00 a.m. - 2:00 p.m.
John Paul Riddle Student Center, Flight Deck

- Body Fat Measurement
- Coronary Risk and Cholesterol/Triglyceride Screenings
- Cholesterol blood test starting at 9:00 a.m.
(14 hour fast required for the above screenings)
- Lung Capacity Test
- Massage Therapy
- Nutritional Analysis
- Presidential Fitness Award
- And Much More!

DENTAL HYGIENE

SEXUALITY UPDATE

STRESS MANAGEMENT

SAFETY

CAREER OPPORTUNITIES

SPIRITUAL HEALTH

SPECIAL EVENTS

Stop by and check it out.

Spring Health Fair

The Spring Health Fair, "Choose Not To Abuse...Your Body!", will be held Wednesday, March 4, from 11:00 a.m. to 2:00 p.m. at the Flight Deck in the John Paul Riddle Student Center. Included in the wellness activities are two types of CHOLESTEROL measurements that will start early since a 14 hour fast (only water) is required:

0700	\$16.00	Cholesterol/Triglyceride and Blood Sugar etc. by blood sample (call Health Services at ext. 6036 for an appointment).
0900	FREE	Cholesterol result, using the finger stick method.

MAMMOGRAPHY screening is also available to students/staff/spouses. Please schedule an appointment by calling Human Resources at extension 6145.

Stop by and check your wellness!

Space Studies minor

A new minor in Space Studies is now being offered through the Aeronautical Science Department for students that would like to add space-related courses to their major. The minor has a 15 credit hour minimum requirement plus an upper level math course or MA 125 - Space Mathematics. One SP course is required for the minor, SP 425 - Special Topics in Space and Aerospace.

Any student who is interested in the minor should apply to the Department of Aeronautical Science. Any student with the minimum 2.5 CGPA is eligible for the minor, although several major programs do not have electives available to apply towards this minor. Any student may also take the SP courses that interest them if they do not plan to complete the minor. Students with a CGPA below 2.5 will be considered on an individual basis.

You may substitute these classes for electives in many of the major programs. Several programs do not have electives available for substitution, such as Engineering Physics and Aerospace Engineering, but you may take the courses outside of the program. You may also substitute certain upper division electives for AS courses. The upper level electives in Aeronautical Science are satisfied by the upper level Space Studies courses, SP 300, SP400 and SP 425.

To apply for the minor, or for more information, contact the Aeronautical Science Department or the Space Studies coordinator, Dr. Erickson, ASSL 106 (TEL: 226-6474).

Classes:

- SP 110 - Introduction to Space Flight
- SP 200 - Planetary and Space Exploration
- SP 210 - Space Transportation System
- SP 215 - Space Stations Systems and Operations
- SP 220 - Life Support Systems
- SP 300 - Introduction to Satellite and Spacecraft Systems
- SP 400 - Introduction to Navigation
- SP 425 - Selected Topics in Space and Aerospace

The Avion Needs You

Cycling club guest speaker

Guest Speaker Mary Burns - Ultra-endurance woman athlete, holder of the 24-hour cycling world record, entrant in the 1991 and 1992 Race Across America, finisher in the 1991 Alaskan Iditarod Challenge, and inspirational guru of positive thinking, will present a slide presentation of her Race Across America attempt and Iditarod Challenge. FEB. 26, 7:00 p.m., Rm. A-109.

BROUGHT TO YOU
BY THE ERAU
CYCLING CLUB

T-Shirt design contest

The 1992 senior class is running a T-shirt logo design contest. The winner be chosen from all available entries and will win a \$20 gift certificate from the bookstore, as well as a free shirt.

All entries should be submitted to the Senior Class president's mail box in student activities no later than March 13, 1992.

Environmental career institute

To help college students, particularly recent graduates and those seeking a challenging career, Government Institutes is offering a unique 9-day Environmental Careers Institute at The Catholic University of America in Washington, DC from June 12 - 20, 1992.

This comprehensive yet practical program will provide students with:

- Extensive knowledge about the environmental fields
- Access to valuable informational resources
- Personal contact with key leaders in the field
- Practical information on possible careers

The program includes classroom lectures, discussion and interesting field trips to the Chesapeake Bay, EPA Headquarters, the United States Congress, and other important practical learning opportunities.

For more information or how to apply for the Environmental Careers Institute, please contact Tim Hohman or Colleen Sullivan at Government Institutes, 4 Research Place, Suite 200, Rockville, MD, 20850, or call (301) 921-2345; FAX (301) 921-0373.

Memorial service

A memorial dedication for CW2 Kerry P. Hein will be held on 27 February 1992 at 12:00 along the University Entrance Parkway. CW2 Hein was an Embury-Riddle Graduate killed on a night medevac mission in Iraq.

The memorial dedication will be performed by Father Morris with representatives from the 348th Medical Detachment (Helicopter Ambulance) and the ERAU Army ROTC.

Correction

In the February 19, 1992 edition of the Avion, Martin Luther King's name was misspelled in a headline on page 3.

We at the Avion apologize for the typographical error that is often inherent in time-critical publications and regret any problems it might have caused.

Astronaut

(continued from page B1)

Gallantry, and over 26 air and space medals. He was also a Distinguished Graduate from the Air Force Test Pilot School and Air Command & Staff College.

During his talk, Astronaut Blaha will discuss the contributions that the United States' space program has made to society, where the space program is today, and its future direction. You are invited to ask questions after the talk, however, a large turnout is expected, so come early. For more information, contact Mr. Nick Simatos, Ext. 6491 or Dr. Lance Erickson, Ext. 6474.

Need ride to
U2 concert
in Miami
March 1

Please contact
Josh at
253-5652

THE
AVION

Birkenstyle



Want to make a weekend even more relaxing? Slip into Birkenstock®. The pure comfort supports and cradles your feet. And when you feel this good, it shows.



Birkenstock

Birkenstock Footwear Store

97 W. Granada (S.R.40)
Ormond Beach, FL.
(904) 677-7011

Church Street Station
Orlando, FL.
(407)649-6484

Ever Get Somebody Totally Wasted?



TAKE THE KEYS.
CALL A CAB.
TAKE A STAND.

TAKE THE KEYS.
CALL A CAB.
TAKE A STAND.

FRIENDS DON'T LET FRIENDS DRIVE DRUNK

Senior Class T-Shirt Logo Design Contest

Deadline March 13

Winner Receives
a
\$20 Gift Certificate
to Bookstore
&
Free T-Shirt

Submit Entries to the
Senior Class President's Box
in
Student Activities

AIM HIGH

GO FAR
IN THE
AIR FORCE.

Learn how far the Air Force can take you. If you're a college graduate, you may qualify for Air Force Officer Training School. After completing Officer Training School, you can become a commissioned Air Force officer with:

- great starting pay
- medical and dental care
- 30 days vacation with pay per year
- management opportunities

Go far in a career as an Air Force officer. Call
AIR FORCE OPPORTUNITIES
COLLECT (904)788-5594

AIR FORCE

CRITIC'S CORNER:
Wayne's World weathers
weekend wash woes

Diversions
Movie
Critic

Lincoln. Her babocity is diabolical. I should know, I'm a licensed babe-tician...

Dana Carvey and Mike Myers play Garth and Wayne, two

But don't forget the plot. Poor Wayne (who's not a Greek guy) falls for a gorgeous Cantonese singer (Tia Carrere), and much of

Although I scampered out without talking to her out of fear that she might see my underwear, I could have sworn I heard "Dream Weaver" playing. If only reality imitated art.



Widespread Panic proves to be a cassette worth listening to.

Entertainment

Chairperson speaks out on movie woes

Hanna concluded the conversation by saying that he personally apologizes to the entire school for what has been going on. He also pointed out that better advertisements for the movies will be done in the future.

If you are a fan of guitar and percussion, you should not pass this one up. Don't just take my word for it, take my cats. He loved the album even more than Ron and Stimpny.


Join the Diversions Staff!

Gonzalez said he spoke for no particular theory.


Calvin and Hobbes

by Bill Waterson


DAD'S CALLING YOU



HE WAKES? HUH? WELL, HORRIBLY TOOK YOUR CHAIR, SORRY.

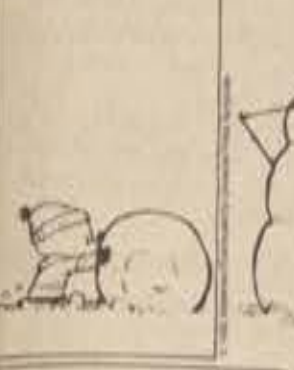


I LIKE MY CHAIRS PRE-WARMED.



YOU OWE ME.






HE KNOWS I HATE THIS.




THIS IS MY SNOW SCULPTURE, "BOURGEOIS BUFFOON." CAN YOU BELIEVE MOM REJECTED MY GRANT APPLICATION TO CONTINUE MAKING THESE?




WHY DO YOU NEED A GRANT?




I'M ON THE CUTTING EDGE OF ART! MY WORK DESERVES PUBLIC SUPPORT!




WHAT IF THE PUBLIC DOESN'T LIKE YOUR WORK?



THEY'RE NOT SUPPOSED TO LIKE IT! THIS IS AVANT-GARDE STUFF! I'M CRITICIZING THE LOWBROWS WHO CAN'T APPRECIATE GREAT ART LIKE THIS!




BUT YOU'LL TAKE THEIR MONEY.




WHAT DO YOU WANT ME TO DO, SUFFER?




THIS SNOWMAN DOESN'T LOOK ESPECIALLY AVANT-GARDE.



ACTUALLY, IT'S VERY AVANT-GARDE.




THIS IS MY NEW FIFTY MOVEMENT, "NEO-EMOTIONALISM." I'M APPEALING TO POPULAR NOSTALGIA FOR THE SIMPLE VALUES OF RURAL AMERICA 50 YEARS AGO.




I FIGURE THE PUBLIC WILL EAT THIS UP AND I'LL MAKE A FORTUNE.




SO HOW IS THIS AVANT-GARDE?



IT'S SECRETLY IRONIC.




I'VE CONCLUDED THAT NOTHING BIG I DO IS MY FAULT.




OH?



RIGHT? BEING "YOUNG AND IMPRESSIONABLE," I'M THE HELPLESS VICTIM OF COUNTLESS BAD INFLUENCES! AN UNWILFUL SOME CULTURE RANDOS TO MY UNDEVELOPED VALUES AND PUSHERS ME TO MALEFICENCE.



I TAKE NO RESPONSIBILITY FOR MY BEHAVIOR! I'M AN INNOCENT RUNN! IT'S SOCIETY'S FAULT!



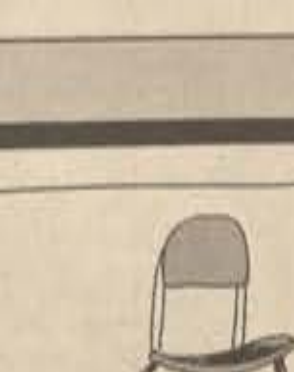
THEN YOU HED TO BUILD MORE CHARACTER! GO SHOVEL THE WALK.



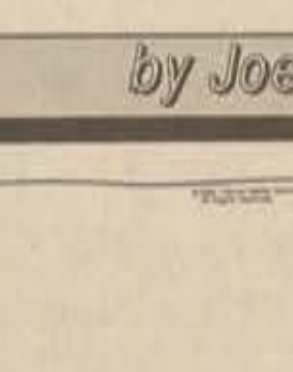
THESE DISCUSSIONS NEVER GO WHERE THEY'RE SUPPOSED TO.




I SEE YOU WITH THAT SNOWBALL!



GO AHEAD AND THROW IT! I'M NOT SCARED! YOU COULDN'T HIT THE SIDE OF A BARN! COME, THROW IT! I DARE YOU!




POW!!



SERIOUSLY, YOU COULD NEVER HAVE DONE THAT IF MY TAIL'S HADN'T BOOSTED YOUR ADRENALIN.



I CAN ONLY FIND ONE OF YOUR SOCKS.



Far Side

by Gary Larson



"Hey! So I made the wrong decision! ... But you know, I really wasn't sure I wanted to swing on a star, carry moonbeams home in a jar!"



What the? Not only has the forest been cleared, but the mountains we got!

DIDN'T WASH HANDS





Sheep that pass in the night



Theater of the Gods



"Hey! C'mon, Jed! ... Ease up on them hammers!"


Mister Boffo

by Joe Martin

THE INVISIBLE EIGHT HUNDRED POUND MAN



MAKING AN ALREADY AWKWARD SITUATION WORSE AWARD



IS THAT A "FIN" IN YOUR MOUTH?

SOME MAGICIANS HAVE CIVIL, SOME HAVE GREAT TALENT, OTHERS JUST HAVE GOOD OLD FASHIONED DETERMINATION




WAS IT THE TWO OF HEARTS?!

Mother Goose and Grim


by Mike Peters

GRIMMY... CAN YOU EXPLAIN THIS?




GEE... I CAN'T.


I DIDN'T KNOW BIRDS HAD A POINTER FINGER.




DON'T BEG AT THE TABLE, GRIMMY. DOGS ONLY EAT FOOD OFF THE FLOOR.



WOW, LOOK AT THAT! SHE SURE IS BEAUTIFUL.



BOY, I WISH I WAS 70 AGAIN.



→ Autos for sale

1986 Z28 IROC. T-tops, auto, tune port V8, loaded, Pearl white! very clean. \$6200 OBO. Call Rob 760-4895.

1986 VW Cabriolet. Red with black top. Auto, A/C, great condition. \$5950, call Rob 760-4895.

1986 Camaro Z28. 44,000 original miles, excellent condition. \$5400 OBO. Call Rob 760-4895.

1985 XV700 Yamaha Virago. Clean, low miles, new battery. Needs front tire and associated brake pads. Box 8123 or call John at 254-2918.

1978 Chevy Camaro V8 White with red interior, good condition, A/C, all power, good tires, runs great. \$1950 OBO. Call Paul 238-1704.

1973 Mercedes \$3500. 767-2603 and leave a message.

1990 Suzuki CXL, air conditioning, stereo cassette, antilock brakes, power windows, cruise control, \$9000. Call 255-8430 or box 4035.

1985 Ford Escort L, stereo, 4 speed, cold A/C, 35 mpg, \$1800. Call 255-8430 or box 4035.

Moped for sale, \$200. Call Pete 239-0997.

1980 Yamaha Exciter II. New chain and sprockets and battery good condition. \$395 OBO. Call Paul 255-9574.

1978 Datsun 510, 4 speed, A/C, very reliable, \$600. Call 255-8430 or box 4035.

→ Roomates & Rental

Two bedroom, 1-1/2 bathroom single story townhouse. Good cond., 2 miles from school, \$42,000, owner will help finance, will rent \$425 / mo. Call 407-699-9309 (Orlando) or 760-3444 (local) and leave message.

Female roommate wanted for apartment 10 min. from school for summer A, B and fall semester. Have own room and share bath. Rent is \$142 plus 1/3 electric and your share of phone. If interested call Malissa or leave message at 760-9686.

Large room available for summer A and B in 2 story, 2 bedrooms, 1-5 bath townhouse. Fully furnished, microwave, cable with all movie channels, 2 pools, tennis courts, \$237/month plus half of utilities. Call David at 761-7998 evenings or leave your number in box 6831.

Rent now and be reserved for the fall. Beautiful, big home just waiting for you. Master bedroom with bathroom is also available. \$190/month plus 1/4 utilities. Weekly payments okay. Call 248-1184 for details.

Wanted: Non-smoking roommate. Have your own room in 3 bedroom/2 bath house in Port Orange (6 miles from I-RAU). \$225/month, 1/3 utilities. Many extras! 767-2908.

Roommates needed: non-smoker, new house, 3 bedroom, 2 bath, dishwasher, microwave, free cable, 2 rooms available, 5 miles south of I-RAU. \$250/month plus 1/3 utilities. Contact Ed at 756-4505.

\$175/month 1/4 utilities. Master bedroom available includes bathroom. 4 bedroom, 2 bath huge house, 2 car garage. Summer rate \$150/month. 1 bedroom or all four bedrooms. Landlord flexible with terms. Call 248-1184.

→ Misc. for sale

Car stereo equipment. Punch 150 amplifier, Phoenix gold 50x50 amplifier, punch 12" proseries woofers, foggate crossover, cosmic crossover XM-3. Good prices. Call Ryan at 255-7356 after 4:00 p.m.

One totally trashed chemistry book. Text is usable, outside cover and binding is gone. Only \$15 OBO. Contact box 4195.

Ibanez tube screamer great for leads! Call after 5:00 p.m. 788-4634 and ask for Phil.

Motorcycle helmets for sale. Bell Aeronaut \$120, Simpson Bandit \$180. Black racing jacket \$140. Call Rob at 760-4895.

Guns for Sale - Uzi carbine new in case! 9mm. \$950 Rob 760-4895.

Soundesign portable CD player, 16 track memory, battery charger, all cables. \$90. Call Paul at 248-1810.

KLIH-195 286 computer. 100% IBM compatible. 44 meg hard drive, 5 1/4, 3 1/2 inch high density floppy drives. VGA monitor and card. 2400 baud internal modem, sound board, speakers and microphones and LOTS of software including MS Dos 5.0, wordperfect 5.1, Lotus works, Morion utilities and lots more. \$1100 (negotiable). Call Russ at 767-1446.

Quality SCUBA instruction specializing in advanced diver training. Open water certifications, \$100. Call Jan Neal 761-2021.

Waterbed (queen) \$90, large desk \$15, night stands/tables (cheap) all in great condition. Call 274-2515.

ATTN: flight instructors: Commodore 64s with 2 disk drives, 1200 baud modem, fastload cartridge. Plenty of games, ready to hook up to Dual for national weather. \$150. 254-8484.

Bofa Bed \$100, love seat \$50. 767-2603, please leave a message.

RC boat for sale - Fiberglass V bottom approximately 30" with OX 40 water cooled engine and 2 channel Futaba. Ready to run videotape runs available taken at ACII lake. \$185 OBO. Mark 239-0997.

RC planes for sale - 7 channel Futaba, PT 40 w/ OS 40 SR, field kit with extras. All for \$295, others for sale also: PT electric low wing trainer, mid wing pylon racer. Call Mark or Jay 239-0997.

RC plane D-coke never flown with controller in box, \$100 OBO. Call Paul 255-9574.

Travel Opportunities for any destination. Call Albert at 441-4340.

Razortuck paintball gun, \$75. 254-8484.

Radar detector - hardly used. Was \$120, but will sell for \$75. Call Jim at 254-2913.

Gun for Sale - Beretta 92F. 3 clips, case and holster. Also custom laser site. 6 months old. All for \$900. Call Roben 756-8338.

→ Miscellaneous

Learn to Fly! Get your pilots license or continue with your flight training. Quality instruction at low rates. Aircraft rental \$36/hr. Train at a local airport. Contact Jack "CJH" at 756-1494 or leave a message.

Join AOPA now through your campus representative and receive a free polo shirt. Contact Joe Henao, ERAU box 6508 or call 677-5724.

Cars and Trucks Wholesale. Buy any year/make car or truck at absolute wholesale! Call Robert for details: 760-4895.

Flight Training! low rates: Cosmos, Piper Warrior, Beach Bonanza.

CLASSIFIED AD POLICY

- Non-commercial classified advertising and personals are free to the student body, faculty and staff of Embry-Riddle with 35 word limit.
- All other non-commercial advertising is \$10 with a 35 word limit. Each additional word is 10 cents.
- Commercial advertising is available through the Avion advertising department, at 226-6051.
- Classified advertising is carried out by filling out a classified ad card in the Avion office.
- Only one classified ad per card. Name and address of advertiser must be included for the ad to run.
- Only paid ads will run for two issues and may be renewed by filling out another classified ad card.
- No classified ads will be accepted over the phone.
- For more information, stop by or call the Avion office at (904)226-6049.

COLLECTOR'S ITEM

Pan Am's last published timetable!!!! \$25. Extremely Limited Quantity. What better way to remember one of America's finest companies. CALL 238-7335 or send inquiries to ERAU box 8316, J. Cameron.

Flight training! build complex time while working on instrument in Beach Bonanza. Instrument, private, commercial with 2 year CFI. Call for rates. Don 677-9730.

I buy cars for cash! Out of state, okay. Contact Rob 760-4895.

Buy any year/make car for wholesale. Call Rob for details, 760-4895.

ESSENCE 80386 computer. Intel Inside. 100% compatible. 42 meg Hard Drive with shock mounts, 5 1/4 or 3 1/2 high density drive, Hyundai VGA monitor and ATI VGA Wonder Super VGA card with 512K, DOS 5.0, Two Megabytes of RAM. \$999. Call Joe at 238-7555

FOR SALE 4 U2 TICKETS/MIAMI March 1st. Make offer call Steve at 252-9517

I need a ride to the Rush concert in Orlando on March 2. I will help pay for gas. If you can help, contact box 6259 or call 252-9401 and ask for Steve.

I have someone's leather jacket. Call Michael at 238-7334 or write to box 3464 and describe it and where you left it.

Having problems with math, physics, chemistry or engineering. I have a degree in Engineering. Call Henry at 767-0006.

Do you go to the clubs? Like to save money? Get the Breakers Club card—discounts on everything from clubs to restaurants to bungee jumping. Call Steve at 257-9711 for details.

→ Personals

The carpet itches. You're tellin' me!

You know it's going to be a bad day when you wake up.

PC: Wanna play racquetball? Nysaal I've had enough exercise. FELLOW LASER

BREWSTER
Hi! Can I get in on some of the fun?
BOY TOY

WA-WA
I know this week will be hard for you so don't forget that I'm here and I care! Smile and have a good day! Yeah!
MUCH LOVE, CRASH'D

STIVIE
Just wanted to leave my honey a happy message. Every day with you gets more special, even if you are stubborn! Have a happy Day!
SWITHEART P.S. Missed you this weekend.

Count the beans is an ass.

Mikay is looking for a ring! We'll let you know how it was. Good luck.

JON
The clock from the top bunk hit me in the face- Why did it fall?

RYAN
Who was the chick with the fake breast? How did you find it?

When will the "super triple probation" end?

Who cares about the general manager?

TO THE CUTE GRADIER OF MR. SALMI'S CS30
Attn: Faiza Khan
I love you, but I forgot these words when I met you. I just want to tell you that I respect you and I love you.

DEAR CAN OPENER
You may think your Hero is hot s... but if you take up 2 parking spots with it again, I'll turn it back into the tin can it came from.
THE WAGONMASTER

TO DON,
I don't want your calculator anymore. I have my own.
NIL

HEY DARLING
The sun shines for you so enjoy its warmth! Hope you enjoyed Valentine's Day too!
LOVE, 11096

ANDREA
Can you get shot with the window rolled up?
TIGGER

IAIN
Thanks for everything lately, you're the greatest.
DL

RANDOM VIOLENCE
Hey, hey! It's me again to tell you we're still in the running, so let's play some serious hockey!
THE MANAGER

SLUT 555
Got a light?
SLUT 911

SLUT 411
When can Charlie come out and play?
SLUT 911

SIBERTS
How's the fan doin'?

OREO MAN
Why are we letting small obstacles get in the way of our desires? Overwhelming lust has possessed me. Let's be "best friends and be buddies." No strings attached! Happy Belated Valentine's Day!
CHUQUITA

SIMON AND PAUL
Seen any Trulls around lately?
RIPPO

TO MY EX-ROOMMATE ANDY
Ladies night anytime you want.
NIL

SB'S
I got that going for me which is nice, I think.
HEAD SB

Goonga Gaoonga
Goonga Goonga Gaoonga

VINNIE
Saw your picture in the paper, cutie. Can I get in on the action?
BREWSTER (member NOPA)

SLUT 69
T.T.F.N.
SLUT 911

JACQUELINE
You hell do have an attitude (When will you realize that the only reason and pleasure all those h...y guys have to attend this class is to daydream staring at you ? Et puis il faut les comprendre: après tout, c'est vrai que tu es plutôt mignonne ! Et alors?
Les Prenchies qui s'aiment bien.

GBU
Give me your box # or stop it. It's not fair to me.

JP
I am the turtles in the moat. Sorry.

SUKU
I want your wardrobe!
MTV FASHION EXPERT

WRANGLER BABE
Better is the enemy of good enough.
THE ONES YOU HATE

LOLO
I want you now, baby ! Tel et maintenant, j'en dis !
KIKI

PROSPECTIVE
Did you notice how our friends from BOW spelled Sprance (as in hall) this past week? The General is turning over in his grave, and he's not dead yet.
C.B.D.

F A S T
FUNDRAISING
PROGRAM

Fraternities, sororities, student clubs. Earn up to \$1000 in one week. Plus receive a \$1000 bonus yourself. And a FREE WATCH just for calling 1-800-932-0528 Ext. 65.

Safe Environment

by Vincent Fuller

Meanwhile, in Dr. Lump-
Warmer's Political science
class...

Give us the inside scoop, Dr. L!
Who's gonna win the '92
presidential election?



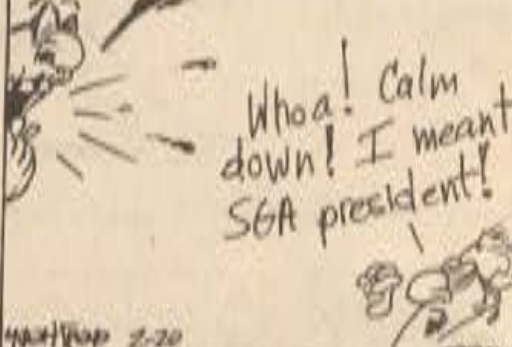
Hmm... Good question!
Looks to me as though
Bush, Duke and Buchanan
will all split the fascist/
screwball/Old money vote,



Clinton and Tsongas will
both be BATTERED by the
media, and Kerrey and
Harkin will never escape
virtual anonymity!



And Jerry Brown rides
to victory on the all-
important demented
cartoonist vote!



Solow

by D. Striker

