



Avion

Newspapers

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Embry-Riddle Aeronautical University

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AERONAUTICA



Explosive power . . .

This F/A-18 equipped with a new GE turbine engine forges ahead in both time to climb and supersonic speeds.

GE's improved turbine going into F/A-18

by Frances L. Cozza

Aeronautica Editor

General Electric's Aircraft Engine has had its initial flight of the F/A-18 Hornets' F404-GE-402 engine.

This powerful engine, named the EPE (Enhanced Performance Engine) will become the standard powerplant for all future production U.S. Navy and Marine Corps F/A-18C/Ds beginning in 1992 and will power all F/A-18C/Ds, including those for Kuwait and Switzerland.

The EPE was designed to enhance the Hornet's time-to-climb, supersonic, and low altitude, high speed performance.

More than 20 flight hours have been logged as of August 15 showing remarkable results in the very rapid accumulation of flight time and successful demonstration

of all tested operating points.

McDonnell Douglas Experimental Test Pilot Fred Madenwald praised the way the engines have behaved under test. "Everyone at GE associated with this enhanced performance engine should take pride in the performance that I am seeing in the air on a daily basis," he said.

"These F404-GE-402 engines have exhibited excellent characteristics out to the very edges of the F/A-18 flight envelope. With the demonstrated thrust increase in the supersonic arena matched with the combat-proven F/A-18 capabilities, the result will be impressive indeed."

The EPA's higher performance is achieved through improved design and materials in the turbine and afterburner.

The engine provides up to 20 percent more thrust than its F404-GE-400 predecessor, without sacrificing the -400's 2,000 hour section life.

Two seater AMX has fast maiden voyage

by Frances L. Cozza

Aeronautica Editor

Recently, the first two-seater AMX attack jet manufactured by Embraer completed a 1:05 hour maiden flight from the company's facilities in São José dos Campos, Brazil.

Flight crew members were chief test pilot Gilberto Peixoto Schmitt on the back seat and assistant test pilot Luiz Alberto Guimaraes Madureira, on the front seat.

The importance of the test flight was to determine the systems functionality. The aircraft reached a speed of 879 km/hr (470 kts), an altitude of 6,100m (20,000 ft.) and also performed five "touch and go's."

Following the flight Schmitt said

"the two-seat AMX handles much like its single-seat counterpart." He added "it is very easy to fly from the rear cockpit, which provides excellent visibility through the wide canopy, and shall present no difficulties for pilots flying it from the back office."

The two-seat AMX has the same dimensions as the single-seat. This includes a length of 13.43 ft., a height of 14.94 ft., and a span with wingtip missiles of 32.71 ft.

The aircraft is powered by a single unheated Rolls-Royce RB168-807 turbofan engine of 11,030 lb thrust, can carry a warload of 8,500 lb and fly at speeds of over 565 kts.

The two-seater AMX provides the same operational capabilities as the single-seater, used for specialized missions such as patrolling, reconnaissance and antisubmarine, it will



Easy flying . . .

Despite its simple appearance, this small jet is highly regarded in the Brazilian Air Force. ERAU founder John Riddle helped train the original Brazilian Air Force.

be used for conversion training as well.

The Brazilian Air Force has an initial requirement for 79 AMX's. Of these, 65 will be single-seater and 14 two-seater. Nine aircraft are operational with the Brazilian Air Force at present, with two more currently going through production

test flying in preparation for delivery.

The first two-seat AMX flew for the first time from Alenia's Turin-Caselle facilities in March of 1990. Altogether the air forces of Brazil and Italy have a joint requirement for over 300 AMX's.

Improved radar for F/A-18

by Frances L. Cozza

Aeronautica Editor

McDonnell Douglas Corp., Hughes Aircraft Co. and the U.S. Navy have signed a production contract estimated at \$257 million for an improved radar for the F/A-18 Hornet strike fighter.

McDonnell Douglas has been the prime contractor working with Hughes on the radar upgrade for two years under a \$223 million full-scale development contract with the Navy. The Canadian Forces also are participating as part of a NATO cooperative development program.

The two companies will build five engineering development models for hardware and software development.

The agreement between the two companies and the U.S. Navy covers the production readiness and actual production of 12 radars in the third block of the fiscal year 1992 F/A-18 procurement. Deliveries of aircraft with the new APG-73 radar, an upgraded version of the F/A-18's

current APG-65 radar, are expected to begin in June 1994.

Flight testing of the APG-73 radar will verify the complete radar system in an airborne environment and will include simulated weapons deliveries.

The improved radar has more than three times the speed and memory... the speed and memory...

The APG-73 will also be used in the F/A-18 E/F, an advanced Hornet scheduled to enter production in the late 1990s. The APG-73 radar will be compatible with various future technologies, including electronically scanned antenna technology, or active array, that will more than double detection ranges for air-to-air and air-to-ground modes.

Details of Mars become clearer

Frances L. Cozza

Aeronautica Editor

McDonnell Douglas Electronic Systems Company (MDBSC) has built and designed the Mars Observer Laser Altimeter (MOLA) laser transmitter. NASA's Goddard Flight Center has designed, built and completed integration and environmental testing with the MOLA instrument.

The MOLA instrument is designed to measure the surface shape of Mars by timing the round-trip of short duration laser pulses between the Mars Observer spacecraft and the planet's surface. It is now undergoing integration to the Mars Observer spacecraft in preparation for launch in September 1992. In addition, the transmitter is designed to withstand the one year journey to Mars and, once in orbit, fire 10 times each second for two

years—roughly 600 million times—to produce a topographic map of the planet.

The MOLA transmitter is the world's first interplanetary diode-pumped laser. The McDonnell Douglas diode-pumped laser has not required service since the start of testing. Flash-lamp pumped lasers, the competing technology, generally required service after about 3-5 million shots. Besides being more reliable, diode-pumped lasers also are smaller, lighter and more power efficient than flash-lamp lasers, qualities that make them especially suitable for spaceborne applications. The MOLA transmitter operates without liquid coolants, generally required for flash-lamp lasers, which contributes to the laser's small size and light weight, 5.38 kilograms.

The MOLA laser consumes only 13.5 watts of power while producing

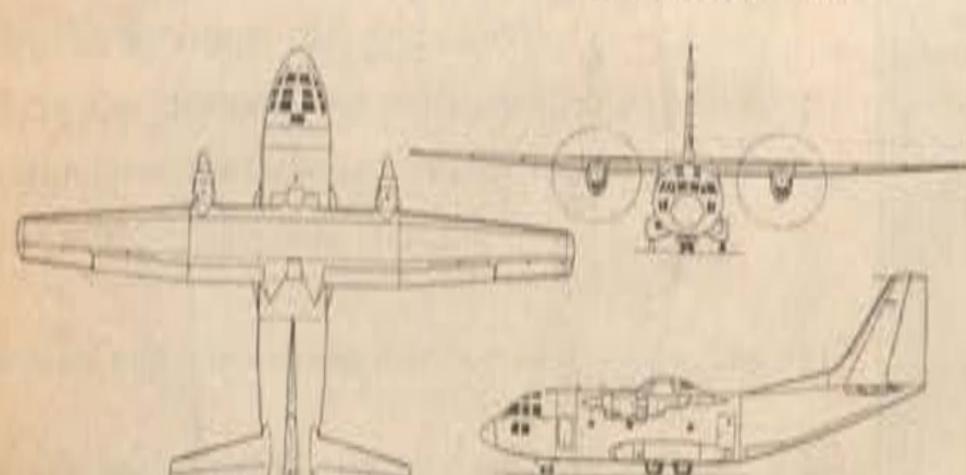
a 45 millijoule beam at 1.064 micrometers.

During subassembly and integrated testing at MDESC laser facilities in St. Louis and at Goddard Space Flight Center in Greenbelt, Md., the MOLA laser transmitter was subjected to launch and on-orbit operational environments. Vibration, acoustic and thermal-vacuum testing was performed.

During its acceptance test at NASA/GSFC, the MOLA transmitter delivered more than 18 million laser shots, and prior to laser assembly the key laser diode components were burned in with an additional 66 million shots.

McDonnell Douglas Electronic Systems Company performed work on the MOLA laser transmitter contract, which is valued at \$2.6 million, over a 17 month period.

Aero Identification



Name _____

ERAU Box # _____

Aircraft Name: _____

Return this form to the Avion. The Avion will randomly draw a winner from all correct submissions. Winners will be informed on the Friday following the current issue of the Avion. The winner will receive a free submarine sandwich of their choice. The student publication staff, their families and previous winners are not eligible.

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Discovery slated to lift off tomorrow evening on Mission to Planet Earth

CAPE CANAVERAL, FL (AP) - The space shuttle *Discovery* is set to blast off this week with an observatory that will usher in NASA's Mission to Planet Earth campaign, a long-term project to study the planet from space.

"I can't imagine a better mission," said Kenneth Reigher Jr., who will make his first space flight as *Discovery*'s pilot. "I believe very firmly we need to understand what's going on in our environment, in our atmosphere in particular, and to get on with what we're going to need to do."

"I mean, we just can't keep going the way we're going."

The Upper Atmosphere Research Satellite to be placed in orbit by *Discovery* "will help quantify just how much damage we're doing," said astronaut Mark Brown.

Four of the satellite's 10 scientific instruments will study the atmosphere's ozone layer, which scientists agree is being depleted by man-made pollutants.

"I wish everybody could see what

A pall of smoke often stretches across the Ocean to Europe.

it looks like from orbit when you go over South America and Africa and Central America where they are slashing and burning large areas of the jungle," Brown said.

A pall of smoke often stretches across the Atlantic Ocean to Europe.

Discovery is scheduled to head for orbit on a five-day mission with a crew of five - and eight baby rats - at 6:57 p.m. EDT Thursday. The countdown is to begin Monday afternoon.

However, NASA was investigating a leak that could delay the mission. If repairs are needed, *Discovery* would have to be rolled back to its hangar and that would delay Thursday's scheduled launch by about two weeks. A decision was put off until Monday.

The leak appeared to be in a valve on a helium line, part of the plumbing of the steering system used to maneuver the shuttle in orbit. A leak could burst the system's monomethyl hydrazine fuel tank.

The 14,500-pound atmospheric observatory, known as UARS, the largest atmospheric research satellite

ever to be flown, is the first in a series of satellites planned for the Mission to Planet Earth program.

"We will truly begin a new era in the study of the global environment" with UARS, said NASA program scientist Robert J. McNeal.

Discovery

will climb to an unusually high altitude

and inclination - the angle of its orbit to the equator - to put the satellite in an orbit covering much of the globe.

Commander John Creighton will maneuver *Discovery* from an altitude of 336 miles to 351 miles about seven hours into the flight.

The shuttle has been stripped of as much equipment as possible to lighten the load for the steep climb. A spare spacesuit, for instance, is being left behind at a savings of 275 pounds.

The satellite will measure atmospheric wind currents, temperature and chemical composition. It also will chart the temperature and concentration of ozone.

Ozone, a form of oxygen, is a component of smog in the lower atmosphere. But in the stratosphere, six to 34 miles up, it serves as a shield against cancer-causing ultraviolet rays.

SCIENTISTS fear a hole in the ozone layer over the Antarctic ozone may be a sign of worse

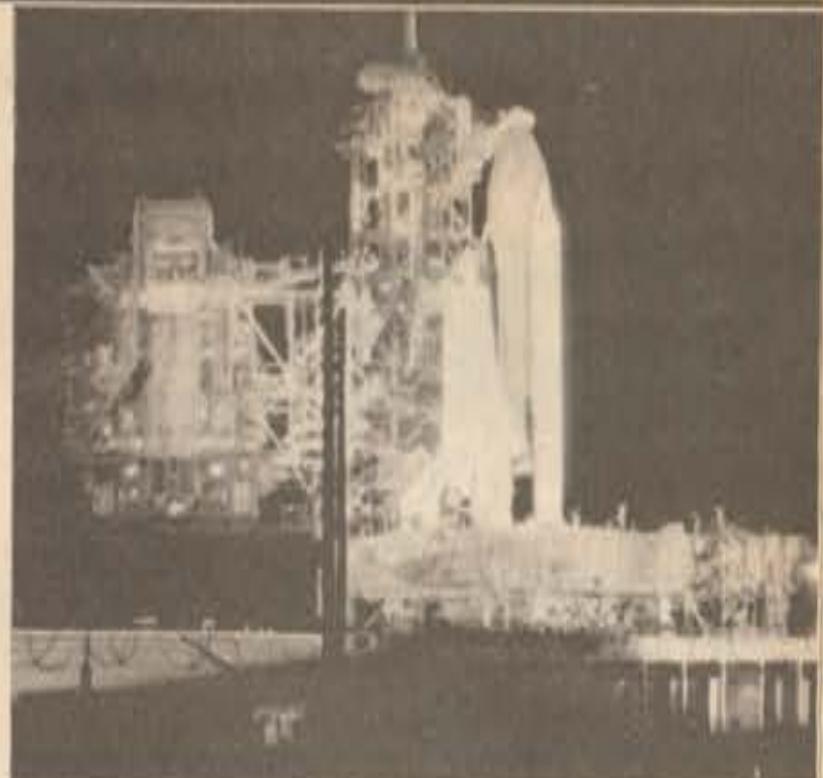
The eight 30-day-old rats will be dissected after the flight to see how weightlessness affected their muscles...

The main ozone threat is thought to be chlorofluorocarbons, or CFCs - chemicals used in aerosol sprays and as coolants in refrigerators and air conditioners.

The astronauts also will perform several experiments.

The eight 30-day-old rats will be dissected after the flight to see how weightlessness affected their hind-limb muscles; the findings will be applied to studies of human muscle wasting in the absence of gravity.

The shuttle is to land at the Kennedy Space Center weather permitting. Touchdown time is around 1:55 a.m. EDT, which would make it the first shuttle landing in darkness in Florida.



Ready to go...

Discovery waits for its launch scheduled for tomorrow. It will be carrying an observatory to study the Earth.

Executives take over \$1 million from NASA

CLEVELAND (AP) - Three count executives have been charged with defrauding the NASA Lewis Research Center and the Air Force by padding a contract with \$1 million in expenses unrelated to government work.

The charges were returned Wednesday against Joseph M. Carsley, 56, of Orlando, Fla.; David J. Wall, 61, of Fort Myers, Fla.; and Edward F. Dierker, 50, of Dayton.

Carsley, former chairman of Analex Corp. of suburban Fairview Park, was indicted by a federal grand jury on one count of conspiracy and three counts of making false statements to a government agency.

Wall, former executive vice president of Analex, was charged in information filed by the U.S. attorney with two counts of making false statements to a government agency, and Dierker was charged by information with one count of conspiracy.

If convicted, each man faces maximum sentences of five years in prison and a \$250,000 fine on each

Wall and Dierker worked out of Analex's Dayton office, and Wall was Dierker's supervisor, according to the charges.

Carsley's indictment says the fraudulent costs included \$100,000 in salaries for Carsley's wife, daughter and another woman for doing little or no government-related work and the salary of an employee who worked at an Atlanta restaurant owned by Carsley and Wall in a partnership.

The indictment said the alleged padding also included \$131,978 for consultants fired by Carsley for his restaurant and pleasure trips for Carsley and Wall, including \$79,953 for one European trip.

Dierker, contacted at his home this morning, declined comment on the charges.

Wall and Carsley could not be reached for comment. There is no phone listing for Carsley in Orlando, and a woman answering the phone at Wall's home said he wasn't available and she didn't know when he might be available.

Soviets debate over fate of Mir station

MOSCOW (AP) - "Is it true the Russians are going to sell the Mir space station, where we are now?" a bewildered Soviet cosmonaut asked recently as his orbiting station floated above the Earth. "And, we are asking, together with us?"

Like the Soviet Union itself, the future of the country's space program is unknown. The days of glory for the cosmonauts - Sputnik in 1957, man's first space flight in 1961 - are over. Now the program is disintegrating as the Soviet republics try to forge a new confederation and new forms of economic cooperation following last month's failed coup.

"The large theater of the absurd is falling apart into small studios," a newscaster said as Soviet television broadcast pictures and recordings of Anatoly Artsebarsky and Sergei Krikalev drifting aboard Mir in weightlessness late Friday night.

Indeed, the newscaster said, the all-union space program may become a bundle of republican ones. Once, you could not see

There has been talk of simply dumping Mir in the Pacific Ocean...

borders from space. Now, you see republican borders quite clearly."

For instance, Kazakhstan, which declared independence last month, also said it is nationalizing all Soviet state installations on its territory. That includes the main Soviet space launching base, Baikonur, which Kazakhstan reportedly wants turned into a joint business venture.

"When you turn out the light in the dining hall, the guests start to grab hamburgers from the table. The last one gets a fork in his hand," the merciless television commentator noted.

So "who owns Baikonur today?" he asked.

The Mir station and attached modules present a puzzle of its own. Assembled in orbit as part of a research project in 1986, it has been home to many cosmonauts, who have broken records for stays in space. Now it seems to have no owner.

"We need to decide the question of property regarding the station. It has remained somewhat fuzzy. It's even hard to say now who owns the station," said Yuri Semenov, chief designer of the Energia (Energy) scientific and industrial complex that produces Soviet spacecraft.

In recent years, the Soviets have transported - for a hefty price - foreign passengers to Mir for visits. In 1990, the Tokyo Broadcasting Service paid \$12 million to the Glavkosmos space agency for Japanese journalist Toyohiro Akiyama's ride.

Facing the new realities, leaders of the Soviet military industries have seriously considered selling the station to who have been aboard since May. There has been talk of simply dumping Mir in the Pacific Ocean.

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or Graduate Admissions office in Spruance Hall

For additional Information, call tournament director Don Tilden, 760-8016

the Avion, September 11, 1991

Attention December IFC RUSH SCHEDULE

The first meeting for December Graduates will be held in the Student Center at 8:00 p.m. on Tuesday, 24 September 1991. Since there is no rehearsal for graduation, it is very important that you attend. Important graduation information will be reviewed. Elections for your Senior Class President and Vice President will be conducted.

If you are interested in running for Senior Class President or Vice-President, Please schedule an appointment in the Student Activities Office, ext. 6039, to meet with Laurie Ranfus, Senior Class Advisor, by 5:00 p.m. on Friday, 20

September, to apply as a candidate.

Volunteers will be secured at the meeting for those interested in being on the Senior Class Council. The Council is responsible for securing discount hotels for guests of the graduates, meeting each week to plan fund raisers, communicating with the Senior Class in terms of their progress, and working on a variety of projects to benefit the December Class. If you are interested in being on the council, please plan on attending the meeting on 24 September at 8:00pm in the Student Center. Thank you.

Sept 9 Sigma Chi Monday Night Football
 Sept 10 Sigma Chi Open House Approx. 8:
 Sept 11 Delta Chi Open Charter Meeting 7:30-9:00pm
 Theta Phi Alpha Safari 7:30pm
 Sigma Chi WERU Dance Party Approx 8pm
 Sept 12 Sigma Chi Open House Party TBA
 Sept 13 Delta Chi Rush Party 7:30-10:00pm
 Theta Phi Alpha LUAU 7:30pm
 Sigma Chi Rush Dance Party TBA
 Sigma Phi Delta Rush Party 7 pm
 Sept 14 Delta Chi BBQ and Pool Party at ERAU 12:00-
 3:00pm
 Delta Chi Rush Party at House 7:30-10:00pm
 Sigma Phi Delta Spud BBQ at House 11:00am-
 3:00pm
 Sigma Phi Delta Storm The Castle 7:00pm
 Sept 15 Delta Chi Flagler Beach Party 11:00am-4:00pm
 Sept 16 Delta Chi Monday Night Football 8:00-12:00 am
 Sigma Chi Monday Night Football Approx. 8:00pm
 Sept 18 Delta Chi Open Charter Meeting 7:30-9:00pm
 Sigma Chi Spaghetti Dinner TBA
 Sigma Phi Delta Information Meeting at ERAU 7:00-
 9:00pm
 Theta Phi Alpha Wanted Dead or Alive 7:30pm
 Sept 20 Delta Chi Let's Play Doctor 7:30-10:00pm
 Sigma Chi Formal Rush Party TBA
 Sigma Phi Delta Spaghetti Dinner TBA
 Sept 21 Delta Chi Volleyball/BBQ 12:00-3:30pm
 Delta Chi Formal Rush 8:00-10:00pm
 Sigma Phi Delta Beach Party 12:00-5:00pm
 Sept 22 Theta Phi Alpha White Rose TBA

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 Thursday Ladies Night-any and all drinks for ladies \$1.50, Male Revue!

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Dread Zeppelin

October 9th,

Heavy Metal with Armored Saint,
 Rathchild America & Last Crack



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New aviation scholarship to be offered

The Mooney Aircraft Pilots Association (MAPA) Safety Foundation Offers a \$1000.00 scholarship yearly to individuals who are pursuing a career in aviation. The rules for the 1992 scholarship are as follows:

1. Must be enrolled in a course of study which will promote general aviation safety. Must have completed 50% of the course of study at the time of the award of the scholarship.

2. Membership in MAPA or sponsorship by a MAPA member is a requirement. To locate a MAPA member in your area, contact the MAPA at 314 Stardust Drive, San

Antonio, TX 78228. Someone in our area may be willing to be a sponsor.

Applicants must have a CGPA of 3.0 or better, and provide the board with an essay explaining how her career would help promote general aviation safety. Transcripts, grades and two letters of recommendation from instructors also required.

The scholarship for academic year 1992 will be for a minimum of \$100.00. The cut-off date for completed applications is 1 July. 2. The winner will be notified on 1 August 1992.

Center, Conference Room Approaches to reading that can cut down the time spent and increase comprehension.

TEST TAKING TIPS

TUESDAY, SEPTEMBER 17, 1991
 1:30-2:30 p.m. John Paul Riddle Student Center, Conference room. Learn ways to prepare for tests, combat anxiety, and take exams efficiently.

SELF-MANAGEMENT AS MOTIVATION

Tuesday, September 24, 1991 1:30-2:30 pm. John Paul Riddle Student Center, Conference Center, Conference Room. Learn how to manage your time so that you can relax without guilt. Also learn how to get going when your get up has gone and when you are free.

IMPROVE YOUR READING MEMORY

TUESDAY,

SEPTEMBER 10, 1991 1:30-2:30

p.m. John Paul Riddle Student

Center, Conference Room. Information on how to efficiently take legitimate

Blood Drive

There will be a blood drive sponsored by Sigma Chi on Thursday and Friday, 19 and 20 September.

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COMICS

B5

the Avion, September 11, 1991

Calvin and Hobbes

by Bill Waterson



Far Side

by Gary Larson



Mister Booffo

by Joe Martin



Mother Goose and Grim

by Mike Peters



the Avian, September 11, 1991

→ Autos for sale

1981 Audi 5000S new tires, front seats, carpet, clutch, paint. Must sell. No reasonable offers refused. \$2200. Call Jeff at 756-3298.

1970 TR6 Overdrive, rollbar, engine good, body good, needs electrical work. Parts or project car. \$1500. Call 238-6491.

'85 Honda CRX Si. Good condition, runs great, A.C., new brakes and tires. Asking \$300. Call Andres or Hector at 258-7759, anytime.

1984 Mercury Lynx, engine good, body good, new tires, new rear shocks, very dependable, only \$450. Call Tom 253-1928 or Box 9089.

For Sale: 1974 Chevelle Malibu Classic, 400 cu. in. V8. Runs great, \$700 O.B.O. Call Brian at 258-1094 or box 2705.

For sale or trade for Ninja 900 or 1000R. 1967 Pontiac Firebird, 14,500 miles on freshly overhauled 350 eng. with Holley, Edelbrock and other high performance equipment. For more info call 258-6794 after 6:00 pm. and ask for Vic.

Car for sale: Datsun 200 SX '81. Good condition, reliable, new alternator/battery, AM/FM Cassette, sunroof, \$2000 O.B.O. Must sell. Call John at 253-9338, Box 8231.

1989 Yellow Honda CRX-SI \$800 sound system, sunroof, CRX floor mats, color coded sidemirrors and door handles, new tires. Can't afford, must sell, \$5800 O.B.O. Call Barry at 756-2165.

For Sale: 1979 Triumph TR7 Convertible 85% restored. Partially rebuilt engine. Very good condition. \$4000 O.B.O. Call Cliff at 257-2472 or Box 6726.

'85 Mazda 626 LX-4 Dr. Dealer burgundy with tan interior. Has all the options, power everything, runs great, looks great, well maintained. \$5500 O.B.O. Call 322-0633 and leave message.

1985 Dodge Ramcharger. Excellent condition, must sell, asking \$4500 O.B.O. call 238-7825.

FREE BIKE!! With purchase of my 1983 Jeep CJ5. Custom paint job and lettering. Only 65,000 miles, very clean no rust! Call Shain, leave message at 238-1777 and make an offer.

1978 Toyota Corolla 1.6 hatchback, runs but reliable, runs well, must sell, \$300 or best offer. Call Bill at 788-8226.

1981 Plymouth Horizon 1.7L, 130K miles, auto, alumin. wheels, runs good, 4 spd. \$3500. Call 253-7360.

Dodge 318-V8 with 727 transmission. \$125 O.B.O. Also has air conditioner compressor, water, and alternator. Contact Jeff at 788-3634.

1978 Caprice Classic, many miles, V-8 305 engine only \$300. Runs fine, call 253-7683.

1988 Ninja 750R, 6500 miles, showroom condition, not a scratch! Includes tank cover. Asking \$3750. Call Rob 760-4895.

'85 Peugeot 505 STL, 5-speed, power windows, sunroof, locks, leather, stereo cassette, alloy wheels, air conditioning, great motor, body, interior. Own this beautiful European luxury sedan for only \$4200. Call Len 904-219-9618 or Box 5614.

1987 Nissan Sentra XE, red, 2-door hatch back, 5-speed OHC, Pioneer tape deck with 7 band EQ/booster, 2 door speakers plus 2.3 way Pioneer. Excellent condition, 90,000 miles. \$3500 O.B.O. Contact Danny at Box E-244 or Res. Hall II #248.

Kawasaki EX500, Vane & Hines, full lower gear carbs, runs great. \$2000. O.B.O. Call 761-0206.

1982 YZ 250 Yamaha. Great dirt bike, Must sell! \$500 O.B.O. Call Nick at 252-1642.

GSXR 1100 Mint condition, Must Sell. Why pay \$8000 to do 180 MPH, race ready, must see to appreciate \$3000 O.B.O. Call 672-3978 or 679-2355.

→ Roomates & Rental

Room for rent. 3 bdr house, 2 bath, fully furnished, cable, cent. airheat, parking. \$175 mo. Call Dave or Debbie at 253-6997.

Room for rent, Port Orange. 1 bedroom, share bath, full house privileges, non-smokers and only small pets. \$250 except phone. Call 756-5760.

Rooomate needed to share 2 bedroom, 2 bath, nicely furnished in Cypress Landings Apts. 1 1/2 miles from school, need own bedroom furniture. Beginning Oct. 1. \$274.50 plus 1/2 utilities, \$100 deposit. Prefer non-smoker. Contact Sam at 253-3798 or leave message.

Female roommate wanted at Island Club. Full furnished, 2 br. 2 ba. Microwave, TV, stereo, ceiling fans, etc. 275.00/Mo + 1/2 mil. 760-0241 ask for Lisa.

Rooomate wanted to share 2 bed/ 2 bath apartment in Port Orange. Apartment is partially furnished including a bed. Must be a non-smoker and have own transportation. Contact Paul D'Agostino at 760-7978.

For sale - no qualifying assume 9.1/2% fixed fairway estate subdivision. 3 bedrooms-2 baths large fenced backyard, concrete block and brick, new central air condition / heat pump. \$72,900 call 255-2547.

NO QUALIFYING ASSUMABLE! 2048 Oak Meadow Circle - minutes from campus. 2 bedrooms, 2 bath townhouse built in 1984. Washer/dryer hook-up, eat in kitchen. Monthly payments \$403, priced at \$54,900. Call Brigitte Linge at 756-4949 or at Hudson Realty at 788-1700.

For sale - no qualifying assume 9.1/2% fixed fairway estate subdivision. 3 bedrooms-2 baths large fenced backyard, concrete block and brick, new central air condition / heat pump. \$72,900 call 255-2547.

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1 pair Acoustic Research stereo speakers
model D-9. 30" tall. \$370.00 O.B.O. Very
good condition! Numark Stereo mixer model
1500 \$150.00 O.B.O.

19" H & W - 537. Distance set-550. Call Rob
760-4895.

For Sale: 286-16MHz with 1024X768 256
color VGA, 40 MHZ HD, 1.44 Floppies
and AMD mathcoprocessor. \$1400 O.B.O.
Call Cliff 257-2472 or 6736.

For Sale Bell star GT-2 Helmet. Black with
gold stripes. Dot approved, excellent
condition. Asking \$175. Call AJ 257-3854.

Zenith data systems 10 MHz 286 at with a 40
MEG hard drive has both 5 1/4 and 3 1/2 inch
drives, a modem plus hundreds of programs.
Asking \$700. Contact Jose at 756-0063 or
Box 5466.

Attention all HP48SX owners. HP48SX
equation library card for sale \$79.00 (retail
\$99.95). Brand new, never been used, owners
manual is still in its sealed package. Write to
ERAU Box 6617 for more information.

For Sale: Twin mattress and box spring with
metal frame-\$35.00. Trundle bed \$100.00.
Call 254-0613

Sharp microwave oven, \$65. Mens Schwinn
10 speed bicycle, excellent condition, \$150.
Call Bill 255-6973

For Sale: Twin mattress and box spring with
metal frame-\$35.00. Trundle bed \$100.00.
Call 254-0613

For Sale IBM compatible portable computer
\$475 (retail \$990) Sanyo MBC-770 w/ 5 inch
color monitor. In very good condition,
includes software containing data base,
spreadsheet and word processing programs.

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- 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

Write to ERAU box 6617 for more information

Scuba equipment for sale. Seavent Mask,
power plants fins, snorkel, U.S. Divers knife,
Goody bag, dive flag, slate, Wrist compass,
gear bag. Excellent condition. \$250.00. Call
672-2249 and ask for Marcus

Fly fighters, tankers and transports for the Air
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Williams Ave. Sioux City, IA 51106

Taking CS-109. Buy your required Enable
software for 50% off. (\$25.00) Take it all plus
instruction manual. Call David at 760-2075.

For sale IBM Selectric typewriter \$65.00
672-2249 and ask for Marcus

For sale JBM compatible printer JLK1 6000
Printer \$90.00 (retail \$249) in very good
condition. Write to ERAU Box 6617 for
more information.

New flight students: Look! 1 year old Self
Comm C-40 Noise Attenuating Headset.

Used by ERAU CFI. Purchased for \$160, sell
for \$100, which includes some extra cost
options purchased separately. Call Jim
Walsh at 258-3023 or 19#069 at Flight
Department

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options purchased separately. Call Jim
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Waterbed for sale: Queen size, oak wood
New \$300, must sacrifice for only \$75. May
need new bladder \$25. Call Jerry or Ted at
673-0534

Smith and Weston 38 special model 67
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serious inquiries only please. \$245. Call 322-
6633, leave message.

Tandy 1400 HD Laptop. 100% IBM
Compatible \$900. 238-7958 Ask for Kent

Utility trailer for rent. All steel construction
with ramp. \$15 per day or \$20 overnight.
Deposits req'd. 24hr notice appreciated. 322-
6633. Leave message.

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White/good condition. \$275.00. Lease
message 322-0633

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For sale: Sleeper sofa, coffee table, bar with bar stools, other tables, small cabinet, golf putter, new dresser, new mattress. All items could be best offer. Call 760-1630.

Mountain Bike, Schwinn, 6 months old, hardly used, showroom condition. \$350 new, sell for \$225. Call 756-1195.

Solid wood kitchen table for sale with 4 chairs. \$65 neg. Box spring and mattress for \$45. Used for eight weeks. Call Jesus at 255-6026.

Pool Table: Excellent condition, solid slate, very ornate, all accessories included for \$999. Call 767-6400.

Must Sell!! Smith Corona PWP-1000 Wordprocessor. Has a typewriter mode, diskdrive, Timex. Many extras. \$400 or best offer. Perfect cond. Please call 761-8050 over or write to box 5129.

For sale: Moving, must sell! Dresser and queen \$130, 2 end tables \$30, Kitchen table \$80, TV stand \$15, 19" color TV \$100, desk \$30. Contact Matt or Curtis at 253-4086.

Need to sell like new kitchen table and chairs. Asking \$40. Call Jesus at 255-6026.

Twin bed for sale - mattress, box and frame. \$75 or best offer. Contact Sherry Box 8723.

3 adjustable barstools, chrome with red cushion. Paid \$125 each asking \$75 for all 3. Excellent condition. C/O Karen at 253-8340 and leave message.

For sale: The Norton Anthology of World masterpieces \$15. Culture and Values Vol. 1 \$20. Write box 6073.

For Sale: Pioneer AM/FM Cassette car stereo with auto reverse \$20. One jeep or small pickup truck style roll bar \$50. One (full) pickup bed tool box \$50. All articles open for best offer. Car stereo can be installed for additional fee. Call 322-0793.

For Sale: Queen size waterbed. Good condition, need money for food. \$125 OBO. Call Pete 677-8177.

Need a paper typed? I have good word processing, spreadsheet, typing skills. Please call for more information at 257-2155, MWI after 5 pm. Ask for Jeanne. Give me 2-3 days prior notice. Only \$1.25 per page.

Window air conditioner for sale. 8,000 BTU, will only cool for one summer. Excellent condition. \$350 OBO. Call John at 274-5411 after 5 pm.

Rover, 38 special, never been fired, still in box, cleaning kit and holster, take it all for \$200. Call Bill 798-8210.

For sale: Twin bed, lamp, desk chair. Call 761-8808.

Anyone going to Tampa? Need Company? If so, Call Eric Roy at 255-4079. Will pay 1/2 gas. Thanks.

Baseball - Current student players looking for even more targets. We play on weekends, day or night. If you're a player or would like to play call Paul at 253-5061 or write box 6081.

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CALLING ALL COMMUTERS: Driving from Orlando to Daytona MWI (approx. 1 am to 2 pm) Looking for assistance. Call (407) 363-0264 or leave message in Box 4072.

Attention Students, staff and family. Child care in my home, Willow Run area. Hourly rates. Call 756-1759.

Mig Welding: call John 298-5160.

Rossi, 38 special, never been fired, still in box, cleaning kit and holster, take it all for \$200. Call Bill 798-8276.

CALLING ALL COMMUTERS: Driving from Orlando to Daytona MWI (approx. 1 am to 2 pm) Looking for assistance. Call (407) 363-0264 or leave message in Box 4072.

→ Personals

NWM, 20, used of meaningless relationships, seeks SF 20+ for long term relationship. I'm 5'9", 155 lbs, blonde hair, blue eyes, enjoy airplanes, cars, movies, beaches, etc. Please respond to box 3507 if interested.

HONEY AND SWEETHEART: It takes my something that your back in school where I can see you. I've been in agony since I left the country, but now I'm back. Will you let me know if you're still there?

POST MAN: 100 TO YOU

CREAM PUFF
Barbie!
CAPTAIN X

DEAR MARS MAN,
I shall think you soundly. Name your time
and place. Unsigned.
SHUSHIEBAR

PRIENDS
The rumors of my death are greatly
exaggerated.
STUDMUTIN

KIM
Seriously, I need to talk bad, really bad.
STUDMUTIN

KIM
Want your body. Photograph only.
STUDMUTIN

PHOTOGRAPHERS: DO IT IN THE
DARKROOM!

OH, is an angel there? One left out... When
they passed heaven above. What about me?
Sitting here in my purgatory? He's dead
I'm after. He's spared. Oh, I rang there!
HOPELESS#2

HEY ROGERHEAD
Happy Birthday and how did you like the
surprise?

SNUGGLEBEAR

P.S. Love you always

PICARD AND CRUSHER
How was operation BBQ? The hunt for the
elusive tazmanian hot was successful, but
Riker caught a cold.

FROG

DEAR FREASHMEN, ER, AH,
FREASHMEN
Do you know absolutely nobody? Are you
interested in meeting new fun loving (or
slightly violent) people? We have an
answer!

JOIN THE FENCING CLUB

HEY PENCILS!
What do we get to use the real pencils?
Breakfast is so relaxing

RACHAEL:
I miss your friend Casey from Comi. Small
world, huh?

HEY BOX 6073

THUMPER
I've finally found my forever (luckily!)
have you?

SLEPPY THE SATISFIED

TO THE BARKING DOG

In response to your question about the
homophobes, I believe Dr. Ruth would say
yes... but I hope you never find out first
hand!

with love and condusion

P.T. BEAR

To followers of the (ARGH!!!)
Beachmaster: Get a life!! Even if it's
somebody else's

TO ALL FREASHMEN SCAT MEMBERS:
Great turnout for our first meeting. Thanks
for your support. Let's have a great semester.
DR. DELTA

JTK
Do Starfleet officers do it on impulse?
TROG

TO PICARD
It is time again OLD FRIEND! to resume
our MISSIONS. To search for new and
unreached scores. To seek out new alcohol-
forms, and to boldly think beyond all reason.
JAMES T. KIRK

DINKY
You better be careful not to get Red mad, or
you'll be wearing silver bracelets that don't
come off without a key.
SLEPPY

ACTET 91-92
Hey guys let's do it one more time
O.V.

HEY 1984 NEIGHBORS!
I still love you and miss chatting and
laughing with you King Kong!

POOKUMS
Work One, Rest we go again. Long time no
see. I guess you must still be around campus
though. It's too bad you're not in Elec. Nav.
with me. Pat and I would love to carry on.
Maybe EB talks to you later or see you at the
Seam (Yeah, right!).
C.J.

TO EVERY GIRL IN THE WORLD
It looks could kill I would stare into your
soul, if words could hurt I would scream at
your memory. If only I could remember why
it didn't always hurt to know you. If it's over
then why do I want to end it still. There's a
place for love but love has no place for me.

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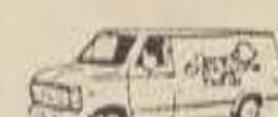
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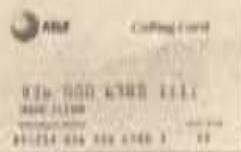
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