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SPACE TECHNOLOGY Second 747 SCA joins NASA fleet

NASA purchased the

logged 32,182 flying

hours.

by Joshua S. Mussaf Space Technology Editor

After the Challenger accident, the single Shuttle Carrier Aircraft (SCA) was identified as the weak link in the shuttle program. If the aircraft were strengthen the incapacitated it would mean the aircraft body; grounding of the shuttle fleet because addition of skin it would leave no means to return an reinforcement and orbiter to the Kennedy Space Center. modification of NASA announced plans to acquire a back-up SCA in February 1988.

NASA purchased the Boeing 747- allow attachment SR aircraft from JAL Airlines, with of two special tip fins each measuring has extra support elements that give it

hours. Boeing began work to modify aircraft added directional stability biter with a maximum gross weight of

bulkheads to the 747's horizontal stabilizer to

whom it had logged 32,182 flying 10 feet by 20 feet which give the the capability to transport a shuttle or- 905 be based in Ell Paso, Texas,

the aircraft in the summer of 1989 when it is carrying the orbiter; inunder a \$55 million contract. The stallation of fittings on which to attach work included the installation of struts to hold the orbiter to the

airplane's fuselage; the removal of interior Boeing 747-SR aircraft equipment such as from JAL Airlines...it had passenger seats, galleys, etc.

> The new SCA in similar to the first

240,000 pounds, about 48,000 pounds more than the original SCA. The new aircraft has a useful life of about 265 ferry flights over a 15 year period.

The only external differences between the two SCAs are the tail numbers and the U.S. flag on the vertical rudder of aircraft number 911, its newest, and veteran aircraft number 905. Aircraft 905 will continue to be SCA except that it based at the Dryden Flight Research Facility in California, while aircraft



In an emergency, dial 911...

The second shuttle carrier aircraft was put into service to ferry the shuttle from its landing in California back to the Kennedy Space Center.

Inderwater tests to help spacesuit design Ames Research Center, Ca (NASA News) -

design better spacesuits for future astronauts work- drical tank 9 feet deep and 11 feet in diameter. ing on the Moon or Mars.

"We hope to answer the basic questions of how human movement and energy consumption will differ in the reduced gravity on the Moon and Mars," said the study's Principal investigator Dava J. Newman, a doctoral candidate in the aeronautical and astronautical engineering at the Massachusetts Institute of Technology.

Newman and Co-investigator Dr. Bruce Webbon of Ames's Advanced Life Support Division also during various gaits. Another objective is to detergravity fields and what energy expenditures are as- (normal Earth gravity). sociated with those gaits.

ing in the test conducted on a treadmill designed by Newman for Underwater use

Each experiment run consists of six 30-minute face tank. Heart rate data and measurements of Scuba divers exercising on a unique underwater sessions. The first session is a control experiment carbon dioxide exhaled and oxygen consumed by treadmill at NASA's Ames Research Center, conducted outside Ames's Neutral Buoyancy Test Mountain View, California, may help scientists. Facility (NBTF). The NBTF is a water-filled cylin-

> We hope to answer the basic questions of how human movement will differ on the Moon and Mars...

Because water immersion is an effective technihope to learn at what speed humans change from que to simulate reduced gravity, the remaining seswalking to running and how much the joints move sions take place inside the NBTF. Five different gravity conditions, or "g's", are simulated: zero g, mine what kind of gait is most effective in different one-sixth g, three-eights g, two-thirds g and 1 g

By varying the number and placement of ballast weights distributed in seven regions on the diver's Three men and three women, all certified scuba body, Newman can change the diver's buoyancy

Air is provided through a supply hose from a sur- to space flight.

the diver indicate how hard the person is working under a specific workload and gravity field.

During each test session, Newman controls treadmill speed while the diver keeps pace with the treadmill belt. Each diver exercises at levels corresponding to 10 percent, 40 percent and 70 percent of the maximum work he or she is able to perform as a measured by maximum oxygen consumption.

The treadmill is equipped with a platform that measures the force of each step, from which vertical speed and duration of each step can be calculated. The degree and amount of leg, arm and torso movements are recorded on video.

Newman believes such information may directly impact the design of advanced spacesuits and portable life support system. For example, designers need to know how much mobility astronauts' spacesuits should have to let them work most efficiently under various gravity forces.

Newman's tests also may lead to development of divers between 20 and 40 years old, are participat- and thus simulate various gravitational conditions. a training program to help astronauts simulate Each diver wears a commercial diving face mask. specific tasks and experience partial gravity prior

Astronauts train in large neutral buoyancy tanks to simulate

weightlessness in space. Tests are now being performed to

evaluate spacesuits designs for the future.

Lift off...

The Space Shuttle Discovery is rotated into a vertical position to be mated with the external tank and solid rocket boosters. Discovery is targeted to be rolled out to launch pad 39-A at 12:01 a.m. Friday.

Additional CRRES releases planned

by Joshua S. Mussat Space Technology Editor

All wet...

NASA will continue a successful January series of space physics experiments with two chemical releases in February from the Combined Release and Radiation Effects Satellite (CRRES), a joint NASA-U.S. Air Force mission to study the Earth's magnetic fields and the effect of space radiation on spacecraft components.

Through the CRRES program's artificial cloud-release experiments, scientists seek to understand the processes which cause auroras by using charged particle clouds to induce them and to study the Earth's ionosphere and magnetosphere.

As with six chemical-release ex-

tire continental United States and portunities each evening. Releases parts of Canada, Central America, the can be seen in the sky generally 40 to Caribbean, Western Europe and Western Africa, These releases will be the last conducted at high-enough altitudes for wide visibility.

...scientists seek to understand the processes which cause auroras ...

There will be five opportunities to and one of lithium, on the nights of (202) 544-5356.

periments in January, the February Feb. 9, 11, 13 and 16 and the morning releases may be visible from the en- of Feb. 19, with multiple release op-60 degrees east of the constellation Orion.

The CRRES program is a joint effort of NASA, through its Marshall Space Flight Center, Huntsville, Alabama, and the Department of Defense's Air Force Space Test and Transportation Program, The releases are commanded from a ground facility at Sunnyvale, California.

For more current information on the times of release opportunities, the CRRES Coordination Center "hotmake the two releases, one of barium. Jine" message is available by calling

by Joshua S. Mussat Space Technology Editor

long and difficult one. Since the Space Shuttle Discovery was rolled into the installation of the five new general purpose computers. The new computers feature 2.5 times the memory capacity and up to three times the processing speed of the older units.

tems while in the OPF, Discovery's conducted in the vehicle assembly three main engines, two orbital building. This test will verify the The road to the STS-39 Department maneuvering system pods and the for-mechanical and electrical connections of Defense (DOD) mission has been a ward reaction control system were, between the assembled vehicle eleremoved for testing or replaced.

A visible step toward launch took Orbiter Processing Facility (OPF) on place last Saturday when Discovery October 18, 22 modifications have was transferred to the vehicle assembbeen implemented, including the ly building atop the orbiter scheduled to be rolled to launch pac transporter.

While in the vehicle assembly building, Discovery will be connected to the external tank and solid rocket boosters, which are already bolted to Required tests and inspections were the mobile launcher platform. The test, is tentatively planned for

ments. Discovery was hard mated to the external tank at 8:57 p.m. on Sun-

The STS-39 vehicle stack is 39-A where flight preparations will continue through launch. The launch day dress rehearsal with the STS-39 launch team and flight crew, called the terminal countdown demonstration performed on the orbiter's major sys-shuttle interface test is scheduled to be February 19-20.



photo by Contra Malkanala (Fillume Spanner)

Soviet cosmonauts aboard the Salyut-7 space station in the mid 1980's enjoyed working aboard the second generation of Soviet spacecraft. Last Thurday, the space station plunged throught the atmosphere back to Earth.

Salyut-7 space station plunges back to Earth in a "rain of fire"

fell on a sparsely popu-

lated area in the Andes

mountains near the

Chilean border...

Moscow (AP) - A Soviet space station the size of a railroad car plunged through the atmosphere in a "rain of fire" over Argentina on Thursday, ending a month of suspense mosphere at 6:47 a.m. (10:47 p.m. Wednesday EST), over where it would land,

The long period of speculation had triggered panic in one Russian village, which shut down its businesses and schools for fear of falling debris.

The 40-ton Salyur-7 space station re-entered the Earth's. atmosphere early Thursday and "burned out of existence," the official news agency Tass said. Pieces of the spacecraft fell on a sparsely populated

area in the Andes mountains near the Chilean border, the Argentine government news agency Telam reported. It said Salyut-7 "triggered a rain of fire."

Officials at the U.S. Space Command in Colorado Springs, Colo., confirmed the space station's entry into the Earth's atmosphere and that

debris had fallen in the western Andes Mountains on Thursday. Soviet media have closely followed the descent of the 9-year-old spacecraft the past month. The lack of precise

information about the landing, combined with the Soviet obsession with UPOs and widespread superstition, caused a wave of anxiety in at least one Russian village.

The Argentine news agency said blazing pieces of the Salyut-7 complex could be seen from several towns in the provinces of Cordoba, Buenos Aires, Mendoza, San Luis, Neuquen and Chubut.

By late afternoon, there were no reports of injuries. No fragments were reported recovered.

The space station was traveling at about 17,000 mph. Tass said that just before the spacecraft entered the atground controllers tried to direct it toward water, but there was not enough fuel to complete the maneuver.

Soviet diplomats were put into action to notify Latin American countries of the expected time and place of the fallout. Tass also said the United States and Soviet Union activated national Centers for the Decrease of Nuclear Danger to exchange information.

The superpowers set up the centers in 1987 to exchange information about ballistic missile Pleces of the spacecraft

launches, nuclear weapons tests and arms control treaties,

The space station was put into orbit in April 1982, the last one in the Salyut series, which is the second generation of Soviet spacecraft. It hosted 10 crews, two of them international.

Tass said the station should have stayed in orbit for several more years, "but solar activity suddenly increased in 1988, and the station began sharply to descend." Sunspots create solar winds, a stream of ionized hydrogen and helium that decays a spacecraft's

Krasnaya Zvezda, the Soviet military newspaper, reported last weekend that the biggest danger was from pieces of the Cosmos-1686 cargo spacecraft, which is docked to the space station.

Sovier officials said earlier that the space station, powered by solar energy and chemical batteries, did not contain any nuclear fuel or other dangerous substances,

CRRES release opportunities and viewing coordinates

| Number | First* | Last | Orlando Florida Azimuth/Elevation Coordinates** |
|--------|-------------|-------------|---|
| 1 | February 9 | February 10 | 118/46 |
| | 9:00 P.M. | 1:00 A.M. | 167/49 |
| 2 | February 11 | February 12 | 148/61 |
| | 10:15 P.M. | 2:15 A.M. | 200/47 |
| 3 | February 13 | February 14 | 197/63 |
| | 11:30 P.M. | 3:30 A.M. | 226/36 |
| 4 | February 16 | February 17 | 136/45 |
| | 10:00 P.M. | 12;30 A.M. | 156/45 |
| 5 | February 19 | February 19 | 176/53 |
| | 12:20 A.M. | 1:40 A.M. | 188/47 |

* Release opportunities occur approximately evey 30 minutes after the first opportunity, with the exception of final opportunity for the fifth release. Exact times will be determined on the night of the release.

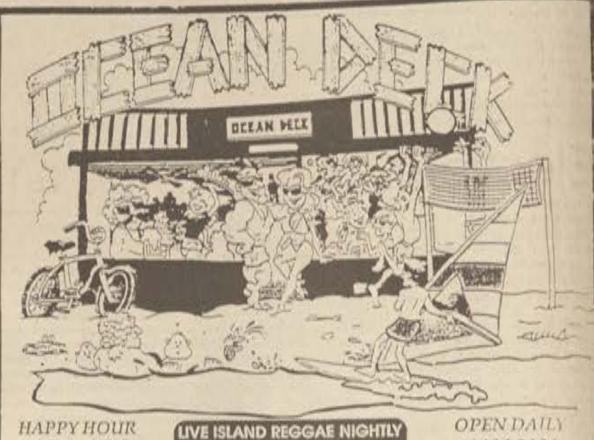
** Azimuth: 0 = North; 90 = East; 180 = South; 270 = West Elevation: 0 = Horizontal; 90 = Zenith



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America West Airlines is growing while other carriers fold

Aeronautica Writer

With the recent loss of Eastern Airlines, many industry officials agree that Eastern may have been just the first of many airlines that will close down due to unprofitability. One carrier that seems to overcome those odds is America West Airlines.

America West Airlines, Inc., began operations on Aug. 1, 1983, with three Boeing 737 aircraft serving five cities. At Dec. 31, 1988, it had a fleet of seven Boeing

757s, 60 Boeing 737s and three de Havilland DHC-8s and served 45 time and to depart toward the opposite direccities throughout the continental United States tion a short time later. In 1986, the nirline and two cities in Canada, primarily through it's hubs in Phoenix and Las Vegas. America West provides high-quality, low-fare air providing non stop round trip flights from travel service designed to appeal to frequent seven cities to Las Vegas, it has since exbusiness travelers as well as to discretionary panded its service to include 33 cities. The

pany has achieved a high degree of employee productivity through employee stock ownership, profit sharing and cross utilization of

The company operates hubs out of Phoenix, Arizona, and Las Vegas. A hub is an airport at which a carrier schedules its flights to permit According to it's company profiles, passengers from cities on one side of the hub

to make convenient connections with its flights to cities on the other side. The airline schedules a series of flights timed to arrive at the hub from one direction at approximately the same

established Las Vegas as its second hub with the introduction of its "Nite Plites" service

the return trip departing between 11:00 p.m. and 2:00 a.m. The service is provided at low, unrestricted fares with no advance purchase requirements. In 1987, daytime service through the Las Vegas hub was added and has resulted in over 90 daily departures.

America West focuses on service to and from California as an essential element in its hub systems. California is by far the dominant destination for Arizona travelers and is a major destination for travelers from other cities in the airline's service area. America West serves Los Angeles International Airport, Orange County, Ontario, Burbank, Long Beach and San Diego in southern California, and Oakland, Sacramento and San Jose in northern California. In 1987, America West began long haul service utilizing seven Boeing 757 aircraft

The airline's Boeing 757 aircraft now serve Chicago's O'Hare Airport, New York's JFK International and the Baltimore/Washington International airports. America West also provides feeder services from Palm Springs, service, and sandwiches and snacks on most

Yuma, Arizona to its hubs in Phoenix and Las Vegas with de Havilland DHC-8 turboprop

have applied to the United States Department vice from the Phoenix hub to the Scottsdale of Transportation to provide additional service between the United States and Australia Phoenix airport where passengers can be tickpursuant to the United States/Australia Air eted, check luggage and receive seat assign-Transport Agreement.

America West provides services designed to appeal to frequent business travelers as well as to discretionary travelers. These services include assigned "

copies of The Wall Street Journal and U.S.A. Today, complimentary alcoholic beverage airlines.

travelers. In management's opinion, the com- flights arrive in Las Vegas in late evening with California, Grand Canyon, Flagstaff and flights over one hour in duration. On its Boeing 757 aircraft, the airline provides meal service on long distance flights. Other scrvices include first-class seating on long haul America West is one of four carriers which destinations, complimentary shuttle bus serresort area and a drive through service at the

> ments without leaving their car. At the Phoenix hub, the airline has opened an airport lounge which provides members with a number of convenient

seating, participation in travel agent services, such as a library, private meeting nutomated reservation systems, interline tick-rooms and reservation and flight information. eting and baggage transfer, large overhead. The airline has also developed a frequent flyer bins for carry-on luggage, complimentary program in conjunction with certain hotels, rental car agencies and selected international

see America, page 86

Ejection seats provide a ride for life

hopefully never used.

by Frances L. Cozza Aeronautica Writer

The decision to eject from an aircraft is one that must be weighted on good timing, the parameters in which you can eject and how well you know yourself, your airplane and your

For military tactical pilots, ejecting is always prepared for but is something that is hopefully never used.

One of the basic problems that occur during flight is for the pilot to realize how little time he has to make the decision.

From taxiing to rotation there is practically no time to think and then react but once the plane has climbed and is in a straight and level flight, a pilot has a chance to think of his options if an emergency should arise.

Let's first look at what a 0/0 seat is and some of the guidelines needed to eject with a high percentage of survival.

The reason it is called a 0/0 sear is basically because the first Orepresents O altitude and the second O represents 0 airspeed, allowing the pilot to eject from ground level with no forward ac-

The pitch, roll and sink rate must center of gravity of a seat/man com-

titude in order to have a successful ejection. Certain aircraft are more sensitive to pitch and a plane can fall into danger once it reaches a 0 speed environment, adding a sink component, allowing not enough altitude to eject

Roll has a loss sensitive reaction in zero sink conditions (dive angle) and at zero speed. Forward speed in some cases improves performance.

To fall within the envelope at ejection, the optimum amount of airspeed guide rail. Emergency oxygen is ac-

you can safely eject from is 600 knots, however there is still an appreciable amount of force on the body still making ejection hazardous.

America West Airlines

focuses on service to

and from California as an

essential element in its

hub systems.

Above 600 knots, (outside the envelope), there is an excessive amount of force and it is extremely hazardous in ejecting. The pilot has to be well aware mentally of the adverse flight

Another factor the pilot has to be concerned with is his weight, since the

and parachute deployment.

Finally, we can look at what exactly happens once the decision is made to eject and its procedure for an automatic seat/man separation from a Martin-Baker seat used in the F-18.

A. After pulling the ejection handle, the IFF (transponder) is actuated, scent, the inertia reel tightens the seat straps and the leg restraints. The canopy is jettisoned by two rocket motors and a catapult fires propelling the seat up a

tuated and the time release For military tactical pilots, mechanism and electing is always prepared drogue gun are for but is something that is tripped. The rocket pack fires near the end of the catapult

stroke propelling the seat about 200 feet upwards.

B. Drogue gun fires. Controller drogue and stabilize drogue are deployed to stabilizer and decelerate

High Altitude Sequence C. When between 14,500 MSL and

11,300 feet MSL is reached, the baros- denomination he's apart of, even if tat controlled mechanism actuates to none, a prayer can't hurt.

fall within required degrees and al- bination can effect seat performance release the occupants harness and leg restraint lines.

The scissor shackle is released and the drogue chutes pull the link line to deploy the main parachute.

D. The opening shock of the parachute separates the occupant from the seat allowing normal de-

Low Altitude Sequence

C. Same as High Altitude except, the time release mechanism actuates approximately 1.5 seconds after ejecting if below 7,500 feet MSL or after less than 3 G's on seat if above -7,500

The best guidelines are: for a pilot to know his seat performance inside and out in extreme low altitude, out of control conditions-don't hesitate and eject while you're still in the parameters

When in control, keep wings level to convert excess airspeed, then eject Also, use the seat as "advertised"

In conclusion, the survival rate should increase once pilots know how to use their 0/0 seat. Though a pilot makes the decision to take the "journey". I'm sure no matter what



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Far Side

0

by Gary Larson





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SNAKE'S GOT ME



TILL SHOVEL AND PACK THE CAN GET IN THE CAR, PEN UP TO NEAR RED LINE, TURON OUT THE CLUTCH, LEAVE A PATCH OF MOLTEN RUBBER OUT THE GARAGE, AND ZOOM UP THE



UPPER JAW BONES ARE

PULLING ME DOWN ITS FRIGID GULLET! BUN FOR YOUR LIFE!



I GUESS TIME WEIGHS MORE HEAVILY ON SOME PROPLE'S

MANDS THAN

CHERS















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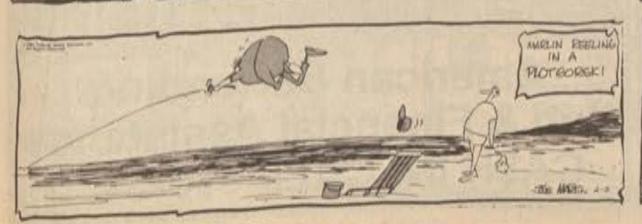
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America

(continued from page B3)

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America West has 8,142 full-time and part-time employees on its payroll, the equivalent of 7,507 fulltime employees. During 1988, the airline had 143,900 available seat miles per full-time equivalent employee and 84,000 revenue passenger miles per full-time equivalent employee, calculated on a monthly average basis. Then favorable employee productivity a faults have been accomplished primarily through the cross-utilization of the Airline's personnel. For ex-

Letters

(continued from A2) leads to course stability which insures quality education. Is that not the purpose of our University? how can this relocation of our department benefit the University? There is absolutely no monetary gain to be achieved. Is growth not beneficial to the University? Why dissolve the department? It does nothing but harm our education. To

ample, America West requires each of its full-time Customer Service Representatives to work the equivalent of a regular 40 hour, five day week. Such an individual might work as a flight attendant three days and in reservations two days in a typical week. The following week that same individual might work two days as a flight attendant and three days in various customer contact and ground positions at the airport, including baggage handling. Pilots put in approximately 80, hours of flight time every month. Maintenance and technical personnel are not cross utilized.

America West believes that cross utilization and the related training in aspects of the company's business not involved with an individual's primary assignment increase the understanding and involvement of each

All and all, America West is a very good carrier to be employed with if you are interested in working for a application to receive an evaluation, United, Delta, and UsAir).

confirm to doing things by convention leads to mediocrity. We are not going to settle for mediocrity! A petition is being circulated throughout the A/CET student body, and we will need the added support of all the other students. Please aid us with your support in fighting this change. Charles Marsh

Simuflite scholarship offered

The Simuflite Corporation at Dallas, Texas has provided two scholarships per year to Embry-Riddle Aeronautical University students. This scholarship is composed of approximately \$8,000 in training in either the Citation or the King Air Phase II simulators and \$1,000 for expenses. To be elegible for this scholarship, the following criteria must be met:

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4) Possess Commercial Instrument and Multi-Engine ratings, 5) Recommendations from previous flight instructor and the appropriate flight train-

6) Two letters of recommendation from Aeronautical Science faculty. Candidate must have had each of the faculty members for at least one upper

Students can pick up applications in the Aeronautical Science Office, room 123, in the new AWS building. The application data is also due into the same office by the end of the day on Thursday, Feb. 14, 1991,

employee in the airline's perfor- Spring degree applications available

Applications are being accepted for those expecting April 1991 degree completion. Come to the Registration and Records Office to complete an

major airline other than the regulars. For those students anticipating summer to a grant Degree Completion Ap-For those students anticipating summer 1991 graduation, the Records and plication for a preliminary evaluation for degree completion. It is especially important for those summer applicants anticipating attendance at the Spring 1991 ceremony to apply at this time.

Applications are available in the Registration and Records Office on the second floor of the John Paul Riddle Student Center Extension,

Happy Valentines Day! From the Avion staff

ACROSS

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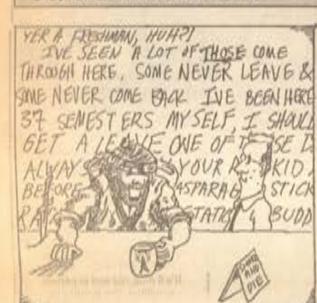
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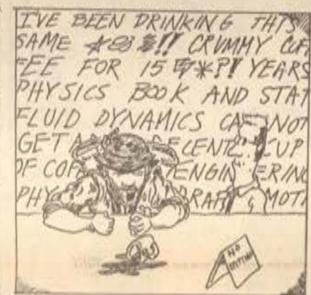
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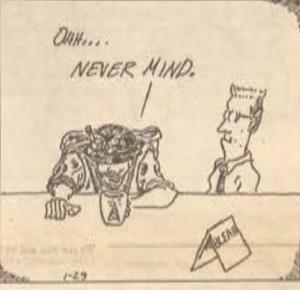
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queers am doing to the soil?

Everyone knews that a Burrough owl lives in

a hole in the ground? I mean, why do ya think

they call then Burrough owls anyways! Do

you think a kid like that would know what the

FAST FUNDRAISING

PROGRAM

STUART

Autos for sale

1987 VW Wolfsburg Edition Stroom-Black & White interior, Mag wheels and custom floor mets. 67,900 miles excellent shape, most see Call Peggy at 677-9402

1959 Dynamic 'III, Oldenobile Perfect Beach croiser-chop top with our cover. 4 door, rues great. Style, comfort and toxury at a price you can afford \$450, Call AI at 252-

+ Cycles for sale

1982 Yamaha-550 Maxim. Rims well, very seliable transportation. Includes owners manual, clymer repair manual and one piece Rajmentt, 5900 OliO. Call 756-6789, leave a message if no one is home.

Misc. for sale

For Sale-Sears. Sovernign, Men's 12-speed bicycle. Excellent condition \$50. Call 756-6789, have a mersage if no one is home.

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ATTENTION BEIER DRINKERS CO2 system for sale. Includes tank, regulator, and tap. All you need is an old refrigerator and year're mady to drink some cold ones. \$75 Call Finis 238-0120

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LOST-Infielder's mitt behind library on Sarunby, \$10 erward. Respond to Box D-228.

→ Miscellaneous

Paint-Hall! Dave a gain and equipment but shey're dusty with disuse? Use 'ent on us? We play every other weekend! Call Paul at 253-5061 for more info.

Conton Racket Stringing-510 for a guarenteed string job. Donn 2 Room 202. Call. 238-4074 and ask for Senny.

TRAVEL POSITIONS AVAILABLE-HGman fentale needed for grand allen tour of the galaxy. Must have echedule elear for next 10,000 years and most be open minded and very flexible, green hair a plus.

+ Personals

NEW ENGLANDER,

Our convenation smooth is nouring the limit. better respond. We his three minutes this week. Let's try to go THE CIVILIAN for the gusto and maybe we see care even see rath other too. Have him down south! WORLD TRAVELER

For "The I are not the kind of dog" in Maryland! Happy Valentines Day!! I miss you Chussy. Can't wait to cause ball this statumer. It's just not the same in Maine without you. Come home! LOVELISAU

DEAR YAK, Thank you for the waxed lipe. And the idol,

TRAVE

Wanted-If you are friendly, pretty, not too SWF ... at Riddle, right!!!!! own weight female and are interested in going out with a nice-looking thoughtful male, contact me...I am more than interested. Box.

EMBRY RIDDLE SAILING TEAM Good back at Eckend.

Beware people with wandering eyes. You may see more than you want.

Positions Available in YUPPIE Manufacturing Plant. Must know all three regulation haircora.

QUESTION: What do you call a mad lawyer ANSWER: A PYUPIII... A pissed young ur-

has profuncional.

DANNY, Lets do it! Seven morn weeks and we will have them dropping dead! I hope you have a wonderful Valentines Day and remember that surprises are always the best! YOU KNOW WHO!

Poland finally sent troops to the gulf...Mexico doesn't know what to do with them.

Sorry I couldn't get your number. So Happy BOOBOO CAKES, Heart Day, and you were not forgotten. Garfield has a message for you soo. Stop by and pick it up. YOU KNOW WHO

TO THE WHOLE GANG AT SHANGI-LA True friends are like diamonds found very rare. Palse friends are like automn leaves fallen everywhere.

HURMAN Happy V-Day (and 11 + 1/2 months).

MARTHA

Happy Valentone's Day IIIII 'Drinking of you. SNUGGLES

TO THE GUY WHO STOLE OUR PEN We saw you, and we think you're come l'airer a note next time with your name and number and we will get back to you ASAP. DORM CHICS

P. PLEASE BE OUR VALENTINE?

To: The girl who is tiving it up at Colgata. Happy Valentines Dayl) I hope you are recovering from our silly conversation. Have a blast in Barbados. Ell see you in May. DOVE, LISA

FLUFFY II

High What can I say? You're the greatest. Happy Valentine's Day. BLACKIACK

AIR FORCH ROTC

I'm bolding these seemd drill bricks ransom, if you ever want to see them in one piece you

Happy Valentines Day McNoggeth LOVEKERRY

Happy Valentines Day Miss Jeannett I miss you. Hope you're having fun at Orono.

THANK YOU!!! IT WORKED!!! I earned \$362,00 in foor days doing GT Distributor's EARN \$5000 MONTHLY Program. Thank you whoever you guys are, HAPPY BILL

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Poland recently ordered 200,000 septic tarks from an American company...and as soon they can find the drivers they are going to attack Russia.

A guy who always pope up at the perfect time, and who can always put a mills on my face. You're the greatest! Happy Valentine's TRICIA

TO MY PRINCIPS

I Love you and need you very much. Happy Valentines Day

ALL MY LOVE YOUR PRINCE

Toni, Tony, Tone has done it again, who's next? So it feels good buh? THE 3 AMIGOS

TO THE BASKETBALL PLAYERS, COACHES, AND MEMBERS OF THE TEAM (EVEN "GOOSE"):

You am the best of the best. Awasoms Job! Happy Valentines Day!!! YOUR CHEERLEADERS

Happy Valentine's Day; "Big Smooch"!

PATTY HAPPY 21st Anniversary!! How about dianor at Pondo's

AMY

LOVEGARY

Happy Valentine's Day IIIII The time we will spend together will be worth remembering. YOUR LITTLE BEARKAT

STUART

So anyway, the guy from the carnival said, Keep your arms and head in the mixer at all simes." But no. . . Max had to mick his head and arms out, yelling, "Hey everyone, look at mel" He got decapitated, and his head ended up over by the snow cone concernional MIKE THE MARINE

Does Roland Bost? A MIMBUR

ACICT-91 We made if through the first wave of test's so let's do it again.

TO LONELY STEVE WITH THOSE TER-RIBLE SCARS Smile and think Jai All. Heal and buy car

pluge Happy Valentine's Day.

TO KIRRY

Happy Valentinus Day! FROM THE CIRL WHO ALWAYS PRODUCTION PERSON WALKS HOME GIALHAD

CLASSIFIED AD POLICY

Non-commercial classified advertising and personals are free to the student body, faculty and staff of Embry-Riddle with a 35 word limit All other non-commercial advertising is \$10 with a

35 word limit. Each additional word is 10 cents.

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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) 239-6049.

ARNOLD 28

What a pid/The heat big breaker one could have. Best of lock with PTP and ER Happy Valentino's Day. BLACKIACK

MILLISSA

Hay moral I need your signature. Hardy haha. Hoppy Valentinn's Day BLACKFACK

You mussed up a koool friendship. Oh well your lost. Happy Valentine's Day anyway. BLACKTACK

GREGG

Don't be a Steve. ha ha Happy Valentine's

Day: m

ARNOLD 28

I'm so glad we met. I mever dresmed it would be you and I. I'm happy. Happy Valentine's

YOUR BABY

FLUFFY T Your love, kindness, and thoughtfulness is

more than I can over ask for in a friend. Thank you for being there. Happy Valentine's FLUFFY "II"

Don't give up. You'll make it to the USAFA. Happy Valentine's Day and good luck. MOTORCYCLES

Happy Valentiess Day to my FAVORITE PILOT in Prescutt Arizons. The sun doesn't phine the same best? I miss you like secrys-

KILLI Bessellent DAVID

TPC

Get well soon, we miss you? DELTA CHI

TO YOU CRAZY EDDIE NERDS We can't help but notice your lame ads in the routly chosen as "CEEKS OF THE WEEK" flag? I want to start a fire. by our Posce. Please withdraw your weekly MAD MAX ade to speen yourselves from funber ambarrasment.

MON PETIT MONSTRE Now that you're a CPIL Can I be your first THE MAD TYPIST student?7 JE T'AIMED

TO: THE MOOSE OWNER The Mexico is loose. Thunks for coming down. You can surprise me like this enytime.

LOVE YOUR MOOSE TO MY SQUEEZE

I got you habe, I got you lishe. LOVE ALWAYS BUBBIE ALINOR

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What's was and done vitting or standing?

ANSWER

A RIDDLE

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ACET-91 Let's Do It!! D.V.

CONVENTION GOIDES Have fun in LA, and watch out for the sand sharks on the beaches. They're mutants from

the planet mare. FORMER EIC

TO THE GULL UPSTAIRS IN THE SC Look out someone has their eye on you. MORE LATER

H.F.G. When is our wings Bar-BQ. Everyone also has had one.

KISSI Happy V-Day! WITH FIRELING

UPSTAIRS

I didn't know you cared so much and I'm sorry I hart you. I hope we can get things back were they were soon. The fast lane isn't

my style.

SPECIAL K:



Happy Valentine's Day!

All roses die and love fades away. My recommendations dump the chick and invest in tax-exempt CD's.

TO RED'S BOYFRIEND I'm not interested in her. I just wanted to get to know her better. So chill. HAS INC.

Hey THE ENTIRE WORLD

SMILE WORLD It maybe the last thing you ever do!!! THE MAD HATTUR

HHY BROWN EYES You sure you want it printed? BLUE BYES

Avins week after week. You have been our. Does anyone know where I can find an Irugi

Thanks for being there when I needed someone to talk to. Your very special to me now and always.

DEAR SANDY Will you be our Valentine? DV + RD

ADW jag alskar dig. MATTIAS

MISS MA112

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