

SCHOLARLY COMMONS

Avion

6-20-1990

Avion 1990-06-20

Embry-Riddle Aeronautical University

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

Scholarly Commons Citation

Embry-Riddle Aeronautical University, "Avion 1990-06-20" (1990). *Avion*. 829. https://commons.erau.edu/avion/829

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.

An Award-Winning Newspaper by Students for Students

Volume 65, Issue 3

Military Maneuvers...

Space Technology Editor

Space Shaule Atlantis was rolled

out to Pad A in the Kennedy Space

Conter's Launch Complex 39 at the

carly house of Monday morning. The three and Chalf mile trip from the Vehicle of mbly Building (VAB) to the part of SEE bout his hours. Everyth-

bout six hours. Everyth-

al of schedule booking.

of NASA workers after

problem with shuttle

arrently occupies the

which Columbia stood

the VAB. The upcom-

TS-38; is a Department

DD) dedicated mission.

et been establish, but it

faunch will occur about

less in the Orbital Processing Facility.

Embry-Riddle Aeronautical University, Daytona Beach, Florida

ERAU faces by Brian Cerni Editor-In Chief

An Embry Rid lle Cemin 172 had to execute a procustionary landing June 13th at approximately 7:00 PM after reported engine roughness. The landing took place about five miles south of Lake Ashby in a large pasture, Instructor Roper James and his student were on a routine training flight when the mishap occurred.

Paul McLutter Charmon of the Flight Technolog-Department, stated that the plant a speciment some "very rough running and power loss." The iostructor and student were uninjured and the airplane mearred no damage.

The prior and instructor were in contact with Sardord tower during the procedure and the Volusia County Sheriff's Department Helicopter, "Air One", was immediately dispatched to the scene to find the occupants of the aircraft walking toward a near by road. Sheriff's Department invesugator J.R. Johnson Sr. reported that there was not a stratch on the plane, and "the pilots did arrescellant, exceltem job of landing the aircraft."

Mechanics were sent to the scene so. find no compression in one of the en-

was fixed in the field the next day and flown out. Once back at Daytona, all the cylinders were rechecked and found to be satisfactory, allowing the plane back into service

This incident follows an accident involving in Embry-Riddle T303 Crusader one week carlier. That airplane suffered substantial damage electrical system.

have been after one of the engines was shut down The aircraft in response to an engine fire warning light. The aircraft was unable to maintain altitude on one engine and crash landed in a swamp ten miles west of Daytona Beach.

Investigations are util being conducted to determine the probable cause of that accident but evidence in pointing to a problem with the planes



Next!...

Embry-Riddle's bad luck continues as a Cessna 172 is forced to land, following the Crusader accident (pictured) gine cylinders. It is reported that the A few weeks and

The students, faculty and approximately Riddle clude a photo station which was allow visitors the opport

same scene.

Acronausical University are cage by awaiting on acrival minity to photograph the same scene. here of a full-size stainless of clareplica of the Wright Flyer which, (2) be installed on campus early this fal-

The spenially-commission 5.000-pound. 40-foot wingsp. allow visitors the oppor-sculpture was designed and co structed under the direction of Larry Godwin, an intermignally-renowned

sculptor of Brandalge, Ala, students, Shannon Murphy (1987) and Phil Dellange contribution for the Flyer from the campus Student pleas the project, President Tallman added.

The students recommended the project because of the association between the historic occasion and the university's dedication to the aviation industry," the president stated,

We also envisioned the Wright Flyer as a unique way to celebrate our 25th anniversary in Daytona Beach and as a means to demonstrate our gratitude for the community's offen to bring the institution here, as well as continuing to support Embry-Riddle since that time," said Tallman,

President Tallman explained the project will be a full-scale outdoor diorama of the 1903 powered flight of the Wright Brothers at Kitty Hawk, N.C., as immortalized in the famous photograph by John T. Daniels.

It will depict the ironant the aircraft lifted off. its catapult on December 17 at 10:35 a.m. with Orville Wright at the controls assisted by his brother, Wilbur The event was frozen forever by the witness-photographer using Orville Wright's camera,

The setting for the sculpture will also in-

The stylized reptica, which features decrically-powered propetters, will The setting for the sculpbe installed a landscoped area in trust of the Jack & Hum Memorial ture will also include a photo station which will Library, and can be so drive to location near the main entrance on 4 29th Mor.

ris Boulevard. Visitor parking is available airjacent to the site. Formal dedication of the Wright Flyer Monument will be

project on Milliand (wo standard L. T. Embry/Riddle Homocoming egicleration in November Homocoming delabration in November,

In the meantime, we will be encouraging everyone to (1988) who were also responsible for initiating a \$5,000 get a provide of the replica this summer while we com-



The Wright Stuff...

The students of Embry-Riddle await the arrival of a full-size model of the famous Wright flyer.



Kurt F. Mackey

prints by dwillness and

Shuttle Atlantis began its secretive trok to Launch Pad A as its troubled twin sat motion-

Atlantis rolls out as

Columbia rolls back

tunity to once again make educated

guesses on the payload. This DOD

flight is the seventh flight up to date

out of 36 planned flights for the Pen-

The five man crew that will fly with

Atlantis arrived Monday night at 8:10

p.m. in preparation for the countdown

demonstration test tomorrow and

Friday. On Tuesday they went

through the regular standard safety

training. Also on Tuesday, the

Auxiliary Power Units (APUs) Land

two were hot fired for seven minutes

high speed. The test was a success,

The date for the STS-38 mission will

be set after the flight readiness review

While Atlantis is readied for

seks ago when it was at normal speed and 10 seconds at

next week.

tilke other missions and launch, Columbia is also readied for

missions the cargo that its August launch. The cargo bay

Atlantis' payload bay is doors for Columbia, which is current-

Students mourn the loss of Kurt F. Mackey by Martin Kammerman News Editor

Kurt F. Mackey, an Aeronautical

Engineering student died last Wednesday from injuries sustained in an automobile accident.

week. At this time technicians will

have access to the Attro-I and the

Broad Band X-Ray Telescope for re-

In the VAB, the 17 inch quick-dis-

connect valve which halted the

launch of Calumbia was removed

from the External Tank (ET) on Mon-

day and shipped out to California

yesterday for repairs. A new valve

was installed yesterday. Meanwhile,

the Solid Rocket Boosters (SRBs)

that were rolled out to Pad B to make

room for Columbia's roll back, were

prepared to be rolled back this morn-

ing to the VAB. Once there, the stack-

At the Canaveral Air Force Station

an Atlax Centaur went through a

count down dress rehearsal. The rock-

et will be rolled out to Pad 36-B next

Tuesday. The scheduled launch date

is July 9 at 4:50 p.m. It will have a

ing process will resume.

servicing them.

driving with a friend on Interstate 4. when his 1985 Ford truck flipped overkilling Mackey and seriously injuring his friend.

According to Florida Highway Patrol Trooper, Mackey was traveling

westbound on I-4 when he inadvenent- a seatbelt. ly slid his truck into the median, Mackey then overcorrected his error, throwing his truck into a clockwise spin which caused the truck to overturn.

Mackey's passenger, Daniel P. Leo Mackey, 24 of Daytona Beach was an Aeronautical Science student sustained critical injuries and was flown by Sheriff's belicopter to Halifax Medical Center, On Monday, Halifax Hospital reported his condition as

A memorial service for Mackey will be held at the President's residence in Ormand Beach this Friday, June 22 at 6 p.m. All students, staff and faculty are invited.

According to Dr. John Wheeler, Mackey was cremated and a funeral service was held for him in Himois. At the request of his parents, an Embry-Riddle plane will fly over the President's residence at approximately Neither Mackey or Luo was wearing 6:15 p.m. carrying Mackey's ashes.

The plane will then drop the ashes over the ocean within view of the President's residence.

"He was deeply loved and will be greatly missed", said Dr. Wheeler, "He comes from a fine family...we all mourn and suffer the loss," he concluded.

Anyone who is interested in attending the inemorial service at the President's residence can contact the Campus Ministry at ext. 6580 for more information.



Space Technology

Section Highlights . . . Space Technology . . .

Endeavor nears completion and is scheduled for roll out in April of next year...page 6

Aeronautica . . .

A new composite kit from Wheeler aircraft offers speeds exceding 200 mph...page 3



Aeronautica

Inside the Avion this week: Aeronautica..... 3

Classifieds......9 Comics...... 8 Diversions.....5

Opinions...... 2 Space Technology...... 6 n, June 20, 1990

& EMBRY-RIDDLE YEARS OF PARTNERSHIP & PROGRESS



Newspaper

Managing Editor

Brian Gerk

News Editor

Martin Kammerman

Space Technology Editor

Jose Luis Vazquez Jr

Erinn Moore

Aeronautica Editor

Hoyt Brown

CHISTOTIS EDILOI

Editor-in-Chief Brian Cerni

Managing Editor Joe Cambron

Production Manager Erik Ford

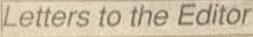
Advertising Manager Jeffreye Dolan

Jaap van Editor

Adviser

Dr. Roger Ostewiolm Ho

plan may be addressed by The Aviet Ne b. 7 mode 22116. Prome: (906) 239-8069



Patriotism?

isseball game or a football game or recently, the subject came up again, watch one on TV, look around you. This time I was very angry because and see how many people are the persons in question were almost Star Spangled Banner, I have a words. But I was also irked because iceling you will be shocked because one of my questionees was a there won't be many. You might member of the United States Navy. even see a few people not paying A person who represents the United attention and talking during the States who couldn't even recite the sing. Most people won't remove "Star Spangled Banner" He replied their hats for just a few moments that he never once had to sing the while the song is being sung. Some song during his entire Navy career, won't even look at the flag during. Many people might ask why we praises the nation in which they everyone they were not in the United States example to the younger generation. they would not be in Shea Stadium. You should read the words to the winning home run.

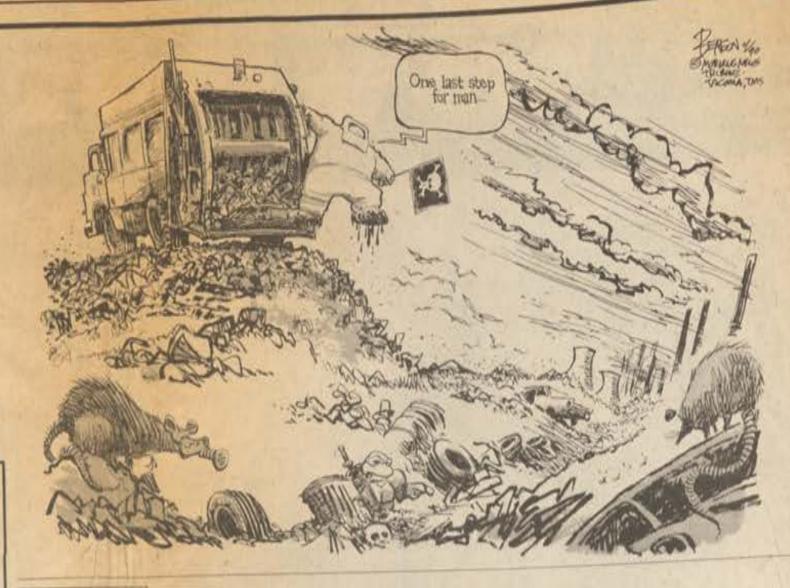
and a diagrace that so many people

ignorant. But I didn't hold it against them. At this point I wasn't The next time you go to a angry enough to take action. But just ictually singing the words to the proud that they did not know the

the song, but instead they will be need to know the words to the drinking their beer. Don't you find it anshem. Well, it's true that the song distincting that while Americans are is not sung everyday, but when it is watching their favorae pastime, they sung, everyone should be able to can't sing the words to a song which sing it. Singing the song lets know. live? I think that they have foreigners and visitors, that you love locgotten, or do not realize, that if America and it will also set an

drinking a beer and watching their Star Spangled Banner sometime. It favorite baseball stars hit the might make you stop and think how lucky you are to be in "the home of I thought that it was both a shame the free and the land of the brave."

Marybeth Allen



Editorials

Smoke causes fire among students

chool American Government or Law class is the principle that "the freedom to swing one's fist ends where another's nose begins.

The idea is that one person's freedoms should not infringe on another's freedoms.

Now imagine someone who violates the bounds of another's body by going right through someone's e, into their lungs, and finally into their blod stream. I am talking of course, of smoking.

n order that smokers can keep their freedom to e without infringing on another person's right th fresh air, the "no smoking" area was ind. In theory, the no smoking area seems to e the problem.

Unfortunately, smoke, and smokers, both seem o have little regard for boundaries. Each permeates areas where they shouldn't be.

The state indoor quality act specifies that a restaurant with scatting for more than 50 people, must have a no singless; area fowy crosest or on

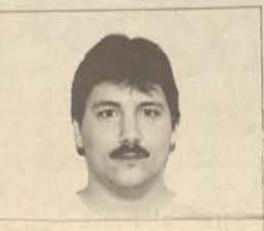
Morrison's office have been designated no smoking (though this fact may come as a surprise to

Morrison's does not put ash trays non-smoking areas and there are two signs attached to the

smoking and non-smoking section is not clear.

Ash trays get moved, and the signs are ignored, In fact, many don't even know there is a no smok-

The non-smoker is usually left with relocating



Joe Szarmach Staff Writer/Photographer

One of the first things learned in a junior high columns off to each side. But the line between the every time someone lights up or being a "smoke cup'

Smokers are a minority, and seem to be even more so here at Riddle, Many employers hire nonsmokers over smokers, and a pilot who smokes is already walking around at sea level with a (blood) altitude of a couple thousand feet.

I remember a story from my AS 150 instructor in which he took some friends (including a heavy smoker) flying. According to my instructor, he realized only

after minutes going by, that one of his passengers was not sleeping, but was in fact suffering from hypoxia (lack of oxygen) and had blacked out. Imagine if this had happened to the pilot.

Another important thing to consider is the effect

that second hand smoke has on non-smokers. A study out just last week estimated that tens of thousands of Americans die each year from breathiing second hand smoke.

Walking into A building at times is like walking into a poker half and is not a healthy environment for example.

ERAU prides itself with being a leader in the aviation field, and moving to a non-smoking campus (or at least smoke free buildings) would be a great example to set.

Bicycles are not welcome at EF

tively new lawn in front of the Airway Science Center, and it urged students not to cross the grass areas. This sign seemed to imply that there were some alternate routes for bicycles and pedestrians that wish to walk directly across Clyde Morris.

Granted there are a whopping two bicycle racks at the ASSL/AWSC building. One of them is accessible only by either carrying a bicycle up the concrete steps, or taking a quite circuitous path around the entire complex and back around to the front, or (my favorite, and the easiest) riding directly across the grass and up to the rack.

It is hard to ignore the fact that the Embry-Riddle campus does not cater in any way to the bicycle rider. The University has about ten percent of the bike racks that any relatively equal acreage campus in the west would contain. The University of California in Santa Barbara even has a complete bike highway that runs directly next to the extensive pedestrian walkways, not to mention the

Two days ago I almost ran over a small sign on thousands of bicycle racks that dot the campus, Is school is enough justification alone for my bicycle. The sign had been pushed into the rela- it any wonder that the sedentary students at this tive student populace. Think of how mu school pale in comparison to their vigorous counterparts in the rest of the U.S.?

The economics of using a bicycle to travel to



Brian Gerk Managing Editor

majority for gas for the daily drive to school. The For the of the student body lives within two m campus. It takes about ten minutes at th pedal the short distance to school, and never a factor, Parking spots are always (as long as you get a spot on the rack to \$ and you are guaranteed not to walk far bike to class:

Why is the administration at this school tant to provide adequate facilities for th riders? Is there some hidden reason to dents driving to school? Are the parking I ly that lucrative? Is it really in the best into the school to keep the students as inactive a sible? I want to hear why the mover's and she around this school won't build proper side-war and bike-paths.

Surely there must be some reason that I haven't yet fathomed for this wide-spread attitude. Please, someone, straighten me out.

Student Forum

The Avion asks: Are you satisfied with the smoking conditions in the student center?



Steve Palk

It sucks. I think they should ban smoking altogether. If you want to smoke go right ahead, OUTSIDE



Gary Brughetti

People still smoke. It really doesn't bother me, that they smoke in the U.C. But other buildings should be smoking



Dave McGinnis

It doesn't bother me at all. Why amoke?



Brian Crooker

It doesn't bother me. I never had anyone smoke close to me.



Ibrahin Aziez

If they want to smoke, they should be aware of students around them.



Damon Frazee and Lisa Combs

There should be no smaking inthe U.C., because its a place. where people eat and its unhealthy.

U.S. Air and Trade Show strives to be next Paris

by Hoyt E. Brown Aeronautica Editor

June 1, 1990 marked a significant milestone in the development of the United States Air and Trade Show as the name was formally adopted for the four day international aerospace exposition. A new logo was also unveiled. The show was formally named the Dayton Air and Trade

Show. As the premier event of its kind in America, the United States Air and Trade Show to be held in Dayton, Ohio from July 19-22 continues to dramatically expand its international trude operations while significantly adding to its air and trade show flying highlights. Over 225 exhibitors from around the world have already signed up for the international event that features a look at the latest developments in acrospace technology. According to show officials, the number of exhibitors is expected to increase right up until show time,

The accelerated growth of the U.S. Air and Trade Show is seen as combination of events that includes the commitment of the Dayton comminity to develop a world-class United States Air and Trade Show that represents America's aerospace industry in the global marketing arena. Growth has also occurred as a result

global competition and a shrinking market share.

nounced that the Lockheed F-117A aircraft during the trade show. Com-



stealth attack fighter will make its international air and trade show debut at the U.S. Air and Trade Show. Officials have also indicated that at least one other special purpose aircraft never before seen by world air and trade audiences will make its flying demonstration debut at the show. The identity of the air craft is to be announced soon. Trade show plans call

AIR AND TRADE

SHOW

of the perospace industry's broad sup- for both professional seminars and port for a U.S. based international flight demonstrations of various show as a response to the growing aircraft on business days scheduled for July 19-20.

A number of flying firms have Show officials have previously an- made plans to demonstrate their

> panies confirming participation include Aerospatiale (France) which will demonstrate the turbo Doing a wheelie ... charged Trimidad; SIAI-Marchetti SpA, a subsidiary of Agusta SpA (Italy) who will bring its \$-211, a and light attack aircraft; and the Fabrica Argentina de Materiales Aerospaciales (Argentina) who will demonstrate the Pampa, a basic-advanced pilot and weapons

Other foreign firms participating in this year's show include Lucas Aerospace, HDA Forgings. Ltd. and Courtaulds Intrex, all from the United Kingdom and Teac Corporation from Japan.

With the introduction of exciting new advanced technology aircraft, expanded trade show activities, the Air Force Thunderbirds and Army Golden Knights demonstration teams; the participation of NASA and the FAA and a host of other aircraft flight demonstrations and displays, show officials are expecting to break all previous attendance records for the four



The new Wheeler Express, seen here flying over the Tacoma, Washington area is a fourplace composite kit. The first factory demonstrator was flown on an extensive tour of lightweight basic jet flight trainer California, Florida, and Maryland to spark intrest in the sleek-looking aircraft.

Wheeler Express offered as kit

by Hoyt E. Brown Aeronautica Editor

Express has been flown at Tacoma-Narrows Airport in Washington. The aircraft has a large fuselage and a different powerplant than the original Express: "It performed beautifully." said company president Ken Wheeler. The aircraft exceeded our expectations. Control response is excellent, trim is perfect, the cockpit is roomier and the engine is much smoother."

The first Wheeler Express crashed in Santa Monica, California after the carefully maintained Lycoming on-

dent, which made a strong statement direct from Wheeler for considerable The first production line Whoeler for the crashworthinese of the Express savings. airframe

> Building the second demonstrator slowed the development of tooling for the last two of our five aircraft kits, but then back to Washington. It was the we're now in a position to give prospective kit buyers a demonstra- the aircraft. "We expect to show the tion ricle and sell them a complete kit. Express to over 300 people on this a the same time," said Wheeler, "We're confident we won't be the only ones at Oshkosh with a flying copy of the Express.

The factory's new airplane is powered by a six cylinder, 210-horse- range. gine lost oil pressure and seized, power Continental engine which

There were no injuries in that acci- builders will be able to purchase new

In fate May, the Express was taken out on an extensive tour through California, Florida, Maryland, and first of a series of trips to demonstrate first trip," said Wheeler,

The Wheeler Express is sold as a complete composite aircraft kit, h is designed to seat four people, cruise at 210 mph, and have a 1,200-mile

BA-123 enters final assembly

by Hoyt E. Brown Aeronautica Editor

The first prototype of the new 19seat, pressurized twin-pusherprop transport CBA-123 entered final assembly this week after leaving the airframe assembly jig in late May. On the same day the second prototype was positioned in the airframe marry up station previously occupied by the number one prototype. Work on the latest transport from Embrace is proceeding aimed at finalizing installation of systems and finishing the

nirframe. The prototype now features the horizontal stabilizor, which has been put into place after arriving from Argentina, and the engine pylons made from carbon fiber composites. Instal-

lowed by installation of the nose and main landing gears,

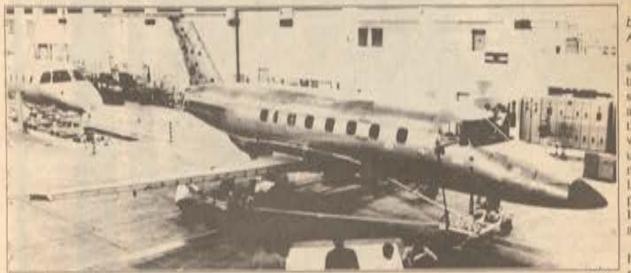
Work is proceeding as planned on installation of the prototypes other systems, such as hydraulic, mechanical and flight control. The two axilar (armpit) fuel tanks (so called because of their location underneath the fuselage, ahead of the wing, enclosed by the wing-to-fusciage fairing) were being tested as to the proper fit prior to final installation to the prototype,

The first flightworthy example of the Carrett TPF351-20 of 1,300 SHP turboprop engine that will power the CBA-123 prototype, in the case of the starboard engine, arrived at Embraer the last week of May. The engine is currently being outfitted at Embraer's

begun early in the week and was fol- checked as to installation on the prototype.

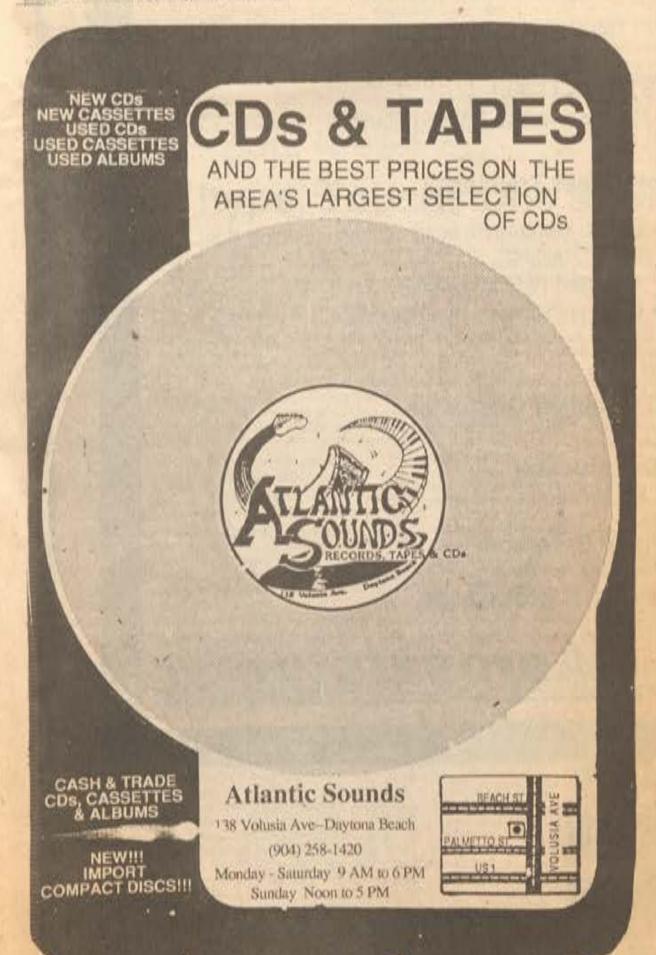
Five CBA-123 prototypes-are scheduled in the program. Aircraft no. 801 is the first flying prototype, built Embraer, and is scheduled for roll-out on June 29. Aircraft no. 802, also a flying prototype built at Embraer, has its first flight set for September 1990.

At this time, there were paid-option contracts totaling 150 CBA-123s placed by 18 clients in 13 countries, the list of customers include various executive customers in Brazil, Ontario Express (an Air Canada partner) has ordered 30 aircraft, Express Airlines I has 20 planes on order, and SkyWest also has 20 CBA-123s ordered. The CBA: 123 is scheduled for certification and entry into service in Into 1991



Leaving the jig...

The first prototype of Embraer's CBA-123 19-seat pusher turboprop, seen here being moved to final assembly in Sao Jose Dos Campos





Serving Embry-Riddle University 255-1711 1500 Besile Rd.

Domino e Plezar hares only sale drivers. Wirchecicall slaving wounds before THEHRIE:

Pantastic



on for early \$2,00 brains! (Too not Hidel Coupon Necessary

thermodium 6/20/90

Duo \$8.99! Declar TWO amalla Harrie Harri

titles and afterprey only \$8,991 CH. TWO Lines obecome Demonto a Pion Par-STREET, STREET, STREET Campon Necessary

Mixed Doubles

ONE support, and you pay only \$10.951 Tax material and Coupon Nocemary Iller providing 6/25/90





In order to train professional pilots you need the equipment and instructors

PHOENIX EAST HAS IT ALL

Boeing 727 Training included in the Professional Training Course

Professional Pilot Career Training

- Professional Pilot Course-250 HRS including King O-ATP (1500 HRS) in 18 months including King Air & Air & B-727 Training \$19,750.
- B-727 Simulator Available
- Staffed and operated by former Airline Pilots
- · Immigration approved
- Intermediate ratings available -ie PVT., COMM., INST., etc.

Job Placement For All Qualified Graduates

King Air Training Center

- · Initial
- Recurrent

B-727 Training

· Approved FAR 141 School

· Open enrollment - start anytime

Boeing 727 Training Programs

• Flight Engineer • Type Rating • Transition/Refresher • Airline Interview Partial training to be done at USAIR

PHOENIX EAST AVIATION, INC.

561 Pearl Harbor Drive • Daytona Beach, FL USA 32114 (904) 258-0703 . 800-868-I-FLY . FAX (904) 254-6842 DIVISION OF PHOENIX EAST AVIATION. INC.



Windows 3.0 puts those little gray Apples their

Managing Editor

Most people are unaware what is meant by the high-tech ohrase "Graphical User Interface" or GUL Nevertheless, as the average computer user strives to define the advantages of such a product, battles are being fought behind the scenes between companies that most people have heard of.

Icon-basing

A GUI is what a makes a Macintosh into a Macintosh, or says Apple Computer, Microsoft, the world's leading manufacturer of personal computer software and operating systems, disagrees. Whether Microsoft has cloned Apple's look and feel is not to be decided here, but what advantages this technology cross-over creates for comouter users is a little easier to define,

For years, IBM users have complained about the comolex file system adorning their computers. Sometimes hundreds of files are required to execute a single program, This bulk of files requires users to create directories on their drives for individual programs. This process divides the files into what amount to separate drawers for each program

These directories provide organization to what would be an endless sea of files on the average hard drive. Even if one was to decide directories were not to their liking, Microsoft's DOS operating system limits the number of files in a directory. Worse, however, different programs often have files with identical names which are not allowed in a single directory for obvious reasons.

Putting that aside, Apple's MACINTOSH has always overcome the file problem by using graphics to represent programs instead of hundreds of files. The graphics, or icons, allow a program to be run by placing a mouse cursor over the icon and pressing a button on the mouse.

This process is infinitely easier than IBM's file maze and is the result of Apple envy

Apples, oranges, and Windows 3.0

With a product called Windows, Microsoft has at-

Microsoft works out the kinks in its sluggishly selling nevertheless time-consuming. One by-stander who OS/2 operating system, the company has begun to provide more and more of its functions to users of Windows.

Windows offers users a GUI similar to Apple's while burying the system's tangle of files, where only the program needs to find them. With a mouse and a IBM PC compatible computer most users can at least scratch the

surface of GUI technology by purchasing Windows. Windows will work with any 8088 based IBM type computer with a monochrome monitor, a small hard drive, and 640K of RAM: but it will not do it happily, and neither will the

What you need

In testing this product on slower 80286 based machines. with only 640K RAM. program seemed sluggish com-

with Microsoft's improved program coding, which increases execution speed by a factor of three, running the program on a 4,77 Mhz 8088 based PC would be foolish

THE PERSON SHOW A PROPERTY OF THE PARTY.

Window into the future...

It is also important to have a fast hard drive if your computer is limited to 640K of memory. This is due to the fact that Windows creates memory space by using unused sectempted to provide the best of both worlds. While tors on hard drives. This technique is innovative, but is the machine was multitusking.

watched this reviewer run windows on a 640K Tandy computer commented that the hard drive stayed on constantly for periods of as long as two or three minutes uninterrupted

What you really need

To truly take advantage of Woutows 3.0, which was

recently released. a user must have at tenst a 30 megabyte hard drive with access time below 35 milliseconds, an EGA monitor or better. an 80386 SX or DX based computer, a mouse, and megabytes of RAM or more.

Multi-tasking With this particular setup, the user may finally take advantage of true multi-tasking while working under DOS. With a 80386 based computer and enough graphical interface white still keeping their IBM computer. memory, almost any two programs

pared to the 80386 computers with 1024K RAM. Even may run simultaneously, as long as they do not employ complex copy-protection schemes or make certain forbidden uses of the internal speaker.

> These limitations are not particularly limiting for those with the proper hardware. Testing the program on a 16 megahertz 80386SX with two megabytes of 80 nanosecond memory, it was not even readily apparent that

This ability is particularly advantageous to the modem user, since Windows will allow unattended synchronous communication while at least one other application is

being executed. As for the program's hard drive needs, they are diminished with additional of RAM memory, and Windows can make use of as much 32 megabytes of RAM.

No more little gray Apples

Window's 3.0 takes another big jump ahead of its predecessor by offering true, 256 color, VGA support for both graphics and text modes. For years, Apple bumbled around with just two color graphics, until recently offering some color apprade possibilities

Applications can now be comparable with those outside the Windows environment. Paintbrush, for instance-which comes with Windows, is now a full color paint program capable of producing quality graphics that can even be doplayed behind Windows applications as "wallpaper". Graphical icons are even in color now, with all other aspects of the program's color scheme user definable.

Life without Windows

Windows offers so many advantages over a DOS only system that it is beginning to seriously damage the success of Microsoft's rival operating system, OS/2. With its latest evolution, Windows actually improves upon OS/2 in many ways.

There seems to be no doubt that Windows is more than a bridge to the future, it is the future. If Microsoft allows Windows to continue growing, instead of suffocating iti.e. DOS, it will soon be a fixture of IBM type computers.

At less than \$100, Windows 3.0 is probably one of the best values in commercial software. The package contains file manipulation capabilities equal to PC Tools, a word processor which is only lacking spell-checking capability, a state-of-the-art paint program with scanning capability, a pair of well-conceived games, a database/filing program; and, as a temporary added bonus, a program called Toolbox which includes a full personal schedule or-

For an even better value, the program may be purchased with a Microsoft Mouse for substantially below \$200.

Quincy Jones makes it Back on the Block with recent album

Windows 3.0 offers users the chance to manipulate a

Cast of Thousands! Ten years in the making! Stars too Numerous to mention! More often than not, such Hollywood hyperbole refers to an excess of extras, cash flow problems and now-you-see-!em-now-you-don't cameos. But in the case of Back on the Block, the long awaited new album from Quincy Jones, all of the above, and much more, is

"Long-awaited," in this case, may qualify as the season's most eloquent understatement. It was in 1981, that the legendary producer, performer, composer, titlent scount and musical visionary first agreed to record an album for Warner Bros. Records, under the auspices of his own Qwest Records label, Originally conceived as a follow up to his groundbreaking concept album, The Dude, (released that same year), the project would continue the approach pioneered by its predecessor, with Quincy serving as mastermind and creative catalyst for a host of artists intent on proving the maxim that it's amazing what you can accomplish when you don't care who gets the credit.

This album brings together a great number of remarkable men and women and, in turn, a great number of those old friends, special guests and new discoveries are represented on Back On The Block. Among them: Gerald Albright, George Benson, Tevin Campbell, Ray Charles, the Andrae Crouch

But Back on the Block is much more than a collection of famous names returning favors.

Singers, Quincy D. III, Miles Davis, El DeGarge, Kool Moe Dee, George Duke, Shelia E., Ella Fitzgerald, Seidah Garrett, Dizzy Gilespie, Herbie Hancock, James Ingram, Al Jarreau, Big Daddy Kane, Chaka Khan, Bobby McFerrin, Melle Mel, James Moody, Al B. Surel, Caiphus Semenya, Ice T., Take Six, Sarah Vaughan, Barry White Joe Zawinul and many others

But Back on the Block is much more than a collection of famous names returning favors, Bringing together such an extraoridinary roster of styles and stars. Quincy has achieved nothing less than a dazzling synthesis of sound, summing up his broadbased musical penchants and suggested all manner of fresh directions for the new decade. "This is my the hip-hop artists-- cats like Ice T, Big Daddy Kane kind of menu," Quincy asserts, "There's a taste of and Kool Moc Dee- are doing it for each other as everything here, from African to Brazilian, be-bop much as for the public. Their concepts of imto hip hop. There's an incredible connection be- provisation, syncopation and rhythm are very tween all these kinds of music and that connection familiar to those of us who grew up with be-bop and is what this album is all about."

"We Be Doin' It," another stand-out cut from again.

Buck On The Black, fetures the powerhouse line-up of Bobby McFerrin, the a cappella gospel group Take 6 and those legendary ladies of jazz, Ella Fitzgerald and Sarah Vaughan, along with some tasty lead vocals from Ms. Garrett, "This was another dream come true," explains Quincy, "to do a song with all human sounds, natural body percussion and no instruments.

The result, here and elosewhere, points up the often-astonishing stylistic mix at the core of Back On The Block. And that mix is nowhere more pronounced than in combination of be-bob legends. and hip-hop pioneers on such selections as"Birdland" and the title track. "It was my son who really introduced me to the whole rap scene, "con-

'He's a hip-hop freak like I was a be-bob freak and, while I can't describe it in words, I feel this incredible connection between these two musical

As with the jazz greats who were my mentors,



Back with a vengeance...

now have a chance to see those cycles come around. Quincy Jones storm the top forty with his recent release. The first single, "I'll Be Good To You," went to number one.

Unfortunately, Touchstone

pictures forgot that there is

a big difference between an

unrealistic background and

a background that looks un-

realistic.

Despite hype, Touchstone's Dick Tracy proves to be flaccid

by Jason Simon Data Tech Editor

It was two weeks ago; I had just walked out of theater; the laughter still rippled out of my body from the last feature. I began to pop the keys out of my pocket when I saw the display.

It was the T-Shirt ticket for the movie Dick Trucy! Being a loyal fan of the detective, I immediately shelled out the fifteen clams that were required to buy the shirt and see the Last Thursday, June 14, I sped out of my

night job like a bat out of hell. It was 11:20 P.M. and I was worried. The instructions that smell of the hot buttered kernels that I had purcame with the shirt said to I parked my car and be at the theater by 11:30

that night, so that I would not miss the Roger Rubbit cartoon before the gangbuster feature. Know-

a car forward. The miles sped past; I finally made it to my destination at 11:47, disappointed that I was late for the preview show.

I parked my car and jaunted briskly up the steps to the theater. The sudden chill of the air conditioning in the movie house brought the the cartoon began. It was hard to hold onto the my sofa. Bad news for Tracy fans,

the deep black of the Dick Tracy shirt stupid rabbit. The cartoon ended about five protected the rest of my torso from the cold, I quickly picked up a soda and a tub of hot buttered popcorn and then entered the doors that tire movie. were marked Dick Tracy.

up and the slide show that AMC provides was. The matte painting was meant to reflect and still running. I could feel the tension in the air, something was wrong. Helpless to do anything. I found a comfortable chair with a clear view of the immense screen a few yards in front of me. The minutes ticked by and the

> chased were getting to me, I commenced munch-

jaunted briskly up the It was midnight, and steps to the theater. the crowd was not in the

the AMC theater, I gunned the beast that I call Finally, at 12:05, four minutes after the scheduled showtime the lights dimmed, leaving the image of my half consumed tub of popcorn firm in my mind.

bitter and wanted to see the feature. At 12:10 Pruneface, reminded me of the foam rubber in

goose pimples up on my forearm. However, popcorn as I laughed uncontrollably at the minutes later, little did the crowd know that they had just witnessed the best part of the en-

The movie opened up on the scene of the To my surprise, the house lights were still city that was to be the setting of the movie. unrealistic city background.

Unfortunately Touclustone pictures forgot that there is a big difference between an unrealistic background and a background that looks unrealistic. The painters painted the latter scene and it took much time for me to comprehend how they could have spent 30 million dollars on this movie and ended up with a bunch of paint and paper mache buildings that looked like hell to begin with,

The first thugs that came into view had the best of moods. The fea- distinct grotesque features that made the ing that I was a good twenty-five minutes from ture had not started and I was getting mad, comie strip Dick Tracy what it was. Unfortunately, in this day and age of high quality makeup and form fitting masks, these faces looked just like the rubber they were imprinted on. I was disappointed that some of my Then the previews started! The crowd was favorite characters, like Flattop and

soon learn that Warren Beatty was not made. for the part. His facial features didn't even come close to the long bridge and sharp chin unscathed. that made Tracy famous, Worst of all his acting reminded me of some low budget B promised Touchstone that he would not go too movie I once saw as a

Madonna, as breathless Mahoney, was involved with the mob that ruled this unnamed city, but she soon fell in love with the title character.

While Madonna shows off enough cleavage to make a Playboy editor jealous her acting is way off par, so far as she cannot even lip synch her singing properly. At least we didn't have to hear her live.

Unfortunately the plot seems to have a few gross errors in it. For example, Tracy gets framed on a drummed up murder charge and is put in jail. Somehow he is able to get out of jail scott free. Never mind the fact that the suspects he captures have been booked by a man who has been stripped of his badge. In For the group at Pleasure Island saw this loser addition, near the climax of the show, Tracy of a movie earlier that evening. (Rating, barehas a giant gunfight in the middle of a road. Iy one star)

When we finally catch up to Dick Tracy, we Tracy is standing in the middle of this lead menagerie but, despite the hundred thousand rounds that are flying about him, he comes out

The director of this film, Warren Beatty,

far over the 30 million dollar budget specified However, Reatty should have dropped a little more money into the film. Beatty is also known

for endless retakes of acenes However he should have done a few more

scenes over. You can observer the spit flying from Tracy's and Maddonna's mouth.

Finally the snorevision movie epic ended. The crowd mumbled unsympathetic things about the movie.

I glanced down the T-Shirt ticker that I was wearing. The shirt said "I was there first!" It really should have stated." I was disappointed first!" But even if it did, it would not be true.

Avion staff prepares for summer with request for new members

by Joseph Szarmach

Staff Writer

It is the end of yet another semester, some people will be leaving and some staying. For the Avion, it means that some staff will come and some will go. But it seems after this semester many more will go,

Many times (perhaps too many times), Avion editorials have advocated that students "get involved!" At times, the quality of the Avion suffers because of tack of participation by students. Perhaps many do not understand who works to provide the Avion, or who "those people" who put together the Avion are. Most students probably do not

even know how the paper is produced. Those guys" are "YOU guys". There are no special classes (like journalism) you need to take, or program that you need to be in. The typical staff member is on the staff

as a result of a coincidence. The only qualification needed is that you must be will-

ing to have fun, and do a little "work" on the way. The Avion is very much like a club or a fraternity (with all the accompanying parties) except that once a week (or every other week in the summer) each of us contributes a little something, and a newspaper is born.

It all starts off with story research. This may incl getting press passes to an air show, going to an aircraft accident, or interviewing the administration to find out their motives behind curious decisions. Other things you might want to cover as a student reporter are shuttle taunches, Reporters go to the primary

press site, where you may sit right next to an ABC or NBC reporter. You may choose to see a "roll out" and stand a few feet dividual stories together into pages that will become their



from the shuttle as it is rolled out to the section (like Space Technology). These pages are arpad. In addition, several staff members are selected by the Editor to represent ERAU at journalism conventions, Conventions in the past have been held in New York, New Orleans, and San Fran-

These trips give a staff member the opportunity to learn as well as enjoy the sights. For the photographer, having your pictures published is quite a thrill and thousands of people get to see the pictures that you take. An Avion photographer has even been invited to visit an

aircraft carrier while flight operations

rangued electronically on one of the special computers at the Avian, printed out, and pasted down on large pieces of paper called broadsheets. Finally, pictures are laid into the holes left on the pages by the section editors. The pictures are developed at the Avian photo lab. The

pictures are also waxed and laid out with the stories. It is these large sheets of paper that will later be shot with a camera and reproduced by a commercial printer. The Avion does not print all the actual papers, just one copy. That copy is sent out to be duplicated.

Though stories are written continuously, layout is done on Monday nights and Tuesday afternoons, By Tuesday night, the newspaper is essentially done, hopefully. It is printed overnight by a company in New Smyrna. One day ster, the paper is back on campus for all to read

Watching people read your work and seeing the com-The "Section Editors" are the ones who pull the inpleted product is tthe most enjoyable part of being a Avion

Space News

U.F.O. Lands in Attic of North Florida Resi-tence... When Ed Walters published some revealing pictures of an UFO, some other persons came forward saying how the UFO terrorized their suburb of Gulf Breeze, Pensacola. Twenty sightings were reported by Walters between Nov. 11, 1987 and May 21, 1988 along with others from different residents, It now seems that the alleged UFO may have only been a model made out of four plastic foam plates and drafting paper. The model was found in the attic of the previous Walters' residence by a man who moved in after Walters moved out. The model was handed over to a local newspaper who in turn reproduced pictures similar to the ones published three years ago. Which brings us back to the question, are there UFOs our there?

Shuttle Shuff-Around... Space Shuttle Columbia rests safely in the Vehicle Assembly Building (VAB) after its long trip from the pad back to the hangar. The roll back occurred last Wednesday morning at about four in the morning and finishing at about ien. The orbiter was safely locked into place by noon. Columbia was demated from the External Tank (ET) by the end of last week and rolled over to the Orbiter Processing Facility (OPF) Bay 2. It is there that the \$150 million dollar payload, the Astro Observatory, will be serviced until its next attempted launch in August. Mean while, a stacked solid rocket booster and part of another, for the October mission of Discovery, had to be rolled out of the VAB in order to make space for Columbia, Atlantis, which is in the VAB also rolled out to the pad on Monday.

Great Balls of Fire... A Delta Rocket blasted into the night sky last Tuesday at 1:52 a.m. with an Indian communication satellite. The satellite separated from the rocket one hour after lift off and went into a temporary orbit of an latitude of 130 nautical miles. The satellite will reach geosynchronous orbit in ten days. The Indian satellite had been delayed over a year. Just ten days before its first scheduled launch an accident in the launch pad was severe enough to send the satellite back to the manufacturer for repairs. A second accident last October, the California earthquake, damaged the satellite again delaying the launch further. The public watching the launch from Titusville had the opportunity to see the rocket as it passed in front of the Moon, a rare sight. Those watching from Daytona Beach had an even more rare sight of seeing a meteorite zoom across the sky as the rocket also thrusted into deep space, thus viewing two "great balls of fire" for the price of one.

Beam me up Scotty... Scientists at the NASA Lewis Research Center are developing the technology needed to be used in powering the Space Station Freedom. The solar concentrator will be used in conjuction with the Solar Dynamic Power System for Space Station Freedom. The Harris Corporation is working with NASA in the project. The Truss Hexagonal Panel concentrator was selected as the most capable of supporting the Space Station Freedom solar dynamic power system. Several tests were done on the solar concentrator to verify that the concentrator can be assembled on Earth, disassembled and then reassembled in space. The Truss Hexagonal Panel Concentrator is 18.1 meters in diameter, and is composed of 19 flat hexagonal panels. One test consists of using a laser beam to determine alignment accuracy of the mirror for the Solar Dynamic Power System. This test consists of reflecting a laser beam off the mirror, recording the data, disassembling the concentrator, reassembling the concentrator and then doing the test over again to see if the spot had made any movement. This test was done by simulating 0-gravity in order to minimize the effects of gravity on the concentrator. The tests performed on this structure demonstrated that the structure maintained the required characteristics of efficiency, design flexibility, maintainability, optical performance, packaging, reliability and development risk that is needed for the Space Station Freedom.

New shuttle to be finished by April 1991

by Jose L. Vazquez-Delgado Jr. Space Technology Editor

On August 1, 1987, Rockwell International's Space Systems Division (SSD) received the go ahead from NASA to construct another or-

...Endeavour will have

all the modifications and

upgre tes...

and two more

which will distinguish it

from its sister shuttles...

biter, Space Shuttle deavour. Construction of the new shuttle is currently underway at Rockwell facilities in Downey and Palmdale, Calif.

Besides managing the orbiter's construction program under the direction of NASA's Johnson Space Center (JSC) in Houston, Texas, SSD also fabricates the orbiter's forward and aft fuselages, forward reaction control system, crew compartment, and secondary structures at its Downey facilities. Final assembly, tests, and checkout will take place at SSD's orbiter assembly facility in Palmdale, Calif. More than 250 other major subcontractors and suppliers across the

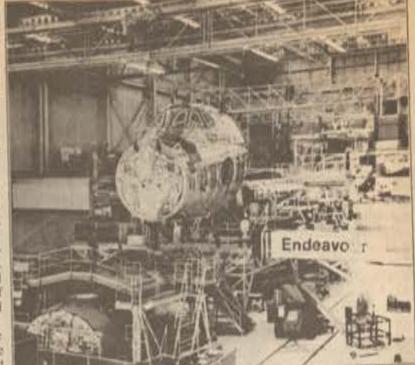
cent of the total work on the program, Endeavour's crew module, wings, mid fuselage, upper and lower forward fuselages, and aft fuselage have been mated. Over 68 percent of the thermal protection system insulation

has been installed. These puts the construction of Endeavour ahead of schedule and under budget.

The forward reaction control system module, payload bay

doors, body flap, and vertical stabilizer, will be mated by fall 1990. Power-on systems testing would proceed in July 1990. The delivery of Endeavour is scheduled for April

Endeavour will have all the modifications and upgrades which the other orbiters have gone through and two more which will distinguish it from its sister shuttles. First is the drag Heads up... chute to aid deceleration and reduce leads on the landing gear and breaks, and second is the capability for accommodating extended mission durations of up to 28 days.



The new improved crew compartment of the new Space Shuttle Endeavour can be seen hoisted down to be worked on. The midfuselage, towards the center of the photo, is obscured by the platforms.

vices, which account for about 50 per-Soviet spacecraft invade the Boston Museum Among the fascinating items in dis- the first man to walk in space, and

mote

than 50

Soviet

space

Space Technology Editor

nation are also performing work on

shuttle components and support ser-

SOVIETSPACE is a major exhibition on the Soviet Union's space program hosted by the Boston Museum of Science. It is the first time

The exhibition focuses in the history and achievements of the Soviet

by Jose L. Vazquez-Delgado Jr. space program, its current status and future direction. It also examines how Soviet and other scientists are trying to solve problems related to living and array working in space, "This historic ex- o. f. hibition marks the dawn of a new era that not one nor two, but a whole fleet of cooperation and scientific exof Sovietspacecraft land on American change between the United States and Towle, Museum of Science Interim a r.

the Soviet Union" said Bradford L.

tifacts Director. You

photo by Bourse Monter of Biomers

NEW T-SHIRTS . NEW MEMBERSHIP CARDS

WE GOTA NEW MANE" SALE

JUNE 22-23 . SAT. & SUN.

10% OFF EVERYTHING IN THE STORE.

CD's · TAPES · LP's · 12" SINGLES

Soviets reveal secrets...

The Soviet exposition, Soviet Space: An International Science Exhibition, will be open to the American public until September 23, 1990.

Valentin Lebedov, who set a world play, the exhibition features a spectocular

"This historic exhibition marks the dawn of a new era of ... scientific exchange...'

> Bradford I. Towle Boston Museum of Science Interim Director

first artificial satellite to orbit Earth; Luna 2, a lunar roving vehicle; and a five-meter model of the currently orbiting Mir space station, where cosmonauts live and work for months at a time-Space suits, tools and food will also be on display.

A team of eight Soviet technical specialists will maintain the exhibition and explain various components to visitors. To officially start the exhibition; community Aleksei Leonov, Bentim call (617) 523-6664.

see a scale model of Sputnik I, the fered a lecture in which the general public was welcomed as well as The space program is a source of

for a

2 11

d n y

flight

space.

visited

1 1 0

muscum

1 (1)

great pride in the Soviet Union and great care has been taken to transport, safe-guard; and present these exhibition to the American public.

SOVIET SPACE opened on June 1 and will be open until September 23, 1990. For hours and information if you are planning on being around

THE AUTO ACCESSORY **PROFESSIONALS**

Whether you want to add performance, style, or protect your investment in your car or truck ACTION can help. We have low prices and a staff of experts to help you select the right parts.



ENGINE KITS RACING EQUIPMENT TRUCK ACCESSORIES STREET ROD PARTS

WE INSTALL WHAT WE SELL



909 Volusia Ave. Daytona Beach 252-2632



We specialize in the finest Thai-Chinese cusine Specially cooked to your taste! Come in and sample some of the best exotic dishes from the Far East!

SALT!!

FREE ADMISSION

FREE BEER

JUNE 23rd "MÉMBERS ONLY" RENAMING PARTY AT

NO M.S.G.!!



10% DISCOUNT for all Embry-Riddle Students and Faculty with I.D.!

Owned and operated by an Embry-Riddle Studentl The Song Kran Restaurant

Open Tuesday through Sunday 11:00 AM till 10:30 PM 2309 Ridgewood Avenue, South Daytona Beach 760-0300

RAPID PHOTO, INC. 1 Hour Photo 10 % DISCOUNT WITH ERAU I.D. Drive though window Hours 8am-7pm Mon.-rri. Sat. 9am-7pm, Sun. 11am-5pm Located across from speedway (904) 258-5051 1808 Volusia Ave. **********************

.............................

BARBER 551 Beville Road (1 link, W. iii U.S. 1) 767-0635 Golfview Plaza • So. Daytona MON. THRU SAT. OPEN STYLE CUT W SHAMPOO REG: CUT SPECIALIZING IN GREAT HAIRCUTS

Eagle Flight Center Has The Best...



...The Best Planes, The Best Prices The Best Instructors —That's Eagle

Here are just a few reasons why you should be flying our Decathlon

- · Like new, low time
- Inverted Fuel System
- Inverted Oil System
- Smoke System
- Transponder equipped
- Voice activated intercom





For Details Call: 255-3456

Eagle Flight Center • 1624 Aviation Center Parkway

We're Number One in The Air For Some Bown To Earth Reasons.

Calvin and Hobbes



WITIZON KLATUJOCIAK IR KOK

TIGERS CAN'T CATCH CHICKEN POKY

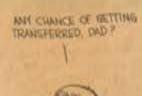
HOU'D LIKE TO

ME TO.





YOU'RE CONTAGIOUS! YOU



by Bill Waterson Far Side









swinging door was just plain tunacy!"



"And one more thing about tomorrow's company pionic: Do I have to mention what happened last year when some moron sabotaged the games with a case of acid-filled LD-50s?"



EATING DUNNER

I'M SURE YOUR

CALVIN

OF THAM

IS STARTING

SEE



WAS AWI'VL

WANT TO

GO WATCH

TELEVISION

TO LEAVE YOU

TABLE IN THE

MIDDLE OF A



דביטונ יין סום מון

SIT HERE MY

CHEW? TUL



PORTANT AS

WATCH YOU GUTS TIME TOGETHER

SPENDING SOME

AS A FAMILY

RIGHT SUMMER VACATION

SEMEPLACE YOUR TY SHOW ISN'T AS IM

IN A MINUTE HOURE GOING TO CHAPPINATE MATCH A DIFFERENCE BETWEEN THOSE MODITIE





"Excuse me , ... I know the game's almost over, but just for the record, I don't think my buzzer was working properly.





WHAT'S THE BIG DEAL ABOUT









Tour Cooms But are you sure we an afford it?

Tapeworms in a cow's atomach

YOU SHOULDN'T IN SHOW NOW YOUR LIFE AROUND THE I HOPE YOU'VE YAWYHA YE

Mister Boffo



LOOK, I DON'T THINK

ITS TOO MUCH TO ASK



I HAVE ALL TYPE GREAT GENES, SAYING THAT'S THE PROBLEM HERE SOMETHING FUNNY

by Joe Martin

Vincent Van Tantor Mother Goose and Grimm

by Mike Peters

REMIND ME NOT TO USE SPRAY STARCH







ME BOTH ARE













Autos for sale

ATSUN B210-Plenty of rust but runs mant. Call Phil 252-4044 (early morning. mings or weekends.)

HONDA PRILLIDII-Ano, PS, PB, M-PM, Sun Roof, Exec. Cond., \$5000 or es offer: 760-4516.

1014 HONDA INTERCEPTOR SOO. resilent condition, very clean, and never 16,500 miles. \$1200 o.h.o. Call Doug #274-5016

FOR SALIS 1985 Ford Tempo. KANDPILIPW/Air cond. 80,000 miles. QSQC.00 Frmt. Call 238-1008.

Cycles for sale

MINS 27 THOUNIUM RALINGH 10 need Racing bike w/new rim, tire and lock, 1200.00. Call 252-6265.

* Misc. for sale

BUNTER BEACH CRUISIR excellent shape. Bought new from Ormond Schwinn for \$250.00. Red, 6 speed, wide tires, alloy wheels, with stainless spokes. Hanfly ever adden. Comes with water bottle, manual and arginal receipt Only 5185.001 Also multimeter good for AMT endont \$5,00, 12 You power supply good for beach use \$10.00. Contact Robert Wartick 238-0386.

FOR SALIE 2 living room chairs, can be add expanally, \$10.00 each. Call C.B. at

FOR SALE: weight on whench, curl bar, descis bell bars. Approx. weight 180ths. Call CB at 238-1490 \$60,00.

DUNG Federally licensed firearms dealer, I have firearms for all your needs. I also carry ansals systems rifle cases, etc. Reloads walable FMJ only - 10% over wholesale and last. Dave 756-0203.

OUNS FOR SALE-AMT backup 360 out numbers steel, 5 shots, \$225.00. (New-Nover Find) AK-47 Hungarian (1 of 7000 in country) complete with bayonet and 3 mags, \$7500.00 Remington 870 police riot 12 1860, \$200.00. Dave 756-0203.

YAMAHA PSR-90 KILYBOARD Excellent 61 Full-sized keys, split trybourd, built in four track recorder, MIDI republy. \$400; call Brian at 255-8481.

Double bed like new \$55.00, Deak & chair \$25.00, Chen & deaws \$10.00, Sofa (black & white) \$50.00. Call Lisa 252-4044 or aflemoon/evening at 255-7497.

IBM AT Clone-51199 Bon 80286-Landmark 15 MHz. State-of-theart 266,144 color VGA monitor, 30 Mag. Puji Hard Drive, 1536K RAM, 101 keys, Advanced memory environment. Almost new with software. Leave message for JOR.

MI GARAND FOR SALE: Parkerized finish, springfield armory, 30-06, \$400? Call.

FOR SALE

General Electric washer and drym \$450.00 for the set, White, Under 2 years old. 13" Color TV w/channel present and times J.C. Permay medium sized microwave \$200.00. Call 761-4001, leave message

GRADUATING Must sell everything. King nize waterbed w/ headboard and mile - \$125, 5 drawer dresser - \$25, 2 desks and chairs \$15/ set, and several other things. Call Doug.

SURFBOARD-Good \$120.00. Call Lain at 238-7748.

→ Miscellaneous

GUTTAR LESSONS: Instruction given at Daytona residence. Start learning now! 238-

CLIDER RIDES and instruction. Bob Lee. Airport, Off 15A in Deland, Open Thursday thru Sunday, 11am on (904)736-6588 or (904)383-5014 even,

WANTED: Tubulur locks (single cam) type. Call 258-5974 if you have any you would be willing to sell.

RESUME SERVICE-chesp, but and professional. \$5.00 for original, you may keep disk for future updates. Call John (904)255-8627 or contact box 7089.

GERMAN CAR REPAIR-Professional service on VW-AUDI. Bug Ghia, Rubbit, Golf, GTL Jens, Scirocco, 4000. Factory trained, 10 yrs. exp. Suspension, strats, e.v. joints, brakes, Bosch injection. Routine maint, and engine overhaul, only 514/bour for ERAU students/faculty. No mark up on parts - Labor warranty. Contact Roben: Wartick 238-0386 or IIII AU box 2193.

D.J. NEHDED for part-time work. \$15.00 per hone start. Some experience dealed but not necessary. Call 255-9269.

WANTED-person to these driving and gas. Rotte is along I-10 and destination is California. Leaving end of Summer A. Contact Rick at Box 5992.

+ Roommates

ROOMMATE NEEDED: to there . 4 bedroom, 2 hathroom house at Pine Lakes. Rent is \$175 per month plus 1/4 until No. deposit required. For immediate occupancy. Commit Maholt 700 0468

HOUSE TO SHARE-Available June 15th. 1128 North Street, 5375 a month includes onlines. Call Louis for info. at 238-8884 or 238-3887 or leave message.

FOR RENT: quies clean room in older bistoric house. Very private Includes all unition. No lease, only \$100.00 Sec. Dep. Only non-smoker gentlemen, solies. 1 1/2 mi. from Univ. 258-5901

NUID A PLACE FOR SUMMER BY FORM Glen Apartment. Includes microwave, washer & dryer and furniture. Private room A buthroom, Ram: \$170.00 + 1/2 utilities. Call Juff 255-3133.

+ Personals

BABUS:

CLASSIFIED AD POLICY

Non-commercial classified advertising and per-

staff of Embry-Riddle with a 35 word limit

sonals are free to the student body, faculty and

All other non-commercial advertising is \$10 with a 35 word limit. Each additional word is 10 cents.

Avion advertising department.
Classified advertising is carried out by filling out a classified ad card in the Avion office.

of advertiser must be included for the ad to run. Ads will run for two issues and may be renewed by

No classified ads will be accepted over the phone.

For more information, stop by or call the Avion of-

TO: SUII from ILLINOISSS:

Rossa and Red,

RX-Ts are blue;

I fixed your brakes,

YOUR LOVE MUPTEN

P.S. Your turn to warch the kids.

never have to live without you.

Awesome test yesterday buh!

Where are you we need those pictures

'She swears that soon she'll be coming back

forever." I always knew it was only a matter

of time. Thanks for waiting for me. I hope I

you are my steaks, How much do I have to do?

ALL MY LOVE,

MAHI CLASS,

Can't wait for the final.

filling out another classified ad card

bush/ewn

fice at (904) 239-6049.

ROOMMATE NUIDED: to sture a 3

bedroom/2 1/2 bath Coudo. (near Forest

Lake) Rant is \$250.00 per month, imfufing

utilities. Near by pool, Garage, Washer/Dryer. Furnished except for

bedroom. Call 255-9366 (leave message if

bedroom/\$210.00/washer & dryer Contact

Wood Forest 257-5929, med apply. 173

Summer II only, \$190.00/month & 1/3

utilities, 2 miles from school, Contact Brian or Pete 255-8022.

ROOM FOR RENT-Private bathroom,

large bodroom, cable TV, microwave,

wadner/dryer, furnished, 10 min. from

campus, NO LEASE. Quiet residential area

in South Daytona, \$250.00 /mo, and 1/2.

otilities, \$150.00 deposit, Call Rob 761-

not home) Female preferred.

NEED ROOMMATE ASAP

militims, free water, Apr. #1727.

bedreion.

ROOMMATIE WANTED

Only one classified ad per card. Name and address

Commercial advertising is available through the

Sorry I couldn't be with you on your birthday but I just wanted you to know that I was thinking about you and that I love you.

TO JIM VARGA YHAHI Lab is over Lab partner and fINABLE bornswire

TX3 P81103-02: Good lock on the final YOUR CLASSMATE

TO RC211-02: Good tack on the final. Boy, she we need FROM YOUR FELLOW SUFFERERS

TO MARGARET: LOVE BOOBLESS- PSYCOPATH

MIKIL You owe me 2 DL

HUY GUYN: When is the next slimiber party??

WEHATHECONOMICSHIE

NILOUPER Hope you enjoyed the cookins. DANIETTE & TAME

Thanks for everything and good link on DANETTE

HARRY LOVE DANKTIU

MISHRIA. Yeu ан вознями колдония. 1 hrv усин dimplied Come up and put in all the classifieds you want..! Hope you find a coorunate... TOIL

JOHNNIE You suck!!!!! STAFF, THE NEW AD MANAGER SECURITY, AND THE REST OF THE STUDENT BODY

Dianies for 206 papers. We have to kick button performance!

UM, Let's try that one again: OK: Maybe one more time.

BURBLES, Car, vote to chaque jour jet t'aime davantage, Augourd'hui plus qu'hier et bien moins que

Happy Birthday

POOKIII

HA SMILEY, Tell your daughter you want to see the last messagn I wrote you! LINDBERGH

CHRLYMEN,

Here me know and believe me in two weeks from tomorrow: You guys are girlymen flyboys. Maybe I should grais you by your love handles and take you out to the trash. HANZ

JAAB. You are becoming a real slacker. Get with it!

FOR SALES

From the Home Boy Shopper network, chesp our stereos, CBs, Cethilar Phones, and if you set now, we could probably get the

THE HOME BOYS

MARTHAT. Happy birthday! You are totally gorgoous and I've get a critch on you! SIGNED,

A GUY YOU DON'T RVEN KNOW

BONTHEAD. Where is my dinner??

Hope you like the cust coust. Are you enjoying your summer to far??? I am. HOMER

To see you, to know you is simply nesenough. Let's spend some time together! A MAN YOU KNOW IXISTS (6398)

BUNNY OF LOVE ETERNAL, I am very much looking forward to our I month annivernity today, It's been a good 3/4 of a year so far, and I think we can continue to make it the best year ever for us

DOLL OF ETERNAL RABYNESS

DANIFFER Thanks for the good times thiring the worst of times. See you in the fall and good back on finals.

FAA Writtens \$20.00 MON-FRI. 9:00 AM TO-5:PM. Florida National Bank New Airconditioned Facility JANCO EXCUTIVE CENTER Aviation Curtus PKW 1620 SOUTH CLYDE MORRIS BLVD SUITE 210 Volunia Ave. DAYTONA BEACH, FL. 32032 760-1705 Close To Airport AVTAR, INC.

American Scenic **Korporation Travel**



Dont Fly Low Unless It's Our Prices. We Get You The Lowest And Best Airline, Amtrak, Cruise, or Tour Prices. As a Former Air Force Officer, We Know Your Needs And Will Fill Them.

1500 Beville Road (Shoppes at Beville Rd.) Daytona Beach, FL 32014

Call Us About Our Motor Coach Tours

call Today (904)255-8687

Differs Statty Bearing, his

"I'M A COLLEGE STUDENT. AND WORKING FOR KELLY HAS HELPED ME UNDERSTAND THE BUSINESS WORLD."



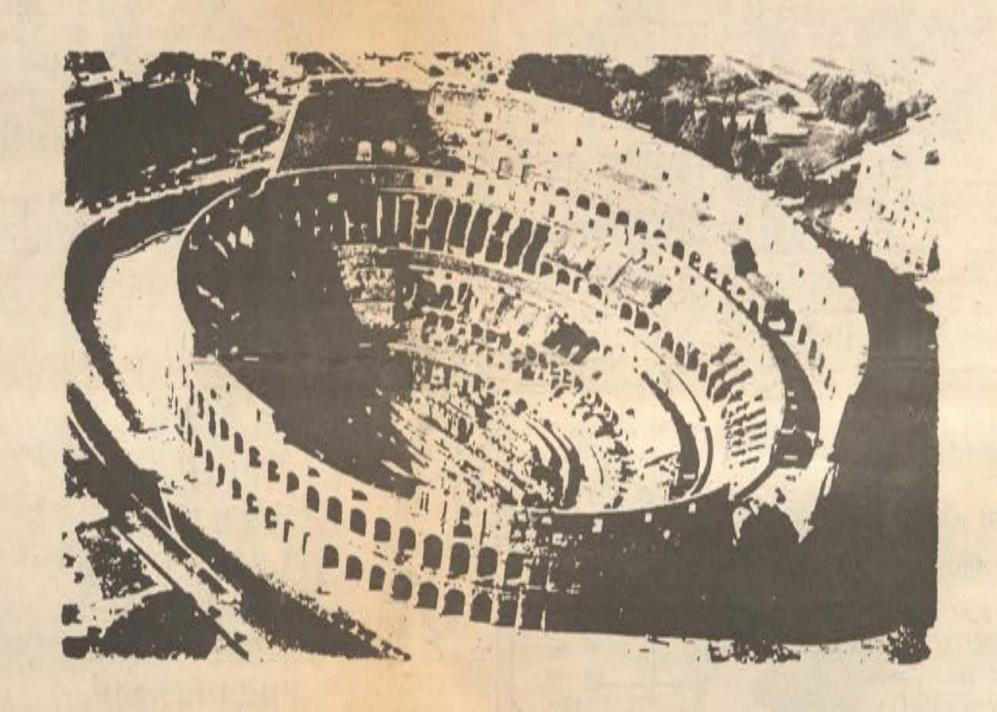
"I've broadened my education and expanded my knowledge. Improved my skills.

It's the perfect job experience to put on a resume or an application."

The Kelly Girl*People - The First and The Best*

first. McPrMcV. feet an agency - cover a los-

....CONTINUOUS ENTERTAINMENT FOR OVER 2000 YEARS!!!



COL/SEUM

176 N. BEACH STREET DAYTONA BEACH, FLORIDA (904) 257-9982