

2-24-1993

Avion 1993-02-24 (B)

Embry-Riddle Aeronautical University

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

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

AeronauticaB1
 Classifieds.....B8
 Clubs.....B6
 Comics.....B7
 Data Technology.....B3
 Diversions.....B4
 Space Technology.....B2

AERONAUTICA

McDonnell Douglas delivers 10,000th military jet

McDonnell Douglas Press Release

Under the theme, "10,000 Jets For Freedom," McDonnell Douglas delivered the 10,000th military jet produced at its St. Louis plant.

Speaking at the delivery ceremony, John F. McDonnell, chairman and chief executive officer of McDonnell Douglas, said he was proud of the company's past and excited about its future. "We are number one in the defense business and we fully intend to hold that position," McDonnell said.

The 10,000th aircraft, an F/A-18C Hornet, was presented in a ceremony at the plant to U.S. Navy Squadron VFA-137 of Naval Air Station Lemoore, Calif. Accepting the aircraft were Capt. Rob Freedman, F/A-18 deputy program manager for the U.S. Navy, and Cmdr. Michael Grootbousen, commanding officer of VFA-137.

Also presented to U.S. military

customers at the ceremony were McDonnell Douglas' other current production fighters and trainer aircraft, the U.S. Navy T-45A Goshawk, U.S. Air Force F-15E Eagle and U.S. Marine Corps AV-8B Harrier II. No other aerospace company in the world has four such aircraft in continuing production.

The theme, "10,000 Jets For Freedom," denotes McDonnell Douglas' contribution to the ongoing cause of securing peace through strength around the world.

The company has been producing military jets for the United States and its allies since 1945, when the F4U Phantom flew for the first time.

The original Phantom initiated the age of U.S. Navy aircraft carrier jet aviation in 1946 when it became the first jet to take off and land on a U.S. carrier.

McDonnell Douglas' St. Louis-built jets have been flown in combat since 1951, when the F2H Banshee

flew in the Korean War.

Today's fighters, the F/A-18, F-15 and AV-8B, played pivotal roles in Operation Desert Storm in 1991.

More recently, the F/A-18, F-15 and F-4 Phantom II carried out allied military strikes on Iraq in Operation Southern Watch.

The F/A-18 Hornet made naval aviation history by validating the strike fighter concept in Operation Desert Storm.

Two F/A-18s flying an attack mission encountered two MIG-21 interceptors.

The Hornet pilots retained their bombs, switched to fighter mode, shot down the MIGs, switched back to attack mode, hit their assigned ground targets and safely returned to the aircraft carrier.

The U.S. Navy has identified the Hornet as the centerpiece of naval aviation well into the 21st century. The F/A-18 flew for the first time on November 18, 1978. As of today, 1,152 Hornets have been produced in St. Louis.

The F-15 Eagle was built to dominate the skies and its performance during Operation Desert Storm is awesome proof of its combat capabilities.

F-15Cs shot down 36 of the 41 aircraft Iraq lost in aerial combat, including 33 of 35 Iraqi fighters.

The F-15E dual-role fighter flew at night and in bad weather to destroy numerous Scud missile launchers.

Other important military targets were also destroyed while maintaining a 95.9 percent average mission-capable rate, the highest of any fighter in the war. The Eagle will remain the U.S. Air Force's premier



The F/A-18 Hornet has proven itself in combat, playing pivotal roles in Operation Desert Storm and Operation Southern Watch in Iraq.

fighter into the next century. The first flight of the F-15 occurred July 27, 1972. As of today, 1,225 Eagles have been produced in St. Louis.

The vertical/short takeoff and landing (V/STOL) capability of the AV-8B Harrier II has made it a leader in technical innovation. The Harrier family of aircraft are the only V/STOL jets in production today.

International collaborative partnerships have preserved this unique V/STOL technology and have led to the development of improved Harriers, like the new radar-equipped Harrier II Plus.

The AV-8B made its first flight Nov. 9, 1978. To date, 268 Harrier

II's have been produced in St. Louis.

The T-45A Goshawk is at the heart of the T-45 Training System (T45TS), the first totally integrated training system developed for use by U.S. armed forces. The T-45A is more than 2,500 combat sorties, disengaging the enemy's radar systems and other ground-based air defenses.

Student pilots graduating from the T45TS program are well prepared for direct assignment to operational aircraft such as the F/A-18.

First flight of a St. Louis-built T-45 took place Dec. 16, 1991. To date, 10 T-45s have been made in St. Louis.

The F-4 Phantom II is one of the most popular fighters ever built and

the most dominant fighter of its era. It was the nation's front-line interceptor, fighter-bomber, escort and reconnaissance aircraft. During Operation Desert Storm, U.S. Air Force Wild Weasel squadrons flew more than 2,500 combat sorties, disengaging the enemy's radar systems and other ground-based air defenses.

McDonnell Douglas built 5,057 F-4s at its St. Louis plant.

Continuing Air Force tests have shown that the F-15 is durable enough to provide more than 33 years of useful economic service. It has also exceeded by more than 25 percent of the most stringent government requirements for airframe durability.



The vertical takeoff capabilities of the AV-8 Harrier has made it a leader in innovative technology.

Learjet deliveries increase from December to February

Learjet Press Release

Learjet in January had its best month for customer deliveries since December 1983.

The company delivered fourteen aircraft which included five of the newly certificated Learjet 60's, eight 31A's and one 35A.

In addition, Brian Barents, Learjet president and chief executive officer, said the company had taken a total of 32 new orders in December and January which included 30's, 60's and the new Learjet 45 announced last September.

"We're not ready to call this a complete recovery, but its an indication we are headed in the right direction," Barents added.

He complimented all the Learjet employees who worked throughout the month to insure all the deliveries were completed on schedule.

Barents said, "the introduction of the Learjet 60 greatly expands our capability to provide a wider range of aircraft offering our customers greater flexibility in cabin size, comfort and performance. The line now includes the Learjet 31A, 35A, 36A, and the 60.

The new Learjet 45 under

development will provide further expansion."

The first of the new Learjet 60's was delivered to Herman Miller, Inc. of Zeeland, Michigan, a large manufacturer of business equipment, office furniture and fixtures serving both domestic and international markets.

Herman Miller's annual sales total approximately \$850 million.

"Herman Miller's Learjet is used primarily for transporting customers to our sales pavilion and manufacturing facilities in Grandville and Zeeland, Michigan," said J. Kermit Campbell, president and chief executive officer of Herman Miller.

"We feel that bringing our customers into our facilities gives us a better opportunity to build partnerships with them and to share our products as well as our philosophies and style of management."

The company has operated business aircraft since 1974 starting with a Learjet 25, then upgrading to a Learjet 35, later a Learjet 55 and now the new Learjet 60. Clark Hutcherson is the chief pilot.

"Our Learjet provides an ease and flexibility in bringing a client's team together to discuss their needs," said Dawn Johnson, vice president for



Five Learjet 60s have been delivered in the month of January, making it the most successful month the company has had since the early 1980s.

North American Sales at Herman Miller.

"Last year, we had client visits nearly every working day and some days the jet would bring in two different client groups. Being located in a non-major market, our Learjet simplifies the complexity of our client's travel and increases the time that they can spend at our

facilities. We see this as a critical element in the selling process."

The paint design of the Herman Miller aircraft is unique. Utilizing the company's logo extensively on an overall white aircraft makes it easily recognizable wherever it operates.

The design was created by the company's own graphic arts

people. Learjet Inc. is a subsidiary of Bombardier Inc., a Canadian corporation with 32,000 employees internationally and annual sales in excess of \$3 billion Canadian dollars.

They are involved in the fields of aerospace, transportation equipment and motorized consumer products.

World Cup aerobatic competition to appear at EAA Oshkosh '93

EAA Press Release

Many of the world's finest aerobatic pilots will have the opportunity to compete at the 1993 Experimental Aircraft Association (EAA) Fly-In Convention to be held July 29 - August 4, as Wittman Regional Airport will be the host site for one leg of the international Breitling Masters World Cup competition.

The unique event, sponsored by the Breitling Swiss Chronograph Company, will be held as part of the Convention's air shows on August 2 and 3. The Oshkosh event is part of the inaugural series taking place at seven sites throughout Europe and the United States.

The competitions will culminate at Miami, Fla., in November with the overall champion receiving the Breitling World Cup.

"We are extremely pleased to be part of the Breitling World Cup

schedule," Convention Chairman Tom Poberezny said. "There have been masters-style aerobatic competitions in the past, but this is the first series of competitions ever established. It's fitting that Oshkosh, with its long tradition of drawing some of the world's best aerobatic performers, would host one of these competitions."

At Oshkosh, two programs will be flown by competitors: 4-minute freestyle program accompanied by music and smoke, and a normal freestyle program. Approximately 10 pilots will participate each day, flying some of the world's finest aerobatic aircraft.

At other World Cup competitions, participants will fly three programs, including a short unknown sequence featuring maneuvers not flown or practiced by the pilot.

At all events, competitors will be scored by an international panel of seven judges, with scores displayed



A 4-minute aerobatic routine, accompanied by music and smoke, will be a new event added to each day of the Oshkosh Convention.

instantly for the spectators benefit.

The series has been sanctioned by the Federation Aeronautique Internationale (FAI), which oversees all official aeronautical records and competitions throughout the world. The Breitling World Cup series has received the same status as the World Aerobatic Championships and will complement that competi-

tion. Top participants from the World and European Championships will be among those invited to the Breitling World Cup series.

The pilots who will be invited to participate have not yet been determined, but many of those will likely be among the top competitors at the European Aerobatic Championships to be held in Italy in

mid-June. Top American aerobatic pilots, many of whom have previously appeared at EAA Oshkosh, will also likely be invited to take part in the World Cup series.

Breitling, as primary sponsor of the series, has provided \$450,000 in prize money for the competitions.

AOPA names new vice president

AOPA Press Release

FREDERICK, Md. — The AOPA Air Safety Foundation (ASF) has named James W. Cunningham as vice-president of Foundation Development.

ASF executive director Bruce Landsberg said, "We're delighted to have someone of Jim's experience in such a key position for the Air Safety Foundation. He is combining his love of flying with already impressive fund-raising credentials."

The Air Safety Foundation, the independent educational foundation of the Aircraft Owners and Pilots Association, supports its general aviation safety education and research efforts through donations from corporations, charitable foundations and individual pilots.

Cunningham, 44, has had extensive fund-raising experience with several Pennsylvania companies and organizations.

He managed to obtain a \$2.2 million endowment fund at the Society of Automotive Engineers (SAE) Foundation. Most recently, Cunningham worked for the North Hills Passavant Hospital Foundation in Pittsburgh.

Cunningham, who assumed his new duties February 1, is a private pilot with 125 flight hours and was co-founder of the Moraine Flying Club in the Pittsburgh area.

He replaces David Knight, who left the Foundation to join the Center for Marine Conservation. Cunningham has moved to the Frederick, Maryland area with his wife, Jeanette.

A U.S. Navy aviator, Cunningham is a 1974 Cum Laude graduate of Pennsylvania's Slippery Rock University.

He is also a Certified Fund-Raising Executive.

Until joining ASF, his "Big Band" style trumpet was heard with "The Buddy Lee Band" of Pittsburgh. AOPA is optimistic about the potential Cunningham will bring to this job.

Space Station Freedom goes back to the drawing board

By Brian Gamage
Space Technology Editor

President Bill Clinton, last week, terminated the present design of Space Station Freedom and urged NASA to reevaluate the station's mission.

The president's 1994 budget request for NASA will call for more money than last year, but with provisions for the space station program and the development of new technologies.

NASA administrator Daniel S. Goldin accepted the plan, stating, "It clearly reflects the President's firm commitment to a meaningful and balanced space program and the revitalization of American industry through cutting-edge science and technology development."

Clinton has directed NASA to redesign the station as part of a program that is more efficient and effective at producing greater returns on the taxpayers' investment. The '94 package provides \$2.3 billion for the smooth transition of the program to a stream-

lined, cost-effective design. Clinton stressed that he wanted to assure stability in the program during the transition and minimizing any potential job loss.

According to George Diller, NASA spokesperson at Kennedy

Freedom Crisis

Problem - Current station design produced too many cost overruns and would have been too expensive to operate.

Solution - NASA will probably get \$1.1 billion this year to stop current design and \$700 million for redesign.

Effects - According to the Clinton administration, the new station will cost less while producing the same valuable science.

Space Center, the current situation started after the first downsizing occurred in the late 1980s. The downsized station tried to maintain the same level of complexities as the larger station, but by doing this, Diller stated, the costs started to overrun.

The recent developments in the Clinton budget proposal call for Goldin to ask the various NASA centers and subcontractors involved in the space station to reevaluate the current situation and to change the way they do things in order to maximize utility and minimize costs.

Mark Hess, NASA Headquarters spokesman specializing in the Freedom project, could not report how the \$2.3 billion will be used in the restructuring and changing. Media reports, however, point to the probability of around \$1.1 billion being used to stop the current design and approximately \$700 million being used to begin a new design.

"No definite numbers will be available until the final budget proposal goes through Congress on March 23," stated Hess.

Spacewalk added to April shuttle flight

By Joshua Mussaf
Cable Editor

The National Aeronautics and Space Administration (NASA) has added a spacewalk to the STS-57

shuttle mission aboard the Space Shuttle Endeavour, set for launch in April.

The additional spacewalk is part of a series of spacewalk tests NASA will conduct during the next three years to prepare for the construction

and maintenance of Space Station Freedom.

The main objective of the STS-57 mission is to retrieve the European Retrievable Carrier (EURECA), which was deployed by the Space Shuttle Atlantis last August. Additionally, the crew will conduct research in the Spacelab module which more than doubles the amount of middeck research locker space aboard the orbiter.

In addition to accomplishing the general objectives of the spacewalk test series, the STS-57 extravehicular activity (EVA) will allow some of the spacewalking procedures to use the Canadarm for the planned Hubble Space Telescope (HST) repair mission later this year. Those procedures involve work by astronauts on a platform at the end of the Canadarm. The arm will be aboard Endeavour for grappling the EURECA satellite.

"The EVA will benefit us in two ways: first, we'll gather generic data on human performance capabilities and limitations in space and secondly, we'll perform some tasks similar to those required for the HST mission later this year," said Ron Farris, Chief of the Extravehicular



Astronaut Gregory Harbaugh moves along the starboard side of Endeavour's cargo bay during a four-hour EVA on STS-54. This year's EVAs will study the limitations of astronaut mobility in space.

see Spacewalk, page B8

NASA releases mission wish list

By Mike Dienhart
Staff Reporter

Recently, NASA announced the selection of eleven new mission concepts in the Discovery Program.

These candidates were chosen from seventy-three possibilities discussed at the Discovery Mission Workshop last November 16-20. The chosen projects were those determined to have the highest chance to meet strict budget guidelines while offering the most scientific value.

By using proven, off-the-shelf technology, Discovery missions proceed from development to flight within three years.

"These missions represent a bold new way of doing business at

NASA," said NASA Administrator Dan Goldin. He continued to say that the way planetary science is carried out will be revolutionized by the Discovery Program.

Director of NASA's Solar System Exploration Division, Dr. Wesley T. Huntress, stated, "the Discovery Program is probably the most exciting new initiative in planetary exploration." Due to lower costs and quicker turnaround times these missions will allow greater participation from academic and aerospace communities.

The concepts to be studied in depth are:

The Mercury Polar Flyby will complete the photo reconnaissance of the planet while studying the polar caps.

The Hermes Global Orbiter will

use remote sensing techniques to study the surface, atmosphere and magnetosphere of Mercury.

The Venus Multiprobe Mission will distribute 14 small entry probes over a hemisphere of Venus to gather data about winds, temperature, and pressure.

The Venus Composition Probe will determine the planet's atmospheric structure and composition during a daytime parachute descent.

The Cometary Coma Chemical Composition mission will conduct 100 days of research after rendezvous with the nucleus of a comet at perihelion.

The Mars Upper Atmosphere Dynamics, Energetics and Evolution Mission will study the upper atmosphere and ionosphere of Mars.

see Missions, page B8

The edges of science... Wormholes could shorten space travel time

By Arie Moller
Staff Reporter

In last week's installment of *The edges of science...*, wormholes were described. In brief, a wormhole is a "tunnel" through space-time.

There are two types of wormholes, the microscopic and the macroscopic. In this second installment of a three-part series on wormholes, the wormhole as a short cut through space is explored as well as the importance of microscopic wormholes to theoretical physics.

We will start off with the microscopic. Microscopic wormholes could help theoretical physicists finally come up with a theory of quantum gravity that holds water. The importance of a quantum gravity theory is immense. Gravity has been the thorn in the side of the G.U.T. (Grand Unification Theory) researchers.

In short, G.U.T.s are attempts at unifying all of the known forces of nature from nuclear forces to gravity. This could possibly be the topic of a future installment of *The edges of science...* Quantum gravity would play a major role in the understanding of our universe.

For purposes of practical space travel, though, microscopic wormholes are useless. Fortunately, all is not lost. Macroscopic wormholes could provide instantaneous travel to the far corners of the universe.

Macroscopic wormholes, if stabilized, could be used for space travel.

What would be involved in stabilizing a wormhole? It turns out to be quite a lot. First problem is that theoretically, macroscopic wormholes would fluctuate between the open and closed states at such a remarkable speed that even a craft moving close to the speed of light could not cross through the entrance of the wormhole before it closed off.

see Wormholes, page B8

Imagine the possibilities...

SPACE TECHNOLOGY

GET MORE FLYING TIME FOR YOUR FLYING DOLLAR WITH

A full service FBO Ormond Beach Municipal Airport
(904) 677-5724

AIRCRAFT	RENTAL LIST	DISCOUNT RATE
CESSNA 152	\$ 40	\$ 36.00
CESSNA 172	\$ 55	\$ 49.50
PIPER ARROW	\$ 65	\$ 58.50
SEMINOLE	\$ 130	\$ 117.00
SEAPLANE	\$ 96 (dual only)	

All rates per hour

AVOID THE COSTLY DELAYS CALL FOR CHECK-OUT TODAY

ATC 610 \$ 16 /hr	DUAL add \$ 16 /hr	Air Charter and Sight-seeing trips available
----------------------	-----------------------	---

NO COUPON NECESSARY!

3 LARGE ONE-ITEM PIZZAS
only \$13.99 plus tax

12" MEDIUM ONE ITEM PIZZA & 2-12 OZ. SODA
only \$5.49 plus tax

Pisanello's PIZZA
A Pizza Never Had It So Good

760-7666

FREE DELIVERY to EMBRY-RIDDLE
open: 11 AM TO 11 PM
Located at 661 Beville Rd.
Contemporary Plaza
Ask about our other specials

* LUNCH SPECIALS *
Your choice of four
1) 7-inch sub & 12 oz. soda
2) 6-inch 2 item pizza & soda
3) 8 Buffalo wings, 12 oz. soda
4) Chef or Greek Salad
only \$2.99 plus tax

pick up only plus tax

SPRUCE CREEK PROPERTIES
Licensed Real Estate Broker

1896 Spruce Creek Boulevard East Daytona Beach, FL 32124
Office # 756-6100 Fax # 788-2445 Home # 788-8026

Come be our neighbors at Spruce Creek
America's Premiere Fly-in Country Club Community

\$76,500 buys a 2 bedroom, 2 bath condo!

- Nature Lots - \$25,000 +
- Golf Course Lots - \$35,000 +
- Taxiway Lots - \$98,000 +

**New Homes and Resale

- 18-hole Championship Golf Course
- 8 Lighted Tennis Courts
- Full Service Club House
- Private Airport with 4,000 ft. Lighted Paved Runway
- 24 Hour Security

Please call for Professional Real Estate Assistance.

Lynne Hunt Doten
Broker-Saleman

Attention all arm-chair stunt pilots

By Ronald Hess
Data Technology Editor

Have you ever watched a movie with exciting action sequences and think to yourself, "Boy, I wish I could do that?" Well now you can, sort of.

Disney Software has released a program that provides personal computer owners with the ability to fly, film and edit 20 minute stunt films. This combination of flight simulator, stunt direction and production is wrapped in the single package Stunt Island.

Stunt Island is a "virtual" world. The manual states that the program reproduces a small island located off the coast of Southern California. The island was a private place where hazardous stunts could be performed and filmed without the necessity of pre-filming logistics.

The program begins outside the production center. From here you can access the airfield, set design, stunt coordinator, post production or the ferry leaving the island. Selection is made by a cursor driven by joystick, mouse or keyboard.

Selecting the airfield allows you to choose from over 30 different aircraft to fly around the island to, "examine potential stunt sights." The available aircraft range from military airplanes to general and commercial airplanes.

The military aircraft vary from World War I to the present (F-117A) and future (B-2). Stunt Island provides foreign aircraft from different eras for dogfighting stunts. Commercial and general aviation includes the 747-400, C-172 and the Learjet 60. If you get bored with these airplanes then try flying a hang glider or a Space Shuttle. If you are still not impressed, then perhaps you would like to fly a duck or pterodactyl.

Touring the island, you will notice that Stunt Island provides many diverse locations for filming stunts. Physical locations include canyons, forests, jungles, lakes, rivers, reservoirs and mountains. A few man-made objects have also

been strategically placed around the island. These structures include the USS Angeles (aircraft carrier), Alcatraz, St. Andrew's Castle, Jersey farms, power plants, oil rigs, air ports, cities, the Pan-Am building, the United Nations Building, Stonehenge and many others.

If you cannot find exactly what you want, then you can construct your own scenes from a list of props which include flora, fauna, structures, military equipment, vehicles and production equipment.

From back at the airport, you can travel to the set design. From here you have birds eye view of the island. The set designer allows you to place cameras and props for your stunts.

This is perhaps the most complicated portion of the program. I found it tedious to place props and set up camera shots for the stunts. It simply takes practice and many attempts to fine-tune the perfect stunt.

A few pre-designed sets are also provided. Once the location has been selected and the set designed, the next step is flying and filming the stunt.

You now appear on the set that you designed. The options include the next take, returning to the set designer or printing the film. Selecting the take, places you in the cockpit at the previously designated location. You simply fly the stunt. The cameras have 20 minutes of film to capture the stunts. If you like what you did, then continue by printing the film.

Post production is an interesting portion of the program. The screen is a synchronized editing deck. From here, portions of film from eight different possible camera sights can be clipped and pasted into the final film.

Sound effects, music, color, speed, fading and credits can also be added to the final film. The use and availability of music and sound effects depends upon the sound capabilities of the computer. Once the film has been edited, then next stop is the theater, where you and



courtesy of Disney Software

If you've ever wanted to coordinate your own stunts, but just could not financially afford the endeavor, then this program is for you. Stunt Island is a combination of flight simulator, set designer, stunt producer and film editor.

your friends can view the final product.

The program also comes with a "Stunt Pilot of the Year" competition. This is a series of pre-designed stunts to fly. Points are awarded based upon performance in flying the stunts.

Once all of the stunts have been flown, points are tallied and a winner is selected. It is a unique twist to the program. It provides a nice diversion to the difficulty of creating your own stunts.

I ran the program on a 386sx-16 and a 486dx-50. The faster computer provided smoother flight and faster reaction time in every aspect, as was expected, but the 386 did hold its own. The Software takes full advantage of any expanded memory beyond 2 megabytes of RAM. The program is compatible with Stackler, but the program has numerous sound and graphics files that are incompatible.

A sound card is a must for this program. The Sound Blaster is the most preferred card for playing the music, sound effects and speech. If you own a Sound Blaster you can import your own music and sound effects into films.

The program accepts most all input devices. I used a mouse, which made selection and editing simple. Flying with a mouse takes some time to get used to. A preference screen has options for coordinated ailerons and rudders and auto-centering. The auto-centering is designed for mouse and keyboard pilots. This allows for more accurate control.

I highly recommend this program. It is not exactly a game, but is an interesting piece of software. The software designers have expanded on a unique concept. The software can be found at any local computer software supplier. The price is approximately \$40.

H-P posts lower profits in first fiscal quarter

PALO ALTO, Calif. (AP) — Hewlett-Packard Co., a leading maker of scientific measuring devices and a growing power in computers, said its earnings fell 13 percent in its first fiscal quarter even as revenue rose 18 percent.

For the three months ending Jan. 31, Hewlett-Packard earned \$261 million, or \$1.03 per share, down from \$302 million, or \$1.19 per share, a year earlier.

Revenue rose to \$4.6 billion from \$3.9 billion in 1992.

Analysts said the first-quarter report was still better than expected. They noted strong orders for Hewlett-Packard products particularly from overseas.

"Our revenue growth was strong, and earnings were good, even though they were lower than those of our outstanding first quarter of 1992," said Lewis E. Platt, president and chief executive.

Orders for the quarter were a record \$5.2 billion, compared to \$4.2 billion in the same period last year, the company said. Orders in the United States grew by 18 percent and international orders shot up 28 percent.

"Our challenge is to turn strong order growth into higher profitability," Platt said.

Hewlett-Packard, traditionally a maker of scientific, medical and engineering testing and measuring instruments, has moved in recent years to stake out a position in the booming computer and computer-peripherals industry.

It is now "the fastest growing major computer company," said Bob Herwick, an analyst with Hambrecht & Quist in San Francisco.

"The big engines of growth (for H-P) are the printer business, which

see H-P, page B8

Intel delays intro of new microprocessor

SAN FRANCISCO (AP) — Intel Corp. will delay the introduction of its long-awaited Pentium microprocessor for about two months, according to a published report.

The semiconductor giant had been expected to unveil all remaining details about the powerful new chip in March, and computer makers were expected to announce new products based on it at the same time.

Instead, Intel won't announce the price of the Pentium until May 20, the San Francisco Chronicle reported in Saturday's editions. The newspaper cited a letter the Santa Clara, Calif. company faxed to customers this week.

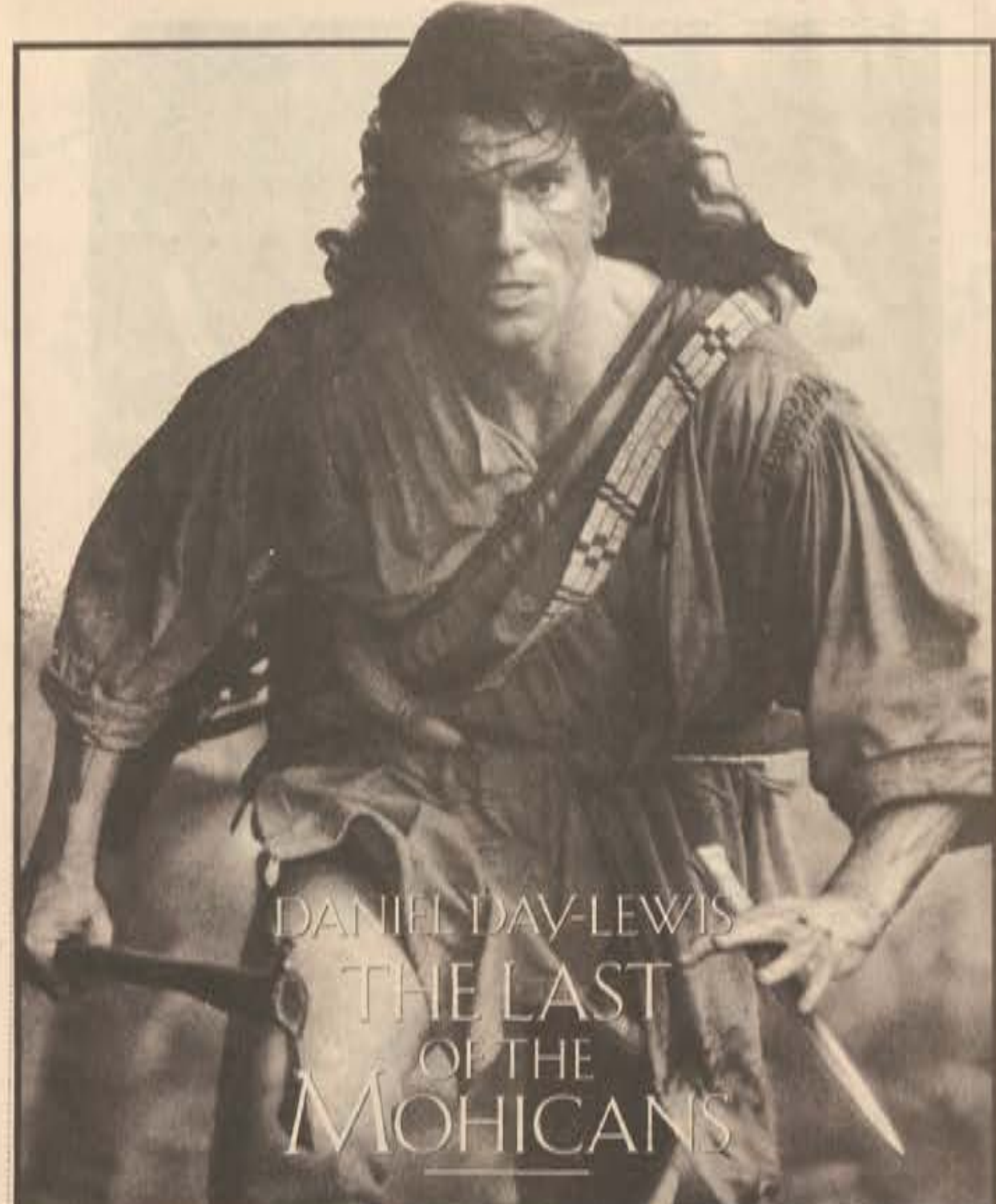
The company on March 22 will disclose technical details about the chip and announce limited shipments to computer makers, the Chronicle said. The new Pentium microprocessor, or personal computer "brain," will pack 3 million transistors on a single slice of silicon wafer.

Such an intentional delay is unusual in the computer industry, where most companies rush to get products on the market as fast as they can before competitors can outflank them.

But Intel currently has no real competition for its current flagship product, the 486 chip, which should be more profitable than Pentium in the early months of production, said Dan Klesken, an analyst with Robertson Stephens & Co.

Several large computer makers, who want to keep profiting from high demand for 486-based computers, reportedly urged Intel to change its schedule, the Chronicle said.

"Having the introduction in May will allow the systems manufacturers to roll out their products in an orderly fashion, so you don't have demand that can't be met," an Intel spokeswoman told the newspaper.



DANIEL DAY-LEWIS
THE LAST
OF THE
MOHICANS

STARRING: DANIEL DAY-LEWIS MADELINE STOWE • JODHI MAY
DIRECTOR: Michael Mann SCREENPLAY: Michael Mann and Christopher Crowe
122 min. • 1992 • Rated R • Twentieth Century Fox Film Corporation

NOW SHOWING
8:30 p.m. Thursday in the J.P.R.S.C.

Schedule of D.J.'S That will be playing in the U.C. this week. WERU

	Wednesday	Thursday	Friday
11:00	Chris Rodecki Rock	Matt Wood Rock	Adam Cerny Vampire Music
11:30	Tom Simms Country / Rock	Dave Rohn Joe Murray Alternative	Carrie Cz'ski Cris Parker 80's
12:00	Arron Gee Classical	Todd Gumbrecht 60's	Mike Hoppin Southern Fried Noise
12:30	Dave Conz Disco/Hardcore	Joe Perrino Heavy Metal	Ken & Dan Variety Show
1:00	Steve Graff Blues/Classical	Trevor Forrest Reggae	Todd Hunt Alex Britton Pink Floyd
1:30	Jason McGarrough End of lunch mystery meat	Dave Parsons Old Rock	Rich Ford Greatful Dead
2:00			

Local car show featured many unique and classic cars this weekend

By Jaylin Billig

Divisions Editor

Anyone who has ever owned a classic car knows the fever you can get from it. By owning a classic car, you are instantly put into an elite group of drivers.

Talk to anyone who drives one and you'll find out just how completely the fever takes over. There is a sort of friendly rivalry between classic car enthusiasts, but beneath it lies an intense loyalty to the whole genre of old cars. As one of this group, I am constantly seeking out shows and swap meets in the hopes

of finding and talking to others who love the car hobby as much as I do.

There is really nothing to compare with going to one of these shows and seeing some of the most beautiful cars ever made.

This weekend at Volusia Point Shopping Center, I got a chance to view many different and interesting show cars. A great diversity of cars was represented, from mint Chevys and awesome Fords to wonderful Dodges and, yes, even a radical Volkswagen.

In all, about forty-five cars and trucks were entered in the show, and even more showed up in their hot

rods just to see the show.

Some of the more interesting vehicles showcased included a 1991 Chevy S10 which had been turned into a very detailed hearse.

This truck, owned by Tom Maccio, has won many car shows lately, including 1st place mini truck at the Sun-Bank Car Show and the Cruisin Concepts Car Show.

Also showcased were two Chevy Chevelles that had gone through ground-up restorations. Everything on these cars had been taken apart and redone. The result was two truly stunning cars. There were also several beautifully done classic Ford Mustangs at the show, including a classic Shelby Cobra and a Mach 1 that looked like they just came off the showroom floor.

A pearl-red 1991 Mustang was also there, with a tricked-out paint job and several modifications that made it a head-turner.

Many of the restored classics entered in the show had complete documentation of the restoration. More than a few people had taken photos of the car during various stages of the restoration showing how the work was done.

It was amazing to see these cars go from junkheaps to jewels. I was more than a little jealous, because my own classic Mustang bears little resemblance to these cars.

Perhaps the most unique car in the show was a VW Bug owned by

Jason Thomas. He took a stock Bug and cut one third of the body out of the middle, making it thinner by about 2 feet. The motor and transmission are the same, but the car is now a one-seater. The Bug has won two best-of-show trophies in his first two shows. Jason goes to DBCC, so expect to see him and his one-of-a-kind car around Daytona.

Most of the people who entered their cars in the show are members of the East Coast Cruisers, a car club that sponsors many local shows and meets.

One only has to have a quality car to be eligible for this club. They meet every 1st & 3rd Friday of each month at the Hardee's in Edgewater and every 2nd & 4th Friday at the Hardee's in Port Orange.

Anyone is welcome to come to the meet and check out the cars or to show off their own. These people love to talk cars and enjoy seeing new faces.

Pat Teehan, the president of East Coast Cruisers, handed out door prizes, trophies for the six best cars in the show and a best-of-show



This radical Volkswagen owned by Jason Thomas was just one of the many unique cars entered in the show.



The second-place trophy went to this beautiful red 1970 SS Chevelle owned by Patty and Randall Fort.

award.

The winners for the six best cars were as follows: Paul Sudak's Chevrolet Coupe, Jim and MaryLou Scriba's Ford Street Rod, Patty and Randall Fort's 1970 Chevelle, Alan Holland's Ford 2-door Sedan, Randy Corson's Chevy Chevelle and Chuck and Regina Johnson's

'23 Ford T-Bucket.

The best-of-show trophy went to Roger Bonnaville's '34 Chevy Coupe. These were all great cars and the whole show was a success.

In all, I was glad I got a chance to go to the show. Just checking out what others are doing to their cars got me thinking about what I'm going to do with mine. I don't know if I'll ever be able to restore the 'Stang enough to enter it in a show, but it sure would be nice to drive around in a car even half as beautiful as the ones I saw this weekend. It's like living a little piece of hot rod history.

(Owning a classic car) is like living a little piece of hot rod history.

A bill to censor erotic music is back in the Washington state courts

OLYMPIA, Wash. (AP) — A bill seeking to rectify constitutional problems with the state's erotic music restriction law ran into a strong opposition from both the music industry and the American Civil Liberties Union.

The law enacted last year would allow a county prosecutor to ask a judge to declare that a particular recording appeals to minors' prurient

interests and offends community standards. If the judge agrees, the offending recording must be labeled "adults only," and the sales prohibited to minors.

Any music dealer who refuses to label and restrict the recording's sale could be fined up to \$500 and sentenced to six months in jail under the new bill.

However, King County Superior

Court Judge Mary Brucker last October declared the law unconstitutional, saying that the wording is vague, causes record stores to have to censor themselves and might be chilling to the artistic instincts of many musicians.

Brucker said the measure was vague because, if a judge in one county declared that a piece of music appealed to the prurient interests of minors in that county, the music could not be sold to minors anywhere in the state. But the law offers no mechanism to alert others to the ban, she said.

Brucker's ruling is now on appeal and is scheduled to be argued before

Stu Halsan, representing the Recording Industry Association of America, urged the committee to delay action on the bill

the Supreme Court late this year.

The remedy contained in the bill, named HB1422, would require that county prosecutors print, in the Washington State Register, the names of recordings that had been declared not fit for sale to minors.

The Washington State Register is published twice a month and mostly contains the text of new or amended regulations proposed by various

administrative agencies.

"We don't receive the register," complained Robert Carpenter, who identified himself as a musician, a producer and a member of the Washington Music Industry Coalition. Carpenter and many others testified Friday before the House Judiciary Committee on the proposed bill.

Stu Halsan, representing the

Recording Industry Association of America, urged the committee to delay action on the bill until the Supreme Court had heard arguments and handed down a ruling on the issue.

"You should wait until the appellate action is complete before tinkering with the law," he said.

ACLU lobbyist Gerard Sheehan called the bill "terribly premature and an insult to the judiciary, the third coequal branch of government."

He, like Halsan and several others, urged that the committee decline to take action on the bill until the Supreme Court has ruled on the bill.

GET INVOLVED

Join the Avion Staff

The Avion has openings for writers and photographers.

Stop by our office 2nd floor of the student center for more details.

You can't change anything

by sitting on your butt!



Ever Get Somebody Totally Wasted?

Q: What is the difference between a job and a career?

A: A good resume.

FIRST IMPRESSIONS®
EXPERT RESUME CREATION AND
CUSTOM PUBLISHING SERVICE.
(904) 258-8022

- Complete desktop publishing service •
- Resumé creation starting @ \$9.00 •
- Student discounts •
- Mass mailings •
- Cover letters •

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



FRIENDS DON'T LET FRIENDS DRIVE DRUNK

The Crying Game has plenty of plot twists and surprises for all



Mike McGrath
Movie Critic

Cracker Jacks and find water soluble tattoos. It's not even the surprise you get when you find out the burger of the month looks worse in reality.

This surprise is far more life-threatening. This girl might have three chins, two noses, a limp when she walks, make funny noises with her armpits and a fetish for car mechanics named Raul.

The point is that blind dates are full of surprises like that. But, you ask, what does this have to do with this week's movie, *The Crying Game*? It has plenty to do with it. *The Crying Game* has one of the biggest surprises you'll find in any movie you'll ever see.

The Crying Game stars Stephen Rea, Jaye Davidson, Forrest Whitaker and Miranda Richardson.

The Crying Game is sort of a war movie, with a little drama thrown in for good measure. Rea and Richardson are two IRA members who kidnap a British soldier played by Whitaker.

Rea and Whitaker develop a sort of friendship during the ordeal. One thing leads to another and Rea agrees to visit Whitaker's girlfriend, Jaye Davidson.

The movie was advertised as a kind of thriller, but it was more of a character study. There are no long action scenes or even a complex plot.

Instead, there are dialogue oriented scenes which show you the thoughts and personalities of the characters.

With the help of writer and director, Neil Jordan, the actors show each character in a direct manner. There are no flashy actors in this one.

I am not going to ruin the surprise ending by revealing it. Jordan, however, provides several subtle hints that give it away.

These hints are so subtle that most will not catch them. Don't even try to look for them, I guarantee you won't find them. The harder you look, the less you see.

The Crying Game has been nominated for the Best Picture Oscar. Not many people believe that it should be in this category.

I am not one of those people. This is one of the most original movies I've seen in a long time.

All the actors provide outstanding performances that just add to the overall success of the film.

Every aspect of the film was well thought out and presented effectively. It may not win the Oscar, but it does deserve a nomination.

Overall, *The Crying Game* is a good movie. Brilliant performances, excellent writing and subtle foreshadowing are just some of the positives.

If you are in the mood for a good movie with a shocking surprise, *The Crying Game* is for you. If you want a movie with no surprises, I think there is another Ninja Turtle movie on the way.

If you happen to see a girl limping around town with a somewhat unique complexion and carrying car magazines under her arm while playing the theme song to *Deliverance* under the other, tell her my roommate wants his favorite pair of boxer shorts back. He says it's next to her bed.

- ★★★★ - Can't miss!
- ★★★ - Worth watching.
- ★★ - Wait until dollar theatre.
- ★ - Read a book instead.

The Crying Game

Starring: Stephen Rea
Jaye Davidson
Forrest Whitaker
Miranda Richardson

Rated: R

Rating: ★★★★★

Length: 1 hour, 50 minutes

Playing: UA Cinemas 4-9

I am sitting, as usual, in my room, waiting for my roommate to give me the idea for this week's review. Everything was quiet until he mentioned the magic words: blind date.

He had apparently secured some kind of get-together over the telephone. He was going out with this girl and all he knew about her was that she had a voice.

I am a pessimist and all I thought was that he was in for a surprise.

No, it's not the kind of surprise you get when you open your

Brilliant performances, excellent writing and ... foreshadowing are just some of the positives.

Two new and talented comic artists bring 'Dave' and 'Bound & Gagged' to the Avion

Titlow Media Service



David Miller



Dana Summers

Two new cartoonists have brought their comic strips to the *Avion* newspaper. "Dave" and "Bound & Gagged" are the creations of David Miller and Dana Summers (respectively).

David Miller is the creator of "Dave," a fresh comic strip about the twenty-something generation that all generations can relate to. David's hip humor, minimalist text and understated art set the strip apart from other leading comic strips.

Miller grew up in Haworth, a small town in northern New Jersey. "When I was a kid, I was uncomfortable-like I didn't fit in my own skin. But drawing changed all that. When I drew, I felt good. By high school, I had a daily habit," said Miller.

Currently, Miller lives in Santa Monica, where he works as an assist-

ant storyboard director on Saturday morning cartoons.

Dana Summers is a successful political cartoonist and comic strip creator of "Bound & Gagged."

Summers has been an editorial cartoonist with *The Orlando Sentinel* since 1982. Before that he worked as a staff artist for the *Fayetteville Times* and as editorial cartoonist for the *Dayton Journal Herald*.

His incisive cartoons have appeared regularly in the *New York Times*, *The Washington Post*, *Time* and *Newsweek*.

A graduate of the Art Institute in Boston, Summers began his cartooning career as a free-lancer for weekly newspapers in Massachusetts.

He has won awards from the Overseas Press Club and the Sigma Delta Chi Society of Professional Journalists.

D-Influence releases their new album titled Good 4 We, which is a funky upbeat soul kind of sound

By David Gass
Staff Writer



Photo by Eastwood Records America

Eastwood Records America has released D-Influence's new album *Good 4 We*. This tape consists mostly of funky upbeat soul music.

The first track on the album is called "Good Lover." This song has a funky beat that you can shake your rump to, and I believe is the best song on the album.

"I'm the One" doesn't have many lyrics besides the lead singer repeating "I'm the One." The song does have some nice background music, though.

"Funny (how things change)" has a slow rhythm but is easy listening to the ears. The song does pick up a little in the middle to make the song worth listening to.

"Good 4 We" is a mellow but upbeat song that has a good beat to it. The background music is quite nice as well.

The first song of side B is "Far You I Sing this Song." The lead singer does a great job singing this song with a mellow mood and it is

D-Influence promises to be a great new funk band. very relaxing to listen to.

"No Illusions" has a good beat to it and I would consider it almost as good as "Good Lover." "Sweetest Things" has some good bass to it and awesome background music. It's a very good funky song to play on your stereo system.

The last song on the tape is called

"Sign." This song is decent and is a little slower than some of the other songs but has some nice harmony between the vocalists.

Overall, the tape is good. It's worth listening to, even if you're just looking for some funky music to pop in the sound system and crank up.

AFTER THE BASKETBALL GAME COME TO THE

Friday Feb. 26th 9:00pm. till 1:00am.

RAVE RAVE

production's

RAVE PARTY

ΣΨΔ

By Bill McDermott

Greetings to all brothers and pledges of Sigma Phi Delta. I have experienced just how cruel the newsmedia can be.

Anyway, on to the business of the week. If last week's article had been printed, you all would have read a thrilling account of our last softball game.

SAA

By Krissy Kopecky

Salutations! Another week, another article. I need to make a correction concerning the departure time for the NAS Mayport trip on the 27th (Saturday).

ΣΠ

By Tore Gudroed Markusson

Greetings and Salutations Brethren! Yes, it has been too long since we last met. In preparing to write this article, Brother Linaus dropped by to chat about his past visit to Toronto.

ΘΦΑ

By Kelly Watkins

Thetaville News Bulletin Congratulations, girls! Another successful bonfire is under our belt. I must say it went fairly well, not too many bitches and diversions from our original plans.

Anyway, we hope everyone enjoyed our Theta Phi traditional bonfire. We would like to thank everyone for their cooperation, but a special thanks to Delta Chi for use of your house, and to Tom (Finstone) for keeping everything as hush hush as possible.

AHP

By Jason Piper

Well another busy week for the brothers. The best part of all is that the track is over for another year. No more slinging beer for this year.

We won our softball game on Sunday, we still need to practice though. Coach P, isn't going to let up

I hope all the brothers enjoyed their 3-day weekend. It was really nice to have a break from the stress and strain of academic life here at Riddle. Well, our next official vacation is not until April 8th, so hang in there!

I'd like to take this time to wish pledges Joel Thompson and Steve Cruz good luck in their studies. The spring semester is a tough one, so keep your heads up, it's not as bad as you may think.

Well, that's about all for this week. Keep your spirits up guys, we can all survive yet another week here in this semester from hell.

AAS

By Amie Tavanese

The Kenneth L. Tallman Squadron of the Arnold Air Society had the fortunate experience of learning from a former ERAU graduate on financial matters on February 9.

Michelle Martin, a consultant with Shearson Lehman Bros, Inc., graduated from Embry-Riddle in the Spring of 1990. Ms. Martin spoke to the society about initial investment techniques.

According to Ms. Martin, investing can be broken down into three main categories: 1. Safe Money; 2. Long Term Investment; and 3. Over the Counter (OTC). The "Safe Money" category includes savings accounts, checking accounts, CD's, money markets, municipal bonds and anything that is low risk.

AAAE

By Stephen R. Harvey

Tonight, at 7:00 p.m. in the Library Conference Room, AAAE will be hosting Mr. Jon Haag, Manager of Planning and Development at the Jacksonville Port Authority. He will be speaking to us on his roles and jobs as a

Counter" category includes high risk investing.

Ms. Martin suggests not to play around in this category until you have enough money that you can afford a loss.

As college students, it is difficult to even make those credit card payments, let alone do investing, however, Ms. Martin expressed that it is possible to invest while in school.

Ms. Martin began investing back in high school under the direction of her father, even though that wasn't really what she wanted to do with her money. Ms. Martin now says that she is thankful to her father for making her save and invest her money early!

The squadron was very interested in learning from Ms. Martin as there are a lot of seniors that are about to become Air Force Officers in April and need to learn as much as they can about managing their money!

Clubs Policy

- All articles must be type-written, double spaced or on disk format (unformatted in Word Star or Microsoft Word). Deadline for submission of all club material is Wednesday at 5 p.m., one week prior to publication.

Aerospace Society

By Joshua Mussaf

Thanks to all the members that went with us to Space Camp last Sunday. From what I have been told, it was an out of this world experience! Tonight's meeting will be our monthly "Movie night."

Week will run from March 8 through March 11.

Space Week Committee chairman Matt Devito is requesting that any club member or any student or staff member that has any models, posters, patches, photographs or any other memorabilia that is space related, please let any of the officers know so your display can be included in our presentation.

Upcoming events include our annual astronomy night with Dr. Fleck on March 10, a visit by Astronaut Eileen Collins on March 17, co-sponsored by the Aerospace Society, a trip to the Daytona Beach Planetarium, a McDonnell Douglas speaker and a trip to Blue Springs.



Cadets Tod Holburn, Robert Washburn, Jason Miller, Marrie Rapp and Phill Dawson perform a flag presentation ceremony to perfection at the Dayton 500.

Army ROTC

By Cadet Jaye Howell

The Eagle Battalion was again granted the privilege of performing in the opening ceremony for the Daytona 500. The largest race in the stock car series.

The detail consisted of two parts. Cadets Tod Holburn, Robert Washburn, Jason Miller, Marrie Rapp and Phill Dawson. These cadets were under the command of Cadet Powell Truster. This group performed the presentation of the

colors in front of several thousand people. The second group of cadets hoisted a second flag to the top of a pole located on a tower behind pit row.

The color guard also performed several other ceremony throughout race week. Cadets performed for the Bush Clash, Twin 125s and the Goody's 300. Cadets performing in these performances were Juan Reyes, John Tubb, Eric Elkins, Michele McKena, Robert Tiedemann, Chad Kincaid and Jared Pollock.

Eagles Flight Team

By Michael A. Campbell

If you've been having trouble sleeping lately, you can blame it on the Eagles Flight Team. You see, those terrified whimperings off in the distance you may have been hearing at night are coming from the flight teams of all the other schools across the country who know they're going to have to face Embry-Riddle at the 1993 Nationals in Killeen, Texas.

The University of North Dakota, Ohio State, The Air Force Academy; they all might as well just change their names right now, because come Nationals, they're going to be thought of in slightly different terms. Has-Been University, Also-Ran College, Dog Meat State. You get the idea.

You really can't blame those other teams for being worried about going up against the Embry-Riddle Eagles

ΔΧ

By Chris Hildebrandt

Another week has gone by as the race fans disappear and the bikers begin to appear for Bike Week. The beaches are becoming more populated with all the visitors from up north. The paleness of the beach goers nearly blinds you as you cruise around looking at the sights.

Thanks to everyone who worked the track over Valentines Weekend.

Riddle Riders

By Rob Sternisa

Speed Weeks have come and gone and Bike Week '93 will be here in a few days. It's amazing how easily a pack of motorcycles can move through town with such ease while the rest of Daytona is in gridlock!

Congratulations are in order for those who braved the elements to race up in Savannah a few weeks ago. Club members Bret Schaller, Mike Lubanski, Doug Byers and James Bicken raced the weekend away with everyone placing within the top ten.

We are still looking for students who would like to earn some extra spending cash (\$4-50/hr) during Bike Week. There are a few slots open in three hour shifts to work at Sundance Leather shop in the heart of it all on Main Street.

ERFSEDS

By Keith Sterner

This past weekend was a great success and many members participated. It started out with dinner and a lecture by astronaut Bob Crippen. This event was held at Florida Tech (FTT). The very next morning about 30 people attended a Space Camp Activity tour which proved to be both educational and a great deal of fun for everyone.

This coming up weekend is the MOSH Science Fiction/Science Fact Day in Jacksonville. Astronaut Kaye Downing has asked us to sponsor a booth on behalf of ERFSEDS, SEDS-FL and SEDS-National. Those of us working the booth will be handing out information so other chapters can be founded by the space enthusiasts we meet.

If you are a paid member and would like to become more actively involved, there are many committees being formed that could use your assistance. Currently we have the

though. Remember when one of those obscure little European or South American basketball teams would have to play Jordan, Barkley and the rest of the Dream Team in the Olympics? That's what Nationals is going to be like.

After winning the National championship last year in Monroe, LA, and dominating the Region 9 competition this year at DeLand, the Eagles are ready to defend our title, and are looking forward to being crowned National Champions for the second straight year.

So to all the students, faculty, staff, administration and alumni of Embry-Riddle; thanks for all your support. Keep it coming, and get ready to cheer for The Eagles again! And to all those other flight teams out there getting ready for Nationals...Wear comfortable shoes. You're going to have a long walk home.

WIN TEXAS!

The Daytona 500 was awesome. I'm sure everyone had a great time there. I did, especially waiting in the traffic jams after the race.

Valentine Weekend's parties went great. Thanks to everyone who showed up. Jay and Dan, you are doing an excellent job at the bar. Keep up the good work.

To all of the pledges that don't think it is that important to make yourself present at all of the activities and at lunch, you better get a clue and start coming around.

as much fun as last year. The work entails selling T-shirts and souvenir pins and meeting people from all over the world! This is definitely an unforgettable experience!

Due to Bike Week festivities, there is no ride planned for this Sunday. We have left this more or less as an open day for everyone to do as they please. Don't forget that next week's ride will be the annual bike parade from Bellaire Plaza to the Daytona International Speedway. We will be meeting early to get a good place in line. Check next week's Avion for details. Also, keep an eye on our display case across from the SGA Office for a list of daily activities around town and the county.

A note of correction from last week's Avion - our Friday night get together is in the form of weekly PIZZA inhaling trips, not PLAZA inhaling trips. We really aren't all that destructive, and besides, most of us are not able to digest concrete. This all takes place every Friday night at Good Times Pizza in Port Orange at 8:00. Bring a friend or two. Everyone is welcome!

Our annual Spring Rodeo is scheduled for March 21. We are in the process of getting the details hammered out and are looking for volunteers to help with this event. For information on this, on working during Bike Week, or anything else, please contact Steve at 257-9711.

following committees:

- 1) Space Week - coordinating joint sponsorship with the Aerospace Society. 2) Space Archives - establishing a network of resources and contacts within the space industry via internet. 3) Publications - publishing articles for various publications (Avion, Phoenix, Nova Newsletter, etc.), creating and posting flyers, banners, emblems to announce upcoming events. 4) Fundraiser - responsible for helping create/present possible ideas, possibly helping out coordinating said activities.

More committees will be formed, so these aren't your only chances to be involved. Feel free to sign-up for multiple committees, if you have the spare time. By delegating these areas of work to the members, more people have a chance to be involved, and acquire the much desired leadership skills that every employer wants!

If you have attended our meetings, or have heard about us, and you are still interested in joining, please contact us. We hold our meetings on Tuesday evenings at 6:30 pm in the Endeavor Conference Room (upstairs in the UC). If you can't make it to the meetings we can be contacted through our box in Student Activities or via e-mail (our address is <erfseds>). To the stars by effort!

Calvin and Hobbes

by Bill Waterson

IMPORTANT MESSAGE THIS WAY

IMPORTANT MESSAGE NEXT SIGN →

IMPORTANT MESSAGE! LOOK OUT!

IT'S LIKE SHOOTING FISH IN A BARREL.

LOOK AT THIS! THIS IS THE BIGGEST SNOWBALL IN THE WORLD!

HA HA! I CAN'T WAIT TO PLASTER SOMEBODY WITH IT!

HOW ARE YOU GOING TO PICK IT UP?

REALITY CONTINUES TO RUIN MY LIFE.

MAYBE YOU COULD PUT IT SOMEPLACE WHERE SOMEONE WILL WALK INTO IT.

I'M NOT GOING TO DO THIS HOMEWORK! C'MON, LET'S GO OUTSIDE!

NBODY GIVES THE EVIL EYE LIKE YOUR DAD.

DID YOU SEE HOW HIS VEINS THROBBED?

WHAT'S IN THE BIG BAG?

NOTHING YOU NEED TO KNOW ABOUT!

C'MON, TELL ME!

WELL, LET'S JUST SAY IT'S SOMETHING THAT MIGHT COME IN HANDY TODAY.

WHY? WHAT HAPPENS TODAY?

WE'VE GOT A HISTORY TEST, REMEMBER?

SO WHAT DID YOU BRING? A BOMB?

WOULDN'T YOU AND THE PRINCIPAL BOTH LIKE TO KNOW?

WHY WONT YOU TELL ME WHAT'S IN THAT BAG?

IT'S A SEVERED HEAD.

IT IS NOT! DON'T BE DISGUSTING!

FINE, DON'T BELIEVE ME.

YOU SAID IT WOULD COME IN HANDY DURING TODAY'S TEST.

THE HEAD IS AN ORACLE. I'LL PUT IT ON MY DESK AND IT WILL TELL ME ANSWERS.

FORGET I ASKED! I DON'T EVEN CARE!

COOOSIE IS A BOGGER BRAINN!

IT SPEAKS THE TRUTH!

HERE ARE YOUR TESTS YOU MAY BEGIN.

CAN I GO GET SOMETHING FROM MY LOCKER?

WHAT DO YOU NEED?

I CAN'T TELL YOU THEN SIT AND DO YOUR TEST.

YOU'RE SPOILING A GREAT SURPRISE FOR THE CLASS!

IT WOULD BE A GREAT SURPRISE FOR ME IF YOU'D JUST GET TO WORK.

Dave

by David Miller

MOVIES FOR HIM

MOVIES FOR HER

MOVIES YOU BOTH CAN ENJOY WITHOUT COMPROMISE

ED SAY I WORK LIKE A DOG.

-BUT BUMPY, OVER THERE, REMINDS ME OF WHEN I WAS ON UNEMPLOYMENT!

"AND FOR THE THIRD YEAR IN A ROW, THE GREATEST POTENTIAL AWARD GOES TO... DAVE"

CORP AWARDS DINNER

YOU THINK HE'D GET A CLUE?

Far Side

by Gary Larson

"Oh, man. There you go again with another one of those his-and-tell books."

She was known as Madame D'Gizarde, and, in the early '40s, she used deceit, drugs and her beguiling charms to become the bane of chicken farmers everywhere.

ERIFF

"And so you just threw everything together? ... Mathews, a posse is something you have to organize."

BORDER

"Excuse me, sir, but could your entire family please step out of the car? ... Your faces are not in order."

"Can't use you, son. ... says here your feet aren't flat."

"Look, if it was electric, could I do this?"

Bound and Gagged

by Dana Summers

SPT! SPTTER! COOPICHA! COOPICHA! SPTTER! CHUGA! CHUGA!

TUNE-UPS

SPT! SPTTER! CHUGA!

PURRRRRR

TUNE-UPS

CLINIC FOR THE PARANOID ENTRANCE AROUND THE CORNER, DOWN THE ALLEY, BEHIND THE DUMPSTER, AND FOR GOEH SAKE, BE CAREFUL!!

?

→ Autos for sale

Buying a vehicle? Buy from a Riddle alumni. New and used cars and trucks/program cars. Contact Mark F. Morano at Gary Yocum's Ford executive car sales, 947-4455. Bring this ad!!!

Buy your next new or used Ford car or truck from an ERAU alumni. Call Gary Yocum's Ford at 253-6771 and ask for Steve Chirosook.

For sale: 1992 Nissan Sentra SE-R. Excellent condition, A/C, stereo tape, cruise. \$10,700. Call Dan @ 441-6211.

For Sale: 1983 Mustang GT, modified, clean, must sell! \$2400 obo. Call 760-7379.

FOR SALE: Awesome scooter, 1986 Yamaha 180 cc. Seats two. Quick and reliable. 55+ mpg. Black. \$600. Includes shop manual. Great condition. Call Dino Davis @ 253-1107, \$500.

'81 Toyota Starlet. Runs well and gets good gas mileage. \$600. Ask for Nick or leave message: 322-0082.

→ Roommates

For Sale or Rent, 2 Bed/2 Bath Townhouse. Two levels, full appliances, Pool, Cable TV, Water and Trash Removal all included. Located only 2.5 miles from ERAU. Call today for more details 788-4343.

Need a place to live? 2 bedroom, 2 bath apt. Island Club Partially furnished. \$292.50 + 1/2 utilities. Washer/dryer, tennis courts, jacuzzi. Must be quiet, clean, non-smoker, trustworthy. Available May 1st, 1 yr. lease. Sun, Fall, Spring. Call Chris @ 767-0739.

Flight instructor needs a place to live. Will be immediate as of March 12. 22 years old, clean, and quiet if necessary. Can put up with about anyone, so please call Phil at 257-9658.

Roommate needed - Beachside or mainland, 2 locations. \$190/month + 1/4 utilities. Great locations and clean wrap-around sundeck. Cable, washer/dryer, 2 car garage. Close to ERAU. Call 238-2535.

→ Misc. for sale

DOWNTOWN USED FURNITURE! 9000 sq. ft. showroom, Tues.-Sat. 10-5:30 406 N. Beach St. Daytona 239-9884. Buy and Sell.

Apartment-sized refrigerator. Excellent Condition. 6 months old. 3.5 cu. ft. New \$179 (best offer). Call 673-1118.

New Flightcom headsets for sale. Contact Sean @ 226-7534 or box 6798.

Schwinn "LaTour" 12 speed touring bike with front and rear quick release, 41/30 chrome moly frame, dual-comp brakes and toe clips. This bike looks and feels brand new, and comes with a lifetime guarantee. \$225. Call Charles @ 274-2722.

Professional laminator and new pilot supplies: Citation I for officer video, 737 systems diagram manual, 747 pilot's eyview video, 1993 Olexon written test books, Handheld ICOM transceiver. Flight course advanced ground school tutoring by ATP. (904) 226-7563.

Word processor, Smith-Corona PWP-125 EX80 character display, 64K RAM, 3.5" disk drive, Spell-Right, 75,000 word dictionary. Like New, still in box \$150. Call 258-0388.

Building a computer? Desk-top case with power supply and keyboard, slightly used, just \$50 takes off. Call 258-0388.

Won a trip to the Bahamas. Can't go must sell. \$600 OBO Bryan @ 322-2701

For sale. Matching sofa and love seat. Matching coffee tables and end tables, matching nightstands and a six drawer dresser. Best offer will be accepted for any of the above items. Call Stu @ 238-0639.

Selling my Compaq 3 portable computer. Has some software \$400.00 OBO. Greg 258-7521

20 gallon aquarium, fully equipped. Have table for stand. \$75 obo, Call Dave @ 238-7279.

For Sale: Electric Guitar and amp \$300, 19" Color television \$200. Call 226-7522.

Entertainment Center, \$75 obo; Eureka Vacuum Cleaner, \$25 obo; Microwave oven, \$45 obo; Stereo system w/ two speakers, \$33 obo; Philips 19 inch color TV, \$100 obo; Wooden dining room table w/ four chairs, \$135 obo. Call Mary @ 788-0751.

Two wooden stools, \$25 obo; two piece sectional living room set with pullout queen size bed, very good condition, \$250; Twin size bed, \$25; king size waterbed with fancy wooden headboard, \$250 obo. Call Mary @ 788-0751.

→ Miscellaneous

1 hour car window tinting using 520. Call 226-7563.

Tailwheel flight instruction in Piper Super Cub at \$50 an hour including instructor training for private and commercial licenses also available. Call Jim at 760-1630.

Waitress position at Italian restaurant. Small apartment space available for residence. Call 226-7563.

Laundry service. Have your clothes Picked up, washed, dried, pressed, folded and delivered to your room by cleaning woman. 226-7563. \$7.00 per basket.

CLASSIFIED AD POLICY

- Non-commercial classified advertising and personals are free to the student body, faculty and staff of Embry-Riddle with 35 word limit.
- All other non-commercial advertising is \$10 with a 35 word limit. Each additional word is 10 cents.
- Commercial advertising is available through the Avion advertising department, at 226-8051.
- Classified advertising is carried out by filling out a classified ad card in the Avion office.
- Only one classified ad per card. Name and address of advertiser must be included for the ad to run.
- Only paid ads will run for two issues and may be renewed by filling out another classified ad card.
- No classified ads will be accepted over the phone.
- For more information, stop by or call the Avion office at (904) 226-6049.

Multi-engine instruction, MEII or initial rating. \$70 hr. block time. All other certificates and ratings available. Don @ 677-9730.

Multi-engine airplane shared expense cross-country flights: 1) Daytona - Paradise Island. Over water, island and customs experience. 3/12/93. 2) Daytona - Tampa. Altitude chamber field trip. 3) Daytona - Atlanta 4/18/93. Delta airlines headquarters tour. Reservations Call (904)226-7563.

Flight training focused on Multi-engine rating. Only by ATP, MEII. Instruction tailored to airline standards with emphasis on cockpit resource management. Interview techniques included. 226-7563.

Get your ATP, MEII or Multi rating. Best quality Seminole and instruction around. Call Steve @ 760-9889.

Fly to learn, learn to fly. Private instrument, commercial, ICC BFR. Flexible, sincere, professional, local. Call Marty. 756-3520.

Quality flight instruction at a great price! Private, instrument, commercial, BFR's, and ICC's. Call Phil @ 257-9658.

NEED MONEY FOR COLLEGE. Send SASE for details to: College Financial Planning Assoc. 4311 NW 53 Ct. Coconut Creek, FL 33073. Ann. Amette Green.

EARN EXTRA INCOME '93! Earn \$200-\$500 weekly mailing 1993 UWTI travel brochure. For more information send a self addressed stamped envelope to: Travel Inc. PO BOX 2530, Miami, FL 33161.

→ Personals

THERESA, Good God... Two years. It's only getting better. Thanks for being you. Jeff

RUPRECHT, That's between me and the plane. Crash

KEEPER OF THE CHEESE, The shorter bread uses superior jumping ability to tip the smelt to a teammate. Crash

To all international students: Thank you to all of you who have taken the time to fill out my survey on logos. Those who have not... Please do. You can get a form at the intl students services office. Jerry Verghese

To all who have responded to the survey on logos - Thank you. If you still have it with you... Please respond as early as possible. Jerry Verghese

HEY MILITERS, When are we going to start hanging out more?

ROB, I just wanted to thank you for introducing me to your mother. I have finally found the woman of my dreams. Thanks Buddy! Love, Dietz

D.B. In response to 2/17/93. Don't jump to conclusions. I might have time. Write me if you're serious. #7541, J.M.

To those who survived Continental flight 358 last weekend. I never thought we would make it back to Daytona. We have to thank John for a job well done. From the kid who missed flight 1197.

HEY MIKE! It's your best friend! No, not your hand, your BK buddy. I just wanted the whole school to know we are best friends! P.S. Drive safe car!

KNEE-COAL, the candles were real, the roses were real, the spaghetti sauce wasn't but I was! K? T.O.A.O.

We came, we saw, we performed... "muff said! Spring '93 S.O.

LES! I just wanted to tell you that you are the man. Duane's Cafe Buddy

KERRY, Two words. Moo moo your roommates.

Sir mixed up - a lot. Does your baby go back?

Melissa and Kirsten Congratulations! the Spirit of Theta Phi Alpha.

DOUG, I'm glad we gave it a chance. I'm having so much fun. I hope we can pull it off. You're my best buddy. You've helped me through some really tough times. I don't know what I would have done without you. Love ya, K.

BARON You are the cutest to the infinity infinity crap. No arguments accepted or listened to. Love, roomie (ex-roomie)

GREEKS & CLUBS
\$1,000 AN HOUR!
 Each member of your frat, sorority, team, club, etc. pitches in just one hour and your group can raise \$1,000 in just a few days!
Plus a chance to earn \$1,000 for yourself!
 No cost. No obligation.
 1-800-932-0528, ext. 65

Don't drink and drive!

Get Involved Join The PHOENIX STAFF

Phoenix needs:

- photographers
- copy writers
- editors
- slaves, lots of slaves

stop by 2nd floor U.C. (Avion Office)
or call X6048

Spacewalk

(continued from page B2)

Section at the Johnson Space Center. "We'll also demonstrate that the EVA community can plan, train and fly four missions this year and in that sense, it will be a banner year for EVA and will be somewhat representative of the EVA efforts required to build and maintain Space Station Freedom," Farris added. The spacewalk tests, as performed during STS-54 in January, concentrate on defining the limits of spacewalking abilities, better understanding the difference between true weightlessness and the ground training facilities that simulate weightlessness and gaining more insight into the times required for various tasks to be performed while spacewalking. The tests also expand the spacewalk experience levels among the astronaut corps, shuttle flight controllers and spacewalk training instructors. The specific tasks to be performed on STS-57 are still being evaluated by flight planners, however they will concentrate on tasks similar to those

Missions

(continued from page B2)

The Comet Nucleus Tour will study three different comets during a five year mission, focusing on the structure and composition of the nucleus. Small Missions to Asteroids and Comets involves the launch of four separate spacecraft to study distinctly different types of comets and asteroids. The Near Earth Asteroid Returned Sample will acquire samples from six sites on an asteroid and return them to Earth for study. The Earth Orbital Ultraviolet Jovian Observer will use a spectroscopic imaging telescope in earth orbit to study the Jovian system. The Solar Wind Sample Return mission will collect solar wind material and return it to earth for analysis.

performed on STS-54 although they will feature the use of the Canadarm. The STS-57 spacewalk, as with the STS-54 spacewalk and other such spacewalk tests will be done without any impact on the mission's main objectives and will carry a low priority among the mission's tasks. STS-57 crew members G. David Low, making his third space flight, and Jeff Wisoff, making his first space flight, will perform the EVAs. Neither spacewalking astronaut will be involved in the retrieval of the EURECA satellite. With the spacewalk performed in January, those planned for April and July and the spacewalks planned for the STS-61 HST servicing mission in December, a total of four shuttle flights this year feature spacewalks. The July spacewalk, scheduled aboard Discovery's STS-51 flight was only added to the launch manifest February 3. Four shuttle missions with planned spacewalks in one year ties a NASA record for missions with EVAs set when four spacewalk missions were flown in 1984, including the dramatic Solar Max satellite rescue.

Wormholes

(continued from page D2)

Furthermore, like a blackhole, a wormhole would have an enormous gravitational well that would crush anything even before it enters the hole. To overcome this problem, the wormhole must be forced in the open position and the gravitation well must be counteracted. This is, unfortunately, much easier said than done. To keep the wormhole open, a superstructure of "exotic" material must be placed in the wormhole. Exotic materials are super dense materials (no we currently do not have any) that could withstand enormous stresses. The material needed to hold the wormhole open would have to withstand pressures up to the pressures encountered within a neutron star. In next week's third and final installment the possible use of wormholes as a time travel gate will be explored.

The information contained in this article was gathered from the following sources available in the Jack R. Hunt Memorial Library: Wormholes, time travel and quantum gravity by Redmount, Ian, *New Scientist*, 28 April, 1990, pg. 57-61. Cosmic Time Travel by Freedman, David H., *Discover*, June 1989, pg. 58-64. Maker of Worlds by Freedman, David H., *Discover*, July 1990, pg. 46-52.

H-P

(continued from page B3)

was the strongest, the Unix multi-users business and the workstation business," he said. H-P has been quick to take advantage of weaknesses shown by Digital Equipment Inc. and International Business Machines Corp. in the market for high-end computers, Herwick said. Hewlett-Packard, based in Palo Alto, Calif., employs 93,100 workers in 100 countries. It had \$16.4 billion in revenue in its 1992 fiscal year.