

6-10-1992

## Avion 1992-06-10 (B)

Embry-Riddle Aeronautical University

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

---

### Scholarly Commons Citation

Embry-Riddle Aeronautical University, "Avion 1992-06-10 (B)" (1992). *Avion*. 946.  
<https://commons.erau.edu/avion/946>

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](mailto:commons@erau.edu).



# SPACE TECHNOLOGY

Aeronautics.....	B2
Classifieds.....	B7
Comics.....	B6
Data Technology.....	B3
Diversions.....	B4
Space Technology.....	B1

## Lockheed continues in role as space shuttle processor

### High technology plays significant role in shuttle processing at Kennedy Space Center

By Joshua S. Mussaf  
Space Technology Editor

Since the space shuttle program began in 1981, Lockheed Space Operations Company, LSOC, has been contracted to process the shuttles between missions. Since 1981, LSOC has continued to advance in the area research and development. These new programs are designed to maintain safety and speed up shuttle processing. Some of the new advances follow.

Quality Assurance is pioneering the use of photographs obtained from still video cameras that record images not on film, but on two inch floppy disks. These images, up to 50 per disk, can be immediately played back on a video monitor and printed out in seconds.

Currently, cameras with viewing and printing capabilities are in use for flight hardware closeout photo documentation in all three Orbiter Processing Facilities, the Vehicle Assembly Building and both launch pads.

A new Video Microscope has proven to be a real time saver. Previously analysis of the "scratches and dings" was accomplished on an optical comparator and took about

four hours per blemish. The new equipment does the same job in only five minutes, reducing the average measurement time per flow from 1,350 to 25 hours.

On the subject of time saving video devices, another newly developed LSOC/NASA/Boeing system, the Automated Radiator Inspection System (ARID-LVIS), is nearing the application stage.

Each orbiter has radiators attached to the inside of its cargo doors that are used to disperse heat from the vehicle's onboard systems while in orbit. These radiators have large surfaces and must be inspected for damage prior to flight.

The current method calls for technicians to inspect these radiators by hand using magnifying glasses. The new system employs a strobed, diffused illuminator, a fringe illuminator, and a high resolution Charge Coupled Device Camera system. The camera-illuminator system is mounted on an automated robotic scanner.

The vision system is essentially complete, the robotic arm is fabricated and mocked up in the NASA Robotics Laboratory, and final systems testing is underway.

Certification will be completed by early 1994.

While this vision system is "smart," it can't think as well as the Ground Processing Scheduling System (GPSS), a computer-based scheduling system that uses Artificial Intelligence (AI) techniques to perform automated planning and scheduling.

Using a new search algorithm, called constraint-based simulated annealing, the algorithm takes "static" or known information, such as certain vehicle configurations, adds time constraints and other scheduling related information to its data bank, and then provides an assessment of the schedule's constraint violations and how to optimize an alternative schedule based on user specified criteria. In other words, it will take a scheduling problem, analyze it, and provide the user an alternative.

With thousands upon thousands of Thermal Protection System (TPS) tiles on an orbiter, how does one measure the step and gap between neighboring tiles?

For years it was done by hand - a somewhat labor intensive process. Today, thanks to the LSOC developed Automated TPS Step & Gap Measurement tool, it's a snap.



Lockheed photo

Several Lockheed employees have been found sleeping or intoxicated on the job. However, this employee continues his job of checking the gap between tiles on the Space Shuttle Columbia.

The tool is run by one technician and the measurements can be accomplished with greater accuracy and speed, and also permanently recorded on a computer.

Once recorded, the computer can print out data sheets, or data maps for whole tile formats. Recording and retrieving information is also the idea behind bar coding - much like your supermarket's scanner "reading" the label imprinted on purchased canned goods.

Using the Shuttle Processing Data Management System II computer

network, tools, equipment, and hardware have bar code labels attached that can be scanned with handheld readers.

By bar coding, tools can be checked in and out of restricted areas to make certain they aren't misplaced. Parts and equipment can be tracked to schedule preventive maintenance and calibration.

A major goal of the Lockheed Shuttle Processing Team is to streamline orbiter preparation operations prior to each mission.

### KSC employees found sleeping and intoxicated

(AP) - A quality control worker found sleeping on the job and smelling of alcohol at Kennedy Space Center has been suspended, and a shuttle technician has resigned after testing positive for drugs.

The quality control worker was found sleeping around 2:30 a.m. Friday, May 29 in the Vehicle Assembly Building, where orbiters are attached to the boosters and external fuel tank.

A Lockheed spokesman, who declined to identify the suspended worker, said a report indicated the man smelled of alcohol.

He also would not identify the shuttle technician who resigned during an investigation into an April 22 hangar accident involving Atlantis.

Three Lockheed technicians were moving work platforms in Atlantis' engine compartment and failed to disconnect a purge line. The line was bent, causing \$11,000 worth of damage and requiring 256 hours to repair.

One of the three tested positive for drugs, although he was not using drugs at the time of the accident. Officials would not identify the drug detected.

## Ultraviolet explorer begins study of spectrum

By Joshua S. Mussaf  
Space Technology Editor

The Extreme Ultraviolet Explorer (EUVE) began an 18 month mission last Sunday, June 7, when it took to the sky at 12:40 p.m. EUVE, NASA's 67th Explorer mission, will be the first satellite to make both spectroscopic and wide-band obser-

variations over the entire extreme ultraviolet (EUV) region. The extreme ultraviolet is one of the least-studied portions of the electromagnetic spectrum.

This unique satellite consists of four telescopes - the most powerful set of EUV telescopes ever flown. Three instruments will map the entire sky to determine the existence, direction, brightness and tem-

perature of sources of extreme ultraviolet radiation. The fourth instrument is designed to make spectroscopic observations to determine the composition and temperature of the EUV sources discovered during the sky mapping. Some of the objects EUVE is likely to detect and study are white dwarfs, binary star systems and hot outer atmospheres (coronae) of stars similar to the sun.

From the many objects of astronomical interest discovered during the EUVE all-sky survey and other objects already thought to be observable in the extreme ultraviolet, guest observers will propose to study targets using the spacecraft's fourth instrument, the extreme ultraviolet spectrometer.

The EUVE is one of a long line of relatively low-cost, small-to-moderately sized missions that make up the Explorer program. Since the Explorer Program began in 1958, these missions have given scientists worldwide a new understanding of astronomy and astrophysics, providing them an opportunity to probe nearly every region of the electromagnetic spectrum from the infrared radiation to gamma rays.

### Science objectives

Astronomers use the term "extreme ultraviolet" to refer to the high-energy end of the ultraviolet portion of the electromagnetic spectrum. Like other forms of light such as infrared and X-rays, EUV light is blocked by the Earth's atmosphere. Initially, astronomers thought it would be impossible to detect EUV rays from sources beyond our solar system.

However, the sun now is known to lie within an unusually hot transparent region of interstellar space.

This region, about 250 light years in diameter, is often called the local bubble. Apart from a few small wisps of cold, opaque gas, it is mostly transparent to EUV radiation. EUV light from very distant stars beyond the local bubble is unlikely to reach the Earth's vicinity and thus, EUVE will detect sources mostly in Earth's stellar neighborhood.

The scientific mission of EUVE will initially consist of a six month all-sky survey, together with a highly sensitive "deep" survey of a limited portion of the sky. This will be followed by a spectroscopy phase of at least one year. In the spectroscopy phase, individual targets, whether discovered in the all-sky survey or identified from other information, will be analyzed in detail through selected observations made with an on-board extreme ultraviolet spectrometer.

As in the case of earlier Explorer missions, the most exciting discoveries may be those that are unexpected. Objects thought to be well understood may display surprising properties at extreme ultraviolet wavelengths, and it is even conceivable that entirely new classes of celestial objects may be discovered.

### Spacecraft operations

The Explorer platform spacecraft, plus the science payload, comprise the EUVE observatory. Like most satellites, EUVE is solar powered. At the beginning of the mission, the solar array panels will provide the spacecraft with more than 1,000 watts of power during its journey around Earth.

After EUVE's 45 day check-out period is complete, the spacecraft will begin its mission.



photo by Paul Hester

The Delta II rocket carrying the EUVE satellite stands ready for liftoff. Liftoff occurred at 12:40 p.m. on Sunday.

## Magellan detects landslides on the Venusian surface

By Joshua S. Mussaf  
Space Technology Editor

Large landslides have been identified on Venus by Magellan Project scientists at NASA's Jet Propulsion Laboratory, Pasadena, Calif. They are similar to landslides that have been known for some time to occur on Earth and Mars, a project spokesperson said.

Project Scientist Dr. Steve Saunders said the large landslides could occur on Venus about as frequently as they do on Earth, about once a year, but they usually are larger than terrestrial slides, he said.

Landslides occur on steep slopes that have formed by faults and on the slopes of volcanoes and generally are triggered by seismic activity or quakes.

The most dramatic landslides on Venus are seen beneath the slopes of volcanoes and may have formed much like the Mount St. Helens

eruption in Washington state in 1980, Saunders said.

"The Mount St. Helens eruption is an example of the formation of an avalanche caldera where a large portion of the volcano collapsed and flowed downslope," he said, "but the avalanche calderas on Venus are much larger."

The larger landslides on Venus spread 18 miles across the surface. Most Venusian landslides have a rough, hummocky appearance that is typical of all landslides, he said.

They are made of a jumble of rock fragments of all sizes that broke up during the violent downhill journey in the few minutes it takes to form the slides.

The longest known landslides are found on Earth. Undersea slides reach more than 200 miles in length. Martian landslides are next in size, with lengths of 60 miles and more. The largest Venusian landslides extend only about 30 miles.



NASA photo

The Magellan spacecraft has observed remnant landslide deposits apparently resulting from the collapse of volcanic structures.

Since erosion rates on Venus are so low due to the lack of water on the surface, landslides are an important mechanism in wearing down mountain regions on Venus. The

rounded hills of the complexly deformed tessera, or tile-like, terrain on Venus have probably been modified by numerous landslides, he said.

### Back to the good old days



NASA photo

NASA administrator Daniel Goldin recently changed the agency's logo back to the original "meatball."

## Space Station Freedom begins nationwide tour

By Joshua S. Mussaf  
Space Technology Editor

NASA has kicked-off a nationwide tour of its full-scale traveling Space Station Freedom model in the Washington, D.C., metropolitan area this past week. The model, which is housed in two connected tractor trailers, features the U.S. living quarters and the U.S. laboratory module of the international space-based research facility.

Visitors can walk through this model and find out what it would be like aboard the facility where the astronauts will live and work for months at a time. Astronauts will start living and working aboard the U.S. laboratory in late 1996.

Inside the habitation module,

which fills most of one tractor trailer, visitors will learn about the challenges engineers face in designing Freedom. Take, for example, the waste management system, or bathroom. A full-scale design of the bathroom is on display in the Habitation Module mockup.

In space, there is no up or down orientation as on Earth. That means all areas of the Space Station will be usable. The Freedom exhibit illustrates this with equipment racks in the floor and ceiling, as well as along the side walls.

On board the real Space Station Freedom, sophisticated systems will make the space station an almost self-contained environment, relying exclusively on solar power to generate electricity.



NASA photo

An artist's concept shows the shorter laboratory and habitat modules of Space Station Freedom. Astronauts will begin to live and work aboard Freedom in late 1996.



# House approves compromise to construct 20 B-2 bombers

WASHINGTON, D.C. (AP) - House approval of a compromise B-2 bomber package should remove most doubts about the future of the aircraft and its planned home at a Missouri military base, Rep. Ike Skelton said Friday.

"I'm confident we're on third base now and Whiteman Air Force Base being home to the B-2 is close to becoming a reality," Skelton said after the House approved a conditional plan to build 20 bombers.

The Lexington Democrat is a member of the House Armed

Services Committee and a staunch supporter of the B-2 bomber, which is to be deployed at a western Missouri military base in his congressional district.

The House voted 212-162 to reject a proposal that would have halted B-2 production at 15 planes.

Whiteman Air Force Base, which is about 60 miles southeast of Kansas City, will be the first operational base for the B-2 bomber.

Under the House plan, lawmakers agreed to provide the \$4 billion the

administration is seeking in the 1993 fiscal year to build four planes to complete the B-2 fleet.

However, the money cannot be spent until the Air Force demonstrates that the bomber meets its "stealth" requirements for evading radar and total costs will not exceed the latest Pentagon estimate of \$44.4 billion.

Skelton said he was confident both conditions would be met.

The Senate still must approve its version of the 1993 defense budget, but Skelton said he expected senators

to accept the House proposal. In the past, the Senate has been more strongly in favor of the B-2 than the House, where some Democrats have pushed to kill the program.

Skelton also said the House vote represented a victory for Whiteman.

The Air Force, the congressman said, has assured him that "all 20 will be there at Whiteman."

Four of the planes will be used for training as well as research and development purposes, and may be temporarily based at other locations, however.

The remaining 16 planes will be split into two squadrons of eight planes each, Skelton said.

Originally, the Air Force planned to house one wing of 30 bombers at Whiteman and has said that deployment would begin in early 1993.

The Defense Department has proposed spending \$82.3 million next year for improvements at Whiteman to prepare the base for the arrival of B-2 bombers.

Capping the B-2 fleet at 20 probably will eliminate the need for some previously planned construction projects

at Whiteman, Skelton said. For example, fewer aircraft hangers may be needed. But the congressman said the effect on military construction spending at Whiteman was unclear. Congress provided \$29.5 million for B-2 projects at Whiteman in the current budget year.

"It's my dream that Whiteman will be the premier base in the Air Force. I think that will come pass," said Skelton, adding that it would be the "most modern and have the most up-to-date weapons" once the B-2 bombers arrive.

## McDonnell Douglas wins Air Force development and training contracts

By Ronald Hess

Aeronautics Editor

McDonnell Douglas became the U.S. Air Force's predominant supplier of fighter aircraft pilot training services at the end of May. F-16 Falcon and F-15 Eagle aircrew training and courseware development contracts have made McDonnell Douglas a leader in the training market.

McDonnell Douglas Training Inc. was awarded an \$11.7 million contract May 7, for the management of 40 F-16 instructors at six US Air Force bases and two National Guard units. The instructors will teach pilots in the classroom and in simulators.

The contract covers one year, with the option of renewal for three

additional years. The contract also calls for the modification to and development of courseware to coincide with aircraft upgrades and changing lesson plans.

On May 20, McDonnell Douglas Training Systems was awarded a \$6.6 million contract to conduct F-15 Eagle aircrew training and courseware development at five USAF bases.

Under the F-15 contract, McDonnell Douglas will continue to be responsible for academic and simulator instruction and courseware development for all models of the Eagle. The contract also covers one year. Options for renewal for three additional years is included.

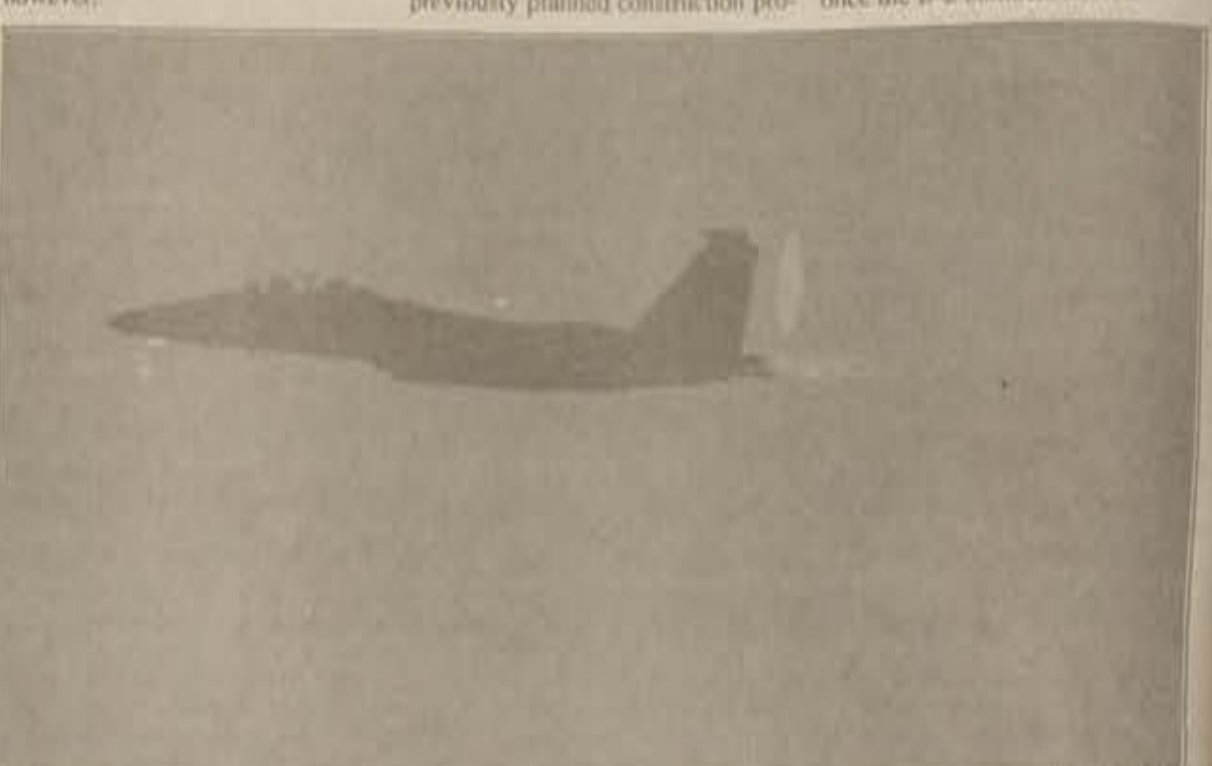
"Winning these contracts positions us well with our customer," said Frank Kimball, general manager

of McDonnell Douglas Training Systems. "In the case of the F-15, not only do we make the premier fighter aircraft for the Air Force, we train the pilots who fly them."

McDonnell Douglas Training Systems has held the F-15 aircrew training contract for the last five years. The Air Force required McDonnell Douglas to make another bid for the contract when it came up for renewal this year.

Among McDonnell Douglas' major competitors were CAE Link Corporation, Reflections Training Corp., Flight Safety International and UNC Services.

In winning the F-16 contract, McDonnell Douglas unseated CAE Link Corporation, which had held the contract since 1988. Both the F-16 and F-15 contracts are effective October 1.



The USAF awarded McDonnell Douglas contracts for F-15 (shown above) and F-16 aircrew training and courseware development.

## FAA investigates cause of midair collision between two Cessnas

OLNEY, Md. (AP) - Federal investigators are trying to determine the cause of a midair collision between two planes in which three men died and four others were injured.

"We have no knowledge as to why this happened and it will take us some time to determine that," Mike Benson, a spokesman for the National Transportation Safety Board. The NTSB and the Federal

Aviation Administration are investigating the accident, he said.

The accident occurred shortly before noon Monday at a small Montgomery County airport. As many as six of the men in the two private planes may have been licensed pilots, said Benson.

The three men were killed on impact when the Cessna 172 in which they were flying broke apart in the collision and crashed into a

field, Montgomery County police said.

Police identified the three dead men as student pilot Robert Rodriguez, of Rockville; instructor and copilot Christopher Baker, 30, of Potomac; and Anthony Paciulli, 24, of Reading, Pa.

Rodriguez was a well-known entrepreneur and active fund-raiser for many local charities, including the Jaycees, the Chesapeake Bay

Foundation and the Doug Williams Foundation.

The second plane, a Cessna 182, circled and made a crash landing into a field about a half mile north of Meadow Farms Nursery in Brookeville, Md., police said. Both planes are owned by Congressional Air Ltd. of Gaithersburg, Md.

"There was radio contact with the airport," said Benson. "They were apparently aware of each other."

One plane was below the other and was struck on its left wing, according to Dimitrios Tsipouras, who witnessed the collision.

"Then the one that lost the left wing started spinning halfway and leaning to the right wing and started coming down," Tsipouras said. Then I heard the noise."

"The second one managed to make a half turn," and then went out of his view, Tsipouras said.

The four occupants of the Cessna 182 were injured, but survived, authorities reported. John C. Mehl, 34, the plane's copilot was taken to Montgomery General Hospital along with Congressional's president William Seaman, 47, and Eric Brockdorf, who wore rear seat passengers. They were treated and released.

see Collision, page B7

- ACROSS**
- 1 Ariz. river
  - 5 Say suddenly (with "out")
  - 10 Sponsorship
  - 14 Former Ugandan leader
  - 15 Uncanny
  - 16 Company symbol
  - 17 Final opportunity
  - 19 On the peak
  - 20 Realm
  - 21 Solons
  - 23 Roster
  - 25 Orchid tuber food
  - 26 Kind of club
  - 30 Gaudy
  - 33 Scot. hill-sides
  - 34 More docile
  - 36 WWII area
  - 37 Small rolls
  - 38 Kitchen knife
  - 39 Old Eng. poet
  - 40 Football player
  - 41 Fe or Monica
  - 42 Surface for inscriptions
  - 43 Kilts
  - 45 In high spirits
  - 47 Under to a poet
  - 49 Sharp in taste
  - 50 Greek
  - 53 Used a certain golf club
  - 57 Small liquid container
  - 58 Fla. resort city
  - 60 Fish-eating bird
  - 61 Young eel
  - 62 Puerto —
  - 63 Foxx
  - 64 Men of vision
  - 65 Large amount
- DOWN**
- 1 Strong wind
  - 2 Moslem leader
  - 3 Speak imperfectly
  - 4 Island group
  - 5 Command
  - 6 Yarn measure
  - 7 Vases
  - 8 Elmer and Grantland
  - 9 Adolescent
  - 10 Click beetle
  - 11 Lose self control
  - 12 Gorin or Stravinsky
  - 13 Bribes
  - 18 Yells
  - 22 Having wings
  - 24 Giant
  - 26 Fr. priestly titles
  - 27 Steamer or Saratoga
  - 28 Together
  - 29 Bill of fare
  - 31 Purloined
  - 32 Desired
  - 35 Intended
  - 38 Recreation activities
  - 39 Speaks imperfectly
  - 41 The Man
  - 42 Bushy plant
  - 44 Staggered
  - 46 Hoglike mammals
  - 48 — Selassie
  - 50 Declare to be true
  - 51 Grow weary
  - 52 Wheel hub
  - 54 Follow closely
  - 55 — homo
  - 56 Indian Ocean vessel
  - 59 Mal de —

1	2	3	4	5	6	7	8	9	10	11	12	13
14				15					16			
17			18						19			
20						21			22			
23			23			24		25				
26	27	28				29		30			31	32
33						34		35			36	
37						38					39	
40						41					42	
43			44					45			46	
47						48		49				
50	51							52			53	54
55								56			57	58
59						60					61	62
63						64					65	

©1992, Tribune Media Services

**ANSWERS**

1	2	3	4	5	6	7	8	9	10	11	12	13
14				15					16			
17			18						19			
20						21			22			
23			23			24		25				
26	27	28				29		30			31	32
33						34		35			36	
37						38					39	
40						41					42	
43			44					45			46	
47						48		49				
50	51							52			53	54
55								56			57	58
59						60					61	62
63						64					65	

**COCAINE...**

**...IT CAN TURN YOU INTO A DIFFERENT PERSON**

Partnership for a Drug-Free America



# New OS/2 dubbed the "War and Peace" of computer programs

→ **Software Review:** OS/2 2.0 for the IBM hits shelves.

By Joe Cambron  
Data Technology Editor

Finally, the war between IBM and Microsoft is on. OS/2 2.0 is now available in stores and through the mail, but it still is not a fair fight. Each application has its own strengths that put the two platforms into different leagues.

**What is an OS?**  
The OS in OS/2 and in DOS stands for operating system. These two letters are noticeably absent from Windows' moniker, and the reason is obvious. Although many people think of Windows as an OS, it clearly is not, not yet at least. Windows is really just another application and the reason is simple. It requires DOS to operate. This situation makes Windows an application and DOS the operating system.

This may seem like splitting hairs, but it makes a big difference. Although Windows can do a lot of things that DOS cannot do, it cannot do anything that DOS prevents it from doing. Working within this framework restricts Windows in many ways. The most obvious penalty is speed.

For many operations, Windows must call upon DOS to undertake its functions, while a stand alone operating system can perform those

functions autonomously. By adding another layer to the command structure, Windows is crippled in terms of speed from the beginning.

Another problem with a DOS-based system is its eight bit orientation. Even video game systems are now running with 16 bit software, but DOS and Windows must run as eight bit programs. The upshot of this limitation is again speed loss, but it also creates a memory debacle that has haunted DOS since the mid-1980s. DOS' eight bit design is responsible for the 640K "barrier" that prevents active program code from being loaded into additional memory.

Enter OS/2 as a full-fledged 32 bit operating system that is capable of wiping away previous DOS limitations by running 386 and 486 based PCs in a completely different operating mode. This mode has no tangible memory limitations except as measured in gigabytes.

OS/2 can even stoop to running DOS programs by fooling them into believing that they are running on a separate operating system. It can even run Windows programs in concert with OS/2 and DOS programs.

**The catch**

Sadly there are roadblocks to achieving an OS/2-gam. The program has brutal requirements for both memory and disk space. This is on top of the fact that the program's 32 bit design does not work with 16 bit

80286 based computers or even earlier eight bit 8088 based PCs.

As for RAM, the program has a minimum requirement of four megabytes (4,096 kilobytes or K). Six megabytes improves performance and eight or more is probably optimal. Even with a megabyte of memory falling well below \$50 in price, that is a pretty hefty investment for a computer user who only needed a couple of megabytes to handle Microsoft Windows.

In the area of hard disk space, OS/2 2.0 really is a resource hog. Up to 35 megabytes of hard drive space may be used just installing the code to operate the three OS/2 sections (OS/2, a DOS environment, and a Windows environment). In addition, another five to 10 megabytes may need to be allocated for creating a swap file (when your computer runs out of RAM, and it will, OS/2 like Windows writes excess information to the hard drive). All together this totals 42 megabytes of data. Considering most users have a 40 megabyte hard drive, this number is extravagant by almost any standard.

**What takes up the space?**

OS/2 basically contains a copy of DOS, Windows, and OS/2 in one package. DOS usually consumes about two megabytes with support files. Windows can require as much as ten megabytes of hard drive space. That leaves OS/2 tying up the remaining 23 megabytes of the installation space.

Making matters worse, is that OS/2 does not contain all the little applications that Windows does. Although "App-lets" are present in the OS/2 presentation manager, they are neither as numerous or as functional as their Windows counterparts.

**Limited Installation?**  
After deleting as many options as possible from the installation screen (but still maintaining the ability to run OS/2, Windows, and DOS), OS/2 took up a slightly leaner 30 megabytes. This is, by the way, the maximum installation size quoted in the documentation. An installation of 35 megabytes is not even mentioned.

**"App-lets"**

If you have not guessed, "App-lets" are little versions of larger applications programs like word processors, telecommunications software, spreadsheets and databases. One "app-let" in each of these categories is included with OS/2.

Guess what, though? These little applications are almost totally undocumented. The manuals, which make the Windows manuals look generous and brilliant, barely cover anything non-technical. Just figuring out how to shut down my computer took 20 minutes of searching through documentation. Repeated attempts met with the phrase "Simply access the pull-down menu and hit shutdown." Sadly, the on-line help and one manual entry neglected to mention that this menu

can only be accessed by directing the mouse over a blank portion of the screen and pressing, perhaps for the first time ever, the RIGHT mouse button.

**The File System**  
OS/2 offers the option of purging one's hard drive of information, and recreating it in a new way. A new directory structure and file access system allows 256 character file names and speeds disk access. Again, though, IBM missed the boat in two important areas.

First, spaces cannot be used (except with quotation marks), unlike the Mac file system. This makes long file names incomprehensible. The second deadly sin of this system is its inability to allow DOS or Windows programs to reside on it. With this option taken away, that leaves only OS/2 applications to inhabit the hard drive.

**Support**

Ironically, programs made for OS/2 are not widely available these days, so the Windows and DOS emulations are very important to the user. This, of course, makes the new file system almost useless, but it also opens up other dangers. The rumor floating around has been that quite a few DOS programs and Windows programs crash quite resoundingly in OS/2's emulation, although these crashes rarely lock up the entire system due to the best fault tolerance of any PC operating system. These glitches are compounded by the fact

that Windows 3.1 was shipped too late to be incorporated into OS/2. This enhancement is scheduled this summer, however.

**What else was left out?**  
In the rush to bring OS/2 to market, Windows 3.1 incorporation was not the only corner to be cut. Besides the seemingly rushed and poorly presented documentation, OS/2 designer IBM cut the biggest corner of all. OS/2 is not a completely 32 bit operating system. Because of late problems, the video system is only 16 bit based. Despite the fact that this not earth shattering, it contributes to the image that OS/2 is not a complete product. The video speed, while still about the same as Windows 3.1, could have been a lot better if this advancement had been incorporated.

**Conclusion**

OS/2's saving grace is its new price. It costs as little as \$49.99 as an upgrade. One must recognize that updating your hardware will be OS/2's primary cost. Although it is technically superior to DOS and Windows, and even Apple's eight/16/32 bit System 7, it fails in so many other areas it seems hard to believe that it has much of a future. This program can only be recommended to power users with an 80386 or 80486 with eight megabytes of memory and 120 megabytes or more of disk space.

# New Maxis game lets players build a railroad empire on their PC screen

→ **Software Review:** A Train for the IBM is due for release soon.

By Joe Cambron  
Data Technology Editor

A new game from Maxis will soon be hitting software store shelves across the United States. The company that brought you *Sim Ant*, *Sim Earth* and *Sim City* now brings *A Train* to the small screen nearest you.

**Railroad Tycoon vs. A Train**

Named for the swing song of the 1940s, *A Train* is an interesting extension of *Sim City* that borrows heavily from *Railroad Tycoon* by

Microprose. Like *Railroad Tycoon*, the player must concern himself with train scheduling, train purchasing, finances (including both the stock market and the bank) and building up local industries to foster trade. The final category is the primary area of difference between *Railroad Tycoon* and *A Train*.

Whereas *Railroad Tycoon* only showed a simple picture of the area surrounding the station and a general continental map, *A Train* uses a "development area" like *Sim City*. Within this area's borders, railroads and subsidiaries may be constructed.

Subsidiaries, businesses other than railroading that your company is involved in, play a much larger

role in this game. Once built, these subsidiary businesses may be bought and sold for profit or loss, depending upon a variety of conditions.

**Building Blocks**

Any game that has functions as vast as *A Train* needs a thread to tie all the pieces together. Without such a thread, a game like this one becomes more of a model building set than a winnable proposition.

A common thread is needed to make different parts of the game dependant upon each other, so a player cannot just play with real estate and ignore the railroad entirely. The Maxis developers came up with a novel and a little bit strange approach to undertaking that task.

Any game (and there were just six setups to choose from in the game we tested) starts out with a station served by several trains. It is presumed from the documentation that these trains are owned by your company, but you have no control over them. You will quickly notice that these trains leave behind mountains of boxes when they stop, and they cover as much real estate as you own near the station. These mounting boxes are the building blocks of the game.

**Is it a profit or a loss?**

For any business student, and perhaps anyone else, the financial aspects of the game are a little bit weird. A menu labeled balance sheet

shows a table which combines an income statement and a balance sheet into one. The result is that any purchase results in a loss for the year equal to that amount. Four million dollars spent to build a golf course, for instance, is a loss of \$4 million. Conversely, a sale of the golf course in later years is all profit. Things like depreciation seem beyond the developers of the game. (Perhaps they should have had Katherine Wilson as a technical adviser.)

The net effect, pardon the pun, of this is that it is very hard to make any money, particularly early in the game. Also, any subsidiary that you purchase that turns out to be unprofitable will decline in value immedi-

ately. The actual railroad operation is very hard to make profitable as well. The only consistent money-makers seem to be housing. Making money would not be so important if it was not for the fact that when you reach zero cash, the game unceremoniously terminates.

**Game play**

Well, we all know from *Sim City* that building things is an enjoyable thing to do, and this game is no exception. The game is hard to pick up at first, but then again so was *Railroad Tycoon* and *Sim City*. Its attractive interface and start-up make you excited by the chance to at least give it a try.

**"ENTERTAINING, CLEVER, WITTY, FUNNY!"**  
Chevy Chase and Daryl Hannah are magic. 'Invisible Man' is a must-see!"  
- Neil Rosen, WNCN RADIO

**CHEVY CHASE DARYL HANNAH**

Women want him for his wit.  
The C.L.A. wants him for his body.  
All Nick wants is his molecules back.

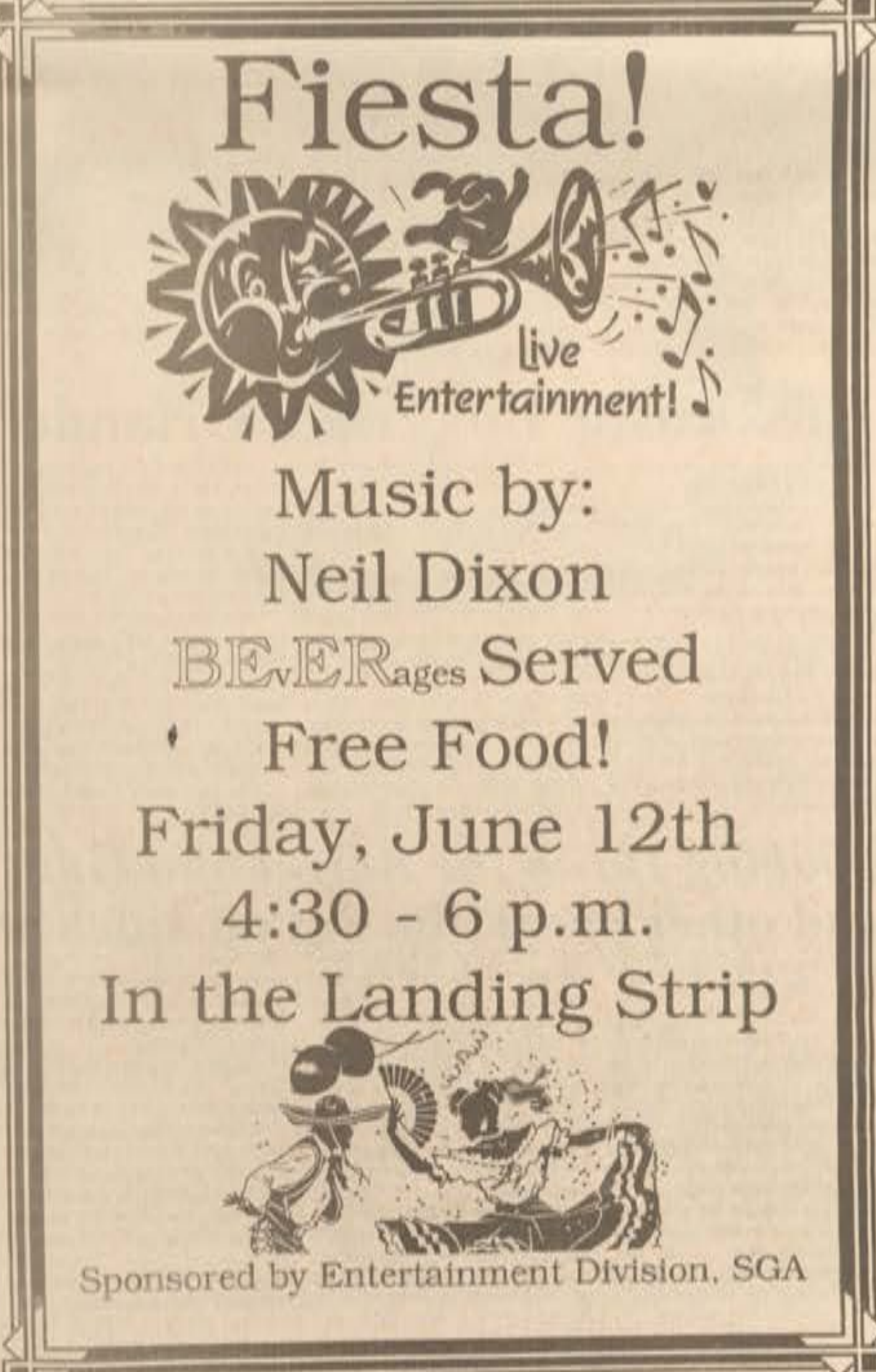


**Memoirs of an Invisible Man**  
An absolute like you've never seen

WARNER BROS. Presents  
In Association With LE STUDIO CANAL • REGENCY ENTERPRISES and ALCON Film A CONFESSION Production  
CHEVY CHASE DARYL HANNAH MEMOIRS OF AN INVISIBLE MAN SAM NEILL MICHAEL WALKER STEPHEN TOMLOWAY  
Music By SHIRLEY WALKER Executive Producers ANTON MILCHAN Based on the Book by HEE SAUNT  
Screenplay By ROBERT COLLECTOR & DANA OLSON and WILLIAM GOLDMAN Produced By BRUCE BOHNER and DAN ROSSBUD  
Directed By JOHN CARRENZA

Tomorrow at 8:30 p.m.  
in the Student Center

**Fiesta!**



Live Entertainment!

Music by:  
Neil Dixon

BEVERAGES Served  
Free Food!

Friday, June 12th  
4:30 - 6 p.m.  
In the Landing Strip

Sponsored by Entertainment Division, SGA



# The Pooh Sticks sound like a 70s pop subculture returning for vengeance

By Boyd Kelly  
Division Editor

The Pooh Sticks are a really interesting band. Not only do they have a Scooby Doo-Partridge family look to them, they also have an obsession with the good music that made the 60s and 70s what they were.

If I were trying to start a modern day pop subculture-type band then this would be it. Their only inconsistency is that they follow 60s and 70s values yet they still use the big cardboard CD box as a package.

The band consists of Hue and Amelia on vocals, Alison on bass, Trudi on tambourine, tape sections, ARP & Moog synthesizers and piano and Stephanie on drums. Trudi explains Hue strange convictions and reminiscent values. In fact I really can't do the album the same justice that Trudi does.

"The Great White Wonder was originally the title of a Bob Dylan bootleg and although our record didn't take as long to get released as *The Basement Tapes*, it still took quite a long time really."

She goes on to talk about the other references. "So apart from all those favourites like Tommy James & The Shondells, John's Children, The Runaways and all those Kim Fowley groups, Super K and The Vaseline and everybody, who we always listen to anyway, there are direct references in the album to lots

of other records we've especially got into this year. Although it might be fun to let you spot all these on your own you'd get confused and come up with a really miserable score and moan when your older brother gets all knowledgeable on you and says things like 'Oh, don't you know, that's a Procol Harum song, that is?' and then oh, what a fool you will feel!"

"So you should look out for things like in 'Young People' where Hue, for no reason at all as far as any of rest of us can make out, shouts bits of Jonathan Richman and Stephen Stills songs. You can't go wrong with Jonathan Richman apart from that last album where he's plugging in guitar on the front - we didn't really like that one at all."

"There was this band in Swansea a couple of years ago called The Love Nazis and they were great and this song reminds me of them. Perhaps because I'd only just started going to see groups but I'd never seen anything like them - they were incredible and I still haven't seen anything that good except maybe Beatle Hans in Holland one time. Their LP on Pierce called 'It's the greatest live LP of all time!'"

"And there's one of a Beatle Hans thing on in 'The Rhythm of Love' - they're really slow like that and in case your clever older brother or dad is trying to tell you it sounds like a

Strangeloves B-side, it is. Anyway the verses are but the choruses and bits are ours (although Hue could have stolen more words or something from somewhere. I'm sure we only know the half of it).

"The solo is 'Powderfinger' by Neil Young, even I know that, right down to the way the guitars play notes that aren't quite the same but nearly are, sort of like the way 'Sweet Baby James' sounds a bit like a Four Seasons song! We took the chorus of that record and used it in our song although I don't know if I'd recommend much of the 70s stuff they did - 'Silver Star' was good but the old 60's things are best like 'Big Girls Don't Cry' and that."

"Sweet Baby James' is basically 'You've Got A Friend' with some nice James Taylor bits in it because we're all big fans of 'Fire And Rain' and that whole 'Sweet Baby James' record."

"So anyway your older brother's going to be there with his 'That's a Procol Harum song, that is' when it gets to 'Pandora's Box' on the LP but now you can tell him to bog off because you know that already, thank you very much. The title is stolen from *Procol's Ninth*, a great record, although obviously it could have come from anywhere really."

"Hue took bits of 'feel' (what?) from The Ozark Mountain Daredevils 'Jackie Blue' and Helen Reddy's wonderful 'Angie Baby' for



Hue, Paul, Alison, Trudi and Stephanie of the Pooh Sticks.

some of the words though I'm not convinced it's not some sort of *Hair* thing cos of that 'planets align'ing bit in there. Appollo's really into *Hair* so it seems quite possible that there's some sort of Original Broadway Cast going on there, don't you think?"

"Which is sort of funny when you think about it because wasn't our big favourite Meatloaf in that? Or was that *Rocky Horror Show*?"

This is basically sort-of an overview of the philosophy of the album.

As Hue says, "We don't see our-

selves as being original. We're very up-front about that. But we don't see ourselves as a marginal thing. I think we're going to be a very big group."

So, are you lost?  
Well if you don't understand, you probably missed it the first time.  
Have a nice day.

# Indian cinema continues to make music in the way of the old musicals

By Boyd Kelly  
Division Editor

Well, when I first heard this album I had no idea of what I was listening to. It sounded like Spanish Bullfighting Music for the Bedroom. Well, that is a loose interpretation of it anyway.

It turned out that this was a pretty interesting album. At most I should have guessed that it wasn't going to be that bad because it was on the Luaka Bop label which I naturally associate with David Byrne.

The album is called *Asia Classics* / and it is a collection of songs from Indian soundtracks. This may not seem like much but there is a lot going on in the Indian cinema community.

I was surprised to find that India makes four times as many movies a year than Hollywood. They make roughly 780 compared to our 150 or so.

Apparently the two largest buildings in any Indian town are the temple and the cinema. They also have a similar political arena, where former movie stars become politicians.

The way the music is distributed and listened to is also different. Most of the popular music that they listen to is taken from film soundtracks.

For the most part they don't even have pop stars. The people who write all the music are the people who get credit for it while the person who sings it is just a singer.

This album is basically a span of Vijaya Anand and his career. The way that he creates songs is also slightly different from how we do things here. Anand explains that all film songs are written to fit tailor-made tunes.

Three people sit down to create film soundtracks. There is a film director, a producer and the music director which is what Vijaya Anand does.

They all sit down and discuss how the soundtrack should be and the musical director tries to get a feel for it. He then gets together a small band and lays down about thirty or forty tunes and takes them back to get the approval of film director.

Once it is approved he then gives it to a writer who writes lyrics for the music that he has written.

The next thing that happens is that each song gets a budget and they decide, depending on the place it belongs in the movie, how many instruments to use and how many musicians.

All the musicians show up early one morning for the recording, they do one rehearsal and then record it.

The whole thing is played back for the film director and the producer. Then they rush off to edit it. Everything gets done in about seven hours.

The Indians have kept the tradition of musicals. Busby Berkeley would have a great time in India. I have always been a big fan of musicals and that era as a whole, and I imagine that many of these Indian movies are probably very beautifully done.

The songs are taken from the movies *The Light of Life*, *The Emperor and the Prince*, *The Ramayana of Today*, *God Incarnated*, *Dance Raja Dance*, *Inspector Vikram*, *Raja Yiva Raja*, *Krishna*, *When You Danced*, *Indira Ramayana* and *King of Kings*.

A few of the song titles I was a little worried about such as "Yerida Gungnalli." Its translation is "The Drink That Has Gone Up." I'm not exactly sure what the reference is, but I figure it's not what I think it is.

Anyway, I really like this album and if you enjoy listening to old movies and the sitar, tabla and other traditional Indian instruments, then give it a shot.

# Iron Maiden releases their long awaited album *Fear of the Dark*

By Boyd Kelly  
Division Editor



Well, you are probably wondering if this is a worthwhile album to buy!

This poses perhaps one of the most interesting questions that any Iron Maiden fan could have trouble answering. For instance, if you are a die hard fan who sticks with the likes of *Killers*, *Number of the Beast* and *Iron Maiden* then there is a good chance you may not like this album.

Now, if you followed their progression through *PowerSlave*, *Seventh Son of a Seventh Son* and *No Prayer for the Dying* then there may be something in this for you.

This album may be especially more important to those of you familiar with Bruce Dickinson's solo career. This album, *Fear of the Dark*, is basically a blend of *No Prayer for the Dying* and Dickinson's album *Tattooed Millionaire*. This isn't much of a surprise considering that Dickinson and Janick Gers co-wrote many of

the songs. Janick Gers was a co-writer of many of Dickinson's solo songs.

This album is far better than the last one, it seems that maybe on *No Prayer for the Dying* they tried too hard to link a central theme.

There are some really decent songs on this album and I'm glad. One of the noticeable differences is that the use of keyboards has almost reduced itself to nil, and the bass sticks out, with Niko laying down a hard track.

I believe that this is the band's transition. They are moving up in the world and taking their music along. They are modernizing in a way.

If anything this album is really melodic as far as the songs go. There is a lot of instrumental sounds to it and many of the songs last over five minutes.

"Be Quick or Be Dead" is the

first single they released and is an old Maiden sound. It keeps the traditional Maiden values and is kind-of a send off of the old as they jump into the new.

A couple of my favorites include "Wasting Love," "Fear of the Dark," "Fear it the Key," "The Fugitive" and "Afraid to shoot Strangers."

One of the things that I am really looking forward to is that they are touring again.

For those of you that remember the last tour they did, Bruce Dickinson got a sore throat and cancelled the Florida concert dates.

To this day I have never seen them and am looking forward to seeing them in concert. There is a lot of material that they can play including some stuff off of this new album. Not to mention that "Eddie" will be there in his ever-lasting presence. Maybe we will even see a little more of Sooty and Sweep.

# The Beastie Boys rock Orlando

By Boyd Kelly  
Division Editor

Two Thursdays ago, a fearless Avion staff travelled west to Orlando to engage in an evening of hard and heavy listening at The Edge.

Our mission was to see the Beastie Boys in action on their "Check Your Head Tour."

If you thought they sounded good on their new album then you should really try to see them live. You could do no worse. This was an excellent show.

The two opening bands were the Fu-Schnickens and Big Chief. The Fu-Schnickens were a straight-up rap band and played what seemed like only two songs.

Big Chief on the other hand was a heavy metal band and they played for about an hour. They were quite a good band and I look forward to reviewing their new album soon.

Well, now we had had a blend of rap and metal, what better way to get psyched up for the Beastie Boys. Did I mention that there were about 1600 screaming fans inside and most of them were on the floor moshing throughout the whole show?

I didn't know if it could get any better, but it did. The Beastie's walked on stage to "To all the Girls," a very fitting entry piece.

From there they jumped into the evening bringing cuts from all three albums and even before that.

There were songs like "Slow and Low," "Rhythm and Stealing," "So What'cha Want" and "Pass the Mic." There were even the early early Beastie Boys songs like "Tigg Raid on Mojo." This should be a sure cue to any serious listener that these guys know what they are doing.

Who said these guys weren't musicians?

and that is that nature is featured quite heavily. In fact there is lots and lots of nature.

The first video is "Looking Down the Barrel of a Gun" and starts off in space orbiting the Earth at warp speeds. We then descend onto the planet to scenes of skateboarding, surfing and snow boarding.

There are a number of live acts too including "Shadrach," "Tigg Raid on Mojo" and "Slow and Low."

There are, in fact, two versions of "Shadrach." One is the most version and the other is the Abstract Impressionist Version. This is just

worth seeing, period. It is a fine piece of abstract impressionistic work. Not to mention that it is really a pretty cool video.

Another great video is "Hey Ladies." This is perhaps one of the most humorous videos on the tape. It is based on the 70s and is complete disco right down to the elevator shows and mirror balls.

All and all this is a great little video and shows where the Beastie Boys came from and where they are going.

These gentlemen should not be underestimated as musicians!

# Radika Miller brings us a look at the power of the flute on *Here and Faraway*

By Boyd Kelly  
Division Editor

I am always delighted to receive some new and entertaining instrumental pieces. Radhiker Miller's *Here and Faraway* certainly achieves this status and more.

Besides being modeled around the flute, this album also uses the likes of the dumbek, talking drum, bass kalimba, buban, marimba and an alto glockenspiel for starters. These instruments and a few traditional ones, like the bass, guitar, cello, piano, harp and Mexican 12 string guitar, blend together for folk, renaissance and impressionistic music.

The first song and perhaps the most powerful statement is "Dam Up a River to Style Your Hair."

"Dam Up a River to Style Your

Hair" started out as a protest song with those very words, but I never got beyond the first line so I kept it as an instrumental with an explanation. At the end of a 14 day white-water rafting trip down the Colorado River I was appalled to see people in Phoenix blow drying their hair in 105° weather.

The energy they were abusing for something so absurd, so unnecessary, was contributing to the devastating erosion of the beaches which line the Grand Canyon. (The Glen Canyon dam releases water in relation to the demand for electricity from Los Angeles and Phoenix which, in turn, washes away the beaches below the dam, not to mention many of its inhabitants.)

I love the wonders of Thomas Edison, but I do think we all need to balance our love of comfort with a

love for our Mother Earth. There is a need for all of us to evaluate every aspect of our energy consumption and to act on it - at home, in the workplace, and in our lifestyles as co-inhabitants of this planet.

There are a number of traditional songs on the album too like "I Once Loved a Lass," "I Gave My Love a Cherry," "Free Amalgamation" and "The Water is Wide."

This is a beautiful album and well worth it if you are into "real" music.

Oh, by the way, for those of you who got a little lost earlier a dumbek is a ceramic Middle Eastern drum; a talking drum is an African squeeze drum; a bass kalimba is a very large African thumb piano; a buban is a wooden slit drum; a marimba is a wooden form of a xylophone; and an alto glockenspiel is a wooden type of xylophone with metal keys.

# Looking Down the Barrel of a Gun and other great hits out on video

By Boyd Kelly  
Division Editor

Well, I just wasn't satisfied by the concert alone and for those of you who didn't get a chance to see it then you might be interested in this new video from the Beastie Boys.

It is called *The Skills To Pay the Bills* and is a compilation of videos spanning their whole career.

This is a must see for any Beastie Boys fan and is a pictorial collection of Beastie-ality.

There is one central theme that seems to link the videos together

# The band Rattlebone rocks Daytona

By Douglas O. Flischer  
Division Editor

Last week's band, Rattlebone, kept the locals and tourists rocking all week long at the Other Place.

Rattlebone consists of Jamie on drums, Stacie on bass, Raymond on vocals, and Dale on guitar. Together they rocked the house with some fantastic cover tunes. They did an excellent Door's barrage, which included a special rendition of "L.A.

Woman" for the smokers in the house. The band also did some cool Poison, killer Aerosmith, and some AC/DC.

Not only did Rattlebone play the crowds' favorite covers, but they also had some killer original music for the crowd. "Motorcycle Boy" is a bitchin' rock 'n' roll song. My favorite is "Psychedelic Blues," where Dale wails and Stacie rips on this fast beat jam.

Rattlebone slowed it down a bit

when they did "Say Goodbye," their "excellent original" that is a top notch song.

Their original tunes are on a tape titled *Honky Tonk Angles*, which I just happened to get a hold of. I'm glad I did because all the songs are done in the good old fashion rock 'n' roll style. If you ever get a chance to get a copy of *Honky Tonk Angles*, don't miss it, you won't be sorry. I'm sure we'll hear from them in the future.



# Local venues continue to promote up and coming bands like Still Rain

By Douglas O. Fischer  
Overshire Writer

On the outskirts of Orlando there is a fantastic live rock club called The Station.

Last week I was very fortunate to see a band from Fayetteville North Carolina that goes by the name of Still Rain. These guys really know how to rock the house. For their first set they did some excellent covers by Ozzy, Thin Lizzy, Billy Joel, Slayer and Van Halen.

I was totally blown away when they did a Pink Floyd Dark Side medley in a manner that was no less than excellent. I was so impressed by the first set I decided to stick around for more.

Apparently that Wednesday is ladies night at The Station, free admission and free drinks all night for the ladies, but it gets better. During the break there is a fashion show sponsored by Flirt custom exotic apparel. They're not kidding when they say "Wear the clothes do the talking." This show made the intermission very enjoyable. Guys, you need to check out what the

ladies are wearing and ladies you need to see what you should be wearing.

After the break, Still Rain was back on stage ready to rock The Station once again, but not with cover tunes, they rocked the crowd some unbelievable original music. The songs were high power rock 'n' roll with just a touch of metal. My favorites were "I am Alive," "Blindfold," "Windsorm" and their brand new never-done-on-stage before "Kingdom for a Throne."

Thanks to Mary Anne, I was able to meet the band and get a hold of two killer demo tapes. Still Rain consists of Bevan on the drums, Corey on bass, his brother Clint on guitar, Troy on guitar, and Don doing the lead vocals.

The guys behind the scene are Bob (he doesn't spell it backwards) taking care of the lights, Wes taking care of all the sound mixing, and Dave working the spotlight and also being the guitar tech. These are the guys that bring the show to the crowd.

Still Rain played their first gig December 26, 1989 at the Station,

which happens to be their favorite club. Since then, they have done over 600 shows across the country. They are a band that takes playing music very seriously. Before a gig they don't get trashed and become a bunch of drunks. Instead they exercise or relax before going to work, where they play what makes them happy.

During the stage show they did some fantastic solo spots, including Bevan beating the drums Bonham style, without sticks, and Corey wailing on the bass as if he was doing a lead guitar bit. Speaking about guitars, Clint and Troy are not competing with each other, they are in fact the most in-sync guitar team I have seen. The way they wait together then back-up each other's tricks makes for a sound that is four times better than any single guitar. And of course Don's versatile voice brings the lyrics to the crowd rock and roll style.

Still Rain is definitely an up and coming band. So don't be surprised when you hear their name on the radio or see them on MTV in the future.



Still Rain keeps the heavy crowd rockin' all night long.

## Kevin Welch and the Overtones have released their new album *Western Beat*

By Rick Arkwright  
Overshire Writer

This is the second effort by Kevin Welch and his band The Overtones. It has its moments, but not quite enough of them.

This product of Oklahoma apparently knows his way around Nashville. Having written hits for such country luminaries as The Judds, Ricky Skaggs, and Moe Bandy, you'd think he'd have saved a couple of gems for himself. It ain't necessarily so, at least half of the time on this album.

On *Western Beat*, Welch plows a lot of that traditional country acreage. Lost loves, I don't know if I should fall in loves and love gained through perseverance.

At their best, Welch and the Overtones can cause you to kick up

some dust and feel good. Notably "Happy Ever After (comes one day at a time)" or feel that outlaw spirit while claiming to be "The Realist Kind," a Michael Henderson cover.

These two songs suggest that Welch is familiar with early Eagles and even Creedence Clearwater Revival which he's filtered through a '90s era recording medium.

Strangely enough though, Mr. Welch makes prominent the fact that this album was recorded in analog, that, as he claims "God meant it to be."

On the down side are such atrocities as "Sam's Town" and "I Look For You." The latter being a protracted yawn about trying to find that proverbial love that slipped away, and the former, easily the most annoying song on the album.

"Sam's Town," tells a tale of some gas-jockey good-guy working at the Texaco who comes into big money by way of the oil field in his backyard. Good ol' Sam plows (duh word again), his profits back into the town. That is, 'till the well goes dry, and don't ya' know, his beloved townfolk buy his land back for him. This epic piece of work is delivered in a folksy, I-wish-I-were-Arlo Guthrie style that grated hard and fast.

With the boom in country music that's currently taking place, Kevin Welch will probably sell a fair amount of product with this release.

Rather than spend your money on this uneven album, keep your ears open for the good lyrics that he's farmed out to artist's more capable of doing them justice.

Grade: C-

## The Poster Children hits the scene hard with *Daisy Chain Reaction*

By Rick Arkwright  
Overshire Writer

Poster Children was formed in a dorm in Champagne, Illinois back in 1987. The foursome; Rick, Jim, Rose, and Johnny (no last names given) put out a hippy, trippy hard rock sound that I'd best define as Heavy Trippy, with mixed results.

The album opens on an uninspiring note with "Dee" dirge-like poorly mixed vocals mixed with an unmemorable riff which define the flaws in this band.

By the third cut, "If You See Kay," the band shows what is best about themselves. Music straight from the early 80s with a way cool 90s rave up chorus. In this song they also demonstrate that Rick can

lose off a funny line such as "Why get your shoes shined when you're made of dirt?" No, they're not a happy lot, but who is?

"Love," with it's "you're attractive, I'm attractive, Nothing happens. Nothing ever happens," chorus, might define the young lust of this rightly paranoid generation.

One of the shorter cuts is also one of the best, "Frustration," weighing in at under two minutes, provides another take on the paranoid theme that course through this album. Combining snake charmer metal with the oft repeated mantra, "I am your paranoid king," this fast cut really shows where this bands head is at.

"Chain Reaction," is the crown jewel of this slightly oxidized lara. It opens with a beautifully disso-

nant, Saddam on mescaline guitar attack and is arguably the best track on the album.

Though the aforementioned songs are unqualified successes, most of the other songs are filler or at best unoffensive.

Don't expect immaculate sound quality from these guys. Most of the album is muddily recorded, with the vocals pushed way back in the mix. To the engineers defense, this may have been exactly what the band requested as they proudly state "We never practice the vocals."

I wouldn't rush out to pick up this album, but I would like to see them in concert and I wouldn't mind hearing "Frustration," or "Chain Reaction" on the radio either.

Grade: B-

## 'Slippery when wet' applies to all at Wet 'N Wild

By Roland Houle  
Editor in Chief

Students looking for something to do on the weekends should not overlook Wet 'N Wild in Orlando. In a little over an hour, students can get to the refreshing and fun water amusement park.

There is a large variety of water rides at the park, ranging from leisurely to "hold on to your shorts". If you haven't been there recently, there is even a new ride called the Bubba Tub.

Some of the rides are not advisable for the claustrophobic or for

people with weak hearts, but there are rides for everyone.

The highest and fastest water slide in the world is at this park. This water slide, the Der Stuka, goes down at almost a vertical drop until it levels off. At the bottom, the water pulling your shorts up and giving you an incredible wedgie will stop you, while onlookers laugh at you.

The Black Hole is one of those rides not advisable for the claustrophobic. This two person ride is very fast as it winds through a dark tunnel. You and a friend are tandem on a tube that is shaped like the number eight. The turns in the tunnel come

up very quickly and surprisingly since you can't see them.

The Alpha level ride is another inner tube ride. This is just your run-of-the-mill water slide, but its still worth going on.

The Beta level ride is much better through. On this one, you ride a slide rather than a tube. This gives you a lot more speed. At the end of the ride, after you have been building up speed for the entire trip, you slide across a pool of water until you stop and sink. If you can't swim, don't worry because the water is only about 3 feet deep.

The wave pool, called the Surf Lagoon, can be fun and also tiring. The large pool produces 3-5 foot waves in the deep end. If you have an inner tube, you can just enjoy the waves and float along. If you don't, you can tread water and try to stay above water until you get so tired you must swim to the shallow end of the pool.

While this gives you a good workout, it can also give you a mouthful of water. I know from experience.

If a group of friends get together and the pool isn't too crowded, it can be fun to try to knock each other over with your inner tubes. There's nothing like a little drowning among friends.

The Blue Niagara is another quick ride. The corkscrew-like ride leaves you disoriented and wet. There are two tubes so two people can go down at the same time.

For a break from the fast paced rides, there is the Lazy River. This pool is shaped in a huge ring has a slow current that just pulls you along.

Its only about 3 feet deep, but its cool and refreshing.

The knee boarding ride can be



The closest you can get to white water rafting is on the Bubba Tub at Wet 'N Wild. The ride consists of three twelve foot drops that seem like you are going over a waterfall.

difficult if you've never done it before. A cable pulls you around a pond while you are strapped to a knee board.

If you don't hold on tightly when the cable first pulls you, you will immediately fall off. Even after the initial jerk, there is still a potential to get a mouth full of water though. You are provided with all the needed safety equipment such as helmet and life vest, so there shouldn't be any problems.

The newest attraction at Wet 'N Wild is the totally tubular Bubba

Tub. The Bubba Tub appears to be a simple leisurely trip down a big slide in a raft. Once you make the long climb to the top of the slide, you start your journey down the most exciting ride in the park. The Bubba Tub is the closest you can get to white water rafting without leaving Florida.

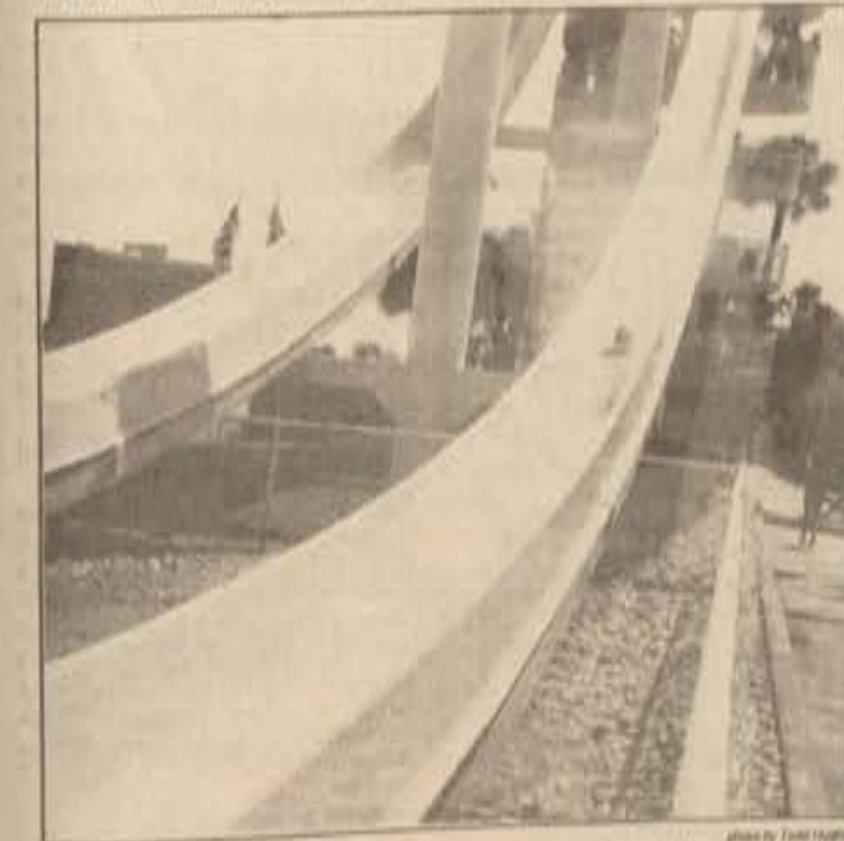
There are other things to do at the park also. There is an arcade and a miniature golf course. Of course there are also high priced concession stands.

Outside the park there are restaur-

ants and convenience stores nearby though.

Wet 'N Wild is located on International Drive off Interstate 4 in Orlando. Most times the park is open from 9 a.m. to 9 p.m. During the day, the lines are long but go relatively fast. In the evening, the lines thin out, and you get to go on a lot more rides.

Arrangements for tickets for anyone of the Embry-Riddle community can be made with the Recreation Department. The all-day group price is \$13.40 per adult.



Der Stuka, the fastest and highest water slide at Wet 'N Wild, will give you a deep thrill.

## Harrison Ford takes character Jack Ryan to great heights in *Patriot Games*

By Boyd Kelly  
Overshire Editor

Well I decided that I would go out and see a good book, so to speak.

I went out and saw the next in the series of Jack Ryan stories, *Patriot Games*. The major difference between this and the *Hunt for Red October* is that the lead character

was switched from Alec Baldwin to Harrison Ford. I haven't decided whether or not this is any detriment to the plot or anything but it does make for a change in pace.

The story opens up in England with Jack Ryan and his family on vacation, while he gives some speeches. One day he gets mixed up in a terrorist attack on a member of the Royal family and ends up saving

the royalty and killing the terrorists little brother who had just been recruited by this Irish Republican Army faction.

The terrorist's name is Shawn Miller and he sets out for the rest of the movie to avenge the death of his little brother. This then leads us on a journey around the world that happens just a little too quickly. This is a good movie but I felt there was a

lot of information that was being left out that could have been useful.

For one thing, if I wasn't from England and didn't know that there was separate factions of the IRA I might have been a little bit confused as to where all this trouble was coming from.

Another problem I had was that this movie had terrorist teams going back and forth across the world from

Ireland to Africa to America without any explanation of how they were getting there.

It seemed like maybe there was a lot of background information on terrorism, the Irish Republican Army, the British involvement, the Special Air Services and some other little quirks.

Other than this, it was an excellent movie and, as always, Harrison

Ford makes a great hero. James Earl Jones once again plays his CIA role very well.

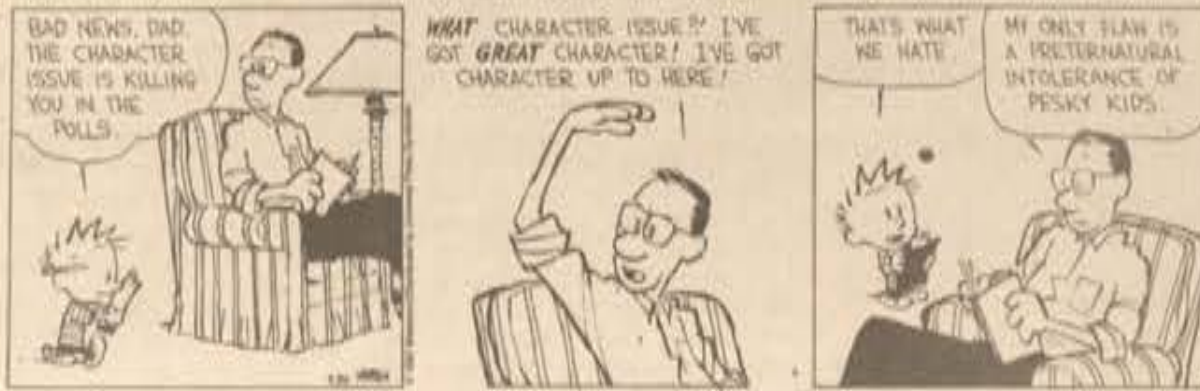
There is a little lost in-between the action sequences, but for the most part this is a good flick and you really couldn't do wrong to go and see it.

Besides, the all day student discount (with I.D.) is more than worth it at the Volusia Square II.



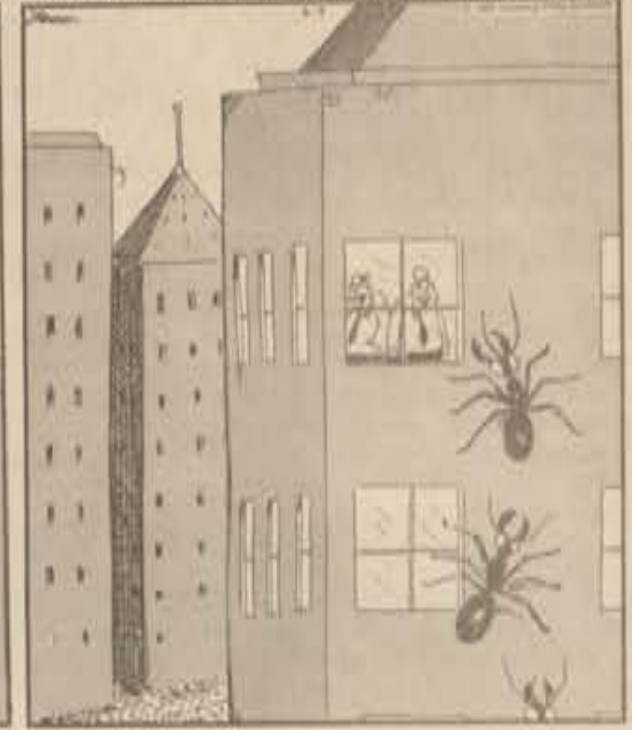
Calvin and Hobbes

by Bill Waterson



Far Side

by Gary Larson



Mister Boffo

by Joe Martin



Mother Goose and Grim

by Mike Peters





## Autos for sale

1982 Firebird - Completely rebuilt and in excellent cond. Blk, PS, PB, cruise, T-tops, tint. High perf. 350 ci engine w/ 350 auto trans. 400 watt Blaupunkt stereo system w/ 10 in. subwoofers. \$4000 Nego. Call Rob 788-6086.

1989 Kawasaki Ninja 250R. Great condition. Well maintained. Asking only \$1500. Call Lou at 226-6565.

## Roommates & Rental

Furnished, nicely decorated, 3 bedroom apartment, new tile bathroom, carpeted, ceiling fans, air conditioner, large open porch off 3rd bedroom, pest control supplied, 2nd floor of two family for non-drinking, quiet living students. \$450 month. Call 254-4730.

Roommate needed, remainder of Summer and Fall. 2 bedroom, 2 bath apartment 3 mi. from ERAU. 247/month plus 1/2 elec. Contact Jon 788-3774, leave message.

Roommate needed starting July 1, lakeside apt. on Dunlawton Ave. Port Orange. Responsible, neat, non-smoker. \$242.50 plus 1/2 elec. and phone. Call Scott or Chuck at 760-9105 or leave a message.

Roommate needed \$190/month plus 1/3 utilities. 1.6 miles from school. Call Chris at 255-2197 or leave message.

Two roommates needed for summer B only in New Smyrna Beach. \$200 monthly and share utilities. Fully furnished, 1/2 block from beach with a pool. Call toll free 1-423-9606, ask for Nathaniel.

## Misc. for sale

Couch for sale, cheap. Good condition. \$50. Call 673-6312.

Amiga 1000 owners: side car. 100% IBM compatible w/ 3 slots. \$295. Call 760-3219.

For sale: 16" 3 speed, oscillating desk fan. \$15 O.B.O. Call 767-6444, ask for Stewart.

Waterbed, king size, for sale. Nice \$95 (nice price). Call Ron now at 756-4244, for limited time only.

Stereo - Fisher hi power amp and tuner, double cassette deck, CD player, 6 disc magazines, JBL speakers. Compact size, large sound! Must hear! Moving, must sell for \$425. Call Curtis at 734-4457.

Super Nintendo - brand new, includes 3 games: Pilot Wings, U.N. Squadron, Final Flight. Also includes nationwide 2 year replacement guarantee. Total cost new \$410 plus tax, will sell for \$300 O.B.O. Call Curtis 734-4457 and leave message or contact box 7522.

For sale: queen size waterbed with padded sides and heater. \$75. Call 266-9922.

RC Plans (5). Call! Must see. W/7 channel FM Futaba compatible radio. \$200. Call 760-3219.

For sale: 3 RC .49 engines and gas and battery and connector. All for \$15 O.B.O. Call 767-6444 ask for Stewart.

Quality SCUBA certification, experienced independent PADI instructor. Open water \$110. Safe Air NITROX and advanced training. Call Jan Neal at 761-2021.

## Miscellaneous

Learn to fly. Primary through advanced instruction at Spruce Creek Airport. Photo and comic flights. Call Mark at (407) 574-5547.

Great way to earn extra income: Modelavia offers a generous income without risk and very flexible hours. A must see opportunity, call now 767-4760 or leave message.

Flight training: Private, Commercial, CFI, BFR, Aerobics, Emergency Manover training. Highest quality at reasonable rates from an experienced instructor at Daytona or New Smyrna. Contact Ken at 760-9265 or leave message.

Getaway vacations: Bahamas or Las Vegas. Hotels, meals, entertainment, tours, plus free casino action. All inclusive VIP Packages group rates are lower than \$15 a day. Call now, sign up, be part of a group. No obligations necessary. Call Jeff: days only, 322-1878.

Embry Riddle graduate offering quality flight instruction at affordable prices. Recreational, Private, Instrument, and Commercial flights and/or ground training. Flight reviews and L.C.C. rides available as well. Call Bill at 352-7336 or ERAU box 1121.

Looking for ride to Embry-Riddle for Summer B from New Smyrna Beach. I will be willing to pay weekly. Call toll free 1-423-9606. Ask for Nathaniel.

## Personals

Always something there to remind me. I just wanted to see you smile. And these things are pretty dull recently. Let me make your life a walking "rubber" room. Pun, what pun. GOOPHIEY

B-RATED SLUM  
You got lucky. I want a rematch!  
KANGAROO

MRS. "G"  
It sounds so good. I'm so happy you accepted. I promise to try to keep you happy. 1-4-3  
Mrs. "G"  
YOUR BUCUNBER OF THE BUDOIR

TO BOB SPIES  
About the \$30 I owe you, I know that money couldn't possibly take the place of this personal ad...  
SUZANNE

TO BANANA MAN  
Thanks for showing my girlfriend a good time! You owe me! (I'm just kidding)  
SUZAN WITH A "Z"

TO BOB SPIEZ  
I love my instructor! Oh yes I'll fly with you! Thanks for your help (I and Banana Man)  
SUZANNA FROM ALABAMA

LCD  
7.6 cm. Need we say more!  
PC

"Reno was an sinless girl, a geographic memory. Carla was a Jesus freak, she liked that kind of misery. Tanya Turkish liked to... while wearing leather biker boots, Julia had a strange obsession for certain vegetables and fruits!"

PC  
Maybe not Nationals, but S.B.O. are going to need body bags when we're through. "Miser? We don't need no stinking marks."  
B FROM ILLIL

J  
Why did you give all these car troubles to me? Keep them next time, would you? They go to N.Y. again. Your car WILL NOT make it this time.  
YOUR MECHANIC

PUSSCAT  
Hope you are feeling better these days. Thanks for helping me with my cat. We will have some fun this weekend. I promise.  
KITTY

Moped Riders Club. Must have own moped, helmet and be 18 yr. old and still a virgin. Contact Howard 788-1421.

### CLASSIFIED AD POLICY

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

Experienced flight instructor. PVT - Multi engine. Fast and enjoyable with someone who cares. Low rates. Contact Larry CFI# 268-9328 or 423-1773 leave message.

Glider rides \$15. Comm. Glider pilot trying to build time, will share expenses with you. Instructor and rentals available. Call Ted 756-4782.

Male round trip airline ticket \$189 west of Mississippi or \$169 east of Mississippi. Leave message and number in box 6917.

Private Tutoring: Need help in Math, Physics or Engineering. I can help you. Call Kenny at 767-0006 or 788-3426.

## Notices

### Attention December graduates

The December 1992 Graduating class has a possible fund raising opportunity during the Firecracker 400 race in July. If you have some free time to volunteer to help out your class, please sign up at the Student Activities Office. Details will be announced closer to the date. Proceeds will be used towards the Senior Class project and party.

If you are not graduating in December, but would like to volunteer, it would be appreciated. Please sign up in Student Activities as well.

### Attention August graduates

We must have a graduation application on file in the records and Registration office in order to evaluate you for degree completion and for the purpose of ordering a diploma with your name properly spelled. Also, as most diplomas will be mailed out, we need a correct mailing address.

The deadline to apply for the August Degree Completion is June 12, 1992. Applications received after that date will be processed after we place our order for the summer diplomas, and a follow-up order will not go out until the end of August.

Any request for Official Transcripts with August 15, 1992 graduation information may not be available for approximately two weeks after the completion of Summer B 1992.

December 1992 graduation applications are being accepted at this time. We will try to process as many as possible with a Preliminary Graduation Evaluation before this term is over.

This may be done at the Records & registration Office located on the second floor of the SC annex.

### Student insurance enrollment

Registration for Summer B is June 24 between the hours of 8:00 a.m. and noon for continuing students. During the registration process, you will have the opportunity to enroll for the student insurance offered by Parker & Parker Consultant and Mega Life and Health Insurance.

The policy provides benefits for 80 percent of the usual and customary charges for loss due to a covered sickness, up to the maximum benefit of \$1000 after the deductible of \$25.00 has been satisfied.

Coverage for Summer B begins June 25 and ends August 28. Coverage is semesterly only. You must renew your enrollment for every semester that you wish to be covered. The student insurance has an open enrollment, unless you wish to have it billed to your student tuition bill. If this is the case, the last day to enroll for the coverage is June 29. If you choose to enroll for the insurance after the deadline, you may do so through the mail. See a Health Service staff member for more details.

Don't miss the opportunity to enroll for the insurance and speak to the Insurance Consultant, Angie Driscoll, face to face. The insurance table will be located in the registration line between 8:00 a.m. and 5:00 p.m. on June 24, 1992.

### Upward Bound program starts

The Summer Program for Upward Bound will begin on June 21 and continue through July 31, 1992. The students will be housed in Dorm 1 on the 3rd floor and will be chaperoned by a staff of 10.

As there will be other programs on campus during the summer, all Upward Bound students will be wearing I.D. badges. If anyone has any problem with an "alleged" student, please contact the Upward Bound staff (Glass Office #8) and it will be handled immediately.

### Weight Watchers meeting

There will be a free informational meeting for the Weight Watchers "At Work Program" on Thursday, June 11, 1992, from 12 to 1 p.m. in the Student Center Conference Room. All students, faculty and staff are invited to this orientation meeting. For more information contact:

Employees - Human Resources  
Students - Student Activities

For your convenience, meetings are held on campus once a week during the lunch hour.

### Attention International Students!

Due to recent changes in the Immigration and Naturalization Service's (INS) policies, International Students are now permitted to pursue off-campus employment.

HOWEVER: there are still certain guide lines that must be followed. If you are currently employed and do not have permission stamped on your I-20, you are out of status.

If you are seeking off-campus employment, please stop by the International Student Services Office to discuss the INS guidelines and employment procedures. Should you have any questions, contact Terrie Davis, Counselor, International Student Services, ext. 6579.

### Avion looking for members

The Avion newspaper is looking for new staff members for Summer B and the Fall terms. If you are interested in any part of the news business, drop by our office of the second floor of the U.C.

# Good luck on your finals!!!

Come Ride The **GRAIN TRAIN**!

Daytona's Most Unique Entertainment Experience!



We're Beachside Next to the MAIN STREET PIER

21 S. OCEAN AVE. DAYTONA BEACH 328-1615

A SPECTACULAR ARRAY OF FROZEN ALCOHOLIC BEVERAGES  
17 DAIQUIRI MACHINES  
Experience the "Wall of Daiquiris"

\*DAYTONA'S MOST UNIQUE ENTERTAINMENT COMPLEX\*

- DOMESTIC & IMPORTED BEERS •
- SUDS AND SPIRITS •
- APPETIZERS AND MUNCHIES •
- POOL TABLES • FOOSBALL • GAMES •
- SPACIOUS OUTDOOR PARTY DECK •

DAILY "POWER HOURS" 6-9 P.M.

WED. & FRI. NITE STORMIN' NORMAN & THE KARAOKE SING THING 8 P.M.

REGGAE ON THE DECK SAT. & SUN. 1 P.M. WITH MATTOCK INTERNATIONAL "PARTY REGGAE BAND"



## Collision

(continued from page B2)

The Cessna 182's pilot, Mike Grady, suffered a broken leg and was taken to Suburban Hospital where he is listed in serious condition.

One man, George Senseman, said

Seaman used the phone in his truck to call for help. Senseman said Seaman told him one of the aircraft was being ferried back to the Montgomery Airpark in Gaithersburg, Md. from the Eastern Shore.

The Aircraft Owners and Pilots Association, based in Frederick, said in-flight collisions are rare in the United States, resulting in only 239 such crashes from 1979 to 1988. Of those in-flight crashes, 135 involved one or more fatalities, the association said.

All Airports, Trains & Buses

## A D.U.I. can end your career

Let us be your Designated Driver

### Special Package Deals

Dorms to Beachside (Seabreeze) 3-5 people .....\$8.00  
Dorms to Beachside (Seabreeze) 6-10 people .....\$10.00

Give us a call we can make you a deal

2nd Avenue Cab  
253-4331

East Coast Cab & Shuttle  
238-4044

All Attractions



# Monday June 22

All College Students, Faculty & Guest With ID

# Stress Relief Party

5pm - 8 pm  
**FREE PIZZA**

with BEER or SHOOTER PURCHASE

Live Reggae

Free  
T-Shirts

Free  
Squeeze  
Bottles

Door  
Prizes

Free  
Hats

\$ 1<sup>00</sup>

Natural Light  
Drafts

Jim Beam  
Shooters

All Night Long

Checkettes

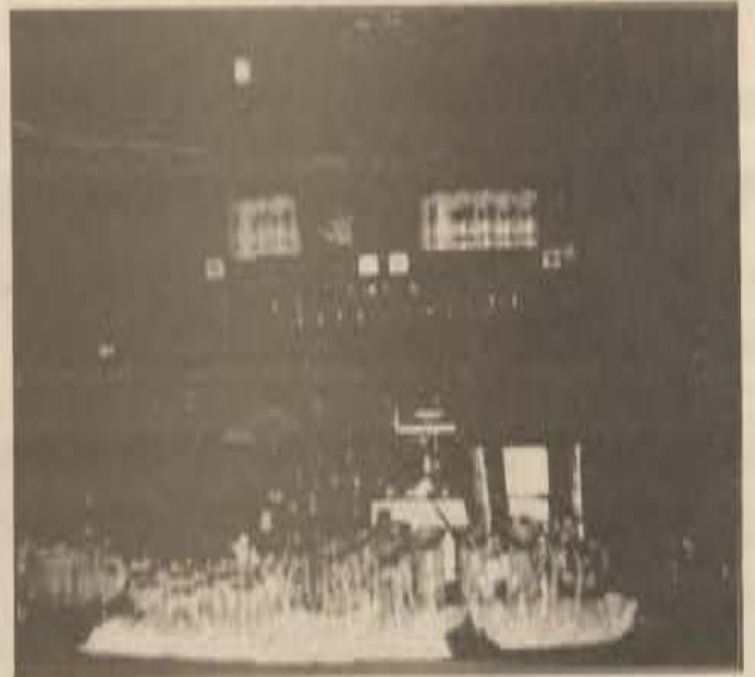


Lots of Freebies



Broadway & A1A

Checkers



## 99.9 FM



## JIM BEAM

## Natural Light BEER

