

10-31-1990

## Avion 1990-10-31 (B)

Embry-Riddle Aeronautical University

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# Atlantis and Columbia are go for launch



Shuttle tested thoroughly...

Space Shuttle Columbia has finally passed a tanking test which revealed no hydrogen leaks and will be scheduled for an early December launch.

by Jose Luis Vazquez-Deigado Jr.  
Space Technology Editor  
NASA officials and Department of Defense (DOD) managers agreed yesterday on November 9 as the target launch date for the next mission, STS-38. This mission will be dedicated to DOD and will fly with space shuttle Atlantis. A window of four hours will start at 6:30 p.m. EST.

The decision to resume with the delayed launch followed the STS-38 Flight Readiness Review (FRR) at the Kennedy Space Center (KSC) that took place last Monday and Tuesday. A special tanking test was conducted on October 24 which Atlantis passed with flying colors. The test was designed to assure the absence of significant liquid propellant leaks, both hydrogen and oxygen.

Atlantis will soar to the sky with a classified payload and a five man crew. Richard Covey, Air Force, will command the mission while Frank Cul-

bertson, Jr., Navy, will be the pilot. Carl Meade, Air Force, Robert Springer, Marine Corps, and Charles Gemar, Army, will serve as mission specialists. All except Covey and Springer will fly into space for the first time.

On the same note, space shuttle Columbia, which was prepared for one of the most elaborate tanking tests ever conducted at KSC, also passed successfully. The test occurred yesterday in an effort to find any leaks. The orbiter has at last been cleared for launch by the end of this year. The Rotating Service Structure (RSS), which covered the orbiter after roll out to the pad and which was rotated back Monday in preparation for the test, will be rolled back to cover the orbiter today.

The tanking test consisted of loading only liquid hydrogen into the orbiter's main propulsive system at slow-fill and fast-fill rates.

For the first time, cameras were installed in

Columbia's aft compartment to help locate any leaks. Other instruments, such as 17 hydrogen leak detectors, several flowmeters and thermocouples, were also installed in various areas and valves in an effort to pinpoint leaks.

Columbia was originally scheduled to fly with its Astro-1 payload on May 29 of this year, but high hydrogen concentrations in the aft compartment prevented the launch. After a first tanking test in June, various roll backs to the Vehicle Assembly Building (VAB), a launch pad change and three other unsuccessful launch attempts, it seems other unsuccessful launch attempts, it seems Columbia, mission STS-35, will finally ascend to the heavens in December.

It appears that as 1990 reaches an end, NASA will attain full flying status with three functional orbiters. Morale is bound to intensify, and maybe 1991 will outshine 1990, after all, how much more does it really take to have a worst year?

## Space news...

**Spotlight on Wilber...** The Hubble Space Telescope is scheduled to focus on Saturn's newly discovered "Wilber Spot". It was named after Stuart Wilber, an amateur astronomer who discovered it on September 24. On October 1, Saturn's "Great White Spot" was over 10,000 miles across. Twenty-one hours later it had grown an additional 2,000 miles. On October 25 the spot had a diameter of over 50,000 miles, larger than Jupiter's "Great Red Spot" and well over five times larger than Earth. The spot shows characteristics of having raised features and seems almost fluorescent in appearance. This is the first Saturnian event of this magnitude since 1033 when astronomers reported a similar phenomenon.

Hubble's observing times have been carefully chosen because Saturn's rapid rotation is making the angle of observation constantly smaller and observations progressively more difficult.

**NASA holds talks on quality and productivity...** The seventh annual NASA/Contractors Conference on quality and productivity took place in Grenelle, Fla. (near Orlando) on October 24-25. The conference featured various panel discussions on the importance of commitment and leadership in implementing Total Quality Management (TQM) within the NASA team and the aerospace industry.

Also, the 1990 Excellence Award recipients were announced. The excellence award, renamed the George M. Low Trophy by NASA Administrator Richard H. Truly, recognizes NASA prime contractors, subcontractors and suppliers for outstanding achievement in quality and productivity improvement and total quality management.

The award recipients were Rockwell International Space Systems Division, Downey, Calif. and Marotta Scientific Controls, Inc., Montville, N.J. Rockwell's Space Systems Division provides products and services ranging from production of the fifth Space Shuttle orbiter to existing orbiter refurbishment. Marotta provides critical valves and systems for NASA flight vehicles, launch pads and engine test facilities.

**Discovery goes through post flight inspections...** Space shuttle Discovery is still going through post flight inspections after its long voyage last October 6. Residual hypergolic propellants have drained from the orbiter. Preparations will begin to remove the right orbital maneuvering system pod and the forward reaction control system. Both vehicle components will be transferred to the Hypergolic Maintenance Facility.

## Mission to explore the red planet is go

by Russell E. Darling  
Space Technology Writer  
Mars was named by the Romans after their god of war because of its blood red color. It has long been the source of wonderment for the people of planet Earth.

Although many scientists and engineers have been planning for manned missions to Mars for some time, NASA has not yet committed to any plan. A Moon/Mars project, now

The first Mars mission will be the Mars Observer, which has a definite launch scheduled for September of 1992. Its primary mission objectives include mapping Mars' distribution of elements and materials, and conducting studies of the climate. The observer will carry a variety of scientific instrumentation packages which should provide some valuable information about the red planet.

**The first Mars mission will be the Mars Observer ... scheduled for September of 1992.**

called the Human Exploration Initiative, was formally set forth in a speech by President George Bush on July 20, 1989 (the 20th anniversary of the Apollo 11 moon landing). In the speech President Bush stated: "Our goal: to place Americans on Mars and to do it within the working lifetimes of scientists and engineers who will be recruited for the effort today."

NASA has set an aggressive timetable for the Human Exploration Initiative, with the eventual goal of placing a human on Mars. Several mission scenarios have been discussed. These include utilizing the space station as a spaceport, establishing a Moon base then going on to Mars, and going directly to Mars.

The next major U.S. mission is the Mars Network Mission in 1998. This mission involves placing

10 to 20 experimental stations on the Martian surface to collect seismology, meteorology, and surface imagery data. On the way to placing the stations, the spacecraft will collect valuable data that is needed before a human mission can be undertaken. This data would include information on landing hazards and the upper atmosphere.

NASA scientists and engineers at Ames Research Center are already testing rover prototypes for the Mars Rover Sample Return mission, which is tentatively set to take place in 2001. The rovers will be equipped with electronic topographical maps of the Martian surface and several cameras



Mass transportation...

The proposed Mars rover, designed by NASA, would be automated and possibly utilized for an international Mars sample collection venture.

which would serve as "eyes." Artificial intelligence would be used to guide the rover to its objectives while avoiding obstacles on the planet's surface. The rovers would then gather samples to be returned to Earth.

NASA says that another important part of this mission will be to "flight test technologies that include aerocapture and aeromaneuvering, hazard avoidance for landing, auto-

matic rendezvous and docking, and overcoming the long communications delay time."

Before actually sending humans to Mars, there are several options to be considered and several obstacles to overcome. These unmanned missions will provide the information to make the decisions that will allow the U.S. to achieve the goal of placing Americans on Mars, set forth by President Bush.

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Behind Wags

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# The Avion describes the day the circus came to town



**Welcome to the show...**  
Inside the big top, the Clyde Beatty Circus began with the death-defying lion tamer and his ferocious felines.

by Hoyt E. Brown  
Aeronautics Editor

On the outset I was a bit skeptical. "The circus," I said, "Why do I have to go to the story on the circus?" I went anyway, and now I'm glad I did.

Before I walked into the big tent I still had my shield of resentment up. After all I am a college senior. I'm not supposed to like circuses anymore. This shield was put away once I stepped out of the bright sunlight, and into the darkness of the big top.

While waiting for my eyes to adjust to the darkness, I let my sense of smell take over for awhile. The sense of smell is a strong one, and one that tends to bring back the most memories of my early childhood. From the moment I stepped into the tent I could remember what going to the circus was like. There was the smell of the big elephant giving rides to small children, the musty odor of the tent, and the lingering aroma of all their popcorn and hotdogs the vendors were carrying around (and trying to make me very hungry).

Once my eyes finished adjusting to dimness of the tent, there were the sounds that I had forgotten about. The chanting requests of the roving vendors. I can still hear them, "Ice cold Coke!", "Cotton candy, folks!", "Hey! Ice cold snow cones!", and "Popcorn! Get your popcorn here!" (Where have I been all these years?)

This I had noticed all before the show started. You could feel the excitement and anticipation of everyone under the big top. There were parents with their small children hoping to make their little ones first circus experience as memorable as when they had been kids.

The show is getting ready to start

now, the house lights are coming down. A man with a loud booming voice announced over the loud speaker, "Ladies and gentlemen, boys and girls! Welcome to the 106th edition of the World's Largest Circus under the Big Top! Presenting the Clyde Beatty-Cole Bros. Circus."

The Ringmaster walks in under the fanfare of the brass band playing in the background. Jimmy James is a large, rolly-polly and tastefully attired man in red tails with his Ringmaster's whistle in his mouth. He blows it loudly to let everyone know the show

will be beginning now. The children (young and old alike), start perking up as the performance begins with James singing the tune "Consider yourself one of us!"

"The Circus is on parade" is the first item on the program. The performers strut their stuff around the circus rings. There are the performer's dazzling costumes and the trained attention of all the animals. "The clowns, Mommy, look at the clowns!" There is a girl on a trapeze swinging gently high above the ring. Here comes the elephants, walking trunk to tail around the big tent. Makes you wish you could run away and join the circus.

The first performance on the program is the Amazing Josip Marcan's wild cats. Touted as the largest assemblage



**Dangerous stunts...**  
Acrobats hung from teeth, outstretched arms and motorcycle parts

is riding on the back of a lion.

"Aerial perch perfection" is the next item on today's agenda. High above Rings One and Three, the La Gills and the Kristos Duo perform feats of aerial artistry and tantamount talent in marriage of athletics and artistry. They're up there doing things up there that would make a pilot acrophobic.

A little closer to the ground, amazing, extra-human tricks of balance. Imagine balancing another person on top of your head. Now imagine doing it with a pair of large dice between you and the other persons head. How about supporting another person weight with only the strength of



**Premier pachyderms...**

The circus' chorus line of trumpeting beasts reminds one of the cafeteria at feeding time.

your toes, throwing the other person into the air and catching the other person who is now standing straight up using the bottom of your foot as a floor.

For those who love the divine grace of horses, the next act was for you. The Bale Sisters' trained Arabian Liberty horses are presented in a review of an equestrian procession. These Arabian thoroughbreds perform a majestic pageant of choreographed concentration around the tents outer rings.

Next, everyone's favorite, it's the clowns! Who can't help but to laugh at the troop of pranksters with all of their wacky tomfoolery. The slapstick comedy of these fools with the painted faces leaves a smile everywhere. The big goofy looking clown is persuaded to get into "Ye Olde Reducing Machine" and, with the audiences help, at the count of three he is supposed to exit slim and trim. Then at the count of three there is a bang, and the fat clown comes out not slim and trim, but as a midget.

The "Perch Pole Prodigies" perform a unique show of strength, endurance, and experience all high above the tent floor. It would make an engineer proud.

Ron and Mitzl Iron Jaw, perform the unbelievable, hanging onto a suspended chandelier with only the strength of their jaws to hold themselves up and from falling to the ground below.

The performing bears of Rex and Ingrid Horton are next on the program. These bears are great. Some of their tricks make you wish you could take one of them home with

you. They're so playful and cuddly. They've even trained one to ride a motorcycle and another can play basketball with its trainers.

Intermission is next. This gives everyone a chance to stretch their legs and get some more snacks. It also gives me the chance to wander over to the far ring and talk to some of the clowns who are signing autographs for the children. Guggles, a younger man in his first year as a clown, I asked him why he joined the circus, he replied, in a non-clown-like way, "I always loved the circus as a kid, and this was the only way I knew to get in". I then asked Guggles what he liked about being with the circus. "The

travel" was his answer. On the other side was the midget known as Li'l Dave. Li'l Dave Williams has been a professional clown for six years. He told me that he had ran away from home and saw a help wanted ad in the paper. On his first day with the circus Li'l Dave helped with the tent crew, the next day he was given the job as clown and has been doing it ever since. I asked Li'l Dave what he liked best about being a clown. "The intermission is the best part. Meeting the kids one-on-one, it's great. I like the ones who aren't afraid". Li'l Dave told me that he had a lot of problems with his parents before he joined the circus, but now that he has moved out on his own has helped to work things out between them. The second half of the show starts with the juggling acts in all three rings. Now high above the floor, almost to the top of the tent, is the La Kristos Astrocycle. Perched on a thin inclined wire, is a specially modified motorcycle with a perch underneath. The cycle roars up and down the wire while a woman twists and balances on the perch. The last act before the finale, is the "Mammoth Monarchs of Asia", the trained elephants under the command of Captain Fred Logan and Family. 35 tons of majestic mastodons performing to the crowds delight. The finale is a festive reunion of the entire troop of performers in a star-spangled salute to the kids in all of

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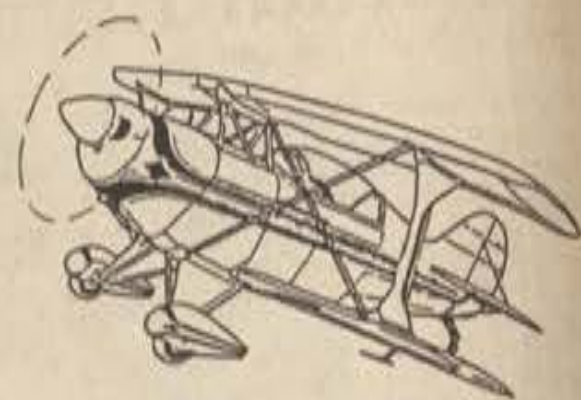
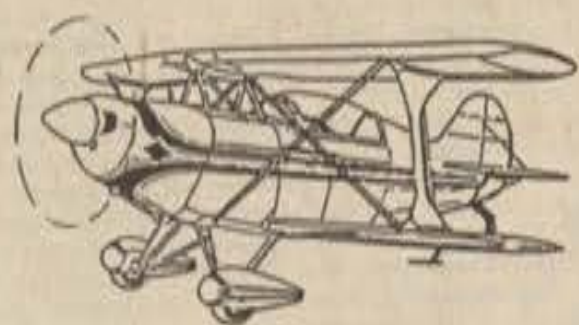
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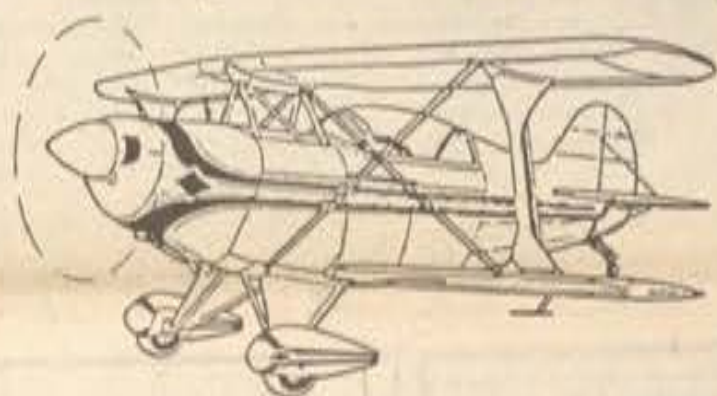


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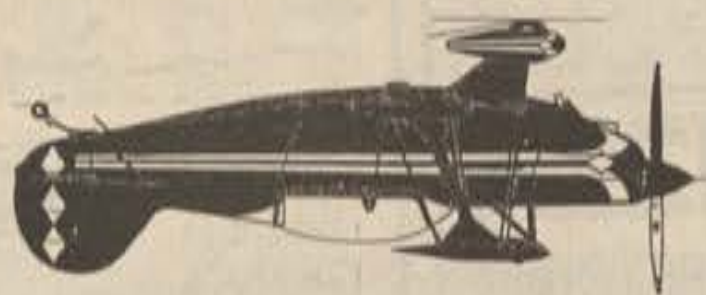
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# Welltris adds new dimension to popular computer arcade game

by Prof. J. Roger Osterholm  
Advisor

Imagine looking down a well that has four sides sloping down to the bottom. This is the image of playing the new game called *Welltris*, billed as a product of Russian Glastnost.

Recently given a copy of the new game, I immediately tried it and found it an excellent pastime. I was pleased that even the manual was usually clear.

I have hardly played *Tetris*, the earlier and simpler version of the geometric puzzle, but much prefer this newer three dimensional version. I think it is easier, although more complex.

*Tetris* is a game in which one tries to drop various shaped blocks and lines or angles of blocks down one wall to the floor and pile more blocks on top of each other without leaving an open square.

*Welltris* is similar, except the blocks descend down four walls to a base below, and you do choose which side to let each block slide down. That is what makes it easier. And instead of piling blocks on top of others, you try to get them to slip together at the bottom without leaving an open square as you look down at them.

A "block" may be two attached squares in a line, or three or four with an angle, like an L or a plus sign with one of the arms cut off. So far it is like *Tetris*, but then the four sides and the well bottom come in.

If an L-shaped block begins to descend, you can hit the K key to turn it into the best position, and then use the direction cursors to move it into the best position, and then use the direction cursors to move it around usable walls. This means that you can drop down an adjacent wall and have more opportunities to place it in a better position to attach it to previous blocks without leaving an open square.

Unfortunately, often one to three walls become unusable, at least for a turn or two, whenever a square of a block is stuck on the wall. If you have pieces stacked up on all four walls, they all become unusable and the game is over, then you check your score.

After two or three games, you should be able to avoid an embarrassing score.

The goal is to have as many blocks as possible slide down into the bottom of the well without any squares stacked on the sides. When a solid line is full at the bottom, that line disappears beneath the visible bottom of the well, opening space for more squares. The more lines of the squares you can "sink," the higher score. The score also increases with the levels of difficulty selected, the speeds chosen and the higher the

position at which you let go of a piece to drop into place. The manual states that the piece come even more complex at higher levels of difficulty, but I am waiting for that till I get the level working well!

*Welltris* was designed by Alexey Pajitno programmed by A. Snegov, Russians delight in their new fame in the West. American version comes from Spectrum 1 Byte of Alameda, California, and copyright trademark owned by the company will quaint name of Bi Proof Software. Paj also designed the *si Tetris* video game.

Glastnost comes in the accompan graphics of scenes of sia, and the codes to l a game are based o capitals and square miles of various S republics. The scenes are excellent.

The version I played was made for an IBM or Tandy computer with at least 256K RAM a monitor of 16 colors. It comes in both 5 1/ 3 1/2 inch diskettes.

Try it. You'll love it. It can become addi Just do not let it interfere much with your st (Next week we return computer games t regular reviewers, who know better what th talking about.)

**The goal is to have as many blocks as possible slide down into the bottom of the well without any squares stacked on the sides.**

# Do you really want to improve your Grammatik?

by Roland Houle  
Data Technology Editor

With the introduction of word processors years ago the letter writing capabilities of the average person has vastly improved. Word processors allow users great power to correct their mistakes, including spelling errors and formatting. However, the largest area open for mistakes in word processors lies with grammar. Reference Software, however, has a grammar checking program called *Grammatik IV* which will help close this gap.

*Grammatik IV* can be used with most word processors and in two separate ways. One, it can be loaded in from the DOS prompt and then files can be brought into it.

The second way, which is much more convenient, allows you to run *Grammatik IV* while in your word processor. Instead of running the word processor in the usual manner, you run a program from *Grammatik IV*, which in turn, runs the word processor.

This basically creates a shell that your word processor can run in. It does not interfere with the running of the program in any way.

When you are done composing your masterpiece, you can hit a series of key strokes, and *Grammatik IV* starts checking your work.

There are several items *Grammatik IV* is capable of checking. It can examine the structure of sentences, whether the verb tenses are the same and if words are repeated, capitalized wrong or spelled incorrectly.

*Grammatik IV* will also prompt you when paragraphs are too short or too long.

After its check, the program will give you the length of the file and more importantly, what the reading level of the file is. This can range from elementary to higher education.

The program can even be customized to your needs. For example, you can add words you would use often, such as your name or Embry-Riddle. Also, it can be customized to a set reading level.

If your grammar problems are turning your \$1500 computer and \$400 word processor into a waste, you have a choice. You can take an advanced humanities course or spend about \$40 and buy *Grammatik IV* by Reference Software.

# Soviets challenge Tetris players to round three

by Joe Cambron  
Managing Editor

Spectrum HolyByte, the maker of *Falcon AT* and *Tetris*, recently released the third installment in its IBM computer/compatible TRIS series.

*Faces* is an educational game that is both challenging and different from the earlier *Tetris* incarnations. The player's purpose is now to construct the "faces" of famous people throughout history. This is accomplished by placing a chin as a base, followed by lips,

nose, eyes and hair. Like *Tetris* the pieces fall from the top of the screen and must be placed horizontally before they reach the pieces below, but they are now essentially uniform in shape. The challenge is now two-fold.

Not only must faces be constructed in a specific order, but two pieces fall simultaneously. For instance, Margaret Thatcher's mouth may fall beside Mao Tse Tung's nose. Both pieces move together

as they fall. Four pieces make up the width of the screen, so the two pieces (with a space between them) may only move one space to the left. Like all the TRIS series, when a stack of pieces reaches the top of the screen, the game ends.

**The game is difficult and different enough to keep the Tetris junkies stymied for a while.**

Keeping the game from being impossible are three factors. First, the two falling pieces may be exchanged before they hit another piece by pressing a button. Second, pieces from different faces may be used together to complete a whole face. Therefore, a completed face may comprise the mouth of the Mona Lisa, the nose of Gorbachev, and the hair of Einstein. Your contorted concoctions appear at the left of the screen after they have been assembled. There is not time to admire your handiwork, however.

Finally, if one piece impacts with another, the remaining piece is freed. Similarly, if a tower of

pieces separates your two pieces, one piece will be able to move independently.

Once a screen is completed, this is tied to the number of completed faces. Different levels bring modern world figures, faces from art, scientists, musicians, historical Americans, literary figures, monsters, American holidays, and historical figures. If the 60 included faces are not enough of a challenge, and they will be, additional faces may be entered in Deluxe Paint format.

Other features encourage competitions through tournament options, and play over a modem is also supported.

The game's copy protection scheme is somewhat cumbersome, requiring a correctly answered question from the manual with each session.

Sequels are not necessarily old hat and this is no exception. The game not only provides a decent variance of the old building block concept, but enhances it with 256 color VGA graphics and AdLib synthesizer music. The game is difficult and different enough to keep the *Tetris* junkies stymied for at least a while.



Fractured faces... Holobyte's *Faces* becomes the third *Tetris* installment.

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### Wednesday: Margaritaville

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Notices

Graduating seniors need exit interviews

If you were a graduating senior who was awarded a student loan as part of your financial aid package while attending Embry-Riddle, Federal Regulations require you to complete an Exit Interview prior to leaving the University. If you received money from the Stafford/GSL programs ONLY, require a separate Exit Interview session to be scheduled through the Financial Aid Office. Further information will be provided at a later date. If you received a Perkins/NDSL or REAL loan alone or in conjunction with a STAFFORD/GSL loan you are required to complete a EXIT INTERVIEW through the University Collections Office.

These EXIT INTERVIEWS provide important information concerning the repayment of these loans. It is important that you complete these EXIT INTERVIEWS if you are a borrower of multiple loans were the terms of each loan differ. It will be necessary for you to know in advance how entering into "multiple loan repayment" will effect you.

Please contact the University Collections Office at 239-6040 to schedule your appointment for an EXIT INTERVIEW.

The schedule for the current semester meetings will be as follows: Monday, November 5 at 3:30 p.m.; Tuesday, November 6 at 10:00 a.m.; Wednesday, November 7 at 3:30 p.m.; Thursday, November 8 at 10:00 a.m.; Friday, November 9 at 10:00 a.m.

These sessions will be held in the John Paul Riddle Student Center (located at the main entrance of the University Center.) If you have not yet scheduled an appointment please do so immediately. Be advised that a hold will be placed on your cap and gown for graduation until you have fulfilled your exit interview requirements.

Space Courses will be offered

The Department of Aeronautical Science is introducing a series of space courses this spring with Planetary and Space Exploration, SP 200. The second and third courses will be offered in the summer and fall terms of 1991. These are three credit courses and satisfy AS electives for the Aeronautical Science major and numerous other majors. This course will be limited to one section and will be available to any student interested who satisfies the prerequisites.

SP 200 Planetary and Space Exploration will meet Mondays, Wednesdays, and Fridays from 12:30 to 1:20 p.m. The prerequisites will be PS 103 or PS 102. The instructor will be Erickson. The course description states: This is a survey course of U.S. and foreign space and planetary exploration programs and the scientific benefits of the past and future exploration programs. The level is introductory physics.

The two Space Studies courses that are scheduled for the summer and fall 1991 term are respectively, SP 210, Space Transportation System and SP 215, Space Station Systems and Operations. These are also three credit courses and limited to one section each. A total of eight courses are proposed for a Space Studies program with the first three approved for introduction in 1991. The five other courses are in the approval stage. The two courses being offered in the summer and fall terms include SP 210 Space Transportation System, given in Summer term of 1991. The course is three credits with prerequisites being PS 103 or PS 201. The course description states: This course will introduce the Space Shuttle operations, missions, systems, training operations, and commercial applications.

The other course is SP 215, Space Station Systems and Operations and will be offered in the Fall 1991. The course credit is worth three credits. The description reads: Space Station Freedom planning and operations will be surveyed in this course. The general space station concepts will also be introduced for past and future systems.

Several of the future Space Studies courses, if approved, will have a mathematics prerequisite, Space Math, MA 111 if you may want to sign up for this mathematics course, offered in the spring terms (including this spring 1991 term). For more information on these courses contact Dr. Erickson at ext. 6474 or the Department of Aeronautical Science.

Pilot exams to be given

Embry-Riddle Aeronautical University will administer the FAA Pilot and/or instructor written examinations for the following dates: November 9, 10, 13, 14, 27, 28. The times will be 9 a.m. and 1:30 p.m. in G-105, GRW Complex for the above dates.

Students intending to take an FAA Pilot Written Examination are required to sign up in office H-119 or call extension 6830 prior to examination day.

Deadline nears for Leadership seminar

The Student Activities Office is still accepting applications for the Stu-

Worthy editorials

To the Editor,  
I feel sorry for all students who have to read the Avion at Embry-Riddle each week. The paper in general is an asset to the University, but the editorials make it almost not worth reading.

Our university has lost many students due to the poor attitude portrayed of the university by the editors of the paper. So many students start out with enthusiasm and then leave the university or join the local "DO IT THIS WAY TO BENEFIT ME" group. Think about it. How many people do you know who sit around complaining about the system, but never get involved and help fix it.

Joining this group would not be so bad, but sitting around just using hindsight all the time would become very boring and not very productive. There are some excellent visionaries at the Avion whose hindsight far exceeds the average student.

The main problem with the editorials is that they are mostly one sided and lacking any fact. However, considering the caliber of writers on their staff it is understandable why the quality of writing is somewhat equal to the National Enquirer.

If you read the editorial in the October 24th issue of the Avion by Mr. David Fekke, you will quickly notice that the words above are in fact Mr. Fekke's, with the word Avion replacing the words Flight Department. In both cases, Mr. Fekke's words are fiction. He obviously has very little knowledge about the actual workings of the Flight Department, nor did he do the homework required to write an editorial on this subject.

Mr. Fekke is quick to throw figures of 1500 flight students and

only 300 can be accommodated. Now, as Paul Harvey would say, "The rest of the story."

A tremendous amount of information and experience goes into the number of flight students the department can handle each term. These factors include the number of aircraft available, the number of instructors available, the average length of each course, and of course, the most predictable factor of all, weather. Historical reports are kept from previous terms regarding other factors such as average aircraft maintenance time, average days of sickness by both students and instructors, average number of no-showed activities, and the average number of weathered flights. All of these factors are considered by the administrative staff of the department and a crucial decision is made on the number of flight students in each course. This decision determines how economically the department can operate and keep the cost of flight to a minimum.

I wonder if Mr. Fekke realizes that if he were running the department and could only accommodate 300 students per term, as his story implies, the cost of a flight course would be four or five times greater than the current rate. Think about that for a moment. In order to provide his "Benefit Everyone Perfectly World," all of the current staff and equipment would be needed along with the normal support provided by the university in general. Now, divide all of the costs by 300 students instead of the 1500 students and you can easily see how it would cost so much. Fortunately, Mr. Fekke does not run our flight department and Embry-Riddle is able to provide 1500 students a

pilot exam fee, validated by the Cashier's Office; a written authorization form signed by an appropriate Aeronautical Science Department Ground Instructor, or the failed results of a previous FAA Written Examination, and present as personal identification and Airman Certificate, driver's license, or other official document.

Explanation of appropriate forms and procedures will be given. Immediately thereafter, testing will commence and unless prior arrangements have been made, late examinees will not be permitted to enter the examining area while testing is in progress.

dent Leadership seminar held each semester. If you are interested in learning leadership skills that can help you in the future, please stop by the office in the front of the Student Center for more information and an application.

quality academic education for a reasonable cost. Of course, Mr. Fekke will learn about fixed and variable cost before graduating when he attends his required business management course.

Apparently Mr. Fekke does not understand why he is attending college. He is here to learn how a professional person handles situations in their chosen career. Let's take a look at the ideas he presented in his editorial.

One, he thinks everyone should be able to start a flight course when they want to. Two, he does not like to conform to a dress code. Three, he feels that information designed to help him become more knowledgeable in his chosen career is not necessary even if presented in a different format.

Now let's put him in his chosen profession and see how well he does. One, what will he do if he is number 45 for takeoff in New York with a one hour taxi to the active? Will he demand that everyone stop flying so that he can take-off? Two, I'm sure that his airline employer will not mind if he wants to wear Bermuda shorts and a flowered shirt on his trip to San Juan so he will be in style when he arrives. Yet regardless of what he is wearing, he will still need oxygen to take care of his hypoxia problem. Three, this same airline employer will certainly excuse him from all re-current training when he explains that he has already been trained and can remember enough to fly company aircraft.

What can we all learn from all this? Certainly there are some positive issues which can be reflected here:

1. There always has been, and always will be a delay to get a quality flight education at a reasonable price. Live with it or

settle for lower quality. No one has ever been forced to change degree programs.

2. There is no perfect system anywhere! Every step in life always has been and always will be a give and take situation. A person's maturity level is measured by how well he or she learns to give and take in a professional manner.

3. When someone creates a situation which you perceive to be incorrect and possibly rude, stop and take a look at the whole picture. If you want the system to change just to benefit you at that time, then you are the inconsiderate to the majority (or rude as Mr. Fekke would say). It would be wise to consult the following people to assist you in understanding the whole picture.

- a) Rude Instructor...consult the Training Manager
- b) Rude Training Manager...consult the Dept. Chairman
- c) Rude Staff...consult the Immediate Supervisor

Hint: When consulting, just state facts and do not accuse anyone with wild, exotic expletives. Remember, until you are familiar with the whole picture, you may be incorrect due to circumstances of which you are unaware (and considered rude by Mr. Fekke's definition).

4. Get the facts from reliable sources (see who to consult above) and listen carefully. You may learn something. Make your own decisions based on factual information and use a professional attitude when discussing your opinion.

Respectfully,  
Chip Hough  
Flight Supervisor



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