

9-28-1977

## Avion 1977-09-28

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Volume 27, Issue 3

EMBRY-RIDDLE AERONAUTICAL UNIVERSITY

SEPTEMBER 28, 1977

# STUDENTS ELECT NEW S.G.A.



A concerned student ponders his choices as he fills out his ballot. (Photo by Paul Hansen)

In one of the strongest attempts to improve student involvement in the S.G.A., this past Wednesday, September 21, saw Bob Allen and Al Graves challenge Smokey Stover and Mike Jaworski to a presidential debate. Moderated by Marty Keller, the debate was held in the U.C.

The panel consisted of six students chosen to represent both sides. Following 30 minutes of questions to the presidential candidates, the panel then asked questions of the V.P. candidates. There after questions were accepted from students in the audience.

Thursday, September 22, was the election. After a minor argument, it was decided by the election committee to have only one voting booth. This was located in the U.C. lobby, and manned by Quad A, and Vets Club members. After the voting closed at

5 p.m., the votes were counted giving the Bob Allen/Al Graves ticket the election by a count of 392 to 319.

The results of the Senatorial race were as follows:

Senators at large:  
Thomas Campagnola  
Mark Lyons

Senators from the College of Aeronautical Studies

Patricia Neuzil  
Paul Varns

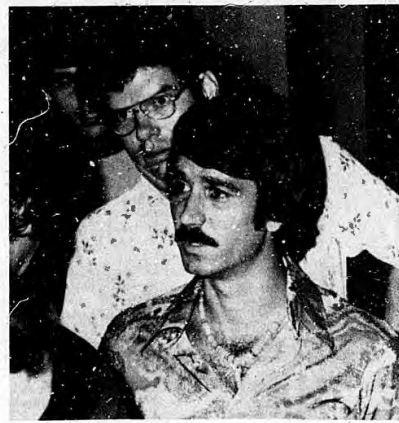
Paul W. Strack  
Steven Rice

Senators from the College of Aviation Technology

David Gallagher  
Kevin Keenan

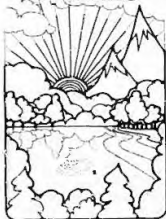
David Schreiber  
Thomas J. Reres

Monday afternoon, Sept. 26, was the swearing in ceremony. Jim Ward officiated, thus bringing a new administration into the office of the Student Government Association.



Bob Allen is surrounded by friends and questioners after the debate. Bob can be found most mornings taking care of S.G.A. business in the S.G.A. office in the University Center. (Photo by Paul Hansen)

## NOTICES



WANTED: Secretary/Treasurer for Student Government Association office - 9:30 - 4 p.m. 5 days a week. Total responsibility of secretarial and financial functions within the S.G.A. Contact Bob Allen, S.G.A. office ext. 400. for an interview.



Debate Panel listens as a candidate answer a question. Marty Keller is seated in the center. (Photo by Paul Hansen)

YOU CAN WIN A PRIZE FROM THE AVION

If a quarterback throws a football during a football game, is the football considered an aircraft and is the stadium an airport, and is the receiver an air carrier? Read you FAR's and think about it. BEST ANSWER WILL BE PUBLISHED IN AVION AND WINNER WILL RECEIVE A FREE PIZZA COUPON FROM PAPPY'S.

## Flight Technology Gets New Hangar

By Paul Woodsum

This new trimester is bringing several changes to our school's curriculum and environment. You might have noticed some added activity across the ramp where the DC-3 and Viscount are. Flight Technology is now located in a hangar that Embry-Riddle

owned when first here at Daytona Beach. The change of location is an example of how much Riddle is growing. Bob Miller, Flight Tech's department head, states clearly that the new location will give the entire university a chance to grow together, not separately.

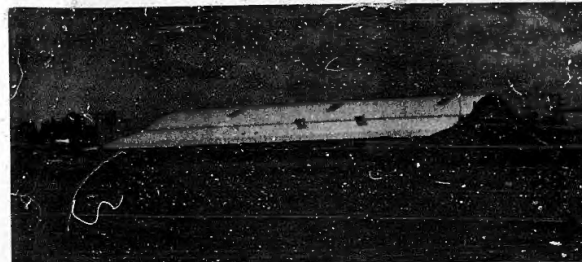
As Mr. Miller explains, the 120 flight students are getting full preparation for professional careers. After asking several students on their thoughts of the program it is apparent that they feel as though it fulfills their requirements completely. Even from an outsider's viewpoint, it is obvious that the process involved in professional flight is followed to the letter. Now in its own location Flight Technology is headed for nothing but progress.

With only minor organization left, the students and instructors are definitely settled into the slightly new atmo-

sphere. When talking to them about improved parking conditions and less congestion as a whole you can almost hear their sighs of relief.

It is Bob Miller's prime

objective to inform, the students of the outlook on professional aviation, through seminars. At this new location the program now has breathing room to accomplish objectives like this.



Flight Technology's new hangar is seen across an empty ramp. (Photo by Chuck Henry)

## Alicia



Folk singer - songwriter Alicia, played to a full house at the U.C. Pub last Wednesday. A very attractive young woman, Alicia held the audience captive as she sang and accompanied herself on guitar for nearly two hours.

Her repertoire included her own original pieces and those of established artists from Trini Lopez to Fleetwood Mac. Her original compositions were very soft and sincere, and very reflective of her Cuban heritage with the Latin rhythm and Spanish lyrics.

She was warmly received and well called back for two encores.

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# OPINIONS

THE OPINIONS EXPRESSED IN THIS PAPER ARE NOT NECESSARILY THOSE OF THE UNIVERSITY OR ALL MEMBERS OF THE STUDENT BODY. LETTERS APPEARING IN THE AVION DO NOT NECESSARILY REFLECT THE OPINIONS OF THIS NEWSPAPER OR ITS STAFF. ALL LETTERS SUBMITTED WILL BE PRINTED PROVIDED THEY ARE NOT LEWD, OBSCENE, OR LIBELOUS, AT THE DISCRETION OF THE EDITOR, AND ARE ACCOMPANIED BY THE SIGNATURE OF THE WRITER. NAMES WILL BE WITHHELD FROM PRINT IF REQUESTED.

## EDITORIAL

By Ray D. Katz  
AVION Editor

ALRIGHT! THAT'S ENOUGH MUDSLINGING, CHILDREN.

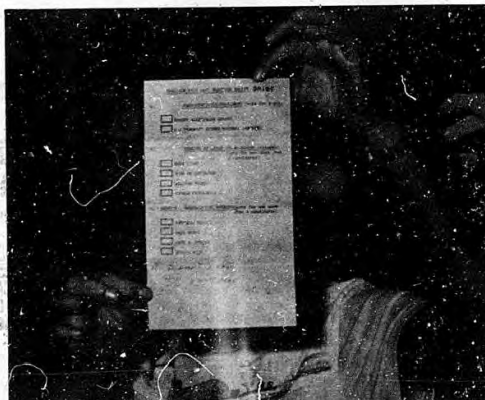
There's no point in blaming someone for starting it, or for how much mud they've spread around. In fact, the time for blame and recriminations is past. It is time, that everyone gets on the same channel, start trying to work for the improvement of the S.G.A. and the rest of the student body.

Smokey Stover and Mike Jaworski are to be congratulated on the race they ran. And if anyone wants a good example of student involvement, he only needs to watch Smokey in action. I sincerely hope that the new S.G.A. administration can encourage Smokey and Mike to stay involved.

And speaking of the new administration - Congratulations and Good luck! Bob Allen and Al Graves are to be congratulated - they won the battle and the election. But the war is still ahead; all my well wishing won't do a bit of good if the entire student body can't get up off of dead center and help. Bob and Al have not only a new year to work with, but they've got a new constitution that must be organized to work properly. I will continue to do my part by putting out the info to the student body - but if you don't read it and act on it, it will continue to be your loss.

I can't be much more blunt than that. Bob and Al can't run the S.G.A. by themselves. If you don't know what to do, stop by, introduce yourself and ask. They need OUR help to run OUR S.G.A.

## NO COMMENT



EDITOR'S NOTE--If you can't read it, it says:

D. I DON'T CARE  
 ABSTAIN

## letters to the editor

**PRESIDENT'S CORNER**  
Bob Allen  
SGA President

I'd like to express my thanks to all the students who supported the Stover/Jaworski ticket. Even though we weren't elected, I feel that the campaigning was well worth it. What other opportunity does one have to get out and meet the rest of the student body on a person-to-person basis? I'm very grateful that I had the chance to meet so many of you and to hear your views.

My most sincere congratulations go out to Bob Allen and Al Graves. I wish them success in putting their campaign programs into effect during the coming year. The new organizational structure of the S.G.A. also has to be implemented, so there's a mountain of work in store for them. I'm sure they'll be able to tackle it, otherwise they wouldn't have had entered into the presidential race.

More congratulations are due Bob Allen - on election day, his wife gave birth to a girl. It must have been a proud day for Bob.

As for myself, I plan to work, for, or, with the S.G.A.

in anyway I can. There's so much to be done.

The "agony of defeat" is offset by the fact that all candidates ran on basically the same platform: to work in the best interests of the student body. Till next time...  
Michael with a "J"

\*\*\*\*\*

We would like to take this opportunity to congratulate Bob Allen and Al Graves on their election as our President and Vice President.

Mike and I want to thank all those who voted for us and especially those who worked so hard in our behalf.

Now is the time for all of us to rally behind the SGA in order to accomplish the task at hand.

S.F. Stover  
Mike Jaworski

## FEEDBACK

**FEEDBACK:**  
The bus should run every half hour from the Scottish Inn. Once an hour is not enough - the buses are overcrowded and the schedule does not fit our programs.

**ANSWER:**  
From A.J. Agett, Associate Dean of Students

Unfortunately, the bus to the Royal Scottish Inn, occasionally is crowded. However, it also has periods where runs have been practically empty. The bus cannot possibly make a run every half hour and be on time. The revised bus schedule is coordinated to blend with classes and the meal hours offered by the food service. Please see your Resident Advisor if you continue to experience this problem.

**FEEDBACK:**  
Are there any plans for expanding the Parking lot? I will not walk 10 miles from my car to the classroom and back to my car. I was considering Purdue University in Indiana but now am considering it even more seriously. The student treatment here is deplorable, also when compared to the J.C. I attended.  
back to my car. I was considering it even more seriously. The student treatment here deplorable, also when compared to the J.C. I attended.

**ANSWER:**  
From A.J. Agett, Associate Dean of Students.

Plans are being made for expanding parking on campus and should be completed about the same time as the new dormitory complex. As further note, it seems that no one at this university must walk ten miles

**FEEDBACK:**  
Ridiculous! The parking is a joke. Especially tickets for parking where you can - out of the way of anyone else. Can we not get some relief for this?

**ANSWER:**  
From A.J. Agett, Associate Dean of Students

Parking should be done in designated areas ONLY. Criteria for parking is not just "out of the way of anyone

else". Please refer to the brochure on campus parking and traffic regulations. Parking facilities should be expanded before next fall.

If you have any concrete suggestions, I would appreciate them.

from his car to the classroom. It would seem that the current parking problem is a matter of convenience rather than no available spaces whatsoever.

## The Avion Staff

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# VIEWPOINT

By Jim Harris

**QUESTION:**

What do you think of the food service at Embry-Riddle?



1) "Compared to the Apollo restaurant at the Scottish Inn, this is a gourmet meal."



4) "The food isn't bad, but it's not worth the wait, more trash pails on the west side of the U.C., and they should list the price of optional items."



2) "For institutional food, it's not bad."



5) "I'd prefer Gainesburgers"



3) "It runs a close second to Piccadilly."



6) "It's food!"

# FOOD SERVICE

By Jim Harris

E-RAU has contracted a new service to operate the dining facility this year. Professional Food Management Corporation, (PFM) charged with the responsibility of improving the food service, has employed 22 year old Dan Prickett to supervise the program.

Prickett began his job training with FPM five years ago when he served as Food Director for the dining program at the Boy Scouts of America campground at Muskege, Michigan, a facility feeding 1,700 people daily. He gained additional experience in jobs at Lake Sumter, New York, Missouri Western University, and in his most challenging assignment at Western Carolina University. Prickett was able to rescue Western Carolina's food program from a \$15,000 deficit and improve quality within a year. Prickett was then selected to oversee E-RAU's meal program.

Prickett's position as Director of Food Service is more than a full time job since 100 hour work weeks are often required to properly supervise a new operation. Hopefully, his youthful endurance will enable him to devote as much time as is necessary to improve his food operations.

Although most students will admit that meals have improved markedly in the past few years, Prickett states that this progress will continue and be accelerated by introducing new ideas in preparation and service. The recent, barbeque was

an example of such planned innovations.

When asked why E-RAU couldn't have a meal plan in which students could pay a flat rate but still get "seconds" on certain items such as salads, Prickett stated that the space required for setting up multiple serving areas would make this an impossibility. When questioned about the quality of the foods purchased, Prickett staunchly defended his choice of foods by stating flatly that only the top grades of meat and produce are purchased. L. Donath, an official of PYA Monarch, one of our food suppliers, confirmed Prickett's statements. Donath stated that E-RAU orders only the top two food grades. Further, Prickett orders these grades in sufficient quantity to qualify for volume discounts. Meats and produce are delivered several times each week to preclude food kept on hand from growing stale in storage. When asked if working with such a young food director makes any difference, Donath commented that the younger people were more innovative and less set in their ways. Furthermore, Prickett has not been reluctant to speak his mind to E-RAU's food suppliers.

The overall picture of the food service at E-RAU looks promising. Hopefully, our new director and enthusiastic staff will give the hungry students something to look forward to.



Dan Prickett is serving behind the line of the Buffet Luncheon, another of his innovative ideas.

## MEDIA CENTER

Two topics were raised by the suggestions received this past week: 1) Too much noise in the library; 2) Where do the magazines go? Both of these problems require student cooperation. We are, however, in the process of covering many magazine titles with special folders which we hope might deter their escape. Let's leave the materials in the Media Center where everyone can use them!

**NEW BOOKS**

In our continuing effort to keep our patrons aware of new acquisitions, this week we highlight three books which can be found in the Media Center, at the Reserve desk, for two weeks.

Burroughs, Edgar Rice. At the Earth's Core, Pellucidar, Tanager of Pellucidar.

These three science fiction novels, first published in the twenties and thirties, reflect the great imagination of the author of the Tarzan and the Mars series.



Higman, Robin, ed. Intervention or Abstinence.

A variety of essays from notable sources concerning U.S. foreign policy and the historical "meddling" of the U.S. government.

Hurst, Ronald, ed. Pilot Error: a professional study of contributory factor.

Authoritative contributors from the varied sectors of the aviation field describe the problems raised by "pilot culpability" in aviation accidents.

## Scholarships Awarded

By Jim Zurales

Congratulations are in order for three students who earned E-RAU academic scholarships for the Fall '77 trimester in recognition of their scholastic efforts. The recipients were senior Urban C. Irish with a \$950 full tuition scholarship, and two \$475 awards were earned by junior John E. Phipps and sophomore David Walen.

These Scholarships were awarded on the basis of meeting credit hour requirements and outstanding grade point

average. Determination of the recipients is made by the financial assistance committee.

Several forms of financial assistance are available through the school. Kenneth Deissler, faculty representative on the finance committee added, "The University provides some money out of its own funds for certain scholarships." For more information on loans or scholarships, contact the Financial Aid office in the administration building.

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# AHP

By Ken Morse, Historian

Alpha Eta Rho serves to actively associate the interested students of aviation with leaders and executives in the industry. This close association, strengthened through the bonds of an international aviation fraternity, establishes opportunities for every member in his relation to aviation and inspires interest and cooperation among those in the profession who are also members of Alpha Eta Rho.

AHP members now have invitations for the rush dinner to be held on October 7. Anyone interested in pledging AHP must be sponsored by an active AHP member and be given an invitation to the rush dinner. Any AHP brother will be happy to discuss our aims, goals and activities with anyone interested.

Three brothers were chosen from the active membership of AHP as nominees for Who's Who in American Colleges. We wish the best of luck to Craig Sabatke, Randy McClain and Randy Bower throughout the selection process.

## DELTA CHI



By "PJ" Lee

It has been another busy and successful week for the brothers of Delta Chi. Most of the week was spent preparing for the weekend's activities. As usual, our Friday night happy hour was a full house. Most of the brothers and prospective pledges were there with quite a few of their friends.

Saturday night, Chi Delphia had a rush party for their prospective members. The little sisters provided the punch, etc., and all the other party trimmings. The evening gave everyone the opportunity to get to know the new faces a little better and make them feel welcome. It was quite a party that lasted into the morning hours.

Early Sunday evening, 12 men were officially pledged into Delta Chi. This ceremony marks the first step of a most memorable experience that the pledges are about to undertake. It will take alot of work, but

the pledges have shown a strong desire to belong to Delta Chi. As a general reminder, anyone still interested in pledging may do so up to two weeks into the pledge period through special arrangements.

We showed a strong effort at Sunday morning's football game with the Brothers of the Wind. Unfortunately, even after putting up a good fight, we were beaten. At least we, unlike our opponents, were able to keep our pants on! I'm sure that we'll do better next week.

Don't forget about the trip to Busch Gardens next Saturday. Transportation has been arranged and the vans will leave the fraternity house at 8:00 a.m. sharp, that's eight o'clock in the morning. Don't be late and expect a ride! Football practice is now going to be held at 5:30 on Tuesday and Thursday.

# SIGMA CHI

By Steve Gregory

Well fellow students, I sure do hope that we all have recovered from this past weekend. It started out super Friday night and ended up fantastic Sunday night.

Both Friday and Saturday nights we really had some good turnouts for our square dances and rush party. Both mornings we tried to watch the sun rise as an inspiration for all to rise. When awakened with the usual "Rise and Shine!", the comeback was "We'll rise but we won't Shine!"

To the people who showed up for our social events we would like to thank them very much and hope they had as much fun as we did. To the people who couldn't make it we'll be at other weekends for a lot of good times.

You simply missed an excellent outing. Ask the ones who came and you'll see what we mean.

The final outcome of this weekend came to a close when we held interviews for new pledges in the Fall Trimester of 1977. We are very proud to announce that we are giving 20 bids to prospective pledges. We welcome them: one and all.

Congratulations to our newly initiated brothers: Mark Schatel and Brian Hendrix.

We also had a good weekend for football as we won 8-0 over Sigma Phi Delta. A job well done to the members of the Sigma Chi Football team.

Until later fellow students, take care!

## Lambda Chi

By Jr II

This past weekend was a good one for Lambda Chi, Friday night most of the brothers got together and went to some of our favorite hangouts and really did the town up well.

Saturday we had our first beach party, everyone there had a good time, drinking beer, eating hot dogs, and soaking up some sun. Turnout was excellent with many new faces, along with all the brothers being their typical rowdy selves. Except for a few items lost to the sea. Everything went along smoothly, and by sunset everyone had gone home excluding those contented few who successfully finished off the keg!

Our continuing search for a house goes on, with a lot of luck we will have one by January. Then we can really get our activities going.

The associate class (of which I am a member) will soon be becoming full brothers, and we will be looking for some new people to join us, so if you're interested, or just need something to do, why don't you look Lambda Chi up. We hold our meetings Saturday nights at 7:00 p.m. in the Faculty-staff lounge upstairs in the University Center. We will be happy to see you, and we will show you what a fraternity is all about.

# RIDDLE PACKERS

HEADLINE FOR THE WEEKEND?



By P.R.

The Riddle Packers began their fall trimester with their first outing on Saturday. We had our "Prairie Dog Bash" at Hopkins Prairie in the Ocala Forest. As usual we left late, Packer tradition, departing Riddle at 11:30 a.m. with a convoy of four cars and one keg of Miller. About 20 miles shy of our destination the convoy pulled over for a short celebration. The "blue bomb" broke the 100,000 miles mark. So we broke out the cups and put a tap on the keg. After a quick toast we were back on the road. Shortly thereafter, we were setting up camp amidst the ever present love-bug. After a few brews and a little frisbee the gang decided to take to the water before a hike on the Ocala Trail. After the hike we lit the fire, prepared the steaks, had a little salad and kept pumping the beer, right Pete? If he only had foresight instead of hindsight his early morning greeting might have been a little more pleasant and appetizing?

After a great dinner and a short dip in the lake, we all sat around and drank beer, wine and chewed the fat. Some of us retired early because we had a good reason, right girls? The rest of the gang took another dip then desperately tried to finish the keg, retiring around 3 a.m.

Morning came early, right Pete, and with it came fresh, blue skies with the sounds of the Riddle Packers taking their morning bath. The morning menu included eggs, bacon, ham, pancake, cereal and every so often a few love-bugs mixed in. After stuffing our face we slowly cleaned up camp. Our next trip will be to another over-nigger north of Gainesville. The club will once again tube down the Ichneutucknee Spring. Come out and join the best outdoor club on campus. Leave a note in the mail room for the Riddle Packers if you want some info. Aloha!

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## AFROTC

By Bill Steele

As the cost of living rises in our economy, it is becoming more and more difficult to pay for the high cost of a college education. AFROTC offers 2.3 and 4 year scholarships to qualified students. These scholarships will pay for full tuition and books. In addition AFROTC will pay you \$100 a month tax free while you are in school. If you are a veteran, you can still receive your VA benefits in addition to the scholarship.

If you have any questions and are interested in AFROTC Scholarships, drop by the AFROTC trailer on the west side of the airport or contact Bill Steele, Box 4021.

## E.R.A.U. MGT CLUB

By Patricia Neuzil  
Publicity Chairman

Don't forget about our next dinner meeting on Wednesday, Oct. 12. Dues must be in by the beginning of the meeting at 7:00 p.m. Our speaker will be David Harris, Manager of the Systems Program, Space Division of General Electric.

If you aren't a member but would like to attend our next meeting and learn about the Management Club, contact Smokey Stover at Box 2271 or me at Box 3358. I hope we'll see everyone there.

## Screaming Eagles

MODEL AIRPLANE CLUB

The Model Airplane Club started off what promises to be a good season with over twenty people in attendance at it's first meeting. The group is mainly composed of RC (radio control) and control-line enthusiasts, with several people also interested in free flight and miniature rocketry.

At the meeting, committees were set up to organize the three major events planned for the Tri: Static Display and Proper Airplane Control; Control-Line Fun-Fly; and RC Fun-Fly. Ideas for more informal activities were also discussed. Bob Ruff (president), Joe Rotunda (vice president) and Greg Stoka (treasurer) talked about the availability of model supplies and described local facilities for flying.

Anyone who missed the meeting or is interested in joining the club should contact Bob Ruff - Box No. 4234, or Room 314. The date of the next meeting will be announced in the following issue of the AVION.

Debbie Redhed (secretary)



## Sigma Phi Delta

By Joe Bielbel

With the fourth week of school almost out of the way, the Engineers of Sigma Phi Delta are full of action.

Last Friday's rush party was attended by both engineering faculty and students. All who attended seemed to enjoy themselves and the free punch, beer, and munchies very much.

The Sigma Phi Delta football team got off to a slow start as they lost 8-0 to a haphazard Sigma Chi team. With an awesome Sigma Phi Delta defense, Sigma Chi was held to only one touchdown pass, and no first downs on yardage. In the meantime, the SPD offense had two long runs (near touchdowns) that were each called back at least 40 yards due to penalty. Also, the Sigma Phi Delta offense had four first

downs on yardage compared to Sigma Chi's none. Last Sunday's game was the first time in three years that Sigma Phi Delta has lost a football game to Sigma Chi.

The main room of the Sigma Phi Delta Castle has been recently changed, and all of the SPD Brothers and Little Sisters agree that the "new look" is great!

Any AE or ACET student wishing to know more about Sigma Phi Delta is encouraged to come to our Smoker which will be held Friday, Sept. 30 at 8:00 p.m. at the SPD castle (513 S. Ridgewood Ave.). Anyone needing a ride should call 252-9374. Any interested engineering student may stop by the SPD Castle anytime, and talk to the Brothers.

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# FLIGHT SAFETY

By Tony DiGirolamo

It might appear that a subject such as Flight Safety needs no introduction, and in some respects, this is probably true. We all recognize its importance and its many relationships to aviation, but there may be more to it than meets the eye. We must develop those factors which are basic to a flying safety program. We do this by surveying historically, the first aircraft accidents, the earliest aircraft accident statistics and the cause factors.

The beginning of the aircraft accident prevention effort is historically established. Present and future aircraft accident prevention efforts have been, and will continue to be, predicated upon man's best efforts, and history provides the basis for study of the past which serves both present and future. There is nothing new in aircraft accident cause factors. The causes of the first 10 aircraft accidents are still occurring with predictable accuracy in today's flying environment.

The "Sequence-of-Events" is the mechanics of an aircraft accident. It is those factor combinations, coincidences, and compounded circumstances of which an accident is made. Any number of past or present accidents can be used to illustrate this point. Oversold flight, potential delay in scheduled departure, thunderstorms with gusting winds approaching and predicted over the field at departure time, hurried loading, hurried pre-flight, running take-off with aircraft on approach, control response was difficult,

unsuccessful abort, the aircraft went through the overrun. The gust lock was never removed! The first Boeing 707 and 747 accidents occurred because the pilots attempted to take off with the flaps in the "UP" position. Illustrations such as these are explained in terms of inevitability or neglect and self-discipline.

From this, the known-precident of accident causation can be established. Because of the almost identical similarity of accident, cause factors and the repetition factor which exists, the known-precident concept can be stated in highly significant terms: An aircraft accident cause factor, like history, tends to repeat itself.

Our task is to develop the pilot's capacity to recognize and avoid accident producing hazards. This does not mean that the task has been accomplished merely because the information has been presented. The process is not complete until the pilot understands, is motivated, and can apply the knowledge. Many hundreds of thousands of words have been written and spoken on the subject of aviation safety. Laid end to end, these would undoubtedly stretch from here to the moon and back. Words alone are not the answer. The proper attitudes towards the flying environment is the ultimate answer for it is the master key. Flying is an unlimited idea of freedom; the pilot with the proper attitudes will live to enjoy this freedom.

# F-15 ON DISPLAY



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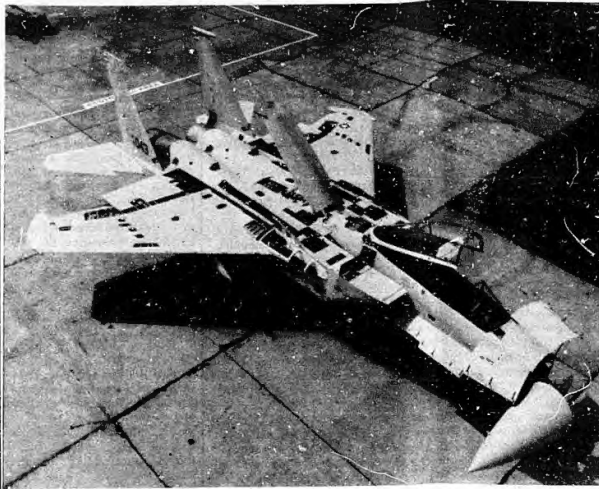
By Kitty Blaisdell

Thank you for coming back to this column but unfortunately there is not much news different from last week. There should be some next week concerning any new activities and ideas you bring up tonight at the dinner meeting at Sir Steak.

There is one correction from last week's article concerning the pledge party. I had written "I hope everyone had a good time. All the pledges are invited . . ." but it was printed as "I hope all the pledges are invited. . ." Maybe sometime I'll write something that sounds that funny. So pledges - you are invited to the dinner meeting tonight in class 'A' uniform.

We have four pledges this term and would like to see more. I am sure that there are more cadets who qualify - come forth and make yourselves known - be more than just the everyday cadet. It still is not too late to start. To our four pledges, since you are pledges you are special so keep working and I wish you luck on your projects.

There is just one more item. I would appreciate it if a pledge member would write a miniature article or keep me posted as to what the pledge class is doing so that it can be included in this column. If you are interested get in touch with me tonight at the meeting. Thanks.



**LIKE RUFFLED FEATHERS** - The maintenance access covers on McDonnell Douglas Corporation's F-15 Eagle stand open for inspection. The Eagle, an air superiority fighter now in service in the U.S., Europe and Israel, has 185 access doors and panels covering a total of 570 square feet to make maintenance work faster, simpler and more dependable than it's ever been before. Virtually every system on the F-15 is accessible through these covers - 85 per cent of which can be reached without a step ladder - a fact that helps explain why the Eagle requires 61 per cent less maintenance time between missions than the older F-4E Phantom. (Photo courtesy of McDonnell Douglas Corporation)

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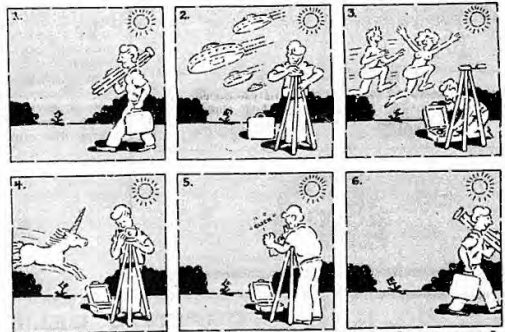
The subject is leadership. The course is Army ROTC. The curriculum, quite different from the "left-right-left" drill sessions and military history classes of yesterday, is exciting, challenging and flexible. Practical leadership with on-hand adventure training and management experience aid in developing men and women to shoulder greater responsibilities, at an earlier age than most other graduates.

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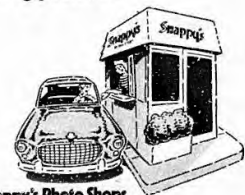
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## NTSB Gets New Member

Vice Chairman Kay Bailey today assumed the position of Acting Chairman of the National Transportation Safety Board, replacing Chairman Webster B. Todd, Jr., who resigned to return to private life.

Miss Bailey, a former Texas State Legislator, was appointed to the Board by President Ford in June 1976, to a term expiring December 31, 1979. She also was named Vice Chairman for a two-year term.

An attorney, Miss Bailey was elected to the Texas House of Representatives in 1972. She was re-elected in 1974, resigning from the legislature at the time of her nomination to the Board.

In 1974, Miss Bailey was a delegate to the White House Summit Conference on Inflation and also was a delegate to the Texas Constitutional Convention. She was appointed to the Transportation Task Force of the National Legislature Conference, studying the problems of railroads, airports, highways, and the trucking industry. While in the legislature she concentrated on transportation issues and served as Vice Chairman of the Intergovernmental Affairs Committee.

Born in Galveston, Texas, Miss Bailey attended the University of Texas, and the University of Texas law school, receiving an LL.B. in 1967.

## BELL'S XV-15 Tilt-Rotor Research Aircraft

FORT WORTH, Texas - Ground run testing of Bell Helicopter Textron's XV-15 tilt-rotor research aircraft has resumed following successful initial hover and air taxi tests.

During three hours of flight testing in the helicopter mode, the aircraft hovered and air taxied at altitudes of up to 100 feet above ground level. It also attained airspeeds up to 40 knots forward, 25 knots sideward and 10 knots rearward.

- Other flight test accomplishments included:
- \* Hovering with the force feed system on off.
  - \* Hovering and landing with the stability augmentation system off.
  - \* Hovering and landing with manual rpm control.
  - \* Takeoff, hovering and landing at 85 degree pylon angle.
  - \* Short takeoff and landings.
  - \* 90 degree hover turns in 25 knot winds.

Bell test pilots Ron Erhart, Dorman Cannon and Ames Project test pilot Dan Dugan were so pleased with the aircraft's handling qualities and performance that they made no request for design changes as a result of the flight tests. Preliminary external noise data obtained during the flights indicate that the 13,000-pound XV-15 is as quiet as a 4,000-pound Bell 206L helicopter.

Detailed transmission and rotor inspections were made prior to the resumption of ground tie-down testing.

Ken Wernicke, tilt-rotor chief project engineer, reported that after almost 50 hours of ground and flight tests had been completed - including several hours at maximum power and one hour of over-speed running - "the transmission gears didn't look as if they had been used."

Prior to the XV-15's first hover flight on May 3, the aircraft completed a series of extensive ground tie-down development tests, including full conversions from helicopter mode and back at normal operating RPM and high power levels; operation of all aircraft and research systems and five hours of demonstrations at high power and over-speed RPM in helicopter mode.

Following a 50-hour ground run to complete qualification of the aircraft transmission and drive system, and installation and checkout of a remote control system, Aircraft No. 1 will be delivered to NASA Ames Research Center at Moffett Field, Calif., for extensive tests in the 40' X 30' large-scale wind tunnel. Wind tunnel tests are expected to begin in early 1978.

Final assembly of the Aircraft No. 2 is almost complete in Bell's experimental shop. The aircraft will be delivered to Bell's Flight Test facility in September for completion of research instrumentation installation, systems checkout, and ground run checkout. Airworthiness flight test by Bell using the second aircraft will commence after wind tunnel testing of Aircraft No. 1 and will include the expansion of the operating envelope and further evaluation of the aircraft's performance, dynamic stability, and handling qualities.

Bell is working under a joint contract with NASA and the U.S. Army to design, manufacture and test two VTOL, tilt-rotor research aircraft. The tilt-rotor is expected to combine the best features of helicopters and conventional airplanes for fast point-to-point transportation.

Research on the tilt-rotor concept began in 1953 when Bell received a joint Air Force/Army contract to build the XV-3 convertiplane. This early model proved feasibility of the concept and operated in both hover and forward flight modes with easy conversion.

## TCP Shows Its Value in E-RAU Research Project

Does the fuel additive TCP substantially reduce aircraft engine spark plug fouling caused by the use of LL 100 aviation fuel? Definitely yes, according to the results of an extensive study into the problem by E-RAU Wallace Research Center.

The study's findings and conclusions are being released by the Florida based University to all sectors of the national and international aviation community, in a specially prepared report. Not only does TCP (trisecryl phosphate) cut spark plug fouling in 80 octane rated aircraft engines using LL 100 fuel by as much as 68 percent, it also might play a major role in reducing a valve sticking problem brought on by use of the low lead fuel, researchers say.

Riddle's Wallace Research Center initiated the comprehensive study in Summer, 1974 when the growing national shortage of 80 octane aviation fuel influenced the University to switch to LL 100 for its fleet of sixty-five C172, C310 and M20C training aircraft.

Shortly after the E-RAU fleet began operating with LL 100 spark plug fouling incidents rose tenfold and sticking valve problems increased from one per 7,500 flight hours to one in every 2,000 hours.

Embry-Riddle immediately notified the Federal Aviation Administration (FAA) and aviation engine manufacturers.

Subsequently, a meeting was held on E-RAU's Daytona Beach, Fla. main campus with representatives of the University, Shell Oil Co., AC and Champion Spark Plug Companies, Cessna Aircraft Corp., Piper Aircraft Corp., AVCO Lycoming Co., Gulf Oil Corp. and the FAA to discuss the problem and coordinate a search for possible solutions.

In an initial attempt to correct increasing engine difficulties, E-RAU maintenance schedules were sharply altered. Oil filter changes were reduced from 100 to 50 hours, oil changes from 100 to 50 and later to every 25 hours. Spark plug inspections were performed at 50 instead of 100 hour intervals, with top and bottom plugs rotated. In addition, a top overhaul program was initiated to clean the valves at half of normal overhaul time.

However, the accelerated maintenance forced a cost increase of approximately \$2.65 per operation hour per engine, not including revenue losses and flight training scheduling complications due to aircraft unavailability.

Viewing these results, E-RAU Wallace Research Center officials decided to attack the apparent source of the problem - LL 100 fuel - using TCP as the weapon. (In civilian aircraft engine tests as early as 1953, TCP demonstrated its

effectiveness in reducing lead fouling in certain engine types. Other TCP applications have included automobile and military aircraft powerplants).

Knowing the University's consistently high aircraft utilization rate (80,000 to 100,000 total flight hours per year) would greatly accelerate any planned fuel research program, investigators selected 18 of E-RAU's Cessna 172's as a test group for the study. For nine months (600 months (600 hours) flight time per aircraft), nine test airplanes flew on standard LL 100 fuel, while the remaining nine use LL 100 treated with TCP.

All the test aircraft were operated routinely with the rest of the E-RAU fleet. This approach posed one problem, but at the same time, further helped to substantiate TCP's value as a fuel additive. On cross-country flights, it was necessary to refuel the TCP aircraft with standard LL 100 fuel away from home station.

After a combined total of 10,000 hours of flight time, the plug fouling rate was three to five times greater among TCP aircraft than among those using the additive. In the TCP airplanes, fouling incidents rose proportionally to cross country flying time, when quantities of untreated fuel were consumed.

Embry-Riddle maintenance inspections have revealed no adverse side effects associated with the use of TCP in LL 100 fuel. On the contrary, when one engine which had been run on untreated fuel prior to the test was disassembled for overhaul, it was found that the TCP introduced into it for the study actually had demonstrated a substantial cleaning capability.

Although the effect of the TCP on plug fouling is dramatically clear, its potential to ward reducing sticking valves has not been fully tested by E-RAU. The accelerated oil and filter changes were continued during the test period, as were top overhauls and other maintenance. However, indications are that TCP's effect in this area is positive. Sludge, deposits and other engine residues decreased significantly with its use. E-RAU anticipates that further testing likely will show a marked reduction in valve incidents.

Largely on the basis of the Embry-Riddle research project, the FAA has approved as satisfactory the use of TCP as an additive to LL 100 fuels in 80 octane rated, normally aspirated, reciprocating aviation engines. Currently in the U.S. alone, there are approx. 100,000 single and multi-engine civilian aircraft using these types of powerplants.

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# RIDDLE SPORTS



## INTERMURAL FLAG FOOTBALL

Intramural Flag Football season got under way this past Sunday at Sand Spur Stadium on Catalina Drive.

The first three games of the day saw the East teams of the Blue Division matching strategies. Sigma Chi officially became the first team to score in the new season picking up 2 points on a safety in the first half on a miscue by their opponents Sigma Phi Delta. Sigma Chi's defense proved to be outstanding the remainder of the game as they held Sigma Phi Delta to no points and scored once again themselves for a final tally of 8 to 0 in favor of Sigma Chi.

The second game of the day saw a well organized group of griders known as Brothers of the Wind take on Delta Chi. Fine passing and running plays put points on the board in both halves for the Brothers of the Wind as their defense came up with a few key interceptions to give them the second straight shutout of the day. Darrell Brewin, the quarterback for the Brothers of the Wind, found things a little drafty late in the second half for a hot and muggy morning but the teams excellent organization once again showed above all as he was seen trotting to the team trunk to replace his pair of shorts which were readily mistaken for a flag by the determined Delta Chi defense. In a matter of moments, he was back on the field leading his team on to victory with a 13 to 0 effort over Delta Chi.

The third game of the morning saw the Miller Boys match wits with the 68er's. The Miller Boys offense proved to be the tops as they handed the 68er's a 13 to 0 defeat. The 68er's held together through the efforts of their leader, Chuck Henry, but could not seem to get the breaks.

In the West Conference of the Blue Division, the first two games were won by forfeit giving the Dirty Birds an easy 6-0 victory over Hang Ten who did not field a team. This puts Lambda Chi in the Blue Division West Conference. The second forfeit enabled Who Cares to pick up a 6-0 victory over the Barnstormers who failed to field a team.

The final game of the West Conference saw the Marauders hand the Vikings a 12-0 loss giving the Marauders the fourth victory shutout of the day.

The final three games of the day pitted the East Conference teams of the Gold Division. In the first game the Vets Club got on the board first against the Raiders early in the first half to take a 6 to 0 lead. As the game progressed and defenses tightened, it proved to be the crucial TD as neither team scored in the second half.

The Raiders and AFROTC went to the sidelines at half time in a 12 to 12 tie. The Raiders defense proved to be superior in the second half as they held the AFROTC passing and running game to 0 points. Their offense came on to score twice more with the final score being Raiders 24 and AFROTC 12.

The final game saw the equally determined teams of the SC's and Beach Boys mixing plays with the Beach Boys coming out on top handing the SC's a 12 - 0 loss and the sixth shutout of the day. Attendance was good and all teams played well. If you are looking for something to do on a dull Sunday, pick a team and come out to Sand Spur Stadium and help cheer them on to victory.



Photos by: Chuck Henry.



Photos by: Chuck Henry.



Photos by: Chuck Henry.

## SOCCKER SEASON BEGINS

By Jim Zurales  
Staff Writer

The Eagles Soccer Team is out to capture first place this season and they can do it. The team is composed of European, Persian, Nigerian, West Indian, Iranian, and American students giving it an international flavor. Most of the players were raised on soccer as it is their national sport much as our game of football.

Coach John Butler is from England and has played soccer all his life and played professionally for the Leicester City F.C. in England at the age of 18. He also played in Gibraltar while serving with the Royal Air Force. Coach Butler is the off-campus coordinator and has been with Embry-Riddle for 18 months.

"I love soccer and would like to see more students involved, particularly foreign students," Butler commented. He continued, "I have a lot of faith and confidence in this season's team."

Ron Asia, a player from Surinam, South America comments, "Spirit on the team is very high. The team has the highest potential I've seen in three seasons."

During a match, the Eagles have only 16 players to choose for the 11 man team while other large universities have enough players to put in a whole new change of team. The Eagles deserve credit for playing with this disadvantage because 90 minutes is a long time for a player to play soccer in a match.

Siavash Poursartip, a team member from Iran stated, "Last season, we came in second place. It was embarrassing for us to have less spectators than the opposing team at the tournament match. We need support just like any other sport."

During practices, the players mainly work towards physical fitness, getting to know each other, and working out plays to use against opposing teams. Coach Butler said, "We usually have a practice scrimmage to avoid boredom during each practice session." The Eagles practice from 4:30 till 6:30 on weekdays on the soccer field near the administration building.

Embry-Riddle is providing the team with gold and blue uniforms. "If the players look good and feel good in their gear, I feel they'll put forth a little more effort," Butler pointed out. All students and faculty are encouraged to attend the soccer team's home matches. We've got an excellent team with speed, experience, and enthusiasm. They need your support so support the Eagles as they use their fancy footwork to razzle-dazzle the opposition to lead Embry-Riddle to victory.

## BOWLING

E-RAU's Bowling League has once again represented the school with an outstanding turnout and performance by all the bowlers.

The league is now twenty-ten strong, however a few spots are open still for substitutes.

Thursday nights action saw Walt Shumate take the high game honors by firing a 223, followed by a 178, and a 152 for a series of 553. Mike Drake also rolled a 553 series with games of 204,145,204. Ken Hauser of Kad Kustom Vans led his team to four wins with a high game of 203 and a 519 series. Other "500" series men were: Dave Warner with a 516, Oscar Torreba with a 531, and Gary Sanders with a 539.

The women were also well represented with Trish Westover bowling a 457 series with a high of 172, followed by Caroline Cash with a 433 series, and high women's game of 175. Marilyn Sills took third place honors with a 164 high game and a series of 428.



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# IMPROVEMENTS ARE MANY IN 1978 SKYHAWK

WICHITA, KANSAS — Skyhawks for 1978 from Cessna feature optional air conditioning, an avionics power switch and a 28-volt electrical system.

These and other improvements on the new Skyhawk are designed to maintain its standing as the "world's most popular airplane."

"New features and options on the 1978 Skyhawk allow operators to tailor the airplane to their specific needs," said Cessna North Vice President Bob Lair.

"Skyhawk air conditioning means additional comfort for pilot and passengers. It will also improve the learning en-

vironment for student and instructor during pilot training," Lair said.

Cessna factory-installed air conditioning keeps the Skyhawk interior cool and comfortable on the ground as well as in the air. Its 14,000 BTU capacity and four overhead outlets molded into the interior trim combine for optimum circulation of cool air throughout the cabin.

Easy operation of the air conditioning unit is provided by controls located up front on the pedestal. There is a three-speed fan switch and a combination on/off, variable temperature control.

Designed for years of reliable service, Skyhawk air conditioning weighs just 63.5 pounds. The system includes a rotary compressor in the engine compartment, a cooling scoop and condenser centered on the bottom of the fuselage behind the main gear and evaporator coils and an air circulation unit located out of sight above the baggage utility shelf.

A winterization fairing is available for the condenser scoop when the air conditioner is not being operated. The air conditioning option is priced at \$7,795.

Avionics power is controlled by a combination toggle switch and circuit breaker on the lower left hand instrument panel. Radio audio levels can be set once and all radios can be turned off and on with the main switch.

A change to a 28-volt electrical system for 1978 means the Skyhawk can accept the full line of 28-volt avionics. The increased voltage also adds extra starting power and more capacity for demanding electrical loads.

An improved door window latch of flush design locks securely and does not interfere with clothing.

Several options have been added this model year to enhance operating ease and comfort, including a padded headset with boom micro-

phone, rudder pedal extensions and speaker sidetone.

The headset/microphone is activated by a microphone button on the control wheel, easing pilot workload and contributing to safer operation of the aircraft.

Pilots who have a problem reaching the rudder pedals will appreciate optional rudder pedal extensions. These reduce leg fatigue and provide for positive control deflection of the rudder surface for added safety.

Speaker sidetone is available with the addition of the new Cessna RT-385A NAV/COM. Pilots can listen to their own radio transmissions to help them improve their radio technique and in a training situation, the instructor and student can listen to each other.

Standard interior fabric in the Skyhawk is Courtier, a brushed nylon that is durable and easy to clean and resistant to stains. Optional vinyl or leather are also available in a variety of colors.

Exterior design, all-new for 1978, includes a selection of nine standard colors on a base of vestal white.

Using a 160 horse power, 100-octane, Lycoming O-320-H engine, the Skyhawk cruises at 122 knots (140 mph), using 75 percent power at 8,000 feet. Rate of climb is 770 feet per minute at sea level and service ceiling is 14,200 feet.



1978 Cessna Skyhawk II With New RT-385A NAV/COM'S

The popular "II package" of avionics for VFR flying and the Nav Pac for IFR-equipped airplanes will continue to be offered. Prices of the airplanes are: Skyhawk, \$23,495; Skyhawk II, \$26,675; and Skyhawk II with Nav Pac, \$30,625. All prices are f.a.f., Wichita, Kansas.

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## ASTRONAUT TURNED EXECUTIVE

(The following is an Associated Press Release revolving around Frank Borman, former astronaut with the U.S. Space program, who is currently the President of Eastern Airlines.)

MIAMI AP — Frank Borman, astronaut-turned-airline executive, says he was a Richard Nixon fan, but Borman's own no-frills style seems more akin to the current occupant of the White House.

The president of Eastern Air Lines drives a 1969 Chevrolet convertible with more than 100,000 miles showing on the odometer, packs a scratched leather briefcase and is "the second-lowest paid airline president I know of," a spokesman says. The salary is \$165,000 a year, less than half the pay of some airline executives, said Eastern media relations chief Jim Ashlock.

At Eastern's Miami headquarters, Borman's office is not the fanciest office on the administration floor, according to one airline official. He wanted a "working office."

Ashlock said that drinking on the job will mean automatic firing at Eastern and long lunch breaks are not looked at very highly. An example of this latter unofficial no-no came when Ashlock recently returned at 2 p.m. from a lunch that lasted one hour and 15 minutes to find a note on his desk. "Ashlock, you're fired. Lunch does not last until 1400, F. Borman."

The next morning he got a call from the boss: "Ashlock, come up here."

"I can't. You fired me, said Ashlock."

"Forget that. Move it."

Although Eastern is not out of the woods yet, financially, last month the line lost \$2.6 million unlike the \$9 million deficit suffered by Eastern in 1970 when Borman first took over.

His arrival as Eastern's president came after an already illustrious career. Borman, 49, arrived in the private business sector after being an Air Force officer, an astronaut including Gemini VII, the first spacecraft rendezvous, in 1969 and after working as an executive with the National Aeronautics and Space Administration.

In a recent interview Borman spoke of his political background and possible future. He said that he was close to Richard Nixon before the Watergate fall. Nixon talked to Borman about a cabinet position as transportation secretary.

"I thought he had the country's best interests at heart, I was very disappointed by the fact that he let us all down, but more because he let me down. I'd believed in him."

The interviewer asked if Borman himself had been approached recently about a bid for the presidency.

"No," he said, but if asked "we'd have to consider it." Said wife Susan, "Could he do it? Oh my gosh yes. He's a born leader, a brilliant man, a decision maker, a big decision maker. He's approaching the right age, he's had the most fantastic career, has fantastic charisma, fantastic integrity. Never could anyone question a hair on his head about his integrity."

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The Visitors Center and tours are operated every day of the year with the exception of Christmas.

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# THUNDERSTORMS AND FLYING (Part 1)

By Kenneth Madden

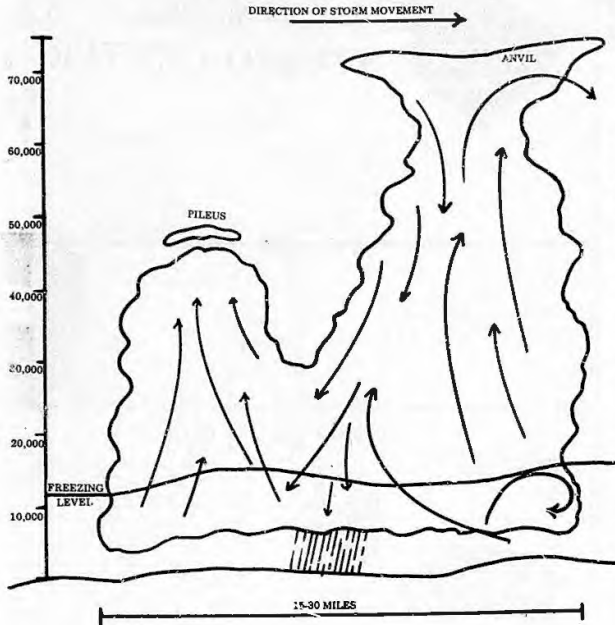
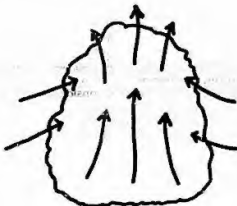
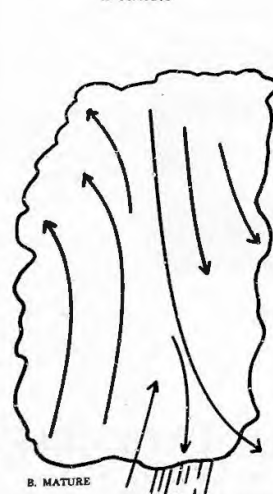


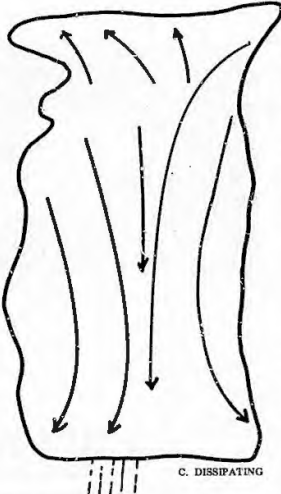
FIG. 1



A. CUMULUS



B. MATURE



C. DISSIPATING

FIG. 2 STAGES OF THUNDERSTORM DEVELOPMENT

### 1.1 INTRODUCTION.

Approximately 44,000 thunderstorms occur each day around the world with about 1,800 in progress at any given moment. Considering these facts, a pilot will frequently deal with thunderstorm hazards but avoidance is the pilot's primary concern. However, sometimes during the career of any serious flyer, he will be confronted at least once with the problem of thunderstorm penetration.

### 1.2 THE THUNDERSTORM DEFINED

According to AC 00-6 Aviation Weather, a thunderstorm is defined as, "a storm invariably produced by a cumulonimbus cloud, and always accompanied by lightning and thunder [it is interesting to note that a thunderstorm is always a cumulonimbus cloud, but not necessarily vice-versa]; usually attended by strong wind gusts, heavy rain, and sometimes hail. It is usually of short duration, seldom over two hours for any one storm."

At least the following three factors must be in existence for thunderstorm development to take place:

- a) the air must be unstable or at least conditionally so;
- b) the air must have a relatively high moisture content; and
- c) there must be some type of lifting action. This lifting action may be provided by thermal heating, upsloping terrain, frontal activity, or convergence.

### 1.3 THUNDERSTORM CHARACTERISTICS

A typical thunderstorm is usually a cluster of several individual cells in close proximity to one another. Each varies in diameter from one to five miles and is composed of an updraft, a downdraft, or both. The general circulation in one cell is independent of that in the other cells.

#### 1.3.1 VERTICAL DEVELOPMENT

A thunderstorm's vertical growth tends to be limited by the tropopause because of its thermal stability. Although, in rare cases, thunderstorm tops have penetrated up to 12,000 ft. above the tropopause due to their momentum. Thunderstorm heights are generally lower in the polar regions than the equatorial region because of the lowering tropopause height when near the poles. The highest thunderstorms recorded had tops well over 70,000 ft. and can grow at a rate in excess of 7,000 ft/min. When a cloud is growing faster than 1,500 ft/min, a "pileus" (cap) cloud may form in the clear air over it due to the rapid push from below. See fig. 1.

#### 1.4 THE THUNDERSTORM'S LIFE CYCLE

Every thunderstorm cell goes through three stages of development: The cumulus stage; the mature stage; and the dissipating stage. These three stages usually occur over a time period of 30 min. to 1 hr.; however, a steady-state thunderstorm may last substantially longer.

##### 1.4.1 CUMULUS (BUILDING) STAGE

Although very few cumulus clouds develop into thunderstorms, all thunderstorms start out as, and are the ultimate manifestation of, a cumulus cloud. As long as there is thermal instability, high relative humidity, and some type of lifting force, innocent looking CU's could become CB's in a very short period of time.

During the cumulus stage, the cell is composed entirely of updrafts - no rain falls as yet because the updraft's velocity exceeds the water droplets' terminal velocity; therefore, the water droplets are either held suspended within the cell or lifted to even greater heights. The water droplets grow in size

due to the process of coalescence (two or more small droplets impact and form one larger droplet). Air is entrained from outside the cloud by the strong updrafts within it which may vary in velocity from several ft/sec to 100 ft/sec in towering CU. These updrafts may extend several thousand feet above the cloud tops, depending on the draft's velocity and the strength of the upper-level winds. Generally, the cumulus stage will last approximately 10 to 15 min. See figure 2A.

**NOTE:** The updrafts generate many small eddies (gusts) which roll out laterally and disturb the surrounding air; thus turbulence may be found well outside of the cloud, particularly on the downwind side. Condensation will continue which produces rain, snow, and hail - especially prevalent in the upper portion of the cloud.

##### 1.4.2 MATURE STAGE

When the precipitation becomes heavy enough, it can no longer be sustained by the updrafts and falls, dragging air with it which forms a downdraft; this downdraft will be augmented by evaporational cooling. This occurrence marks the beginning of the mature stage. At this time, the cloud

has a top composed of ice crystals that usually towers more than 25,000 ft. Heavy precipitation (in the cloud and on the ground) will be accompanied by frequent cloud-to-ground lightning after the cloud top reaches the -20 degrees C level. Thunderstorms in this stage may reach over 60,000 ft. The mature stage usually lasts approximately 15 to 30 min. See figure 2B.

##### 1.4.3 DISSIPATING (ANVIL) STAGE

The dissipating stage occurs when the downdrafts spread over the entire lower portion of the cell, although weak updrafts may still exist in the upper portion. The anvil top (which may have been present in the late mature stage) spreads out with the upper-level winds and may reach 70,000 ft. Light rain, cloud-to-cloud lightning, and an absence of cloud-to-ground lightning indicate a cell is in the dissipating stage. Turbulence is less intense during this stage and composed mostly of weak downdrafts. Lower portions of the cloud tend to become stratified; finally, the whole cloud loses its definition and becomes "dead-looking." The time span of the dissipating stage is the most variable of the three stages discussed. See figure 2C.

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are being updated to the latest configuration by GE's Aviation Service Operation located here.

Of the two remaining engines to be shipped, one will be delivered to Eastern's Newark facility, and the other will go to Miami.

Eastern Airlines will evaluate four of the wide-bodied A300

aircraft powered by two 51,000 pounds thrust CF6-50C high bypass turbofan engines for six months. The aircraft, which will be operated on Eastern's routes between New York/Newark and Miami/Fort Lauderdale/West Palm Beach/Tampa/Orlando, will enter regular scheduled service beginning in December.

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