
Tradewinds

The Official Newsletter of the FITSA Alumni Network

July, 2001

FROM THE PRESIDENT

by Dave Byers
FITSA President

Well, its been some time since we've been able to get a new edition of the Tradewinds out. A lot has happened in the past year, both on campus and elsewhere. Here's a recap of recent events we've been involved in as FITSA.

FITSA Student Chapter

The FITSA Student Chapter met Thursday, October 19, 2000 with 15 students and 4 alumni in attendance. Dave Byers, president of FITSA welcomed new members and spoke about the opportunities available to students as members of FITSA. Tony Kioussis ('75) gave students an overview of the potential for employment in the corporate aviation world and encouraged them to consider alternatives to flying as career as a back-up plan. Kent Duffy ('98) gave students an view of the world of airport consulting from his perspective. Richard Freeman ('89) presented a brief history of his experiences in the airline and airport management. Tentative plans were set for the student chapter to visit next year's NBAA convention in New Orleans.

General Aviation Center

Many of you may not know that the School's Flight Center has been allowed to remain at its current location on a month-to month basis since the lease expired in 1996. With the Melbourne Airport Authority's plans for attracting
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FITSA BY THE NUMBERS

Current Membership	280
2000-01 Renewals-to-date	62
2000-01 New Members	14
2000-01 Corporate Members	2



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OLIN CAMPAIGN

by Jim Blessing
FITSA Secretary/ Treasurer '92

In June 2000, the James Constantine Endowment campaign kicked-off in full force on the heels of the University-wide "Campaign for a Rising Star". The Campaign for a Rising Star is an effort to raise \$25 million for the University, of which the Olin Foundation (donors of the new Science and Engineering Complex) will match 100% - but only if the \$25 million mark is achieved by April 2002. To date, the University has raised over \$15 million toward its' goal.

Florida Tech and the School of Aeronautics have established the Constantine Endowment effort to earmark contributions directly for Aero, with sponsorship levels available. The proceeds of the Endowment effort will assist with

- the development of a stronger base of scholarships for current and prospective students (currently the University ranks poorly among its' peers in curriculum affordability and financial aid to students)

- research aids for developing next-generation technologies for the aviation and aerospace industries

- teaching resources and laboratories within which students can train at a higher level

The Endowment Campaign is a great (and necessary) opportunity to help strengthen the School of
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WHERE DO WE GO FROM HERE?

By Milo Zonka '95
Tradewinds Editor

When I volunteered to serve as editor for *Tradewinds* I was caught up with the thought of "What can I do to make this better?" So I pulled out a pad of paper, put down some notes, fired off a few missives to some FITSA board members.

...We need some school updates, some profiles of faculty and alums, some gossip and alumni news...

...We need some networking capability, some advertising...

...We need alums to contribute, tell us all about the industry from their perspective...

...We need to give the undergrads a resource, access to alums...

The list goes on. You might say I had too much time to think... Don't I have a job??? But I gave it enough thought that, in the end, I designed a *Tradewinds* that I would absolutely love.

The downside to this is that I pay 35 bucks a year for my FITSA membership, and that doesn't comprise the entire organizational budget. There are others out there—including you—who, year in, year out, pay their dues. You expect a little something for your money—even more importantly, you deserve it. By joining FITSA, you have demonstrated an interest in staying involved.

Some take their degree and fall out of touch. Others want more.

I'd like to think that every member of FITSA is interested in staying in touch with the SOA and vice versa. *Tradewinds* is a great resource for doing just that. It's been published for some time now, here and there, but I say it doesn't fill the needs we have, and I'm willing to spend the time to do better. But unless you

want to read Milo's *Tradewinds* every quarter, you'll have to take a few minutes and tell me what works for you. I'll start the ball rolling with some ideas, and I'd like some feedback and thoughts on how we can make *Tradewinds* work for all of us.

As for some contributions from readers at large, we're looking for:

Industry perspectives. One to three page articles telling us what you're doing and how much fun it is—make us jealous! Follow that with some thoughts on how your time at the School of Aeronautics contributed to your success, and perhaps strap on those 20/20 hindsight glasses and give us a few thoughts on what you would do differently—don't forget, we want some benefit to the undergrads here!

Advertising. ATTENTION ALL ACTIVE FITSA MEMBERS: You send me a business card and I'll print it next issue. Free—no cost—not a penny (well... 34 cents to mail it, I suppose.) Get your name out! Tell us where you are and maybe we can use ya. I'm in the marketing field and I know a warm market when I see one. If we can't help each other...? What a deal. Put it in the mail today. PS... If you work for or run an organization that wants to run an actual ad, give me a call. We're not for profit here, so it'll be a great deal, and that warm market thing...

Gossip. This is perhaps the greatest resource we can offer. Unlimited pages (with an unlimited budget, right, Mr. Byers???) to tell the world who got a new job, had a kid, bought a boat and named it "Touch & Go". Who got married? Who came home and found the locks had changed? We're a traveling bunch... Where are you, and on what days can we drag you out of the office for a brew if we pop into town? Lots of good

opportunities here—tell us what's going on! We'll print it as you send it, with the caveat that my sweet mother has to be able to read it also.

Features. Ever read AOPA Pilot and wanted to try your hand? We've all got thoughts about aviation in general, or had a great trip somewhere and wanted to tell others about it. Perhaps you had a "come-to-Jesus" moment in an airplane and might save someone else the trouble by sharing your wisdom? Maybe you do something other than monitor an autopilot and abuse the poor first officer for a living, and want to open some eyes to a side of aviation we don't know about?

Finally... What more do you want to know? You've got as much of a right as anyone to ask for specific content—we're all equal, so long as the dues are paid. Humble me with a great idea and I'll make it happen.

With a revised web page thanks to Kiko Picornell and a new look with the *Tradewinds*, we're ready to give you some serious bang for your 35 bucks. Why? To make FITSA and the SOA stronger. We've got a solid institution that is our common bond. We've got the opportunity to make it better, simply by becoming stronger as an organization. Best way to do that, in my humble opinion, is to be more active--to know more about the school and its goings-on, to help each other more and give value to being a Florida Tech SOA alum.

As you can see, I really like to write, so I'll take care of the hard stuff. If it's me alone, however, this thing will be pretty bland. But with some contributors and some new ideas, the next issue of *Tradewinds* will be pretty darned interesting. I can't wait to check the mailbox!

zonka@bellsouth.net

OLIN CAMPAIGN

(From Page 1)

Aero academically, cost-competitively, technically, and with greater affordability for the next generations of students.

FITSA has offered to spearhead a secondary effort to raise funds for the Endowment. Currently the Endowment Campaign is soliciting funds at various "levels of giving", ranging from the low of \$1,000 to \$25,000 and above. While there are many Aero alumni who can afford these levels, FITSA has established an Endowment fundraising account for those who would rather donate within the \$1,000 level (\$1,000 and below), or would prefer to earmark donations specifically for a particular function (i.e. Scholarships or Student Aids).

Donations can be made directly to FITSA (reference the Constantine Endowment) for Scholarships, Student Aids, Research and Development, or general support for the Endowment now through April 2002. FITSA will present the combined contributions prior to the close of the "Catch a Rising Star" campaign, while efforts will continue beyond this effort to gradually raise the Constantine Endowment to FITSA's stated goal of \$10 million.

In order for the School of Aero to solidify itself as the source for aviation professionals, the School needs the most advanced aviation training environment, the latest technical and computer simulation aids, and a more affordable University experience where the "best" students can attend regardless of their financial backing. The Aero Alumni and their employers are tasked with ensuring these objectives are reached.

FROM THE PRESIDENT

(From Page 1)

international service and expanding parking, the Flight Center eventually needs to be relocated. Past relocation plans recommended a site on the north side of the airport however, this was an unattractive alternative due to relative distance from the main campus. A new proposal has been unveiled where the Flight Center is relocated to a site near the Air Traffic Control Tower. This site has many advantages over other proposals since its is centrally located on the airfield and is well suited for flight training activities in addition to FIT Aviation's role as a Fixed Base Operator. There is some federal and state grant funds available to assist in the contraction of the infrastructure (taxiway/apron, roads and utilities) as well as for the classroom/office building.

The maintenance hangar will have to be funded separately however, there may be some alternatives, either from private sector financing or economic development programs. We are putting together a team of alumni to act as advisors to represent the School in the planning, design, construction and lease negotiations. If you are interested, please contact me at (800) 231-7025.

Flight Instructor Unionization

In May, 1999, FITSA and many of the alumni were involved in the imminent vote of the Flight Center's CFI's to have the International Association of Machinists (IAM) represent them as a collective bargaining unit. Acting as intermediaries between the flight instructors and administration, we were able to convince the CFI's to withdraw there petition and give the administration a six-month opportunity to make extensive changes in how CFI's are

compensated. Needless to say, it was an interesting time and everything went down literally to the last minute before the withdrawal, but shortly thereafter, the administration came through with substantial increases in the pay and benefits flight instructors receive.

I checked with instructors recently and they seem to be satisfied with the pay changes (They still have some problems with how the flight line is operated, but then, you can't have everything). A special thanks go out to Paris Michaels ('75) who made the trip down to speak personally one-on-one with the CFI's and to the many alumni who sent e-mails of support to me and to the CFI's who needed to know that there were alumni out there who really cared about them and the School.

As an aside, I have to say that this event was one of FITSA's finest hours and showed the University Administration that FITSA and the alumni are a force not to be taken lightly. The attorney the University hired to present the anti-union viewpoint told me afterwards, in his 20 years of experience, he has never seen a group 100 percent in favor of unionizing, turn around completely on the issue (and especially in so short a time). None of this could have happened without our alumni in action to show a balanced view of what was at stake.

Olin Endowment Campaign

After a great start this summer for our fund-raising campaign to raise \$1,000,000 to be matched by the F.W. Olin Foundation, we have already received over \$120,000 in cash and pledges! Most every alumni should have received their campaign package which highlights (Continues on Page 4)

FROM THE PRESIDENT

(From Page 3)

what this program is about and how they can contribute. While I realize that many do not have the resources to make a substantial contribution, every little bit helps us reach our goal.

A number of alumni have approached me about the idea of pooling their contributions through FITSA so that we can make one large enough donation in FITSA's name. (The minimum contribution for the privilege of naming opportunity is \$25,000). Interestingly, we were already planning to incorporate FITSA before the end of the year as a non-profit organization be able to offer receipts for tax-deductible donations and should be set up to allow members to take advantage of the end-of-year tax planning period. If you are interested in contributing through FITSA, let us know as soon as possible.

We expect most of our funds to come from (1) other foundations, (2) wealthy individuals, and (3) corporate partnerships. Where you can be of tremendous help is introducing us to any contacts that may have a potential interest in the SOA. Let us know if there is someone you feel we should get to know.

We are co-hosting a special event this fall to coincide with the Melbourne International Airport's Annual Aviation Day. A formal dinner/dance party "Happening in the Hangar" with a Casablanca theme will be held Saturday evening, October 13th, 2001 with proceeds to go to the SOA's Olin Campaign in the name of the late Chad Rhodes, a local teen who had aspirations to attend the SOA. Of course, FITSA members are invited to attend and tax-deductible

sponsorship opportunities are available by contacting me at (800) 231-7025.

2001 Symposium

The Symposium (February 7-10, 2001) was one of our best ones yet. On Wednesday, Feb 7th, we hosted our first ever Career Day/Job Fair, with 15 companies in attendance to visit the School and meet potential employees. By all accounts, it was a successful event and we hope to expand it next year.

Our traditional class visits were held on Thursday and Friday with superb alumni representation in virtually all segments of the aviation industry. Our guest speaker for the Symposium Luncheon was Col. Hiram Mann, on of the original Tuskegee Airmen. His "no punches pulled" account of the Tuskegee Experience was enthusiastically presented and received.

The 2001 Skurla Award winner was Francisco Picornell ('84), who enjoyed a homecoming of sorts as an alum as well as a teacher.

Our Outstanding Faculty Award of Excellence was given to Dr. Donna Wilt for her continuing efforts in not only day-to-day instruction, but her contributions in supporting extra-curricular activities.

Retiring University Vice President - Academic Affairs, Dr. Andy Revay was inducted as a Honorary Member of FITSA as was presented with a certificate at the luncheon.

FITSA's annual membership meeting was held Friday afternoon with election of new officers and directors. New Board of Directors included Mike Perry, Mark Erickson, and Francisco Picornell. Yours truly was reelected as

President for another two-year term. Evan Futterman ('78) was elected Vice-President with Marshall Stevens stepping down after faithfully serving the organization in many capacities from its inception in 1992. (Marshal says he's just taking a sabbatical to spend time with the family and promises he will be back!). Jim Blessing (as my co-conspirator and bag man) was reelected as Secretary-Treasurer.

A full report of the annual meeting can be found on our website at www.FITSA.org.

The auction was a success as well with many interesting items, including my slightly abused RC Blimp which I hadn't intended to sell but went for more than I expected or originally paid for!

Saturday dawned bright and beautiful for Aviation Day. We had several fly-in guests with interesting airplanes on display as well as walk-ins from the local community. The SOA's New Piper Arrow's were the instrument of choice for the Hash-Mark contest, although I managed to slip my Grumman Yankee into the pattern but without success. At least, I landed inside the box this year.

In summary, the Symposium keeps getting better, but this could not be done without the countless hours of preparation by many, including our Executive Director Lyn Bubb, Ann and Sandy in the office and the efforts of the FITSA Student Chapter members. Well done and Thank You all!

Well, that's its from me. I want you all to know that we are taking the efforts to provide more value-added benefits of being a member of FITSA and encourage you to let us know what we can and should be doing to develop FITSA into a leader in alumni relations.

FITSA BY THE NUMBERS

By Jim Blessing
FITSA Secretary/ Treasurer

2000 was an interesting year for FITSA. The organization pledged its' manpower support of the Constantine Endowment and Olin Campaign while significantly increasing financial and non-financial contributions to student development.

A summary accounting of the year is as follows:

As of February 2001

Total Income	\$11,397.03
Total Expenses	\$14,042.39
Net In (Out)	(\$2,645.36)
Balance in Accounts	\$ 4,792.02
<u>Symposium 2000</u>	
Income	\$7,318.03
Expenses	\$7,307.29
<u>Other Expenses</u>	
Scholarships	\$1,100.00
Membership Drive	\$1,467.86
Communications	\$2,892.74
Advertising (for SoA)	\$400.00
General Business	\$968.60

FITSA's role has evolved into the primary sponsor of the annual School of Aero Symposium. As such, FITSA's ability to grow depends more and more on the success and attendance during Symposium weekend. Into the future, FITSA will work to build the Symposium weekend as an annually self-sustaining event.

In 2001 FITSA has committed more resources to student development, partly by increased student scholarships by over 70%, and partly by developing a student chapter of FITSA. In addition, we will be working to expand the membership, improve alumni communications, create more networking opportunities through-out the year, and develop a better symposium format for the benefit of the students and alumni. Please lend your support by offering your suggestions to its developing activities.

WEB SITE UPGRADE/UPDATE

By Francisco Picornell
Director/Internet Project Manager

Hello fellow graduates:

As a founding member of FITSA, it is a pleasure to be back on the board and equally pleased to take over the reins of the FITSA website.

First off, I would like to thank Mr. Greg Johnson for his service to the organization in building and maintaining the site. Greg is not going away as I hope he would agree to continue to serve on a Committee (to be organized) that would oversee the running of the site.

Continuing on Greg's good work, it is my aspiration to make the website more than what it presently is into a "value added" service to the membership. Thus my question to you is: What would you want to see on it? More importantly: what do you think you should be getting for your \$35.00 membership dues each year? As you know, the strength of the organization is drawn from its membership and is only proportionate to its members' involvement and participation. What is it going to take to increase member involvement and participation? (sorry, we can't afford to give a million dollars away a day; at least on the present membership dues schedule).

How do we attack corporate sponsorships? We can present a significant benefit to those seeking exposure if we can show activity. This benefits to them, can mean opportunities to us as a group.

My initial thoughts are to divide the site into two sections; one open to the public and the other only for

members. The bang for your \$35.00 would be available only to you members (in good standing). The public side would not only showcase us as an organization but be one of the vehicles which we can promote the School of Aeronautics. So; What should go on the public site, what should go on the members only site ?

Some thoughts:

Public Site

- Organization & SOA Activities
- Board and member listings
- *Tradewinds*
- Member Organization Profiles
- Open Forums

Members-only Site

- The Gossip sheet
- A resource Center/Library
- Member Profiles
- Member Organization Profiles
- Links
- Organization bylaws
- Online employment classifieds
- Private Forums

These are just first pass ideas, we want to know what you want to see. We have had a good start (thanks to Greg) and I am making it my challenge to elevate this to the next step so that one day, I will turn it over to the next sucker (OOOOPPPPS !!) I mean the next dedicated individual to take it even higher.

How do we do this?

Please email your suggestions to:

fitsa@fit.edu

Look forward to reading your comment and suggestions.

LABOR UNIONS AND YOU

By Paris Michaels

If there ever was a vocation requiring the facilitation of an organized labor group, you are entering it. The disdain for the cost of aviation safety among pioneer airline operators was the major catalyst for the creation of the largest pilot union in the world, Air Line Pilots Association, in 1931. Since then, it has mushroomed into an entity whose influence and effectiveness are today realized by even the highest levels of Management at every major airline. ALPA is not the only professional association serving the industry but it is the most effective and the one smaller groups are modeled after.

THE UNION ROLE

The modern relationship shared by pilots, management and labor is one of necessity. It goes beyond the simplicities of wages and productivity that other occupations commonly require of organized labor. Aviation labor unions have had a profound influence on shaping the job of airline pilot into what it is today how it will be in the future. When you become a member of a union, you help shape its future and its goals. As an employee of a major air carrier, you are destined to be a member of a union or association.

Like it or not, the technological pace at which the industry is evolving makes it an infant industry. It has been this way since the Wright brothers' first flight and it will forever be considered a growing and evolving industry. It is never static. This is in part what makes aviation such an exciting field. This dynamism is also the catalyst for a fully functioning and efficient organized labor group. Unions help keep the experiment under control by providing a research infrastructure to evaluate new developments in the industry. Unions are needed in the airline

business. Accept and understand this position throughout your interview process.

Volumes have been written on the subject of labor unions and their origin. If you aren't familiar with the basics of organized labor, you should educate yourself. To understand today's issues, you must know the history of the organized labor movement in the United States and the airline industry. If you need a place to start, read-up on the mechanics of a "closed-shop." Basically, every major airline's pilots are organized. You will not have a choice of unions nor whether you wish to be a member or not. By understanding the "closed-shop" concept, many of your questions will be answered concerning voluntary and involuntary participation. Although the unions representing air carrier pilots are indeed unions, you will often hear them referred to as "associations." This term reflects a politically correct aspect of your industry.

Unions provide the labor movement a legal ability to strike. Without this right, a union has limited effectiveness. There are numerous legal mechanisms available to both union and management forces, including residential intervention and influence.

Contrary to the perverse perception which many uninformed people share of unionized environments, we in the airline industry are not seeking the use of mutually assured destruction to guide us through labor disputes. Negotiation and conciliation act through their processes until agreement is achieved. This is what it is all about.....making both sides happy while being productive.

PROFESSIONALISM

The question you ponder before and during your first participating experience at this is; if any thought

is given to your situation at all! Does anyone really care? Is anyone listening? Of course, passengers about to board an airliner are much more concerned about demonstrations of airline employees' dissatisfaction than the majority of the non-traveling public.

You also learn quickly that on the job, airline employees tend to remain professional and provide the passengers the service they deserve even during periods of labor strife. Employees often wear pins or laden their bags with stickers during periods of labor strife, though everyone continues to do their job. It's an educational process. You wish to educate your passengers, not alienate them. The passenger is the reason the airline exists. Your plight is brought to them for understanding.

Safety is of paramount concern all the time in our business, and everyone is aware of it. You become a soldier of a cause when you demonstrate. If you are a union member, demonstrating is a right and a weapon. This may be somewhat difficult to grasp unless you are educated on the topic. So educate yourself. Someday it may be you out there.

VOLUNTEERISM

Did you ever think about who makes the phone calls to families of Crewmembers involved in an accident regarding the status of their loved ones? How about the arrangements regarding insurance and retirement benefits when a pilot dies? Who does all these things and more? A committee of union representatives called a "survivorship committee." This is part of what your union does for you as an airline pilot.

Pilot volunteers are the lifeblood of pilot associations. Every function of an organization tasked by its
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Labor Unions and YOU

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members to represent them require a multitude of talents beyond those of piloting an airliner. There is plenty of rewarding work to be done for those who are motivated to participate. Remember, like any other organization, its success is gauged by how well its constituency is served. This efficiency relies on the actions of its membership.

NEW MEMBERS

This first year of employment with a major airline is termed the "Probationary Year" for aspiring union members. Probationary pilots are prudent to avail themselves to the customs, membership requirements and services of their professional association.

For now, just know that you have to jump through hoops for the rest of your career. Getting hired is just a start. Know that it is all worth it. The system is good and it works for you. You must believe and know this to understand the environment.

While you aren't expected to be totally conversant in union-related issues, your sentiments can be easily revealed without even knowing it. You may be asked in an interview how you feel about "buying American-made products." Keep in mind. You are seeking to be hired by the interviewing airline. You wish to show yourself as a positive person who understands union structure, sympathy and support. You don't want to come off as a radical.

BENEFITS: AN EXAMPLE

Your union is involved in your training environment. The union has negotiated for example, the preferable times for simulator checkrides in distinction to training. That is to say, it is more preferable to use the simulators for training

between midnight and six AM than it is for giving checkrides. We all know that aviation is an around-the-clock industry, but a pilot who spends all night in the simulator cannot be used for duty the next day. So in effect, we've shot down the use of a pilot for two days instead of one, for the purposes of completing a required checkride. Taken to an annual perspective, if the pilot has to block four days a year instead of two for checkrides, you lose productivity by one hundred per cent over that which is really required. We would rather be available to fly two more days than resting.

The pilot in training is of no use to the productivity created by line flying. If a pilot is marked off the schedule for three months of training, it is immaterial whether the training is conducted in the middle of the day or at night. The company is just trying to maximize the use of simulator sessions and instructors.

Your union will negotiate with the company that the darker sessions should be sold to outside carriers,

leaving the preferred sessions dedicated to in-house functions of training and checking the company pilots. Somebody has to organize these priorities. That somebody is your union. We're only scratching the surface of what the associations do for their members, the pilots.

TO LEARN MORE....

Talk to people you know about unions. Write letters to the aviation associations inquiring of specific topics on which you may have questions. Find out for yourself why they exist. Make appointments to visit people or at least make a few phone calls. They will have information about job requirements and work opportunities at each airline. There are 70,000 unionized airline pilots in the United States. Learn about dues and what that investment will return to you. Union officials, employers and a large number of airline pilots in the field are all willing to help you, but it is up to you to contact them. The inquiry will prove interesting and rewarding. Guaranteed.

COMING SOON....

TO A MAILBOX AND WEB PAGE NEAR YOU

A NEW-LOOK TRADEWINDS!

(Debuts next issue)

For more info: Milo Zonka '95

Zonka@bellsouth.net

(800) 945-2310 – Day

(305) 278-0136 – Eves

A MORE FUNCTIONAL WEBSITE!

Member-only areas... Forums...

Gossip! Classifieds...

For more info: Francisco Picornell '84

fitsa@fit.edu

WHERE ELSE ARE YOU GETTING MORE
FOR YOUR MONEY EACH YEAR???

727 NOISE REDUCTIONS

By Carl Wagner '76

As we all know, on January 1, 2000, all of the older stage 2 jets had to meet the new noise requirements of "Stage 3." You may be interested in how American Airlines quieted their 727 fleet.

One of the prime considerations was that the fleet was not going to be around for a long time. AA intends to use the 727s for specific markets for only five to ten years, after which they will be replaced by 737-800s. Already, there are no 727 flights in or out of Chicago O'Hare Airport, which is a major hub for AA. So, given the relatively low value of 727s, meeting the Stage 3 rules represents a considerable incremental capital investment as well as imposing payload penalties.

AA operates 22 727s powered by JT8D-15A engines. These have a max takeoff weight of 190,500 pounds. The only option available

for these airplanes is the FedEx heavyweight hush kit. This consists of engine and nacelle acoustical treatment and engine mount structure upgrades. This mod adds 1,400 pounds to the empty weight, and the cost is approx. \$3.5 million per airplane.

AA also operates 53 of the older 727s powered by JT8D-9A engines. The max takeoff weight of these models is 178,000 lbs. The most effective proposal for the -9A powered airplanes is a system developed by Raisbeck Engineering. This kit meets the Stage 3 requirements with drag reduction enhancements that are less intrusive and less costly than the FedEx hushkit. Landings are conducted with 25 degrees of flap. By having less flap (30 or 40 is the previously used setting) less drag is created, thus less power is required, thus making less noise. It also results in slightly longer landing distances. Raisbeck replaces the wing leading edge

device actuators with new actuators, which reduce LED extension by about two inches.

Now, how do you quiet the engines down for takeoff? The 727 was not very far out of Stage 3 to begin with, and it is a fact that using less thrust makes less noise. The engines are set to produce less thrust for takeoff. This imposes a takeoff weight decrease for a given runway length. This negatively impacts payloads in certain instances, requiring either a longer runway, or a lower takeoff weight. The Raisbeck mod only costs \$1.4 million per airplane, and there are no easily visible changes to the outside of the airplane.

So, the new rule of thumb for you airplane watchers is, if you see extended tailpipes, that is the FedEx mod. If the extended tailpipes are not there, the airplane has the Raisbeck mod.