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South Carolina Aeronautics Commission Aviation Newsletter

No. 4

APRIL 1978

Vol. 28

AVIATION SAFETY WEEK

Mr. Phillip M. Swatek, Director Southern Region Federal Aviation Administration, has accepted an invitation to speak at the Annual Aviation Awards Banquet. This years Banquet will be held at the Thunderbird Motel at the Greenville Downtown Airport on April 20, 1978 at 7:00 p.m.

The Southern Region of the Federal Aviation Administration covers the eight southeastern states, the Caribbean, the Panama Canal Zone and FAA's international aviation activities in Central and South America.

From his headquarters in Atlanta, Mr. Swatek directs all FAA activities and programs in the Southern Region including 337 offices and facilities and more than 8,000 employees. FAA, a decentralized governmental agency, is responsible for aviation safety and for fostering the development of civil aviation. It certifies all civil aircraft and airmen; establishes and maintains the airways; provides for the safe and efficient movement of air traffic and other related aeronautical service; certifies air carrier airports and administers federal grants-in-aid for airport planning and development.

Before coming to the Southern Region, Mr. Swatek had served since 1965 as Director of FAA's



PHILLIP M. SWATEK

Pacific Region with headquarters in Honolulu. For a year prior to going to the Pacific, he had been Deputy Director of Southwest Region in Fort Worth, Texas. He joined FAA in 1961 as Director of Public Affairs in Washington.

Immediately following the Banquet at 8:30, Mr. Swatek will conduct a listening session to answer questions pertaining to FAA operations.

Tickets to the banquet will be \$5.50 per person and everyone having an interest in aviation is invited to attend. The FAA Listening Sessions is free.

In observance of Aviation Safety Week, the South Carolina Aeronautics Commission in cooperation with the FAA and SOPA, has scheduled several additional programs.

The first will be the State wide accuracy landing contest, Regional contests will be held at Owens Field Columbia, Walterboro, Anderson, Spartanburg, Florence, and Aiken. The regional contests will be conducted on Saturday, April 8 at 2:00 p.m. Contestants should register in advance at the following locations; Columbia, Midlands Aviation, Walterboro, with George Welch, at Harrington's in Aiken, at the Control Tower in Spartanburg and at the Flight Service Station at Anderson and Florence. The Hope Insurance Agency of Columbia will provide trophies for the six regional winners and also for the winner of the state championship.

The Regional winners will compete for the championship trophy on Saturday, April 15 at Camden at 2:00 p.m.

Other events include: The Colleton County Rice Festival Air Show at the Walterboro Airport on Sunday, April 16th. Activities include a new aircraft and avionics display, Sky Diving and Military Aircraft displays. The Breakfast Club has been invited.

On April 21st, the Greenville Airport Commission will hold a dedication ceremony for the opening of the new East-West parallel taxi-way at the Greenville Downtown Airport. This program begins at 12 noon. Everyone is invited to attend.

The Aircraft Owners and Pilots Association's Air Safety Foundation will conduct their famous weekend Flight Training Clinic at Greenville Downtown Airport on April 21, 22, and 23. The courses offered at Greenville Air Inc. will be:

1. The Pinch Hitter Course for non-pilots who fly the right seat. This course is completed in 4 hours flying and 4 hours ground school.
2. The AOPA Survival Training Course, 5 hours classroom and 6 hours field training.
3. The Instrument Pilot Preparatory Course for those who have passed the written and wish to get ready for the Flight Check. This will be 4 hours ground school and 5 hours flying.
4. The Instrument Pilot Refresher Course, 6 hours flying and 4 hours of ground school

The FAA written courses will also be offered at this time.

For further information call the AOPA Air Safety Foundation (800) 638-0853 TOLL FREE!

For motel reservations call the Thunderbird Motor Inn (803) 233-4651.

For Banquet reservation complete form below.

IN ORDER TO HELP IN PLANNING PLEASE COMPLETE THE FORM AND RETURN BY APRIL 14

TO: MR. JACK BARRY, SOUTH CAROLINA AERONAUTICS COMMISSION, P.O. BOX 1769, COLUMBIA, S. C. 29202

PLEASE INCLUDE FOR THE AVIATION AWARDS BANQUET - 7:00 P.M. - APRIL 20TH THUNDERBIRD MOTOR INN (Do Not Send Money Or Checks).

PERSON(S) \$5.50 PER PERSON

NAME _____

ADDRESS _____

CHESTER SOARING CONTEST DRAWS RECORD CROWD

The tenth annual Region 5 Soaring Championships will again be hosted by Bermuda High Soaring School at Chester Airport, April 18-22. More than a month before the contest, a record field of 75 pilots had entered, several from foreign countries.

As in past years, the contest will consist chiefly of speed tasks around fixed-course triangles, or goal-and-return flights, covering distances from 100 to 200 miles each day, depending on weather conditions and forecast thermal strength.

Competition Director John Randall of Coral Gables, Florida, a recently retired senior captain with Eastern Air Lines, is a veteran of soaring competition, with experience dating back to the 1950's.

Prominent names on this years roster include several former national soaring champions, and half of the four-man U.S. International Soaring Team Herbie Mozer of Michigan, 1977 U.S. Standard Class Champion; and Karl Striedick of Pennsylvania, 1977 15-Meter Class Champion. Striedick also holds the distinction of being the only soaring pilot in the world to have flown more than 1,000 miles nonstop. His epic flight is featured in the March, 1978 National Geographic magazine.

Contest tasks will be flown within a semicircle of about 100 miles' radius, extending from Chester Airport to the west, north and east. General aviation pilots penetrating this area at altitudes of 10,000' MSL or below during the contest dates (and the prior practice weekend) should be on the lookout for sailplanes flying singly or in clusters. Normal cruising speeds for sailplanes are in the 80-100 knot range.

Chester Airport will remain open throughout the contest period. However, transients and pilots wish-

ing to observe the contest should plan to arrive before 1100 or after 1400 hours, if possible, to avoid possible delays launching operations. Control frequency for the contest will be 123.3 MHz; please use it sparingly to avoid interference with contest operations.

A number of the newest sailplane designs, mostly from West Germany, will be making their Chester contest debuts this spring. Among these will be the Mosquito, AS-W 20, AS-W 19, and the Dick Schreder-designed HP-19.

Accurate, pinpoint weather forecasting is the secret of a good soaring contest. Columbia forecasters John Purvis, Ed Pacquet and their weather bureau colleagues have honed their soaring forecast techniques to the level of a fine art as well as a science. For any given time of day, they can predict thermal strength, height of convection and cloudbase with astonishing accuracy. This information enables the Competition Director to select tasks that will be challenging but not impossible to complete.

The Chester contest marks the beginning of the U. S. soaring season, and each year it attracts numbers of snow bound pilots from New York, Ohio, Indiana, Minnesota, and other snowbelt locales.

Bermuda High Soaring furnishes the nucleus for contest ground and towing operations; volunteer workers from several nearby states fill out the organization as timers, scorers, linemen, etc.

Today Chester is considered one of the major competition sites in the nation; in August, it will be the site of the U. S. National Unlimited Championships. It could be said that Chester is to competition soaring what Madison Square Garden is to boxing.

If additional information or clarification needed, contact Gren Seibels, 799-1838 Columbia.

FAA NOTESINCORRECT SHIPMENT

We have received a report of secondary fuel nozzles for some models of Airesearch TPE-331 engines being incorrectly shipped. The nozzles ordered were P/N 868752-1, but P/N 868752-2 nozzles were received. The error is believed to have occurred at the factory in Arizona and may not be an isolated case. The installation of the incorrect nozzles, if not detected, could cause serious engine damage. An incoming materials inspection required by Part 145 found the error.

UNAPPROVED INSTALLATIONS

Unapproved additions still continue to cause hazards to safety. There have been numerous engine failures and forced landings attributed to these installations.

Oil quick drains and retractable nose gears are still being reported as a problem area. Obtain the engine and aircraft manufacturer's approval before adding equipment.

The latest known problem due to an illegal installation was an inflight fire believed to be the result of a long range fuel tank installation. An auxiliary wing tank in close proximity to a turbocharger was ignited and the resulting fire substantially damaged the aircraft wing structure. The heat was so intense that wing replacement will be necessary prior to operating aircraft.

WHEELS

Recent reports have been received of bent, broken and worn wheel bolts. Proper bolt length, correct use of washers, and correct torque are important factors.

Rim cracks and deformations are also frequent. Wheels should be cleaned, stripped of paint thoroughly inspected and protected with new paint at each tire replacement. Dye penetrant and other nondestructive testing methods are worthwhile for wheel inspections. Serviceable, clean, properly lubricated and correctly torqued wheel bearings are also necessary for safe wheel serviceability.

REPAIR STATION PRIVILEGES

During a recent safety meeting, one speaker implied that he was permitted to approve certain parts when they were defective according to the manufacturer's overhaul specifications. The part mentioned was an engine crankshaft having a crack in a flange area that extended from the edge of the flange to a hole in the flange. The reasoning behind this comment was that the crack would cause no harm because it could not extend beyond the radius of the hole. This implication is contrary to the following: The manufacturer states very plainly in the inspection data of the overhaul manual that crankshaft thrust flanges are critical areas that must be specifically inspected for cracks. Cracks are not acceptable. The manual stresses magnetic particle inspection before taking time to dimensionally inspect the shaft. Manhours spent measuring would be wasted if the shaft was cracked. 14 CFR 145.57 (a) specifies that the performance standards for a repair station shall be in accordance with Part 43. Section 43.13 (a) is explicit in requiring completion of work in accordance with accepted industry practices and practices acceptable to the Administrator. Section 43.13 (b) further requires a product worked on to be

equal to its original or properly altered condition.

In regard to a repair station authorized to perform specialized service functions, the station must perform these functions in accordance with the specifications for the specific operation to be accomplished. The specification itself must be approved by the Administrator as required by 14 CFR 145.33 (c).

The inspection and repair methods mentioned by this speaker are not approved by either the FAA or the manufacturer of the product.

SIZE OF REGISTRATION MARKS

We have had several inquiries about the size registration marks for helicopters. Amendment 45-9 to Part 45 allows a reduction in size of the required nationality and registration marks on certain fixed wing aircraft; however Section 45.29 (b) 3 of the FAR still specifies 20 inch high marks or four-fifths the width of the fuselage on the bottom surface of the helicopter and marks a minimum of two inches high on the side surfaces.

GTSIO CYLINDER CRACKS

We have had reports of Teledyne Continental GTSIO-520-D engine cylinders cracking in the area of the fuel injection nozzle boss. These cracks extend out from the nozzle and lead to cylinder head failure. There has been erroneous information circulated in industry that these cylinders can be continued in service if there is no evidence of fuel leakage or combustion chamber leakage. At the present time, there is no inspection criteria published by the manufacturer pertaining to the problem. The cylinders should be replaced with serviceable units when cylinders are found cracked. We expect service information on this matter from the manufacturer in the near future.

AIRCRAFT REGISTRATION

We have been advised that with the passage of Bill No. H.R. 3647, the Federal Aviation Act of 1958 was amended to allow the citizen of a foreign country (individual) who has been lawfully admitted for residence in the United States to own and legally register an aircraft.

G.E., CJ-610, AND CF-700 ENGINES

There has been an Airworthiness Directive issued pertaining to compressor section discs on these engines. Failures have occurred requiring immediate inspection and/or replacement of certain discs. General Electric Service Bulletin A72-140, dated 3-8-78, pertains to this problem.

The Directive applies to CJ-610-5 and -6 models as well as CF-700-2C, -2D, and 2D2.

0-200 - ENGINE POWER LOSS

We have had reports of power losses when owners and operators reset the ignition timing on Teledyne Continental 0-200 model engines in order to comply with Airworthiness Directive 77-13-03.

The manufacturer relates in each instance they have investigated that a previously undetected problem contributes to the power loss. They recommend the following: Prior to performing the magneto timing change, a brief static RPM ground run should be accomplished, and the static RPM noted and compared with that recommended by the airframe manufacturer for the model and type propeller installed. At the same time, a brief magneto check should be conducted at 1700 RPM. The difference between the two magnetos operated individually should not be more than 75 RPM. Observe engine for excessive roughness during this check. Maximum allowable drop, when operating on one magneto, is

S. C. WING CIVIL AIR PATROL



Gen Gardner Col Compton Mrs Compton Col Morse

The February Commander's Call at Hampton, Virginia was the site of very exciting news for Civil Air Patrol members from South Carolina. With ten seniors and four cadets in attendance from the Wing, the announcement that our Commander, Lt. Col. George O. Compton, had been promoted to Col. brought applause from those in attendance.

The Evaluation standings of the Middle East Region and M.E.R. Wings were accepted with smiling faces when it was reported that the region had not only regained it's No. 1 position, but had done it with a flare that had never been seen in CAP before. The region captured the first four slots along with the 16th, the 18th, and the 23rd. They were in order; North Carolina No. 1, Virginia No. 2, National Capitol No. 3, West Virginia No. 4, South Carolina No. 16, Maryland No. 18, and Delaware placing 23rd. The states of West Virginia and South Carolina took gigantic leaps in the standings with W. Va. jumping 34 slots and S.C. 21 slots above their standings of just one year ago.

The Commanders Call featured workshops for information, Aerospace Education, Cadet Programs, Emergency Services, Communications and Inspection Officers.

NEW AG PROGRAM AT HAWTHORNE

Hawthorne Aero Sales has announced a new agricultural sales program designed to assist ag dealers and operators throughout the State of South Carolina.

Included in the program is the naming of an agricultural aircraft specialist, increased availability of Piper ag aircraft parts, and an increase in inventory levels of new Piper agricultural aircraft.

Piper manufactures 3 models of ag aircraft including the Pawnee 235, Brave 300, and the Brave 375, in addition to the Multi-Use Piper Super Cub.

Joe D. Wright, formerly of Shelby, N.C. has been named agricultural aircraft specialist. He will be based at Hawthorne's office in Charleston.

Hawthorne Aero Sales is a Division of Piper Aircraft and Parts throughout South Carolina, Georgia, and part of North Carolina.

WRITTEN GROUND SCHOOL

AV-ED, Inc. of Columbia will offer a 2½ day ATP course at North Myrtle Beach on April 14, 15, and 16. Classes are from 1:00 p.m. to 5:00 p.m. on Friday and 8:00 a.m. to 5:00 p.m. on Saturday and Sunday.

A Private and Instrument ground school will be conducted on two (2) weekends at Hilton Head on April 22, 23, and April 29, and 30.

For further information contact Fred Begy or Jeff Trumbower (800) 922-5111.

TRIDENT TEC

Trident Technical College at North Charleston is accepting applications for Aircraft Maintenance Technology students for the spring and summer quarters.

For further information contact Student Personnel at Trident.

BREAKFAST CLUB NEWS



John Cureton and Terry Coats

The South Carolina Breakfast Club held a meeting on March 12th at Don's Pancake House in Myrtle Beach. Don Kelly prepared a delicious breakfast for some 65 Breakfast Clubbers who managed to find their way thru the unfavorable weather with the help of very cooperative tower controllers. One of these very determined and dedicated members was Russ Appleton of Eagle Aviation in Columbia, who managed to coax his 65 Hp. two cylinder Bellanca Champ thru two hours of cloud dodging at a top speed of 63 mph, he must have been very hungry.

Among the visiting guests was Tom Turnipseed, a candidate for governor of South Carolina, who spoke to the group.

We were honored to have Mr. John Cureton of the Columbia General Aviation District Office present. Mr. Cureton presented a certificate to Mr. Terry

Coats, of Myrtle Beach, appointing him as a Accident Prevention Counselor. This makes Terry one of the few "Safety Counselors" in the State.

Since nobody claimed to have bounced upon landing, Walter Carson, president, asked Mr. Cureton to sign our "bouncing ball" as honorary signee. He signed under John Hamilton of the S.C. Aeronautics Commission, another honored member.

The next meeting is scheduled for April 9th at Dillon. On April 16th we will meet for a special meeting at Rock Hill. This is Rock Hill's "Come See Me Week" and we will be treated to a tour of the very beautiful gardens for which Rock Hill is famous. April 23rd is a meeting at Johns Island, May 7th at Bennettsville which is long overdue. On May 21st we meet at Sumter where we will be treated to a cook-out picnic breakfast, prepared by the local Civil Air Patrol. On June 4th we will be at Lake City and on June 18th at Trenton, both locations have not hosted the Breakfast Club for sometime and we are looking forward to returning to two of our old favorites.

Now that the weather is warming up we hope everyone will "Air-Out" their bird and start coming to the Breakfast Club. We hope to see everyone at our next meeting at Dillon.

DELTA TO SERVE LONDON

Delta will begin nonstop service between Atlanta and London on April 30th using L-1011 TriStars.

The schedule will be:

Lv Atlanta	6:30 p.m.	Ar Gatwick	7:20 a.m.
Lv Gatwick	12:10 p.m.	Ar Atlanta	4:25 p.m.