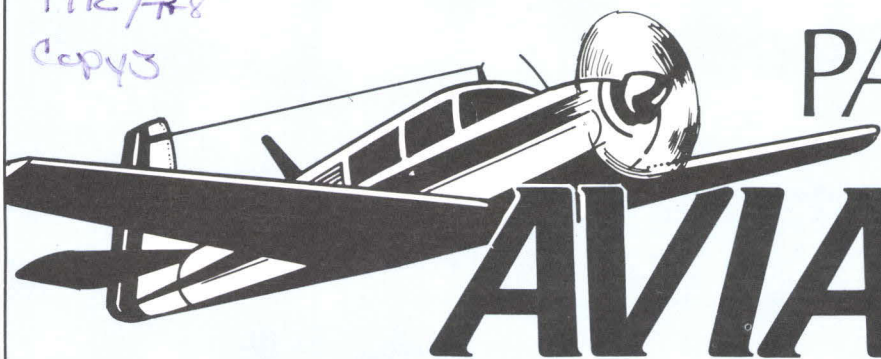


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AVIATION

Volume 44, Number 4

Published by the S.C. Aeronautics Commission

July/August, 1992

Airport Consultants and FAA Join Forces to Solve Airport Problems

The S.C. Aeronautics Commission held a joint sponsored workshop recently with airport consultants and the FAA's Airport District Office in Columbia.

The informal session July 21, brought FAA airport engineers, airport safety and program specialists together with area airport consultants to discuss mutual problems.

John Park, executive director of the S.C. Aeronautics Commission, opened the meeting by asking questions about engineering fees and how they are set.

The informal discussion opened dialogue on difficult topics to answer on the spot.

"We're here today to answer any questions you have," said

Howard Robinson, assistant manager of Safety and Program Development at the FAA's Atlanta Airports District Office, "If we can't give you the answers today, we'll give you an answer in writing later."

Topics discussed were: engineering fees, new policies, signage, storm water discharge, land acquisition for Part 24, the American Disabilities Act, landfills, PFCs, airport master plans and airport layout plans, modification for construction standards/design, and change orders.

"This was quite an agenda for such a short workshop," Bill Walls, assistant director for airports, said.

"The five hours, I believe, were well
See Page 6, Joint Meeting



Paul Werts of SCAC makes a point as Jim Castleberry (l) and Scott Serritt (r) of the FAA Airports District Office listen.

EAA Chapter 242 Wins International Award

The Experimental Aircraft Association (EAA) Chapter 242 in Columbia has won the prestigious McKillop Newsletter Award.

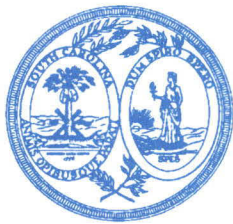
The award is given to the best chapter newsletter with outstanding writing, graphics, overall appearance, and which utilizes member participation.

"The participation and written contributions by a large number of our members were cited as primary reasons for our newsletter being chosen as the best," according to John Garder, president of Chapter 242. EAA chapters all over the world entered the

competition for the McKillop Award.

Gardner expressed his thanks to the diligent work of newsletter editor Jean Edwards and the regular contributors including: Allen and Mary Folger, Gordon Cargile, Bob and Susan Cuzzort, and Mike Jones. All members are encouraged to participate in writing articles for the newsletter on various subjects.

The McKillop Newsletter Award will be presented to the Chapter 242 at Oshkosk in August at the Theater in the Woods. Congratulations!



PALMETTO AVIATION is an official publication of the South Carolina Aeronautics Commission. It is designed to inform members of the aviation community, and others interested in aviation, of local developments in aviation and aviation facilities, and to keep readers abreast of national and international trends in aviation.

The Aeronautics Commission is a state agency created in 1935 by the South Carolina General Assembly to foster and promote air commerce in the state.

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From the Directors Desk

Getting A Round Toit

'One of these days I have got to get around to it' God Knows how many things we miss because we never make the time available.

How many times have we not been able to get the right vacation spot or missed a traveling theater production because we did not make arrangements in advance.

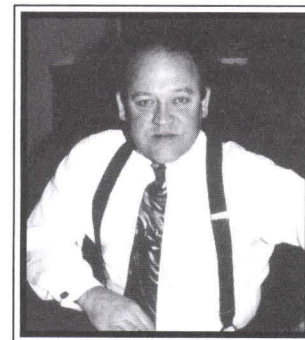
Well now is the time to "get a round toit" and make arrangements to attend the South Carolina Airports Conference in November.

Too far ahead? Maybe, but if you put it on your calendar now, if you contact your SCAA representative now, you will probably follow through and attend a conference that is going to be fun and give you lots of insight on how you can run things better.

You just can't buy the value of people in the same business sharing ideas.

Something good always comes

out of it. This year's conference is in Columbia during the week of November 10.



John Park

representative now.

If you haven't joined the SCAA, do so now, or at least get in touch and make plans to attend the conference.

Things are changing in the nation, the state, and the industry.

Get this information first hand.

Get a "round toit" and make plans to attend the 15th Annual Airports Conference.

John Park

15th Annual Airports Conference Gearing UP

The 15th Annual Airports Conference is gearing up to be the best ever. Speakers are being lined up, microphones polished and gavels dusted. Topics include: DBE compliance, aircraft taxes, special pilot program and airport safety and security.

The conference will be held November 9-12 at the Sheraton Hotel Convention Center in Columbia. The Sheraton is conveniently located at I-26 and Bush River Road.

For more information call Public Information at SCAC or write to SCAA PO Box 290426, Columbia, SC 29228.

South Carolina Aeronautics Commission Offices are at Columbia Metropolitan Airport.
Mailing Address: Post Office Drawer 280068, Columbia, South Carolina, 29228.
Phone: (803) 822-5400, or 1-800-922-0574.

Florence Regional Gets Delta Connection

Atlantic Southeast Airlines announced plans to inaugurate a "Delta Connection" service between Florence and Atlanta beginning September 11.

The service will begin with three daily non-stop flights.

"We are delighted to have this opportunity to serve the Florence market," said Samuel Watts, vice president of Customer Services.

"We see Florence as an excellent opportunity for ASA as a 'Delta Connection' carrier." Watts added, "Our initial schedule will include three daily non-stop flights to At-

lanta to connect with Delta's flight complexes. This schedule will offer the Florence traveler the most convenient connections to more than 309 Delta/Delta Connection cities located throughout 48 states and 34 countries."

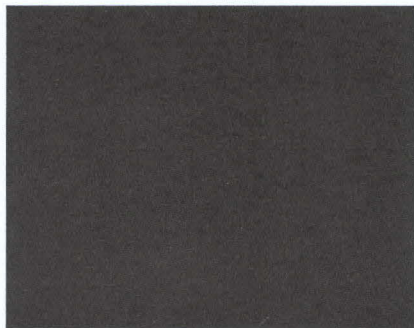
Al Kolakowski, Delta Airlines Senior Vice President of Sales, said "ASA offers one of the finest regional air services in the air transport industry, and we are pleased to join our regional airline partner in bringing the highest standards of air service to travelers in this new market."

Night Flying Has Special Risks

When you fly at night does the airport look like this -- dark and black?

If so, or if you notice any other airport maintenance flaws, call SCAC day or night (answer machine) at 1-800-922-0574.

We're checking runway and taxiway lighting systems for proper intensity, and airport nighttime security.



Gene Johnson of Million Air--Charleston

Thomas Eugene "Gene" Johnson of Charleston, an avionics manager with Million Air, died June 12.

Johnson, 65, managed the avionics department with Million Air (formerly Hawthorne Aviation) for nearly 37 years.

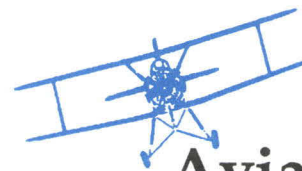
Johnson was born December 28, 1927, in Charleston and attended Murray Vocational High School. He served in the U.S. Navy as an Aviation Radioman, and joined Holst Radio and TV Repair in 1947 where he worked until 1956.

On September 1, 1956, he began

working for Hawthorne as a Radio Technician. In 1964 he was promoted to Manager of the Avionics Department. The department has shown steady growth under his leadership and the quality of his department's technical ability is well-known throughout the southeast.

Surviving are his mother of Charleston, his wife, Margaret Fludd Johnson; two sons and a daughter.

Memorials may be made to the American Cancer Society, Charleston, PO Box 573, Charleston, SC 29402.



Aviation Calendar

August 23

Breakfast Club
Avery County Airport, NC

August 30

Breakfast Club
Laurens County Airport

September 6

Breakfast Club
Louisville Municipal
Louisville, GA

September 13

Breakfast Club Weekend
Jekyll Island
For reservations
Call 1-800-841-6262

September 20

Breakfast Club
Newberry Municipal

September 27

Breakfast Club
Kirk Air Base

October 4

EAA Chapter 3
Annual Fly-In
Woodward Field
Camden, SC

October 11

Breakfast Club
Hilton Head Island Airport

October 18

Breakfast Club
East Cooper Airport
Mount Pleasant

October 25

Breakfast Club
Daniel Field
Augusta, GA

November 10-13

S.C. Airports Conference
Sheraton Hotel
Columbia, SC

Seven Airport Improvement Projects Awarded

Hilton Head Island Airport, Florence Regional Airport, Greenville-Spartanburg Jetport, Corporate Airport Pelion, Walterboro Municipal, Darlington County Airport, and Clarendon Memorial Hospital Heliport received funding for improvement projects at the State Aeronautics Commission June and July meetings in Columbia.

The State Aeronautics Commission held their regular monthly meetings and approved more than \$298,000 for airport projects.

When completed, the projects will generate more than \$4.6 million dollars when combined with local and federal funding.

Commission Chairman Jim Hamilton announced the state allocations:

◆ **Hilton Head Island Airport** - \$234,986 for grading, drainage, marking and lighting necessary to construct 490 ft. of taxiway, 80,000 square feet of apron, an access road, and parking for new terminal building, and construction of new terminal building. This airport improvement project was funded with 6 percent state funds, 36 per-

cent local funds, and 58 percent federal funds, for a total project cost of \$3.7 million dollars;

◆ **Darlington County Airport** -- \$28,759 for reconstruction of parallel taxiway, for installation of medium intensity taxiway lights, replacement of wind cone, and 2 inch overlay of apron and taxiway adjacent to terminal building. This project is funded with 5 percent state, 5 percent local sources, and 90 percent federal sources, for a total project cost of \$575,197.00;

◆ **Clarendon Memorial Hospital Heliport** -- \$4,000 for construction of an emergency medical services heliport. This project is funded with 50 percent state and local funds for a total cost of \$8,000.

◆ **Florence Regional Airport** - \$2,860 to update the airport Master Plan. This is funded with 90 percent federal funds and five percent local and state funds, total project cost is \$57,200.

◆ **Greenville-Spartanburg Jetport** -- \$22,358 to acquire aircraft fire and rescue vehicle with a capacity of 1,500 gallons. This project is funded with 90 percent federal funds and five percent local and

state monies. Total cost is \$325,164.

◆ **Corporate Airport Pelion** -- \$3,400 for engineering and legal services for land acquisition. Funded 50/50 with state and local money with a total cost of \$6,800.

◆ **Walterboro Municipal Airport** -- \$2,600 for emergency repairs to the storm drainage system underneath the concrete ramp. This project is funded 50/50 with state and local monies; total cost \$5,200.

In other matters, the S. C. Aeronautics Commission heard reports on the new congressional district boundaries as a result of reapportionment.

And, heard statements regarding the Hidden Glen private airport from Clemson-Oconee County Airport officials, airport engineers, property owners, and Hidden Glen representatives about the viability of the private airport.

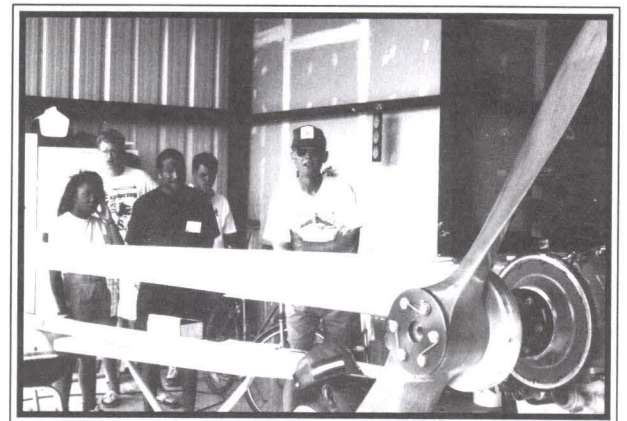
The Aeronautics Commission is responsible for fostering the growth of air commerce in the state, cooperating in the development and improvement of airports as well as supervising aeronautical activities and facilities.

Law Enforcement Explorer Scouts Delve into Aviation



Over 100 Explorer Scouts interested in aviation got a chance to learn more about it from EAA Chapter 242 recently. The Scouts were part of a national Jamboree focused on law enforcement at the University of South Carolina. The EAA took the scouts on introductory flights in various members' aircraft.

At left, Walter Carson helps an explorer into the cockpit of his Porterfield. At right, George Walters, talks to explorers about building his home-built Long EZ.



Area Teens Learn Value of Work and Wonder of Flight Through Summer Program

By Matthew Bourlakas

The Aviation Summer Youth Program is flying high once again. Eight area high school students were selected from a field of over 100 applicants to participate in the six-week internship designed by the South Carolina Aeronautics Commission.

Now in its second year, the program has become more focused on recruiting and educating teenagers who have some knowledge of aviation and/or express interest in pursuing a career in aviation.

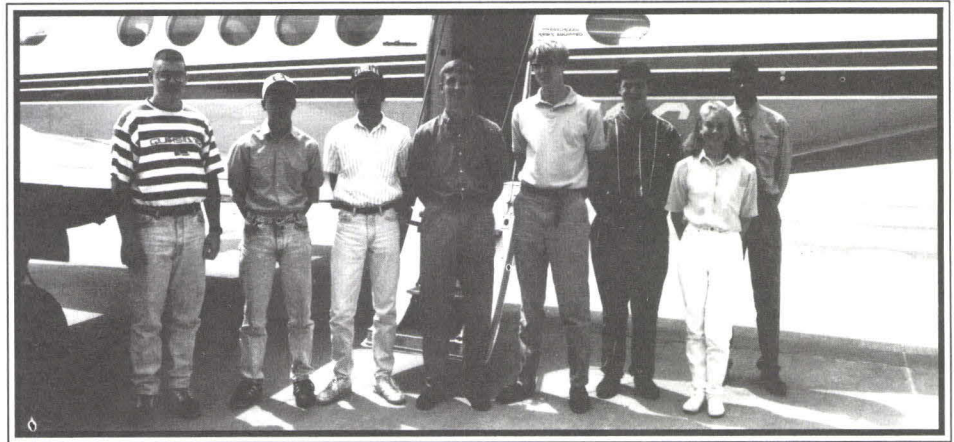
The six-week program is a paid internship with local businesses sponsoring students.

Students get a hands-on approach to aviation combined with a classroom style orientation into areas of aviation they may not already know about.

In the first week students were exposed to a variety of aviation subjects and learned about the careers aviation has to offer other than just being a pilot. Some highlights included learning about the nation's air transportation system and how it operates through the FAA, big business talk from American Airlines and a flight down to Charleston International Airport where the students got a tour of both the airport and the US Customs area.

Also during the first week students toured the air traffic control tower, Columbia Metropolitan Airport, the US Weather Service, and Shaw Air Force Base where the students got the opportunity to inspect a high altitude chamber and learn about spatial disorientation.

Crash, Fire and Rescue is an in-



1992 Summer Youth Participants are (l to r) Damon Sawyer, Michael Adams, Skip Hudson, Matthew Lengel, David Burrows, Clinton Carter, Kimberly Smith and Dan Nunn.

tegral part of aviation that participants learned more about through a CFR demonstration by Columbia Metro Capt. Fred Mullis.

Before the week was through, the students took an introductory flight in a helicopter and an airplane.

After the first week of the internship, each student was assigned to a particular business at the airport where they learned more about the day-to-day operations of aviation.

Matthew Lengel, a 17-year-old senior at B-C High School, said that working at Columbia Aviation has given him the opportunity to see first hand how a business is run from the inside and to get paid for that experience.

At Columbia Metropolitan Airport, Kim Smith, senior at Gilbert High School, learned that her job was anything but routine and that there is a lot more to running an airport than scheduling flights.

Damon Sawyer, a 17-year-old at Richland Northeast High School, was also employed at Columbia Metro Airport.

The program is not without

jobs that offer practical experience as Skip Hudson, a senior at Lexington High School, learned how to fuel an airplane while working for Eagle Aviation, and Dan Nunn, a rising junior at Keenan High School, who's job experience was working for American Airlines.

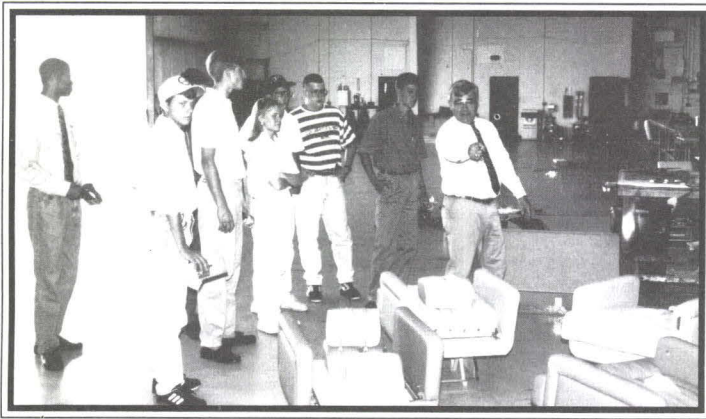
Nunn added, "I enjoyed meeting and working with diverse people and learned in the process that I'm capable of working a job that's very stressful."

The real world often comes as a shock to these high school students and the lessons they learn are invaluable. Clinton Carter, a rising junior at B-C High School, learned through working at the FAA FSDO that patience is important to have.

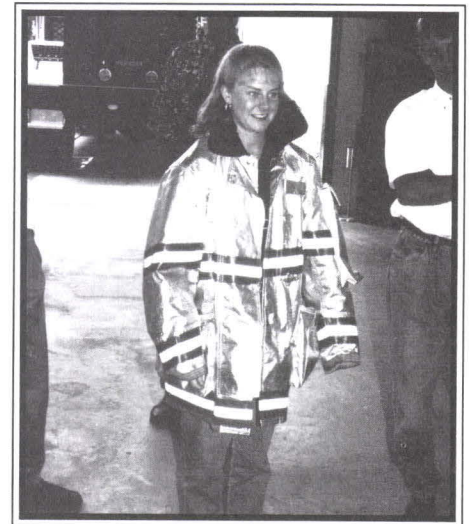
David Burrows and Michael Adams, seniors at Spring Valley and Lexington High Schools, respectively, were employed at the South Carolina Aeronautics Commission and spent time in airport development and aircraft maintenance.

Michael Adams understands the importance of communication in aviation. "During the program
See Summer Interns, on Page 6

Summer Interns Learn More than Drag



At left, students toured Eagle Aviation as Larry Yon shows them some projects in progress. At right, Kim Smith models an aircraft fire and rescue jacket.



Continued from Page 5

"I've learned how important each area of aviation is to the others, added Adams." For example, the way that the mechanics and pilots help keep the airplane flying by telling each other the problems it has and how to avoid them."

David Burrows, who is working on earning his private pilots license, wanted the opportunity to work around airplanes.

The Columbia-area high school students were selected on the basis of interest in aviation as a possible career goal, by referral from high school counselors and grades.

Aviation businesses participating include: American Airlines, Columbia Metropolitan Airport, Columbia Aviation, Eagle Aviation, the Federal Administration Aviation Flight Standards District Office and the Aeronautics Commission.

Participating businesses exposed the students to as many facets of the business as possible. So one week the student might be in line service and the next week working with baggage handling or aircraft maintenance.

The program is also designed so that college bound and vocational students can both be selected, due to the wide range of opportunities aviation offers.

The program is also slated to expand to other areas of the state to include all carrier airports and commuter service airports making this accessible to all students in the state.

FAA, Consultant and SCAC Meeting Successful

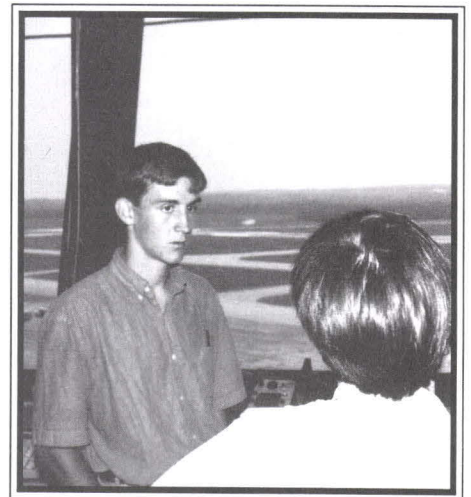
Continued from Page 1

spent in providing much needed information to the people attending."

"A lot of these items will be discussed later this fall at the Airports Conference," Walls added. "Many of these topics are too complex to discuss all at once and need a greater time frame to discuss fully."

Wayne Corley, an independent airport consultant said, "It was nice to get the status on the FAA Advisory Circulars, and it's important to know when the new advisories will become available for use."

Also on hand to give advice were Jim Castleberry, Lee Kyker, and Scott Serritt all of the FAA's Airport District Office.



Above, Matt Lengel listens to an air traffic controller during a tour of Columbia's air traffic control tower.



Howard Robinson (r) and Lee Kyker of the FAA listen to questions at the one-day workshop.

FYI From the FAA

Magneto Maintenance Should Be a Priority

Since 1985, the National Transportation Safety Board (NTSB) has cited magnetos as a cause or factor in 92 accidents involving 22 fatalities and 21 serious injuries. A multitude of Service Difficulty Reports regarding magnetos produced by various manufacturers have been submitted to the FAA during this period.

"Magnetos are electromechanical devices which use rotating parts and are subject to the same wear as the engine."

These reports include 130 instances of cracking, burning, arcing, leaking, or other deficiencies in certain magneto ignition coils. The FAA believes that period inspection, overhaul, and replacement of critical components are important fundamental facets of magneto remedial maintenance. However, an examination of accident reports and Service Difficulty Reports make it clear that the current level of magneto inspection, maintenance, and service is much too infrequent.

In 1990, an aircraft sustained a loss of engine power while in flight due to faulty ignition and crashed. An investigation of the magnetos revealed that the same magnetos were installed on this aircraft for 27 years. A review of maintenance records disclosed that the magnetos had been overhauled 21 years ago, but had not been thoroughly inspected since that time.

Although annual or 100-hour inspections of the aircraft had been performed by different inspection/repair facilities, an AD which should have been complied with in

1981 (at the time the aircraft reached 2,000 flight hours) was never accomplished. When the magnetos from aircraft were mounted on a test stand, both units began to malfunction after 15 to 20 minutes of operation. The obsolete coils in these units were cracked and leaking.

Test personnel indicated that the inflight performance of the magnetos would have been worse than experienced on the test stand because of the increased operating temperatures.

When performing annual and 100-hour inspections, on reciprocating engine powered aircraft, maintenance personnel are required to run the engine(s) to determine satisfactory performance in accordance with manufacturers' recommendations for power output, static idle, revolutions per minute, and magnetos. However, this only determined that engine RPM using both magnetos does not drop excessively. The magnetos are not removed and inspected unless a problem is evident. As a result there is no assurance of the integrity of the components of the magnetos or that the magnetos are capable of safe, reliable operation.

Teledyne Continental Motors (TCM) acquired the Bendix ignition system product line and recommends that all magnetos in their product line be disassembled and given a detailed inspection at 500-hour intervals. TCM's Service Bulletin No. 632 (as revised), issued in Nov. 1989, further emphasizes several important inspection/overhaul intervals.

Magnetos are electromechanical devices which use rotating parts

and are subject to the same service treatment, environmental conditions, and wear as the engine. Also at engine overhaul, harnesses should be replaced, and ignition switches and starting vibrators should be internally inspected and functionally tested for airworthiness.

Severe environmental operating conditions can affect operating engines as: engines overspeeds, sudden stoppage, immersion, and other circumstances may require complete or partial engine overhaul prior to the overhaul time recommended by the engine manufacturer. The magneto is an integral part of the engine and is subjected to the same degenerating forces as the engine under abnormal conditions previously listed. In such circumstances, the magneto (regardless of "in service" time) should be overhauled with particular attention focused on all rotating parts, bearings and electrical components.

There are unknown number of airplanes which, because they have been stored or otherwise utilized infrequently, may not have accumulated sufficient flight time to require that obsolete magneto ignition coils and/or rotating magnets be replaced with more reliable parts in accordance with AD 73-07-04, or other service information. Ignition coils are adversely affected by the environment over relatively long periods of time. They should be replaced and inspected at conservative intervals of calendar and flight time.

This article is reprinted from FAA General Airworthiness Alerts No. 168, July 1992.



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This Month... Inside Palmetto Aviation

- Explorer Scouts explore aviation with the EAA
- Summer Youth Program gets teens started right
- Airport Consultants, FAA and SCAC join forces

...and much much more!

*1992 S.C. Aeronautical Charts are here!
Call 1-800-922-0574 for one today.*

Greenville Downtown Gets A Facelift



The Greenville Downtown Airport opened its doors recently to reveal a new face inside and out. The complete renovation included additional floor space, a new modern exterior (l), additional lease areas for aviation businesses, two conference rooms and pilot lounges with snooze room. Ar right, Jack Kuhne, chairman of the Greenville Airport Commission welcomes guests.

This bi-monthly publication is printed at an annual cost, including tax, of \$8,851.50, and has a circulation of 8,000 per edition for a cost of \$.18 per copy. Palmetto Aviation is printed and distributed by the South Carolina Aeronautics Commission in the interest of aviation safety and to foster growth of responsible aviation in the state. The viewpoints expressed in articles credited to specific sources are presented as the viewpoints of those writers and do not necessarily reflect the opinion of the South Carolina Aeronautics Commission.