

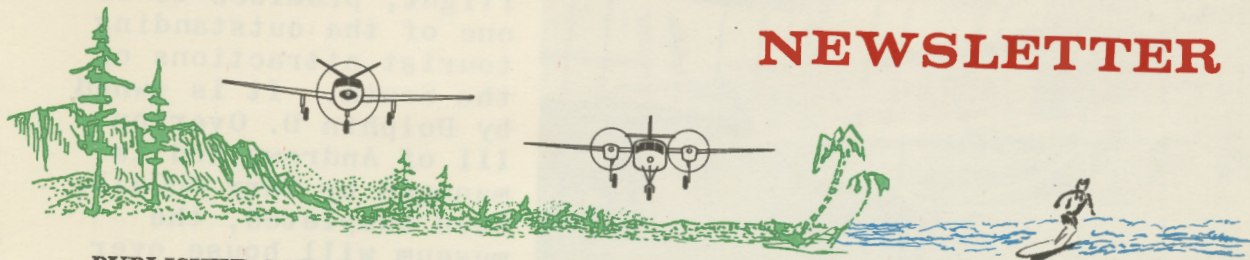
SOUTH CAROLINA



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AVIATION

NEWSLETTER



PUBLISHED MONTHLY BY THE SOUTH CAROLINA AERONAUTICS COMMISSION

G. C. MERCHANT, JR., DIRECTOR

J. F. BARRY, ASSISTANT DIRECTOR

No. 1

January 1969

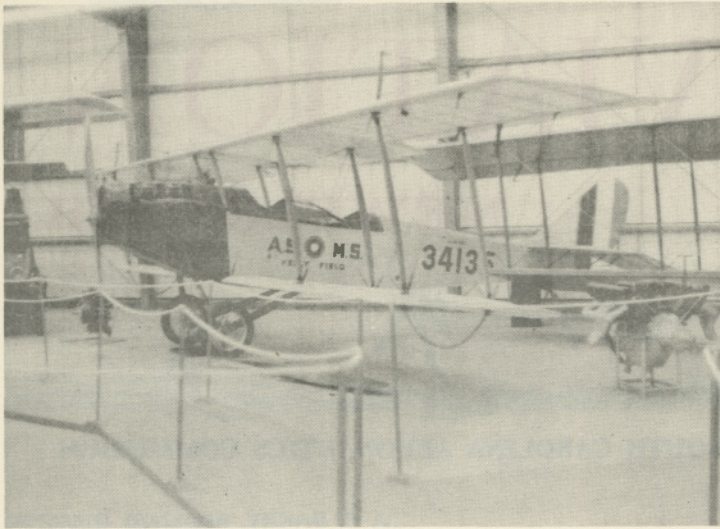
Vol. 20



ANTIQUÉ AIRCRAFT MUSEUM

Shown in the photo above is one of the antique aircraft on display at the Wings and Wheels Antique Aircraft Museum at Santee, South Carolina; the Ford Tri-Motor which is used for passenger flights over the lake area. On page 2 is a World War I Jenny.

Continued on Page 2



biles.

The museum, which was dedicated on December 17, the 65th anniversary of the Wright Brothers first flight, promises to be one of the outstanding tourist attractions of the South. It is owned by Dolphin D. Overton III of Andrews and is managed by Gary McCall. When completed, the museum will house over forty authentic antique aircraft as well as a dozen classic automo-

The Wings and Wheels Museum is located just three miles west of the Vance VOR and the 2800-foot sod landing strip is in excellent condition. By highway, it is just two miles south of the 15-301 highway bridge over Lake Marion.

Another attraction will be the "Best Friend of Charleston," the first locomotive in the United States, which will provide rides for young and old through typical Southern plantation scenes.

A restaurant will be available on the grounds and a new Holiday Inn has just opened adjacent to the field.

Plans are being developed for a "fly in" for this spring.

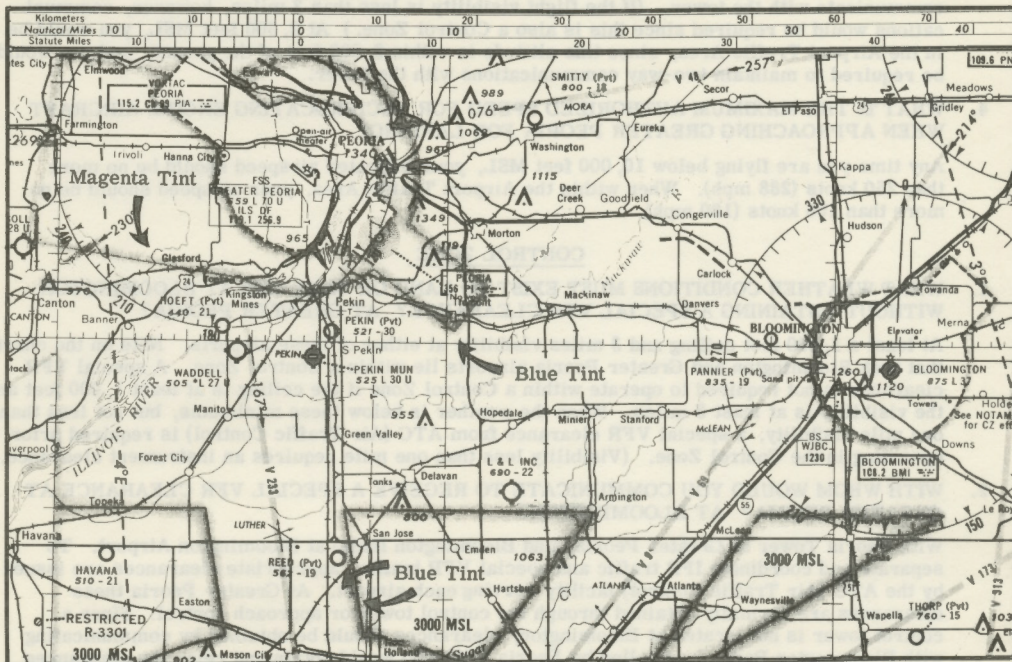
STEVENS AVIATION INC.

Stevens Aviation Inc., Greer, S.C., has merged with Southeastern Beechcraft Inc., Knoxville, Tenn. Southeastern will become a wholly-owned subsidiary of Stevens, which is controlled by J.P. Stevens & Co. Under the new arrangement, Southeastern will continue to be a distributor in the Kentucky and Tennessee areas for Beech Aircraft Corp. with sales offices at Nashville and Louisville, Ky.

Department of Transportation
 FEDERAL AVIATION ADMINISTRATION
 VFR PILOT EXAM-O-GRAM® NO. 42

CONTROLLED AIRSPACE (SERIES 2)

Illustrations and brief descriptions of airspace in which certain controls are imposed on VFR flights, along with references to pertinent Regulations, are presented in Exam-O-Gram No. 41. In addition, questions relating to a segment of a selected aeronautical chart are posed with the answers omitted, to inspire complete study of controlled airspace. Those questions are restated and the correct answers are briefly discussed in this Exam-O-Gram as an additional service to the reader.



AIRPORT TRAFFIC AREA

1. IS THERE AN AIRPORT TRAFFIC AREA AT GREATER PEORIA AND BLOOMINGTON AIRPORTS?

There is an Airport Traffic Area at Greater Peoria, but not at Bloomington. Remember that Airport Traffic Areas exist only at airports where control towers are in operation. In checking the airport data box for Greater Peoria, you will note radio frequencies, indicating the existence of a control tower and therefore an Airport Traffic Area when the control tower is in operation. The lack of frequencies at Bloomington Airport indicates there is no tower, so there is no Airport Traffic Area at that airport. Two-way radio communications are normally required for takeoff and landing at Greater Peoria, but not at Bloomington during VFR weather.

2. IF YOU HAVE NO RADIO, AND THE CEILING AND VISIBILITY ARE UNLIMITED (CAVU), ARE YOU PERMITTED TO LAND AT GREATER PEORIA? AT BLOOMINGTON?

Yes. Because Greater Peoria has an Airport Traffic Area, radio communications are normally required for takeoff and landing. However, Regulations provide that if the radio becomes inoperative during flight, a landing may be made if the ceiling and visibility are at least 1,000 feet and 3 miles, after obtaining clearance to land by light signal (green light) from the tower.

Similarly, an aircraft not equipped with radio may land if prior approval (by telephone) is obtained from the control tower. Inasmuch as Bloomington has no control tower, (therefore no Airport Traffic Area) there are no requirements for radio communications or prior approval for landing when the weather meets basic VFR minimums.

3. WHEN OVERFLYING GREATER PEORIA AIRPORT AT 3,000 FEET MSL IN CAVU WEATHER, ARE YOU REQUIRED TO MAINTAIN TWO-WAY RADIO COMMUNICATIONS WITH THE CONTROL TOWER? AT 2,500 FEET MSL?

At 3,000 feet MSL - no; at 2,500 feet MSL - yes. Airport Traffic Areas extend from the surface up to but not including 2,000 feet above the ground. Since the airport elevation is 659 feet, you would be above the Airport Traffic Area when at 3,000 feet MSL and would not be required to communicate with the tower. (If the flight visibility is less than 3 miles, however, communications would be required since this is also a Control Zone.) At 2,500 feet MSL, you would be in the Airport Traffic Area, since this altitude is within 2,000 feet of the ground, and you would be required to maintain two-way communications with the tower.

4. WHAT IS THE MAXIMUM AUTHORIZED SPEED FOR RECIPROCATING ENGINE AIRCRAFT WHEN APPROACHING GREATER PEORIA FOR LANDING?

Any time you are flying below 10,000 feet MSL, your indicated airspeed should be no more than 250 knots (288 mph). When within the Airport Traffic Area, your airspeed should be no more than 156 knots (180 mph).

CONTROL ZONE

1. WHAT WEATHER CONDITIONS MUST EXIST TO LAND OR TAKE OFF AT BLOOMINGTON WITHOUT OBTAINING A SPECIAL VFR CLEARANCE? AT GREATER PEORIA?

At least a 1,000 foot ceiling and 3 miles visibility at either of these airports. Note on the chart that both Bloomington and Greater Peoria airports lie within a Control Zone. A special VFR clearance is not required to operate within a Control Zone if the ceiling is at least 1,000 feet and the visibility is at least 3 miles. When the weather is below these minimums, but not less than one mile visibility, a special VFR clearance from ATC (Air Traffic Control) is required prior to operating in the Control Zone. (Visibility less than one mile requires an instrument clearance.)

2. WITH WHOM WOULD YOU COMMUNICATE TO RECEIVE A SPECIAL VFR CLEARANCE AT GREATER PEORIA? AT BLOOMINGTON?

With Peoria Tower at Greater Peoria, and Bloomington Radio at Bloomington Airport. To separate and coordinate IFR traffic and special VFR traffic, appropriate clearances are issued by the ATC (Air Traffic Control) facility serving each airport. At Greater Peoria these clearances are normally obtained through the control tower or approach control. Since a control tower is not located at Bloomington, clearances should be obtained by communicating with Bloomington Radio (controlled by Peoria FSS) who would obtain and relay the clearances from ATC.

3. AT WHAT ALTITUDE ARE YOU PERMITTED TO PRACTICE STALLS, SPINS, OR ACROBATICS OVER BLOOMINGTON AIRPORT?

At no altitude! Regulations prohibit the performance of those maneuvers within a Control Zone (as well as an airway). Bloomington Airport lies within a Control Zone and since this zone extends upward with no vertical limit, those maneuvers would not be permitted at any altitude over Bloomington Airport.

CONTROL AREA

1. WHEN OVER THE TOWN OF MACKINAW (center of the chart) AT 3,000 FEET ABOVE THE GROUND, ARE YOU WITHIN CONTROLLED AIRSPACE?

Yes. At first it may appear on the chart that Mackinaw does not lie within controlled airspace. However, remember that the outer limit of controlled airspace is shown by the darker and more definite edges of the tinted boundaries and the vanishing, or feathered edges show the direction of the controlled airspace. Since the darker edges of the nearby controlled airspace boundaries face away from Mackinaw, and the vanishing edges face toward Mackinaw, it is apparent that this town lies in a Control Area. This particular Control Area starts at 1,200 feet above the ground (boundaries in blue tint); therefore at 3,000 feet above the ground you would be within the Control Area.

2. WHEN FLYING IN THE IMMEDIATE VICINITY OF MACKINAW AT 15, 500 FEET MSL, WOULD YOU BE IN THE CONTROL AREA?

No. Control Areas extend from 700 feet or 1, 200 feet (as designated) above the ground, upward to the base of the Continental Control Area. Since the Continental Control Area starts at 14, 500 feet MSL, you would be in this overlying area (instead of the lower Control Area) when at 15, 500 feet MSL.

3. WHAT ARE THE VISIBILITY AND CLOUD CLEARANCE MINIMUMS WHEN FLYING AT 9, 500 FEET MSL IN THE IMMEDIATE VICINITY OF MACKINAW?

3 miles visibility and 1, 000 feet above or 500 feet below and 2, 000 feet horizontally from any cloud formation. We have established that the airspace surrounding Mackinaw between 1, 200 feet above the ground and 14, 500 feet MSL is a Control Area. Therefore, on a VFR flight at 9, 500 feet MSL, you must have at least 3 miles visibility and remain at least 1, 000 feet above or 500 feet below, and 2, 000 feet horizontally from clouds.

CONTINENTAL CONTROL AREA

1. WHAT VISIBILITY IS REQUIRED TO FLY VFR AT 16, 500 FEET MSL ON V9 V69 AIRWAY?

At least 5 miles. The VFR visibility requirement is the same when at or above 10, 000 feet MSL or in the Continental Control Area (above 14, 500 feet MSL), regardless of whether you are on or off airways. Therefore, at 16, 500 feet MSL on V9 V69, a VFR flight requires a visibility of 5 miles. **

2. IF THERE ARE CLOUDS AT 17, 000 FEET MSL, HOW FAR BELOW THE CLOUDS SHOULD YOU FLY ON V9 V69 AIRWAY VFR?

At least 1, 000 feet. When on an airway below 10, 000 feet MSL, only 500 feet clearance beneath the clouds is required. However, at and above 10, 000 feet or in the Continental Control Area (above 14, 500 feet MSL) you are required to have at least 1, 000 feet clearance beneath the clouds regardless of whether on or off airways. **

3. IF YOU ARE OUTSIDE THE LATERAL LIMITS OF AN AIRWAY AT 15, 500 FEET MSL, WHAT ARE THE MINIMUM WEATHER CONDITIONS FOR VFR FLIGHT?

At least 5 miles flight visibility, since a flight at or above 14, 500 feet MSL, on or off an airway, is within the Continental Control Area. Additionally, you cannot fly VFR at less than 1, 000 feet above or 1, 000 feet below and 1 mile horizontally from any cloud formation. **

FEDERAL AIRWAYS

1. HOW FAR EAST OR WEST OF WADDELL AIRPORT (SOUTHWEST OF PEORIA) SHOULD YOU GO TO PRACTICE STALLS, SPINS, OR ACROBATICS?

At least 5 miles east or 3 miles west. Waddell Airport lies within the 8-mile width of V233 airway and Regulations prohibit the performance of those maneuvers within a Federal Airway. To be outside the limits of the airway you must fly 5 miles east or 3 miles west of Waddell.

2. IF YOU ARE FLYING VFR AT 15, 500 FEET MSL ON V9 V69 AIRWAY (SOUTHWEST OF BLOOMINGTON) WHAT ARE THE MINIMUM VISIBILITY AND CLOUD CLEARANCE REQUIREMENTS? AT 3, 000 FEET MSL?

Flight at 15, 500 feet MSL, on or off airways, is within the Continental Control Area, and above 10, 000 feet MSL, where you must have at least 5 miles visibility and remain at least 1, 000 feet above or 1, 000 feet below and 1 mile horizontally from any cloud formation. When flying at 3, 000 feet MSL on the airway you are in a Control Area and VFR flight requires that you have at least 3 miles visibility and remain at least 1, 000 feet above or 500 feet below and 2, 000 feet horizontally from any cloud formation.

 ** NOTE: Since the original printing of this Exam-O-Gram, the airspace at and above 18, 000 feet MSL in the area involved in this particular chart segment, has been designated Positive Control Area. Flights under Visual Flight Rules are prohibited above 18, 000 feet MSL in this area.

3. WHAT MINIMUM VISIBILITY IS REQUIRED TO FLY FROM WADDELL AIRPORT TO PEKIN MUNICIPAL AIRPORT AT 1,100 FEET MSL?

One mile visibility. Although a Federal airway lies between Waddell Airport and Pekin Municipal, and both airports are within the horizontal boundaries of a Control Area, the base of an airway or control area is never less than 700 feet above the surface. The elevation of the two airports and the route between them is approximately 500 feet, so at 1,100 feet MSL, you would be beneath the controlled airspace. Therefore, this flight can be made at 1,100 feet MSL under VFR with as little as 1 mile visibility.

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FAA Aeronautical Center
Flight Standards Technical Division
Operations Branch
P. O. Box 25082
Oklahoma City, Oklahoma 73125

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S.C. AIRCRAFT ACCIDENTS 1 JULY 1967 - 30 JUNE 1968

<u>TYPE A/C</u>	<u>INJURIES</u>	<u>DAMAGE</u>	<u>NATURE OF ACCIDENT</u>
Cessna 172	None	Major	Brake Failure
Waco Aso	None	Major	Engine Failure
Cessna 150	None	Minor	Fuel Exhaustion
Cessna 337	None	Major	Fuel Exhaustion
Piper PA-24	None	Minor	Gear Up
Piper PA-28	2 Serious	Major	Weather
Piper PA-23	2 Serious	Major	Hit Equip. On Field
Cessna 210	1 Minor	Destroyed	Fuel Exhaustion
Boeing A-75	None	Major	Engine Failure
Beech B-95	None	Major	Gear Up
Beech B-50	2 Fatal	Destroyed	Weather
Beech B-33	None	Minor	Gear Up
Piper PA-24	None	Minor	Gear Up
Piper PA-24	None	Major	Gear Up
Hughes 300	1 Critical	Major	Hit Building
Cessna 150	None	Major	Gear Collapsed
Cessna 172	1 Minor	Destroyed	Stolen Aircraft
Ercoupe 415	None	Major	Crashed On T/O
Piper PA-28	None	Major	Hit Power Lines
Cessna 210	None	Minor	Gear Up
Beech D-55	None	Major	Fuel Exhaustion
Mooney M-21	None	Minor	Nose Gear Collapsed
Navion D	None	Major	Gear Up
Beech B-35	1 Fatal	Destroyed	Unknown
Beech P-35	None	Major	Gear Up
Piper PA-22	None	Major	Engine Failure
Beech A-23	None	Minor	Engine Failure
Beech A-23	None	Major	Nose Wheel Collapsed

<u>TYPE A/C</u>	<u>INJURIES</u>	<u>DAMAGE</u>	<u>NATURE OF ACCIDENT</u>
Cessna 206	2 Minor	Destroyed	Ground Loop
Cessna 150	None	Destroyed	Ground Loop
Piper PA-24	None	Major	Gear Up
Piper PA-22	None	Major	Pilot Lost
Cessna 182	1 Minor	Major	Soft Field
Piper PA-17	1 Fatal 1 Serious	Destroyed	Hit Trees
Cessna 185	None	Major	Ground Loop
Piper PA-28	1 Fatal	Destroyed	Weather
Piper PA-24	2 Fatal 3 Serious	Destroyed	Over Loaded
Piper PA-24	None	Major	Gear Failure

In the five fatal accidents from 1 July 67 to 30 June 68, seven people were killed, four were local residents of South Carolina. Of these five fatal accidents, it appears that two were weather related. How many of the accidents listed above were due to mechanical failure, poor judgement or poor training?

PILOTS

The general aviation fleet is flown by about 550,000 licensed pilots. Their proficiencies vary according to their individual needs, but all must meet standards of health, knowledge and flying ability prescribed by Federal regulations.

It is a carefully fostered misconception that only "professional airline pilots" are competent to ply the airways and use our busy airports. Out of all licensed pilots, less than 25,000 are employed by the airlines. Thousands of others, flying for business or personal reasons, are equally well qualified in training and experience. As with our highways and waterways, the qualifications of the operator are geared to what he is doing. Those operating vehicles for hire are required to meet more rigid examinations than the operators of private vehicles. But that does not bar the private vehicle operator from the highways or the waterways and neither should it bar the properly licensed pilot from our public airports and airways.

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LIGHT TWIN ENGINE SEMINAR

John Cureton of the Columbia Aviation District Office of the FAA has arranged for a Light Twin Engine Aircraft Seminar to be presented on January 21, by instructors from the FAA Academy in Oklahoma City. The program will begin at 7 p.m. at the Tremont Motel on Knox Abbott Drive in Cayce and will be conducted by Mr. C.A. Zimmerman and Mr. R.S. Lawler.

On January 21, 1969, at 7 p.m. the two instructors from the FAA Academy will present a lecture on the operation of light twin aircraft. The subjects to be covered will include Light Twin Engine Performance and Characteristics as well as aircraft certification requirements as they apply to the pilot. Also to be covered will be V-Speeds, Take Off Variables, Techniques, Wake Turbulance and Health Problems Associated with High Attitude Operation.

This meeting will be of general interest to all pilots and of particular interest to pilots and instructors who now fly, or plan to fly, multiengine aircraft. Those interested in attending this meeting should contact the FAA General Aviation District Office at Columbia, S.C., telephone 794-9042.