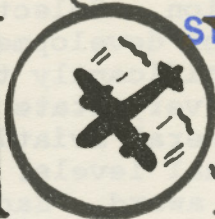


Ne 825  
3.A84  
V15/11

# South Carolina



# AVIATION



# News Letter

S. C. STATE LIBRARY  
APR 26 1968  
STATE DOCUMENTS

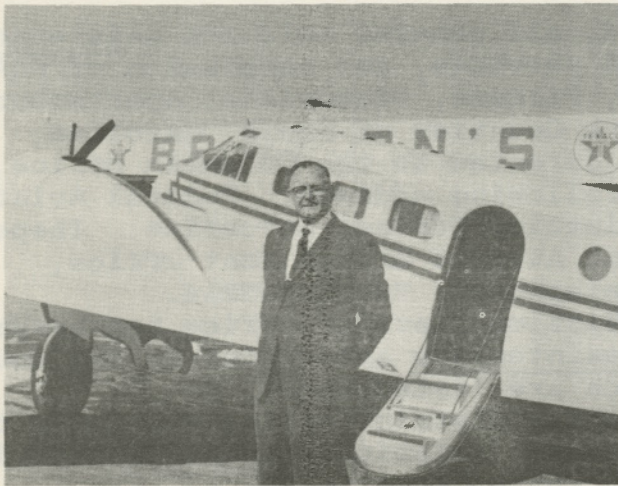


PUBLISHED MONTHLY BY THE SOUTH CAROLINA AERONAUTICS COMMISSION

VOL. 15

NOVEMBER, 1964

No. 1



JEAN BRANNON

training, and aircraft maintenance.

This award was based on the development by Mr. Brannon of a cross system for unfeathering a dead aircraft engine with the propeller feathered prior to attempting to restart the engine.

The awards program was established in 1963 by FAA Administrator, N. E. Halaby, in connection with the "Aviation Maintenance Year" program to honor aviation mechanics making outstanding contributions to air safety, in both general and

## MECHANIC OF THE YEAR AWARD

In a brief ceremony at the office of Governor Russell, the general aviation maintenance award for 1964 was presented to JEAN N. BRANNON, of Greenville, South Carolina, who aviation career has spanned the era from Jennies to Jets. Mr. Brannon is presently owner and operator of Brannon's Aero Service at the Greenville Downtown Airport, engaged in the operation of executive aircraft, flight

commercial aviation. Selection of winners is based on the best suggestion or development, during the preceding year, contributing significantly to safety in aviation. Winners are chosen from every state to represent general aviation and from both general aviation and the airlines at the regional and national levels. All winners receive appropriate citations and an award. Each state winner competes at the regional level and the regional award winners are entered in a national contest. The two national winners, one from general aviation and the other from the airlines, will travel to Washington, D. C., for a formal presentation of special awards.

#### FAA MAINTENANCE CHANGE

Effective 1 October 1964, all general aviation maintenance inquiries, requests for FAA services, and submission of FAA required records in Oconee, Pickens, Greenville, Spartanburg, Anderson, Cherokee, and York Counties of South Carolina, which have previously been directed to the Columbia office, should be directed to the following address: Federal Aviation Agency, General Aviation District Office; Attention: Inspector Allen B. Roth, Municipal Airport Branch Post Office, Charlotte, N. C. 28208 - Telephone: 704/392-3214.

The Charlotte General Aviation District Office has assumed FAA jurisdiction over all maintenance activities in the counties in South Carolina which are listed above.

The Columbia, South Carolina district office continues to have jurisdiction of all general aviation operations activities in the entire state of South Carolina.

#### CARBON MONOXIDE

This is the time of year to winterize your aircraft. An important item in the winterizing program should be a thorough inspection of the exhaust cabin heater components for possible leaks. Carbon monoxide gas from such leaks could enter the cabin and result in pilot incapacitation. When carbon monoxide gas enters the cabin, there is no warning. It is colorless, odorless and tasteless.

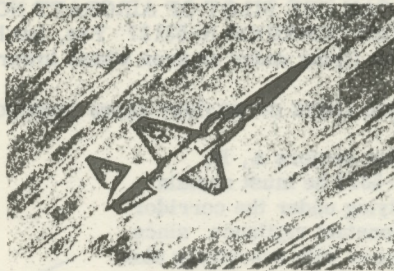
FEDERAL AVIATION AGENCY  
VFR EXAM-O-GRAM\* NO. 25

INTERPRETING SECTIONAL CHARTS (Series 3)

This is the last in a series of three Exam-O-Grams dealing with understanding and interpreting the aeronautical symbols and legend of sectional charts. See Exam-O-Grams No. 23 & 24.

Military Climb Corridors

Pilots of Century Series aircraft (F-101, F-104, F-106, etc.) on active air defense missions are unable to see and safely avoid other aircraft during the climb phase of a scramble. Anyone who has observed the takeoff of an aircraft such as the F-106, can fully understand the pilot's limited forward visibility in a maximum power climb. In addition to maintaining steep pitch angles and airspeed control, the Century Series fighter pilot's attention is also on such tasks as check-in, identification, procedures, and spatial orientation.



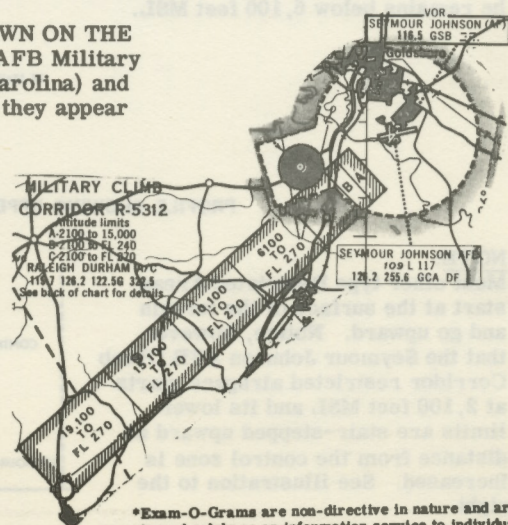
In the interest of safety, the Department of Defense and the FAA have agreed to establish restricted corridors to segregate such operations from other air traffic. All flights through these areas must obtain prior approval from the controlling agency. Positive control is enforced within the corridor airspace under the sole jurisdiction of the controlling agency which is usually the associated control tower or approach control.

**HOW ARE MILITARY CLIMB CORRIDORS SHOWN ON THE SECTIONAL CHARTS?** The Seymour Johnson AFB Military Climb Corridor (located at Goldsboro, North Carolina) and shown to the right, is a typical example of how they appear on the front of the charts.

**WHAT DOES THE "R-5312" MEAN?**

This denotes that the Seymour Johnson AFB Climb Corridor has been designated a Restricted Area (R-5312). By referring to the legend on the back of the chart you can locate and identify the data which applies to Restricted Area R-5312.

Note the location and lateral limits of the Climb Corridor in relation to terrain and aeronautical facilities. Also notice that the Seymour Johnson AFB elevation is 109 feet above sea level, but in order to stay in round figures 100 feet was used to establish the lower altitude limits of the corridor.



\*Exam-O-Grams are non-directive in nature and are issued solely as an information service to individuals interested in Airman Written Examinations.

**HOW LARGE IS THE CLIMB CORRIDOR R-5312?** R-5312 is 3.45 statute miles wide at the starting point near Seymour Johnson AFB and it expands to a width of 4.5 statute miles at the 27 statute miles termination point.

**IS IT EVER LEGAL TO FLY THROUGH R-5312?** Notes on the back of the chart indicate that no person shall operate an aircraft within the Restricted Area between the designated altitudes - unless prior permission has been issued by the FAA Raleigh-Durham, N. C. Approach Control.

**DO THE LOWER ALTITUDE LIMITS OF THE CLIMB CORRIDOR APPLY TO ALTITUDES ABOVE SEA LEVEL OR ALTITUDES ABOVE THE SURFACE?** When climb corridors are established they are based on absolute altitudes, however, the lower altitude limits of the climb corridor printed on the sectional chart are designated MSL and represent heights above the average level of the sea (Mean Sea Level).

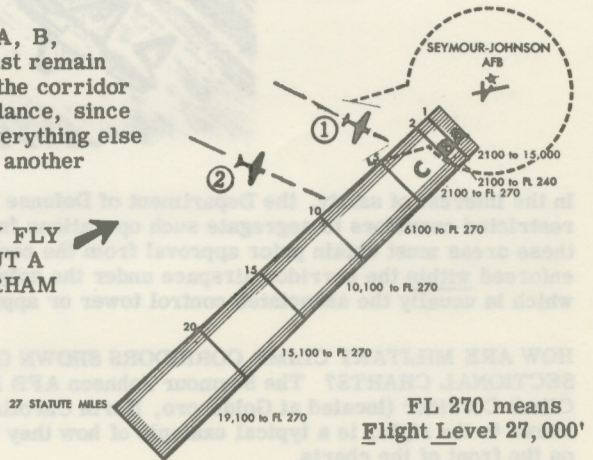
\* \* \* \* \*

**IN THE EXAMPLE BELOW, CAN THE PILOT OF AIRCRAFT NO. 1 LEGALLY FLY VFR UNDER SECTOR "C" OF CLIMB CORRIDOR R-5312?** Yes, but he must remain below 2,100 feet MSL since he will be flying under an area whose lower limit is 2,100 feet MSL.

LATERAL LIMITS OF MILITARY CLIMB CORRIDOR R-5312

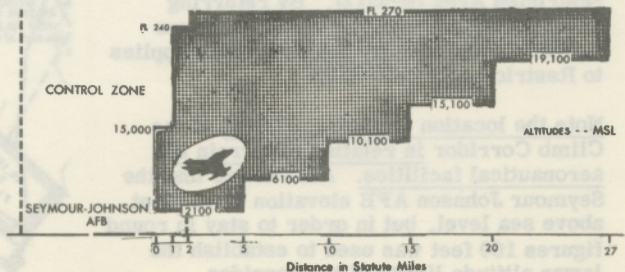
**NOTE:** When a pilot flies under sectors A, B, or C of Restricted Area R-5312 he must remain below 2,100 feet MSL. Flying under the corridor at this point will require constant vigilance, since the pilot is confined to an area with everything else that flies - from canvas back ducks to another pilot in a "bug smasher".

**CAN AIRCRAFT NO. 2 ABOVE LEGALLY FLY UNDER THE CLIMB CORRIDOR WITHOUT A CLEARANCE FROM FAA RALEIGH-DURHAM APPROACH CONTROL?** Yes, provided he remains below 6,100 feet MSL.



PROFILE SHOWING UPPER AND LOWER LEVEL OF MILITARY CLIMB CORRIDOR

**NOTE:** Most other type Restricted Areas start at the surface of the terrain and go upward. Notice, however, that the Seymour Johnson AFB Climb Corridor restricted airspace starts at 2,100 feet MSL and its lower limits are stair-stepped upward as distance from the control zone is increased. See illustration to the right.



WHERE CAN A PILOT FIND INFORMATION CONCERNING THE RESTRICTED AREA CONTROLLING AGENCY? The back of the sectional chart contains a listing showing the "Appropriate Authority" that he must contact before flying through the Restricted Area. A listing of this and other data, such as altitude and time restrictions, can be found on the back of all sectional charts that display Restricted, Prohibited, Warning and Caution Areas (see examples below).

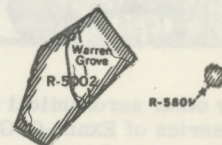
Excerpts

PROHIBITED, RESTRICTED, WARNING, AND CAUTION AREAS  
ON WASHINGTON SECTIONAL CHART

NO.	NAME	ALTITUDE	TIME	APPROPRIATE AUTHORITY
P-54	Washington, D. C.	Unlimited	Unlimited	
R-2512	Dahlgren Complex, Va.	To 7000	0800-1700 Mon. through Friday	† FAA Washington ARTC Center or area 1355 Comdr. Naval Proving Grounds, Dahlgren, Va.
W-305	Patchogue, N.Y.	Unlimited	Sunrise to sunset	C. O. NAS New York, Brooklyn 84, N.Y.

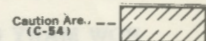
P - Prohibited      R - Restricted      W - Warning      C - Caution      † - Controlling Agency

HOW ARE RESTRICTED AREAS OTHER THAN MILITARY CLIMB CORRIDORS SHOWN ON THE CHARTS? The Restricted Areas are depicted on the charts in many shapes and sizes and their boundaries are outlined by crosshatching as the two examples on the right illustrate.



WHAT IS A CAUTION AREA AND HOW IS IT SHOWN ON THE CHARTS?

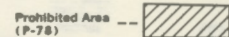
It is an area in which there is a visible hazard to flight or navigation, such as aircraft maneuvers, parachute drops, etc. There is no restriction on flight, but they are to warn the pilot that activities may be in progress which will require him to be constantly on the alert. See example to the right.



WHAT IS A WARNING AREA? . . . WHERE CAN THEY BE FOUND? It is a specified area over international waters within or over which there may exist activities constituting a potential danger to aircraft. They are established to permit military maneuvers and firing in certain off-shore areas as a necessary part of combat training. Warning Areas are found along the Atlantic coast, Pacific coast, and Gulf of Mexico coast. In flights along an uneven coastline pilots may attempt to take shortcuts over water and unintentionally fly in a Warning Area, since some Warning Areas lie within 3 statute miles of the coast. **Be Alert** and refer to the appropriate chart before attempting flight along any coastline!

WHAT IS A PROHIBITED AREA? . . . ARE THEY NUMEROUS?

It is airspace identified by an area on the surface of the earth within which the flight of aircraft is prohibited. No, Prohibited Areas are rare. The capitol in Washington, D. C. is a Prohibited Area. Notice how the wide spaced crosshatching covers the entire Prohibited Area in the example.

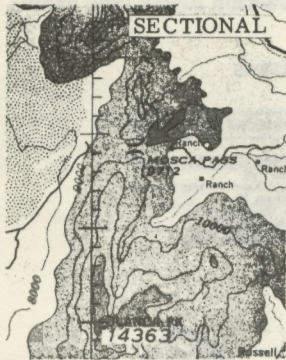


\* \* \* \* \*

IS THE SAME INFORMATION FOUND ON THE BACK OF ALL SECTIONAL CHARTS?

No, there is some data common to all charts, but in general there is a great variation in the information listed for different parts of the country. For example, by comparing the New York and Albuquerque charts, we find (a) Half of the back of the New York sectional chart is devoted to airport data listing for those airports which appear on the front of the chart; (b) In the case of the Albuquerque chart, airports are fewer in number and only a small portion of the space on the back is needed for airport data listing. This space is utilized by including a Koch Chart and data pertinent to flying over mountainous terrain.

**WHY ARE SECTIONAL CHARTS RECOMMENDED FOR VFR FLIGHT IN MOUNTAINOUS AREAS?** When flying over unfamiliar mountainous terrain Sectional Charts are advantageous over other charts for locating, identifying by name, and establishing routes through specific mountain passes. To illustrate this point, refer to the chart excerpts to the left below, which cover identical areas.



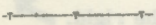
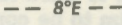






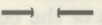





WAC

Assume that Pilot Reports indicate that VFR flight through certain passes is not possible due to snow showers or other weather, but that a pilot has just reported good VFR conditions through MOSCA PASS. Noting the excerpts to the left, MOSCA PASS can be identified by name and located only by reference to the Sectional Chart, and the elevations are more realistically pictured to determine the necessary flight altitudes.

\* \* \* \* \*

Many other aeronautical symbols appear on Sectional Charts that have not been mentioned in this series of Exam-O-Grams. Some of the following topographical symbols are used on all charts while others may only be found on a few charts. Test your knowledge in the quiz below by filling in the spaces provided. Check your answers with those at bottom of the page.

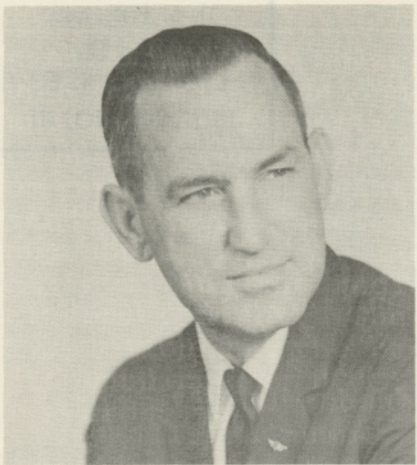
#### HOW MANY OF THESE SECTIONAL CHART SYMBOLS CAN YOU IDENTIFY?

- |   |  |
|---|--|
| (1)    | (8)     |
| (2)    | (9)     |
| (3)    | (10)    |
| (4)   | (11)   |
| (5)  | (12)  |
| (6)  | (13)  |
| (7)  | (14)  |

#### DO YOUR ANSWERS AGREE WITH THESE?

- |  |                                   |
|--|-----------------------------------|
| 1. Prominent transmission line.        | 8. Isogonic line.                 |
| 2. VFR routes through mountain passes. | 9. Railroad overpass.             |
| 3. U. S. Road Marker.                  | 10. Multiple track railroad.      |
| 4. Oil tanks and oil fields.           | 11. Cities                        |
| 5. Highway tunnel.                     | 12. Small cities and large towns. |
| 6. Race tracks or stadiums.            | 13. Towns.                        |
| 7. Swamps and marshes.                 | 14. Small towns and villages.     |

HAWTHORNE NAMES STRICKLAND  
AS MANAGER



Vernon B. Strickland

Beverly Howard, President of Hawthorne Aviation, announces that Vernon B. Strickland had been promoted to General Manager of the firm's operation located at the Charleston Municipal Airport.

Mr. Strickland, a native of Charleston, assumes his new position with over fifteen years service with Hawthorne. He also has filled a number of key positions with the company including that of Sales Manager. In addition to his

administrative and technical background he holds an FAA Commercial Certificate with virtually all landplane ratings. He served in Naval Aviation during World War II.

Hawthorne Aviation is a distributor of Piper aircraft and offers a complete range of services to general aviation with recent emphasis on charter flights and flying training.

Strickland succeeds John M. Hawkins who was formerly Vice President of Hawthorne. Johnny has moved to Jacksonville, Florida, where he will operate at Craig Field.

BAD NEWS FOR COMMERCIAL PILOTS

Commercial pilots who "take an occasional charter" are in for a bad time unless they hold a valid Air Taxi Commercial Operators certificate.

A regulation ACTIVE SINCE 7 April 64, called Part 135, under FAA, requires that NO passengers-for-hire may be flown by a pilot unless he has the Air Taxi Commercial Operators certificate, or has applied for one.

"Any person who holds an air taxi operating certificate issued under Special CAR SR-395 and Part 42 or 42A, who applied for a certificate before 7 September '64, may continue operations until a certificate and specifications are issued to him under this part, or until the Administrator notifies him that his application is denied."

8/

BREAKFAST CLUB ELECTS OFFICERS

Officers for the coming year were elected Sunday, November 1, 1964, at the Annual Founder's Day meeting in Orangeburg. This meeting is held annually in Orangeburg to honor Tom Summers, who organized the Breakfast Club back in the 1930's.

The meeting was attended by approximately 125 members who arrived in over 35 aircraft. The breakfast was held at Nolen's Restaurant. Mayor Clyde Fair extended the welcome to all the guests.

Paul Fillman of Allendale who flies a Cessna was elected President and his wife Hazel was re-elected Secretary. Homer Collum of Greenwood who owns a Piper Carribean was elected to the office of Vice-President to represent the upper state and Earle Kirkwood, a Navion owner was elected Vice-President of the lower state.

The last meeting scheduled for Chester was rained out. This meeting has been re-scheduled for November 15th. The following, November 29th is schedule for Summerville, S. C.

NEW PUBLICATION

The FAA's three basic flight information publications-- the Airman's Guide, Directory of Airports and Seaplane Bases, and Flight Information Manual, will be replaced on Dec. 10 by a single volume, the Airman's Information Manual, which will be sold through the U. S. Government Printing Office.