HQ AFSVA/SVPAR

Annual Standardization Exam

1 October 2004

(supplement with 15 local area questions)

(Required passing score: 80%)

Please do not mark on booklet

Annual Standardization Exam Questions (35)

(Question 1 references 14 CFR Part 61)

1. What documents must be in your personal possession or readily accessible in the aircraft while operating as pilot in command of an aircraft?

A. Certificates showing accomplishment of a checkout in the aircraft and a current flight review.
B. A pilot certificate with an endorsement showing accomplishment of an annual flight review and a pilot logbook showing recency of experience.
C. An appropriate pilot certificate, photo identification, and an appropriate current medical certificate.

(Questions 2 - 6 reference 14 CFR Part 91)

2. The pilot-in-command shall, before beginning a flight within the vicinity of an airport, become familiar with the following information concerning that flight?

A. fuel requirements, weather reports and forecasts.
B. takeoff and landing distance information, runway lengths at airports of intended use.
C. known traffic delays, alternatives available if the planned flight cannot be completed.

3. With certain exceptions, safety belts are required to be secured about passengers during

A. all flight conditions.
B. flight in turbulent air.
C. taxi, takeoffs, and landings.

4. When operating to an airport in Class D airspace, each pilot of an airplane approaching to land on a runway served by a visual approach slope indicator shall

A. remain at pattern altitude until the runway can be reached in a power-off landing.
B. maintain a 3° glide slope to the runway until a lower altitude is necessary for a safe landing.
C. maintain an altitude at or above the glide slope until a lower altitude is necessary for a safe landing.

5. (Refer to figure 1, area 1). You are on a day VFR flight overhead Hampton-Varnville Airport (3J0) (N32-52.06 W081-04.99) at 1,400 feet MSL. What minimum visibility and clearance from clouds is required?

A. 3 miles visibility, 500 feet below, 1,000 feet above, and 2,000 feet horizontal clearance from clouds.
B. 1 mile visibility, 500 feet below, 1,000 feet above, and 2,000 feet horizontal clearance from clouds.
C. 1 mile visibility, clear of clouds.

6. (Refer to figure 1, areas 1 and 2). Which VFR cruising altitude is acceptable for a direct flight from Allendale Co Airport (88J) (N32-59.71 W081-16.21) to Statesboro-Bulloch Co Airport (TBR) (N32-28.96 W081-44.22)?

A. 4,500 feet MSL.
B. 5,000 feet MSL.
C. 5,500 feet MSL.

(Question 7 references 14 CFR Part 91, AFMAN 34-232)

7. You are planning to rent an aero club aircraft for a local area flight that will last approximately 1 hour 30 minutes. During the flight, you plan to spend one hour accomplishing pattern work (takeoffs and landings) at another airport in the local area that has a maintenance facility capable of performing 100-hr inspections. During your review of the aircraft maintenance records, you notice the next 100-hour inspection is due in 0.7 hours. Although you know your flight will exceed 0.7 hours, you plan to fly anyway because you know your final destination (home airport) has the capability to accomplish 100-hour inspections. Should this aircraft be cleared for the flight?

A. Yes. The 100-hour limitation may be exceeded by not more than 10 hours to get the aircraft to a place where the 100-hour inspection can be done.
B. No. If the aircraft is at the other airport when the time has exceeded the 100-hr limitation, the pilot would be required to keep the aircraft at that airport to have the 100-hour inspection accomplished.
C. Yes. The 100-hour inspection is not required because the pilot is just renting the aircraft and it's not being used to carry people for hire or flight instruction for hire.

(Question 8 references NTSB Part 830)

8. Which of the following would be considered an accident?

A. An aircraft was being repositioned from the maintenance hangar to the flight line when it was overturned by prop wash from a C-130. The aircraft received substantial damage.
B. A pilot flew through an area of severe turbulence causing his hand to violently strike the top of the cabin. As a result, he received a fracture in his wrist.
C. A pilot failed to extend the landing gear prior to touchdown. As a result, the aircraft's engine and landing gear were damaged.

(Questions 9 - 20 reference FAA-H-8083-25; question 13 also references AIM)

9. Determine how much cargo must be shifted from the aft cargo compartment at station 95 to the rear passenger seat at station 73 to move the CG to exactly the aft limit.

Given:

Aircraft Total Weight……2,300 lb
CG…… Station 109.5
Aft CG Limit……108.0

A. 150 lb.
B. 157 lb.
C. 47 lb.

10. Which of the following statements correctly describes the effect of load distribution on flight performance?

A. The airplane will stall at a higher speed with a forward CG location; the airplane will cruise faster with an aft CG location; and the airplane becomes less stable as the CG is moved rearward.
B. Recovery from a stall becomes progressively more difficult as CG moves aft; an airplane loaded to the rear limit of its permissible CG range will not handle differently in turns or stall maneuvers than when it is loaded near the forward limit.
C. The CG position does not influence the lift and angle of attack of the wing; and a forward CG location increases the need for greater forward elevator pressure.

11. (Refer to figure 2). Best rate of climb airspeed (V_Y) is the speed where there exists the greatest difference between power available and power required. Which statement is true regarding this speed?

A. V_Y would occur at lift over drag maximum (L/D max).
B. V_Y is best angle of climb speed.
C. V_Y is the speed at which the airplane will gain the most altitude in a given period of time.

12. Dynamic hydroplaning is a condition in which the airplane tires ride on a thin sheet of water rather than on the runway's surface. This may result in poor braking and directional control. Since tire pressure is a factor in dynamic hydroplaning, calculate the minimum speed, in knots, at which hydroplaning will begin, based on a tire pressure of 28 psi.

A. 47 knots.
B. 42 knots.
C. 51 knots.

13. (Refer to figure 3). Based on the following ATIS report, calculate the headwind and crosswind components for a takeoff on runway 23L. The airport has a magnetic variation of 15° W.

ATIS report: "Aero Park information Bravo. 2000 Zulu weather. Measured ceiling four thousand overcast. Visibility five, haze. Temperature eight five, dewpoint six seven. Wind two eight zero at one six. Altimeter two niner niner eight…Landing and departing runway two three right and two three left…"

A. 7 kts headwind, 15 kts crosswind.
B. 10 kts headwind, 12 kts crosswind.
C. 13 kts headwind, 9 kts crosswind.

14. The most critical conditions on takeoff performance are the result of some combination of

A. high gross weight, low pressure altitude, high temperature, and unfavorable wind.
B. high gross weight, high pressure altitude, high temperature, and unfavorable wind.
C. high gross weight, high pressure altitude, low temperature, and unfavorable wind.

15. (Refer to figure 4). During an inadvertent takeoff into a microburst, which position(s) will result in decreased aircraft performance?

A. Aircraft position #1.
B. Aircraft positions #1 and #2.
C. Aircraft positions #3 and #4.

16. Warm fronts and cold fronts are very different in nature as are the hazards associated with each of them. Which of the following lists an accurate comparison between cold and warm fronts?

A. Cold fronts move quicker and possess a steeper frontal slope; warm fronts generally bring low ceilings and poor visibility; weather generally clears rapidly after cold front passage.
B. Warm fronts bring sudden storms, gusty winds, and turbulence; cold fronts provide advance warning of their approach and can take days to pass through a region.
C. Squall lines can form during the summer months as far as 200 miles in advance of a severe cold front; warm fronts are fast approaching with little or no warning, and they make a complete weather change in just a few hours.

17. Radar stations issue radar weather reports (SD) at 35 minutes past the hour, with special reports issued as needed. Decipher the following radar weather report (SD).

Given: EWX 1935 AREA 3TRWX 336/95 348/86 13W C1917

A. New Braunfels, TX (EWX) radar weather report, 1935Z, area of echoes, 3/10 coverage containing thunderstorms and intense rain showers, the area is 13 nm wide from 336° at 95 nm to 348° at 86 nm from EWX, cell movement is from 190° at 17 knots.
B. New Braunfels, TX (EWX) radar weather report, 1935Z, area of echoes, 3/10 coverage containing thunderstorms and extreme rain showers, the area is 13 nm wide from 336° at 95 nm to 348° at 86 nm from EWX, cell movement is from 190° at 17 knots.
C. New Braunfels, TX (EWX) radar weather report, 1935Z, area of echoes, 3/8 coverage containing thunderstorms and intense rain showers, the area of echoes located from 336° at 95 nm to 348° at 86 nm from EWX are moving from the west at 13 knots, cell maximum tops are between 19,000 and 17,000 feet.

18. Terminal aerodrome forecasts (TAF) are reports established for the 5 statue mile radius around an airport, and are usually given for larger airports. Based on the following TAF, determine the forecast conditions for a flight that will takeoff from San Antonio Intl Airport (SAT) at 0500Z.

Given: TAF KSAT 291735Z 291818 18008KT 3SM TSRA BR BKN010 OVC030CB
TEMPO 1822 3/4SM TSRA OVC010CB
FM2200 18009KT 5SM SHRA BKN015 BKN060
TEMPO 2224 2SM TSRA OVC010CB
FM0000 18008KT P6SM BKN030 BKN100
FM0400 15008KT P6SM OVC010
TEMPO 0408 3SM TSRA OVC010CB
FM1500 15010KT P6SM VCSH BKN025

A. Wind from 150° at 10 knots, visibility 6 miles with ice pellets, showers in the vicinity, 2,500 feet broken.
B. Wind from 180° at 8 knots, visibility greater than 6 miles, 3,000 feet broken, 10,000 feet broken.
C. Wind from 150° at 8 knots, visibility greater than 6 miles, 1,000 feet overcast, temporarily visibility 3 miles, thunderstorms with rain, overcast cumulonimbus at 1,000 feet.

19. Various surface features and atmospheric conditions encountered during landing can create illusions of being on the incorrect approach path. A narrower-than-usual runway can create an illusion that the airplane is _____ than it actually is, while a wider-than usual runway can have the opposite effect, causing the pilot to flare too _____ or overshoot the runway.

A. lower, low
B. higher, low
C. higher, high

20. Aeronautical decision making (ADM) is a systematic approach to the mental process used by pilots to consistently determine the best course of action in response to a given set of circumstances. However, there are a number of operational pitfalls or behavioral traps which pilots have been known to fall into. Which of the following correctly lists some of these operational pitfalls?

A. fatigue; stress; work overload; resignation; impulsivity
B. peer pressure; get-there-it is; neglect of flight planning, preflight inspections, and checklists; continuing VFR into instrument conditions
C. the pilot-in-command; the airplane; the environment; the operation

(Questions 21 – 28 reference AIM)

21. Pilots of inbound traffic to an airport without an operating tower should monitor and communicate as appropriate on the designated frequency from 10 miles to landing. Pilots of departing aircraft should monitor/communicate on the appropriate frequency

A. from start-up, during taxi, and until 10 miles from the airport unless the CFRs or local procedures require otherwise.
B. before taxiing and before taxiing on the runway for departure unless the CFRs or local procedures require otherwise.
C. before taxiing on the runway unless the CFRs or local procedures require otherwise.

22. While it is a good operating practice for pilots to make use of the ATIS broadcast where it is available, some pilots use the phrase “have numbers” in communications with the control tower. Use of this phrase should be avoided because it means the pilot has received

A. only runway information.
B. only runway and local NOTAM information.
C. only wind, runway, and altimeter information.

23. If remaining in the traffic pattern, the turn from the departure leg to crosswind should not commence until

A. within 300 feet of the pattern altitude.
B. reaching pattern altitude.
C. at least a half a mile beyond the departure end of the runway and within 300 feet of pattern altitude.

24. A pilot who accepts a Land and Hold Short Operations (LAHSO) clearance should be aware of the following:

A. a rejected landing is not authorized since this may create a collision hazard with other aircraft or vehicles.
B. once accepted, it must be adhered to, unless an amended clearance is obtained or an emergency occurs.
C. full read back of the clearance is not required.

25. Unless local ATC procedures dictate otherwise, a pilot who has just landed at an airport with a operating control tower should change to the ground control frequency

A. after touchdown and prior to clearing the runway.
B. automatically after clearing the runway.
C. when directed to do so by the controller.

26. A pilot who requests an option approach and receives “cleared for the option” from the appropriate controller may make

A. a touch-and-go, low approach, stop-and-go, or full stop landing.
B. a low approach or full stop landing only.
C. a touch-and-go, stop-and-go, or full stop landing only.

27. You have inadvertently flown into a temporary flight restrictions area and observe a military aircraft to the left and slightly above and ahead of your position rocking its wings. What should be your first response?

A. Rock your wings and follow the military aircraft
B. Set transponder code to 7700 and contact ATC for further guidance
C. Turn 180 degrees away from the military aircraft to leave the area

28. Enroute Flight Advisory Service (EFAS) is a service specifically designed to provide en route aircraft with timely and meaningful weather advisories pertinent to the type of flight intended, route of flight, and altitude. Which of the following statements is true regarding EFAS?

A. May be used for filing or closing flight plans, position reporting, or obtaining random weather reports and forecasts.
B. Is normally available in the conterminous U.S., and provides communication capabilities for aircraft flying above 1,000 feet AGL.

C. Service is normally available from 6 a.m. to 10 p.m. based on the zone in which the flight watch control station is located.

(Questions 29 – 35 reference AFMAN 34-232)

29. You have just joined a USAF Aero Club for the first time and hold a private pilot certificate with an airplane single-engine land endorsement. You would like to exercise pilot-in-command privileges in an aero club aircraft only during day/VFR conditions. Which of the following flight checks and knowledge exams does AFMAN 34-232 require?

A. Initial make/model check; open & closed book make/model exam.
B. Initial make/model check, initial flight check (standardization); open & closed book make/model exam, and standardization exam.
C. Initial make/model check; open & closed book make/model exam, and standardization exam.

30. (Figure 5) You are planning a flight with two passengers and determined that a portion of your cruise flight will operate over water, 9 nm from land. If you are cruising at 4,500 feet AGL, will you be required to carry FAA approved personal flotation devices onboard the aircraft?

A. Yes, but only for the pilot.
B. Yes, for all occupants.
C. No, the aircraft is within gliding distance of land.

31. You arrived at your place of employment at 0800 hrs (8:00 a.m.), worked until 1700 hrs (5:00 p.m), then headed to the aero club for a dual (instructional) flight. You leave the aero club at 2100 hrs (9:00 p.m.) and head home. You plan to be back at work tomorrow starting at 0800 hrs and plan to be off work again at 1700 hrs. You'd like to rent an aero club aircraft tomorrow after work to fly a non-pilot friend around the local area. Although you are day/night VFR current and qualified, you need to figure out the latest time you can be airborne so as to not exceed the maximum aero club duty day. What is the latest time you may operate the aircraft?

A. 2000 (8:00 p.m.)
B. 2100 (9:00 p.m.)
C. You may not rent the aircraft due to insufficient crew rest.

32. (Figure 6). Based on the information presented in the figure, may aero club aircraft use this airport for normal landings?

A. No
B. Yes
C. Yes, but only with approval from the Chief Flight Instructor

33. You are planning to fly to another airport to pick up a friend (passenger) so you can take him on a local area flight. What are your AF Form 1585, *Covenant Not to Sue*, considerations?

A. Both pilot and friend must have an executed AF Form 1585 on file at the aero club prior to their flight(s).
B. The pilot may carry the friend's executed AF Form 1585 on the return flight to the aero club.
C. The pilot must have an executed AF Form 1585 on file and ensure the friend's executed AF Form 1585 is sent to the aero club prior to their flight.

34. Due to official duty commitments (manager has deemed valid reason to miss meetings), you were unable to attend the last two aero club safety meetings. Now that you have returned from your official duty, you would like to rent an aero club aircraft for a local flight (assume you have met all other currency requirements). According to AFMAN 34-232, what is the minimum action required for you to achieve safety meeting currency if the club is not authorized to videotape safety meetings?

A. Review meeting minutes or receive a briefing from the club safety officer or designated representative.
B. You must attend a safety meeting.
C. Attend an AOPA safety seminar or other commercially developed safety program that is authorized WINGS program credit.

35. Who is authorized to ground an aero club aircraft, when in their opinion, the aircraft is not airworthy?

A. Only the club manager
B. Any club pilot
C. Only the club manager and club Airframe and Powerplant mechanic

ANNUAL STANDARDIZATION EXAM
LOCAL QUESTIONS (Revised-0106)

36. It is 15 September. An Aero Club Private Pilot with 175 hours total pilot time has the following recent experience in the following two makes and models of airplanes, in which he was qualified for day and night flight as of 15 June as PIC.

Piper Warrior: 10 touch and go day landings on 18 June the same year.

Piper Arrow: 3 full stop day landings on 15 June, 2 full stop night landings on 17 July, 1 full stop night landing 16 August the same year.

The pilot is:

a. day current in both the Warrior and the Arrow
b. day current in the Warrior and only night current in the Arrow
c. not current in either the Warrior or the Arrow
d. not current in the Warrior, day and night current in the Arrow

37. Which of these preflight, engine start, and parking items are applicable:
    1. parking within 50 feet of the refueling area is not allowed
    2. during engine start, prop blast is directed onto the grass field surrounding the Aero Club ramp
    3. each PIC will ensure his aircraft is within the proper weight and balance limits
    4. positioning the aircraft on the concrete portion of the ramp before engine start is permitted
    5. each pilot is responsible for verifying the beginning Hobbs time prior to power-on operation; if any portion of the next tenth of an hour is in view upon power-off at the end of the flight, the ending Hobbs recording shall include that tenth
        a. 1, 2, 3, 4
        b. 1, 2, 4, 5
        c. 2, 3, 4, 5
        d. 1, 2, 3, 5

38. The minimum altitude that an Aero Club pilot can fly is:
    a. 1000 ft. agl (2,000 ft. agl in designated mountainous terrain) unless required by specific regulation, airspace restriction, for take-off or landing, or when accomplishing requirements directed by an approved syllabus of instruction
    b. 500 ft. agl over other than congested areas, except over open water or sparsely populated areas
    c. 500 ft. agl during practice simulated forced landings, except to approved runways
    d. a and c

39. You are required to report leaving Paterson’s Class D airspace.
    a. true
    b. false
    c. true, if you are flying the standard Aero Club departure out of WPAFB
    d. only if requested by approach control

40. You are on a VFR cross-country returning to WPAFB. When you are approximately 75 miles from WPAFB, you discover that you no longer have communications capability. The most appropriate action would be:
    a. land at the nearest airport and call the Aero Club
    b. Squawk 7600 and listen on the Patterson VOR for instructions from the tower
    c. Proceed VFR to an acceptable uncontrolled airport near WPAFB. Call either the Aero Club or Patterson operations and comply with instructions received for return to WPAFB
    d. Proceed to Point Alpha, then squawk 7600 and proceed toward WPAFB control tower. Look for light gun signals and proceed in accordance with the light gun signals

41. Returning to WPAFB from a local VFR flight, you attempt to contact Patterson's tower at Point Alpha and there is no response from the tower. Your best action will be.
    a. circle Point Alpha until receiving an alternating red and green light, rock your wings in acknowledgement. Continue to final for 23L and observe a steady green light in order to land
    b. execute an immediate 180-degree turn, climb to 2,500 ft. msl and proceed to Greene County airport (I19). Then call the Aero Club for instructions
    c. continue toward Patterson and observe tower. If you receive a green flashing light, continue and land
    d. continue toward Patterson and observe tower. If you see a steady green light followed by an alternating red and green light, rock your wings in acknowledgement and continue to land while exercising extreme caution

42. The standard procedure for Aero Club VFR cross-country flights out of WPAFB is to open your flight plan with Patterson operations upon departure and to close it with them upon return.
    a. true
    b. false
    c. only if you have not contacted FSS to open or close your flight plan

43. Upon completion of your run-up on taxiway Bravo, you contact Patterson tower for take-off clearance. The tower says, "runway 5L, cleared for take-off."
    The most appropriate action is for you to:
    a. request permission to taxi back on runway 23R for your take-off on 5L

b. use the appropriate taxiways to get to the midfield intersection (taxiway Charlie) and take-off from there
c. advise the tower that you are not in position for runway 5L take-off and request instructions
d. back-taxi on runway 5L until you have sufficient runway available and take-off

44. Minimum fuel reserve for VFR flight at night is:
a. 45 minutes at normal cruise airspeed
b. 45 minutes at maximum endurance airspeed
c. 60 minutes at normal cruise airspeed
d. 60 minutes at maximum endurance airspeed

45. You arrive at work today at 0730 and intend to make a solo flight after work. You take-off at 1745. You must be on the ground by:
a. 1930
b. 2130
c. 2000 EST or 2200 EDT on Tuesday, Thursday, or Saturday
d. there is no restriction

46. Aero Club Safety meetings are normally conducted on the 4th Monday of each month. Any member who misses a safety meeting is non-current for flight in Aero Club aircraft by AF Regulation and is denied all Aero Club flying privileges. A member can regain flying privileges by:
a. after one meeting, review the video minutes and have the SOF annotate his/her PIF card
b. after two meetings, review both video tape minutes and have the SOF annotate his/her PIF card
c. after three meetings, review video tape minutes for all meetings missed, receive counseling by the manager.
d. all of the above

47. Which item below is not required on the cross-country request:

a. point of contact at each overnight stop
b. the minimum guaranteed flight hours based on the number of days
c. each leg of flight to include estimated time enroute, fuel burn at 75% power against a 15 knot headwind

d. points of intended landings (RON) (to include city name and airport identifier)

48. Departure procedure for Aero Club aircraft is:
   a. runway heading to 1300 ft. msl; turn to a 180 degree track, and climb to 2500 ft. msl
   b. runway heading to 1300 ft. msl; obtain permission to turn to a 180 degree track, and climb to 2500 ft. msl
   c. runway heading to 1300 ft. msl; obtain permission to turn to a 180 degree heading, and climb to 2500 ft. msl
   d. runway heading to 1300 ft. msl; turn to a 180 degree heading, and climb to 2000 ft. msl

49. Standard arrival procedure for Aero Club aircraft is:
   a. obtain ATIS information; cross Point Alpha at 2000 ft. msl; contact Patterson tower, proceed as directed descending to 1800 ft. msl
   b. obtain ATIS information; cross Point Alpha at 2000 ft. msl, contact Patterson tower, proceed directly to midfield downwind
   c. obtain ATIS information; cross Point Alpha at 2000 ft. msl, proceed directly to base leg descending to 1800 ft. msl
   d. obtain ATIS information; cross Point Alpha at 2000 ft. agl, contact Patterson tower, proceed as directed descending to 1800 ft. agl

50. Qualified pilots (night checked out and current with at least a Private Pilot certificate and 50 hours PIC after obtaining the rating) may fly as PIC at night except for the following:
   a. non-precision approaches to local airports with an operational visual glide slope indicator
   b. make all landings to a full stop
   c. VFR flight outside the local area
   d. Simulate forced landings to lighted runways with a night qualified and current Aero Club instructor occupying a pilot seat

Annual Standardization Exam (Test A) Figures

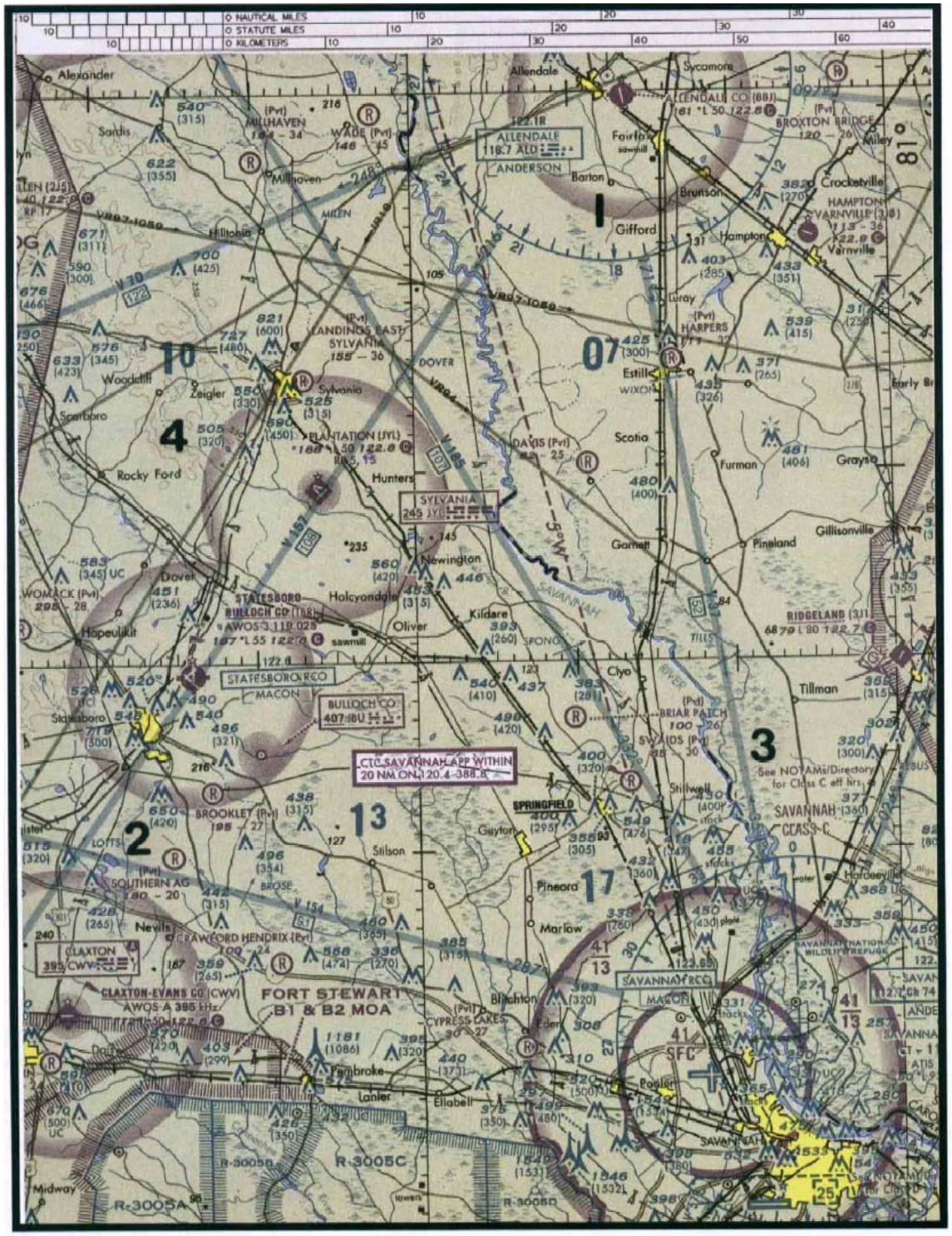


Figure 1 – Sectional Chart

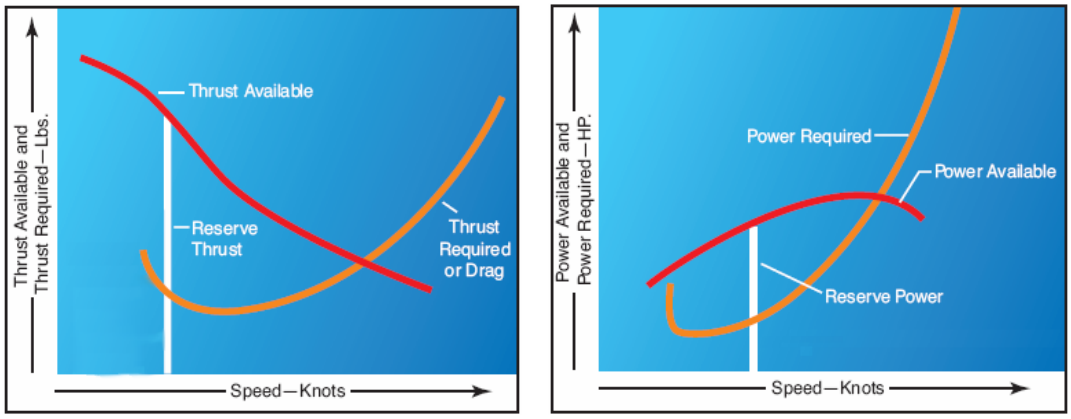


Figure 2 – Thrust/Power Curves

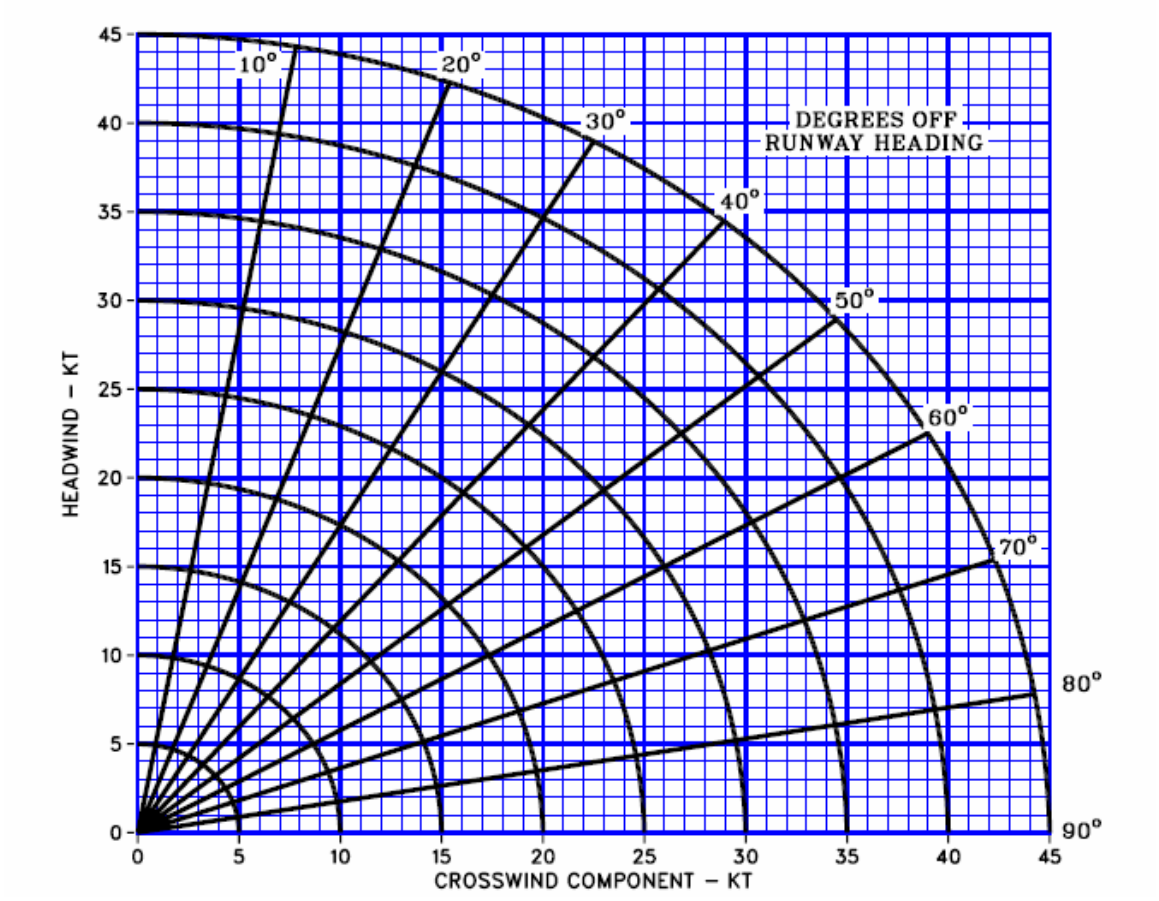


Figure 3 – Headwind/Crosswind Component Chart

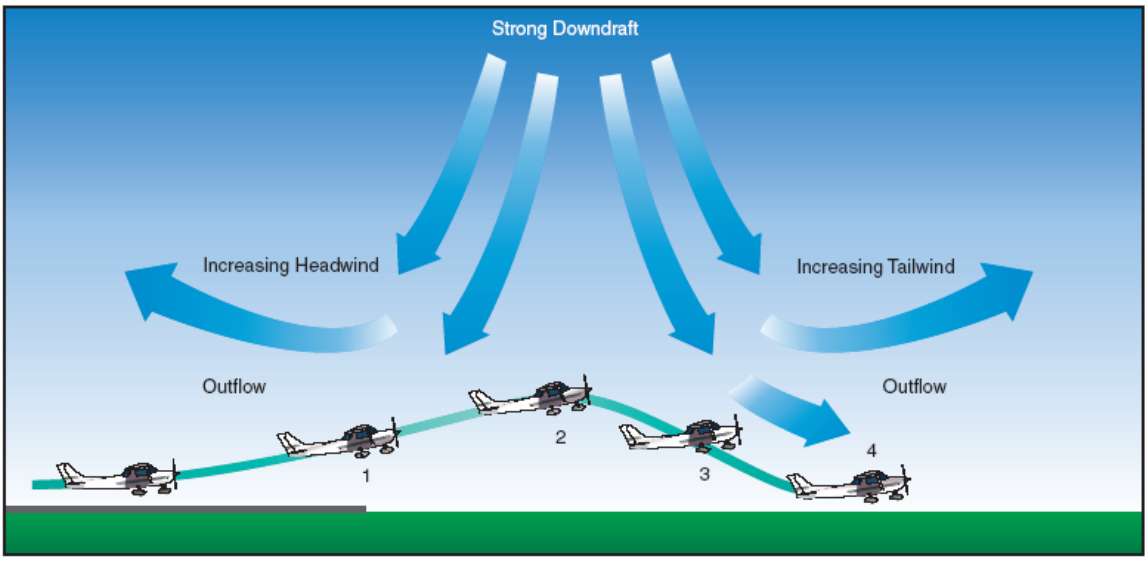


Figure 4 – Effect of a Microburst Wind

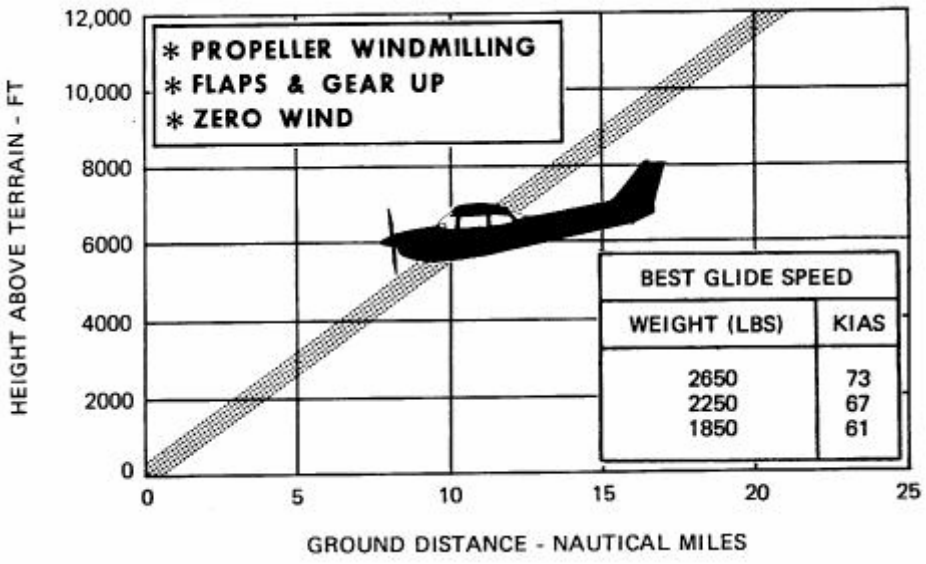
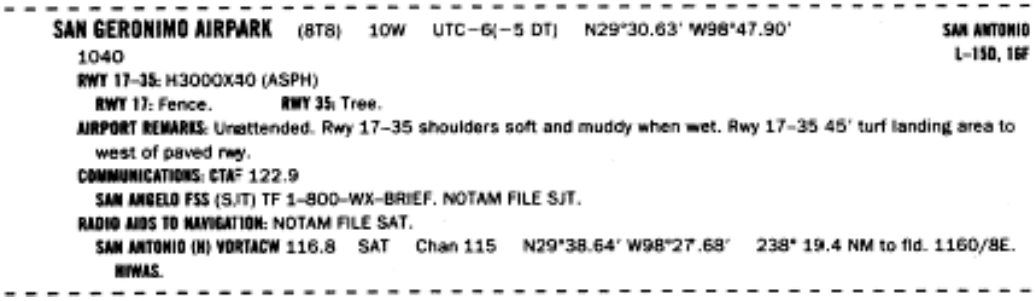


Figure 5 – Maximum Glide



SAN GERONIMO AIRPARK (8T8) 10W UTC−6(−5 DT) N29°30.63' W98°47.90' **SAN ANTONIO**
1040 **L−15D, 16F**
RWY 17−35: H3000X40 (ASPH)
RWY 17: Fence. **RWY 35:** Tree.
AIRPORT REMARKS: Unattended. Rwy 17−35 shoulders soft and muddy when wet. Rwy 17−35 45' turf landing area to west of paved rwy.
COMMUNICATIONS: CTAF 122.9
SAN ANGELO FSS (SJT) TF 1−800−WX−BRIEF. NOTAM FILE SJT.
RADIO AIDS TO NAVIGATION: NOTAM FILE SAT.
SAN ANTONIO (H) VORTACW 116.8 SAT Chan 115 N29°38.64' W98°27.68' 238° 19.4 NM to fld. 1160/8E.
HIWAS.

Figure 6 – 8T8 Airport Information