SSF/CAP Tow Pilot Course Test

Question 1. You see the wing runner holding his arms out with forearms up. What is the signal?

- **A.** Hold.
- **B.** Stop engine.
- **C.** Begin takeoff.

Question 2. You waggle your rudder on the ground prior to takeoff roll. What is the signal?

- **A.** Tow plane ready.
- **B.** Spoilers out.
- **C.** Glider problem.

Question 3. The minimum allowable strength of a towline used for an aerotow of a glider having a certificated gross weight of 1,040 pounds is:

- **A.** 502 pounds.
- **B.** 1,040 pounds.
- **C.** 832 pounds.

Question 4. The minimum allowable strength of a towline used for an aerotow of a glider having a certificated gross weight of 700 pounds is:

- **A.** 700 pounds.
- **B.** 560 pounds.
- **C.** 1,000 pounds.

Question 5. Your rate of climb is lower than normal and you notice the gliders spoilers are deployed. How would you signal the glider that that his/her spoilers are deployed.

- **A.** By waggling the tow planes rudder.
- **B.** By rocking the tow planes wings.
- **C.** By yawing the tow planes tail.

Question 6. For the aerotow of a glider that weighs 700 pounds, which tow line tensile strength would require the use of safety links at each end of the rope?

- **A.** 1,040 pounds.
- **B.** 850 pounds.
- **C.** 1,450 pounds.

Question 7. Safety weak link requirements at the glider end are:

A. Minimum of 80% of the glider empty weight to a maximum of twice the glider empty weight.

B. Minimum of 80% of the glider maximum certified operating weight to a maximum of twice the maximum glider operating weight.

C. Minimum of 70% of the glider maximum certified operating weight to a maximum of twice the maximum glider operating weight.

Question 8. When using a towline having a breaking strength more than twice the maximum certificated operating weight of the glider, an approved safety link must be installed at what point(s)?

A. The point where the tow line is attached to the glider and the point of attachment of the towline to the towplane.

B. Only the point where the tow line is attached to the glider.

C. Only the point where the tow line is attached to the towplane.

Question 9. If at any time the nose of the tow plane is pulled uncontrollably by the glider to a dangerously high or low pitch attitude, the tow plane should:

A. close the throttle and apply full pitch control opposite the pitch attitude.

B. pull the cockpit release handle.

C. apply full throttle and maintain a vertical pitch attitude.

Question 10. What is the single most important factor in tow plane performance.

A. Density altitude.

B. Humidity.

C. Winds.

Question 11. The American style tow ring must be:

A. Two inches in diameter, 1/4 inch steel, magnafluxed with a good weld.

B. 1 1/2 inches in diameter, made of high grade 1/4 inch steel, with a good weld.

C. Two inches in diameter, made of high grade 1/4 inch steel, and available from most hardware stores.

Question 12. A certificated private pilot may not act as pilot in command of an aircraft towing a glider unless there is entered in the pilot's logbook a minimum of:

A. 100 hours of pilot flight time in any aircraft, that the pilot is using to tow a glider.

B. 200 hours of pilot-in-command time in the aircraft category, class, and type, if required, that the pilot is using to tow a glider.

C. 100 hours of pilot-in-command time in the aircraft category, class, and type, if required, that the pilot is using to tow a glider.

Question 13. To act as pilot in command of an aircraft towing a glider, a pilot is required to have made within the preceding 12 months:

- **A.** at least three flights in a powered glider.
- **B.** at least three flights as observer in a glider being towed by an aircraft.
- **C.** at least three actual or simulated glider tows while accompanied by a qualified pilot.

Question 14. When the tow plane climbs out of ground effect, what are some important relationships the tow pilot should be familiar with?

- **A.** The tow plane will require a decrease in angle of attack to maintain airspeed.
- **B.** The tow plane will experience an increase in induced drag and thrust required.
- **C.** A reduction in static source pressure and a decrease in indicated airspeed.

Question 15. What is not a part of the American Type tow hook operational check?

- **A.** With tension on the tow line, have another person pull the tow plane cockpit release control and check for proper release.
- **B.** Inspect the release assembly to ensure it has remained closed after giving the closed hook and tow rope a moderate tug in the direction of tow.
- **C.** Ensure the tow plane end of the tow line is fitted with a TOST tow ring.

Question 16. The presence of personnel in the tow line drop area should result in:

- **A.** dropping the tow line beyond the drop area.
- **B.** dropping the tow line short of the drop area.
- **C.** an immediate go-around without dropping the tow line.

Question 17. What is the maximum tow line strength requirements?

- **A.** Twice the gliders maximum certificated empty weight.
- **B.** Twice the gliders maximum certificated operating weight.
- **C.** Twice the tow planes maximum operating weight.

Question 18. What is the minimum tow line strength requirements?

- **A.** 80% of the tow planes maximum certificated weight.
- **B.** 80% of the gliders maximum certificated operating weight.
- **C.** 80% of the gliders empty weight.

Question 19. If the glider pilot has signaled he/she can not release and you find you can not release, how will you signal the glider of your problem?

- **A.** Rock the tow planes wings.
- **B.** Waggle the tow planes rudder.
- **C.** Yaw the tow planes tail.

Question 20. Safety weak link requirements at the tow plane end are:

A. Minimum strength is greater, but not more than 25% greater than the glider safety link and maximum of not more than twice the gliders maximum operating weight.

B. Minimum strength is greater, but not more than 15% greater than the glider safety link and maximum of not more than twice the gliders maximum operating weight.

C. Minimum strength is greater, but not more than 30% greater than the glider safety link and maximum of not more than twice the gliders maximum operating weight.

Question 21. After computing your takeoff distance from the tow plane's pilot operating hand book, what is the rule of thumb for the takeoff distance of your tow plane?

A. Three times the computed distance.

B. One-half the computed distance.

C. Twice the computed distance.

Question 22. You have just lost power at 1500 feet AGL with a glider in tow. How would you signal an immediate release?

A. Waggle your rudder.

B. Rock your wings.

C. Yaw the tow plane.

Question 23. You look in the mirror and see the glider pilot rocking his/her wings directly behind your tow plane. What is the signal?

A. Speed up.

B. Slow down.

C. Release immediately.

Question 24. You see the glider off your left side and notice your tail is being pulled to the left, pointing your nose to the right. What is the glider trying to tell you?

A. Turn right.

B. Turn left.

C. Speed up.

Question 25. What are the two types of tow hooks and rings you may encounter?

A. Schweizer (American type) , TOST (European type)

B. Schweizer (American type) , Blanik (Czech type)

C. Blanik, LET

Question 26. The wing runner signals with a circular motion of the arm. What is the signal?

A. Pilot ready.

B. Begin take-off.

C. Take up slack.

Question 27. The tow pilot should always evaluate winds aloft and attempt to put the glider in a position to release:

- **A.** upwind of the glider port.
- **B.** downwind of the glider port.
- **C.** crosswind of the glider port.

Question 28. If on initial take off roll the tow plane accelerates and then slows down, the glider may:

- **A.** not be able to take off.
- **B.** not be able to maintain rudder authority.
- **C.** may overrun the tow line.

Question 29. During takeoff roll, with the tow plane on the runway and the glider airborne, the tow pilot must remain alert for:

- **A.** the glider descending to low.
- **B.** the glider climbing to high.
- **C.** the glider side-slipping for crosswinds.

Question 30. If the glider moves out to the side and rocks it's wings, what is the glider signaling?

- **A.** Glider problem.
- **B.** Release glider immediately.
- **C.** Glider can not release.

Question 31. The wing runner is moving his/her lowered arm from side to side. What is the signal?

- **A.** Take up slack.
- **B.** Pilot ready.
- **C.** Begin take-off.

Question 32. A tow plane power failure while on takeoff roll should normally result in:

- **A.** the tow plane maneuvering to the left if space is available.
- **B.** the tow plane rolling straight ahead.
- **C.** the tow plane maneuvering to the right if space is available.

Question 33. The waggling of arms back and forth above the head of a ground crew means:

- **A.** ready for take off.
- **B.** take up slack.
- **C.** stop operations or emergency.

Question 34. What is the normal angle of bank used for turns.

- **A.** 10-30 degrees.
- **B.** 15-20 degrees.
- **C.** 10 degrees.