
Name/Employee # _____ Date _____

FBO/ASO Location _____ Score _____

This exercise contains completion, matching, multiple choice and true/false questions. These questions are derived from material presented in both the video tape and the corresponding section of the E.C.R.G. Read each question carefully and review your answers before returning the test to your instructor.

TOW VEHICLES

- 1. ____ (True or False) Because it is difficult to bring an aircraft to stop, once it is in motion, never tow an aircraft any faster than a person can walk.
- 2. Turning maneuvers which are ____ (sharp/wide) and ____ (slow/abrupt) are required when moving aircraft because the nose wheel is susceptible to sliding from side-to-side, even on dry pavement.
- 3. Prior to any towing operation, you must perform a safety check of the tow vehicle. List three items which you must check prior to leaving the vehicle parking area:
a. _____ b. _____ c. _____
- 4. ____ (True or False) When moving aircraft at night or during inclement weather situations, such as wet or icy ramp conditions, you must reduce your speed to maintain a margin of safety.

TOWBARS

- 5. Two rules for the proper use of a towbar are: a. Never _____ any towbar that is not specifically designed for the aircraft you are about to tow; b. Never use a towbar that is, or appears to have been, _____.
- 6. When repositioning a towbar across the ramp, you should always _____ (push/pull) the towbar so that your full attention is focused on your direction of travel.
- 7. ____ Towbars are typically connected in one of three places on tricycle gear aircraft:
 - a. in the nose gear wheel axle, on the nose gear shear pins, or on the connection points specifically designed to accommodate a towbar,
 - b. on the nose gear, on the nose gear scissor pins, or on any connection points,
 - c. in the nose gear wheel axle, on the nose gear lock pin, or on the connection points specifically designed to accommodate a towbar.

GENERAL TOWING OPERATIONS & PROCEDURES

- 8. Pre-planning for the movement of an aircraft requires that you determine the _____ and the shortest route available and verify that adequate _____ is available at your destination prior to moving the aircraft.
- 9. When approaching an aircraft with a tug, you should always test the _____ on the vehicle, in advance, allowing yourself enough room to maneuver the unit if needed.
- 10. Before dismounting from any tug you must always place the transmission int _____ or _____, shut off the vehicle, and set the _____.



11. To maximize your view and control of the aircraft, throughout the towing operation, aircraft should always be towed from the _____ (front/rear) hitch of the tug.
12. Before moving any aircraft, you must perform a _____ - _____ to verify any aircraft damage, assure the removal and disconnection of any tie-down chains/rope, ground equipment and chocks, and to verify that the towing area is clear.
13. Before towing any aircraft, you must know the turning radius of that aircraft's nose gear. How do you determine the radius when it is not marked on the nose gear?

14. Should it become necessary to move the propeller of a single engine aircraft, in order to safely connect the towbar, you must follow these three rules of propeller safety:
 - a. move the propeller slowly in the _____ (opposite/same) direction of normal powered rotation,
 - b. keep your body out of the _____ - _____,
 - c. never wrap your fingers over the _____.
15. _____ (True or False) The aircraft chocks may be removed before the towbar is connected.
16. On aircraft that are equipped with an external rudder lock, why must you disengage or remove this lock prior to towing?

17. _____ If an aircraft becomes disconnected from the tug while under tow, you must:
 - a. attempt to stop the aircraft yourself,
 - b. attempt to stop the aircraft by throwing chocks at the main gear,
 - c. move the tug and yourself away from the aircraft's direction of travel.
18. _____ When positioning an aircraft for overnight parking, and there is no Tiedown equipment available, it is recommended that all aircraft:
 - a. have the main gear chocked,
 - b. have all three landing gear chocked,
 - c. have the nose gear chocked.

PUSHBACKS/HANGAR OPERATIONS

19. When pushing an aircraft back, you should slowly steer the tug in the _____ (opposite/same) direction that you want the aircraft to go.
20. When pushing any aircraft back or whenever a question arises as to the proper clearance available you must always use a _____ - _____.
21. _____ (True or False) Movement of an aircraft which has a red maintenance tag on the nose gear is allowable if you are only moving the aircraft a short distance.
22. Whenever repositioning aircraft, whether into a hangar or on the ramp, aircraft wing and tail surfaces should never _____, and no part of an aircraft should be parked within the _____ - _____ of another aircraft.
23. _____ (True or False) You should always approach hangar tracks at an angle so that each main gear goes over the tracks separately.

24. _____ Identify the correct scenarios when you should leave the nose wheel steering mechanism disconnected: (there may be more than one answer)
- the aircraft is to be left outside on the ramp overnight,
 - the aircraft is to remain inside a hangar,
 - the aircraft has just been repositioned from a hangar to the ramp for departure
 - the aircraft towbar remains attached to the aircraft after towing.

AIRCRAFT NOSEGEAR DISCONNECTION

25. List the following turboprop aircraft, by letter, that require disconnection of the nosegear prior to towing:

- _____
- | | |
|--------------------------|--------------------|
| a. Cheyenne III | d. Turbo-Commander |
| b. Mu-II (all series) | e. Gulfstream-I |
| c. King-Air (all series) | f. Beech Starship |

26. List the jet aircraft, by letter, that require the nose gear to be disconnected prior to towing: _____

- | | |
|----------------------------|-------------------------|
| a. Falcon 50 | e. Citation III |
| b. Challenger (all series) | f. Falcon 900/2000 |
| c. Citation V | g. Learjet (all series) |
| d. Citation X | h. Falcon 10/100 |

Match the following aircraft to the correct towing and/or nosegear disconnect statement:

- | | |
|---------------------------------------|--|
| 27. _____ Westwind/Astra (all models) | a. The pin which locks the steering collars is also used to connect the towbar. |
| 28. _____ Falcon 20/200 | b. Disconnect by removing the safety clip from the lock pin, remove the horizontal lock pin that holds the scissors together, and before connecting the tow bar, replace the lock pin in the original position for storage. |
| 29. _____ Beechjet and Diamond | c. A special service tool, is needed to lower the “connection shaft”, and must be left on the aircraft until the gear is reconnected. |
| 30. _____ Hawker (all series) | d. Disconnection of the nose gear requires disconnection of the scissors, securing the upper scissors and connection of the towbar to the aircraft by inserting the towbar rod through the nosegear axle of the aircraft and inserting the lock pin. |
31. To avoid damage to the Sabreliner nosegear collars, you must NOT move the tow bar from side-to-side unless the aircraft is _____.
32. _____ After disconnecting the scissors of a Jetstar, the upper scissors must be pinned in the “up” position. If the scissors are not pinned:
- The nose gear strut may collapse.
 - The upper scissors is not required to be pinned.
 - The APU will shut down if it is operating.

