



U.S. Department  
of Transportation  
Federal Aviation  
Administration

# Advisory Circular

**Subject:** Towbar and Towbarless Movement  
of Aircraft

**Date:** 8/11/23

**AC No:** 00-65A

**Initiated by:** AFS-300

**Change:**

- 1 PURPOSE OF THIS ADVISORY CIRCULAR (AC).** This AC provides guidance for towbar and towbarless movement of aircraft and applies to all operators under Title 14 of the Code of Federal Regulations (14 CFR) parts [91](#), 91 subpart [K](#) (part 91K), [121](#), [125](#), [129](#), and [135](#). The term “certificate holder (CH)” will be used throughout this document to represent “operators,” “air carriers,” and their agents. The contents of this document do not have the force and effect of law and are not meant to bind the public in any way, and the document is intended only to provide information to the public regarding existing requirements under the law or agency policies.
- 2 AUDIENCE.** This AC applies to all parts 91, 91K, 121, 125, 129, and 135 CHs who allow towbar and/or towbarless tug movement of their aircraft or are tasked with towing other CHs’ aircraft.
- 3 WHERE YOU CAN FIND THIS AC.** You can find this AC on the Federal Aviation Administration’s (FAA) website at [http://www.faa.gov/regulations\\_policies/advisory\\_circulars](http://www.faa.gov/regulations_policies/advisory_circulars) and the Dynamic Regulatory System (DRS) at <https://drs.faa.gov>.
- 4 WHAT THIS AC CANCELS.** AC 00-65 Change 1, Towbar and Towbarless Movement of Aircraft, dated November 8, 2010, is canceled.
- 5 RELATED 14 CFR REGULATIONS.**
  - Part [5](#), Safety Management Systems.
  - Part [91](#), General Operating and Flight Rules.
  - Part [121](#), Operating Requirements: Domestic, Flag, and Supplemental Operations.
  - Part [125](#), Certification and Operations: Airplanes Having a Seating Capacity of 20 or More Passengers or a Maximum Payload Capacity of 6,000 Pounds or More; and Rules Governing Persons on Board Such Aircraft.
  - Part [129](#), Operations: Foreign Air Carriers and Foreign Operators of U.S.-Registered Aircraft Engaged in Common Carriage.
  - Part [135](#), Operating Requirements: Commuter and On Demand Operations and Rules Governing Persons on Board Such Aircraft.
  - Part [139](#), Certification of Airports.

## 6 RELATED READING MATERIAL (current editions).

- AC [00-34](#), Aircraft Ground Handling and Servicing.
- AC [20-35](#), Tiedown Sense.
- AC [60-28](#), FAA English Language Standard for an FAA Certificate Issued Under 14 CFR Parts 61, 63, 65, and 107.
- AC [91-73](#), Parts 91 and 135 Single Pilot, Flight School Procedures During Taxi Operations.
- AC [120-57](#), Surface Movement Guidance and Control System.
- AC [120-74](#), Parts 91, 121, 125, and 135 Flightcrew Procedures During Taxi Operations.
- AC [120-92](#), Safety Management Systems for Aviation Service Providers.
- AC [150/5200-37](#), Safety Management Systems for Airports.
- AC [150/5210-5](#), Painting, Marking, and Lighting of Vehicles Used on an Airport.
- AC [150/5210-18](#), Systems for Interactive Training of Airport Personnel.
- AC [150/5210-20](#), Ground Vehicle Operations to include Taxiing or Towing an Aircraft on Airports.
- AC [150/5340-1](#), Standards for Airport Markings.
- AC [150/5340-18](#), Standards for Airport Sign Systems.

**7 BACKGROUND.** There have been several reported cases of near incursions and mishaps involving tug operators during aircraft movement. Specifically, super tugs (i.e., “towbarless” tugs) have had incidents such as jackknifing, uncontrolled movement, and the inability to quickly stop the tug and aircraft. There have been several potential ground incursion instances where super tugs were not seen by the aircraft and ground controllers. There have also been reported cases where pilots were not cognizant of the “right of way passage” of these tugs, even when they are cleared for movement in the active areas. Lastly, air traffic control (ATC) specialists have reported that it is very difficult to identify a super tug towing an unpowered aircraft at night because the aircraft being towed is not properly illuminated with any lights. No person should park or move an aircraft in, or in dangerous proximity to, a night flight operations area of an airport unless the aircraft or the area is clearly illuminated. Without proper aircraft-illuminated lighting during towing, the aircraft may be nearly invisible to ATC and other pilots in the area. Further related guidance can be found in AC 150/5210-20.

- 7.1** The aviation industry has found, through experience, that the potential for damage and/or injury if a mishap occurs is high; however, firm safety practices deter accidents or incidents. This AC contains accepted safety practices and information, which may help mitigate/eliminate injuries to personnel and damage to aircraft during ground handling and reduce runway incursions.

**8 SAFETY MANAGEMENT SYSTEM (SMS).** Organizations that have an SMS should encourage involvement from employees at all levels of the organization to identify hazards in the operational environment, which will lead to improvements in processes and procedures to further improve safety. Refer to part 5 for requirements and AC 120-92 for additional guidance.

**9 CH's PROCEDURES FOR TOWING OPERATIONS.**

**9.1 CH Policy/Procedures.** CHs should establish policy and procedures under parts 91, 121, 125, and 135. CHs may cover this information in a standard operating procedures (SOP) handbook, which should clearly define duties and responsibilities and employ the use of a checklist (see Appendix A, Checklist Example) that covers the safe movement of the type of aircraft being towed.

**9.2 Requirement to Submit to FAA and Airport Management.** CHs should submit appropriate procedures that outline their towing operations to the responsible Flight Standards office or certificate management office (CMO) and to respective airport management for acceptance/approval. The procedures should include, but not be limited to, the following:

- Safety instructions.
- Operating procedures (include the differences between day and night operations).
- Initial and recurrent training.
- Radio communication.
- Towing procedures checklist.

**Note:** These procedures should include items required by the respective airport's Ground Vehicle Access Program Training Curriculum in AC 150/5210-20, as revised.

**10 TRAINING.** CHs should ensure that all aircraft ground handling personnel are trained and thoroughly familiar with all published towing procedures pertaining to the type of aircraft being towed, and understand the restrictions and/or limitations of any vehicle authorized to move an aircraft. The CH should establish initial and recurrent training for all personnel involved in the movement of the aircraft. The type of training can be in the form of on-the-job training (OJT), computer-based training (CBT), classroom training, or any other form of training that provides adequate information to the prospective ground handler. The CH should ensure the training meets any requirements of the airports where operations occur. This guidance can be found in AC 150/5210-20.

**10.1 Safety OJT.** All personnel should receive safety OJT upon initial assignment and whenever there is a change in equipment, procedures, processes, or safety requirements. Well-trained personnel can be the greatest mishap deterrents in the workplace. Supervisors should document safety-related training.

**10.2 New Personnel.** Newly assigned aircraft maintenance specialists/ground movement personnel should pass a proficiency test on the types of aircraft towed after completing supervised OJT.

**10.3 Exception in Training.** Wing and tail walkers may not have to be trained on all published towing procedures or receive annual proficiency training if their duties are restricted to these positions during towing operations.

**10.4 Training Topics.** Initial and recurrent training should include, but not be limited to:

1. Speed restrictions for clear and cluttered ramp conditions.
2. Speed restrictions for contaminated pavement conditions.
3. Momentum effects while towing various weights and at various speeds.
4. Airport signage and markings.
5. Tow vehicle and equipment inspection (prior to use).
6. Situational awareness.
7. Use of written checklists (see Appendix [A](#) for checklist example).
8. Acceleration and deceleration characteristics and techniques.
9. Aircraft braking during towing operations.
10. ATC communications procedures.
11. Tug/aircraft configuration (i.e., lighting).
12. Emergency procedures.
13. Flight deck/cockpit observer responsibilities.
14. Proper hand signals and terminology for towing.

## **11 TOWBAR AND TOWBARLESS TOWING OF AIRCRAFT.**

**Note:** The CH may have other topics not discussed below in their program/procedures to help mitigate risk during towing operations.

**11.1 Tow Vehicle Movement Characteristics.** Tow vehicles, whether tugs that use a towbar or super tugs, usually move aircraft between the terminal gates and maintenance hangars. Aircraft weight and its fuel load are major considerations during towing because tow tractor handling characteristics change proportionally with the change in aircraft weight (e.g., heavier aircraft put more stress on the vehicle). After movement begins, heavy aircraft can “push” the tug with a greater force than lighter aircraft because of weight and momentum. Tow operators should recognize and understand these characteristics. Heavier weights and excessive speed create the potential for accidents. Towing speeds should be reduced according to the weight of the aircraft. The braking distance required to stop a large aircraft will be greater than the distance required to stop a smaller aircraft.

**11.2 Towing Vehicle and Equipment Inspections.** Tow vehicle operators should ensure all towing equipment is serviceable and functioning properly according to the manufacturer's specifications before any towing operation. Before connecting the towbar to the aircraft, the tow vehicle operator should inspect the tow vehicle for defects or extraneous material that may interfere with safe operation. An operator should inspect each tow vehicle at least once during each shift to verify the vehicle cab and exterior are clear of all extraneous materials and it is in safe working condition. Additionally, the tow vehicle operator should check all radio communications before dispatching a tow vehicle. The vehicle operator should inspect towing connections before each use. When tow vehicle operators find mechanical defects that could affect tow vehicle safety, the CH should take the equipment out of service and send it to vehicle maintenance for repairs.

**11.3 Towing Safety Considerations.** The CHs should utilize their SMS, or a similar Safety Risk Management (SRM) and safety assurance process, to evaluate its towing procedures to address the following:

1. The procedures for installation of chocks whenever an aircraft towing operation has been stopped, either temporarily or when the towed aircraft is parked at the intended parking location.
2. The procedures for all personnel to remain clear of the aircraft in tow until the aircraft has come to a complete stop.
3. Trained, qualified, and authorized personnel, should follow established procedures and properly plan for weather and local conditions (e.g., inclined ramps, emergencies, and other limitations) to lessen the likelihood of accidents.

**Note:** The best practice is to use a checklist.

4. Placards are legible and located inside the tow vehicle cab to identify any restrictions that apply to it.
5. Observance of any other temporary placards prior to all movements.
6. When connecting a towbar to any towing vehicle, personnel should stand clear until the backing tow vehicle is in close proximity to the towbar.
7. When connecting a tow vehicle, personnel should be extremely vigilant to any unexpected tow vehicle or aircraft movement.
8. The use of the proper towbar and/or tow vehicle use in accordance with the CH's approved/accepted procedures. The wrong type of towbar, or makeshift equipment, can cause damage to the aircraft or injury to personnel.
9. When the auxiliary power unit (APU) is operated while the aircraft is being towed, the use of an approved checklist by the cockpit observer for normal APU start-up and/or shutdown and emergency procedures is essential for safe operation.
10. Personnel are aware that safety is the responsibility of all personnel involved in moving an aircraft.

- 11.4 Communication.** Proper communication is critical for safe aircraft towing operations. In the case of ATC clearance, standard clearance terminology should be used. Anyone authorized to taxi or tow an aircraft should have the ability to communicate and understand English. English language proficiency rests with the hiring authority (AC 150/5210-20). Before movement of aircraft, ground personnel should be briefed on the type of communications being utilized (e.g., hand signals, radios, etc.).
- 11.5 Aircraft Lighting.** Before aircraft movement, the CH should ensure the aircraft has proper illuminated lighting. No person should park or move an aircraft in, or in dangerous proximity to, a night flight operations area of an airport unless the aircraft or the area is clearly illuminated.
- 11.6 Flight Deck/Cockpit Observer.** The CH should determine through their SMS process (per Part 5, Safety Management Systems, requirements) whether a flight deck/cockpit observer is required for towing operations when a towbarless tow vehicle (TLTV) is used. If the CH does not have an SMS process in place, they should use an equivalent process when evaluating hazards associated with operations involving aircraft movement. Examples of hazards to consider include, but are not limited to:
- Visibility—night vs. day towing operations.
  - Airport traffic.
  - Weather.
  - Congestion—area where towing will take place on airport.
  - Airport requirements.
  - Tow vehicle manufacturer’s recommendations.
- 11.6.1 Personnel Duties and Responsibilities.** The flight deck/cockpit observer should be trained and authorized to operate the aircraft’s brakes. If the hydraulic pressure that provides braking drops below safe operating limits, then the observer should terminate towing operations. Additionally, the observer serves as the primary person communicating with the ground operations (e.g., control tower and/or ramp control), with the tow vehicle operator as a backup. Flight deck/cockpit observer duties include looking outside the cockpit and warning the tow vehicle operator of possible safety issues. TLTV driver and observer communication responsibilities should be clearly defined and understood before every tow operation.
- 11.6.2 Towing Operations Without Flight Deck/Cockpit Observer.** If the CH determines a flight deck/cockpit observer is not needed, the CH should have clearly defined procedures for proper communication between the TLTV driver and ground operations (e.g., control tower and/or ramp control). The same safe operating limitations should be defined in regard to braking conditions, communication, and observer duties in the TLTV.
- 11.7 Tow Vehicle Operators.** The tow vehicle operator is responsible for operating the vehicle in a safe manner. If a flight deck/cockpit observer is utilized, then the vehicle operator should follow all directions from the flight deck observer in accordance with

control tower/ground control instructions. Emergency stop instructions from any team member should be obeyed. A trained vehicle operator should be at the controls of the towing vehicle at all times during aircraft movement. The vehicle operator should stop the vehicle upon losing communication with the cockpit observer, control tower, and/or ramp control. If communication loss occurs while operating on an active runway, proceed so that the entire aircraft has crossed the runway holding position markings to clear the active runway.

- 11.8 Aircraft Marshaller.** The aircraft marshaller, also known as “signalman,” guides the movement of an aircraft prior to departure or upon arrival by utilizing standard hand signals. Aircraft marshallers rely on the wing walkers, tail walkers, and cockpit observers to ensure proper clearance when moving an aircraft into/out of hangars, airport terminals, etc. Aircraft marshallers should have annual proficiency testing and be fully qualified in all towing procedures, as required by CH and airport training requirements.
- 11.9 Wing Walkers.** A wing walker should be stationed at each wingtip to ensure adequate clearance of any obstruction in the aircraft’s path. The wing walker is responsible for properly signaling the tow vehicle operator immediately when an aircraft is in danger of colliding with an obstruction. In such cases, the tow vehicle operator should stop towing operations until the vehicle operator personally checks to ensure the aircraft will clear the obstruction. Wing walkers are not required for helicopters being towed with rotor blades in parallel position. Wing walkers do not require annual proficiency testing and need not be fully qualified in all towing procedures, as long as this is their only task. The airport may require additional training; refer to AC 150/5210-20.
- 11.10 Tail Walkers.** The CH should use a tail walker during towing operations when the tow vehicle operator turns the aircraft sharply or backs into a parking position. Backing of aircraft should be avoided as much as possible. Tail walkers do not require annual proficiency testing and need not be fully qualified in all towing procedures as long as this is their only task. The airport may require additional training; refer to AC 150/5210-20.
- 11.11 Personnel Riding or Walking.** Under no circumstances should personnel walk between the nosewheel of an aircraft and its towing vehicle, nor should they ride on the outside of a moving aircraft, on the towbar, or on the outside of the vehicle unless in an authorized seat. No person should attempt to board or leave a moving aircraft or towing vehicle.
- 11.12 Night Crew Signals.** CHs should issue two luminous wands to towing team members who require wands. Other tow team members should use wands, as required, to warn any aircraft traffic that may approach.
- 11.13 Control Tower Clearance.** CHs should ensure compliance with the airport’s procedures established pursuant to part 139, § [139.329](#) for contacting ATC before towing an aircraft on or across an active taxiway or runway. The tow vehicle operator should obtain clearance from the control tower via the flight deck/cockpit observer (if utilized). At no time should any aircraft be towed on, or across, runways or taxiways without advance approval of the control tower. The primary means of communication will be the aircraft radio. An alternate method (when conditions restrict aircraft battery operation) is through

an escort vehicle in direct radio contact with the control tower. The radio-equipped escort vehicle will accompany the aircraft throughout the towing operation.

- 11.14 Towing Speed.** Towing speed should not exceed that of walking team members. Towing speed should not exceed the safe operating speed for the taxiway surface conditions. The CH and tow vehicle operator should reference the field condition (FICON) report, the potential impact of wind during towing on a contaminated surface, or the speeds established by the TLTV operator's published procedures for the towing surface condition.
- 11.15 Aircraft Brakes.** For aircraft being towed with a flight deck/cockpit observer, to mitigate the loss of braking, the CH should charge aircraft brake systems before each towing operation and stop towing immediately if brake pressure drops below safe operating limits. Aircraft with faulty brakes should not be towed, except to repair facilities, and then only in accordance with the CH's FAA-accepted/approved policy and procedures, to include having personnel standing by ready with chocks for emergency use.
- 11.16 Chocks.** The CH should make chocks immediately available in case of an emergency throughout towing operations. They should be placed properly before disconnecting the towing vehicle. When towing or parking aircraft with snow, ice, or frost present anywhere on the parking ramp or towing surface, sand bags and chocks should be used. Heavier tow vehicles with chains should be used to improve starting and stopping traction during tow operations on ice- or snow-covered towing surfaces. Chocks or other support equipment should not be placed or hung on any part of the aircraft exterior during towing or repositioning.
- 11.17 Starts and Stops.** When moving aircraft, tow vehicle operators should not start and stop suddenly. The flight deck/cockpit observer should never apply aircraft brakes when an aircraft is being towed, except in emergencies and upon instructions given by any respective team member. Before disconnecting the towing vehicle from the aircraft, the tow vehicle operator should chock the aircraft in place and set the aircraft's brakes.
- 11.18 Equipment, Stands, and Similar Materials.** The CH should remove and store all equipment, work stands, loose aircraft parts, and other materials from the vicinity of an aircraft.
- 11.19 Entrance Doors, Ladders, and Down Locks.** To avoid possible worker injury and aircraft damage during towing operations, the CH should close entrance doors, retract or remove ladders, and install landing gear down locks (if required). The CH should only deviate from these procedures per specific aircraft manufacturer instructions.
- 11.20 Struts and Tires.** Before towing any aircraft, towing team members should check nose and main landing gear struts and tires for proper inflation. Unless the applicable manufacturer instructions require a gauge check, a visual check of tires and struts is adequate for towing purposes.
- 11.21 Engine Operation.** As a general rule, aircraft with engines running should not be towed. The following exception applies to aircraft towing operations with engines running:



pushing aircraft away from terminal gates used by airlines for dispatch. Ground personnel involved in this operation should follow the CH's accepted/approved policy and procedures for safety of personnel so that they avoid rotating propellers, the danger zones of jet engines, and maintain awareness of other movements on their respective surface to mitigate the risk of an accident or incident with other aircraft or vehicles.

- 11.22 Airport Signage and Markings.** Airport pavement markings and signs provide information that is useful during towing operations. Uniformity in airport markings and signs from one airport to another enhances safety and improves efficiency. Refer to AC 150/5340-1 and AC 150/5340-18 for more information.
- 11.23 Painting and Markings on Tow Vehicle and Equipment.** Refer to AC 150/5210-5 for detailed information.
- 12 CONTACT.** For additional information, please contact the Aircraft Maintenance Division at 202-267-1675 or at 9-AWA-AFS-300-Maintenance@faa.gov.
- 13 AC FEEDBACK FORM.** For your convenience, the AC Feedback Form is the last page of this AC. Note any deficiencies found, clarifications needed, or suggested improvements regarding the contents of this AC on the Feedback Form.



Robert M. Ruiz  
Acting Deputy Executive Director, Flight Standards Service

**APPENDIX A. CHECKLIST EXAMPLE**

Qualified and authorized personnel should use the appropriate group of checklist items before performing each operation. Check Logbook and Special Equipment List.

**LOGBOOK AND SPECIAL EQUIPMENT LIST**

**(Prior to engine start, perform the following visual walk-around safety checks)**

**Check for:**

1. Tires	Checked	4. Hydraulic Fluid Quantity	OK
2. Fluid Leaks	No	5. Three (3) Sets of Chocks	Verify
3. Structural Damage	No	6. Aircraft Steering Bypass Pins Installed or Removed, as applicable	Verify

**Note:** If defects are found, complete company form on unserviceable ground equipment.

**VEHICLE SAFETY CHECKLIST**

1. Manufacturer's Safety Check	Complete	12. Seat Belts	On
2. Airport Diagram	Checked	13. Seat and Mirrors Position	Checked
3. Cabin Switches	Off	14. VHF Radios (if applicable)	On
4. Tractor Parking Brake	On	15. Transponder (if equipped)	Standby
5. Fuel Quantity	Verify	16. Nosewheel Cradle	Up
6. Air Tank Pressure (if applicable)	Verify	17. Parking Brake	Released
7. Warning Lights Test	Complete	18. Travel Direction Selector	As Required
8. Interior Light Operation	Checked	19. Normal Brakes	Checked
9. Exterior Light Operation	Checked	20. Steering	Checked
10. Windows and Windshields	Clean, Free of Obstructions	21. Side View Mirrors	Undamaged
11. Wipers	Good, Working Condition		

**Note:** If defects are found, complete company form on unserviceable ground equipment.

**AIRCRAFT SAFETY CHECKS**  
**(Perform prior to connecting tractor to aircraft)**

1. Aircraft Logbook for Items that Would Prevent Towing	Checked	6. Aircraft Lights	As Required
2. Perform Aircraft Exterior Safety Checks Per Aircraft Requirements	Complete	7. Aircraft Fuel Quantity	As Required Checked and Balanced
3. Landing Gear Ground Lock Pins as Required	Installed	8. Total Tow Weight	Computed
4. Chocks Both Main Landing Gear	Installed	9. Aircraft Nosewheels	Straight
5. If APU Inoperative, Brake Accumulator Fully Charged	As Required		

**CONNECTING TO AIRCRAFT**

1. Seat Belts	On	13. Tractor Parking Brake	On
2. Position Tractor in Front of and in Line with Aircraft Nosewheel	Complete	14. Press Nosewheel Pin Button	Complete
3. Parking Brake	On	15. Raise Cradle Until Cradle Raised Light is Illuminated	Complete
4. Rotate Seat to Face Aircraft	Complete	16. Flight Deck Communication	Established
5. Select Required Steering Mode	Complete	17. Aircraft Towing GHCL (if aircraft is occupied)	Completed
6. Lower Cradle Until Cradle Down Warning Light is Illuminated	Complete	18. Aircraft Chocks	Removed
7. Select Correct Aircraft Wheel Size	Complete	19. Aircraft Parking Brake	Released
8. Open Gate Until Gate Open Warning Light is Illuminated	Complete	20. Select Appropriate Forward or Reverse Gear	Complete
9. Aircraft Steering Bypass Pin	Installed/Confirmed	21. Tractor Parking Brake	Off
10. Parking Brake	Released	22. Select Appropriate Forward or Reverse Gear	Complete
11. Drive to Engage Nosewheel Centrally in Cradle	Complete	23. Tractor Parking Brake	Off
12. Close Gate Until Gate Closed Light is Illuminated and Safety Bars Contact Nosewheels	Complete		

**AIRCRAFT TOWING**

1. Crew Briefing	Complete	7. Wing Walkers	As Required
2. VHF Radios	Set	8. Parking Brake	Off
3. ATC	Contact	9. Accelerator	Smoothly Actuate
4. Clearances	Read Back	10. Brakes	Check
5. Transponder (if equipped)	On	11. Aircraft Steering Angle	Monitor
6. Exterior Lights/Strobes	On	12. Towing Surface Condition	Check

**CAUTION:** If red oversteer indicator illuminates, notify crew chief, supervisor, or manager. Engineering will determine if documented aircraft nose gear inspection is required.

**AIRCRAFT PARKING/UNDOCKING**

1. Wing Walkers	As Required	11. Raise Cradle Until Cradle Raised Light is Illuminated	Complete
2. Exterior Lights/Strobes	As Required	12. Rotate Seat to Face Forward	Complete
3. Transponder (if equipped)	Standby	13. Travel Direction Selector	Neutral
4. Parking Brake	On	14. Parking Brake	On
5. Aircraft Chocks	Installed Both MLG	15. Aircraft Steering Bypass Pin	Removed
6. Parking Brake	Off	16. Aircraft Parking Brake	As Required
7. Lower Cradle Until Cradle Down Warning Light is Illuminated	Complete	17. Perform Parking Checks Per Aircraft GHCL (if required)	Complete
8. Open Gate Until Gate Open Warning Light is Illuminated	Complete	18. Perform Aircraft Exterior Safety Checks Per Aircraft GHCL	Complete
9. Withdraw Tractor from Aircraft	Complete	19. Inspect Spray Deflector for Damage (if applicable)	Complete
10. Close Gate Until Gate Closed Light is Illuminated	Complete		

**AIRCRAFT SHUTDOWN**

1. Driver Seat	Forward	6. Exterior Lights	Off
2. Nosewheel Cradle	Up	7. Interior Lights	Off
3. Travel Direction Selector	Neutral	8. Engine Ignition	Off
4. Parking Brake	On	9. Seat Belts	Stowed
5. VHF Radios/Transponder	Off		

**ABNORMAL OPERATIONS**

<b>APU Inoperative</b>	
1. Aircraft Brake Accumulator	Charged
<b>Oversteer Warning (Red Light)</b>	
1. Tow Operation	Complete
2. Crew Chief, Supervisor, or Manager	Advised

**EMERGENCY OPERATIONS**

<b>Unclear Radio Transmission</b>	
1. Vehicle	Stop
2. Instructions	Repeat
<b>TLTV/Cockpit Communication Lost</b>	
1. Use Backup Frequency/Radio	Check
<b>ATC Communication Lost</b>	
1. Last Clearance	Complete
2. Await Ground Control Light Gun	Check
<b>Disorientated</b>	
1. Vehicle	Stop
2. Ground Control	Request Progressive
<b>TLTV Disabled</b>	
1. Clear Runway (if possible)	Complete
2. Ground Control	Advised
3. Ramp Control Tower (if applicable)	Advised
<b>TLTV or Aircraft Collision</b>	
1. TLTV/Aircraft (clear runway if possible)	Stop
2. Ground Control	Advised
3. Ramp Control Tower (if applicable)	Advised
4. Provide Assistance	Complete
<b>Aircraft Disabled</b>	
1. Clear Runway (if possible)	Complete
2. Ground Control	Advised
3. Ramp Control Tower (if applicable)	Advised
<b>Aircraft Fire</b>	
1. Ground Control	Advised
2. Ramp Control Tower (if applicable)	Advised
3. TLTV/Aircraft	Stop
4. Evacuate Aircraft	Complete
5. Extinguish Fire (if possible)	Complete
6. Chock Aircraft	Complete
7. Provide Assistance	Complete

### Advisory Circular Feedback Form

If you find an error in this AC, have recommendations for improving it, or have suggestions for new items/subjects to be added, you may let us know by contacting the Flight Standards Directives Management Officer at 9-AWA-AFB-120-Directives@faa.gov.

Subject: AC 00-65A, Towbar and Towbarless Movement of Aircraft

Date: \_\_\_\_\_

*Please check all appropriate line items:*

An error (procedural or typographical) has been noted in paragraph \_\_\_\_\_  
on page \_\_\_\_\_.

Recommend paragraph \_\_\_\_\_ on page \_\_\_\_\_ be changed as follows:

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In a future change to this AC, please cover the following subject:  
(Briefly describe what you want added.)

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Other comments:

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I would like to discuss the above. Please contact me.

Submitted by: \_\_\_\_\_

Date: \_\_\_\_\_