



SNS COLLEGE OF TECHNOLOGY
(An Autonomous Institution)
COIMBATORE-35
DEPARTMENT OF AEROSPACE ENGINEERING



Course: 19ASB303-Aircraft Maintenance Engineering

UNIT I - Aircraft Ground Handling and Support Equipment

UNIT I: U1 LP3 :Towing operations - Preparation Equipment - precautions in Aircraft Maintenance



DEFINITION Towing is the process of moving the aircraft without using engine power by pushing by hands or using tow bar and tow tractor.

Towing operations are an important part of aircraft maintenance and involve moving an aircraft from one location to another on the ground. Proper preparation, equipment, and precautions are necessary to ensure safe and effective towing operations.

Preparation:

1. Obtain the appropriate towing manual and review it thoroughly.
2. Conduct a pre-tow inspection of the aircraft to ensure it is in good condition and ready to be towed.
3. Check the towing equipment to ensure it is in good working condition.
4. Identify and mark any obstacles, such as curbs or poles, that may be in the path of the aircraft during towing.

Equipment:

1. Tow bars: These are used to attach the towing vehicle to the aircraft. Tow bars should be compatible with the aircraft's nose gear or tow points.

Tow vehicle: A properly sized and equipped vehicle, such as a tug or tractor, is required to move the aircraft. **Page: 1/1**

2. Chocks: Wheel chocks are used to prevent the aircraft from rolling during towing.
3. Communication equipment: A two-way radio or other communication device is necessary to maintain contact between the towing vehicle and the aircraft.

Precautions:

1. Check the weight and balance of the aircraft to ensure it is within limits for towing.
2. Ensure that all personnel involved in towing operations are properly trained and qualified.
3. Maintain a safe distance from the aircraft during towing operations to avoid injury.
4. Follow the proper procedures for connecting and disconnecting the tow bar.
5. Use proper hand signals or communication equipment to direct the movement of the aircraft.
6. Be aware of the aircraft's height, width, and length to avoid collisions with other aircraft or obstacles.
7. Always tow the aircraft at a safe speed and be prepared to stop if necessary.

In summary, proper preparation, equipment, and precautions are necessary to ensure safe and effective towing operations during aircraft maintenance. It is important to follow the procedures outlined in the towing manual and to maintain clear communication between all personnel involved in the operation.