The Aerial Periodic Inspection course features five individual segments covering the Terex Utilities Aerial Platform Periodic Inspections. The training outlines the Terex Utilities inspection form as well as inspection points and criteria for the Aerial Periodic Inspection.

1. Aerial Periodic Inspection Forms
   a. This lesson breaks the Terex Utilities Periodic Inspection form down, detailing the information that needs to be captured and providing explanations and examples on how the form is meant to be used.

2. Chassis / Body
   a. The second lesson focuses on the components that fall into the Chassis and Body section of the inspection sheet. This section is broken into two separate lessons: Cab Controls and Body / Flatbed. Pictures and descriptions are used to provide examples of areas that need to be checked for each inspection point.
      b. Cab Controls
         i. Master Switch Panel
         ii. Strobe Lights / Beacons
         iii. PTO Shift Control (cable, air, electric)
         iv. PTO Indicator Light
         v. PTO Warning Label Present
         vi. Stowed Height Placard
         vii. Start / Stop, Throttle Controls
         viii. Auxiliary Brake Control
         ix. Back Up Alarm
         x. Operators Manual With Truck
      c. Body / Flatbed
         i. Headlights, Stop, Tail, Turn, Hazard
         ii. Fire Extinguisher
         iii. Wheel Chocks
         iv. Outrigger Pads
         v. Unit Grounding Equipment
         vi. Cab Guard / Headache Rack
         vii. Steps / Accessibility
         viii. All Safety Decals - Legible and Proper Location
3. Aerial Unit
   a. The Aerial Unit segment is broken into eight lessons: Basic Hydraulics, PTO/Pump, Outrigger/Torsion Bar System, Pedestal and Turntable, Booms and Platform, Platform Controls, Platform Leveling System, and Extension System. Pictures and descriptions are used to provide examples of areas that need to be checked for each inspection point.
   b. Basic Hydraulics
      i. Reservoir - Oil Amount and Condition
      ii. Filters, Breather Cap
      iii. Gate Valves, Hoses, and Fittings
   c. PTO / Pump
      i. Gate Valves, Hoses, and Fittings
      ii. PTO / Pump Noises and Leaks
      iii. PTO / Pump Hoses and Fittings
   d. Outrigger / Torsion Bar System
      i. Welds, Metal Structure, and Mounting
      ii. Anchor Bolts
      iii. Hydraulic Cylinders - Leaks
      iv. Cylinder Pins and Keepers
      v. Foot Assembly and Pins
      vi. Holding Valves / Locks (Drift Test)
      vii. Cylinder Lock - Out Valves
      viii. Torsion Bar Structure
      ix. Torsion Bar Bushings
      x. Hose Condition, Routing Under Chassis
      xi. Control Valves
      xii. Boom Interlock System-Jan. 2005 On
      xiii. Outrigger Motion Alarm-Feb. 2000 On
      xiv. Relief Valve Setting
      xv. Auxiliary Let Down System
      xvi. Chassis Level Indicator-Jan. 2003 On
      xvii. Chassis Tire Pressures
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e. Pedestal and Turntable
  i. Welds - Metal Structure and Mounting
  ii. Elevator - Welds and Metal Structure
  iii. Elevator Cylinders and Holding Valves
  iv. Elevator Pins, Bushings, and Keepers
  v. Collector Block / Hoses / Fittings
  vi. Rotation Bearing and Fasteners
  vii. Rotation Gearbox
  viii. Lower Control Valve / Shut-off Valve
  ix. Relief Valve Setting
  x. Auxiliary Let Down System
  xi. Accumulator Operation
  xii. Nitrogen Setting / Charge
  xiii. Unloading Valve / Unit Cycling

f. Booms and Platform
  i. All Fiberglass for Damage and Finish
  ii. Booms - Cleanliness Inside and Out
  iii. Boom Metal Sections
  iv. Hoses and Hose Protection
  v. Boom Pins, Bushings, and Nuts
  vi. Boom Cylinders
  vii. Boom Lift Rod and Lift Cable
  viii. Compensation System
  ix. Boom Cylinder
  x. Boom Rest and Hold Down System
  xi. Platform - Mounting, Liner, and Cover
  xii. Lanyard Anchor - Belt or Fixed
  xiii. Safety Harness and Lanyard
  xiv. Non - Skid Platform Step

g. Platform Controls
  i. Control and Safety Decals / Placards
  ii. All Upper Control Operations
  iii. Start / Stop and/or Throttle Control
  iv. Auxiliary Let Down System
  v. Hydraulic Tool Valve / GFI Outlet
  vi. Control Guards / Covers
  vii. Winch Gearbox
  viii. Winch Rope and Safety Hook
ix. Jib and Jib Tilt Cylinder  

x. Load Chart, Boom Angle Indicator  

xi. Control Valve - Leaks  

xii. Control Valve - Vacuum Vent Valves  

xiii. Platform Rotator, Level, or Dump  

h. Platform Leveling System  

i. Leveling Cables and Chains  

ii. Cable Pulleys and Chain Sprockets  

iii. Cable Sheaves and Clamps  

iv. Anchor Brackets  

v. Turnbuckles and Tie Wire or Lock Nut  

vi. Hinge Points  

vii. Leveling Cylinders and Shocks  

viii. Cylinder Holding Valves  

ix. Leveling Hoses  

x. Platform Drift  

i. Extension System  

i. Catrac, Hoses, and Wire Harness  

ii. Hose / Wire Routing, and Protection  

iii. All Wear Pads and Rollers  

iv. All Cable Sheaves and Pulleys  

v. All Extension Cylinders  

vi. All Pins and Retainers  

vii. Cylinder Holding Valves  

viii. All Limit Switches  

4. General  

a. The fourth segment is broken into three lessons: General Lubrication, Auxiliary Equipment, and Misc. Powered Equipment. Pictures and descriptions are used to provide examples of areas that need to be checked for each inspection point.  

b. General Lubrication  

i. Gearboxes – Pinion Gears, Oil Level  

ii. Rotation Brake - Oil Level  

iii. Rotation Bearing  

iv. Control Linkages  

v. Cables Sheaves and Pulleys  

vi. Hinge Points  

vii. Outriggers - Slip Plate
c. Auxiliary Equipment
   i. Capstan
   ii. Auxiliary Winch
   iii. Pony Motor Hydraulics
   iv. Chipper Body Dump
   v. Hose Reels
   vi. Hydraulic Tools

d. Misc. Powered Equipment
   i. Generator - Condition
   ii. Battery - Condition
   iii. Hose and/or Wire Condition

5. Red Tag Items
   a. The final lesson installment covers “Red Tag” inspection items, providing details and examples to help the technician identify these deficiencies. This lesson is broken into four parts, each covering different items on the inspection sheet.

Quizzing and Testing

Entrance Exam
The entrance exam is provided to help you gauge your knowledge on the topics that will be covered in this training. It also provides the instructors with valuable feedback, allowing us to modify and expand the training to ensure it is as effective as possible. The entrance exam can be taken only once and should be completed before starting any of the training lessons. This exam has no effect on the final grade for the course.

Review Quizzes
A review quiz is provided after each lesson segment to allow the technician to gauge their knowledge and understanding of the topic. The review quizzes can be taken as many times as desired and have no effect on the final grade for the course.

Aerial Periodic Inspection Final Exam
The final exam consists of 70 multiple choice and true/false questions. To successfully pass this course, the technician must achieve a score of 90% or higher on the final exam in a maximum of 2 attempts. Upon the successful completion of this course, the technician will receive a Certificate of Completion for the course.