

**BY ORDER OF THE COMMANDER
ROBINS AIR FORCE BASE**

**ROBINS AIR FORCE BASE INSTRUCTION
21-103**



2 MAY 2012

Maintenance

**LIFTING DEVICES, RESTRAINTS, AND
PERSONNEL SAFETY EQUIPMENT**

COMPLIANCE WITH THIS PUBLICATION IS MANDATORY

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This instruction covers wire rope, alloy steel chain, metal mesh, synthetic web, safety nets, cargo nets, beam slings, and restraints. A sling is defined as an assembly which connects a load to material handling equipment and/or a holding device. Improper use of slings can cause injury, death, and property damage. Mishaps often occur when loads are dropped or slip because the sling or its attachments break. Most sling mishaps can be attributed to inadequate design, improper selection, poor inspection, failure to make sure loads are properly attached and secured, or improper storage and care. This instruction establishes policies and procedures to implement the 402d Maintenance Wing (402 MXW) sling program and to mitigate these factors. In addition, this instruction assigns responsibilities to individuals and organizations (users) to implement the commander's program. Squadron commanders are ultimately responsible for ensuring compliance where organizations or users are referenced. All personnel with duties requiring use or inspection of slings will receive the sling user formal training course. Only personnel that have received the sling user training course are qualified to perform periodic inspections. Refer recommended changes and questions about this publication to the office of primary responsibility using the Air Force (AF) Form 847, *Recommendation for Change of Publication*. Ensure that all records created as a result of processes prescribed in this publication are maintained in accordance with (IAW) AF Manual (AFMAN) 33-363, *Management of Records*, and disposed of IAW the AF Records Information Management System (AFRIMS) Records Disposition Schedule (RDS) located at https://www.my.af.mil/afirms/afirms/afirms/rds/rds_series.cfm. See Attachment 1 for a glossary of references and supporting information.

SUMMARY OF CHANGES

This revision updates the AFRIMS RDS site, opening paragraph; deletes information previously in paragraph 1. (General) and incorporates pertinent information into current paragraph 1. (Responsibilities); adds responsibilities for group commanders/directors, sling program manager (SLPM), sling program management office (SLPMO), group equipment/sling manager (GE/SM), sling monitor, owning organization, production support centers (PSC) or assigned personnel, and testing organization (402d Maintenance Support Squadron, Maintenance Flight, 402 MXSS/MXDVAB), paragraph 1.; adds acquisition requirements, paragraph 2.; adds inspection requirements, paragraph 3.; adds repair requirements, paragraph 4.; adds load/proof tests requirements, paragraph 5.; adds prescribed and adopted forms, Attachment 1; updates glossary of references and supporting information, Attachment 1; and adds sling identification requirements, Attachment 2.

1. RESPONSIBILITIES.

1.1. 402 MXW group commanders/directors:

1.1.1. The 402d Maintenance Support Group (402 MXSG) Director appoints, in writing, a SLPM to manage the 402 MXW sling program.

1.1.2. 402 MXW group commanders/directors and any other organization covered by a support agreement with 402 MXW will appoint, in writing, to the 402 MXSG SLPMO, a primary and alternate GE/SM and sling monitor.

1.2. SLPM (402 MXSG):

1.2.1. Controls the wing program and reports discrepancies to 402 MXW leadership.

1.2.2. Coordinates annual inventory of slings with GE/SM.

1.2.3. Maintains the wing critical load sling list. This list will be consolidated from individual lists that are developed and maintained by the GE/SMs (reference paragraph [1.4.4](#)).

1.2.4. Provides GE/SM and sling monitor all work orders and work schedules a minimum of 5 workdays prior to the next month. This package will also include all past due data from prior months.

1.2.5. Assists members of the wing with questions and discrepancies concerning the Facilities and Equipment Maintenance System (FEMS) and FEMWEB (<https://femweb.robins.af.mil/>).

1.2.6. Supervises the SLPMO.

1.3. The SLPMO:

1.3.1. Creates or add slings to owning organizations' account in FEMS.

1.3.2. Assigns sling identification (ID) numbers and inputs numbers into FEMS. Sling ID number prefixes will be "SL" for metal slings or "SDB" for nylon slings. Critical load slings will be identified as a Priority 5 in FEMS.

1.3.3. Identifies and closely monitors critical load slings in FEMS.

1.3.4. Picks up all completed work orders not closed in FEMS daily.

1.3.5. Provides file maintenance of slings, bars, restraints, and personnel safety equipment in FEMS. These items will be:

1.3.5.1. Entered into FEMS, if new items.

1.3.5.2. Scheduled for required test and/or visual inspection as required by Technical Order (TO) 35D6-1-106, *Aircraft and Engine Slings (General) and Restraining Devices*, TO 35-1-246WC-1, *Periodic Inspection Workcards*, Cards 5-001 through 5-004 for metal slings, and TO 00-25-245, *Testing and Inspection Procedures for Personnel Safety and Rescue Equipment*, for restraints and personnel safety equipment.

1.3.6. Provides monthly inspection schedules and weekly past due reports to group commanders/directors/deputies.

1.4. GE/SM:

1.4.1. Monitors group program and reports discrepancies to group and squadron leaders.

1.4.2. Coordinates on requests for purchase and outsourcing and on new sling acquisition processes (locally manufactured and/or commercially purchased).

1.4.3. Maintains proficiency in FEMWEB usage.

1.4.4. Builds a group critical load sling list and submits to the 402 MXSG SLPMO. This list shall be generated IAW paragraph 2.2 Ensures slings are identified in FEMS and applicable inspections and tests are scheduled.

1.4.5. Coordinates on sling monitor appointments to group commander/director.

1.4.6. Requests designation of slings that do not fit the standard definition as critical load to the 402 MXSG SLPMO and provides additional written justification.

1.4.7. Forwards the endorsed package, signed by applicable person(s) based on acquisition type, to the 402 MXSG SLPMO and ensures proper coordination of work order and requirement to the manufacturer.

1.5. Sling monitor:

1.5.1. Maintains proficiency in FEMWEB usage.

1.5.2. Maintains sling inventory IAW AFMAN 23-110, *USAF Supply Manual*, Chapter 6.

1.5.3. Ensures equipment is available for scheduled inspection/testing.

1.5.4. Requests out-of-cycle inspections/load testing through the 402 MXSG SLPMO.

1.5.5. Coordinates on the group critical load sling list. Ensures applicable inspections and tests are scheduled.

1.5.6. Monitors accuracy of historical data in FEMWEB. At a minimum, ensures dated and signed records of all periodic inspections, repairs, and tests are updated as changes occur.

1.5.7. Requests, in writing, to the 402 MXSG SLPMO any sling deletions from the system. Supporting documentation (i.e., Air Force Materiel Command (AFMC) IMT

310, *Lost/Found Item Record*, or ID tags) must be provided in order for the equipment to be deleted. Deletions will be coordinated with the GE/SM.

1.5.8. Provides Robins AFB Form 25, *FEMS Database Action Form & Certification of Proof-Test*, completely filled out for new items to be entered into FEMS.

Note: Robins AFB Form 25 is available on AF e-Publishing at <http://www.e-publishing.af.mil/>.

1.6. Owning organization:

1.6.1. Host tenant and area base support units submit funding document (i.e., Department of Defense [DD] Form 448, *Military Interdepartmental Purchase Request*) or AF Form 185, *Project Order*, citing appropriate customer funds, to the Workload Section (402 MXW/OBWB) requesting a temporary work authorization to have slings, bars, restraints, and personnel safety equipment tested and inspected by 402 MXSG. Include a description of the item with blueprint, part number, and quarterly and annual requirements.

1.6.2. Prior to signing out a sling from PSC, tool cribs, or shop storage location, performs visual inspection IAW paragraph 3.1 of this instruction.

1.6.3. Prior to signing out personal fall arrest systems, harnesses, lanyards, and life lines, performs a documented (Air Force Technical Order [AFTO] Form 244, *Industrial/Support Equipment Record*, or computer maintenance management system [CMMS]) visual inspection IAW Air Force Occupational Safety and Health Standard (AFOSHSTD) 91-501, *Air Force Consolidated Occupational Safety Standard*.

1.6.3.1. Removes all dirt, grease, or oil from all sling components prior to returning to the PSC, tool cribs, or shop storage location. Use only soap or water soluble detergent to clean slings.

1.6.4. Ensures the safe working condition and use of slings. Only use for sling's specific purpose and weight capacity.

1.6.5. Ensures proper storage of restraints and personnel safety equipment IAW TO 00-25-245.

1.6.6. Identifies slings used for lifting critical loads to the GE/SM. See definition of critical load slings in paragraph 2.2

1.6.7. Routes synthetic web slings, with hardware, through the 402d Commodities Maintenance Group (402 CMXG) Material Processing Flight (573 CMMXS/MXDPBE) for nondestructive inspection (NDI), as appropriate, to inspect welded hardware.

1.6.8. Performs periodic inspections IAW paragraph 3.2

1.6.9. Lubricates metal slings and restraining devices every 30 days or prior to each use.

Note: See TO 35-1-246WC-1, Cards 5-001 through 5-004, and TO 35D6-1-106, Section 4, for lubrication instructions, including type of lubricant.

1.6.10. Provides drawings or drawing numbers to testing organization and/or manufacturing/repair shops.

1.6.11. Ensures inspections are performed IAW TO 00-25-245, TO 35D6-1-106, American Society Mechanical Engineers (ASME) B30.9, *American National Safety Standard for Slings*, Web Sling Association 1983, AFOSHSTD 91-46, *Materials Handling and Storage Equipment*, and AFOSHSTD 91-501.

1.6.12. Delivers slings and work order to testing organization upon receipt of a work order number. The testing organization will give the owning organization a hand receipt.

1.6.13. Obtains certification of proof test performed on newly acquired slings by the manufacturer.

1.7. PSC or assigned personnel:

1.7.1. Maintains slings for the organization supported.

1.7.2. Prior to “signing in” a sling, performs a visual inspection of the sling. Visually inspects all parts for excessive wear, deformations, fraying, stretching, and any other defects that may reduce the sling’s rated capacity.

1.7.3. Ensures user has removed all dirt, grease, or oil from all sling components prior to receiving.

1.7.4. Ensures proper storage of restraints and personnel safety equipment IAW TO 00-25-245.

1.7.5. Ensures slings, safety nets, lanyards, and harnesses located in PSC are inspected IAW TO 00-25-245, TO 35D6-1-106, ASME B30.9, AFOSHSTD 91-46, and AFOSHSTD 91-501.

Note: Properly trained personnel will be given the capability to close FEMS work orders and update tags for all slings, safety nets, lanyards, and harnesses not identified as critical load.

1.7.6. Performs periodic inspections for items stored in the PSC IAW paragraph **3.2**

1.8. Testing organization (402 MXSS/MXDVAB):

1.8.1. Ensures tags are attached to slings. All tags will contain the information provided in Attachment 2, Sling Identification Requirements.

1.8.2. Performs load and proof tests.

1.8.2.1. Do not test slings without proper TO reference, drawing number, or part number.

1.8.2.2. Load/proof test slings IAW paragraph **5**.

1.8.3. Prior to being placed into service for use, proof-load tests locally manufactured slings. A record of the most recent proof test will be retained in FEMS. Stamps next due date on tags after testing.

2. ACQUISITION.

2.1. Commercial purchase: Procurement of slings for use in the AF will comply with the design and manufacturing requirements for all slings IAW 29 Code of Federal Regulations (CFR) 1910.184, *Slings*, and ASME B30.9. Specifications for procurement of slings will contain enough information to ensure that manufacturers comply with all design, construction, and testing criteria in the references above.

2.1.1. The applicable organization will specify on the blueprint or sketch the maximum safe load capacity. Also, specify on the blueprint or sketch that the manufacturer will etch or stamp this information permanently in a conspicuous place on the sling. Slings shall be marked or identified on the sling or on durable and legible tag or label as identified in Attachment 2.

2.1.2. All commercially purchased slings will be processed through the 402 MXSG SLPMO and input into FEMS. Sling monitors will submit Robins AFB Form 25, endorsed by the GE/SM, to 402 MXSG SLPMO.

2.2. Critical load slings are defined as any sling used above aircraft or personnel to lift aircraft engines, wings, or flight controls; slings that are used to handle hazardous materials that if failed would result in significant release of a hazard; and slings identified as critical load per TOs.

2.2.1. The purchaser will obtain a certified document of proof test performed by the manufacturer.

2.2.2. The owning organization will follow the process in paragraph 2.3.3 for any required maintenance not performed by the manufacturer.

2.3. Local manufacture: Whole slings or components may be manufactured locally. Component parts manufactured locally will be made IAW engineer's or manufacturer's drawing for that part. 402 CMXG accomplishes local manufacture for metal slings, restraints, personnel safety equipment, and/or synthetic web slings and their component parts. Locally manufactured slings will be:

2.3.1. Designed with a minimum safety factor of 5 to 1 ratio IAW AFOSHSTD 91-46 and ASME B30.9. Testing adapters will be designed for locally designed slings when appropriate testing adapters are not available.

2.3.2. Marked IAW AFOSHSTD 91-46, ASME B30.9, and Attachment 2.

2.3.3. Prior to being placed into service for use, proof-load tested by the 402 MXSS/MXDVAB. A record of the most recent proof test will be retained in FEMS. 402 MXSS/MXDVAB will stamp next due date on tags after testing.

2.3.4. Owning organization:

2.3.4.1. Reviews and ensures each request is feasible and completely justified.

2.3.4.2. Ensures the description of work is accurate and specific.

2.3.4.3. Ensures the urgency of need/work priority, as well as the impact on production if the work is not completed, is included in the request.

2.3.4.4. Submits new sling documentation to the GE/SM using Robins AFB Form 25. Form must be properly filled out for work to be performed. Incomplete or improperly filled out documents will be returned.

2.3.4.5. Attaches drawings, sketches, and required data for design, planning, and work performance.

2.3.4.6. Identifies which equipment account the new sling(s) will be assigned to.

- 2.3.4.7. Drafts and routes an AFMC Form 206, *Temporary Work Request*, to the GE/SE manager citing appropriate customer funds. Include a description of the item with blueprint, part number, and quarterly and annual requirements. If no data is available for part, the owning organization will have engineers supply data/drawings. Request an AFMC Form 206 by completing a DD Form 1348, *DoD Single Line Item Requisition System Document (Manual)*, and route this form through the group workload office. The workload office will initiate the AFMC Form 206 to the appropriate Weapon System Support Center (WSSC). The WSSC will generate the work control document (WCD) for the shops that will perform the work. A copy of the FEMS work order must accompany the WCD.
- 2.3.4.8. As required, contacts the Depot Maintenance Account and Production System Office, 78 ABW/SCPM, to establish a cost class 4 job order number (S number) so labor can be charged to the owning organization.
- 2.3.4.9. Picks up the finished product. Completed slings must be picked up within 3 business days.
- 2.3.5. 573d Commodities Maintenance Squadron (573 CMMXS):
- 2.3.5.1. Accomplishes work orders for all metal slings and synthetic web slings and component parts to be locally manufactured.
- 2.3.5.2. Turns away incomplete documents or improperly filled out work order requests.
- 2.3.5.3. Permanently etches or stamps the maximum safe load capacity on a tag and attaches to locally manufactured sling.
- 2.3.5.4. Marks locally manufactured slings IAW AFOSHSTD 91-46, ASME B30.9, and Attachment 2.
- Note:** 402 MXSG will attach inspection tags.
- 2.3.5.5. Attaches metal identification disc with safety wire or other suitable method to each metal and/or synthetic web sling that has been weight tested, NDI, or visually inspected, reflecting the information identified in Attachment 2.
- 2.3.5.6. Coordinates proof tests with the 402 MXSS/MXDVAB.

3. INSPECTIONS.

3.1. Prior-to-use inspections.

- 3.1.1. Users must visually inspect slings before each use. At a minimum, check the following:
- 3.1.1.1. Cable assemblies: inspect for broken wires, excessive rust, or corrosion.
- 3.1.1.2. Spreaders, beams, links, and plates: check for distortion, strain, and cracks (especially areas around bolt holes).
- 3.1.1.3. Shackles, safe-line/U-bolt clamps, and hardware: inspect for security of attachment and evidence of strain.
- 3.1.1.4. Welds: check for cracking or separation.

- 3.1.1.5. Cloth webbing and straps: inspect for mildew, dry rot, and broken stitching.
- 3.1.1.6. Chain and chain assemblies: check for bent, twisted, worn, and poorly welded links.
- 3.1.1.7. Check periodic inspection date for currency.
- 3.1.2. Return damaged slings to PSCs. PSCs will initiate repair or condemnation process.
- 3.1.3. This inspection is not required to be documented.
- 3.2. Periodic inspections (User/PSC):
 - 3.2.1. Slings and attachments shall be thoroughly inspected. Refer to TO 35D6-1-106, AFOSHSTD 91-501, and AFOSHSTD 91-46 for specific inspection requirements. Where no TO guidance exists, the 402 MXSG SLPMO shall determine frequencies for each sling and input requirements into FEMS.
 - 3.2.1.1. Slings overdue any periodic inspection will be deemed unserviceable and removed from service by the user.
 - 3.2.2. Perform annual preventive maintenance required during periodic inspections on slings, including examination for excessive wear, permanent deformation of parts, deteriorated condition of material, and legibility of safe workload markings IAW TO 35D6-1-106, TO 35-1-246WC-1, Cards 5-003 and 5-004, AFOSHSTD 91-501, and AFOSHSTD 91-46.
 - 3.2.2.1. All slings (including slings in contingency storage) will be visually inspected for general condition annually. The sling will be cleaned, lubricated, and NDI IAW TO 35D6-1-106.
 - 3.2.2.2. Slings equipped with rubber coated attaching fittings, such as aircraft canopy slings, are exempt from an annual magnetic particle, dye-penetrant, and radiographic inspection. Instead, slings in this category will be load tested at 100 percent of their rated load.
 - 3.2.2.3. In addition to the visual inspection, owning organizations perform periodic inspections every 180 days, or annually, according to TO 00-25-245. This inspection will be documented and maintained in FEMS until the next periodic inspection IAW AFOSHSTD 91-46 and AFOSHSTD 91-501.
 - 3.2.2.4. Inspect restraints, personnel safety equipment, and synthetic web slings. Stamp new inspection date on tags.
 - 3.2.2.5. Inspect belts, straps, harnesses, lanyards, lifelines, and escape ladders constructed of nylon (impregnated with neoprene or equal) and leather for defects listed in TO 00-25-245. Any one of the defects is cause for condemning (rejecting) the item being inspected.
 - 3.2.2.5.1. Call 402 MXSS/MXDVBB work order desk, extension 468-8975, to have permanently installed safety nets and devices removed for inspection and reinstalled after inspection. Take appropriate safety precaution while net is down. Inspect safety nets daily. Owner inspects safety nets every 6 months. The safety

nets will be rejected (condemned) if any of the conditions listed in T.O. 00-25-245, paragraphs **3.3a.-f.**, are found.

3.2.2.6. Synthetic web slings shall be inspected every 180 days according to ASME B30.9 and Web Sling Association 1983, revised Chapters **1-4**, for the deteriorated conditions. Slings with any of these conditions are unserviceable.

3.2.3. Remove sling from service if any component shows defects or deterioration. Initiate sling repair process identified in paragraph **4.3** of this instruction.

3.2.4. Consult manufacturer's instructions, where available, for additional guidance.

3.2.5. FEMS will be the system of record for all inspections. If FEMS is unavailable, generate an AFTO Form 95, *Significant Historical Data*, as temporary record until FEMS can be updated.

3.3. Documentation.

3.3.1. Inspections will be documented in FEMS and maintained on file until the next periodic inspection IAW AFOSH Standard 91-46. If FEMS is unavailable, document inspections on an AFTO Form 95 until FEMS can be updated.

3.3.2. Next inspection due date will be stamped on tags.

4. REPAIRS.

4.1. General repairs:

4.1.1. Repair of all slings is limited to the replacement of component parts.

4.1.2. All component parts found defective during pre-use and/or annual inspection will be repaired or replaced (when a component is replaced, use an exact duplicate). Condemned slings will be turned in to the sling monitor. The customer must then order another one using an AFMC Form 206, if internal, or place an order to a vendor. 402 CMXG must have paperwork before repairing any sling (see paragraph **2.3.4.7**).

4.1.3. Component parts manufactured locally will be manufactured IAW AF, locally engineered, or original equipment manufacturer drawings, as applicable, for that part.

4.2. Welds: Welding will only be accomplished using applicable TO for a sling. Welded repairs may be accomplished in case of emergency when appropriate technical assistance request mechanisms are unavailable. Use standard equipment and welding rods for the material involved. For all load bearing structural members such as beams, channels, etc., after weld repair, the material must be returned to the temper specified on the drawing.

4.3. Repair Section: After repairing metal slings and bars, these items must be proof-load tested IAW TO 35D6-1-106, TO 35-1-246WC-1, Cards 5-003 and 5-004, and AFOSHSTD 91-46. Proof test document will be kept in FEMS and maintained on file until the next periodic inspection IAW AFOSHSTD 91-46. Owning organization will submit documentation (e.g., Robins AFB Form 25) to the 402 MXSG SLP MO when turning in slings for repair.

5. LOAD/PROOF TESTS.

5.1. New slings:

5.1.1. Prior to initial use, all new slings will be proof tested by the manufacturer or by 402 MXSS/MXDVAB at 200 percent of their rated capacity. Record load/proof tests in FEMS.

5.1.2. For multiple-leg alloy steel chain slings, each leg shall be proof tested to 200 percent of the single-leg rated load. Master links and master coupling links for double- or triple-leg slings shall be proof tested to 200 percent of the single-leg rated load times the number of legs connected to the link. The sling shall not be proof tested in excess of the rated capacity of the weakest component.

5.1.3. Wire rope slings: Proof load for swaged-socket and poured-socket assemblies shall be IAW the wire rope or fitting manufacturer's recommendations. Proof load for single-leg hand-tucked slings shall be not less than 100 percent or more than 125 percent of the rated capacity. Proof load for mechanical-splice single-leg slings and endless slings shall be 200 percent of the vertical rated capacity. Proof load for multiple-leg bridle slings shall be applied to the individual legs and shall be 200 percent of the vertical rated capacity of a single-leg sling of the same size, grade, and construction of rope.

5.1.4. All new metal mesh slings, including handles, shall be proof tested at a minimum of 150 percent of their rated capacity before use. Elastomer impregnated slings shall be proof tested before they are coated.

5.1.5. Prior to use, new fiber rope sling shall be proof tested to 200 percent of the vertical rated load.

5.1.6. Prior to use, all new synthetic web slings shall be proof tested to 200 percent of rated capacity.

5.2. Repaired slings:

5.2.1. Slings repaired by component replacement shall be load tested using 100 percent of rated load.

5.2.2. Slings repaired other than component replacement shall be proof tested using 200 percent of rated load.

5.2.3. Record load/proof tests in FEMS.

5.2.4. All repaired metal mesh slings, including handles, shall be proof tested at a minimum of 150 percent of their rated capacity before use. Elastomer impregnated slings shall be proof tested before they are coated.

5.2.5. Prior to use, all repaired synthetic web slings shall be proof tested to 200 percent of rated capacity.

5.3. Critical load sling:

5.3.1. Critical load metal slings will be load tested at 200 percent of the sling's rated capacity annually or after any repair or after component replacement. Overdue slings will be removed from service.

- 5.3.2. Critical synthetic web slings will have an initial pull test at 200 percent of the sling's rated capacity. Thereafter, a pull test will only be required if repairs have been made.
- 5.3.3. Critical load slings will be identified in FEMS as a Priority 5.
- 5.3.4. Review TO 35D6-1-106 for additional guidance on critical load slings.
- 5.3.5. A record of the most recent load test shall be kept in FEMS.
- 5.4. Testing Section: 402 MXSS/MXDVAB performs all required load/proof tests.

MITCHEL H. BUTIKOFER, Colonel, USAF
Commander

Attachment 1

GLOSSARY OF REFERENCES AND SUPPORTING INFORMATION

References

AFMAN 33-363, *Management of Records*

TO 35D6-1-106, *Aircraft and Engine Slings (General) and Restraining Devices*

TO 35-1-246WC-1, *Periodic Inspection Workcards*

TO 00-25-245, *Testing and Inspection Procedures for Personnel Safety and Rescue Equipment*

AFMAN 23-110, *USAF Supply Manual*

AFOSHSTD 91-501, *Air Force Consolidated Occupational Safety Standard*

ASME B30.9, *American Nation Safety Standard for Slings*

AFOSHSTD 91-46, *Materials Handling and Storage Equipment*

29 CFR 1910.184, *Slings*

AFI 21-101, AFMC Supplement, *Aircraft and Equipment Maintenance Management*

Prescribed Form

Robins AFB Form 25, *FEMS Database Action Form & Certification of Proof-Test*

Adopted Forms

AF Form 847, *Recommendation for Change of Publication*

AFMC Form 310, *Lost/Found Item Record*

DD Form 448, *Military Interdepartmental Purchase Request*

AF Form 185, *Project Order*

AFTO Form 244, *Industrial/Support Equipment Record*

AFMC Form 206, *Temporary Work Request*

DD Form 1348, *DoD Single Line Item Requisition System Document (Manual)*

AFTO Form 95, *Significant Historical Data*

Terms

Chain—A series of links pivotally joined together for conveying or transmitting motion or power. General classes of chain are detachable, pintle, combination, roller, rivetless, coil, inverted tooth, and bar link chains.

Chain, Roller Link—. A chain consisting of a series of stamped steel plates fastened with pins, bushings, and rollers, giving articulation in only one plane.

Chain, Welded Link—A chain consisting of a series of interwoven links formed and welded from round bar stock.

Daily or Prior-to-Use Inspection—A visual inspection of equipment performed once each day prior to initial use. If the equipment is not used on a daily basis, this inspection is performed prior to each use and is not required on those days the equipment is not used. The use of additional items such as ladders, personnel lifts, or special tools or disassembly of lifting equipment is not required by this standard for this inspection. (Note: The daily or prior-to-use inspection is not an operational test).

Load Rating—A rating in pounds established by the manufacturer as the maximum safe working load for an individual hoist, crane, or related lifting equipment.

Load Test—Also called rated load test. A 100-percent to 125-percent test of the rated capacity (working load limit), as determined by type of equipment and designated by the manufacturer. See individual chapters for applicable equipment-specific test procedures.

Load (Working)—The external load, in pounds, applied to the crane, including the weight of load-attaching equipment such as load blocks, shackles, slings, and ropes.

Proof Test—A nondestructive tension test performed by the manufacturer or qualified person to verify construction and workmanship of a lifting device. See individual chapters for applicable equipment-specific test procedures.

Rated Load—Sometimes called rated capacity or working load limit. The maximum working load, as designated by the manufacturer, for which a crane, individual hoist, or related hoisting equipment is designed and built.

Rated Load Test—Also called load test. A 100-percent to 125-percent test of the rated capacity (working load limit), as determined by type of equipment and designated by the manufacturer. See individual chapters for applicable equipment-specific test procedures.

Shall—Indicates a mandatory requirement.

Sling—An assembly which connects a load to the material handling equipment and or holding device.

Will—Is also used to indicate a mandatory requirement; in addition is used to express a declaration of intent, probability, or determination.

Attachment 2**SLING IDENTIFICATION REQUIREMENTS****Wire rope slings**

ID number (SL)
Nomenclature
Drawing number
Owner account number (MNP#)
Next inspection due date - INSP due day-month-year (Example: INSP due 30 May 12)
Manufacturer
Maximum weight to be lifted by metal sling

Alloy steel chain slings

ID number (SL)
Nomenclature
Drawing number
Owner account number (MNP#)
Next inspection due date - INSP due day-month-year (Example: INSP due 30 May 12)
Manufacturer
Rated load and angle upon which the rating is based
Its reach and number of legs

Metal mesh slings

ID number (SL)
Nomenclature
Drawing Number
Owner account number (MNP#)
Next inspection due date - INSP due day-month-year (Example: INSP due 30 May 12)

Synthetic web slings

ID number (SDB)
Nomenclature
Owner account number (MNP#)
Next inspection due date – INSP due day-month-year (Example: INSP due 30 May 12)
Manufacturer
Rated load for types of hitches used