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LOGISTICS

DEPOT MAINTENANCE PRODUCTION CAPACITY MEASUREMENT AND REPORTING PROCEDURES

26 March 1982

DEPARTMENTS OF THE NAVY, THE ARMY, THE AIR FORCE AND THE MARINE CORPS

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Headquarters Naval Material Command Crystal Plaza, Washington, DC 20360	NAVMATINST 4790.26
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Recommended changes may be submitted by affected service activities as need arises. All recommendations for additions, deletions, and corrections, including individual service supplements regarding implementation of the procedures and functional processes stated herein or in the cited directives will be processed through the Service headquarters to JADMAG for resolution prior to implementation. Recommendations or comments will be identified to the specific page, paragraph, and line in the text. The proposed version should be submitted with sufficient rationale to support the recommended change.

Purpose: This publication provides the procedures which the logistics elements of the military services have established to accomplish the intent of DOD 4151.15H, and DOD 7220.29H as they apply to Depot Maintenance Production Capacity determination. These procedures provide uniform implementing guidance with the express intent to facilitate realistic and consistent physical capacity measurement and reporting which will be uniform shop by shop throughout every military facility performing depot maintenance workload. Physical capacity, as collected under these procedures, will be used as a baseline for determining both peacetime and war mobilization posture.

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TABLE OF CONTENTS

Chapter 1

INTRODUCTION

1-1 Background

The Joint Logistics Commanders (JLC) chartered the Joint Aeronautical Depot Maintenance Action Group (JADMAG) to develop and recommend, for JLC approval and implementation, policy and actions necessary to assure effective and efficient aeronautical depot maintenance in support of service missions.

A specific task assignment of JADMAG to accomplish its mission is to obtain uniform capacity measurement and reporting by each depot. Consistency and accuracy among the services are required in the application of DOD 4151.15H to determine both physical and peacetime capacities. Stated capacities have significant impact on the accommodation of depot level workloads associated with the mobilization/combat support base.

The collection of capacity data must be in specific formats and at reporting levels compatible with collection of workload and other data. Compatibility is essential for application of analysis techniques by JADMAG. Coordination with service logistics staffs is necessary to accomplish this tasking. Development of these procedures was in concert with the service staffs whose influence provided for the future inclusion of non-aeronautical commodity groups. Each service will implement the uniform capacity measurement guidance contained here with JADMAG providing an overall coordinating and monitoring effort for the aircraft commodity group. Implementation of uniform capacity measurement for the other non-aircraft commodity groups will be contingent upon inclusion of paragraphs 2-4 through 2-12.

1-2 Terms Explained

a. Physical Capacity. The amount of workload, expressed in actual direct labor hours, that a facility can accommodate with all work positions manned on a single-shift, 5-day, 40-hour week basis while producing the product mix that the facility is designed to accommodate.

b. Peacetime Workloading Capacity. The amount of workload, expressed in actual direct labor hours, that a facility can effectively produce considering the management limitations upon applying sufficient workers to continuously fill every work position on a single-shift, 5-day, 40-hour week basis while producing the product mix that the facility is designed to accommodate.

c. Work Position. The designated space of equipment/process usage that can be occupied consistently by one direct production worker to accomplish the assigned task on a full-time basis. A work position may include more than one location if the worker moves to other locations to perform the assigned task.

d. Work Station. The lowest order of equipment/process location which requires separate analysis of work flow and function during the capacity calculation. It will consist of one or more work positions as determined by the criteria in paragraph 3-2b4.

e. Shop. This term refers to a work center, functional work group or resource group, etc. A shop generally represents the smallest organizational unit to which direct workers are assigned.

f. Availability Factor. The availability factor is the percentage of an 8-hour shift that a work station can be utilized to accomplish direct productive work. In cases where a facility is shared between depot maintenance and other activities/tenants, the availability factor may represent the percentage of an 8-hour shift the facility is available for the depot maintenance function.

g. Depot Maintenance. That maintenance which is the responsibility of and performed by designated maintenance activities, to augment stocks of serviceable materiel, and to support Organizational Maintenance and Intermediate Maintenance activities by the use of more extensive shop facilities, equipment, and personnel of higher technical skill than are available at the lower levels of maintenance. The phases normally consist of inspection, test, repair, modification, alteration, modernization, conversion, overhaul, reclamation or rebuild of parts, assemblies, subassemblies, components, equipment end items, and weapon systems; the manufacture of critical non-available parts; and providing technical assistance to using activities to using activities and intermediate maintenance organizations. Depot maintenance is normally accomplished in fixed shops, shipyards and other shore-based facilities, or by depot field teams.

h. Direct Labor Factor. That percentage of the 2000 hours of annual duty time per production employee which remains for direct application to the job after subtraction of leave, training and other recognized indirect hours.

i. Production Shop Category (PSC). The segregation of, or identification of, maintenance shops consistent with the grouping(s) of materiel the shop is established and designed to process or produce. Ten PSC's specifically apply to aircraft. These are identified and fully explained in Chapter 2.

The PSC's for non-aircraft commodity groups are identified in DODI 4151.15.

j. Unutilized Space. Unutilized space is that part of a plant capacity held in stand-by, idle or lay-away status.

k. Bottleneck. A bottleneck is a process in the production flow within which capacity to do work is limited to the degree it restricts the ability to achieve full single, shift utilization of the other processes either preceding or following the bottleneck.

l. Product Mix. A combination of heterogeneous workloads identified to major systems, subsystem components, stock classes, or items.

m. Commodity Group. A grouping or range of items which possess similar characteristics, have similar applications, or are susceptible to similar logistics management methods.

1-3 Objectives

a. To obtain a uniform measure of production capacity among the Services.

b. To standardize capacity reporting methods among the Services, using applicable existing systems and procedures to the maximum extent possible.

c. To collect credible and supportable capacity data.

d. To maintain a capacity data base for planning applications by the Services and JADMAG.

e. To provide validated capacity data inputs to the JADMAG Master Plan for analysis of plant utilization levels for mobilization and peacetime capabilities and to assess workload realignment recommendations.

f. To provide validated capacity data to the Maintenance Interservice Support Management Offices (MISMOs) for their analysis and placement of workloads in consonance with the JADMAG Master Plan.

1-4 Scope

This publication provides the necessary guidance to implement a program whereby each military service will measure and report all depot maintenance capacity in a uniform manner. Reporting will be to JADMAG through respective command headquarters.

1-5 Responsibilities

a. Each military service will:

(1) Implement these procedures for production plant capacity measurement and reporting.

(2) Provide a focal point at each depot to ensure proper measurement and reporting of production plant capacity.

(3) Provide a service focal point at each headquarters to implement these procedures and to ensure accomplishment of the objectives.

(4) Revise its internal procedures as applicable to accommodate these procedures and accomplishment of the objectives.

(5) Use the capacity data in the JADMAG Master Plan for peacetime and mobilization capability planning.

b. JADMAG will:

(1) Collect capacity data in accordance with the JADMAG Master Plan schedule and ensure application of the data in an objective and uniform manner.

(2) Maintain a central file of production plant capacity.

(3) Coordinate and monitor efforts of each service in their measurement and reporting of capacity. Provide guidance as required.

(4) Establish and conduct on-site validation to ensure uniformity, accuracy and credibility of the capacity data.

(5) Report progress to the Joint Policy Coordinating Group for Depot Maintenance Interservicing (JPCG-DMI) and the JLC.

Chapter 2

Commodity Group Production Shop Categories

2-1 General

DODI 4151.15 identifies ten commodity groups. These commodity groups are segregated into Production Shop Categories consistent with the material the shops are established and designed to process or produce. For uniformity in reporting capacity, the definition of these categories has been expanded to include the identification of shops or work functions that are commonly assigned to each category. A ten digit code has been assigned to each shop or work function for reporting clarity.

2-2 Code Structure

The ten digit code used herein has been developed from existing service systems. The first digit is the commodity grouping as identified in DODI 4151.15. The second and third digits are the Production Shop Categories within the commodity group. The fourth, fifth, and sixth digits are from DODI 4165.3 and identify the facility class, category group, and basic category respectively. The seventh and eighth digits identify specific Navy facilities within the DOD basic categories as determined by NAVFAC P-72. Digits nine and ten identify specific Air Force facilities within the DOD basic categories using AFLCR 66-4, Chapter 5 as a basis.

2-3 Aircraft Production Shop Categories

101 Airframe. covered areas associated with processing the airframe under those programs commonly identified as Standard Depot Level Maintenance (SDLM), Programmed Depot Maintenance (PDM), On-Condition Maintenance (OCM), crash damage repair and/or overhaul, modernization, modification, etc. The work functions include cleaning, stripping, disassembly, airframe repair, reassembly, systems check, refinishing, painting, and fueling/defueling using covered facilities.

101-211-1190 o Shop, Corrosion Control. (This category includes aircraft corrosion control and decontamination facilities designed for cleaning, paint stripping, etc., of the complete aircraft.)

101-211-126F o Paint and Finishing Hangar.

101-211-133B o Shop, Nondestructive Inspection. (This category applies to shop space used for nondestructive inspection of Airframes.)

101-211-141A o Shop, Machine (Airframe Dedicated). (Facility dedicated to support airframe requirements only.)

101-211-141B o Shop, Welding (Airframe Dedicated). (Facility dedicated to support airframe requirements only.)

101-211-141C o Shop, Plating (Airframe Dedicated). (Facility dedicated to support airframe requirements only.)

101-211-141I o Shop, Airframe Examination and Evaluation, Pre-Shop Analysis and Examination and Inspection.

101-211-1430 o Dock, Maintenance. (Applicable to structures which normally cover only a portion of the aircraft.)

101-211-144S o Shop, Quick Engine Change. (A facility used for quick engine change and engine build-up including deseal and reseal operations.)

101-211-146B o Shop, Aircraft Overhaul and Repair. (Trainers, Attack Fighters and Helicopters.)

101-211-146E o Shop, Aircraft Overhaul and Repair. (Bombers, Cargo and Patrol.)

101-211-1490 o Dock, Maintenance. (Fuel System Facility).

102. Engine. covered areas associated with processing jet, turbojet, and reciprocating type aviation engines in terms of overhaul, low time repair, complete repair, and major inspection. The work functions include uncanning, disassembly, cleaning, material examination, parts reconditioning, subassembly, final assembly and preservation.

102-211-2260 o Shop, Engine Preparation and Storage. (Areas used in preparing the engines for test, storage or shipment.)

102-211-233B o Shop, Nondestructive Testing (Engines).

102-211-237I o Shop, Engine Examination and Evaluation, Pre-Shop Analysis, Examination and Inspection.

102-211-241A o Shop, Cleaning (Engine Dedicated).

102-211-241B o Shop, Paint (Engine Dedicated).

102-211-241C o Shop, Machine (Engine Dedicated).

102-211-241D o Shop, Plating (Engine Dedicated).

102-211-241E o Shop, Welding (Engine Dedicated).

102-211-247D o Shop, Engine Modification and Repair. (All type Engines).

102-211-257A o Shop, Jet Engine Overhaul.

102-211-267B o Shop, Reciprocating Engine Overhaul.

102-211-277C o Shop, Turbine Engine Overhaul.

103. Accessories and Components. Covered areas associated with processing airframe and engine accessories.

103-211-311A o Shop, Cleaning (Dedicated).

103-211-311B o Shop, Paint (Dedicated).

103-211-311C o Shop, Machine (Dedicated).

103-211-311D o Shop, Plating (Dedicated).

103-211-311E o Shop, Welding (Dedicated).

103-211-313E o Shop, Examination and Evaluation, Pre-shop Analysis, Examination and Inspection.

103-211-314A o Shop, Hazardous Test. (Facility used to test a portion of the accessories items overhauled above. Because of the volatile fluid with which they are tested or the hazardous conditions of testing, the test area must be rigidly controlled. Items such as fuel pumps, fuel controls, etc. are worked in this area.)

103-211-314B o Shop, Reclamation (Facility for removal of useable parts from defective end item components).

103-211-3140 o Shop, Aircraft and Engine Accessories Overhaul. (Facility used for the overhaul and testing of miscellaneous accessories such as control assemblies, engine fuel system components, accessories gear drives.)

103-211-324D o Shop, Tank and Radiator Repair. (Facility to repair all types of radiators, inter-coolers and metal tanks.)

103-211-327A o Shop, Sheet Metal. (Facility for repair of surface sheet metal parts.)

103-211-327S o Shop, Metal Surface. (Facility for repair of wings, doors, stabilizers, tailbooms, control surfaces, etc.).

103-211-328S o Shop, Seat Repair.

103-211-328M o Shop, Metal Bonding.

103-211-328N o Shop, Container Reclamation. (Facility for repair of engine, transmission, rotor blade and other type metal containers.)

103-211-332L o Shop, Life Raft Repair. (Includes inflatable life vests, dinghies, etc.)

103-211-332N o Shop, Rubber Repair. (Facility for the repair of rubber equipment such as aircraft fuel cells and molded rubber products.)

103-211-334B o Shop, Parachute Repair. (Facility for repair of parachutes, aerial pickup gear, etc.).

103-211-334G o Shop, Fabric and Upholstery.

103-211-334L o Shop, Tire Repair.

103-211-335A o Shop, Plastic and Fiberglass. (Facility for the repair of fiberglass and reinforced plastic items such as radomes, wingtips, ducts, covers, canopies, hatches and windows).

103-211-338N o Shop, Composite rework.

103-211-344F o Shop, Propeller and Propeller Control Overhaul.

103-211-347B o Shop, Rotor Head Overhaul.

103-211-347C o Shop, Rotor Blade Overhaul.

103-211-348A o Shop, Transmission/Gearbox Overhaul.

103-211-348B o Shop, Dynamic Drive System Overhaul. (Facility used for the repair of drive shafts, pitch links, swash plates, etc.)

103-211-354C o Shop, Hydraulic Components Overhaul. (Facility used to overhaul hydraulic components.)

103-211-3540 o Shop, Bearings. (This category designates a specialized shop in which bearings are cleaned, disassembled, inspected, reassembled and tested.)

103-211-354U o Shop, Aircraft Landing Gear. (Facility used for the repair and overhaul of aircraft landing gear components such as wheels, brakes and struts.)

103-211-363A o Shop, Alternator Drive Overhaul. (Facilities for the repair of alternator drive components.)

103-211-364E o Shop, Electrical Accessories Overhaul and Test. (Facility used in the overhaul and test of electrical components including electrical systems, starters, control equipment and converters, etc.)

103-211-364Q o Shop, Battery. (A facility for the repair and test of aircraft batteries.)

103-211-364S o Shop, Constant Speed Drive.

103-211-365E o Shop, Electro-Mechanical Components. (Facility used to repair Electro-Mechanical actuators, cargo and rescue hoists, etc.)

103-211-371A o Shop, Turbine Accessories Overhaul. (The primary workload in this category is air compressor type equipment, such as air turbine starters, air conditioning packs, and air driven motors.)

103-211-371B o Shop, Turbine Accessories Test.

103-211-371E o Shop, General Purpose Units. (This includes the overhaul and repair of gas/air turbine engines and auxiliary power units, installed on the aircraft other than its' primary propulsion unit.)

103-211-371F o Shop, General Purpose Units Tests.

103-211-372A o Shop, Ram/Air Turbine Accessories Overhaul. (Air driven accessories such as ram air turbines, scoops).

103-211-372B o Shop, Ram/Air Turbine Accessories Test.

103-211-385C o Shop, Pneumatic Components Overhaul. (Facility used to overhaul pneumatic components.)

103-211-389A o Shop, Cryogenics.

103-211-384M o Shop, Oxygen Equipment. (Facility used for repair of oxygen regulators, converters, etc.)

103-211-394N o Shop, Photographic Equipment Repair. (Facility for repair of aircraft cameras and other photographic items).

103-211-394P o Shop, Optical Component Repair.

104. Electronic, Communication and Armament Systems. Covered areas associated with processing airborne communication and navigation equipment, instruments, airborne data computers, fire control and bombing system equipment, gyroscopes, inertial guidance systems, and other avionics equipment.

104-211-411A o Shop, Cleaning (Dedicated).

104-211-411B o Shop, Paint (Dedicated).

104-211-411C o Shop, Machine (Dedicated).

104-211-411D o Shop, Welding (Dedicated).

104-211-411E o Shop, Plating (Dedicated).

104-211-411F o Shop, Bearings (Dedicated).

104-211-4110 o Shop, Instrument Overhaul.

104-211-4220 o Shop, Armament and Avionics. (Facility for repair of navigational missile and bombing radar; electronic countermeasure equipment; flight facilities and communication equipment; electronic instruments, and fire control systems.)

104-211-4230 o Shop, Airborne Systems Software. (Facility for preparation, repair or modification of software packages for aircraft automated systems).

104-211-4260 o Shop, Navigational Aids Repair. (Facility for repair of airborne navigational instruments such as celestial tracking system, sextants, driftmeters, etc.)

104-211-4270 o Shop, Avionics Testing.

104-211-431E o Shop, Inertial Quality Gyroscope Overhaul. (Environmentally controlled space for the overhaul of inertial quality gyroscopes. Inertial quality gyroscopes are those having a radome drift rate of 0.25 degrees per hour or less. All other gyroscopes are considered non-inertial quality for facility categorization purposes.)

104-211-431G o Shop, Inertial Guidance System Overhaul and Calibration.

104-211-441B o Shop, Electronic Instrument Overhaul. (Facility used to support communications electronic instruments such as systems and display panels, oscilloscopes, etc..)

104-211-441C o Shop, Mechanical Instrument Overhaul. (Facility for overhaul of items such as bank indicators and air speed indicators.)

104-211-441D o Shop, Non-inertial Gyroscope Overhaul. (Facility used to overhaul non-inertial gyroscope devices such as N-1 compass gyroscopes, bomb navigational system gyroscopes, etc.)

104-211-441H o Shop, Magnetic Instrument Overhaul and Test.

105. Armament. Covered areas associated with processing weapons including guns, missiles, bomb racks, weapon pylons, etc., used by the aircraft in carrying out its assigned mission.

105-211-511A o Shop, Cleaning (Dedicated).

105-211-511B o Shop, Paint (Dedicated).

105-211-511C o Shop, Machine (Dedicated).

105-211-511D o Shop, Welding (Dedicated).

105-211-511E o Shop, Plating (Dedicated).

105-211-5230 o Shop, Aircraft Weapon Overhaul and Test.

105-211-5240 o Shop, Ordnance Equipment.

105-211-5250 o Shop, Weapon Accessories Repair. (Facility for repair of bomb racks, weapon pylons, etc.)

105-211-5320 o Shop, Missile. (Facility for repair of air launched missiles.)

106. Support Equipment. Covered areas associated with processing aviation general and special support equipment and aerospace ground support equipment.

106-211-611A o Shop, Cleaning (Dedicated).

106-211-611B o Shop, Paint (Dedicated).

106-211-611C o Shop, Machine (Dedicated).

106-211-611D o Shop, Plating (Dedicated).

106-211-611E o Shop, Welding (Dedicated).

106-211-6210 o Shop, Aeronautical Electronic Support Equipment. (Includes mobile maintenance facility construction, outfitting and repair.)

106-211-621V o Shop, Electronic Test Systems Repair. (Facility for repair of VAST, ATE, etc.)

106-211-6280 o Shop, Precision Measurement Equipment. (Facility used to repair, calibrate and certify precision measurement and test equipment. Type III).

106-211-6320 o Shop, GSE Maintenance. (Facility for servicing and maintaining ground support equipment such as, workstands, fire fighting equipment, portable air conditioners, air compressors, generators, etc.)

106-211-632M o Shop, Training Devices. (Facility used to repair, and modify training aids such as, mock ups, cut away models, etc.)

106-211-634R o Shop, Hydrostatics. (Facility used to periodically inspect and overhaul of hydrostatic equipment.)

106-211-641H o Shop, Ground Support Equipment Holding Shed.

107. Manufacture and Repair. Covered areas which are not an integral part of other categories previously described and which contribute to aircraft repair operations by such work functions as parts cleaning and painting, plating and metal processing shop.

107-211-712G o Shop, Welding.

107-211-712H o Shop, Foundry.

107-211-712X o Shop, Peening and Blasting.

107-211-713B o Shop, Nondestructive Inspection. (Magnetic particle, Dye Pentrant, etc.)

107-211-716A o Shop, Parts Cleaning.

107-211-716B o Shop, Parts Painting.

107-211-722D o Shop, Machine.

107-211-722S o Shop, Grinding. (Facility used primarily for close tolerance grinding of metal parts that have been built up by metalizing or electroplating processes.)

107-211-722U o Shop, NC Machine. (Facility primarily using numerically controlled machines; separate from common machine shop.)

107-211-722Y o Shop, Metal Parts Fabrication.

107-211-732C o Shop, Metal Processing. (Facility for metal treating processes such as nickel braze, ceramic coating, plasma, etc.)

107-211-732E o Shop, Plating.

107-211-732F o Shop, Heat Treating. (Facility for heat treating metals such as, tempering, annealing, quenching, stress relieving, etc.)

107-211-742J o Shop, Plastic Fabrication. (Facility for the manufacture of plastic items such as, tubing, caps, covers, panels, foam container liners, templates, fixtures and tooling.)

107-211-742L o Shop, Pattern.

107-211-742M o Shop, Decal (Graphic Arts)

107-211-742P o Shop, Woodworking.

107-211-744A o Shop, Rubber Fabrication. (Facility for fabrication of rubber equipment, such as aircraft fuel cells and molded rubber products.)

107-211-765B o Shop, Tubing.

107-211-765C o Shop, Cable.

107-211-765D o Shop, Cordage (Flight Controls).

107-211-765E o Shop, Electrical Cable/Harness

108. Test and Calibration. Covered areas which are dedicated to test, trim, or calibrate engines, electronics, communications or armament systems.

108-211-833B o Jet Engine Test Cell. (10,000-16,000 lbs. maximum thrust.)

108-211-833C o Jet Engine Test Cell. (Over -16,000 lbs. maximum thrust.)

108-211-833D o Jet Engine Test Stand. (Facility for testing jet aircraft engines, which has no accoustical noise abatement and is not part of an enclosed facility.)

108-211-833E o Turbo Prop Test Cell.

108-211-833F o Reciprocating Engine Test Cell. (3,000 HP or less.)

108-211-833G o Reciprocating Engine Test Cell. (Over 3,000 HP.)

108-211-833H o Reciprocating Engine Test Stand. (Facility for testing reciprocating aircraft engines, which has no accoustical noise abatement and is not part of an enclosed facility.)

108-211-833I o Turbo Shaft Test Cell.

108-211-833J o Turbo Fan Test Cell.

108-211-833K o Pneumatic Gas/Air Turbine Test Cell.

108-211-8440 o Helicopter Blade Test Facility.

108-211-8560 o Radome Test Facility.

108-211-8660 o Radar/Antenna Test Facility.

108-211-8700 o Aircraft Bore Sight Range.

109. Other. Those areas used to perform productive work that are not included in categories 1 through 8 above. This includes ramp, apron, and aircraft storage sites.

109-211-9110 o Apron, Aircraft Rework (Uncovered areas specifically assigned for depot maintenance.)

109-211-911A o Apron, Reclamation (Uncovered areas assigned to depot maintenance used for performing aircraft reclamation work.)

109-211-911B o Pad, Armament and Disarmament.

109-211-911C o Apron, Predock/Postdock.

109-211-9120 o Aircraft Corrosion Control Facility (Uncovered).

109-211-913A o Ground Check/Flight Test Support (Uncovered).

109-211-921A o Ground Check/Flight Test Support (Covered).

109-211-934A o Material Handlers/Parts Expediters.

109-211-935A o Material Control Laboratory.

109-211-935B o Standards Laboratory.

109-211-936A o Programmer's (Automatic Test Equipment and Numerical Controlled Machine.)

109-211-9440 o Power Check Pad (No Suppressor)

109-211-9450 o Power Check Pad with Suppressor.

109-211-9460 o Propeller Aircraft Power Check Pad.

109-211-9470 o Helicopter Aircraft Power Check Pad.

109-211-9480 o VSTOL Aircraft Power Check

109-211-9510 o Packaging and Preservation

109-211-980G o Aircraft Power Check Facility (Covered facility which encloses the entire aircraft and contains sound suppression equipment.)

110. General Shop Support. Those covered spaces which are used in providing general support to all aircraft production operations. General support includes functions such as management, supervision, engineering, clerical functions, plant maintenance, central or general storage, quality assurance, and

materials testing. This category includes offices, cafeterias, supervisors' work space, shop parts storage areas, multipurpose/main aisles, wash and dressing areas, dispatching facilities, inspection facilities, stairwells, auxillary equipment rooms, walls, etc.

NOTE: Codes for subdivisions of this category are defined in the instructions for completing JLC Form 26 "Reporting of General Shop Support."

*2-4 Missile Production Shop Categories

*2-5 Ships Production Shop Categories

*2-6 Combat Vehicles Production Shop Categories

*2-7 Automotive Equipment Production Shop Categories

*2-8 Construction Equipment Production Shop Categories

*2-9 Electronic and Communications Systems Production Shop Categories

*2-10 Ordnance, Weapons and Munitions Production Shop Categories

*2-11 Generator Set Production Shop Categories

*2-12 General Purpose Equipment Production Shop Categories

*Use codes identified in DODI 4151.15 until detailed breakout is added.

Chapter 3

CAPACITY MEASUREMENT

3-1 General

a. Although the techniques in this publication are oriented toward capacity measurement of covered shop space, they can be applied to uncovered areas used in depot operations. For example, the techniques are appropriate for measurement of the capacity of uncovered test and calibration areas. Unless otherwise directed, uncovered work areas and those areas included in the Production Shop Categories titled "other" and "general shop support" are not to be included in the capacity measurement calculations.

b. Two factors govern the capacity to accomplish depot maintenance of material. The facility, its included shop equipment, and product mix establish the physical capacity. The ability to place the necessary work force skills on the job when needed establishes the peacetime workloading capacity. Both need to be determined before programming workloads or calculating facility utilization. This guidance specifies techniques for determining both.

3-2 Physical Capacity

a. Physical Capacity may be limited by the shop availability factor and/or the bottlenecks. Calculation of the availability factor is addressed in Chapter 4. Treatment for bottlenecks is addressed in paragraph 3-2b5.

b. The following steps provide the procedure for calculating physical capacity. It is necessary to follow these procedures for each shop as a separate reporting entity.

1. Determine the product mix the shop is required to accommodate.

2. Prepare a detailed shop layout which identifies the shop function, boundaries, area, work stations, work positions, and specific equipment/work bench locations.

3. The number of work positions identified on the layout should reflect the maximum number that can be effectively and efficiently utilized to accomplish the assigned product mix. In determining the maximum number, the following rationale applies:

(a) Equipment identified on the layout must be in place and operational at the time the shop capacity is measured to be included in the work position count.

(b) Work benches must be in place or readily available to set in place and made operational within one (1) day where power, air and utilities, if required, are already available to be included in the work position count. Typically this demonstrates a situation where the equipment has been disconnected and set aside for the convenience of the shop or because existing workload does not require its use.

(c) Mobile type work stands and equipment must be on hand, available for immediate relocation to the position identified on the layout, and functionally operational to be included in the work position count.

(d) The shop layout prepared for purposes of capacity determination should reflect a realistic configuration of the shop. The layout should not portray conditions which include equipment, work benches, and mobile stands that are not available and/or cannot readily be made operational or require a major shop rearrangement to conform with the layout.

(e) The removal, installation, or relocation of equipment/work benches, etc., constitutes a reconfiguration which may affect the shop capacity. A shop layout prepared for the "new" configuration should not be used for capacity measurement unless action to reconfigure is physically in progress at the time the capacity determination is made.

4. Work station capacity is governed by the following rationale:

(a) If the equipment/process in the work station is designed to be operated by one person, the capacity shall be recorded as one work position.

(b) If the equipment/process in the work station is designed to be operated by more than one person, the capacity is the number of work positions that these personnel represent.

(c) If the equipment/process is infrequently used by a person(s) from one or more work stations, it will be designated as support equipment and not included as a capacity work position, e.g., a drill press used occasionally by several workers.

(d) If an equipment/process is frequently but not continuously utilized, it should be included as part of another related position and not counted as a separate work position for capacity, e.g., a cleaning device used frequently by one mechanic principally working at an equipment/bench site.

(e) If a work position is designed to be manned continuously but is currently vacant because of reduced workload quantity, it shall be counted as capacity.

(f) Some examples of work stations are:

(1) Stall/Work Bay/Aircraft Dock. For the stall/work bay/aircraft dock (or assembly line spot) situation, the number of persons who can effectively work during each phase of the process cycle will be determined. Chapter 4 addresses a method for performing this calculation. In general, the weighted average over the cycle is used as the work position quantity of the work station. An analysis of a product mix and process variations may be necessary to determine this value. The cycle or "flow time" in the stall/work bay/aircraft dock/assembly line spot should be the cycle which would exist under optimum conditions for the designated product mix. Inordinately long cycle times due to current non-availability of material, manpower, etc. - should be shortened to suit the intent of the definition of physical capacity, i.e., capacity unconstrained by a current lack of material or manpower.

(2) Major Special Facilities (Engine Test Cell, Radar Range, Helicopter Rotor Test Aircraft, Power Check Facility, etc.). These special facilities should be assigned work positions reflecting designed utilization of the facility, i.e., handled similar to work positions referred to in paragraph 3-2b4(f)(1) (above).

(3) Bulk Processing Area (Plating, Chemical Cleaning, Heat Treating, etc.). Bulk processing work stations, where design is largely determined by required product mix, can be regarded as one work station with capacity determined by the number of persons necessary to effectively man the entire work station.

(4) Bench (hydraulics, Electronics, etc.). A work station in a bench type operation may consist of one or more work benches and support equipment items. A work bench designated for continuous productive activity will be counted as a work position.

(5) Equipment (Machine Tools, Component Test Stands, etc.). Equipment work stations may include one or more items of equipment and be assigned one or more work positions depending on the designed utilization of each item of equipment within the station.

5. Analysis for bottlenecks which limit work flow between work stations should be conducted when the detailed shop layout is prepared. The bottleneck should be eliminated through appropriate

techniques to achieve a balanced work level among all work stations as required to accommodate the workload. If the bottleneck cannot be eliminated, the Industrial Engineer or Technician must consider that particular operation/process as the pacing factor. The work station and work position designations must be limited to only that number required to accommodate maximum utilization of the bottleneck operation/process. Only these positions are to be indicated on the layout. In practice every flow process has a pacing operation/process which the engineer or technician routinely considers in preparing shop layouts. In other words, proper preparation of the shop layout will suffice for the treatment of bottlenecks and a special method over and above standard engineering practices is not required.

6. Multiply the number of work positions in each work station by 2000 to obtain the gross capacity expressed in manhours.

7. Multiply the gross capacity obtained in step 6 above by the availability factor. (Use .95 unless some other specific availability factor can be justified using JLC Form 23 in Chapter 4. When completing the form, provide sufficient detail so that the computations are clear and easily followed.)

8. Add the capacities of the work stations to arrive at a physical capacity for each shop and identify the shop to a PSC (ten digit code). (Do not split shops into two or more Production Shop Categories.) However, if a shop performs work in two or more sub-category codes (ten digit code level) within a PSC, that portion of the capacity associated within that specific shop. Next, summarize shop capacities to derive the depot capacity for each Production Shop Category. The resulting totals comprise the depots' current single-shift physical capacity unadjusted for manpower availability.

3-3 Peacetime Workloading Capacity

a. Full single-shift utilization of each work position requires the proper skill to be working the position for 2,000 hours of direct labor per year. Leave, training, and miscellaneous indirect factors as described in DOD 7220.29H preclude obtaining 2,000 hours of direct labor from an individual worker.

b. The alternatives for utilization are: (1) to have one worker per work position and expect to have positions unmanned when workers are absent, or (2) to obtain more workers than there are work positions and fill all vacant positions from a pool of extra workers. Peacetime needs for the most cost effective

operation favor the first alternative. Surge or wartime situations, where the volume of production could be more important than the cost considerations, tend to favor the second alternative to the extent that trained workers can be generated.

c. When warranted by the required volume of production, work stations and shops may be operated under the second alternative during peacetime. For example, workers can be dispatched as needed from a skill pool to an aircraft dock or similar function. Sufficient skilled workers are kept on the payroll to ensure that workers are available to man all work positions each day. This practice is common when the flow time on the equipment being repaired must be kept within the shortest possible time.

d. This section provides guidance for calculating peacetime workloading capacity under both alternatives. The steps are repeated in a flow chart on page 22.

1. Obtain the physical capacity in accordance with paragraph 3-2.

2. Determine whether sufficient workers are hired to regularly man the available work positions.

(a) If the answer is yes, the second alternative situation exists and the physical capacity is also the peacetime workloading capacity.

(b) If the answer is no, proceed to step 3.

(c) If the answer is between yes and no, a judgment must be made to determine what percentage of the capacity should be treated in accordance with step 2a and what percentage should be treated in accordance with step 2b.

3. From data gathered in accordance with the provisions of DOD 7220.29H determine the direct labor hours that have been received from the workers assigned to the function under review.

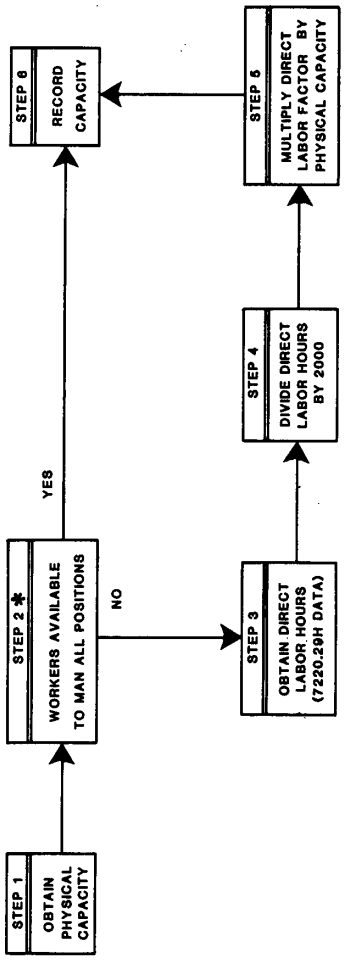
4. Divide the direct labor hours by 2,000 hours per year to obtain the direct labor factor.

5. Multiply the direct labor factor by the physical capacity to determine the peacetime workloading capacity.

3-4 Direct and Indirect Functions

a. Typically, only those shop functions assigned as direct are included in the capacity determination. The assignment of direct functions varies among the services and in some cases

CALCULATION OF PEACETIME WORKLOADING CAPACITY



* If The Answer To STEP 2 Is Between Yes And No, A Judgement Must Be Made To Determine What Percentage Of The Capacity Should Be Immediately Treated In Accordance With STEP 6 And What Percentage Should Be Treated In Accordance With Step 3

22

between depots within a service. For purposes of capacity measurement, in accordance with this publication to accommodate these variances, the following specific direct/indirect functional assignments are to be used for the aircraft commodity group.

b. Direct Functions

1. Quality inspection stations within a shop.

2. Examination and Evaluation (E&E), Examination and Inspection (E&I), and Pre-shop Analysis (PSA) within a production shop.

3. Snappers/team leaders within a shop.

4. Nondestructive testing performed within a production shop.

c. Indirect Functions (These functions may be reported in PSC 109 or PSC 110).

1. Material/Chemical/Metallurgy/Metrology laboratory personnel.

2. Crane operators that service two (2) or more shops.

3. Material handlers/parts expediters who assemble, deliver, and preposition repair parts and supplies for subsequent use.

4. First-line supervisor.

5. Automatic test equipment and numerically controlled machine programmers (if not an integral part of a production shop).

6. Packaging and preservation.

7. Test Pilots.

NOTE: Direct and indirect functional assignments for other commodity groups will be included at a later date.

3-5. Unutilized Space

a. Unutilized space in the custody of the reporting depot maintenance activity can represent potential production capacity. If placement of the proper equipment in such space is feasible within the ensuing year and would enable the space to be made

productive then it should be counted as potential capacity. This capacity will be reported separately as specified in Chapter 4.

b. The capacity of the unutilized space may be estimated as follows: (1) Determine the process or product the facility is most suited to accommodate and select the applicable commodity group and Production Shop Category, and (2) divide the area of the unutilized space by the average square feet required per work position in the Production Shop Category selected. The result is the estimated capacity.

c. It must be emphasized that unutilized space is only that space within the depot maintenance activity held in standby, idle or lay-away status. Unmanned positions or idle space within an active shop represents underutilized capacity rather than unutilized capacity. Underutilized capacity should reported integral with the cognizant shop.

3-6 Non-Aeronautical Commodity Groups

Those areas where non-aeronautical maintenance functions are predominant in a shop and performed within an aeronautical depot will have capacity measured and reported within the commodity group assignment in accordance with DODI 4151.15. The Production Shop Category codes shown in paragraph 2-3 are for the aircraft commodity group only.

Chapter 4

Capacity Reporting

4-1 General

a. The physical and peacetime capacity of each aeronautical maintenance depot will be reported to JADMAG annually. The specific reporting dates for any given year will be established by JADMAG and a tasking directive issued as required to obtain the data. Capacity data for other than aircraft commodity groups will be reported as directed by individual service headquarters.

b. This chapter outlines the reporting procedures for capacity. JLC Form 21 is used to summarize capacity data by depot. JLC Form 22 will be prepared for each shop performing direct functions that require capacity measurement. JLC Forms 23 and 24 will be prepared when applicable. JLC Form 25 will be used for reporting unutilized space. JLC Form 26 will be prepared for each area where indirect functions are performed.

c. A copy of all prepared forms will be submitted to JADMAG. Copies of each form and additional supporting/back-up data such as shop layouts, labor standards, etc., will be maintained on file at the depot. These will be made available to JADMAG personnel or representatives thereof at such time as an on-site validation is conducted.

d. The following Report Control Symbols have been assigned to the reporting requirements listed:

(1) NAVMAT 4790-7 Depot Maintenance Capacity Data Summary (JLC Form 21)

(2) NAVMAT 4790-8 Depot Maintenance Shop Capacity Calculation (JLC Form 22)

(3) NAVMAT 4790-9 Depot Maintenance Shop Availability Factor Calculation (JLC Form 23)

(4) NAVMAT 4790-10 Depot Maintenance Stall/Work Bay/ Dock/Assembly Line Capacity Calculation (JLC Form 24)

(5) NAVMAT 4790-11 Unutilized Shop Support (JLC Form 25)

(6) NAVMAT 4790-13 General Shop Support (JLC Form 26)

INSTRUCTION FOR PREPARATION
OF "DEPOT MAINTENANCE CAPACITY DATA SUMMARY"
JLC FORM 21

1. General

   JLC Form 21 expresses the depots' capacity by Production Shop Category as summed from the aggregate of shops in each category.

2. Elements 1 through 6 — Complete these as indicated - self explanatory

3. Columns A and B — Enter the physical capacity and peacetime capacity summed from Blocks L and N respectively of JLC Form 22

   Note: This form is applicable only to the aircraft commodity group.

JLC FORM 21 OCT 81

DEPOT MAINTENANCE
CAPACITY DATA SUMMARY

1-DEPOT NAME	2-DEPOT CODE	3-PREPARED BY	4-ORGANIZATION	5-PHONE	6-DATE

CODE	PRODUCTION SHOP CATEGORY	UTILIZED SPACE PHYSICAL CAPACITY A	UTILIZED SPACE PEACETIME CAPACITY B
101	AIR FRAMES	MH	MH
102	ENGINES	MH	MH
103	AIRCRAFT AND ENGINES ACCESSORIES AND COMPONENTS	MH	MH
104	ELECTRONIC & COMMUNICATION EQUIPMENT	MH	MH
105	ARMAMENT	MH	MH
106	SUPPORT EQUIPMENT	MH	MH
107	MANUFACTURE AND REPAIR	MH	MH
108	TEST & CALIBRATION	MH	MH
	TOTAL	MH	MH
109	OTHER	MH	MH
110	GENERAL SHOP SUPPORT	SF	SF
	NON-AERONAUTICAL	MH	MH

SAMPLE

27

INSTRUCTIONS FOR PREPARATION
OF "DEPOT MAINTENANCE SHOP CAPACITY CALCULATION"
JLC FORM 22

1. General

The shop capacity is the denominator of the formula used to compute utilization of DOD Facilities. Capacity data reported by the Services may be used in evaluating future workload distribution and for interservice decisions. Therefore, careful attention must be given the development of accurate and current data. JLC Form 22 provides a uniform approach to document and report capacity. The form is developed to fit the DOD 4151.15H criteria.

2. Elements 1 through 7 — Complete these as indicated - self explanatory.

3. Block A — Enter the alpha or numeric code representing the identity of the depot entered in Element 1 (left justify the entry).

4. Block B — Enter the building number in which the shop identified in element 2 is located. If a shop is located in more than one building, enter the building number representing the greatest portion of the floor spaces and place an "S" behind the building number to indicate the shop is split between buildings. Explain split shops in remarks block - i.e. 60% of shop X is in Building A and 40% in Building B.

NOTE: A separate form for each building may be prepared and submitted if desired. (Right justify the entry).

5. Block C — Enter the shop alpha or numeric identifier (left justify the entry).

6. Block D — Enter the ten digit number representing the Production Shop Category and Facility Category Code applicable to the shop. Reference Chapter 2 for the facility codes.

7.	Block E	Enter the shop name, i.e., Landing Gear, Plating, Bearing, etc., (left justify the entry).
8.	Block F	Enter the drawing number of the layout for the shop identified in Block C (left justify the entry).
9.	Block G	Enter the total gross square feet of the shop identified in Block C. This number must correspond to that computed from the layout drawing (right justify the entry).
10.	Block H	Within the spaces allocated, provide a brief listing of the items worked in the shop and associated weapon system i.e., - Landing Gear F-14 (left justify the entry).
11.	Block I	Enter the total number of work positions identified in the shop when determining the physical capacity of the shop (right justify the entry).
12.	Block J	Enter the gross capacity in manhours using a 2000 manhour/year/position factor (right justify the entry).
13.	Block K	Enter the availability factor of .95 or that computed from JLC Form 23 (right justify the entry). Attach JLC Form 23 as back up.
14.	Block L	Compute and enter the physical capacity (right justify the entry).
15.	Block M	Enter the direct labor factor rounded off to the nearest 1,000th (right justify the entry).
16.	Block N	Enter the peacetime capacity - self explanatory (multiply blocks L&M) (right justify the entry).

17. All forms shall be signed and dated by the supervisor of the organization identified in Element 4.

18. Insert remarks as necessary on the bottom section of the form.

DEPOT MAINTENANCE
SHOP CAPACITY CALCULATION

1-DEPOT NAME			2-SHOP NUMBER
3-PREPARED BY	4-ORGANIZATION CODE	5-PHONE NUMBER	6-DATE	7-PAGE OF

DEPOT CODE A	BUILDING NUMBER B	SHOP NUMBER C	(1) D	SHOP NAME E
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40				

DRAWING NUMBER F	TOTAL SHOP AREA G	WORK MIX DESCRIPTION H
41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60 61 62 63 64 65 66 67 68 69 70 71 72 73 74 75 76 77 78 79 80		

WORK MIX DESCRIPTION (CONT) H
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40

WORK MIX DESCRIPTION (CONT) H	(2) I	GROSS CAPACITY (I x 2000) J	(3) K	PHYSICAL CAPACITY (J x K) L	(4) M	PEACETIME CAPACITY N
41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60 61 62 63 64 65 66 67 68 69 70 71 72 73 74 75 76 77 78 79 80						

NOTES:

SUPV. _____ DATE: _____

(1) PRODUCTION SHOP CATEGORY CODE
(2) NUMBER WORK POSITIONS
(3) AVAILABILITY FACTOR (XXX)
(4) DIRECT LABOR FACTOR (XXX)

REMARKS:

JLC FORM 22 OCT 81

INSTRUCTION FOR PREPARATION
OF "SHOP AVAILABILITY FACTOR CALCULATION"
JLC FORM 23

1. General

Use of this form is only necessary when the standard availability factor of .95 is not used. An availability factor must be determined for each shop and the shop identified to a predominant PSC.

2.	Elements 1 through 11	Complete these as indicated on the form - self-explanatory.
3.	Column A	Enter the numerical sequence of work stations identified in the shop. The work stations must also be identified on a current shop layout.
4.	Columns B, C, D, E and F	Enter the average annual downtime in hours for the equipment in the work station for Preventive Maintenance (PM), Calibration (CAL), Unscheduled Maintenance (UM) and Warm-Up (W-UP).
5.	Column G	Enter the total of Columns B through F.
6.	Column H	Enter the total number of work positions in each work station as identified when computing physical capacity.
7.	Column I, J, K, and Blocks L, M, and N	Complete these as indicated on the form. The number computed and entered in Block N represents the availability factor for the shop identified in Element 3.

8. Equipment identified as support to a work station will not be included in the availability factor computation unless its downtime controls the production of that or another work station.

DEPOT MAINTENANCE
SHOP AVAILABILITY FACTOR CALCULATION

1-DEPOT NAME	2-BUILDING NUMBER	3-SHOP NUMBER	4-SHOP NAME	5-PRODUCTION SHOP CATEGORY CODE

6-DEPOT CODE	7-PREPARED BY	8-ORGANIZATION CODE	9-SUPERVISOR	10-DATE	11-PAGE OF

WORK STATION CODE A	AVERAGE DOWNTIME (HOURS/YEAR/WORK STATION)						WORK POSITIONS H	TOTAL DOWN TIME (G X H) I	TOTAL AVAILABILITY (H X 2000) J	% AVAILABILITY $100-\frac{I}{J}(100)$ K
	PREVENTIVE MAINTENANCE B	CALIBRATION C	UNSCHEDULED MAINTENANCE D	WARM-UP (EQUIP) E	OTHER F	TOTAL B+C+D+E+F G				

SAMPLE

REMARKS

TOTAL L	*TOTAL* M	

SHOP AVAILABILITY FACTOR

$100-\frac{L}{M}(100)$

N

JLC FORM 23 OCT 81

32

METHOD FOR DETERMINING
CAPACITY OF STALL/WORK BAY/DOCK/ASSEMBLY LINE SPOT
JLC FORM 24

1. General

Airframe capacity measurement requires a detailed analysis of the tasks to be performed during each operation/phase of the maintenance cycle. From this analysis the flow/cycle time must be determined. The combination of manhours required, number of work positions and flow/cycle time determines the capacities for each operation. The sum of The sum of capacities for each operation multiplied by the number of airframe work stations available equals the total airframe capacity. JLC Form 24 provides a systematic method of recording the tasks, manhours, work positions and flow/cycle time for computing airframe capacity and serves as supporting documentation for review and verification. To expedite use of the form, and simplify reporting, it is acceptable to combine all tasks for a specific shop with corresponding total manhours and flowtime indicated and the work positions computed from Block G entered in Block I of JLC Form 22. Supporting documentation for the manhours and flowtime must be maintained in the depot files for review by JADMAG.

In many cased, several shops may simultaneously perform work on an aircraft in a dock/stall. In this situation, it is necessary to prorate the total capacity of the dock/stall to each of the applicable shops and report a capacity for each shop.

Use of this form is applicable to all commodity groups though the instructions are oriented to aircraft. Broadening of the instructions to more specifically address the other commodity groups is contingent upon incorporation of paragraphs 2-4 through 2-12.

2.	Elements 1 through 11	Complete these as indicated - self explanatory.
3.	Block A	Insert the applicable operation and weapons system. Typical airframe repair operations are: Disassembly, Electrical Repairs/Checks, Hydraulic and Pneumatic Repairs/ Checks, Structural Repairs, Sheet Metal Repairs/Rework, and Assembly. Other operations may also apply.
4.	Block B	Identify all tasks required for each operation in the sequence they should be performed.

NOTE: All tasks may be combined for a specific work center/shop as explained in center/shop as explained in paragraph 1.

5. Block C — Enter the manhour standard or estimated time required to complete the corresponding task in Block B.

6. Block D — Enter the total number of work positions for each task in Block B as determined when computing physical capacity. NOTE: When all tasks/manhours/and flowtimes are combined, this block is omitted.

7. Block E — The number of positions (Block D) multiplied by eight (8) is the total number of manhours that can be expended each day on the tasks in Block B. Starting from day one (1), enter this number in the appropriate column and continue through the number of days required for the sum of entries to equal that in Block C. The second and succeeding tasks in a sequence may not start from day one (1). (Example - If engine removal requires three (3) days and must be done before engine supporting mounts could be removed then this task would start on day four (4)). (If more than 12 flow days are involved use additional forms).

Note: For multi shift operations base this analysis on the number of shifts rather than days.

8. Block F — Enter the total of Block C.

9. Block G — Compute and enter the number of work positions (round to the nearest whole number) as indicated, self-explanatory.

NOTE: The flow/cycle time shall be rounded to the highest number in Block E having an entry.

DEPOT MAINTENANCE
STALL/WORK BAY/DOCK/ASSY LINE CAPACITY CALCULATIONS

1. DEPOT NAME	2. BUILDING NUMBER	3. SHOP NUMBER	4. SHOP NAME	5. PRODUCTION SHOP CATEGORY CODE

6. DEPOT CODE	7. PREPARED BY	8. ORGANIZATION CODE	9. SUPERVISOR	10. DATE	11. PAGE
					OF

OPERATION: & TYPE A/C (A)			MAN HOURS EXPENDED EACH DAY BASED ON 8HR/PERSON/DAY (E)											
TASK (B)	MAN HOURS REQD (STANDARD) (C)	WORK POSITIONS (D)	1	2	3	4	5	6	7	8	9	10	11	12
				SAMPLE										
	Total (F)	WORK POSITIONS = $\frac{F \times \text{No. of STALLS}}{8 \times \text{FLOW TIME IN DAYS}}$ = (G)												

JLC FORM 24 OCT 81

35

INSTRUCTIONS FOR PREPARATION OF JLC FORM 25 "REPORTING OF UNUTILIZED SPACE"

1. General

Unutilized space in the custody of the maintenance activity represents potential capacity. This potential capacity shall be reported separately on JLC Form 25. Only the physical capacity will be reported. Peacetime Capacity, if required, will be computed by JADMAG through application of an averaged direct labor factor.

2. Blocks 1 through 13: Complete these as required - self explanatory.

NOTE: (1) Block 8 - a drawing may not exist and the capacity estimated. If so, leave blank.

(2) Block 12. Use an availability factor of 95.

UNUTILIZED SPACE

1.-DEPOT NAME	2.PREPARED BY	3.PHONE NUMBER	4.DATE
5.DEPOT CODE	6.BUILDING NO.	7.ASSIGNED P.S.C. AND F.A.C. CODE	
8.DRAWING NUMBER	9.TOTAL SHOP AREA	10.WORK POSITIONS	
11.GROSS CAPACITY	12.AVAILABILITY FACTOR (.95)	13.POTENTIAL PHYSICAL CAPACITY	

NOTE: (1) PEACETIME CAPACITY NOT REPORTED FOR UNUTILIZED SPACE

Remarks:

SAMPLE

JLC FORM 25 OCT 81

37

INSTRUCTIONS FOR PREPARATION
OF JLC FORM 26
"REPORTING OF GENERAL SHOP SUPPORT - PSC 110"

1. General

Only those assigned indirect functions shall be reported on JLC Form 26. Total visibility of all assigned aeronautical depot maintenance space is required by JADMAG to properly conduct required analysis and to ensure inclusion of all space.

2. General Shop Support falls into three categories:

110A. That covered indirect area which provides support solely to that specific production shop category code. These areas will be coded as 110A plus a numeric code for the applicable production Shop Category of the shop, e.g., 110A 103. This coding includes technical file centers, toolcribs, production centers, washrooms, lunch areas, dressing areas, locker rooms, production supervisory and clerical support office areas, restrooms, multi-purpose/main aisles, stairwells, auxilliary equipment rooms walls, etc.

110B. That covered area which provides support to two or more Production Shop Category codes. The proration of support space should be based on the percentage of the total building space occupied by a specific shop category. This category will include the space required to directly support or service a production area as follows:

a. External boundary aisles and lanes.

b. Lunch, rest, smoking and shower room.

c. Utility areas within the building.

d. Maintenance inventory control centers.

e. Direct support office areas. This is space occupied by an organization whose primary function is to provide supervision, planning, scheduling, and controlling of the production operation. These personnel act as intermediaries between the directorate of administration and shop production functions to accomplish the direct physical aspects of logistical support. The following will be included:

(1) Planners, schedulers, and material expediters.

(2) Quality inspectors.

(3) Engineering technicians.

(4) Section supervisors and clerical personnel when these offices are part of the above areas.

f. Receiving and dispatch areas.

g. Temporary storage areas.

Areas in this category will be coded 110B plus an appropriate numeric code for that portion attributable to PSC 101 through 109.

110C. Those covered indirect spaces which provide general support to all depot maintenance operation. These include functions such as management, administration, engineering, clerical offices, cafeterias, plant maintenance, central or general storage, quality assurance facilities, and any area provided to non-maintenance activities, such as personnel offices, credit union offices, dispensaries, etc.

3. Instructions for form completion:

A. Items 1 through 7 - Self explanatory.

B. Item A - Enter identification code outlined in paragraph 2 above.

C. Item B - Enter brief description of space use, e.g., washroom, cafeteria, locker room, etc.

D. Item C - Enter brief description of the specific function supported by 110A or 110B.

E. Item D - Enter the area in square feet of the space itemized in Item C.

GENERAL SHOP SUPPORT

1.-DEPOT NAME				2.-BLDG. NUMBER
3.-PREPARED BY	4-ORGANIZATION CODE	5.-PHONE NUMBER	6-DATE	7.-PAGE

A. CODE	B. FUNCTION	C. FUNCTION SUPPORTED	D. AREA SQ.FEET
	SAMPLE		
		TOTAL	

Remarks:

JLC FORM 26 OCT 81

40

REFERENCES

1. DOD Instruction 4151.15, "Depot Maintenance Support Programming Policies", 22 November 1976

2. DOD Handbook 4151.15H, "Depot Maintenance Production Shop Capacity Measurement Handbook", 28 July 1976

3. DOD Handbook 7220.29H, "Department of Defense Depot Maintenance and Maintenance Support Cost Accounting and Production Reporting Handbook", 21 October 1975

4. DOD Instruction 4165.3 "DOD Facility Classes and Construction Categories", 1 September 1972

5. NAVFAC P-72 "Category Codes for Navy Facilities Assets".

6. AFLCR 66-4, (C5) Chapter 5, AFLC Maintenance Facility Master Plan System (G004K)

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