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GROUND SUPPORT EQUIPMENT FUNCTIONAL
CLASSIFICATION CATEGORIES



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DEPARTMENT OF DEFENSE
WASHINGTON, D. C. 20301

GROUND SUPPORT EQUIPMENT
FUNCTIONAL CLASSIFICATION CATEGORIES

MIL-STD-864

1. This Military Standard is mandatory for use by all Departments of the Department of Defense.
2. Recommended corrections, additions, or deletions should be addressed to AFLC (MCSIA), Wright-Patterson AFB, Ohio 45433.

CONTENTS

PARAGRAPH		PAGE
1	SCOPE	1
1.1	SCOPE	1
2	REFERENCE DOCUMENTS	1
2.1	DOCUMENTS	1
3	DEFINITIONS	1
4	GENERAL REQUIREMENTS	1
4.1	FUNCTIONAL CLASSIFICATION	1
4.2	EQUIPMENT IDENTIFICATION	1
5	DETAILED REQUIREMENTS	1
5.1	LIST OF EQUIPMENT FUNCTIONAL CLASSIFICATION CATEGORIES	2
5.2	LIST OF EQUIPMENT FUNCTIONAL CLASSIFICATION INDEX	2
5.3	LIST OF EQUIPMENT IDENTIFICATION CHARACTERISTICS	9

MIL-STD-864

1. SCOPE:

1.1 This Military Standard provides a functional classification of the categories and the technical characteristics requirements for Ground Support Equipment (GSE) which are necessary for making comparisons of similar items of equipment. It also provides Government and contractor personnel a standard for determining the appropriate functional classification category of ground support equipment for indexing and for providing a technical description of such equipment as required by Data Item, Standard Integrated Support Management System (SISMS) - SE-4 "Ground Support Equipment Illustration," for inclusion of items in MIL-HDBK-300, Technical Information File (TIF) on Ground Support Equipment.

2. REFERENCED DOCUMENTS:

2.1 The following document of the issue in effect on the date of invitation for bid or request for proposal form a part of this standard to the extent specified herein.

HANDBOOK

MIL-HDBK-300

Technical Information File (TIF)
on Ground Support Equipment

Data Item. SISMS-SE-4, Ground Support Equipment Illustration (GSEI)

(Copies of specifications, standards, drawings, and publications required by suppliers in connection with specific procurement functions should be obtained from the procurement activity or as directed by the contracting officer.)

3. DEFINITIONS: Not applicable.

4. GENERAL REQUIREMENTS:

4.1 The functional classification index provides the contractor a means by which equipments can be functionally categorized to provide a homogeneous grouping of items for publication in MIL-HDBK-300.

4.2 The list of equipment identification characteristics will be used to assist in developing the "Functional Description" and "Technical Description" of the item as prescribed by Data Item, SISMS-SE-4.

5. DETAILED REQUIREMENTS:

MIL-STD-864

5.1 LIST OF EQUIPMENT FUNCTIONAL CLASSIFICATION CATEGORIES

- GROUP AA - Measuring, Testing, and Adjusting
- GROUP BB - Signal and Power Generating, Supplying, Storing, and Converting (Excludes Transducers)
- GROUP CC - Communicating, Signaling, and Lighting
- GROUP DD - Engine and Missile System Checkout and Testing
- GROUP EE - Gas and Liquid Supplying, Processing, Storing, and Shipping
- GROUP FF - Personnel and Solid-Material Protection
- GROUP GG - Maintenance and Servicing
- GROUP HH - Handling and Moving of Equipment and Solid Material
- GROUP JJ - Heating, Cooling, Ventilating, and Humidity Control
- GROUP KK - Fire-Fighting, Rescue and Survival
- GROUP LL - Training and Simulating

5.2 LIST OF FUNCTIONAL CLASSIFICATING INDEX

AA. MEASURING, TESTING, AND ADJUSTING

- AA-1 Voltage, Current, and Resistance Measuring and Indicating
 - AA-1.1 Voltage Measuring
 - AA-1.2 Current Measuring
 - AA-1.3 Resistance Measuring and Voltage Leakage, Short Circuit, Continuity, and Cable Testing
 - AA-1.4 Multimeters
- AA-2 Standing Wave Ratio and Impedance Measuring
 - AA-2.1 Standing Wave Ratio Measuring
 - AA-2.2 Impedance and Related Parameter Measuring
 - AA-2.3 Combined Standing Wave Ratio and Impedance Measuring
- AA-3 Waveform Measuring and Analyzing
 - AA-3.1 Oscillographs
 - AA-3.2 Oscilloscopes and Synchroscopes
 - AA-3.3 Waveform and Spectrum Analyzing
- AA-4 Power and Mechanical Energy Measuring
 - AA-4.1 Electrical (Cabled) Power Measuring (Includes Metered Loads)
 - AA-4.2 Radiated (Noncabled) Power Measuring
 - AA-4.3 Combined Radiated and Nonradiated Power Measuring
 - AA-4.4 Mechanical Power Measuring
- AA-5 Intensity Measuring
 - AA-5.1 Mechanical Force Measuring
 - AA-5.2 Motion, Displacement, and Impact Detecting and Measuring
 - AA-5.3 Sound Measuring
 - AA-5.4 Electric Field Detecting and Measuring
 - AA-5.5 Electromagnetic Field Detecting and Measuring
 - AA-5.6 Magnetic Field Detecting and Measuring

MIL-STD-864

- AA-5.7 Infrared Radiation and Temperature Detecting and Measuring
- AA-5.8 Visible Radiation (Light) Measuring
- AA-5.9 Ultraviolet Radiation Detecting and Measuring
- AA-5.10 X-Radiation Detecting and Measuring
- AA-5.11 Nuclear Radiation Detecting and Measuring
- AA-5.12 Multifunction Detecting and Intensity Measuring
- AA-6 Acceleration, Velocity, Rate, Frequency, and Time Measuring and Counting
 - AA-6.1 Acceleration Measuring
 - AA-6.2 Velocity, Rate, and Mechanical Frequency Measuring
 - AA-6.3 Electrical Frequency Measuring and Indicating
 - AA-6.4 Mechanical Counting
 - AA-6.5 Electrical Counting
 - AA-6.6 Reference Time Measuring
 - AA-6.7 Elapsed (Cumulative) Time Measuring
 - AA-6.8 Duration Measuring
 - AA-6.9 Interval Measuring (Chronoscopes)
 - AA-6.10 Multifunction Time Measuring
- AA-7 Optical Measuring, Testing, and Aligning
 - AA-7.1 Collimation and Similar Optical Measuring and Testing
 - AA-7.2 Spectroscopic and Spectrographic Testing
 - AA-7.3 Microscopic Testing
 - AA-7.4 Photographic Measuring and Testing
- AA-8 Material Measuring and Testing
 - AA-8.1 Physical Dimension Measuring
 - AA-8.2 Weight, Density, and Specific Gravity Measuring
 - AA-8.3 Volume Measuring
 - AA-8.4 Pressure Measuring
 - AA-8.5 Moisture Content Measuring
 - AA-8.6 Hardness Measuring
 - AA-8.7 Stress and Strain Measuring
 - AA-8.8 Tension and Compression Measuring and Testing
 - AA-8.9 Static and Dynamic Balance Measuring
 - AA-8.10 Friction Measuring
 - AA-8.11 Color, Luster, and Reflectance Measuring and Testing
 - AA-8.12 Contamination and Surface Irregularity (Fluorescent) and Similar Testing
 - AA-8.13 Vibration and Acceleration (Shock) Testing
 - AA-8.14 Breakdown Testing
 - AA-8.15 Solid Analysis
 - AA-8.16 Liquid Analysis
 - AA-8.17 Gas Analysis
- AA-9 Multifunction Measuring and Testing (Excludes Engines and Missile Systems, but Includes Most Test Sets)
 - AA-9.1 Combined General-Purpose Functional Testing
 - AA-9.2 General Electronic, Electrical, Mechanical, and Hydraulic System Testing
 - AA-9.3 Subsystem and Component Testing
 - AA-9.4 Assembly and Subassembly Testing
 - AA-9.5 Circuit Board and Circuit Card Testing
 - AA-9.6 Part (Electron Tube, Semiconductor, Relay, Selsyn, Synchro, etc.) Testing

MIL-STD-864

- AA-10 Standards and Calibration Equipment for Measuring and Testing
 - AA-10.1 Calibration Equipment for Voltage, Current, and Resistance Measuring Devices
 - AA-10.2 Calibration Equipment for SWR, Impedance, and Related Parameter Measuring Devices
 - AA-10.3 Calibration Equipment for Waveform Measuring and Analyzing Devices
 - AA-10.4 Calibration Equipment for Power and Mechanical Energy Measuring Devices
 - AA-10.5 Calibration Equipment for Intensity Measuring Devices
 - AA-10.6 Calibration Equipment for Velocity, Frequency, and Time Measuring Devices and Similar Devices
 - AA-10.7 Calibration Equipment for Optical Devices
 - AA-10.8 Calibration Equipment for Material Measuring and Testing Devices
 - AA-10.9 Calibration Equipment for Multifunction Measuring and Testing Devices
 - AA-10.10 Multipurpose and General-Purpose Standards
- AA-11 Active Devices for Test Purposes (Excludes Most Test Sets)
 - AA-11.1 Transducers
 - AA-11.2 Active Filters
 - AA-11.3 Active Mixers and Modulators
 - AA-11.4 Active Coupling, Matching, and Distribution Devices
 - AA-11.5 Test Amplifiers
 - AA-11.6 Active Terminations and Dummy Loads
 - AA-11.7 Active Delay Devices
 - AA-11.8 Active Matching Devices
- AA-12 Passive Devices for Test Purposes (Excludes Most Test Sets)
 - AA-12.1 Variable Resistors and Unqualified Variable Attenuators (Series Type)
 - AA-12.2 Variable Capacitors (Series Type)
 - AA-12.3 Variable Inductances (Series Type)
 - AA-12.4 Passive (Cabled) Electrical Coupling, Matching, and Distribution Devices (Includes Fixed Attenuators and Most Voltage Dividers and Probes)
 - AA-12.5 Passive (Non-cabled) Electromagnetic and Electrostatic Coupling, Matching, and Distribution Devices (Includes Inductive Voltage Dividers and Probes)
 - AA-12.6 Mounting Devices and Passive Mechanical Coupling Devices
 - AA-12.7 Passive Filters (Excludes Probes)
 - AA-12.8 Passive Delay Devices
 - AA-12.9 Passive, Non-Power-Measuring Terminations and Dummy Loads
 - AA-12.10 Passive Mixers, Modulators, and Detectors (Excludes Probes)
- BB. SIGNAL AND POWER GENERATING, SUPPLYING, STORING, AND CONVERTING (EXCLUDES TRANSDUCERS)
 - BB-1 Signal Generating
 - BB-1.1 Signal Generators and Oscillators (Includes a-m, f-m, pulse-modulated, audio, sweep, etc. types)

MIL-STD-864

- BB-1.2 Complex Wave Generators (includes Pulse, square-wave, triangular-wave, sawtooth, etc. types)
- BB-1.3 Random Function Generators (Includes random noise and noise generators)
- BB-1.4 Waveform Synthesizers
- BB-1.5 Multifunction and Special-Purpose Signal Generators
- BB-2 Electrical Power Supplying, Generating, Storing, and Converting
 - BB-2.1 Electrical Generators, Converters, Inverters, and Dynamotors
 - BB-2.2 Electrical Power Supplies and Battery Chargers
 - BB-2.3 Transformers and Electrical Distribution Networks
- BB-3 Mechanical, Hydraulic, Pneumatic, and Vacuum Power Supplying, Storing, and Converting
 - BB-3.1 Mechanical Power Supplying, Storing, and Converting (Includes Motors, Turbines, etc.)
 - BB-3.2 General-Purpose Compressing and Pumping
 - BB-3.3 Hydraulic and Pneumatic Power and Vacuum Generating and Storing
 - BB-3.4 Multifunction and Special-Purpose Mechanical, Hydraulic, Pneumatic, and Vacuum Devices (Includes those which also Supply Power)

CC. COMMUNICATING, SIGNALING, AND LIGHTING

- CC-1 Communicating (Excludes Headsets, Loudspeakers, etc.)
 - CC-1.1 Intercommunication Systems
 - CC-1.2 Public Address Systems
 - CC-1.3 Multifunction and Special Purpose Communicating Devices
- CC-2 Signaling
 - CC-2.1 Signal Lights
 - CC-2.2 Mechanical Signaling Devices
 - CC-2.3 Special-Purpose Signaling Devices
- CC-3 Lighting
 - CC-3.1 Area Lighting
 - CC-3.2 Search Lighting
 - CC-3.3 Marking and Identification Lighting
 - CC-3.4 Special-Purpose Lighting

DD. ENGINE AND MISSILE SYSTEM CHECKOUT AND TESTING

- DD-1 Engine Checkout and Testing
 - DD-1.1 Automotive Engine Testing
 - DD-1.2 Aircraft Engine Testing
 - DD-1.3 Missile Engine Testing
 - DD-1.4 General and Special-Purpose Engine Testing
- DD-2 Missile System Checkout and Testing
 - DD-2.1 Missile Guidance System Checkout
 - DD-2.2 Missile Target or Flight Programming System Checkout
 - DD-2.3 Missile Telemetry and Tracking System Checkout
 - DD-2.4 Missile Hydraulic and Pneumatic System Checkout
 - DD-2.5 Missile Fuel System Checkout
 - DD-2.6 Miscellaneous Missile System Checkout and Testing
 - DD-2.7 Missile Countdown Equipment

MIL-STD-864

EE. GAS AND LIQUID SUPPLYING, PROCESSING, STORING, AND SHIPPING

- EE-1 Gas Storage, Processing, Supplying, and Shipping
 - EE-1.1 Gas Storage Containers
 - EE-1.2 Gas Storage, Processing, Supplying, and Shipping Equipment and Vehicles
 - EE-1.3 Multipurpose and Special-Purpose Gas-Handling Equipments
- EE-2 Liquid Storage, Processing, Supplying, and Shipping
 - EE-2.1 Liquid Storage Containers
 - EE-2.2 Liquid Storage, Processing, Supplying, and Shipping
 - EE-2.3 Special-Purpose and Multipurpose Liquid-Handling Equipments

FF. PERSONNEL AND SOLID-MATERIAL PROTECTION

- FF-1 Shelters and Chambers
 - FF-1.1 Personnel Shelters
 - FF-1.2 Maintenance Shelters
 - FF-1.3 Test Chambers and Test Shelters
 - FF-1.4 Special-Purpose and Multipurpose Shelters and Chambers
- FF-2 Protective Deflectors, Shields, Screens, and Coverings
 - FF-2.1 Deflectors, Shields, and Screens
 - FF-2.2 Protective Coverings
 - FF-2.3 Miscellaneous Protective Equipment
- FF-3 Supports for Storing and Shipping
- FF-4 Special-Purpose and Multipurpose Protective Devices

GG. MAINTENANCE AND SERVICING

- GG-1 General Mechanical Cleaning, Degreasing, and Descaling
 - GG-1.1 Pressure and Vacuum Cleaners
 - GG-1.2 Spray Cleaners and Degreasers
 - GG-1.3 Descalers
 - GG-1.4 Special-Purpose and Multipurpose Cleaning Devices
- GG-2 De-Icing and Decontaminating
 - GG-2.1 De-Icing
 - GG-2.2 Decontaminating
- GG-3 Road and Runway Cleaning and Repairing
 - GG-3.1 Road and Runway Cleaning
 - GG-3.2 Road and Runway Repairing
 - GG-3.3 Combination and Special-Purpose Road and Runway Cleaning and Repairing and Associated Devices
- GG-4 Lubricating
 - GG-4.1 Oiling Equipments
 - GG-4.2 Greasing Equipments
 - GG-4.3 Combination Oiling and Greasing Equipments
 - GG-4.4 Special-Purpose Lubricating Equipments
- GG-5 Wheel, Tire, and Mechanical System Servicing
 - GG-5.1 Wheel and Tire Servicing
 - GG-5.2 Brake System Servicing
 - GG-5.3 Hydraulic System Servicing
 - GG-5.4 Pneumatic System Servicing
 - GG-5.5 Special-Purpose and Multipurpose Mechanical System Servicing

MIL-STD-864

- GG-6 Special-Purpose and Multipurpose Servicing
- GG-7 Maintenance Platforms, Stands, Supports, and Accessories
 - GG-7.1 Maintenance Platforms and Stands for Personnel
 - GG-7.2 Equipment Supports
 - GG-7.3 Weapon and Special-Purpose Supports
 - GG-7.4 Maintenance Accessories

HH. HANDLING AND MOVING OF EQUIPMENT AND SOLID MATERIAL

- HH-1 Hoisting, Jacking, Lifting, Towing, and Positioning
 - HH-1.1 Hoisting and Lifting
 - HH-1.2 Jacking
 - HH-1.3 Erecting
 - HH-1.4 Towing
 - HH-1.5 Special-Purpose and Multipurpose Lifting and Positioning Equipment
- HH-2 Transporting of Equipment and Solid Material
 - HH-2.1 Powered Trucks and Tractors
 - HH-2.2 Hand Trucks, Carts, and Dollies
 - HH-2.3 Trailers
 - HH-2.4 Special-Purpose and Multipurpose Transporting Vehicles and Devices
 - HH-2.5 Accessory Equipment for Transportation
- HH-3 Launching
 - HH-3.1 Aircraft Launching
 - HH-3.2 Guided-Missile Launching
 - HH-3.3 Rocket Launching
- HH-4 Arresting, Parking and Securing
 - HH-4.1 Auxiliary Braking
 - HH-4.2 Emergency Braking and Arresting
 - HH-4.3 Securing (Chocking, Locking, etc.)
 - HH-4.4 Parking and Similar Storing
- HH-5 Special-Purpose and Multipurpose Handling and Moving (includes combined Lifting and Moving Vehicles and Equipments)

JJ. HEATING, COOLING, VENTILATING, AND HUMIDITY CONTROL

- JJ-1 Heating
 - JJ-1.1 Area Heating
 - JJ-1.2 Equipment Heating
 - JJ-1.3 Special-Purpose and Multipurpose Heating Equipments
- JJ-2 Air Cooling and Air Conditioning
 - JJ-2.1 Air Cooling and Air Conditioning
 - JJ-2.2 Special-Purpose and Multipurpose Cooling Equipments
- JJ-3 Ventilating and Air Circulating
 - JJ-3.1 Ventilating and Air Circulating
 - JJ-3.2 Special-Purpose and Multipurpose Ventilating and Air Conditioning Equipments
- JJ-4 Humidity Controlling
 - JJ-4.1 Humidity Reducing
 - JJ-4.2 Humidity Increasing
 - JJ-4.3 Constant-Humidity Equipments
 - JJ-4.4 Special-Purpose and Multipurpose Humidity-Controlling Equipments

MIL-STD-864

- JJ-5 Refrigerating
 - JJ-5.1 General-Purpose Refrigerating Equipments
 - JJ-5.2 Special-Purpose and Multipurpose Refrigerating Equipments
- JJ-6 Multipurpose and Special-Purpose Heating, Cooling, Ventilating and Humidity-Control Equipments

KK. FIRE-FIGHTING, RESCUE, AND SURVIVAL

- KK-1 Fire-Fighting, Crash, and Rescue Equipments
 - KK-1.1 Fire-Fighting Equipments
 - KK-1.2 Crash Equipments
 - KK-1.3 Rescue Equipments
 - KK-1.4 Special-Purpose and Multipurpose Fire-Fighting, Crash and Rescue Equipment
- KK-2 Survival Equipments and Devices
 - KK-2.1 Survival Tools and Accessories
 - KK-2.2 Survival Vehicles
 - KK-2.3 Special-Purpose and Multipurpose Survival Items

LL. TRAINING AND SIMULATING

- LL-1 Pilot and Flight-Crew Flight Simulators
 - LL-1.1 Basic Flight Simulator Trainers
 - LL-1.2 Advanced Flight Simulator Trainers
 - LL-1.3 Instrument Flight Trainers
 - LL-1.4 Mobile Training Units
- LL-2 Ground-Crew-Training Flight Simulators
 - LL-2.1 Flight-Principle Trainers
 - LL-2.2 Flight-Control, Navigation, and Warning-Indicator Instrument Systems Trainers
 - LL-2.3 Mechanical System Trainers
 - LL-2.4 Electrical System Trainers
 - LL-2.5 Engine Operation and Maintenance Trainers
 - LL-2.6 Aircraft Servicing Equipment Trainers
 - LL-2.7 Mobile Training Units
- LL-3 Armament Trainers
 - LL-3.1 Stationary Airborne-Gunnery Trainers
 - LL-3.2 Free Airborne-Gunnery Trainers
 - LL-3.3 Airborne-Rocketry Trainers
 - LL-3.5 High-Altitude-Bombing Trainers
 - LL-3.6 Ground-Support-Bombing Trainers
 - LL-3.7 Armament Components Trainers
 - LL-3.8 Multipurpose Armament Trainers
 - LL-3.9 Mobile Training Units
- LL-4 Navigation Trainers
 - LL-4.1 Dead-Reckoning Navigation Trainers
 - LL-4.2 Celestial Navigation Trainers
 - LL-4.3 Electronic Navigation Trainers
 - LL-4.4 Crew Navigation Trainers
 - LL-4.5 Mobile Training Units
 - LL-4.6 Aero-Space Navigation Training Units
- LL-5 Radar and Communications Trainers
 - LL-5.1 Primary Communications Equipment Trainers
 - LL-5.2 Advanced Communications Equipment Trainers

MIL-STD-864

- LL-5.3 Primary Radar Equipment Trainers
- LL-5.4 Advanced Radar Equipment Trainers
- LL-5.5 Radar Countermeasures Trainers
- LL-6 Psychological and Psycho-physiological Trainers
 - LL-6.1 Low Pressure Chambers
 - LL-6.2 Ejection-Seat Trainers
 - LL-6.3 "Dilbert Dunker" and Other Survival-Procedures
 - LL-6.4 Space-Environment Trainers
 - LL-6.5 Vertigo Simulator Trainers
- LL-7 Ground-to-Ground and Ground-to-Air Missile Trainers
 - LL-7.1 Ground-Crew, Missile-Operation and Maintenance Trainers
 - LL-7.2 Launch-Control Equipment Trainers
 - LL-7.3 Flight-Control-Equipment Trainers
- LL-8 Special Project Trainers
 - LL-8.1 Synthetic Warfare Tactics Trainers
 - LL-8.2 Combat Information Centers (CIC) Equipment Trainers
- LL-9 Training Aids
 - LL-9.1 Charts and Posters
 - LL-9.2 Maneuvering Boards and Demonstrator Panels
 - LL-9.3 Self-Instruction Cards
 - LL-9.4 Training Manuals
 - LL-9.5 Three-Dimensional Models
 - LL-9.6 Audio-Visual Training Devices (Projectors and Sound Recorders and Reproducers)
 - LL-9.7 Training Films and Recordings
 - LL-9.8 Miscellaneous Classroom Teaching Aids
- LL-10 Command Training Programs (Tangible Items)
 - LL-10.1 Service-School Training Programs
 - LL-10.2 Activity Training Programs
- LL-11 Miscellaneous Training and Simulating Devices
 - LL-11.1 Automotive Training Devices
 - LL-11.2 Airfield Training Devices
 - LL-11.3 Simulators for Material Testing
 - LL-11.4 Hydraulic, Pneumatic, Oxygen, Fuel, Oil, etc.

5.3 LIST OF EQUIPMENT IDENTIFICATION CHARACTERISTICS

AA-1-VOLTAGE, CURRENT, AND RESISTANCE MEASURING AND INDICATING

INPUT CHARACTERISTICS

Voltage
Frequency
Phase
Power Consumption

OUTPUT AND OPERATIONAL CHARACTERISTICS

Frequency Range and Response
Voltage Type and Range
Current Type and Range
Resistance Range
Decibel Range

Probe Data
Meter Size
Meter Movement
Accuracy
Equipment Supplied

MIL-STD-864

Input Impedance and/or Sensitivity
Output Impedance

Environmental Limitations

TUBE/SEMICONDUCTOR COMPLEMENT

(Types and Quantities)

AA-2-STANDING WAVE RATIO AND IMPEDANCE MEASURING

INPUT POWER CHARACTERISTICS

Voltage
Frequency
Phase
Power Consumption

OUTPUT AND OPERATIONAL CHARACTERISTICS

Frequency Range	Capacitance Range
Maximum Reflected Power	Power Factor Range
Voltage Range	Phase Angle Range
Current Range	Input Signal Level
Resistance Range	Selectivity
Impedance Range	Sensitivity
Reactance Range	Vernier Scale
Inductance Range	

OUTPUT AND OPERATIONAL CHARACTERISTICS

Accuracy
Equipment Supplied
Environmental Limitations

TUBE/SEMICONDUCTOR COMPLEMENT

(Types and Quantities)

AA-3-WAVEFORM MEASURING AND ANALYZING

INPUT POWER CHARACTERISTICS

Voltage
Frequency
Phase
Power Consumption

OUTPUT AND OPERATIONAL CHARACTERISTICS

Type of Indicator	Z-Axis (Intensity Modulation) Data*
X-(Horizontal Axis) Data*	Sensitivity
Sensitivity	Frequency Range and Response
Frequency Range and Response	Input Impedance
Input Impedance	Attenuation
Attenuation	Rise Time
Rise Time	Distortion

MIL-STD-864

Distortion	Type of Output
Sweep Type(s)	Voltage Calibration Data
Sweep Frequency	Acceleration Potential
Sweep Duration	Type of Deflection
Sweep Repetition Rate	Trace Persistence
Sweep Calibration and Accuracy	Image Storage Duration
Sweep Synchronization Type	Writing Rate
Y-(Vertical) Axis Data*	Chart Data
Sensitivity	Timing Markers
Frequency Range and Response	Presentation Aids
Input Impedance	Photographic Provisions
Attenuation	Equipment Supplied
Rise Time	Environmental Limitations
Distortion	

TUBE/SEMICONDUCTOR COMPLEMENT

(Types and Quantities)

(*NOTE: Described, as necessary, for a-c coupled, d-c coupled, and direct coupled conditions.)

AA-4-POWER AND MECHANICAL ENERGY MEASURING

INPUT POWER CHARACTERISTICS

Voltage	Power Consumption
Frequency	Mechanical/Pneumatic/Hydraulic/
Phase	Input Requirements

OUTPUT AND OPERATIONAL CHARACTERISTICS

Input Rating (Capacity)	Input Impedance and/or Sensitivity
Power Range	Output Impedance
Torque Range	Probe Data
Reception Type	Indicator Type
Voltage Type and Range	Meter Size
Current Type and Range	Meter Movement
Decibel Range	Accuracy
Frequency Range	Equipment Supplied
Speed Range	Environmental Limitations
VSWR	

TUBE/SEMICONDUCTOR COMPLEMENT

(Types and Quantities)

AA-5-INTENSITY MEASURING

INPUT POWER CHARACTERISTICS

Voltage	Power Consumption
Frequency	Mechanical/Pneumatic/Hydraulic/
Phase	Input Requirements

MIL-STD-864

OUTPUT AND OPERATIONAL CHARACTERISTICS

Input Rating (Capacity)	Displacement Range
Indicator Type	Impact Range
Meter Size	Sound Intensity Range
Meter Movement	Field Strength Range
Frequency Range and Response	Flux Density Range
Sensitivity	Temperature Range
Selectivity	Radiation Detected
Accuracy	Radiation Range
Recovery Rate	Light Range
Type of Reception or Input	Probe/Sensor Data
Receiver Type	Shielding Conditions
Intermediate Frequency	Equipment Supplied
Mechanical Force Range	Environmental Limitations

TUBE/SEMICONDUCTOR COMPLEMENT

(Types and Quantities)

AA-6. ACCELERATION, VELOCITY, RATE, FREQUENCY, AND TIME MEASURING
AND COUNTINGINPUT POWER CHARACTERISTICS

Voltage	Power Consumption
Frequency	Mechanical/Pneumatic/Hydraulic
Phase	Input Requirements

OUTPUT AND OPERATIONAL CHARACTERISTICS

Input Rating (Capacity)	Displacement Range
Indicator Type	Voltage Range
Meter Size	Current Range
Meter Movement	Synchronization Input Data
Sensitivity	Trigger Input Data
Selectivity	Synchronization Output Data
Accuracy	Trigger Output Data
Duty Cycle	Reset Data
Spurious Response	Reference Frequencies
VSWR	Crystal
Loaded "Q"	Interpolation Oscillator
Type of Reception or Input	Reference Frequencies
Attenuation	Audio
Input Impedance	(Other)
Output Impedance	R-F Output Voltage
Frequency Range	Audio Output Voltage
Time Range	Output Modulation
Count Range	Flash Duration
Velocity Range	Peak Light Intensity
RPM Range	Probe/Sensor Data
Acceleration Range	Equipment Supplied
	Environmental Limitations

MIL-STD-864

TUBE/SEMICONDUCTOR COMPLEMENT

(Types and Quantities)

AA-7-OPTICAL MEASURING, TESTING, AND ALIGNINGINPUT POWER CHARACTERISTICS

Voltage

Phase

Frequency

Power Consumption

OUTPUT AND OPERATIONAL CHARACTERISTICS

(Description of Equipment Supplied, its Utilization and its Limitations)

NOTE: Due to the wide variety of optical equipments, it is not feasible to establish a pattern for the entire "Technical Description." (In many cases, even "INPUT POWER CHARACTERISTICS" is not applicable.) Existing technical descriptions will be reworked to ensure good presentation and, where required, more complete descriptions of equipments will be requested from manufacturers.

TUBE/SEMICONDUCTOR COMPLEMENT

(Types and Quantities)

AA-8-MATERIEL MEASURING AND TESTINGINPUT POWER CHARACTERISTICS

Voltage

Power Consumption

Frequency

Mechanical/Pneumatic/Hydraulic

Phase

Input Requirements

OUTPUT AND OPERATIONAL CHARACTERISTICS

Input Rating (Capacity)

Flow Rate Range

Indicator Type

Special Ranges

Meter Size

Work Capacity

Meter Movement

Balancing Speed

Frequency Range

Vibration Time

Pressure Range

Vibration Amplitude

Volume Range

Maximum Test Pressure

Hardness Number Range

Maximum Test Voltage

Humidity Range

Sensitivity

Tension Range

Selectivity

Compression Range

Accuracy

Dimension-Indicating Range

Input Impedance

Reflectance Range

Output Data

Weight Range

Equipment Supplied

Density Range

Environmental Limitations

Specific-Gravity Range

MIL-STD-864

TUBE/SEMICONDUCTOR COMPLEMENT

(Types and Quantities)

AA-9-MULTIFUNCTION MEASURING AND TESTING

INPUT POWER CHARACTERISTICS

Voltage	Power Consumption
Frequency	Mechanical/Pneumatic/Hydraulic
Phase	Input Requirements

OUTPUT AND OPERATIONAL CHARACTERISTICS

Types of Test Performed	Test Adapters and Holders
Method of Testing	Number & Type of Test Points
Type of Indication	Readout Devices
Method of Connection to Test Item	Input Devices
Output Data	Computational Requirements
Test Connectors	

(Additional Characteristics Taken from Patterns AA-1 through AA-8
Shown as Required.)OUTPUT AND OPERATIONAL CHARACTERISTICS

Equipment Supplied	Environmental Limitations
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TUBE/SEMICONDUCTOR COMPLEMENT

(Types and Quantities)

AA-10-STANDARDS AND CALIBRATION EQUIPMENT FOR MEASURING AND TESTERS

INPUT POWER CHARACTERISTICS

Voltage	Power Consumption
Frequency	Mechanical/Pneumatic/Hydraulic
Phase	Input Requirements

OUTPUT AND OPERATIONAL CHARACTERISTICS

Input Rating (Capacity)	Inductance Range
Input Impedance	Output Type
Sensitivity	Output Impedance
Selectivity	Output Modulation
Accuracy	Output Voltage
Type of Indicator	Output Power
Meter Type	Output Signals
Meter Movement	Type of Auxiliary/Supplementary
Internal Reference Type	Output
Means for Calibration	Equipment Supplied
Drift	Environmental Limitations
Temperature Coefficient	Voltage Range

MIL-STD-864

Current Range
Power Range
Resistance Range
Capacitance Range

TUBE/SEMICONDUCTOR COMPLEMENT

(Types and Quantities)

AA-11-ACTIVE DEVICES FOR TEST PURPOSES

INPUT POWER CHARACTERISTICS

Voltage	Power Consumption
Frequency	Mechanical/Pneumatic/Hydraulic
Phase	Power Requirements

OUTPUT AND OPERATIONAL CHARACTERISTICS

Input Rating (Capacity)	Channel Separation
Input Impedance	Mixing Ratio
Regulation	Type of Indicator
Attenuation	Meter Type
Insertion Loss	Meter Movement
Gain/Amplification	Means for Calibration
Resistance	Voltage Range
VSWR	Current Range
Duty Cycle	Resistance Range
Breakdown Voltage	Capacitance Range
Transducer Type	Inductance Range
Means of Coupling	Delay Period
Sensitivity	Output Type
Selectivity	Output Impedance
Accuracy	Output Voltage
Frequency Range and Response	Output Power
Bandwidth	Equipment Supplied
Number of Channels	Environmental Limitations

TUBE/SEMICONDUCTOR COMPLEMENT

(Types and Quantities)

AA-12-PASSIVE DEVICES FOR TEST PURPOSES

OUTPUT AND OPERATIONAL CHARACTERISTICS

Input Rating (Capacity)	Number of Channels
Input Impedance	Channel Separation
Regulation	Mixing Ratio
Attenuation	Type of Indicator
Insertion Loss	Meter Type
Resistance	Meter Movement
VSWR	Means for Calibration
Duty Cycle	Voltage Range
Breakdown Voltage	Current Range

MIL-STD-864

Means of Coupling	Resistance Range
Sensitivity	Capacitance Range
Selectivity	Inductance Range
Accuracy	Delay Period
Frequency Range and Response	Output Type
Bandwidth	Output Impedance
Environmental Limitations	Output Voltage
	Equipment Supplied

BB-1-SIGNAL GENERATING

INPUT POWER CHARACTERISTICS

Voltage
Frequency
Phase
Power Consumption

OUTPUT AND OPERATIONAL CHARACTERISTICS

Frequency Range	Modulation Frequency
Frequency Stability	Modulation Amplitude
Pulse Repetition Frequency	Synchronization Input
Pulse Rise Time	Synchronization Output
Pulse Decay Time	Provisions for External Modulation
Pulse Duration	Trigger Input Required
Pulse Amplitude	Trigger Output
Pulse Spacing	Marker Frequency
Number of Pulses Generated per Cycle	Marker Amplitude
Output Type	VSWR
Output Waveform	Electrical Leakage
Output Voltage	Distortion: (Type and Amplitude)
Output Current	Harmonic Output
Output Power	Hum Output
Output Amplitude Stability	Equipment Supplied
Output Impedance	Environmental Limitations
Modulation Type	

TUBE/SEMICONDUCTOR COMPLEMENT

(Types and Quantities)

BB-2-ELECTRICAL POWER SUPPLYING, GENERATING, STORING, AND CONVERTING

INPUT POWER CHARACTERISTICS

Power Source (Type)	Power Consumption
Power-Source Rating	Power-Coupling Method
Voltage	Mechanical/Pneumatic/Hydraulic
Frequency	Input Requirements
Phase	Fuel Type
	Fuel-Tank Capacity

MIL-STD-864

OUTPUT AND OPERATIONAL CHARACTERISTICS

Output Voltage	Output Voltage Regulation
Output Frequency	Output Frequency Regulation
Output Phase	Ripple Voltage
Output Power	Output Harmonic Content
Metering Provided	Duty Cycle
Chart Data	Power Factor
Shelf Life	Efficiency
Rated Ambient Temperature	Temperature Rise
Transient Recovery	Vehicle Type
Phase Balance	Pintle Height
Permissible Overload	Lunette Height
Engine Type	Number and Size of Wheels
Rated Speed	Tire Size and Type
Speed Regulation	Road Clearance
Buss System Type	Wheel Base and Tread
Output Circuits	Turning Radius
Output Connections	Braking System Type
Frame Type	Light System Type
Protective Devices and Features	Equipment Supplied
Transportation Data	Environmental Conditions

TUBE/SEMICONDUCTOR COMPLEMENT

(Types and Quantities)

BB-3 - MECHANICAL, HYDRAULIC, PNEUMATIC, AND VACUUM POWER SUPPLYING, STORING,
AND CONVERTING

INPUT CHARACTERISTICS

Power Source (Type)	Power Coupling Method
Power Source Rating	Input Pressure Required
Voltage	Input Volume Required
Frequency	Fuel Type
Phase	Fuel-Tank Capacity
Power Consumption	

OUTPUT AND OPERATIONAL CHARACTERISTICS

Discharge Pressure	System Filter Size
Discharge Volume	Protective Devices and Features
Discharge Temperature	Transportation Data
Storage Volume	Vehicle Type
Storage Pressure	Pintle Height
Loss During Storage	Lunette Height
Output Connections	Number and Size of Wheels
Motor Data	Tire Size and Type
Turbine Data	Transportation Data
Compressor Data	Road Clearance
Pump Data	Wheel Base and Tread
Output Regulation	Turning Radius
Duty Cycle	Braking System Type

MIL-STD-864

Permissible Overload
 Operating RPM
 Back Pressure
 Lubricant Type
 Lubricant Capacity
 System Filter Type

Lighting System Type
 Equipment Supplied
 Environment Limitations

CC-1-COMMUNICATING (EXCLUDES HEADSETS, LOUDSPEAKERS, ETC.)

INPUT POWER CHARACTERISTICS

Voltage
 Frequency
 Phase
 Power Consumption

OUTPUT AND OPERATIONAL CHARACTERISTICS

Frequency Range and Response	Method of Frequency Control
Power Output	Type and Range of Indicators
Type of Signal	Output Impedance
Type of Modulation	Power Output
Output Stability	Duty Output
Number of Stations	System Protection
Number of Channels	Equipment Supplied
Range of Communication	Environmental Limitations
Regulation Type	

TUBE/SEMICONDUCTOR COMPLEMENT

(Types and Quantities)

CC-2-SIGNALING

INPUT POWER CHARACTERISTICS

Voltage	Power Consumption
Frequency	Mechanical/Pneumatic/Hydraulic
Phase	Input Requirements

OUTPUT AND OPERATIONAL CHARACTERISTICS

Type of Illumination	Type of Light and Base
Repetition Rate	Fuel Type
Type of Coding	Fuel Tank Capacity
Luminous Rating	Regulation Type
Signal Duration	Power Output
Spectrum Range	Range of Rotation
Type of Detection	Elevation Range
Range of Detection	Duty Cycle
Beam Spread	System Protection
Type of Pyrotechnic	Maximum Storage Period
Type of Indicators	Safety Features
Size of Indicators	Equipment Supplied
Number of Lights	Environmental Limitations

MIL-STD-864

TUBE/SEMICONDUCTOR COMPLEMENT

(Types and Quantities)

INPUT POWER CHARACTERISTICS

Voltage
Frequency
Phase
Power Consumption

OUTPUT AND OPERATIONAL CHARACTERISTICS

Type of Illumination	Type of Light and Base
Luminous Rating	Fuel Type
Range of Visibility	Fuel Tank Capacity
Beam Spread	Duty Cycle
Range of Rotation	System Protection
Elevation Range	Safety Features
Filter Type	Equipment Supplied
Filter Color	Environmental Limitations
Lens Data	
Number of Lights	

TUBE/SEMICONDUCTOR COMPLEMENT

(Types and Quantities)

DD-1-ENGINE CHECKOUT AND TESTING

INPUT POWER CHARACTERISTICS

Voltage	Power Consumption
Frequency	Mechanical/Pneumatic/Hydraulic
Phase	Input Requirements

OUTPUT AND OPERATIONAL CHARACTERISTICS

Compression Range	Ignition Requirements
Manifold Pressure Range	Type of Carburetion
Operating Temperature	Meter, Chart, or Scope Data
Vacuum Range	Sensitivity
Dwell-Time Range	Stability
Fuel-Pressure Range	Brake Horsepower
Combustion Efficiency Range	System Protection
Operating Voltages	Safety Features
Regulation: (Manual or Automatic)	Equipment Supplied
Coolant Pressure	Environmental Limitations
Lubricant Pressure	

TUBE/SEMICONDUCTOR COMPLEMENT

(Types and Quantities)

MIL-STD-864

DD-2-MISSILE SYSTEM CHECKOUT AND TESTING

INPUT POWER CHARACTERISTICS

Voltage	Power Consumption
Frequency	Mechanical/Pneumatic/Hydraulic
Phase	Input Requirements

OUTPUT AND OPERATIONAL CHARACTERISTICS

Operating Frequency Range and Response	
Receiving System	Type of Indication
Transmitting System	Data Indicated
Type of Fuel	Data Recorded
Operating Pressure	Chart Data
Operating Temperature	Meter Data
Operating RPM	Sequence of Events Timer Data
Operating Voltage	Frequency-Indication Range
Discharge Volume	Voltage Range
Hydraulic Pressure	Current Range
Vacuum Range	Power Range
Time Intervals	Static Firing Position
Regulation: (Manual or Automatic)	Sensitivity
Type of Actuation	Stability
Combustion Efficiency	Selectivity
Elevation Range	Malfunction Provisions
Type of Separator Mechanism	Standby Provisions
Type of Antibacklash Provisions	System Protection
Number of Reception Channels	Safety Features
Number of Transmission Channels	Equipment Supplied
Type of Programming	Environmental Limitations
Discharge Pressure	

TUBE/SEMICONDUCTOR COMPLEMENT

(Types and Quantities)

EE-1-GAS STORAGE, PROCESSING, SUPPLYING, AND SHIPPING

INPUT POWER CHARACTERISTICS

Voltage	Mechanical/Pneumatic/Hydraulic
Frequency	Input Requirements
Phase	Fuel Type
Power Consumption	Fuel Tank Capacity

OUTPUT AND OPERATIONAL CHARACTERISTICS

Type of Input	Method of Venting
Number and Type of Cylinders or Sections	
Volume of Cylinders or Sections	Tie-Down Provisions
Vacuum Range	Lifting Provisions
Discharge Pressure	Transportation Data
Discharge Volume	Vehicle Type
Operating RPM	Pintle Height

MIL-STD-864

Operating Temperature Range	Lunette Height
Method of Filtration	Number and Size of Wheels
Method and Degree of Purification	Tire Size and Type
Back Pressure	Road Clearance
Type of Snubber	Wheel Base and Tread
Regulation Type (Manual/Automatic)	Turning Radius
Duty Cycle	Braking System Type
Method of Filling	Lighting System Type
Method of Purging	Safety Features and Devices
Method of Sealing	Equipment Supplied
	Environmental Limitations

EE-2-LIQUID STORAGE, PROCESSING, SUPPLYING, AND SHIPPING

INPUT POWER CHARACTERISTICS

Voltage	Mechanical/Pneumatic/Hydraulic
Frequency	Input Requirements
Phase	Fuel Type
Power Consumption	Fuel-Tank Capacity

OUTPUT AND OPERATIONAL CHARACTERISTICS

Number and Type of Tanks/Compartments	Types and Ranges of Indicators
Volume of Tanks/Compartments	Tie-Down Provisions
Discharge Pressure	Lifting Provisions
Discharge Volume	Transportation Data
Operating RPM	Vehicle Type
Operating Temperature Range	Pintle Height
Method of Filtration	Lunette Height
Method and Degree of Purification	Number and Size of Wheels
Back Pressure	Tire Size and Type
Type of Snubber	Road Clearance
Regulation Type (Manual/Automatic)	Wheel Base and Tread
Duty Cycle	Turning Radius
Method of Filling	Braking System Type
Method of Purging	Lighting System Type
Method of Sealing	Safety Features and Devices
Method of Venting	Equipment Supplied
	Environmental Limitations

FF-1-SHELTERS AND CHAMBERS

Configuration	Platform Required
Method of Assembly	Door Locations: (Internal)
Assembly Time: Man-Hours	Exit Locations
Capacity	Compartmentation Data
Floor Space: square feet	Facilities
Total Area: cubic feet	Heating Data
Personnel: (number)	Ventilation Data
Safe-Load Factor	Illumination Data
Life Expectancy	Electrical Outlet Data
Safety Features	Communications Circuits

MIL-STD-864

Foundation Data	Supplementary Characteristics
Type of Foundation	Tie-Down Provisions
Material Used	Leveling Provisions
Method of Construction	Height-Adjusting Mechanism Data
Fabrication Data	Head Clearance
Type of Design	Equipment Clearance
Material Used	Loading and Unloading Facilities
Material Requirements	Means of Transportation
Method of Construction	External Connection Data
Framing Required	Equipment Supplied
Number and Size of Doors	Environmental Limitations
Layout	
Number of Levels	

FF-2-PROTECTIVE DEFLECTORS, SHIELDS, SCREENS, COATINGS, COVERINGS, AND CLOTHING

Method of Application	Countermeasures Used Against
Operational Use	Hazards Involved
Safety Features	Hazard Data
Design Data	Type of Hazards Encountered
Type of Design	Maximum Protection Against
Material Used	Minimum Protection Against
Material Limitations	Life Expectancy
	Equipment Supplied
	Environmental Limitations

FF-3-CARGO AND MATERIEL STORING AND SHIPPING CASES, CONTAINERS, AND SUPPORTS

Operational Use	Type of Design
Safety Features and Devices	Materiel Used
Storage Data	Materiel Limitations
Floor Area Required: (square feet)	
Stacking Method	Sealing Method
Handling Method	Reusable Qualities
Warehouse Equipment Required	Life Expectance
Design Data	Equipment Supplied
	Environmental Limitations

FF-4-SPECIAL-PURPOSE AND MULTIPURPOSE PROTECTIVE DEVICES

Operational Use	Type of Hazards Encountered
Safety Features and Devices	Maximum Protection Against
Design Data	Minimum Protection Against
Type of Design	Life Expectancy
Materiel Used	Equipment Supplied
Materiel Limitations	Environmental Limitations
Sealing Method	Power Requirements
Reusable Qualities	Voltage
Countermeasure Used Against Hazards	Involved
Storage Data	Frequency
Floor Area Required	Phase
Stacking Method	Power Consumption
Handling Method	Mechanical/Pneumatic Input

MIL-STD-864

Warehouse Equipment Required
Hazard Data

GG-1-GENERAL MECHANICAL CLEANING, DEGREASING, AND DESCALING

INPUT POWER CHARACTERISTICS

Voltage	Power Consumption
Frequency	Mechanical/Pneumatic/Hydraulic
Phase	Input Requirements

OUTPUT AND OPERATIONAL CHARACTERISTICS

Type of Cleaning Agent	Vehicle Type
Type of Foreign Substance Removed	Pintle Height
Method of Application	Lunette Height
Type of Container	Number and Size of Wheels
Tank Capacity	Tire Size and Type
Maximum Size of Item Cleaned	Road Clearance
Operating Temperature	Wheel Base and Tread
Type of Regulation: (Manual/Automatic)	
Duty Cycle	Turning Radius
Operating Pressure	Braking System Type
Method of Filling Tank	Lighting System Type
Pump Capacity	Type of Purifier
Pump Discharge Pressure	Type of Preservative
Pump RPM	Method of Winterization
Number and Type of External Connections	
Transportation Data	Type of Nozzles
	Equipment Supplied
	Environmental Limitations

GG-2-DE-ICING AND DECONTAMINATING

INPUT POWER CHARACTERISTICS

Voltage	Power Consumption
Frequency	Mechanical/Pneumatic/Hydraulic
Phase	Input Requirements

OUTPUT AND OPERATIONAL CHARACTERISTICS

Type of Foreign Substance Removed	System Protection
Type of Removal Agent	Safety Features
Method of Application	Transportation Data
Maximum Size of Item Cleaned	Vehicle Type
Type of Container	Pintle Height
Tank Capacity	Lunette Height
Operating Temperature	Number and Size of Wheels
Operating Pressure	Tire Size and Type
Method of Distribution	Road Clearance
Method of Purging	Wheel Base and Tread
Type of Metering Device	Turning Radius
Type of Timing Device	Braking System Type
Type of Flushing Agent	Lighting System Type

MIL-STD-864

Method of Purification	Tie-Down Provisions
Degree of Purification	Equipment Supplied
Regulation: (Manual/Automatic)	Environmental Limitations

GG-3-ROAD AND RUNWAY CLEANING AND REPAIRING

INPUT POWER CHARACTERISTICS

Voltage	Power Consumption
Frequency	Mechanical/Pneumatic/Hydraulic
Phase	Input Requirements

OUTPUT AND OPERATIONAL CHARACTERISTICS

Substance To Be Removed	Flow Width
Type of Removal Agent	Transportation Data
Method of Application	Vehicle Type
Type of/Container	Pintle Height
Capacity	Lunette Height
Type of Fan	Number and Size of Wheels
Operating Pressure	Tire Size and Type
Regulation (Manual/Automatic)	Road Clearance
Method of Winterization	Wheel Base and Tread
Number and Type of External Connections	
Type of Pump	Turning Radius
Pump Capacity	Braking System Type
Power Plants	Lighting System Type
Number and Type of Tie-Downs	Equipment Supplied
Sweeper Wheel Base	Environmental Limitations

GG-4-LUBRICATING

INPUT POWER CHARACTERISTICS

Voltage	Power Consumption
Frequency	Mechanical/Pneumatic/Hydraulic
Phase	Input Requirements

OUTPUT AND OPERATIONAL CHARACTERISTICS

Type of Pump	No. & Type of External Connections
Operating RPM	No. & Type of Pressure-Relief Devices
Pump Capacity:	Type and Size of Filler Opening
Minimum	Method of Filling
Maximum	No. & Type of Tie-Downs
Discharge Pressure	Servicing Range (Distance)
Type of Lubricant	Method of Purging
Type of Reservoir	Method of Winterization
Reservoir Capacity	Transportation Data
Method of Draining Reservoir	Vehicle Type
No. and Type of Filters	Pintle Height
Type and Range of Indicator	Transportation Data
Type of Surge Arrestor	Lunette Height
Method of Water & Oil Separation	No. and Size of Wheels
Method of Water Disposal	Tire Size and Type

MIL-STD-864

Method of Venting	Road Clearance
Operating Temperature	Wheel Base and Tread
Purity Control	Turning Radius
Type of Regulation (Manual or Automatic)	Braking System Type
Duty Cycle	Lighting System Type

GG-5-WHEEL, TIRE, AND MECHANICAL SYSTEM SERVICING

INPUT POWER CHARACTERISTICS

Voltage	Mechanical/Pneumatic/Hydraulic
Frequency	Input Requirements
Phase	Fuel-Tank Capacity
Power Consumption	Fuel Type

OUTPUT AND OPERATIONAL CHARACTERISTICS

Operational Use	Output Regulation
Method of Preparation	Leak-Detection Method
Method of Application	Maximum Permissible Leakage
Method of Operation	Regulation Type: (Manual or Automatic)
Type of Output	Indicator Type
Capacity	Indicator Range
Discharge Volume	Operating RPM
Discharge Pressure	Duty Cycle
Temperature-Control Range	Types of Holding Fixtures Used
Number & Type of External Connections	Transportation Data
Hose or Ducting: (Size and Length)	Vehicle Type
Reservoir Volume	Pintle Height
Type of Fluid Used	Lunette Height
Filter Type	Number and Size of Wheels
Filter Size	Tire Size and Type
Filler Opening (Type & Size)	Road Clearance
Type of Flushing Agent Used	Wheel Base and Tread
Flushing Agent Specification	Turning Radius
Purging Method	Braking System Type
Bonding Pressure Required	Lighting System Type
Dust-Collection Method	Safety Features and Devices
Type of Brake System Serviced	Equipment Supplied
Type of Wheels Serviced	Environmental Limitations
Type of Tires Serviced	

GG-6-SPECIAL-PURPOSE AND MULTIPURPOSE SERVICING

INPUT POWER CHARACTERISTICS

Voltage	Power Consumption
Frequency	Mechanical/Pneumatic/Hydraulic
Phase	Power Requirement

MIL-STD-864

OUTPUT AND OPERATIONAL CHARACTERISTICS

Type of Agent Removed	Method of Flushing
Type of Agent Replenished	Method of Removal
Discharge Volume	Metering Devices
Discharge Pressure	Timing Devices
Type and Range of Detection	Duty Cycle
Type and Range of Indication	Safety Features and Devices
Regulation Type (Manual or Automatic)	Transportation Data
Regulation (Amount)	Vehicle Type
Sensitivity	Pintle Height
Selectivity	Lunette Height
Operating Temperature Range	Number and Size of Wheels
Operating RPM	Tire Size and Type
Rated Capacity	Road Clearance
Method of Application	Wheel Base and Tread
Method of Distribution	Turning Radius
Method of Filtration	Transportation Data
Method of Venting	Braking System Type
Method of Draining	Lighting System Type
Method of Purging	Equipment Supplied
	Environmental Limitations

GG-7-MAINTENANCE PLATFORMS, STANDS, SUPPORTS, AND ACCESSORIES

INPUT POWER CHARACTERISTICS

Voltage	Power Consumption
Frequency	Mechanical/Pneumatic/Hydraulic
Phase	Input Requirements

OUTPUT AND OPERATIONAL CHARACTERISTICS

Operational Use	Towing Equipment Required
Method of Operation	Materiel Protective Devices
Assembly Method	Equipment Protective Devices
Assembly Time	Personnel Protective Devices
Design Data	Tool/Equipment Resting Features
Type of Design	Transportation Data
Materiel Used	Vehicle Type
Materiel Requirements	Pintle Height
Frame Requirements	Lunette Height
Configuration	Number and Size of Wheels
Capacity (Personnel/Equipment)	Tire Size and Type
Number of Platforms	Transportation Data
Platform Materiel	Road Clearance
Work Area	Wheel Base and Tread
Head Clearance	Turning Radius
Height-Adjusting Mechanism	Braking System Type
Locking Devices Used	Lighting System Type
Tie-Down Provisions	Input Connections
Resting Surface/Foundation Requirements	Output Connections
Storage Requirements	Safety Features
	Life Expectancy
	Environmental Limitations

MIL-STD-864

HH-1-HOISTING, JACKING, LIFTING, TOWING, AND POSITIONING

INPUT POWER CHARACTERISTICS

Voltage	Power-Source Type
Frequency	Power-Source Rating
Phase	Method of Coupling
Power Consumption	Fuel Type
Mechanical/Pneumatic/Hydraulic Requirements	Fuel-Tank Capacity

OUTPUT AND OPERATIONAL CHARACTERISTICS

Rated Capacity	Lunette Height
Maximum Radius	No. and Size of Wheels
Minimum Radius	No. and Size of Driving Wheels
Maximum Permissible Overload	Tire Type and Size
Maximum Overload Period	Road Clearance
Boom Type	Wheel Base and Tread
Maximum Boom Elevation	Turning Radius
Minimum Boom Elevation	Braking System Type
Boom Regulation Type: (Manual or Automatic)	
Rotation Range	Steering Type
Erection Capability	Suspension Type
Length of Trolley Movement	Maximum Speed
Type of Control	Maximum Towing Speed
Electrical System Type	Type of Lift Assembly
Electrical System Function	Lifting Arrangement
Transportation Data	Body Type
Prime Mover Type	No. and Type of Tie-Downs
Pintle Height	Protective Devices and Safety Equipment
	Configurations Available
	Equipment Supplied
	Environmental Limitations

HH-2-TRANSPORTING OF EQUIPMENT AND SOLID MATERIAL

INPUT POWER CHARACTERISTICS

Voltage	Power Consumption
Frequency	Mechanical/Pneumatic/Hydraulic
Phase	Input Requirements
	Fuel Type
	Fuel-Tank Capacity

OUTPUT AND OPERATIONAL CHARACTERISTICS

Rated Capacity	Wheel Base and Tread
Maximum Permissible Overload	Turning Radius
Maximum Overload Period	Braking System Type
Loading Area	Steering Type
Type of Control	Suspension Type
Electrical System Type	Maximum Speed

MIL-STD-864

Electrical System Function	Maximum Towing Speed
Transportability (Self-Propelled or Towed)	
Prime Mover Type	Type of Lift Assembly
Pintle Height	Lifting Arrangement
Lunette Height	Mechanism Type
No. and Size of Wheels	Body Type
No. and Size of Driving Wheels	No. and Type of Tie-Downs
Tire Type and Size	Protective Devices and Safety Equip-
Angle of Approach	ment
Road Clearance	Configurations Available
	Equipment Supplied
	Environmental Limitations

HH-3-LAUNCHING

INPUT POWER CHARACTERISTICS

Voltage	Power-Source Type
Frequency	Power-Source Rating
Phase	Method of Coupling
Power Consumption	Fuel Type
Mechanical/Pneumatic/Hydraulic Requirements	Fuel-Tank Capacity

OUTPUT AND OPERATIONAL CHARACTERISTICS

Mechanism Type	Type and Range of Indication
Method of Operation	Accuracy of Indication
Method of Replenishing	Protective Devices and Safety Equip-
Regulation Type and Rating	ment
Discharge Volume	Average Assembly Time
Discharge Pressure	Leveling Devices
Thrust	External Connections Required
Launch Velocity	/Equipment Supplied
Capacity	Associated Equipment
	Environmental Limitations

HH-4-ARRESTING, PARKING, AND SECURING

INPUT POWER CHARACTERISTICS

Voltage	Power Consumption
Frequency	Pneumatic/Mechanical/Hydraulic
Phase	Input Characteristic

OUTPUT AND OPERATIONAL CHARACTERISTICS

Capacity	Maximum Storage Period
Method of Preparation	Mechanism Type
Method of Application	Type of Material
Method of Operation	Average Assembly Time
Regulation Type	Equipment Supplied
Safety Features	Environmental Limitations

MIL-STD-864

HH-5-SPECIAL-PURPOSE AND MULTIPURPOSE HANDLING AND MOVING

INPUT POWER CHARACTERISTICS

Voltage	Power-Source Type
Frequency	Power-Source Rating
Phase	Method of Coupling
Power Consumption	Fuel Type
Mechanical/Pneumatic/Hydraulic Requirements	Fuel Tank Capacity

OUTPUT AND OPERATIONAL CHARACTERISTICS

Rated Capacity	Transportation Data
Maximum Radius	Suspension Type
Minimum Radius	Maximum Speed
Loading Area	Maximum Towing Speed
Type of Control	Mechanism Type
Electrical System Type	Method of Replenishing
Electrical System Function	Regulation Type and Rating
Maximum Permissible Overload	Discharge Volume
Maximum Overload Period	Discharge Pressure
Boom Type	Thrust
Maximum Boom Elevation	Launch Velocity
Minimum Boom Elevation	Type and Range of Indication
Boom Regulation Type (Manual or Automatic)	Type of Lift Assembly
Rotation Range	Lifting Arrangement
Erection Capability	
Transportability: (Self-Propelled or Towed)	
Transportation Data	Body Type
Prime Mover Type	Number and Type of Tie-Downs
Pintle Height	Protective Devices and Safety Equipment
Lunette Height	
Number and Size of Wheels	Configurations Available
Number and Size of Driving Wheels	Method of Preparation
Tire Type and Size	Method of Application
Angle of Approach	Method of Operation
Road Clearance	Maximum Storage Period
Wheel Base and Tread	Mechanism Type
Turning Radius	Type of Material
Braking System Type	Average Assembly Time
Steering Type	Leveling Devices
	Equipment Supplied
	Associated Equipment
	Environmental Limitations

JJ-1-HEATING

INPUT POWER CHARACTERISTICS

Voltage	Power-Source Type
Frequency	Power-Source Rating
Phase	Method of Coupling
Power Consumption	Fuel-Type

MIL-STD-864

Mechanical/Pneumatic/Hydraulic
Input Requirements

Fuel-Tank Capacity

OUTPUT AND OPERATIONAL CHARACTERISTICS

Output Temperature Range
 Temperature-Control Accuracy
 Rated Discharge Volume
 Rated Discharge Pressure
 Means for Air Distribution
 Means for Air Purification
 Input Connections
 Operating RPM
 Type of Control
 Duty Cycle
 Noise Level
 Installation/Mounting Provisions
 Tie-Down Provisions

Heater Type
 Heater Rating
 Towing Provisions
 Maximum Towing Speed
 Transporting Vehicle
 Number and Size of Wheels
 Tire Type and Size
 Braking System Type
 Lighting System Type
 Body Type
 Protective Devices and Safety Equip-
 ment
 Equipment Supplied
 Environmental Limitations

JJ-2-AIR COOLING AND AIR CONDITIONING

INPUT POWER CHARACTERISTICS

Voltage
 Frequency
 Phase
 Power Consumption

Mechanical/Pneumatic/Hydraulic
 Input Requirements
 Power Source Type
 Power Source Rating
 Method of Coupling

OUTPUT AND OPERATIONAL CHARACTERISTICS

Output Temperature Range
 Temperature-Control Accuracy
 Cooling Capacity
 Refrigerant Type
 Refrigerant Capacity
 Type of Coolant
 Coolant Connections
 Means of Regulation
 Dehumidifier Type
 Output Relative Humidity
 Heat Exchanger Type
 Rated Discharge Volume
 Rated Discharge Pressure
 Means for Air Distribution
 Means for Air Purification
 Input Connections

Operating RPM
 Type of Control
 Duty Cycle
 Noise Level
 Installation/Mounting Provisions
 Tie-Down Provisions
 Towing Provisions
 Maximum Towing Speed
 Transporting Vehicle
 Number and Size of Wheels
 Tire Type and Size
 Braking System Type
 Lighting System Type
 Body Type
 Protective Devices and Safety Equip-
 ment
 Equipment Supplied
 Environmental Limitations

MIL-STD-864

JJ-3-VENTILATING AND AIR CIRCULATING

INPUT POWER CHARACTERISTICS

Voltage	Mechanical/Pneumatic/Hydraulic
Frequency	Input Requirements
Phase	Power-Source Type
Power Consumption	Power-Source Rating
	Method of Coupling

OUTPUT AND OPERATIONAL CHARACTERISTICS

Rated Discharge Volume	Towing Provisions
Rated Discharge Pressure	Maximum Towing Speed
Means for Air Distribution	Transporting Vehicle
Means for Air Purification	Number and Size of Wheels
Input Connections	Tire Type and Size
Operating RPM	Braking System Type
Type of Control	Lighting System Type
Duty Cycle	Body Type
Noise Level	Protective Devices and Safety Equip-
Installation/Mounting Provisions	ment
Tie-Down Provisions	Environmental Limitations

JJ-4-HUMIDITY CONTROLLING

INPUT POWER CHARACTERISTICS

Voltage	Mechanical/Pneumatic/Hydraulic
Frequency	Input Requirements
Phase	Power-Source Type
Power Consumption	Power-Source Rating
	Method of Coupling

OUTPUT AND OPERATIONAL CHARACTERISTICS

Maximum Volume of Controlled Area	Rated Discharge Volume
Relative-Humidity Range	Rated Discharge Pressure
Output Relative Humidity	Means for Air Distribution
Humidifier Type	Input Connections
Water-Supply Connections	Drain Connections
Dehumidifier Type	Operating RPM
Absorption/Adsorption Range	Type of Control
Recharging Time	Duty Cycle
Condensed-Water Capacity	Noise Level
Humidity-Control Accuracy	Installation/Mounting Provisions
Means for Air Purification	Tie-Down Provisions
Towing Provisions	Maximum Towing Speed
Transporting Vehicle	Number and Size of Wheels
Tire Type and Size	Braking System Type
Body Type	Protective Devices and Safety Equip-
Equipment Supplied	ment
Environmental Limitations	

MIL-STD-864

JJ-5-REFRIGERATING

INPUT POWER CHARACTERISTICS

Voltage	Mechanical/Pneumatic/Hydraulic
Frequency	Input Requirements
Phase	Power-Source Type
Power Consumption	Power-Source Rating
	Method of Coupling

OUTPUT AND OPERATIONAL CHARACTERISTICS

Output Temperature Range	Operating RPM
Temperature-Control Accuracy	Type of Control
Cooling Capacity	Duty Cycle
Refrigerant Type	Noise Level
Refrigerant Capacity	Installation/Mounting Provisions
Type of Coolant	Tie-Down Provisions
Coolant Connections	Towing Provisions
Means of Regulation	Maximum Towing Speed
Dehumidifier Type	Transporting Vehicle
Output Relative Humidity	Number and Size of Wheels
Heat Exchanger Type	Tire Type and Size
Rated Discharge Volume	Braking System Type
Rated Discharge Pressure	Lighting System Type
Means for Air Distribution	Body Type
Means for Air Purification	Protective Devices and Safety Equip-
Input Connections	ment.
	Equipment Supplied
	Environmental Limitations

JJ-6-MULTIPURPOSE HEATING, COOLING, VENTILATING, AND HUMIDITY-CONTROL EQUIPMENT

INPUT POWER CHARACTERISTICS

Voltage	Mechanical/Pneumatic/Hydraulic
Frequency	Input Requirements
Phase	Power-Source Type
Power Consumption	Power-Source Rating
	Method of Coupling

OUTPUT AND OPERATIONAL CHARACTERISTICS

Output Temperature Range	Output Relative Humidity
Temperature-Control Accuracy	Heat Exchanger Type
Heater Type	Relative-Humidity Range
Heater Rating	Output Relative Humidity
Cooling Capacity	Humidifier Type
Refrigerant Type	Water Supply Connections
Type of Coolant	Dehumidifier Type
Coolant Connections	Absorption/Adsorption Range
Means for Air Purification	Recharging Time
Means of Regulation	Condensed-Water Capacity
Refrigerant Capacity	Humidity-Control Accuracy

MIL-STD-864

Dehumidifier Type	Rated Discharge Volume
Rated Discharge Pressure	Towing Provisions
Means for Air Distribution	Maximum Towing Speed
Input Connections	Transporting Vehicle
Drain Connections	Number and Size of Wheels
Operating RPM	Tire Type and Size
Type of Control	Braking System Type
Duty Cycle	Lighting System Type
Noise Level	Body Type
Installation/Mounting Provisions	Protective Devices and Safety Equip-
Tie-Down Provisions	ment
	Equipment Supplied
	Environmental Limitations

KK-1-FIRE-FIGHTING, CRASH AND RESCUE EQUIPMENT

Operational Use	Angle of Departure
Method of Preparation	Pumping Plant Data
Method of Application	Type of Pump
Safety Features of Equipment	Pump Controls
Propulsion Data	Discharge Volume
Truck Power Plant Data	Discharge Pressure
Transmission Features	Rated Capacity
Number and Size of Wheels	Maximum Operating Time
Number and Size of Driving Wheels	Hydraulic System Data
Size and Type of Tires	Type of Hydraulic System
Type of Braking System	Hydraulic System Limitations
Type of Steering Mechanism	Hydraulic System Data
Chassis Data	Hydraulic System Controls
Suspension Data	Discharge Equipment
Wheel Base and Tread	Type of Equipment
Truck Equipment Data	Location
Cab Data	Discharge Pressure at Nozzle
Primary Agent Tank Capacity	Discharge Rate at Nozzle
Secondary Agent Tank Capacity	Area Coverage
Tertiary Agent Tank Capacity	Service Range
Fire-Fighting Equipment Power	Safety Features
Plant Data	Use:
Electrical System Data	Preparation for Operational Readiness
Truck Equipment Data	Condition
System Protection Features	Equipment Storage Method
Internal Control Locations and Use	
External Control Locations and Use	
Driving Limitation Data	Equipment Flushing Method
Speed	Equipment Testing Method
Transmission Controls	Extinguishing Agent Data
Turning Radius	Types of Extinguishing Agents Used
Height Clearance	Extinguishing Agent Specification
Road Clearance	Primary Agent Qualification
Angle of Approach	Secondary Agent Qualification
Winterization Kit Data	Environmental Limitations

MIL-STD-864

KK-2-SURVIVAL EQUIPMENT AND DEVICES

Type of Survival Equipment or Device	Equipment Supplied
Use of Survival Equipment	Environmental-Limitations
Installation Preparation Method	Data
Installation Method	Jungle
Emergency Removal/Utilization Method	Arctic
Emergency Checking of Equipment Data	Desert
Equipment Limitations	Afloat

NOTE

Due to the wide range of conditions which are simulated, and to the great number of training methods and techniques which are used, it is not feasible to prepare descriptive patterns for all "LL" categories. Therefore, one pattern has been formulated for use in preparing tabulated technical data for training and/or simulating equipments. This pattern is sufficiently broad in scope to be used for any training and/or simulating equipments, yet is specific enough to ensure adequate technical description of any of these equipments.

LL-TRAINING AND SIMULATING

INPUT POWER CHARACTERISTICS

Voltage	Power Consumption
Frequency	Mechanical/Pneumatic/
Phase	Hydraulic Input Requirements

OUTPUT AND OPERATIONAL CHARACTERISTICS

Training Mission:	Trainee Response to Equipment
Primary	Trainee-Testing Method Data
Secondary	Trainee Response to Command
Personnel Factors	Trainee Response to External Stimuli
Number of Trainees Handled	Scoring-Equipment Data
Maximum	Type of Device
Minimum	Method of Computation/Conversion
Number of Instructors/Operators	Forms or Charts Required
Maximum	Tracking-Equipment Data
Minimum	Type of Device
Trainee Qualifications Required	Method of Operation (Manual, Automatic, etc.)
Instructor/Operator Qualifications Required	
Maintenance Personnel Qualification Required	
Sensory Excitation Method	Use
Visual	Charts or Maps Required
Audio	Computer-Equipment Data
Tactile	Type of Device
Gustatory	Method of Operation (Manual, Automatic, etc.)
Olfactory	
Kinetic	Use
Trainee-Testing Method Data	Forms or Charts Required

MIL-STD-864

Trainee Learning Process	Safety Features
For Trainee	Type of Equipment Simulated
For Instructor/Operator	Name of Equipment Used
Safety Features:	Method of Operation
For Equipment	Use
For Maintenance Personnel	Location
Maintenance Data	Radar Equipment Data
Preventive Maintenance Requirements	
Overhaul Maintenance Requirements	Type of Equipment Simulated
Level of Maintenance-Personnel	Name of Equipment Used
Training	Radar Equipment Data
Test Equipment Required	Method of Operation
Spare Part Availability	Use
Flight Characteristics	Location
Type of Airborne Vehicle Simulated	
Aircraft Attitudes Simulated	Emergency Condition Characteristics
Pre-Flight Characteristics Simulated	
In-Flight Characteristics Simulated	
Post Flight Characteristics Simulated	
Flight-Control Handling Characteristics	
Load Condition Range	Type of Condition Simulated
Speed Condition Range	Method of Application
Power Condition Range	Use
Instrument/Indicator Data	Simulated Environmental-Condition
Name of Instrument	Characteristics
Method of Operation	Type of Environmental-Condition
Use	Method of Application
Location	Use
Navigation Equipment Data	Equipment Supplied
Type(s) of Equipment Simulated	Forms, Reports, Charts, Etc.
Name of Equipment Used	Special Equipments
Method of Operation	Modification Kits
Use	(Other)
Location	Environmental Limitations:
Communication Equipment Data	Housing Requirements
	Temperature Range
	Pressure/Altitude Range
	Humidity Range
	Weather-Protection Requirements
	Mounting Surface Requirements

CUSTODIANS:

AIR FORCE - 26
 ARMY - AV
 NAVY - AS

PREPARING ACTIVITY:

AIR FORCE - 26

REVIEW ACTIVITIES

AIR FORCE - 11

PROJECT NUMBER

MISC-0591

SPECIFICATION ANALYSIS SHEET			Form Approved Budget Bureau No. 119-R004
<p align="center">INSTRUCTIONS</p> <p>This sheet is to be filled out by personnel either Government or contractor, involved in the use of the specification in procurement of products for ultimate use by the Department of Defense. This sheet is provided for obtaining information on the use of this specification which will insure that suitable products can be procured with a minimum amount of delay and at the least cost. Comments and the return of this form will be appreciated. Fold on lines on reverse side, staple in corner, and send to preparing activity.</p>			
SPECIFICATION			
ORGANIZATION		CITY AND STATE	
CONTRACT NO.	QUANTITY OF ITEMS PROCURED	DOLLAR AMOUNT	
<p>MATERIAL PROCURED UNDER A</p> <p><input type="checkbox"/> DIRECT GOVERNMENT CONTRACT <input type="checkbox"/> SUBCONTRACT</p>			
<p>1. HAS ANY PART OF THE SPECIFICATION CREATED PROBLEMS OR REQUIRED INTERPRETATION IN PROCUREMENT USE?</p> <p>A. GIVE PARAGRAPH NUMBER AND WORDING</p>			
<p>B. RECOMMENDATIONS FOR CORRECTING THE DEFICIENCIES</p>			
2. COMMENTS ON ANY SPECIFICATION REQUIREMENT CONSIDERED TOO RIGID			
<p>3. IS THE SPECIFICATION RESTRICTIVE?</p> <p><input type="checkbox"/> YES <input type="checkbox"/> NO IF "YES" IN WHAT WAY?</p>			
4. REMARKS (Attach any pertinent data which may be of use in improving this specification. If there are additional papers, attach to form and place both in an envelope addressed to preparing activity)			
SUBMITTED BY (Printed or typed name and activity)			DATE