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MILITARY STANDARD

GROUND SUPPORT EQUIPMENT FUNCTIONAL CLASSIFICATION CATEGORIES

FSC MISC

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

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:

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

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

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)

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 Telemetering 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

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

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

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

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, Pheumatic, 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

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

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

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

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

OUTPUT AND OPERATIONAL CHARACTERISTICS

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

TUBE/SEMICONDUCTOR COMPLEMENT

(Types and Quantities)

AA-5-INTENSITY MEASURING

INPUT POWER CHARACTERISTICS

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

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 COUNTING

INPUT 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

TUBE/SEMICONDUCTOR COMPLEMENT

(Types and Quantities)

AA-7-OPTICAL MEASURING, TESTING, AND ALIGNING

INPUT POWER CHARACTERISTICS

Voltage
Frequency
Phase
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 TESTING

INPUT POWER CHARACTERISTICS

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

OUTPUT AND OPERATIONAL CHARACTERISTICS

Input Rating (Capacity)
Indicator Type
Meter Size
Meter Movement
Frequency Range
Pressure Range
Volume Range
Hardness Number Range
Humidity Range
Tension Range
Compression Range
Dimension-Indicating Range
Reflectance Range
Weight Range
Density Range
Specific-Gravity Range
Flow Rate Range
Special Ranges
Work Capacity
Balancing Speed
Vibration Time
Vibration Amplitude
Maximum Test Pressure
Maximum Test Voltage
Sensitivity
Selectivity
Accuracy
Input Impedance
Output Data
Equipment Supplied
Environmental Limitations

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

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

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
Frequency
Phase
Power Consumption
Mechanical/Pneumatic/Hydraulic Power Requirements

OUTPUT AND OPERATIONAL CHARACTERISTICS

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

TUBE/SEMICONDUCTOR COMPLEMENT

(Types and Quantities)

AA-12-PASSIVE DEVICES FOR TEST PURPOSES

OUTPUT AND OPERATIONAL CHARACTERISTICS

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

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

BB-1-SIGNAL GENERATING

INPUT POWER CHARACTERISTICS

Voltage
Frequency
Phase
Power Consumption

OUTPUT AND OPERATIONAL CHARACTERISTICS

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

TUBE/SEMICONDUCTOR COMPLEMENT

(Types and Quantities)

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

INPUT POWER CHARACTERISTICS

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

OUTPUT AND OPERATIONAL CHARACTERISTICS

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

OUTPUT AND OPERATIONAL CHARACTERISTICS

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

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

TUBE/SEMICONDUCTOR COMPLEMENT

(Types and Quantities)

CC-2-SIGNALING

INPUT POWER CHARACTERISTICS

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

OUTPUT AND OPERATIONAL CHARACTERISTICS

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

TUBE/SEMICONDUCTOR COMPLEMENT

(Types and Quantities)

INPUT POWER CHARACTERISTICS

Voltage
Frequency
Phase
Power Consumption

OUTPUT AND OPERATIONAL CHARACTERISTICS

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

TUBE/SEMICONDUCTOR COMPLEMENT

(Types and Quantities)

DD-1-ENGINE CHECKOUT AND TESTING

INPUT POWER CHARACTERISTICS

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

OUTPUT AND OPERATIONAL CHARACTERISTICS

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

TUBE/SEMICONDUCTOR COMPLEMENT

(Types and Quantities)

DD-2-MISSILE SYSTEM CHECKOUT AND TESTING

INPUT POWER CHARACTERISTICS

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

OUTPUT AND OPERATIONAL CHARACTERISTICS

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

TUBE/SEMICONDUCTOR COMPLEMENT

(Types and Quantities)

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

INPUT POWER CHARACTERISTICS

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

OUTPUT AND OPERATIONAL CHARACTERISTICS

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

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

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

INPUT POWER CHARACTERISTICS

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

OUTPUT AND OPERATIONAL CHARACTERISTICS

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

FF-1-SHELTERS AND CHAMBERS

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

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

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

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

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

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

FF-4-SPECIAL-PURPOSE AND MULTIPURPOSE PROTECTIVE DEVICES

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

Warehouse Equipment Required
Hazard Data

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

INPUT POWER CHARACTERISTICS

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

OUTPUT AND OPERATIONAL CHARACTERISTICS

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

GG-2-DE-ICING AND DECONTAMINATING

INPUT POWER CHARACTERISTICS

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

OUTPUT AND OPERATIONAL CHARACTERISTICS

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

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

GG-3-ROAD AND RUNWAY CLEANING AND REPAIRING

INPUT POWER CHARACTERISTICS

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

OUTPUT AND OPERATIONAL CHARACTERISTICS

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

GG-4-LUBRICATING

INPUT POWER CHARACTERISTICS

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

OUTPUT AND OPERATIONAL CHARACTERISTICS

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

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

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

INPUT POWER CHARACTERISTICS

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

OUTPUT AND OPERATIONAL CHARACTERISTICS

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

GG-6-SPECIAL-PURPOSE AND MULTIPURPOSE SERVICING

INPUT POWER CHARACTERISTICS

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

OUTPUT AND OPERATIONAL CHARACTERISTICS

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

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

INPUT POWER CHARACTERISTICS

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

OUTPUT AND OPERATIONAL CHARACTERISTICS

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

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

INPUT POWER CHARACTERISTICS

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

OUTPUT AND OPERATIONAL CHARACTERISTICS

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

HH-2-TRANSPORTING OF EQUIPMENT AND SOLID MATERIAL

INPUT POWER CHARACTERISTICS

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

OUTPUT AND OPERATIONAL CHARACTERISTICS

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

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

HH-3-LAUNCHING

INPUT POWER CHARACTERISTICS

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

OUTPUT AND OPERATIONAL CHARACTERISTICS

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

HH-4-ARRESTING, PARKING, AND SECURING

INPUT POWER CHARACTERISTICS

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

OUTPUT AND OPERATIONAL CHARACTERISTICS

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

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

INPUT POWER CHARACTERISTICS

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

OUTPUT AND OPERATIONAL CHARACTERISTICS

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

JJ-1-HEATING

INPUT POWER CHARACTERISTICS

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

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 Equipment
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 Equipment
Equipment Supplied
Environmental Limitations

JJ-3-VENTILATING AND AIR CIRCULATING

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

- 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 Equipment
- Environmental Limitations

JJ-4-HUMIDITY CONTROLLING

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

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

JJ-5-REFRIGERATING

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 Equipment.
Equipment Supplied
Environmental Limitations

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

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

Dehumidifier Type
Rated Discharge Pressure
Means for Air Distribution
Input Connections
Drain Connections
Operating RPM
Type of Control
Duty Cycle
Noise Level
Installation/Mounting Provisions
Tie-Down Provisions
Rated Discharge Volume
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 Equipment
Equipment Supplied
Environmental Limitations

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

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

KK-2-SURVIVAL EQUIPMENT AND DEVICES

Type of Survival Equipment or Device
Use of Survival Equipment
Installation Preparation Method
Installation Method
Emergency Removal/Utilization Method
Emergency Checking of Equipment Data
Equipment Limitations
Equipment Supplied
Environmental-Limitations Data
Jungle
Artic
Desert
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
Frequency
Phase
Power Consumption
Mechanical/Pneumatic/Hydraulic Input Requirements

OUTPUT AND OPERATIONAL CHARACTERISTICS

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

Trainee Learning Process
For Trainee
For Instructor/Operator
Safety Features:
For Equipment
For Maintenance Personnel
Maintenance Data
Preventive Maintenance Requirements
Overhaul Maintenance Requirements
Level of Maintenance-Personnel Training
Test Equipment Required
Spare Part Availability
Flight Characteristics
Type of Airborne Vehicle Simulated
Aircraft Attitudes Simulated
Pre-Flight Characteristics Simulated
In-Flight Characteristics Simulated
Post Flight Characteristics Simulated
Flight-Control Handling Characteristics
Load Condition Range
Speed Condition Range
Power Condition Range
Instrument/Indicator Data
Name of Instrument
Method of Operation
Use
Location
Navigation Equipment Data
Type(s) of Equipment Similated
Name of Equipment Used
Method of Operation
Use
Location
Communication Equipment Data

Safety Features
Type of Equipment Simulated
Name of Equipment Used
Method of Operation
Use
Location
Radar Equipment Data
Type of Equipment Simulated
Name of Equipment Used
Radar Equipment Data
Method of Operation
Use
Location
Emergency Condition Characteristics
Type of Condition Simulated
Method of Application
Use
Simulated Environmental-Condition Characteristics
Type of Environmental-Condition
Method of Application
Use
Equipment Supplied
Forms, Reports, Charts, Etc.
Special Equipments
Modification Kits
(Other)
Environmental Limitations:
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

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SPECIFICATION ANALYSIS SHEET

Form Approved Budget Bureau No. 119-R004

INSTRUCTIONS

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.

SPECIFICATION

ORGANIZATION	CITY AND STATE

CONTRACT NO.	QUANTITY OF ITEMS PROCURED	DOLLAR AMOUNT
		$

MATERIAL PROCURED UNDER A

☐ DIRECT GOVERNMENT CONTRACT ☐ SUBCONTRACT

1. HAS ANY PART OF THE SPECIFICATION CREATED PROBLEMS OR REQUIRED INTERPRETATION IN PROCUREMENT USE?
   A. GIVE PARAGRAPH NUMBER AND WORDING

   B. RECOMMENDATIONS FOR CORRECTING THE DEFICIENCIES

2. COMMENTS ON ANY SPECIFICATION REQUIREMENT CONSIDERED TOO RIGID

3. IS THE SPECIFICATION RESTRICTIVE?

   ☐ YES ☐ NO IF "YES" IN WHAT WAY?

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

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