



EQUIPMENT NEEDED AT ROBERTS INTERNATIONAL AIRPORT

The following equipments are needed to improve operations at Roberts International Airport. This equipment will allow the level of ramp service and efficiency desired by air carriers seeking to operate flights to and from ROB.

1. General.

(a) Scope of Work

- I. Supply, commission and place into operation equipment and vehicles as specified in Section 4 at Roberts International Airport, Liberia.**
- II. Provide 3 sets of Equipment Operations and Maintenance Manuals for each type of equipment or vehicle as specified in Section 4.**
- III. Provide Spare Parts as specified in Section 2 for each piece of equipment specified in Section 4.**
- IV. Provide On-The Job Training for the operation and maintenance for each type of equipment or vehicle specified in Section 4.**

2. Products

a. General Requirements

- i. Each vehicle and/or equipment will operate in the manner intended by the manufacturer and as specified and described in the manufacturer's equipment/vehicle manual**

b. Spare Parts

- i. As part of this Bid, the bidder shall:**

- 1. Prepare and submit the priced list of spare parts as recommended by the manufacturer, being sufficient to cover a period of three (3) years after commissioned when utilizing a maintenance program in accordance with the manufacturer's suggested routine/preventative maintenance schedule. In the event there is a part covered under warranty, the replacement of part will be required.**

2. Execution

a. Commissioning

- i. Bidder shall arrange for and supervise the pretest, adjustment, and commissioning of the covered passenger air stairs.**

b. Field Quality Control

- i. Supervised Adjustment and Pre-testing**

1. Under supervision of manufacturer's representative, pre-test equipment functions, operations and protective features. Adjust to ensure operation complies with the specifications.

- ii. Inspection**

- 1. The equipment shall be inspected and tested in the presence of the Procurement Committee or designated representative.**

- iii. Demonstration and On-The Job Training**

1. The Bidder shall arrange and pay for the services of manufacturer's representative to demonstrate the equipment and to provide on-the job training.
 - iv. Guarantee
 1. The Bidder shall guarantee the proper performance of the equipment and all components for a period of one (1) year. Any component used from the spare parts in storage with the Airport Authority during this period will be replaced immediately free of charge.
- c. On-The Job Training
 - i. The bidder shall submit to the Procurement Committee fourteen (14) days in advance a proposed training program and time schedule for demonstration and training for the equipment's operation to relevant personnel.
 - ii. The Training Program shall also include comprehensive instruction to personnel of the Airport Authorities GEMD & Aircraft Handling Division for adjustment and routine preventative maintenance of the equipment.
 - iii. The bidder shall coordinate with the Procurement Committee as to the number of personnel who will participate in the program.
 - iv. On-The Job Training will only take place when the Operations and Maintenance Manuals have been approved and submitted to the Procurement Committee.
 - v. Factory training on maintenance for two (2) RIA personnel as selected by the Airport.
3. Vehicles and Equipment Specifications:
 - a. Covered Air Stairs – One (1)
 - i. General Requirements
 1. Load Capacity
 - a. Access Platform : 3500 lbs
 - b. Steps (extended) :11,000 lbs
 - c. Passenger Step : 500 lbs
 2. Wind Resistance (Stabilizers Extended)
 - a. Steps extended: 68 mph
 - b. Steps lowered: 80 mph
 3. Maximum Speed : 15 mph
 4. Ground Clearance : 6 in
 5. Working Dimensions
 - a. Access platform height (min): 94 in
 - b. Access platform height (max): 220 in
 - b. Lavatory Service Vehicle – One (1)
 - i. General Requirements
 1. Refill /Waste Water Tanks Capacity: 400 Gals/600 gals
 - a. Stainless Steel tanks
 - b. Drain Plugs and Filter Caps
 - c. Waste hoses with universal aircraft coupling

ii. Other Features

1. Flush Rinse System
2. Vacuum system with automated vacuum and rinse cycles
3. Hydraulically operated working platform
4. Self propelled with a heavy duty chassis
5. Automated drive train
6. Mounted on Ford Truck with heavy duty chassis

c. Potable Water Servicing Vehicle – One (1)

i. General Requirements

1. Water Tank Capacity: 700 Gals
2. Baffled Stainless Steel tank
3. Direct Drive Pumping System
4. With elevator to allow servicing of large aircraft

ii. Other Features

1. Will include all required hoses, fittings, and connectors for servicing of commercial aircraft.
2. Self propelled with a heavy duty chassis
3. Automated drive train

d. Aircraft Tow Tractor/Pushback

- i. Towing capacity 75,000 lbs
- ii. Max. towing speed (both direction) 20 mph
- iii. Electrical system 28 volts & 90 kva power output
- iv. Fuel tank capacity 100 gal.
- v. Hydrostatic drive for smooth acceleration and dynamic braking
- vi. Full vision high comfort cab
- vii. Rotating driver's seat
- viii. Emergency Aircraft Release System

e. Runway Sweeper

i.

Engine

Engine Type	4-cylinder in-line, direct injet with turbocharger
Horsepower	150 HP (78.2 kW)
PTO HP	90 HP (67.1 kW)
Total Displacement	230 cu. in. (3769 cc)
Rated RPM	2,600 rpm
Bore and Stroke	3.94 in. x 4.75 in. (100 x 120 mm)
Alternator/Battery	80 Amp/12V 100Ah at 20 hours, 900CCA
Air Cleaner	8 in. dry, dual element
Muffler	Corner post exhaust pipe

Dimensions and Weight

Wheelbase	95.9 in. (2435 mm)
Height	105.9 in. (2690 mm)

Width	83.7 in. (2125 mm)
Weight	8,987 lbs. (4,085 kg)
Ground Clearance	23.2 in. (590 mm)
Turning Radius (w/o brake)	13.1 ft. (4.0 m)
Tire Size	Standard front tire: 13.6 R24; Standard rear tire: 18.4 R34

General

Fuel System	Diesel
Fuel Capacity	50.2 gal. (190 l)
Transmission	Intelli-Shift Transmission 16F/16R
Brakes	Hydraulically operated wet disc brakes, with automatic front axle engagement (4WD)
Hydraulics	Pump flow (Hitch & remotes): 18.1 gpm (68.4 l/min) Pump flow (Power steering): 15.8 gpm (60.1 l/min)

Other features

- i. **Live-independent PTO, Hydraulically operated wet clutch with PTO brake**
- ii. **Cab lighting with standard features**
- iii. **Operator's area: ISO mounted flat deck, hanging pedals and tilt steering wheel**
- iv. **Seat- Air Ride: Swivel, reclining, full adjustment, arm rests, retractable seat belt and knee-action attenuator**

ii. Rotary sweeper

Features

- i. **Angles manually 30 degrees left or right; hydraulic angling also**
- ii. **Driven from tractor hydraulic drive or rear 540 PTO via telescoping drive shaft and heavy-duty gearbox**
- iii. **Lifts with tractor 3 point hitch ASAE category I or II**
- iv. **Includes steel hood, chain shield, height adjustment chains and mounting pins**
- v. **Brush type, poly steel**
- vi. **T-shaft gearbox allows for reversal of brush rotation on mechanical drive**

Dimensions and weight

Sweeping width	96"
Path at 30 degrees Angle	88"
Brush Diameter	32"
Weight (lbs)	1,050
GPM Range	18 to 36
PSI Range	2000 to 3500
Motors	Dual