

STANDARD BID CONDITIONS

M-07-067P

1. **ACCEPTANCE AND REJECTION:** The Arkansas State Highway and Transportation Department (AHTD) reserves the right to reject any or all bids, to accept bids in whole or in part (unless otherwise indicated by bidder), to waive any informalities in bids received, to accept bids on materials or equipment with variations from specifications where efficiency of operation will not be impaired, and to award bids to best serve the interest of the State.
2. **PRICES:** Unless otherwise stated in the Bid Invitation, the following will apply: (1) unit prices shall be bid, (2) prices should be stated in units of quantity specified (feet, each, lbs., etc.), (3) prices must be F.O.B. destination specified in bid, (4) prices must be firm and not subject to escalation, (5) bid must be firm for acceptance for 30 days from bid opening date. In case of errors in extension, unit prices shall govern. Discounts from bid price will not be considered in making awards.
3. **BID BONDS AND PERFORMANCE BONDS:** If required, a **Bid Bond** in the form of a cashier's check, certified check, or surety bond issued by a surety company, in an amount stated in the Bid Invitation, must accompany bid. **Personal and company checks are not acceptable as Bid Bonds.** Failure to submit a Bid Bond as required will cause a bid to be rejected. The Bid Bond will be forfeited as liquidated damages if the successful bidder fails to provide a required Performance Bond within the period stipulated by AHTD or fails to honor their bid. Cashier's checks and certified checks submitted as Bid Bonds will be returned to unsuccessful bidders; surety bonds will be retained. The successful bidder will be required to furnish a **Performance Bond** in an amount stated in the Bid Invitation and in the form of a cashier's check, certified check, or surety bond issued by a surety company, unless otherwise stated in the Bid Invitation, as a guarantee of delivery of goods/services in accordance with the specifications and within the time established in the bid. **Personal and company checks are not acceptable as Performance Bonds.** In some cases, a cashier's check or certified check submitted as a Bid Bond will be held as the Performance Bond of the successful bidder. Cashier's checks or certified checks submitted as Performance Bonds will be refunded shortly after payment has been made to the successful bidder for completion of all terms of the bid; surety bonds will be retained. Surety bonds must be issued by a surety company authorized to do business in Arkansas, and must be signed by a Resident Local Agent licensed by the Arkansas State Insurance Commissioner to represent that surety company. Resident Agent's Power-of-Attorney must accompany the surety bond. Certain bids involving labor will require Performance Bonds in the form of surety bonds only (no checks of any kind allowed). In such cases, the company issuing the surety bond must comply with all stipulations herein and must be named in the U. S. Treasury listing of companies holding Certificates of Authority as acceptable sureties on Federal Bonds and as acceptable reinsuring companies. Any excess between the face amount of the bond and the underwriting limitation of the bonding company shall be protected by reinsurance provided by an acceptable reinsuring company. Annual Bid and Performance Bonds on file with E & P Division must have sufficient unencumbered funds to meet current bonding requirements, or the bid will be rejected, unless the balance is submitted as set forth above, prior to bid opening.
4. **TAXES:** The AHTD is not exempt from Arkansas State Sales and Use Taxes, or local option city/county sales taxes, when applicable, and bidders are responsible to the State Revenue Department for such taxes. These taxes should not be included in bid prices, but where required by law, will be paid by the AHTD as an addition thereto, and should be added to the billing to the AHTD. The AHTD is exempt from Federal Excise Taxes on all commodities except motor fuels; and excise taxes should not be included in bid prices except for motor fuels. Where applicable, tax exemption certificates will be furnished by the AHTD.
5. **"ALL OR NONE" BIDS:** Bidders who wish to bid "All or None" on two or more items shall so stipulate on the face of bid sheet; otherwise, bid may be awarded on an individual item basis.
6. **SPECIFICATIONS:** Complete specifications should be attached for any substitution or alternate offered, or where amplification is necessary. Bidder's name must be placed on all attachments to the bid.
7. **EXCEPTIONS TO SPECIFICATIONS:** Any exceptions to the bid specifications must be stated in the bid. Any exceptions to manufacturer's published literature must be stated in the bid, or it will be assumed that bidder is bidding exactly as stated in the literature.
8. **BRAND NAME REFERENCES:** All brand name references in bid specifications refer to that commodity or its equivalent, unless otherwise stated in Bid Invitation. Bidder should state brand or trade name of item being bid, if such name exists.
9. **FREIGHT:** All freight charges should be included in bid price. Any change in common carrier rates authorized by the Interstate Commerce Commission will be adjusted if such change occurs after the bid opening date. Receipted common carrier bills that reflect ICC authorized rate changes must be furnished.
10. **SAMPLES, LITERATURE, DEMONSTRATIONS:** Samples and technical literature must be provided free of any charge within 14 days of AHTD request, and free demonstrations within 30 days, unless AHTD extends time. Failure to provide as requested within this period may cause bid to be rejected. Samples, literature and demonstrations must be substantially the same as the item(s) being bid, unless otherwise agreed to by AHTD. Samples that are not destroyed will be returned upon request at bidders expense. Samples from successful bidders may be retained for comparison with items actually furnished.
11. **GUARANTY:** Unless otherwise indicated in Bid Invitation, it is understood and agreed that any item offered or shipped on this bid shall be newly manufactured, latest model and design, and in first class condition; and that all containers shall be new, suitable for storage or shipment and in compliance with all applicable laws relating to construction, packaging, labeling and registration.
12. **BACKORDERS OR DELAY IN DELIVERY:** Backorders or failure to deliver within the time required may constitute default. Vendor must give written notice to the AHTD, as soon as possible, of the reason for any delay and the expected delivery date. The AHTD has the right to extend delivery if reasons appear valid. If reason or delivery date is not acceptable, vendor is in default.
13. **DEFAULT:** All commodities furnished will be subject to inspection and acceptance by AHTD after delivery. Default in promised delivery or failure to meet specifications authorizes the AHTD to cancel award or any portion of same, to reasonably purchase commodities or services elsewhere and to charge full increase, if any, in cost and handling to defaulting vendor. Applicable bonds may be forfeited.
14. **ETHICS:** *"It shall be a breach of ethical standards for a person to be retained, or to retain a person, to solicit or secure a State contract upon an agreement of understanding for a commission, percentage, brokerage, or contingent fee, except for retention of bona fide employees or bona fide established commercial selling agencies maintained by the contractor for the purpose of securing business."* (Arkansas Code, Annotated, Section 19-11-708).

ARKANSAS STATE HIGHWAY AND TRANSPORTATION DEPARTMENT

BID SPECIFICATIONS

1. GENERAL CLAUSES AND CONDITIONS

This bid shall be for the furnishing of Automatic Weight and Classification System (AWACS) traffic recorders, lightning protection and modems as specified in the following:

- A. AWACS traffic recorders to be provided shall be current finished production models, not proto-types or experimental types. These recorders shall be fully warranted and ready to operate as specified. Any refinements, adjustments, and modifications made with the firmware and software for the AWACS traffic recorders supplied on this bid shall be provided at no cost to the Department for a period of 24 months from the bid acceptance date. The recorder models shall be new, in current production (as offered to commercial trade) and shall be of high quality material and workmanship. At the Department's discretion, the vendor shall furnish, at vendor's expense, a demonstration model of the AWACS recorder, complete with operating manuals and manufacturer support and training, supplied to the Technical Services Section of the Planning and Research Division of the Arkansas State Highway and Transportation Department, within 30 days after bid opening, for a one month evaluation period to verify that the equipment meets bid specifications, subsequent to final acceptance. Variations from specifications shall be listed on a separate sheet and shall be labeled as such.
- B. Modems to be provided shall be current finished production models, not proto-types or experimental types. These modems shall be fully warranted and ready to operate with all traffic recorders specified, but not necessarily limited to said models. Modems shall be new, in current production (as offered to commercial trade), and shall be of high quality material and workmanship. If required, a demonstration model, of the modem bid, shall be furnished along with the AWACS traffic recorder, for evaluation to verify that the equipment meets bid specifications, subsequent to final bid acceptance. Variations from specifications shall be listed on a separate sheet and shall be labeled as such. Modems shall be supplied with all necessary hardware for telemetry connection to the AWACS traffic recorder models specified in the bid.
- C. All units shall be fully assembled and ready for continuous operations.
- D. The Arkansas State Highway and Transportation Department reserves the right to accept, reject, or award each item separately. Right is also reserved to accept or reject, in whole or in part, to waive information in bids received, or to accept bids with variations.

2. **WARRANTY**

- A. AWACS traffic recorders provided shall be warranted against defective material and workmanship for a period of not less than 24 months. Warranty shall include parts, labor, and shipping costs to and from repair facility.
- B. Modems provided shall be warranted against defective material and workmanship for the life of the modem. Warranty shall include parts and labor at the authorized repair facility of the vendor or manufacturer. If for any reason the modems delivered by the vendor fail to meet the bid specifications, the modems will be returned, at the discretion of the Department, within 120 days following the date of delivery to the vendor at the vendor's expense. Modems will be replaced with a comparable product or payment reimbursed in full.

3. **TECHNICAL SUPPORT**

All support manuals will be supplied for each unit. Technical manuals, including all wiring diagrams, will be supplied for each model tendered. Technical support personnel and contact information will be identified.

**ARKANSAS STATE HIGHWAY AND TRANSPORTATION DEPARTMENT
SPECIFICATIONS FOR**

TRAFFIC RECORDERS

SPECIFICATIONS:

The basic AWACS traffic recorder shall be provided with a minimum of 4 Megabytes of battery backed memory as described in the following specifications. The recorder shall provide for the option to expand the battery backed memory to 8 Megabytes. The bid shall list the battery backed memory expansion options and prices.

The recorders will process traffic data signals from piezo electric axle sensors and traffic loops in each lane. The standard configuration, consisting of two lane width class 1 piezo electric axle sensors on either side of a traffic loop trailing an on-scale piezo electric axle sensor installed in one wheel path, must be supported by the traffic recorder models bid. The piezo electric recorder inputs shall be equipped with sensitivity adjustments to compensate for variations in signal strength, and traffic static and vibrations.

BASIC AWACS TRAFFIC RECORDER SPECIFICATIONS

Enclosure:

Rack Mount units shall be card cage design.

Data storage:

Shall be lithium battery backed RAM.

Capacity:

Shall have a minimum of 4 Megabytes memory and be expandable to a minimum of 8 Megabytes.

(PCMCIA memory card up to 8 MEGABYTES)

Operating temperature range:

-40° C to +74° C.

Dimensions:

Shall fit standard AHTD instrument cabinet with hardware.

Rack mounts approximate max. dim. 5.25"H X 19" W X 9.35" D

Display:

20 x 4 line liquid crystal display and keypad.

Power:

Standard 115-120 VAC with battery back up, or 12VDC battery solar panel (not to be supplied with recorder) or deep cycle lead acid battery.

Power Consumption:

Maximum power consumption shall not exceed 400 milli amps for a four lane AWACS traffic recorder using a standard installation for Class 1 Road Trax BL Piezoelectric axle sensor with one inductance loop in each lane.

Accuracy:

Meets ASTM Type I or II specifications and TMG and HPMS field manual standards for accuracy.

Speed:

±1.0 mph

Axle spacing:

±0.5 ft.

The AWACS traffic recorder shall be designed to operate on a deep cycle lead acid 12.0 volt battery, or standard 115-120 vac commercial electrical power. The cabinet, solar panels and all supporting hardware will be provided by the Department and will not be part of these specifications. All hardware necessary for lightning protection shall be provided with the recorder to protect the equipment cabinet and all its contents, including piezo sensors, inductance loops, temperature probes, grounds, solar panel leads, telephone lines, and all potential sources of damage from lightning and static electricity associated with weather patterns. The traffic recorders shall be supplied complete with lightning protection, wiring harnesses for operation including power and telemetry, modems capable of supporting high speed (14400 baud or greater) binary data transfer on standard telephone lines, temperature compensation devices, operating manuals, and shop manuals with wiring diagrams.

The AWACS traffic recorders to be provided shall be rack mount traffic recorders capable of monitoring up to eight lanes of traffic simultaneously.

For each highway lane monitored, the AWACS traffic recorder must include two inputs compatible with the Class 1 Road Trax BL Piezoelectric Axle Sensor per lane and one input for a traffic loop per lane. Each recorder shall be equipped with one temperature probe input for temperature compensation. The recorder outputs must include an RS232 serial interface for use with the telemetry device and for an output to a portable computer for data transfer and recorder programming.

The traffic recorder shall be designed to provide traffic data collection on a per lane basis. It shall collect per vehicle weight (PVW) data including vehicle axle count, axle spacing, vehicle speed, axle weight, gross vehicle weight, and vehicle classification. It shall be capable of collecting traffic volume count data and automatic vehicle classification (AVC) data. The recorder shall have a dual programming mode which allows the machine to retain AVC, vehicle count, and lane selective PVW data simultaneously. The basic AWACS traffic recorder model, equipped with 4 Megabytes of memory expandable to 8 Megabytes, shall have sufficient memory to retain PVW and AVC data for over 100,000 vehicles from a continuous traffic stream.

Software and software training for the traffic recorder operation, including but not limited to that necessary for remote operation from the central office by telemetry, evaluation in the traffic recorder shop, and local operation in the field using a portable computer, shall be provided with the traffic recorder purchase at no additional cost. This software shall have the capability to automatically and manually poll and collect data from the existing ADR recorders, currently in use by the AHTD, as well as the equipment being bid. The office software shall provide the following capabilities:

1. Automatic data retrieval as a remotely operated system.
2. Automatic polling of equipment sites as a remotely operated system.
3. Manual data retrieval and reprogramming of recorders by telemetry.
4. Manual polling of traffic recorders as a remotely operated system.
5. Tabulated reports of data including PVW lists, AVC hourly reports, Traffic Volume Count reports, and speed data reports.
6. Creation of FHWA formats for traffic volume (CARD 3), vehicle classification (CARD C), and truck weight (CARD W) data records

The AWACS traffic recorders shall be designed to operate in temperature extremes as listed in the specifications. The recorder firmware shall include adjustments for calibration of weight data for each lane and compensation of weight data for temperature variation. The recorder shall be capable of communicating via modem at a variety of transmitting speeds from 1200 to 14400 baud or greater. Recorder specifications shall be adequate to satisfy the ASTM E1318 standards for Type I or Type II WIM systems. The AWACS recorder shall produce vehicle count, vehicle classification, vehicle speed, and vehicle weight data within the precision ranges specified in the latest edition of the Traffic Monitoring Guide (TMG) and the Highway Performance Monitoring System (HPMS) field manual.

**ARKANSAS STATE HIGHWAY AND TRANSPORTATION DEPARTMENT
SPECIFICATIONS FOR**

MODEM

1. GENERAL DESCRIPTION

Must operate from power supplied by a 12 volt battery charged by solar panels or standard 115-120 vac commercial power. Shall be compatible with CCITT V.42 bis, V.42 bis, V.32 bis, V.32, V.22 bis, V.22, as well as Bell 212a and 103J modems. Shall use CMOS technology.

2. INTERFACES

Telephone: Shall be supplied with a single RJ-11 jack. Must work with both land line and cellular phone systems.

Digital: RS-232 serial port

Voltage and Current Rating:

Voltage Input--		5.0-36 VDC
Current Draw--	Stdby. :	0.5 mA at 12VDC maximum
	Oper. :	85 mA at 12 VDC typical

AC/DC adapter supplied with each unit. Separate adapter for solar panel bar supplied with each unit.

Mechanical and Environmental:

Temp. Range:	-20° C to +55° C operating -40° C to +100° C storage
Humidity:	0 to 90% non-condensing
FCC:	Part 66 and 15 compliance
Ringer Equiv:	0.6B
Receiver Sensitivity:	-43 dBm
Receiver Reject:	-48 dBm
Transmit Level:	-9 dBm

Command Set Compatibility: Standard AT command, as well as extended command set.

Error Control: Minimal MNP class 2-4.

Data Compression: Up to 57.6 Khps MNP class 5.

Diagnostics: Power on self test, internal self test, local digital loop back, local analog loop back, and remote digital loop back.

Baud Rates: 1200 to 14400 bps

3. TECHNICAL SUPPORT

All support manuals will be supplied for each unit. Technical manuals, including all wiring diagrams, will be supplied for each model supplied. Technical support personnel and contact information will be supplied.