



RadioSTAT

Portable Emergency Advisory Radio Station



During public health and safety emergencies, take a RadioSTAT Portable Emergency Advisory Radio Station into critical areas and speak directly to citizens via standard radio receivers.

RadioSTAT can be a lifesaver, allowing the broadcast of critical instructions and information regarding . . .

- Disasters/Evacuations.
- Medical Emergencies (hospital surge, points of distribution field information, quarantine isolation, decontamination).
- Terrorist/Shooter Incidents.
- HAZMAT and Traffic Information.
- Critical Public Safety Instructions.
- Road Construction/Infrastructure Failures.
- AMBER Alerts.

RadioSTAT is built for speed and portability. All electronics are housed in an easy-to-transport, high-impact, weather-resistant case. The quick-erect antenna system folds down for transportability. The entire system may be set up in 10 minutes by one person.

RadioSTAT is a FCC-licensed service. Operate one or more RadioSTAT units within a specified territory such as a city, county or state. The signal is typically announced to the public by FASTrack or other portable signs, positioned at the periphery of the coverage area.



RadioSTAT broadcasts may be received on standard vehicle radios over a 3-5 mile range (25-75 square miles). The stations are priced affordably so that multiple units can be deployed simultaneously at different locations during an emergency as required.

During nonemergency times, RadioSTAT operators may operate from a fixed location using an optional Vertical Profile Antenna System. This helps familiarize citizens with the frequency as well as affording added protection for the frequency. RadioSTAT's portability becomes an instant asset during emergencies, allowing reestablishment of the signal from a new location quickly. RadioSTAT's portability also makes it especially useful at large public gatherings for broadcasting key information, such as: schedules, traffic, parking, safety and critical instructions for patrons approaching or exiting.

RadioSTAT IP

In addition to the conventional USB-flash drive method described above, the new IP version of RadioSTAT allows you to upload audio via a standard Ethernet network. RadioSTAT can be a greater asset to your community from a fixed location and, as such, a network connection makes it all the more valuable when it is at its "home base." When in the field, RadioSTAT IP programming may still be controlled via the USB port – but now because of the addition of the network port – messages may also be uploaded via a direct connection from a field laptop or other computer.

When it really counts, put public health and safety information on the air stat . . . with RadioSTAT.

The RadioSTAT package includes . . .

- Transmitter/Message Player/Test Equipment in Portable Shock Case.
- Portable Antenna System and Stand with Stabilizing Sand Bags, Coaxial Cable and Setup Tools.
- 6 Flash Drives in Carrying Case.
- Live Microphone/Cable.
- Equipment Pouches & Stowing Bags for Mics, Cables and Antennas.
- Customizable Equipment Management Tags.
- Illustrated Instructions/Training DVD.
- Setup Tools.
- Optional:
 - ... Audio Management Software & Recording Headset/Mic.
 - ... Additional Flash Drives.
 - ... FCC Licensing Service.
 - ... Fixed Antenna System.
 - ... Antenna Height Extender.
 - ... Onsite Training.
 - ... Professional Message Recording Service (complimentary to AAIRO members for general messages and commissioned for event-oriented messages; see www.AAIRO.org regarding free membership in the nonprofit American Association of Information Radio Operators).
 - ... FASTrack Quick-Erect Sign.
- Free 24/7 Remote Technical Support for the Life of the Product.



Planning Steps

Step 1: Order a frequency search.

Contact ISS to order a frequency search. Just provide the geographic area where the system might be operated. This no-charge service includes the license-application work, as well, once you decide to move forward. ISS will develop a list of available AM frequencies and send it to you with our suggestions and instructions on how to monitor them.

Step 2: Survey onsite listening.

Survey the highways where listening is required with an automobile digital AM radio tuned to your candidate frequencies. Monitor all of the candidate frequencies throughout the listening areas at least once during daylight hours and at least once after dark. Report your results to ISS, using the short form provided.

Step 3: Choose an operating site for coverage.

Use a map to select a portable operating location for RadioSTAT such that a 3-mile-radius circle fully encompasses the highways requiring coverage. The signal will usually carry 3-5 miles and be heard much farther away on some radios, but the strongest part of the signal will always be in this radius. If a specific highway or intersection is critically important to cover, consider locations immediately adjacent to the roadway. Mark the map to show the area within which the antenna should be located to meet your coverage goals. Consider where signs will be placed to announce to motorists entering the area that the signal is available.

Step 4: Choose a specific location for your RadioSTAT station.

For best coverage, the immediate location should be free of tall objects that will “crowd” or overshadow the antenna. This includes tall buildings, trees, terrain features, lighting, power and communication poles and towers, overpasses and highway signs. Make certain that there is a 20’-by-20’ area of open ground to set up the station’s antenna and deploy the portable groundplane.

Note: Steps 3 and 4 apply also to planning a fixed, semi-permanent location for operating the RadioSTAT station during non-emergency times.

Step 5: Complete a FCC License Application.

Request from ISS the RadioSTAT FCC License Questionnaire, which gives ISS the information needed to prepare and submit the 10-year FCC license application on your behalf. On the questionnaire, you are asked to provide information on your antenna operating territory and any fixed locations, your frequency choice and required names and addresses. The FCC typically takes 3 to 6 months to process it and grant the authorization. While waiting for the 10-year license to be granted, you may procure the equipment, if you wish.

IMPORTANT: You must have a FCC license in hand to operate. Special Temporary Licenses (STA) might also be available from the FCC, if immediate operation is required. ISS will assist you in requesting it. The FCC grants these licenses as secondary to standard AM broadcast stations.

Step 6: Consider equipment, options and services.

Contact Bill Baker (bill@theRADIOsource.com), if you need prices or submit the following information to obtain a quotation.

Checklist for Receiving a Quotation:

Provide to ISS the following details, so a precise quotation can be provided:

- ✓ Your name, agency, phone and fax numbers; email address, if desired.
- ✓ Select Product Name: RadioSTAT or RadioSTAT^{IP} station.
- ✓ Review options on the pricing sheets and include them, as desired.



Technical Specifications

Broadcast Control Electronics



Transmitter

- 0-10-watt operation, Class D, high efficiency output; internal components rated to 3 times operating wattage, utilizing 2 output devices.
- Federal Communications Commission certified for Travelers Information Service in the United States under Part 90.242., Certification Number B7MTR-6000TIS-WB.
- Approved for US Military use.
- Single-board design with all RF, power and audio circuitry.
- Integral LED wattage and VU reference meters.
- Remote broadcast monitoring control.
- Synthesized frequency selection, compander-style audio processing.
- Defeat-able LED operation to save power.
- 24 VDC, fully regulated power supply.
- 530 to 1700 kHz AM frequency range.
- Frequency stability +/-20 Hz.
- Continuously adjustable power and audio modulation controls, externally accessible on front panel.
- Tune-able series filter on RF output.
- Audio distortion: less than 1.2%, 100 Hz to 3 kHz.
- Noise level: 70 dB below 95% modulation level, 100 Hz to 3 kHz.
- Modulation: 99%, -40 dB to +20 dB.
- Temperature: -40 to +85 degrees Celsius.
- Humidity: 95 percent (non-condensing).
- External audio, power and synchronization inputs.
- External PL-259 UHF style RF output and 1/4-inch audio headphone output driven by detector circuit to provide positive modulation indication.
- Rack, panel or shelf-mountable cabinet.
- Slim-line design (7.5 inches high by 17 inches wide by 1.5 inches deep); 4 pounds.
- Mean time between failure: in excess of 60 years.
- Estimated product life: in excess of 30 years.
- Power surge arrestor: high speed, high capacity.
- IPC-610 certified.
- Manufactured in compliance with Class-3 wavesolder standards.

Test Equipment

- Wattmeter and dummy load for antenna tuning and system diagnosis.

USB-MP3 Digital Message Player

- Local operation.
- Message loading: removable USB flash drives; drag-and-drop MP3 files from PC/laptop USB port.
- 6 flash drives, 1 GB each, provided.
- File format: MP3.
- Memory storage: internal 11 MB.
- Compatibility: Microsoft Windows computer operating system.
- Recording time: 2,000 minutes per flash drive.
- Up to 1,023 messages, auto rotation.
- Message sizes: variable.
- Message order: sequential message play based on file order.
- Memory format: "Flash," with no battery backup required.
- Audio outputs: 8 or 600 ohms.
- Auto reboot on power outage.
- Power: 12 VDC.

Live Mic

- Shure vocal microphone, 20-foot cable, XLR connectors.
- Live mic jack/switch.

Portable Shock Case

- Shock and Mil-spec certified wate
- Indoor or outdoor use.
- Weather-resistant power and coa:
- Key lockable.
- Low-profile, retractable pull handl
- Built-in wheels.
- Gasket-protected front and rear doors.
- Snap-down, trigger latches.
- Electronics pre-installed, rack mounted (front).
- Internal black Cadura Nylon microphone/cable/flash drive pouches (rear).
- External AC and coaxial connectors.
- Size: 23" high by 28.25" wide by 30.5" deep (doors on) or 21" deep (doors off); 68 pounds.



Antenna and Groundplane System

Antenna

- Whip-style antenna, between 15 and 25 feet long; maximum 2.0-inch OD, tapering to 0.5 inch.
- Aluminum construction, black finish color to discourage ice buildup; UV resistant finish; architectural anodization process #801.
- Stainless-steel tuning tip and assembly hardware.
- Wind rating: antennas 1230 kHz and above 100 MPH; 80 MPH with 1/4 radial ice; antennas 1220 kHz and below 80 MPH; 50 MPH with 1/4 radial ice.
- Total antenna system weight: 18-20 pounds depending upon antenna needed for frequency.
- Stowed size: 1-by-1-by-6-foot area.

Portable Antenna Stand and Arrestor

- Antenna stand: folding, quick-erect, aluminum; 26 pounds, 65 by

11 by 9 inches.

- Antenna mounts and hardware.
- 4 empty sandbags for weighting the antenna stand.
- Integrated RF lightning arrestor:
- Capacity: 50,000-amps surge.
- Clamping speed: fewer than 2.5 nS.
- 2 UHF connectors.
- Aluminum flange ground connection.

Groundplane

- Patented, factory-assembled, flexible antenna groundplane (30 elements, 10-foot radius).

Coaxial Cable

- 2 sections 50' each, 50 ohm with joining connector.

Carrying Sleeves

- 2 black Cadura Nylon carrying bags with straps: 1 for antenna, 1 for coaxial cable and groundplane.

Setup Tools

- Includes 10-inch crescent wrench, 12-inch crescent wrench, 1/8-inch hex wrench, 7/16-nut driver, slotted screwdriver.

Overall Station Specifics

Total System Weight

- 120.5 pounds.

Utilities Required

- 110 VAC, single-phase/50/60 Hz, less than 1 amp AC operating current (20-Amp breaker).

Training Materials

- Illustrated instructions.
- Training DVD.

System Options



Audio Management Software

- Audio management software with these system requirements for customer-provided PC or laptop:
 - Intel Pentium 4 (1.4 GHz for DV, 3.4 GHz for HDV); Intel Centrino; Intel Xeon (dual Xeon 2.8 GHz processors for HD); or Intel Core Duo or compatible processor (SSE2-enabled processor

required for AMD systems).

- Microsoft Windows XP Pro or Home Edition with Service Pack 2 or Windows Vista Home Premium, Business, Ultimate, or Enterprise (certified support for 32-bit editions only).
- 512 MB of RAM (1 GB for DV playback, 2 GB for HDV and HD playback).
- 10 GB of available hard-disk space (when used with Loopology DVD).
- DVD drive.
- 1280-by-900 monitor resolution with 32-bit video card and 16 MB of VRAM.
- Microsoft DirectX- or ASIO-compatible sound card.

Mic/Headset for recording.

- USB behind-the-head stereo headset, compatible with Microsoft Windows and Macintosh:
 - Speaker driver size: 36 mm diameter.
 - Speaker frequency response: 20 Hz-20kHz.
 - Microphone frequency response: 100 Hz to 8 kHz.
 - Cable length: 9.5 feet (3.5 mm plugs).
 - Plug into sound card.



Optional Fixed, Vertical Profile Antenna System

- Space requirement: less than 1 square foot.
- RF grounding element: 4-foot length; integral to support pole.
- Lightning ground: 8-foot groundrod, copper clad.
- Support pole composition: aluminum, 6-inch OD, .3125-inch wall thickness.
- Support pole length: 24 feet.
- Support pole finish: powder coat, silver/gray.
- Support standing height: 18 feet above grade; 6 feet below grade.
- Wind: hurricane rated. 1400-1700 kHz, support pole exceeds Florida Dade/Broward County windload requirements with attached antenna, greater than 146 MPH/3-second gusts. 530-1390 kHz, support pole meets and exceeds Florida windload requirements with attached antenna, 130 MPH/3-second gusts. (Florida Building Code – 2001).
- Internal components: RF lightning arrestor, grounding bus, coaxial feedline.
- External components: threaded attachment for antenna mount, weatherproof service hatch with tamperproof hardware. Crane hook.
- Frequencies: 530-1700 kHz.
- Compliant with ANSI/TIA-222-G-2005 standard (Class III, Category 4, Exposure D) 130 mph/3-second gust for frequencies 1400-1700 kHz when installed in soil types per Annex F of the standard.

Exclusive Features

Optional Antenna Height Extender

Optional Additional Flash Drives

Optional Additional Computer Mic/Headset

Optional Additional Audio Management Software

Optional Recording Services

Information Station Specialists is the sole provider in the United States of the exclusive RadioSTAT Portable Emergency Advisory Radio Station. Other specific-area radio systems cannot perform any of the following important functions:

1. RadioSTAT is the only system of its kind that is comprised of a transmitter/audio system mounted in a weather-resistant shock case to allow maximum in portability (via handles/wheels) and flexibility (it may be used on the ground or on a building roof).
2. Only the RadioSTAT Portable Emergency Advisory Radio Station features black antennas that discourage ice build-up. Also, they are finished with a special UV-resistant, architectural-anodization process to prevent color fading.
3. Only the the RadioSTAT Portable Emergency Advisory Radio Station includes a USB/MP3-based Digital Message Player and includes audio editing software to allow message creation and management on any standard PC or laptop.
4. Only the the RadioSTAT Portable Emergency Advisory Radio Station features a quick-erect antenna stand to support the antenna and connected groundplane that collapses and can be deployed within 10 minutes.
5. Only RadioSTAT uses an AM transmitter with a modern synthesized frequency system, so that if a frequency change ever be necessary, it can be easily done without component changes or board-level work. RadioSTAT's TR6000 Transmitter utilizes an efficient Class D amplifier, comprised of only two driver devices for highest reliability. Moreover, TR6000 is the only such unit manufactured and type-accepted for Travelers Information Station (TIS) applications in the United States.
6. Only ISS offers no-charge message-recording services by professional announcers.
7. ISS' electronic designs are nonproprietary. This means that in the future, you may change out components, as needed without the requirement to return to ISS; i.e., simple wiring diagrams are provided, so you can service equipment yourself, if you choose, or have a third party assist – all with full ISS support.
8. Additionally, only Information Station Specialists offers technical assistance for the life of the product. ISS supports today radio stations that first went on the air in the 1980s. ISS' staff of engineers has more than 80 years of combined experience specifically in the kind of radio technology under which RadioSTAT operates (FCC Rules, Part 90.242). This experience level is more than double that of any other company in the business.

Companion Product



Optional FASTrack Quick-Erect, Portable Sign

- NCHRP-350 approved for use on rights-of-way and FHWA/NFPA approved for use at emergency scenes.
- Flexible vinyl, ultra-reflective (fluorescent pink, orange, yellow or green) sign panels.
- Custom lettering with changeable text overlays.
- Light-weight aircraft aluminum and coated steel stand, rated to withstand 60 MPH wind gusts.
- Carrying bag that holds assembled sign.
- Setup time: 20 seconds, no tools required.



RadioSTAT Prices

RadioSTAT Standard Equipment Package \$8,995

Includes transmitter and 256-minute/1000+ digital message player and test equipment in a portable, weather-resistant, shock case. Quick-erect antenna system with stabilizing sand bags. Six flash drives. Cables, connectors, mounts, setup tools, metering. Illustrated instructions with training DVD. Complimentary broadcast recording service of general messages. Lifetime technical support and standard warranty.

RadioSTAT IP Equipment Package \$9,995

Includes all the above plus the ability to connect to your network

System Engineering & Planning

One per system of stations. \$750

Options

PC Microphone-Headset	\$89
Audio Management Software	\$395
FCC Licensing (per frequency/operating territory)	\$790
Flash Drive (each, additional to the 6 provided)	\$25
Vertical Profile Antenna System (additional antenna, support pole for fixed-location operation)*	*\$2,970
Coaxial Cable (per foot, permanently installed cable for fixed-location operation)*	*\$2
Antenna Height Extender (to raise antenna 10' in challenged areas)	\$595
Onsite Training (per system of stations)	Inquire for Quote
Electronics Installation & FCC Signal Study (for optional fixed antenna system)	Inquire for Quote
Professional Recording Services	General Messages N/C
Event-Oriented Messages as follows...	
Annual with 1 message change	\$ 195
Seasonal with 4 message changes	\$ 495
Monthly with 12 message changes	\$ 995
Weekly with 12 message changes	\$1,995

Companion Product

Portable FASTrack Sign (each, with custom legend)	\$495
Custom Overlay for FASTrack Sign (add)	\$45

**Installation service may be provided but is not included in this pricing.*

Shipping, Terms, Warranty

Ground freight is prepaid by ISS. Product availability is typically 30 days after receipt of the order. Terms: Net 30 days to governmental entities and their agents; check-with-order or cash-on-delivery for initial orders from private-sector entities. Mastercard/VISA accepted for contracts under \$3,500. Prices listed above are suggested retail, subject to change without notice. Call ISS for a firm quote, guaranteed for 180 days (616.772.2300 x102). There is a 1-year parts-and-service warranty. Note: the warranty is void if the customer modifies the product. ISS provides technical support for the life of the product, 24/7. Purchases from ISS are subject to a standard-terms-and-conditions agreement signed by the purchaser, becoming part of the contract.

About Us



Since its founding in 1983, Information Station Specialists has been the USA's primary supplier of AM information radio systems and services, with an installed base of more than a thousand stations across the country. The ISS product array includes emergency and highway advisory radio systems as well as travelers information stations and related components. In the past decade, ISS has averaged 65 percent of all such stations sold in the United States and is the only company whose full-time business is dedicated strictly to this market. For a corporate overview, visit www.theRADIOsource.com.

More than Products . . .

- Project planning assistance.
- Searches for available frequencies.
- FCC field studies and licensing.
- System integration/customization.
- Installation.
- Training and operation instructions.
- 24-hour technical support.



Copyright 2010. **Information Station Specialists, Inc.** All Rights Reserved.
3368 88th Avenue, PO Box 51, Zeeland, Michigan, USA, 49464-0051
Phone 616.772.2300, Fax 2966, Email iss@theRADIOsource.com

...

US Patents: PowerPlane "Flex" Factory-Assembled Groundplane (#5,495,261), Vertical Profile Antenna System (#7,027,008)
Registered Trademarks: ALERT AM®, Information Station Specialists®, PowerPlane®, RoadRunnR®, StationMaster®
Pending Trademarks: RadioSTAT™ SignalcastIP™