STORM SIRENS, INC.

3801 HARROGATE DRIVE
NORMAN, OKLAHOMA 73072
1-800 527-6375 FAX 1-405 329-0542
E-MAIL stormsirens@aol.com

'08/3/4

May 25, 2007

COPY

Teddy Hooton, P.E., Street Superintendent
City of Jonesboro
P.O. Box 1845
Jonesboro, Arkansas   72403

Regarding: Storm Siren System

Dear Mr. Hooton:

Based on our recent meeting and my subsequent survey of the City, I have prepared a comprehensive report on the City's storm warning system for your consideration.

COVERAGE IN MAIN CITY:

The coverage throughout the main City is generally very good. Also, with the recent change to the 3 sirens on order, the omni-directional coverage will further increase the warning level in the areas where these sirens will be located and in the adjacent areas.

As discussed, my only major concern with the coverage in the main City is along the South and West perimeters. With most storms coming out of the SW, I believe that the accompanying winds shift the coverage NE, opening coverage gaps along the western and southern borders.

To fill these gaps and to provide a safety margin, I recommend locating 2 Sentry model 16V1T-B Storm Warning Sirens at or near:

* Blackberry & Wilderness Run
* Southwest & Wilkerson Drives

In addition, I recommend locating 2 smaller Sentry model 7V8-Bs at or near:

* Dan Avenue & Shady Lane
* Whispering Pine Lane (north end)

The Sentry model 16V1T-B is the same model that the City currently has on order. The model 16V1T-B and model 7V8-B are both omni-directional and equipped with battery back-up. The current price for the model 16V1T-B is $16,500.00, installed. The current price for the model 7V8-B is $14,500.00, installed.

SERVING THE PUBLIC SAFETY FIELD

CCVERAGE IN THE INDUSTRIAL PARK:

Coverage in the industrial park is incomplete. As the area develops, I recommend adding 6 Sentry model 16V1T-Bs at or near:

* Kathleen Street * Pacific Road
* Highland Drive * Easley Lane
* Highway 63 & Hancock Road
* Highway 63 (Opposite Taylor Chapel Lane)
* C W Post Road & Quality Way
* Ingels Road & Industrial Drive

As shown on the enclosed map, the proposed coverage does not have the same level of overlap as the main City. The Industrial Park is flat with significantly lighter tree cover and for these reasons the outdoor coverage from the sirens should be maximized.

In addition, the size and/or high noise level of many of the structures in this area greatly limit the indoor effectiveness of a storm siren system. For this reason, I recommend supplementing the storm sirens with Veetronix model 2TR9A Desk Top Radios.

A radio would be located in the main office or other key location at each business. The model 2TR9A is equipped with battery back-up and audible alarm. It would be activated from the dispatch using a code similar to the one used to activate the sirens. Once activated, a voice message as to the nature of the emergency can be given.

The price of a Veetronix model 2TR9A Desk Radio completely programmed and delivered is $325.00.

REPORTBACK SYSTEM:

The Sentry model G5 Siren Controller includes 2-way communication between siren sites and the dispatch center. It is capable of monitoring the individual sites for battery voltage, siren activation, intrusion, etc.

The G5s would replace all of the radio decoders currently controlling the sirens. The siren system would be activated in the same way as it is currently. However, you would also have the ability to interrogate the system to determine the status of each siren and the system would automatically report a fault.

The proposed Reportback System can be expanded to accommodate additional sirens. The G5 Controllers could be switch to new sirens as the ACA Alertors are replaced. The cost to equip the 26 current sirens would be $86,000.00, installed.

Controllers = $3,307.69/each

If you have any questions on the survey or the equipment proposed, please let me know.

Sincerely,

Frederick R. Engelbrecht
President

FRE:st

SIREN	LOCATION	STATUS	MAKE	MODEL	DATE
1	Fox Road, East of Stadium	1	FEDERAL SIGNAL	ALLERTOR 125 ARCL-MS1	?
2	University Loop East @ Convocation Center - Yellow	1	FEDERAL SIGNAL	ALLERTOR 125 ARCL-MS1	?
3	North Church @ Belt	1	FEDERAL SIGNAL	2001AC	10/3/2002
4	Aggie Road @ AGR House - East of Stadium	1	FEDERAL SIGNAL	2001AC	?
5	E Nettleton @ Willow	2	FEDERAL SIGNAL	ALLERTOR 125 ARCL-MS1	?
6	Stadium @ Forest Home - near U-Haul	1	FEDERAL SIGNAL	ALLERTOR 125 ARCL-MS1	?
7	E Nettleton @ Country Club DIRECTIONAL SIREN	2	SENTRY SIREN	16V1T-B	6/12/2007
8	Culberhouse @ Cherry	1	FEDERAL SIGNAL	ALLERTOR 125 ARCL-MS1	3/7/1988
9	Nettleton @ Strawfloor DIRECTIONAL SIREN	2	SENTRY SIREN	18V1T-B	6/12/2007
10	Harrisburg Rd @ Stroud	1	FEDERAL SIGNAL	2001-130	4/3/2007
11	Wood St @ Craighead Rd DIRECTIONAL SIREN	4	SENTRY SIREN	16V1T-B	6/12/2007
12	Spyglass Dr off Hazeltine (Ridgepointe)	1	FEDERAL SIGNAL	2001AC	?
13	Neely Rd @ Neely Ln	4	FEDERAL SIGNAL	ALLERTOR 125 ARCL-MS1	?
14	Friendly Hope Rd @ Friendly Hope Church	1	FEDERAL SIGNAL	2001AC SERIES B	8/16/1994
15	Craighead Forest Rd @ Sherwood Oaks (near water tower)	4	FEDERAL SIGNAL	2001AC SERIES B	?
16	S Caraway @ Harrisburg Rd	4	FEDERAL SIGNAL	2001AC SERIES B	7/20/1993
17	C.W. Post west of Commerce (near truck stop)	1	FEDERAL SIGNAL	2001AC	?
18	Nestle Way north of C.W. Post	1	FEDERAL SIGNAL	2001AC	?
19	E Johnson @ Paragould Dr	1	FEDERAL SIGNAL	2001AC	?
20	Peachtree @ Ponderosa	1	FEDERAL SIGNAL	2001AC	?
21	N Culberhouse @ Thomas Green	1	FEDERAL SIGNAL	2001AC	?
22	Royal Dr @ Westvale Baptist Church	1	FEDERAL SIGNAL	2001AC SERIES B	?
23	Winchester @ Willett	1	FEDERAL SIGNAL	2001AC	6/11/1997
24	Renee @ Utnage	1	FEDERAL SIGNAL	2001AC	8/18/1999
25	Hwy 49 South @ Darr Hill (Valley View)	1	FEDERAL SIGNAL	2001AC	8/25/1999
26	Sage Meadows Blvd @ Clubhouse	1	FEDERAL SIGNAL	2001AC	?

SOUNDED AND ROTATED	1
SOUNDED ONLY	2
ROTATED ONLY	3
NOTHING	4

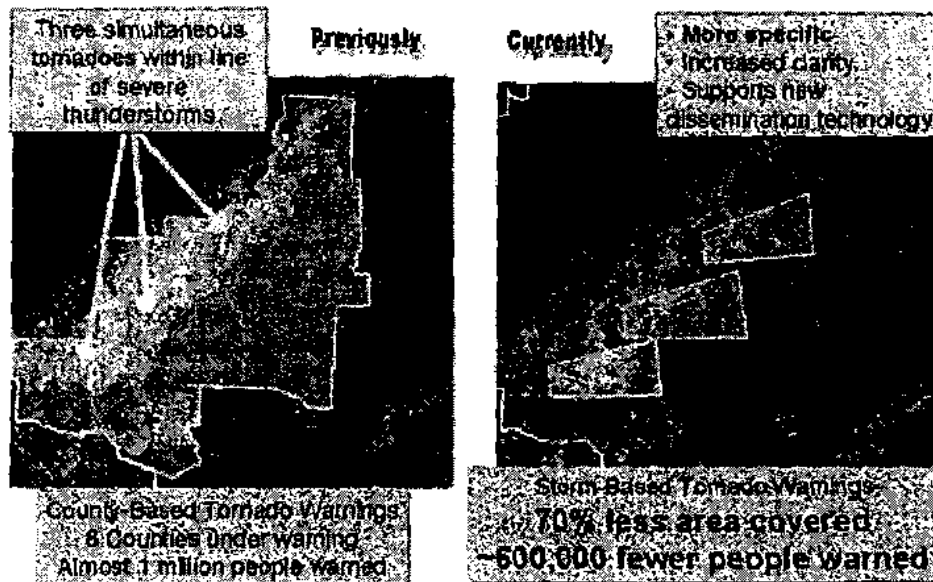Some of the control boxes for the sirens had a hand-wriwtten date on a tag with no other writ information.

Futher research is being done to find out the dates noted w/ a question mark. The marjority of the ones w/ a question mark came from the county.

Why Storm-Based Warnings?

NOTE: A higher resolution version of these graphics is available for download (2.62 MB TIF file).

The National Weather Service (NWS) mission is defined as the provision of weather forecasts and warnings for the protection of life and property and the provision of weather information for the Nation's economic well-being. The NWS previously issued and disseminated warnings for tornado, severe thunderstorm, flood and marine hazards using geopolitical boundaries. Realizing the continuing need to improve the specificity and accuracy of warnings for tornadoes, severe thunderstorms, floods and marine hazards, the NWS currently implements **Storm-Based Warnings** (as of October 1, 2007).

Storm-Based Warnings (threat-based polygon warnings), are essential to effectively warn for severe weather. **Storm-Based Warnings** show the specific meteorological or hydrological threat area and are not restricted to geopolitical boundaries. By focusing on the true threat area, warning polygons will improve NWS warning accuracy and quality. **Storm-Based Warnings** will promote improved graphical warning displays, and in partnership with the private sector, support a wider warning distribution through cell phone alerts, pagers, web-enabled Personal Data Assistants (PDA), etc. NOAA Weather Radios will work as before and continue to alert entire counties.

AMERICAN CITY & COUNTY

Giving notice

Dec 1, 2007 12:00 PM, By Annie Gentile

A gasoline tanker crashes and bursts into flames. Prevailing winds carry the noxious smoke into a residential area. Within minutes, commuters in the vicinity of the accident are alerted on their car radios to take a different route, and residents within a targeted radius of the incident are advised on their cellular and land-line phones to seek shelter indoors until the cloud passes.

From severe weather warnings to terror attack alerts, newer and more sophisticated technologies are helping local officials quickly and accurately notify residents about events in their communities. While warning messages typically are generated by government agencies, the systems that distribute the information often are owned and operated by private entities. So, the dissemination of information can require public/private collaboration with the shared goal of reducing losses, increasing response times and, ultimately, saving lives.

Behavior guides technology

Warning systems are only effective if the information is accurate and the public takes the appropriate actions. A turning point in research and development of effective emergency notification systems (ENS) and for emergency officials in guiding their development came in November 2000 when the Washington-based National Science and Technology Council (NSTC) released the report "Effective Disaster Warnings." "A major finding [of the report] was that people don't tend to act on a single warning," says Art Botterell, community warning system manager for Contra Costa County, Calif. For example, a loud noise that sounds like a gunshot could just as easily be a backfiring car, but it will get the attention of residents long enough to look out their windows. If they do not observe any corroborating visual warning, most will ignore the sound, he says.

Using key findings from the report, Contra Costa County created an integrated public warning system with a variety of corroborative messages. To begin, the county installed 42 outdoor sirens clustered mostly around refineries and petrochemical plants, and it distributed hundreds of weather radios to nursing homes, day care centers and schools. It also implemented a telephone notification system by Morristown, N.J.-based Honeywell International that uses electronic mapping and an automatic dialing system to call phone numbers in targeted areas to deliver pre-recorded alerts. The system was recently used to contact residents within a 1.5-mile radius of where a missing Alzheimer's patient was last seen. The county also can alert residents on pagers, by e-mails or pop-ups on desktop computers. Recently, the county began adding a cellular alerting system. The county's strategy has been to employ several methods of public notification so warnings are both received and heeded.

6

Such broadcasts must use common alerting protocols with a "write-it-once" program that triggers the various alerting systems so that warning messages are accurate and consistent, Botterell says. Contra Costa County's budget for its notification systems is about $1.2 million per year, much of which is funded by refineries and other industries that handle hazardous materials. With a county population of about 1.2 million, that spending equates to about $1 per person per year, Botterell says.

Any effective mass notification system must account for the unique attributes of the area it serves. Densely populated and home to the Pentagon and 30 to 40 other federal agencies, Arlington County, Va., brought together commercial interests and academia to develop a layered system that can communicate warnings to those who live and work in the area as well as to its thousands of visitors. "By doing it right the first time, we hope to be a model for the rest of the country," says Dave Jordan, chief information security officer for Arlington County.

Doing it right has been an evolution, he says, beginning with a mass notification system from locally based Roam Secure that sends text alerts to desktop computers, cell phones and personal digital assistants. Billboards placed in strategic areas throughout the county advise the public how to program their cell phones to enroll in the system and receive the free alerts. "It's a great tool to reach people who don't live here and will help to reduce chaos if we have a major incident," Jordan says.

To supplement that system, in October 2006, the county launched an AM radio system that interrupts cable programming in case of an emergency. And, this past spring and summer, the county rolled out an outdoor loudspeaker warning system by Sarasota, Fla.-based Cooper Notification that is mounted on utility poles and can deliver pre-recorded emergency messages that are intelligible up to a half mile away. County officials are working to tie the mass notification programs into one computerized text system with a drop-down selection list so emergency management officials can easily choose which elements of the system they want to use, Jordan says.

The NSTC report also found that warnings are most effective when they are delivered specifically to the people at risk. The study determined that if people who are not at risk receive warnings that are not followed by the anticipated event, they are much less likely to take seriously future warnings. That concern was one reason why Spartanburg County, S.C., chose Web-based mapping software by Troy, N.Y.-based MapInfo and services by Baton Rouge, La.-based FirstCall Network to send emergency alerts to residents and businesses only in designated areas. The messages are relayed from the county's emergency operation center to the FirstCall phone network operation center in Baton Rouge.

At the same time, local officials select an area to send messages to as many as 500 land-line and wireless phones per minute. The system proved useful recently after an explosion at a local industry, and emergency management officials pinpointed the affected area and notified residents to shut off their heating and air conditioning and to move to a safe place.

Although the automated calls originate from outside the county, the system generates a Spartanburg County caller ID, which greatly increases chances of residents picking up their phones, says Community Emergency Response Team Coordinator Robbie Swofford. And, the system connects to two additional network operation centers in Philadelphia and Las Vegas, so county officials do not have to worry that an electrical grid blackout in Baton Rouge would affect their ability to notify their residents of an emergency.

Simple technology still works

With tornadoes, severe storms and floods generating seven Presidential-declared emergencies in the past year alone, Oklahoma officials have an arsenal of tools to deal with natural emergencies, says Oklahoma Emergency Management Office Public Information Officer (PIO) Michelann Ooten. While many sophisticated technologies are being used to notify residents of a problem, the older low-tech items still belong in every standard emergency kit, Ooten says.

7

Oklahoma officials encourage residents to have National Oceanic and Atmospheric Administration (NOAA) all-hazards weather radios in their homes, especially during tornado season. The National Weather Service (NWS) produces the broadcasts only for the radios, which can be purchased in retail outlets for $25 to $45. Some NOAA radios are designed to turn on automatically when NWS warning information is being transmitted.

The all-weather radios came in handy this past January, Ooten says, when a record number of people went to local hospitals suffering from symptoms of carbon monoxide poisoning. With electricity out for days, many people were running generators inside their homes and becoming sick from the fumes. "We were able to get on the weather radio and put out a public service announcement that described the symptoms of carbon monoxide poisoning and what people should do if they see the signs," Ooten says.

Having little experience with hurricanes or tornadoes, residents of northeastern communities face ice storms and floods that can cripple them. When the Local Emergency Planning Committee (LEPC) for the small suburban community of Sharon, Mass., began looking for an ENS system, they realized they had to communicate with the public despite down phone and power lines.

The need for a non-wire-based notification system led them to radio, says Chuck Levine, training officer for Sharon Civil Defense, the lead LEPC organization. The committee purchased a Highway Advisory Radio (HAR) system from Bloomingdale, Ind.-based Quixote Transportation Technologies and installed it in the town's emergency operations center.

Most communities with HAR systems use them for traffic advisories only, Levine says, so the challenge for Sharon was to increase public awareness of the system so residents would know to tune in during emergencies. Sharon officials began by using the HAR system for daily broadcasts of community information, such as town meetings, local tax deadlines, scheduled road construction and various civic activities.

With only about a five-mile radius, the town is planning on purchasing a second transmitter to shore up communications to some parts of town where the signal remains weak. So far, Levine says, town officials are pleased with the results. More people are tuning in to the station and getting emergency notices, and the local police dispatcher has been fielding fewer calls for advisory information during bad weather.

Emergency notification's future

As people become aware of an increasing number of hazards, their expectations for warning notification rise. "The challenge of public warning is not going to go away," Botterell says.

At the same time, he says, government officials are afraid of the economic, political and career fallout that can happen when they take ownership of warning responsibilities. Once the act of warning becomes a statutory obligation rather than a discretionary act, there is liability, Botterell says. So, without a coherent framework of responsibility, an easy way out is to simply do nothing.

With that in mind, Botterell says the next step is to create integrated, all-hazard warning systems with established best practices so decisions are not left to judgment calls. "At the end of the day you have to be governed by wanting to do the right thing," Ooten says.

Annie Gentile is a Vernon, Conn.-based freelance writer.

National Weather Service

NOAA Weather Radio All Hazards

Home   News Organization   Search [   ]   ○ NWS ● All NOAA

- Espanol
- Station Listings
- Coverage Maps
- SAME Coding
- Receiver Information

  Public Alert

- Logo Information
- All Hazards
- Emergency Alert System
- Report NWR Outages
- Special Needs Info
- General Info/News
- Frequently Asked Questions

NWR Receiver Consumer Information

NOAA Weather Radio All Hazards transmitters broadcast on one of seven VHF frequencies from 162.400 MHz to 162.550 MHz. The broadcasts cannot be heard on a simple AM/FM radio receiver. However, there are many receiver options, ranging from handheld portable units which just pick upWeather Radio - to desktop and console models which receive Weather Radio in addition to other broadcasts.

Where to Buy One

While NOAA's National Weather Service staff prepare and produce Weather Radio broadcasts, NWS neither manufactures nor sells receivers. Receivers can be found at many retail outlets, including electronics, department, sporting goods, and boat and marine accessory stores and their catalogs. They can also be purchased via the Internet from online retailers or directly from manufacturers.

Receiver Types and Models

The National Weather Service does not endorse any particular make or model of receiver. The following lists below, which contains just some of the many NOAA Weather Radio/EAS receiver manufacturers, is provided to obtain information to decide on a purchase. Manufacturers who wish to add their company's information to this page may e-mail the webmaster of this web page, Melody Magnus.

- Residential receivers
- Industrial/commercial grade receiver

Key Features

Depending on the information you want to access, and how and where you plan to access our broadcasts, you have many options. There are Standalone Weather Radio receivers as well as Multi-Band/Function Receivers with the Weather Band included. If you are want to be alerted to Warnings and Watches day or night, a Standalone receiver might work best for you. If you just want to be able to tune to in the Weather Broadcast, but you do not care about receiving alerts, a general multi-band/function receiver could be better.

Standalone Receivers: Standalone Receivers might also come with AM/FM bands, but their primary use will be to receive Weather Radio broadcasts. You can choose between handheld and desktop models, depending on whether you will want to take your radio with you when you go out. There are many choices from a number of manufacturers with prices ranging from around $20 to over $100, depending on the number of features included.

Multi-Band/Function Receivers: These receivers bundle a number of features, and Weather Radio is just one of possibly many frequency bands included. You can find the Weather Radio band included in:

- AM/FM radios
- Shortwave receivers
- CB radios
- VHF Marine radios

- Scanners
- GMRS/FRS 2-way radios
- Car radios
- TV/Radio combinations

Residential Grade Radios and Features

Prices can vary from $20 to $200, depending on the model. Many receivers have an alarm feature, but some may not. Among the more useful features in a receiver are:

Tone alarm: The National Weather Service will send a 1050 Hz tone alarm before most warning and many watch messages are broadcast. The tone will activate all the receivers which are equipped to receive it, even if the audio is turned off. This is especially useful for warnings which occur during the night when most people are asleep.

SAME technology: SAME, or Specific Alert Message Encoding allows you to specify the particular area for which you wish to receive alerts. Most warnings and watches broadcast over NOAA Weather Radio are county- or independent city-based (parish-based in Louisiana), although in a few areas of the country the alerts are issued for portions of counties. Since most NWR transmitters are broadcasting for a number of counties, SAME receivers will respond only to alerts issued for the area (or areas) you have selected. This minimizes the number of "false alarms" for events which might be a few counties away from where you live.

Selectable alerting of events: While SAME allows you to specify a particular area of interest, some receivers allow you to turn off the alarm for certain events which might not be important to you. For example, if you live in a coastal county, but not right at the beach, you might not care about Coastal Flood Warnings.

Battery backup: Since power outages often occur during storms, having a receiver with battery backup can be crucial. However, unless you have a portable unit which you will use away from other power sources, an AC power connection is recommended.

External antenna jack: While most receivers come with a whip antenna which can usually be extended out from the unit, depending on your location you may need an external antenna to get a good reception. Some receivers come with an external antenna jack (normally in the back of the unit) which will allow you to connect to a larger antenna (indoors or outdoors). You can often purchase these as accessories at the place where you bought your receiver, or from most stores with an electronics department. NWR broadcasts are in the Public Service VHF frequencies, just above FM radio and between TV channels 6 and 7 - so an antenna designed for VHF televisions or FM radios should work. Or, you can make your own antenna. Go to this web site for more information.

Public Alert ™ Devices

We can not recommend one brand of receiver over another, but we do suggest that you look for receivers which carry the Public Alert logo. The Public Alert Standard (CEA-2009) was developed by the Consumer Electronics Association in conjunction with the National Weather Service. Devices which carrying the Public Alert logo meet certain technical standards and come with all the features mentioned above. The site below are commercial sites. They are NOT part of the NOAA website.

First Alert Weather Radios *Public Alert* Sima Products Corporation Customer Service 140 Pennsylvania Ave., Bldg #5 Oakmont, PA 15139 800-345-7462, 412-828-3700 fax: 412-828-9338 e-mail: custserv@simacorp.com http://www.simacorp.com	**Radio Shack** *Public Alert* 200 Taylor Street, Suite 600 Ft. Worth, TX 76102 Customer Relations phone: 817-415-3200 fax: 817-415-3240 www.radioshack.com
Midland Radio Corporation *Public Alert* 5900 Parretta Dr Kansas City, MO 64120 phone: 816-241-8500 e-mail: mail@midlandradio.com www.midlandradio.com	**Reecom Electronics Inc.** *Public Alert* 3603 Woodlark Drive Roswell, GA 30075 phone: 770-641-9226 fax: 770-641-1040 e-mail: sales@reecominc.com www.reecominc.com
Oregon Scientific *Public Alert* North American Headquarters 19861 SW 95th Place Tualatin, OR 97062 phone: 503-639-8883 fax: 503-684-8883 e-mail: info@oscientific.com http://www2.oregonscientific.com/	**HomeSafe, Inc** *Public Alert* 519 Dupree Road Willow Springs, NC 27592 phone: 800-607-6737 phone: 919-639-3001 fax: 919-639-0547 http://www.homesafeinc.com e-mail: homesaferadios@aol.com info@homesafeinc.com
Ambient Weather *Public Alert* 6503 W. Frye Road, Suite 11 Chandler, AZ 85226 phone: 480-283-1844 fax: 480-283-1645 e-mail: support@AmbientWeather.com http://www.AmbientWeather.com/noaaradio.html	**Alert Products Inc.** Distributed by Media Group Inc. 102 Hamilton Av. Stamford, CT 06902 phone: 203-406-1000
C. Crane Company 1001 Main Street Fortuna, CA 95540 phone: 800-522-8863 phone: 707-725-9000 fax: 707-725-9060 e-mail: ccraneco@aol.com www.ccrane.com	**WeatherRadios.com** 430 N Wanda Ln. Palatine, IL 60067 phone: 800-818-6505 e-mail: mailto:@weatherradios.com http://WeatherRadios.com/
MTS Communication Products Lyn Williams, CEO Skip White, VP 950 Hwy 42 West Clayton, NC 27520 phone: 919-553-2995 fax: 919-553-0437 www.mts-comm.com www.EmergencyAlertRadio.com	**ExploraTrack** PO Box 1190 Cannon Beach, OR 97110 1-800-414-8655 info@exploratrack.com http://www.weatherradiostore.com http://www.weatherconnection.com

Freeplay Energy Dixie Sales Company PO Box 600 Brown's Summit, NC 27214 Toll free: 1-866-697-7529 Fax: 336-621-9100 e-mail: pthornton@dixiesales.com www.freeplayenergy.com	**Etón USA** Etón Corporation 1015 Corporation Way Palo Alto, CA 94303 USA Phone: 650 335 3008 Fax: 650 903 3867 email: snguyen@etoncorp.com www.etoncorp.com

Industrial/Commercial Grade Receivers

Designed for reception of Emergency Alert System EAS broadcasts as well as NOAA Weather Radio broadcasts. Prices may vary from hundreds to thousands of dollars.

Thunder Eagle, Inc. Dan Gropper Thunder Eagle, Inc. P.O. Box 625 Vienna, VA 22183 phone: 888-877-8022 fax: 703-281-7459 e-mail: dgropper@thuneagle.com www.thuneagle.com	**MTS Communications Products** Lyn Williams, CEO Skip White, VP 150 Clayton Commerce Center Clayton, NC 27520 phone: 919-553-2995 fax: 919-553-0437 www.mts-comm.com
TFT, Inc. Darryl E. Parker, VP, Bus. Development 2243 Ringwood Avenue San Jose, CA 95131-1737 phone: 408-943-9323 fax: 408-432-9218 e-mail: DParker@TFTInc.com e-mail: info@TFTInc.com www.TFTInc.com	**Communistarr, Inc.** 215 S. Pavilion Avenue Riverside, NJ 08075-3613 phone: 800-952-7129 fax: 856-764-6519
Veetronix, Inc PO Box 480 Lexington, NE 69130 sales@veetronix.com www.veetronix.com	**Hamtronics, Inc.** Jerry Vogt 65 Moul Road Hilton, NY 14468-9535 phone: 716-392-9430 fax: 716-392-9420 e-mail: jv@hamtronics.com www.hamtronics.com
Gorman Redlich Manufacturing Co . 257 West Union Street Athens, OH 45701 phone: 740-593-3150 fax: 740-592-3898 e-mail: jimg@gorman-redlich.com www.gorman-redlich.com	**Computer Automation Technology Inc.** 4631 N.W. 31st Avenue, Suite 142 Fort Lauderdale, FL 33309 phone: 954-978-6171 fax: 561-488-2894 e-mail: webmaster@catauto.com www.catauto.com

08/3/4

Dayton Industrial Corporation
2237 Industrial Blvd.
Sarasota, FL 34234
phone: 941-351-4454
fax: 941-351-6081
e-mail: SCARadio@aol.com
www.daytonindustrial.com

Receiver Recalls

For information on Weather Radio receiver recalls, go to the U.S. Consumer Product Safety Commission web site and choose "Radios Weather" in the product Type list.

Español, News, General Info, Coverage Maps,
Station Listings, Automated Voices, Receiver Info, SAME Coding,
All Hazards, EAS, Report NWR Outages, Special Needs, FAQs

NOAA, National Weather Service	Disclaimer	Privacy Policy
Office of Climate, Water, and Weather Services	Credits	About Us
1325 East West Highway	Glossary	Career Opportunities
Silver Spring, MD 20910		
Questions, Comments?		

Last Updated: November 13, 2007->->->->

13

INFORM CITIZENS AND IMPROVE COORDINATION AND EMERGENCY RESPONSE TIMES WITH THE 3n SYSTEM

"The 3n system has undoubtedly improved our ability to quickly notify citizens of disasters, potential hazards, and other public safety information. 3n is exactly what we need in a mass notification system. We realized an immediate return on investment in the speed in which we are able to communicate internally as well as with citizens."

Michael Falkow, Director, Information Technology & Communications, City of Inglewood

Managing the safety and welfare of citizens while ensuring government continuity is now more challenging than ever. Residents and businesses depend on county and local governments to keep them informed of everything from street closures to terrorist alerts. Governments are required to meet community demands for day-to-day information and be prepared for natural disasters, industrial accidents, and terrorist acts. Detailed plans for Continuity of Government (COG) and Continuity of Operations (COOP) are now mandated for government at all levels.

3n's InstaCom Citizen Alert enables government agencies and organizations to communicate in less time using fewer resources. InstaCom Citizen Alert quickly and efficiently delivers messages to tens, hundreds, or thousands of recipients across all voice and text communication devices (landline/satellite/mobile phones, text messaging, instant messaging, email, pagers, BlackBerry® devices, PDAs, fax, and more) and will cycle through devices until the message is delivered.

Use 3n's InstaCom Citizen Alert across departments, cities, and counties to:

→ Target communications to businesses and residents by postal code, street address, incident site, or user-defined area

→ Communicate to thousands easily and efficiently during disasters of any size and scale

→ Deploy police, fire, and other first responders in minutes

→ Improve emergency response times and coordination efforts

Benefits for County and Local Government

With 3n's InstaCom™ Citizen Alert, county and local government organizations can:

→ **Send geographically targeted notifications to businesses and residents in specific locations.** The 3n mass notification system enables government officials to issue evacuation notices, emergency instructions, and other messages to businesses and residents in a specific geographical area.

→ **Reach thousands of citizens and government personnel immediately with critical information.** Rapidly and reliably disseminate critical information to agencies, mobilize city workers, keep officials abreast of developments, and relay emergency instructions to residents and businesses, even when local or regional communication systems are damaged.

→ **Deploy police, fire, and other emergency personnel on short notice.** Improve emergency response times and coordination efforts in the field.

→ **Make quick, informed decisions.** Leverage instantaneous reporting of message receipt, non-completions, and citizen or personnel responses to make up-to-the-minute decisions.

→ **Manage the system easily and cost-effectively.** With InstaCom Citizen Alert, you do not need to purchase or maintain expensive hardware or software or worry about updates and maintenance. Feel confident with maximum data security through our Oracle/Linux platform and built-in redundancy at every level.

For more information about 3n, please visit
www.3nonline.com or call 888-366-4911.

→ Simple. Reliable. Global.

14

3n

Target communications geographically
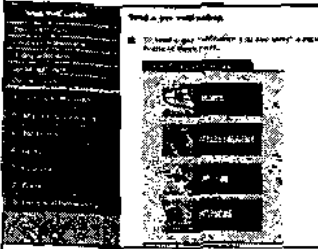
→ Send messages to citizens located in a specific geographical region defined by postal code, street address, radius from a specific point, or by using a polygon drawing tool to identify a neighborhood or other location.

Enable citizens to subscribe to alerts
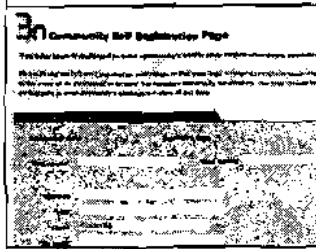
→ Citizens and businesses can voluntarily sign up for alerts and specify the best way to reach them in an emergency through InstaCom Citizen Alert's Opt-In page.

Map organization-specific data
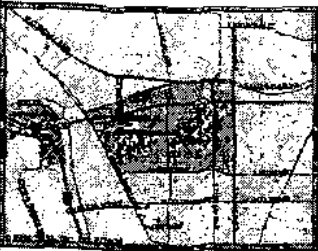
→ Easily add custom layers with organization-specific data—such as the location of hospitals, police stations, utility poles, and fire hydrants —to target communications more precisely and effectively.

Use one system for all organizations
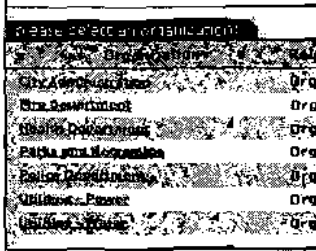
→ Organizations with multiple departments, locations, or districts can organize and manage the system in logical divisions. Each division operates autonomously while the umbrella organization can send messages to everyone in the system.

Instant communication, instant results
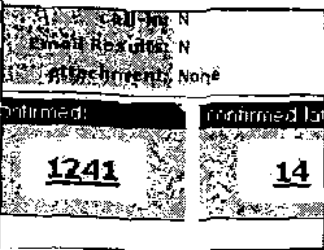
→ Send thousands of voice and text messages in a matter of minutes. InstaCom Citizen Alert assembles broadcast data in real-time to display compiled results in a clear, easy-to-read dashboard for quick and informed decision-making.
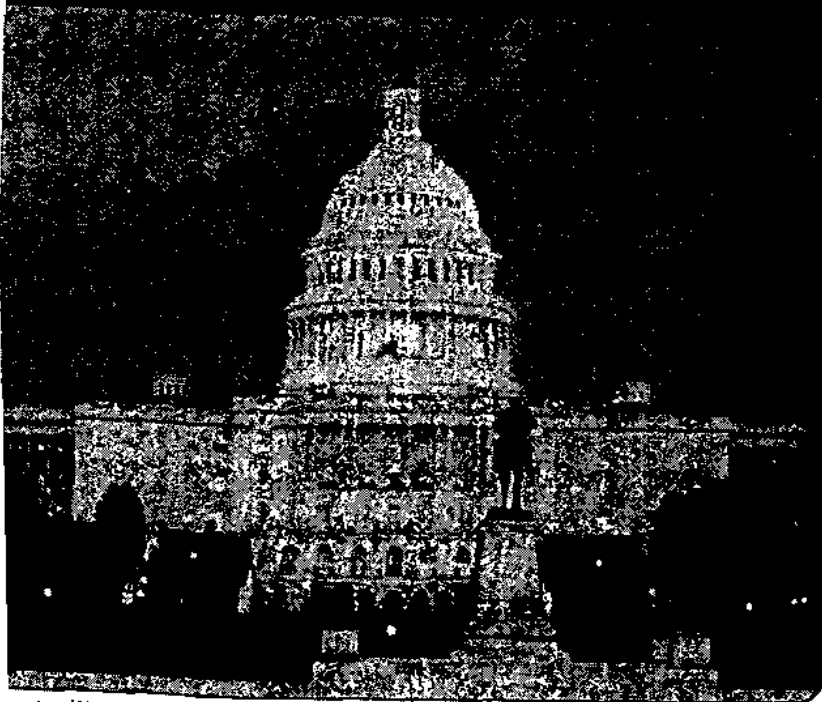
Optimal reliability, minimal effort
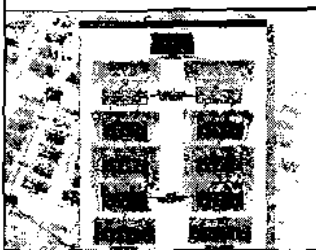
→ 3n's Software-as-a-Service (SaaS) delivery model provides unparalleled speed, reliability, security, and scalability for rapid message delivery with no hardware, software, or equipment to maintain.

About 3n

3n® (National Notification Network) is the leading global provider of mass notification solutions to Global 2000 corporations, government agencies, healthcare systems, and educational institutions in more than 70 countries with the ability to communicate in more than 230 countries worldwide. 3n's web-based mass notification system enables county and local government organizations to effectively communicate with citizens, businesses, government officials, first-responders, and more in minutes via all voice and text communication devices, such as landline/satellite/mobile phones, text messaging, instant messaging, email, pagers, BlackBerry® devices, PDAs, and fax. For more information, visit 3n at **www.3nonline.com**.

For more information about 3n, please visit
www.3nonline.com or call 888-366-4911.

→ Simple. Reliable. Global.

15

3n
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www.3nonli~.com
one call - reaches all

3n (NATIONAL NOTIFICATION NETWORK)

3n Mass Notification System for

Government Users

"Rapid, accurate communication can make the biggest difference in the first 24 hours following a disaster."

» BENEFITS OF 3n FOR GOVERNMENT USERS

The 3n mass notification system allows emergency managers and Emergency Operations Centers (EOCs) the freedom to manage the crisis, not the communications. The 3n system can rapidly and reliably disseminate critical information and instructions to agencies, mobilize city workers, keep officials abreast of developments, and relay emergency instructions to residents and businesses.

Tragedies such as the Oklahoma City bombing, 9/11 terrorist strikes, 2003 Blackout, Hurricane Katrina, and raging wildfires in Southern California have focused our national attention. And every year, severe weather, radiological hazards, child abductions, prison emergencies and other acts of violence are additional sources of alarm for U.S. cities, its residents and businesses.

Detailed plans for Continuity of Government (COG) and Continuity of Operations (COOP) are now mandated features of government at all levels. Disaster management planning, however, is not just about setting up evacuation shelters and providing emergency supplies. Without rapid, coordinated communications, even the best disaster management plan is virtually ineffective.

In emergency situations—when seconds count—city, county, and state emergency managers need a fast and reliable means of communicating. 3n, a Software-as-a-Service Provider (SaaS), meets this need by dramatically reducing the traditionally long and labor-intensive task of notifying large numbers of people to a simple, reliable and easy to execute process. The 3n notification system is a proprietary telephony and data communications platform delivered on a subscription basis, offering unparalleled accessibility, reliability, security and scalability in a simple and cost-effective manner.

Whether in an emergency or non-emergency situation, 3n subscribers can access a fully hosted SaaS-based system and initiate mass notification simply by logging on to 3n's secure web or by making one toll-free call from any landline or cell line. The system then disseminates critical messages (preded or created on-the-fly) simultaneously and continuously to thousands of target recipients. An entire network, organization, geographically mapped area can be contacted within minutes, and the system will cycle through multiple voice and text messages until delivery is made. The sender's process is complete receipt of real-time confirmation of message delivery.

Using the 3n system, constant lines of communication are available via phone, email, IM, SMS, fax, pager, PDA, and BlackBerry. Archived records of all messages sent, and clear audit trails, make broadcast tracking and record keeping simple. 3n provides the best solution where existing communications methods are too unreliable and limited in scope.

"I can't over-emphasize the importance of communication, and how innovative technology can be used to improve vital links between agencies and across jurisdictions."

Mayor Kerry Donley
Alexandria, Virginia

ARE YOU PREPARED?

"Enhanced communications and warning systems are one of the top priorities for improving emergency preparedness. The ability to warn citizens of potential hazards and threats, and to coordinate response and recovery to a disaster is critical."

NEMA Report, 2002
Homeland Security and Disaster Preparedness

» HOW 3n WORKS

| USER CALLS 3n OR ACCESSES INTERNET | 3n SYSTEM PROCESSES INFORMATION | MESSAGE TRANSMITTED | NOTIFICATION SENT TO ALL CONTACT PATHS SIMULTANEOUSLY | | | | | | | REAL TIME REPORTS GENERATED |

LANDLINE · CELL PHONE · E-MAIL · PAGER · BLACKBERRY · PDA · FAX

Real time reports confirm the message recipients or, for example, who are new to initiating agency
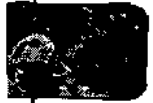
GOVERNMENT APPLICATIONS

Emergency Management. Mobilize emergency response teams and public safety employees – EOCs, Police, Fire, EMS, SAR, Red Cross

Resident Evacuation. Notify buildings, campuses or specific geographic areas when major disasters hit

Employee Mobilization. Call in additional city workers to meet emergency demand, shut down facilities, reschedule or cancel shifts

Terror Response. Alert Emergency Managers and citizens to changing terrorist threat levels and DHS warnings

Weather Alerts & Power Outages. Relay critical communications to residents related to power outages or severe weather conditions

Geographic Targeting. Target notifications by geography (e.g. by zip codes, physical streets, vicinity around an accident, neighborhoods, etc.)

Radiological Events. Give residents immediate warning of hazardous toxins or other airborne threats
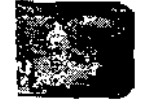
Local Government. Disseminate information on missing persons, deliver public meeting announcements, newsletters, bulletins, and other event information

» 3n CUSTOMER TESTIMONIAL

"We know the 3n notification system is reliable and that provides an immense amount of reassurance during a crisis. Now we can focus on resolving the emergency situation and not spend time on unnecessary efforts like our communication system. 3n has made our entire communication process much more convenient and user-friendly."

Dale DeHart, Team Leader, City of Camarillo Disaster Assistance Response Team

» WHY CHOOSE 3n?

- Facilitates inter-agency communications with one single, effective, automated solution

- Delivers messages via more devices (landline, cell, pager, SMS, PDA, Blackberry, fax, IM, and email) than any other system

- Allows members to manage own contact information, prioritize contact order, and differentiate between emergencies/non-emergencies

- Multiple accesses via web interface, live operator, and automated voice response system

- Allows administrators to both manage member data and delegate authority to multiple administrators

- Frees key personnel to perform other critical tasks during emergencies

- Real-time reporting of message receipt, non-completions, broadcast history, and member participation

- Inexpensive solution with no hardware/software purchase and no fixed costs from maintaining phone lines

- Built on an Oracle/Linux platform that ensures security of all data. Redundancy is built in at every level

- Significantly faster message delivery with a SaaS model that provides access to powerful software and thousands of phone lines

3n (NATIONAL NOTIFICATION NETWORK)

(888) 366.4911   fax: (818) 545.7040
web: www.3nonline.com

FREE demo   888-366-4911

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ORACLE

CREATING A MASS NOTIFICATION STRATEGY ACTION PLAN WORKSHEET

ASSESS YOUR COMMUNICATION NEEDS

What is your mission?	
List your objectives. Be specific.	1. 2. 3. 4. 5.

	Known Gaps	Failure Points
Identify the known gaps and pinpoint potential failure points in your current plan that can be addressed by mass notification.	• • • • •	• • • • •

	Current system:	
Evaluate the performance and effectiveness of your current communications system.	Strengths	Weaknesses

List possible disaster scenarios that could happen at your company.	
Outline how those scenarios may escalate.	
What added preparation do you need to do in case they do escalate?	

ASSESS YOUR COMMUNICATION NEEDS *(continued)*

Identify the benefits of mass notification specific to your company's needs.	
List some situations when a mass notification strategy would have helped you. *(Include emergency uses as well as general business uses.)*	
Who are the key decision-makers in your business continuity or disaster recovery planning?	
Who else will use your mass notification system? For which activities?	
Who (and how many) *Will need to be notified in a crisis? Will use the system? Will receive training?*	
What: *Type of communication needs to be transferred? Will the system be used for?*	
When: *Will you use the system? Will you run drills? Do you expect to have a system in place?*	
Where: *Will the system be housed? Will you be when you need to use it? Will key executives be?*	
How: *Will you contact people (devices)? Will you access the system? Will you maintain contact information?*	

ASSESS YOUR COMMUNICATION NEEDS *(continued)*

Determine your timeline for selecting and implementing your new system *(e.g. 90 days)*	
Determine your budget for selecting and implementing your new system	

SELECT THE BEST SYSTEM FOR YOU

Refer to the "Selecting a Mass Notification System" scoring worksheet to prioritize requirements and score systems against each other.

Please refer to the list of considerations and choose which are most important for your strategy. Prioritize them.	**Critical needs** 1. 2. 3. 4. 5.	**Nice-to-have capabilities** 1. 2. 3. 4. 5.

	Paper-based model	In-house model	On-demand model
Evaluate the platform options and decide which best satisfies your specific considerations.	**Pros** > Inexpensive > No technical skills needed	> You own the equipment > Complete control	> Cost effective > No equipment purchases > Uses few resources > Multiple access points
	Cons > Hard to maintain > Slow/time consuming > Single access point > Multiple failure points > Low visibility into results	> More resources > Most expensive > Common location	> Subject to system availability > Less ability to customize
	Scale		
	Cost $	$$$	$$

Use this space to write down the contact information of companies you are researching for your mass notification solution.	

SELECT THE BEST SYSTEM FOR YOU (continued)

Solution 1 Pros and Cons	Solution: Pros / Cons

Solution 2 Pros and Cons

Solution:

Pros	Cons
•	•
•	•
•	•
•	•
•	•

Solution 3 Pros and Cons	Solution: Pros / Cons

IMPLEMENT A MASS NOTIFICATION SYSTEM AND PROCESS

Evaluate your current contact list. How do you maintain it? Make a plan to verify and update all the information.	
Choose which contact paths you would like to populate. (e.g. home phone, cell, email, fax, IM, pager, etc.)	
Designate a system administrator and choose two back-up administrators	Primary system administrator: Back-up 1: Back-up 2:
Define notification groups and subgroups	

IMPLEMENT A MASS NOTIFICATION SYSTEM AND PROCESS *(continued)*

Designate roles and delineate responsibilities for your key players In the event of an emergency.	
Make a plan to educate users and recipients. Determine who needs to be trained to send notifications.	
Set up rules for continuing education.	
Schedule your testing. (Conduct scheduled and unscheduled/ unannounced drills.)	
How often will you update your contact information and how will you do it?	
List other possible routine business uses to maximize the return on your Investment.	

GLOSSARY AND EXPLANATION OF CONSIDERATIONS

API (Interface with current systems)	Application Programming Interface. If your organization uses other business software tools, integrating those systems with a mass notification system might be advantageous. For example, you might want contact lists created in one application to be automatically available to the other one.
Database and Lists	How member information can be uploaded, stored, queried and used. A few considerations: How will members' information, such as phone numbers and emails, get into the notification system? Does the system allow for multiple contact paths? How can members be deleted from the system? Can messages be sent to "portions" of the entire member list?
Ease of Use	Your mass notification system should be easy enough to be used by anyone in the company, not only the IT department. It should offer a simplistic and intuitive interface. Considerations: Are the set-up and training and processes quick and effortless? How much technical expertise is involved in using the system?
Equipment	Hardware, software, phone lines, and other special equipment which may need to be purchased to use the notification system.
Grouping	An organization's ability to create groups and subgroups. Does the system allow members to be organized into functional, geographic, or other logical groups with messages sent separately or simultaneously to one or all?
Geo-notifications	The integration of geographic data with member contact information, allowing notifications to be targeted at a designated area. This function is critical for organizations with a need to notify or evacuate the population within set geographic boundaries.
Infrastructure	The fundamental structure of a system or organization. The basic architecture of any system determines how it functions and how flexible it is to meet future requirements.
Multiple Access Points	The ability to gain access to an application in multiple ways — for example, the ability to access and use a notification system via any touchtone phone (using a live operator or an automated telephone attendant) or computer with Internet access.

GLOSSARY AND EXPLANATION OF CONSIDERATIONS *(continued)*

Notification Distribution	A user's ability to determine to whom, when, and how a message is distributed / delivered. A few considerations: What volume can the system handle? Can a future date and time be specified? Will messages only be delivered to a live person? Is there a limit to the number of messages that can be scheduled at one time? How does the system indicate that the notification was delivered?
Notification Response	The means and methods by which members of an organization can respond when they receive a notification, and the way the system tracks and records the response. Some considerations: How is receipt confirmed? What if the system does not receive a response? Do the recipients of notification system messages need a computer?
Platform	The basic technology of a computer system's hardware and software that defines how a computer is operated and determines what other kinds of software can be used.
Power	Organizations should consider whether their notification system is tied to the same power source as the organization itself and thus might be unavailable in a localized disaster.
Price	With an in-house system, the customer not only pays licensing fees to the vendor but must also pay for telecom fees, system administration, backup electrical power, and so forth. With a vendor-operated system, all costs are included in the vendor's fee. Other considerations: How much does the notification system cost? Is it processed by use or members? Are there any hidden fees? What is the contract length?
Privacy/Security	Security isn't just necessary to protect the privacy of the individuals on your list, it also protects your data from tampering. Your contact list, once developed, is an important business asset. Vendors should be prepared to demonstrate how they can secure that asset.
Redundancy	Duplication or repetition of elements in electronic equipment to provide alternative functional channels allowing for no single point of failure. The term "single point of failure" describes any part of the system that can, if it fails, cause an interruption of required service from that system. This can be as simple as a process failure or as catastrophic as a computer system crash.

GLOSSARY AND EXPLANATION OF CONSIDERATIONS *(continued)*

Reliability	The degree to which a system or equipment is operable and in a committable state. Considerations: Historically, what is the system's uptime and downtime? Can the system be relied upon to work when you need it? What is the system's availability?
Reporting	The collection, display, and storage of data about an initiated broadcast. Reporting should include all the requisite broadcast details – to whom, when, and how a message was sent. Creating and using a report should be simple; the report should be searchable; and it should be archivable for later viewing or audit.
Support	Support considerations: When is live support available? Is there support standing by 24 X 7 or only during business hours? Is there a fee associated with using support or is it included in the original pricing structure?
Testability	The ability of an organization to run tests or drills in preparation for an emergency.

	3n		
Access to the Mass Notification System			
Via any web browser	✓		
Toll-free via any phone using 24/7 live telephone operator or IVR	✓		
Via an internal system	✓		
Message Initiation			
Schedule broadcasts for later delivery and/or recurring messages	✓		
Create text messages	✓		
Convert text to speech (English, Spanish, French, Italian, Portuguese)	✓		
Record voice messages via computer or phone	✓		
Record a custom greeting to be used in all messages	✓		
Send voice and text messages simultaneously	✓		
Store pre-recorded messages in online library	✓		
Create personal one-time or recurring reminder messages	✓		
Broadcast Options			
Grant priority in queue to emergency messages	✓		
Send messages easily in three easy steps	✓		
Choose contact paths for each broadcast	✓		
Send email attachments with broadcast messages	✓		
Enable confirmation of message delivery	✓		
Unique broadcast identifiers to prevent multiple messages	✓		
Multiple contact cycles per broadcast	✓		
Rebroadcast to recipients who did not confirm receipt of initial message	✓		
Escalate broadcast if primary recipient does not respond	✓		
Secure voice message retrieval requiring a PIN (Personal Identification Number)	✓		
Notification Delivery			
Phone (landline, mobile, and satellite)	✓		
Email	✓		
Instant Messaging	✓		
Facsimile	✓		
Pager (one-way and two-way alpha and numeric)	✓		
Text / native SMS and PDA (including BlackBerry®)	✓		
Voice and text to the same device on same broadcast (multi-modal support)	✓		
Continuously updated voicemail recognition by carrier (wireless performance tuning)	✓		
Advanced Features and Tools			
Polling for multiple-choice surveying	✓		
One-touch conference call initiation and connection	✓		
International dialing	✓		
Customizable fields for data collection, filtering, and reporting	✓		
Customizable caller ID	✓		
Quota notifications that terminate when the quota has been reached	✓		
Toll-free, recorded-message call-ins	✓		
"What-if" scenario management	✓		
Geographically targeted broadcasts (GIS)	✓		

Reporting			
Web-based, real-time message delivery tracking and response consolidation	✓		
Time and date stamp for all confirmed messages	✓		
Detailed broadcast reports with history and audit trail	✓		
Detailed member and registration reports	✓		
Detailed usage reports	✓		
Ad hoc reporting	✓		
Member Access			
Option to allow members to access and control their own contact information	✓		
Ability to select privacy options according to member preference	✓		
Prioritized contact paths based on emergency / standard notifications	✓		
Organization / Administrative Control of Data			
Upload member data in all formats	✓		
Single member addition or removal on the fly	✓		
Capability to update multiple records with data export/import capabilities	✓		
Administrator can delegate and define hierarchies of authority	✓		
Ability to define a top-level organization with fully functional sub-organizations	✓		
Track members by customizable external ID numbers	✓		
Specialized search function for individuals and groups	✓		
Solution Options			
No hardware or software purchase required	✓		
No ongoing in-house technical support required	✓		
Continuous upgrades of hardware, software, and communication lines	✓		
Adheres to industry-standard, highly scalable database architectures	✓		
Easy to use / simple and intuitive interface	✓		
Online help, tutorials, and user documentation	✓		
Integration			
Open standards Web service application programming interfaces (APIs)	✓		
Support building of APIs between mass notification system and your internal system	✓		
Contact data maintenance through internal system (API)	✓		
Broadcasting initiation and reporting through internal systems (API)	✓		
Security			
Built on highly secure platform	✓		
Hosted in top-tier secure facilities with 24/7/365 security, access, and Type II SAS 70 cert.	✓		
VeriSign secure site with 128-bit SSL encryption	✓		
Annual third-party security assessments	✓		
Audit logging for login attempts and other security concerns	✓		
Reliability / Availability			
Geo-dispersed data centers	✓		
Multi-tier, multi-server fault tolerant architecture with full redundancy	✓		
Multiple phone carriers used to ensure system accessibility	✓		
Hosted in high-availability facilities	✓		
Active-active configuration with no failover delays	✓		
Internal load balancing support	✓		
24/7 monitored service with automatic alerts	✓		