



## It's tornado time again!

Over the past several years, Falcon Direct has been involved in developing more efficient and affordable alternatives for alerting large numbers of people in an emergency. Through trial and error, we have concluded that there are four basic systems available for providing reasonable alternatives.

We are aware that access to the NOAA weather service broadcasting system is available for use by EMA directors. Without going into detail, we will simply say that although the economic considerations are favorable, the operational procedures leave much to be desired. Years ago, we supplied *bedside monitors* which were distributed in schools, malls and other public places. The emergency messages were sent over regular VHF radio channels. The system worked well but the cost of receivers was prohibitive. There was a time when pagers were used. They were efficient and affordable, but nobody wears pagers any more. Times have changed!

Today, we have all kinds of emergencies that can result in mass casualties. Chemical spills, earthquakes, floods, hurricanes, tornados, and the list goes on. More than ever, the ability to quickly assimilate information to the public, and/or to make information available on demand is not an option. It is a necessity.

On the following pages, we will provide additional information on the systems we feel best suited to providing emergency information exchange, whether it relates to severe weather, or a simple highway advisory.

As you will note, the cost ranges from almost nothing to very sophisticated systems with costs running into the thousands of dollars. Don't let the cost of the system be a deterrent to your planning. Saving lives is no place to cut corners! Rather, consider the availability of federal funding. In particular, FEMA through the Assistance to Firefighters Grants will be shortly announcing the availability of grant money for fire safety. We believe a properly written application could qualify for funding in this area.

Thanks for your interest in our products and services. We look forward to serving you!

*Burch H. Falkner*

At your service!

TornadoTime.doc

# eLert

Here are a few facts worth remembering. Fact #1 - Virtually every cell phone has an email address. Fact #2 – According to Insight Research, 51.6 of all households have both cellular and wired telephones. More interestingly, 6% of households have cell phones but no wired telephone!

The average wire line residential toll minutes of use (MOUs) have been dropping at a compounded rate of 15 percent since 2000, while wireless interstate MOUs per user grew at a compounded rate of nearly 40 percent during the same period. According to one FCC study, on the wireless side, the percentage of interstate residential minutes has increased from 16 percent to 26 percent of all wireless minutes. These changes in calling patterns are being reflected in ILEC line losses—a trend likely to continue. So what's the point? The point is that right now, today, there are most likely more people with cell phones than there are with wired phones. So, if you want to get a message out to the greatest number of people, the way to get the message to them is on their cell phones!

So, if you have access to the Internet, and you have the cell phone numbers and the name of the carrier providing the service for the subscriber, you can build an emergency calling network capable of simultaneously calling between 500 and 2500 people for just \$30 per month! You can sign up at [www.constantcontact.com/index.jsp?pn=falconwireless](http://www.constantcontact.com/index.jsp?pn=falconwireless). There is no long-term contract commitment. Your only additional cost is a one-time cost of \$500 to assist you in setting up the system.

Once you have entered the cell phone subscriber information in your Constant Contact database, you have the ability to notify THOUSANDS of people instantly by simply addressing your group list, typing the emergency message, and hitting the SEND button from your Internet connected PC. Nothing else is faster or more efficient – nothing!

## **MessageCasting**

is our term for a product or service that provides information simply, efficiently, and affordably to the public via telephone. We've been involved in *MessageCasting* since the 70's when we worked with long forgotten manufacturers such as Code -A-Phone and Record-A-Call, two of the pioneer manufacturers of what we now refer to as answering machines.

The original devices were expensive, required a connecting phone line, and could generally handle only one call at a time. Changing the message generally required going to the machine location although later models had remote message recording and retrieval. The PC allowed the development of a service known today as Voice Mail. This allowed greater flexibility, remote management, and the ability to handle multiple calls simultaneously with a single PC handling multiple phone lines.

Today, we take Voice Mail for granted. It is often included with the features provided with home or business phone service, cell phones, and even pagers. With that historical perspective behind us, let's take a look at the current offerings. We will narrow our choices to cell phones and a new technology called VoIP or Voice over Internet Protocol. Due to the financial instability of the paging industry, we do not consider pagers to be a viable alternative. On the following page is a comparison of a cell phone with unlimited incoming messages and VoIP, both of which are available from Falcon Direct.

Either of these services is well suited for *MessageCasting*. Your choice will depend on your requirements that may go beyond the basic service. For example, if you could benefit from an additional cell phone, a cellular phone may be your best choice. Conversely, if you need another fixed phone line with unlimited long distance and the least possible cost, a VoIP phone would be a good choice.

We recommend the \$49.95 Nextel cell phone plan including unlimited incoming minutes or the \$24.95 Globalinx VoIP phone service for use with a high speed Internet connection. The following comparison should be helpful.

## A comparison of *MessageCasting* Services

Feature	Cell phone	VoIP
Unlimited incoming messages	Yes	Yes
Outgoing calling minutes	300	Unlimited
Nationwide long distance	Yes	Yes
Equipment required	Cellular handset	2 Port Router*
Model	Motorola i836**	Linksys 2100
Equipment cost	FREE	FREE
Contract term	2 years	None
Local access number***	Any major US City	Any major US City
Service provider	Nextel	Globalinx
Monthly charge	\$49.95 plus tax	\$24.95 plus tax****
Special requirements	None	High speed Internet
Activation cost (One time)	\$36	None
Voice Mail (Unlimited)	Yes	Yes
Remote message change	From any phone	From any phone
How to order	On the Internet*****	On the Internet*****

\* Allows connection of any standard telephone (not supplied)

\*\* Other phones optionally available at no cost for new Nextel accounts

\*\*\*Other local access numbers available nationwide

\*\*\*\* Check with us for current incentive plans. The cost may be less.

\*\*\*\*\* You can order on line at [www.5linx.net/falcon](http://www.5linx.net/falcon). If you require assistance in ordering, call Burch Falkner at 205.422.2011.

MessageCasting is ideal for any entity desiring to make information available to the public by phone. It is suitable for churches, court referral services, municipal offices, schools, and others. It could be just right for YOU!



In many respects, public safety services are more advanced in Europe than in the USA. A prime example is the use of broadcast sub-carriers for the delivery of emergency information. Without getting technical, let us explain what a sub-carrier is, what it does, and how it can be used for emergency alerting purposes.

Every FM broadcast station has the ability to transmit not one, but four separate transmissions. The main carrier is used for transmitting the main content of the station. Prior to the introduction of stereo broadcasting, all FM broadcasters used all of their channel bandwidth for transmitting monaural programming. With the introduction of stereo, 10% of the bandwidth was allocated for secondary transmissions known as sub-carriers. Typically, there are three sub-carriers. The first is used to carry the "B" side of a stereo signal (the "A" side is transmitted on the main carrier).

The "C" and "D" channels are available for other purposes as determined by the broadcaster. PBS stations in Alabama use the "C" channel for transmission of reading services for the blind. In large cities, the "C" channel is often used for the transmission of background music such as Muzak, stock reports, wide area paging such as Que, or other forms of specialty broadcasting. This leaves the "D" channel open for other purposes. In rural areas, both the "C" and "D" channels are generally unused.

Before proceeding, we should mention that some FM stations in large metropolitan areas are converting to digital transmission systems. This allows even more capacity within the space limitations of a single "channel". For now, we will assume that we are dealing with the more traditional analog technology which will be the prevailing standard in most areas for many years to come.

We said all that to say this. If a local area FM broadcaster is willing to allow the use of their "C" or "D" sub-carrier for public service purposes, they can do so without degrading their regular broadcast signal and at the same time receive significant publicity and recognition for their contribution to the safety of their community.

An additional piece of equipment will be required at the FM station. Known as a Sub-Carrier Modulator, the cost is \$10,000 plus the cost of a high speed Internet connection. An existing connection can be shared if desired. There is also a \$1,200 annual maintenance and support fee. Equipment and support services are provided by ViaRadio through Falcon Direct. This cost would normally be paid by the public safety user agency.



The home alerting receivers are \$149.95 each. They are capable of receiving both voice alerts and text messages displayed on the screen. These units are essentially fail safe. They cannot be turned off and are supplied with internal batteries to allow operation in the event of an AC power failure.

While this system is relatively expensive (\$236,125 to equip 1500 homes for the first year and \$1,200 annually each year thereafter), the ViaRadio concept offers a great deal of flexibility. This system may possibly qualify for the fall FEMA fire safety grants to equip all residences. Business users could purchase their own receivers, and there may be the potential of corporate sponsorship, particularly where there are chemical manufacturers or others handling toxic materials involved. Additional information is available on the Internet at [www.viaradio.com](http://www.viaradio.com).



# RAPIDREACH<sup>®</sup>

## Emergency Notification System

Reverse 911 is essentially the process of notifying large numbers of people via telephone. Unlike the eLert Constant Contact system which sends text messages via email to cell phones, the RapidReach system by Enera can send voice messages to any telephone (wired or cellular) as well as to fax machines.

RapidReach is an Internet based emergency calling system that can be configured to contact large groups of people quickly. The cost is based on the number of devices to be called and the time required for delivery. For example, a community requiring emergency notification to 1500 people within 15 minutes would be calculated as indicated below.

First, there is an annual subscription cost. This covers the cost of servers, support, and access to the number of telephone lines required to deliver the desired volume of messages within the time required by the users. For example, to place 1500 calls within 15 minutes, assuming 1 minute per call, would require 100 phone lines. That could get pretty expensive! We'll discuss this in more detail later. For now, we are dealing only with the annual subscription cost. There are three levels – Bronze, Silver, and Gold.

In order of priority, Silver takes precedence over Bronze, and Gold takes precedence over Silver. The annual subscription cost is \$2,000 for Bronze, \$3,000 for Silver, and \$5,000 for Gold. For routine use, the Bronze plan should be acceptable. For emergency message distribution, the Gold program would be recommended.

Next, we deal with the call package. A call package consists of 500 names in a predefined list of phone numbers, cell numbers, fax numbers, SMS addresses, or email addresses. Each package is based on the associated calling plan. For Bronze, the cost is \$960, for Silver - \$1,440, and for Gold - \$2,400.

Now, let's take a hypothetical case of a community of 1500 residents desiring tornado warnings within 15 minutes. We will further assume a need to use this system three times a year. Our cost would be calculated as follows:

Silver annual subscription cost	-	\$2,400
Call package - 3 x \$2,400 x 3 (1500 users – 3 messages per year)	-	21,600
Total Annual cost	-	<u>\$24,000</u>

A three year service agreement would result in savings of \$5,000 over the three year service term (\$67,000 versus \$72,000 on an annual payment basis).

You will note that we have assumed three calls per year. If you don't actually use your allotted number of call units, they will be carried over to the next year. In other words, you do not lose your call package minutes since they are automatically rolled over to the next year.

Although this system is fairly expensive, it has the potential of being eligible for Homeland Security grants, corporate sponsorships, or even discretionary legislative grants. To appreciate the value and usefulness of this system, you may want to try it without cost or obligation. Check out the free trial offer at [www.enera.com](http://www.enera.com). In the meantime, you may want to review some of the more frequently asked questions on the following pages.

## **RAPIDREACH ENS WEB - FAQ**

We have XX employees. How long will it take RR services to call all of them?

You can generate many thousands of calls in minutes, but what percentage of these calls reach the people intended is more complicated. Enera is dedicated to giving you reliable information about the effectiveness of your callout, through alternate contact methods or alternate individuals, retries and prompting for responses.

Calls encounter answering machines, voice mail, busy signals, no answer, all of the normal things that happen when you are trying to reach someone. Furthermore, an emergency can damage the telecom network in the area that your organization operates, or the emergency could generate its own local phone traffic. Enera believes that the most important question with emergency notification is not necessarily how many calls you can place, but how effective your overall notification strategy is. Calling everyone is a viable tactic for some situations, but calling effectively should be the guiding strategy.

With a Shared service, how do I know my call outs will go out?

Enera guarantees that Gold call outs will start immediately upon hitting our server. Capacity and utilization on our network is closely monitored, and we add capacity as our customer base places heavier demands on the system. Even in times of relative inactivity or mostly small scale callouts, we will add capacity if the number of Gold subscribers reaches 70% of the number of available lines.

Should I be concerned about call out delays with Silver or Bronze Priority Levels?

Gold typically start within a minute of hitting our server. This is the core of our service guarantee. For lower priority accounts, there is a risk of delay, though historically it has been small. We are so confident of the performance of our servers, that all of our sales people in Europe, Far East and the US use Bronze Accounts for sales demonstrations.

What is your Security Statement for the service?

Enera is fully committed to keeping your contact information private. All data is securely encrypted, and protected by multiple passwords. The Servers are installed behind Firewalls, with constant monitoring, both for network intrusions or incursions and for performance. RapidReach ENS WEB Servers operate in a highly automated environment, in part to minimize the risk of human error. This also minimizes the possibility that Server maintenance personnel will have unauthorized access to any customer data.

What is Enera's failsafe and redundancy plans?

Enera maintains redundant servers with failover and automatic call sharing on separate, geographically disparate telephone switches. There is automatic failover in place for inbound Data traffic, and phone lines are live on both the primary and backup site. These phone lines are wholly owned by us, and not used for any other purpose than Emergency Notification.

How many simultaneous calls can we make from your service network?

Enera can originate far more calls than a destination network can typically absorb. Our RapidReach ENS WEB servers are the most efficient calling engines on the market today (up to 480 lines serviced by a single server, most competitors can't accommodate more than 200 lines on one server without bottlenecks). By automatically distributing calls among multiple servers, we can handle a very high volume of notifications



However, very large scale call outs (over 1000 calls a minute) will overload the long distance trunks at most destination networks, responsible vendors of notification services limit the volume of calls they place. Sometimes they even inform their marketing departments! Initially, by default, customers are restricted to 120 calls per minute. If it is necessary to exceed this volume, customers can upgrade the volume of calls placed, if after an engineering review the destination network is judged able to absorb the additional capacity in typical emergency conditions.

Can you create Scenarios and activate them remotely?

Call outs can be saved as a Scenario, and started by dialing into the Service. You will get the opportunity to rerecord the call out message over the phone, before initiating the call out, if desired. There is no limit to the number of scenarios you can store on the website.

Do you support calling Alternate People? Can you assign one individual to multiple lists?

Yes, ENS WEB now supports Primaries and Alternates, and one individual can be entered in multiple lists if you chose the Comprehensive Option.

Is there any limit or any additional costs based on the number of people or groups I include?

There is no limit to the number of people or groups you want to include in your call out database, and no additional costs per group or individual.

Can multiple organizations use the same account? How can I make sure one user doesn't access another user's data?

RapidReach ENS WEB supports Departments, which allow you to segment the database into multiple sections and assign users different responsibilities (System Administrator, Operator, Data Manager, etc.) within these different departments. Additional Departments and allowing multiple simultaneous users on the service does involve some extra costs.

Can I import information from another database?

Rapidreach ENS WEB comes with a manual import tool that can take information from a Comma Delimited text source. There are several different options for this import, including importing by Name or by a Unique PIN based identifier. Techniques used with our RapidReach Professional can also be applied to RapidReach ENS WEB to automate this import process according to a user defined schedule. The automatic import using Data Connection Platform requires purchase of an option.

How are Contact numbers organized?

You have complete freedom to define whatever types of contact numbers you want and whatever contact types, depending on your requirements: preferred & alternate numbers; cell phone, home phone, work phone, etc. You can chose different orderings, or exclude different categories in a call out if desired.

Please note, that because different device types (pagers, email vs. phones) can have very different behavior and timing for message delivery, different orderings can lead to wide differences in the times different people in a response group get their message in an emergency, and also differences in who records responses. For relatively small groups (less than 500) contacting phones before text devices will usually be faster, and achieve higher response rates; for very large groups (5,000 or more) text messages will usually be distributed much faster.

