By adopting aggressive marketing strategies

and taking advantage of government-

sponsored trade missions, an emerging

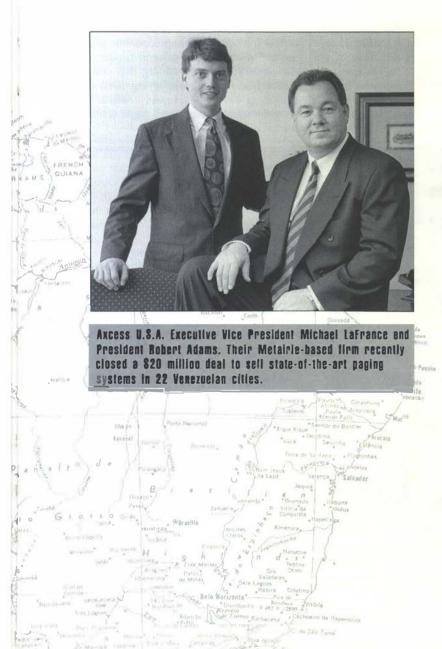
contingent of entrepreneurs is doing

deals that will allow the Port of

New Orleans and related businesses to benefit

from increased trade with Latin America.

BY GREG LACOUR



Robert Adams has ample reason to be elated: on a recent trade mission his Metairiebased company, Axcess U.S.A. Corp., closed a \$20 million deal to sell state-of-the-art paging systems in 22 Venezuelan cities.

But Adams isn't popping any champagne corks yet. His business in Latin America is far from complete. ''I'm planning on going back in another six to eight weeks,'' Adams says. They need to know we're here. We can't sit around New Orleans waiting for them to call. For years, the attitude's been, 'Let them come to us.' We're just now starting to realize we've got to go to them.''

Adams' sentiments reflect an important change of strategy for New Orleans business. Ousted in recent years from its once-firm position as a major doorway for Latin American



May 27, 1996



Axcess Debuts Information Service

Carrier Uses RBDS Frequencies To Deliver News, Stocks

By Rikki Lee

A xcess Global Communications Corp. and Matsushita Consumer Electronics Co. will debut a paging and information service package in 11 Western states next month.

Secaucus, N.J.-based Matsushita and Metairie. La,-based Axcess are employing Radio Broadcast Data Service frequencies for the paging venture. RBDS uses the subcarrier or sideband portion of the FM radio channels to transmit messages and broadcast data to spedesigned Panasonic cially pagers. Subcarriers in the 87.5-108 MHz band usually are used by FM broadcast radio stations to send out call letters, song titles and artist names, traffic reports and other information to specially equipped receivers.

Three RBDS pagers, expected to sell from \$100 to \$150, are stamped with the Axcess Global logo,

Matsushita, Panasonic's U.S. sales and marketing arm, will promote its RBDS pager models at point-of-purchase displays in



consumer electronics and retail outlets. Customers can activate the service by calling a toll-free number.

The service will first become available in Washington, Oregon, California, Idaho, Nevada, Montana, Wyoming, Utah, Arizona, Colorado and New Mexico. More than 90 FM stations will receive data encoders to transmit the paging and information services to the subscriber units.

Axcess reportedly plans to offer East Coast service in the fall and a nationwide RBDS network within another year.

"Panasonic got involved [in this project] for two re a sons," said Jonas Tanenbaum, Matsushita's national market manager for wireless paging devices.

"The paging business is experiencing rapid growth and alphanumeric pagers as a product subset are growing at the fastest rate. Information sources are very hot and this service gives the user

an ability to stay informed and remain extremely mobile."

The RBDS pagers can receive numeric and alphanumeric messaging and wireless Internet email up to 2,000 characters. Axcess and Matsushita services will feature stock quotes, weathcr reports, news headlines, movie reviews, horoscope, lottery results and soap opera news.

Information providers are Reuters, NASDAQ, American Stock Exchange, New York Stock Exchange, Johns Hopkins University, National Oceanographic and Atmospheric Administration, astrologer Jeane Dixon, Variety, Sports Illustrated and others.

Service provider Axcess expects to implement a graduated rate scale based on the number of content offerings a user wants, Basic paging service costs about \$9 per month, with content prices starting at \$2.50.

The Axcess and Matsushita paging project will help expand the potential of RBDS technology and bring it to a wider segment of the population, said Axcess President Robert Adams in a press statement. "This partnership represents the start of a new era."

Axcess Global and Panasonic plan to promote the service with newspaper advertisements and radio and local cable TV commercials in Los Angeles, San Francisco, Las Vegas, Denver, Phoenix and Seattle.

"Our goal is to ... get people to think of paging as an information delivery system as well as traditional paging," Tanenbaum said.



January 29, 1996

Paging

RBDS IS Driving Pager Initiative

Matsushita Develops Pagers For Axcess Global's Planned Service

By Tammy Parker

anasonic is seeking to leverage the popularity of alphanumeric paging and coming ubiquity of Radio Broadcast Data Service to launch a new line of pagers for retail distribution.

The manufacturer this month unveiled three pagers, the RY-P1000, RY-P700 and RY-P500, that will work over RBDS frequencies, RBDS is an FM-subcarrier signal used by radio stations to deliver data transmissions such call letters, song and artist names, traffic reports and other consumeroriented information to specially equipped receivers. Panasonic developed its pagers under a partnership with Axcess Global Communications Corp., a carrier building a nationwide RDBS network.

The RDBS paging network will launch in the western United States this June, quickly covering 11 western states. Within 12 to 18 months of the launch, the network should cover the nation's major metropolitan areas.

The alphanumeric pagers will be manufactured and offered hy Matsushita Consumer Electronics Co., which traditionally carries mass market goods such as televisions and boom boxes, rather than through Panasonic Personal Communication Systems Co., the company's traditional pager provider. Panasonic PCS has a 2 percent market share in pagers and sells only 900 MHz numeric pagers throughabouttwo dozen radio common carriers, noted Jonas Tanenbaum, national marketing manager for the RBDS pager category au Matsushita. He said the Matsushita division was chosen to develop the RBDS products because it was best suited "to go after the strength of the retail segment and alpha segment."

Specific retail channels and pricing have not been released for the RBDS pagers, However, Tanenbaum noted dealers will buy the devices directly from Matsushita rather than carriers, allowing the manufacturer to provide its consumer merchandising expertise to the new line.

Matsushita is the pagers' exclusive manufacturer and Axcess is the only carrier, which 'Tanenbaum said will allow the companies more control over distribution and branding, "This tells a very simple marketing story," he said, in that customers know exactly which companies are serving them.

Pager buyers will need only call a toll-free number shown in product literature and on the back of the pager to request activation through Axcess.

While other paging carriers, namely Seiko Communications and Cue Paging Corp., use FM



Panasonic's RBDS pager

subcarriers for their services, Panasonic believes it is unique in offering RBDS-based service.

Information services will be key to marketing the pagers, Tanenbaum noted. "We plan to provide a huge variety of information services," he said, citing potential offerings of news, sports, weather and leisure services. "We will partner with nationally recognized providers of information in each of those areas,"

The paging service will be able to provide specific information, such as scores for particular sports or teams, as ordered by the customer, he said. "This is not just a messaging device but an information device," Tanenbaum added. Axcess can allocate multiple service codes that can be designated for personal messages, business messages, financial information or any other information services.

Each of Matsushita's pagers can scroll extended messages. The topof-the-line RY-P1000 can deliver email messages of up to 2,000 characters. It also can be used as a phone directory, storing up to 100 names and addresses sorted alphabetically.

All of the devices can alert users to messages by audible beeps of vibration. In addition, the pagers allow a user to assign three distinct heep tones to the services selected so information received can be distinguished instantly.

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on data: Mixing Success from Mixed Successes

Will a partnership of alphanumeric and FM subcarrier paging bring success for two technologies that, on their own, have yet to find their niche?

ALAN A. REITER

here are people who believe the glass is always half *full*, and it's always partly *sunny*. These persons are often described by the adjective "perky." They are the optimists. I prefer reality; I know the glass is almost always half empty and the heavens are partly cloudy with tornadoes.

As a believer in the Woody Allen School of Existence, I know pessimism is the true reality. Pessimists are rarely disappointed and, on occasion, pleasantly surprised when situations actually work out well. Optimists are devastated when it rains on their parades; pessimists shrug and just open their umbrellas.

So it should be no surprise to me that alphanumeric paging has been doing so poorly. Nor should I be surprised by FM subcarrier paging's relative lack of success. Still, the success of both seems so *logical*. Now consider this: can logic triumph to allow two negatives to combine to produce a positive? By the time you read this, the equation will be undergoing tests in the real world.

Bobby Adams sold his Louisiana trucking company, American Transport, and is devoting his time to developing a subcarrier paging system stretching from Texas to Florida. Mr. Adams says he needs forty subcarrier leases and already has that many broadcasters who say they will sign a contract; however, at press time, forty contracts had not yet been signed. Mr. Adams sees no problem obtaining leases and notes he has not had to pay more than \$500 per month for any lease.

Mr. Adams' company, Adams Communications in Lafayette, Louisiana, is getting his receivers from a source new to paging but not to the subcarrier industry. Micro Controls, Inc. (MCI) in Burleson, Texas has developed and manufactured equipment for the broadcast industry, including subcarrier generators, for fourteen years, says Jeff Freeman, president of MCI. The company has spent some \$250,000 developing the pager and has been studying the market for two years. Mr. Freeman says the alphanumeric unit features a fourteen-character LCD screen and contains four banks of 4,000 bits of random access memory (RAM). Not all the memory can be used for messages. Mr. Freeman says the pager can hold about one-half page of text, or about 125 words. The pager is a scanning, frequency-agile unit. If there are two or more FM stations in a city broadcasting Adams' paging signal, the unit will lock onto the strongest signal.



The MCI pager unit is half as thick as the thinnest subcarrier pager, about the size of a pocket calculator.

The unit also can be tuned by MCI to any subcarrier channel (*e.g.*, 57 KHz, 67 KHz, 92 KHz) and can use any signaling format, such as two-tone, 5/6 tone and POCSAG. The unit uses rechargeable batteries and can hold a charge for about four days, Mr. Freeman says.

Adams Communications will use the pager in a unique way. With the first batch of pagers, subscribers will be able to receive numeric messages, but not alphanumeric ones from callers. Instead, the pager will be preprogrammed with a maximum of nine canned messages, such as "call your office" and "you have electronic mail," Mr. Freeman says. That way, a caller can send an alpha message by punching a few buttons on a touchtone telephone. It gets around, in part, the inconvenience of needing an input device. Although Adams Communications will use only nine messages, the pager can store a maximum of ninety-nine preprogrammed messages, Mr. Freeman says.

Mr. Adams is optimistic about the chances for success with his venture because of the pager's sensitivity. He says it will be as good or better than a radio common carrier unit and "very much" better than any other subcarrier pager on the market. Mr. Freeman says lab tests indicate the sensitivity is five to twelve microvolts per meter. MCI's unit will be half as thick as the thinnest subcarrier pager, about the size of a pocket calculator.

American Development Corporation in Costa Mesa, California owns 49 percent of MCI. American Diversified, which has established its own nationwide subcarrier network, is a subsidiary of American Development. Mr. Freeman couldn't comment on whether MCI would be a second source of pagers for the Costa Mesa, California company. He emphasized that MCI would sell its product to any interested firm.

All the microchips were specially designed, he adds. In addition, MCI is taking a cue from the Japanese and is building a new plant for completely automated pager production, thus helping to reduce costs. MCI's pager was expected to be introduced publicly at the National Association of Broadcasters' annual convention in Dallas last month. Mr. Adams already has tested prototype units; his regional paging system was scheduled to begin operation in mid-March or early April.

Because he has such high hopes, he has ordered an awful lot of pagers and, therefore, can obtain them for a rather low price. MCI's price to Mr. Adams is \$130 apiece. The first order will be for 10,000, with additional monthly orders of 15,000. Mr. Adams projects 200,000 subscribers within two years. The state of Louisiana has already ordered 2,000, he says. Adams Communications will lease the pagers for \$30 per month, including messages.

"All the News That's Fit to Print"

VOL.CXLIII No. 49.508

Convright @ 1993 The New York Tim

Warning of Disasters, Digitally

NEW YORK, SUNDAY, NOVEMBER 7, 993

0101

Ehe New York Eimes

Spreading Bad News Instantiv

With the modernized Emergency Broadcast System, local or regional disaster officials will be able to warn the public by transmitting wireless digital signals that can be received by a variety of devices. Under the current system, officials must place phone calls to radio and television stations to spread the word.



By SABRA CHARTRAND

This is a test of the Emergency Broadcast System... If this had been an actual emer-gency, you would have been instructed on where to tune in your area for news and

WASHINGTON

WASHINGTON GET ready to kiss another Cold War artifact goodbye. The weekly test of the Emergency Broadcast System is going the way of the backyard bomb shelter and the schoolroom "duck and cover" nucle-ar attack drill. The Enderst Commission

The Federal Communications Commission intends to bring the 42-year-old emergency warning system into the digital age by letting Federal and local disaster-management offi-cials transmit electronic alerts directly to the public. Instead of relying solely upon the decades old town-crier tradition of phoning radio and television stations and asking them to spread the word of impending calamities, officials will be able to blanket entire com-

munities will be able to blanket entire com-munities with wireless signals. Firefighters and police officers might re-ceive these signals as data messages that would be displayed on pagers or portable computers. These signals will be able to automatically turn on televisions and radios, set off home smoke detectors, make lamps flash to alert the deaf, and activate various other consumer-electronics devices to let the citizenry know that trouble is on the way.

The overhaul of the Emergency Broadcast System, scheduled to begin next year, may represent just a \$100 million market for makers of the warning systems used by organizations responsible for spreading di-saster news. But for consumer-electronics makers, although they will not be bound by law to include the technology in their prod-ucts, the new warning system will represent ucts, the new warning system with represent a marketing opportunity of inestimable val-ue: a new generation of gadgets that can be sold as "disaster ready" devices that render older appliances obsolete. By next spring, for example, buyers of most General Motors cars will be able to order radios with a data chip that will auto-

matically switch on the receiver when an emergency signal is in the air. And other consumer-electronics makers are preparing

consumer-electronics makers are preparing emergency versions of their products. "We don't have a dollar figure yet," said Alan Haber, communications director for the Electronics Industry Association. "But I think 1994 is going to be a big year. It can add from \$10 to \$50 to the cost of products."

Although radio and TV stations will still play a key role in communicating official instructions on where to hide or when to flee, the system will no longer rely solely upon the system will no longer rely solely upon broadcasters to get people's attention. By this time next year, broadcasters will no longer be required to interrupt their pro-grams with that weekly tone of doom, fol-lowed by the "this is a test..." litany that We the People have learned to ignore

Since its creation in 1951 by a Congress fearful of Soviet nuclear attack, the Emer-gency Broadcast System has stood ready to alert the country to foreign threats. But the system has never been activated on a nation-wide level. Instead, it has been used to warn of more than 17,000 state and local disasters, such as hurricanes and riots. The weather-beaten system is overdue for an overhaul.

The emergency pager used by firefighters in Jefferson County, Tex.

Besides using outmoded technology, the existing Emergency Broadcast System is based on the broadcasting market of the 1950's, and so excludes cable television sys-

This is an overhaul of the Emergency Broadcast System.

tems, which reach almost 60 percent of American homes and often use unmanned local stations. Moreover, the system has no provision for getting bulletins to millions of Americans with hearing problems. And it is

useless to people who don't speak English. The F.C.C., basing its new requirements on technology that some local communities have already adopted, plans to issue regulations for the new Emergency Broadcast System next spring and hopes that many local disaster agencies and broadcasters will convert to the system by the end of next year. The new emergency transmissions will be

computerized, and will automatically send audio, text and bilingual bulletins to television and radio stations, cable operators and satellite-TV companies. Warnings will be tai-lored to trouble in specific communities. Over time, the F.C.C. hopes, the receiving equipment will be widely in place so that

public address systems in hospitals, schools

public address systems in nospitals, schools and nursing homes can receive and play warning announcements. A primary weakness with the current Emergency Broadcast System is that it re-lies on the staff of radio and television sta-

lies on the staff of radio and television sta-tions to relay emergency messages. "It's a daisy chain," said Helena Mitchell, chief of the system at the F.C.C. in Washington. Currently, when a crisis arises, emergency management teams — whether at the Fed-eral Emergency Management Administra-tion, the National Weather Service, the state governor's or local mayor's office, or police or fire deartments — must telephone the or fire departments — must telephone the broadcast stations that are responsible for first putting the warning on the air. These stations then activate a two-tone signal and read a bulletin over the air. The tone cues a group of stations down the line to repeat the signal and message. Their tone, in turn, prompts a subsequent group of stations, and so on, until the daisy chain is complete. The success and timeliness of the opera-

The success and trinsmess of the opera-tion is inordinately dependent upon chance. First, officials must be able to get through on phone lines that might be jammed during a crisis. Then, all along the chain, station staff must be available and must know to operate the system.

Broadcast industry lore is full of stories of broken dalsy chains. During the San Francis-co earthquake in 1989, a radio disk jockey in the suburb of Petaluma put the local fire chief on hold for seven minutes while he searched for someone who knew how to trig-ger the system. But all the station's engi-neers were broadcasting live from the World Series game. So in Petaluma the emergency signal never went out.

To avert such breaks in the chain, the F.C.C.'s new notification procedure will "fan out like a web," Ms. Mitchell said. Already, a dozen manufacturers are gearing up to sell the high-tech equipment that will be required

by emergency-management centers, as well as by radio, television, cable and satellite companies. The cost to a TV station is expected to be \$3,500.

Expected to be \$3,500. One such manufacturer is Sage Alerting Systems Inc., of Stamford, Conn. Sage makes a PC-based monitoring and transmissionsys-tem that is already in use in such localities as Jetferson County, Tex., which includes the cities of Beaumont and Port Arthur.

Cities of Beaumont and Port Arthur. "We want to automate the system to the degree that emergency management people — firemen, the mayor — can control it," Gerald LEBow, Sage's president, said. "We want to be able to localize the information disseminated so you don't have to alert peo-ple in areas where the problem is not an issue. Then we want to make it totally auto-matic in each house."

At the heart of Sage's transmission system At the neartor sage's transmission system is a personal computer at the local or region-al emergency management center, which can be programmed with hundreds of emer-gency contingencies – hurricanes in south-ern Texas, blizzards in Colorado, or melt-downs at a nearby nuclear reactor. An emergency management official calls

up the appropriate contingency plan or tells the computer what, when and where the problem is, then transmits the emergency message to the appropriate broadcast or cable stations, where the information is autocable stations, where the information is auto-matically passed to the audience. The offi-cials can choose an audio message, along with text that crawls across a television screen or fills the whole picture. They can select different messages for audio and text, and they send them in English or Spanish. TFT inc., of Santa Clara, Calif, which has sold alerting equipment to broadcasters since the 1970's, is another company that has redesioned its technology to match the

The New York Time

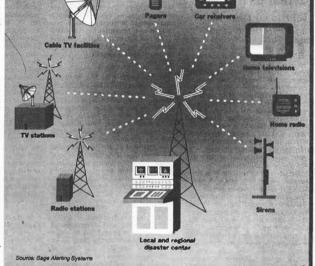
Late Edition New York: Today, mostly sunny, brisk, chilly. High 46. Tonlaht, clear, cold. Low 36. Tomorrow, mostly sun-

ny, not quite as cold. High 52 Yesterday, high 60, low 49. Details, page 47.

TWO DOLLARS

Fedesigned its technology -F.C.C.'s new system. Bad news has always traveled fast. But TFT has configured its system to insure that in the information-age future, bad news will travel even faster. "We've connected our TFT's president, Joe Wu, said. "We distribut-ed the signal through satellite and into each paging area we wanted to address. So if someone lives in California but is traveling in Chicago, this system can find him and notify him that there's an emergency at home."





Is This a New Dawn for RDS?

Opinion Divided on State of Technology and Market Acceptance After Strong Promotion

by Alan Haber

WASHINGTON Opinion is divided as to whether Radio Data System (RDS) technology is progressing fast enough to reach critical mass, or simply moving slowly without building appreciable momentum. Yet RDS is making progress. The number of radio stations listed in **RW**'s RDS Roll Call rose to 624 between February and October, an increase of almost 57 percent.

Perhaps the chicken-and-egg syn-

percent desired paging and messaging features, and 26 percent wanted the technology's ability to automatically switch to alternate frequencies.

The consumer electronics market is about to grow. Pioneer will have six new RDS-enabled car radios available in 1997, the first expected by February and the rest by May, according to Russ Johnston, vice president, car product planning.

Pioneer will show its RDS radios at the Winter Consumer Electronics Show in Las Vegas next month. All will feature

I think you'll see that more and more stations continue to see the benefits of RDS.

drome attached to RDS since its 1993 introduction has been broken. The president of the the Consumer Electronics Manufacturers Association, Gary Shapiro, said the syndrome broke when the association began its promotional campaign placing 300 RDS encoders in radio stations in the top 25 markets during its April 1995 to June 1996 run.

NAB President Edward O. Fritts said in October that "progress is being made and that's encouraging. As we go forward in that arena, I think you'll see that more and more stations continue to see the benefits of RDS."

The encoder side

Encoder makers are at work with cautious optimism. RE America supplied the encoders for the CEMA campaign. Ron Caird, customer support engineer, said the level of interest at radio stations has been about where it was before the campaign started: "moderate at best." Caird said he feels that "it's going to take probably another six months" before the effects of the campaigns "start to show up."

Circuit Research Labs' Domestic Sales Marketing Manager Bill Ammons said stations buying encoders "are typically the ones that want to try making some money." He said, "Until you can walk down to a Chevrolet dealer and get your brand new Malibu or Impala that has (RDS) built in, there's not going to be the mass exodus."

Ben Barber, senior development engineer at Inovonics. said his company shipped few encoders within the United States in 1996, but shipped quite a few to overseas destinations. Yet, he said, Inovonics wants to see RDS "go, and we want to see every station have RDS on the air." Things are "moving in the right direction," he said.

New car radios

A 1996 CEMA survey showed that 48 percent of respondents were interested in receiving Emergency Broadcast System alerts with RDS, 44 percent were interested in receiving automatic traffic and emergency news, and 33 percent were hungry for song titles and artist names on their RDS displays.

Further, 31 percent wanted to be able to search for radio stations by format, 29

—Edward O. Fritts scrolling radiotext and ID Logic capability. National department store Best Buy and other stores will carry them. Pioneer

plans a trade advertising campaign, probably in the spring, to trumpet its entry into the RDS marketplace. Duane Hoff, Best Buy's senior buyer for car audio, thinks RDS will be a success for the retailer, particularly if the

cess for the retailer, particularly if the radio broadcasting community supports it. He said Best Buy will train its sales staffs on RDS features "and how to talk about those features and sell 'em."

Denon Electronics has virtually led the way on the manufacturer side until now and will roll out three car units at the CES. Denon has sold more than 100.000 RDS home and car units. Stephen Baker, vice president of sales and marketing, said that Denon sees "what we think to be a critical mass of radio stations out there ... covering a significant portion of the U.S. population."

Baker observed that "there's a body of broadcast activity, there's a body of manufacturing activity, and there's consumer interest. We think it will continue to accelerate."

Delco next year will produce RDS radios in high volume for other companies,



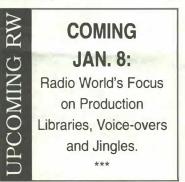
for sale under their names, according to business manager Ed Catlett. Bang & Olufsen introduced three home audio systems that feature RDS since this past spring. Onkyo now has two RDS products, with the introduction of a new model this year (available in a gold finish).

Paging

The RDS paging front saw movement. Thanks to a marketing agreement between AXCESS Global Communications and Matsushita Electric Industrial, an RDSbased nationwide paging network is being built.

The network started with almost 100 stations on the West Coast. AXCESS Global CEO and President Robert L. "Bobby" Adams said he wanted 500 stations on fine within the next 24 months.

Some manufacturers remain skeptical. Blaupunkt's Senior Design Engineer Mike Stosich said that his company will not make RDS radios available for the aftermarket until probably 1998. He said he doesn't think that a lot of radio stations are taking RDS seriously.





ENGINEERING

GSSNet extends utility of FM networks

Historically speaking, broadcast stations have been at the front lines in providing emergency information to their audiences. For example, the EAS (emergency alert system) with which Americans are so familiar - "This is a test of the Emergency Alert System. This is only a test" - has been used for decades to warn citizens of emergency conditions, and it was in 1963 that the president permitted state and local emergency information to be transmitted using the system. In more recent years, local emergency management personnel have used broadcast stations, cable and wireless cable systems along with radio and cellular dispatches to distribute information to local responders.

However, when the tragedy of Sept. 11, 2001, occurred, it became clear that the communications measures in place were inadequate and that there were fundamental flaws in emergency responders' ability to exchange or receive information during a crisis. Firefighters working within the World Trade Center towers were unaware of police radio warnings to exit the quickly failing buildings. In fact, many firefighters in the remaining tower had no idea the first tower had fallen. The problem wasn't that they didn't have communications systems in place; the issue was that those systems simply didn't hold up under catastrophic conditions. Different responder groups - NYPD, FDNY, EMS, Port Authority - used different UHF-based and VHF-based radio systems with varying degrees of success.

With 9/11 and other national crises underscoring the need for a better plaform for comprehensive and complete emergency alert messaging, Global Security Systems (GSS) developed a solution that takes the role of broadcaters to a new and more sophisticated level. The GSS single-point to multipoint messaging system uses the FM RDS (radio data system) frequency, the standard for sending digital text information along with an analog FM signal.

The "GSSNet" alert and notification system uses the existing nationwide FM broadcast infrastructure to provide Target Area Coverage messaging and a proprietary messaging system that allows secured and encrypted data with layered and targeted messaging to "need-to-know" personnel. Command and control centers (message point-of-origination) are installed with full redundancy, and messages are transmitted from a typical FM radio tower (a single point) to multiple receivers in the coverage area.

Fixed-wireless substation receivers and wireless receivers are made available to be distributed to all counties and other jurisdictions throughout the state as defined by the authorities. GSS uses a standard commercial FM receiver chip that can be inserted into pagers, smoke detectors, cell phones, PDAs, and other like devices to alert responders and provide vital information as a situation develops.

The potential of this emergency communications platform for public safety workers, first-responders and the general public is very exciting. It's also an exciting opportunity for FM radio broadcasters, who will also find that this network offers new options for revenue

generation. Emergency alerts take priority on the system and are facilitated by the country, state or federal officials controlling and subsidizing the system. However, at times when there is no emergency, which is most of the time, the system can be used by FM stations as a private network to communicate encrypted and non encrypted data to a variety of audiences.

Private use of the system could include networks of pharmacies, or a network connecting university students and other types of schools with receivers in their classrooms. Companies relying on a nationwide fleet of trucks could take advantage of the nationwide coverage to connect with all of its units, or just those in a particular geographic region. In more serious circumstances, the network could be used by a nuclear power plant to alert people in the immediate area of the possibility of a melt-

down, or it could be used similarly by a major plant to notify the surrounding community of a chemical spill.

Because this network is established as part of a nationwide emergency communications vehicle, messages are encrypted and directed only toward intended users. Furthermore, control over the system is limited to authorized administrators and official government enterprises at the county, state or federal level. As a result, the risk of abuse is very low.

Among the reasons the GSS solution is so powerful is that the broadcast signal is so much more robust than cellular signals. Overlapping signals from different stations helps to ensure that there is always a signal that can be received.

The national emergency communications in-

frastructure has not been improved greatly until now, but GSSNet represents a significant enhancement to officials' ability to transmit critical information to those who need it. We feel this concept is an excellent proposition, and the technology already is tested and proven through a real-world pilot test incorporating over 50 FM radio stations across the state of Mississippi.

The Mississippi statewide emergency alert network was designed and delivered by GSS under contract to the Mississippi Office of



Homeland Security. During a test of the FEMA DEAS (Digital Emergency Alert System), driven out of Virginia, the GSS system demonstrated live interoperability by delivering EAS text messages via FM radio signals (through Mississippi Public Broadcasting and private FM stations) to the cell phones of test participants in Jackson.

Americans have become all too aware that rapid response to crisis situations can save lives. With continued deployment of GSSNet across the United States, broadcasters can play an even more vital role in the safeguarding of the public safety and help first-responders provide the type of aid required in times of turmoil.

Eddie Fritts, former NAB CEO, is founder of The Fritts Group consultancy.