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## **WFED-AM 1050, Federal News Radio – “Tech Talk with John Gilroy” Digital Disaster Assistance**

John Gilroy: Today with are speaking with Russ Hall CEO of Macfadden How are you doing today Russ?

**Russ Hall: Good morning John, very well thank you**

JG: Russ was here about 6 months ago; we talked bout talking about technology. Most people think of technology as kind of hard-hearted and mathematics based but if you go to Russ's web site [www.macf.com](http://www.macf.com) you find out that they talk about technology with a heart. And what we're talking about today is managing humanitarian assistance with a heart. Tell me a little about your company and tell me how GIS fits in with helping humans.

**RH: Sure, thanks again for the opportunity to be here to speak this morning. The company has been around twenty one years, primarily as a federal government contractor, consultant and integrated IT and program project management arenas. And we've had kind of a common thread throughout the company in terms of the types of projects that we support on behalf of our customers where there's been a lot of human factors involved. Whether that's the US agency for International Development, Federal Aviation Administration, the Food and Drug Administration. So we felt like a lot of the IT that we've been able to bring to bear for our customers have had a very human orientation so we have this theme of technology with a heart. We feel it's a differentiator for us too.**

JG: And you can't predict what's going to happen with humans. You can't predict what's going to happen, where it's going to happen. So what you can do is you can assist with federal IT professionals' desire to respond quickly to emergencies.

**RH: Exactly, and we've had a lot of experience in these rapidly changing, fluid, chaotic environments and so we feel that we would be a great partner for our clients to be able to bring technology, processes, people and resources to bear to prove the decision analysis when there are a lot of resources potentially that could be committed for the response to some of these world events.**

JG: Four or five years ago people were worried about data storage, they're worried about access. But today hard drives are cheap, the internet is fast, you can get all kinds of information quickly. The real question is how accurate is it and are there any errors in it, and what's going to happen. Is it changing? Because the information that's out on the streets yesterday may not be accurate today. And I think that's where a lot of your products fit in. You've worked in many different areas of the world – Africa, Latin America, Asia, the Pacific Islands. When you go to your website you can see different maps from parts of these worlds. Give me an example of a project you've worked with recently that would actually help humans using this technology.

**RH: Sure...as you said it's a matter of making sure that we're up to date with information. You know the best information is going to render the best results. We've always been able to stay on the cutting edge of the technology, to be prepared, make sure that we have the data acquisition and we maintain it between these events. Recently, about a month ago, there was an earthquake in Peru. It happened about 5:30 Eastern time and we were very quickly able to ramp up a response team on behalf of USAID...put together the situation reports with GIS products to provide to the decision makers in terms of what type of initial**

**response would be made to help the Peruvian government and its people that were faced with this natural disaster.**

JG: So I guess that's the differentiator with your company? With Macfadden, you get results quickly and flexibly. I think that's the whole thing, how flexible can you be? Saturday at noon something happens. Friday at midnight something happens. You have to have a partner to work with you to have an accurate and quick response to help the humans on the ground in Peru, or Ghana, or in Lebanon.

**RH: That's correct and it's applicable really anywhere. It really has to do with making sure the information is available and that we can render it. And within an hour usually we can have the initial maps done, provided, prepared for an event around the world because we're able to stay on top of the information that's out there.**

JG: There are federal IT professionals who are listening and they may be tasked with trying to put together reports on incidents that happen quickly. If you do some basic research on this, you go to Google, you type in GIS, you get thousands of hits. You go to Wikipedia, you get a 19 page document. Many different ways to approach this topic of GIS. What makes you folks better than the other ones?

**RH: Well I think one thing is that we're not stove piped on any particular technology and that we can bring to bear a number of solutions. And again it gets down to working with the client in terms of what the real requirements are. Again, proven expertise in these chaotic environments. Unflappable, a lot of our folks are...they understand the immediate need to get the information out there and to work with their clients in terms of getting the best decision made.**

JG: You know, if you go to Google and type in your home address and see the satellite photo, you might find a map that's three or four years old. I have a tree that I took down in front of my house and when I google my house I see this old tree. I figure how old the map is. You can't afford to have old maps can you?

**RH: No, you really can't. And same thing here...there's a lot of information out there on Google maps that's just way out of date but you do have to have the most current information, particularly in these changing environments where there's so many different factors involved.**

JG: So it's not just a matter of finding a tree that was cut down in front of your house. You can take this information and apply health data to it. You can apply weather data to it. Many different types of data that can be applied to Geographic Information.

**RH: Clearly, and a lot of it has to do with the specificity on some of the products that we've been able to provide for our customers and I think that it really has served as a differentiator for us. The polish, the specificity, and it all goes back to having the most up to date information to render.**

JG: Humanitarian assistance, you think of people sitting in front of computers and getting reports. A lot of handheld devices out there now. There may be people on the ground in a remote area with a handheld device...they're going to want that information quickly.

**RH: For sure. I mean the GPS technology that's out there right now we've been able to deploy that for our clients. A lot of it has to do with the training that we provide to make sure that the information is there and then what to do with it. We've had people in places that are accessible only really via Bureau Express and so to be able to have a handheld to**

**know where the hazardous regions are...correlate that with their situational reports...it's great information to have and there's a lot of training that goes behind that to make effective use of the data that's available to them via handhelds.**

JG: When you're scurrying around helping with emergency humanitarian relief I guess the unasked question is security. This can't be dropped especially in today's environment. So security is a concern, quick access, accuracy...so the organization has had a lot of experience in handling many different aspects of this emergency response situation. I think that many people listening would have to take a planned look in their future and figure out what tool to use to respond to many different types of situations whether it's a geographic response, or a health response, and your company's got many different notches on its belt in these categories don't you?

**RH: We do, and again its 21 years providing a wide array of services and products for a number of customers that we've developed a deep rooted knowledge and have basically become the partner of choice for a lot of our clients because of this and we seem to be able to provide to them exactly what it is they need whether it's tools or processes...so it's been great.**

JG: Tools, processes, security, accurate information. I think Macfadden can provide that all and I think the objective here is to get our listeners knowledgeable about different ways, different approaches that they can use to solve some of the problems that may be presented in the future when it comes to Geographic Information Systems.

(Commercial)

JG: Welcome back to Federal Tech talk with John Gilroy on Federal News Radio AM 1050. Here speaking with Russ Hall, CEO of Macfadden and they work with government organizations to manage humanitarian systems. Today we're talking about GIS, Geographic Information Systems and...wide, wide-ranging topic. You Google it, you get 19 pages. You get all kinds of information on it. A lot of different products out there too. I mean I can go to Google and get geographic information. The listeners can probably go the U.S. Geological Service in Reston and get information. They can use a product like MapInfo Professional. I guess the question that many of my listeners have Russ is what tools are used when. When would they be able to handle something themselves and when do they have to call you up and go to the next level.

**RH: That's a great question. What we've tried to do is... provide an agnostic view toward the technology that would be used which means that Macfadden has relationships, partners with a lot of the technology vendors out there. Some that you mentioned have MapInfo, ESRI...ESRI tool sets, so really it depends on the requirements, some are much more robust than others as you can imagine so we feel we are able to convert those requirements into the proper solution and suggest proposals to our clients. So a lot of it is definitely requirements driven.**

JG: So because you have experience with a wide range of tools you can almost act as a consultant also, a consulting capacity where if someone has a problem or they anticipate a problem in six or eight months, they can come to you and say 'Well Russ, what tool should I use, when should I use it, where should I go, where do I get the best use of my...the most bang for the buck in order to solve some of the problems.

**RH: Correct. I mean we would take kind of a best agreed approach to it. Do the platform analysis and figure out what the requirements are. A lot of times they are report driven requirements so sometimes reporting might be the discriminating factor in terms of which tool set to go with.**

JG: Interesting. When you go to your website you see maps, of course...you see maps of avian flu outbreaks, Ghana...I'd like to focus on just three of these different concerns. Three different geographic aspects. One is Greece. Anyone whose been reading the papers knows there's been a lot of fires breaking out in Greece and...so you have the situation, you have an emergency, you have fires breaking out...what tool do you use, how do you use it, how have you stepped in to help them?

**RH: Yeah, again, on behalf of our clients in that humanitarian arena, we've been able to, in Greece with the wildfires there, we've been able to use GIS technology and cartographic products to assess the fire damage there. There's a lot of satellite imagery that's available commercially, and we can take this information, apply it, and assess the burnt areas and the current fires that are ongoing there. But we've been able to have the ability to extract those areas and overlay the information with population and economic information as well. It's been very strong in terms of decision analysis in terms of resource equipment.**

JG: Well I'll ask the obvious question. I have two sisters that live in California. Well if you can help manage fires in Greece, I guess you can help manage fires in Palos Verdes, California or all through the West coast.

**RH: That's definitely my feeling about it John. I mean it's very replicable. The process, the technology, the resources, the networks that we've established over the years with the data providers...it's pretty much plug and play, and it very well can be used internationally as well as on a domestic scale as well.**

JG: Let's switch countries, let's go to Peru. We talked about Peru earlier and emergency response to earthquakes there. I've been to Peru and they have a lot of administrative opportunities there you know. I went to get a visa in Peru once and the elevator broke in the building in Peru where I was supposed to get the visa. They have a lot of infrastructure issues there. Infrastructure issues all over the place, administration issues all over the place. Even in a place like Lebanon. I am sure they may not have fires breaking out in Lebanon now. They may not have an earthquake there but there are other issues where GIS techniques, GIS skills can assist them.

**RH: Definitely. You know in Lebanon really it's a humanitarian emergency that's going on there. We've had the opportunity to provide on behalf of our customer very specific detailed maps of the arena there, the area there...and these GIS and cartographic services and products that basically augmented the situation were reports in that arena. So we've been able to provide additional decision analysis, decision making results for them based on applying that technology there.**

JG: Yeah I think one of the weaknesses Americans have is they don't really understand some of these geographic concepts. If you read about Darfur, it's as big as France. I mean, let's just send 7,000 UN troops to Darfur and we'll quell all the issues. Well that's not going to happen. There's all kinds of issues in Africa. Ghana. Another administrative concern. You've gone into a country like Ghana, the other coast of Africa and handled some administrative issues as well using GIS principles.

**RH: Definitely. We've been able to again, kind of map the region in terms of emergency relief, supplies, health, rehabilitating infrastructure. We've been able to render a lot of that information geo-spatially. As they say, a picture paints a thousands words, and when you've got the decision makers, and the government, along with the commercial partners, it's so much easier to see things, see how it's mapped out and then also look on the**

**anticipatory side rather than what's just happened. But what do we need to do, where do we mobilize, where do the resources need to be committed.**

JG: Even for a place like the Marshall Islands you know. Tsunamis are a concern in the Marshall Islands. Not much in Washington D.C. But, there was a tsunami a few years back. I guess if you can anticipate, you can predict where you're going to have problems and issues in the Marshall Islands as well.

**RH: For sure. Even locally, when you think about the Chesapeake Bay, you think about waters rising, floodplain mapping requirements that would have to be in place to understand, you know, what areas would be affected just here in the D.C. metropolitan area. So again, it's crosscutting, it's horizontal capability and we feel that we're very well positioned to provide a wide array of these services to a number of our clients.**

JG: Many of our listeners have heard of this ESRI, I guess that's a suite of products. Is that something you're comfortable discussing Russ? ESRI, tell us a little about this company's products.

**RH: Yeah we've had a relationship with ESRI for a number of years. We've worked most exclusively with their Art GIS, Art Info products and we've got a vendor relationship with them, we know it very well, it's a very robust suite of technology tools and has played very well particularly in the humanitarian arena because there's so many different buttons and knobs you can turn on with their suite.**

JG: I think that's the factor for many listeners. They may have read about a product, they may have read about MapInfo, maybe gone to the ESRI site. You read a white paper, all of a sudden you become an expert and then you're presented with a situation and you're frustrated. You don't know exactly which tool to use, when.

**RH: That's right, and we like to think that we're in a unique situation with the experience, with the people that we have, the relationships, the access to resources, that we can really be the vendor of choice for a lot of our clients. And the institutional knowledge that we have about the tools, the applicability of those tools and how to get the information out I think really differentiates us, so we appreciate every opportunity we have to convey that to our customers.**

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JG: Welcome back to Federal Tech talk with John Gilroy on Federal News Radio AM 1050. Today we're speaking with Russ Hall, CEO of Macfadden. We're talking about humanitarian systems and Geographic Information Systems. The last two segments we talked about helping people in Greece, helping people in Ghana, helping people in Peru. I guess I'd like to talk about the people in Indiana and the people in Wisconsin, and the Americans here. A lot of this technology can be applied to a wide variety of applications. Fires, administration, and stuff like food and drug issues. I mean as you read the paper, you read about E.coli breakouts here and there. There's another emergency situation. You don't have much time, you're under the gun, and the people who are listening to this program may have to prepare reports and design responses to these emergencies. They have no idea when it's going to happen, where it's going to happen or what product. It could happen tomorrow, it could happen in a year, it could happen in Colorado or Maine. No one really knows which way to go. How can we use some of your technology in forward-looking areas. Give us a couple examples of how this technology can be applied back here in the United States.

**RH: Sure, I guess I should say first off that we've had a lot of experience around the whole disaster life cycle. So from the time there's a response, an immediate response to an outbreak, a civil unrest, natural disaster, we really support that initial rapid response. What we've started to do John is bend more over toward the anticipatory side of the house. On the preparedness side. And we feel that there's a lot of applicability for geographic information services, its products, the cartography products that we've produced for our current clients in terms of now pre-positioning supplies, pre-positioning various resources, natural resources in place, in the event of future disasters. And that certainly applies domestically as well, to some of the places that you mentioned.**

JG: And adverse events can take place with food, can take place with earthquakes, can take place with hurricanes. A wide variety of unanticipated events. I think it might be a good idea for listeners to develop a relationship with Macfadden, find out what they have because you never know what arrow you'll have to pull out of your quiver in six or eight months or six years in order to be able to respond. And I think what's happening is there's not a whole lot of room to make mistakes here especially if people are dying because of an E.coli outbreak. And people want to know where it's happening, what caused it and what kind of future response there is. I guess the Gulf Coast states are the most obvious place we've had disasters in the United States. How can we use GIS to maybe prevent future troubles from recurring in that area.

**RH: You betcha. We've actually started to venture into the state and public health sector now looking for ways to provide GIS software and associated professional services around that. Again, you know, we feel like had we been involved pre-Katrina...you know, we've been pretty much stove piped on the international side which is a great market for us, there's a lot of opportunity to be able to help people there but based on the charters and some of the international work we do for the government, really have not been focused domestically. So we'd like to think that had Macfadden been involved pre-Katrina, that we would have been able to bring some of our products, our services, our deep knowledge and expertise about how to have those processes in place, be able to bring technology to bear, better reports, better information, better decisions, and at the end of the day you're saving lives, you're saving resources, you're saving government money. And so, that's really it in a nutshell.**

JG: Yeah. Generating reports are always important and I think quick turnaround and...I see more and more people wanting to access information on handheld devices and they want to have it quickly. And where five or six years ago you would never have anticipated having graphical information on a handheld device about an emergency that happened six hours ago. Today, people almost demand it don't they?

**RH: They do. I mean it's a...you gotta have it yesterday. And so... a lot of it goes with training too. People need to understand that the information is there and then also what to do with it. So we like to make sure that we have the proper technology, the proper information available for those folks that are deployed around the world. But absolutely, it's better information and you gotta have it now.**

JG: You know what I have seen is when there is an emergency that happens, people scurry and run around and try to figure out what other organizations have done or they come up with the best solution. It seems to me that GIS gives you so many different options there's no one way to go and an option that involves perhaps something with food and drugs may be a different option for something involving an issue with fire outbreak. I think that's the key concept here Russ, is what tool do you use when, and can you anticipate what's going to happen down the road and you have to plan for some of these disasters and know what technology to use in the future.

**RH: Correct. Very well said, and being able to bring a proven process, a proven management process into place along with the technology tools really is what it's about. Drugs, foods, being able to identify if there's an outbreak you know with respect to Vioxx and Tylenol in the past. Where are those locations, who could be affected by them, these are all areas we're looking to explore.**

JG: I think what the listeners have to focus in on is what the management wants and what the United States' citizens want out of an agency. They want to have quick, accurate information, handheld information, available on the web, and its kind of an intriguing situation because you really can't plan what's going to happen in the future. I'd like to thank my guest today, Russ Hall, CEO of Macfadden. You're listening to Federal Tech Talk with John Gilroy on Federal News radio AM 1050.