>> Ladies and gentlemen, welcome to the Opening Session of the Hearing Loss Association of America, 2009.

And now, please give a warm round of applause for the president of the board of trustees, Michael Stone.

[Applause]

>> Welcome to Nashville and the Hearing Loss Association of America's annual convention. Welcome!

[Applause]

It is my hope that you are enjoying the convention and attending some of the many fabulous workshops and seminars that we're having. We have an exciting evening planned for you today but first, I ask that you please welcome Captain Mark Brogan, United States Army (Ret.), who was wounded in Operation Iraqi Freedom and Command Sergeant Major Mark Breece, Senior Enlisted Leader of the Tennessee National Guard. They will lead us in the Pledge of Allegiance, gentlemen.

[Applause]

>> Please rise. Uncover.

>> I PLEDGE ALLEGIANCE TO THE FLAG OF THE UNITED STATES OF AMERICA AND TO THE REPUBLIC FOR WHICH IT STANDS, ONE NATION UNDER GOD, INDIVISIBLE, WITH LIBERTY AND JUSTICE FOR ALL.

[Applause]

>> Thank you. Thank you very much.

We also thank all the men and women of the armed forces who so proudly serve their country and oftentimes without the type of assistance that they should necessarily be receiving.

Many people are responsible for HLAA's success. I want to recognize some of your leaders. First, the Board of Trustees, I would ask that they stand and allow the audience to recognize them and their work. Please stand.

[Applause]

Thank you very much. The next group I'd like to recognize are the chapter delegates and there are 61 of them here today from across the country. I would also ask that you stand and allow this audience to recognize your valuable work.

[Applause]

We have state chapter coordinators here, there are 19. They play a fundamental role in the day-to-day operations of the activities and various states. I'd ask that they stand and be recognized.

[Applause]

Thank you for your dedication. The chapter leaders, also play a vital role in this organization, I would ask that they stand and be recognized.

[Applause]

Thank you very much. You have much hard work to do, we expect and hope but you will continue that valuable work. And finally, the state leaders, would they also stand so we can recognize their valuable assistance. Thank you.

[Applause]

To all of the leaders we thank them for the work that they do on an ongoing basis, oftentimes it’s tedious and trying, but what you do is you make the fabric of this organization – so much stronger. Continue the good work.

Tonight's event is sponsored by Ultratec who has been a friend and supporter of HLAA over 20 years. Friends like Ultratec, welcome Kevin Caldwell to the stage.

I'm having a tough time balancing this thing.

>> Thank you very much. Thank you.

Let me start by saying that Ultratec's founder and – this is going to be problematic, founder and president Rob Engelke sends his regrets that tonight he's unable for the first time in over 20 years to attend this conference. He will miss the opportunity to catch up with all of you.

A little repair here.

Ultratec is delighted to be and we're honored to be a sponsor. We're proud to sponsor the most important work that is done by the Hearing Loss Association of America. For those of you who may not know, Ultratec for 35 years has developed products and technology for people with hearing loss. Most recently we developed the captioned telephone technology and service.

And your response to CapTel has been both inspiring and humbling, inspiring because many of you have shared personal experiences or other things about how it's affected you, and humbling because we've received thousands of heartfelt thank you's about the technology. For us, HLAA is an important conference as it is for you. Because from HLAA, Ultratec learns how people with hearing loss navigate through their daily lives and by you sharing your experiences with us, we learned how to improve our products and that's very important us too. Again, I want to thank you for your interest for your continued support for CapTel and your interest and again we're proud to be a sponsor.

[Applause]

>> Thank you very much.

Thank you, Kevin.

No convention can run smoothly without volunteers. The local volunteers have worked tirelessly on your behalf. Please stand and give a warm welcome to the volunteers from Nashville.

[Applause]

The volunteers were led by Jennifer Thorpe who I would like to now invite to join me at the podium. Jennifer Thorpe.

>> Hey, y'all! You know, y'all are in Tennessee – when somebody says "Hey y'all" you're supposed to say "Hey," let's shout again. Hey, y'all!

>> Hey!

>> Y'all are pretty good at that, y'all keep that up. We're so glad that y'all are here. I want to take a minute to shout out real quick to our committee and just a few members in particular. Our committee chairmen, Jim [Minogue] and Kathy [Minogue] I'd like for them to stand. And Shari Koeper and Karyn Menck. I'm not seeing anybody. I'll tell you what, Shari and Karyn have burned up the e-mail and phone lines, they have been in touch, they have been doing so much hard work, I don't have organizational skills. I'm just a cheerleader, these girls have worked.

Jim and Kathy – Jim, in particular, has made Excel spreadsheets every day. I get the new, the latest Excel spreadsheet telling me what is going on. So I really appreciate all their hard work. I hope you'll take a little while to get acquainted with some of our local host committee members. You'll know them by their red vests. There are red vests all over the weekend this weekend and their job is to make sure that y'all feel at home here.

If you have any questions, feel free to hit them up. And they may not know the answers but they can try to find out for you. And if you feel like you're lost and you want somebody to point you in the right direction, you can ask them. They might be able to do it, if they can't, I'm sure they wouldn't mind getting lost with you. I mean we've got southern hospitality here, people! I know all of y'all are going to have a great weekend besides all the workshops and exhibits; all the time that you're going to spend with your fans we hope you'll take the time to enjoy Nashville while you're here.

There's a great big old shopping mall just right across the parking lot here. And lots of restaurants, lots of things to do over there. And just – there's a river, you can take the General Jackson Showboat if you like that, if you like dinner cruises they have mid-day and dinner cruises; you can buy your tickets at the registration desk down in the

lobby. If you are a big country music fan, go downtown to lower Broadway, we have it all down there. Try the Wildhorse Saloon or Tootsie's Orchid Lounge or Hard Rock Cafe is down there. You might want to even check out the Country Music Hall of Fame while you're there. It's really a neat place to go, if you have never been.

We also, if you like cultural things, we have the Parthenon, we have the Frist Center for the [Visual] Arts, Cheekwood Botanical Gardens, and if you like history, President Andrew Jackson's home is in Hermitage just right down the road. Whatever your interests we feel that Nashville has something for everyone. We hope that you will take the time to enjoy it while you're here. And we hope that this is a weekend that you will never forget, that is what we wanted for you. If there's anything that we can do to make that happen, do not hesitate to let us know. Thank y'all for coming.

Y'all have a good weekend!

[Applause]

>> Thank you very much, Jennifer.

A little glitch –

>> And now the executive director of HLAA, Brenda Battat!

>> Good evening, everybody.

>> Good evening!

>> I'm really delighted to be here. I hope you're ready to have some fun because we have a lot of fun lined up for you. I don't know about you but I came here three days early. Not for sightseeing just to make sure that I could get from the Cascades lobby to my room in Magnolia.

We're celebrating our 30th anniversary and we have much to celebrate. Since 1979, HLAA has been fighting for the rights of people with hearing loss and helping them adjust to living with hearing loss. Thanks to your support this year, we have been working with the Obama administration on issues around disability, sensitizing them to those issues. We've got strong congressional support for the hearing aid tax credit; we're determined to get it passed this year.

[Applause]

We're working hard to mandate captions no matter where video appears, whether it's on a cell phone or the Internet.

[Applause]

And we are working to make sure that captions didn't get lost during the DTV transition when you turn your TVs on. We're going to get mandated CapTel in the states for sure, we're working on that right now.

We've been working with the Department of Transportation on more accessible travel and we have been getting more into consumer protection, as part of that, we developed a checklist which coincided very nicely with the report the "Consumer Reports" report on hearing aids. I don't know if you've seen it, it's on page 32 of the July/August issue of HLM. If you don't have it, we have 500 copies Consumer Reports sent to us for you; you can just go help yourself in the exhibit hall at our booth. We worked extensively with them on this report and I think it's really very telling, it really tells what is going on out there. So I encourage to you read it.

And lastly, but not least, just last week finally after years and years of advocating, the national fire alarm code was changed by unanimous consent to mandate low frequency square-wave alarms. So we're going to see that in residences and in hotels over the next few years. That's taken a long time.

We like to collaborate as much as possible with other organizations and I would like to recognize some of them who are here attending the convention. Including the Clarke School for the Deaf, the National Technical Institute for the Deaf, Telecommunications for the Deaf, Incorporated, Deafness Research Foundation, Hearing Industries Association, Gallaudet University, Northern Virginia Resource Center, the state commissions and the National Court Reporters Association. It's not my intent to leave anybody out, if I did, I'm sorry but we're welcoming you and very happy that you're here.

We're also really delighted to have so many young adults here with us this year. Twenty-five scholarships were awarded to young adults as a result of generous donations from Sorensen, CTIA-The Wireless Association, the Rocky Stone Endowment Fund, and eight HLAA chapters and state organizations who donated money to try to make sure that young adults were well represented. So welcome young adults, I hope we can find ways to get you involved, get you on the board and get you really having some say in this organization. The future of this organization.

Three years ago as you all know we started a *Walk4Hearing* to raise awareness about hearing loss, raise funds for programs and services and send a message about hearing loss as a health condition to the general public. This year, we have 22 walks throughout the country that are all put on by HLAA volunteers. I want to recognize the walk volunteers, so if any of you here are involved at all in any of those walks or have been over the last two, three years please would you stand up and we want to give you all a great hand because this is a tremendous amount of work that you all do.

[Applause]

I would also like to recognize our national walk sponsors led by T-Mobile. They include Advanced Bionics, Sorenson, HEAR USA, Phonak and IBM, we really are appreciative because that allows us to provide a quality program with quality materials to disseminate out to the walk sites.

[Applause]

I could try to describe the excitement of the Walk, but it's much better if you see it for yourself, you can go to our booth where we have the video playing, you can also go to our website where we also have the video. Gives you an idea of what it's like, maybe motivate you to get involved and have a walk in your community. So, thank you, that's just a brief overview of what we've been up to in the last year.

I would now like to introduce Alan Hurwitz, the president of the National Technical Institute for the Deaf to come up. We're going to announce something to you.

[Applause]

>> This is a very exciting time for us. I want to thank Brenda for inviting us here, and also for this program tonight, I'm really excited to be here with you. Also I'm excited to be here with Alan Ford and Larry Scott. Is Alan anywhere in the audience?

So, we're happy to be here to announce an exciting partnership between HLAA and RIT and NTID that will benefit thousands of men and women who have suffered a hearing loss as a result of their service to our country, in the recent conflicts in Iraq and Afghanistan. In order to advance, improve and expand academic and career employment opportunities for these veterans with hearing loss, RIT and NTID and HLAA are committing themselves to active cooperation and coordination in implementing a number of priorities to help these brave veterans, to help them adjust to their life after their service to their country. We're also deeply committed to helping their families, helping the families of these veterans along with HLAA and the Department of Veterans Affairs and also other veteran service organizations to share their information and their expertise. HLAA is an invaluable resource on consumer issues, that military veterans with hearing loss issues, that they may be facing. We pledge to work collaboratively with HLAA on efforts that will enhance the success of veterans with hearing loss. We are proud of our veterans and all that they do for our country. It is now our turn to give back to them. We are honored to be working so closely with HLAA on this very important and worthwhile endeavor.

So, if you would please sign this agreement, both of us understand this agreement with the organization.

[Applause]

>> Thank you.

It's now my pleasure to introduce Barbara Kelley, the Deputy Executive Director of Hearing Loss Association of America.

Barbara.

[Applause]

>> I hope everybody is having a fun day. The exhibit hall is opened, the state leaders have already been at it for a day and a half. And I have had a wonderful afternoon. I spent a few hours chatting with the cutest, young, adorable, attractive couple. Sunny and Mark Brogan. In fact they're kind of like Ken and Barbie when you look at them. Sunny said that when she first met Mark, she thought he was kind of a nerd; he had khaki pants, he was all buttoned up, but she soon fell in love with him. And he fell in love with her. And they're here in the audience.

Today Captain Mark Brogan, U.S. Army (Ret.) does not wear the clothes of a nerd. He wears the uniform of a U.S. Army soldier. On his shoulder boards are two pins, engraved with the words "Suivez moi," which means, "Follow me." Mark Brogan is a leader. Under the pins he has green fabric which indicates that he is a leader. A commander, he leads a command and leads a platoon.

You may have heard about Mark, he's been featured on our Veterans page on our website. And we learned about Mark Brogan through the Knoxville, Tennessee chapter.

Mark led his platoon into Operation Iraqi Freedom and one day on one of his missions, a suicide bomber was behind him and decided to detonate that bomb. Mark took the hit, he suffered a brain injury, the same one that ABC news reporter, Bob Woodruff suffered. He also sustained a hearing loss. In our conversation today, I think one of the most compelling things he said to me was, "It was okay for me to take that hit, because the suicide bomber behind me died and that's one less person who is on this earth to hurt somebody." Mark was awarded the Purple Heart among many other honors and medals, the Marine Corps commander even awarded him a special Marine insignia and said to him, Mark, if the U.S. Army ever kicks you out, the Marines will take you.

I am honored to introduce you to Captain Mark Brogan, would you please come up.

[Applause]

>> Please be seated.

I'd like to thank everyone here for their support and the NTID program, it's amazing that we have that kind of support at home for our veterans that will lead to successful integration of our veterans with hearing loss back in to our communities. I'm honored to be here and participate with such an excellent organization as HLAA. It's estimated that over 50,000 OIF, OAF vets returning that have hearing loss. This is a significant healthcare issue that will be dealt with through the V.A. and military. It's going to require a committed effort by all parties to make sure that they're successful in returning to their communities and learning how to deal with hearing loss.

HLAA can be an incredible tool to work alongside these veterans to make sure that they are – three years ago at this time I was at Walter Reed doing physical therapy every day relearning how to walk, talk, just about everything really. I knew that I couldn't hear well, but we had no idea just how bad it was. From what I've been told after the bomber went off and my soldiers got to me, I had blood pouring from both of my ears. I later found out that my right ear was perforated and I had severe-to-profound hearing loss in both ears. Once I went to rehab at the V.A., I was fitted with my first pair of hearing aids, I realized, wow, did I have hearing problems? The difference between having them and not having them in was amazing.

I had taken my hearing for granted before this, I had excellent hearing, I was a musician and it just was incredible to realize, wow, you know, not hearing is such a challenge. As Barbara stated, I had a suicide bomber go off behind me in Iraq. I sustained the brain injury along with other injuries. Out of all the injuries that I have, hearing loss is definitely one of the most troublesome problems. Between the brain injury and the hearing loss I may hear it, and I may not, if I do hear it, I may not understand it because of the brain injury. So it's kind of a double whammy. But it's about learning to overcome those difficulties and continue life. As I've continued on this journey of recovery, I've learned that – learned to advocate for others has really been an important tool in my recovery. You have to get out there and get moving, do something not just sit there and feel sorry for yourself.

I found being involved with a lot of the veteran service organizations such as the DAV, traumatic brain injury support group in my hometown of Knoxville and disabled veterans, it's been really rewarding. I decided I would look up to see if there is any organization for hearing loss and I happened to come across HLAA's website and I typed in "Knoxville" when it came up I got Laurie Pullins, where are you at, Laurie? Hey, Laurie.

Laurie, she messaged me back pretty soon, invited me to come out to the meeting. It was so nice to be able to come and be among people that had hearing loss as well. It was really hard describing to my family and friends how it

was to not be able to hear, they had just never seen me like that before. I got involved with the chapter, Laurie has been great, she's such a sweetheart. And it was great to be there with the members of the group and learn from them, learn from their experiences. I'm now retired medically from the Service and I'm committed to continue serving my community by being involved with all these different organizations. And my hope is that in the future that HLAA can be involved with all the veteran organizations such as the DAV, VFW and help all the veterans out there with hearing loss. Please help me and get involved in welcoming and helping our veterans [who] come home with hearing loss.

Veterans in the audience, please rise.

[Applause]

Thank y'all for your service.

And HLAA, thank you for giving me the opportunity to come and participate in this wonderful seminar and I'm not sure who is next.

[Applause]

Thank you.

>> Captain Brogan, thank you for your service to our country. And for coming here.

I'm now very pleased to introduce Dr. Gene Bratt, he is the chief of audiology and speech pathology services at the Virginia Tennessee Valley Healthcare System. He is also chair of the National Audiology and Speech Pathology Field Advisory Council. And this is the council that reports directly to Dr. Lucille Beck who is head of audiology for the Veterans Administration. Dr. Beck is also a former board member of HLAA. So, Dr. Bratt we'd like you to say a few words.

[Applause]

>> Greetings to HLAA.

And welcome to Nashville on behalf of the Department of Veterans Affairs, the National Audiology and Speech Pathology program and certainly Dr. Beck. I think many of you know Dr. Beck personally, she would very much have liked to have been here with you for this weekend, but personal circumstances have prevented that. But she sends her greetings to all. I also want to thank Brenda and Barbara, the planning committee of HLAA for the opportunity just to greet you and to wish you congratulations for 30 years of service to our nation's hearing impaired.

This year in particular we join with HLAA in recognizing the sacred sacrifice of our nation's veterans through their military service and obligation we undertake to provide for those who have borne the battle, the best care that we can imagine. On this occasion two individuals come to mind who I would like to note. The first of course is Rocky Stone. The beloved leader of HLAA, the founder of HLAA himself a veteran of military duty who understood the magnitude of the sacrifice and our need to respond with our very best efforts to those soldiers injured in harm's way. And also to Captain Mark Brogan, what an honor it is and privilege for me to be able to share this platform with this remarkable young man. A soldier who has served with honor, who sustained life-threatening injuries because of that service. And through his achievements now inspires us to achieve all that we can do to repay our debt to those heroes of military conflicts past and present.

Permit me just for a moment to provide a very brief glimpse of what the V.A. is doing for our veterans in the areas of speech-language pathology and audiology. In speech-language pathology, I believe our greatest challenges lie in the understanding of the effects of a misnamed condition that has become the signature injury of the present conflict in Iraq and Afghanistan. Mild traumatic brain injury, it is misnamed "mild" because the outward and immediate effects appear to be mild. But we are just beginning to understand and address the far-reaching consequences these injuries have upon one's cognitive, attentive and organizational abilities. Be assured that the research within the V.A. is ongoing to provide the best treatment strategies to address these effects that significantly complicate the daily lives of our injured veterans.

With regard to hearing, just a few numbers. Hearing loss and tinnitus, the condition of ringing or other noises in the ears, now the two most widely compensated injuries in the V.A. When looking at veterans of all conflicts,

750,000 veterans now draw service-connected disability for hearing loss. Over 600,000 draw service connected disability for tinnitus. For those who have served in Iraq and Afghanistan and elsewhere in the Persian Gulf, 94,000 of those now have incurred service-connected compensation for tinnitus and over 75,000 of those for hearing loss.

To address these injuries, the V.A., through its training programs is attracting the brightest and best audiologists in the country to provide care along a wide continuum, including hearing aids and other assistive technology, balance assessment and rehabilitation and tinnitus assessment and management.

Last year, the V.A. dispensed over 400,000 hearing aids at a cost of $135 million. Thirty-three million hearing aid batteries at a cost of $4.5 million. Which is actually a fairly remarkable number when you consider that $4.5 million of our national budget goes for hearing aid batteries for veterans' hearing aids. One-hundred seventy cochlear implants. In fact in 2008 one out of every seven hearing aids that was fitted in the United States was fitted in the V.A. using the latest technologies available. Our mandate for care is extended to veterans of all periods of service, but presently we bring special attention to younger injured veterans to provide assistance not only in healthcare, but as well with assistance and vocational pursuits, job training, parenting skills and fitness and wellness.

That it is why it is so exciting tonight to note the partnering of HLAA with the National Technical Institute for the Deaf in Rochester. In the Military Veterans with Hearing Loss Project, what a creative way to collaborate the use of resources to provide assistance to so many deserving veterans. To all gathered here, you have much to be proud of. And during the next three days I hope you take the time to celebrate your accomplishments.

And also to, redouble your resolve to do what is necessary to provide and promote hearing care for all those who need our services. Best wishes for a great meeting and Godspeed in your endeavors.

Thank you very much.

[Applause]

>> Thank you very much, Dr. Bratt.

Now it gives me great pleasure to present the 2009 HLAA Access Award to Dr. Vinton Cerf who is also our keynote speaker. Dr. Cerf, would you come up, please?

[Applause]

The award is given to those who have provided or significantly improved communication access for people with hearing loss.

Dr. Cerf is the co-designer with Robert Kahn, I'm sure all of you read the wonderful interview in the magazine, of the protocols and basic architecture of the Internet for which they received the highest civilian honor bestowed in the U.S., the Presidential Medal of Freedom. And inducted into the National Inventors Hall of Fame. Their invention, the Internet, is a growing part of the online lives of over 1.5 billion people around the world. Widely known as one of the fathers of the Internet, a graduate of Stanford University and UCLA and grew up in Los Angeles. He's now vice president and Chief Internet Evangelist for Google in Herndon, Virginia. Is also working on interplanetary Internet together with NASA's Jet Propulsion Laboratory.

There he's developing new standards to communicate from planet to planet using radio laser communications that are highly tolerant to signal degradation. I really want to know more about that. As a result of his ground-breaking work, the Internet and e-mail has opened up a whole new world and way of communicating for people with hearing loss. In a truly miraculous way, people with hearing loss have been brought back in to the mainstream and have access to information in unprecedented ways and are able to participate more fully in all areas of everyday living.

We are truly honored to give this award to you.

[Applause]

>> We'll now we have an opportunity to see whether all this technology will wake up having been asleep for a good part of the afternoon. Let's see what happens here.

First question is, can I identify myself to it? If it doesn't work we'll blame Steve Jobs. That looks good – here we go. We want to go back one. All right!

First of all, Sigrid and I want to thank very much Michael and Brenda and the board of HLAA for a really wonderful and warm reception here in Nashville. This is a city that I am becoming very fond of; we've just discovered that it's possible to navigate in the hotel without a GPS receiver which was very impressive. If any of you remember reading the "Wizard of Oz" you remember that four parts of Oz were different colors and this hotel bears a certain resemblance to.

That second, I want to wish happy 30th birthday to HLAA. We had the pleasure of knowing Rocky Stone and we had great respect not only for his work, but for the work that you carry on in his memory, and on his behalf and on behalf of all people who suffer hearing impairments of one kind or another.

I also want to acknowledge the operative word "collaboration" which has been used several times tonight. There is nothing more powerful than people with a common objective willing to work together and to combine their resources to make things happen. And the combination of HLAA and NTID is just one example of the kinds of collaborative work, the linkage now with the Veterans Administration is another. There are many examples sitting in this room tonight of people collaborating with each other to reinforce the energy that they put in to the problems they're trying to solve. That kind of collaboration is a very powerful tool. And I feel compelled to remind you that the Internet itself would not exist were it not for a stunning degree of collaboration on a global scale.

Although Bob Kahn and I did the original design work in 1973, it would not be what it is without an enormous degree of contribution from literally hundreds of millions of people around the world. Well, I'm going to take you back in to history momentarily. This is a picture, diagram of the predecessor to the Internet; it was called the ARPANet, Advanced Research Project Agency Network, a part of the Department of Defense. That reported to the office of the secretary of defense.

In 1969, I was a graduate student at UCLA, and I had the pleasure of writing the software to connect the Sigma 7 computer at the bottom of the screen to the first node of this ARPANet. This was an experiment in a technology called packet switching. And at the time it was considered a completely ridiculous idea, AT&T was the inventor of telecommunication services in the United States and didn't believe that this technology would be particularly effective and they declined to participate in the experiment. But they were happy to lease circuits to us to try our idea out.

Well, the Sigma 7 machine is in a museum now, some people think I should be there along with it, but the fact remains that the successful experiment showing packet switching work led to an even more ambitious experiment, it was to design a technology that would allow an arbitrarily large number of different kinds of packet switch nets to be interconnected. That was the Internet problem. And if we leap forward 30 years to 1999, this is what the Internet looked like, this is a diagram that was generated automatically, each color represents a different organization operating a different part of the Internet and all of the lines are the connections among the various parts.

If we were to look at the 2009 version of this, it would be bigger, it would be more connected, it would be more colorful and that's probably as good a description of Internet as anything else I could come up with. So, this is what the Internet looks like today.

There are over 600 million machines that are publicly visible on the Internet. That doesn't include things like personal digital assistance, or laptops that are connected from time to time, and it doesn't include the computers that are hiding in enterprises behind firewalls, so there are probably two or three times as many machines as this publicly visible number suggests.

The number of users of the Internet exceeds now 1.5 billion around the world. A great significant portion of them are in Asia, something like 600 million, many of the users of the Internet are in Asia, in China, in India. There are over 250 million users in China, that's about the same number of users as there are in North America. So if you think that the Internet is an American thing, if you think that the Internet is an English language thing, please think again. It is becoming a very, very international environment covering literally dozens, if not hundreds, of languages around the world.

Another thing which has happened over the last decade or so is an avalanche of mobile communication entering into the telecommunication system. Many of those mobiles, over four billion of them now in use, are connected to the Internet and are becoming a new way of accessing Internet resources for many people in the world, it will be their first introduction to the Internet. And for some of them perhaps the only way that they will have access to the content and services of this global network.

My colleagues at Google and I are very, very aware that disabilities are not well served in the online environment and we see this as a challenge both corporate and personal. We also note that the population of the world includes a very large number of people with color deficiency problems in their vision, or simply poor quality vision or perhaps poor dexterity, or some form of hearing impairment. They number in the millions around the world, tens of millions and so reaching them is important from the point of view of a company like Google, which wants to organize the world's information and make it accessible and useful and it won't be accessible unless we make the tools useful for people with a variety of impairments.

There are lots of different ways to achieve that objective, here are a few on this slide. My point here is simply to emphasize how important it is to recognize the diversity and spectrum of impairments of one kind or another. I'll come back to this theme later, but the American public generally does not appreciate the nuances of hearing impairment and what a broad range of symptoms and manifestation is that it covers. And therefore, the number of different solutions that people need in order to overcome some of these challenges.

I'm going to just remind you of some of the applications that are available to you on the Internet which I think have some significance for people with hearing difficulties, one of them is electronic mail. Google offers a service called G-mail, it's a free service offering. E-mail was actually invented in 1971. It was part of the original ARPANet experiment.

I have been a user of e-mail for over 35 years now. I can tell you that my career would not have been what it is were it not for the fact that most of my colleagues chose to communicate with me by way of e-mail, not because of my deafness, but because it was more convenient for them. It allowed them to overcome time zone differences and things of that kind and it resulted in more precise communication. So, the consequence of this uptake of electronic mail in my career has allowed me to be as effective as any other member of the hearing population, and I'm deeply grateful for that.

Another example is instant messaging; this is just one example from the Apple world, it's called I-chat but there are lots of other similar kinds of applications that allow people to interact with each other in realtime. Through the network. And that has been expanded now from purely textual interactions to video interactions. And I have to tell you that my experiences with video communication began over the Internet, began in the 1980s. And the quality was really terrible.

As time has gone on, the capacity of the Internet to carry video traffic has increased dramatically. The core backbone speeds of the Internet in the 1970s was 50,000 bits per second. That's the core backbone speed. That's all you can get with a dial-up line today. Today the backbone speeds are running in the 40 gigabits per second; 40 billion bits per second, a thousand times faster. The consequence of that is that video transport through the packet switch net is quite feasible.

Sigrid and I, our family, often wind up having three-way video conferences with each other, using some of these technologies. For people who are relying on lipreading, the quality can be good enough to achieve that objective. Another example is Skype. It's a voice-over I.P. application which also includes chatting in text form and also now includes video as well.

What you're seeing in the Internet is the ability to support virtually every mode of communication that's ever been invented. In fact that's an important core value of the Internet's design. The Internet itself has absolutely no idea what the packets of the network are carrying. It is completely neutral and unaware of whether those packets contain part of a webpage, part of an e-mail, a bit of a video clip or some audio that's been digitized. It simply doesn't know. Therein lies the power of the Internet because any new application which is implemented can be put on the network without changing the Internet itself. The result is an Internet which has accumulated an extraordinary range of applications and every day people are coming up with new ones.

Here's another one that's more recent is called Twitter. It's a remarkable communication system when you think it's limited to 140 characters per message. I often wonder whether the principals at the company should be called Twits but I suspect they would not want that title. On the other hand, some people will tell you what they're doing and you may not be terribly interested that they just put on their new Nike shoes and are running down the stairs. On the other hand when emergencies happen, this kind of casual communication and rapid dissemination can be incredibly powerful. So, although I like to poke fun at the name of the organization and the way in which it's used, I want to emphasize how valuable and important this form of communication can be.

Here's another example of something that we recently announced at Google, it's called Google Wave. While we don't have time to go in to a lot of detail, I want to you imagine for a moment that all of the different modes of Internet communication that you know about have somehow been combined in to one package. Instead of a separate chatting application and an e-mail application and a blogging application and a Twittering application, it's all part of the same application. And it doesn't care whether the communication is happening between somebody with a mobile that's sending these little short messages and someone who is operating a blog or someone else who is responding by way of e-mail. It's all handled uniformly in one single application. It remains to be seen how well that will resolve or how it will evolve but we've announced an early version of this system in order to find out what people do with it.

Here is another example, Web-X. There are other applications of collaborative tools that allow people to work together over the Internet in a group, seeing the same information at the same time. And discussing it.

Google also has a service called Google Docs for documents, it could be spreadsheets, it could be text documents or it could be presentation documents. Realtime voice communication or realtime texting, between the collaborators and changes to those documents are seen by all of the collaborators in realtime. It is a remarkably powerful way of working together and it's certainly better than sending copies of a document around as e-mail attachments leaving the participants wondering who has the most recent copy of the document, which one is it. So here we're seeing collaboration again augmented and facilitated through the use of this network.

Here is another example, Google Maps. You can imagine the difficulty of getting directions from someone if they have to speak to you and tell you all of the left and right turns; here is a system that will be happy to provide that information in text form and print it out visually as well as with directions. There are others, of course, like MapQuest that do similar things on the Internet.

Another example of an advanced application that Google supplies is called Google Earth, I suspect many of you have taken the chance to go look at Google Earth and go Google your home to see whether or not it's visible in our overhead photography. One thing I want to emphasize is that all of the imagery that you see in Google Earth is from publicly available sources.

So we don't have any special satellites, we don't have any arrangements with the intelligence agencies, these are simply publicly available sources. But you can see that creating this common framework for presenting geographically indexed information has become a very powerful tool for other people who have information with a geographical character to present that information through this medium. And so part of our motivation at Google is to create platforms that allow other people to share their information in effective ways.

We're seeing scientists using this tool to display information that they have collected from sensor networks. We're seeing people who are interested in real estate development using this tool to say, this is where the freeways are going to go, here is where the buildings are going to go. There are just uncounted numbers of applications of this tool.

Another one is called Google Ocean, we recently added not only knowledge of the land masses, but also knowledge of the undersea topography; you can imagine the utility that the oceanography community can make of that, people who are working on undersea cables and things of that nature.

I want to come back to mobiles for just a moment to emphasize again that these are not just telephones. They are programmable devices and they do a variety of functions, texting, web access, some people use them to make authorized payments. There are real challenges with these devices, they have very small displays, typically the size of a 1928 television set. And they have keyboards that are suitable for people that are three inches tall.

There's a lot of work to be done to make an application comfortably useful in this very narrow and constrained environment. As time goes on, I'm sure that these devices will become even more friendly and elaborate.

The other thing I want to emphasize when you have a mobile, which has access to the Internet, you are carrying your information window around on your hip or in your purse. We have seen the consequences of that, when people ask queries of the search engine and doing it through their mobiles they ask questions that are geographic in nature. "Where is the nearest ATM machine?" "Where is the nearest restaurant?" "Where is the nearest hospital?"

I understood this intellectually but I didn't really viscerally understand how important this geographic call information was, until my family and I went on vacation to Page, Arizona, planning to go out on Lake Powell with a houseboat for a few days. And as we were driving in to this little town of Page, Arizona, someone pointed out that there were no grocery stores on the lake. So, we had better buy the food that we need to put on the boat before we get out there. So, the conversation turned to, what meals we wanted to serve on this trip and someone said, why don't we make paella. I remember thinking, oh, I love paella, but you have to have saffron to make it; where am I going to find saffron in this little town of Page, Arizona?

Well, I got out my BlackBerry and I got a good data signal so I went to the Google home page and I typed "Saffron Page Arizona grocery store" and I got several responses back with telephone numbers and little maps showing how to get to the store. I clicked on the telephone number, the phone rang, a voice answered and I said, "May I speak to the spice department, please?" Now, this is a very small store, it's probably the owner of the store and he says, “This is the spice department.” So, I said, "Well, do you have any saffron? He says, "I don't know," but he goes off to look, he comes back and says, “Yes, we have saffron.” So, we follow the map, got to the store and I ran in and I bought $12.99 worth of saffron. That's .06 ounces in case you wondered. We made really nice paella.

Now, I have to explain as I was walking out of the store, I was stunned to realize what had just happened. I had gotten precisely the information I needed to solve my problem, where is saffron in Page, Arizona, in realtime. I didn't get the answer, "Oh, saffron is available in New York City, it's only 1,500 miles away." So, getting information in a timely way with geographical significance was a really powerful way of solving the problem. And I've now come to appreciate the value of geographically indexed information, so have others.

You're going to see many people monetizing their knowledge of information that has geographical encoding. Well, the Internet has introduced some interesting new business practices. Businesses are expected, by you and me, to be available 24 hours a day. We don't want to hear anything about business hours or call us back when we're open again. We want what we want when we want it. Some of the businesses that work online on the ’net will let you go to instant messaging interaction when you need help. So instead of sending an e-mail that might take some time to get a response or trying to make a phone call which might not work if you can't hear, you have the ability to go and interact textually with someone to help you out. I'm seeing an increasing amount of that as time goes on. Another example of a very powerful and popular application, if you're shipping something somewhere or you have ordered something and you want to know, where is it?, you can go to a website and say basically "where's my stuff?" And UPS, for example, or FedEx will say, the last time we saw it, it was over here. They can't necessarily tell you where it is now but they can tell you where they last saw it. And that's a pretty good start.

Airline flight status is another example and increasingly, if you have [a] baggage tag available you can ask, where's my bag now? Of course sometimes you won't like the answer, but at least we have better knowledge than we had before.

Amazon sells a very interesting little device called a book reader. And it will allow you to download books online, so as the mood happens to strike, while you're holding your little book reader in your hand, online you can download additional works to keep you interested.

I think that another phenomenon that we've seen grow up around the Internet is what's called "open source software" these are programs that people are willing to share the source code to. Normally in the past source code was considered the jewels, the crown jewels of the company and you never released that. But there are people who want to release the source of their software, partly so people can know what they're getting and partly so people can come up with ideas to improve it. And partly so people can find bugs in it and tell you about that so you can fix them. So Google has done exactly that, we released an operating system called Android in source code form for

mobiles. Our intent was to offer this platform to allow people to build more flexible mobile systems that could download and run new applications easily.

We also released a software package called "chrome" which is a browser, it runs extremely fast, part of our objective was to make it run more quickly than the other browsers do. And we believe it is also a lot more secure. Because it's very careful about what programs it will download and execute, that, too, is available in source code form.

We're seeing evolving and maturing technologies in the Internet world, one thing which is becoming quite exciting is speech recognition. The ability to speak to, for example, your mobile and have it understand or at least recognize the words that you said. I want to be careful not to say understand, because that implies more than is merited to recognize the words that you have spoken. So we use that to allow people to ask questions on the Internet and have searches done and to get answers back in text form or in audible form.

We're also very interested in doing automatic captioning, I don't want to mislead you in to thinking that this is imminent, this is a really very hard problem. I will tell you about some captioning work that we have been able to do for YouTube, but it is not entirely automatic and it's not done as it would be if you could recognize the speech and produce the captions automatically. But we try to enhance people's ability to produce captions for videos that they have contributed in YouTube, for example.

We also have speech and text translation capability, we don't quite get it in realtime yet, but I'm hoping someday we'll reach that objective. So that people who have trouble hearing may actually be able to see the text as people are speaking. In the case of YouTube, the captioning mechanisms have been added recently that would allow you to upload a video and upload the text that's associated with the video and have the captions placed on the video for you. I think I can get this to – may be able to go online, maybe not. Well, since I promised I wouldn't take up too much time let me not do that.

Basically – let's go back. Basically in the YouTube experiment we're allowing people to take a transcript and associate that with a video that they have uploaded and combine the two so that they are presented in captioned form. We can also translate the transcript into different languages so if you supply a transcript in English and someone who is Japanese is watching that video, we can translate the English into Japanese. Just to give you an example of that, here is another very nice tool, we're looking at a webpage which is written in Spanish, this is the "El Pais," which means "the country" in Spanish, the newspaper, very popular newspaper in Spain. There was a story written about a visit that I made there recently. I didn't read the Spanish, I went to the Google translation system, I'm sure that that's not very visible to the people in the audience, but basically there's a place where you can type in the URL, the uniform record locator of the webpage that you want to have translated. It will automatically translate the text on that webpage and present it back to you in the same form as the previous webpage. What you're seeing here is exactly what happens when you hand this Spanish language page to the Google translator, it will hand you back the page that looks exactly the same except all the words have been translated from Spanish into English. I can tell you I'm very, very proud of my team at Google that has achieved this objective.

Generally speaking, I'm seeing more and more devices showing up on the Internet, in fact I am now convinced there will be billions of devices on the 'net, more than there are people. Some of them I never expected to ever see on the network like refrigerators or picture frames or telephones that look like telephones but they're actually voice-over I.P. computers.

But the guy that is the most amazing is the one in the middle, he invented an Internet enabled surfboard. He's from the Netherlands, I've not met him. But I have this image in my head of him sitting on the water thinking, you know, while I'm waiting for the next wave if I had a laptop in my surfboard I could be surfing the Internet while I'm waiting! So, he put a laptop in his surfboard and put a Wi-Fi, radio service at the rescue shack; now he sells this as a product and a service.

Just to reinforce the point about sensor networks, Sigrid and I have a sensor network in our house. It's run on radios, and it records the temperature and the humidity and the white levels in each room in the house every five minutes. Now I'm sure you'd say, only a geek would want to do that. And you'd probably be right.

The reason that I wanted to do this, though, is that I wanted a year's worth of data to tell me how well the heating, ventilation and air conditioning system was actually working so I could show the people responsible for adjusting the ventilation and heating system exactly how it performs. Rather than just getting anecdotal reports that this room seemed hot during the summer or that room seemed cold during the winter. Now I have a year's worth of data that I can use to calibrate my heating and ventilation system.

However, there is one other important purpose, one of the rooms in the house is the wine cellar. It's very important to keep the wine cellar below 60 degrees Fahrenheit. And also above 60 percent humidity so the corks don't dry out. This one has been alarmed, so if I am away and if the temperature goes above 60 degrees Fahrenheit, I get an SMS message on my mobile. So, last year when I was visiting Argonne National Laboratory as I was walking in to the building for a three-day meeting my mobile went off, it was the wine cellar calling. It said, “the temperature in the wine cellar has just gone through 60 degrees." Now, Sigrid was away for a two-week holiday, she couldn't go and turn the cooling system back on. So every day for three days, every five minutes, I got a message saying "your wine is warming up!"

>> So, I was a nervous wreck by the time I got home. It had reached 70 degrees in the wine cellar which is not terribly damaging. I turned the system back on. But I called the maker of this system, this is a commercial system, this is not just something I concocted in the garage. It's made by company called Arch Rock in California. I called and said, do you have actuators as well as sensors? And they said, “Yes.” So one of my projects is to install the actuator system so when I'm away when the wine cellar calls, I'll be able to turn the cooling system back on.

I got to thinking, you know, there is more information that you can get from such a sensing network. If the lights go on in the wine cellar that gets recorded. That means when I'm away I can tell if somebody went into the wine cellar which might lead me to think that some wine is leaving the cellar without my permission. But I thought, you know, I could do better than that. I thought why don't I put an RFID chip on each of the bottles in the wine cellar, these are radio frequency identification devices. Then I can tell if any bottles leave the wine cellar, however, one of my engineering friends pointed out there's a flaw in this design, because you can go into the wine cellar and drink the wine and leave the bottle. So, now I have to put a sensor in the cork in order to figure out if there's any wine in there. And if I'm going to go to that trouble, I might as well sample the testers that make the flavors of the wine in order to decide whether or not the wine is ready to drink. Now, the practice will be that you interrogate the cork before you open the bottle, and if you discover that the wine has exceeded 90 degrees Fahrenheit that's the bottle you give to someone who doesn't know the difference.

[Applause]

I hope that this gives you some idea of the utility of sensor networks in the Internet environment.

There are some policy issues that I just want to draw to your attention, HLAA is an example of an activist organization, it's one that takes challenges and meets them. It undertakes to draw attention to issues that are of interest and concern to people with hearing impairments. Broadband access to the Internet is an example of something that we really want to have on a – certainly on a national scale and I would love to see on a global scale. It increases the kinds of applications that we can implement, it enhances the value of cloud computing, which is the kind of computing that we do at Google. And it creates platforms for new business development and certainly in these economic times, anything that creates new business has got to be a good thing.

The problem is, that there isn't a lot of competition for the provision of broadband service. It's either a teleco or cable company. Often you may have a choice of one service and nothing – only one service. You might have a choice of two, but you certainly don't have a choice of multiple service providers. And the problem with not having enough competition is that the broadband provider might choose to favor his own services over those of others. So if you happen to be a cable company selling video services to your customers in addition to broadband Internet, you might not want to have competition from some other video provider delivering video through those same broadband Internet paths. And so you might interfere with that. In favor of your home video service.

Many of the carriers claim that they would never do that during a two-year debate on possibility of ’net neutrality legislation being passed. And then after that subsided, after they said we'd never do that, a number of instances occurred and evidence was shown where they really were interfering with some people's broadband access to the ’net. So, I'm only alerting you to the importance of advocating for broadband access which is nondiscriminatory

and allows every user to get access to every service no matter where it is in the world. And to allow any new services to come up and deliver to all possible customers.

Google was started by two graduate students at Stanford University. They did not have to make an agreement with every Internet service provider in the world before they could bring up their application, they just put it up on the 'net and people got access to it. And it is this ability to innovate without permission which has allowed the Internet to expand so dramatically the number of services that it offers.

Here is another big one, I know you all care about this, high definition video captioning. I am now fully persuaded that it's not working properly. And that there are a lot of different potential reasons for that. In my visit recently at NTID with Dr. Hurwitz and also in my conversations with Cheryl Heppner at NVRC and now today with some of the members of the board at HLAA, I am personally committed to trying to advocate for solutions to this problem. It's simply a question of getting the engineering right. And I think everyone who relies on captions deserves to get those captions whenever they need them. I would like also to see realtime captions available in movie theaters and in plays, those are also not widely available.

[Applause]

We have a challenge as a community to educate the public about hearing impairment. They don't understand, they have very, very simple models of what this all means. Some of you may have had the experience I had, I went to an airline ticket counter and I said "I'm hearing impaired, I may not hear the announcements, can you please help me by telling me when anything important comes up?" The nice ticket agent said, do you need a wheelchair? You know, it is that level of simplicity and naivety in the general public and I'm sorry to say, also among some of the lawmakers in the country that has to be improved. I'm personally committed to meeting this Senator Tom Harkin to talk about some of the issues that you see on this slide in the next month or so.

So, I want to finish by giving you a summary of something else that I've been doing. This is not a Google project. I don't want you to leave the room thinking that Google's business model is to take over the solar system, because that's not what this is about. This is really about creating a communication system for space exploration which is as rich as the communication system we enjoy here on planet Earth.

The Internet is a very flexible networking tool. It is serving hundreds of millions of machines in – countless different ways. Our interplanetary communications for the last 40 years or so has been point-to-point radio links. That's a pretty simple network, two nodes.

And so my colleagues and I at JPL are looking at some of the exploration to Mars. About ten years ago we began thinking how to build and design a much more elaborate networking capability for space. If you have been to Google Earth, let me invite you to look for the icon that shows the planet Saturn, up at the top of the screen and click on it. You'll see a pull-down menu, one of the choices is "Google Mars" you're seeing a picture here of Mars. We have data from NASA, we have data from the rovers and from the overhead orbiters, which we've accumulated and stitched together the same way we've stitched together Google Earth. You can go and explore Mars.

Here is an example of a very large image that you can roam around in that's taken by stitching together the pictures from one of the rovers on the surface of Mars. It's a very exciting place to visit. And it's a lot of fun to pretend that you're there steering the rover around. You can zoom in to the image and magnify the rocks to see what they look like.

Here is another example that same icon of the planet Saturn, will allow to you pick up Google Sky. Here we reverse the view instead of looking down on planet Earth we look outward from planet Earth. And we can go outward all the way to 14.5 billion miles away using images from the Hubble far afield with a camera. So, here's another opportunity for you to explore the universe using imagery that's been brought together through the Google Earth geographical system.

Well, I want to say that my colleagues and I have been looking at implementing richer networking for not just the Mars missions but for all of the other missions that are planned in the future to the outer planets. And although I don't have time to give you any details here, the two images you see at the top are two orbiters, there are four right now around Mars, these two were used to map the surface to decide where the rover should go.

As you see the rover on the left-hand lower part of the screen, the rovers landed in January of 2004. The original mission plan was for 90 days. We thought that the atmosphere and the dust of Mars would accumulate on the surface of the solar panels and would eventually render these rovers inoperable because we couldn't recharge the batteries. Well, over the last five years, the solar panels have remained clean enough that the rovers have continued to function for much longer than planned. Now, personally I think there's somebody up there dusting off the solar panels. But we haven't caught them on video so I can't prove my theory. There might be another more plausible explanation, from the orbiters and from the surface, you can see little dust devils in the atmosphere of Mars, when they happen to be near the rovers they actually blow the dust off of the solar panel, if you're in the operation center you can watch the voltage level jump up when one of these little dust devils cleans off the solar panels that's turned out to be quite powerful. It turned out that the original plan for transmitting data back from the rovers on Mars was to go from a radio on the surface of Mars on the rover directly back to the deep space network which has big 70-meter dishes in three places on the planet. In Gold Stone, California; Canberra, Australia and Madrid, Spain. But the radios overheated. So they had to reduce the duty cycle to keep them from damaging themselves, reducing the amount of data that could come back. The scientists were really very, very upset.

So, the engineers at the Jet Propulsion Laboratory said there is another radio on the rover, it doesn't – can't get all the way back to Earth. But it can run at 128 kilobytes a second four times faster than the other one, up to an orbiter. So they reprogrammed the rovers and orbiters so that the rover would transmit data to an orbiter. The orbiter would hold onto the data until it got to the right place in its orbit. Then it transmitted data back to Earth at 128 kilobytes a second. So 99.9 percent of all the information that's coming back now from the rovers uses this store and forward method. Well, store and forward is exactly how the Internet works. So, my colleagues and I said, well, this is a demonstration of the value of this kind of technology in space communication.

When the Phoenix Lander, the one on the lower right landed on the North Pole of Mars in May of last year, there was no way to get the data directly back to earth from that Lander. The topology didn't work. They deliberately programmed it to transmit data up to the orbiters and back to earth. So we had two very powerful demonstrations of the utility of this kind of networking.

Well, my colleagues and I have spent the last ten years doing design and implementation of a new protocol suite, TCP/IP which actually doesn't work at interplanetary distances. There are reasons for that, that I won't bore you with right now. We had to invent a new suite of protocols to do that. The exciting moment for us came in October last year. NASA gave us permission to upload this new set of protocols to a spacecraft which had just rendezvoused with a comet, very, very far away from Earth, had shot a probe in to the comet in order to expose the interior to see what it was made of. Well that spacecraft was called deep impact.

And it is in orbit around the sun so it was on its way back towards earth last October. NASA said, “Why don't you use it to test your new interplanetary protocols?” We did. We uploaded the protocols, we were running tests for about a month and it worked. Then we got permission, this year, to load the protocols on the International Space Station. And we're going to later this year reload the protocols to that spacecraft, the deep impact spacecraft. We'll have a three node interplanetary network in operation for test purposes by the end of the year. Our purpose here is to space qualify these new protocols.

Once we have demonstrated their utility in space, we can then turn around, not only to NASA but all of the other space faring nations and say, we're offering you these new protocols which have been tested and demonstrated in space to use for all space communications in the future. If they accept this, we hope what will happen is that every time a new mission is launched, using the new protocols, they will be able to reuse the spacecraft which have completed their missions but are still operational.

And so over time, over the next several decades, we'll literally accumulate an interplanetary backbone to support both manned and robotic exploration of the solar system. If you don't think this is like living in a science fiction story, let me tell you, it's really, really exciting. It's actually happening. So we're at the point now where it's not science fiction, it's engineering and if it's engineering, you can do it.

Well, let me stop there and thank you very much for allowing me to take this much time and thank you again.

[Applause]

>> Wow! I don't know about you, but I think my brain just grew about five times its size. Dr. and Mrs. Cerf, we were so lucky to have them featured on the May/June *Hearing Loss Magazine* cover with a wonderful interview by one of our members, Barbara Chertok, and our photographer Cindy Dyer and I got to photograph the Cerfs. The photos started in that wine cellar, I had no idea all of that was happening. With the temperatures and the controls. But it's true. We're very thankful to have you, Dr. Cerf and have you as an advocate for people with hearing loss. Because you know what you're doing and you have a hearing loss and you know the issues. If you think Dr. Cerf is exciting, you should meet his wife, Sigrid Cerf. Why don't you stand up, thank you for coming.

[Applause]

Thank you.

This presentation is just a morsel of what you're going to experience the next few days. Tonight after we finish here there's a Get Acquainted Party with karaoke singing and some snacks. And it's going to be emceed by the one and only Colin Cantlie from Calgary. Everybody loves him.

We have one of the most communication accessible conferences in the country. And I just want to thank our sign language interpreters, our CART reporters, realtime captioning, headed up by Deanna Baker and her team. Also –

[Applause]

If you didn't know, Deanna is really famous. She captioned shows like, little shows like "Oprah," "Survivor," things like that. So we have the best here. We also have a hearing assistance technology team with assistive devices that is par above the rest in this country. So thanks to all of the providers who volunteer their time to come to this convention and make it accessible to you. And of course, to you our members and guests, without you there wouldn't be a convention.

You know, you probably see me, Christopher Sutton has pinned two flashing pins on me. If you want to get these pins, you can. The little guitar is for our annual fund. And the flashing cowboy hat is in honor of our founder and first executive director, Rocky Stone who always wore his trademark cowboy hat. This is for the Rocky Stone Endowment Fund. You can find out about these pins in the exhibit hall. We want you to go in the exhibit hall and just see everything in the latest in technology. On behalf of the Board of Trustees and the staff and the local committee of volunteers, this is – Oh!

One more thing.

Elvis has been spotted in the building.

You might know the famous Sam and Janet Trychin, they're here this year again doing their ever-popular living with hearing loss workshops. They actually have their picture taken with Elvis.

But I really don't believe them, they were going to show me the pictures and the pictures have disappeared. So, this is our first announcement of lost and found, if you find the pictures of Elvis with Sam and Janet, please turn them in because they're very valuable. With that, go have a great time and thank you for being here.

Thank you to all our honored guests.

[Applause]