Hi Tom, it’s Julie. How are you? I am fine thanks. Will you be able to come to the birthday party this weekend? Yeah, I’m looking forward to it. Need me to bring anything? Ok, sounds great. I will see you this weekend. Have a good one.

Keeping An Eye On The Call
Captioned Telephones: A Review

ALSO INSIDE:
Interview with Brian Jensen
Details on page 19
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Contact TDI WORLD Editor for reprints of articles in PDF format.

TDI WORLD is published quarterly by TDI to provide information about telecommunications, media and information technology access for people who are deaf, late-deafened, hard of hearing and deaf-blind. You may freely copy and distribute all or portions of TDI WORLD for non-commercial use with credit given to TDI. TDI has no affiliation with any company advertised, and the mention of company names, products and services in the articles herein comes solely from the authors’ own experiences and does not imply accuracy nor endorsement by TDI. Furthermore, TDI does not warrant any products or services mentioned in TDI WORLD to be in compliance with any applicable federal, state or local disability access laws and regulations or industry standards.
The organization now known simply as TDI was born in 1968 when H. Latham Breunig of the Oral Deaf Section of the Alexander Graham Bell Association for the Deaf and Jess M. Smith of the National Association of the Deaf incorporated what was then Teletypewriters for the Deaf, Inc. The purpose of the organization was simply to collect and repair used teletypewriters (TTYs), add an acoustic coupler modified for Baudot transmission that had been developed by Robert H. Weitbrecht, a deaf physicist from California, and distribute the modified telephony equipment to deaf organizations and consumers. The addition of Weitbrecht's Phonetype modem to teletypewriters enabled deaf people to use the public telephone network for the first time since the telephone was invented almost a century earlier (Alexander Graham Bell was awarded a patent for the telephone in 1876).

Initially the modified teletypewriters were distributed mostly to deaf clubs in various cities around the country and to a few deaf individuals. But being able to access the public telephone network was of no benefit to anyone unless they knew the telephone number of someone to call who also had a TTY. At that time regular telephone books did not list TTY numbers. So, in order to facilitate telecommunications among deaf people, in 1968 TDI published its first National Directory of TTY Numbers (what has since become affectionately known as the Blue Book). The first Blue Book consisted of a mere 145 listings! So in reality, at its inception TDI provided a very limited but important service to the deaf organizations and individuals that had TTYs.

But as the years passed, many changes occurred in the world. The big, bulky, manual TTYs that TDI modified and distributed were made obsolete when small, electronic TTYs became commercially available. The technology for closed captioning television programs was developed. Movies could be made accessible to people with hearing loss using Rear Window Captioning technology developed by the Media Access Group at WGBH in Boston. Telephone Relay Services (TRS) came into being, enabling persons with hearing loss to telecommunicate with anyone in the hearing world. The Internet and World Wide Web became household telecommunication tools. And email, text messaging, pagers, smartphones, and videophones pushed most TTYs into the dust bin.

So over the years TDI had to change also. The Blue Book was expanded to include email and website addresses. TDI's formal constituency was expanded to include hard-of-hearing people. The focus of its concerns was expanded to include promoting access to television, movies, relay services, wireless communications, and the Internet. And its mission changed from simply modifying and distributing teletypewriters to enhance the lives of a relatively few deaf people to advocating for access to telecommunications, media, and information technologies for millions of deaf and hard-of-hearing people.

Indeed, TDI has become the premier organization in Washington, DC, promoting telecommunications access for people with hearing loss.

Continued on page 18
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We are elated to be featuring a number of providers in captioned telephone relay services (CTS) in this TDI World issue. Just a few short years ago, we had only one provider, and today we now have five providers and there are more to come. This is truly beneficial for consumers who use this type of relay service. With a growing number of providers in the market, we get to experience a variety of features from each provider. We can select whichever vendor we think best meets our communication needs for either one conversation or all conversations. With competition among the CTS providers, we will continue to see improvements in captioned telephone technologies and service features. It is vital that captioned relay evolves as an empowering service that meets our daily needs and puts us on a level playing field with hearing people in using the phone.

TDI salutes Ultratec for its leadership and pioneering efforts with its CapTel® services. It has had the vision and commitment to meet the phone communication needs of a sector within the deaf and hard-of-hearing population that would not adequately benefit from using any of the other forms of relay services. We also thank AT&T, Hamilton, and Sprint for offering CapTel services through licensing arrangements with Ultratec. Last but definitely not least, we commend other companies for coming into the market with their own brand of CTS such as Purple’s ClearCaptions®, Sorenson’s CaptionCall®, and American Network’s PhoneCaption®. We look forward to working with other companies that enter this growing market.

In this issue, you will be reading about some of the features and options that come with each captioned telephone relay service vendor that submitted their information to TDI World. We thank all the vendors for their help and support for this issue of the magazine.

I do want to bring attention to possible improvements that the providers can make with their captioned telephone relay services. I encourage the FCC to provide incentives toward improvements that could be done with grants or other types of funding support. Currently the CTS providers are reimbursed around $1.74 per minute. It is unlikely this adequately helps cover the costs of research and development to create enhancements for this service. Here are some suggestions for possible service enhancements that I have heard from CTS advocates and other users:

1. Reduce the delay between the spoken word and the captioned message. Currently, there is a delay of around seven seconds between the time words spoken from the other end of the phone call and the time captions are viewed by the deaf or hard-of-hearing person. Many would like to see the delay reduced to two seconds, without increasing caption errors.

2. Be able to see the other person on the screen. Why can’t we enjoy seeing the person with whom we are speaking with on the call? We could see the person on the video screen with the captions coming across at the bottom of the screen. This would make for a much better communication experience.

Continued on page 6
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3. Use captioned telephone relay service as a part of a multi-modal TRS experience. For example, when one uses VRS there may be situations when one is not able to understand the interpreter’s sign for a word or a phrase; the deaf or hard-of-hearing person can then shift from sign language to the captions on the bottom of the screen. This concept is similar to the increased comprehension that captioning provides when one is watching TV.

We are equally appreciative that captioned telephone relay services can be used on mobile phones as well as stationary phone devices. Being able to access CTS by mobile phone enables people to function better “on the go.”

We call on our providers and their customers to collaborate more in the development stage to improve services as well as equipment, including software.

The FCC plays an important role in promoting and implementing recommended enhancements in captioned telephone relay services. It is also important that the FCC ensures that the reimbursement per minute for CTS does not hamper or discourage providers from coming up with improvements. Please stay in touch with your selected provider and the FCC, and don’t be shy to write a note of thanks, file a complaint, or provide an idea for an enhancement to this form of TRS.
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Give me a word that describes what many deaf and hard of hearing people think has been the greatest improvement to the world of telecommunications?

Just one word. Hint: The word is not Windows, videophones, Skype, or Android.

The word is TEXT. After years of general disregard outside our circle, text has emerged in the mainstream as a pervasive and extremely valuable method of communication. It takes various forms—email, IM, text messaging, tweets, Facebook posts, etc—and for a continually growing vast number of people its what they think of first in an emergency and other situations that require or are perceived to require immediate communication.

Recent media reports claim that the largest group of text users are teenagers who text with their friends. But deaf and hard-of-hearing people have been using text in one form or another to communicate with each other and with hearing people for almost 50 years, and on a percentage basis likely constitute a larger group of users than teens.

For the first 88 years after the beginning of the telephone age in 1876, every conversation over phone lines was voice. You had to be able to hear and speak on the phone to make full use of this technology.

Text telephony became a reality when Robert Weitbrecht invented the TTY modem in 1964. This allowed deaf and hard-of-hearing people to communicate with each other directly by phone. Because text phones could not communicate with voice phones, text relay services were established to bridge the gap. However, relay conversations lacked the natural ebb and flow of verbal and nonverbal cues between two people. People did not always feel comfortable using text relay because transmission of the text was very slow. Also, as the third party on the line, the communication assistant (CA) did not always remain “transparent” due to the need to repeat or clarify what was said. Moreover, many callers with hearing loss prefer to speak and read instead of type, but technological limitations prevented the simultaneous use of text and voice. The two modes of communication could not travel through the phone line at the same time.

Inspired by his longtime friendship with Weitbrecht, Robert Engelke had built Ultratec into a leading TTY manufacturing company with a variety of models. In 1999 at the TDI Conference in Seattle, Ultratec unveiled plans for the CapTel® captioned telephone as the first system to allow callers with hearing loss to speak for themselves while at the same time read responses from the other party in text on a small display. The text is generated by a specially trained CA who repeats the other party’s words using speech recognition technology, which converts the spoken words to text.

Continued on page 9
After its roll-out in 2003 the CapTel network grew state by state, mainly among hard-of-hearing and deafened people who have used the phone in the normal way all or much of their lives. Members of the Association of Late-Deafened Adults (ALDA) and Hearing Loss Association of America (HLAA) acknowledged that captioned telephone relay services (CTS) preserved most of the user experience on the phone. More recently Ultratec introduced an Internet version of CapTel where callers can use their cell or landline phones and read text of the other party's words on a Web browser. This form of relay service, called IP CTS, also works with VoIP technology such as Skype. Today Ultratec licenses the CapTel service to three well-established relay service providers: AT&T, Hamilton, and Sprint. In addition, other providers such as ClearCaptions and PhoneCaption also offer IP CTS.

Speech from the other party is converted into text, which is read by the deaf or hard of hearing caller. There are several ways to accomplish speech to text translation. Ultratec uses an enhanced speech recognition program that is trained to each of its communications assistants’ voice. Other vendors use various combinations of speech-to-text, including CART and manual entry, along with speech recognition systems that help the relay operator maintain the normal speed of dialogue that relay users expect.

In this issue of TDI World we showcase several different versions and providers of captioned telephone relay services.

Since TDI has a non-endorsement policy, we are not able to provide recommendations on the services that work best or that should be avoided. So, with that in mind, do try them all and pick the one that works just right for you!
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The house I grew up in had only one telephone. Big, black, with a rotary dial, it lived in the dining room on a small table with a seat—the telephone table—and was the nerve center of our home. The phone had a tremendously loud brrrinnnggg that could be heard throughout the house, in the yard, and down the alley; a call to action and about the only thing that made my parents move swiftly other than a son’s cry for help.

Phones have had a central place in my life as well. A Catholic, in fifth grade I chose Alexander for my Confirmation name. I didn’t know squat about Saint Alexander, but with Alexander as part of my name I could call myself Alexander Graham Bill, a pious nod to the famed telephone pioneer. Perhaps this seems ridiculous now, but at the time I thought it clever and classy.

I spent hours on the phone as a teenager. Most of my calls went to school friends. I was a first-rate impersonator and I’d often call my buddies in the voices of our teachers. “Mister LePORis….This is Brother Dominick….Is your mother home, HMMM?” I made hearts skip a beat more than once.

But as I gradually lost my hearing the phone became an unwelcome benchmark. It was the telephone that made me realize I couldn’t hear like I once could. By age 25 I had given up entirely on using the phone. The point where gradual hearing loss becomes deafness is subject to interpretation, but if people ask me when I became deaf I tell them at 25: no more phoning = no more hearing.

Captioned telephones were introduced in 2003. Pam Holmes, the storied CapTel evangelist, demonstrated the first CapTel phone to me early on. Don’t ask me why but I never acquired

As technology and performance continue to improve, maybe I’ll feel and act like a teenager on the phone again.”

“Good-Bye Brain Freeze

The implanted device seemed a strange if not embarrassing way to make a phone call. But as I made friends with deaf people, the TTY became my social lifeline. I even wrote a satirical book about the devices—One Thing Led to the Next: The Real History of TTys—illustrated by Val Nelson, a hard-of-hearing work colleague, and soon to be a major motion picture. (Not.)

In 1995 I evolved into Cochlear Implant Man. The implant was, of course, nothing short of a miracle—I could understand some speech again. But try though I might—and despite earnest encouragement and tips from audiologists and CI-using friends—my ability to hear on the phone never quite made it to Fatima.

In the early 1980s I bought a TTY and so did my mother. Hers gathered dust under the telephone table. (“This keyboard is impossible!”) I don’t recall using mine much either; typing

Continued on page 12

When VRS came along I was slow to use it. That was mostly a sign language thing: I’m one of those deafened adults who has never been able to follow ASL perfectly well. My default system of signing I term Crappy Sign Language, or CSL, the semi-official language of the Association of Late-Deafened Adults (ALDA). The key characteristics of CSL and its users include miming, exaggerated mouth movement and facial expression, and an exceptional slowness in connecting signs with meaning. All ASL idioms impede the communication process and speed in any form results in brain freeze.

I’ve found that few VRS interpreters are naturally gifted at CSL. But with adequate CSL coaching, which I always provide upfront and during a call, my VRS ventures generally go pretty well. Nonetheless, whenever sign language is involved I’m on edge about brain freeze, which itself can cause brain freeze.

Enter IP CTS. The whole concept appeals to me: captions right there on my monitor, tablet, or smartphone… voice carryover (VCO)… no ASL to be anxious about… greater anonymity and the freedom to comfortably make calls in my pajamas or less. It’s the perfect combination for a CI-wearing CSL user like me.

Clearly, IP CTS is nowhere near as reliable as VRS yet, at least in my experience. The quality of the captions are painfully inconsistent, the delay or gaps in transcription when I know something’s being said are exasperating, and the captioning bloopers rival anything I’ve ever seen on television. But given a good audio connection and a spot-on CA… oh baby, let’s reach out and touch someone! I find myself using the phone now way more than I had been. I even know how to navigate the call functions on my Android phone now. I think.

I have high hopes for IP CTS. As technology and performance continue to improve, maybe I’ll feel and act like a teenager on the phone again. Maybe I’ll call up some of my high school friends in Brother Dominick’s voice and give them pause. Maybe Fatima is in sight, and maybe brain freeze will be but a memory.
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When you chat with hard-of-hearing or late-deafened people who are up on the latest technology, the conversation most often turns to telecommunications. From such dialogue, you could easily come to the conclusion that the Age of Telephony falls into three distinct eras: (1) The First Era BC—"Before Captioned" telephones—a time when most phones were black and had curly tails that stuck into the wall and rotary dials rather than touch-tone buttons; (2) The Second Era BC—"Birth of Captioned" telephones—beginning in 2003, when people began to discover a neat new technology that allows them to "speak-N-listen-N-read" instead of only "speak-N-listen" or "type-N-read" on the telephone; and (3) Era AD—the flowering of "Additional Devices" for captioned telephone service—which seems to have begun within the past year.

In the years preceding the Second Era BC, voice carry-over (VCO) became part of the relay service, allowing the user to speak directly to the other party on the phone and read the responses on a separate text telephone (TTY). Since most communication assistants (CA) could only type 45 to 60 words per minute at best and voice conversation can go to 200 words per minute or more, something always got lost in the translation. The CA frequently had to ask the hearing party to slow down or repeat what they said. Many hearing people found this annoying, and some would hang up in frustration.

The Second Era BC began when the Federal Communications Commission (FCC) permitted the use of captioned telephones in relay services, although states were not mandated to implement the service. But one by one the states began to adopt the captioned telephone relay service (CTS), and the telephones themselves became available through state equipment distribution programs. This grew into a patchwork quilt where the telephones were rationed to a certain number of users per year, while many more lined up on waiting lists. The lack of a nationwide mandate led to varying distribution methods—in some states you could purchase the phones at a subsidized rate but in other states you needed to pay the full price.

In 2006 TDI published a GA-SK newsletter feature on Ultratec’s CapTel®, the first captioned telephone. We praised the concept and encouraged further innovation. We also noted the paradox of having only one manufacturer for a widely acclaimed service. The FCC noted this several times as the reason it did not draft more regulations on CTS as the Commission did not want to be seen as promoting a monopoly.

Now, at the advent of Era AD, the FCC’s concern about a captioned telephone monopoly may be coming to an end. CaptionCall competes with CapTel in marketing desktop phone devices, and other companies like PhoneCaption and ClearCaptions competes with CapTel in offering web and mobile applications using VoIP (Voice over Internet Protocol) technology. VoIP offers advantages over traditional landline phone systems including lower cost and more efficient call handling regardless of the communication mode. All captioned

Continued on page 17
CaptionCall hails its captioned telephone and relay service as a revolutionary experience for anyone who has trouble hearing on the phone. The CaptionCall® telephone is a sleek black device with a 7-inch, easy-to-read display screen that shows up to five lines of text. The CaptionCall relay service uses a combination of speech recognition technology and a human transcriber who quickly edits the captioning as needed.

CaptionCall users find the phone easy to use. Calls are made and received just like with a regular phone. There is no additional dialing to use the caption service, and a button below the screen turns the captions on and off. The text size is adjustable with different contrast settings and smooth scrolling for easy reading. The state-of-the-art touch screen phone can be placed anywhere in the house near an electrical outlet and phone hook-up plus a wired or wireless Internet connection. The built-in phone book stores up to 200 phone numbers and caller ID photos. The ringer and handset volume settings are easy to adjust and the frequency amplification can be customized based on your audiogram. The CaptionCall phone is hearing aid compatible and supports induction neckloops with a microphone.

In addition to its popular web-based service for all consumers, ClearCaptions came out with a unique workplace solution using technology from Cisco, a leading provider of business VoIP telephone systems. ClearCaptions for Cisco is a software solution for businesses that use Cisco phones. No additional or special phones are required. When an employee requests a captioned telephone as an accommodation to perform the duties of the job, the technician attaches a Cisco screen reader on the phone and downloads the ClearCaptions software.

For more information about ClearCaptions for Cisco, visit www.clearcaptions.com/cisco.

Ultrade makes several models of CapTel® phones, the most recent being the CapTel 800i. CapTel relay service is provided under licensing arrangements with AT&T Relay CapTel (https://captel.att.com/captel.cfm), Hamilton Relay CapTel (www.hamiltoncaptel.com), and Sprint Relay CapTel (www.sprintcaptel.com). CapTel phones are available in several models from Ultratec and through the CapTel relay provider in your state. In addition, if your state has a telecommunications equipment distribution program (TEDP), you can obtain a CapTel phone through the program (www.tedpa.org/StateProgram.aspx).

The web-based CapTel services provided by AT&T, Hamilton, and
Sprint Relay allow a hard-of-hearing or deafened person to use VCO and read captions on a computer monitor or laptop. On the service provider’s website, the caller logs in and provides two phone numbers: their own number and the number of the party being called. Any landline or wireless phone works as long as the caller has connection to the Internet.

Web-based relay services allows you to use your browser to customize your screen to a wide variety of fonts and colors to match your taste or your access needs. Conversations can be saved as a file for reference, eliminating the need to take notes. Users usually need to be logged into the provider’s CapTel website in order to be alerted to and receive incoming calls.

Android devices from Sprint includes a CapTel app preloaded. Since the Wireless CapTel by Sprint app does NOT require voice services and runs on data only using VOIP, it allows customers to save money on their wireless bills! This feature is only available on Android-powered devices running OS 2.2 or better. (not available on the iPhone at this time).

CapTel relay is also available on mobile devices that can handle voice and text simultaneously with 3G or 4G wireless Internet service. Both Sprint and Hamilton offer a free downloadable CapTel app for iPhones and a variety of Android phones, bringing captions to people on the go. Sprint includes a CapTel app in most of its line-up of Android-powered wireless devices as well as the iPhone 4S.

Hamilton CapTel is available for download on Android, iPhone and BlackBerry mobile devices that can handle voice and text simultaneously with 3G or 4G wireless Internet service. Hamilton Relay takes a different approach with its CapTel marketing to mobile phone users by enhancing the app selection process based on the user’s preferred mobile network and device operating system. Hamilton’s exclusive online smartphone selector program at www.hamiltoncaptel.com/mobile_captel/smphone_selector/ guides wireless users to the correct app download page specifically for their iPhone, Android, or BlackBerry mobile device.

To get free captioned telephone relay service, users need to register with their CTS provider. This can be done on the provider’s website. Regulations by the Federal Communications Commission (FCC) require that each relay conversation remains confidential, as mandated by the Americans with Disabilities Act (ADA). CTS CAs are governed by these confidentiality requirements just like video relay interpreters and CAs in traditional text relay services.

TDI World thanks those vendors who provided information about their captioned telephone products and relay services for this issue: Ultratec, Sprint Relay CapTel, Hamilton Relay CapTel, CaptionCall, and ClearCaptions. Other CTS vendors include American Net’s PhoneCaption at www.phonecaption.com and AT&T’s CapTel at https://captel.att.com/captel.cfm, plus others yet to open shop. Our advice to you is: Try them all!. No matter which service you ultimately select, do become an active consumer. Give the providers feedback and constructive suggestions on how to improve and market their products. The vendors appreciate hearing from you and it’s important that they do. After all, you are the experts: You know exactly what you need.

So please help spread the word about TDI, its mission, and its importance in the lives of deaf and hard of hearing people (even if they don’t know it exists!). What was once a service provider for a relatively small number of deaf people is now the principal advocate for the telecommunication access rights of millions of Americans with hearing loss. TDI deserves your strong support.

TDI Facilitates interaction among advocacy organizations concerning telecommunications access. TDI Advocates directly with members of Congress and federal agencies, such as the Federal Communications Commission, for the access rights of people with hearing loss. TDI Coordinates the telecommunications advocacy efforts of many deaf and hard of hearing organizations. And TDI Educates consumers, industry representatives, and government policy makers regarding the telecommunication needs of people with hearing loss.

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Be Inspired!
An Interview with Brian Patrick Jensen

By Bill Graham

Brian Jensen entered my consciousness a couple months ago from his posts on LinkedIn and elsewhere. He is deaf, has an interesting story, and writes a great blog. I got hooked straightaway and started to follow him. Don’t be surprised if you do, too.

TDI World: Two years ago you were unknown to the deaf and hard-of-hearing community, but now you have an ever-expanding following. How did that happen?

Brian Jensen: Well, two years ago the deaf and hard-of-hearing communities were unknown to me! I suffered sudden hearing loss in my left ear in 2008. My right ear was already prone to tone deafness since childhood. But the problems were easily managed with hearing aids. All that changed in June 2010 when I suffered a major decline in hearing across all decibels and frequencies. The diagnosis was Sudden Sensorineural Hearing Loss (SSHL), or sudden deafness—I’ll say!

I have been a corporate communications and human resource executive most of my career as well as a college instructor and leadership consultant. As such, persuasive writing and spirited public speaking have always been my forte. It made sense to parlay those skills to start blogging and speaking about my deaf experience, so that’s what I aimed to do.

Enter www.brianpatrickjensen.com. At first, I had the notion to use my homemade website to market myself for a few extra speaking stints. However, it quickly evolved to something far more important than that. Writing candidly in my blog about this life-changing experience—going from hearing to deaf—became a very valuable personal support tool for coping with the problem. I am usually all-business, but I know hurt and healing when I feel it and the more I wrote about my hurt, the more I healed!

As readers began to respond I was blown away by the feedback. There is a tremendous sense of satisfaction in reaching out and connecting with those who can relate most to your pain, perseverance, and triumph. It evoked a sense of accomplishment that far exceeds any prior career success for me.

Most important, my blog became the way to network with deaf and hard-of-hearing people and support groups by, for example, sharing in LinkedIn discussion groups and seeking feedback and resources from people in the know. That’s how I made connections with the Hearing Loss Association of America (HLAA), Association of Late-Deafened Adults (ALDA), Alexander Graham Bell Association for the Deaf and Hard of Hearing, and National Association of the Deaf (NAD).

And if, as it seems, my message of silent perseverance continues to “resonate,” so to speak, I am very keen to share it from the podium at support group events and conferences that benefit the deaf and hard of hearing. There is no better way to take advantage of those forums than as a speaker. It is the best seat in the house! I learned long ago that you learn most by teaching and you acquire the best knowledge by giving it away!

TDI World: You characterize yourself as a motivational speaker. What do you talk about? Do you have a primary target audience?

Brian Jensen: I have honed my newest message to three major themes: service to others, leadership, and perseverance. And the best way to present those themes is with personal stories that connect with other people’s personal stories.

Traditionally, my audiences have been in the corporate genre: (1) Top executives who are interested in innovative workplace solutions, (2) Human Resource Management professionals who want to implement meaningful training and performance-management programs, and (3) college students looking for tips on how to obtain the best jobs and, once hired, how to succeed on the job. Surprisingly, perhaps, my new themes are playing well with these traditional audiences.

And now I’m addressing deaf and hard of hearing audiences and advocacy and support groups too, which, of course, are new opportunities for me. It is a huge honor and privilege as well. Of course, I claim no expertise; I can only share my experience, strength, and hope since going deaf less than two years ago. Instead I must approach this esteemed audience for what they have to teach me. Sure, I am intrigued by the vast knowledge base out there to benefit the deaf and hard of hearing—the research, medical advances, advocacy issues, technologies,

Continued on page 20
INTERVIEW WITH BRIAN JENSEN Continued from page 19

accommodations, visual language, etc. But as a newly deaf individual learning my way, the most significant thing I have to say now about all of that great stuff is that I am overwhelmed by it!

TDI World: What communication methods and technology do you use in your interactions with people?

Brian Jensen: First, I thought American Sign Language would be my best bet. I have taken two college night courses and receive regular private tutoring. It is a beautiful visual language and I am enamored to watch it in action. However, I am stunned by how difficult it has been for me to learn ASL. My world at work and with family and friends is still largely all hearing. So there is little opportunity to practice. I am grateful to interact with a few deaf friends and sign interpreters, but I wish it were more frequently. Having said that, even the smallest amount of sign language helps me. Every word that I do not have to strain to figure out by lip reading is immensely helpful. Of course, when I interact with another deaf person my incentive to learn ASL is huge. So I need to keep plugging on that one.

To date, communications technology has been far more helpful than ASL. Telephone voice-to-text captioning services have been a Godsend. Everyone who knows me uses the Dragon Dictation application on their smartphone; especially to communicate technical information and anecdotes. I use CART for training programs and important boardroom meetings at work. Plus, I have gotten pretty creative with my staff and colleagues using Skype combined with telephone captioning to have very effective virtual “face-to-face” communications from the comfort of our own offices.

Before discovering captions apps for my iPhone, iPad, and laptop, text messaging was my lifeline for all remote communications. One-on-one interactions either defaulted to good old pad and paper or to my “Chalkboard” finger-scribble app where you write notes on my iPad using your fingertip as your “pen.” As noted, Dragon Dictation came in handy too for face-to-face dialogue.

Finally, I use Google Voice to receive all telephone messages and have downloaded various ASL tutorial apps on my iPhone.

I am familiar with AIM, AT&T, Relay and Sorenson videophone and have both tools, but hardly ever use them. I find that my preferred captions app outperforms AIM, AT&T, Relay and maybe I’d use the videophone more if I just knew sign language! But I do love my videophone for talking directly with my deaf friends who are patient and understanding about my amateur ASL skills.

TDI World: You’ve written glowingly about captioned telephone service in your blog. So what about it?

Brian Jensen: I was introduced to most of these wonderful technologies as a direct result of networking with deaf and hard of hearing people and support groups via my blog. After going deaf, iPhone texting became my communications lifeline. Everything was thus communicated to me in tweet-sized bullets. In meetings and family gatherings multiple people would text me to give me the gist of what was going on. At work, one of my staff members would tap out notes on my laptop during training sessions or meetings where CART was not used.

While I was grateful for this assistance, the end result was my getting seven minutes of bullet-summary data out of a one-hour meeting. The richness of every conversation eluded me. Because I was yet unfamiliar with telephone captioning technology, this problem dogged me for over a year.

My first introduction to captioned telephone service (CTS) was the installation of my caption display phone landline at work. Prior to installing the display phone, my staff would listen to all of my messages and write down notes and sit next to me during calls to fill me in. But mostly, I simply didn’t use the phone. So the landline display helped a lot and remains my best solution at work for inbound calls. However, the captioning service itself is noticeably delayed and a bit unreliable.

Things got hugely better when I discovered a captioning app for my iPhone. Only then was I able to communicate on the go like everyone else. I am very impressed with the speed and accuracy of the captioning service I use. However, it too is not without its limitations. Inbound phone calls cannot be captioned and the app’s interface with my iPhone is very clunky and unreliable. As much as I appreciate the service when it works, I have been immensely frustrated with the quirky app that sometimes locks up mid phone call or does not allow me to login. I have had to delete and upload the app multiple times and it still gives me problems, although the service provider is always responsive and apologetic and promises to improve their product going forward. I hope so.

Yet the imperfections of these critical technologies do not negate my heartfelt gratitude for them. When you receive communications in tweet-sized text bullets all the time you begin to literally feel starved for detailed information from another human being. With near-realtime telephone captioning, I could once again glean EVERY WORD another person was saying to me. The joy of that is hard to describe unless this basic ability has been taken from you for a while.
Through the convenience of realtime captioning, I speak to my children five times more frequently than I used to by text. Not only do I get every word they say, I can see, by the pattern of the words and expressions used, HOW they talk— their logic, word usage, speed, and I can even sense their emotions. This has helped bring back some lost memory of their voices and expressions.

So captioning for me is not just about getting every word—it is connecting again with loved ones at an emotional level and assimilating the rich details of every conversation. It’s a wonderful thing!

_TDI World:_ If you had to design your own CTS service, what features would it have that it doesn’t have today?

_Brian Jensen:_ First, they really need to get the bugs out of these otherwise terrific services. My landline caption service is too delayed. Every conversation is encumbered by missed information and captioned text being backed-up to the point where I am reading the callers words up to half minute or more after they are stated. My iPhone captions service is fast— nearly realtime; however the app itself is chock full of problems and its lack of reliability has been a source of great frustration.

The perfect service will allow iPhone captioned calls in both directions and be fully integrated into my smartphone app—right now you have to flip back and forth between the phone display and the captions app.

And the FCC may not like this, but...they should allow use of these telecommunication apps for face-to-face conversations too. In other words, it shouldn’t matter if the person is standing in the same room with me when I talk to them on the phone to see their words in captions. Right now your phone call gets cut off if the caption writer figures out that you are conversing over the phone with a person in the same room; the legal snafu there, I am told, is that phone captions of people standing in the same room is equivalent to a CART service and is outside of the scope of telecommunications regulated by the FCC. But CART service from hearing individual to deaf individual—personal CART if you will—should be allowed. Finally, another great functionality would leverage in the power of captioning with videophone services like Skype. Or for videophones for VRS to have a captioning feature that runs simultaneous with the signing interpreter. It seems basic enough to do—the technology is there. So...why not? It’d be a killer app.
September 7 - TDI and other consumer groups filed comments concerning proposed rules for Video Relay Services (VRS) that were announced by the Federal Communications Commission (FCC). The consumer groups commended the FCC for taking steps to combat fraud, waste and abuse of the VRS program and supported the steps taken to ensure the availability of this relay service in spite of what happened. TDI, et. al. stressed that functional equivalency should be the standard in every action undertaken by the FCC in regulating video relay and other services. Some of the recommendations include:

- Cease services provided by VRS centers outside the United States
- Ensure that high standards of fidentiality are maintained, even by interpreters who work from home
- Maintain fair compensation for the communication assistants and remove incentives to artificially increase minutes for reimbursement and other abuses
- Adopt a procedure to allow reimbursement for questionable minutes pending results of investigation, and seek repayment if those minutes were found to be illegitimate
- Allow for international calls in every situation as long as one party is a resident of the United States and possesses a valid ten-digit number
- Exhaust all measures to detect fraud, waste, and abuse before mandatory disconnects due to excessive idle time or use of privacy screens
- Permit five-year provisional certification for white-label providers
- Adopt whistle-blower protection rules for employees and subcontractors who report possible wrongdoing within the industry

TDI hosted an all-day summit of consumer groups and VRS providers at Gallaudet University to initiate work on the Consumer Groups’ TRS Policy Statement.

October 5 - TDI and other consumer groups participated in a teleconference session hosted by the FCC to discuss a petition for mandatory Captioned Telephone Service (CTS). CTS is still not available in Delaware and there is a patchwork of restrictions and fees in other states that prevent the captioned phones from going out to all who could use them. There are no technical standards for the phones themselves in terms of amplification, and speed and accuracy of the text being displayed. Many questions remain on how to funding research and development as well as outreach efforts for the growing number of vendors providing CTS.

October 5 - Later in the day, many of the same advocates went to the FCC and met with officials to discuss the comments filed in response to the Notice of Inquiry that was released on June 28 regarding VRS reform. In particular, representatives of TDI and other consumer groups covered the need for open competition, equipment interoperability and plug-and-play capabilities, and separation of equipment distribution from service provision. They also discussed the need for the VRS industry to move away from randomly assigning interpreters to incoming calls and allow callers to preselect interpreters according to specific needs by users in a profile.

October 25 - TDI and other consumer groups signed on to comments filed by the Hearing Loss Association of America (HLAA) regarding the further notice of proposed rulemaking released by the FCC on August 5 regarding the hearing aid compatibility (HAC) rules. The consumer groups...
believe that HAC should apply to all emerging wireless voice communications technologies, encouraging manufacturers to design accessibility features at the beginning of the product cycle. The definition of telephone should be extended to multi-purpose devices such as smart phones and fall under HAC regulations. The consumer groups also encourages the FCC to improve in-store testing or at least make their return policies more flexible and eliminate penalties for customers who return phones because they do not work well with hearing aids.

November 18 - Claude Stout participated on a panel at a Telecommunication Industry Association Forum “A Facilitated Dialogue on Real Time Text” where consumers and professionals exchanged their vision of incorporating real time text as a viable replacement for the TTY.

Media Access

September 30 - TDI and other consumer groups met with the staff in the Consumer and Governmental Affairs Bureau (CGB) at the FCC to discuss the recent efforts to streamline the captioning complaint procedures as well as the remaining issues addressed in the Captioning Quality Petition filed in July 2004. Specifically, the consumer groups discussed the need for compliance audits with the TV industry on captioning of their video programming. Other issues included the Anglers Exemption Order and the digital television captioning technical working group. Future plans under consideration include addressing the Universal Captioning Petition and standards for the emerging 3D television technology.

November 24 - TDI and other consumer groups filed comments in response to the Public Notice issued by the Consumer and Governmental Affairs Bureau (CGB) at the FCC. The consumer groups support establishing quality standards for non-technical aspects of captioning because the marketplace has consistently failed to provide high-quality captioning and therefore minimum measurable standards should be established to help consumers and contractors evaluate the quality of captioning. Consumer groups also support requiring video programming distributors (VPDs) to file closed captioning compliance reports that would be available to the public online and by request. Also, the consumer groups support amending the rules that will phase out electronic newsroom transcription captioning in smaller markets.

ADA Updates

November 18 - Karen Putz from the Association of Late-Deafened Adults gave a five-minute testimony at a US Department of Justice public hearing in Chicago regarding proposed rules that update the Americans with Disabilities Act. TDI welcomes and encourages innovation in movie captioning technologies and supports a mixed strategy of open captions for certain showings and closed captions for all other shows, and that equipment used to view captioned movies should be easy to use and not detract from the movie-going experience. Websites must be captioned and considered as places of public accommodations. Also, TDI commented in support of proposed rules requiring direct and indirect access to the next generation 9-1-1 services through voice, text, and video.

Communication and Video Accessibility Act (CVAA) Implementation

November 17 - TDI provided technical assistance to American Association of the Deaf Blind in drafting comments to the FCC’s proposed rules on establishing a National Deaf-Blind Equipment Distribution Program. This program would be the long-awaited link to accessible telephone equipment for this unserved population.

November 22 - TDI and other consumer groups filed comments in response to a Public Notice issued by the FCC on advanced communication services. In this filing, the consumer groups urges the FCC to extend current hearing aid compatibility requirements that apply to landline and wireless phones to VoIP telephones without the use of third party peripherals and applications. With respect to equipment used for videoconferencing, there are many acceptable and available software that may require modifications to work with video relay services and enable voice or hearing carryover services.
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