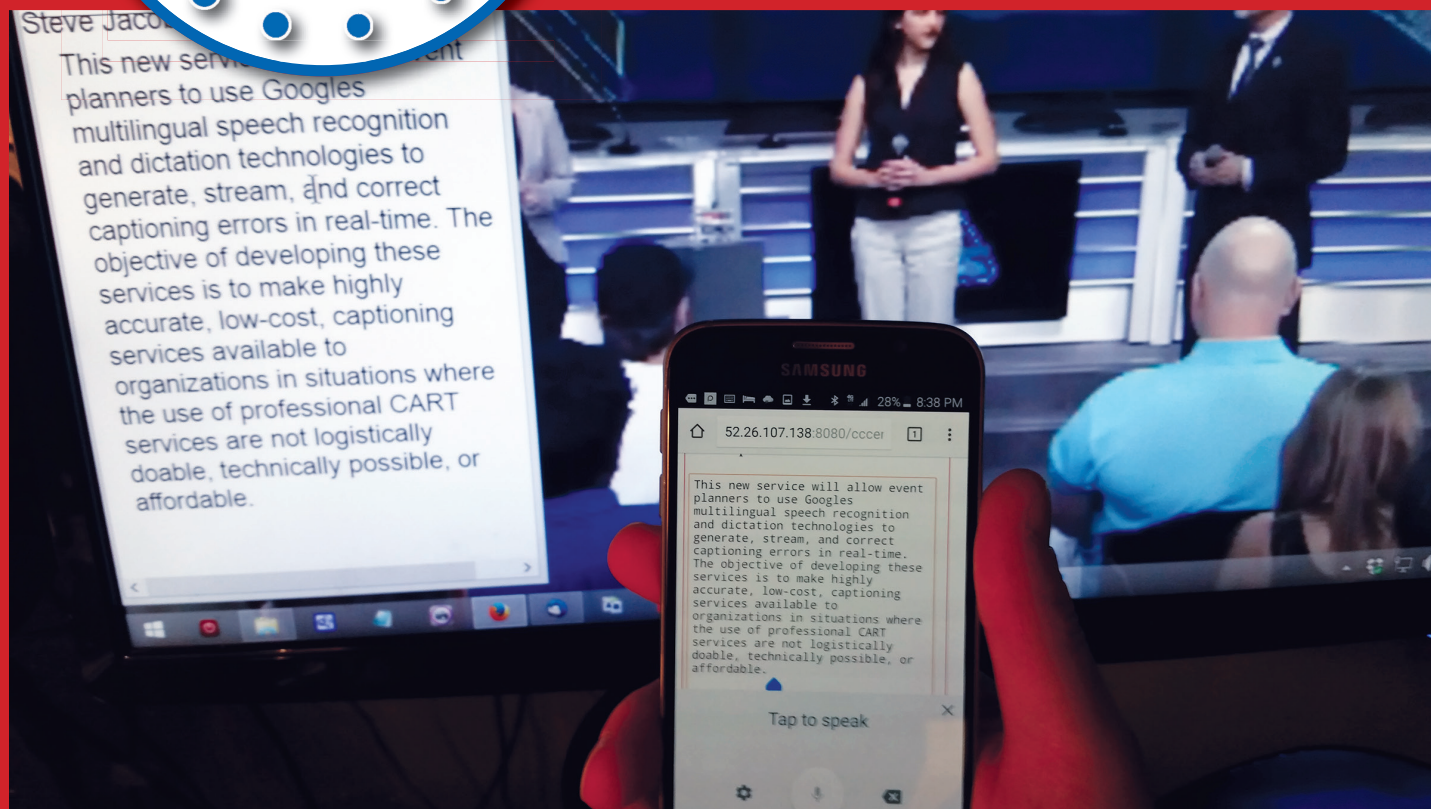




WORLD

Technology News and Commentary for Deaf and Hard of Hearing People



A SNEAK PREVIEW FOR TDI MEMBERS:

uCaption

STARTING ON PAGE 10

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Save the Date for 2017 TDI Biennial
Conference July 27-29, 2017 – page 9

Real-Time Text Technology (RTT) – page 12

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TDI'S MISSION

"TDI provides leadership in achieving equal access to telecommunications, media, and information technologies for deaf and hard of hearing people."

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Volume 47.4

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Shaping An Accessible World

Board Views



**SHEILA
CONLON-MENTKOWSKI**
*TDI President and
Board Member, West Region*

“We find it is a means to share updates on 911, text alerts, captioning on TV, the Internet, and movies. We also share information on devices that deaf, hard of hearing, and deaf blind consumers can use in their daily lives.”



Reaching out on Social Media

Humans are social beings and have communicated in various ways since the dawn of time. We have seen and experienced a variety of communication systems develop and eventually die out: the telegraph, the short lived Pony Express, Morse Code, and landline phones. In the 21st century, social media opened opportunities to reach the worldwide community in an instant.

How many social media networks are there? What media do you like to use and for what purpose? I conducted research to see what is available on the internet. I will focus on the major social media networks that are being used by a large number of people.



Facebook: I have been a Facebook user since 2008 and seen it evolve. I originally intended to have a small circle of friends on Facebook but at the moment, I have over 900, friends from

my hometown, my colleges, and the community at large. Empowered by the social network on Facebook, I am networking beyond my circle of friends.

As President of TDI, I administer the West Region of the TDI Facebook page where I provide updates on telecommunications and technology for that group. The other elected regional TDI Board members also manage Facebook groups for their region. If you are interested in joining these regional Facebook groups, send us a message and we will be happy to add you to the subscriber list. We find it is a means to share updates on 911, text alerts, captioning on TV, the Internet, and movies. We also share information on devices that deaf, hard of hearing, and deaf blind consumers can use in their daily lives.

Facebook helps me with following current events and how the

Continued on page 3

BOARD VIEWS Continued from page 2

community is perceiving current events. Currently with the rainy weather, I receive updates on floods and weather in my area as well as around the United States and the world.

On Facebook, you can post status updates, upload photos, share news items, messenger friends individually or in groups, help find people who are missing or abducted, and the like. One feature I like is Happy Birthday greetings on one's birthday. It is fun to see birthday greetings from friends near and far.



Twitter: I have a Twitter account which isn't used much. Twitter feels like I am watching the constantly moving

electronic sign in New York Times Square which can be mesmerizing. In my research on Twitter and its users, in Wikipedia, Twitter is identified as an online news and social networking service where users post and interact with messages; Messages are called tweets, and are restricted to 140 characters. Twitter has been in existence since March 2006 and as of 2016 has 310 million active users. I feel better about my non-use of Twitter as the Wikipedia entry states that statistics indicate that about 44% of user accounts have never tweeted as of April 2014.



Yahoo: I have used Yahoo mostly for its groups feature since 2005.

I am a member of other groups but they seem to have migrated to Facebook. I have moderated one group that focuses on telecommunication and technology for deaf, deaf-blind, and hard of hearing users.



LinkedIn: I consider LinkedIn as my electronic Rolodex as I keep an online contact list of professionals, resume sharing, and other topics of interest in the world of employment.



Instagram: I use this app to share my photos and follow other people and organizations that share their photos and videos.



Snapchat: I don't use Snapchat but I understand that a number of users use it for private messaging and public content including brand networks. 71 per cent of the users said they preferred the app for its chat, messaging, and information services.



Pinterest: Users display photos of item found on the web and 'pin' them in Pinterest, and share ideas with others. I don't use this service but I know it is very popular among hobbyists.

I haven't addressed every single service used in social media, focusing mainly on the largest ones that are in use today. In the course of my online research of social media use,

I came across an article by a Master Gardener on how she uses the web for gardening purposes. She says when she was studying to be a Master Gardener, everything was in print but now she can find a wealth of gardening information online from how to identify weeds, calculate water needs to find plants. She did warn that there is one thing that hasn't changed. Master Gardeners are part of a Cooperative Extension system, designed to help people use research based knowledge. She explained that as there is a lot of fake or bogus information on the Internet related to gardening and horticulture. In this vein, do be careful when you do research on the Internet as there is a lot of information available and it can be difficult to determine if the material is accurate or not.

Pausing for a TDI commercial break: Finally, I am inserting a blurb for our upcoming TDI Conference in Bethesda July 27 through 29, 2017. Come join us, network with your peers, individuals in technology and telecommunications, government, and more! There will be presentations on technology developments and telecommunications as well as exhibit from a number of companies. We will have inspiring plenary speakers, awards, and entertainment. We look forward to seeing you there!

All for access,

Sheila Conlon Mentkowski

President, TDI

West Region Board Member



Find TDI on Facebook!

www.facebook.com/TDIForAccess

Capitol Commentary



BY CLAUDE STOUT
TDI Executive Director

“One of the building blocks for sustaining the mission of a nonprofit national organization for a successful future is expanding its membership base.”

Top Ten Reasons to Join TDI as A Member

Support Its Advocacy Work in the Nation's Capital - Washington, DC

Believe it or not, TDI will be celebrating its fifty years of advocacy and community development next year in 2018. It was established on June 10, 1968. -Let's use this upcoming milestone to build a greater future for the organization. One of the building blocks for sustaining the mission of a nonprofit national organization for a successful future is expanding its membership base. If you haven't joined TDI as an individual or an affiliate member, I encourage you to join TDI. What benefits will you expect from joining TDI, this article will serve as a clear prospectus.

You may recall David Letterman who was a highly successful host of two late-night TV talk-shows, one with NBC and another one with CBS. His shows regularly produced Top 10 lists, which numbered over 6,000 when he retired from CBS. Some were put together simply for outrageous fun, and others as political fodder.

Allow me to give you the Top Ten Reasons for Joining TDI:

10.) As an active member, you get the annual Blue Book-and four quarterly issues of the TDI World magazine. You have the option to be listed in the Blue Book, and to search for your friends and contacts in 50 states, a number of US territories, and Canada. The TDI World magazine keeps you posted on the latest developments in accessible technologies and services that benefit us at home, in the workplace, or in the community.

9.) When you choose to file a complaint and need to know how to do it, for example: erroneous captions with a TV program, unqualified interpreting

with a VRS call, or the rather lengthy delay between the spoken word and the captions with a IP-CTS relay call, you are most welcome to contact our staff by email, videophone, or relay. Our staff email addresses are: cstout@tdiforaccess.org and tmayer@tdiforaccess.org. We stand ready to assist you on filing a complaint by including key details that will help the Federal Communications Commission (FCC) understand the issue, and with the goal being to produce some kind of resolution between you-and a TV programmer or a TRS provider.

8.) We host a Biennial Conference on odd-numbered calendar years in the DC metro area. We send you information via eNotes, website postings, and the TDI World magazine to keep you posted on our plans for the Conference. The next Conference is this summer on July 27-29, 2017 in North Bethesda, MD. When we announce updates from time to time, you will find the program empowering and informative. Not only will the Conference serve well for our members that are deaf or hard of hearing, it will be equally beneficial for employers and service providers that do business with their deaf/hard of hearing employees and clients.

7.) We have a website, www.tdiforaccess.org. We post information to keep you aware of the latest technological improvements, FCC access initiatives, Conference program updates, and industry news. You can read about TDI's 49 year history. There you will see whom that are on the staff and board of directors with TDI. An archive allows you to review back-to-back issues of the TDI World magazine. We send out eNotes to our members and others to notify them of some new developments that were occurring from

Continued on page 5

CAPITOL COMMENTARY Continued from page 4

TDI, and/or its contacts in industry and government. When we send out eNotes, we share them via other social media channels such as Facebook and Twitter.

6.) We represent you in meetings and projects with government and industry. We invite industry and government, as well as consumer leaders to join us in needs assessment and field-testing activities for our captioning/caption correction project, which is funded by Google. Check the feature column on our Google project, written by Eric Kaika, Product Manager, on page 10 of this issue. I serve on the CTIA advisory panel so that in about five years from now, you will have better location accuracy features on your smartphone. When you make an emergency call, we will be able to locate your whereabouts via x, y, and z coordinates, we will not know just your home address, we will know exactly which floor and room you are in if you live in a tall building, etc. We work closely with the National Association of Broadcasters to ensure that best practices are being adhered to in areas of captioning quality with educational and entertainment video programs, and

local news, weather, and sports shows. TDI staff Tayler Mayer and Eric Kaika will be attending a Google Accessibility Summit in California in the third week of February. We exchange email communication with key people at Apple, Google, Microsoft, Comcast, Verizon, AT&T, five VRS providers, five IP-CTS providers, and others when there is an issue with one of their products or services, or a terrific idea for access improvements.

5.) TDI participates in regular meetings of the Deaf and Hard of Hearing Consumer Advocacy Network. We work with seven other consumer groups and four professional trade groups/service providers to produce initiatives that would benefit us with our contacts at the federal level. Just recently, we submitted a leadership and public policy document to the White House. When we had the 9/11 terrorist attacks, we received over 3,000 responses to the survey on our access experiences or lack thereof, before, during, or after the attacks, and as a result, we produced a report and a list of recommendations in emergency communication and preparedness for the federal government.

4.) We deeply value fostering/cultivating

our collaborative relations with other sister consumer groups, coalitions, and academia. We do advocacy work regularly with NAD, HLAA, ALDA, DHHCAN, NASADHH, CCASDHH, CPADO, and AADB. Also, we maintain ongoing relations with research and technology units with Gallaudet TAP, NTID, Georgia Tech RERC, and Trace Center. Check the TDI In Action regular column in the back of this issue. We do not file comments or petitions alone as an organization. We invite them to join us to make these filings. This kind of process is the only way that works for everyone in the deaf and hard of hearing community.... Often, because of our consensus-building approach, we have seen drafting of comments improve substantially from the time we send our fellow groups the first draft, and making the filings with the final draft, often a third or a fourth one. FCC and other federal agencies tell us this makes their jobs much easier to produce regulations and policy. As the saying goes, "when there is a high tide, all boats rise together."

3.) We have pro bono services with four legal entities, a.) Morgan Lewis

Continued on page 6

More ways to say "I love you."

If you, or a loved one, is Deaf, hard of hearing, Deaf-Blind, or have difficulty speaking, Maryland Relay offers many calling options to keep you connected by phone.

Plus! You may qualify for a free TTY, VCO phone, Captioned Telephone* or other assistive device through the Maryland Accessible Telecommunications program. Free training may be available upon request.

Just dial 7-1-1 to make a Relay call.

Visit mdrelay.org or like us on Facebook to learn more.

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- Speech-to-Speech
- Captioned Telephone*
- Spanish Relay

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Baltimore, MD 21201
800-552-7724 (Voice/TTY)
443-453-5970 (VP)



*Available to qualified applicants

CAPITOL COMMENTARY Continued from page 5

& Bockius, Washington, DC; b.) Institute for Public Representation, Georgetown Law School, Washington, DC; c.) Office of Blake Reid, Attorney, Boulder, CO, and d.) Squire Patton Boggs, Washington, DC. They give us their time and expertise (worth \$700K to \$900K a year) to draft numerous filings on our behalf that with the Federal Communications Commission (FCC) on topics like relay services, TV captioning, broadband access, emergency communication, etc. In the last twenty years, with their support, we have filed over 2,000 documents with the FCC and other federal agencies. Without our filings, the federal agencies would not make the kind of decisions that substantially meet our needs and issues.

2.) We have a nine-member Board of Directors actively working on your behalf in areas of governance

and sustainability for TDI as an organization. You can see their names in the credit side bar on the Table of Contents page of this issue. They make sure the TDI staff is meeting their expectations (and yours) every day, be it a policy issue, improvements for the TDI website, program details for the biennial Conference, raising funds to meet our daily operation expenses, and etc. They ensure we have a strategic plan to guide us for the next four years. As I write this article, they are putting together a succession plan, which would culminate with selection of a new Executive Director by end of 2019. They are good watchdogs for TDI's members. Thank you, Sheila Conlon-Mentkowski, President, and the eight members of the TDI Board of Directors!

1.) We make sure your needs and issues are known to our contacts in industry and government. It is vital that we maintain ongoing and effective communication and collaboration with the key players in the marketplace

and the halls of government. In the future, when you see improvements in technology or public policy, it will be because we would have played a consistent advocacy role with these stakeholders, and more often than not, they have responded with follow-up action to our suggestions for their products and services. We strive to be your effective advocate in Washington, DC! Without your membership and support, TDI will not do as good a job it does to address your needs and issues in the nation's capital.

If you haven't joined us at TDI, we hope you are now persuaded to be a new member with us at TDI. You can join TDI as an individual or affiliate member. For your convenience, the membership forms are in the back of this issue. Thank you for your consideration. To all of you who continue to be our members, we thank you very much and we appreciate your continuing support of TDI.



Contribution Form



☐ \$25 ☐ \$50 ☐ \$100 ☐ \$200 ☐ Other \$ _____

Name _____

Mailing Address _____

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_____ If donation is in honor or memory of an individual, please give name, address and any special instructions. _____

_____ I want my donation to be anonymous.

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info@TDIforAccess.org • www.TDIforAccess.org**

Forward Together



BY TAYLER MAYER
Managing Editor

“You are the last line of defense against online scams.”

Paying Membership Dues Online is Back!

Instead of mailing in your membership dues, enjoy the instant convenience of paying online by credit card. Go to our website and click on “Join Now”

<https://tdiforaccess.org>

At Your Service

When I login into the computer terminal, it stands ready to receive my command with the text: “At your service, sir”. This prompt, which I customized, means to me the command line is ready to serve me, that my command is its wish.

The reality is there’s only so much a computer can do. For example, over the years e-mail spam filters have gradually improved, but there’s always those that slip through - for which it falls to the final line of defense. I, me and only myself.

Identity theft and scamming has become more advanced. With the same pattern, the best technology has worked hard to combat this dangerous trend. Again, the final line defense is I, me and myself.

We need to become expert at identifying online scams. This last line of defense requires understanding the different techniques used by scammers. At TDI’s Biennial Conference this July, we are having workshops on two of those techniques: phishing and scamming. The conference will have presenters describe how to avoid revealing personal and private information to those who should not have them.

I encourage you to register for the conference to take advantage of the “online self-defense classes”.

In the meantime, Tax Day is well before the conference on April 18, 2017. Tax scams are now targeting deaf victims who use Video Relay Service (VRS) and this cannot wait until the

conference. The Internal Revenue Service (IRS) has produced a video, “ASL: Tax Scams via Video Relay Services (VRS)”. The video is free, and is available in ASL and has captions and a transcript.



ASL: Tax Scams via Video Relay Services (VRS)

The below is the link to the YouTube video.

<https://youtu.be/LHYB-g-pTTc>

The video is also available at IRS.gov: <https://www.irs.gov/uac/irs-warns-of-video-relay-scam-targeting-deaf-and-hard-of-hearing>

The transcript is here: <https://www.irs.gov/uac/videos-american-sign-language-asl>

The producer of the IRS official video is a long-time deaf employee, Toby Silver. The actors signing the messages in all of their videos are also deaf employees of the IRS. Please take the time to view the video, as well as help your friends by sharing the important video.

Although computers cannot do everything for you, by providing the online self-defense workshops, TDI is “at your service”. Don’t delay registration to boost your last line of defense against scammers. I will be personally present at the classes and look forward to serving you!



Save the Date!

2017 Biennial TDI Conference in Bethesda on July 27-29!

TDI is proud to announce the upcoming 22nd Biennial TDI Conference to take place in Bethesda, Maryland on July 27-29, 2017. Save the date and start making plans! All of us at TDI hope to see you there for this occasion. Bethesda is a thriving urban district comprised of nearly 200 restaurants, two live theatres, 20 art galleries and some of the best shopping in the Washington, D.C. Metro area. The district has ample parking, and is accessible by the Metro Red Line. Bethesda is also the home of the National Institutes of Health (NIH), National Library of Medicine and the National Naval Medical Center, it is one of the leading biomedical research centers. Popular attractions in this area include: Glen Echo Park, Clara Barton National Historic Site, historical lock houses, trails and the Great Falls at the C&O Canal.

Discover the comforts of one of the premier hotels in Bethesda, MD with a stay at the prominent Bethesda North Marriott Hotel & Conference Center. Stylish guest rooms, a Concierge level welcome both business and leisure travelers with everything needed for a remarkable hotel experience. Conveniently located near the White Flint Metro Station, guests enjoy

easy access to downtown Bethesda, Rockville, Washington, D.C. and northern Virginia attractions. Well-furnished rooms pamper guests with luxurious bedding ensembles, high-speed Internet access and plug-in

panels for easy connectivity, while tantalizing on-site dining, 24-hour guest privileges to the hotel's fitness center and a heated indoor pool add comfort and convenience for a relaxed and productive stay.

Traditional rooms have WiFi, coffeemakers, iPod docks, desks and flat-screen TVs. Upgraded quarters add minibridges and gain access to a lounge (open weekdays only) with free continental breakfast and evening appetizers. Some upgraded options include separate living areas and dining rooms. Perks include a heated indoor pool and a 24/7 gym. There's a high-end bar and restaurant with an old-school vibe. The 13 meeting rooms accommodate 2,500 guests.

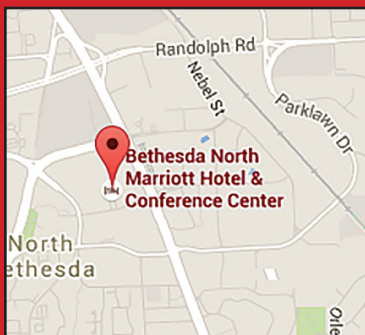
Across from the White Flint Metro station, the hotel is only 1.4 miles from Strathmore's museum and music venue, and 5.1 miles from Brookside Gardens. Gorgeous downtown Bethesda is also not to be missed!

The conference will include award presentations, exciting workshops, exhibits featuring state-of-the-art technology for everyone's telecommunication needs, and unique

Thurs., July 27
-to-
Sat., July 29

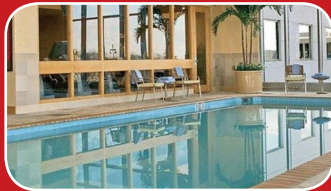
Bethesda North
Marriott Hotel

5701 Marinelli Road
North Bethesda, MD 20852



Please go to our website
<https://tdiforaccess.org>, for:

- More Conference Information
- Online conference registration
- Discounted Hotel Room Reservations



Continued from page 8

networking opportunities.

Do stay tuned as TDI will be sending out more information on the conference as the date approaches!

This will be the 22nd Biennial TDI Conference held during the 49 years since TDI's establishment in 1968.

The Conference Planning Committee, chaired by Claude Stout, TDI Executive Director, will be working hard to make this Conference a huge success.

About TDI's Biennial Conference

Every two years TDI hosts a conference that brings together government policy makers, industry representatives, and consumers to discuss the latest in accessible telecommunications, media and information technologies for people who are deaf, late-deafened, hard of hearing, and deaf-blind. TDI conferences are held in various places around the country in order to provide opportunities for consumers everywhere to participate in the conferences.

For more information about

previous conference, visit the conference archives. Feel free to also browse through the photos from the 2015 Biennial TDI Conference in Baltimore.

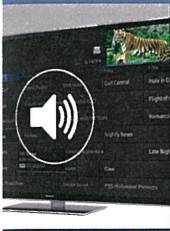

TDI conferences have grown into biennial events that feature exhibits from various industry vendors, presentations from government policy makers concerning their plans for future policy changes, workshops given by industry representatives concerning their newest accessible technologies, panels where consumers are invited to ask questions and raise issues concerning accessibility, an awards luncheon where worthy individuals are recognized for their outstanding contributions to making telecommunications, media and information technologies accessible for deaf and hard of hearing people, and unlimited opportunities for networking with movers and shakers who are concerned with and knowledgeable about accessibility issues facing deaf and hard of hearing consumers.


So, please consider joining us at the next TDI Biennial Conference. You will not be disappointed!




COMCAST

ACCESSIBILITY



Comcast Accessibility Center of Excellence

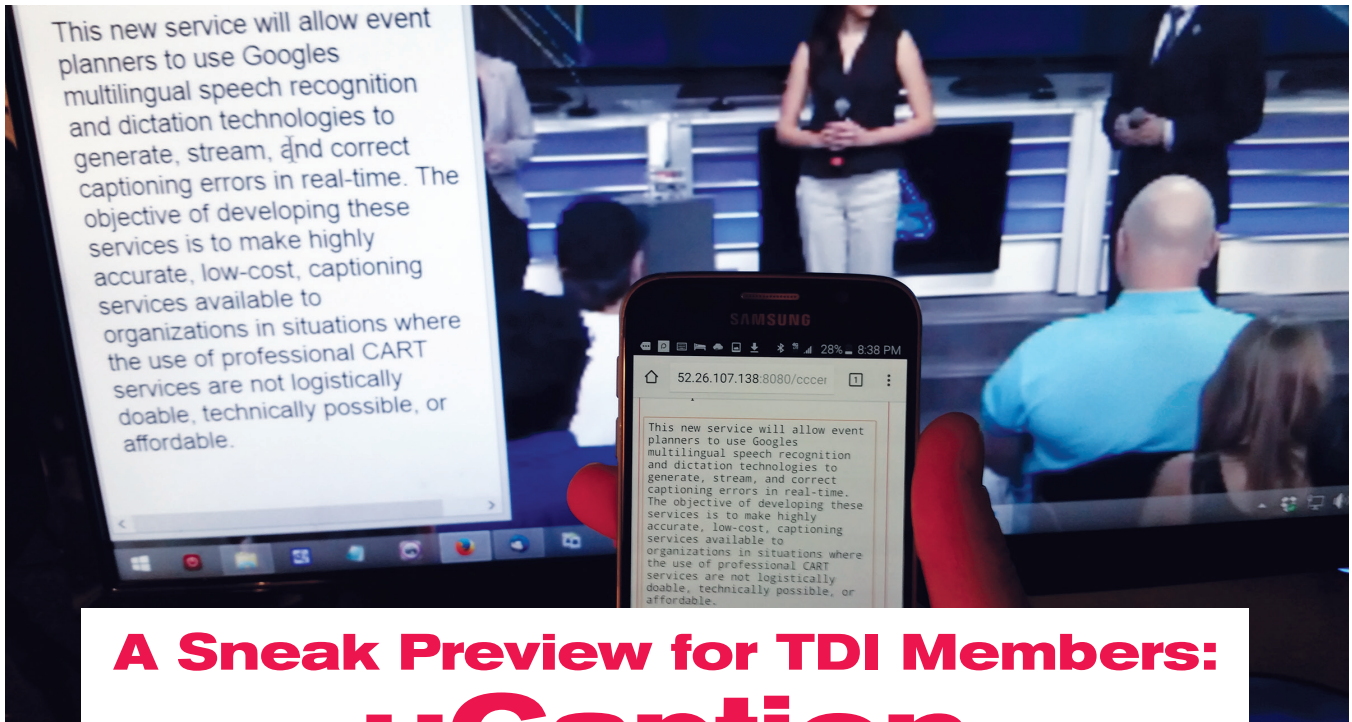
Comcast customers seeking assistance for accessibility support now have a valuable new resource at their disposal: Comcast's Accessibility Center of Excellence (ACE).

Comcast ACE will provide customers who rely on key services—including closed captioning and video description services—direct access to a specially trained customer support team dedicated to accessibility support.

Customers can reach Comcast ACE directly by phone at

855-270-0379

9:00 AM to 10:00 PM Eastern seven days a week.



A Sneak Preview for TDI Members: uCaption

BY ERIC KAIKA

This new product, uCaption.me, utilizes speech-to-text and caption correcting. uCaption.me has been made possible through the Google.org Impact Challenge: Disabilities grant. Google's challenge calls for bold ideas addressing a cause, with the goal of jumpstarting change. Launched in May 2015, Google.org has provided \$20 million in grant funding to nonprofits using emerging technologies to increase independence for people with disabilities.

Over 350 organizations submitted applications in 2016 for this grant, and TDI was one of the 29 recipients. TDI aims to create scalable access to affordable, accessible, and accurate captions for any live event by combining speech-to-text technology with real-time corrections made by event-designated peers, along with caption streaming via the Internet.

Thanks to Google's Impact Challenge grant, TDI is partnering with the IDEAL Group to create this web-based application. This partnership enables TDI to provide another tool for each

deaf or hard of hearing's individual to remove inaccessible communication mediums. There are hundreds of millions of deaf, deafblind, or hard of hearing people who are disenfranchised because events are not live-captioned. Of nearly 900 million people in the world who have some degree of hearing loss, two-thirds of that population reside in developing countries. uCaption.me is built as a global solution for this population.

Using any Internet-capable device (smartphone, laptop, smart TV, etc.), point your web browser to the uCaption.me website and login. Once you've created a session, you're ready to start using the app. Your device must have a dictation application, which is likely already built-in. Using speech recognition technology, uCaption.me will transcribe the speech into captions and broadcast it to all session participants.

Despite the great improvements in speech recognition and voice-to-text technology, translations still aren't perfect. This means relying solely on speech-to-text can impede the quest for perfection. This is how uCaption.

me differs from other speech-to-text applications: uCaption.me provides the ability to correct any captioning errors and, in real-time, broadcast the edits across all devices.

uCaption.me was designed primarily for small organizations that host webinars, online courses, and other meeting types. For such settings, the participants are able to use the real-time caption correction services to make corrections to captions in real-time, during actual events.

uCaption.me has three user types: caption creator, caption editor and the caption viewer.

The caption creator sets up the session, invites participants, assigns editor/viewer roles, and most importantly, handles the hardware that generates the captions. Think of the creator as the conference planner, presenter, the host, and the one who speaks to the audience. uCaption.me will caption every word the creator speaks in real-time. The creator must be logged into uCaption.me within proximity of the microphone of a device (smartphone resting on a podium or

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UCAPTION continued from page 10

a microphone connected to an audio/visual system) running uCaption.me and a dictation application.

Next is the caption editor, a role that opens uCaption.me to a world of possibilities. The editor could be someone in the audience or someone thousands of miles away listening in, via audio, and proofreading the captions. There can be multiple editors; each editor, upon logging in, will be automatically assigned color codes to identify them. Other editors will see this colored text in real-time, showing them who is making corrections so they can focus on other words. All edits are immediately seen across all devices.

Finally, there's the caption viewer. This role has some notable capabilities, such as customizing the captions to their preferences. Viewers can modify caption sizes, colors, fonts, and more. Transcripts are automatically stored in their accounts for access anytime. They can also create mailing lists, including the addresses of frequent participants.

In essence, uCaption.me allows worldwide use. For example, the speaker (caption creator) could be in the United States generating real-time captions, then the caption editor could be someone in Australia, and the viewers could be from Japan. uCaption.me is not for English language use only; captioning is supported for 26 languages.

uCaption.me should not replace nor compete with CART, caption providers, or interpreters. CART, caption providers and interpreters should continue to be a viable option for communication access. However, the cost for these services can be admittedly prohibitive, especially for organizations with smaller budgets. uCaption.me is a low-cost alternative for smaller companies, institutions, conference planners who typically cite "undue hardship" as a reason to avoid providing accessible language options. The uCaption.me platform strives to fill this gap, especially for captioning when professional services are not logistically, technically, or financially possible.



One example is senior citizen centers, which often provide educational classes at a discounted price — but often cannot afford captioning or interpreting services. Private learning centers typically depend on membership dues, and the financial means to accommodate a handful of individuals seeking captioning could wipe out their budget. uCaption.me is an ideal alternative for this situation, and the learning center now only needs to ensure technical capability. Center employees could serve as editors, and the resultant captions could be displayed on a television set.

Benefits of using uCaption.me also are plentiful for other needs, such as DeafBlind individuals attending workshops at a church in a rural area, or a hard of hearing student at a school in a developing country where interpreters are a scarce commodity.

uCaption.me provides an affordable solution. Using the overseas student as an example, the school could ask notetakers to serve as editors, while the teacher speaks into a smartphone. The student can then view the captions on a device, with transcripts automatically generated — all the while minimizing costs.

uCaption.me is still in its infancy, and we are still troubleshooting and identifying possible uses. We invite your input and ideas as we hone the product. TDI will unveil the uCaption.me at the TDI Biennial Conference in Bethesda, Md., on July 28, 2017. Come join us!

Acknowledgement

Never did I imagine, when thumbing through the Blue Book as a child looking for my friends' TTY numbers, that I would end up working for TDI. For years, I've appreciated closed captioned shows on television and making relay (and then video relay) calls to anyone, anywhere in the country — but I never really thought about just how these things became possible. It's largely because TDI has, for years, firmly advocated for our accessibility rights. Today, I realize how much progress TDI has made — especially as I manage TDI's newest product that utilizes Speech-to-Text and Caption Correcting.

uCaption.me would not be possible if it weren't for the contributions of many people, namely Claude Stout, Steve Jacobs of the IDEAL Group, Willie King of CSD, and their respective teams during the testing phases. The many individual testers and Google have also been a crucial part of this project.

The IDEAL Group and its subsidiaries believe in enhancing the independence, quality of life, employability, and quality of education for hundreds of millions of individuals with disabilities around the world.

FCC Adopts Rules to Facilitate Transition from TTYs to Real-Time Text Technology

In a historical open meeting, the Federal Communications Commission (FCC) adopted rules to facilitate a transition from text telephony (TTY) technology to real-time text (RTT) technology on December 15, 2016. In the Report and Order, the FCC:

- Permits wireless service providers and handset manufacturers to support RTT in lieu of TTY technology;
- Ensures RTT users will be able to call 911 for emergency services and 711 for relay services;
- Defines RTT to be interoperable across networks and devices and backward compatible with TTYs; and
- Establishes a phased rollout of RTT for wireless networks from December 31, 2017 to June 2021.

In the accompanying Further Notice of Proposed Rule making (FNPRM), the FCC seeks comment on:

- A timeline to sunset its requirement for RTT to be backward compatible with TTY;
- Integration of RTT into telecommunications relay service operations, and
- Real-time text features that may be needed for people with cognitive disabilities and people who are deaf-blind.

(The FCC will announce the public comment due dates for the FNPRM when these become available.)

Claude Stout, TDI Executive Director shares with TDI members:

“Last Thursday’s formal action for Real Time Text Technology (RTT) by the



five-member Federal Communications Commission was historic, in terms of impact and system change for many Americans who will benefit enormously from using this direct mode of communication every day over the IP networks. This technology will not just benefit Americans who are deaf and hard of hearing, but their hearing family members, friends, colleagues in the workplace, service providers, and others.

This will help provide an additional kind of accommodations that we can use with our hearing peers in any life activity area, such as education, employment, human services, civics, leisure and recreation, commerce, transportation, and etc. Those who are deaf and hard of hearing will feel more included and independent in the general community.

We give our deepest gratitude to all parties in government, industry, academia, and consumer advocacy for making possible this communication tool for its effective deployment in the marketplace. We look forward to working with all parties to see to that this technology reaches its full promise and potential as a mainstream benefit for everyone involved.”

Eight years ago, an article written by

In light of new RTT technology, TTYs will continue to work for some time



Mr. Stout appeared in TDI World Magazine, pushing for federal adoption of RTT technology. The article was sent as an email, on December 8, 2016, to the five FCC commissioners thanking them for taking on RTT as an agenda item for the December 15, 2016 open meeting. On December 12, 2016, TDI sent out an eNote asking the community to attend the session at FCC headquarters in Washington D.C..

If you have any questions or comments about Real Time Text technology, please feel free to contact TDI.

Dr. Christian Vogler, pictured on the right, summed up the contributors to the RTT collaborative effort. Dr. Vogler, Director of the Technology Access Program (TAP) at Gallaudet University, granted permission for TDI to publish the below recognition:

“This represents a culminating achievement of the work we’ve done over the past five years. Although the article quotes me extensively and highlights my role in this, I would like to emphasize that this has been an immense collaborative effort by many, many people, companies, and organizations.

For instance, Norman Williams solved a user interface puzzle to make RTT a natural thing to people used to messaging. Gallaudet TAP as a whole, especially with Norman Williams, Paula Tucker and Judy Harkins had been working on this for over a decade. Initially this was a part of NIDILRR- funded projects with our partners Gregg Vanderheiden at the Trace Center at the University of Maryland (formerly Wisconsin) and Gunnar Hellström at Omnitor in Sweden. This started long before I even knew TAP existed.

David Bahar of CSD shepherded the first round of RTT recommendations across the finish line in the FCC Disability Advisory Committee (DAC), and Zainab Alkebsi of NAD did the same for the second set of DAC recommendations, which were critical in building consensus between consumers and industry, and showed that we collectively meant business.

Gunnar Hellström of Omnitor and Paul Jones of Cisco co-authored RFC 4103, which is the crucial standard holding all this together. Brian Rosen made sure it became part of



Dr. Christian Vogler, Director,
Gallaudet Technology Access Program

next-generation 9-1-1 specifications. Then we have Gunnar’s and Paul Michaelis’s (of Avaya at that time) work in the FCC Emergency Access Advisory Committee to write the TTY transition document, which despite failing to reach consensus on one particular section, was hugely influential and laid out a roadmap. The standards themselves coalesced over many years, with ITU creating the concept of RTT as part of multimedia conversations, with the strong support of Polycom, through Dave Lindbergh. The Swedish Telecom Agency and Ericsson did much to advance the standards work at the IETF and 3GPP, especially through Olle Franceschi of Ericsson, as did Panasonic and Orange later.

We have people like Arnoud van Wijk who tirelessly advocated for RTT and did much to get it off the ground in Europe, which also was critical to be able to point to as a deployment. Gregg and Gunnar have been everywhere, never giving up. Gunnar did a lot of additional legwork on technical standards,

above and beyond the call of duty. Gregg was instrumental in framing the adoption of RTT as something that would be a net industry and net regulatory positive, and pushing back against the dilution of the technical standards.

Then we have David Talbott and Matt Terrill at AT&T, who invited us to meet with them at their NJ labs, and after seeing what RFC4103 was capable of, convinced their own company to do a 180-degree turn on the TTY issues, with substantial help from the likes of Susan Mazrui, Aaron Bangor, Linda Vandeloop, and Matt Myrick. Without them the rulemaking wouldn’t even have gotten off the ground. ATIS took up additional standards work. CTIA, CCA, and the major wireless carriers pushed the FCC hard on RTT, right to the end, just as we did.

And don’t forget the FCC – Suzy Rosen Singleton, Bob Aldrich, Eliot Greenwald, Michael Scott, Henning Schulzrinne, Peter Trachtenberg, David Furth, and Karen Peltz Strauss really went to the mat on this and with our help, secured the support of all five FCC Commissioners.

We also have the tireless advocacy of folks like Claude Stout of TDI with Drew Simshaw of Georgetown IPR as pro bono counsel, Lise Hamlin of HLAA, Cheryl Heppner (formerly of NVRC), Howard A. Rosenblum of NAD, and others over the past decade who kept respect for consumers and disability issues at the forefront of FCC proceedings. This probably was instrumental in having some FCC Commissioners go and bat for us in the final order.

I’m probably missing more key individuals here. Please be assured that this in no way was intentional, and I will be glad to acknowledge you if you ping me.”

Tayler Mayer: Director of Public Relations

We're excited to announce that Tayler Mayer has joined TDI as the new Director of Public Relations!

Mayer received two degrees, one in information technology and one in management, from Rochester Institute of Technology and Gallaudet University. Over the last 10 years, he's worked as a freelance web developer, and created two well known and popular websites, DeafRead.com and DeafVIDEO.TV. DeafRead, started in 2006, pioneered social media in the deaf community by aggregating several deaf-related blogs into a single website. DeafVIDEO.TV is the only interactive website that provides complete access to American Sign Language via video.

Mayer expressed his excitement on joining TDI saying "I am thrilled to bring the importance of accessible technology to the several media



platforms TDI delivers to its members."

Claude Stout, Executive Director of TDI, shared in the sentiment saying "TDI is pleased to have Tayler on its team for communications and

public relations. Tayler will bring unique skills and experience in web development, social media, and database management to TDI. He understands the crucial importance of maintaining TDI's visibility and activities on the Internet, and building on TDI's most cherished relations with its Board of Directors, constituents, government policy makers, researchers, service providers, advertisers, corporate sponsors, and other interested parties. He will follow in the footsteps of the current Director of Public Relations, Don Cullen in our continuing efforts to reach out to the new generation of Americans who are deaf and hard of hearing."

With Mayer's guiding hand at the helm of public relations for TDI, we anticipate an exciting adventure in going even further in helping to create an accessible world! Please do join us in welcoming Tayler Mayer aboard!



2017 Biennial TDI Conference in Bethesda on July 27-29!

TDI is proud to announce the upcoming 22nd Biennial TDI Conference to take place in Bethesda, Maryland on July 27-29, 2017.

Save the date and start making plans! All of us at TDI hope to see you there for this occasion.



See what you've been missing... at work!



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Designed exclusively for business professionals with hearing loss, Hamilton® CapTel® for Business, Interconnected by Tenacity™ allows you to listen and read captions of everything being said to you on your Cisco® phone screen. Users experience a natural flow of conversation and word-for-word captions ensure added clarity and confidence.

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visit: **HamiltonCapTel.com/biz**



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Eric Kaika: Product Manager, TDI's UCaption Project

On the heels of our announcement of our historic collaboration with Google to launch a product that will change the lives for many, we're excited to announce that Eric Kaika has joined TDI as Product Manager for TDI's speech-to-text technology and caption corrections project.

Before joining TDI, Mr. Kaika oversaw marketing and sales for Communication Services for the Deaf's multimedia services, operations for Aspen Camp, and training future ASL interpreters at Iowa Western Community College. His experience working for non-profits brings a diverse skill set to make the caption corrections project an exceptional service.

Upon joining TDI, Mr. Kaika exclaimed "I'm excited to start a new challenge within TDI and look forward to working with its team and community on the project. Accessibility is a longstanding core value of mine and I am fortunate to be joining a respected company that prides itself on equal access."

Claude Stout, Executive Director of TDI, is absolutely excited as well, and



said: "We are elated to have Eric on board as its Product Manager for the project. Eric will be a catalyst to attract as many deaf and hard of hearing constituents and their community/academic contacts from and outside America to test, try out, and/or then regularly use the caption corrections service. He will be a great ambassador for TDI in consultations on the project with key stakeholders in government, industry, academia, and consumer advocacy groups. With his leadership of the project, TDI will not only advocate for its constituents' access needs and issues, but also engage directly with others in research and

development to expand our universal design capacity and options."

A recipient of Google's \$500,000 Impact Challenge/Disabilities two-year grant, TDI launched a project to create scalable access to affordable, accessible, and accurate captions for any live event by combining available speech-to-text technology with real-time caption corrections made by event-designated peers in addition to caption streaming via the internet. Pre-existing speech-to-text technology is used to generate and stream a live caption feed that can be corrected by event-designated participants. The web-based prototype is accessible using Android, iOS, and Windows-based mobile devices, as well as any computer equipped with a browser, speech recognition capabilities, and a microphone. When completed, the platform will offer the world's first multilingual, speech-driven, cross-platform, real-time captioning/caption correction services.

With Mr. Kaika's guiding hand on the speech-to-text technology and caption corrections project, we anticipate an exciting adventure in going even further in helping to create an accessible world! Please do join us in welcoming Eric Kaika aboard!

www.TDIforAccess.org

Shaping an Accessible World

The banner features a blue background with white and red circles. On the left is the large, stylized 'TDI' logo. On the right is a screenshot of the website 'www.TDIforAccess.org', which displays the TDI logo and the tagline 'Shaping an Accessible World'. Below the website screenshot, the slogan 'Shaping an Accessible World' is written in a large, bold, black font.



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AADB = American Association of the Deaf Blind

ALDA = Association of Late Deafened Adults, Inc.

ASDC = American Society of Deaf Children

CC – closed captioning

CCASDHH = California Coalition of Agencies Serving Deaf and Hard of Hearing, Inc.

CGB = Consumer and Governmental Affairs Bureau

CPADO = Cerebral Palsy and Deaf Organization

CTS – Captioned Telephone Service

DHHCAN = Deaf and Hard of Hearing Consumer Advocacy Network

DRO = Disability Rights Office

E-911 – Enhanced 911

FCC = Federal Communications Commission

FNPRM – Final Notice of Proposed Rulemaking

HLAA = Hearing Loss Association of America

IP – Internet Protocol

NAD = National Association of the Deaf

NBDA = National Black Deaf Advocates

NG-911 – Next Generation 911

RERC-TA = Rehabilitation Engineering Research Center on Telecommunication Access

SCAT/SCABT = Speech Communications Assistance By Telephone, Inc.

SoA = Speed of Answer

TAP = Technology Access Program at Gallaudet University

TDM = Time Division Multiplexing, a method of handling electronic communications

TIA = Telecommunications Industry Association

TLPC = Samuelson-Glushko Technology Law & Policy Clinic

TRS – Telecommunications Relay Service

VRS – Video Relay Service

Captioning, Subtitles, and User Interfaces

■ (October 20) *Drew Simshaw of the Institute for Public Representation (IPR), Georgetown Law (Counsel to Telecommunications for the Deaf and Hard of Hearing, Inc. (TDI)) and Blake Reid (Counsel to TDI) spoke with Maria Mullarkey and Diana Sokolow of the Media Bureau, and Rosaline Crawford, Suzy Rosen Singleton, and Karen Peltz Strauss of the Consumer and Governmental Affairs Bureau, regarding the above-referenced docket. Counsels to TDI discussed the Commission's efforts on the accessibility of user interfaces, including possible requirements of manufacturers and MVPDs, to ensure that closed captioning settings are readily accessible. Throughout this proceeding, TDI

and a coalition of deaf and hard of hearing advocacy organizations have stressed that in order for consumers to be able to access closed captioning, they must be able to readily access settings that allow them to adjust the font, size, color, background, and location of closed captioning text.

<https://www.fcc.gov/ecfs/filing/102468434813/document/1024684348134277>

■ (November 14) Drew Simshaw of the Institute for Public Representation (IPR), Georgetown Law, Counsel to Telecommunications for the Deaf and Hard of Hearing, Inc., and IPR clinical law student Thomas Koh, met with David Grossman of Commissioner Clyburn's office, Jennifer Thompson of Commissioner Rosenworcel's office, and Holly Saurer of the Chairman's

office, regarding accessibility of the user interfaces. Consistent with comments made by the deaf and hard of hearing Consumer Groups and the Rehabilitation Engineering Research Center on Technology for the Deaf and Hard of Hearing, Gallaudet University, throughout this proceeding, counsel to TDI reiterated that readily accessible captioning settings are critical to deaf and hard of hearing consumers' ability to access closed captions. If a consumer cannot readily locate and use display settings that allow them to adjust aspects such as the font, size, color, background, and location of closed captioning text, then closed captioning itself is not truly accessible, because the consumer cannot ensure that captions are rendered in a readable

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and accessible format. We also reiterated that captioning settings are currently difficult for many consumers to access.

<https://www.fcc.gov/ecfs/filing/111582743343/document/111582743343bd3d>

■ (January 12) TDI, NAD, HLAA, CSD, DSA, CPADO, NASADHH, Gallaudet RERC, AFB, and ACB submitted comments on the December 20, 2016 Petition for Limited Waiver of Honda Motor Co., Ltd. Consumer Groups and DHH-RERC appreciate Honda's expressed support for the accessibility requirements of Section 204 of the Twenty-First Century Communications and Video Accessibility Act ("CVAA"), as well as its assurance that it "fully intends to offer" options of its rear entertainment system ("RES") "that achieve the functionality sought by the [CVAA]." We appreciate

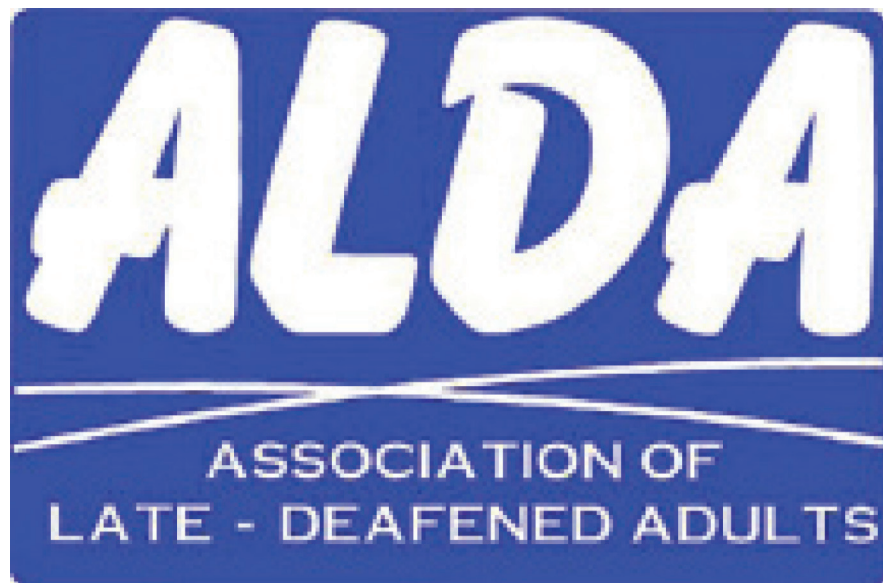
Honda's expressed commitment to taking steps to ensure that its RES on-screen text menus or other visual indicators are accompanied by audio outputs so that they are accessible to individuals who are blind or visually impaired, as required by the CVAA. However, we stress that the CVAA and the Commission's rules also subject Honda to additional requirements that ensure that digital apparatus, such as Honda's RES, are accessible to individuals with disabilities, including those who are deaf or hard of hearing and those who are blind or visually impaired. Specifically, in addition to requirements concerning audio output for on-screen menus, the Commission's rules also provide that manufacturers of digital apparatus with built-in closed captioning and video description capability must ensure that these functions "can be activated through a mechanism that is reasonably comparable to a button, key, or icon." In addition,

the Commission's rules require manufacturers to ensure that individuals with disabilities are aware of the availability of accessible devices, and that consumers have ready access to information and the necessary support to ensure that they are able to operate them.

<https://ecfsapi.fcc.gov/file/101121282019900/2017-01-11%20Consumer%20Groups%20and%20DHH-RERC%20Honda%20UI%20Waiver%20Comment.pdf>

FCC's Activities During the Transition Between the Two Administrations

■ (November 23) Drew Simshaw of the Institute for Public Representation (IPR), Georgetown Law, counsel to Telecommunications for the Deaf and Hard of Hearing, Inc. (TDI); Blake Reid, counsel to TDI; IPR clinical law student Thomas Koh; Lise Hamlin of Hearing Loss Association of America; Christian Vogler and Paul Pattak of Gallaudet University; Tony Stephens of American Council of the Blind; Zainab Alkebsi of the National Association of the Deaf; David Bahar of Communication Service for the Deaf; and Mark Richert of American Foundation for the Blind, met with Holly Saurer of Chairman Wheeler's Office, Robin Colwell and Erin McGrath of Commissioner O'Rielly's office, Jennifer Thompson of Commissioner Rosenworcel's office, Daudeline Meme of Commissioner Clyburn's office, and Brendan Carr of Commissioner Pai's office, to



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discuss the importance of finalizing FCC accessibility proceedings that are critical to the civil rights of millions of Americans. Our comments were consistent with the November 18, 2016 letter filed by Blake Reid, counsel to TDI, on behalf of a broad coalition of disability advocacy organizations addressed to the Commissioners, Chairman, and Representatives Upton and Walden. We elaborated on several specific pending items that have been the product of extensive and long-running collaborations between, and hard work by, the disability community, industry, and government. We urged the Commission to move forward with a vote on the video description order currently on circulation, so that the hard work of consumer groups, industry, and Commission staff comes to fruition. The order will ensure that people who are blind or visually impaired have access to video programming through the expansion of descriptive audio. We reiterated that the technology transition from PSTN to IP offers an once-in-a-lifetime opportunity to make RTT available to everyone on every phone. Indeed, all parties benefit when RTT is implemented on all phones, as consumers gain better accessibility, industry is relieved of needing to comply with outdated TTY requirements, and the Commission saves money with reduced pressure on the TRS Fund. We also briefly discussed the status of the iTRS database waiver in docket numbers 10- 191, 10-51, and 03-123. We emphasized how critical passing this waiver is to getting a direct video calling

solution deployed. We expressed the importance of finalizing the Commission's efforts to ensure that closed captioning settings are readily accessible to consumers, and our support for the order on circulation. We reiterated that the order offers a fair and practical solution to the difficulty that many consumers face in navigating menus on devices where closed captioning settings are not readily accessible. The order also ensures that these settings will be readily accessible on all types of devices in the future. We reminded the Commission that the issue of Hearing Aid Compatibility (HAC) has remained unsolved for almost a decade. Although cell phone use is more prevalent now than ever, many people with hearing loss are not able to fully utilize the technology – often for the simple reason that their phones are not capable of making the volume loud enough to be useful. We pointed out that the issue of volume control is well known, and was included for comments in the 2010 Review of HAC regulations, and stressed the need for a resolution by year's end.

<https://www.fcc.gov/ecfs/filing/1124264021557/document/1124264021557e0b3>

Real-Time Text Technology

■ (November 28) TDI, NAD, HLAA, ALDA, and CPADO filed comments to respond to recent filings in the above referenced dockets concerning the transition from TTY to Real-Time Text Technology (RTT), and to express our support for several specific requirements that are critical for a successful transition to RTT. First,

we strongly support the position of Rehabilitation Engineering Research Center on Technology for the Deaf and Hard of Hearing–Gallaudet University (RERC) and Omnitor that RTT must be supported on every phone that has a display and the ability to generate text or to connect to devices that will generate text. This is essential to ensuring that people who rely on text, or a combination of voice and text, are able to call doctors, neighbors, businesses, and others with whom they need or wish to communicate, and not just those who have purchased special phones. In addition, we agree with RERC and Omnitor that the control to add RTT to a call must be available alongside other in-call controls, and in all instances that such controls are presented to users. All consumers should be able to readily add RTT to a call in the same way that they can mute a conversation or activate their phone's speakerphone. This is important not only for users with disabilities, but also for elderly users and mainstream users who need to communicate at times when their voice calls cannot be understood, including instances where either party is in a noisy environment. In order to ensure this ability, all users must be able to locate the RTT control in the first instance. The goals of this proceeding will be severely undermined if there is a setting that allows RTT control to be hidden. We also agree with RERC and Omnitor that all incoming calls that include RTT must be accepted with RTT automatically enabled. Of course, a call receiver can refuse to answer any call, including one

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with RTT. However, we strongly urge the Commission not to enable call receivers to accept only the voice portion of a call but not the RTT portion. Such design would discriminate against the millions of users who need RTT as part of their call in order to communicate. As RERC and Omnitor further point out, a design that allows just RTT to be rejected would also lead to increased use of and reliance on relay services in order to make sure that calls are received. These key handset requirements are essential to ensuring that RTT is deployed in a way that will bring RTT into mainstream use for all consumers, and that RTT will reduce the growing demand for relay services. Finally, as Consumer Groups have previously expressed, the integration of RTT into Telecommunications Relay Services ("TRS") is essential to RTT's accessibility and integration into the mainstream telecommunications ecosystem. To this end, we support the position of Hamilton Relay that relay providers should be included in the RTT ecosystem, with wireless carriers connecting to relay providers in RTT. With RTT-to-RTT connections between wireless carriers and relay providers, relay services should be able to transition to an all-RTT interface.

<https://ecfsapi.fcc.gov/file/1129303498054/2016-1128%20TDI%20RTT%20submission%20AS%20FILED.pdf>

[https://ecfsapi.fcc.gov/file/1129303498054/2016-1128 TDI RTT submission AS FILED.pdf](https://ecfsapi.fcc.gov/file/1129303498054/2016-1128%20TDI%20RTT%20submission%20AS%20FILED.pdf)

■ (December 7 and 16) TDI, Gallaudet TAP, Gallaudet, and the

Trace Center, UMD met with Karen Peltz Strauss, Eliot Greenwald, Michael Scott, Bob Aldrich, and Suzy Rosen Singleton of the Consumer and Governmental Affairs Bureau (CGB), Holly Saurer of Chairman Wheeler's Office, and Jennifer Thompson of Commissioner Rosenworcel's office, to discuss the Real-Time Text draft order in the above referenced proceedings. TDI and Gallaudet TAP also met with Erin McGrath of Commissioner O'Rielly's office to discuss the same item. TDI, Gallaudet TAP, CSD, the Trace Center, NAD, Omnitor, and Gallaudet met with Brendan Carr of Commissioner Pai's office and Erin McGrath of Commissioner O'Rielly's office. TDI, Gallaudet TAP, and Claude Stout, Executive Director of TDI, also sent a letter, attached to this filing, to all Commissioners and their respective staff, as well as members of CGB. In our meetings, we expressed support for the proposed order, consistent with the views expressed in filings throughout this proceeding by the RERCs and Omnitor, and by TDI with the support of consumer groups, including acceptable latency and error rates and the use of RFC 4103 as a safe harbor standard. We noted that industry initiated this rulemaking and that it is important in allowing them to have a path for moving away from TTY and to a modern IP based solution to replace it, which does not work well on IP networks. We respectfully ask that given the broad process of consensus-building that has gone into this order, the marked absence of controversy, and the fact that this order provides industry with regulatory relief from the TTY regulations, the provision of a "safe harbor" standard, and

the unique opportunity to usher telecommunication access into a new era, that the FCC proceed with a vote on this item at its December 15, 2016 open meeting.

<https://www.fcc.gov/ecfs/filing/1209924101580/document/120992410158083d3>

<https://www.fcc.gov/ecfs/filing/1209924101580/document/1209924101580a13d>

<https://www.fcc.gov/ecfs/filing/1214805205033/document/1214805205033f7f3>

<https://www.fcc.gov/ecfs/filing/1214805205033/document/1214805205033374d>

<https://www.fcc.gov/ecfs/filing/1214719516033/document/121471951603382b2>

Section 504 of the Rehabilitation Act of 1973

■ (October 3) TDI, NAD, DHHCAN, ALDA, CPADO, AADB, HLAA, DSA, NASADHH, CSD, and CCASDHH submitted comments in response to FCC's request for comment on the Commission's Policies and Practices to Ensure Compliance with Section 504 of the Rehabilitation Act of 1973. We listed a good number of items in which the FCC has made great strides in providing accessible resources and services. We did indicate that while the FCC has made progress with the national TRS program, there is still room for improvement. There has, however, been undue emphasis on the TRS Fund reimbursement rate

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without concomitant emphasis on measuring and maintaining the quality of TRS itself. We believe that emphasis is needed on addressing service improvements with all forms of TRS, and that prudent expenditure of funds now may in the long run make TRS cost-efficient. We propose a good number of ways that the FCC can employ effective outreach to continually inform the deaf and hard of hearing Americans about its proceedings that directly affect them.

<https://ecfsapi.fcc.gov/file/1003158609137/Consumer%20Groups%20Comments%20Dkt.%2010-162.pdf>

U.S. Department of Justice's Web Accessibility Rulemaking

- (October 7) TDI co-signed, along with other forty-seven organizations and entities to the omnibus comments, largely drafted by the National Federation of the Blind, to the Department of Justice Supplemental Advanced Notice of Proposed Rulemaking on the issue of web accessibility for people with disabilities to the programs, services, and activities on state and local government websites.

Accessibility of Gaming Systems and Virtual Reality

- (November 30) TDI, NAD, HLAA, ALDA, CPADO, CCASDHH, NASADHH, DHHCAN, and DHH-RERC sent comments

on the Oct. 19, 2016 Petition for Extension of Waiver of the Entertainment Software Association (ESA Petition), in response to the Commission's October 31, 2016 Request for Comments (RFC). As the RFC notes, the ESA Petition is rooted in a petition initially filed in 2012 for multiple classes of video-game-related equipment, which the Consumer and Governmental Affairs Bureau granted until 2015 and then partially renewed for video-game software only through January 1, 2017. We were concerned about three key aspects of the ESA Petition: 1.) while the Petition contends that "applying assistive technologies to video game software ACS continues to present substantial technical challenges," it offers only high-level invocations of specialized code and fast-paced environments and does not describe specific efforts undertaken to make specific games accessible that have failed as a result of as-yet-insurmountable technical challenges. 2.) likewise, the Petition's description of progress over the preceding waiver period is limited to high-level themes and scattered examples, but does not survey the extent to which progress has been made across at least a representative sample of games or identify specific challenges that remain. 3.) the Petition speaks only in general terms, and without specifics or detailed milestones, to ESA's members' plans to address remaining technical challenges or engage with the deaf and hard of hearing community over the final year of the proposed waiver period. If ESA supplements the petition with detailed, specific information on remaining challenges, progress achieved over the previous waiver period, and its members'

specific plans for coming into full-compliance over the proposed final year of the waiver and continuing to gather feedback from the deaf and hard of hearing community—including through the inclusion of panelists who are deaf or hard of hearing at ESA member-hosted conferences and summits such as the PlayStation Experience 2016—we would be inclined to support the waiver so long as it is limited to that one-year period and not subsequently renewed.

<https://ecfsapi.fcc.gov/file/1130208530839/2016.11.30%20Consumer%20Groups%20ESA%20Waiver%20Comment%20final.pdf>

Emergency Information Alerts

- (January 10) TDI, Gallaudet RERC, NAD, ALDA, and DHHCAN submitted reply comments in response to the Federal Communications Commission's Report and Order and Further Notice of Proposed Rulemaking. The Wireless Emergency Alert (WEA) platform and the Emergency Alert System (EAS) are essential tools for individuals who are deaf, hard of hearing, deafblind, and deaf with mobility issues. We reiterated that the Commission should make WEA alerts available in ASL. In the event the Commission declines to make WEA messages available in ASL, Consumer Groups and DHH-RERC urge the Commission to make accommodations for the delivery of ASL messages through alternative means. For example,

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the WEA messages could transmit an Internet link to a streaming ASL video. We asserted that making WEA messages available in ASL will not lead to congestion issues, as these messages will only be accessed by the individuals who require them and merely need to be comprehensible and informative to those who use ASL, which, as stated above, are likely to number 500,000 in relation to a population of 330 million for the entire United States.

<https://ecfsapi.fcc.gov/file/10109012307746/15-91%2001-09-2017%20Telecommunications%20for%20the%20Deaf%20and%20Hard%20of%20Hearing%2C%20Inc.pdf>

■ (January 13) TDI, NAD, DHHCAN, HLAA, ALDA, CPADO, NASADHH, and Gallaudet RERC submitted these reply comments in response to CTIA's Petition for Reconsideration regarding the Emergency Alert System and Wireless Emergency Alerts. CTIA's Petition requests that the Commission clarify certain aspects of the Order, including the definition of clickable links and that support for embedded references is not required for older devices. Moreover, CTIA requests that the Commission defer mandating actual implementation of support for embedded references until some unspecified date, following carrier completion of feasibility testing. Consumer Groups and DHH-RERC respectfully request Commission to deny CTIA's petition and require actual implementation of embedded references by its original date of November 1, 2017. In the event that the Commission finds a deferral is warranted, Consumer Groups and

DHH-RERC agree with APCO that any such deferral should include a specific timeline for testing such that a deadline exists for ensuring implementation of WEA enhancements. Consumer Groups and DHH-RERC additionally request that should the Commission limit support for embedded references to "new" mobile devices, it define "new" after reviewing technical parameters for whether "old" mobile devices are truly incapable of supporting embedded references. Consumer Groups and DHH-RERC submit that deferring or limiting implementation of support for embedded references absent a sufficient showing of necessity to do so is inconsistent with the Commission's overarching public interest goals in this proceeding and would hinder the efficacy of public safety alerts for individuals who are deaf, hard of hearing, deafblind, and deaf with mobility issues.

<https://ecfsapi.fcc.gov/file/10113478529030/15-91%2001-13-2017%20Telecommunications%20for%20the%20Deaf%20and%20Hard%20of%20Hearing%2C%20Inc.pdf>

Hearing Aid Compatibility

■ (January 13 and 17) HLAA, Gallaudet/DHH-RERC, NAD, CSD, and TDI met with Karen Peltz Strauss, CGB, Robert Aldrich, CGB, Suzy Rosen Singleton, DRO, and Susan Bahr, DRO to discuss an apparent Hearing Aid Compatibility item that was being circulated on the eighth floor of the Commission. They also met with Erin McGrath of Commissioner O'Rielly's office, Brendan Carr of Commissioner Pai's office and Daudeline Meme

of Commissioner Clyburn's office. Consumer Groups noted that the adoption of standards for volume control for wireless phones is a critical issue for consumers. An HLAA survey of consumers (filed with our 8/22/2016 ex parte), found that of 728 people surveyed, 44% reported that the volume was "comfortably loud" only half the time or less. In addition, we understand that two formulating groups, TIA TR-41.3.14 and ANSI C63.19, are discussing development of a volume control standard for wireless phones, so we see a natural path forward. However, without regulations in place we are concerned that the marketplace, which has not responded on its own for at least eight years, will continue to leave people with hearing loss behind.

https://ecfsapi.fcc.gov/file/10118644102850/Consumer%20Groups%20ex%20parte%20re%20HAC%20regulations%20filed%20copy%201_18_2017.pdf

[https://www.fcc.gov/ecfs/search/filings?date_received=%5Bgte%5D2017-1-1%5Blte%5D2017-1-31&q=filers.name:\(Hearing%20Loss%20Association%20of%20America\)&sort=date_disseminated,DESC](https://www.fcc.gov/ecfs/search/filings?date_received=%5Bgte%5D2017-1-1%5Blte%5D2017-1-31&q=filers.name:(Hearing%20Loss%20Association%20of%20America)&sort=date_disseminated,DESC)

[https://www.fcc.gov/ecfs/search/filings?date_received=%5Bgte%5D2017-1-1%5Blte%5D2017-1-31&q=filers.name:\(Hearing%20Loss%20Association%20of%20America\)&sort=date_disseminated,DESC](https://www.fcc.gov/ecfs/search/filings?date_received=%5Bgte%5D2017-1-1%5Blte%5D2017-1-31&q=filers.name:(Hearing%20Loss%20Association%20of%20America)&sort=date_disseminated,DESC)

<https://ecfsapi.fcc.gov/file/1072580432958/2016-07-25 CG Dkt No 16-145 GN Dkt No 15178 Reply Comments of Consumer Groups.pdf>

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If yes: ☐ Send to my E-Mail address ☐ Send to another E-Mail address: _____

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Zip/Postal Code: _____ USA? ☐ YES ☐ NO Country: _____

Date of Birth: _____ Email Address: _____

Main Phone: () _____ ☐ Video ☐ TTY ☐ TXT ☐ Voice ☐ Captioned ☐ FAX

Alternate Phone: _____ ☐ Video ☐ TTY ☐ TXT ☐ Voice ☐ Captioned ☐ FAX

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May we send you TDI eNotes, our free TDI E-Mail newsletter? ☐ Yes ☐ No

If yes: ☐ Send to my E-Mail address ☐ Send to another E-Mail address: _____

Select One TDI Membership Rate:	1 Year	2 Years	LIFETIME
Individual-Regular:	<input type="checkbox"/> \$40.00	<input type="checkbox"/> \$75.00	<input type="checkbox"/> \$1000.00
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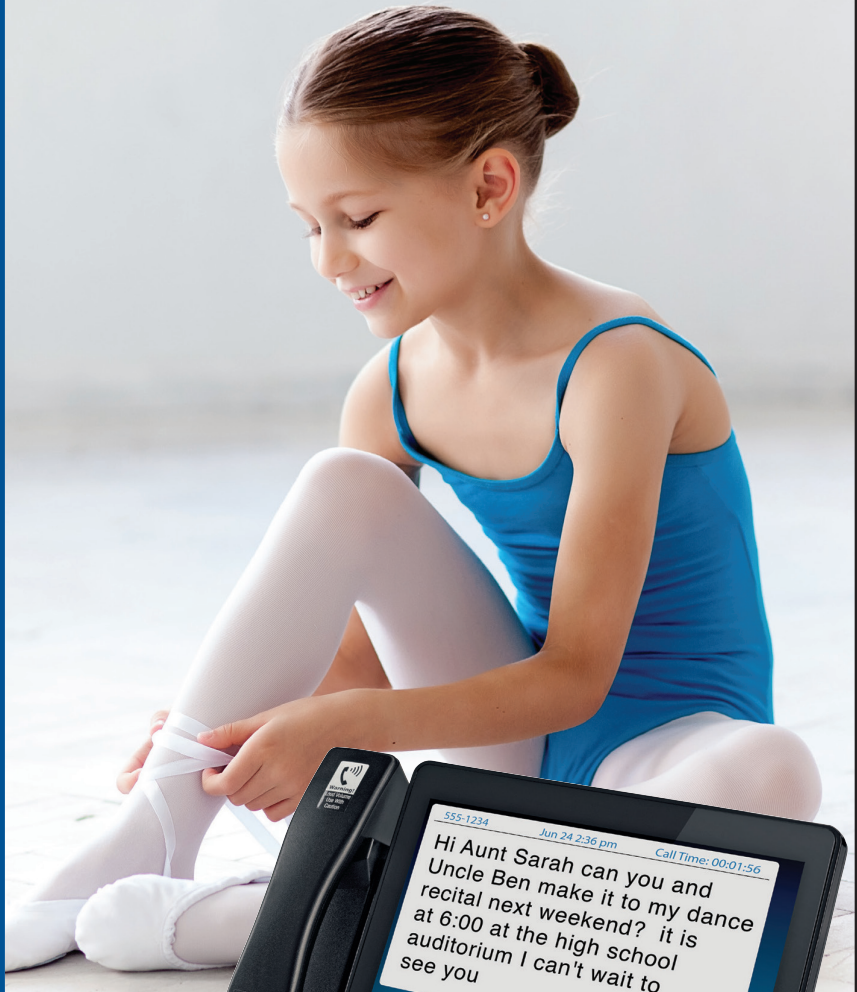
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