

**Testimony by SSG Brian K Pearce (retired Combat wounded vet) &
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Mechanicsville, Virginia
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Chairman Senator Kerry, Members of the Senate Subcommittee on Commerce for Communications and Technology, thank you for the opportunity to speak to you today regarding our experiences following my injuries in Iraq and my own experiences with adjusting to blindness and trying to use technology today.

Military History:

I joined the US Army in June 1992 and served until March of 2000, joining the WVARNG. After a 3 year service break I returned to Active Duty in January of 2004. My new duty station was the 172nd Stryker Brigade Combat Team out of Ft. Wainwright, Alaska. There I was assigned to 4-11th FA as the Brigades Survey/Targeting Acquisition Chief. After an intense training period we deployed in July of 2005. My SBCT spent August 2005 through August 2006 the first year of our deployment operating in the Mosul area. As the Brigade prepared to re-deploy home to Ft. Wainwright in July we were extended for 120 days and assigned to area of responsibility in the Sunni Triangle.

Injury Iraq

On October 20, 2006 I was severely injured by an IED blast that caused shrapnel to penetrate the right occipital lobe of the skull. Once the blast zone had been secured I was air evacuated to the field hospital in Ballad, Iraq. There I underwent an emergency craniotomy of the right occipital and posterior fossa with duraplasty retaining foreign body, and a ventriculostomy. This blast in turn caused me to suffer from a severe TBI and cortical blindness. Later we learned it was the cause for more complex visual impairments, PTSD, hearing loss, pulmonary embolism, seizure and REM sleep disorders.

During this time my wife was contacted in Alaska and was told that I had been involved in IED blast and was in stable condition complaining only of neck injury. Roughly 3 hours later she was contacted by my commander who was with me in Iraq. He then told her that I had come through the brain surgery fine and was listed as very critical and once they could get me stable enough I would be air lifted to Landstuhl Germany. Once she was able to talk to my doctor at Ballad one of the first questions she asked him about was vision loss. My wife was told then my diagnosis was cortical blindness and a very severe TBI. Some time on the 21 October I was air evacuated to Landstuhl, Germany. There I underwent a re-exploration surgery before being transported on to the US mainland then on 24 October I was admitted to Bethesda Naval Hospital. Late on the evening of 25 October I was transferred to WRAMC's ICU. There I remained in a coma like state for 47 days.

Rehabilitation from Traumatic Brain Injury

I was then sent to Poly Trauma VA Center in Richmond VA for rehabilitation for over a year. In January of 2007 I was discharged from inpatient care at Richmond where I had spent approximately 1 month. My inpatient care consisted of extensive and long program with variety of specialists KT, PT, RT, OT, mental health, speech, and vision sessions. After my discharge I began constant out patient therapies in February consisting of KT, PT, RT, OT, speech, vision and mental health.

I went to the VA Blind Center in West Haven CN for eight weeks in October 2007 and received training for blindness with the VA providing me with adaptive technology computer devices and training. The VA Eastern Blind Rehabilitative Center was excellent helping me go through extensive and thorough training in living skills, manual skills, orientation and mobility training, and computer training. I spent approximately eight weeks going through extensive care and therapy to help me cope with everyday living with visual impairments and my TBI complications. I also found out how complex my visual impairments are and how to deal with them. What is difficult for most people to include my general doctors, and other providers is they don't understand the fact that my vision damage actually has nothing to do with my eyes themselves but stems from the damage to visual pathways impacting the parts of the brain that process my vision. My eyes are actually very healthy and were not directly damaged from the blast and it is my brain that will not allow my eyes to function appropriately. I have been left with no peripheral vision and about 8 degrees central core vision. The VA Blind Center was great help for me and my wife in the training they provided.

Technology and Communications Today for Disabled

But today I come before the Senate Committee because over the past two years it has become clear that there are big problems for disabled who suffer from blindness, deafness, or other problems in accessing the world in which we all live and work in now. Communication technology is advancing at rapid pace for all aspects of daily living, but those technologies are generally frustrating for many of us trying to use them.

While I was not a telecommunications technology expert before my injury, the frustrating thing about recovery has been the things everyone else takes for granted or depend upon for every day use are giant challenge to use for the sensory disabled. I would quote what the National Council on Disability (NCD) Chairman in early 2009 wrote as further evidence that should help explain the problems before us today.

21st Century Access to Technology Issues:

“The claim by some today has been made in recent times that emerging technology has made access to employment and independent living for the disabled easier than ever before.” According to NCD Chairperson John R. Vaughn, “The United States already has in place a string of federal laws and regulations designed to guarantee various levels of access to telecommunications products and services.” He states further “That such service nevertheless leaves gaps in coverage and are rapidly becoming outdated as the analog

technologies upon which they were premised are being substituted with technologies that are digitally and Internet-based.” As Congress, the Federal Communications Commission (FCC), and other federal or state agencies take on the daunting task of defining regulatory measures that will govern the deployment of these next generation communication technologies. Further he states “The problems include inaccessible user interfaces on consumer equipment, lack of interoperable and reliable text transmissions, and obstacles to video and web programming all threaten the ability of individuals with functional limitations to gain equal access to these products and services. We stress that new communications technology that some take for granted as improving our lives can add more frustration and new barriers for those with sensory disability impairments.”

Since my injury, using the television in my home has become an adventure at times. None of the on-screen menus are accessible to people like me, who are blind or visually impaired. I can't access the electronic program guide in order to see what shows are currently on or will be shown later in the evening. I am paying for this service and want to have access to it.

Likewise and a big fear for the blind is I have to rely on my wife to tell me what the emergency crawls are saying when it flashes on TV screen. This is a very basic but vitally important information service that I should also have access to through a text to speech platform because in natural disasters a blind person at home may have no other warning system to avoid danger from storm or hurricane.

Finally, the most difficult challenge that I have faced with technology has been identifying a cell phone that is accessible. I haven't been able to find a phone that suits my needs and is accessible. Not every person who is blind or visually impaired needs or wants to own a PDA. Blind Americans like me want to have options as consumers so that we can identify the most appropriate phone for our needs. Having accessible PDA's is important but also ensuring full accessibility to a wide spectrum of different phones is also vital.

I want to sincerely thank both Representative Ed Markey (D-MA-7) who introduced H.R. 3101 and especially today Senator Pryor and Senator Kerry today for trying to help individuals with sensory disabilities deal with the problems of access to new technology with the hearing today on Senate bill S 3304. Technology must be accessible for those who are disabled and federal agencies must be able to develop policy or regulations to ensure that these changes are included in new technology development before we are left even further behind.

I sincerely appreciate the chance to testify before your committee today and hope that I have helped put this into the perspective of just one blinded veteran and like thousands of other Americans with sensory impairments who want to be as fully independent as possible and I will take any questions you might have now.