



Canadian Hard of Hearing Association

North Shore Branch

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September and December by CHHA – North Shore Branch,
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Editor: Hugh Hetherington Issue 93 June 2016

Mountain Ear

Pres Mez

By Mike Hocevar

At the same time that the Liberal Party of Canada was fine-tuning its vision for Canada at the Fort Gary Hotel in Winnipeg, Hugh Hetherington and I were upstairs in the same hotel participating in the CHHA National's "Leadership in Action" conference and the 2016 AGM. Following the AGM we were delighted to hear that the CHHA National Conference and the 2017 AGM will be held in the West in Sidney, British Columbia next May.



From left to right, Glenn Martin, Executive Director, Myrtle Barrett, Outgoing President, and Lorin MacDonald, Incoming President of CHHA National

The workshops at this 2016 event held in the Fort Gary Hotel on the last weekend in May covered six areas of interest to guide our newly elected National Executive Board in the coming year.

The more than 50 delegates from across the country from Victoria B.C. to St. John's Newfoundland diligently thrashed out priority values for Membership, Advocacy, Communications, Branches & Chapters, and Fundraising through several workshops.

June Presentation

**Monday, June 13, 2016 7:00 pm
at the Summerhill**

135 West 15th Street, North Vancouver

Guest Speaker

**Christine Callaghan, M.Cl.Sc.,
RAUD, RHIP, CASLPO**

Audiologist with Starkey

Topic:

**Starkey's Synergy Platform
Hearing Aids.**

Everyone Welcome

Wheelchair and Hearing Accessible

For information call 604-926-5222

Congratulations to outgoing president Myrtle Barrett for spearheading this important exercise, and congratulations to newly elected president Lorin MacDonald who is delegated to lead the executive board in providing action and implementation of the initiatives proposed at the conference. This will be a work in progress designed for CHHA to carry out the important work on behalf of the hard of hearing community's interests.

Back home I am excited about a number of new initiatives that will be presented to you at our annual general meeting in September. The directors will be working on these at our summer board meetings and we also expect to have some very special guests at the AGM. It should be a pretty wonderful meeting, all in all. Also with this report, I want to acknowledge and thank our guest speakers and you, the members, who have continued solid support for our Branch's programs over the first few months this year.

The directors hope to see you at the June Summerhill presentation on Monday, June 13th and hope you all enjoy the summer to the fullest.

Please make special note that the June Summerhill presentation has been moved up a week due to renovations being started at the Summerhill. It is on the 2nd Monday rather than the usual 3rd Monday. Our guest speaker is Christine Callaghan, an Audiologist with Starkey Hearing Technologies. Christine will be talking about the exciting new Synergy hearing aid platform recently introduced by Starkey. I look forward to seeing you there.

April Presentation

Report by: Hugh Hetherington

An evening with Roger was the theme for our April presentation given by Dan Paccioretti, M.Sc., Aud (C), Western Canada Roger and FM Sales Manager for Phonak Canada. Roger is a military term with the meaning “message received and understood,” a phrase that has special meaning to those who are hard of hearing. Many of you will recognize that often the message is neither heard or understood and sometimes is heard and misunderstood. The Roger system is also Phonak’s replacement technology for its earlier and very successful series of FM and Dynamic FM products which included their EasyLink, SmartLink, and ZoomLink. Dan made the point that the new Roger system is not FM or Frequency Modulation, but rather DM or Digital Modulation. It operates in the 2.4 GHz ISM band, the same frequencies used for WiFi, Bluetooth, baby monitors and other systems. This is a global band dedicated to industry, science and medicine and can be used freely worldwide.

The Roger system, however, uses intelligent adaptive protocols and allows for ultra-low acoustic delay and reliable long range broadcast. It uses miniature receivers and provides for confidential transmission. This means that the transmission between transmitters and receivers cannot be intercepted by other systems and privacy is guaranteed. This was not the case with FM transmission, which only needed a receiver tuned to the same transmitting frequency in order to intercept transmission.

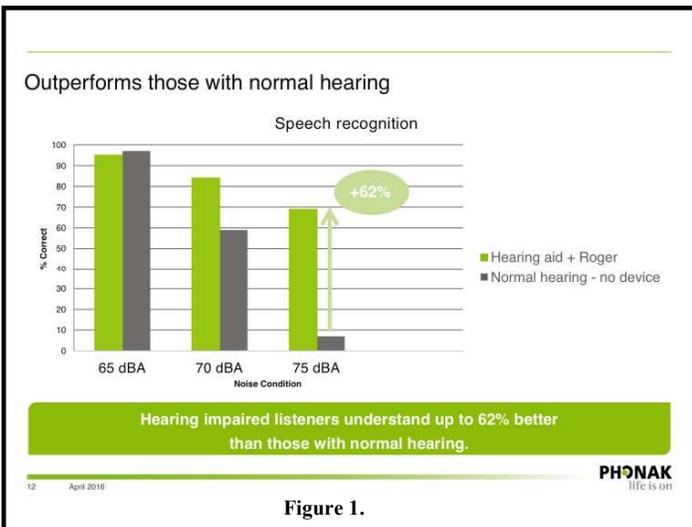


Figure 1.

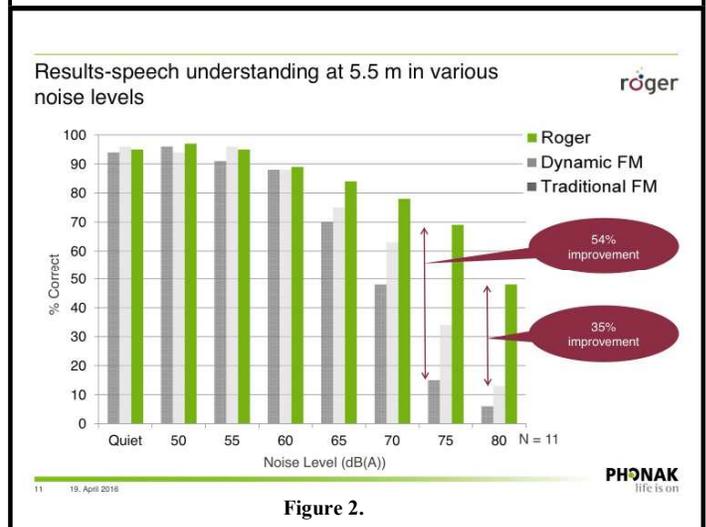


Figure 2.

The main advantage to Roger technology is due to its intelligent adaptive protocols in which the audio signals are sampled and digitized and sent as packages. Studies have shown that for a hard of hearing person to hear reliably in a noisy environment a +10 dB signal to noise ratio (SNR) must be maintained. With Phonak's previous Dynamic FM system this was achievable but diminished as the noise level increased. With the Roger system this SNR was dramatically improved. With Roger, the louder the noise, the greater the improvement in SNR. As for understanding speech in noise, which was one of Phonak's primary goals in developing the Roger system the results were impressive as demonstrated in figure 1 which shows how the hearing impaired listeners with Roger are able to understand up to 62% better than even those with normal hearing and in figure 2 which shows a comparison of speech understanding by percent correct comparing FM, Dynamic FM and Roger. This clearly shows that the higher the noise level the greater the advantage with Roger.

The microphone for the Roger system is the Roger Pen, so called because it looks like a pen. There are two versions, the Roger Pen (original) and now a newer version, the EasyPen. Both versions feature an accelerometer. An accelerometer is a small mechanical and electronic



component that measures accelerations in three dimensions (X, Y and Z). The accelerometer informs the Roger Pen continuously about its orientation with respect to the direction of gravity. It also tells the Roger Pen if it is accidentally dropped. Should this happen in use, the listener does not receive a "bang" in the ear when it hits the floor or table. The microphone momentarily shuts off when it senses this falling movement. Accelerometers are used in other applications, such as, smartphones. In the smartphone application, for instance, it allows for pictures to be automatically rotated so they are displayed in the proper orientation and never upside down. The Roger Pen also attenuates loud transient signals like clapping or tapping or knocking on the table. In addition, it attenuates noises generated by touching and rubbing on clothes as well as wind noise.

In the Roger Pen, the accelerometer allows the microphone to automatically adapt to one of three modes.

- (1) Interview style. This is when the pen is held in the hand and pointed towards a speaker. In this mode, in a noisy environment, the speaker's voice can be filtered out from the background noise. In a quiet environment, soft voices or speakers further away are automatically closed-up and the acoustically perceived distance can be reduced up to 75%.
- (2) Conference style. This mode is automatically selected when the Roger Pen is placed flat on a table. In this mode there are again two situations. In a quiet situation, the Pen will go into omnidirectional mode and pick up sounds from all around. In noise, the Pen automatically activates its beam former and picks up the voice of whoever is speaking.
- (3) Lanyard mode. This is for listening to a single speaker. In this mode, a voice activity detector attenuates the microphone when the talker is not speaking. This mode is useful when out walking with a partner or having someone who is giving a lecture wear it around the neck.

These three modes operate the same in both the full version of the Roger Pen and the EasyPen. In the full version, however, it is possible to lock the microphone orientation so that it remains in that mode until unlocked. This gives the advantage that the Roger Pen can be locked in directional mode even while lying flat on a table. The full version of the Roger Pen also features wideband Bluetooth. This allows it to be used with cellphones giving hands free operation and it supports headset profile for accepting and declining phone calls, voice dialing, and last number recall.

The Bluetooth feature also permits its use for transmitting your TV audio directly to your hearing aids. This is in conjunction with its docking station which also provides for charging. It automatically detects an audio signal even if the device is turned off, and powers down if there is no audio signal for 45 seconds.

The system also comes with an audio cord that plugs into the bottom of the pen and transmits audio from any multimedia device, such as an iPod, directly to your hearing aids. When used in this mode, the microphones are muted. The pen remains in this mode until the audio cable is unplugged or the Roger Pen is switched off.

In addition to the Roger Pen, there are other Roger microphones available.



There is the Roger Clip-On Mic. This microphone can be clipped on to the clothing. It is ideal for use by a partner or friend. It also includes an audio input for listening to multimedia and TV similar to the Roger Pen.

A newer addition to the Roger family is the Roger Table Mic. It is useful for people who participate in meetings. It is easy to connect and allows for full participation in



large meetings with multiple participants. With its rechargeable battery it allows for 20 hours of operating time before needing to be recharged. For very large meetings, multiple Table Mic's can be networked together to provide for larger table coverage.

While the Roger system works seamlessly with Phonak hearing aid models, it is also compatible to be used with most other hearing aid manufacturer's products. With Phonak aids a number of receiver options are available. Integrated receivers are built right into the hearing aids and become the battery door. There is also a universal Roger X receiver. This can be plugged into the ComPilot and operates

through the ComPilot neckloop.

For other manufacturer's hearing aids, including cochlear implants and bone anchored hearing aids (BAHA), there are also options. The Roger X receiver can be plugged into the streamers of other manufacturer's or plugged into their hearing aid via a boot or audio shoe. There is also a Roger MyLink Neckloop receiver that functions with all hearing aids that are equipped with telecoils.



The Roger components, microphones and receivers work seamlessly and automatically with each other. There are no channels to select or change. To connect simply press a button on the Roger microphone or it can be set up to connect automatically. The operating range is about 20 meters, but will be somewhat less if there are walls or room dividers involved.

If understanding speech in noise is a major problem for you, then maybe the Roger System is your answer. To find out more about Roger you can ask your audiologist or hearing instrument practitioner. Phonak have arranged with certain hearing clinics to be Roger Partners. At these clinics, the audiologists or practitioners have been specially trained on Roger and will work with you to determine if Roger is right for you. For information on the location of these clinics in North and West Vancouver you can contact the CHHA – North Shore Branch.

Thank you, Dan, for once again providing us with a very interesting and informational presentation.

Gotta Love that iPhone (Part 7)

By Hugh Hetherington

In this issue I want to describe another App for the iPhone (and other smart phones) that I have found to be useful. It is a bit of a departure from previous Apps that I have written about for the hard of hearing because it is not about hearing loss, assistive technologies or tinnitus, etc. In fact, it is a camera or photography App, but one with a difference.

The App is called "Office Lens" and is put out by Microsoft Corporation. In the description it is described as a pocket type scanner, but it is much more than a scanner. It takes photographs, scans docu-

ments, makes digital copies of things like business cards, receipts, etc. It claims to automatically recognize printed and handwritten text with its OCR function (Optical Character Recognition). You can search for words in images and then copy and edit them.

To make full use of all of the features, you really need to have Microsoft Word Apps on your iPhone and create a Microsoft Account. To use the photographic features of the App, however, this is not necessary.

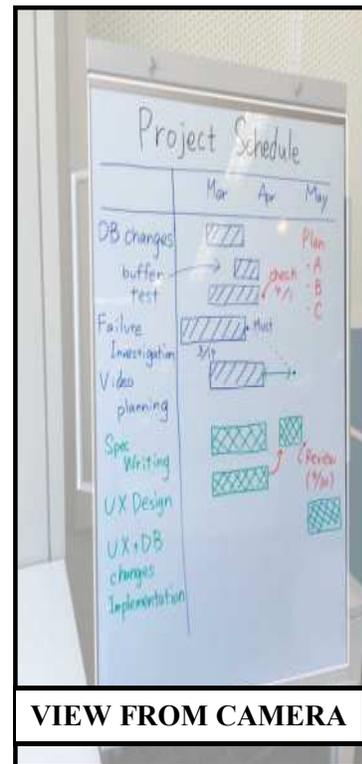
I will describe some of the scenarios where I have found it to be one of the most useful camera Apps that I have found. I make use of it quite regularly and can highly recommend it. You can get it free from the Apple App Store. It has four settings, “Business Card,” “Photo,” “Document,” and “Whiteboard.”

Have you ever found yourself wanting to photograph a picture hanging on the wall but it is in a glass frame and if you photograph it head on you will get your own reflection or unwanted light reflections in the photo? Or, the picture is too high up on the wall to get in front of to take the picture. Office Lens comes to the rescue. You can snap the picture at an oblique angle from either side, or from below or above. Office Lens will capture the rectangular picture in the frame and then expand it out to fill the frame and correct for the keystone distortion. To produce this action, you use the “Document” setting.

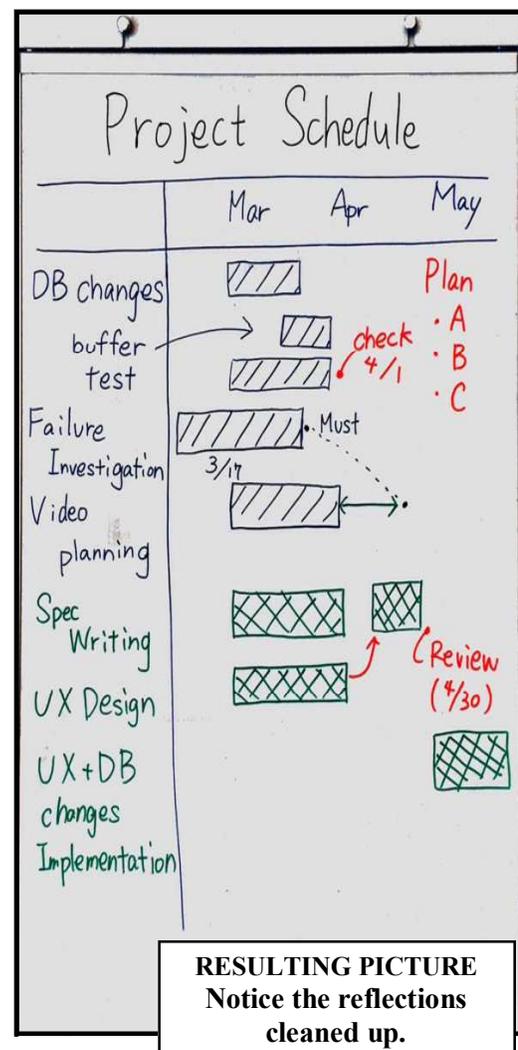
You are at a meeting or presentation where they are using a whiteboard or flip chart to record the proceedings. There is no need to get up and stand in front of the whiteboard or flip chart to record it. Just snap your picture from a side angle and the App will frame and capture the the content and expand it out to fill the frame, and again correct the keystone distortion. This also works for PowerPoint presentations projected on a screen or the on the wall. The setting for this can be either “Document” or “Whiteboard,” whichever gives the best result.

When set on “Photo” it, of course, just takes a regular photograph. “Business Card” setting is self-explanatory. It frames the business card and lets you store it in your photo library.

For most of the features, you will need a Microsoft account. It supports and works with the following Apps: OneNote, OneDrive, Word, PowerPoint, and Outlook. If you have a Microsoft account, you can



VIEW FROM CAMERA



RESULTING PICTURE
Notice the reflections
cleaned up.

also create a PDF file from the photographed document.

However, without the Microsoft account you can still store the pictures in your photo library or email the pictures. You can also take advantage of the amazing features that I have described.

Below is another example of a blackboard in a restaurant taken from below and off to the left, The resulting picture is a straight on view with no resulting distortion to the picture.

If you don't have your iPhone handy, you can even snap the picture from a regular camera and transfer the picture to an iPhone later and import it into Office Lens to get the same result.



Sound Advice

Presented by:

The Canadian Hard of Hearing Association

North Shore Branch

The group meets on the First Friday of each month from 10:00 AM to 12 Noon

at the West Vancouver Seniors' Activity Centre's Social Rec Room, 695 21st Street in West Vancouver.

No Meeting in July and August

When we meet, we discuss topics and issues dealing with hearing loss.

We look forward to seeing you there.

Bring a friend, a family member, they are welcome too.

Subjects to be addressed include:

Technology; Speechreading;

Effective Coping Strategies;

Behavioural Issues;

Improving Relationships;

Improving Hearing Environments

For Information call:

604-926-5222



CANADIAN HARD OF HEARING ASSOCIATION

NORTH SHORE BRANCH

MEMBERSHIP APPLICATION

Name: _____

Address: _____

City: _____ Prov. _____

Postal Code: _____ Phone: _____

Please mail application to:

CHHA—North Shore Branch

Attention: Treasurer

600 West Queens Road

North Vancouver, B.C.

V7N 2L3

Cheque enclosed

Money Order Enclosed

Charitable Registration No.

BN 89672 3038 RR0001

I wish to support the aims of CHHA and the North Shore Branch and enclose my \$40.00 annual membership fee. (National \$30.00, Branch \$10.00). Membership is paid annually from 1 October to 30 September.