THE BRAILLISTS FOUNDATION

USING BRAILLE ON iOS

Matthew Horspool: This episode of BrailleCast Extra is made possible thanks to a grant from the Winston Churchill Memorial Trust. For more information about the Trust, visit its website at wcmt.org.uk.

 Welcome back. This session is entitled Using Braille on iOS and it was recorded on Tuesday, 2nd February 2021. It was presented by me. I must apologise befor we get into this. There are some glitches in the recording which I'm going to present. I'm not entirely sure why there were so many audio glitches but, please, do be patient. Hopefully the quality of the audio is not so bad that you can't understand what's going on but we will endeavour to fix the audio issues for next week.

 The session is introduced by Holly Scott-Gardner.

Holly Scott-Gardner: I'm really glad to see so many of you back for another of our sessions, this one talking about using Braille on iOS. I know many of us have iOS devices, whether that be an iPhone or an iPad, so I'm sure that we'll all get a lot out of this.

 As per usual, this event is running in line with our moderation policy. We do keep everyone muted, just for now, because with so many of us in one room, there would be huge amounts of background noise if everyone could unmute themselves.

 We do run several other events at the Braillists Foundation. On a Thursday, we run our book club. On a Friday, we run our Open Forum. And we're now four weeks into our Braille for Beginners course on a Monday, which is really exciting. Our Braille for Beginners group has now finished learning Grade 1 and they'll be moving on to contracted Braille so we're really excited to have them doing so well.

 We advertise all of our events on our website. You can find them at braillists.org/events. This event, as with all of our events, is being recorded and the recording will be made available on our Media page at braillists.org/media. It won't go up straight after the event but it should be within the next day or so.

 You can also find our previous events on BrailleCast which is a podcast and you can find that by searching for BrailleCast on your podcast app of choice or on a dedicated device, like a Victor Reader Stream.

 If you do want to ask questions during the event, we ask you to raise your hand and I'm going to pass over to Ben, who is our moderator, who will explain a bit about that. Hi, Ben, how are you today?

Ben Mustill-Rose: Not bad. Really looking forward to this one, actually. I think for me, Braille on iOS is the sort of thing where I've done it before a little bit, I've got my Orbit paired, but I don't know if I'm doing it necessarily in the best way possible, so I'm really looking forward to learning.

 As Holly said, if you would like to ask a question at any point and I'm sure there'll be plenty of times for questions, you can raise your hand in a few different ways depending on what device you're using. So if you're using Windows, you can press Alt-Y or Option-Y on the Mac. If you're dialling in over the phone, it's star-nine. Or if you're on an iDevice, like an iPad, iPhone or maybe even an iPod Touch, if you press the More button which is in the bottom right of the screen, you'll then find the Raise Hand button. To give people a quick bit of background on how we usually do that, we like to try and give people as much warning as possible. So what we'll usually say, for example, is, "Okay, now we're going to go to Matthew and after Matthew we're going to be going to Holly," and that just gives people a little bit of time to get ready.

Holly Scott-Gardner: Thank you so much. So we will give you plenty of opportunity to ask questions.

 Now I am not leading this session. This session is being taught by Matthew Horspool. Matthew is a member of the Braillists Foundation board. He's also worked as a Braille transcriber and he's heavily involved with Braille in the UK, so a great person to be leading this session. Hi, Matthew.

Matthew Horspool: Well, good evening, Holly and good evening, everybody. Hope you're all doing well. It's a pleasure to be here leading the session. This is only the second Braillists sessions that I've led. I think I've been at pretty much all of them but it's only the second one that I've actually led.

 The format is basically going to be the same as most other Braillists events of this type. I'm going to go through quite a lot of information relatively quickly and then I'm going to stop and ask if there are any questions and answer some and then I'm going to go on and do a bit more information and some more questions and so on and so on.

 The priority of this session is to teach people how to use a Braille display in conjunction with their iPhone, iPad or iPod Touch. I will be using an iPhone and I'll be talking a lot about iPhone. Don't get hung up on that. iPad or iPod Touch would also work just as well in most of these cases.

 I'm going to try to keep it fairly generic, however there's got to be a Braille display for demonstration purposes and it might as well be an Orbit Reader because that's got such a huge market share. So it will be the Orbit Reader that I'll be demonstrating on and I'll probably give a bit more attention to the Orbit Reader because, as I say, of the market share.

 Any display should work as long as it's got Bluetooth. It really must have Bluetooth. You can't connect your Braille display via USB to your iPhone or at least not officially. So a Bluetooth Braille display should work just fine. Also if your Braille display has an input keyboard, you will really make the most of this session. There are some very old Braille displays like the original Humanware Brailliant that don't have input keys but that do have Bluetooth. You can use the original Brailliant with the iPhone but obviously the functionality that you get will be quite limited by virtue of the fact that you can't control the phone from the display.

 So I'll be talking about Perkins input keys for this session because they're by far the most common. If you're one of those lucky people who has a Mantis Q40, you'll need to use Bluetooth keyboard commands and this is beyond the scope of this session really but contact us as help@braillists.org if you're really stuck and we can point you in the direction of an article.

 Now, the thing you need to know, before we even start, is that your Braille display needs to be in a mode that can accept a Bluetooth connection. You could use a Braille display. You could also use a Braille notetaker. And I'm just going to go through it on a few devices, very quickly, just to show you a few of the different ways in which you do it. This is not comprehensive. You'll need to refer to your device's manual.

 Just as a starting point, I've got my BrailleNote Apex, my trusty BrailleNote Apex that I've been using for many, many years and it's at the main menu. We need to find "Terminal for Screen Reader" in the main menu or press Backspace with Enter with T. And in that case it's on Bluetooth. If it wasn't, I'd press the letter B and press Enter. And now the BrailleNote Apex is set up and ready to connect to the iPhone. That's all we're going to see of the BrailleNote Apex today but I just wanted to put that out there, how to find and use the terminal mode. I'll just put that BrailleNote away.

 Similarly on the Humanware Brailliant displays, I have a Humanware Brailliant display here and I'm going to turn it on. I'm in the menu. If I double-tap the menu button again, I'll get into Edit mode so it says Humanware Brailliant BI 40. If I press the rightmost thumb key, I'll move down to Battery and then again down to Channel which is currently set to USB. If I press the thumb key second in from the right, that will change it to Bluetooth and if I press the outer thumb key again, you should have heard the Braille display restarting in Bluetooth mode. So we now have the Brailliant set up in Bluetooth and ready to be paired to the iPhone.

 So you're starting to get the idea. Obviously these steps are not foolproof. If you don't have a Humanware display, you're obviously not going to control it in that way but that's hopefully a good start.

 I'm going to switch over to the Orbit now which has been patiently charging up, attached to my computer, and I'm going to turn the Orbit Reader on. Of course the beauty of the Orbit Reader is you can hear it which is really quite amazing. It's very easy to access the Bluetooth setup of an Orbit Reader. The way to do is to press space with dot 7 with dot 4, and to do it, you need to be in the stand-alone mode first. So press the Select key and the left arrow key and then press space with dot 7 and dot 4 and that will put you into Bluetooth mode.

 So, here we are with our Braille devices all ready and set up to connect to the iPhone. I must apologise for the slight popping noise that we're getting through the mix. This is to do with the way that I've connected my phone for demonstration purposes. Hopefully it won't be too distracting. This is where we get to the real meat of the operation though. I'm going to unlock my phone. And I'm not going to worry too much about all of these calendar notifications and things like that, and I'm going to ask Siri to, "Open VoiceOver Settings."

VoiceOver: Here are the Voiceover Settings.

Matthew Horspool: Okay, so I'm in Voiceover Settings. I'm going to find Braille, it's about halfway down on the screen, I think. There we go, and double-tap. Okay. Now, Bluetooth is obviously on already at this point but if Bluetooth wasn't on, you'd need to turn it on, but we'll assume Bluetooth is on. If I go to the bottom of the screen...

VoiceOver: Choose a Braille Display.

Matthew Horspool: ...I can see "Choose a Braille Display" and I can swipe along.

VoiceOver: In progress. Brailliant BI 40, 000230.

Matthew Horspool: Then I can see my Brailliant BI 40.

VoiceOver: Orbit Reader 20.

Matthew Horspool: And I can see my Orbit Reader 20.

 Now I'm actually going to pair the Brailliant BI 40 first because it's an older display and some interesting things will happen. So let's go back to the Brailliant BI 40 and double-tap on that.

VoiceOver: Brailliant BI 40, 00230, Brailliant BI 40, 002307, pairing. Brailliant BI 40, 002307 would like to pair with your iPhone.

Matthew Horspool: Now, on modern displays you shouldn't actually get this prompt but what you have is this and if you swipe right...

VoiceOver: Confirm pin code 060497 is showing on Brailliant BI 40, 00--

Matthew Horspool: Now, the thing I need to tell you is that that pin code is not showing on Brailliant BI. I don't care. I'm going to say that it is.

VoiceOver: Cancel. Button, pair, button.

Matthew Horspool: So double-tap on Pair.

VoiceOver: Brailliant BI 40, 002307.

Matthew Horspool: And you'll have heard a funny little noise there and my Brailliant BI is now showing what Voiceover is saying. It's showing Brailliant BI 40, 002307. If I pick up the Brailliant BI 40 and look at the serial number on the back, yes, sure enough, I can see 65000002307. So, there's some consistency there. This is where it gets its Bluetooth name from, 2307.

 Now, I actually don't want to use the Brailliant BI for this demonstration because I actually want to use the Brailliant BI with my computer. So, I'm actually going to swipe right now and find the Orbit Reader.

VoiceOver: Orbit Reader 20, 5076, Orbit Reader.

Matthew Horspool: And double-tap on that and pair with the Orbit Reader. You'll hear that it disconnected from the Brailliant and hopefully...

VoiceOver: Selected, Orbit Reader 20, 5076, connected.

Matthew Horspool: ...there we go. It's now connected to the Orbit Reader and so my Orbit Reader is all paired with my iPhone and ready to go. So a very painless process, you simply put your Braille display into Bluetooth mode and pair it in the way that I've just described.

 So, it's paired. Now what to do with it? I'm going to try my level best to put my phone to one side, so not touch my phone at all and drive the whole of the phone from the Braille display from here on in, so you get an idea of what's going on.

 I'm going to introduce you to two commands straight away, which are very useful. The first is the Back button. You might be familiar with the two finger scrub gesture on iOS. This can be replicated in Braille by pressing space with B.

VoiceOver: Braille. Orbit Reader 20, 5076.

Matthew Horspool: And there we go, I'm on Orbit Reader and so on and so on. If I press space with B again.

VoiceOver: Accessibility features help you customize your iPhone to your individual needs.

Matthew Horspool: Okay. So here I am and so that's the Back button and that's working very well and it's just taking me further and further back out of Settings.

 If I want to go to somewhere more interesting, like the Home screen, for example, funnily enough if space with B was back, then guess what? Home is space with H.

VoiceOver: WhatsApp, one new item.

Matthew Horspool: And here I am on my Home screen. And on the Braille display, it's got this little box of four signs at either end of the display with the word "Home" in the middle because VoiceOver said, "Home." That flashed up for two or three seconds and then disappeared and now I can see "WhatsApp, one new," and that's all I can see is, "WhatsApp, one new."

 The reason why I can only see, "WhatsApp, one new," is because I'm on a 20 cell display. So what I'm going to do is use the panning keys of the Braille display and now I can see item. The Braille display is literally just showing me whatever VoiceOver is speaking.

 If I want to move through the Home screen, I have to swipe left and swipe right. Well, let's try swiping right on the Braille display. If you're familiar with notetakers, you'll know how this works. You need to press space with dot 4.

VoiceOver: Voice screen reader.

Matthew Horspool: And again.

VoiceOver: Mail. 32 unread emails.

Matthew Horspool: And again.

VoiceOver: [UNSURE OF WORD].

Matthew Horspool: And again.

VoiceOver: Settings.

Matthew Horspool: And so on and so on. You can hear that that moving right across the screen is working very well with space with dot 4. Guess what? If you want to move left, space with dot 1.

VoiceOver: Clock, 19:45. Mail, 32 unread emails. Voice Screen Reader. WhatsApp, one new item. WhatsApp. WhatsApp. WhatsApp.

Matthew Horspool: And I can't go any further. So that's space with dot 1.

 If you're a long time notetaker user, you'll know that the command to go to the bottom of a document is space with dots 4 5 6. So let's try it on the Home screen.

VoiceOver: Dock, messages.

Matthew Horspool: And you'll hear I'm in the dock on the last position on the dock so that's taken me to the bottom of the screen.

 Similarly space with dots 1 2 3 ought to take me back to the top of the screen.

VoiceOver: WhatsApp, one new item.

Matthew Horspool: So, hopefully you're starting to get an idea now of just how easy it is to use the iPhone with Braille or at least just how easy it is to get started. On the Orbit Reader, you've got this little joystick type setup with the left and right arrow keys and the up and down. Similarly I can press the right arrow to move right, the left arrow key to move left.

VoiceOver: Mail, 32 unread emails.

Matthew Horspool: If I press the down arrow key...

VoiceOver: Edit mode.

Matthew Horspool: ...that's the equivalent of swiping down, if you like. This won't work on all Braille displays because not all Braille displays have down arrow keys. There will be an equivalent key to move down on your particular Braille display and there'll be more information about how to find those commands at the end of this session. On the Orbit Reader, it's the down arrow. If you press the up arrow key...

VoiceOver: Activate default.

Matthew Horspool: ...it will move back up again. The last thing I'd like to demonstrate before I break for questions is the Item Chooser. Now, if I want to get to, say, Safari, you would think, wouldn't you, that I can type the letter S. In fact...

VoiceOver: S.

Matthew Horspool: ...I've typed the letter S and it's done nothing. I can try typing a bit more.

VoiceOver: A-F-A.

Matthew Horspool: And it's still not done anything. So first letter navigation, for better or worse, doesn't work on the Home screen. So I want to get to Safari, there's a few things I can do. I could just swipe right until I get to Safari. Or I could use Spotlight, which I'm not going to cover here but I could use it. Or I could use something called the Item Chooser. The Item Chooser is a bit like the links list in JAWS or the elements list in NVDA, for example. So to get to the Item Chooser, I press space with I.

VoiceOver: Search field.

Matthew Horspool: And I'm in a search field. Now the search field did not say, "Search field is editing," therefore I need it to actually start editing. Normally on the screen I would double-tap to go into Edit mode. Of course you can't double-tap on the Braille display, but what I can do is press a cursor routing button or on the Orbit Reader, because it doesn't have a cursor routing button, I can press the Select button.

VoiceOver: Search field, editing. Character mode. Insertion point at start.

Matthew Horspool: And if I type "Safari"

VoiceOver: S-A-F-A-R-I.

Matthew Horspool: Okay, now I need to move round.

VoiceOver: One item, Safari.

Matthew Horspool: There we go. One item, Safari. And if I press--

VoiceOver: Queue. Quebec. Search field is editing. Safari. Character mode. Insertion point at end. Safari.

Matthew Horspool: There we go. That's the one item. We just needed to press space with dot 1 and space with dot 4 a few times until we get it and press the Select button again, to double tap.

VoiceOver: Zero items.

Matthew Horspool: For some reason, that didn't work, of course. It never works properly in a live demonstration, does it?

VoiceOver: One item, Safari. W. Q. Safari. Safari.

Matthew Horspool: Now, I've double-tapped on Safari. What it hasn't done is launched Safari. It's just put me on Safari on the Home screen. If I press space with dot 4...

VoiceOver: Settings.

Matthew Horspool: ...it'll move to Settings. If I press space with dot 1, it'll move back to Safari. Well, it would. Okay, it seems to have lost its place. There are some bugs currently in iOS which mean that things are not working quite in the way that they should, as far as Braille is concerned, and I think I might have just found one of them. Maybe it's by design.

 But, anyway, that's the idea behind the Item Chooser. While I regroup and start to look at what I'm going to cover next, I'm going to offer people the opportunity to ask any questions, with apologies for the audio setup. I'm going to adjust that now.

Ben Mustill-Rose: No problem. Thanks for that, Matthew. I don't know about you, Holly, but actually just hearing Matthew going through that and actually hearing VoiceOver as he's talking about it, I find really works well for me because I don't know, sometimes I'll be reading instructions and they'll be useful but actually sometimes what I want is someone sitting there and actually doing it live, so to speak, if they're brave enough, while they're describing how to do it, to me. So very grateful for that.

 So, we'll just let people have a moment or two to raise their hands. We've already got a couple but as a quick reminder, it's Alt-Y on Windows, Option Y on the Mac, star-nine if you're dialling on a phone or if you're on an iDevice like an iPhone, iPad or iPod Touch, you can press the More button in the bottom right of your screen, then find the Raise Hand button.

 So a good selection of hands raised now. We're going to go to Lyle first. Then after Lyle, we're going to go to Marsha.

Lyle: Thank you. Two questions. One, what's the difference between the commands space with F versus space with 1 2 dots for Item Chooser?

Matthew Horspool: That's a very good question and I don't know the answer but it's a good opportunity to introduce a key stroke I was going to introduce a bit later which is the key stroke for Keyboard Help which is space with K.

 My phone has just locked itself. Let me unlock my phone. Can I type my pass code in Braille? This will be fun, won't it?

Ben Mustill-Rose: It will also be interesting to see if it says it out loud but I guess you've got some control over that there.

Matthew Horspool: Let's press space with K for Keyboard Help.

VoiceOver: Starting Help. To stop Help, perform a four-finger double-tap or two-finger scrub, or press Space on the keyboard.

Matthew Horspool: Start by pressing space with I.

VoiceOver: Dot 2, dot 4, spacebar, show Item Chooser.

Matthew Horspool: Okay, so that shows the Item Chooser. What was the other one you said? Space with F, I think you said. Let's try that.

VoiceOver: Dot 1, dot 2, dot 4, spacebar. Item Text Search.

Matthew Horspool: So I guess that's some sort of Find feature.

VoiceOver: Dot 1, dot 3, spacebar. Start Help.

Matthew Horspool: Interestingly, to get out of Help, I actually need to press space with B, not space with K.

VoiceOver: Stopping Help.

Matthew Horspool: Let's try space and K.

VoiceOver: Enter Search Text.

Lyle: And the second question, sometimes I've noticed that some of [UNSURE OF WORD], the commands don't work. Is it related to the display specific or--

Matthew Horspool: So most of the commands are general but you might find that on certain Braille displays, certain commands don't work. The example that I was going to give of this--

Lyle: I use the Polaris and some of the commands don't work.

Matthew Horspool: They might not. I'm a BrailleNote Apex user and when I try using the BrailleNote Apex, space with H for Home doesn't work because space with H is the command for Help. So there are alternative commands and if you go on the Apple website, and I'll post some links at the end of the session, there will be a command list for your Braille display, for the Polaris, that will show the alternative commands, if some don't work in the way that you want them to.

Lyle: Thanks.

Ben Mustill-Rose: Thanks for that, Lyle. We're going to come to Marsha next and then after Marsha, we're going to crack on and go to Mark Ellis.

Marsha: One of the things that I have found with the Orbit 20 particularly is that there are a couple of ways to do double-taps, once you have Bluetoothed your thing to your iPhone and one of the things I found is chord E, as in Every Good Boy Does Fun, and that also does a double-tap. And also another way to do it is chord dots 3 and 6, which is also the equivalent of a double-tap.

Matthew Horspool: Yes, thank you for that. There are common commands and there are also commands that are specific to the Orbit Reader. So, yes, you're right and it was lax of me not to say it. Space with dots 3 6 is I believe the common command that will work on any Braille display for a double-tap. The Select key on the Orbit Reader [INAUDIBLE].

Marsha: But if that doesn't work, chord E also works.

Matthew Horspool: That's very interesting. I didn't realise that chord E worked. That's very good to know. Thank you.

Ben Mustill-Rose: I think that's why it's really useful to have an audience for stuff like this, because it's impossible to know everything and so it's really nice to hear all these tips and different ways of doing things from everyone. Thank you for that, Marsha. Sorry for moving on so hastily but we do have quite a few hands. So we're going to come to Mark Ellis next and then after Mark, we're going to come to Adeel.

Mark Ellis: I've got the Orbit Reader 20, in fact I've just got mine back the other day. I had to repair it. I wasn't quite sure how to do it, so I looked-- but also you can actually do it from the-- without switching it on first, I think you can go to the Braille settings under VoiceOver and then if you turn it on, without going into Bluetooth mode, it apparently finds it first as well. That's the way I managed to pair it as well.

Matthew Horspool: Yes. There's definitely more than one way of doing things.

Mark Ellis: I didn't realise you could go back and forth with space and dots 4 and dots 1. So, very useful. Thank you.

Ben Mustill-Rose: Thanks for that, Mark. So we're going to come to Adeel next and then we're going to come to Jean.

Adeel: I've got the Orbit Reader. I find the input keyboard on the Orbit not as accurate a lot of the time. So when I use the command to move to the next control sometimes, it'll jump two controls ahead rather than go to the next control or sometimes when I'm typing, it will do weird stuff. So I was just wondering whether that was me or other people are having those issues. I was reading about the Orbit Writer and people seem to be having issues with that.

Matthew Horspool: It's good of you to check. I don't know if other people are having the issue but I know I certainly am. It was something that was going to come up sooner or later in this demo. Very occasionally, more frequently than I would like, if you're doing something on the Orbit Reader, it will ghost and it will do it twice or sometimes even three times. I have it when I'm doing rotor gestures quite often. I don't know whether it's an Orbit problem or whether it's a VoiceOver problem. I would suspect it's probably an Orbit problem because I haven't had the problem on any other display but that's not to say that there aren't other displays that also have that problem.

Adeel: Yes, I was reading about the Orbit Writer which is just a keyboard for use with the iPhone and on reviews, people seemed to be having similar issues. I'm assuming it's something to do with Orbit, but thank you very much.

Matthew Horspool: Yes. Lyle has just put in the chat that he's having the same issue as well.

Ben Mustill-Rose: Technology is never perfect unfortunately. We're going to come to Jean next and after Jean, we're going to come to Jess.

John: It's John. Very interesting and useful information and I appreciate you doing this. I'm wondering, it all seems very Apple-centric and I'm wondering if Android is going to be covered at all at any point.

Matthew Horspool: Not in this session. However watch this space because you're not the first person to have asked for this and we are looking into ways in which we would be able to do Android in the future.

John: Good. Okay, thank you.

Ben Mustill-Rose: We're very actively looking into that so I would be very surprised if there wasn't an Android session at some point soon. We're going to come to Jess next.

Jess: I've got the VarioUltra reader and I've got a little quirk. When I go to connect it with my iPhone and on the VoiceOver on the Braille settings, the first time I tap on it, it says, "Not connected," and then when you say, "Okay," to then try again, it somehow automatically connects itself and it reads, "Not connected," on the Braille display. I think you said that there was going to be links to different Braille displays and a list of command.

Matthew Horspool: So there's a very comprehensive list on the Apple website of every Braille display that the iPhone supports with a link to all of the commands that are supported on that Braille display. So the VarioUltra would be listed on that list.

Jess: So I just go to Apple's website for that, do I?

Matthew Horspool: You could probably Google it, yes, but there will be a handout, like with all of these sessions, and the link will be in there if it's easier to just wait for that to come out.

Ben Mustill-Rose: Thanks for that, Jess. I'll just give Matthew a few seconds to regroup for the next part of the session. Holly, I don't know if you wanted to come in on this, but for me one of the really nice things about Braille on iOS is what Matthew demonstrated earlier, the fact that he was able to take his phone, put it to one side and just use a Braille display. That's the best of both worlds. You often get semi Smart functionality on Braille notetakers where you can browse the web and read books and that's really useful but, to be honest, in some ways you just can't beat having that flexibility of a Smartphone. I know that I read quite a few books with my iPhone and my Orbit.

Holly Scott-Gardner: Personally I particularly like it for reading. I think it's really useful in that situation. Certainly pairing it with something like the Kindle app because you can get millions of books on Kindle and then be able to access them in Braille which is just something that not so long ago was unheard of.

Ben Mustill-Rose: Definitely. What's really nice is that some people look at iPhones and they think, oh, these are quite expensive and let's be honest, they are, but you could buy an iPod Touch, for example, which in the UK starts at £199 which is still a lot of money but it's clearly not £1,000 which is what some of these newer phones cost. Then you have a really accessible reading system, because the Touch can download apps, so as long as you don't need to make phone calls, then you're ready to go and particularly if you've been lucky enough to take advantage of one of the grants in the UK for a free Orbit Reader, then that's a really compelling setup for me.

Holly Scott-Gardner: I completely agree. I think with more affordable Braille coming along, which we're seeing more and more, it's going to change things so much.

Ben Mustill-Rose: It's amazing, isn't it? If you told me a few years ago that you could get a 20 cell Braille display for £400 odd, it would be, "What? No, no, you can't." But it's here and it's not perfect, it's a first generation product but actually it's pretty good.

 So we'll just ask Matthew if we're ready to go.

Holly Scott-Gardner: We do, by the way, have a couple of questions in the chat.

Ben Mustill-Rose: Shall we do questions, Matthew, or do you want to press on?

Matthew Horspool: I did see the one from Suzanne Procter which I can answer very quickly. Yes, the Mantis Q40 does work with the iPhone. I'm just not doing it here because I don't have one and I haven't tried it and I won't be able to demonstrate it but, yes, it does work and there are VoiceOver Bluetooth keyboard commands that will work with the Mantis Q40.

Holly Scott-Gardner: What I would say in terms of the Mantis as well, I do have one, so if you're looking for resources, maybe email us at help@braillists.org and that can get forwarded onto me because I'm using that as my primary Braille device at the moment. So I'm happy to deal with Mantis-related requests.

Matthew Horspool: Holly, I'll let you reply to Suzanne in the chat window. While we do that, I think I'll probably crack on, unless there's any burning questions.

Ben Mustill-Rose: We have just over 20 minutes to go.

Matthew Horspool: There's quite a lot that I haven't managed to cover that I would have liked to have covered and perhaps there's a possibility to do a second session on this at some point.

 For now, I'd like to jump straight into Messages and I'm in Messages at the moment and I'm going to scroll right, with space and dot 4, like we showed before, and I'm going to hope. So that's a message from Richard and I'm going to go one more.

 Now the reason why I did this is because this is a junk message so it doesn't matter if I accidentally send it a text message of junk because it's not going to reply anyway.

 So let's double-tap on that and let's try these other key strokes, space with dots 3 and 6.

VoiceOver: Messages.

Matthew Horspool: Hey, and it worked. So I'm going to go down--

VoiceOver: Camera, button, apps, hidden, message, text message, text field.

Matthew Horspool: And I'm going to double tap on that.

VoiceOver: Message, text field, editing, text message, insertion point at start.

Matthew Horspool: And I'm going to type some text in Braille on the Braille keyboard and you'll see how it works.

VoiceOver: Dot 6, H-E-L-L-O, full stop, space, Hello.

Matthew Horspool: Nice and simple, in Grade 1. You can toggle keyboard Echo, I'm not going to talk about that here but you can do it and the information is in the handout.

 Let's try some Grade 2.

VoiceOver: Dot 6, dot, U, space, icon.

Matthew Horspool: And already...

VoiceOver: Space.

Matthew Horspool: ...it was starting to look like it's not working quite so well. So this is the sort of problem that we have on the Orbit Reader.

VoiceOver: Space, space. Space, word.

Matthew Horspool: There we go, just about.

VoiceOver: Space, space. Space, space.

Matthew Horspool: Okay, I am using iOS 14.4 and there are some bugs in iOS 14.4. This is very embarrassing for which I apologise. Typing problems notwithstanding, I wanted to really show how to edit text. I'm not so bothered about typing text in. I'm more bothered about editing it.

 So if I press space with dot 3, it will behave as I expect it to as a long-time notetaker user and move by character.

VoiceOver: D-S-O-H-W, space, space, space, comma, D-R-O-W.

Matthew Horspool: And if I press space with dot 6...

VoiceOver: O-R-D, comma, space, space, space, W, H.

Matthew Horspool: ...it will move forward by character. This is where the similarity with notetaker ends.

 The thing about Braille display usage on an iPhone is that every Braille command that you type is mapped to a touch screen gesture. So space with dot 5 will not move forward by one word. Space with dot 2 will not move backwards by one word. What I'm instead going to do is press space with dots 5 6.

VoiceOver: Speaking rate.

Matthew Horspool: And again it's ghosting but what it's doing is going through the rotor. I've actually got to speaking rate so what I want to do is press space with dots 2 3 to go back to the previous rotor item.

VoiceOver: Words.

Matthew Horspool: Okay. I'm on Words. So now if I press space with dot 6--

VoiceOver: [UNSURE OF WORD].

Matthew Horspool: Okay, and if I press space with dot 3...

VoiceOver: Word, [PHONETIC: night], icon, hello. Hello, icon, [PHONETIC: night], word.

Matthew Horspool: And you can see the sentence that I was trying to write, which was, "Upon my word, whose are these and those?"

 So let's try and get rid of some of these spaces. If I go back, so space with dots 2 and 3--

VoiceOver: Mentions, characters.

Matthew Horspool: Yes, okay. So now I'm on characters and I can do space with dot 3 by itself.

VoiceOver: E-O-H-W.

Matthew Horspool: And now I can just press the backspace key as normal.

VoiceOver: Space, space, whose.

Matthew Horspool: Okay, wonderful, and I've deleted too many space so I'll press the space bar again to put the space in there.

VoiceOver: Whose.

Matthew Horspool: So I'm now upon my word whose and I've got rid of all of those spaces.

 If Grade 2 is really a problem, you can press space with the lower h...

VoiceOver: Braille input, six dot.

Matthew Horspool: ...and that will put it into six dot Braille entry mode.

 Let's see [VOICEOVER] if that's a bit more reliable. Whose--

VoiceOver: A-R-E, space, T-H-E-S-E, space, these, [INAUDIBLE], question, space, those.

Matthew Horspool: Okay, so for the time being, it would seem that Grade 1 input is significantly more reliable than Grade 2 input. What's very nice about this is that on the Braille display, I can still see it in Grade 2, so I can see dots 4 5, WH, for "whose", the AR sign in "are", dots 4 5 and the THE sign in "these" and so on and so on. Even though I'm typing in Grade 1, the Braille display is showing me Grade 2.

 Then if I want to send this garbled message, I can do space with dot 4...

VoiceOver: Send, button.

Matthew Horspool: ...to swipe right and that'll take me to the Send button and I can obviously press the double tap gesture and that...

VoiceOver: Send message.

Matthew Horspool: ...will send it and it will probably bounce back and give me an error because this is sending to a nuisance call number but never mind. Nuisance calls have got to be good for something.

 The last thing I wanted to do, because I'm aware of the time, is I just wanted to show that you can basically now do everything that you want to do with your Braille display. It might be a bit slow. You might want to look at those command lists that I talked about earlier on and you might want to have a look at ways of doing things more effectively, because there really are lots of things you can do. If I press space with H to go to the Home screen...

VoiceOver: WhatsApp.

Matthew Horspool: ...I can move to the next and previous page of the Home screen. I can go to the notification centre. I can go to the status bar. Space with S will get me to the status bar. There's all sorts of things you can do. I'm not going to cover too many of them now. I am going to try to go back to the fateful Safari, just to show that things are possible.

VoiceOver: WhatsApp, WhatsApp. [INAUDIBLE]. Safari.

Matthew Horspool: So let's see. Here's Safari.

VoiceOver: Safari, Zoom logo, [UNSURE OF WORD], Landmark, Zoom logo, Image.

Matthew Horspool: Let's press space with L for the top.

VoiceOver: Format Options, button.

Matthew Horspool: And now let's scroll right.

VoiceOver: Address, [INAUDIBLE].

Matthew Horspool: And double tap.

VoiceOver: Address, Address, Text Field, is editing. H-T-T-P-S slash, slash--

Matthew Horspool: And now I'm going to press the backspace.

VoiceOver: Selection deleted.

Matthew Horspool: And that will delete the whole thing. I'll just check that I am in still in six dot Braille mode because it's obviously more reliable. I'll try--

VoiceOver: W-W-W, full stop, B-R-A-I-L-L-I-S-T-S, full stop, O-R-G, W dots 4 5, slash, M-E-D-I-A, W-W-W.

Matthew Horspool: I actually pressed the Enter key. That worked that time which is rather nice. I think--

VoiceOver: Service log in, Google, Address, Google.co.uk.

Matthew Horspool: It didn't work. Why did that not work? Of course it always happens, doesn't it? [VOICEOVER]

VoiceOver: Safari cannot open the page because the address is invalid.

Matthew Horspool: Well, clearly browsing web pages is not going to be working. I think what I'm going to do is take some more questions and while I'm taking questions, I'm actually going to get to a web page and show that it does actually work. This is clearly not a very good shop window for browsing with the iPhone today, but believe me, when you actually get used to it, it does work when you're not using a version of iOS that has Braille bugs in it. So I'll leave it to Ben to acknowledge some hands.

Ben Mustill-Rose: I think it's one of those things where communities like this and other communities as well, like AppleVis, for example, these are incredibly important because unfortunately these pieces of technology do have bugs in them and actually if you're dependent on Braille in iOS, it really does pay to do a bit of research online whenever a new version of iOS comes out, just wait for a few days and just make sure that nothing's broken that will impact your ability to use your devices. It's a real shame that we have to, but unfortunately we are in a situation where that is something that is actually quite a good idea.

 So we have a few hands. We've got three at the moment and then we'll come to Holly with some questions in the chat. I'm going to prioritise people who haven't spoken yet but we will make an effort to get to everyone.

 So we're going to come to Theo first and then after Theo, we're going to come to Mike.

Theo: Braille screen input on an iPad, I was wondering whether that's possible or whether there's a way to do and whether the size of the iPad screen makes that not possible.

Matthew Horspool: It's definitely possible to do Braille screen input on an iPad. You can definitely do it and in fact it's even better on an IPad because you can do it with eight dot Braille.

Ben Mustill-Rose: Thanks, Theo. We're going to come to Mike and then we're going to come to Lyle.

Mike: I'm watching this from the States and found your information, thanks to Matthew posting on one of the lists that I'm a member of. I will definitely be joining in future. Curious to know, I use a QBraille XL from HIMS. I was looking to see if they had a list of commands that you could utilise specific to that Braille display because so far the ones that I use are basically common ones, Braille commands that would work on just about any device. Do you know or are you aware of any such list? I looked and did a Google search a moment ago to see and the list of HIMS Braille displays doesn't even include that one, that Apple allegedly supports. So is there a place where I could find that information? Does anyone know?

Matthew Horspool: Well, it's quite possible that Apple just doesn't support the QBraille and therefore you're doing very well just to get it to work in the first place. I guess, yes, the QBraille's an interesting one because it's got the Windows key and the CTRL and the ALT key and such, hasn't it? So that will have a very interesting command structure.

 Is the Braille EDGE listed there?

Mike: It is.

Matthew Horspool: Some of the Braille EDGE commands might work. I suspect the VoiceOver thinks it's a Braille EDGE and that's why it's working, either a Braille EDGE or one of the Braille Sense setups.

Mike: Okay, very good. Thank you.

Ben Mustill-Rose: Thanks for that, Mike, and glad to have you here. So we're going to come to Lyle next and then we're going to go to Rachel afterwards.

Lyle: Just a note about HIMS because I'm not using the QBraille but I use the Polaris and all the commands are the same, under HIMS or Braille EDGE.

Matthew Horspool: So the commands for the Braille EDGE and the Polaris are the same. That's very good to know. Thank you.

Ben Mustill-Rose: So we're going to come to Rachel next and then we're going to try to squeeze in Marsha and then we're going to come to Holly and check in with any questions that are on the chat.

Rachel: Nice demonstration. What I just want to ask, I'm using the Brailliant BI 20 from Humanware and I'm just trying to understand the difference between the contracted, the eight dot, and the other option.

Matthew Horspool: Yes, so I didn't really cover that, did I? So there's contracted, there's eight dot, and there's six dot.

Rachel: I assume the six dot maybe means uncontracted so I was trying to write in uncontracted Braille and it was still coming out in contracted. What?

Matthew Horspool: That's right. You can control the input separately to the output and this is quite useful sometimes and a headache at other times.

 Six dot Braille versus eight dot Braille, let's not worry about eight dot Braille too much for the time being, suffice to say that eight dot Braille, you can use, for example, dot 7 to represent capitals instead of having to put a dot 6 before the letter.

Rachel: There isn't a dot 7 on my display, is there?

Matthew Horspool: The backspace key will be dot 7.

Rachel: Oh, that's a dot 7, is it?

Matthew Horspool: Concerning eight dot Braille, we'll have relegate that to another session because you could spend a whole hour talking about eight dot Braille. So six dot Braille is what you want or contracted Braille and don't worry too much about eight dot Braille.

 You can control the input and the output separately. So if you're on six dot Braille and you're still seeing contractions on the Braille display, that's because you're controlling the input mode and not the output mode. Somewhere there will be a command to toggle contractions in output mode.

Rachel: I toggle between them with the 2 3 6 chord.

Matthew Horspool: That's toggling the input mode and not toggling the output mode. I can't remember the key stroke to toggle the output mode because I do it so rarely as I'm quite comfortable in Grade 2. It is in the settings.

Rachel: I just wanted to try it out. I'm a competent Braillist. I've been doing it for years and years. Normally I use contracted but I was just trying it out to try to understand the difference between all of these.

Matthew Horspool: If you go into Settings and then into Accessibility and VoiceOver and into Braille, so where we went to pair the Braille display, I won't go through it now because there's lots of settings in there but the top two settings are input mode and output mode and you can toggle output mode there. So you can turn contractions off on the output side from that Settings screen.

Ben Mustill-Rose: Great tip, Matthew, thank you. Last hand for now, we're going to go to Marsha and I'm just conscious of the time so then we'll check in with Holly to see if there are any other questions in the chat. I also know that we have James Bowden with his hand raised so we'll try to get James in at some point too but for now, Marsha, you are unmuted.

Marsha: One of the things that I have found in the Orbit 20 is that output dots, chord dots 1 2 4 5, toggles between the grades, Grade 1 and Grade 2. Another way to do it is chord dot 2 3 5 6, which also messes with your output mode, as to whether you're in Grade 1, Grade 2, six dot or whatever and this is what I have found both with the Focus 40 Blue 5th Generation and also with the Orbit Reader.

Matthew Horspool: That's fantastic. Thank you very much. So space with G for Grade of Braille, I guess that's what that means. So, yes, that would toggle the output mode. Thank you very much.

Ben Mustill-Rose: Holly, how are we looking for chat?

Holly Scott-Gardner: We are actually good for chat, mostly just agreements and people confirming that they have the same bugs. So no actual questions.

Ben Mustill-Rose: Okay, then let's bring in James Bowden now.

James Bowden: Marsha just actually said exactly what I was going to say about the space G command to toggle the output. The other one I was going to say is on the Orbit Reader, there is a mode where you can actually input a string of text which might behave better than character input one at a time. It's called Buffered Input Mode and you press the Select key together with the Down button and the Orbit Readers says Buffer and then you type the text you want and press dot 8.

Matthew Horspool: Yes, I have a feeling that would work much better, although that only works in Grade 1, is that right?

James Bowden: I don't think so. I haven't tried it, I'm going to try now.

 Yes, looking good, I think.

Matthew Horspool: Fantastic. I think the ideal would be for VoiceOver to fix their bugs and then we wouldn't have this problem but that's definitely a good feature to know. Other Braille displays also have a similar sort of buffer mode. I know the VarioUltra that Jess talked about earlier has a similar equivalent buffer mode and information about that would be in the Braille display manual, not in the VoiceOver manual.

Ben Mustill-Rose: We've got about three minutes or so left, so do we want to try web browsing yet or shall we take another question?

Matthew Horspool: Well, I've managed to get web browsing to work now. I actually had to use Braille screen input to get web browsing to work and sadly I don't think there's going to be enough time to demonstrate Braille screen input in this session. So what I would do is I would refer people to Braillecast, our podcast, episode number 14 and on Braillecast episode 14 I did a very comprehensive 45 minute demonstration of Braille screen input as an episode. So if people want information about that, that's where to go. Actually with Braille screen input, I was able to type the web address in flawlessly and got to the right place. So that's braillecast.com or if you want the exact URL, it's braillecast.com/e014, for episode 014.

 I think we can take another question if you want.

Ben Mustill-Rose: We'll come to Keith and then we'll pass over to Holly to round things off.

Keith: Matthew, thanks for the excellent presentation. Just something I don't know if you're aware of and I don't know if this works with the Orbit, but I do know that with the Brailliant 40, you don't have to swipe to the Send button, if you just press Enter in the middle of a message or at the end of a message, it will send automatically.

Matthew Horspool: That's good to know. I was having so many problems with messages by then, that I didn't want to introduce another one. Thank you.

Ben Mustill-Rose: Thank you, Keith, and thank you, Matthew. I thought that was really comprehensive and useful stuff.

 Let's hand over to Holly now.

Holly Scott-Gardner: Well, thank you, everyone, for coming to this session and I do want to say thank you to Matthew because I know from experience that teaching and wrestling with technology is always a mildly to moderately stressful process, so thank you for remaining calm. I'm not sure I would have.

 As I mentioned at the beginning of the session, as people were coming in, we do make recordings of our webinars available on our website at braillists.org/media. You can also find them on Braillecast as well which you can look for in your podcast app of choice.

 We have a newsletter which I would really encourage you to sign up to by going to our website and you can just find that at braillists.org and then search for newsletter and sign up to that because we post about all our upcoming events on that as well.

 I won't keep you any longer. Thank you for attending.