

Issue 210

SUMMER 2020

ISLE OF WIGHT PC USER
GROUP



HOT KEY

AUGUST 2020

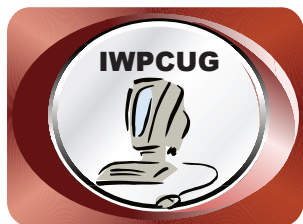


A screenshot of Jonathan Burt at the
start of his Zoom presentation for our
July Meeting

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The Isle of Wight Personal Computer User Group

We welcome anyone who has an interest in computers and related technology and what you can do with them.

We are a group which seeks to exchange ideas and new information.

Membership is £12 per annum

Our meetings are normally held on the first Wednesday of each month at

The Riverside Centre, Newport from 7.00 to 9.00 pm

Visitors are always welcome.

A charge of £2 is made per meeting, which includes tea or coffee during the break.

If you would like to know more about us, you are most welcome to come along to one of our meetings, or you can contact one of our Committee Members listed on page 3.

The Club web site address is **www.iwpcug.org**

We also have an e-group discussion area on

Yahoo groups: **iwpcusers@yahoo.co.uk**

Details of how to join are on page 8.



FUTURE MEETINGS

<u>Date</u>	<u>Subject</u>	<u>Speaker</u>
2nd Sept	TBC	
7th Oct	Editing wild life video	Mike Hoar
4th Nov	Using Zoom with green screen, etc.	Buzz Austin
2nd Dec	Denny's Christmas Quiz	Denny Linzmaier
6th Jan	Something from Jonathan again	Jonathan Burt

ISLE OF WIGHT PC USER GROUP COMMITTEE

Chairman : David Groom

Secretary : Susanne Bone

Treasurer : Mike Hoar

Membership and Database Secretary : Roger Skidmore

Committee Member : Steve Sutters

Treasury Supervisor : Phil Rogers

Note

Contact details removed prior to
publishing on the internet

Suggestions for new events, topics or speakers for talks are always
welcome.

Please contact Steve Sutters, or any committee member, with your ideas.
If necessary we may be able to find a speaker for your subject.

Chairmans Report

I hope that all our readers are well and have been coping ok in the strange circumstances in which we find ourselves. I'm afraid that the funeral of my uncle has been arranged for the 2nd Sept, the date I was due to give my talk to you. Please look at the web site and emails for an update on the alternative.

I do apologise that this issue of Hotkey did not come out on time, but in recent months I've had increasingly less time to sit at a computer to research and write articles.

I'm pleased to say that with the exception of the April meeting we have managed to to continue some form of club activities over the past few months. I'm grateful to our our speakers for adjusting to the changing times and delivering subject matter via Zoom video experience.

It was particularly nice too to see and hear from Sean and to learn a little bit more about Varna and Bulgaria in general.

I do urge those of you that have not yet joined us via the Zoom software to give it a try. The experience is not difficult and if you you are uncomfortable with the idea of sharing a video and sound feed, then I would remind you that it is possible to join us with these feeds muted allowing you to watch and listen to the rest of us, whilst we cannot see or hear you. Also, as I noted in my review of video conferencing software in the April edition of Hokey, it is possible to join the meeting even if you do not have a webcam.

I'm pleased to report that some of our meetings held via zoom have been the highest attended in recent years and it's been particularly nice to see some members who we haven't met in person recently.

In addition to the monthly zoom meetings we do still have the email group as a method of asking questions and keeping in touch with fellow members.

Whilst it's impossible to predict what might happen in the future I do feel we will be continuing with our Zoom meetings for some time yet, as it seems unlikely Riverside will be opening the Hunnyhill Room in the foreseeable future. There is of course also the question that when it does become logistically possible to meet up, whether in fact members will wish to do so, or will wish to still retain some form of social distancing, but that's a question which we are still some way away from needing an answer to.

David Groom

Email Traditionalism and emClient

I use my email like a business filing cabinet - I have "important" emails on my hard disk from years ago. Probably it wouldn't change anything if I lost them, but some things you feel are important to keep. So I keep very few emails in my Inbox - when they are dealt with I either delete them or file them somewhere. That can be under the current month (I retain 12 of these) or under a specific folder name or sub-folder.

This produces a complex set of folders - well, why not? It's what computers are good at. Years ago David Broughton showed me how to change the "Storage Location" from some very obscure Windows hidey-hole to a meaningfully named folder in My Documents. This has the advantage that when I back up My Documents (to either another location on my computer or, better still, to a USB hard drive) the backup includes all my emails. And as a bonus, using Live Mail also includes all the settings as well.

So why am I using Live Mail 2012 still? Old fashioned I suppose, and addicted to POP3 because I never really understood IMAP. Basically because it works for me. And my mobile phone (Samsung Android S10 now) is quite OK at picking up my email anywhere, and being set to not delete email on server, leaves my emails on the server until I get to my proper desk-top computer.

But, Live Mail has a hideous internal filing mechanism and I would never start out again with Live Mail. ComputerActive has recently recommended emClient (<https://www.emclient.com/>). I duly installed this program and imported my email library into it. It did work, but not very well. I attribute this to importation being an almost impossible task from my email library which I have carried through from Outlook Express and kept over the years.

But I did find that just like Live Mail, the data directory can be relocated into My Documents in the same way, carrying with it all my precious settings. So I have half a mind to wipe everything and start again with emClient - I was very impressed with everything and most certainly would start life again with emClient if I absolutely had to. But for now I am sticking with my clunky and outdated Live Mail (which does, incidentally, handle Gmail as a POP3 client).

P.S. I use "SyncBack" for incremental backups - easy and fast - another totally essential program.

Roger Skidmore

In Praise of Jamkazams Free Music Software

I play keyboards and am in a group with a bassist and drummer. Before lockdown we all met for a full band practice once a week at my house in Ryde with a view to building up a set to play live with. After lockdown started we had a choice of waiting till it finished or try to see if there was a way to jam together over the internet. First I have edited an article from <https://audiogeek11.com/best-services-for-online-music-jam-2020/> to give an overview of what's involved.

Many are the reasons for musicians to look for a service that allows them to jam online. Getting the whole band and the gear in one place is hard. Times might not suite because of work and other commitments. And in more recent times, we're all stranded at home for a while...

What is the gear required?

- a high-speed internet connection. Upload speed is just as important as download speed. I've read 0.4 Mb/s is about the minimum for both;
- connecting your computer to your router via an ethernet cable – avoid wi-fi, this will add unnecessary latency;
- an audio interface ;
- headphones with microphone or just a mike if using monitor speakers but watch out for feedback. Not having the monitor speakers facing the mike will help stop feedback ;
- cameras are optional and since the focus is on the music, I would not cut down on bandwidth by adding video.

The main issue: latency

There is no way around this. For this to work you need low latency from one musician to another. In a rehearsal space, you are all listening to each other via direct sound waves, so unless the space is gigantic the latency is virtually zero. But over the internet you will have the compound effect of your interface, their interface, and the Internet connection between you, in addition to whatever other processing the service you are using might have. The Internet latency will be a function of the distance between musicians. This is due to the way in which it is all connected; if you're in the same city you have a better chance of experiencing tolerable latency when jamming online.

With video chatting platforms like Zoom or skype if there is half a second or

so of delay between transmission and reception of sound it does not matter much but can make a huge difference between musicians trying to play in time with each other. The worst delay I found was about 5 seconds. Impossible to play with that much delay.

So what is the tolerable threshold ? According to research I've done over the years when recording with various interfaces while listening to the 'wet' signal live, anything above 20 to 25ms starts becoming very noticeable. As you will later see this is highlighted in some of the services I've tried.

The formula for the total one-way latency when jamming with another musician online is: $(\text{your audio gear latency} + \text{their audio gear latency} + \text{round-trip Internet latency}) / 2$. So it's easy to see that if your gear and their gear combined are close to 40ms together you have problems regardless of how close to each other you live. Step number one then is to go for low latency gear if you can.

A network ping generally provides the RTT or Round-trip time, which gives us the round-trip Internet latency. To make things more challenging, consider that the packets of data need to go from your computer to the server of the service you will be using for jamming, and the same applies to the other musicians.

Another factor is sample rate and bit depth. A higher sample rate and bit depth will give higher quality more detailed audio but will result in larger packets of data to send over the internet so it is best not to worry too much about sound quality as this can result in a slowing up of packets of data and if they don't join up together it results in pops and clicking sounds.

Audiogeeks review of Jamkazam

First step is to create a free account. With that done, we proceed to the configuration, which basically consists of performing some network tests and then configuring the audio interface. I wanted to have a stereo input for guitar, a microphone to chat, and the return audio in stereo on my headphones or monitors. Upon doing that the service measures your gear latency (7.29 ms in my case).

I've then proceeded to run a solo session to make sure everything was

working. For that I've muted the return channel of my guitar sound back into my headphones on the audio interface, as I wanted to hear back from their service, not the direct sound. In a solo session the latency was negligible.

Next, you can join existing sessions or start your own public session and invite other people. When you check the sessions online it gives you an estimate of the one-way latency, if available. The issue here is that there was no way to search for 'local' jams, and the ones that popped up on the screen were primarily in the United States, which would be a no-no for latency – unless you're stateside of course.

Back to my group and the bassist and myself tried all sorts of 'free' jamming software programs but found they were either not free, would not load on both our computers, kept crashing, were very difficult / impossible to join etc. apart from Jamkazam which ticked all the boxes. So much depends on factors like the distance between users (Paul lives a couple of miles away in Binstead), how fast the internet connections are, how busy the internet is at the time of use etc. So our experience might be different to others.

We both have our instruments and microphones going to mixing desks with a stereo output. There is no noticeable latency and the sound quality is so good it is like Paul is talking and playing in my room. There are occasional clicks and pops but they are not a big nuisance. Much better than with the video chatting platforms I've used but of course most of their bandwidth is taken up by video. The sound to each other is in stereo too. You can record your performances at the track level, share your recordings, and even broadcast your live sessions to family, friends, and fans.

By Stephen Sutters

Joining the Yahoo Group

Send an email to: iwpcusers-subscribe@yahoogroups.com with "join" in the subject line. You will get an email from yahoogroups asking you to confirm your wish to join the group, please follow the instructions in that email.

All members are encouraged to join this group (it's free and private to club members) so you can keep in touch with events and join in with the discussions.

You can also keep in touch by regularly visiting www.iwpcug.org

The Location of Your Local Fibre Broadband Cabinet

In the January 2018 (page 6) and the July 2018 (page 10) issues of Hotkey I wrote a little about the issue of “Fibre Broadband” which essentially is just fibre to the cabinet. The final part of the broadband connection from the cabinet to the home being on copper cables. I’ve now come across a website which lists all cabinets for an area, together the cabinet location, which roads are served from the cabinet, and the approximate distance from the cabinet to each road served. Location and distance are approximate as they are based on postcode, but its a useful addition to the information provided two years ago. The web site address is www.telecom-tariffs.co.uk/codelook.htm

David Groom

HotKey Index

For some time one of the things which I’ve felt was missing from the club web site was an index of past articles in HotKey. I believe I may have even written in the past asking if anyone was interested in taking on the task of creating the index. However I have recently started this task. There are a number of stages to this process. Firstly I need to create a list of past articles in Hotkey, and note in which issue these articles occurred. As I have the original PagePlus files for HotKey for the last few years, then it is relatively easy to copy the index from the front cover and use that as a starting point, and put these details into a database. But there is one question to which I don’t yet have an answer. Obviously any index would need the article title, issue date, and page number, but what other information should I index? Would it be useful to have the article author, maybe some form of tagging system to make it easier to search for a particular topic? I would welcome any thought on this.

Next I will have to decide how I want this to be presented on the web site and what search facility I need, and write the necessary code. Hopefully by the time we get to the next issue of HotKey there should be something for you to look at.

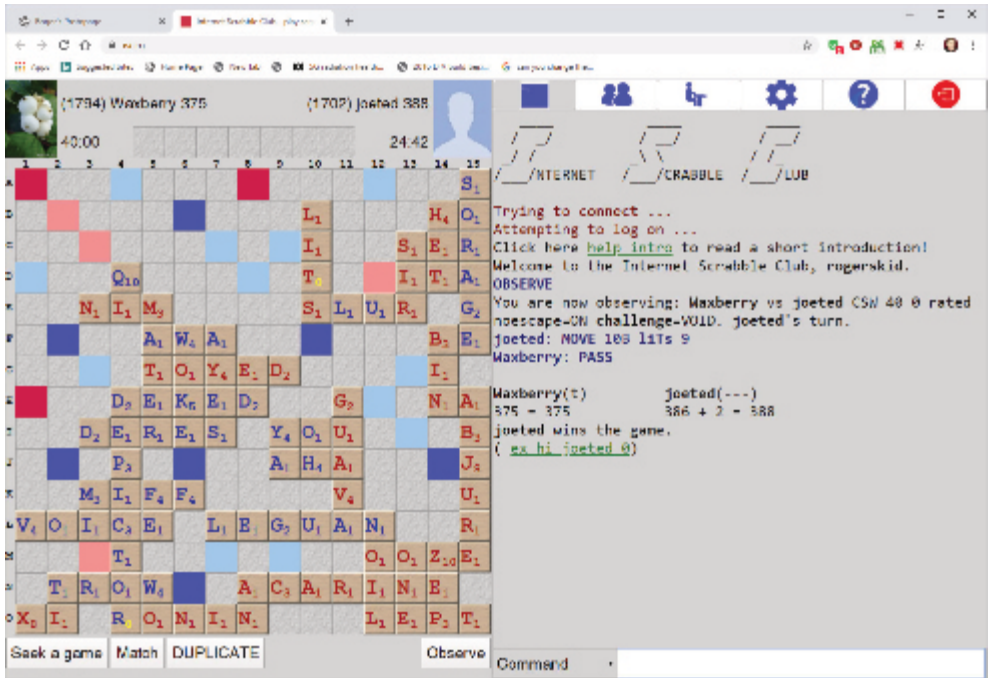
The final task will then to be to go over the past issues for which I do not have PagePlus files, and manually create the index for these by looking at the front cover of each issue and writing down the article name and page number. Its possible I may ask for help in this latter task. After all four or five people working on the simple task will achieve it far quicker than me on my own.

David Groom

Internet Scrabble Club

I'm not a great one for shoot 'em up on-line games and the like, but am partial to a gentle game of Chess or Scrabble. The ComputerActive magazine (6-19 May) has indicated both of these as available free, on-line, so I thought to have a go.

I've registered for the Chess game at www.chess.com but not tried it yet, but I have had several games of Scrabble at <https://isc.ro> where after registration and a brief look at the getting started help it worked a treat. I do tend to phone my partner at the same time, but this is not essential. Perhaps should do a Zoom or Jitsi meeting alongside?



The Chess you can play on your own but it seems the Scrabble is better designed for an on-line partner. You can set various parameters to your own liking but I've long thought a choice of alternative letter frequencies would be nice to have for those times you seem to end up with all vowels, etc., or wish you had an extra "Z".

Roger Skidmore

Mozilla's Common Voice Initiative

Voice recognition technology is revolutionizing the way we interact with machines, but the currently available systems are expensive and proprietary. Common Voice is part of Mozilla's initiative to make voice recognition technologies better and more accessible for everyone. Common Voice is a massive global database of donated voices that lets anyone quickly and easily train voice-enabled apps in potentially every language. They are not only collecting voice samples in widely spoken languages but also in those with a smaller population of speakers. Publishing a diverse dataset of voices will empower developers, entrepreneurs, and communities to address this gap themselves. In addition to the Common Voice dataset, they are also building an open source speech recognition engine called Deep Speech.

The goal of the Common Voice dataset is to enable anyone in the world to build speech recognition, speaker recognition, or any other type of application that requires voice data. A voice assistant is just one of many types of applications you could use the dataset to build.

Most speech databases are trained with an over representation of certain demographics which results in a bias towards male and middle class. Accents and dialects that tend to be under-represented in training data sets are typically associated with groups of people who are already marginalised. Many machines also struggle to understand female voices. This is why in their voice database they want variety!

How does it work?

They are crowdsourcing an open-source dataset of voices. Donate your voice, validate the accuracy of other voice clips, make the dataset better for all.

Contributors record voice clips by reading from a bank of donated sentences. Voice clips are entered into a submission queue that readies them for listening. Users validate the accuracy of donated clips, checking that the speaker read the sentence correctly. A voice clip is marked "valid" when a user gives it a Yes vote.

To make it into the Common Voice dataset, a voice clip must be validated by two separate users. When a user rejects a voice clip it returns to the Queue. If rejected a second time, the voice clip is moved to the Clip Graveyard.

To get involved yourself, visit <https://commonvoice.mozilla.org/en/speak> in your web browser and then you have two choices.

Speak - you need a microphone attached to your computer, and you read into the microphone the sentence that is displayed on the screen.

Listen – you play a recording of someone speaking a sentence, and then have the option of validating it, rejecting it, or skipping validation and moving to another clip. However I found no guidance on what criteria should be used when deciding whether to reject or accept a clip, and ended up skipping far more clips than I validated or rejected.

David Groom

Based on information on the Mozilla Common Voice website (<https://commonvoice.mozilla.org/en>) published under a CC-BY-SA 3.0 license.

Astronomy Picture of the Day

Discover the cosmos! Each day a different image or photograph of our fascinating universe is featured, along with a brief explanation written by a professional astronomer.

Roger Skidmore has suggested you might be interested in The Astronomy Picture of the Day web site, which is based upon work supported by NASA.

The APOD archive contains the largest collection of annotated astronomical images on the internet, it can be found at the main NASA site: <http://apod.nasa.gov>

There is an example image on the back cover.

Amstrad

The following article is based on a talk given by Buzz to the IWPCUG 20 years ago.

The Amstrad company is headed by Alan Sugar who was seen as a bit of a pirate by some computer enthusiasts in the 80's, he was a businessman not a computer anorak like Clive Sinclair or Steve Jobs. He couldn't design a PCB or write an operating system to save his life, I don't think he could write a line of Basic code on his own machines. However, he watched the market trends, creamed off the best ideas and undercut the opposition. He was a man with a vision and that was to get an Amstrad computer into every home and business

He saw the games market was dominated by Spectrum but you had to buy a

tape recorder to load and play them, then you needed a TV, his big idea, to integrate a tape and a monitor into his CPC range. The BBC had a good keyboard and lots of graphic modes, Sugar gave the CPC464 a good keyboard and it looked great on the colour monitor. He saw that Sinclair's Microdrives were a disaster, fitting a disk drive to a Spectrum was difficult and Uncle Clive was not developing in that direction anyway. The BBC was offering an add-on disk drive but at a price and with only 32K of memory it required a special ROM chip to use it! His CPC 464 had a built in 3-inch drive and 64K of memory. (Buying into the 3-inch drive was probably his one big mistake, it didn't catch on worldwide and only a couple of other manufacturers such as Tatung used them.)

Sugar also realised that a home computer was not in use for most of the day so he marketed a tuner box to turn a CPC computer into a TV, a good move when you consider that even today the TV card in a IBM PC is considered to be a luxury add-on. He also used a system of local agents to sell his computers but didn't use a lot of advertising which was a real revolution after Sinclair who constantly advertised his machines and sold them directly via mail order. That is when they were available, people waited weeks and months for Sinclair goods that never arrived or indeed had not even been built.

He saw that the small businessman needed a cheap machine with a good printer to word process and run accounts, after all IBM was costing the earth to buy in the UK. He designed the PCW range with dot matrix or daisy wheel printer options. As the PCW ran CP/M as an operating system there was a vast library of applications running on other machines that only needed to be written to 3" disk. (CP/M is a shell operating system so in theory all you have to do is hook the program into the system and it will run. A bit like windows on a good day!!!) The bundled programs like Locoscript were so good that people didn't bother to buy anything else and it has since been rewritten for the IBM PC.

Unlike other computer builders Alan Sugar didn't stand still and wait for the world to convert to his systems, he decided to build an IBM "clone" because he felt that taking onboard an IBM type was a good way to advance his company. The 1512 and 1640 range with standard 5.25 drives and IBM compatibility at less than half the cost was an instant success for Amstrad. Standard internal ISA slots meant that IBM add-on cards fitted his machine, who cared if the box and the monitor were not standard as long as they worked! We bought them in tens of thousands and in the UK Amstrad was the market leader in weeks.

Looking around with a fortune to spend he saw that his CPC 464 machine was still not the leader in the games market so he bought the opposition in 1986. The Spectrum name and product line was his and with a little reworking the Spectrum got a built-in tape recorder or a 3-inch disk drive as well. The 1987 crop of Spectrum +2 and +3 box even looked like the CPC apart from the colour! After 18 months or so he closed down the Spectrum production line and Speccy's became history.

There was an attempt to use the Spectrum name again as a games machine in a curious computer, the Spectrum Professional PC200. This was IBM compatible with two ISA slots, a single 720K 3.5 disk drive, built in joy stick ports and CGA or TV output if you couldn't afford the monitor. The PC200 was not a success. One of the many odd points about the PC200 was that the case said Sinclair but the PCB is labelled Amstrad. I have only seen the case with Spanish labels on the ports and LEDs however the computer was on sale in the UK for about a year though only through Comet warehouses or mail order. The machine was a failure and one which Amstrad wishes to forget.

So Mr. Sugar had to make a decision, standing still wasn't an option. Go with his own range of CPC and PCW machines or expand the IBM clones. He made the decision to expand the IBM range.

The 1000 series comprised an XT type and an AT 286 machine which were disastrous for the company. The hard drives fitted to the series proved to be unreliable old stock or that is what was said in the court. The drive maker said it was a dodgy BIOS in the Amstrad!!! I cannot remember who was right but the 1000 series died very quickly and I have never seen one, though I do have a keyboard from a 1286.

The 2000 series launched on the 13 September 1988 followed and proved to be a success the 2086 (XT), 2286(AT 286) (£1,249 at Comet) and later the 2386 (AT 386) all had the case with the sloping front and an IBM compatible VGA monitor (colour or mono), 3 ISA slots free and 3.5 disk drives. The internal layout and the power supply are not standard and are difficult to repair, I also find the colour monitors prone to going out of focus. The most important thing was they worked well and were 100% compatible with IBM type software. I even heard a story that someone in a far-off town or city managed to get the bundled Lotus Symphony to work!

The 2000 series became 3000 then 4000 and finally with the 5000 series the internal bits in the box became early IBM standard and allowed people to boldly stick their hands into the case and recognise the components like other

PC users. The 9000 series is the last that was sold directly to the public.

Amstrad also ventured into the world of portable computing with the PPC 512 and PPC 640 range in 1988, both had a CGA LCD screen with either 1 or 2 720K disk drives and the PPC 640 even included an internal 2400 baud modem. No one could see the LCD screen because it was not back-lit or afford the ten U2 batteries. Sugar even solved that problem by allowing you to use the monitor from the 1640 range as a monitor and power source for the PPC.

At about the time the 3000 series were in production 1990 the ALT 286 and ALT 386 portable machines appeared. They look big to us today and get called luggables rather than portables however the specification was good for their day. With a choice of Mono or colour VGA backlit screen, one ISA slot, a 40 or 60 Meg hard drive and a rechargeable battery they worked well but slowly. I was using one of these machines only last year and was running Windows 3.1 with 2 Meg of memory and Works 3 but was unable to upgrade the memory to 4 Meg because the Amstrad uses 100 n/s SIMM chips and they are as rare as hens' teeth.

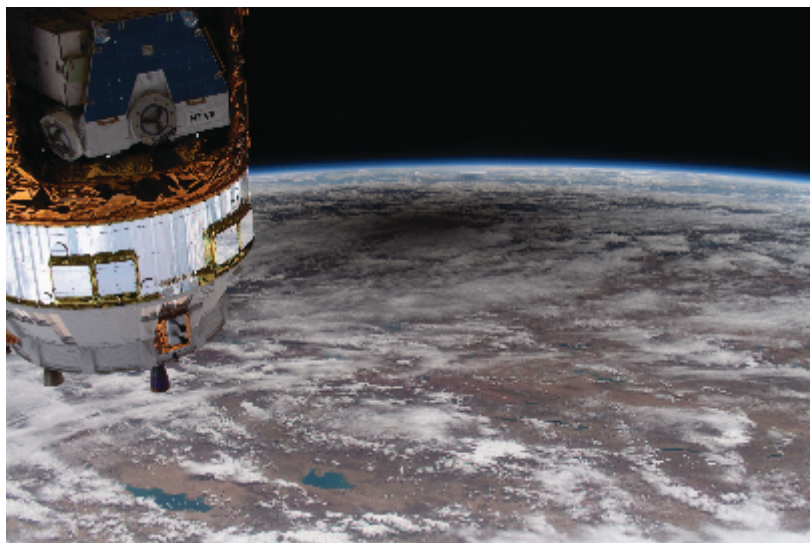
There was also the rather curious 1994 Amstrad "Mega Plus" this was a 486 SLC 33 with either 2 or 4 Meg RAM and a built in Sega Mega Drive. All the other things such as VGA, 1.44 disk drive and a 40 Meg hard drive were included but as a PC the machine was seriously under the current specification, as a Mega Drive the machine was very expensive. Still a lot of parents with more money than sense who had bought little Jimmy a Sega at Xmas were sold on the idea of a computer that could play all the expensive Mega games and was a "real" PC with "educational" potential was a bargain at £899 plus VAT. A clever attempt at a niche market machine but a failure when looked at and judged by the market.

What of Alan Sugar and Amstrad now? Well the PC clone computers are no longer in the shops and are only available by direct mail order. You never see them advertised in the magazines though!! Strangely the PCW in its latest guise as the PCW 16 is on sale at Dixons. Mr Sugar has other interests including football clubs and the like! In summary then, Amstrad was an innovative supplier of good cheap computers who forced the price of all computing down to a level that people could afford. In the end the big players on the international stage and the rate of change within the industry overwhelmed the company, they couldn't design new innovative product lines quickly enough to beat the opposition.

Buzz Austin



Some of the participants in our first Zoom meeting in May
- photo courtesy of Peter Johnson.



Eclipse under the ISS, Image Credit:
NASA, see page 12

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