# THE APPLE BARREL

## the JOURNAL of the HOUSTON AREA APPLE USERS GROUP

## New Mac Pro and Pro Display XDR Offer Power for a (High) Price

*by Michael E. Cohen of TidBITS*

As we learned last year, Apple was stepping away from the debacle of its cylindrical Mac Pro and bringing in actual pro users to consult with on a complete reimagining of what a Mac for professional users should offer (see "New Mac Pro Slated for 2019; May Be Modular," 6 April 2018). At WWDC 2019, Apple unveiled the results of that effort with a new Mac Pro that looks something like the old "cheese grater" Mac Pro—that is, if extraterrestrials were grating the cheese.

Built on a stainless steel frame and encased in a high-tech, highly perforated slip-off aluminum shell, the new Mac is designed for serious, well-heeled users who want a maximum of expandability and customization options. With the Mac Pro's shell off, users can get access to any side of the Mac, and take advantage of its copious expansion capabilities.

### Expansion

And expansion capabilities it has! The new Mac Pro boasts eight PCI expansion slots: four double-wide slots, three single-width slots, and one half-width slot preconfigured with an Apple I/O card.

Those double-wide expansion slots won't go wanting for components to populate them, either. Apple is offering several Radeon Pro-equipped MPX (Mac Pro Expansion) modules to take advantage of the Mac's 64 PCI Express lanes, ranging from a single Radeon Pro 830X for less GPU-intensive applications to a Radeon Pro Vega II Duo, capable of providing a terabyte of memory bandwidth and over 28 teraflops of single precision math co-processing. To add to the fun, and, doubtless, to the price tag, these MPX modules can be added in pairs, increasing the capability of the Mac to perform intensive graphics processing, passing data around via something called "the Infinity Fabric Link", a technology that quintuples data transfer rates between the modules' GPUs. Paired Radeon Pro Vega II Duo MPX modules also provide a combined 128 GB of HBM2 memory.

The new Mac Pro's single-width slots probably won't remain unpopulated either. They have been engineered to support cards like Apple's new Afterburner hardware accelerator card. This handy little add-on gives video professionals the ability to play back up to 3 streams of 8K ProRes RAW or up to 12 streams of 4K ProRes RAW data.

### Memory, CPU, and Ports

Speaking of memory, the Mac Pro comes standard with 32 GB of RAM (courtesy of four 8 GB DIMMs), but a high-end Mac Pro with a 24-core or higher processor can support as much as 1.5 TB of RAM in the form of 12 128 GB DIMMs.

Did we say "24-core or higher processor"? We did, indeed. The Mac Pro offers a variety of CPU options, starting at the low end with a 3.5 GHz Intel Xeon W 8-core processor that can handle 16 threads of execution at a time and stretching into the high-performance stratosphere with a 28-core 2.5 GHz Intel Xeon W, capable of supporting as many as 56 threads of execution.
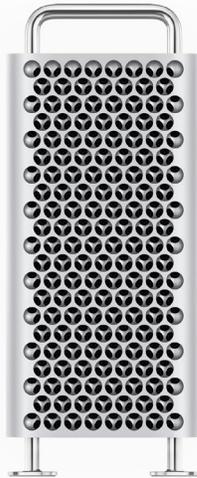
Then there are ports: the base model comes with four Thunderbolt 3 ports, two USB-A ports, and two 10 Gb Ethernet ports. But that's just for starters because each MPX module you add increases the number of available ports.

### Power and Cooling

To provide power to all this screamingly fast technology, the Mac Pro has a 1.4-kilowatt power supply. 300 of those watts drive the CPU and the Mac Pro's memory, with the

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## Upcoming Events

**July 20, 2019 – 3D Modeling in AutoDesk Fusion 360 (Ryan Eisworth)**
In July 2018, Ryan Eisworth discussed and demonstrated the potential of home 3D printing. At our May meeting, he will explain the basics of 3D modeling with AutoDesk's powerful Fusion 360 software and how you can qualify for a free hobbyist license of the software.

# BOSS HAAUG SPEAKS

**by Phil Booth, 2019 HAAUG President**

## July 2019

We had a great talk at last month's meeting, Lee Hutchison of Ars-Technica discussed the effort to land an American on the Moon. We are celebrating the fiftieth anniversary of the Apollo 11 landing. I was in Caldwell, Texas at a summer camp when we landed on the moon. I did not realize then the significance of the effort until later. I think that you can trace our modern technology to the effort to land a man on the moon.

The folks at Fairchild and Texas Instruments designed the integrated circuits of which NASA bought almost all of the production. IC's allowed equipment to become smaller and more reliable. It was only a few years later that Intel was created, and they created the microprocessor and computers went from large machines with limited power to desktop machines that we know today.

Well, if you saw the WWDC keynote you got a sneak peek at the new Apple operating systems and the "one more thing" was a redesigned Mac Pro. The new computer has a strong resemblance to the older "cheese grater" Mac Pros but it has a lot more power and upgradability. We hope to have a program on the updated operating systems. The new versions should be released in the fall.

The board is always looking for suggestions for programing. I am at the meetings so come up and talk to me. I talk about the need for new ideas in the organization, and the board is always on the lookout for folks who would like to help. One of the recent suggestions was the addition of coffee and soft drinks available in the meeting room.

Our next meeting is July 20th and we will meet at the Center Point Meeting room in Bellaire.

## June 2019

I had a need to get some papers out of my bank deposit box. When I opened the box, I found a hard drive that I put in the box at least two years ago. The drive only had Firewire 800 connections. My iMac only has Thunderbolt and USB connections. I do have a Thunderbolt to Firewire adapter, so I was able to mount the drive and look at the contents. The drive's name was "G5 Backup." The drive was a clone of my old computer's hard drive. I was looking at the several of the folders brought back memories, some good, some not so good. There was a folder covering my mother's estate, and a folder of old Boss HAAUG Speaks columns.

The bottom line is we have all kinds of data lying around in different hard drives. Why? Because it is easy it doesn't take up space like physical documents in filing cabinets. I am not suggesting that you have to be the computer equivalent of Marie Kondo. Getting rid of files that don't bring you happiness, but it might be time to go though and delete files that you no longer need. It is easier to buy drives because they are cheap, so we just buy larger drives to hold more data. But this does not mean that you should not back up your data.

As I write this, we are two days from the start of Apple's World Wide Developers Conference. The Keynote will give direction for all of Apple's operating systems. There are rumors that we might see a new Mac Pro to replace the "Waste Basket" model. We will see. The WWDC is usually not a place where much hardware is discussed. So, the new improvements to iOS macOS, watchOS, and tvOS will be announced and explained. Stay tuned.

This month's meeting, we will have Lee Hutchinson talking about the Apollo 11 Moon landing. We are celebrating a month early as Lee will be involved with celebrations at Space Center Houston in July. Those of us my age know where we were when we landed on the moon. In many ways you can trace the road to the personal computer though the space program. The computer that managed the mission was about the size of a desktop. It shares much of the architecture that we us today – things like embedded programs, storage, keyboards, and displays.

Dave Jaschke gave a great presentation on building and switching different photo and music libraries for iTunes and Photos. I don't think that many folks know that you can have more that one library connected to those programs. His other tip was how to possibly rescue data from an external hard drive that refuses to mount. His solution is to crack open the case and pull the drive mechanism, and using an inexpensive SATA interface you can many times get the drive to mount. That meant that the original drive enclosure was bad but the actual drive still works.

A committee of the Board of directors met and looked over the 2018 financial records. We pronounced the club's books were in good shape. Members can be confident that the board is a good steward of the association's funds.

## May 2019

A very large thank you to Dwight Silverman for a great presentation last month. The topic was cord cutting. Dwight made the point that it will be more complex and expensive with all the new services that are set to start soon. Netflix has recently raised prices from $9.99 to $12.99 monthly. The other factor is that several program producers are letting their contracts expire with Netflix so they can start streaming services of their own. Disney, which now owns the Fox catalog (and also Star Wars and Marvel), will start a service called Disney+. Apple is getting in to streaming with original programing. Because of the loss of product, Netflix is investing in more original programming.

Dwight pointed out that the main advantage to traditional cable is that it is packaged and easier to use. Cable has an advantage with live sports. Comcast, on their X series of boxes, will provide you with Netflix and other streaming services as long as you subscribe. Dwight thought that while cable cutting will still be cheaper versus a cable subscription, it will be a little harder to navigate.

Dwight also touched on the new 5G services that are being rolled out. There are technological hurdles that will need to be overcome. 5G uses very high frequencies and the signal does not go through buildings or trees. He related a story about testing a 5G receiver in his home. Even with the transmitter on a light pole with in eyesight of his condo; it still did not work because a tree was in the way. 5G will use a lower frequency that get around the problem, but those have not been turned on yet. In Houston, Verizon is the only carrier that is deploying true 5G.

Apple released 2019 first quarter results and while they weren't popping Champagne corks the results were not bad. The iPhone has been the main driver for the past several years. iPhone sales have flattened, and Apple now will actively sell the device. Before all the company had to do was release a new phone and watch the sales. The site Six Colors has excellent coverage of the most recent Apple results.

Membership director David Jaschke will be our speaker next month. His presentation will cover how to move iTunes and Photos to external disk drives, how to get photos from iPhone to Mac, without using Photos and how to save an external drive that no longer responds where the enclosure is broken and not the disk drive. These are skills that every Mac user can use. See you on May 18th.

**Location:** CenterPoint Energy Community Center, 7001 5th Street, Bellaire, TX.

**Attendees:** Phil Booth, Clair Jaschke, Mike King, Steve Bridgham, David Jaschke, Mike Epstein, Marcy Spears (absent), Ryan Eisworth (absent)

**Call to Order:** Phil Booth at 12:25 p.m.

**Monthly Reports**

**General Announcements:** Have not heard from Ryan lately, Phil will try to contact.

**Secretary:** Marcy has caregiver problems. The minutes for November 2018, December 2018, and January 2019 were deferred for approval at the February board meeting to allow the board members a chance to review them. The February 2019 minutes were not presented because of Marcy's absence. In March, November and December 2018, January, February, and March 2019 minutes will need to be approved.

**Treasurer's Report:** Clair Jaschke reported our checking account balance as of the end of February 2019 was $3,881.04 Our savings account balance was $8,005.89, for total cash on hand of $11,886.93. All bills were paid and all funds deposited for February. The audit committee has been selected: Mike King, Mike Epstein, and Phil Booth.  Phill will try for an audit meeting in May, 2019.

**Membership:** We ended February with 108 members, up by one from January. February of 2018 we had 125 members. In February we had 7 membership transactions, 1 two-year renewal, 2 lapsed renewals and 4 regular renewals. Of the 7 renewals, we had 1 by web and 3 with credit card.

**Programming Report:** (presented by Phil Booth):

Proposed future meetings:

> April 2019 (confirmed): Dwight Silverman on Apple Streaming Services.

> May 2019 (need to confirm): Ryan Eisworth will do a 3D presentation. Details will be provide as available.

> Tentative: Dave Hamilton of The Mac Observer will present on a topic yet to be determined. Reimbursement for airfare and hotel reimbursements are expected. UPDATE: Mike King previously contacted Hamilton who said he would let us know whether he can do April, May, June, or July.

> Tentative - Josh Centers will be contacted about presenting at a future date.

Programming Summit: The committee will meet in April for future months.

**HAAUG Electronic Communications Systems:**

Ryan released a February 2019 issue of the Apple Barrel. The website has not been updated.  Phil will contact Ryan.

**New Business:** There was no new business.

**Adjournment:** Phil Booth motioned to adjourn the meeting at 12:40 p.m.

## Meeting Recap: Some Fun Tidbits About Project Apollo with Lee Hutchinson of arsTechnica

At our June 2019 general meeting, Lee Hutchinson visited us to share some of the fascinating history of the Apollo space program that took mankind to the moon and back. For Lee's slide deck from the presentation, click the image to the right. Our thanks to Lee for his great talk!



arstechnica        CONDÉ NAST

# Some Fun Tidbits About Project Apollo

Lee Hutchinson
Senior Technology Editor

lee@arstechnica.com

## Board Meeting Minutes – February 16, 2019

**Location:** CenterPoint Energy Community Center, 7001 5th Street, Bellaire, TX.

**Attendees:** Phil Booth, Clair Jaschke, Mike King (absent), Steve Bridgham (absent), David Jaschke, Mike Epstein, Marcy Spears, Ryan Eisworth (absent)

**Call to Order:** By Phil Booth at 1:18 p.m. following the conclusion of the Swap Meet.

**Monthly Reports**

**General Announcements:** Lots of people came for Bob LeVitus. It was a great meeting. Thirty-four people signed in, but maybe were forty people in attendance.

**Secretary:** The minutes from the November 2018, December 2018, and January 2019 were deferred for approval until next month to allow the board members a chance to review them.

**Treasurer's Report:** Clair Jaschke reported our checking account balance as of the end of January 2019 was $3,491.02 Our savings account balance was $8,005.83, for total cash on hand of $11,496.85. All bills were paid and all funds deposited for January. The sales tax forms have been paid and filed and the federal forms filed.

**Membership:** We ended January 2019 with 107 members, down by 2 from December 2018 at 109. January 2018 we had 123 members. Please see attache membership count report. We had 8 membership transactions in January, of which 1 was two-year, 4 regular and 2 lapsed renewals and 1 new member joined. Of the eight transactions, 1 was by web and 1 was by credit card. All other were by mail or check or cash at the meeting. Not bad for January.

**Programming Report:** (presented by Phil Booth):

Proposed future meetings:

March 2019 (confirmed): Phil proposed that he present information on cloud services, including iCloud, Microsoft One Drive DropBox, and Google Drive.

April 2019 (tentative): Dwight Silverman, topic to be determined.

May 2019 (confirmed): Ryan Eisworth will do a 3D presentation. Details will be provide as available.

Tentative: Dave Hamilton of The Mac Observer will present on a topic yet to be determined. Reimbursement for airfare and hotel reimbursements are expected. UPDATE: Mike King previously contacted Hamilton who said he would let us know whether he can do April, May, June, or July.

Tentative: Dwight Silverman, topic to be determined.

Tentative - Josh Centers will be contacted about presenting at a future date.

Programming Summit: Phil Booth said he would get with Steve to set a date for a programming summit.

**HAAUG Electronic Communications Systems:** Ryan released a January issue of the Apple Barrel.

**New Business:** While working on scheduling for the HAAUG meetings, Phil discovered that the City of Bellaire will only allow you to schedule four meetings in advance. A change in the December meeting was proposed to change the 12/21/19 date to 12/14/19 because the 21st is the weekend before Christmas and the day before Hanukkah. This change cannot be confirmed until the end of the summer because of Bellaire's scheduling rules.

**Adjournment:** Phil Booth motioned to adjourn the meeting at 1:50 p.m. and it was seconded by David Jaschke.

## July Meeting Itenerary

Our July meeting will feature HAAUG's own Ryan Eisworth, who will demonstrate how to get started with simple 3D modeling in AutoDesk's Fusion 360. Learn how you can qualify and apply for a free hobbyist and startup license for the software and get started with your first 3D project. The focus of the presentation will be on modeling simple parts for 3D printing. Ryan previously spoke at HAAUG in July 2018 on getting started with 3D printing. The slide deck from that presentation is available by clicking here.

| | CenterPoint Energy Community Center |
|---|---|
| 9:00 am | |
| 9:30 am | **iOS and Mac One-on-One SIGs** |
| 10:00 am | |
| 10:30 am | |
| 11:00 am | |
| 11:30 am | |
| 12:00 pm | **Intro to 3D Modeling in Fusion360** |
| 12:30 pm | Ryan Eisworth |
| 1:00 pm | |
| 1:30 pm | |

**Location:** CenterPoint Energy Community Center, 7001 5th Street, Bellaire, TX.

**Attendees:** Phil Booth, Clair Jaschke, Mike King, Steve Bridgham (absent), David Jaschke, Mike Epstein, Marcy Spears, Ryan Eisworth (absent)

**Call to Order:** By Phil Booth at 11:41 a.m. following the conclusion of the Swap Meet.

**Monthly Reports**

**General Announcements:** Thank you to Dave and Clair Jaschke for setting up the room for the Swap Meet!

The proposed April meeting will be held on 4/13/19.

**Secretary:** Approval for the minutes of November and December of 2018 and January 2019 have been deferred until the February meeting.

**Treasurer's Report:** Clair Jaschke reported our checking account balance as of the end of December 2018 was $4,301.41 Our savings account balance was $8,005.76, for total cash on hand of $12,307.17. All bills were paid and all funds deposited for December.

Rent through the month of April 2019 has been paid to the City of Bellaire along with the required $500.00 deposit. Because the deposit was due January 17, 2019 (before our next meeting), Clair sent an e-mail to all of the board members for their approval. It was approve unanimously.

Clair made a motion to approve the airfare reimbursement of $239.96 for Bob LeVitus who will be the presenter in February. Mike King seconded it and approval by the board was unanimous.

Clair will file and pay the sales tax collected by January 20, 2019.

Five table fees will be collected for the swap meet.

**Membership:** David Jaschke presented the HAAUG Membership Count Report. HAAUG ended We ended December with 109 members, down by one for November with 110. In December 2017 we had 124 members. The month of December was kind to us as we had 6 renewals of which one was by web access and this was a two-year renewal. There were no credit card transactions at the meeting.

2018 Year-end summary membership report:

In all of 2018 we had a grand total of 73 transactions broken down as follows: 3 new memberships, 24 two-year renewals, 39 regular renewals, 7 late renewals

From all of these we had: 10 Credit Card transactions, 30 Web transactions, 33 All other transactions (either in person at a meeting or by mail)

**Programming Report:** (presented by Phil Booth):

Proposed future meetings:

February 2019 (confirmed by Steve Bridgham): Bob LeVitus, topic to be determined.

March 2019 (confirmed): Phil proposed that he present information on cloud services, including iCloud, Microsoft One Drive DropBox, and Google Drive.

May 2019 (confirmed): Ryan Eisworth will do a 3D presentation. Details will be provide as available.

Tentative (date range from March to July 2019): Dave Hamilton of The Mac Observer will present on a topic yet to be determined. Reimbursement for airfare and hotel reimbursements are expected. UPDATE: Mike King contacted Hamilton who said he would let us know whether he can do March, April, May, June, or July.

Tentative: Dwight Silverman, topic to be determined.

Tentative - Josh Centers will be contacted about presenting at a future date.

Programming Summit: Phil Booth rescheduled the programming summit for the first part of February, 2019 to be held at Cafe Express.

**HAAUG Electronic Communications Systems:** Ryan released a November/December issue of the Apple Barrel.

**New Business:** Phil spoke with Grant (who is charge of leasing space for meetings) at the City of Bellaire. He said that the new City Hall of Bellaire is now open. The new police station is almost finished. And the city will be building a new city center civic complex after the police station is torn down. It will be a single story building and they expect it to be open this summer.

The new rental rate structure may be $100 to $150 a month. We will need good Wi-Fi.

It is possible that we will be able to move back over there in October or November.

HAAUG is currently only booked at the CenterPoint Energy Community Center through April 2019.

UPDATE on Filemaker Pro hosting and the transfer of HAAUG domains and administration credentials to the HAAUG board.

Phil Booth sent a letter to Jeff Davis indicating that we would no longer be hosting the Filemaker Pro database on his system (refer to December 2018 minutes).

However, Jeff is currently in Arizona because of his Dad's illness—there will be a slight delay in getting the passwords for MacHighway to get control of our domains and our registration.

**Adjournment:** Phil Booth motioned to adjourn the meeting at 12:09 p.m. and it was seconded by David Jaschke.

**Location:** CenterPoint Energy Community Center, 7001 5th Street, Bellaire, TX.

**Attendees:** Phil Booth, Clair Jaschke, Mike King, Steve Bridgham, David Jaschke, Mike Epstein, Marcy Spears, Ryan Eisworth

**Call to Order:** By Phil Booth at 12:40 p.m. following the conclusion of the presentation.

**Monthly Reports**

**General Announcements:** The membership approved the 2019 budget and slate of officers with no opposition. Phil Booth made an announcement that meetings will be held at the CenterPoint Energy Community Center for the next year. We will try to get space in the new facility when it becomes available.

**Secretary:** Marcy Spears did not have the November minutes completed for the December meeting. They will presented for approval in January 2019.

**Treasurer's Report:** Clair Jaschke reported our checking account balance as of the end of November 2018 was $4,358.96 Our savings account balance was $8,005.69, for total cash on hand of $12,364.65. All bills were paid and all funds deposited for November.

**Membership:** David Jaschke presented the HAAUG Membership Count Report. HAAUG ended November with 110 members, the same as October and September. In 2017 we had 125 members.

We had four renewal transactions in November, 2 regular and 2 two-year renewals, two of which were submitted using our web interface.

**Programming Report:**

Proposed future meetings:

January 2019 (confirmed): The Swap Meet will be held at the same location as the monthly HAAUG meetings (CenterPoint Energy Community Center, 7001 5th Street, Bellaire, TX). We will use the tables that are available here. The January 2018 Swap Meet sign-up is up on the website.

February 2019 (confirmed by Steve Bridgham): Bob LeVitus, topic to be determined.

March 2019: Phil proposed that he present information on cloud services, including iCloud, Microsoft One Drive DropBox, and Google Drive.

April 2019 (tentative): Dwight Silverman, topic to be determined.

May 2019 (confirmed): Ryan Eisworth will do a 3D presentation. Details will be provide as available.

Tentative - Josh Centers will be contacted about presenting at a future date.

Tentative (date range from March to July 2019): Dave Hamilton of The Mac Observer will present on a topic yet to be determined. Reimbursement for airfare and hotel reimbursements are expected. Mike King will get a date for this presentation.

Programming Summit: Phil Booth proposed a programming summit after January 1st, 2019 to be held at Cafe Express. He said he would try to include others in the meeting using Face Time.

**HAAUG Electronic Communications Systems:** Ryan will do a November/December issue of the Apple Barrel.

**New Business:**

2019 Budget: After the 2019 budget was presented to the membership, David Jaschke motioned that the budget be approved. Fred Cull and Steve Bridgham seconded the motion. The 2019 approved budget was accepted by membership by a majority vote.

Proposed meeting date changes: Members were asked for input regarding the date changes for meetings in April and December in 2019. The members present were fine with the changes. All members will be notified once the changes have been confirmed. The proposed dates to be changed are:

April 20, 2019 (the Saturday before Easter) will be changed to 4/13/19 or 4/27/19.

December 21, 2019 (the week before Christmas and the day before Hanukkah) will be changed to 12/14/19.

Before the date changes are put into place, a board member will seek confirmation from the City of Bellaire regarding the availability of those dates.File hosting for Filemaker Pro and the HAAUG website.

Filemaker Pro web hosting: Clair asked whether we should continue paying for Mac Highways. Jeff Davis is currently paid through December.

The board voted to no longer pay for hosting Filemaker Pro ($54.13 per month), effective January 1, 2019. Before a letter is sent to Jeff, Ryan and David will confirm that all data has been moved.

To ensure that backups of the Filemaker Pro database file is taken care of, a copy of a monthly backup will be e-mailed to current all board members for safe keeping.

Transfer the HAAUG domains and administration credentials to the HAAUG board: The purpose of this change is to bring the domains and administration under board member control to make it easier to respond or plan changes in the future.

Phil asked for a motion to work with Jeff Davis to do this. Ryan proposed that the domains be moved to a hover account so that the HAAUG board can control the HAAUG web domains. David Jaschke made the motion, Mike King seconded it and the board unanimously approved it.

**Adjournment:** Ryan Eisworth motioned to adjourn the meeting at 1:40 p.m. and it was seconded by Clair Jaschke.

**Location:** CenterPoint Energy Community Center, 7001 5th Street, Bellaire, TX.

**Attendees:** Phil Booth, Clair Jaschke, Mike King (absent), Steve Bridgham (absent), David Jaschke, Mike Epstein, Marcy Spears, Ryan Eisworth (absent)

**Call to Order:** By Phil Booth at 12:27 p.m. following the conclusion of the presentation.

## Monthly Reports

**General Announcements:** We have not had an apple barrel since October.  No barrel was released in November.

**Secretary:** Marcy Spears presented the minutes of the October 2018 BOD meeting. Acceptance of the minutes for the October 2018 BOD meeting was proposed by Phil Booth and seconded by Clair Jaschke. They were approved unanimously with an amendment of correcting the membership committee report.  This was proposed by David Jaschke and seconded by Mike Epstein.

**Treasurer's Report:** Clair Jaschke reported our checking account balance as of the end of October 2018 was $4,634.51 Our savings account balance was $8,005.63, for total cash on hand of $12,640.14. All bills were paid and all funds deposited for October. The Account Edge software is going to cost an extra $40.00 for a total of $159.00 for the update.  David Jaschke proposed the increased amount be approved and it was seconded by Clair Jaschke and unanimously approved.

**Membership:** David Jaschke presented the HAAUG Membership Count Report. Attached is HAAUG member count report for October 2018. We ended October with 110 members, the same as September. In October of 2017 we had 125 members. October was a slow month for renewals. We had just three renewals. 1 by web, 1 by credit card and 1 two-year lapsed renewal also by credit card.

**Programming Report:**

Proposed future meetings:

December (confirmed): Ryan Eisworth will present 3D Modeling in Fusion.

January 2019 (confirmed): The Swap Meet will be held at the same location as the monthly HAAUG meetings (CenterPoint Energy Community Center, 7001 5th Street, Bellaire, TX). We will use the tables that are available here. The January 2018 Swap Meet sign-up  is up on the website.

February 2019: Bob LeVitus, topic to be determined. Steve will confirm with LeVitus.

March 2019 (tentative): Dave Hamilton of The Mac Observer will present on a topic yet to be determined. Reimbursement for airfare and hotel reimbursements are expected.

April 2019 (tentative): Dwight Silverman, topic to be determined.

**Programming Summit:** The programming summit scheduled for Thursday, November 8 at Cafe Express was derailed.  Phil Booth and Jeff Davis were in the hospital, and Steve Bridgham was in a car accident on the way there.  Only David Jaschke and Ryan Eisworth made it.

**HAAUG Electronic Communications Systems:** The HAAUG website needs to be updated promoting the December meeting.

A list of nominations for the board officers needs to put in the Apple Barrel along with a requests for other volunteers to serve on the board.

These changes were proposed by David Jaschke and seconded by Mike Epstein.

**New Business:** Ryan proposed that we send announcements for the meetings to members—and after the meeting send out the Apple Barrel.

Clair pointed out the there are two meeting dates in 2019 that will be a problem.

She proposed that the 4/20/19 (3rd Saturday of April which is the Saturday before Easter and is also Passover) meeting could be changed to either 4/13/19 or 4/27/19.

The 12/21/19 (3rd Saturday of December which is the weekend before Christmas and the day before Hanukkah starts) meeting could be changed to 12/14/19.

Before the date changes are put into place, someone will seek confirmation from the City of Bellaire regarding the availability of those dates.

The new 2019 budget will be submitted and voted on by the membership in December.

**Adjournment:** David Jaschke motioned to adjourn the meeting at 12:58 p.m. and it was seconded by Phil Booth.

## Join the HAAUG Board of Directors!

We will soon be asking for members to volunteer to serve on the Board of Directors. Please consider putting your name up for a leadership position. For more information, talk to any board member at a meeting or send an email to president@haaug.org.

## Meetup Group

The Houston Area Apple Users Group is now on Meetup.com! Click here to visit our group's Meetup page and join. Already a member? We'll mark your dues as paid on the Meetup website, so you won't have to pay HAAUG dues twice!
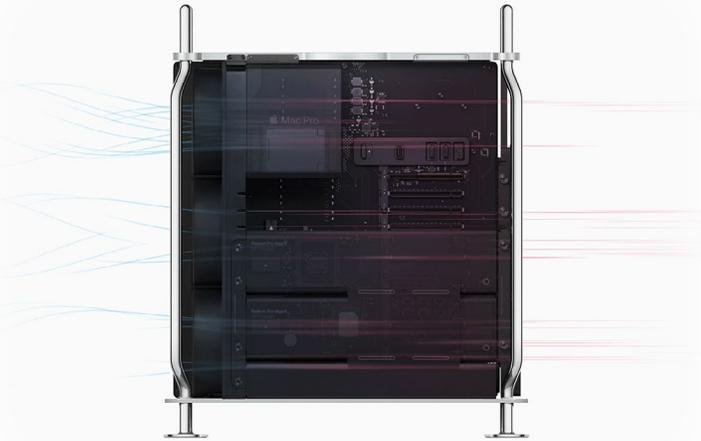
## HAAUG Website Updates

If you haven't vistited the HAAUG website recently, stop by and check it out. Learn more about the organization, get up-to-the-minute news and updates, and browse the Apple Barrel archives, dating back to 1996!

remainder available to its PCI modules. For example, the Mac Pro can supply an MPX module with as much as 500 watts.

To cool it all down, since that much power will generate a lot of heat, the Mac Pro has three impeller fans on one side to cool the CPU and GPUs, while the other side provides a blower that sucks air across the RAM, storage devices, and power supply.

All of this huffing and puffing, according to Apple, is quiet enough to be almost silent under normal workloads. Cooling, by the way, is why the cheese-grater vents look so startlingly alien: Apple claims the lattice pattern is based on natural molecular crystal structures and employs a network of interlocking hemispheres to provide more surface area and enhance the airflow.

### Pro Display XDR

So let's say you're planning to get one of these new Mac Pros. What kind of monitor will you hook up to it?

Apple has that covered, too, with its new 32-inch Pro Display XDR ("Extreme Dynamic Range"), capable of offering a 1 million-to-one contrast ratio, made possible by a finely tuned LED display that employs real-time intelligent image processing. The monitor can produce 1000 nits of full-screen sustained brightness and as high as 1600 nits. The display boasts a P3 wide color gamut with 10-bit color, capable of displaying more than a billion colors accurately.

But why stop at just one of these displays? (Apart from needing a third mortgage on the house?) If you trick out your Mac Pro with enough MPX modules, you can drive as many as four of Apple's new wide-angle 6K displays at once. Cinerama has nothing on a fully loaded Mac Pro with a quad-display setup.

### Pricing and Availability

It's not clear how pricing will break down for various configurations of Mac Pro. All Apple is saying at the moment is that a base model Mac Pro will lift $5,999 from your wallet when it is released later this year.

The Pro Display XDR is also not for the budget-conscious: it will start at $4,999, with the Pro Stand that attaches to it (itself a high-tech marvel) running another $999. Fortunately, an easy-to-attach VESA mount for the Pro Display XDR costs only $199.

So, as great as it is to see Apple returning to the monitor market, we don't see many people adding a Pro Display XDR to a Mac mini or MacBook Pro. It's just too expensive for anyone who wasn't previously considering a super-expensive reference monitor.

Unlike the previous generation of Mac Pro models, which sacrificed capability for compactness, this Mac Pro is made to be configured and reconfigured to suit the needs of a wide range of professional users. Although the prices are certainly high for "the rest of us," for those who need a Mac capable of crunching and shuttling data around at very high speeds, Apple may have finally gotten this Mac Pro right.

(Did we mention that the nearly 40-pound Mac Pro comes with wheels? We didn't? Well, they're optional, anyway.)

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