On Sunday, April 21, 2018, the monthly meeting of the Audio-Video Club of Atlanta was held at the Hi-Fi Buys store in Buckhead. This meeting was all about the new MQA process of preserving recordings and allowing high quality recordings to be downloaded in files smaller than normal high-resolution files, so that it is easier to deliver high quality music to everyone. Ken Forsythe of MQA, Ltd. was our presenter.

John Morrison, president of the club, made some brief announcements, and then introduced Ken and our host, Alan Jones of Hi-Fi Buys, who had opened his extensive showroom and audio store for us today. Also present from Hi-Fi Buys were David and Mike. We had more than 35 members and guests present, with at least two folks attending their first AV Club meeting.

Ken was with Meridian (Bob Stuart's high-end audio and video company) for 20 years and resigned to become Director of Business Development MQA 2 years ago, which now has 32 folks in it. Bob Stuart had earlier resigned from Meridian and founded MQA, mainly so other manufacturers and recording companies would consider MQA as an independent entity and submit their equipment for certification.

Ken then described the objectives of MQA, and the technology used to meet those objectives. MQA is intended to "rescue the archives" of the recording labels. After three years, the labels have adopted the process. MQA strives to "fix" everything "after the microphone". It utilizes files to eliminate "fingerprints" of the equipment used to create the recording. It reverses issues with that equipment, for example to eliminate tape machine wow and flutter (if analog was used) or timing issues (if digital was used). The human ear is very sensitive to time intervals in sound, since it could mean the difference between being a hunter or being a meal for a predator. This is the base of the science of MQA. Once this process is done, the file is MQA authenticated by the label as hearing the performance as intended by the artist(s).

MQA has created a large library of these "fingerprint" files that have parameters customized for each piece of gear used in the recording process. The process then takes the recording and "folds" more information about the recording into the "noise floor" portion of the first 0 kHz to 24 kHz. This means that non-MQA decoders (DAC's) can still process the file, and if the DAC's hardware and/or software can handle it, unfold the information in that "noise floor" to create even better sound. Ken gave us details on this process and how it works via a slide presentation. It is beyond the scope of these minutes to describe all those details, so it is best to go to the <u>www.mqa.co.uk</u> website or other sites such as Stereophile's or The Absolute Sound's to read detailed articles on the process.

It later became apparent that MQA could also be an answer for music download sites that wanted to offer high quality music to consumers in reasonably (CD) sized download files. MQA uses intelligence, authentication, clever "packaging" (of the high-resolution information), and complete compatibility to meet its goal of archiving recordings and the goals of labels to offer high-quality downloads. Without additional hardware, an MQA file can decode into CD (or slightly better) quality. With software decoding, the music decodes to 24/96K and can be shown to be an authenticated recording approved by the content owner. With additional hardware (or firmware) in the DAC, the file is fully decoded to "studio master" quality.

There was also some discussion that this technology does have its "opponents". Some say it is "bad for music", and other manufacturers are hesitant to upgrade or change their equipment (mainly DAC's) to accommodate the technology, since it still is not widely accepted by consumers. Time will tell on that.

After Ken's presentation, everyone went to several listening rooms in the shop to hear MQA for themselves. The listening was done on mostly high-performance equipment. This secretary did most of his listening in the "medium" cost room, while others listened in the "high" cost room.

The refreshments were donated by Jennifer and Dennis in the absence of Dan Wittmayer, whose wife has had recent surgery. The club thanks them for a great "spread"! Many, many thanks once again to Ken for his detailed presentation, and to Alan and his folks for letting us see and hear all the music in their fine shop! Thanks also to Mark Chaffin for managing the event.

Thomas Horner Secretary, A-V Club of Atlanta