## A Behind the Scenes Technical Look at the Golden Hour Radio Broadcast

If you're interested in seeing "behind the scenes" as to how our St Matthews worship service becomes the Golden Hour Radio Broadcast every Sunday morning this is how it's done.

Our sanctuary and control room is connected to Faith FM Radio's control room via a dedicated Bell Telephone line. Inside our St Matthews control room our operators control all of our microphones using a large multi channelled audio fader board. We have numerous microphones located throughout our sanctuary. Some of these microphones are permanently mounted and "hard wired" to our control room. We have two microphones at the front of the sanctuary (located on either side of the chancel). Those two microphones pick up the congregation during hymns. We have one at the pulpit, two in the ceiling above the choir, two at the railing of the choir loft and two solo microphones behind the organ. We also have the option of adding up to 4 more temporary microphones on stands to pick up the sound of soloists and musicians as required.

In addition to these hard wired microphones we have three wireless microphones (two of which have headsets) which are used by our Pastors and assisting Pastors. This gives them the mobility to move around the chancel and sanctuary as they prefer. We also have one wireless hand held microphone located at the lectern.

Our operators are usually quite busy during the service controlling all of these microphones as we strive to have only the one or two microphones being used at that precise moment turned on. All others are turned off to minimise any background noise. We have a two camera closed circuit television system which covers the majority of the sanctuary to assist our operators with that task. Microphone volumes must be continually adjusted throughout the service to ensure that the volume is loud enough for all to hear but yet not too loud to cause that annoying screech or whistle (feedback).

Our operators communicate with the Faith FM operator via the telephone prior to the service to ensure that the radio station can hear our signal, and they will communicate during the service should any problems arise, or if the service will be running short (less than 60 minutes long). In that case the radio station will cue up some of their own music and add it to the broadcast to cover that shortfall in time.

Our control room is equipped with a computer which we use to record the services for playback should we wish to do so at a later date. We also have the option of playing prerecorded music during the service through our sanctuary's speaker system by using as a source our computer or a smart phone, laptop, or tablet. For our congregation members with hearing difficulties we offer a number of portable hearing assist devices available with head sets that are connected wirelessly to our control room and can be adjusted by the user to a higher amplification as preferred. At precisely 9:30 Sunday morning Faith FM begins recording our service on their computer. We know that the 9:30 start time is accurate as we have a digital clock in our control room, one on the organ, one in the chancel for the Pastors and a clock in the Faith FM control room which are synchronized to within a half second of each other. At 9:30 our operator also turns on a red light which is visible in the chancel and at the organ to signify that the radio station recording has started. At 10:30 a.m. Faith FM stops the recording and formats it for our 11 a.m. Golden Hour broadcast. Should there be a system problem such as a power failure at our end or a signal problem between their and our control rooms, Faith FM has an emergency pre-recorded service which we had previously produced here in-house which they can play in lieu of our regular service. Although this type of problem is a rarity it does happen on occasion.

We are very proud of the quality of our sound system here at St Matthews. A number of years ago we produced a Liona Boyd concert. For that concert we hired a professional audio technician. He was very impressed with our system in fact he used some of it in tandem with his own equipment.

Please feel free to drop into our control room after the service should you wish one of us operators to explain in more detail the devices that we use or contact myself (Gary Pootz) with any other question.