



CHURCH  
OF THE  
ASCENSION

Technology, Liturgy, Music, Fellowship & Mission  
Conjectures, Questions & Options  
Pentecost 2020

Background and Document Aims

We at Church of the Ascension have little or no consistent past use of technologies used to live-stream, record, share, promote or archive our liturgies and music. The early-2020 coronavirus pandemic and related stay-at-home directives and health concerns have put us on a steep learning curve. Member's of the parish's re-opening task force recognize that the present difficulties have yielded unexpected opportunities, by way of technology, to better reach and serve our members and also to expand our vision and mission by reaching non-members near and far. We already seem to have recognized that 'there's no going back,' or that to do so would result in a loss of greater connection that technology has uniquely and sometimes surprisingly allowed.

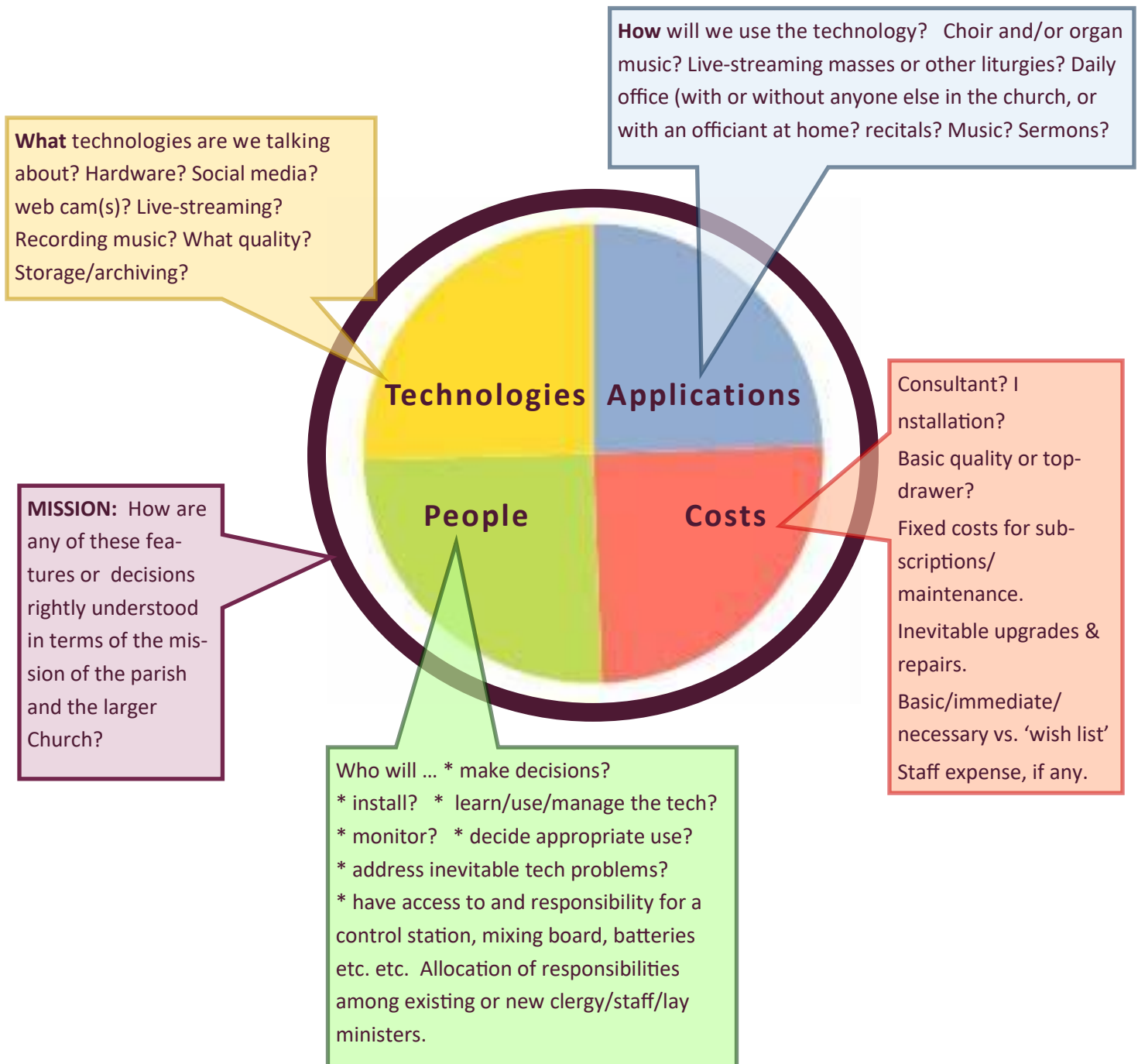
This document is NOT A PROPOSAL. Think of it as a meeting ground to present some initial ideas in hopes of pooling and examining our common knowledge, interests and questions, all of which, we pray, will begin to suggest some ways forward.

*"At your command all things came to be:  
the vast expanse of interstellar space,  
galaxies, suns, the planets in their courses,  
and this fragile earth, our island home.  
By your will they were created and have their being."*

Book of Common Prayer, Eucharistic Prayer C

## Facets and Complexities

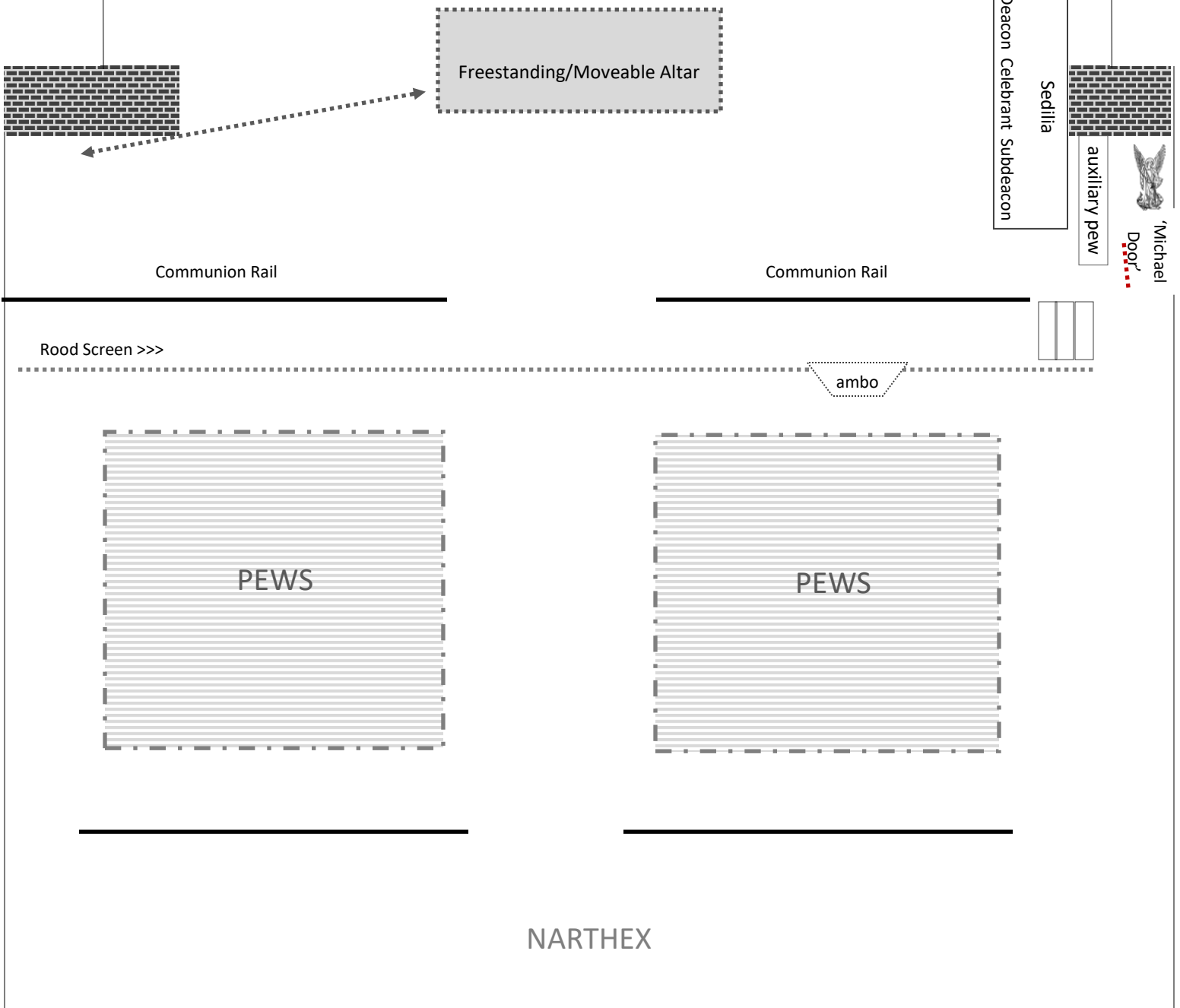
Technology issues can quickly become complicated, and misunderstandings can arise due to differing definitions, expectations or priorities. The schema below attempts to show four different facets of decisions about technology, all 'surrounded' or framed by the primary reference point and value of mission.



**SOME  
OPTIONS  
- Page 1 -**



Before stay-at-home, we had some success with and were perfecting live-streamed masses in the sanctuary, with one priest and one server. We used Facebook Live via an iPhone held onto the rood screen with a furniture clamp. The sedilia was placed behind the freestanding altar. The celebrant used one hard-wired lapel mic that was shared with the server for readings and prayers of the people. This arrangement likely would not work at the high altar, in part due to the mic wire ... Otherwise, we already have the tech to continue this.



**SOME  
OPTIONS  
- Page 2 -**



Acolytes and Emcee on benches

Door to  
sacristy

Deacon Celebrant Subdeacon

Sedilia

auxiliary pew



'Michael  
Door'



Freestanding/Moveable Altar

Communion Rail

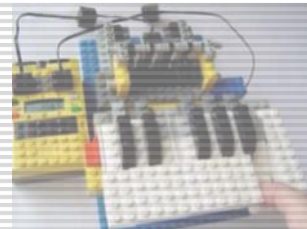
Communion Rail

Rood Screen >>>

ambo

PEWS

PEWS



We do not presently have the technology to feasibly live-stream or record a mass with music. This could be done at a cost of under \$500 by getting a simple system by which two wireless mics feed into the smartphone by which the mass is being streames.

NARTHEX



**SOME  
OPTIONS  
- Page 3 -**



Acolytes and Emcee on benches

Door to  
sacristy

Deacon Celebrant Subdeacon

Sedilia

auxiliary pew



'Michael  
Door'

OOPS! I didn't  
know my mic  
was off!

Freestanding/Moveable Altar

Communion Rail

Communion Rail

Rood Screen >>>

ambo

Here's a basic wireless two-mic system ... it can seem simple, but it can quickly get complicated both due to some quality and mic/cable compatibility issues and when it comes to using it.



**Which Cable to use?**



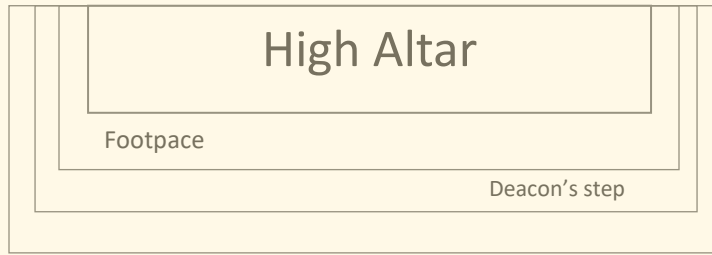
And here I didn't  
know I'd left  
mine ON!

**See more mic info and scenarios on 'Options' pp 7-10**

NARTHEX



**SOME  
OPTIONS  
- Page 4 -**



## Church Sanctuary Webcam, Part A

In mid-March we acquired a laptop, camera and signal-extender to provide a continuous live-streaming web cam image of the Ascension sanctuary. The laptop and camera are in the choir loft and not competing for any other space or need. The signal extender allows us to use the church's existing Internet signal. We can use this equipment/configuration as is with no more expense. (A failure of the laptop fan will be repaired and the system up and running again by mid-June.)

Acolytes and Emcee on benches

Door to  
sacristy

Deacon Celebrant Subdeacon

Sedilia

auxiliary pew



'Michael  
Door'

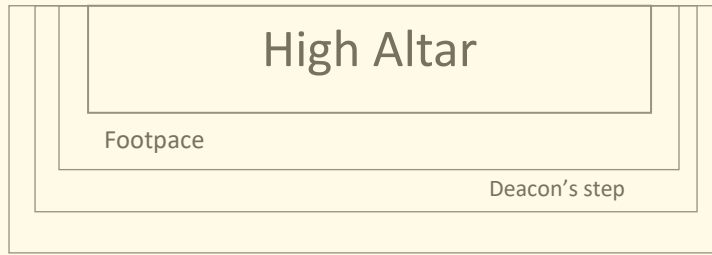
Freestanding/Moveable Altar

ambo

PEWS

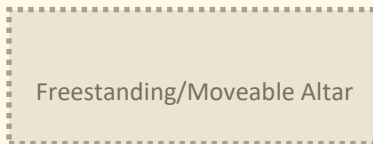
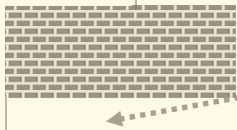
PEWS

**SOME  
OPTIONS  
- Page 5 -**



## Church Sanctuary Webcam, Part B

We may wish to explore how we could use a higher resolution camera, and perhaps a means for **faster processing speed**, from the same location. This could be used for most or all purposes—although to be adequate for live-streaming any liturgy, microphones in and closer to the sanctuary would need to be acquired and joined to the camera feed.



Note: 'faster processing speed' would likely require improved internet for the church as a whole.

Acolytes and Emcee on benches

Door to  
sacristy

Deacon Celebrant Subdeacon

Sedilia

auxiliary pew



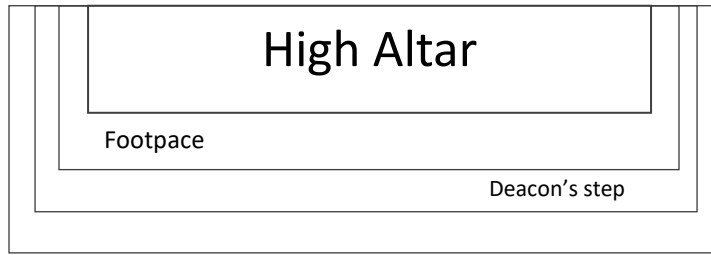
'Michael  
Door'

ambo

PEWS

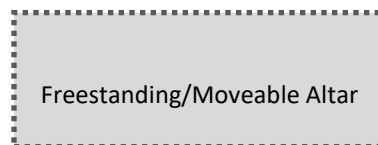
PEWS

**SOME  
OPTIONS  
- Page 6 -**



**Tech Acquisition and Installation and Economies of Scale**

There may be economies of scale as we consider tech options. After assuring minimal ongoing online presence, we may wish to allow some time to consider a more comprehensive technology plan. On the other hand, tech issues can become so complicated and options so many that we could indefinitely delay ...



Acolytes and Emcee on benches

Door to  
sacristy

Deacon Celebrant Subdeacon

Sedilia

auxiliary pew



'Michael  
Hall'  
Door

Communion Rail

Rood Screen >>>

Communion Rail

ambo

PEWS

PEWS

**Examples of tech  
improvements:**

Audio speakers  
in the nave.

Music recording  
potential congru-  
ent with stature  
of our music  
ministry.

A/V feed from/  
to Wheeler and/  
or Michael Hall.

Speaker feed to  
the street! at en-  
trances.

*What else?*

NARTHEX



**SOME  
OPTIONS  
- Page 7 -**

## High Altar

Footpace

Deacon's step

### Options for Exploration: Microphones

Presently using one mic, hard wired to an iPhone.  
May wish to consider an array of hard-wired, lavalier,  
altar (table) and/or music recording microphones.

Acolytes and Emcee on benches

Door to  
sacristy

Deacon Celebrant Subdeacon

Sedilia

auxiliary pew



'Michael  
Door'

Freestanding/Moveable Altar

Communion Rail

Communion Rail

Rood Screen >>>

ambo

PEWS

PEWS

NARTHEX

## Microphone Types and Uses



< **Lectern mic** for preacher, lector, intercessor, announcements.



< **Wireless lavalier mic** allows priest and/or deacon to move around without distraction and limitations of cords. Notoriously prone to hi-jinx (clergy who dislike them, place them poorly, can't or won't learn the basics of using them or fail to turn them off).



< **Altar-top mic.** Does this need explanation? Flat, linen-white, picks up voices at or near the altar. There are likely wireless/battery-operated versions.



< **Free standing, movable music recording microphones** may be relatively affordable or insanely expensive. Two mics allow for stereo sound. For best presentation of both choir and organ we would probably want four.



< **Fixed, drop-down music recording microphone** ... another option. This is one area where we'd want to consult with a sound engineer.

# High Altar

Footpace

Deacon's step

**SOME  
OPTIONS  
- Page 9 -**

Acolytes and Emcee on benches

Door to  
sacristy

Deacon Celebrant Subdeacon

Sedilia

auxiliary pew

'Michael  
Door'

## Options for Exploration: Microphones

Possible microphone placement  
(whether for in-person worship, live-streaming or recording.)

Freestanding/Moveable Altar



Communion Rail

Communion Rail

Rood Screen >>>

PEWS

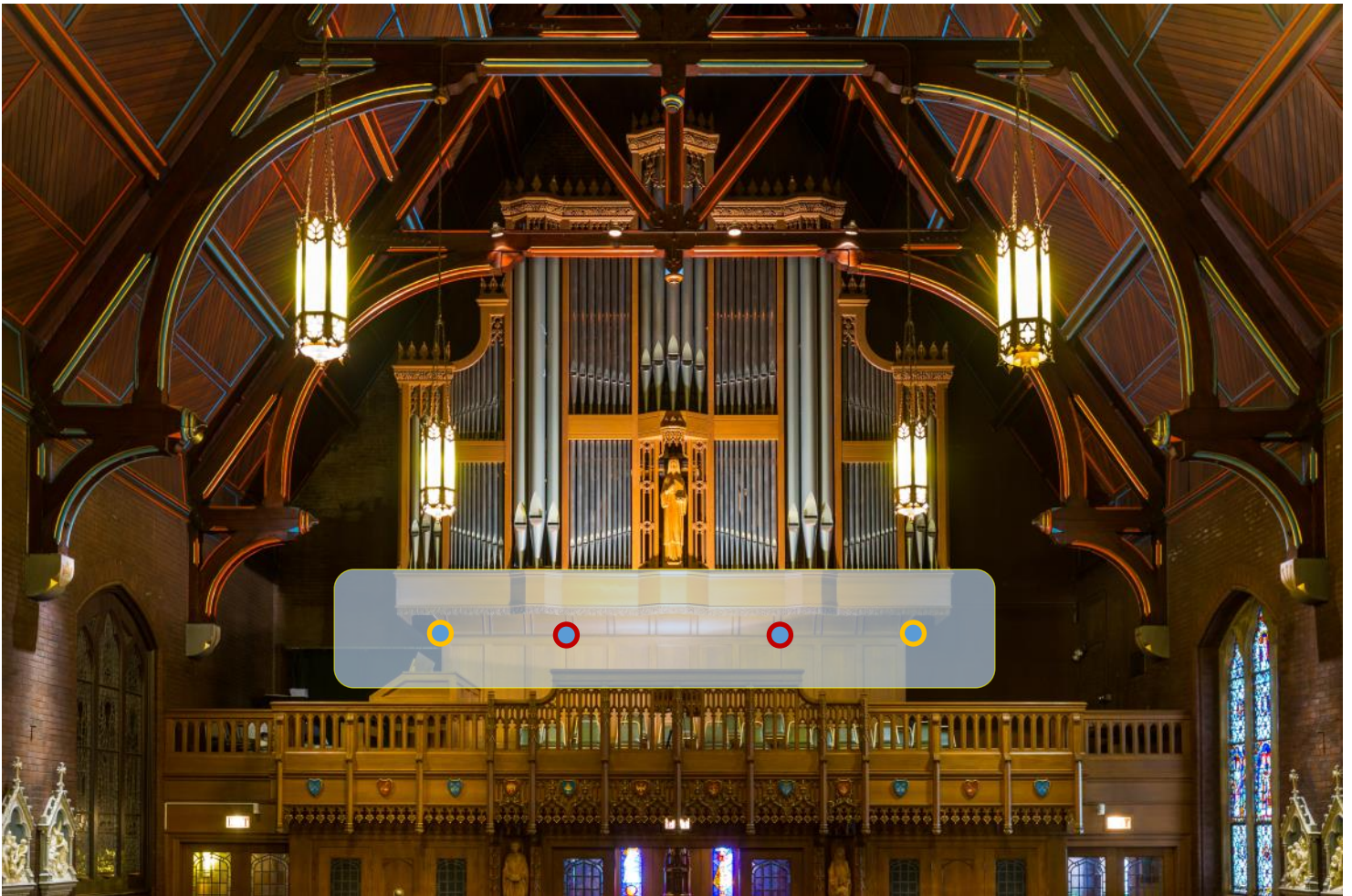
PEWS

ambo

NARTHEX

**Approximate placement of two or four music recording microphones**

Could be placed on floor, mounted on oak rail or suspended from ceiling (likely most expensive).



Note: Other than the mass for the Third Sunday of Lent -- March 22, 2020, the First Sunday after Stay-at-home orders went into effect -- our 'Ascension Day Choir and Organ Musical Offerings' has been our most-watched Facebook/YouTube video ...

**RECENT VIDEOS**

**Ascension Day Choir and Organ Musical Offerings - FB:517 YT147**

Mass for Ascension Day - FB236 YT14

Bishop's Ascension Day Reflection and Blessing - FB121 YT78

Mass for the 4th Sunday of Easter - FB 212 YT14

David White Recital on Marian themes, May 3, 2020 - FB176 YT75

**\*\* These figures do NOT take into account the 'Analytics' that segment average viewer length and more. \*\***

**SOME  
OPTIONS  
- Page 11 -**

## High Altar

Footpace

Deacon's step

### Options for Exploration: Speakers

Consider the statistics below, provided by the  
Center for Hearing and Communication, NYC

Acolytes and Emcee on benches

Door to  
sacristy

Deacon Celebrant Subdeacon

Sedilia

auxiliary pew



'Michael  
Door'

Freestanding/Moveable Altar

Communion Rail

Communion Rail

Rood Screen >>>

ambo

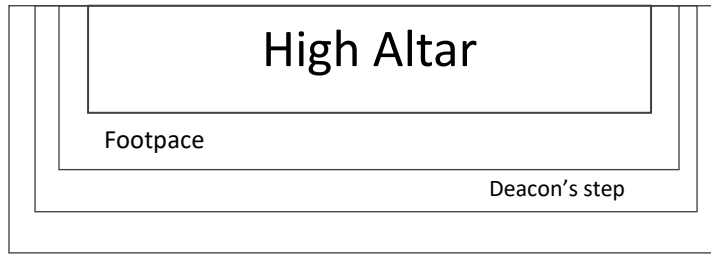
## Hearing loss: Prevalence

- 48 million Americans have a significant hearing loss
- 1 out of 3 people over age 65 have some degree of hearing loss
- 2 out of 3 people over 75 have a hearing loss
- 14% of those ages 45-64 have some type of hearing loss
- Tinnitus (ringing in the ears) affects 50 million people in the United States.

NARTHEX



**SOME  
OPTIONS  
- Page 12 -**



**Options for Exploration: Speakers**  
Consider installation of two unobtrusive strip speakers in the window recesses nearest the rood screen.



Personal listening devices may be an alternative to whole-space speakers and would preserve the nave's 'natural' acoustics that some may value. See the note on Page 16 of 'Some Options'

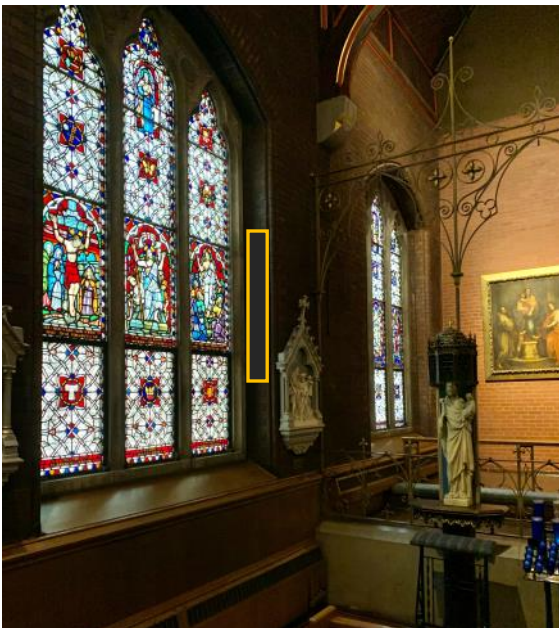
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Communion Rail

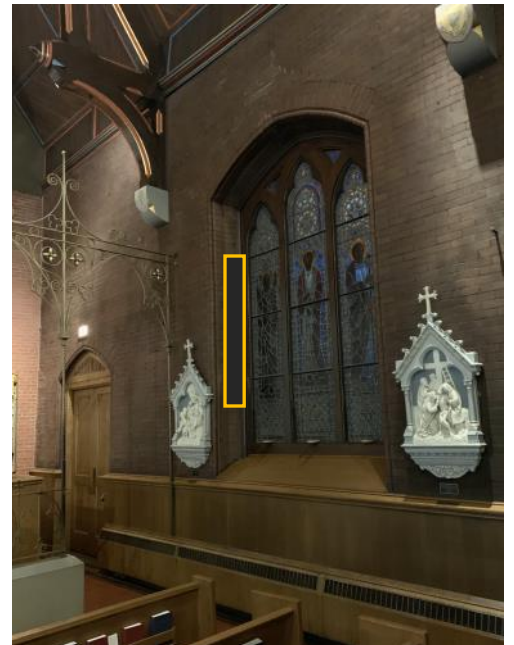
munion Rail

ambo

Rood Screen >>>



The yellow outline of the speakers shows location, not proposed design. Speakers would be matte black and most persons would not notice them.



Acolytes and Emcee on benches

Door to  
sacristy

Deacon Celebrant Subdeacon

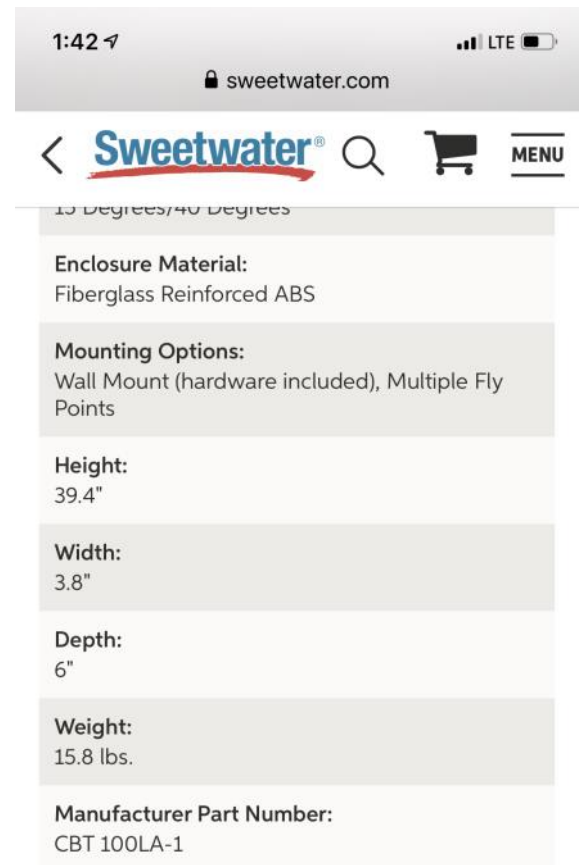
Sedilia

auxiliary pew



'Michael  
Door'

Example of a 'column' speaker, with dimensions ...



*This is NOT a recommendation.*

### Options for Exploration: Speakers

What about a couple of outdoor speakers that might quietly communicate at one or more doors what happening inside?  
(The Greek Cathedral a block south has this feature.)



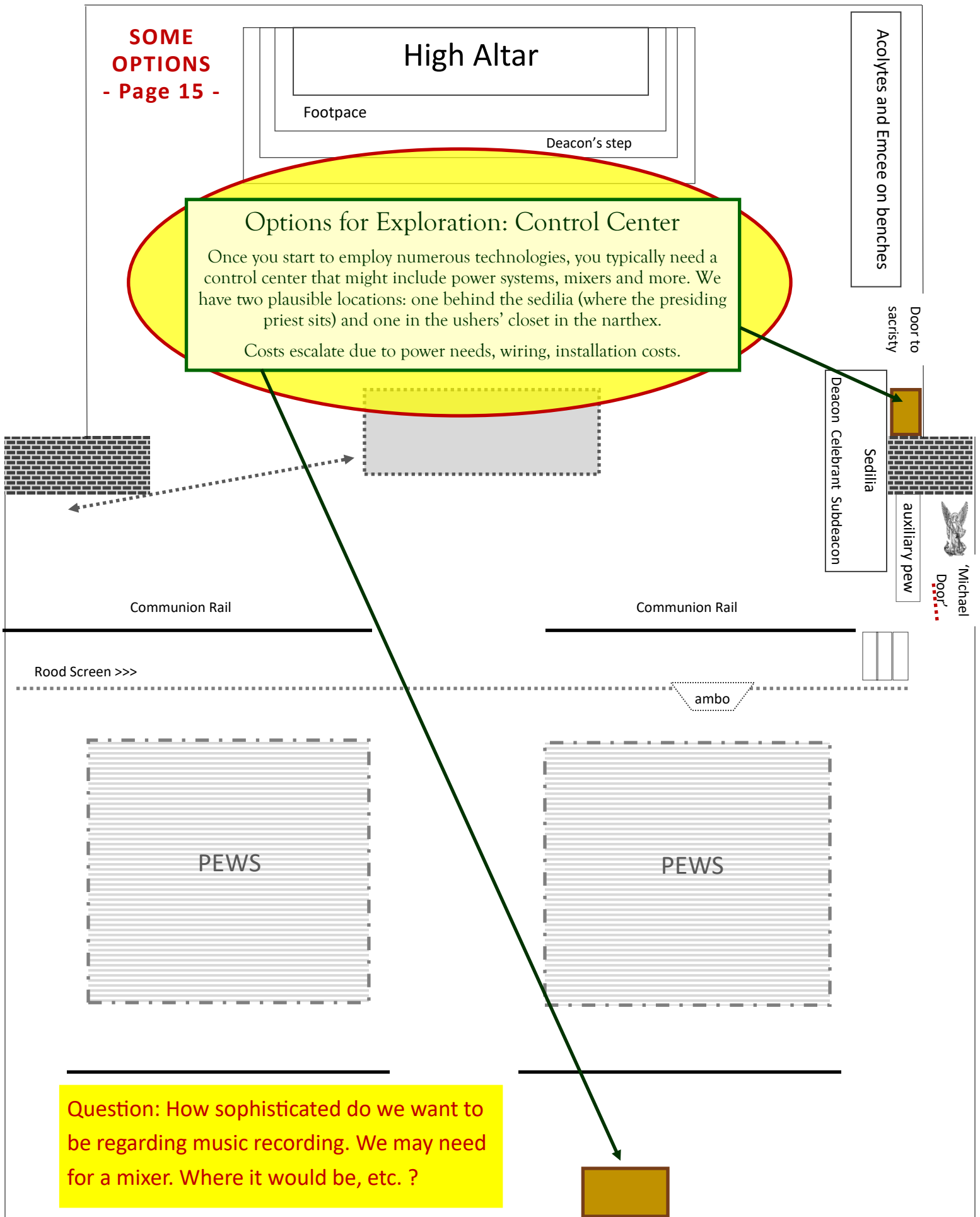
### Options for Exploration: Speakers

What A/V connectivity might we or should we explore between the main church and Michael Hall or Wheeler Hall.





**SOME  
OPTIONS  
- Page 15 -**



## Zoom, Continued ...

A number of parishioners have taken to Zoom and want to explore how we can continue using it even after returning to the church building. This matter is hereby noted but not otherwise addressed in this presentation.



## Twitch? Really?

Twitch is built for a video gaming culture far removed from the aesthetic predilections of Ascension. Some churches are turning to it for live-streaming because of the high-quality streaming capabilities that gamers demand. Who knew? Should we explore live-streaming options ...



An Assisted Listening System could be used in lieu of speakers. Tend to be somewhat high maintenance, health issues, 'management'. But a good option if a congregation favors preserving mostly natural acoustics.



Amazon: 1 'transmitter' and  
25 hearing units for \$888.88

What else should we include or  
be looking at or wondering about?





**Challenges with regard to new technology will include:**

- 1. The exploration and decision-making process.**
- 2. Money.**
- 3. WHO will master and manage and trouble-shoot any new technology?**

**Of these three challenges, the third may be our greatest. We should not underestimate what will be required to acquire, install, learn and operate any new technology. NO decisions should be made about adding new technologies without a written plan.**

***For your doodles ...***

**... a (not-to-scale) layout of the church is found on the following page.**

