



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.

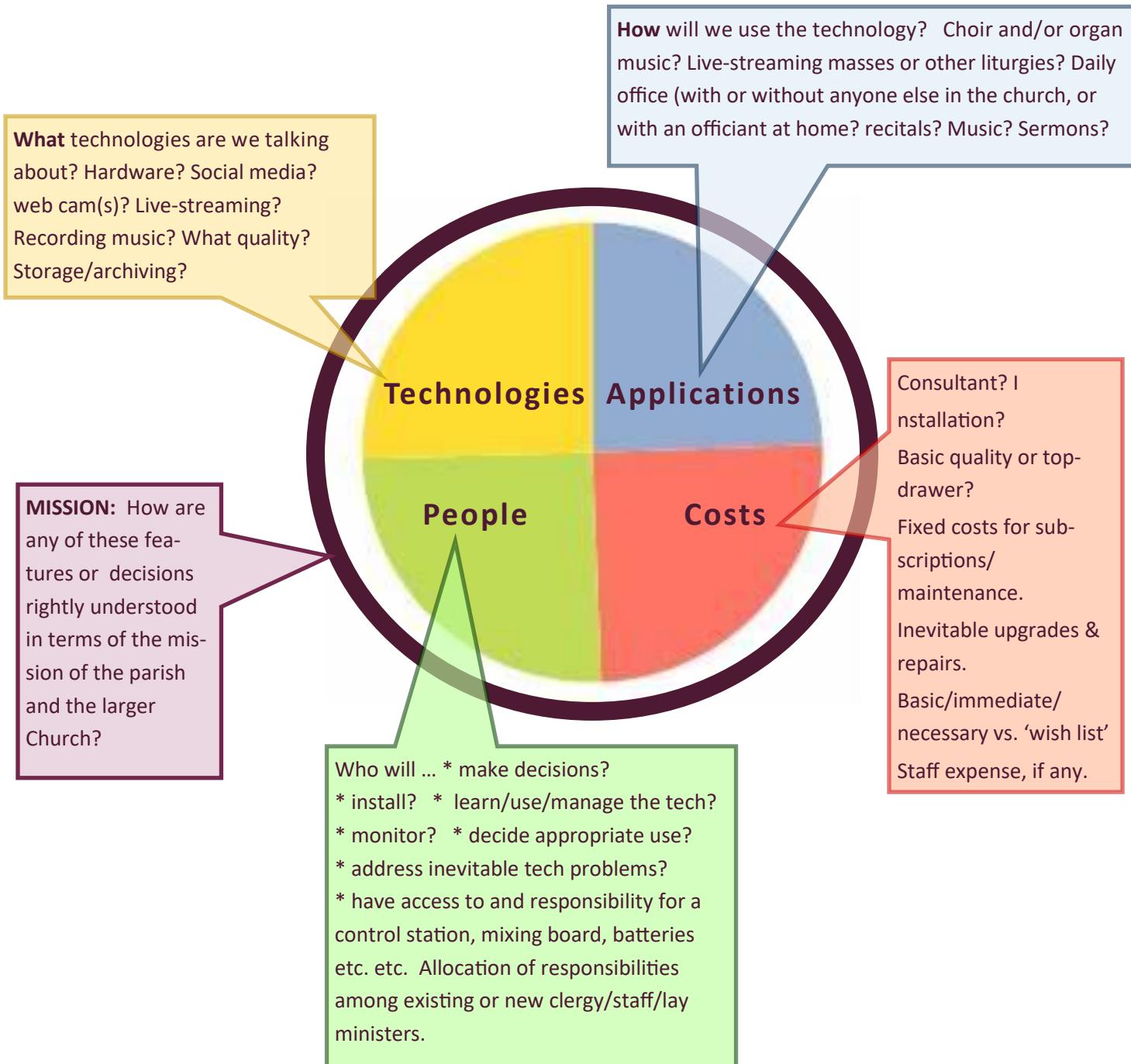
This document is NOT A PROPOSAL. Think of it as a meeting ground to present some initial ideas in hopes of pooling and examining our common knowledge, interests and questions, all of which, we pray, will begin to suggest some ways forward.

*"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."*

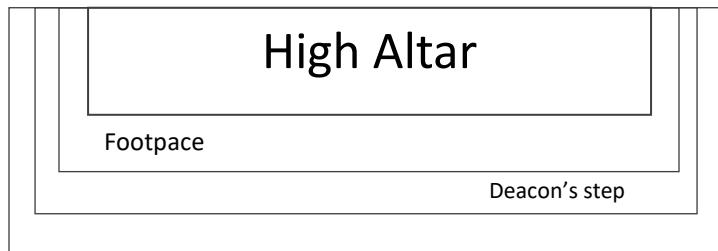
Book of Common Prayer, Eucharistic Prayer C

## 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.



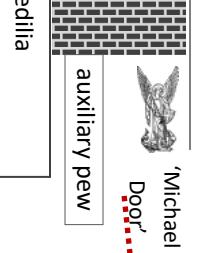
**SOME  
OPTIONS  
- Page 1 -**



Acolytes and Emcee on benches

Door to  
sacristy

Sedilia



Communion Rail



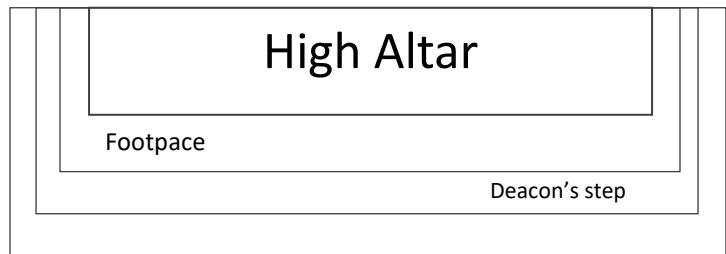
'Michael  
Dog'

Rood Screen >>>



NARTHEX

**SOME  
OPTIONS  
- Page 2 -**



Acolytes and Emcee on benches

Door to  
sacristy

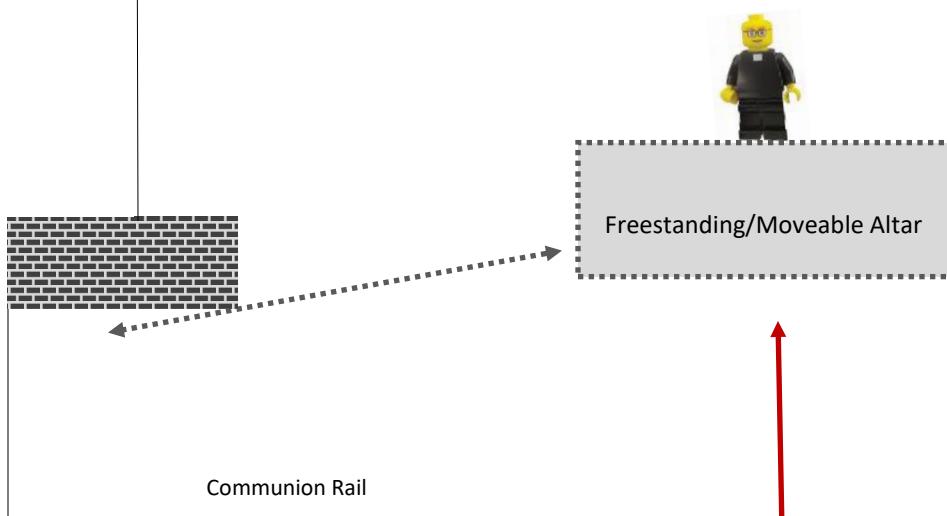
Deacon  
Celebrant  
Subdeacon

Sedilia

auxiliary pew



'Michael  
Dogg'



Communion Rail

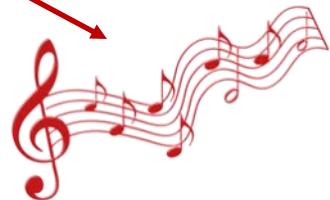
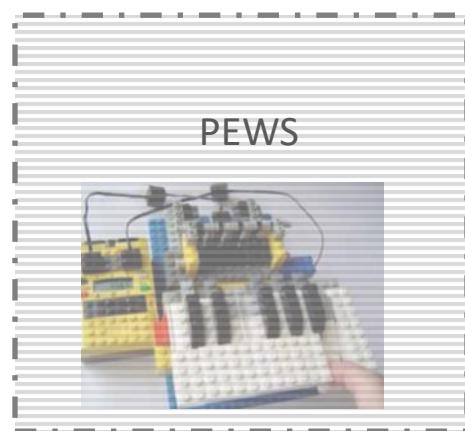
Communion Rail

Rood Screen >>>



NARTHEX

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 streamed.



**SOME  
OPTIONS  
- Page 3 -**

**High Altar**

Footpace

Deacon's step

Acolytes and Emcee on benches

Door to  
sacristy

Sedilia

Deacon  
Celebrant  
Subdeacon



Michael  
Dog

auxiliary  
pew

Communion Rail

Communion Rail

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



Freestanding/Moveable Altar

Rood Screen >>>

ambo

Communion Rail

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?**



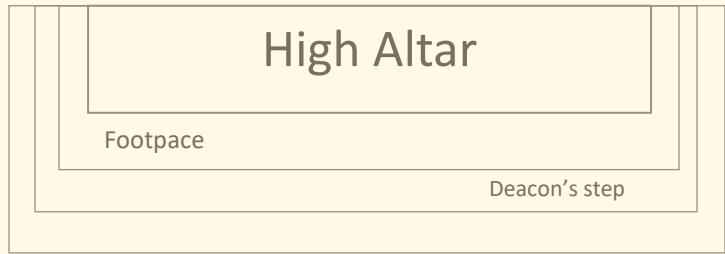
And here I didn't  
know I'd left  
mine ON!

**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

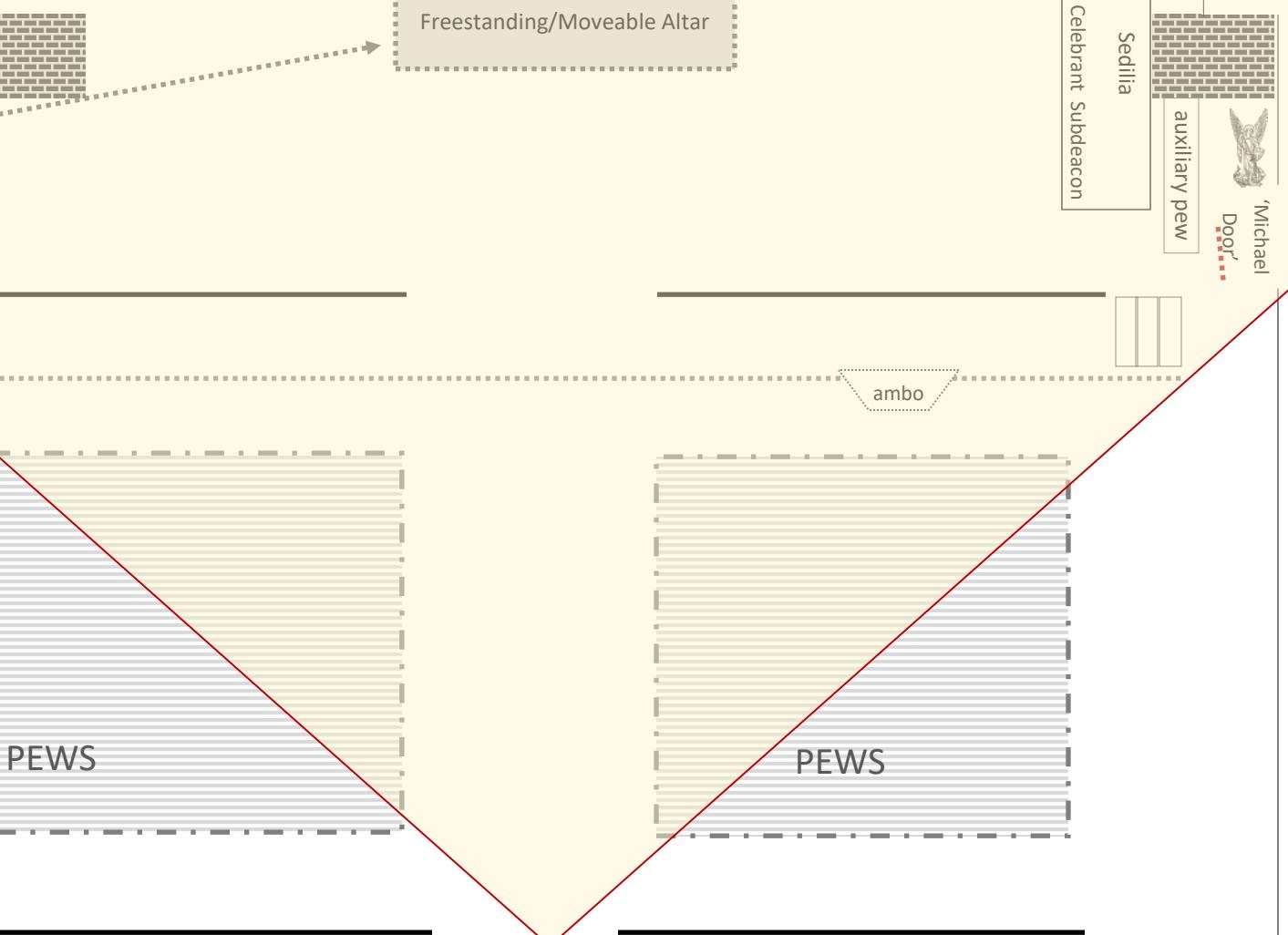
Door to  
sacristy

Sedilia

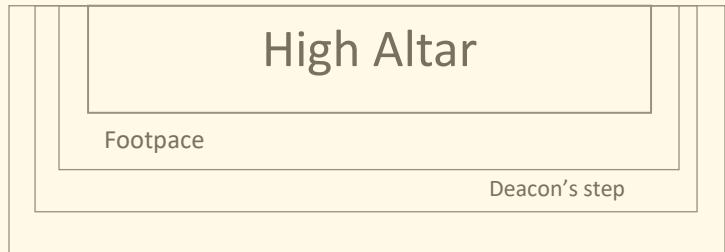
auxiliary  
pew

'Michael  
Dog' 

Freestanding/Moveable Altar

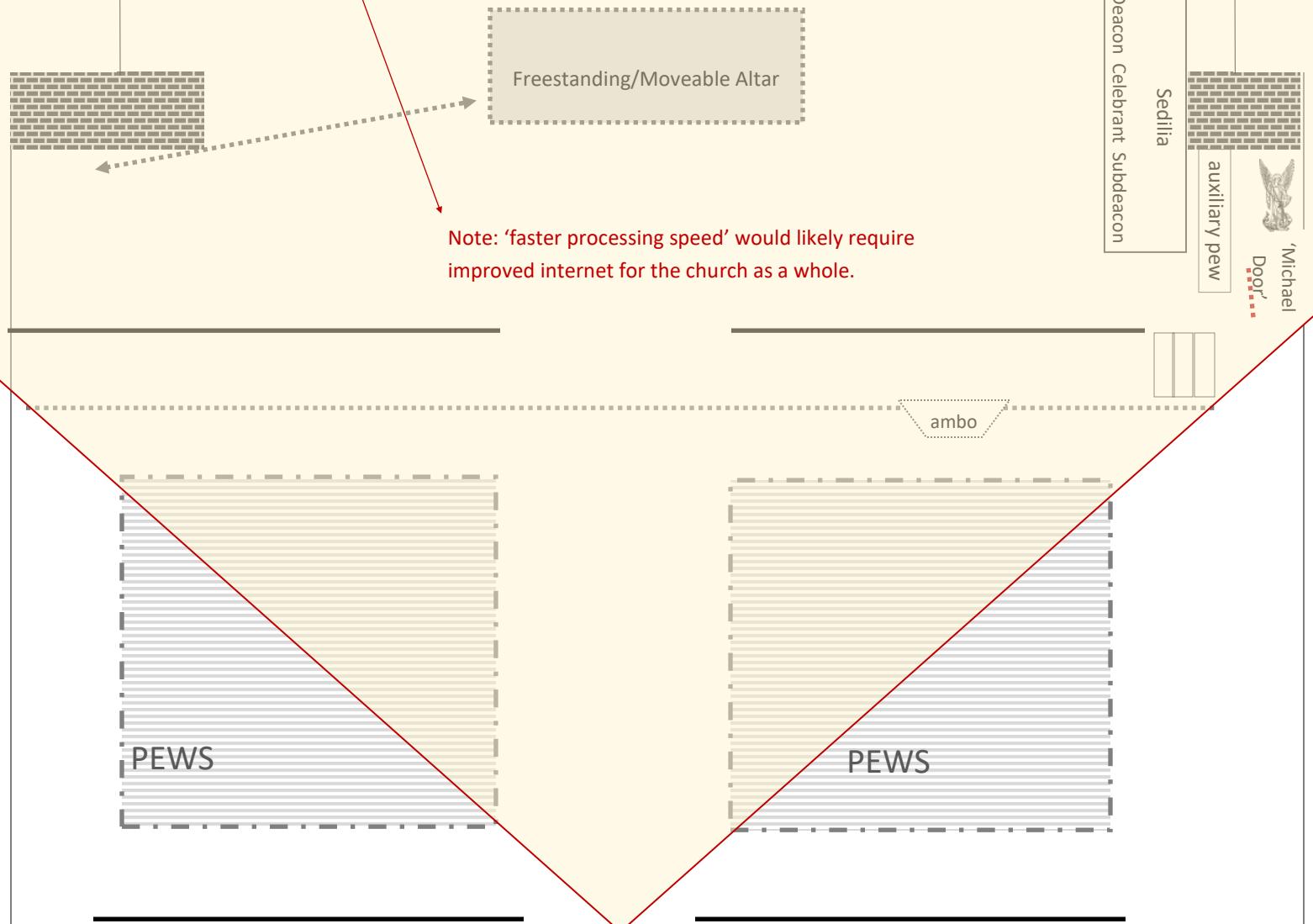


**SOME  
OPTIONS  
- Page 5 -**

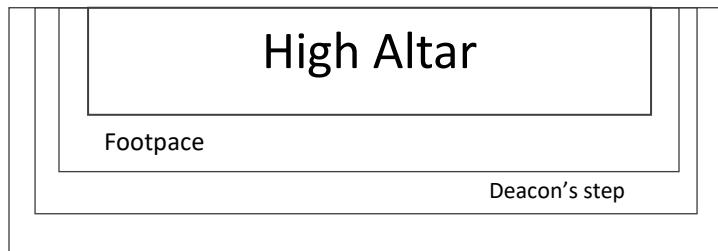


### Church Sanctuary Webcam, Part B

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.

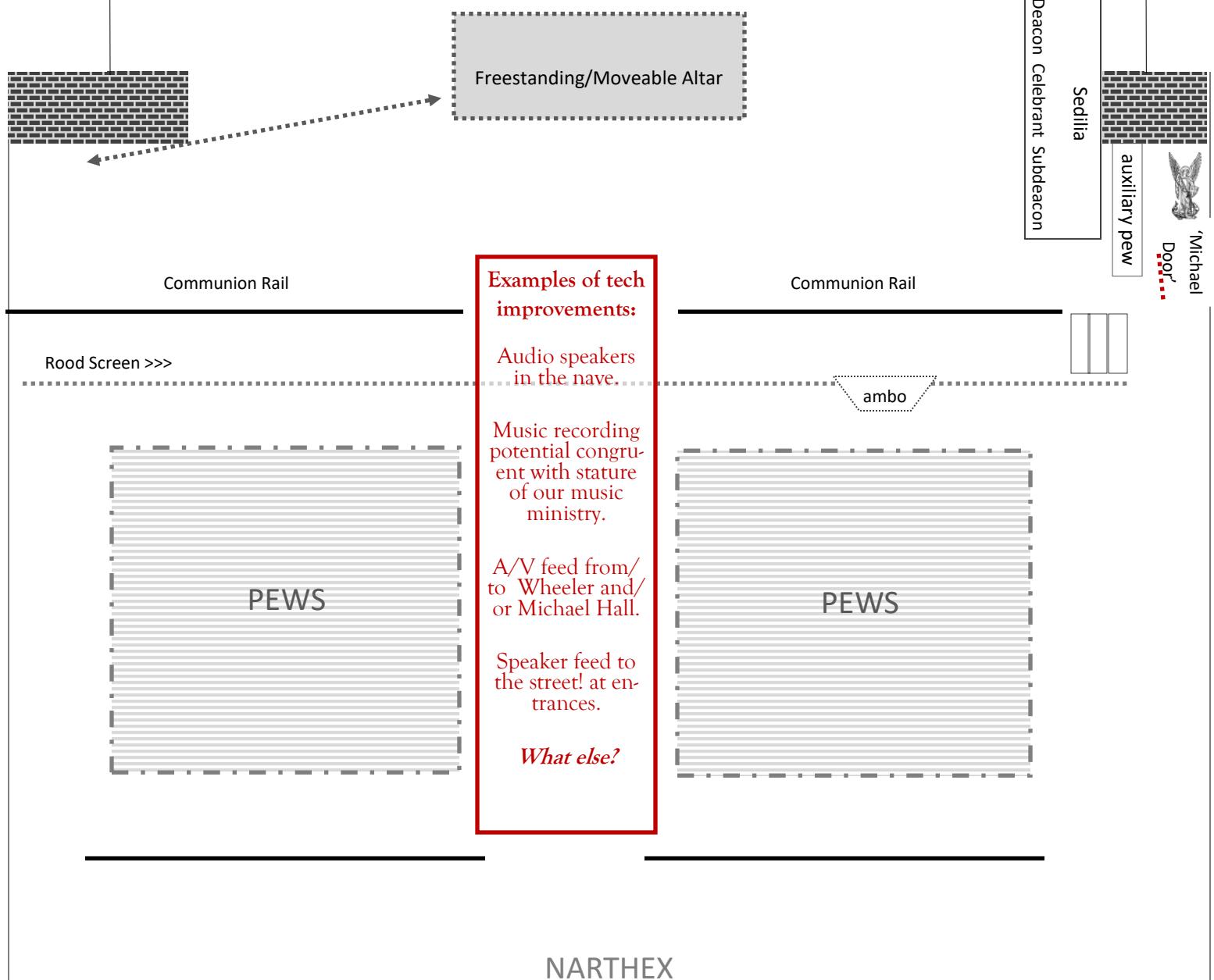


**SOME  
OPTIONS  
- Page 6 -**



**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 ...



**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  
Dogg

Communion Rail

Communion Rail

Rood Screen >>>

ambo

PEWS

PEWS

NARTHEX

## Microphone Types and Uses



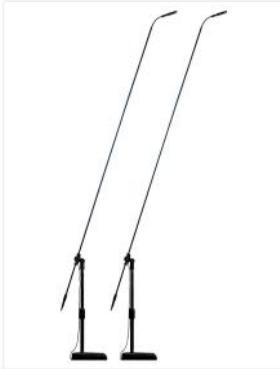
< **Lectern mic** for preacher, lector, intercessor, announcements.



< **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.

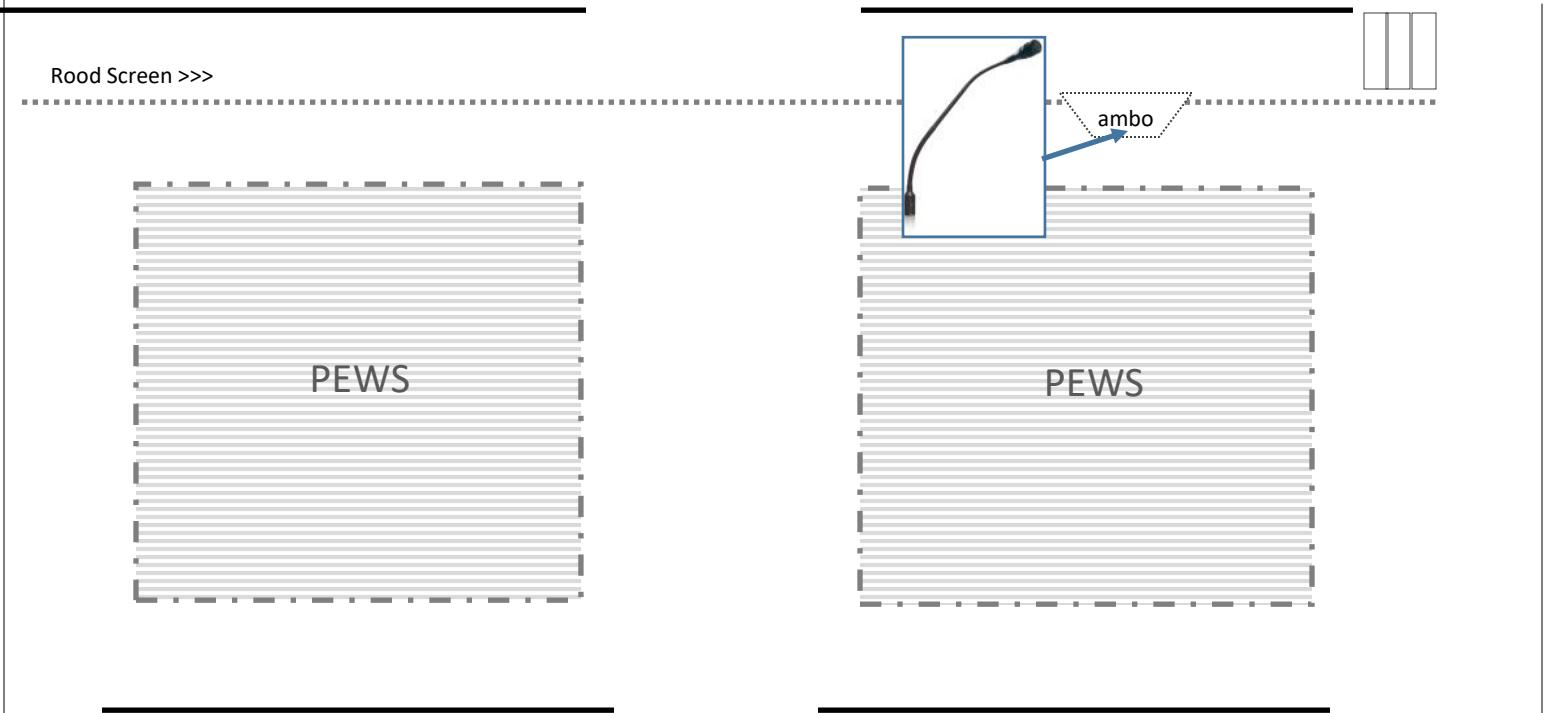


< **Fixed, drop-down music recording microphone** ... another option. This is one area where we'd want to consult with a sound engineer.



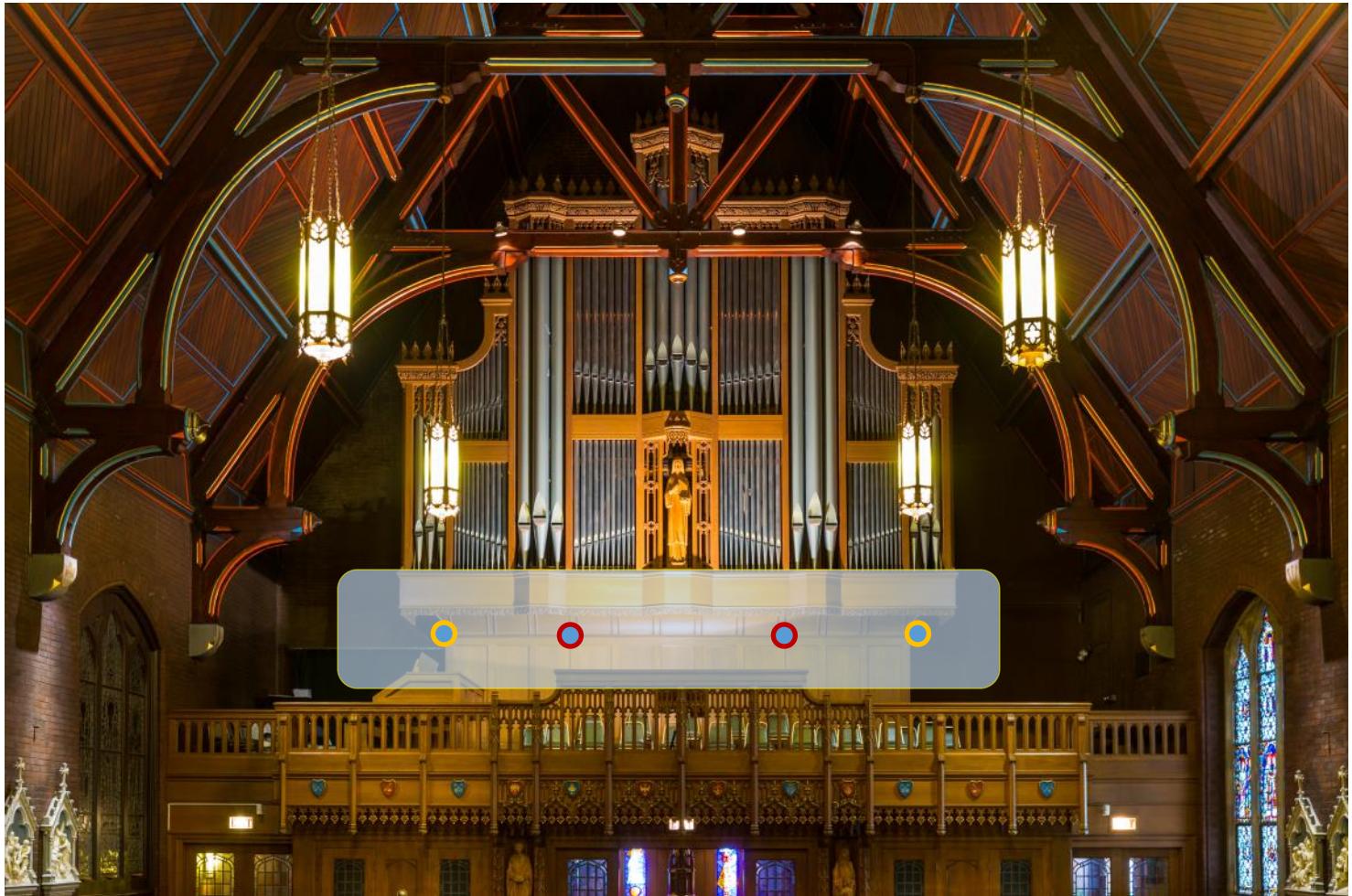
**Options for Exploration: Microphones**

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



**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  
Dogo'

Communion Rail

Communion Rail

Rood Screen >>>

ambo

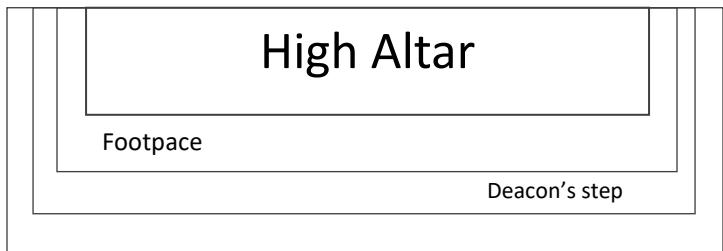


## Hearing loss: Prevalence

- 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

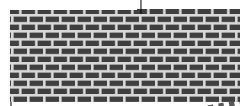
**SOME  
OPTIONS**  
- Page 12 -



Acolytes and Emcee on benches

**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'

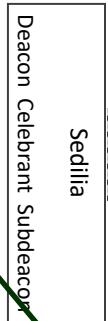
Com-

Communion Rail

Communion Rail

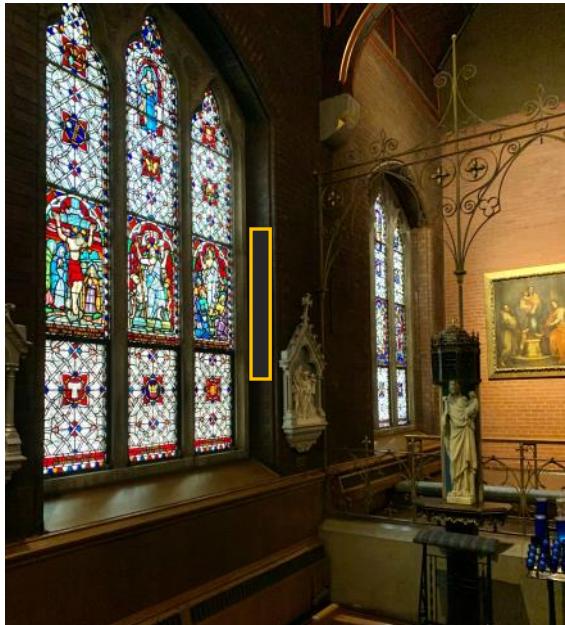


Door to  
sacristy



'Michael  
Dog'

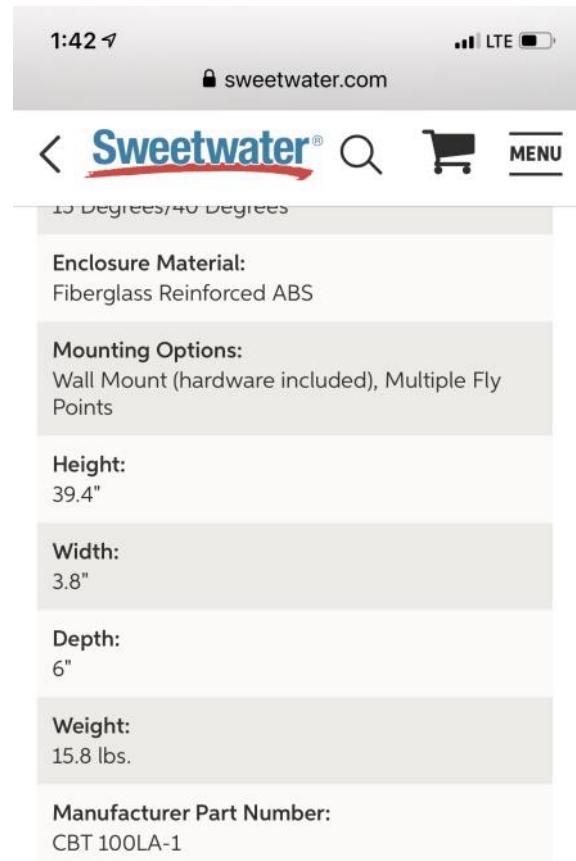
Rood Screen >>>



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



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



*This is NOT a recommendation.*

**SOME  
OPTIONS  
- Page 14 -**

**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 -

## High Altar

Footpace

Deacon's step

### Options for Exploration: Control Center

Once you start to employ numerous technologies, you typically need a control center that might include power systems, mixers and more. We have two plausible locations: one behind the sedilia (where the presiding priest sits) and one in the ushers' closet in the narthex.

Costs escalate due to power needs, wiring, installation costs.

Acolytes and Emcee on benches

Door to  
sacristy

Deacon  
Celebrant  
Subdeacon

Sedilia

auxiliary  
pew



'Michael  
Dogo'

Communion Rail

Communion Rail

Rood Screen >>>

ambo

PEWS

PEWS

Question: How sophisticated do we want to be regarding music recording. We may need for a mixer. Where it would be, etc. ?

## 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 ...



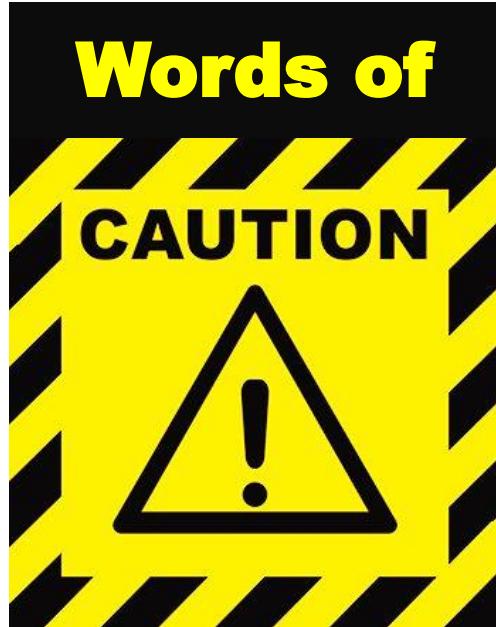
An Assisted Listening System could be used in lieu of speakers. Tend to be somewhat high maintenance, health issues, 'management'. But a good option if a congregation favors preserving mostly natural acoustics.



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

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





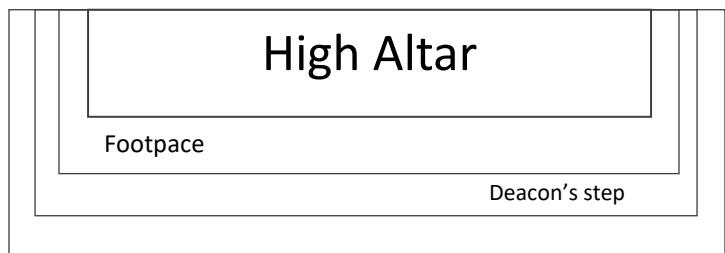
**Challenges with regard to new technology will include:**

- 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 ...*

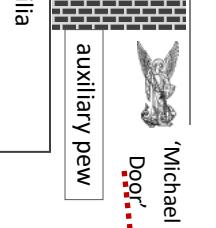
**... a (not-to-scale) layout of the church is found on the following page.**



Acolytes and Emcee on benches

Door to  
sacristy

Sedilia



Communion Rail

Communion Rail

Rood Screen >>>



ambo

NARTHEX