

December 14, 1982

The organ at Pilgrim Church can be thought of in terms of these following five main sections:

1. Pipes
2. Windchests
3. Reservoirs, swell shade actions, wind lines
4. Console
5. Chambers and acoustical speaking space

Each section can be discussed as an entity in order to realize the costs which may be involved in upkeep, repair, and/or renovation and replacement. From the information in the files, I have also some history of work on the particular sections to share.

1. I was not able to find, as yet, the original stop list of the organ. To the best of my knowledge, a major pipe revision was made in 1947 by Moeller Company (this included windchest work and a new console. I do not think that the number of pipes was significantly increased from what had been there previously. The original organ probably included about 2800 pipes, and this figure has remained even after the recent refurbishing by Dick Lurth. The Moeller rebuild was an attempt to "modernize" the organ sounds, and this included revoicing pipes and changing the type of stops (pipes) in the organ. The Lurth refurbishing was an attempt to even out the work of Moeller and to be more sympathetic to the original tonal concept. With major replacement by both companies, I feel that the original concept is quite completely lost. In Moeller's attempt to modernize the organ sound, and in Lurth's use of all kinds of various hodge-podge ranks of pipes from various organs, most of dubious reputation, no integrity can be claimed by the organ. Yes, now there are a few sounds which are a bit nicer to play and to listen to, but the working together of the ranks of pipes with each other always remains a problem unless the organ is scaled completely as a unit. This, of course, has not been done since the original.

It is interesting that organ rebuilders are always most interested in changing the pipes or working with them when, in actuality, the pipes themselves do not deteriorate in sound or in material through the years--they are what they were originally supposed to be and sound like. And yet, the pneumatics, the electrical contacts, the reservoirs, the magnets, and other much more quickly deteriorating components do not interest the refurbishers as much, even though they know very well that these are the items that need work much more than do the pipes. David Rutford is an exception to this since his interest is much more in the workings of the organ rather than the pipes. Lurth's proposal was really only tonal although he agreed to certain repairs at regular intervals; this point, in fact, convinced the Music Committee to go with him rather than with Gould. But, as you can probably see, pipes are the easiest to warrant, especially since the tuning is not part of the warranty.

The speech of the pipes is not probably as good as it can be considering that some chest magnets or pneumatics will make uneven speech because of their condition and that many of the pipes are poorly made to begin with.

At least one good, respected musician has commented that the organ does not sound any better, or very little better, than before the \$28,000 was spent.

2. Kim Kasling referred to the high wind pressure in his recommendation as a contributor towards faster malfunctioning of the organ. Most of the chest work--that is the wooden parts--is original; but the pneumatics and magnets have (some or all) been changed at least once since the original. Each pipe in the organ, with the exception of the three stops that are Mixtures, have their own magnet and pneumatic. Each stop has at least one magnet and pneumatic per note. These are all in the chests; the console is another item. Replacement of many of these magnets and pneumatics is very difficult, time-consuming work; and this, even though it requires the

2. continued

most attention, is probably why the refurbishers would rather work only with the pipes.

Although the records don't show how much of this type of work has been done on the organ through the years, it is obvious that this is and has been a continuous concern. At least now, on the average, every two weeks another pneumatic is in need of replacement. David Rutford feels that a definite plan to work on a division at a time should be undertaken. Gould's original proposal in 1978 was "you will have to think in terms of ten to fifteen thousand dollars per division with little or no tonal change." And although Lurth is replacing some of these on every trip here, he feels that they are not that bad--his quote from June, '79, "I would predict that you could reasonably expect another ten years from the chests without major problems." In his warranty of his work he warrants, in his own protection, that any new device, attachment or appliance is warranted for ten years and that normal wear and tear are not covered by the guarantee. Not that it matters with pipes, but only one set that he replaced is new. And, since there is no record kept of exactly which pneumatics or magnets have been replaced, it would be difficult to say who did what work. Lurth has been doing the minor replacements he agreed to do, it seems, at least as far as the chests are concerned, but it seems it will remain his judgement as to when he wishes to do the major work Gould and Rutford suggested.

3. Both Lurth and Rutford agree that at least one reservoir has to be releathered. Lurth thinks the others are not too bad; Rutford thinks they should all be redone. I think that more than one have leather which is now too old, and therefore too hard to keep it from cracking and forming leaks. There are ten larger reservoirs, one smaller one, and four tremolos; there are also four swell engines. Each of these has large areas that have leather under constant flexation. The individual pneumatics on each of the swell shutter slats are in very bad shape--the leather is very brittle and some are leaking. The swell shutter engines were releathered in 1947, as were the individual pneumatics for the shutters. Lurth installed very inexpensive (clothes-dryer) tubing when he recently did his work; one already split open a few weeks ago; but since this was new material, he replaced it (with the same type material) at his own expense. The blower is huge--7.5 h.p., 19.7 amps. the main power supply for everything else electric is a rectifier with 15-30 amp rating.

4. The console problems are now fairly well understood, partly with thanks to Rutford and his materials to show the committee. It is suggested that Gould be contacted to expect him to fix at least the pneumatic problems in the console which are due to the failure of the material he used. Otherwise, Rutford suggests replacing the pneumatics as they go and eventually thinking of an electronic system hook-up. Lurth advises this solid state electronic system in terms of spreader strip installation (\$1500) and then the hooking up of these individual pneumatics to the strip as they go, thus eliminating the pneumatic completely. (Presently \$120 each.)

5. Although the tuning stability of the organ may be of importance to only certain musicians, there are certain inherent reasons for this in the present organ. They are: installation is in separate chambers, each of which develops its own ambient temperature during seasonal changes--particularly the choir division is against an outer wall which gets cold on very cold days and is more affected by the external temperatures than the others; the blower is drawing a different temperature air in the basement than the pipes are sitting in, and as you hold a note the pipe goes out of tune since its own temperature changes with the blower wind. Many of the pipes are not voiced very well and therefore any instability in temperature will make them sound even more out of tune than the others; and, finally, if all the pipes for one key were over the same wind source (tone-channel chest) they would be more sympathetic to each other and remain in tune easier.

Because the organ is so deeply embedded in chambers, the wind pressure has to be much higher than it would were the organ pipes exposed in the church or in a free-standing case (the problems of higher wind pressure have been mentioned; one more is in order--the higher cut-ups of the pipes required with this high wind pressure causes the pipes to be much duller sound than they would otherwise have to be.) You may recall that Gould and Gauger each proposed that at least some pipes be in an exposed position hung on a wall in the sanctuary.

Finally, the acoustics of the organ sound are inhibited by not having a wooden resonating case around them, by being spread out in the chambers, (there is more blend of sound if their reflecting surface is closer to them and if the pipes are closer together) and by the carpeting in the choir loft and in the nave.

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Contrary to the statements made in a "Report on the status of the Organ" given in 1976, "The cost of replacing such an instrument is. . .\$400,000 to \$600,000", even present day figures would be only now \$300,000 to \$400,000.

Thus my proposal to build a new mechanical action pipe organ, in a free-standing case in the church for \$300,000, with approximately the same number of pipes as are presently in the organ.

It is possible to build a new organ and allow for "preparations" to be added to the organ in future months or years, importantly by the the original builder or someone completely sympathetic to his ideals.

As an example, a \$300,000 organ could be built with up to half of the stops being preparations, and with the contract price being closer to \$200,000.

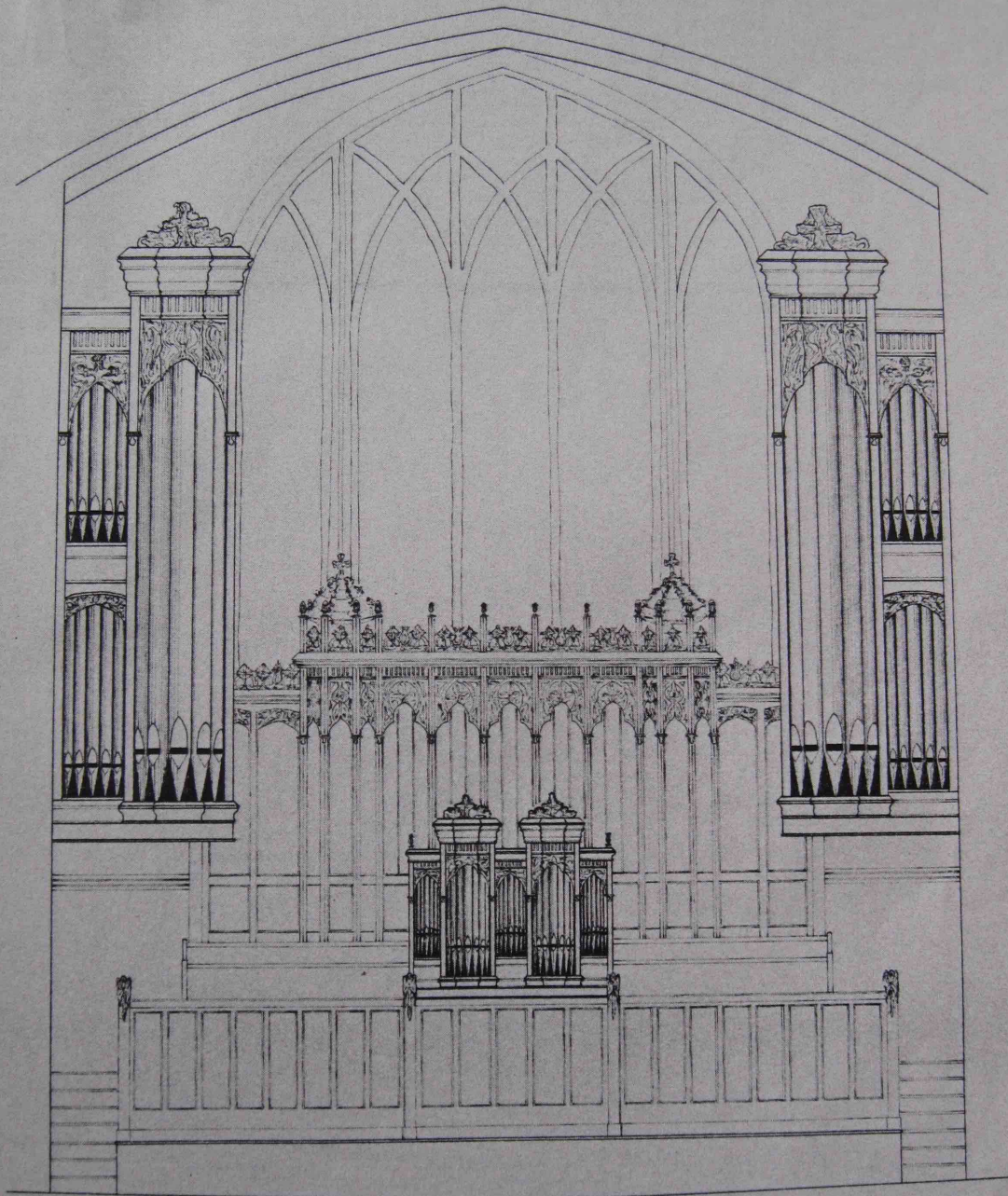
I personally think that an organ a bit smaller would be quite nice for this church and that this could also include some preparations.

I cannot recommend either Rutford's , Lurth's, or Gould's proposal simply because my ideals include a concern for the future stewardship of the church. Perhaps the one idea favoring one of these other proposals is that it would take a long time to spend \$200,000-\$300,000 in the ways they are proposing.

The organ cannot be used as a concert instrument as was expected once the refurbishing was done--very few organists of any decent caliber would wish to concertize on this organ; it is not a good example of any period tonal scheme, and the tuning, speech, and pneumatics continue to be a frustration.

If you wish, I will prepare one or two proposals for a new instrument; and I will include a visual drawing to show you what it might look like.

Dan Jaeckel



PILGRIM CONGREGATIONAL CHURCH - UCC
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