

The Organ of Saint Mark's Cathedral

D. A. Flentrop Orgelbouw (1965)

Paul Fritts and Company (additions 1993, 1995, 2011)

A History and Guide to Registration

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Dedication

This Customary is written in loving memory of

Peter R. Hallock

Who endowed the Cathedral of Saint Mark
with an enduring artistic foundation
including
The Flentrop Organ

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Preface

The Flentrop organ at Saint Mark's Cathedral is one of the most influential instruments built in the 20th century. In addition to its role in the liturgies of the cathedral, the Flentrop is one of the most recorded organs of our time. Its unique sound has reached tens of thousands of listeners through radio, compact discs and the Internet. The musical success of the Flentrop organ has influenced organ choices of many churches, universities and concert halls in the United States. It is no accident that the Pacific Northwest has become a region of leading organ builders, performers and composers since the Flentrop's installation in 1965. The leading organs of our region, such as Benaroya Hall (Seattle Symphony), Lagerquist Hall (PLU, Tacoma), the University of Washington and numerous churches are a direct adaptation of the Flentrop's key design features: mechanical keyboard action, wooden case and historically-inspired tonal design.

This paper documents the time when the organ was commissioned through Peter Hallock's retirement. This account, therefore, has a limited scope, being concerned primarily with Peter's time at the Cathedral. Peter always referred to himself and others by their last name—a tradition I have honored throughout this document.

The remarkable success of Saint Mark's music programs is due to a combination of visionary leadership and the combined, coordinated work of many people. Musical excellence and innovation, such as that provided by Peter Hallock, Mel Butler and Michael Kleinschmidt, requires a stable and supportive environment to flourish. The extraordinary support of Dean John C. Leffler made commissioning the Flentrop possible. Currently, Dean Thomason's leadership in renovating the Nave has literally "created the space" for our cathedral music program to continue and expand.

I am very grateful to Bill Giddings, David Ruberg, Mel Butler, Paul Fritts and most especially Herb Williams, each of whom has contributed many details to this document. I think all of us who have served as organists at Saint Mark's are grateful for the privilege of playing the Flentrop as part of our service.

It is my hope that those who read this document will enjoy the stories about the Flentrop's installation at Saint Mark's. I also hope that organists will find it useful to understand Dirk Flentrop's original concept of the organ and the registrational practices that were assumed by its design and voicing.

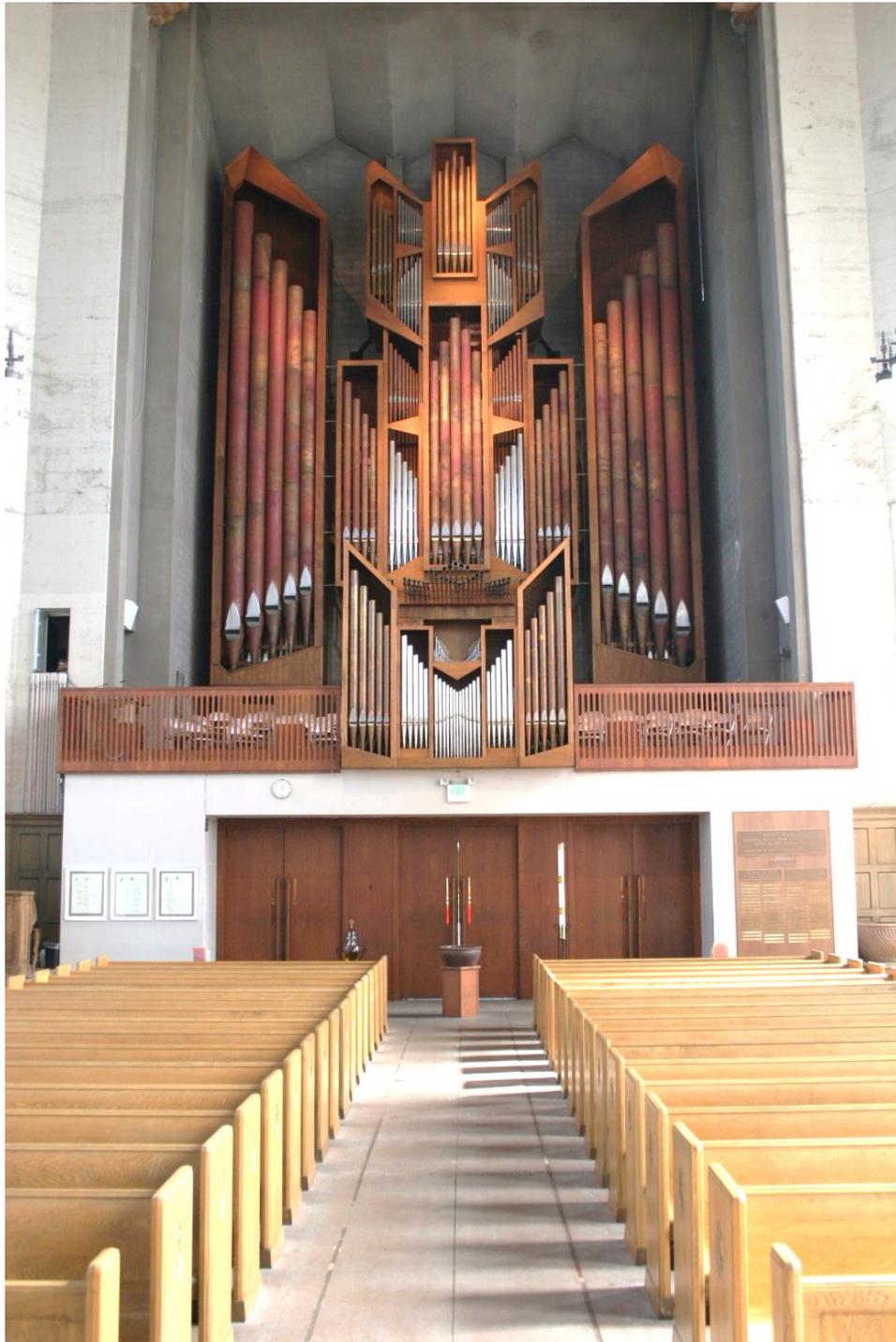
Of course, it is traditional for organ builders to build instruments based on their own concept of organ sound, and for organists subsequently to ignore the builder's intent in favor of their own preferences...

Roger W. Sherman
Orcas Island
Candlemas 2019

Part I:

A History of the Flentrop Organ

Organ Portrait



D.A. Flentrop organ (1965) at Saint Mark's Cathedral (Seattle)
Portrait taken September 2005 by the author

Description of the Flentrop organ

The original text for this description of the organ came from a brochure about the organ that was printed when the organ was new. It has been updated several times, as the organ changed. This version was edited by Herb Williams, and can be found on the cathedral's Web site, www.saintmarks.org/music/organs/the-flentrop-organ/

The main organ of Saint Mark's Cathedral was an extraordinary accomplishment when it was installed in 1965. Designed and built by the Dutch firm of D. A. Flentrop, the organ now contains 3,944 pipes, ranging in size from 32 feet to less than one inch. The pipes are made of either a tin and lead alloy, cured copper, African and/or Brazilian mahogany. The organist may select from 58 speaking stops distributed over four manuals and pedal. While not the first, Saint Mark's Flentrop is one of the largest 20th century organs employing mechanical key action, and its success has influenced organ building throughout the United States and remains a landmark instrument of international note. A major restoration of the organ was completed by Paul Fritts Organ Builders of Tacoma, WA in 1993—1994 and in 2001 further work was done following damage sustained by the Nisqually earthquake including substantial seismic reinforcements.

Although modern in style, the African mahogany case is structured like that of an 18th century organ, each division of the organ having its own section, complete with pipes and wind chest. Each keyboard (including the pedalboard) plays a different division. The Pedal division is split on either side of the main case and contains the longest pipes. The first (lowest) manual plays the Rugwerk (literally "back work") whose pipes sit at the organist's back on the edge of the gallery railing. The second manual plays the Hoofdwerk in the center of the main case. This division includes the horizontally mounted TROMPETS, similar in style to those found on Spanish organs of the 17th century. The Bovenwerk is at the top of the case equipped with swell shades behind the Prestant facade pipes and is played by the third manual. Located inside of closable doors below the horizontal TROMPETS is the smallest and most intimate division of the organ, the Borstwerk, playable from manual four.

In 1991, thanks to a generous gift from Marion Oliver Garrison, funds were provided for the renovation of the Flentrop organ. A thorough cleaning and regulating of the instrument has been augmented by other work including replacement of all stop motors and providing a solid-state combination action, giving the organist instant manipulation over the organ's total tonal resources. Likewise, the key action has been completely renewed with a "suspended" action that provides for a lighter, more responsive key mechanism. Three new tonal additions include a full-length 32-foot BAZUIN (a reed stop located behind the organ case and mounted high on the rear gallery wall) which greatly enhances the bass response of the Pedal division and new Hoofdwerk 16' and 8' TROMPET stops installed as chorus reeds for that division's ensemble (the 16-foot reed made possible by an additional generous gift in 1995 from Roger Sherman and Arlene Tande). A

mechanical addition is the Bovenwerk to Rugwerk (III + I) manual coupler to better accommodate the demands of Romantic (particularly the French school) and/or contemporary repertoire. In 1996 a Zymbelstern was given in loving memory of Lawrence F. Dayball by Dr. Stephen C. Hofmann. All organ renovation work has been entrusted to and carried out by the acclaimed Tacoma firm of Paul Fritts & Co. Organ Builders through Century II, a program for long range planning and completion of Saint Mark's Cathedral.

In 2011, organ builder Paul Fritts & Company (builder of Thomsen Chapel's "Marion Camp Oliver" organ and restorer/curator of the Flentrop organ for over twenty-five years) built and installed new Spanish-style trumpets ("TROMPETAS") which are the horizontally mounted pipes extending from the main organ case immediately above the Borstwerk division. These new pipes, a gift to St. Mark's from Mr. Fritts, were inspired by similar horizontal trumpet pipes found in organs built in seventeenth- and eighteenth-century cathedrals in Spain, Portugal, and Mexico and are specifically based upon the TROMPETAS found on an organ in Santanyi, Mallorca, built by Jordi Bosch in 1762 and considered to be one of the greatest organs ever built. These stops (16, 8 and 4 foot) are commanding both in appearance and sound and add a new brilliance and a penetrating power to the Flentrop organ, whether used as a solo stop (such as for soloing out hymn tunes, trumpet voluntaries, etc.), or when added to cap the grandeur of full organ sound. Honoring the past, the original horizontal trumpet pipes installed in 1965 have been carefully packed, crated and stored in the cathedral crypt for historical preservation and archival purposes.

The instrument is pitched at A-440 and is tuned in equal temperament. Finally, use of classic scaling, low wind pressure and mechanical key action permits the gentle, articulate voicing appropriate for the cathedral's reverberant acoustics.

The beginnings of a revolution

When Peter Hallock was invited by Dean John Leffler to be Organist and Choirmaster of Saint Mark's Cathedral in 1951, the existing organ was barely functional. The 1902 Kimball organ was not particularly reliable to begin with. In addition to being almost 50 years old, much of its life was spent without the benefit of any maintenance. Stuck notes and cyphers were common. Hallock accepted the position on the condition that the cathedral replace the organ.

In 1960 he served notice to the Dean that he would leave if a new organ was not installed soon. Nine years of struggle with the old Kimball did have one beneficial result—Hallock's views on organs changed, particularly due to the influence of E. Power Biggs. Biggs had a nationwide weekly radio program on CBS which had been broadcast since 1945. He had also concertized and recorded on the historical organs of France, Holland and Germany. To gain access to the large Schnitger organs of Holland, Biggs introduced himself to Dirk Flentrop, whose firm had restored the largest Dutch organs. (An interview with Flentrop about his first meeting with Biggs was included in The Organ Loft radio program #139, first broadcast in January of 1997. It is included in the Appendix.). Biggs commissioned Flentrop to build an organ for Harvard where the radio program originated and in September of 1958 the organ was installed and heard for the first time nationwide, on the radio.

Only four months later, CBS dropped all of its unsponsored public service programs, including Biggs's. With the radio program gone, Biggs turned to making recordings on the new Flentrop for Columbia Records. His most popular recording was "Bach Organ Favorites." Through a contact in Victoria, BC (a name I don't remember), Hallock got in touch with Biggs, and made a trip to the Northeast to hear examples of new American organs, and of course, the Harvard Flentrop. Biggs suggested that Saint Mark's receive a proposal for a new organ by D. A. Flentrop.

The kind of organs that Flentrop was making couldn't be more different than the old Kimball, and other similar organs that occupied many Episcopal cathedrals in the United States. Modelled after English Victorian organs, the Kimball had thick, heavy Diapasons, capable of an impressive muddy thunder but devoid of the focused clarity required for counterpoint.

What Flentrop proposed to the Vestry of Saint Mark's was a radically different kind of organ, and a significant challenge for both Saint Mark's and the Flentrop firm. The organ would be modelled after Schnitger organs found in Holland and North Germany—the very organs on which Biggs had made recordings, and that Flentrop had restored. Two proposals were made, one with a 16' Principal as its basis, and the other with a 32' Principal. The larger instrument was the obvious choice—its proportions fit the Nave, and as one of the Vestrymen said after Flentrop left the meeting, "We don't have the money for either, so we might as well go for the big one." (Nota bene: there are numerous accounts of this Vestry meeting; see the Appendix for the Dean's story.)

Perhaps “not on the table” at the Vestry meeting was the fact that no Episcopal cathedral in the Anglican Communion had ever installed anything like it. And although Flentrop had restored a handful of organs this size, they had never built one. In fact, the Flentrop Orgelbouw wasn’t big enough to even assemble an instrument this size.

The detailed design of the Flentrop was the result of negotiations between Hallock and Flentrop. Two features of the organ in particular were hallmarks of Flentrop’s work: an architecturally significant wooden case (typically of African mahogany) and mechanical keyboard action. Although antique antecedents had wood cases and mechanical action, Flentrop’s cases were modern in style, and the keyboard action was typically balanced (like a harpsichord), rather than suspended (like the antique organs).

Hallock brought a few of his own requirements to the project. They were:

- An organ that was designed for the music of J.S. Bach.
- Relocation of the organ to a rear gallery with room for the choir.
- Electric combination stop action to assist the organist in accompanying the choir.

A True Bach Organ

The question of which type of instrument is ideal for Bach may never be resolved, but following World War II the historical organs in North Germany were the primary candidates. At the time, the organs of Bach’s part of Germany were mostly behind the Iron Curtain. Many of these had been damaged in the war, and organ builders and organists did not have access to them. Only the instruments on the West side of the Iron Curtain were accessible. Fortunately, a case could be made that the organs of northern Germany were the true Bach organs because Bach spent his late teens (15—22) in the North, especially in Lüneburg and Hamburg, where there were many large, fine organs. In 1720, Bach applied for the position of organist at the Jacobi Church in Hamburg which had a famous, large, four-manual organ by Arp Schnitger. After auditions, he was offered the post. But he turned down that offer, most likely because the Vestry required a “thank offering” of 4000 Thaler for accepting the position, a fee the second-place candidate was willing to pay.

In his obituary, Bach’s son C.P.E. Bach stated that “despite all [his] knowledge of the organ, he never enjoyed the good fortune, as he used to point out frequently with regret, of having a really large and really beautiful organ at his constant disposal.” Could he have been referring to the Jacobi Schnitger? And if so, was the large Schnitger organ—the quintessential North German organ—the true Bach organ?

Arp Schnitger, who was responsible for the Jacobi church organ in Hamburg, also built many organs in Holland. Many of these were instruments that Flentrop had restored. Having Flentrop

build an organ of this type satisfied Hallock's first requirement: Flentrop was the best firm to build a Dutch/North German Baroque organ that would be ideal for the music of J.S. Bach.

The Organ Gallery

Relocation of the organ and the choir to a rear balcony was an important part of the plan for a new organ. The placement over the entrance doors of the cathedral was normal for large Dutch organs, but not for Episcopal cathedrals. Unfortunately, the wall of the cathedral was not strong enough to hold the organ, and the only solution was to build a Narthex that could support the weight of the instrument. The balcony/narthex addition cost more than the \$110,000 needed for the organ itself. (See Appendix 4 for pictures of the demolition of the east wall and construction of the balcony, and see Appendix 5 for Dean Leffler's description of the costs involved.)

Hallock wanted more than an organ in the back of the Cathedral—he wanted the choir there too, with enough room for a small orchestra or brass ensemble on special occasions. In later years, there were performances of Handel's *Messiah* and Bach's *St. John Passion* — with choir and orchestra in the balcony, and the continuo being played on the Borstwerk. The visual impact of the Flentrop *in situ* caused many to joke that people didn't know whether to genuflect towards the front or rear of the room when they entered.

Flentrop also wanted the organ in its own rear gallery, but did not want a big space between the main case and the Rugwerk necessary to accommodate the choir and additional musicians. Normally, the Rugwerk would be right at the back of the organist. The long distance between the console and the Rugwerk meant long trackers, which meant a heavier action that also might be less reliable. Flentrop reluctantly conceded on this design decision.

The distance from the console to the Rugwerk caused another problem – the organist could not hear the Rugwerk very well. In the first few years, organists would open the back doors of the Rugwerk so they could hear what they were doing when playing the Rugwerk. This was not good for the sound of that division; without a "back wall" the Rugwerk did not project into the room as effectively. Eventually, slots were cut into the doors on the back, just enough so the organist could hear.

Construction of the gallery presented some interesting issues. Thick steel plates had to be installed under the organ frame to distribute the weight more evenly. There was also an attempt to heat the balcony with its own furnace, located at the bottom of the stairs, just inside the door from the Narthex (now an usher's closet). Wooden boxes with grills on the front were installed on the floor of the balcony to exhaust the heated air. The system consumed a tremendous amount of energy and was totally ineffective. More than one organist tripped over the two boxes near the console, especially when stepping backwards. Eventually, long after the furnace had been removed, the boxes on the floor next to the organ were also removed---but not before many a gullible visitor was told that they contained the speakers for the organ.



Combination Action

Hallock wanted to have a combination action (a feature that allows large combinations of stops to be changed at the push of a button). He had never played an organ extensively without one. A combination action would require that each of the 55 stops have an electric motor to move wind chest sliders, which turned the stops on and off. A mechanical connection between the stop knob and the slider was more reliable, but a combination action meant less effort for the organist, particularly if they desired a large number of stops to be changed at once. Just push a button.

Flentrop was against electric stop action for several reasons. The first was (again) reliability. He said that the only problems Saint Mark's would have with the organ in the future would be with the electronic parts needed to construct a combination action.

Flentrop also felt that combination actions encouraged a type of playing that was antithetical to the concept of the organ. Changing stops on an historical Dutch organ requires effort, forethought and a little bit of time. Each stop is substantial in its own right and makes a noticeable effect on the ensemble. As a consequence, the normal way of playing a traditional, large Dutch organ does not involve frequent or dramatic registration changes. If the organ were large like Saint Mark's, some stops might even be out of the reach of the organist, requiring stop pullers on both sides of the console. Playing an organ with mechanical stop action implied that changes in sound were less frequent, with large changes accomplished by manual changes, and perhaps use of a coupler. Frequently, it also implied that the organist would need to take more time to make registration changes, especially when engaging/disengaging couplers. This type of playing and registering was "baked into" the kind of music usually played on a Dutch/North German organ. It was less convenient for playing English organ and choir anthems.

In the end, a compromise was made when Flentrop agreed to include six divisional pistons on each keyboard and pedal. There were no general pistons, and no "General Cancel."

Flentrop's prediction about reliability of the combination action and particularly the slider motors proved to be correct. Glenn White and David Ruberg spent a great deal of time working with Heuß, the motor manufacturer, to keep the stops working. Until the Fritts renovations in the '90s, having stops stick "on", or stick "off" a common problem.

Flentrop's design for Saint Mark's

Flentrop's design of an organ at Saint Mark's was unique in many ways. The organ was larger than any other instrument Flentrop had built. At the time, most of Flentrop's output was for instruments of 15 stops or less. Saint Mark's organ had 55 stops, including a full-length 32' PRESTANT. During the same time period, Flentrop built three other organs of similar size:

- 1967 Osnabrück (Germany): 42 stops, 4 manuals and pedal (16')
(https://www.flentrop.nl/orgelbouw/osnabr_mari_grot.html)
- 1968 Breda (NL): 53 stops, 4 manuals and pedal (16')
(https://www.flentrop.nl/orgelbouw/breda_grot.html)
- 1964, rev. 2012 Lisbon (Portugal): currently 51 stops, 4 manuals and pedal (16')
https://www.flentrop.nl/orgelbouw/lissab_kath_grot.html

Each of these instruments was too large to construct in the Flentrop shop; a tall church building was rented to assemble and erect these four organs, one after the other.

It is unlikely that Flentrop made money constructing these four large organs. But each went to a different country, and spawned numerous orders for smaller, more profitable instruments.

The full-length 32' PRESTANT for Saint Mark's was particularly daring. I am certain that Flentrop had never built a stop like this prior to Saint Mark's, or after. The problem with full length 32' stops is that the longest pipes are so heavy that the pipe collapses on itself over time. This is particularly true of tin/lead pipes. Every few years, the deformed pipes must be removed and straightened out using a mandrel—a major job! Copper is not as soft as lead or tin, and Flentrop was using it for the lower/longer pipes in his organs. It must have been something of a gamble to make these pipes with the expectation that they would be stable over time. Incidentally, the copper was finished with uranic acid (cow urine), which gives the copper its flaming patina. Apparently, this application of cow by-products is no longer allowed in the Netherlands.

The case design was based on the Golden Section, a first by the Flentrop firm.

symmetrical and well-proportioned plan, including the angles at top of the pedal and Rugwerk towers.

Flentrop was known for his beautiful modern casework, which often took aesthetic clues from the church architecture in which the organ was placed. Needless to say, Saint Mark's stark, unfinished concrete box offered few suitable clues. But the case does suggest the shape of a Pacific Northwest Indian thunderbird, with the pedal towers being the wings. An early design also called for pipe shades which were never installed.

The balcony was designed for the organ, with African mahogany rails, and a ceiling which reflected angles in the organ case. The design for the ceiling above the balcony was done by acoustician Glenn White. The case itself was elongated beyond the height required by speaking facade pipes. Two fields of pipes in the façade are placed just below the Bovenwerk to make the full height of the case appear functionally necessary. Originally, they were to be speaking pipes, but Flentrop determined that the wind channel tubes might be too long for prompt pipe speech. The existing pipes in those fields do not speak.

The Saint Mark's Flentrop was the first project to be assigned to Hans Steketee in the Flentrop company. Steketee later went on to succeed Dirk Flentrop as the company's president.

Saint Mark's new organ was one of the largest mechanical action organs built in modern times. At the time of its installation, there was only one other "new" mechanical action organ on the West Coast (St. Paul's Episcopal, Seattle), a small instrument without an enclosing case. Only two other organs of comparable size had been installed in North America, both by Rudolph von Beckerath of Hamburg. One was in St. Joseph's Basilica in Montreal, and the other was in St Paul's R.C. Cathedral in Pittsburg. Von Beckerath also built a smaller, four-manual organ for Trinity Lutheran Church in Cleveland. An organ of this size and type was clearly an unknown commodity in the West.

Before the organ was built, the Dean contacted several Episcopal cathedral organists asking them whether a new instrument of this type would be desirable for Saint Mark's. The answer was universally "no," except for Vernon de Tar, who didn't exactly think it was a good idea either, but who wrote back to say that the Dean had a "good man" in Hallock, and that the Dean should trust his judgment. This was an argument that Dean Leffler understood, and it convinced him to support the project. Vernon de Tar wrote a letter of support for the project, which the cathedral published in a fundraising brochure entitled, "The Great Gift of Music" (1962).

Hallock had never played a tracker organ for an extended period, and the new instrument was going to require that he change his organ technique and learn new repertoire appropriate to the instrument. While the building was being prepared for the organ, Hallock was given a six month leave to go to Europe where he took lessons with Marie-Claire Alain. During the trip he was awarded a Fulbright scholarship. In Europe, he met Fenner Douglass and his family. Douglass was doing research for his book, "The Language of the French Classical Organ." At the

time, this was a repertoire that was almost completely unknown to American organists, and it would be a good fit for the new organ. In addition, Hallock learned how to modify his playing to make effective use of mechanical action.

Douglass and Hallock became good friends. One of the first uses of the partially-installed organ was at a performance of Britten's "Noye's Fludde" in the summer of 1965. The Douglass children were part of the production, playing in the roles of animals. Douglass made the first recording on the Flentrop and played two recitals at Saint Mark's between 1966 and 1969.

The choice of artist for the inaugural concerts had to be E. Power Biggs. Not only was he pivotal in the cathedral's choice of Flentrop for a builder, he was the leading advocate of tracker action organs, both through his radio program and extensive recordings. The two inauguration concerts were in September of 1965. Each concert began with a clergy procession, Lord's Prayer, Collects and Grace. The audience was asked not to applaud in the program flyer. Later concerts at the Cathedral noted that the concerts were offered "in praise to Almighty God," and that applause should be reserved for the performer until the end of the program.

Biggs played the tunes that were popular on his recordings. The programs included a wide selection of historical styles and composers: Purcell, Pasquini (to show off the horizontal TROMPETS), Handel, Hindemith (Sonata 2), Alain (Litanies), R. Strauss, Brahms, Ives ("America" variations) and of course, J.S. Bach. The first program ended with the Bach Passacaglia, and the second ended with the Toccata and Fugue in D minor.

Fenner Douglass's two recitals were surprising in that they each included major works by César Franck. The first recital ended with Franck's Chorale No. 1 in E Major, and the second included Franck's Chorale No. 2 in B minor.

It was surprising to many how effectively the Flentrop organ rendered these French symphonic works. Although the Flentrop was far, far different than a French symphonic organ, the effectiveness of the sound in these performances was due to two factors. The first was the generous acoustics of the room (not yet carpeted, and before the freeway below the bluff had been completed). The second factor was the placement of the Rugwerk—20' in front of the main organ case. With the Bovenwerk (also about 20' away), Rugwerk and Hoofdwerk coupled together, the sound was warm and spacious, not unlike the character (if not the color) of a Cavaillé-Coll organ. Cavaillé-Coll famously said, "A pipe should have room to breathe; you should be able to walk around each one." Pipework in his organs are laid out with lots of space, and create an ambient effect. At Saint Mark's the ambience of three coupled divisions separated by substantial distances created a surprisingly similar sound for Franck.

Other sounds which surprised audiences at the time included the Bovenwerk 8' TROMPET, which unlike many Swell Trompet stops of the time, has a very melodic character, ideal for Franck's trumpet melodies. The ZWEVING impressed as well. Unlike the sizzling thin strings of a more common celeste stops, the GEMSHOORN+ZWEVING combination seems to come from many

directions at the same time. When played with the 32' PRESTANT the combination was astonished listeners. This is a combination of stops that should not work together. Normally, a 32' Principal would be far too loud for the bass of the softest stops on the organ. But here, the Prestant was in perfect balance, and although it is narrow in scale, it does not sound like a 32' string stop. And amazingly it still functions well as the bass of the Principal chorus.

Douglass also used the Borstwerk 8' REGAAL in place of the Vox Humana that Franck specified in his Chorales. The Flentrop does not have a Vox Humana, and the REGAAL is the closest in sound to a true Vox. With the Borstwerk doors closed, and the 32' Prestant in the Pedal, this combination provided an effective surrogate.

Another successful element in the registration of the two Franck Chorales was the hierarchy of reeds on the manuals. On a Cavaillé-Coll, a crescendo is built by adding the Récit reeds, then the Positif reeds, then the Grand Orgue reeds simultaneously with pedal reeds. Each division's reeds are louder and has more gravitas than the previous set. When playing Franck at Saint Mark's, one registers a crescendo using the same scheme, even though the colors of a French symphonic organ differ significantly. The Bovenwerk (Swell) has two 8' reeds, the Rugwerk (Positive/Choir) has 16' and 8' reeds with more mixtures, and the Hoofdwerk (Great) has the horizontal Trompets and a full 16' Principal chorus. American organs built at the time typically have most of their reeds in the Swell, making a crescendo as specified by Franck more convoluted.

After Biggs's and Douglass's recitals it became clear that the Flentrop (unexpectedly) was not just an organ for Bach.

Fenner Douglass's recording "Fenner Douglass at St. Mark's Cathedral" is available in its entirety in the Appendix.

Other memorable concerts in the early years were given by international artists Anton Heiller (Bach), Luigi Ferdinando Tagliavini (Bach-Vivaldi concertos), Marie-Claire Alain (J. Alain *Trois Danses*), and Montserrat Torrent. The first concerts were organized by Julia Kissel. In 1974, Cathedral Concerts was formed with David Ruberg's leadership. Many of these organists also taught master classes on the Flentrop.

Historical models and implications for registration



The original specification of the Flentrop organ looks like an 18th century Dutch-German organ with some notable exceptions. They are:

- The full-length 32' PRESTANT
- The TERTS on the Hoofdwerk
- The 16' and 8' horizontal TROMPET stops on the Hoofdwerk
- The 8' ZWEVING in the Bovenwerk
- A division enclosed in a swell box
- Independent divisional tremulants
- So many couplers

The full-length 32' PRESTANT is unusual, but the old organs did have 32' Principal stops, they simply did not go all the way down to low C. At Saint Mark's, the scale is very narrow for a Principal, and the stop is voiced to go with quiet foundations as well as to provide bass support for the Principal choruses. The pipes were cast in a Rotterdam shipyard.

Fenner Douglass, in his notes for the first recording made on the Flentrop, singles out the inclusion of a tierce stop on the Hoofdwerk to "bridge the cultural gap between the North European and the French lines of heritage." The TERTS on the Hoofdwerk provides the possibility of a cornet combination on the division. Like the 2' OCTAAF, the 2-2/3' QUINT has Principal scaling, and so the TERTS is also more Principal-like than a typical tierce. However, the cornet one can construct on the Hoofdwerk is considerably more flute-like than the one in the Rugwerk, and the tierce goes all the way to low C without breaking. This makes it possible to compose registrations for the French "Tierce en taille," using a cornet combination on the Hoofdwerk. This is important

because the Flentrop, being a Dutch organ, has a Sesquialter in the Rugwerk which breaks at tenor C, making it unsuitable for this type of piece.

The TERTS on the Hoofdwerk is also important in the composition of the Grand Jeu. In this combination, the stops that make up a cornet (8', 4', 2-2/3', 2', 1-3/5') are needed to reinforce the TROMPETs in the treble. A true Classic-French Trompette peters out in the treble more than our Germanic/Dutch ones do, but the Cornet still helps the treble and provides a similar color to a true Grand Jeu.



Flentrop's horizontal reeds

*To hear the Flentrop horizontal reeds by themselves,
listen to the track "Valente – La Romanesca" in the Appendix.*

The question of reeds for the Hoofdwerk was resolved in an unusual manner. Two sets of horizontal reeds were provided, one 16' and the other 8'. The 16' ran through the entire compass without breaking, unlike the current *en chamade* 16'. Flentrop's pair of TROMPETS were true twentieth century inventions. Without any reeds inside the case, the horizontal reeds had to do "double duty," both as ensemble reeds, and as the kind of solo stop you'd expect from an *en chamade* TROMPETA. To prevent them from overpowering the Principal choruses, the TROMPETS had small holes bored in the metal blocks. This allowed a small amount of wind to escape when played and gave them a slightly milder sound. This helped the TROMPETS to blend with the rest of the organ when used as ensemble reeds.

Even though they were carefully voiced to function as both ensemble and solo reeds, their greatest shortcoming was that they were not well-suited as a chorus reed(s) in Germanic Baroque music, where the Principal chorus should dominate. Yet as the loudest reeds on the organ, they provided a thrilling crown to full-organ sound in later repertoire, and the 8' reed alone could be used as a solo stop in Anglican choral works without overpowering the choir.

Although the horizontal TROMPETs were not copies of original Spanish Trompetas, they were closer to that sound than most other similar stops of the time. Their inclusion in the specification made it possible to play Spanish music with a sound that was almost authentic---on a Dutch/German organ!

Dutch Baroque organs did not have celestes, and so the presence of one in the Flentrop is another departure from historic models. The ZWEVING (Dutch, for "waving") in the Bovenwerk is a quiet string celeste, matched to the GEMSHOORN. It also plays well with the FLUIT 8', or both the GEMSHOORN and the FLUIT. Apparently Hallock had Flentrop go hear the Erzhaler Celeste on the original Kimball organ at University Methodist Church to use as a model.

The Bovenwerk is enclosed in a Swell box, behind the façade pipes of the PRESTANT 8'. This leaves the appearance of a traditional, exposed Bovenwerk like historical models, but with swell shades providing modest possibilities for crescendos and decrescendos. The need for an enclosed division may seem obvious to some, but a Swell was not part of a traditional Dutch/German organ. In addition to Hallock's desire to have a Swell, Dean Leffler was also keen on having an organ that played Franck---the Three Chorales (particularly the first) were his favorite organ works. The volume difference between closed swell and full open was never great, which was a disappointment to Hallock. (Hallock lamented that the Flentrop organ later installed at Holy Name Cathedral in Chicago where Richard Proulx was organist had a swell pedal which provided greater dynamic contrast, something he had wished for in the Saint Mark's organ).

Although it is something we don't think about very often, the scheme for the tremulants is also modern. Individual manuals (except for the HW and Ped) have their own tremulants, which presumes a registrational practice where solo stops waver, but the accompaniment does not. Very few historic organs had tremulants that affected only one division.

Finally, the number of couplers, particularly pedal couplers, is high for large organs, compared to historic models. Compare these historic 17th/18th century Dutch/N. German organs of similar size:

Zwolle: BW to HW, HW to RW

Alkmaar: RW to HW, BW to HW, BW to RW

Groningen-Aakerk: BW to HW, HW to RW, RW to Ped

Groningen-Martinikerk: HW to RW, BW to HW

Hamburg-Jacobi: Brust to HW, OW to HW

Although no one standard exists from the old organs regarding the number of couplers on an organ this size, it is clear that couplers to the pedal on large organs were somewhat rare. Not as obvious from the table above is the fact that the manual couplers to the Hoofdwerk were often too heavy for two couplers to be in operation at the same time. Also, changing a coupler was something less---likely to do during a piece---many of these couplers require sliding the keyboard in or out.

As one can see from the table above, a unique type of coupler existed in Dutch organs: couplers TO the Rugwerk from the Great or Bovenwerk. This made it possible for the accompaniment of a congregational Psalm to be played on a full Hoofdwerk, while the melody was played on an even stronger Rugwerk. The SESQUIALTER in the Rugwerk is an important voice for this work. It is made of Principal ranks and is stronger in the treble than a Baroque-style reed in that register.

Another Dutch tradition is the inclusion of a small trumpet in the Rugwerk (SCHALMEI 8', in our case), rather than the KRUMMHORN 8' that is more common in Germany. The 16' DULCIAAN makes a nice Krummhorn-like sound when played up an octave. And, of course, there is an 8' KROMHOORN in the Bovenwerk.

There are two tracks in the Appendix feature the Dulciaan as a solo stop, both on Fenner Douglass's LP – An Wasserflussen Babylon (Dulciaan alone, up an octave) and the Du Mage Fugue (Dulciaan and Prestant 8', played up an octave.)

The pedal division of our organ has many typical Dutch/German characteristics. There are several choruses of stops. Flentrop's reed chorus is comprised of the 16' and 8' TROMPETS and the MIXTUUR VII, which includes a tierce-sounding rank. The Principal chorus is comprised of the 32' PRESTANT (extended from the 16'), 16' PRESTANT, 8' OCTAAF and 4' OCTAAF. The 4' TROMPET and 2' CORNET in a Dutch/German organ are made to be combine well with the 2'+1' NACHTHOORN for *cantus firmus* melodies. The 2' stop in particular was an important stop for Dutch organists. (For example, Sweelinck's organ had only two pedal stops: an 8' TROMPET and 2' NACHTHOORN.) Larger Dutch organs may not have a 16' SUBBAS if there is room for a 16' Principal. The 8' GEDEKT even more rare in large Dutch organs. (I don't know of a Baroque Dutch/German organ with a 4' flute in the pedal).

Finally, it should be noted that an organ of this size might typically have a RAUSCHQUINT mixture in the Pedal to go with the Principals, in addition to the larger tierce-mixture that went with the pedal reeds. 16', 8', and 4' Principals are not enough to provide a foundation for coupled Principal choruses on the manuals. In the Flentrop's first years at the cathedral, the tierce rank in the pedal MIXTUUR was muted to make it more useful with the Principals, to make up for the lack of a RAUSCHQUINT. However, that was not its purpose, and when the tierce rank was restored, the MIXTUUR once again became functional in its role of topping off the 16' and 8' pedal reeds. To make up for the lack of a RAUSCHQUINT in the pedal against coupled manual plenums, use a pedal coupler (RP+Ped is a good choice), or the Pedal MIXTUUR VII (but only if you are using the 16' BAZUIN and 8' TROMPET), or the TROMPET 4' and/or the CORNET 2' to balance the coupled manual plenums. *See Appendix: Bach – Passacaglia to hear how the 4' and 2' pedal reeds may be used to make the pedal melodically strong in place of a Rauschquint. Opening registration on the manuals is the uncoupled Hoofdwerk: 16, 8, 8, 4, 3, 2, Mixtuur. Pedal is 16', 16', 8', 8', 4 Octaaf, 2+1, 16' Bazuin, 8, 4, 2'...*

The Borstwerk has a very traditional Dutch/N. German specification. The 8' REGAAL is the only reed stop built in Flentrop's shop. The Borstwerk can be enclosed with doors, creating a Swell box effect.

A good example can be heard in Mel Butler's recording "French on the Flentrop" (Loft Recordings LCCD-in the Tournemire tracks.

The Borstwerk has a suspended key action and no couplers. A common saying when the organ was new: "The Borstwerk does not need the rest of the organ, and the organ does not need the Borstwerk!" (I believe this statement can be attributed to David Farr.)

Additions by Paul Fritts and Company

In the 1990s the organists of the cathedral felt that the Flentrop needed some renovations and repairs. The Flentrop firm was asked to evaluate and repair the organ, but the work they did not thoroughly address the problems we were having. Most were caused by age or obsolete technology. Electrically motivated sliders were not reliable on some ranks, languids had sagged in the largest pipes, and there were worn action parts. Funds were available to do additional work, and Paul Fritts was commissioned to do it. Where possible, the keyboard action was changed to suspended, which lightened the touch, particularly on the Hoofdwerk and Bovenwerk. The Borstwerk action, which had always been too deep, was made shallower. The Hoofdwerk was given new 16' and 8' TROMPET ranks inside the case, and a full-length 32' BAZUIN with wooden resonators in the bass was added to the Pedaal. According to Herb Williams, Hallock had suggested a 32' reed to Flentrop based on the scale of the building, but Flentrop rejected the idea, stating that 32' reeds were not traditional in Dutch organs. (To the best of my knowledge, the only historic Dutch organs with a 32' reed are the Schnitger in Zwolle and the Muller in St. Bavo, Haarlem. The Zwolle reed is a half-length.)

At the request of Mel Butler, a Bovenwerk to Rugwerk coupler was added for French Romantic music. A ZIMBELSTERN (not visible) was also added to the organ. Finally, the original combination action was replaced with a more modern, multi-level type, complete with eight general pistons and a General Cancel (the sound of which now seems to end every piece). In a nod to Flentrop, the number of division pistons remained at six. The toggle switchboard used for the original combination action was left in place, and the old console was archived in the cathedral crypt. In addition to repairing soldered pipe joints, and sagging languids, many pounds of dirt were also vacuumed out of the interior of the instrument.

The quality of the new work was very high, and in spite of the changes to the console, it still looks almost exactly like the original.

On Ash Wednesday 2001, the Nisqually earthquake (known as the Ash Wednesday earthquake if you are religious, or the Seattle earthquake if you are from the national media) caused serious damage to the Flentrop organ. The instrument was rendered unplayable, and unsafe. The metal struts which were supposed to secure the back of the case to the wall, instead punched holes in the organ case as the instrument swayed and twisted. The Fritts company installed scaffolding in front of the organ, tied it to the side walls, then tied the Flentrop to the scaffolding to keep the organ from falling on its face (and the organist!) The scaffolding allowed Paul to do some work on the front of the organ which had been inaccessible in the earlier work. This included improving the *pianissimo* of the division by making the swell shades totally closable with felted shutter edges. The scaffolding also enabled repair to a buzzing façade pipe high up in the Bovenwerk.



Scaffolding erected in front of the Flentrop to re-secure it to the back wall after the 2001 earthquake and repair pipework in the façade.

The work done on the organ in the 1990s did not change Flentrop's original voicing. Hallock was opposed to making any changes to the Flentrop. He didn't like the idea of these additions to the organ but did not express his reservations to the committee of which he was a member. He did, however, report to the Flentrop firm and others that the voicing was possibly being changed, even though it was not. Pipes were repaired and made to work as they did when new, but no re-voicing was done.

In 2011, Flentrop's "horizontal" Trompets on the Hoofdwerk were replaced by a set donated to the cathedral by Paul Fritts. The new pipes were modelled after historic pipes on an organ in Mallorca, Spain. The original reeds are stored in the crypt with the old console. Like historic "Spanish Trompets" one rank speaks at 8' pitch and the second speaks at 4' pitch in the bass, and 16' in the treble. The appearance of the new pipework is virtually identical to the originals.

In total, these additions and changes made the Flentrop more flexible in the repertoire it could play, particularly music of the 19th century. The renovated organ is now more reliable mechanically and plays with a lighter (yet still substantial) touch. The new reeds changed the both the "balance of power" and the maximum volume of the organ, and the new combination action changed how organists registered the instrument. But, with the exception of the retired original horizontal TROMPETS, one can still play the organ using just the original pipework, and the organ will sound the same as it did when new.

Saint Mark's acoustics

When the organ was installed, the bare concrete floor was painted "tile red" and there was no freeway below the bluff on which the cathedral sits. One year later, surplus red carpeting from a department store was installed without appropriate prior discussion. The Vestry refused to pay for the carpet from parish funds and the Dean had to find private sources to cover the cost. The red carpet affected the sound of the organ significantly, and there were hopes to remove the carpet at some time in the future. The completion of I-5 in the late 1960s combined with the thin window glazing made the Nave a noisy place. The sound of the organ was now dampened by carpet, and reverberation was masked by noise.

The next major building renovation ("Century II") in the 1990s did much to improve the sound of the room. The ceiling of the Nave was strengthened which reflected the sound from the Bovenwerk more efficiently. Patio block tiles were removed from the ceiling, and double sheets of plywood (painted the same color as the patio blocks) were put down in the tile's place. The tile was then placed on top of the plywood to add mass to the ceiling so that it would reflect more bass. The result was that the Bovenwerk became a little louder than before, and the Swell pedal less effective at making the division as quiet as it was when new when the boxes were closed. When scaffolding was put up in front of the organ after the 2001 earthquake, it became possible to improve the effectiveness of the Swell box. The pianissimos from the Bovenwerk

were largely restored, and the Swell pedal was made to be slightly easier to move as well. Efforts to improve the bass were not as successful, due to new holes in the ceiling for lighting and the fact that the thin windows continued to absorb bass and reflect treble.

A gift for the organ renovation of 1993 was given with condition that the existing carpet be removed at the next stage of the building's completion. The removal of the carpeting greatly improved the sound of the organ, as well as hymn singing and choral music. It is planned that the bare concrete floors will eventually be covered with a stone or marble veneer.

Another change involved removing the Vestry with the old organ chamber on top and Chantry. These structures occupied the southwest and northwest corners of the Nave, with the chancel was between them. Removing these rooms increased the Nave's effective cubic volume and caused the corners of the Nave to become acoustically active. The chancel was also removed (along with its green "indoor-outdoor" carpeting). The altar moved to the East on a new platform, and the area behind it was refinished with sound reflecting materials.

Much of the success of the acoustical renovations of the cathedral can be credited to parish member Glenn White, an acoustician and organ builder. Glenn served on the Century II Design Committee chaired by Herb Williams. For much of the Flentrop's early years, he also maintained and tuned the organ.

With much better windows on the West end the sound of the organ greatly improved in the room. Reverberation times increased, and the bass of the organ was somewhat stronger. The building renovations completed in 2018 significantly lowered ambient noise, slightly increased reverberation times, and noticeably improved the bass.

Flentrop's voicing and tonal balance

The balance and relative gravitas of the three main manual divisions is different than that of a typical American organ, or of a Werkprinzip style Neo-Baroque organ. The three main manuals (Hoofdwerk, Rugwerk, Bovenwerk) each have 8' Principal choruses with 8' reeds. The relative volume level of the three divisions is approximately the same, but each has its own character. The Bovenwerk has an 8' Principal chorus, with 8' TROMPET and one Mixture. It can be used like a second Hoofdwerk; its forthright 8' PRESTANT pipes are in the front of the case, like those of the 8' PRESTANT of the Hoofdwerk just below. From downstairs, it is not always easy to distinguish between the two divisions. The Rugwerk is brighter and more present, being 20 feet closer to the congregation. It too has an 8' Principal chorus, with two mixtures, a SESQUIALTER, and 16'+8' reeds. While the Hoofdwerk is grandest of all when fully registered, the 8' Prestant is in the façade, making it possible for the Principal chorus to sound very similar to that of the Bovenwerk and Rugwerk. With the 16' PRESTANT and chorus, two mixtures and 16+8 horizontal reeds, the Hoofdwerk brings a bigger sound to the party, especially when coupled to the other divisions.

When the organ was new, it used to be said that it was "Flentrop's answer to Aeolian-Skinner." Flentrop knew that Saint Mark's was an Episcopal/Anglican cathedral, and that the organ would be called upon to accompany English-American organ and choir anthems. Normally, a Dutch organ in such a large room would be voiced to accompany loud congregational singing. Atypically, Flentrop voiced our organ to have a gentle voice, and many who are familiar with other Flentrop organs from this period are surprised that this organ sounds so unlike his other work. Nevertheless, it is easy to register the Flentrop to be too loud for the choir, especially given the organ's architectural advantages. This is not always obvious from the console, with the Bovenwerk being both above and a long distance away, yet strongly projecting into the Nave. Visiting organists have been known to complain that the organ isn't as assertive as they expected.

In spite of the gentle voicing, beautifully proportioned case, and overall clarity even at full organ, the Flentrop was controversial when new. I was present for one of the inaugural concerts and heard open complaints at intermission. One person argued, "You can't play an Episcopal service on an organ like that!" There were complaints too about the *en chamde* TROMPET 8' which the listener felt was totally inadequate compared to a TUBA MIRABILIS which Episcopal church organs of this size "should" have.

Use of the organ during the Hallock era

In January of 1986, I was hired by Dean Cabell Tennis as the first Associate Organist of the cathedral. In May 1986 I was named Curator of the Organs at Saint Mark's Cathedral. My notes below come from documents and personal memories during the time that followed.

Hallock did not subscribe to the standard Anglican canon for church music, which should be obvious from the selection of Flentrop for the cathedral organ. It was also obvious that the Flentrop organ was not well-suited to big organ-choir anthems. In his staff review of me in 1986, he said "We both may need to be reminded of the fact that bringing off the accompanied English cathedral anthem on a Dutch organ is flying in the face of nature."

Hallock welcomed me to play as often as I liked, and frequently I played all but the first hymn of a service. I was paid a salary, not by the service, and was given the right to teach on the organ and invited to attend cathedral staff meetings.

The organ was heard during the liturgy more often than it is today. Pieces in the prelude were played with several minutes of silence between them. At funerals and memorial services, the entire prelude (with intervening silence) could be as long as 30 minutes, but was usually 15-20 minutes (inter-piece silences included).

We didn't have video monitors in those days, so it was necessary for the organist to have an assistant to let him/her know when the processional hymn, post-Gospel procession, Offertory and communion voluntaries needed to end or be extended. Beth Berry Barber filled this role for many years, and often there were comedic gestures associated with delivering the news. These included a dramatic finger across the throat ("it's over"), pulling down a giant imaginary window shade when the sermon began, scraping and bowing when the bench changed occupants, and so on.

Hallock played the hymns in a fairly straightforward way, sometimes changing the harmony of the final cadence. Repeated notes were halved in value and all others were legato. He frequently criticized fancy hymn harmonizations and introductions as being too Lutheran (by which, he meant Paul Manz, et al.). Hallock felt that the purpose of the hymn introduction was to define the tempo and articulations of the text in the first verse. In other words, to model how to sing the hymn, without distracting harmonization.

Hallock's Psalms settings included a simple introduction to the congregational antiphon, which, like his hymn playing, was intended to model how to sing the antiphon. The congregational antiphons were always accompanied and introduced with a SESQUIALTER combination on the Rugwerk. When a stronger combination was needed, Hallock prescribed coupling the Hoofdwerk and Rugwerk Cornet combinations. But the purpose of the accompaniment was to be understated and consistent so that one's attention would migrate to the words. The use of the Rugwerk SESQUIALTER to lead congregational singing is exactly its purpose in a Dutch organ.

Following the Gospel, the organist played a short and quiet improvisation, long enough for everyone in the procession to return to their seats. This short piece was never loud (to avoid upstaging the Gospel). On a good day, the congregation was not told or signaled to sit down until after the music reached a natural conclusion.

An organ voluntary was typically played for the Offertory, although the choir would sing an anthem instead approximately once a month during choir season. Organ Offertories were not usually loud, but a Grand Jeu would be appropriate every once in while (not during Lent). Following the Offertory there was a Presentation Anthem, sung while the gifts were brought forward. For Easter, this was always the Vaughn Williams' setting of OLD HUNDREDTH. On all other Sundays it was a short piece by Hallock with the text: "Herein, Christ Jesus, we present ourselves: a living sacrifice, holy and acceptable."

During communion (which took longer those days) there was usually time for one or two organ voluntaries after the communion motet. These pieces never appeared to be planned in advance. (They were never noted in the service leaflet). Hallock would simply look over to me after the choir anthem and say, "Would you like to play something???" and I would select a piece from the file cabinet in the loft as if by total chance, and play. The most common types of Communion voluntaries were Buxtehude chorale preludes and French Classical *Tierce en Taille*, or *Cromorne en taille* pieces (which were among Hallock's favorites).

The service concluded with a short postlude, allowing those who were disinterested in hearing the organ an opportunity to escape with their conversations to Coffee Hour in Bloedel. After the postlude, there was a brief "organ recital" (with the program noted in the service leaflet). This post-service recital could last up to 20 minutes, and might include suites and other multimovement works. Many congregants stayed to hear these recitals and they were respectfully silent. This tradition ended when coffee hour was moved into the Nave.

During Lent, the horizontal reeds were usually not used.

The 32' PRESTANT was used sparingly during the liturgy. It was not unusual to have an entire service without it.

During the summer, the organ was used more often in services due to the absence of the choir. With the "new" 1979 BCP came different options for the Entrance Rite. A common practice was for the clergy to process to an organ voluntary, and for the opening hymn to be sung in the place of the Gloria. This shortened the opening of the service in accordance with the prayer book, and avoided the usual problem of having two congregational hymns in close succession. The processional pieces might be a French classic *Plein Jeu* or an English organ voluntary done up in Victorian style. Target tempos for these selections were Largo to Andante.

Changes in the liturgy since the Hallock era further reduced playing of organ repertoire during the liturgy. Butler's superb choral direction resulted in an increased number of anthems sung by the choir. The Offertory during his time as Canon Musician was almost exclusively rendered as choral work, rather than as an organ voluntary. Modifications to the chancel significantly decreased the amount of time for communion, which also eliminated the need for organ voluntaries during communion. Today, during choir season, organ solo repertory is only heard during Preludes, and in competition with coffee hour.

Special services and situations

On Easter, there were identical services in the Nave at 8:00 AM and 11:00 AM. There was never a Prelude on Easter; the first thing people heard was the opening brass fanfare, followed by two processional hymns: "Jesus Christ is Risen Today" and either "Come ye Thankful, Raise the Strain" or "Welcome, happy morning". The second hymn (both choices are by Arthur Sullivan) was included to appease Duncan Bayne, who cooked the choir's breakfast between Easter services.

Hallock's "Christ our Passover is Sacrificed for Us" was sung at the place of the Gloria. The Gradual Psalm was always Hallock's Psalm 114, the tract anthem was usually Bach's "Awake, Thou Wintry Earth" from Cantata 129, and the "Sermon Hymn" was "The Strife is 'O'er."

Performed at the Offertory, the "Easter anthem," if it was composed by Hallock, always presented special challenges. The dress rehearsal on Saturday morning nearly always resulted in a re-write, which was handed out at 7:30 AM on Sunday morning just before the 8:00 service. On

one occasion, after the 8:00 services, I was given verbal instructions to improvise the last page of the piece at 11:00. Many these were true “white knuckle rides,” but they always had more than enough redeeming qualities to make up for it.

Following the Offertory was the singing of the Presentation Anthem, which was Hallock’s arrangement of Vaughn Williams’ setting of Old Hundredth. Three verses were sung using a paraphrase to Psalm 117 (see Hymnal 1982, #380). Written for the Coronation of Queen Elizabeth, this arrangement is totally “over the top,” calling for “All Available Trumpets.” OLD HUNDREDTH is probably the most popular of all Genevan Psalter tunes, and was sung in many Protestant denominations at the end of the Offertory. This ensured a spectacular conclusion to the Offertory rite, even if the performance of the anthem “needed improvement.” I think for many, singing “The Doxology” was a high point of the Easter service.

The First Sunday of Lent usually began with a singing of the Litany—a chant processional written by Hallock. The use of the organ during Lent was greatly reduced. In the 1990s, the Hallock moved to a policy of no postludes during Lent. There was, at the time, some speculation as to Hallock’s motive for this policy.

In 1992, Mel Butler reinstated appropriate, quieter Lenten postludes.

At the midnight Mass on Christmas Eve, I played a half-hour recital at 10:00 PM. A prelude of congregational and choir carols went from 10:30 pm to 11:00 pm, with the Christmas Eve service beginning at 11:00 PM. The Christmas Eve service was broadcast on KING 5 TV and simulcast on KING-FM (98.1) until the mid-1990s. I did the sound engineering for KING in the last two years of the broadcast.

Post Compline “recitals”

When the organ was new, Hallock would go to the organ loft after Compline to briefly play the instrument so that the young people could hear it. He did this for several weeks, and then said to Bill Giddings, an organist who sang in the Compline Choir, “You do it.” Bill played music from Hallock’s files in the gallery, and often brought music he had played for his Sunday morning church job. Bill played the organ after Compline for many years, introducing the organ to young organists and enthusiastic, if not silent, congregants below.

The scene after Compline has always been, shall we say, “informal,” but I believe it has had a big impact on the popularity of the organ in the Pacific Northwest. When the number of attendees at Compline services exploded in the summer of 1967, large numbers of young people got a chance to hear the Flentrop. Students and amateur musicians also had a chance to play the organ and no one minded particularly if mistakes were made. As those young people got older, they tuned into KING-FM radio broadcasts of Compline instead of attending in person. In 1993, The Organ Loft began broadcasting immediately after the Compline broadcast, just as the casual recitals did at the cathedral. All combined, this means that tens of thousands of people have

heard the Flentrop organ over a period of more than 50 years. No other organ I know of has been heard this often by as many people, over such a long period of time, with the possible exception of the Mormon Tabernacle organ. For many people in the Pacific Northwest, the Flentrop is the very definition of what an organ is.

Part II:

Appendix & Source materials



Appendix 1: “The Great Gift of Music” including the proposed 1962 specification

In 1962, a brochure, “The Great Gift of Music” was published to describe the project and to raise funds. It contained letters from the Dean, the Bishop, Peter Hallock, D. A. Flentrop, E. Power Biggs and Vernon de Tar. Each page contains a letter, a quote or title across the top, and in some cases, a short bio of the author. The document concludes with the proposed stoplist (1962).

At this time, I do not have a copy of the original, but Herb Williams has provided a xerox version which enabled me to include the texts here. I did not change capitalizations or spellings. Some choice quotes (emphases are mine):

“Our Christian experience begins with our local church or congregation. **God help us if it ends there.**”

“...**not even Peter Hallock’s skill can overcome** the dilapidated and unpredictable organ long overdue for replacement.”

“What a magnificent combination a good organist and **an adequate organ** and a church with good acoustics will be.”

“But it should be added **that these rather elegant, articulate, and even very slightly aloof sounds are perfect for church service** use.”

“Our new organ therefore is both an architectural as well as musical expression and will be a thing of great beauty even when it is silent.”

The Vestry and all concerned are to be congratulated for their decision to seek the best solution for their cathedral, **rather than to follow without question one or more of our rather dubious Anglo-American “traditions.”**

The full contents of the brochure follow, starting on the next page.

*Great master, touch us
with the skillful hand
Let not the music
that is in us die*

GREAT MUSIC has always been associated with a cathedral in the church's tradition; where composer and organ-builder, organist and choir have combined to bring to christian [sic] men the highest expression of religious aspiration.

This is our hope for the Cathedral of St. Mark in the City of Seattle, and this is the reason why we have set as our next goal the installation of one of America's outstanding organs.

Already the Cathedral Choir and the Men's Choir who sing Compline every Sunday evening under the direction of one of our country's outstanding exemplars of the place of music in worship – Peter R. Hallock, have made St. Mark's known to an ever-widening circle.

The one thing needful is an instrument fitted to the excellent musical environment the Cathedral affords, that organist-director and choir may be heard at their best.

Our's is the opportunity now to make the Seattle Cathedral second to none as a place where Christian worship achieves its highest expression of praise to the Living God.

Faithfully yours,
John C. Leffler
Dean and Rector

THE DIOCESE, THE CATHEDRAL AND THE ORGAN

The title would serve for a fairy story or a solemn book. I'd like to compress its implications into a few paragraphs. Our Christian experience begins with our local church or congregation. God help us if it ends there. We need to know His still small voice in our hearts and we also need to catch a glimpse of the blessed company of all faithful people.

The Diocese should stretch our hearts and minds in both worship and work. And the Cathedral of a Diocese should be a place where we join from time to time in the most glorious worship we can offer to the Lord, the Almighty, the King of Creation. This corporate worship praises God first and it also bears witness to our faith and joy in His glory and love.

The Cathedral may be supremely beautiful like Chartres or Salisbury or Washington. It may be far simpler and smaller and of native construction like some in Africa. But it must be our best in that time and place. Otherwise it is less than fitting for God's Worship, it belittles Him in the minds of others, and it cannot serve as a continual source of inspiration for the regular worship of the smaller congregations.

For some years our Cathedral has set forth God's worthy praise in music of a high quality. But not even Peter Hallock's skill can overcome the dilapidated and unpredictable organ long overdue for replacement. So the Cathedral vestry is undertaking the tremendous task of securing an adequate organ.

It is not only the responsibility of the Cathedral parish and vestry. This is our Cathedral. Many of its greatest services belong to the whole Diocese. I commend this undertaking to all Olympia Churchmen most earnestly. When this great new instrument sounds to God's glory, that it may sound on behalf of all of us who join in His praise together.

(The R. Rev.) Wm. Fisher Lewis
Bishop of Olympia

A great heritage

In the final choice of a new organ for St. Mark's, we reach a culmination of two years of careful study and planning. The architectural form of the building both present and future presented all concerned with definite limitations which in turn gave us a sense of direction. Our new organ therefore is both an architectural as well as musical expression and will be a thing of great beauty even when it is silent. The important relationship between the architectural and musical expression is one of the primary principles which has distinguished the superiority of Mr. Flentrop's work as well as the work of great organ builders of past centuries.

But the acquiring of an excellent organ is not an end in itself; it is but a beginning. In recent years of my twenty-four years as a musician of the Church I have become aware of how often we seem to lose sight of the primary reason for music; as a rather divine and extra-special means of communication. One of the treasures of our faith is its historic fact which finds a witness in a vast musical heritage extending from early plainsong to the recent works of our contemporary composers. It is the vision of a new and far greater communication of this witness which is now our exciting and special opportunity. As a minister in this pursuit I know I will find great personal joy, and I pray for the grace to be a good and faithful servant.

Peter Hallock

Organist and Choirmaster.

“Organs must be seen...”

...played, and above all heard, and least of all should we spend too much time talking about them. We must learn how to look at them and how to listen to them, so that we do not expect an organ to resemble something which it is not.

The “making again” today of fine organs depends entirely on a renewed understanding and appreciation of the principles followed in organ building’s “Golden Age.” The principals followed have to be realized in a modern way.

I am very pleased with your plans to place the new organ on a rear gallery against the “west-wall” of the church. In my opinion, that is the best place you could choose for the organ as well for the choir. In this way you will have the optimum use of the excellent acoustics in St. Mark’s. At the same time, it provides the organ builder with the best possible means of obtaining the proper balance of those principles necessary to a related whole; a sensitive and responsive key-action, a well-designed tonal structure, carefully finished and speaking easily and directly into the building, and an organ case which has the important function both as a resonating shell and in blending the different stops.

Although our instruments are founded on the same classic principles which produced earlier instruments, we do not build “Baroque organs.”: In this sense, we liken our approach to the modern violin maker who attempts to succeed with his art from the same set of fundamental principals which served Stradivarius. I believe that we, with all the problems in organ building, are now standing only at the beginning of a new period of true organ design.

We have learned only very recently how to recognize the fundamental principles which produced earlier instruments. We are now applying these principles, but in instruments made by modern people of modern materials and they are modern instruments for the needs of our own day.

But let me stop now, I have already written down too much. I don’t like to say too much about organs, I want to make organs and only the organ specially made for your church. What a magnificent combination a good organist and an adequate organ and a church with good acoustics will be.

Yours sincerely,

D. A. Flentrop

D. A. Flentrop’s modern organs and historic restorations are as highly valued in Europe as they are numerous. The Flentrop Orgelbouw in Zaandam, Holland, founded by the present owner’s father and teacher, has built organs for all of Europe and Scandinavia. In 1958 Mr. E. Power Biggs played the dedicatory recital on the new Flentrop organ in the Busch-Reisinger Museum at Harvard. This organ has been described as “a landmark in organ building in America and

marks a decisive step in the return of the fundamental principles of fine musical design in organ building". With the installation of the new organ at St. Mark's, Mr. Flentrop will bring to the city of Seattle the rare fits of a great artist and craftsman.



“For the music of the city, such an instrument will be a revelation...”

Concerning the plans of St. Mark’s Cathedral for the installation of a new Flentrop organ---I can say, only, that nothing in the world could be more wonderful.

In enlightened progress, and at the same time in the great European Church tradition of 400-500 years, and this includes England and the Church of England as well, you will be far in the forefront on the west coast---in fact in the whole U.S.A.

After some three years of continuous use of the Flentrop here in Cambridge, I can report that we have had no trouble, and that the instrument---apart from the reeds---has remained almost perfectly in tune the whole time. Since it can be so readily heard on records, I need not describe the tonal characteristics.

But it should be added that these rather elegant, articulate, and even very slightly aloof sounds are perfect for church service use, and have been so for hundreds of years.

For the music of the city, such an instrument will be a revelation of the musical possibilities of an organ.

So---the best of luck to you all. It will be a great achievement to obtain such an organ for the Cathedral.

Very sincerely yours,

E. Power Biggs

Mr. Biggs has become the organ’s best-known and most widely traveled concert and recording artist; his records are among the best sellers in classical music. He has appeared as soloist with many major American orchestras and has played or recorded on virtually every important organ in Europe and America. Since 1942, his Sunday broadcasts from Harvard have been heard all over the nation and, with his other activities, probably guarantee that he has been heard by more music lovers than any organist in history.

"...with the organ tone flooding the cathedral from its lofty placement, all the music... will take on a new dimension."

I am delighted to hear that your plans for the new organ have been completed and that you will enjoy all the advantages, mechanically and tonally, of an organ-choir togetherness.

I still remember how beautiful the music sounded on a summer Sunday in 1959, even with the strange noises and numerous ciphers made by the poor, tired old organ. Now, with the kind of clear, lovely sound that Flentrop will create for you, and with the organ tone flooding the cathedral from its lofty placement, all the music, and especially the congregation's part, will take on a new dimension.

How fortunate, too, that your choir will be together as a unit, its fine blended tone being at one with the organ tone—the sound all coming from one focal point, and how right to have the organist-director where he can conduct his singers with a minimum of effort and also hear the organ and the organ-choir balance.

The new situation is so right in the concept that all worship, sung and spoken, will now be towards the altar, eliminating the oft-asked question as to whether the choral parts of the service are sung to the congregation or for the worship of God.

The Vestry and all concerned are to be congratulated for their decision to seek the best solution for their cathedral, rather than to follow without question one or more of our rather dubious Anglo-American "traditions".

I hope that I will sometime have the pleasure of hearing your music in this wonderful new situation.

Cordially,



Vernon de Tar

Vernon de Tar has been organist and choirmaster of the Church of the Ascension in New York City since 1939. He is also instructor in Organ and Church Music at the Julliard School of Music, and associate professor at the Union Theological Seminary School of Sacred Music. As a member of the Joint Commission on Church Music of the Episcopal Church and of the Commission on Music of the National Council of Churches and with his extensive schedule of teaching at church music conferences across the nation, he has become one of the foremost spokesmen in the art of church music today.

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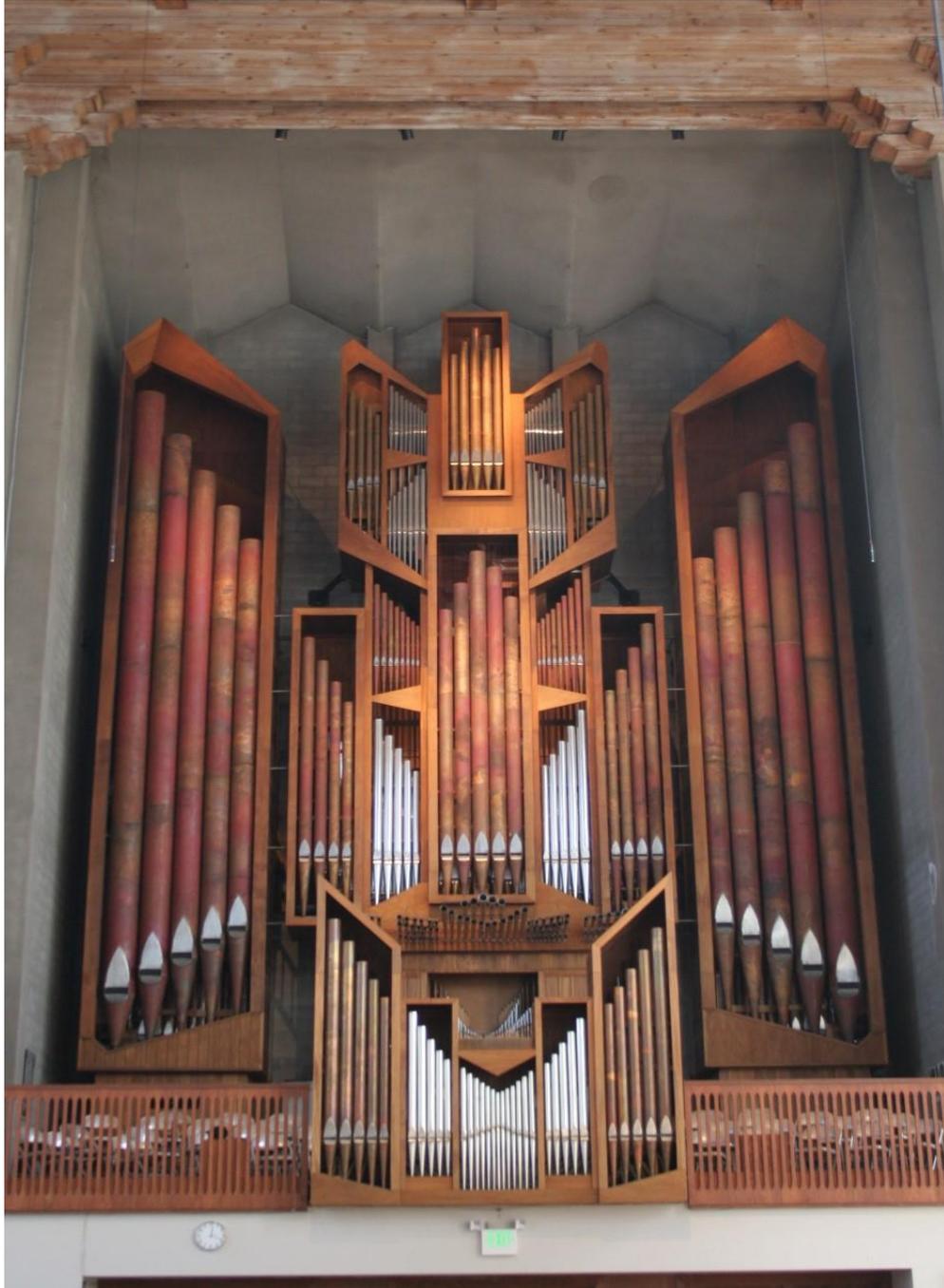
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This picture was part of the brochure. Note that the Gallery is not as deep as it is today; the Borstwerk has Swell shades (see the 1962 specifications); there are four carvings in the case representing the four Gospels (Saint Mark is to the left of the Borstwerk); tin/silver pipes have gilded mouths.



This picture was not part of the brochure and is provided for comparison. Note that the 1962 organ picture has more of its pipework rendered in silver/tin, the Bovenwerk appears to be a 4' division rather than 8', and the organ gallery does not appear to be as deep as it is today.

The Cathedral Organ

The organ for St. Mark's Cathedral will be the largest modern tracker-action organ in the United States. It will have four manuals, fifty-four stops, seventy-two ranks (sets of pipes) and 3,564 pipes. The large pipes will be of copper and the smaller pipes of thirty to seventy percent tin. The wooden pipes as well as the case of the organ will be of African mahogany. The stop-action will be electric with six combination pistons for each manual to aid the organist in the instant manipulation of the numerous stops. The entire instrument will be handmade at the Flentrop Orgelbouw in Zaandam, Holland, and will be completely assembled and finished in a large church near the factory before it is shipped to Seattle.

Hoofdwerk (*Great*)

Prestant	16'	Flageolet	2'
Prestant	8'	Octaaf	1'
Roerfluit	8'	Plein Jeu	IV
Octaaf	4'	Trompet	8'
Speelfluit	4'	Kromhoorn	8'
Quint	2-2/3'		
Vlakfluit	II		
Mixtuur	IV		
Scherp	II		
Trompet	16' (horizontal)		
Trompet	8' (horizontal)		

Borstwerk (*Brustwerk-enclosed*)

Gedekt	8'
Prestant	4
Fluit	4'
Gemshoorn	2
Larigot	1-1/3'
Cymbel	II
Regaal	8'

Rugwerk (*Rückpositiv*)

Prestant	8'
Gedekt	8'
Quintadeen	8'
Octaaf	4'
Roerfluit	4'
Octaaf	2
Sesquialtera	II
Mixtuur	III
Scherp	III
Schalmei	8'
Dulciaan	16'

Pedal

Prestant	32'
Subbas	16'
Prestant	16'
Gedekt	8'
Octaaf	8'
Octaaf	4'
Spitsgedekt	4'
Nachthoorn 2'+1'	II
Mixtuur	V
Bazuin	16'
Trompet	8'
Trompet	4'
Cornet	2'

Bovenwerk (*Oberwerk*)

Prestant	8'
Fluit	8'
Gemshoorn	8'
Gemshoorn Celeste	8'
Octaaf	4'
Koppelfluit	4'
Nasard	2-2/3'

Couplers:
Rugwerk to Hoofdwerk
Borstwerk to Hoofdwerk

Ped to I (Rugwerk)
Ped to II (Hoofdwerk)
Ped to III (Bovenwerk)

< end of brochure "The Great Gift of Music" >

Appendix 2. Current stop list of Saint Mark's organ

Hoofdwerk II

16'	Prestant
8'	Prestant
8'	Roerfluit
4'	Octaaf
4'	Speelfluit
2-2/3'	Quint
2'	Octaaf
1-3/5'	Terts ⁴
IV	Mixtuur
III	Scherp
16'	Trompet ²
8'	Trompet ²
16'+4'	Trompeta ³
8'	Trompeta ³

Rugwerk I

8'	Prestant
8'	Gedekt
8'	Quintadeen
4'	Octaaf
4'	Roerfluit
2'	Octaaf
II	Sesquialter
III	Mixtuur
III	Scherp
16'	Dulciaan
8'	Schalmei
-	Tremulant

Borstwerk IV

8'	Gedekt (wood)
4'	Prestant
4'	Fluit
2'	Gemshoorn
1-1/3'	Larigot
II	Cymbel
8'	Regaal
-	Tremulant

Bovenwerk III ¹

8'	Prestant
8'	Fluit
8'	Gemshoorn
8'	Zweving
4'	Octaaf
4'	Koppelfluit
2-2/3'	Nasard
2'	Flageolet
1'	Octaaf
V'	Mixtuur ⁵
8'	Trompet
8'	Kromhoorn
-	Tremulant

Pedaal

32'	Prestant (ext 16')
16'	Prestant
16'	Subbas (wood)
8'	Octaaf
4'	Octaaf
8'	Gedekt
4'	Spitsgedekt
2'+1'	Nachhoorn
VII	Mixtuur ⁶
32'	Bazuin ²
16'	Bazuin
8'	Trompet
4'	Trompet
2'	Cornet
-	Zymbelstern

Couplers:

II+I, II+III, I+III
Ped + I (Rugwerk)
Ped + II (Hoofdwerk)
Ped + III (Bovenwerk)

¹ Division enclosed by mechanically-operated Swell shutters, except for the façade pipes of the 8' Prestant

² New work by Paul Fritts in 1992, 1995 and 2011

³ horizontal pipes, replaced by Paul Fritts in 2011 with new, historically-styled Spanish Trompetas

⁴ original proposal was Vlakfluit 2'

⁵ original proposal was Plein Jeu IV

⁶ original proposal was Mixtuur V

Suspended key action and electric stop action ²

Solid state combination action (255 memory levels) ²

Couplers and general pistons duplicated on toe studs.

6 Combinations per Division
8 General Pistons
1 General Cancel
1 Setter Position

Appendix 3: The 1962 proposed stop list and 1965 stop list compared

Astute readers will note that significant changes were made to the specifications before the organ was constructed. The most significant is that the (1962) Borstwerk was to be "enclosed" and the Bovenwerk was not. Also, the (1962) Borstwerk could be coupled to the Hoofdwerk, but the Bovenwerk could not. In this configuration, the Bovenwerk functions as a second "Great" and does not need a coupler to the Hoofdwerk. You could use either the Hoofdwerk or the Bovenwerk as the main division for a piece. If you needed couplers, particularly to an enclosed division, you would use the Hoofdwerk. Likewise, if you needed a 16' ensemble, use the Hoofdwerk. But if you needed a somewhat different-sounding principal chorus, or a TROMPET in the case, you used the Bovenwerk.

Swell organs evolved from the Borstwerk/Echo divisions of historical organs. The 1962 plan shows how little is required to create a Swell out of a traditional Borstwerk. However, it was clearly more advantageous to enclose the larger Bovenwerk for repertoire that requires a Swell. Most English / American organs have their largest reed ensembles in an enclosed Swell division and much choral/organ music assumes that configuration, with the swell pedal used to balance the roar of the organ against sweet singing in the choir. Enclosing the Bovenwerk also meant that the Borstwerk could return to its traditional configuration with hand-movable doors. Providing a coupler from the Bovenwerk to the Hoofdwerk rather than a Borstwerk to Hoofdwerk coupler completes the reconfiguration for 1965.

Note also that several of the mixtures were changed before 1965. The "Vlakfluit II" on the Hoofdwerk is certainly a typo--it should be VLAKFLUIT 2' as it was on other Flentrop organs, including Harvard's. Here, the placement of a 2' flute on the Hoofdwerk instead of a 2' OCTAAF implies that the principle chorus does not need a 2' Octaaf when the MIXTUUR is drawn, since the MIXTUUR already has 2' stops in it. Ultimately the 2' flute was abandoned for a 2' Octaaf and the addition of a TERTS.

Two other mixtures were changed: the Bovenwerk PLEIN JEU IV was changed to a Mixtuur V, and the pedal MIXTUUR V was changed to a MIXTUUR VII (possibly adding that tierce rank).

Less important things to note: the change in name from GEMSHOORN CELESTE to ZWEVING in the Bovenwerk, the omission of the tremulants, and the odd order of stops, particularly in the Pedal.

Items in Appendices 4 & 5 are available on a Dropbox share:

<https://www.dropbox.com/sh/fxmk9spmifgmk0/AABO643i42UZUchN9IoKzgUua?dl=0>

You do not need to have Dropbox installed on your computer to see these files. Just click on the link!

Appendix 4: Photographs of the organ installation

These photos were provided by Ted and Beth Barber, who gave them to Paul Fritts. Paul digitized them and provided them for this project.

Appendix 5: Audio recordings from the first 20 years.

The audio files here include two brief interviews with the late D. A. Flentrop and the first three Long Play Records made of the organ. This list ends with selected works from the 20- year anniversary concerts which were re-enactments of E. Power Biggs's inaugural recitals.

1969 The first LP: "**Fenner Douglass at Saint Mark's**" is long out of print, and was never digitized or released as a CD. It was recorded by Glenn D. White. There is no copyright notice or record label indicated on the LP label or jacket.

Side one:

- 01 Franck: Chorale No. 1 in E Major
- 02 Bach: "Kommst du nun"
- 03 Bach: Prelude and Fugue in A Major

Side two:

- 01 Bach: "An Wasserflussen Babylon",
- 02–05 Du Mage: Plein Jeu, Recit, Grand Jeu, Fugue;
- 06 Bach: Fantasia in C minor

1976 "Fantini Frescobaldi: A Concert in Rome, 1635" was performed by Fred Sautter, trumpet and Douglas Butler on the Flentrop organ. It was released in 1976 by Cathedral Associates on their new label, Ars Forma. Glenn White did the recording, Peter Hallock did the cover

design which included an embossed image of the Cathedral and Vernon Nicodemus was the production supervisor.

The solo organ works are tracks 2 and 4 on Side 1. Butler uses the ZWEVING with the PRESTANT 8' to create an Italian Principale for track 4.

Side 1: The Concert – 1635

- 01 Fantini – Sonata No. 3 in C *detta del Niccolini*
- 02 Frescobaldi – Quarto Corrente (1)
- 03 Frescobaldi – Quarto Corrente (2)
- 04 Frescobaldi – Quarto Corrente (3)
- 05 Frescobaldi – Quarto Corrente (4)
- 06 Fantini – Sonata No. 6 in C *detta del Mornoe*
- 07 Frescobaldi – Toccata per l'Elevatione
- 08 Fantini – Sonata No. 8 in C *detta del Nero*

Side 2: Telemann – Heroic Music

- 01 La Majesté
- 02 La Grâce
- 03 La Vaillance
- 04 La Tranquillité
- 05 L'Armement
- 06 L'Amour
- 07 La Vigilance
- 08 La Gaillardise
- 09 La Douceur
- 10 La Générosité
- 11 L'Espérance
- 12 La Réjouissance

1978 Lawrence Moe: "Buxtehude". Issued on Cambridge Records (CRS 2515), a company that no longer exists. Moe had degrees from Northwestern and Harvard Universities. At the time of the recording he was Professor of Music and Organist at the University of California in Berkeley.

Side 1

- 01 Prelude, Fugue and Ciacona in C Major
 - 02 Prelude and Fugue in G Minor
 - 03 Suite "Auf meinen lieben Gott"
 - Allemande (Double) – Sarabande – Courante – Gigue
 - 04 Ciacona in E Minor
-

Side 2

Chorale Preludes

01 Lobt Gott, ihr Christen allzugleich

02 In dulci jubilo

03 Puer natus in Bethlehem

04 Chorale Fantasy "Wie Schön leuchtet der Morgenstern"

05 Prelude and Fugue in D Minor

06 Prelude and Fugue in F# Minor

The next two recordings were made by the author in the Summer of 1968. These recordings were made with microphones on stands on the floor of the Nave. Mel Butler's recording of Tournemire on "French on the Flentrop" (Loft Recordings, LRCD-1013) has a good example of how the Borstwerk doors can be used to create an effective decrescendo. (Assistants need to move them.) These recordings are previously unpublished.

1968 Jehan Alain: Litanies

1968 R. Sherman: Chorale and variations on "Deck Thyself, O Soul, with Gladness" (1968)

Chorale – Fanfares – Aria - Canon in 3 - Exuberance

1970 Joubert: "Torches, Torches". David Ruberg organist. This track is from the 1970 choir album, "Christmas Greetings from St. Mark's Cathedral" LP. This was the only track that included the Flentrop. Both first and last verses were played on the Rugwerk. Verse 1 is registered with the 8' Prestant chorus to Mixtuur III, plus 16' and 8' reeds. Verse 2 is a cappella. Verse 3 is registered with the 8' Prestant and 4' Octaaf. Microphones are in the balcony, and the Rugwerk doors are open (the back of the case) so the organ can be "heard" by the microphones. "Greetings from St. Mark's Cathedral" bears no copyright or recording company label. Rights to this recording belong to The Compline Choir.

These two recordings were made by the author in 1984:

1984 J.S. Bach: *Herr Jesu Christ, dich zu uns wend* demonstrates the suggested trio registration that consists, essentially, of three 8' Principal stops. This recording is previously unpublished.

1984 J. S. Bach: *Nun komm, der Heiden Heiland*. This is an example of the registration that sounds like a mounted cornet: couple the Bovenwerk 2-2/3 Nasard and 2' Flageolet to the

cornet ensemble on the Hoofwerk. You may also want to experiment with adding the Octaaf 4' in the Bovenwerk, and not using the Octaaf 2' on the Hoofwerk. Accompaniment on the Rugwerk: 8' Prestant, 8' Gedekt. This recording has been published on reZound Records (RZCD-5022).

From the 1985 re-enactment of Bigg's inaugural recitals:

1985 Antonio Valente: *La Romanesca*. The author. This short piece demonstrates the sound of the Flentrop horizontal reeds by themselves in the first verse. This recording has been published on reZound Records (RZCD-5022).

1985 César Franck: *Pièce Héroïque*. Carole Terry, This recording is previously unpublished.

1985 J.S. Bach: *Passacaglia*. The author. This illustrates using the 4' Trompet and 2' Cornet in the pedal instead of the Mixtuur to create a strong pedal sound that is also melodic. This recording has been published on reZound Records (RZCD-5022)

1996 Interview (part 1) by the author with D. A. Flentrop about how he met E. Power Biggs.

1996 Interview (part 2) by the author with D. A. Flentrop about the organ at Saint Marks. Recorded at Flentrop's home, and later included in The Organ Loft program 139. Part 1.

Appendix 6: Liner notes from the LP “Fenner Douglass at St. Mark’s Cathedral”

Note: the order of pieces in the program notes on the LP jacket, and the order of pieces on the LP are not the same. Although the Du Mage Suite contains additional movements, the composer’s order of pieces is: Plein Jeu, Fugue, Recit, Grand Jeu. The order of the audio files in the Appendix follows the order on the physical LP, which is:

Side one: Franck: Chorale, Bach: “Kommst du nun”, and Prelude and Fugue in A Major.

Side two: Bach: “An Wasserflüssen Babylon”, Du Mage: Plein Jeu, Recit, Grand Jeu, Fugue; Bach: Fantasia in C minor.

The complete liner notes are included here for their unusual registrations, and to show, in part, how a creative organist with deep experience in historical organs registered the Flentrop.

The Organ at St. Mark’s Cathedral

The great instrument built for St. Mark’s Cathedral in 1965 is the work on one of the leading organ builders of our time, D. A. Flentrop, of Zaandam, Holland. Its case of African mahogany stands forty-five feet high in the rear gallery of the Cathedral, where there is also space for a large choir and orchestra. The four-manual instrument is mechanical in its operation but for the stop action, which is electric.

1. The *Rugwerk* (Ruckpositiv), situated on the gallery rail, is encased separately in the tradition position forward of the main case. To a large extent the front pipes of the 8’ Principal determine its dimensions.
2. The *Hoodwerk* (Great Organ), centrally located in the main case, is controlled by the second manual keyboard. This most important division of the instrument occupies the most prominent position in the design. Its dimensions are dictated by the 165’ Principal, which provides the basis for the tonal structure of that division.
3. The *Borstwerk* (Brustwerk) is under the Great Organ, directly at the player’s ear. It contains the “snappiest” and the sharpest sounds in the organ, these coming from relatively short pipes. Thus, its case derives its dimensions from a 4’ Principal. The *Borstwerk* according to long tradition, has doors which may be closed for echo effects.
4. The *Bovenwerk* (Oberwerk) is above the Great Organ. This section is basically conceived in the spirit of the ancient *Oberwerk*, with its case proportioned to the *Borst* and Great divisions.
5. The Pedal, situated on either side of the Great Organ, is a complete organ in itself, with a pedal keyboard of thirty-two keys. Its tonal structure responds to the Pedal’s primary function as the bass section for the entire instrument. The case height is determined in the same manner as the other divisions, thus we find Principal pipes of 32’ on the front, made of copper.

The organ at St. Mark's Cathedral, having been assigned the same aesthetic approach which governed North European thinking for about two centuries, benefits from a focused tonal structure in all its divisions. In a instrument of such generous size, moreover, Mr. Flentrop was also able to include certain additional ingredients which help to bridge the cultural gap between the North European and the French lines of heritage. Thus, certain voices such as the Tierce on the Great Organ, and the Flute 8' on the Swell Organ, prove extremely useful in the performance of French Music.

The Music

Fantasia in C Minor (BWV 562) by Johann Sebastian Bach (1685-1750)

The majestic five-part Fantasia in C minor is followed in the autographed manuscript by a fugue which is unfortunately incomplete. It was probably written between 1712 and 1716, which Bach was at Weimar. The registration used on this recording:

Great Organ: Prestant 8', Octaaf 4'; Additions: Octaaf 2', Mixtuur, Scherp

Pedal Organ: Prestant 32', Prestant 16', Octaaf 8', Octaaf 4'' Additions: Mixtuur, Trompet 8'

Chorale Prelude: "Kommst du nun, Jesu, vom Himmel herunter" (BWV 650) by J. S. Bach

With the completion of the third part of the Clavierübung in 1739, Bach wrote a few new arrangements of chorale tunes, but transcribed and collected a number of earlier works. The set of six chorales from which this comes was published by Johann Georg Schübler or Zella. With one exception, they are all traceable to movements of cantatas written during Bach's Leipzig period. "Kommst du nun" is arranged from verse 2 of Cantata 137 "Lobe den Herren, den mächtigen König, der Ehren," of the twelfth Sunday after Trinity. It was originally composed in 1732 or later, and the instrumentation in the cantata was for alto solo, violin obligato, and continuo, to verse two of the text:

"Praise to the Lord, who o'er all things so wondrously reigneth,

Who, as on wings of an eagle, uplifteth, sustaineth.

Hast thou not seen

How thy desires all have been

Granted in what He ordaineth?"

The Registration is:

Borstwerk: Gedekt 8', Fluit 4'

Great Organ: Roerfluit 8', Terts 1 3/5'

Pedal Organ: Trompet 4'

Chorale Prelude: "An Wasserflüssen Babylon" (BWV 653) by J. S. Bach

The first form of this work must have been written before 1712, but it underwent at least two revisions. The version used here is included in the large manuscript volume referred to as the Great Eighteen. It was the same tune upon which Bach improvised for about a half hour, when in 1722 he played for the famed old Johann Adam Reinken in the Catherinenkirche of Hamburg. Reinken, who died that very year at the age of ninety-nine, praised Bach's spontaneity with the modest compliment: "I thought that this art was dead, but I see that in you it still lives."

Registration:

Great Organ: Roerfluit 8'

Rugwerk: Dulciaan 16' (played an octave higher)

Pedal Organ: Gedekt 8'

Prelude and Fugue in A major (BWV 536) by Johann Sebastian Bach

Spitta attributes this delightful work to an early date, assuming that it originated about the same time as Cantata 152 "Tritt auf die Glaubensbahn," in which the instrumental opening uses the same fugue subject as the Fugue in A.

Registration: Prelude in A.

Great Organ: Roerfluit 8', Octaaf 2'

Pedal Organ: Subbas 16', Gedekt 8', Spitsgedekt 4', Nachthoorn 2'

Fugue in A.

Great Organ: Roerfluit, Octaaf 2'

Bovenwerk: Koppelfluit 4', Octaaf 1'

Rugwerk: Gedekt 8', Roerfluit 4'

Pedal Organ: Subbas 16', Gedekt 8', Spitsgedekt 4'

Works of Pierre Du Mage (c. 1676-1751)

The Livre d'Orgue of Du Mage contains eight pieces on the first tone, none of which is based upon plain chant. The works, typical of late French style of organ writing, are written in the colorful and decorative manner adopted from the Lullian opera. One cannot fail to notice that the specific tonal color of organ stops specified to be used for each individual pieces lies at the very root of this compositional style.

Registration: *Plein jeu*

Great Organ: Prestant 16', Prestant 8' Roerfluit 8', Octaaf 4', Quint 2 2/3', Mixtuur IV

Rugwerk: Gedekt 8', Octaaf 4', Octaaf 2' Scherp III

Pedal Organ: Prestant 16', Octaaf 8'

Couplers: II to I, II to Pedal

Fugue:

Rugwerk: Prestant 8', Dulciaan 16' (played an octave higher)

Recit:

Great Organ: Roerfluit 8', Speelfluit 4', Terts 1 3/5'

Rugwerk: Gedekt 8'

Grand Jeu

Great Organ: Trompet 8', Roerfluit 8', Octaaf 4'

Rugwerk: Schalmey 8', Octaaf 4'

Bovenwerk: Trompet 8'

Pedal: Trompet 8'

Coupler: II to Pedal

Chorale in E major, by César Franck (1822-90)

The application of the symphonic style to organ composition was made possible by the innovations of the single great organ builder in France during the nineteenth century, Aristide Cavaillé-Coll. It was for this sort of instrument, sounding in the spacious Gothic churches, that Franck conceived his great organ works. In this performance, the resources of the instrument have been used as faithfully as possible to the printed wishes of Franck himself. Where Franck calls for the Voix Humaine, which would necessarily be used along with certain foundation sounds, we have closed the doors of the Borstwerk, with the following stops pulled:

Gedekt 8', Fluit 4', Regaal 8', Tremulant

Where Franck calls for a solo Trumpet, we interpret the tradition by using:

[Bovenwerk:] Trompet 8', Prestant 8', Octaaf 4'

Much of the success of the Franck Choral must be attributed to the spaciousness of St. Mark's Cathedral and its excellent acoustics.

The Performer

Fenner Douglass, Professor of Organ and Harpsichord at the Oberlin College Conservatory of Music since 1946, has long worked for the reinstatement of classical traditions in organ building. He has written articles in the *Organ Institute Quarterly* and the *Musical Quarterly* dealing with ancient instruments of Holland and France. This year his book, *The Language of the French Classical Organ*, will be released by Yale University Press.

Appendix 7: Excerpts from “The Holy Box” by The Very Rev. John C. Leffler

THE ORGAN AND THE NARTHEX

The old organ built in 1889, twice moved, rotting from dampness, and choked with dust, had been kept alive with baling wire and bicycle tape for years but now it was obviously about to expire. Hardly a service went by without a blown fuse on the motor or a pipe which would start squeaking during prayer or sermon. Several keys in the much-used middle register were bad because all the squeaking pipes had to be pulled out of the wind chest. To be sure, the lack of an organ made our Canon Precentor, Peter Hallock, a master of choral a cappella music, but it didn't make sense to have a gifted organist go to waste with no worthy instrument to play. A good organ was essential to the kind of music a cathedral should offer.

It was the business and professional women of St. Margaret's Guild who decided it was time to act. In 1959 they made their main objective the creation of an Organ Fund. It was not easy for women who worked all day to take on such a project. But they did, using every means available to increase that Fund. By early 1963 with the approval of the Vestry they had enough money to finance a trip for Peter Hallock to examine the great organs of the northeast. After playing on instruments created by noted American builders, he finally spent a day or so with E. Power Biggs at Harvard University, who was then the most famous American organist, recording his numbers on the Baroque organ at Harvard Museum. Peter returned absolutely convinced that the builder of that organ, Flentrop of Holland, was tops in the field. When Peter Hallock is convinced, he is a hard man to turn down, so finally the Vestry, again with an assist from St. Margaret f s Guild, agreed to ask Mr. Flentrop (fortunately in this country) to come to Seattle to study our problem and make a proposal.

Mr. Flentrop, a most charming and delightful man, spent several days in the Cathedral with one of his assistants studying the acoustics from every angle and remaining over a Sunday to get the feel of a worshipping congregation. He was enthusiastic about the acoustical properties of the building as a perfect setting for the crisp, definite tones of a Baroque instrument. He spent much time with Peter Hallock sharing ideas as to the kind of stops and tonal quality desired. He discussed with the architect the structural requirements and possible solutions. My only request was that it should be flexible enough to play some of the great romantic music of the 19th century by Franck, Vierne and others as well as Bach and the earlier composers. I suspect Mr. Flentrop was a bit taken aback by this request, but he acceded to it with good grace, as has been proven by the great adaptability of the Cathedral organ in many a recital.

In the spring of 1962, the Vestry considered two proposals from Flentrop, one for \$70,000 which he called "adequate", and one for \$110,000 which he said would be "second to none anywhere", both prices at the factory. He would require a clause in the contract covering exchange and wage fluctuations. It would take at least three years to build and install.

After Peter Hallock had explained the specifications and answered questions, the Vestry began its discussion. As yet, the unknown factor was the location of the organ and the additional cost involved. But finally, one of the young vestrymen, who was already a successful businessman, said "Let's go for broke" and moved that we contract for the \$110,000 instrument. To my amazement the motion passed unanimously, and I was both thrilled and scared because no one had any idea of the ultimate cost or what we would be facing in the next three years.

Soon the architect told us that it would be impossible to hang an organ and choir loft on the walls and the only solution would be to extend the narthex eastward and create a loft above, at an estimated cost of \$120,000. With the cost of the organ installed, this meant another campaign for capital funds of \$224,000.

Very fortunately the Diocesan Jubilee Thanksgiving Fund campaign of 1960 had been reasonably successful and the Cathedral had been the recipient by 1965 of \$81,000 "for the beautification and improvement of the Cathedral interior". Having been invested as it came in, this now amounted to \$85,000. This could now be used for the building of the new narthex and, equally important, it reduced the amount we would have to raise. Also, St. Margaret's Guild now had several thousand on hand!

Having had the benefit of expert advice in the Cathedral House campaign, it was decided to raise the Organ Fund on our own. It did not come easily, but with the successful appeal for memorial gifts and some help from outside the parish we managed to borrow enough against pledges without a mortgage.

Alas, as the demolition of the east wall began, costs escalated. The demolition work proved to be much more difficult than anticipated and- more expensive. The decrease of the dollar value and wage increases in Holland were upping the organ cost. Also, we were denied a hoped-for impart tax exemption of \$10,000. All in all, the final cost of the completed project ran to \$240,000, considerably in excess of the original estimate.

The year from June 1964 to June 1965 was certainly the most difficult and critical period since 1947. Overshadowing us in the summer of 1964 was the terminal illness of Bishop Lewis who died of leukemia on September 5th. At St. Mark's there was a complete dislocation of the parish program.

Part of the Sunday school met in St. Nicholas School, part in Diocesan House, the rest upstairs. Worshipping in Bloedel Auditorium left much to be desired. The seats were hard, the occasional noise from upstairs would interrupt us, and the smell of coffee provided the incense! Congregations dropped off markedly in the summer of 1964 and remained low during the fall and winter. Because of poor attendance income fell and the Every Member Canvass in November lagged badly.

Construction fell behind due to a long strike in late summer and exceptionally bad weather that fall. It looked doubtful as to whether we would be able to use the Cathedral on Christmas Eve, and the date of completion had to be moved to Easter 1965, if we were lucky.

In the meantime, the organ was being built in Holland. Peter Hallock had been given several months leave in order to work with Flentrop and familiarized himself with the mysteries of a Baroque organ. Glowing reports from Peter did not completely offset the fact that there had been a rise in wages and a fall in the exchange rate of the dollar.

A YEAR OF CRISIS

The arrival of the organ at the dock was a local news feature in mid-July. Flentrop's men began the uncrating. Pipes and parts were scattered on the floor in the side aisles on the Sunday when the Old Testament lesson happened to be the vision of the valley of dry bones brought to life again by the breath of God (Ezekiel 37:1-10) What an appropriate lesson it was as we looked at all the bits and pieces lying about waiting for a master builder to fashion them into an instrument of beauty which would one day respond to the air flowing through it and the touch of Peter Hallock at the keys. It made that passage from Ezekiel a very contemporary thing indeed.

Day by day the organ took shape and form, awesome in its size and beauty. Finally, late in August part of it could be played upon and it was decided to use the old organ until the final hymn, then use the Flentrop. Apparently, the old organ decided in mid-service that it was time to expire, which it did. The tired old instrument seemed to know that its successor was ready to take over and its labor done!

The dedication of the organ and narthex took place at a memorable service in September of 1965. Every available space was taken as the record congregation waited quietly and gaped in awe at the beauty of Flentrop's design. The Bishop first dedicated the porch and narthex in memory of the second Dean of Olympia, the Very Rev. John D. McLaughlan and his wife Adelaide. Then the Bishop, standing beneath the loft railing, blessed the organ and ordered it to sound forth for the first time with a fanfare of trumpets, a stop which Flentrop had copied from Spanish baroque instruments. The Rev. John V. Butler, Rector of Trinity Church, New York, preached the sermon and the choir and organ joined in an anthem which Peter Hallock had composed for the occasion ["Hail, Universal Lord"—RWS]. It was a great evening indeed, marking the realization of another impossible dream in the life of St. Mark's.

E. Power Biggs, who had directed us toward Flentrop four years before, was the natural choice to play the inaugural recitals on two evenings following the dedication. Again, the Cathedral was packed with eager listeners moved by a master's touch. Thus [the organ was] inaugurated with [the] concerts by outstanding organists of Europe and America which continue to thrill thousands each year. And it was from the proceeds of these concerts, and gifts from people who

were proud to have a part in providing such a world-renowned cultural asset for Seattle, that the final debt was paid in full in the spring of 1971.

More importantly, the Flentrop organ soon made a tremendous difference in the music at our services. The choir, already amply skilled in unaccompanied singing, now added great choral works with organ accompaniment. Equally impressive was the rapid improvement in congregational singing reinforced by organ and choir from the rear balcony.

All of this was, in a true sense, the crowning recognition of the unusual gifts of Peter Hallock who, ever since we gambled on him as an untried young musician in the fall of 1951, has devoted himself singly and without stint to the ministry of music at St. Mark's. Now recognized throughout the country as one of a select few church musicians, he might have left here long ago for more lucrative fields. But he stayed as a missionary in a difficult field, and if Seattle is now a city of some cultural standing Peter certainly must share the credit for making it so. As an artist of many gifts he has, through his special musical services and dramatic presentations marked by a quality of excellence, made the Cathedral not only a place of joyful worship but a cultural center as well. A modern expression of the original concept of a cathedral as the focus of community life.

From the fall of 1965 on there was a real resurgence in St. Mark's. Congregations grew steadily, the young began to turn out by the hundreds for Compline; Bloedel Auditorium was used by church and community groups seven days a week...

Appendix 8: Organists of Saint Mark's Cathedral

From 1951 to the present...

Peter R. Hallock, Canon Precentor, Emeritus

J. Melvin Butler, Canon for Music, Emeritus

Michael Kleinschmidt, Canon for Cathedral Music

David Locke, Assistant Organist

David Ruberg, Assistant Organist

Diane Rabinovich, Assistant Organist

Thomas Joyce, Organ Scholar and Assistant Organist

Alan DePuy, Assistant Organist

Dent Davidson, Music Associate

Brian Fairbanks, Music Associate and Chapel Organist

Herb Williams, Chapel Organist, Emeritus

Roger W. Sherman, Associate Organist, Emeritus

John Stuntebeck, Associate Organist
