

PIPE SCALE DETAILS

JOB: ST PETER, ST. LOUIS

PITCH: A 440 @ 20°C

DEPARTMENT: Great Organ

FINAL

DATE: 11th January 2000

TUNING METHOD: Cone & Slot

PRESSURE: 80mm

MANDER ORGANS

INITIALS: JPM

TEMPERAMENT: ET

| No | Stop Name | Pitch | Pipes | Mat | Ears | MW | C ¹ | C ¹³ | C ²⁵ | C ³⁷ | C ⁴⁹ | C ⁶¹ | Remarks |
|----|--|-------------------------------|-------|-----|---------------|------------------|----------------|----------------------------------|----------------------------------|------------------------------------|-------------------------------------|------------------------------------|---|
| 1a | Double Diapason | 16 | 1-24 | QP | | | 150x 120 | 95x 75.5 | (b:62.5 x49.5) | | | | Stopped Wood scale No. 32 |
| 1b | Double Diapason | 16 | 25-61 | 56% | 25-48 | 4 | | | 74 | 43.5 | 27 | 17 | Fronts in upper case |
| 2 | Open Diapason | 8 | 61 | 75% | small 1-36 | 4 | 150 | 90 | 55 | 34 | 20 | 13 | Fronts |
| 3 | Stopped Diapason | 8 | 61 | QP | | | 115x 91.5 | 72.5x 57.5 | 45.5x 36.5 | 29x 23 | 18x 14.5 | 11.5x 9 | Stopped Wood No. 39 |
| 4 | Gamba | 8 | 61 | 56% | 1-48 | 4 | 110 | 84/56 | 50/33.5 | 30/20 | 18/12 | 11/7.5 | 1-5 parallel, tapered 2/3rds by ten. C, bearded as req. |
| 5 | Principal | 4 | 61 | 56% | 1-24 small | 4 | 89 | 54 | 32 | 20 | 12 | 7.5 | |
| 6 | Open Flute | 4 | 61 | 35% | 1-30 | 1-12 4 rem4.5 | 87 B=60 | 62 | 42.5 | 28.5 | 19 | 12.5 | 1-12 canisters 13-61 tapered 1/3rd |
| 7 | Fifteenth | 2 | 61 | 56% | 1-12 small | 4 | 52 | 31 | 19 | 11.5 | 7.5 | 5 | |
| 8 | Furniture IV 1-6: 1 ¹ / ₃ .1. ² / ₃ . ¹ / ₂ 7-18: 2.1 ¹ / ₃ .1. ² / ₃ 19-30: 2 ² / ₃ .2.1 ¹ / ₃ .1 31-42: 4.2 ² / ₃ .2.1 ¹ / ₃ 43-61: 8.4.2 ² / ₃ .2. | 1 ¹ / ₃ | 305 | 56% | none | 4 | (2' 45) | 1' 28.5 | ¹ / ₂ ' 18 | ¹ / ₄ ' 11.5 | ¹ / ₈ ' 7 | ¹ / ₁₆ ' 4.5 | |
| 9 | Mounted Cornet III Ten G to top G 20-56: 2 ² / ₃ .2.1 ³ / ₅ | 2 ² / ₃ | 111 | 35% | none | 4.5 | (1' 35) | ¹ / ₂ ' 22 | ¹ / ₄ ' 13 | ¹ / ₈ ' 8 | (¹ / ₁₆ ' 5) | | Mounted |
| 10 | Trumpet | 8 | 61 | 56% | | | 120 | 92 | 71 | 54 | 45 | g = 40 | Domed shallots, scale No. 13 57-61 flues as Open Diap. 8 |
| 11 | Clarion | 4 | 61 | 56% | | | 92 | 71 | 54 | 45 | g = 40 | | Domed shallots, scale No. 13 45-61 flues as Principal 4 |

DEPARTMENT: Swell Organ

PRESSURE: 80mm

JOB: St. Louis

| No | Stop Name | Pitch | Pipes | Mat | Ears | MW | C ¹ | C ¹³ | C ²⁵ | C ³⁷ | C ⁴⁹ | C ⁶¹ | Remarks |
|-----|--|-------------------------------|-------|-----|---------------|-----|------------------|----------------------------------|----------------------------------|---------------------------------|------------------------------------|-----------------|--|
| 12 | Open Diapason | 8 | 7-61 | 56% | small 1-36 | 4 | (135) | 80 | 47.5 | 28 | 17 | 11 | 1-6 from Gedackt bass (with helpers) |
| 12a | Open Helpers | 4 | 1-6 | 56% | small | 4 | C=67 F=55 | | | | | | |
| 13 | Gedackt | 8 | 61 | 35% | 1-42 | 4.5 | 115 | 78 | 53 | 36 | 24.5 | 16.5 | 1-6 with stays 57 –61 open |
| 14 | Viola da Gamba | 8 | 61 | 56% | 1-48 | 4 | 93 | 56.5 | 36 | 22.5 | 14 | 10 | Parallel slotted beards as req. |
| 15 | Voix Celeste (T.C.) | 8 | 13-61 | 56% | 13-48 | 4 | | 51 | 33 | 20.5 | 13 | 9 | Parallel slotted, tuned flat. |
| 16 | Principal | 4 | 61 | 56% | 1-24 | 4 | 87 | 52 | 31 | 19.5 | 12 | 7 | |
| 17 | Nason Flute | 4 | 61 | 35% | 1-30 | 5 | 73 | 49 | 33 | 22 | 15 | 10 | 1-36 stopped 37-61 upper Ø 1/2 scale |
| 18 | Fifteenth | 2 | 61 | 56% | 1-12 | 4 | 50 | 30 | 19 | 11.5 | 7 | 5 | |
| 19 | Sesquialtera II 1-56: 2 ² / ₃ .1 ³ / ₅ 57-61: 2 ² / ₃ .3 ¹ / ₅ | 2 ² / ₃ | 122 | 35% | to 1' | 4 | 2'2/3 56 2'46 | 1' 28.5 | 1/2' 18 | 1/4' 11.5 | 1/8' 7 | 1/16' 4.5 | 57- 61 of tierce rank as 3 ¹ / ₅ |
| 20 | Mixture IV 1-6: 1. ² / ₃ . ¹ / ₂ . ¹ / ₃ 7-12: 1 ¹ / ₃ .1. ² / ₃ . ¹ / ₂ 13-20: 2.1 ¹ / ₃ .1. ² / ₃ 21-32: 2 ² / ₃ .2.1 ¹ / ₃ .1 33-48: 4.2 ² / ₃ .2.1 ¹ / ₃ 49-61: 8.4.2 ² / ₃ .2 | 1 | 244 | 56% | none | 4 | 1' 27 | ¹ / ₂ ' 17 | ¹ / ₄ ' 11 | ¹ / ₈ ' 7 | ¹ / ₁₆ ' 4.5 | | |
| 21 | Fagotto | 16 | 61 | 56% | | | 120 b=95 | 100 | 78 | 60 | 44.5 | 34.5 | 1-12 half length. Square shallots scale no. 1 |
| 22 | Harmonic Trumpet | 8 | 61 | 56% | | | 110 | 85 | 65 b 51 | 68 | 52 | g 48 | Harm from 37, 57-61 flues scales as Gt. Octave Square shallots scale no. 1 |
| 23 | Hautbois | 8 | 61 | 56% | | | 70 | 66 | 47 | 39 | 34 | g 25 | 57-61 flues scaled as Salic. 8 See separate sheet. Domed shallots scale no. 13 |

DEPARTMENT: Choir Organ

PRESSURE: 70mm

JOB: St. Louis

| No | Stop Name | Pitch | Pipes | Mat | Ears | MW | C ¹ | C ¹³ | C ²⁵ | C ³⁷ | C ⁴⁹ | C ⁶¹ | Remarks |
|----|---|------------------|-------|------|---------------|-------------------------------|-------------------|------------------|-----------------|------------------------|-----------------|------------------|---|
| 24 | Chimney Flute | 8 | 61 | 35% | 1-42 | 4 | 110 | 75 | 46 | 29 | 19 | 12.5 | 18 wood, 1-12 no chimneys 13-56 internal chimneys 1/4Ø, 1=Ø 49-61 open tapered upper Ø 2/3 scale |
| 25 | Principal | 4 | 61 | 75% | 1-24 small | 4 | 83 | 49 | 29 | 17 | 11 | 6 | Fronts |
| 26 | Koppel Flute | 4 | 61 | 35% | 1-36 | 4 cone 1 top Ø | 85 | 56 110 18 | 36 70 11 | 24 40 (35) 7 (6) | 15.5 | 10 | 1-12 solid canisters 13-36 Koppel canisters 37-61 tapered 1/2 |
| 27 | Nazard | 2 ^{2/3} | 61 | 35% | 1-24 | 4.5 | 65 | 41 | 26 | 16.5 | 10 | 6.5 | |
| 28 | Fifteenth | 2 | 61 | 56% | 1-12 | 4 | 45 | 27 | 16 | 10 | 6 | 4.5 | |
| 29 | Recorder | 2 | 61 | 35% | 1-18 | 4.5 | 53 | 34 | 21.5 | 13.5 | 8.5 | 5.5 | |
| 30 | Tierce | 1 ^{3/5} | 61 | 35% | 1-14 | 4.5 | 45.5 | 28.5 | 18 | 11.5 | 7.5 | g=6 | 56-61 as 3 ^{1/5} |
| 31 | Sharp Mixture III 1-12: 1. ^{2/3} . ^{1/2} 13-24: 1. ^{1/3} .1. ^{2/3} 25-36: 2.1. ^{1/3} .1 37-48: 2. ^{2/3} .2.1. ^{1/3} 49-61: 4.2. ^{2/3} .2 | 1 | 183 | 56% | none | 4 | (1' 25) | 1/2' 15.5 | 1/4' 10 | 1/8' 6 | 1/16' 4.5 | | |
| 32 | Cromorne | 8 | 61 | 56%% | | scale total 1 cone 1 | 35 1500 180 | 30 780 125 | 25 410 80 | 23 210 60 | 21 95 42 | g=20 50 25 | 1-12 Capped Canisters 13-24 Open Canisters 57-61 flues scaled as Prin 4. Square shallots scale no. 1 |

DEPARTMENT: Pedal Organ

PRESSURE: 90mm

JOB: St. Louis

| No | Stop Name | Pitch | Pipes | Mat | Ears | MW | C ¹ | C ¹³ | C ²⁵ | G ³² | Remarks |
|-----|---|-------------------------------|-------|--------------|--|----|------------------------------------|-----------------|-----------------|-----------------|---|
| 33 | Subbass | 32 | 1-12 | | | | 310x 255 | (198x 163) | | | |
| 34 | Open Diapason | 16 | 7-32 | 75% & 56% | 1-32 | 4 | 250 | 150 | 89 | 65 | Fronts |
| 34a | Open helpers | 8 | 1-6 | 56% | 1-6 | 4 | C=120 F=103 | | | | |
| 35 | Bourdon | 16 | 32 | QP | | | (198x 163) | 125x 103 | 79x 65 | 60x50 | Bourdon Scale No 15 Bottom 6 notes used as 16ft Open with helpers, made 2 notes larger separate pallets blown harder. |
| 36 | Principal | 8 | 32 | 56% | 1-32 | 4 | 150 | 89 | 55 | 41 | |
| 37 | Bass Flute | 8 | 32 | 35% | 1-32 | 4 | 122 | 82 | 53 | 40 | 1-6 with stays, sturdy feet |
| 38 | Octave | 4 | 32 | 56% | 1-24 | 4 | 85 | 53 | 33 | 26 | |
| 39 | Choral Flute | 4 | 32 | 35% | 1-32 | 4 | 85 | 55 | 36 | 30 | (Stopped Flute) |
| 40 | Mixture IV 1-32: 2 ² / ₃ .2.1 ¹ / ₃ .1 | 2 ² / ₃ | 128 | 56% | to 1' not 1 ¹ / ₃ rank | 4 | 2 ² / ₃ ' 62 | 2' 50 | 1' 30 | 1/2' 18 | |
| 41 | Bombard | 32 | 1-12 | zinc | | | 200 b=160 | | | | Half Length. Wooden leathered shallots, light tongue loading |
| 42 | Trombone | 16 | 32 | 56% | | | 158 | 120 | 88 | 73 | Full length. Square shallots, scale No. 1 |
| 43 | Trumpet | 8 | 32 | 56% | | | 130 | 98 | 76 | 65 | Domed shallots, scale No. 10 |
| 44 | Clarion | 4 | 32 | 56% | | | 98 | 76 | 58 | 50 | Domed shallots, scale No. 10 |