

PIPE SCALE DETAILS

JOB: CRANLEIGH SCHOOL

PITCH: A 440 @ 20°C

DEPARTMENT: Great Organ

DATE: April 2009 (Final)

TUNING METHOD: Cone & Slot

PRESSURE: 80mm

MANDER ORGANS

INITIALS: JPM

TEMPERAMENT: Kellner

| 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 | Tulip | | | 150x 120 | 95x 75.5 | (b:62.5 x49.5) | | | | Stopped Wood scale No. 32 |
| 1b | Double Diapason trebles | 16 | 26-61 | 56% or 75% | 25-48 | 4 | | | 74 | 43.5 | 27 | 17 | 56% Small ears |
| 2 | Open Diapason | 8 | 1-61 | 75% | 1-36 | 4 | 150 | 90 | 55 | 33 | 20 | 13 | Small ears |
| 3 | Stopped Diapason | 8 | 1-61 | Tulip | | | 107x85 | 67x 53.5 | 42.5x 33.5 | 26.5x 21 | 17x 13.5 | 12x9.5 | Stopped Wood Scale 41 |
| 4 | Viola da Gamba | 8 | 1-61 | 56% | 1-48 | 4 | 105 | 80/54 | 48/32 | 29/19.5 | 18/12 | 11.5/7.5 | 1-5 parallel, then gradually tapering to 2/3 by tenor C. Bearded as required |
| 5 | Principal | 4 | 1-61 | 56% | 1-36 | 4 | 89 | 54 | 32 | 20 | 12 | 7.5 | Small ears |
| 6 | Chimney Flute | 4 | 61 | 35% | 1-30 | 4 | 69 | 45 | 29 | 19 | 12 | 8 | 1-48 internal chimn $\frac{1}{5}\varnothing$ l=1.5x \varnothing , 49-61 upper $\varnothing=\frac{2}{3}\varnothing$ |
| 7 | Twelfth | $2\frac{2}{3}$ | 61 | 56% | 1-18 | 4 | 61 | 38 | 23 | 14 | 9 | 5.5 | Small ears |
| 8 | Fifteenth | 2 | 61 | 56% | 1-12 | 4 | 52 | 31 | 19 | 11.5 | 7.5 | 5 | Small ears |
| 9 | Seventeenth | $1\frac{3}{5}$ | 61 | 56% | 1-8 | 4 | 42 | 26 | 15.5 | 9 | 5.5 | $g^{56}=4$ | 57-61 @ $3\frac{1}{5}$ ' pitch. |
| 10 | Cornet IV g ⁰ -g ³ 20-56: 4.2 $\frac{2}{3}$.2.1 $\frac{3}{5}$ | 4 | 148 | 35% | none | 4.5 | g4'=45 | 1'=38 | $\frac{1}{2}'=25$ | $\frac{1}{4}'=17$ | $\frac{1}{8}'=11$ | | |
| 11 | Furniture IV 1-8: 1 $\frac{1}{3}$.1 $\frac{2}{3}$. $\frac{1}{2}$ 9-18: 2.1 $\frac{1}{3}$.1 $\frac{2}{3}$ 19-30: 2 $\frac{2}{3}$.2.1 $\frac{1}{3}$.1 31-42: 4.2 $\frac{2}{3}$.2.1 $\frac{1}{3}$ 43-58: 8.4.2 $\frac{2}{3}$.2 | 1 1/3 | 244 | 56% | none | 4 | (2' 45) | 1' 28.5 | $\frac{1}{2}'$ 18 | $\frac{1}{4}'$ 11.5 | $\frac{1}{8}'$ 7 | $\frac{1}{16}'$ 4.5 | |
| 12 | Trumpet | 8 | 61 | 56% | | | 120 | 92 | 71 | 54 | 45 | g = 40 | Domed shallots, scale No. 13 57-61 flues as Open Diap. 8 |
| 13 | Cromorne | 8 | 61 | 56% | | scale tot.l. cone l | 45 1500 180 | 37.5 780 125 | 31.5 410 80 | 26.5 210 60 | 22 95 42 | g^{56} 20 50 37 | Domed shallots, scale No. 13 57-61 flues as Open Diap. 8 |

DEPARTMENT: Swell Organ

PRESSURE: 80mm

JOB: Cranleigh School

| No | Stop Name | Pitch | Pipes | Mat | Ears | MW | C ¹ | C ¹³ | C ²⁵ | C ³⁷ | C ⁴⁹ | C ⁶¹ | Remarks |
|----|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------|-------|-----|-------|-----------------|---------------------------|----------------------------------|----------------------------------|---------------------------------|------------------------------------|-----------------|--------------------------------------------------------------------------------------------------------------|
| 14 | Salicional | 8 | 7-61 | 56% | 1-42 | 4 | F#=87 | 70 | 42 | 26 | 16 | 10 | parallel, slotted beards. 1-6 from No. 15 |
| 15 | Gedackt | 8 | 61 | 56% | 1-42 | 4.5 | 115 | 78 | 53 | 36 | 24.5 | 16.5 | 1-8 wood as 3. 57-61 open tapered upper Ø half scale Domed canisters |
| 16 | Celeste TC | 8 | 13-61 | 56% | 13-48 | 4 | | 51 | 33 | 20.5 | 13 | 9 | Parallel slotted, tuned flat |
| 17 | Principal | 4 | 61 | 56% | 1-24 | 4 | 87 | 52 | 31 | 19.5 | 12 | 7 | Small ears |
| 18 | Open Flute | 4 | 61 | 35% | 1-30 | 1-12 4 rem45 | 87 B=60 | 62 | 42.5 | 28.5 | 19 | 12.5 | 1-12 canisters 13-61 tapered 1/3rd |
| 19 | Nazard | 2 ² / ₃ | 61 | 35% | 1-24 | 4.5 | 65 | 41 | 26 | 16.5 | 10 | 6.5 | |
| 20 | Fifteenth | 2 | 61 | 56% | 1-12 | 4 | 50 | 30 | 19 | 11.5 | 7 | 5 | |
| 21 | 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 |
| 22 | Mixture III 1-10: 1. ² / ₃ . ¹ / ₂ 11-22: 1. ¹ / ₃ .1. ² / ₃ 23-38: 2.1. ¹ / ₃ .1 39-52: 2. ² / ₃ .2.1. ¹ / ₃ 53-61: 4.2. ² / ₃ .2 | 1 | 183 | 56% | none | 4 | 1' 27 | ¹ / ₂ ' 17 | ¹ / ₄ ' 11 | ¹ / ₈ ' 7 | ¹ / ₁₆ ' 4.5 | | |
| 23 | Bassoon | 16 | 61 | 56% | | | 115 | 100 f=87 f#=92 | 80 | 63 | 46 | 35 | 1-18 half length. Shallots Square No.1 |
| 24 | Trumpet | 8 | 61 | 56% | | | 105 | 83 | 65 | 50 | 39 | g56=33 | 57-61 flues as Great Open 8 Sq Shallots No.1. If space tight, 1-6 could be half lenth |
| 25 | Hautbois | 8 | 61 | 56% | | | 70 G8=55 G#9= 76 | 66 | 47 | 39 | 34 C#50= 30 | 21 | 57-61 flues scaled as Salic. 8 Scale details as St. John's Cor Anglais. Domed shallots scale no. 13 |

DEPARTMENT: Pedal Organ**PRESSURE:** 105**JOB:** Cranleigh School

| No | Stop Name | Pitch | Pipes | Mat | Ears | MW | C ¹ | C ¹³ | C ²⁵ | G ³² | Remarks |
|----|------------|-------|-------|-------|------|----|----------------|-----------------|-----------------|-----------------|--------------------------------------|
| 26 | Bourdon | 16 | 32 | Tulip | 1-12 | | 213x 176 | 134x 111 | 85x 70 | 65x54 | Bourdon Scale No 13 Beards 1-12 |
| 27 | Principal | 8 | 32 | 56% | 1-32 | 4 | 157 | 92 | 55 | 41 | Small ears |
| 28 | Bass Flute | 8 | 32 | 35% | 1-32 | 4 | 122 | 82 | 53 | 40 | 1-6 stayed, sturdy feet |
| 29 | Octave | 4 | 32 | 56% | 1-32 | 4 | 93 | 56 | 34 | 27 | |
| 30 | Trombone | 16 | 32 | 56% | | | 155 | 120 | 90 | 76 | Full length square No. 1 shallots |
| 31 | Trumpet | 8 | 32 | 56% | | | 130 | 98 | 76 | 65 | Domed shallots No. 10 |