

Chanter

# Chanter, stamped R. L. O'MEALY BELFAST  
 # Formerly Jim MacIntosh, now Trevor Stuart  
 # meas wph 17/12/08

| LOA  | 379.2 | throat    | 3.94x3.97             |
|------|-------|-----------|-----------------------|
| prob | diam  | insertion | diam (oval) insertion |
| 64   | 6.45  | 379       |                       |
| 58   | 5.85  | 378       |                       |
| 57   | 5.7   | 377       |                       |
| 55   | 5.5   | 376       |                       |
| 53   | 5.38  | 374       |                       |
| 51   | 5.12  | 371       |                       |
| 49   | 4.88  | 370       |                       |
| 47   | 4.7   | 370       |                       |
| 46   | 4.6   | 369       |                       |
| 45   | 4.47  | 368.5     |                       |
| 44   | 4.38  | 368.5     |                       |
| 43   | 4.3   | 368       |                       |
| 42   | 4.26  | 367.5     |                       |
| 41   | 4.1   | 366.5     |                       |
| 40   | 4     | 364       |                       |
| 39a  | 3.94  | 362.5     | est.                  |
| 40   | 4     | 359       |                       |
| 41   | 4.1   | 353       |                       |
| 42   | 4.26  | 347       |                       |
| 43   | 4.3   | 344       |                       |
| 44   | 4.38  | 341       |                       |
| 45   | 4.47  | 337.5     |                       |
| 46   | 4.6   | 332       |                       |
| 47   | 4.7   | 327.5     |                       |
| 48   | 4.78  | 325.5     |                       |
| 49   | 4.88  | 320       |                       |
| 50   | 4.96  | 318       | 317                   |
| 51   | 5.12  | 313       |                       |
| 52   | 5.26  | 306.5     |                       |
| 53   | 5.38  | 302       |                       |
| 54   | 5.47  | 299       |                       |
| 55   | 5.5   | 297       |                       |
| 56   | 5.56  | 295       | 300                   |
| 57   | 5.7   | 290       |                       |
| 58   | 5.85  | 285       |                       |
| 59   | 5.88  | 282.5     | 282.5                 |
| 60   | 5.99  | 278.5     | 280                   |
| 61   | 6.13  | 273       |                       |
| 62   | 6.24  | 263.5     | 265.5                 |
| 63   | 6.34  | 258.5     |                       |
| 64   | 6.42  | 255       |                       |
| 65   | 6.49  | 249.5     | 247                   |

Chanter

|     |       |       |       |
|-----|-------|-------|-------|
| 66  | 6.61  | 240.5 |       |
| 67  | 6.67  | 239   |       |
| 68  | 6.8   | 232.5 |       |
| 69  | 6.91  | 226.5 |       |
| 70  | 7.05  | 216   | 220   |
| 71  | 7.13  | 213   |       |
| 72  | 7.2   | 208   |       |
| 73  | 7.31  | 200   |       |
| 74  | 7.42  | 195   |       |
| 75  | 7.49  | 190   |       |
| 76  | 7.67  | 180   | 184.5 |
| 78  | 7.76  | 173.5 |       |
| 79  | 7.86  | 167   | 174.5 |
| 80  | 7.98  | 160.5 | 159   |
| 81  | 8.06  | 155   |       |
| 82  | 8.22  | 145.5 | 152.5 |
| 83  | 8.31  | 141   |       |
| 84  | 8.37  | 137.5 |       |
| 85  | 8.53  | 126   |       |
| 86  | 8.57  | 123   | 124   |
| 87  | 8.68  | 115.5 |       |
| 88  | 8.75  | 111   |       |
| 89  | 8.92  | 99    | 100.5 |
| 90  | 8.99  | 97    |       |
| 92  | 9.22  | 80.5  |       |
| 94  | 9.35  | 73    | 74.5  |
| 95  | 9.48  | 65    |       |
| 96  | 9.63  | 57.5  |       |
| 98  | 9.81  | 47    |       |
| 100 | 10.03 | 37.5  | 40.5  |
| 102 | 10.21 | 32.5  |       |
| 103 | 10.29 | 28    |       |
| 106 | 10.63 | 16.5  | 18.5  |
| 108 | 10.84 | 11.5  |       |
| 110 | 11    | 7     |       |
| 113 | 11.3  | 2     |       |
| 116 | 11.6  | 0     |       |

| Toneholes | Dist-ctr-bell | Diam-v | Diam-h | Dist-ctr-top | chimney |
|-----------|---------------|--------|--------|--------------|---------|
| LT -      | 269           | 4.67   | 4.64   | 109.9        | 11.6    |
| L1 -      | 252.9         | 4.55   | 4.51   | 126.1        | 12.1    |
| L2 -      | 221.9         | 5.05   | 4.98   | 157          | 12.8    |
| L3 -      | 190.6         | 4.89   | 4.86   | 188.6        | 13.2    |
| R1 -      | 150.6         | 4.52   | 4.57   | 228.3        | 14      |
| R2 -      | 119.3         | 5.56   | 5.45   | 260          | 14.2    |
| R3 -      | 85            | 4.94   | 4.92   | 293.9        | 14.8    |
| R4 -      | 51.2          | 4.37   | 4.34   | 327.2        | 15.5    |

Bari Reg

Baritone reg, stamped R. L. OMEALY  
Formerly Jim MacIntosh, now Trevor Stuart

meas wph 17/12/08

LOA 415.1

throat 3.37x3.39

| probe | diam | insertion | diam(oval) | insertion |
|-------|------|-----------|------------|-----------|
| 58    | 5.85 | 414.5     |            |           |
| 57    | 5.7  | 413       |            |           |
| 55    | 5.5  | 412.5     |            |           |
| 53    | 5.38 | 411       |            |           |
| 51    | 5.12 | 407.5     |            |           |
| 50    | 4.98 | 407       |            |           |
| 47    | 4.7  | 406       |            |           |
| 46    | 4.6  | 405       |            |           |
| 45    | 4.47 | 404.5     |            |           |
| 44    | 4.38 | 404       |            |           |
| 43    | 4.3  | 404       |            |           |
| 42    | 4.26 | 403       |            |           |
| 41    | 4.1  | 402.5     |            |           |
| 40    | 4    | 402.5     |            |           |
| 38    | 3.8  | 401.5     |            |           |
| 36    | 3.6  | 401.5     |            |           |
| 35    | 3.5  | 401.5     |            |           |
| 34    | 3.37 | 401       |            | est       |
| 35    | 3.5  | 393.5     |            |           |
| 36    | 3.6  | 391       |            |           |
| 37    | 3.71 | 385       |            |           |
| 38    | 3.8  | 383       |            |           |
| 39    | 3.92 | 376       |            |           |
| 40    | 4    | 372       |            |           |
| 41    | 4.1  | 367.5     |            |           |
| 42    | 4.26 | 362       |            |           |
| 43    | 4.3  | 359       |            |           |
| 44    | 4.38 | 356.5     |            |           |
| 45    | 4.47 | 351       |            |           |
| 46    | 4.6  | 346       |            |           |
| 47    | 4.7  | 342       |            |           |
| 48    | 4.78 | 340.5     |            |           |
| 49    | 4.88 | 335.5     |            |           |
| 50    | 4.96 | 330.5     |            | 332.5     |
| 51    | 5.12 | 325       |            |           |
| 52    | 5.26 | 318       |            |           |
| 53    | 5.38 | 313       |            |           |
| 54    | 5.47 | 310       |            |           |
| 55    | 5.5  | 307.5     |            |           |
| 56    | 5.56 | 305       |            | 312.5     |
| 57    | 5.7  | 298.5     |            |           |

Bari Reg

|     |       |       |       |
|-----|-------|-------|-------|
| 58  | 5.85  | 292   |       |
| 59  | 5.88  | 290   |       |
| 60  | 5.99  | 285   | 289.5 |
| 61  | 6.13  | 280   |       |
| 62  | 6.24  | 273   | 276.5 |
| 63  | 6.24  | 272.5 |       |
| 64  | 6.42  | 265   |       |
| 65  | 6.49  | 260   | 259.5 |
| 66  | 6.61  | 253.5 |       |
| 67  | 6.67  | 252   |       |
| 68  | 6.8   | 247   |       |
| 69  | 6.91  | 241.5 |       |
| 70  | 7.05  | 235   | 237   |
| 71  | 7.13  | 232.5 |       |
| 72  | 7.2   | 228.5 |       |
| 73  | 7.31  | 221   |       |
| 74  | 7.42  | 215   |       |
| 75  | 7.49  | 211.5 |       |
| 76  | 7.67  | 202.5 | 204   |
| 78  | 7.76  | 195   |       |
| 79  | 7.86  | 189.5 | 193   |
| 80  | 7.98  | 181.5 | 178   |
| 81  | 8.06  | 178   |       |
| 82  | 8.22  | 167   | 172   |
| 83  | 8.31  | 161.5 |       |
| 84  | 8.37  | 158   |       |
| 85  | 8.53  | 147.5 |       |
| 86  | 8.57  | 144.5 | 144.5 |
| 87  | 8.68  | 138   |       |
| 88  | 8.75  | 132.5 |       |
| 89  | 8.92  | 120   | 121   |
| 90  | 8.99  | 117   |       |
| 92  | 9.22  | 102   |       |
| 94  | 9.35  | 93.5  | 96.5  |
| 95  | 9.48  | 86.5  |       |
| 96  | 9.63  | 80    |       |
| 98  | 9.81  | 70.5  |       |
| 100 | 10.03 | 57    | 61    |
| 102 | 10.21 | 50.5  |       |
| 103 | 10.29 | 46    |       |
| 106 | 10.63 | 30    | 35    |
| 108 | 10.84 | 14.5  |       |
| 110 | 11    | 5     | 6     |

## Bari Reg

| Reg keys | Dist-bell-ctr | Dist-top-ctr | Diam (circular) | Keylength |
|----------|---------------|--------------|-----------------|-----------|
| D        | 38.9 -        |              | 8.1             | 148       |
| F#       | 150.2         | 265.5        | 6.6             | 71        |
| G        | 178.2         | 237.4        | 4.3             | 76        |
| A        | 230.2         | 184.9        | 5.7             | 68        |

## Bass Reg

Bass regulator

R. L. O'Mealy, C# set

Trevor Stewart, cust.

meas wph 17/12/08

probe diam          insertion    diam (oval)    insertion

Section 1 – short timber section including reed seat

|    |     |     |                               |
|----|-----|-----|-------------------------------|
| 33 | 3.3 | 277 | throat, not sure of distance. |
|----|-----|-----|-------------------------------|

|    |     |     |  |
|----|-----|-----|--|
| 33 | 3.3 | 260 | there is a semiparallel section about 17 mm long |
|----|-----|-----|--|

Section 2, incl. Bent brass tubing – only the straight section, to ~170mm, was measured

|    |      |       |       |
|----|------|-------|-------|
| 52 | 5.26 | 173   |       |
| 53 | 5.38 | 164   |       |
| 54 | 5.47 | 162   |       |
| 55 | 5.5  | 161   |       |
| 56 | 5.56 | 160.5 |       |
| 57 | 5.7  | 156   |       |
| 58 | 5.85 | 148.5 |       |
| 59 | 5.88 | 147   |       |
| 60 | 5.99 | 146   | 146.5 |
| 61 | 6.13 | 139.5 |       |
| 62 | 6.24 | 132   |       |
| 64 | 6.42 | 126   |       |
| 65 | 6.49 | 122   |       |
| 66 | 6.61 | 122   |       |
| 67 | 6.67 | 122   |       |
| 68 | 6.8  | 122   | STEP  |
| 69 | 6.91 | 122   |       |
| 70 | 7.05 | 120   | 121   |
| 71 | 7.13 | 115.5 |       |
| 72 | 7.2  | 113.5 |       |
| 73 | 7.31 | 106   |       |
| 74 | 7.42 | 101   |       |
| 75 | 7.49 | 97    |       |
| 76 | 7.67 | 86.5  |       |
| 78 | 7.76 | 76.5  |       |
| 79 | 7.86 | 69    |       |
| 80 | 7.98 | 60.5  | 58    |
| 81 | 8.06 | 57.5  |       |
| 82 | 8.22 | 47    | 53.5  |
| 83 | 8.31 | 43    |       |
| 84 | 8.37 | 40    |       |
| 85 | 8.53 | 32.5  |       |
| 86 | 8.57 | 29.5  | 31.5  |
| 87 | 8.68 | 24.5  |       |
| 88 | 8.75 | 18    |       |
| 89 | 8.92 | 4     | 9     |
| 90 | 8.99 | 3     |       |

Section 3 – timber “separator” section (which is in fact solid, without fluting) and metal tenon,

## Bass Reg

attached to mainstock. There is a 74.5 mm socket on the bag side,  
and a 34.5 mm outboard tenon which fits into section 4 (below)

|     |        |         |
|-----|--------|---------|
| 96  | 9.63 - | through |
| 98  | 9.81   | 49.6    |
| 100 | 10.03  | 38      |
| 102 | 10.21  | 33      |
| 106 | 10.63  | 9       |

### Section 4, timber

|     |       |     |       |
|-----|-------|-----|-------|
| 106 | 10.63 | 320 | 323.5 |
| 108 | 10.84 | 311 |       |
| 110 | 11    | 299 |       |
| 113 | 11.35 | 287 |       |
| 116 | 11.63 | 268 |       |
| 120 | 11.95 | 251 | 257   |
| 125 | 12.5  | 224 |       |
| 130 | 13    | 191 |       |
| 135 | 13.5  | 172 |       |
| 140 | 14    | 140 |       |
| 145 | 14.5  | 113 |       |
| 150 | 15    | 84  |       |
| 155 | 15.5  | 65  |       |
| 160 | 16    | 45  |       |
| 165 | 16.5  | 18  |       |
| 170 | 17    | 3   |       |

Keys toneholes round

| Keys | Dist-bell-ctrdiam | keylength | pivot     |
|------|-------------------|-----------|-----------|
| G    | 45.1              | 13.9      | 191 104.5 |
| A    | 147.3             | 11.6      | 123 193.5 |
| B    | 229               | 9.3       | 79 249    |
| C    | 275.5             | 7.4       | 71 294    |

## Contrabass

Contrabass Regulator, R. L. O'Mealy

Trevor Stewart, cust.

inboard/reed section

LOA 42.5

| probe | diam | insertion | diam (oval) | insertion |
|-------|------|-----------|-------------|-----------|
| 73    | 7.31 | 482.5     |             |           |
| 60    | 5.99 | 481.5     |             |           |
| 57    | 5.7  | 479.5     |             |           |
| 55    | 5.5  | 479       |             |           |
| 53    | 5.38 | 477.5     |             |           |
| 51    | 5.12 | 475       |             |           |
| 49    | 4.88 | 473       |             |           |
| 47    | 4.7  | 472.5     |             |           |
| 44    | 4.38 | 470.5     |             |           |
| 41    | 4.1  | 469.5     |             |           |
| 39    | 3.92 | 469       |             |           |
| 36    | 3.6  | 469       |             |           |
| 35    | 3.5  | 469       |             |           |
| 33    | 3.28 | 467.5     |             |           |
| 33    | 3.28 | 463.5     |             |           |
| 35    | 3.5  | 427.5     |             |           |
| 36    | 3.6  | 425       |             |           |
| 37    | 3.71 | 417       |             |           |
| 38    | 3.8  | 415.5     |             |           |
| 39    | 3.92 | 404       |             |           |
| 40    | 4    | 400.5     |             |           |
| 41    | 4.1  | 397       |             |           |
| 42    | 4.26 | 392       |             |           |
| 43    | 4.3  | 389       |             |           |
| 44    | 4.38 | 386       |             |           |
| 45    | 4.47 | 381       |             |           |
| 46    | 4.6  | 375       |             |           |
| 47    | 4.7  | 370.5     |             |           |
| 48    | 4.78 | 368.5     |             |           |
| 49    | 4.88 | 363       |             |           |
| 50    | 4.96 | 355.5     |             | 357       |
| 51    | 5.12 | 353       |             |           |
| 52    | 5.26 | 345       |             |           |
| 53    | 5.38 | 339       |             |           |
| 54    | 5.47 | 336.5     |             |           |
| 55    | 5.5  | 334       |             |           |
| 56    | 5.56 | 331       |             | 337.5     |
| 57    | 5.7  | 324.5     |             |           |
| 58    | 5.85 | 317.5     |             |           |
| 59    | 5.88 | 315       |             | 314.5     |
| 60    | 5.99 | 310.5     |             | 313       |
| 61    | 6.13 | 304.5     |             |           |



Contrabass

|     |       |       |       |
|-----|-------|-------|-------|
| 62  | 6.24  | 296.5 | 298   |
| 63  | 6.34  | 296   |       |
| 64  | 6.42  | 289   |       |
| 65  | 6.49  | 284.5 | 283   |
| 66  | 6.61  | 277   |       |
| 67  | 6.67  | 275   |       |
| 68  | 6.8   | 270   |       |
| 69  | 6.91  | 263.5 |       |
| 70  | 7.05  | 256.5 | 257.5 |
| 71  | 7.13  | 253   |       |
| 72  | 7.2   | 249.5 |       |
| 73  | 7.31  | 241.5 |       |
| 74  | 7.42  | 236   |       |
| 75  | 7.49  | 232.5 |       |
| 76  | 7.67  | 224   | 226.5 |
| 78  | 7.76  | 216   |       |
| 79  | 7.86  | 210   | 214.5 |
| 80  | 7.98  | 201.5 | 201.5 |
| 81  | 8.06  | 199   |       |
| 82  | 8.22  | 188   | 195.5 |
| 83  | 8.31  | 183   |       |
| 84  | 8.37  | 179   |       |
| 85  | 8.53  | 169   |       |
| 86  | 8.57  | 164.5 | 165.5 |
| 87  | 8.68  | 158.5 |       |
| 88  | 8.75  | 154   |       |
| 89  | 8.92  | 142.5 | 146.5 |
| 90  | 8.99  | 140.5 |       |
| 92  | 9.22  | 123.5 |       |
| 94  | 9.35  | 115   | 118.5 |
| 95  | 9.48  | 107   |       |
| 96  | 9.63  | 99.5  |       |
| 98  | 9.81  | 90    |       |
| 100 | 10.03 | 89    | 89    |
| 102 | 10.21 | 90    |       |
| 103 | 10.28 | 88    |       |
| 106 | 10.63 | 88    |       |
| 108 | 10.84 | 88    |       |
| 110 | 11    | 88    |       |

"H" cross bend/bore – first section

|     |      |      |
|-----|------|------|
| 115 | 11.5 | 98.5 |
| 120 | 12   | 78   |
| 125 | 12.5 | 33   |
| 130 | 13   | 10   |

second section, meas from (opposite) end of metal tubing

|     |      |     |
|-----|------|-----|
| 135 | 13.5 | 100 |
| 140 | 14   | 65  |

## Contrabass

|                         |      |     |
|-------------------------|------|-----|
| 145                     | 14.5 | 42  |
| 150                     | 15   | 19  |
| outboard timber section |      |     |
| LOA                     | 400  |     |
| 153                     | 15.3 | 304 |
| 154                     | 15.4 | 302 |
| 155                     | 15.5 | 286 |
| 160                     | 16   | 263 |
| 165                     | 16.5 | 252 |
| 170                     | 17   | 240 |
| 175                     | 17.5 | 224 |
| 180                     | 18   | 209 |
| 185                     | 18.5 | 198 |
| 190                     | 19   | 185 |
| 195                     | 19.5 | 169 |
| 223                     | 22.3 | 83  |
| 250                     | 25   | 25  |

#

| keys   | dist-ctr-bell | diam | keylength(s) |     | pivot(s) |     |  |
|--------|---------------|------|--------------|-----|----------|-----|--|
| D      | 46            | 23.5 | 85           | 128 | 88       | 196 |  |
| E      | 169.5         | 20.1 | 131          |     | 130      |     |  |
| Fsharp | 245           | 18.6 | 306          |     | 212      |     |  |

## Drones

Drones, R. L, O'Mealy

|          | standing joint lbore | Slide joint lbore | Slide joint length | bore      | socket length | socket diam | exit |
|----------|----------------------|-------------------|--------------------|-----------|---------------|-------------|------|
| Tenor    | 149                  | 3.12              | 141                | 4.1       | 59            | 7.9         | 4.02 |
| Baritone | 282.7                | 3.85              | 292                | 5.2 - 5.5 | 104           | 11.6        | 6.3  |
| Bass     | 457                  | 4.7               | 363 (folded)       | 8.8       | 134.5         | 11.6        | 8.14 |
|          |                      |                   | 6                  |           | 9.5           |             |      |
|          |                      |                   | 7.5                |           |               |             |      |