

|  | A | B | C | D | E | F | G | H | I |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 117 | e | 13.3 |  |  |  |  |  | 13.4 |  |
| 118 | d | 13.6 |  |  |  |  |  | 13.6 |  |
| 119 |  |  |  |  |  |  |  |  |  |
| 120 | c | 16.2 |  |  |  |  |  | 17 |  |
| 121 | b | 17 |  |  |  |  |  | 17.3 |  |
| 122 | a | 17.2 |  |  |  |  |  | 17.4 |  |
| 123 | 9 | 18.4 |  |  |  |  |  | 19 |  |
| 124 | f1 | 22 |  |  |  |  |  | 22.3 |  |
| 125 |  |  |  |  |  |  |  |  |  |
| 126 | e1 | 23.2 | e1 tone hole bore diameter on long joint |  |  |  |  | 23.8 |  |
| 127 | d1 | 26 | d1 tone hole bore diameter on long joint |  |  |  |  | 27 |  |
| 128 | c1 | 30.2 | DeLoose2 OOR; c1 tone hole bore diameter on long joint |  |  |  |  | 30.2 |  |
| 129 |  |  |  |  |  |  |  |  |  |
| 130 |  |  |  |  |  |  |  |  |  |
| 131 |  |  |  |  |  |  |  |  |  |
| 132 |  |  |  |  |  |  |  |  |  |
| 133 |  |  |  |  |  |  |  |  |  |
| 134 | VIII. Bell |  | DeLoose2 no tone hole in the bell |  |  |  |  |  |  |
| 135 | bell logic |  | If bell_logic $=0=>$ normal conical bore; if bell_logic $=1=>$ inverted concial bore; if | 2 => bell expansion |  |  |  | 0 |  |
| 136 | bell_length ( $0,1,2$ ) | 325 | total length of bell |  |  |  |  | 319 |  |
| 137 | bell_bot_bore ( $0,1,2$ ) | 30 | DeLoose2; OOR $30.9 \times 31.2$; dia bore at the bottom of bell [end with socket]; |  |  |  |  | 31.2 |  |
| 138 | bell_top_bore 0, ( $1,0,2)$ | 32.5 | DeLoose1, OOR, bell flare, measured at bottom of caliper jaws; dia bore at the top of | low Bb exits]; |  |  |  | 32.6 |  |
| 139 | bell_center_bore (only for logic 2) |  | dia bore at max center of expansion |  |  |  |  |  |  |
| 140 | bell_wall (only for logic 2) |  |  |  |  |  |  |  |  |
| 141 | bell_bot_bore_expansion (only for logic 2) |  | dist of bottom to maxium of expansion [including bell socket length, if bell logic=0 => |  |  |  |  |  |  |
| 142 | Outside diameter of wood at expansion |  | Just for David |  |  |  |  |  |  |
| 143 | bell_tenon ( $0,1,0,2$ ) | 44.7 | bell socket length |  |  |  |  | 45.3 |  |
| 144 | bell_expansion_length (only for logic 2) |  | distance of maxium expansion to top of bell [where Bb exits] |  |  |  |  |  |  |
| 145 | belflg | 39 | Usually about 10 mm more than line 138; |  |  |  |  | 42 |  |
| 146 |  |  |  |  |  |  |  |  |  |
| 147 |  |  |  |  |  |  |  |  |  |
| 148 | IX. PITCH |  |  |  |  |  |  |  |  |
| 149 | pitch | 430 | input the historical pitch of the bassoon, must input value, best quess |  |  |  |  | 430 |  |
| 150 | freq_init | 380 | Initial frequency range variable |  |  |  |  | 380 |  |
| 151 | Delta frequency | 3 | frequency increment parameter |  |  |  |  |  |  |
| 152 | Number of frequencies | 18 | number of frequencies to scan for min chi sq |  |  |  |  | 18 |  |
| 153 | Frequency adjust | 1.05 | frequency adjustment parameter |  |  |  |  | 1.05 |  |
| 154 | X. Title |  |  |  |  |  |  |  |  |
| 155 | title |  | Bassoon Calculation: DeLoose2-O-Watel242-Wg1-WOB-DNM |  |  |  |  |  |  |
| 156 |  |  |  |  |  |  |  |  |  |
| 157 |  |  | Notes on long joint bore: DeLoose2 OOR more than normal, especially near large teno |  |  |  |  |  |  |
| 158 |  |  | Notes on boot joint bore: DeLoose2 normal |  |  |  |  |  |  |
| 159 | XI. Bore Diameter Locations |  | Notes on wing joint bore: DeLoose2 normal |  |  |  |  |  |  |
| 160 |  | 22 | Number of diameters |  |  |  |  | 19 |  |
| 161 | Bell Bore | 9.5 | Initial bore diameter [do not include in line 160 counting] |  |  |  |  | 9.9 |  |
| 162 | 30.0 mm dia. at socket | 415 | dist1; measured from the bottom of the wing joint- 10 mm |  |  |  | 1 | 470 |  |
| 163 | 31 mm rod 110 mm from socket OOR | 380 | dist2; measured from the bottom of the wing joint- 11 mm |  |  |  | 1 | 380 |  |
| 164 | 32.5 mm dia.at bell end OOR | 338 | dist3; measured from the bottom of the wing joint- 12 mm |  |  |  | 1 | 348 |  |
| 165 |  | 255 | DeLoose2 OOR; dist ; measured from the bottom of the wing joint- 13 mm |  |  |  | 1 | 255 |  |
| 166 |  | 125 | DeLoose2 vrfd gap, OOR; dist5; measured from the bottom of the wing joint- 14 mm |  |  |  | 1 | 30 |  |
| 167 |  | 70 | dist6; measured from the bottom of the wing joint- 15 mm | Bottom wing it | 16.5 |  | 1 | 0 |  |
| 168 |  | 78 | dist7; measured from the top of the bootjoint - small bore side- 16 mm | top boot small | 15.9 |  | 2 | 0 |  |
| 169 |  | 154 | dist8; measured from the top of the bootjoint - small bore side- 17 mm | top boot large | 23.6 |  | 2 | 0 |  |
| 170 |  | 270 | dist9; measured from the top of the bootjoint - small bore side- 18 mm |  |  |  | 2 | 225 |  |
| 171 |  | 320 | dist10; measured from the top of the bootjoint - large bore side- 19 mm | sbore dia sep | 18.9 |  | 3 | 330 |  |
| 172 |  | 260 | dist11; measured from the top of the bootjoint - large bore side- 20 mm | Ibore dia sep | 17.2 |  | 3 | 290 |  |
| 173 |  | 190 | dist12; measured from the top of the bootjoint - large bore side- 21 mm | Hook Length | 402 |  | 3 | 215 |  |
| 174 |  | 135 | dist13; measured from the top of the bootjoint - large bore side- 22 mm |  |  |  | 3 | 180 |  |
| 175 |  | 538 | dist14; measured from the top of the bootjoint - large bore side- 23 mm |  |  |  | 4 | 90 |  |
| 176 |  | 490 | DeLoose2 OOR; dist15; measured from the top of the long joint- 24 mm | lj_bot_bore | 22.2 |  | 4 | 500 |  |
| 177 |  | 425 | DeLoose2 OOR; dist16; measured from the top of the long joint- 25 mm |  |  |  | 4 | 440 |  |
| 178 |  | 337 | dist17; measured from the top of the long joint- 26 mm |  |  |  | 4 | 380 |  |
| 179 |  | 285 | DeLoose2 OOR; dist18; measured from the top of the long joint- 27 mm |  |  |  | 4 | 318 |  |
| 180 |  | 225 | dist19; measured from the top of the long joint- 28 mm |  |  |  | 4 | 250 |  |
| 181 |  | 165 | dist20; measured from the top of the long joint- 29 mm |  |  |  | 4 | 165 |  |
| 182 |  | 125 | dist21; measured from the top of the long joint- 30 mm |  |  |  | 4 | 126 |  |
| 183 |  | 43 | DeLoose2 OOR vrfd; dist22; measured from the top of the long joint- 31 mm |  |  |  | 4 | 40 |  |
| 184 |  | 0 | dist23; measured from the top of the long joint- 32 mm | li_top_bore | 31.9 |  | 4 | 0 |  |

