

|  | A | B | C | D | E | F | G | H | I |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 112 |  |  |  |  |  |  |  |  |  |
| 113 |  |  |  |  |  |  |  |  |  |
| 114 |  |  |  |  |  |  |  |  |  |
| 115 | VII. Bore diameters at Tone Holes |  |  |  |  |  |  |  |  |
| 116 | f2 | 12.2 |  |  |  |  |  | 11.6 |  |
| 117 | e | 12.7 |  |  |  |  |  | 12.8 |  |
| 118 | d | 12.8 |  |  |  |  |  | 13.1 |  |
| 119 |  |  |  |  |  |  |  |  |  |
| 120 | c | 15.1 |  |  |  |  |  | 15.1 |  |
| 121 | b | 16.3 |  |  |  |  |  | 16.2 |  |
| 122 | a | 17.2 |  |  |  |  |  | 17.1 |  |
| 123 | g | 19.3 |  |  |  |  |  | 19.2 |  |
| 124 | $f 1$ | 22.7 |  |  |  |  |  | 23.2 |  |
| 125 |  |  |  |  |  |  |  |  |  |
| 126 | e1 | 25.1 | e1 tone hole bore diameter on long joint |  |  |  |  | 25.1 |  |
| 127 | d1 | 27.4 | d1 tone hole bore diameter on long joint |  |  |  |  | 27.8 |  |
| 128 | c1 | 31.1 | c1 tone hole bore diameter on long joint |  |  |  |  | 31.2 |  |
| 129 |  |  |  |  |  |  |  |  |  |
| 130 |  |  |  |  |  |  |  |  |  |
| 131 |  |  |  |  |  |  |  |  |  |
| 132 |  |  |  |  |  |  |  |  |  |
| 133 |  |  |  |  |  |  |  |  |  |
| 134 | VIII. Bell |  | AdlerFG6 no tone hole in the bell, |  |  |  |  |  |  |
| 135 | bell logic | 1 | If bell_logic $=0=>$ normal conical bore; if bell_logic $=1=>$ inverted concial bore; if | bell_logic = 2 => be | expan |  |  | 1 |  |
| 136 | bell_length (0, 1, 2) | 331 | total length of bell [lines $141+144=$ line 136] $\quad$ \| |  |  |  |  | 331 |  |
| 137 | bell_bot_bore (0, 1, 2) | 33.8 | AdlerFG6 vrfd; dia bore at the bottom of bell [end with socket] |  |  |  |  | 34.1 |  |
| 138 | bell_top_bore 0, (1, 0, 2) | 32.5 | dia bore at the top of bell [where low Bb exits] |  |  |  |  | 33.5 |  |
| 139 | bell_center_bore (only for logic 2) |  | dia bore at max center of expansion |  |  |  |  |  |  |
| 140 | bell_wall (only for logic 2) |  | bell wall thickness, Just for David |  |  |  |  |  |  |
| 141 | bell_bot_bore_expansion (only for logic 2) |  | dist of bottom to maxium of expansion [including bell socket length, if bell logic $=0=>1$ | 1001 |  |  |  |  |  |
| 142 | Outside diameter of wood at expansion |  | Just for David |  |  |  |  |  |  |
| 143 | bell_tenon ( $0,1,0,2$ ) | 40.8 | bell socket length |  |  |  |  | 40.5 |  |
| 144 | bell_expansion_length (only for logic 2) |  | distance of maxium expansion to top of bell [where Bb exits] |  |  |  |  |  |  |
| 145 | belfig | 37 |  |  |  |  |  | 37 |  |
| 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 | 2 | frequency increment parameter |  |  |  |  | 2 |  |
| 152 | Number of frequencies | 60 | number of frequencies to scan for min chi sq |  |  |  |  | 60 |  |
| 153 | Frequency adjust | 1.05 | frequency adjustment parameter |  |  |  |  | 1.05 |  |
| 154 | X. Title |  |  |  |  |  |  |  |  |
| 155 | title |  | Bassoon Calculation: AdlerFG6-O-Rapoport-Wg1-WOB-DNM |  |  |  |  |  |  |
| 156 |  |  |  |  |  |  |  |  |  |
| 157 |  |  | Notes on long joint bore: AdlerFG6 good |  |  |  |  |  |  |
| 158 |  |  | Notes on boot joint bore: AdlerFG6 normal |  |  |  |  |  |  |
| 159 | XI. Bore Diameter Locations |  | Notes on wing joint bore: AdlerFG6 normal, an obstruction in the bore |  |  |  |  |  |  |
| 160 |  | 21 | Number of diameters |  |  |  |  | 21 |  |
| 161 | Bell Bore | 9.9 | Initial bore diameter [do not include in line 160 counting] |  |  |  |  | 9.9 |  |
| 162 | 33.8 mm diameter at socket | 405 | dist1; measured from the bottom of the wing joint-10mm |  |  |  | 1 | 422 |  |
| 163 | 33 mm rod 115 mm from socket | 350 | dist2; measured from the bottom of the wing joint-11mm |  |  |  | 1 | 330 |  |
| 164 | 32 mm rod 158 mm from socket | 330 | AdlerFG6 vrfd gap, could be an obstruction in the bore; dist3; measured from the bott | tom of the wing joint- | 12 mm |  | 1 | 268 |  |
| 165 | 31 mm rod 265 mm from socket | 145 | AdlerFG6 vrfd gap; dist4; measured from the bottom of the wing joint- 13mm |  |  |  | 1 | 170 |  |
| 166 | 32.5 mm diameter at bell end | 0 | dist5; measured from the bottom of the wing joint-14mm |  |  |  | 2 | 0 |  |
| 167 |  | 78 | dist6; measured from the bottom of the wing joint- 15 mm | Bottom wing it | 14.3 |  | 2 | 70 |  |
| 168 |  | 123 | dist7; measured from the top of the bootjoint - small bore side- 16 mm | top boot small | 15.3 |  | 2 | 135 |  |
| 169 |  | 178 | dist8; measured from the top of the bootioint - small bore side- 17 mm | top boot large | 24.4 |  | 2 | 183 |  |
| 170 |  | 265 | AdlerFG6 vrfd gap; dist9; measured from the top of the bootjoint - small bore side- 18 | 8 mm |  |  | 2 | 273 |  |
| 171 |  | 0 | dist10; measured from the top of the bootjoint - large bore side- 19 mm | sbore dia sep | 18.6 |  | 3 | 0 |  |
| 172 |  | 305 | dist11; measured from the top of the bootjoint - large bore side- 20 mm | lbore dia sep | 19.1 |  | 3 | 300 |  |
| 173 |  | 235 | dist12; measured from the top of the bootjoint - large bore side- 21 mm | Hook Length | 383 |  | 3 | 245 |  |
| 174 |  | 188 | dist13; measured from the top of the bootjoint - large bore side- 22 mm |  |  |  | 3 | 205 |  |
| 175 |  | 129 | dist14; measured from the top of the bootjoint - large bore side- 23 mm |  |  |  | 3 | 160 |  |
| 176 |  | 78 | dist15; measured from the top of the long ioint- 24 mm | li_bot_bore | 25.4 |  | 3 | 80 |  |
| 177 |  | 523 | AdlerFG6 OOR; dist16; measured from the top of the long joint- 25 mm |  |  |  | 4 | 545 |  |
| 178 |  | 427 | dist17; measured from the top of the long joint- 26 mm |  |  |  | 4 | 450 |  |
| 179 |  | 350 | dist18; measured from the top of the long joint- 27 mm |  |  |  | 4 | 415 |  |
| 180 |  | 274 | dist19; measured from the top of the long joint- 28 mm |  |  |  | 4 | 305 |  |
| 181 |  | 223 | dist20; measured from the top of the long joint- 29 mm |  |  |  | 4 | 245 |  |
| 182 |  | 163 | dist21; measured from the top of the long joint- 30 mm |  |  |  | 4 | 170 |  |
| 183 |  | 110 | dist22; measured from the top of the long joint- 31 mm |  |  |  | 4 | 115 |  |
| 184 |  | 35 | AdlerFG6 OOR; dist23; measured from the top of the long joint- 32 mm | li top bore | 32.9 |  | 4 | 65 |  |

