1.			_	•			I = I -				
Process of Section 1997 1998 19	1	A I. Bocal	В	C Original bocal: Key3 not original	D	E	F	6 H	I	J Kev1	Kev2
According to profit by the 10 1 1 1 1 1 1 1 1 1	2	dia reed end		inside diameter of reed end of bocal						,-	,-
Process Control Cont	3					-					
The content of the											-
1.											
1.	7 8	hocal logic	2	if bocal logic = 0 = > bocal is choke; if bocal logic = 1 = > choke in wing joint calc; if bocal logic	C = 2 = > no	hocal				2	- 2
	9	bocai logic		in bocar rogic = 0 = 2 bocar is crioke, ii bocar rogic = 1 = 2 crioke iii wing joint care, ii bocar rogic	C = Z = > 110	T	Ħ				
March Proceedings March							Ш				
The content complete											
Company Comp		II. Wing Joint Lengths		bocal receiver: Key3 NO receiver; Bocal reciever bore has been replaced							
1 1 1 1 1 1 1 1 1 1						eiver					
Section Section 46.3 Section Section 1.00					tn)		H				
1		tenon length									
20 25 25 25 25 25 25 25			220	disk has a ferriary has subsure have been been from he had a subsure had a				_		222	220
20				dist top of wing to where tone note enters bore [not at the center of the tone note]		-					
1.0 1.0											
1.00 1.00		Pore dia Pottom of uing joint	16.0	kov2 Mood to Average, usally evalues 16 E.y. 17.3		-				16.2	16.4
25 Dispose 1				keys need to Average, usally oval, yes 10.5 x 17.2			H				
Fig. 1 Proceedings Fig. Procedure of the process of the pr	25										
A bit block 1 cycles of the large of the la		III Post Langths		Kov3 No Two whole decign; normal rounded cert also		<u> </u>	H	+			
20 10 10 10 10 10 10 10			1				H	+		1	1
1982 1992 1992 1993 1994 1995	29	bj c					П			90	
1						-	+	+			
1		υj α	190				H	+		130	1.74
Description Description Company Compan	33										
20							+	+			
20 20 20 20 20 20 20 20						L	ΕĦ	╅			
200 100	37										
Doors bottom (Needled for both boot logics 17 use hook, dist of sore (list on stick plus 7mm, diff between hook end but of stick) 10 = 7 = 17					Hook length	36	\vdash	+			
1			290			L	┢	ᆂ		J9Z	374
A							П				
A common process Recedent for logs 1 only 47		booti bottom [Needed for both boot logics	17	use hook, dist of bore [same as boots bot except tenon depth will be different]		-	H	+		16	15
Comparison Com	44	extreme bore [Needed for logic 1 only]	47	Key3 verified large; Outside dia of plug [measured] = small bore dia + large bore dia + the se	eptum width			ᆂ		46.2	42.8
42 Septim Height Calc - do not import value 36 dist. From very bottom of boot to spetim (Bi) - boot 35 32 32 32 32 32 32 3										_	
15 15 15 15 15 15 15 15					do not impu	t value	\vdash	+			
19.7 19.7	48										
20.3 20.2 20.2 20.3 20.3 20.2 20.3 20.3 20.3 20.3 20.3 20.3 20.3 20.3 20.3 20.3 20.3 20.3 20.3 20.3		d: FNId-d & b-sb bs l:-	10.7							10.7	10.7
2 Sep width exp (Need for logic Q only) 0 0 0 0 0 0 0 0 0							\vdash				
54 Sep width - 40 not imput value	52	sep width exp [Need for logic 0 only]	0	septum width; direct measurement if remove plug							
Section Sect								-			
144 144 145 146 146 147 148 149		sep width - do not imput value	7.2	ii bj logic = 0 = 2 sep widti = sep widti exp, ii bj logic = 1 = 2 sep widti = sep widti calc	do not impu	Value	H			0.2	2.3
Section Sect	56						Ш				
59		bj f1	140	dist from top of boot (socket) to where F1 hole enters bore [not at cent of tone hole]						144	144
Column C	59										
Call											
Column C							H				
S S S S S S S S S S	63	IV. Tone Hole Diameters		Key3, small finger holes on wing joint							
66 d 5 5 5.1 5 5.1 5 5.1 5 5.1 5 5.1 5 5.1 5 5.1 5 5.1 5 5.1 5 5.1 5 5.1 5 5.2 5 5.3 5 5 5 5 5 5 5 5 5		f2				-					
63 6.9 6.9 7 6.5 6.9 7 6.5 6.9 7 6.5 6.9 7 6.5 6.9 7 6.5 6.9 7 6.5 6.9 7 6.5 5.4 7 6.5 5.4 7 6.5 5.4 7 6.5 5.4 7 6.5 5.4 7 1 1 1 1 1 1 1 1 1		d d					\vdash	+			
6.5 6.5 7.1 6.5 7.2 6.5 7.3	67						ш				
10		c h				-	+	+			
11		a					┢	┇			
32 1	71	9	8.3				П	I		7.3	7.3
14 1 9.8 1 10.5 10		11	11.6		-	-	+	+		10.4	10./
15 di	74						ഥ	t			
78							H	F			
Total Content of the Content of th		C1	13.2	c1 tone note dia, on long joint [need to average NS and EW dias, NS usually greater]		1	+	+		13.2	13.1
S0	78										
81							H	+			
S2 V. Tone Hole Depths							+	+			\dashv
84 e 25 25.1 25.3 25.5 25.3 27 25.6 25.5 25.3 27 27 27 27 27 27 27 2	82										
S5 d 26.5 25.3 27		f2				-	+	+			
Second S		d					+	+			
19.5 22.2 21 21 22.8 22.7 29 20.7 20.7 20.8 20.7 20.7 20.7 20.8 20.7 20.7 20.8	86							F			
89 a 20.7 18.5 19.7 19.0 9.1 18.5 19.7 19.1 19.0 9.1 19.0 9.1 9.1 9.1 9.1 9.1 9.1 9.1 9.1 9.1 9.2 9.1 9.2 9.3 9.1 9.2 9.3 9.1 9.1 9.2 9.3 9.1 9.2 9.3 9.1 9.3 9.		b					H	+			
91 15 22.8 meas along east side tone hole wall [north wall, toward reed,t hole usually at angle] 19 21.5	89	a	20.7				ഥ	t			
92 9	90	9	18.2	meas along bot tone hole wall [north wall, toward reed,tone hole usually at angle]			П			18.3	16.5
92 11 9 e1 tone hole depth; meas east/west with deapth gauge [at center, or shortest dist] 9.1 11.2 8.6		11	22.8	meas along east side tone note wall [north wall, toward reed,t hole usually at angle]			+	+		19	21.5
State	93	e1									
96				d1 tone hole depth; meas east/west with deapth gauge [at center, or shortest dist]			H	H			
97	96	C1	8.5	c.r. tone noie depth; meas easy, west with deapth gauge [at center, or shortest dist]			H	+		გ .გ	σ.4
99	97										
100							H	+			
10.1 VI. Long Joint Key3 There is a table along long joint S73 S73 10.2 Ig. length S73 S74 S75							\vdash	T			
103 Ig_tenon_bot 50.3 length bottom tenon on long joint [tenon going into boot joint] 49.7 50	101										
							+	+			
							ш				

_										
105	A	В 20.4	C	D	E	F (3 H	I	J	K
105	lj_top_bore lg_tenon_top	30.4 36.1	long joint top tenon bore diameter [tenon going into bell] length top tenon on long joint [tenon going into bell]			+	+		30.4 37.5	30.8 36.8
	e1 distance	55	dist long joint tenon to e1 [from bot of tenon to where tone hole enters bore]						60	58
108	d1 distance	249	dist long joint tenon to d1 [from bot of tenon to where tone hole enters bore]						246	248
	c1 distance	446	dist long joint tenon to c1 [from bot of tenon to where tone hole enters bore]			\vdash			448	446
110 111										
112										
113										
114										
115 116	VII. Bore diameters at Tone Holes	12.4		1					12.2	12.2
117	e	13.2				H			13.1	13.2
118	d	13.9							13.7	13.8
119		17.0			-	\vdash			17.1	17.1
120 121	h	17.2 18.1		-					17.1 18.2	17.1 18.2
122	a	18.6				H			18.8	18.8
123	g	20.5							20.5	20.5
124	f1	23.5							23.8	23.6
125 126	e1	25.4	at tana hala hava diameter an lang joint		-	\vdash	-		25.3	25.4
127	d1	27.5	e1 tone hole bore diameter on long joint d1 tone hole bore diameter on long joint			H	+		26.8	27.1
128	c1	29.6	c1 tone hole bore diameter on long joint						29.7	29.6
129										
130										
131 132				1	-	+	+			
133						H	+			
134	VIII. Bell		Key3 There is not a tone hole in the bell			ഥ				
135	bell logic	0	If bell_logic = 0 => normal conical bore; if bell_logic = 1 => inverted concial bore; if bell_logic	ic = 2 => bel	l expan	sion	F		0	0
136 137	bell_length (0, 1, 2) bell_bot_bore (0, 1, 2)	310 30.2	total length of bell [lines 141 + 144 = line 136] dia bore at the bottom of bell [end with socket]		-	\vdash	+		313 30.8	311
137	bell_bot_bore (0, 1, 2) bell top bore 0, (1, 0, 2)	46.7	dia bore at the bottom of beil [end with socket] dia bore at the top of bell [where low Bb exits]			+	+		41.5	38.8
139	bell_center_bore (only for logic 2)		dia bore at max center of expansion			ഥ	I			
140	bell_wall (only for logic 2)		bell wall thickness, Just for David			II	F			
141	bell_bot_bore_expansion (only for logic 2)		dist of bottom to maxium of expansion [including bell socket length,if bell logic=0 =>100]			\vdash	+			
142 143	Outside diameter of wood at expansion bell_tenon (0, 1, 0, 2)	37.2	Just for David bell socket length			+	+		39.4	38.5
		37.2	distance of maxium expansion to top of bell [where Bb exits]		L	广	J		55.4	50.5
145	belflg	57.2	Usually about 10mm more than line 138						59	61
146						oxdot	\perp			
147	IX. PITCH			-	-	\vdash	+			
149		430	input the historical pitch of the bassoon, must input value, best guess						430	430
150	freq_init	380	Initial frequency range variable						380	380
151	Delta frequency	2	frequency increment parameter			П	Τ		2	2
152	Number of frequencies	60	number of frequencies to scan for min chi sq			\vdash	+		60	60 1.0F
153 154	Frequency adjust X. Title	1.05	frequency adjustment parameter	1	-	+	+		1.05	1.05
155	title		Bassoon Calculation: Key3-O-Veriam-Wg1-WB-DNM			H	+			
156			, ,			ΠŢ	T			
157			Notes on long joint bore: Key3 normal			ΠŤ				
158			Notes on boot joint bore: Key3 down side slightly OOR			广	╧			
159	XI. Bore Diameter Locations		Notes on wing joint bore: Key3 good shape			Д	Τ			
160	Poll Pore	16	Number of diameters Initial base diameters [do not include in line 160 counting]			\vdash	+		18	17
161 162	Bell Bore 30.2mm dia. at socket	10.6	Initial bore diameter [do not include in line 160 counting] dist1; measured from the bottom of the wing joint- 10mm			\vdash	1		9.8 415	10.2
163	29.0mm rod 185mm from socket	450	dist2; measured from the bottom of the wing joint- 11mm		L		1		368	368
164	28.0mm rod 230mm from socket	330	dist3; measured from the bottom of the wing joint- 12mm				1		318	320
165	29.0mm rod 55mm from top of bell	260	dist4; measured from the bottom of the wing joint- 13mm				1		235	245
166 167	30.0mm rod 47mm from top of bell 31.0mm rod 43mm from top of bell	170 120	dist5; measured from the bottom of the wing joint- 14mm dist6; measured from the bottom of the wing joint- 15mm	Bottom wing	16.9		1		162 105	160 120
168	46.7mm dia.at bell end [bell flares]	0	dist7; measured from the bottom of the wing joint - 15mm dist7; measured from the top of the bootjoint - small bore side- 16mm	top boot sma			1		0	0
169		70	dist8; measured from the top of the bootjoint - small bore side- 17mm	top boot larg	25.2		2		0	110
170 171		160	dist9; measured from the top of the bootjoint - small bore side- 18mm	choro din :	107		2		145	145
172		240	dist10; measured from the top of the bootjoint - large bore side- 19mm dist11; measured from the top of the bootjoint - large bore side- 20mm	sbore dia sep Ibore dia sep	19.7		2		213 0	218 0
173		350	dist12; measured from the top of the bootjoint - large bore side- 21mm	Hook Length	390		3		345	355
174		270	dist13; measured from the top of the bootjoint - large bore side- 22mm				3		295	278
175		195	dist14; measured from the top of the bootjoint - large bore side- 23mm	li bee i	25.0	\vdash	3		195	190
176 177		130	dist15; measured from the top of the long joint- 24mm dist16; measured from the top of the long joint- 25mm	lj_bot_bore	25.2		4		137 70	125 525
178		490	Key3 vrfd (490); dist17; measured from the top of the long joint- 26mm				4		355	410
179		385	dist18; measured from the top of the long joint- 27mm				4		310	375
180		260	Key3 very OOR; dist19; measured from the top of the long joint- 28mm				4		253	235
181 182		180	dist20; measured from the top of the long joint- 29mm dist21; measured from the top of the long joint- 30mm				4		187 70	195 0
183		0	dist22; measured from the top of the long joint- 31mm				4		0	0
184			dist23; measured from the top of the long joint- 32mm	lj_top_bore	30.4		4		0	0
185						Щ	1		10	10
186 187						+	+		11 12	11 12
188						H	+		13	13
189							I		14	14
190						Щ			15	15
191 192				-	-	\vdash	+		16 17	16 17
192						+	+		17	17
194						Ħ	+		19	19
195									20	20
196						Щ	1		21	21
197 198				-	-	\vdash	+	-	22	22
198						H	+		23	23
200							I		25	25
201						Д	Τ		26	26
202						\vdash	+		27	27
203 204				1		+	+		28 29	28 29
205						广	+		30	30
206									31	31
207					1	ΙĪ	1		32	32