The Book of the Common Common Analysis and Common C	$\overline{}$	٨	D	C	<u> </u>		_	_
Here and any control with the control wi	1	A I. Bocal	В	9	D	Е	F	G
The control price (c) 1 Control of the control of	2							
Service in the control of the contro				length of bocal inserted into receiver				
Seat and control contr					1			
Doubling Committee Committ								
Level Joint Lengths Level Joint Level	7		_		2			
D. Wing Jelmit Lengths 1. Study Processing Committee Control of the Control of Control o	8	pocai logic	2	rr pocar rogic = U => bocar is choke; if bocar logic = 1 =>choke in wing joint calc; if bocar logic =	= z => no bocal			
D. Wing Jelmit Lengths 1. Study Processing Committee Control of the Control of Control o	10							
Description	11							
Second part Committy of the legal Committy of the legal Committy Committee Committy Committee Co		II Wing loint Lengths		hocal receiver: Ruhner&Keller6, yes there is a receiver	1			
See class (1.6) (Internally close letter) 1.			7.9		ottom or receiver			
1 1 1 1 1 1 1 1 1 1	15	receiver length (1, 0) (formally choke length)	35	logic 1; length of choke from top of wing joint; logic 0; length of receiver (same as string length)				
10 cm d. 20								
Section Control Cont		tenon length	44.2	tenon length				
2		wj f2	214	dist top of wing to where tone hole enters bore [not at the center of the tone hole]				
The control of the								
1.4.0 Need to American London (1.5.0 1.5		wj d	343					
20 December of the principle of the		Bore dia. Bottom of wing joint	14.4	Need to Average, usally oval; Buhner&Keller6, no				
Description Company		Bore dia. top of boot joint small side		Need to Average, usally oval; Buhner&Keller6, no				
Septembrook Commonwealth Commo		Bore dia. top of boot joint large side	23.6	Buhner&Keller6, OOR; 23.3 X 23.9	1			
1		III. Boot Lengths						
Set from the property of the	28	bj logic		logic=> if bj logic = 0 => plug removed; if bj logic = 1 => plug cannot be removed				
1986				dist from top of boot to where topmost tone hole enter bore [not at center of tone hole]	1			
Description Control of the Contr					1			
33 Distace Reserved for both boot logics 430 Issael Interested for both boot logics 430 Issael Interested for both boot logics 430 Issael Interest Reserved for both boot logics 430 Issael Interest Reserved for both boot logics 430 Issael Interest 430 Issael In								
35 Disput small (Need for took of the Property of the Prop	33			total length of boot, include socket, along the small bore side				
So Douglarge (Reed for Good Control)								
38 boots (Reeded for both boot logics) 38 boots (Reeded for both boot logics) 38 book length along a bore => bijs-septum length = boot = septum <= calc (the septum 38 boots (Intelled for both boot logics) 39 book length along a bore => bijs-septum length = boot = septum <= calc (the septum 40 boots buttom (Reeded for both boot logics) 42 boots buttom (Reeded for both boot logics) 43 boots buttom (Reeded for logic 1 only) 44 bottom bore (Theeded for logic 1 only) 45 boots are bore (Reeded for logic 1 only) 46 septum length calc - do not imput value 47 boots (Reeded for logic 1 only) 48 boots (Reeded for logic 1 only) 49 boots (Reeded for logic 1 only) 40 boots (Reeded for logic 1 only) 40 boots (Reeded for logic 1 only) 41 boots (Reeded for logic 1 only) 42 boots (Reeded for logic 1 only) 43 boots (Reeded for logic 1 only) 44 boots (Reeded for logic 1 only) 45 boots (Reeded for logic 1 only) 46 boots (Reeded for logic 1 only) 47 boots (Reeded for logic 1 only) 48 boots (Reeded for logic 1 only) 49 boots (Reeded for logic 1 only) 40 boots (Reeded for logic 1 only) 41 boots (Reeded for logic 1 only) 42 boots (Reeded for logic 1 only) 43 boots (Reeded for logic 1 only) 44 boots (Reeded for logic 1 only) 45 boots (Reeded for logic 1 only) 45 boots (Reeded for logic 1 only) 46 boots (Reeded for logic 1 only) 47 boots (Reeded for logic 1 only) 48 boots (Reeded for logic 1 only) 49 boots (Reeded for logic 1 only) 40 boots (Reeded for logic 1 only) 41 boots (Reeded for logic 1 only) 42 boots (Reeded for logic 1 only) 43 boots (Reeded for logic 1 only) 44 boots (Reeded for logic 1 only) 45 boots (Reeded for log					1			
32 Doord Treeded for both boot logics 387 Dook region and prove \$-\$ \$\psi\$ Septum length \$= boot - septum = ced the septum 40 40 40 40 40 40 40 4	37							
Doors bettom Needed for both boot logics 23 use hook, dist of bore (dist on stack plus 7mm, diff between hook and bot of stack); 16+7-23, verified								
2. Jose but State Reeded for both boot logics 2. Jose hook, did to fore (first on stake thus 7mm, qriff between hook and bot of stox); 6+7-23, verified 4.1 Joseph Boot 2.5 Joseph Boot		booti [Needed for both boot logics]	387	nook lengtn along I bore => bjl-septum length = boot - septum <= calc the septum	1			
1.0		boots bottom [Needed for both boot logics]	23	use hook, dist of bore [dist on stick plus 7mm, diff between hook and bot of stick]; 16+7=23, ve	erified			
Septum insertin sog (Titled field for logic 1 only)	42							
dist. from very bottom of boot to septum [pin between the large and small bore] dist. from very bottom of boot to septum [pin between the large and small bore] do septum length calc - do not imput value 43 dist. from very bottom of boot to septum [pin between the large and small bore] do short dis sept. Receded for both boot logics 18.3 septum septum calc 40 not imput value 19 bloget a 20 septum septum calc 40 not imput value 19 bloget a 20 septum septum calc 40 not imput value 19 bloget a 20 septum septum calc 40 not imput value 19 septum and bore dia lassame = short dia septum septum calc 40 not imput value 40 septum small bore dia lassame = short dia septum septum dia septum septum calc 40 not imput value 40 septum with direct measurement if remove blug 40 septum with calc 40 septum with direct measurement if remove blug 40 septum with calc 40 septum with direct measurement if remove blug 40 septum with calc 40 septum with calc 40 septum with direct measurement if remove blug 40 septum with calc 40 septum with calc 40 septum with direct measurement if remove blug 40 septum with calc 40 septum with direct measurement if remove blug 40 septum with calc 40 septum with a septum with calc 40 septum with calc 40 septum with a septum with calc 40 septum with a septum with calc 40 septum with a septu		extreme hore. [Needed for leads 1 and 2]	/1 1	Outcide die of plus [meacured] = cmall boro die 1 large bore die 1 large meacure width	1			
dist. from very bottom of boot to septum [point between the large and small bore] dist. from very bottom of boot to spetum [point between the large and small bore] do not imput value dist. does not imput value dist. from very bottom of boot to spetum [point between the large and small bore] do not imput value dist. does not spetum [point between the large and small bore] do not imput value dist. does not spetum [point between the large and small bore] do not imput value do not imput value do not imput value 3. spetum and bore dis assume = shore dis ses pl. septum and bore dis assume = shore dis ses pl. septum and bore dis assume = shore dis ses pl. septum and bore dis assume = shore dis ses pl. septum value 3. septum and bore dis assume = shore dis ses pl. septum value 3. septum and bore dis assume = shore dis ses pl. septum value 3. septum and bore dis assume = shore dis ses pl. septum value 3. septum and bore dis assume = shore dis ses pl. septum value 3. septum and bore dis assume = shore dis ses pl. septum value 3. septum value 4. septum value 4		extreme bore [ineeded for logic 1 only]	41.1	Outside dia or plug [measured] = Small bore dia + large bore dia + the septum width				
47 Septum length calc - do not imput value 43 dist. From very bottom of boot to spetum (bit - boott) do not imput value 40 do not imput value 41 do not imput value 42 do not imput value 43 dist. From very bottom of boot to spetum sey (bit place) 1 1 1 1 1 1 1 1 1	46							
30		septum length calc - do not imput value		dist. From very bottom of boot to spetum [bjl - bootl]				
18 18 18 18 18 18 18 18		septum length - do not imput value	43	r b] logic = 0 => septum = septum exp; if bj logic = 1 => septum = septum calc	do not imput value			
13 Ibore dia sep* Needed for both boot logics 19.1		sbore dia sep* [Needed for both boot logics]	18.1	septum small bore dia [assume = Ibore dia sep]				
3 Septiment of the content of th	51	Ibore dia sep* [Needed for both boot logics]	19.1	septum large bore dia [assume = sbore dia sep] [mesure if cork can be removed; for Logic 0]				
					do not imput value			
SS								
144 8 & KG vrfd; dist from top of boot (socket) to where F1 hole enters bore [not at cent of tone hole]	55				- Impervalue			
S8					1			
159		11 נמ	144	ס מ אט אוום, מוזג ודטווו נטף טו טטטג (אטנאפג) נט שוופרפ דב חסופ פחדפרא ססרפ נחסד מד כפחד סד לסחפ hole	1			
10	59							
Same								
10					1			
Simple S		IV. Tone Hole Diameters						
5.5	64							
Fig. 12 Fig. 13 Fig. 14 Fig. 15 Fig.		e d			1			
68 C		u .	٥.٥					
170 20 20 20 20 20 20 20		c	7.3					
72 1		b			-			
172 173 174 185 187	71	q		B & K6 G tone hole filled with wax	 			
10.7 e1 tone hole dia, on long joint [need to average NS and EW dias, NS usually greater]: 12.3 d1 tone hole dia, on long joint [need to average NS and EW dias, NS usually greater]	72	f1						
TS d1		01	10.7	of tone help dis on long joint [need to suppose NC and FW 45 - NC conditions to 12]				
Total 12.3 Buhner&Keller6, tone hole filled with cork; c1 tone hole dia, on long joint [need to average NS and EW dias, NS usually greater]	74 75	d1			1			
78	76	c1			nd EW dias, NS usuall	y great	er]	
79	77							
Solution	78				 			
S2 V. Tone Hole Depths								
S3 F2 S4 E S5 S5 S5 S5 S5 S5 S5	81							
84 le 35.9 85 d 44.5 86		V. Tone Hole Depths	20.2	Pubpor® Vollare Wing topo holos at outromo angles	1			
SE Description SE Descri		e		purmer accenero, wing tone noies at extreme angles	1			
86	85	d						
88 b 24.3 89 a 25 90 q 13 meas along bot tone hole wall [north wall, toward reed,tone hole usually at angle] 91 ft 29 8uhner&Keller6 vrfd, meas along east side tone hole wall [north wall, toward reed,t hole usually at angle] 92 93 e1 9.4 e1 tone hole depth; meas east/west with deapth gauge [at center, or shortest dist] 94 d1 7.8 d1 tone hole depth; meas east/west with deapth gauge [at center, or shortest dist] 95 c1 7.6 c1 tone hole depth; meas east/west with deapth gauge [at center, or shortest dist] 96 97 98 98 99 99 99 99 99	86							
89 a 25 90 g 13 meas along bot tone hole wall [north wall, toward reed,tone hole usually at angle] 91 ft 29 Buhner&Keller6 vrfd, meas along east side tone hole wall [north wall, toward reed,t hole usually at angle] 92 93 le1 9.4 e1 tone hole depth; meas east/west with deapth gauge [at center, or shortest dist] 94 di		b						
90 g 13 meas along bot tone hole wall [north wall, toward reed,tone hole usually at angle] 91 f1 29 Buhner&Keller6 vrfd, meas along east side tone hole wall [north wall, toward reed,t hole usually at angle] 92 93 e1 9.4 e1 tone hole depth; meas east/west with deapth gauge [at center, or shortest dist] 94 d1 7.8 d1 tone hole depth; meas east/west with deapth gauge [at center, or shortest dist] 95 c1 7.6 c1 tone hole depth; meas east/west with deapth gauge [at center, or shortest dist] 96 97 98		a			1			
92 93 e1 9.4 e1 tone hole depth; meas east/west with deapth gauge [at center, or shortest dist] 94 d1 7.8 d1 tone hole depth; meas east/west with deapth gauge [at center, or shortest dist] 95 c1 7.6 c1 tone hole depth; meas east/west with deapth gauge [at center, or shortest dist] 96 97 98 99 99 99 99 99 99	90	g	13					
93 e1	91	f1	29		at angle]			
94 d1 7.8 d1 tone hole depth; meas east/west with deapth gauge [at center, or shortest dist] 95 c1 7.6 c1 tone hole depth; meas east/west with deapth gauge [at center, or shortest dist] 96 97 98		e1	9 4	e1 tone hole denth:meas east/west with deanth gauge (at center, or shortest dist)	+			
95 c1 7.6 c1 tone hole depth; meas east/west with deapth gauge [at center, or shortest dist] 96 97 97 98 98	94	d1						
97 98	95	c1						
98					1			
100								
	100							

_				_		_	
101	A A	В	C	D	Е	F	G
	VI. Long Joint	602	There is a table along long joint; Buhner&Keller6, yes a table along long joint		\vdash		
	lg_length lg_tenon_bot	603	total length of long joint;				
		48.3	length bottom tenon on long joint [tenon going into boot joint]	into book inint?			
	lj_bot_bore lj_top_bore	22.7 31.1	Buhner&Keller6, OOR 23.6 x 23.8 Average; long joint bottom tenon bore diameter [tenon going long joint top tenon bore diameter [tenon going into bell]	ווונט טטטנ ןטווונן			
	Ig_tenon_top	44.4	length top tenon on long joint [tenon going into bell]				
	e1 distance	66	dist long joint tenon to e1 [from bot of tenon to where tone hole enters bore]			-	
	d1 distance	257	dist long joint tenon to d1 [from bot of tenon to where tone hole enters bore]				
	c1 distance	483	dist long joint tenon to c1 [from bot of tenon to where tone hole enters bore]				
110	er distance	105	and rong joint center to az [mont bot of tenter to milet a tone hore after bore]				
111							
112							
113							
114							
115	VII. Bore diameters at Tone Holes						
116	f2	11.2					
117	e	12.1					
118	d	12.6					
119							
120	C	15.8					
121	b	16					
122	a	16.2			\vdash		
123	y £1	19.3					
124	11	22					
126	e1	24.5	e1 tone hole bore diameter on long joint				
120	d1	27.3	d1 tone hole bore diameter on long joint				
128	c1	30	c1 tone hole bore diameter on long joint				
129		- 50	and the state diameter on long joint				
130							
131							
132							
133							
134	VIII. Bell		Buhner&Keller6, There is not a tone hole in the bell				
	bell logic	0	If bell_logic = 0 => normal conical bore; if bell_logic = 1 => inverted concial bore; if bell_logic	= 2 => bell expansio	n		
	bell_length (0, 1, 2)	322	total length of bell				
137	bell_bot_bore (0, 1, 2)	31.1	dia bore at the bottom of bell [end with socket];				
138	bell_top_bore 0, (1, 0, 2)	31.6	dia bore at the top of bell [where low Bb exits]				
139	bell_center_bore (only for logic 2)		dia bore at max center of expansion				
	bell_wall (only for logic 2)		bell wall thickness, Just for David				\vdash
	bell_bot_bore_expansion (only for logic 2)		dist of bottom to maxium of expansion [including bell socket length,if bell logic=0 =>100]				
142	Outside diameter of wood at expansion	1/1 2	Just for David				
	bell_tenon (0, 1, 0, 2) bell_expansion_length (only for logic 2)	44.3	bell socket length distance of maxium expansion to top of bell [where Bb exits]				
	belfig	57.1	Usually about 10mm more than line 138;		\vdash		
145	being	5/.1	osaany aboat 1011111 more than line 150,				
147							
	IX. PITCH						
	pitch	430	input the historical pitch of the bassoon, must input value, best guess				
	freq_init	380	Initial frequency range variable				
	Delta frequency	3	frequency increment parameter				
	Number of frequencies	18	number of frequencies to scan for min chi sq				
153	Frequency adjust	1.05	frequency adjustment parameter				
	X. Title						
155	title		Bassoon Calculation: Buhner & Keller6-O-Deitch-Wg1-WB-DNM				
156							
157			Notes on long joint bore: Buhner&Keller6, normal				
158	VI. Para Diameter I castiana		Notes on boot joint bore: Buhner&Keller6, normal, down bore slightly OOR		$\vdash \vdash \vdash$		
159 160	XI. Bore Diameter Locations	20	Notes on wing joint bore: Buhner&Keller6, normal Number of diameters			-	
	Bell Bore; almost cylindrical	7.9	Initial bore diameter [do not include in line 160 counting]			-	
162		381	dist1; measured from the bottom of the wing joint- 10mm				1
	31.3mm rod 92mm from top of bell	315	dist2; measured from the bottom of the wing joint- 11mm				1
	31.5mm rod 75mm from top of bell	233	dist3; measured from the bottom of the wing joint- 12mm				1
165	31.6mm dia.at bell end	130	dist4; measured from the bottom of the wing joint- 13mm				1
166		35	dist5; measured from the bottom of the wing joint- 14mm				1
167		0	dist6; measured from the bottom of the wing joint- 15mm	Bottom wing jt	14.4		1
168		95	dist7; measured from the top of the bootjoint - small bore side- 16mm	top boot small	15.4		2
169		270	dist8; measured from the top of the bootjoint - small bore side- 17mm	top boot large	23.6		2
170 171		365	dist9; measured from the top of the bootjoint - small bore side- 18mm				2
171		0	dist10; measured from the top of the bootjoint - large bore side- 19mm	sbore dia sep	18.1		2
172		295	dist11; measured from the top of the bootjoint - large bore side- 20mm	Ibore dia sep	19.1		3
173 174 175 176		203	dist12; measured from the top of the bootjoint - large bore side- 21mm;	Hook Length	387		3
174		140	dist13; measured from the top of the bootjoint - large bore side- 22mm		\vdash		3
175		70	dist14; measured from the top of the bootjoint - large bore side- 23mm;	If hat have	22 -		3
176 177		557	dist15; measured from the top of the long joint- 24mm dist16; measured from the top of the long joint- 25mm	lj_bot_bore	22.7		4
170		512 430	dist16; measured from the top of the long joint- 25mm dist17; measured from the top of the long joint- 26mm				4
178 179		370	dist18; measured from the top of the long joint- 25mm dist18; measured from the top of the long joint- 27mm				4
180		315	dist19; measured from the top of the long joint- 2/mm dist19; measured from the top of the long joint- 28mm				4
180 181 182 183		253	dist20; measured from the top of the long joint- 28mm				4
182		115	dist21; measured from the top of the long joint- 30mm				4
183		15	dist22; measured from the top of the long joint- 31mm				4
184		0	dist23; measured from the top of the long joint- 32mm	lj top bore	31.1		4
101			The second secon				