## LISTING OF ALL KNOWN SLIDE RULES WITH HYPERBOLIC SCALES

## by William K. Robinson

## Maker, Name and Other Information

(See the footnotes below this list for sources of information; and for explanations of symbols used, and for values of the different gauge and cu
1ALVIN (Japan San-Ai Group) ALVIN ELITE VECTOR No. $1157 \quad 25 \mathrm{~cm}$.; Plastic face on laminated wood ; Cursor is not fran
Front scales: $\| \mathrm{Sr}, \mathrm{S} \theta \& \mathrm{~S} \theta$, $\mathrm{P} ', \mathrm{P}\|\mathrm{Q}, \mathrm{CF}, \mathrm{CI}, \mathrm{C}\| \mathrm{D}, \mathrm{DF}, \mathrm{LL} 2$, LL3 || Note:Sr is radians; S $\theta$ degrees Back scales: || Sh2, Sh1, A \| B , K, Th, C || D, Tr1, Tr2, db
Gauge Marks on scales: $\pi$ is on A, B, C, D, CF and DF; $\pi / 4$ and M is on A and B; C and C1 are on C and D. Curss
Cursor Back: has marks; KW at top middle ; $\mathrm{HP}\left(^{*}\right)$ is at right on vertical line over A \& B scales; $\pi / 4$ is at a vertical line on left over the A \& B scales, and $\sqrt{ } 4 / \pi$ on the right over tr
2ARISTO (Germany) Made in Hamburg ARISTO HyperboLog No. 971 1953-1960 25 cm .; Plastic; Cursor is not framed. This early version hi
Front scales: || LLo1, LLo2, LLo3, DF \| CF, CIF, L, CI, C \| D, LL3, LL2, LL1\| Back scales: || Th, K, A || B, T\&T, ST, S\&S, C || D, DI, S1
Gauge Marks on scales: $\pi$ is on A, B, C, D, CF, DF, CI, DI, and CIF. The marks " and 'are on scale ST.
Cursor Back: has marks; KW at top middle ; $\mathrm{HP}\left(^{*}\right)$ at right on vertical line over A \& B scales; There is a $\pi / 4$ vertical line on left over the A \& B scales.
3ARISTO (Germany) Made in Germany $\quad$ ARISTO HyperboLog No. 0971 $1961-1972 \quad 25 \mathrm{~cm}$.; Plastic; Cursor is not framed. Has fixed plastic enc
Front scales: || LLo1, LLo2, LLo3, DF || CF, CIF, L, CI, C || D, LL3, LL2, LL1\| Back scales: || Th, K, A || B, T\&T, ST, S\&S, C || D, DI, S1
Gauge Marks on scales: $\pi$ is on A, B, C, D, CF, DF, CI, DI, and CIF. The marks " and 'are on the back C scale; e is on LL2 and LL3. Cursor Front: has a mark on right over CF
Cursor Back: has marks; kW at top middle ; $\mathrm{HP}\left(^{*}\right)$ at right on vertical line over A \& B scales; There is a $\pi / 4$ vertical line on left over the A \& B scales, and $\sqrt{ } 4 / \pi$ on right over C an
4In another version of the same No. 0971 rule the Cursor Back has marks; kW at top middle and PS2 at right on vertical line over A \& B scales; $\pi / 4$ is left over the A and B scales; a
5aARISTO (Germany) ARISTO HyperLog No. 0972 1969 - 197725 cm .; Plastic; Cursor is not framed. Has fixed plastic enc
Front scales: || Lloo, LLo1, LLo2, LLo3, DF || CF, CIF, L, CI, C || D, LL3, LL2, LL1, LLo \| Back scales: || H2, Sh2, Th, K, A || B, T\&T, ST, S\&S, P, C
Gauge Marks on scales: $\pi$ is on A, B, C, D, CF, DF,CI, CIF, and DI. The marks Q" and Q'are on back scale C; e is on LL2 and LL3.
Cursor Front: has marks; there's a vertical mark on right over CF/DF scales (for multiplication of the value on C/D by 36 ); $\pi / 4$ is left over the $A$ and B scales; and $\sqrt{ } 4 / \pi$ is right ove
Cursor Back: has marks; kW at top middle ; PS2 at right on vertical line over A \& B scales; There is a $\pi / 4$ vertical line on left over the A \& B scales, and $\sqrt{ } 4 / \pi$ on right over the C a
5bARQUIMEDES (Brazil) Archimedes Vectolog 21-D
Front scales: || LLo1, LLo2, LLo3, DF || CF, CIF, CI, C || D, LL3, LL2, LL1 ||

6BEACON (Korea) BEACON KOREA No. $315 \quad 25 \mathrm{~cm}$.; Plastic; Cursor is not framed. Has adjustable meta
Front scales: $\|\mathrm{L}, \mathrm{K}, \mathrm{DF}\| \mathrm{CF}, \mathrm{CIF}, \mathrm{CI}, \mathrm{C} \| \mathrm{D}, \mathrm{LL} 3$, LL2, LL1 $\| \quad$ Back scales: $\|$ Sh1, Sh2, Th, A $\|$ B, TI2\&TI2, TI1\&TI1, S
Gauge Marks on scales: $\pi$ is on CF and DF; c is on the back C scale.
SEE THE NOTE AT END OF THIS LISTING REGARDING THE SLIDE RULES DESIGNED BY F. BLANC AND J. ST. VINCENT PLETTS
7aBLUNDELL (Great Britain) Multilog Vector Duplex No. JV $56 \quad$ 1957-1965 Source: Hopp page 144.
Do not have a picture or manual for this slide rule. Hopp shows same scales as below No. 506 (Academy Duplex). So these two slide rules may be almost the same. To check this ne
7bBLUNDELL (Great Britain) Log-Log Electro No. 506 ( Academy Duplex)1965-1970 25 cm .; Plastic; Cursor is not framed. Has fixed plastic enc Front scales: $\left\|L_{01}, L_{02}, L_{03}, \mathrm{DF}\right\| \mathrm{CF}, \mathrm{CIF}, \mathrm{CI}, \mathrm{C}\left\|\mathrm{D}, \mathrm{LL}_{3}, L_{2}, L_{1}\right\| \quad$ Back scales: || Sinh1, Sinh2, Tanh, A \| B, T\&T, ST, S\&S |
Gauge Marks on scales: $\pi$ is on A, B, C, D, CF, DF, CI, DI, and CIF; The marks $9^{\prime}$ and $9^{\prime \prime}$ are on front scales C and D. Cursi
Cursor Back: There is a $H P\left(^{*}\right)$ vertical line mark at right over A and B scales; There a $\pi / 4$ vertical line on left over the A and B scales, and $\sqrt{ } 4 / \pi$ on the right over the C and D scal
8BLUNDELL (Great Britain) Log-Log Electro No. A506 (Super Duplex) 1970-1980 25 cm .; Plastic; Cursor is not framed. Has fixed plastic enc
Front scales: || LL01, L102, LL03, DF || CF, CIF, CI, C || D, LL3, LL2, LL1\| Back scales: || Sinh1, Sinh2, Tanh, A || B, T\&T, ST, S\&S
Have a picture for this slide rule from Ron Manley's Web Site of "sliderules.clara.co.uk". Has same scales as above No. 506 (Academy Duplex) but some are with different type font:
Need gauge marks and cursor lines information as pictures do not show this detail.

- SEE THE NOTE AT END OF THIS LISTING REGARDING CHINESE SLIDE RULES.

9aCHINA BEIJING 6681 Haiou Pai (Seagull) See Haiou Pai on this list 25 cm .; Plastic; Cursor is not framed. Has fixed plastic enc
Front scales: $\left\|\operatorname{Ln}_{01}, \operatorname{Ln}_{02}, \operatorname{Ln}_{03}, \mathrm{DF}\right\| \mathrm{CF}, \mathrm{CIF}, \mathrm{H}, \mathrm{CI}, \mathrm{C}\left\|\mathrm{D}, \mathrm{LL}_{3}, L L_{2}, L_{1}\right\| \quad$ Back scales: || L, Sh1, Sh2, A \| B, T, ST, S, C \| D, P, Th,
Need gauge marks and cursor lines information as pictures do not show this detail.
9bCHINA B No number $\quad$ Has si

| 10CHINA S | Cultural Revolution Slide Rule 1002 | This appears to be a renamed Flying Fish 1002 |
| :--- | :--- | :--- |
| 11 CHINA SHANGHAI | $\mathbf{1 0 1 5 - 1}$ | Maybe same as listing under Flying Fish 1015-1 |

Do not have a picture or manual for this slide rule. Hopp does not list it. Need complete information: listing of details of dimensions, physical appearance, scales, gauge marks,cursol
12CHINA SHANGHAI $\mathbf{1 0 1 8} \quad$ Maybe same as listing under Flying Fish 1018
Do not have a picture or manual for this slide rule. Hopp does not list it. Need complete information: listing of details of dimensions, physical appearance, scales, gauge marks,cursol
13CHINA SHANGHAI $\mathbf{5 8 9 1}$ (Has same scales as K\&E 4083-3 (1955) Maybe same as listing under Shanghai (China) 5891
Do not have a picture or manual for this slide rule. Hopp does not list it. Need complete information: listing of details of dimensions, physical appearance, scales, gauge marks,cursol
14COMPASS (JAPAN San-Ai Group) No. $1325 \quad 25 \mathrm{~cm}$.; Plastic face on laminated wood ; Cursor is not fran
Front scales: $\|\mathrm{Sr}, \mathrm{S} \theta, \mathrm{P}, ~ \mathrm{P}\| \mathrm{Q}, \mathrm{CF}, \mathrm{CI}, \mathrm{C}\|\mathrm{D}, \mathrm{DF}, \mathrm{LL} 2, \mathrm{LL} 3\| \quad$ Note: Sr is radians; S $\theta$ degrees $\quad$ Back scales: $\|\mathrm{Sh} 2, \mathrm{Sh} 1, \mathrm{~A}\| \mathrm{B}, \mathrm{K}, \mathrm{Th}, \mathrm{C} \| \mathrm{D}, \mathrm{Tr} 1, \mathrm{Tr} 2$, db
Gauge Marks on scales: $\pi$ is on $\mathrm{A}, \mathrm{B}, \mathrm{C}, \mathrm{D}, \mathrm{CF}$ and $\mathrm{DF} ; \pi / 4$ and M is on A and $\mathrm{B} ; \mathrm{C}$ and C 1 are on C and D .
Curs
$\rightarrow$ SEE THE NOTE AT END OF THIS LISTING REGARDING THE DIETZGEN SLIDE RULES.
15DIETZGEN (USA) Vector Type Log Log No. 1735 Maniphase Multiplex (Variation 1)1941-52
Front scales: \|L, LL1, DF \| CF, CIF, CI, C \| D, LL3, LL2\|
Gauge Marks on scales: $\pi$ is on A, B, CF, and DF; $\pi / 4$ is on A and B scales; The marks $1^{\circ}$, ' and " are on scale ST.
16DIETZGEN (USA) Vector Type Log Log No. 1735 Maniphase Multiplex (Variation 2) 1950
Front scales: || LL02, LL03, DF || CF, CIF, CI, C || D, LL3, LL2\|
Gauge Marks on scales: $\pi$ is on A, B, CF, and DF; $\pi / 4$ is on A and B scales; The marks $1^{\circ}$, ' and " are on scale ST.
17DIETZGEN (USA) Vector Type Log Log No. 1725 Maniphase Multiplex
Front scales: || LL02, LL03, DF || CF, CIF, CI, C || D, LL3, LL2 \|
Gauge Marks on scales: $\pi$ is on A, B, CF, and DF; $\pi / 4$ is on A and B scales; The marks $1^{\circ}$, ' and " are on scale ST.
10 in.; Plastic face on wood; Cursor is not framed. Adjust Back scales: || LL0, LL00, A || B, T\&T, ST, S\&S || D, Th,

10 in. Plastic face on wood. Cursor has metal frame Adju Back scales: || L, LL01, LL1, A \| B, T\&T, ST, S\&S || D, $]$

Curs
25 cm ; Plastic face on wood ;Cursor has metal frame. Adju Back scales: $\|$ Sh1, Sh2, Th, A \| B , T\&T, ST, S\&S \| D, I

8DIETZGEN (USA) Vector Type Log Log No. N1725 1955-59 Source: Hopp page 161.
Do not have a picture or manual for this slide rule. Need complete information: listing of details of dimensions, physical appearance, scales, gauge marks, cursor lines, etc.
19DIETZGEN (USA) Vector Type Log Log No. N1725, Microglide $\quad$ 1959-70 25 cm ; Plastic face on wood ;Cursor has metal frame. Adju

Front scales: || LL01, LL02, LL03, DF || CF, CIF, L, CI, C || D, LL3, LL2, LL1||
Back scales: || Th, Sh2, Sh1, A || B, T<45 \& $\mathrm{T}<45^{\circ}$, $\mathrm{T}>45^{\prime}$
Gauge Marks on scales: $\pi$ is on A, B, CF, and DF; $\pi / 4$ is on A and B scales; The marks $1^{\circ},{ }^{\prime}$ and " are on scale ST.
Cursi
20DIETZGEN (USA) Vector Type Log Log No. N1725 Micromatic 25 cm ; Plastic face on wood ;Cursor has metal frame. Adju
This "Micromatic Adjustment" slide rule is the same as the N1725, Microglide, but has a special screw for fine adjusting of the alignment. This screw is located on the top scales on
21DIETZGEN (USA) Vector Type Log Log No. B-1725 (Made in Japan) $1972 \quad 25 \mathrm{~cm}$.;Plastic face on laminated wood ;Cursor not framed.
Front scales: || Th, Sh2, Sh1, A \| B, T<45 ${ }^{\circ} \& T<45^{\circ}, ~ T>45^{\circ} \& T>45^{\circ}, \mathrm{ST}, \mathrm{S} \& \mathrm{~S}\|\mathrm{D}, \mathrm{DI}, \mathrm{K}\| \quad$ Back scales: || LL01, LL02, LL03, DF \| CF, CIF, L, CI, C
Gauge Marks on scales: $\pi$ is on A, B, CF, and DF; $\pi / 4$ is on A and B scales; The marks $1^{\circ}$, ' and " are on scale ST. Curst
22DING FENG (China) Slide Rule has no ID No. or name on it; Box has No. 547125 cm.; Plastic face on laminated wood; Cursor is framed;
Front scales: $\|$ 2D, L, K, A $\|$ Tan\&Cot, Sin\&Cos, H', CI, C $\|$ D, Th, Sh1, Sh2 \| $\quad$ CF and DF are folded at $\pi$. Back scales: \| LL1I, LL2I, LL3I, DF \| CF, CIF, H, CI, C
Gauge Marks on scales: on front C scale are the marks $1^{\circ}$ and R. On back $\pi$ is on the DF scale.

## 23aDING FENG (China) No. 5471 Duplex Vector

Front scales: || Th, L, K, A || B, S, H, T, C || D, DI, Sh2, Sh1 ||
Back scales: \|LL01, LL02, LL03, DF \| CF CIF H, CI, C
Gauge Marks on scales: Need information Cursi
23bDING FENG (China) No. $5571 \quad 25 \mathrm{~cm}$; Plastic face on laminated wood ;Cursor is not frame
Front scales:|| 2D, L, K, A \| Tan\&Cot, Sin\&Cos, H', CI, C \|D, Th, Sh1, Sh2 \| $\quad$ CF and DF are folded at $\sqrt{ } 10$ Back scales: || LL1I, LL2I, LL3I, DF || CF, CIF, H, CI, C
Gauge Marks on scales: on front C scale has the mark R. On back $\pi$ is on the DF scale.
24aDING FENG (China) No. $5651 \quad$ Scales were hard to read on eBAY, but seem similar to the,
Do not have a picture or manual for this slide rule. Hopp does not list it. Need complete information: listing of details of dimensions, physical appearance, scales, gauge marks, cursol
24bDING FENG (China) No. $5810 \quad 25 \mathrm{~cm}$; Plastic face on wood ;Cursor is not framed; Adjusta
Front scales: || LL1I, LL2I, LL3I, DF || CF, CIF, H, CI, C \| D L LL3, LL2, LL1 \| $\quad$ CF and DF are folded at $\sqrt{ } 10$ Back scales: \| Th, L, K, A \| B, S\&S, H', T\&T, C \| D, DI,
Gauge Marks on scales: $\pi$ is on A, and B back scales; and C, D, and DF front scales; The marks $1^{\circ}$ and R are on back scale C; unknown mark v is at 4.2 on K Curs
25DING FENG (China) No. 5852
Do not have a picture or manual for this slide rule. Hopp does not list it. Need complete information: listing of details of dimensions, physical appearance, scales, gauge marks,cursol
26ECKEL (The Eckel Co., USA) Engineer's Log Log (Circular Slide Rule) This is the only known circular slide rule with hyperbolic s
Scales are printed on cursor: Front from center to edge:|| LLI, LL2, LL3, LL4, C || D, DI, A, K, L \| Back from center to edge: || SH1, SH2, TH, D, ST, S, T<45ㅇ, T>45 ${ }^{\circ} \|$
27FABER-CASTELL (Germany) Mathema No. 2/84 1966Source: Hopp page $172 \quad 20 \mathrm{~cm}$.; Plastic, Cursor is not fr
NOTE: The F-C Mathema rules do not use letters to name the scales such as, A, C, CIF, S, etc. Instead formulas or symbols are used to name the scales.

Front Scales(on right side): $\left\|g_{\ln } \mathbf{Y}, g_{\tan Y}, \operatorname{sqrt}\left(1+\mathbf{Y}^{2}\right), \quad \mathbf{Y}^{2}\right\| \mathbf{y}^{2}, \quad 1 / \mathbf{y}^{2}, \quad 1 / \mathbf{y}, \mathbf{y}\left\|\mathbf{Y}, \operatorname{sqrt}\left(1-\mathbf{Y}^{2}\right), g_{\sin Y},(\ln Y)\right\|$
Back Scales (on left side): \| -0,1 $\ln X,-\ln X,-10 \ln X\left\|\tanh x^{g}, 0.1 \cosh x^{g}, 0.1 \sinh x^{g}, \sinh x^{g}\right\| 10 \ln X, \ln X, 0.1 \ln X \|$
Back Scales(on right side): \| $e^{-10 Y}, \quad e^{-Y}, \quad e^{-0,1 Y}\left\|g_{\tanh } y, g_{\cosh } 10 y, g_{\sinh } 10 y, \quad g_{\sinh } y\right\| e^{0,1 Y} \quad, e^{Y}, \quad e^{10 Y} \|$
Gauge Marks on scales: There are no gauge marks on the scales.
Cursor Front : under the upper two sqrt $\mathbf{X}$ scales were two lines to the left at $2 \pi$ and $\pi / 4$; and to the right were two lines at $4 \pi$ and $\pi / 2$. These symbols were printed above on the cu
Cursor Front (contined): under the lower two $\mathbf{Y}$ scales were two lines to the left at $2 \pi$ and $\pi / 4$; and to the right were two lines at $4 \pi$ and $\pi / 2$. These symbols were printed below on 1 Cursor Back : under both the the upper and lower scales were two lines at left at $2 \pi$ and $\pi / 4$; and at right were two marks at $4 \pi$ and $\pi / 2$. These symbols were printed above and belo
28FABER-CASTELL (Germany) Mathema No. 2/84N 20 cm.; Plastic, Cursor is not framed. Adjus


Back Scales (on left side): \| $10 \ln X, \ln X, 0.1 \ln X, Y\left\|y, 0.1 \cosh x^{g}, 0.1 \sinh x^{g}, \sinh x^{g}\right\| \tanh x^{g},-0.1 \ln X,-\ln X,-10 \ln X \|$

Gauge Marks on scales: There are no gauge marks on the scales.
Cursor Front : under the upper two sqrt $\mathbf{X}$ scales were two lines to the left at $2 \pi$ and $\pi / 4$; and to the right were two lines at $4 \pi$ and $\pi / 2$. These symbols were printed above on the cu Cursor Front (contined): under the lower two $\mathbf{Y}$ scales were two lines to the left at $2 \pi$ and $\pi / 4$; and to the right were two lines at $4 \pi$ and $\pi / 2$. These symbols were printed below on 1 Cursor Back : under both the the upper and lower scales were two lines at left at $2 \pi$ and $\pi / 4$; and at right were two marks at $4 \pi$ and $\pi / 2$. These symbols were printed above and belo
29FABER-CASTELL (Germany) 989 Complex Hyperbolic Function Calculator Source: Hopp page 172; Dieter von Jezierski and Peter I
with information on this very unique "Calculator" shown in the 1966 F-C catalog. It is very large; about $21 \times 31 \mathrm{~cm}$., and its picture shows a rule full of graphs of families of curves. values off of the graphs it works more like a nomograph than a slide rule. Peter sent me translations that Dieter had made of the manual. Using this device you can find solutions to functions. Also, Richard Hughes, kindly sent me very clear and complete full size pictures of his F-C 989. (See his JOS article). Of interest is that all calculations are based upon the
30FLYING FISH (China) No. $1002 \quad 25 \mathrm{~cm}$.; Plastic; Cursor is not framed. Has fixed plastic enc

Front scales: \| Ln1I, Ln2I, Ln3I, DF \| CF, CIF, H2, H3, CI, C \| D, Ln3, Ln2, Ln $\|\| \quad$ CF is folded at $\sqrt{ } 10 \quad$ Back scales: \| sh2, sh3, K, A \| B, $\sin 2 \cos 2, ~ H ' 2, \operatorname{tg} 2 \operatorname{ctg} 2$
Gauge Marks on scales: $\pi$ is on A, B, C, D, and DF; $\pi / 4$ is on A and B; $1^{\circ}$ and R are on C and D; v on K. Cursor Front: Has KW at top middle; $\mathrm{HP}(* *)$ is at right and $\pi / 4$ left over
31FLYING FISH (China) No. $1003 \quad 25 \mathrm{~cm}$.; Plastic; Cursor is not framed. Has fixed plastic enc

Gauge Marks on scales: $\pi$ is on C, D, and DF; v and s are on CI._ (Variations exist with v, $\mathrm{v}_{1}$, and s on scale C) Cursor Front and Back: has no marks. Back
32FLYING FISH (China) No. $1004 \quad 25 \mathrm{~cm}$.; Plastic; Cursor is not framed. Has fixed plastic enc
Front scales: \|Th, Ch, K, A \| B , T\&T, ST\&ST, S\&S, C || D, DI, Sh2, Sh1 \| $\quad$ CF and DF are folded at $\pi \quad$ Back scales: || LL01, LL02, LL03, DF || CF, CIF, L, CI, C
Gauge Marks on scales: $\pi$ is on A, B, C, D, CF, and DF; $\pi / 4$ is on A and B; v is on K. Cursor Front: Has KW at top middle; HP(**) is at right and $\pi / 4$ left over the A \& B scals
33FLYING FISH (China) No. $1009 \quad 25 \mathrm{~cm}$.; Plastic; Cursor is not framed. Has fixed plastic enc
Front scales: \| Sh1, Sh2, K, A \| B, T\&T, ST, S\&S, C \| D, DI, P, Th \| $\quad$ CF is folded at $\sqrt{ } 10 \quad$ Back scales: || LL01, LL02, LL03, DF || CF, CIF, L, CI, C
Gauge Marks on scales: $\pi$ is on A, B, C, D, and DF; $\pi / 4$ is on A and B; v is on K. Cursor Front: Has KW at top middle; $\mathrm{HP}\left({ }^{* * *}\right.$ ) is at right and $\pi / 4$ on left over the A \& B s
34FLYING FISH (China) No. 1015 and 1015-1 $\quad 25 \mathrm{~cm}$.; Plastic; Cursor is not framed. Has fixed plastic enc
Front scales: || Sh1, Sh2, K, A || B, T\&T, ST, S\&S, C || D, DI, L, Th || CF is folded at $\sqrt{ } 10 \quad$ Back scales: || LL/1, LL/2, LL/3, DF || CF, CIF, H, CI, C $\mid$
Gauge Marks on scales: $\pi$ is on A, B, C, D, and DF. Cursor Front: $\pi / 4$ on left and $\mathrm{HP}\left({ }^{* *}\right)$ on right over the A \& B scales.

| 35FLYING FISH (China) | No. 1018 Electricians slide rule | (See Shanghai China No. 1018) |
| :--- | ---: | :--- |
| Front Scales: $\left\\|\theta^{\circ}, \mathrm{R} \theta, \mathrm{P}^{\prime}, \mathrm{P}\right\\|$ Q, QI, L, I $\\|\mathrm{J}, \mathrm{J}, \mathrm{T}, \mathrm{G} \theta\\|$ | This has Gudermannian scales. | Back Scales: $\left\\|\operatorname{lnI}_{-1}, \operatorname{lnI}_{0}, \operatorname{lnI}_{1}, \mathrm{~K}_{1}, \mathrm{~A}_{1}\right\\| \mathrm{B}_{1}$, Plastic; Cu $\mathrm{tg}_{0} \mathrm{ctg}_{0}, \sin _{\mathrm{o}} \mathrm{C}$ |
| Gauge Marks on scales: $\pi$ is on $\mathrm{A}_{1}, \mathrm{~B}_{1}, \mathrm{C}$, and $\mathrm{D} ; \pi / 4$ is on $\mathrm{A}_{1}$ and $\mathrm{B}_{1} ; 1^{\circ}$ and R are on scales C and D; $1 / \mathrm{R}$ is on $\mathrm{B}_{1}$ | Cursor Front: has no marks. | Cursor Back: $\pi / 4$ |



Front scales: || L, LL1, DF || CF, CIF, CI, C || D, LL3, LL2
Gauge Marks on scales: $\pi$ is on A, B, CF, and DF; $\pi / 4$ is on A and B scales; The marks $1^{\circ}$, ' and " are on scale ST.
55KEUFFEL \& ESSER (USA) Log Log Duplex Vector No. 4083-3 1947-1948
Front scales: || LL02, LL03, DF || CF, CIF, CI, C || D, LL3, LL2||
Gauge Marks on scales: $\pi$ is on A, B, CF, and DF; $\pi / 4$ is on A and B scales; The marks $1^{\circ}$, ' and " are on scale ST.
56KEUFFEL \& ESSER (USA) Log Log Duplex Vector No. N4083-3 1949-1952
Front scales: || LL02, LL03, DF || CF, CIF, CI, C || D, LL3, LL2 $\|$
Gauge Marks on scales: $\pi$ is on A, B, CF, and DF; $\pi / 4$ is on A and B scales; The marks $1^{\circ}$, ' and " are on scale ST.
57KEUFFEL \& ESSER (USA) Log Log Duplex Vector No. N4083-3 1953
Front scales: || LL02, LL03, DF || CF, CIF, CI, C || D, LL3, LL2 $\|$
Gauge Marks on scales: $\pi$ is on A, B, CF, and DF; $\pi / 4$ is on A and B scales; The marks $1^{\circ}$, ' and " are on scale ST.
58KEUFFEL \& ESSER (USA) Log Log Duplex Vector No. 4083-3 1954-1954
Front scales: || LL02, LL03, DF || CF, CIF, CI, C || D, LL3, LL2 ||
Gauge Marks on scales: $\pi$ is on A, B, CF, and DF; $\pi / 4$ is on A and B scales; The marks $1^{\circ}$, ' and " are on scale ST.
59KEUFFEL \& ESSER (USA) Log Log Duplex Vector No. 4083-3 1955-1961
Front scales: || LL02, LL03, DF || CF, CIF, CI, C || D, LL3, LL2|
Gauge Marks on scales: $\pi$ is on A, B, CF, and DF; $\pi / 4$ is on A and B scales; The mark $1^{\circ}$ is on scale SRT.
60KEUFFEL \& ESSER (USA) Log Log Duplex Vector No. 68 1424 \& 681429 (4083-3) 1962-1967
Front scales: \|LL02, LL03, DF || CF, CIF, CI, C || D, LL3, LL2 \| Identical rules with different color cases
Gauge Marks on scales: $\pi$ is on A, B, CF, and DF; $\pi / 4$ is on A and B scales; The mark $1^{\circ}$ is on scale SRT.
61KEUFFEL \& ESSER (USA) Log Log Duplex Vector No. 4083-5 1939-1946
Front scales: || L, LL1, DF || CF, CIF, CI, C || D, LL3, LL2||
Gauge Marks on scales: $\pi$ is on A, B, CF, and DF; $\pi / 4$ is on A and B scales; The marks $1^{\circ}$, ' and " are on scale ST.
62KEUFFEL \& ESSER (USA) Log Log Duplex Vector No. 4083-5 1947-1948
Front scales: || LL02, LL03, DF || CF, CIF, CI, C || D, LL3, LL2|
Gauge Marks on scales: $\pi$ is on A, B, CF, and DF; $\pi / 4$ is on A and B scales; The marks $1^{\circ}$, ' and " are on scale ST.
63KEUFFEL \& ESSER (USA) Log Log Duplex Vector No. N4083-5 1949-1952
Front scales: || LL02, LL03, DF || CF, CIF, CI, C || D, LL3, LL2||
Gauge Marks on scales: $\pi$ is on A, B, CF, and DF; $\pi / 4$ is on A and B scales; The marks $1^{\circ}$, ' and " are on scale ST.
64KEUFFEL \& ESSER (USA) Log Log Duplex Vector No. N4083-5 1953
Front scales: || LL02, LL03, DF || CF, CIF, CI, C || D, LL3, LL2 $\|$
Gauge Marks on scales: $\pi$ is on A, B, CF, and DF; $\pi / 4$ is on A and B scales; The marks $1^{\circ}$, ' and " are on scale ST.
65KEUFFEL \& ESSER (USA) Log Log Duplex Vector No. 4083-5 1954-1954
Front scales: || LL02, LL03, DF || CF, CIF, CI, C || D, LL3, LL2||
Gauge Marks on scales: $\pi$ is on A, B, CF, and DF; $\pi / 4$ is on A and B scales; The marks $1^{\circ}$, ' and " are on scale ST.
66KEUFFEL \& ESSER (USA) Log Log Duplex Vector No. 4083-5 1955-1961
Front scales: || LL02, LL03, DF || CF, CIF, CI, C || D, LL3, LL2 $\|$
Gauge Marks on scales: $\pi$ is on A, B, CF, and DF; $\pi / 4$ is on A and B scales; The mark $1^{\circ}$ is on scale SRT.
67KEUFFEL \& ESSER (USA) Log Log Duplex Vector No. 681424 \& 681429 (4083-5) 1962
Front scales: || LL02, LL03, DF || CF, CIF, CI, C || D, LL3, LL2 \| $\quad$ Identical rules with different color cases Gauge Marks on scales: $\pi$ is on A, B, CF, and DF; $\pi / 4$ is on A and B scales; The mark $1^{\circ}$ is on scale SRT.

Back scales: || LL0, LL00, A || B, T\&T, ST, S\&S || D, Th, 10 in.; Plastic face on wood ; Cursor is framed. Adjustable Back scales: || L, LL01, LL1, A || B, T\&T, ST, S\&S || D, ] Curs
10 in.; Plastic face on wood ; Cursor is framed. Adjustable Back scales: || L, LL01, LL1, A || B, T\&T, ST, S\&S || D, ]

Curs
10 in.; Plastic face on wood ; Cursor is framed. Adjustable Back scales: || Sh1, Sh2, Th, A || B, T\&T, ST, S\&S || D, I Curs
10 in.; Plastic face on wood ; Cursor is framed. Adjustable Back scales: || Sh1, Sh2, Th, A || B, T\&T, ST, S\&S || D, I

Curs
10 in.; Plastic face on wood ; Cursor is framed. Adjustable Back scales: || Sh1, Sh2, Th, A || B, T\&T, SRT, S\&S || D, Cursi
10 in.; Plastic face on wood ; Cursor is framed. Adjustable Back scales: || Sh1, Sh2, Th, A || B, T\&T, SRT, S\&S || D, Curs
20 in.; Plastic face on wood ; Cursor is framed. Adjustable Back scales: || LL0, LL00, A || B, T\&T, ST, S\&S || D, Th,
Cursi

20 in.; Plastic face on wood ; Cursor is framed. Adjustable Back scales: || L, LL01, LL1, A || B, T\&T, ST, S\&S || D, ] Curs
20 in.; Plastic face on wood ; Cursor is framed. Adjustable Back scales: || L, LL01, LL1, A || B, T\&T, ST, S\&S || D, ]

20 in.; Plastic face on wood ; Cursor is framed Adjurst Back scales: || Sh1, Sh2, Th, A || B, T\&T, ST, S\&S || D, I Cursi
20 in.; Plastic face on wood ; Cursor is framed. Adjustable Back scales: || Sh1, Sh2, Th, A || B, T\&T, ST, S\&S || D, I

20 in . Plastic face on wood ; Cursor is framed. Adjustabs Back scales: || Sh1, Sh2, Th, A || B, T\&T, SRT, S\&S || D, 20 in.; Plastic face on wood; Cursor is framed. Adjustable Back scales: || Sh1, Sh2, Th, A || B, T\&T, SRT, S\&S || D,

68KEUFFEL \& ESSER (USA) KELON (This 10 in. Rule was designed, but not produced Information furnished by Joe Maskin from June 1999 arti Front scales: || Ln-3, Ln-2, Ln-1, Ln-0, DF || CF, CIF, L, CI, C || D, Ln0, Ln1, Ln2, Ln3 || Back scales: \| Constants, Sh1, Sh2, Th, A || B, T1\&T1, Si Discussed at K\&E for including on the KELON was more gauge marks, a magnifying lens built into the cursor, greater use of color on the scales, and using a folded scale at sqrt 10 .
69LAFAYETTE (USA / JAPAN San - AI Group) VECTORLOG No. F - $686 \quad 25 \mathrm{~cm}$.; Plastic face on laminated wood ; Cursor is not frar Front scales: || Tr1, Tr2, P', P \| Q, ST, Sr, S $\theta$, C || D, LLo3 LLo2, Llo1 || Note: Sr is radians; S $\theta$ is degrees. Back scales: || Sh1, Sh2, DF, A || B, CF, Th, CI, C || D, LI
Gauge Marks on scales: $\pi$ is on C, D, CF, and DF; C is on Cand D; (Variations exist with $\pi$ and M on A \& B; and C1 and $\rho^{\circ}$ on C\&D)
Cursi
70LAFAYETTE (USA / JAPAN San - AI Group) VECTORLOG No. 99-7102
25 cm .; Plastic face on laminated wood ; Cursor is not frar
Front scales: $\|\operatorname{Tr} 1, \mathrm{Tr} 2, \mathrm{P}, ~ \mathrm{P}\| \mathrm{Q}, \mathrm{ST}, \mathrm{Sr}, \mathrm{S} \theta, \mathrm{C} \| \mathrm{D}, \mathrm{LLo3}$ LLo2, Llo1 $\|$ Note: Sr is radians; $\mathrm{S} \theta$ is degrees. Back scales: $\|\mathrm{Sh} 1, \mathrm{Sh} 2, \mathrm{DF}, \mathrm{A}\| \mathrm{B}, \mathrm{CF}, \mathrm{Th}, \mathrm{CI}, \mathrm{C} \| \mathrm{D}, \mathrm{LI}$
Gauge Marks on scales: None on Front scales; On back $\pi$ is on C, D, CF, and DF; C and $\rho^{\circ}$ are on C and D. (Other variations of gauge marks may exist). Cursi
71aLAFAYETTE (USA / JAPAN San - AI Group) VECTORLOG No. 99-71029 Same as No. 99-7102 with slight variations of size of mark
71bLUTZ (JAPAN / USA) No. 300 B $\quad 25 \mathrm{~cm}$.; Plastic face on laminated wood ; Cursor is not frar
Front scales: \| Sh1, Sh2, Th, A \| B , T\&T, ST\&ST, S\&S, C \| D, DI, P, K \| $\quad$ Back scales: \| LL1, LL2, LL3, DF || CF, CIF, L, CI, C \| L
Gauge Marks on scales: $\pi$ is on front C, D, CF, and DF; C and $\rho^{\circ}$ are on C and D front.
72MICRONTA (JAPAN) No. $157 \quad 25 \mathrm{~cm}$.; Plastic face on laminated wood ; Cursor is not frar
Front scales: $\|\mathrm{Sr}, \mathrm{S} \theta, \mathrm{P}, \mathrm{P}\| \mathrm{Q}, \mathrm{CF}, \mathrm{CI}, \mathrm{C}\|\mathrm{D}, \mathrm{DF}, \mathrm{LL} 2, \mathrm{LL} 3\| \quad$ Note: Sr is radians; $\mathrm{S} \theta$ is degrees. $\quad$ Back scales: $\|\mathrm{Sh} 2, \mathrm{Sh} 1, \mathrm{~A}\| \mathrm{B}, \mathrm{K}, \mathrm{Th}, \mathrm{C} \| \mathrm{D}, \mathrm{Tr} 1, \mathrm{Tr} 2, \mathrm{db}$
Gauge Marks on scales: $\pi$ is on A, B, C, D, CF and DF; $\pi / 4$ and M are on A and B; c and c 1 are on C and D; e is on LL2 and LL3
73MICRONTA (JAPAN San - AI Group) No. 1157 Electric Vector $\quad 25 \mathrm{~cm}$.; Plastic face on laminated wood ; Cursor is not frar
Front scales: $\|\mathrm{Sr}, \mathrm{S} \theta \& \mathrm{~S} \theta, \mathrm{P}, \mathrm{P}\| \mathrm{Q}, \mathrm{CF}, \mathrm{CI}, \mathrm{C}\|\mathrm{D}, \mathrm{DF}, \mathrm{LL} 2, \mathrm{LL} 3\| \quad$ Note: Sr is radians; $\mathrm{S} \theta$ is degrees. $\quad$ Back scales: $\|\mathrm{Sh} 2, \mathrm{Sh} 1, \mathrm{~A}\| \mathrm{B}, \mathrm{K}, \mathrm{Th}, \mathrm{C} \| \mathrm{D}, \mathrm{Tr} 1, \mathrm{Tr} 2, \mathrm{db}$
Gauge Marks on scales: $\pi$ is on A, B, C, and D; M is on A and B; C and C1 are on C and D. Cursi
Cursor Back: has marks; KW at top middle ; $\mathrm{HP}\left({ }^{*}\right)$ is at right on vertical line over A \& B scales; $\pi / 4$ is at a vertical line on left over the A \& B scales, and $\sqrt{ } 4 / \pi$ on the right over th
74aNIKKEI (JAPAN Nippon Slide Rule Co.) NIKKEI 520 Duplex
Front scales: \| L, K, DF \| CF, CIF, CI, C \| D, X, $\theta \|$ Note: X is radians; $\theta$ degrees $\quad$ Back scales: $\left\|\mathrm{Sh}_{1}, \mathrm{Sh}_{2}, \mathrm{Th}, \mathrm{A}\right\| \mathrm{B}, \mathrm{T}, \mathrm{S}, \mathrm{ST}, \mathrm{C} \| \mathrm{D}, \mathrm{LL}_{1}, \mathrm{I}$ Do not have a picture or manual for this slide rule. Hopp does not list it. Need complete information with listing of details of scales, gauge marks and cursor lines.
74bPaper Slide Rule (CHINA) No Number and unknown Name 25 cm .; Paper face glued to wood; Cursor is not framed; A
Front scales: || L, LL1, DF || CF, CIF, CI, C || D, LL3, LL2Nery crudely made - scales are all black color
Gauge Marks on scales: $\pi$ is on A, B, CF, and DF; $\pi / 4$ is on A and B scales; The marks $1^{\circ}$, ' and " are on scale ST.
75PATRICK Corp/ (USA)
MARK IV data $\log$
Back scales: || LL0, LL00, A \| B , T, ST, S || D, Th, Sh2, S
10 in.; Plastic; Cursor is not framed. Adjustable Metal Br:

Front scales: || K, odd V, even $\sqrt{ }$, A || B, T \& T, ST, S \& S, C || D, DI, Th, Sh2, Sh1\|
Back scales: ||LL0 +, LL0 -, LL1 +, LL1 -, DF || CF, CIF,
Gauge Marks on scales: $\pi$ is on A, B, C, D, CF, DF, CI and DI; $\pi$ is shown as a ' mark on CIF; R is on C, D, CI and DI. R is shown as a 'mark on CF, DF, and CIF;
Gauge Marks on scales (Continued): e is shown as a 'mark on the front C and D, and on CIF; the ST scale shows $1^{\circ}$ mark, and " and a second mark '
Curs
-SEE THE NOTE AT END OF THIS LISTING REGARDING THE PICKETT SLIDE RULES.
76PICKETT \& ECKEL (USA) Model 4 Deci- Log Log Vector Hyperbolic 25 cm .; White plastic film over Magnesium alloy, Cursor is
Front scales: $\left\|1 / \mathrm{N}_{1}, 1 / \mathrm{N}_{2}, 1 / \mathrm{N}_{3}, 1 / \mathrm{N}_{4}, \mathrm{DF}\right\| \mathrm{CF}, \mathrm{Th}, \mathrm{Sh}, \mathrm{Sh}, \mathrm{CI}, \mathrm{C}\left\|\mathbf{C}_{\mathbf{0}} \& \mathrm{D}, \mathrm{N}_{1}, \mathrm{~N}_{2}, \mathrm{~N}_{3}, \mathrm{~N}_{4}\right\| \quad$ Back scales: $\|$ Three cubert scales ${ }^{3} \sqrt{ }, ~ D F \| \mathrm{CF}, \mathrm{T} \& \mathrm{~T}, \mathrm{ST}, \mathrm{S}$
Gauge Marks on scales: $\pi$ is on C, D. Also on CF and DFon the front scales; marks $1^{\circ}$, " at 1.18 , and ' at 1.97 , are on ST
Cursi
77PICKETT \& ECKEL (USA) Model No. 4 Vector Hyperbolic Log Log $\quad 25 \mathrm{~cm}$.; White plastic film over Magnesium alloy, Cursor is
Front scales:||Three cubert scales ${ }^{3} \sqrt{ }$, DF $\|$ CF, T\&T, ST, S\&S, CI, C $\|$ D, DI, Two sqrt scales $\sqrt{ }\|\| \quad$ Back scales: $\| 1 / N_{1}, 1 / N_{2}, 1 / N_{3}, 1 / N_{4}, D F / M \|$ CF/M, Th,
Gauge Marks on scales: $\pi$ is on C, D. Also, CF, DF on the front scales. ; R is shown on front C and D ; marks $1^{\circ}$, ' and " are on ST
Curs
78 PICKETT \& ECKEL (USA) Model 4-T Dual-Base Log Log (Vector Hyperbolic) 25 cm .; White plastic film over Aluminum, Cursor is not fr (Same rules with different colors) Model 4-ES Dual-Base Log Log (Vector Hyperbolic) 25 cm .; Yellow plastic film over Aluminum, Cursor is not 1
Front scales:||Three cubert scales ${ }^{3} \sqrt{ }$, DF $\|$ CF, T\&T, ST, S\&S, CI, C \| D, DI, Two sqrt scales $\sqrt{ }\|\| \quad$ Back: || LL1\&LL1, LL2\&LL2, DF || CF, Th, Sh\&Sh, L, C
Gauge Marks on scales: $\pi$ is on C, D, CF,
79PICKETT \& ECKEL (USA) Model 4-T Dual-Base Log Log Reciprocal Scale (Vector Hyperbolic) 25 cm .; White film over Aluminum, Cursor
(Same rules with different colors) Model 4-ES Dual-Base Log Log Reciprocal Scale (Vector Hyperbolic) 25 cm.; Yellow film over Aluminum, Cursc
Front scales:||Three cubert scales $\sqrt[3]{ } \sqrt{ }$, DF $\|$ CF, T\&T, ST, S\&S, CI, C || D, DI, Two sqrt scales $\sqrt{ }\|\| \quad$ Back: || LL1\&LL1, LL2\&LL2, DF/M || CF/M, Th, Sh\&Sh
Gauge Marks on scales: $\pi$ is on C, D, CF, DF, CF/M, DF/M, CI, DI, CIF ; R and $\pi / 4$ are on $\mathrm{C} \& \mathrm{D} ;$ marks $1^{\circ}$, ' and " are on ST.
Curs

80PICKETT \& ECKEL (USA) Model N4-T Vector - Type LOG LOG Dual - Base Speed Rule
(Same rules with different colors) Model N4-ES Vector - Type LOG LOG Dual - Base Speed Rule

25 cm .; White film over Aluminum, Cursor

L1\&LL1, LL2\&LL2, DF/M \| CF/M, Th, Sh\&S

81PICKETT \& ECKEL (USA) Model N4p-T Vector - Type LOG LOG Dual - Base Speed Rule 12.5 cm .; White film over Aluminum, Curs (Pocket version, same ruleswith different colors) Model N4p-ES Vector - Type LOG LOG Dual - Base Speed Rule 12.5 cm .; Yellow film over Aluminum, Cur Front:||Three cubert scales $\sqrt[3]{ } \sqrt{ }$, DF || CF, CIF, T\&T, ST, S\&S, CI, C || D, DI, Two sqrt scales $\sqrt{ }\|\| \quad$ Back: || LL1\&LL1, LL2\&LL2, DF/M || CF/M, Th, Sh\&Sh Gauge Marks on scales: $\pi, \pi / 4$, and R are on C, D, CF, DF, CF/ $/ \mathrm{M}, \mathrm{DF} / \mathrm{M}, \mathrm{CI}, \mathrm{DI}$, and CIF; e is on C and D ; and marks $1^{\circ}$, ' and " are on ST. Curs .
82PICKETT \& ECKEL (USA) Model N16-ES ELECTRONIC LOG LOG Dual - Base Speed Rule 25 cm .; Yellow film over Aluminum, Cursc Front scales: $\|$ SH1, SH2, TH, DF $\|$ CF, L, S\&S, ST, T\&T, CI, C \| D, LL3, LL2, LL1, Ln \| Back: \| $\Theta \& \Theta, d b \& d b, D$ or $\mathrm{Q}, \mathrm{X}_{\mathrm{L}}, \mathrm{Zs}$ OR Xc $\|$ C or L,
Back scales (continued): $\| \mathrm{Lr}, \mathrm{db} \& \mathrm{db}, \mathrm{COS} \mathrm{Q} \& \mathrm{COS} \mathrm{Q}, \mathrm{t}^{\prime} \mathrm{C}$ or $\mathrm{C}^{\prime} \|$ (NOTE: Both the $\mathrm{R}^{\prime}$ or $\mathrm{X}^{\prime} \mathrm{c}$ and the $\mathrm{t}^{\prime} \mathrm{C}$ or $\mathrm{C}^{\prime}$ scales include numerous sub-scales for solving electronic calcul Gauge Marks on scales: $\pi$ is on C, D, CF, DF, and CI; R, $\pi / 4$, sqrt $\sqrt{ }$ of 2 , and $1 /$ sqrt $\sqrt{ }$ of 2 , are on C \& D scales; e is on LL2 and LL3; the marks ' and " are on ST.
83PICKETT \& ECKEL (USA) Model X-4 Vector - Type LOG LOG Dual - Base Speed Rule 25 cm.; Brown, with white slide piece, Cur:
Front:||Three cubert scales ${ }^{3} \sqrt{ }$, DF || CF, CIF, T\&T, ST, S\&S, CI, C || D, DI, Two sqrt scales $\sqrt{ }\|\| \quad$ Back scales: || LL1\&LL1, LL2\&LL2, DF/M || CF/M, Th, $؛$
Gauge Marks on scales: $\pi, \pi / 4$, and R are on $\mathrm{C}, \mathrm{D}, \mathrm{CF}, \mathrm{DF}, \mathrm{CF} / \mathrm{M}, \mathrm{DF} / \mathrm{M}, \mathrm{CI}, \mathrm{DI}$, and CIF; e is on C and D ; and marks $1^{\circ}$, ' and " are on ST. (Comes in plush box). Curs
84POST (USA) Log Log Vector Model No. 1460 (Same as Hemmi 154)
85aPOST (USA) Log Log Vector Model No. 1461 (Similar to Hemmi 153) 10 in.; Plastic face on laminated wood ; Cursor is frame
Front scales: $\|\mathrm{L}, \mathrm{K}, \mathrm{A}\| \mathrm{B}, \mathrm{CI}, \mathrm{C}\left\|\mathrm{D}, \mathrm{T}, \mathrm{G}_{\theta}\right\| \quad$ Note: has Gudermannian hyperbolic scales. Back Scales: \| $\theta, \mathrm{R}_{\theta}, \mathrm{P}\|\mathrm{Q}, \mathrm{Q}, \mathrm{C}\| \mathrm{LL} 3$, LL2, LL1 1 urs
Gauge Marks on scales: $\pi, 2 \pi, \mathrm{R}$, with marks $\mathrm{C} \& \mathrm{C} 1$, ' and ", are on front scales C and $\mathrm{D} ; \pi, \pi / 4$, and M are on A and B scales; $\pi$ is on CI. On back scales on far right of P is SII
85bPRECISION SCALE (USA)[1] Model 1751 Lo 25 cm .; White f
Front scales: || K, L, DIF, DF || CF, CIF, Two sqrt scales $\sqrt{ }$ (odd \& even), CI, C || D, DI, TH, SH1, SH2 || Back scales: || LL1, LL2, LL3, LL4, A || B, S\&S, ST\&ST
Gauge Marks on scales: $\pi, \pi / 4$, and R are on C, D, CF, DF, CI, DI, and CIF; $\pi \& \pi / 4$ are on A and B; and marks $1^{\circ}$, ' and " are on ST. Cursor is missing. Note:
85cPRECISION SCALE (USA)[2] Model 1752 Lo 25 cm .; White f
Front scales: || Sh1, Sh2, Th, A || B, T\&T, ST, S\&S, CI, C || D, DI, K, L \| Back scales:||LL/0, LL/1, LL/2, LL3, DF || CF, CIF, Two
Gauge Marks on scales: $\pi, \pi / 4$, and R are on C, D, CF, DF, CI, DI, and CIF; $\pi \& \pi / 4$ are on A and B; and marks $1^{\circ}$, ' and " are on ST. Cursor is missing. Note:
85dQUIFAN (CHINA) Rose Wood Slide Rule Has no Model No. ( QUIFAN Instrument Industrial Group). See Gong Si He Ying No. 37a on this list

86REISS (East Germany) Duplex Model $3227 \quad 196625 \mathrm{~cm}$.; Plastic; Cursor is not framed. Has fixed plastic enc

Gauge Marks on scales: $\pi$ is on A, C, D, DF, CF, CI, DI, and CIF; $Q^{9}$ and $Q^{\circ}$ are on the front scale DF, and back D scale; e is on $L L_{2}$ and $L L_{3}$
Curs
-SEE THE NOTE AT END OF THIS LISTING REGARDING THE RELAY / RICOH SLIDE RULES.
87RELAY (Japan San - Ai Group) No. $157 \quad 25 \mathrm{~cm}$.; Plastic face on laminated wood ; Cursor not framer
Front scales: $\|\mathrm{Sr}, \mathrm{S} \theta, \mathrm{P}, \mathrm{P}\| \mathrm{Q}, \mathrm{CF}, \mathrm{CI}, \mathrm{C}\left\|\mathrm{D}, \mathrm{DF}, \mathrm{LL}_{2}, \mathrm{LL}_{3}\right\| \quad$ Back scales: $\|\mathrm{Sh} 2, \mathrm{Sh} 1, \mathrm{~A}\| \mathrm{B}, \mathrm{K}, \mathrm{Th}, \mathrm{C} \| \mathrm{D}, \mathrm{Tr} 1, \mathrm{Tr} 2, \mathrm{db}$
Gauge Marks on scales: $\pi$ is on A, B, C, D, CF,and DF; M is on A and B; C and C1 are on C and $\mathrm{D} ; \pi / 4$ is on the $\mathrm{A} \& \mathrm{~B}$ scales; e is on $\mathrm{LL}_{2}$ and $\mathrm{LL}_{3}$. . Cursi
88aRELAY (Japan San - Ai Group) No. $158 \quad 25 \mathrm{~cm}$.; Plastic face on laminated wood ; Cursor not frames

Gauge Marks on scales: $\pi$ is on A, C, and $\mathrm{D} ; 2 \pi$ is on C and $\mathrm{D} ; \mathrm{C} 1$ is on C and D ; Marks $f, \rho^{\prime}, \rho^{\prime \prime}$ and $\rho^{0}$ are on C and $\mathrm{D} ; \pi / 2$ is on Y ; e is on LL2 and LL3. Cursi
88bRELAY (Japan San - Ai Group) Model No. De $1008 \quad$ Similar to No. 158 (see 1957 Catalog)
Front scales: $\left\|\mathrm{Sh}_{2}, \mathrm{Sh}_{1}, \mathrm{Th}, \mathrm{A}\right\| \mathrm{BI}, \mathrm{S}, \mathrm{T}, \mathrm{CI}, \mathrm{C}\left\|\mathrm{D}, \mathrm{DI}^{2} \mathrm{LL}_{3}, \mathrm{LL}_{2}, \mathrm{LL}_{1}\right\| \quad$ Back Scales: \| $\mathrm{X}_{2}, \mathrm{X}_{1}, \mathrm{P}_{2}, \mathrm{P}_{1}\left\|\mathrm{Q}, \mathrm{Y}, \mathrm{L},{ }_{\mathrm{L}} \mathrm{X}, \mathrm{I}\right\| \mathrm{I},{ }_{\mathrm{L}} \theta_{1}$ d
Do not have a picture or manual for this slide rule. Hopp does not list it. Need complete information: listing of details of dimensions, physical appearance, scales, gauge marks,cursol
89RICOH (Japan San - Ai Group) No. $157 \quad 25 \mathrm{~cm}$.; Plastic face on laminated wood ; Cursor not framer
Front scales: || Sr, S $\theta$, P’, P || Q, CF, CI, C || D, DF, LL2, LL3 \| Back scales: || Sh2, Sh1, A || B, K, Th, C || D, Tr1, Tr2, db
Gauge Marks on scales: $\pi$ is on A, B, C, D, CF, and DF; M is on A and B; C and C1 are on C and D; $\pi / 4$ is on the $\mathrm{A} \& \mathrm{~B}$ scales; e is on $\mathrm{LL}_{2}$ and $\mathrm{LL}_{3}$. Cursi
90RICOH (Japan San - Ai Group) No. 158
Front scales: $\left\|\mathrm{Sh}_{2}, \mathrm{Sh}_{1}, \mathrm{Th}, \mathrm{A}\right\| \mathrm{BI}, \mathrm{S}, \mathrm{T}, \mathrm{CI}, \mathrm{C}\left\|\mathrm{D}, \mathrm{DI}, \mathrm{LL}_{3}, \mathrm{LL}_{2}, \mathrm{LL}_{1}\right\| \quad$ Back Scales: \| $\mathrm{X}_{2}, \mathrm{X}_{1}, \mathrm{P}_{2}, \mathrm{P}_{1}\left\|\mathrm{Q}, \mathrm{Y}, \mathrm{L},{ }_{\mathrm{L}} \mathrm{X}, \mathrm{I}\right\| \mathrm{I}, \mathrm{L} \theta_{1}$ d
Do not have a picture or manual for this slide rule. Hopp does not list it. Need complete information: listing of details of dimensions, physical appearance, scales, gauge marks,cursol
91RICOH (Japan San - Ai Group) Model No. $159 \quad$ Have manual copy from Scott Pawelka, but it does not hav
Front scales: || LL-1, LL-2, LL-3, A || B, BI, CI, C || D, LL ${ }_{3}, L L_{2}, L_{1}| |$
Back scales: \| $\mathrm{Sh}_{1}, \mathrm{Sh}_{2}, \mathrm{P}_{2}, \mathrm{P}_{1}\|\mathrm{Q}, \mathrm{Sr}, \mathrm{S} \theta, \mathrm{Th}, \mathrm{C}\| \mathrm{D}, \mathrm{T}_{2}$,

Do not have a picture or manual for this slide rule. Hopp does not list it. Need complete information: listing of details of dimensions, physical appearance, scales, gauge marks, cursol


93RUYI (Chinese Shanghai) Model No. 6201 Seems to be the same as SIDA Model 6201
Do not have a picture or manual for this slide rule. Hopp does not list it. Need complete information: listing of details of dimensions, physical appearance, scales, gauge marks, cursol 94SCIENTIFIC INSTRUMENT COMPANY (SIC) (USA) Electro-Vector Log-Log No. $1570 \quad 25 \mathrm{~cm}$.; Plastic face on laminated wood ; Cursor not framer
Front scales: $\|\mathrm{Sr}, \mathrm{S} \theta \& \mathrm{~S} \theta, \mathrm{P} ’, \mathrm{P}\| \mathrm{Q}, \mathrm{CF}, \mathrm{CI}, \mathrm{C}\left\|\mathrm{D}, \mathrm{DF}, \mathrm{LL}_{2}, L_{2}\right\| \|$ Back scales: $\|\mathrm{Sh} 2, \mathrm{Sh} 1, \mathrm{~A}\| \mathrm{B}, \mathrm{K}, \mathrm{Th}, \mathrm{C} \| \mathrm{D}, \mathrm{Tr} 1, \mathrm{Tr} 2, \mathrm{db}$

Gauge Marks on scales: $\pi$ is on $\mathrm{A}, \mathrm{B}, \mathrm{C}, \mathrm{D}, \mathrm{CF}$, and DF; M is on A and $\mathrm{B} ; \mathrm{C}$ and C 1 are on C and $\mathrm{D} ; \pi / 4$ is on the $\mathrm{A} \& \mathrm{~B}_{\text {scales; }}$ e is on $L_{2}$ and $L_{3}$. $\quad$ Cursor Front and
95SCIENTIFIC INSTRUMENT COMPANY (SIC) (USA) Vector Log-Log No. $1580 \quad 25 \mathrm{~cm}$.; Plastic face on laminated wood ; Cursor not framer
Front scales: $\left\|\mathrm{Sh}_{2}, \mathrm{Sh}_{1}, \mathrm{Th}, \mathrm{A}\right\| \mathrm{BI}, \mathrm{S} \& \mathrm{~S}, \mathrm{~T} \& \mathrm{~T}, \mathrm{CI}, \mathrm{C}\left\|\mathrm{D}, \mathrm{DI}, \mathrm{LL}_{3}, \mathrm{LL}_{2}, \mathrm{LL}_{1}\right\| \quad$ Back Scales: \| $\mathrm{X}_{2}, \mathrm{X}_{1}, \mathrm{P}_{2}, \mathrm{P}_{1}\left\|\mathrm{Q}, \mathrm{Y}, \mathrm{L},{ }_{L} \mathrm{X}, \mathrm{I}\right\| \mathrm{I}, \mathrm{L}_{1} \&$
Gauge Marks on scales: $\pi$ is on $A, C$, and $D ; 2 \pi$ is on $C$ and $D ; C 1$ is on $C$ and $D$; Marks $f, \rho^{\prime}, \rho^{\prime \prime}$ and $\rho^{0}$ are on C and $D$; $\pi / 2$ is on Y; e is on LL2 and LL3; to the far left of the LL
Cursor Front and Back: has no gauge marks; however the scale names are imprinted on the cursor on the left hand of each side, and each of the ranges of the S, T, CI, LL1, LL2, a

| 96aSHANGHAI (China) | Model No. 1002 | There is no name on th | le, only the number 1002. | Seems to be the sal |
| :---: | :---: | :---: | :---: | :---: |
| 96bSHANGHAI (China) | Electricians Slide Rule No. 1018 |  | Source: Hopp page 218. | Same as Flying Fis |
| 97SHANGHAI (China) | Model No. 5891 |  | This has same scales as K\&E 4083-3 (1955 Model) See li: |  |
| Do not have a picture or manual for this slide rule. Hopp does not list it. Need complete information: listing of details of dimensions, physical appearance, scales, gauge marks, cursol |  |  |  |  |
| 98SIDA (China) | Model $\mathbf{N o} 1$ | Source: Hopp page 218 | 25 cm .; Plastic, Cursor is | djustable metal bra |
| Front scales: \|| L, LL1, D |  |  | Back scales: \|| LL0, LL00, | ST, S\&S \|| D, Th, |
| Need complete information | auge marks an |  |  |  |

99SIDA (China) Model No. $1002 \quad 25 \mathrm{~cm}$.; Plastic, Cursor is not framed. Adjustable metal bra,
Front scales: || Ln1I, Ln2I, Ln3I, DF \| CF, CIF, H2, H3, CI, C \| D, Ln3, Ln2, Ln1\| CF is folded at $\sqrt{ } 10 \quad$ Back scales: \| sh2, sh3, K, A \| B, sin2cos2, H'2, tg2ctg2
Gauge Marks on scales: $\pi$ is on A, B, C, D, and DF. Marks $1^{\circ}$ and R are on back scales C and D; $\pi / 4$ is on A and B; v is on K. Cursor Front: no lines. Cursor Back: has

| 100a SIDA (China) | Model No. 1009 |
| :--- | :---: |
| 100b SIDA (China) | Model No. 1012 |
|  | Same as Flying Fish 1009 |

Do not have a picture or manual for this slide rule. Hopp does not list it. Need complete information: listing of details of dimensions, physical appearance, scales, gauge marks, cursol
101SIDA (China) Model No. $1015 \quad 25 \mathrm{~cm}$.; Plastic; Cursor is not framed. Has fixed plastic enc
Front scales: $\|$ LL/1, LL/2, LL/3, DF \| CF, CIF, H, CI, C \| D, LL3, LL2, LL1 \| $\quad$ CF is folded at $\sqrt{ } 10 \quad$ Back scales: \| Sh2, Sh1, K, A $\|$ B, T\&T, ST, S\&S, C \| D,
Gauge Marks on scales: $\pi$ is on A, B, C, D, and DF.

102SIDA (China) Model No. 1015-1 $\quad 25 \mathrm{~cm}$.; Plastic; Cursor is not framed. Has fixed plastic enc
Front scales: $\|L L / 1, L L / 2, L L / 3, D F\|$ CF, CIF, H, CI, C $\|$ D, LL3, LL2, LL1 $\| \quad$ CF is folded at $\sqrt{ } 10 \quad$ Back scales: $\|$ Sh2, Sh1, K, A $\|$ B, T\&T, ST, S\&S, C $\|$ D,

Gauge Marks on scales: $\pi$ is on A, B, C, D, and DF. Cursor Front: no lines. Cursor Back: has
103a SIDA (China) Model No. $1083 \quad 25 \mathrm{~cm}$.; Plastic face on laminated wood; Cursor is framed.
Front scales: || L, LL1, DF \| CF, CIF, CI, C \| D, LL3, LL2 \| Back scales: || LL0, LL00, A || B, T\&T, ST, S\&S || D, Th,

Gauge Marks on scales: $\pi$ is on A, B, CF and DF; $\pi / 4$ is on A \& B; marks $1^{\circ}$, ' and " are on ST. Curs
103b SIDA (China) Model No. $5810 \quad 25 \mathrm{~cm}$; Plastic face on wood ;Cursor is not framed; Adjusta

Front scales: || LL1I, LL2I, LL3I, DF \| CF, CIF, H, CI, C \| D, LL3, LL2, LL1\| $\| \quad$ CF and DF are folded at $\sqrt{ } 10$ Back scales: || Th, L, K, A \| B, S\&S, H', T\&T, C \| D, DI,
Gauge Marks on scales: $\pi$ is on A, B, C, D, and DF; $1^{\circ}$ and R are on A, B, and C. $\quad$ Cursi
104SIDA (China) Model No. $6171 \quad 25 \mathrm{~cm}$.; Plastic; Cursor is not framed. Adjustable metal bra
Front scales: || Ln1I, Ln2I, Ln3I, DF \| CF, CIF, H2, H3, CI, C \| D, Ln3, Ln2, Ln1\| CF is folded at $\sqrt{ } 10 \quad$ Back scales: \| sh2, sh3, K, A \| B, sin $2 \cos 2, H^{\prime} 2, \operatorname{tg} 2 \mathrm{ctg} 2$
Gauge Marks on scales: $\pi$ is on A, B, C, D, and DF; $1^{\circ}$ and R are on C\&D. Similar to SIDA 1002. Cursor Front: has HP(**) lin.
105SIDA (China) Model No. $6201 \quad 25 \mathrm{~cm}$.; Plastic on laminated wood; Cursor is framed. Adju
Front scales: $\|\mathrm{L}, \mathrm{K}, \mathrm{A}\| \mathrm{B}, \mathrm{T} \& T, \mathrm{ST}, \mathrm{S} \& \mathrm{~S}, \mathrm{C}\|\mathrm{D}, \mathrm{Sh} 2, \mathrm{Sh} 1, \mathrm{Th}\| \quad$ Back scales: $\|$ LLo1, LLo2, LLo3, DF $\|$ CF, CIF, CI, C $\|$ ]
Gauge Marks on scales: $\pi$ is on A, B, C, D, CI, CF and DF; $\pi / 4$ is on A \& B; c is on C; marks $1^{\circ}$, ' and " are on ST
-SUN (Japan) (for Cross Reference See HEMMI)

| 106U. S. BLUEPRINT (USA/HEMMI) | No. 1893 Duplex Slide Rule (For Electric Engineer) |
| :--- | :--- |

Do not have a picture or manual for this slide rule. Hopp does not list it. Need complete information: listing of details of dimensions, physical appearance, scales, gauge marks,curso
108XUESH (China) $6171 \quad 25 \mathrm{~cm}$.; Plastic on laminated wood; Cursor is not framed. $A$
Front scales: $\|\lg \ln 1 I, \lg \ln 2 I, \lg \ln 3 \mathrm{I}, \mathrm{DF}\| \mathrm{CF}, \mathrm{CIF}, \mathrm{H} 1, \mathrm{H} 2, \mathrm{CI}, \mathrm{C}\|\mathrm{D}, \lg \ln 3, \lg \ln 2, \lg \ln 1\| \mathrm{CF}$ is folded at $\sqrt{ } 10 \quad$ Back scales: $\|$ sh1, sh2, K, A $\| \mathrm{B}, \sin \& \sin , \mathrm{H} 1 \operatorname{tg} 1 \& \operatorname{tg} 1$,
Gauge Marks on scales: $\pi$ is on A, B, C, D, and DF; $\pi / 4$ is on $A \& B ; 1^{\circ}$ and R are on front C\&D; vis on K; CF and DF are folded at $\sqrt{ } 10$ on right side. $\quad$ Cursi
109XUESHI (China) $\quad \mathbf{1 5 7 2 - K 3} \quad$ (Maybe XUESH, see above) 25 cm .; Plastic on laminated wood; Cursor is framed. Adju
Front scales: || LL02, LL03, DF || CF, CIF, CI, C || D, LL3, LL2 \| Back scales: || Sh1, Sh2, Th, A || B, T, SRT, S || D, DI, LI
Gauge Marks on scales: $\pi$ is on CF and DF.
Cursi

## NOTES:

On this list the "Front" of the slide rule is where the Name and Number are most prominently displayed. The "Front Cursor" is also on this side. There are exceptions, such as w other. On some, where I had a copy of the instruction manual available, it said what was Front and Back. Where there are two entries such as "S \& S" it denotes there are Black and actually two scales. Usually one being the complement of the other. As examples, in the case of "S \& S" the degrees are shown as 1080 , and 70 20, etc. At least one rule has Black are in black where I do not own or have a color picture of the slide rule.

The CF and DF scales are all folded at $\pi$, unless noted that they are folded at $\sqrt{10}$, or other value.

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The values of the symbols and gauge marks on the slide rule scales and on the cursors are as follows: (Note: Do not be confused as some marks look similar
Note: Not all gauge marks could be identified. Instead, where a mark is unknown, a numerical value is shown
\(\pi=3.14159\)
\(\pi / 4=0.7854 \quad\) This is to aid in finding the area of a circle by the formula; \(A=\pi D^{2} / 4\)
\(\mathrm{v}=\pi / 6=0.5236\) This mark is on K scale and is used for calculating volume of sphere where \(\mathrm{V}=(\pi / 6) \mathrm{D}^{3}\)
R or \(\rho^{o}\) or \(\rho=180 / \pi=57.2958^{\circ}\) (the degrees in one radian)
\(\mathrm{M}=1 / \pi=0.3183\), or \(100 / \pi=31.83\)
C or \(\mathrm{C}^{\prime}=4 / \pi=1.273\)
c or \(C=(\sqrt{ } 4 / \pi)=1.128\)
\(C 1=(\sqrt{ } 40 / \pi)=3.568\)
Marks for small angle calculations are usually on ST and read on C: \(\quad 1^{0}=1.745 * 10^{-2}=\pi / 180\); The sine of one minute is \(=2.909 * 10^{-4}\); the sine of one second is \(=4.8\).
' or \(\rho^{\prime}\) or \(9^{\prime}\) or \(\delta^{\prime}\) or \(\zeta^{\prime}\) or \(\mathrm{Q}^{\prime}=\) minutes in a radian \(=3437.74=(180 \times 60) / \pi \quad\) If the mark ' is \(=1.970\), it is \(=206,265 *(180 / \pi) / 60=1.97 * 10^{5} \mathrm{Wher}\)
" or \(\rho\) " or \(9^{\prime \prime}\) or \(\delta^{\prime \prime}\) or \(\zeta^{\prime \prime}\) or \(\mathrm{Q}^{\prime \prime}=\) seconds in a radian \(=206,265=(180 \times 60 \times 60) / \pi \quad\) If the mark "is \(=1.182\), it is \(=206,265 *(180 / \pi)=1.182 * 10{ }^{7} ;\) Wher
\(\rho^{\prime \prime}\) or \(\delta 2\) or \(\zeta 2\) or Q2 \(=\) seconds in a radian \((\) French decimal system 400\()=636,620=(200 \times 100 \times 100) / \pi\)
KW or kW stands for Kilowatts. HP(*) stands for Horsepower in U.S. and Great Britain. HP(**) for Horsepower in Continental Europe
\(\operatorname{HP}\left(^{*}\right)\) (value for this mark is \(=1.341\) ). Conversions are: Kilowatts \((K W)\) times \(1.341=H P(*)\); Ergs per Second times 1.341 times \(10^{-10}=\operatorname{HP}(*)\).
\(\mathrm{HP}\left({ }^{* *}\right)(\) value for this mark is \(=1.358)\) for HP metric.
PS1 \(=\) factor is 1.33413
PS2 \(=\) factor is 1.3599 (this is for HP metric)
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SOURCES OF INFORMATION AND ACKNOWLEDGEMENTS (These are shown on the far right of the individual slide rule listing, and others are no D.D. - David Davis - from his web site of the "Relay/Ricoh Archive" listing of slide rules.
clara.co - from Ron Manley's web site, "www.sliderules.clara.co.uk".
eBay - from pictures and listings of slide rules on eBay.
Fahey - John Fahey - from pictures he furnished to me on the Eckel Circular side rule.
HVH - many of the listings were checked to Herman Van Herwijnen's listing of slide rules on his CD's. These many cross-checks are not listed. However, Herman's immense contil
Holland \& D.v.J. - from Peter Holland and Dieter von Jezierski - email pictures, and copies of the translation of the manual by Dieter, of the Faber-Castell 989.
JOS - The Journal of the Oughtred Society, and JOS PLUS is on the OS web site.
J. R. G. - from information sent to me by Joäo Roberto Gabbardo on the Archimedes slide rule.

MOL - Michael O'Leary and Clark McCoy- from email pictures Michael sent the Author on K\&E and Pickett slide rules; and from Clark's web site on K\&E slide rules and catalogs.
P. Ross - Paul Ross - from his Article in Spring 2003, Journal of the Oughtred Society;"A Comprehensive Hemmi Slide Rule Catalog".

PMH - from Peter M. Hopp's, book, "SLIDE RULES Their History, Models, and Makers", Astragal Press, 1999.
PVM - from Pierre Vander Meulen's article on "Hyperbolic Functions on Slide Rules and Civil Engineering Applications", Autumn 2001 issue of the "Slide Rule GAZETTE" (UK);
R. H. - from information sent to me by Richard Smith Hughes about the slide rules in his collection.
R. S. - Rodger Shepherd - from articles he sent to me on the Blanc and Pletts slide rules.
S. T. - from scans and information sent to me by Steve Treadwell on the Lutz No. 300 B

SPHERE - Sphere Research, "Slide Rule Universe"- from pictures on their web site.
WKR - from the Author's collection of slide rules.
For corrections and additions to the listing email: wrobinson62@cox.net
WKRM - from the Author's collection of instruction manuals.

## NOTE: ON THE SLIDE RULES DESIGNED BY F. BLANC AND J. ST. VINCENT PLETTS:

My JOS article on hyperbolic slide rules was completed for printing a few weeks before the above listing was prepared to go on the JOS web site. In the interim perio came upon an article that is of real interest. It is something that would have been nice to know ahead of time so that it could have been included in my JOS article. It i In JOS Vol. 4, No. 2, Rodger Shepherd presented a description of a slide rule designed in 1890 by F. Blanc. This slide rule was the first design to show a way to obtain information on this slide rule was furnished in a letter submitted by Dr. Gunter Kugel. Although Blanc's slide rule did not have actual hyberbolic scales it did have mar made, the values of Sinh and Cosh could be obtained. This slide rule is a major historical landmark in the history of hyperbolic rules, but unforunately no picture of it : it was not issued and the slide rule was never manufactured. Peter Holland, in response to my questions for information, contacted Dr. Kugel, who said that he tried to It seems the slide rule, if completed, would have been at least one and a half meters long. Also, a circular version may have been completed at the University of Frank! and a picture, if possible.
After reading about the Blanc slide rule I contacted Rodger Shepherd, the author of the JOS Vol. 4, No. 2 article. He has been very helpful in sending me additional arti me is copy of a paper from Vol. 33, Part 2, of the Proceedings of The Physical Society of London, dated February 15, 1921. The title of this paper was Some Slide Rule important as it seems to be the first to show a picture of a slide rule with hyperbolic scales. It also predates Puchstein's patent application, dated May 12,1921 (that res proximity of dates appears to be just a coincidence as there is just no resemblance betwween the pictures of the scale layouts on the Pletts' and Puchstein's slide rules.
Although Blanc's and Pletts' slide rule designs predated Puchstein's we need to keep in mind that the K\&E 4093-3 was the first hyperbolic slide rule to be actually mar

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## DNOTE: ON HEMMI SLIDE RULES WITH HYPERBOLIC SCALES:

Details on Hemmi slide rules are listed in Paul Ross's article, A Comprehensive Hemmi Slide Rule Catalog, in JOS, Vol 12, No1, Spring 2003. I added a number of sl After World War II the Hemmi slide rule models that were produced were inscribed with the words, "Made In Occupied Japan". Also, some sold in the Phillipines had I checked a few rules that were inscribed with these extra labels against those that were not inscribed, and I could find no differences to report between the details on th Information on the POST slide rules, that were made by Hemmi, was taken from the tables in the article by Paul Ross and Ted Hume, Slide Rules of the Frederick Post

## - NOTE: ON K\&E SLIDE RULES WITH HYPERBOLIC SCALES:

The initial source of the K\&E slide rules that are listed was Michael O'leary's, Keuffel and Esser Slide Rule Master Cross Reference (K\&E XREF) list that he emailed tu McCoy's and Michael's web site showing dates and scans of many of the K\&E Catalog pages. I checked the slide rules in my collection to these two sources, and adde an Article, On the Evolution of $K \& E$ Vector Slide Rules, in JOS, Vol. 14, No.1, Spring 2005. He reviewed my list and I have made corrections from the comments and

## - NOTE: ON PICKETT AND ECKEL SLIDE RULES WITH HYPERBOLIC SCALES:

In July 2002 Michael O'leary emailed me a listing he had of the various Pickett Model 4 slide rules. One year later, July 2003, he sent detailed photographs he had takt comprehensive information from Michael was combined with the details shown on the Author's slide rules in order to complete the Pickett listing. Please review the confused in trying to sort out the different changes of Logos and Name descriptions on what appeared to be identical scale layouts. Some changes have been picke in the change to ES \& T models the three cube root scales were retained, but two of the cube root scales were placed together, top and bottom on the same scale. So same for the two square root scales that were combined on top and bottom so that they were shown together on one scale. Also the eight N scales were all redesigna were then combined into four scales so that they were shown together on one scale. Also, the eight N scales were all redesignated as LL scales. The eight LL scales ( + After these changes, other modifications were the addition of a L scale, and then later a Ln scale was added. Other hard to follow changes were additions at times to th variations have been listed. Also, around 1949, it seems there was a move from Chicago to Alhambra, CA. Most rules seen said Chicago on them, but there was one w

## DNOTE: ON RELAY / RICOH SLIDE RULES WITH HYPERBOLIC SCALES:

Most of the following information has been taken from David Davis' "Relay / Ricoh Archive" web site. This is found under: www. geocities.com/usra $482 \mathrm{~b} / \mathrm{index} . \mathrm{html}$ The history of these slide rules started with the Nippon Slide Rule Company that distributed under the name "Nikkei". This Company later became San-ai, and adoptec again changed names to San-ai Keiki Co. Ltd., the brand name became "Ricoh". The Relay/Ricoh slide rules were Rebranded, and the same slide rule layouts were sc Companies were in the United States. The Relay / Ricoh and the Rebranded slide rules with hyperbolic scales were as follows: Relay 157; Ricoh 157; Alvin 1157; Co Lafayette 99-71029; Micronta 157; Scientific Instrument Company (SIC) 1570. More advanced slide rules with hyperbolic and special scales were: Relay 158; Relay layout of the scales and other features of the slide rules following the above listed Relay 157, and Relay 158, are identical for practical purposes. The only exception, i of the other brands have a model 159. If someone knows of other 159 models, please let me know.
[1]
jrobinson:
[2]
jrobinson:
[3]
jrobinson:
[4]
jrobinson:


[^0]:    -NOTE: ON THE CHINESE SLIDE RULES WITH HYPERBOLIC SCALES:
    In the listing above there are duplicates because of the confusion of the different manufacturers names. Such as those under the names of $C H I N A S H A N G H A I ~ a n d ~ S H F ~$ There are many Chinese slide rules and I expect more will be found and added to the list as time goes by. Fortunately some of my confusion in how to list these has be dealer, who lives in Beijing. He informed me that the SIDA company was formed in the 1930's. Then later in the 1960's united into the Shang Hai factory. He says sli are the same maker, and that Flying Fish and Ruyi are Trademarks.. Also, where the slide rule numbers are the same the scales are the same layout. For example, the F and Shanghai (SHANG HAI) rules with the same number of 1015. I know his comment to be true for some of the names, but as I only have a few of each of the vario Also, this information only covers one manufacturer. What is the story about the other makers such as Ding Feng, Haiou Pai, Hangzhou, Hua Fang, Jang, Xuesh and ur If you know of Chinese slide rules that need to be added, or you see something on the list that needs correction, please send me the details. Pictures front and back and Since the above note was written an article on Chinese slide rules, written by Richard Smith Hughes and myself, has been published in the JOS Vol. 14, No 2; and a lis The listing on the JOS Plus web site (of Chinese slide rules with hyperbolic scales (Vectors)) will be updated from time-to-time by Richard and myself as new informat

[^1]:    - NOTE: ON DIETZGEN SLIDE RULES WITH HYPERBOLIC SCALES:

    JOS, Vol 5, No 2 has a number of articles on the history of The Dietzgen Company and its slide rules. This JOS Volume also contains a four page insert by Bruce Babc slide rule model numbers and the years they were listed in the catalogs. From 1897 to 1972

