WATER EXPERIMENTS

XXV

D = 29 In., Load = 254 C_H' lbs.

	T = 0.10 Sec.				T = 0.43 Sec.				T = 0.77 Sec.				T = 1.10 Sec.			
A, inches	.0125	.024	.036	.0525	.225	.33	.54	.758	.51	.96	1.645	2.05	1.035	2.00	2.705	3.13
$\alpha_{har.}$, % g	13.0	24.5	36.7	53.6	12.4	18.3	29.7	41.8	8.8	16.5	28.3	35.2	8.7	16.7	22.9	26.9
$\alpha_{max.}$, % g	"	"	"	"	16.7	24.7	43.4	55.5	21.1	37.6	68.0	84.5	30.0	58.3	78.5	91.0

XXVI

D = 25 In., Load = 401 C_H' lbs.

	T = 0.10 Sec.				T = 0.43 Sec.				T = 0.78 Sec.				T = 1.10 Sec.			
A, inches	.013	.024	.0355	.052	.20	.32	.50	.67	.42	.805	1.61	1.995	.80	1.50	2.19	2.65
$\alpha_{har.}$, % g	13.2	24.2	36.2	52.8	11.1	17.1	27.1	37.1	9.1	15.2	27.0	33.5	6.7	12.1	18.5	22.4
$\alpha_{max.}$	"	"	"	"	15.0	23.2	37.4	50.1	17.3	37.4	64.5	92.5	23.1	43.9	63.8	77.3

XXVII

D = 30 In., Load = 597 C_H' lbs.

	T = 0.10 Sec.				T = 0.43 Sec.				T = 0.79 Sec.				T = 1.10 Sec.			
A, inches	.013	.023	.035	.051	.20	.31	.49	.66	.435	.91	1.565	1.965	.79	1.48	2.16	2.65
$\alpha_{har.}$, % g	13.0	23.5	35.6	52.2	11.0	17.1	27.1	36.3	7.0	14.7	23.6	32.2	6.7	12.5	18.3	22.4
$\alpha_{max.}$	"	"	"	"	14.9	23.1	36.6	49.3	17.4	37.1	63.7	80.1	23.1	43.2	63.2	77.3

XXVIII

D = 35 In., Load = 786 C_H' lbs.

	T = 0.10 Sec.				T = 0.44 Sec.				T = 0.80 Sec.				T = 1.10 Sec.			
A, inches	.011	.0195	.031	.047	.185	.32	.51	.703	.435	.89	1.525	1.73	.76	1.42	2.14	2.28
$\alpha_{har.}$, % g	11.0	19.9	31.4	48.2	9.8	16.8	26.6	37.2	6.9	14.2	24.2	27.5	6.4	12.9	18.1	21.8
$\alpha_{max.}$	"	"	"	"	13.7	23.4	37.4	52.1	17.3	35.6	60.7	69.0	22.2	41.5	62.6	78.5

XXIX

D_1 = 35 In.
D_2 = 20 In.
Load = 786 C_H' lbs.

	T = 0.10 Sec.				T = 0.46 Sec.				T = 0.80 Sec.				T = 1.11 Sec.			
A, inches	.0135	.0255	.0405	.055	.21	.345	.565	.735	.43	.82	1.33	1.63	.71	1.31	2.00	2.40
$\alpha_{har.}$, % g.	13.8	25.3	41.4	56.1	10.1	16.6	27.2	35.4	6.3	13.1	21.3	26.0	5.9	10.9	16.6	19.9
$\alpha_{max.}$, % g.	"	"	"	"	14.7	24.0	39.4	51.4	16.1	33.0	53.7	65.5	20.6	38.2	58.1	69.6

XXX

D_1 & D_2 = 35 In., Load = 786 C_H' lbs.

	T = 0.11 Sec.				T = 0.43 Sec.				T = 0.81 Sec.				T = 1.14 Sec.			
A, inches	.014	.0245	.0375	.051	.19	.33	.51	.67	.39	.76	1.24	1.53	.67	1.24	1.65	2.23
$\alpha_{har.}$, % g.	11.8	20.7	31.6	43.2	8.55	14.3	22.7	29.6	5.9	12.2	19.3	23.5	5.3	9.7	14.3	19.2
$\alpha_{max.}$, % g.	"	"	"	"	12.9	21.9	34.2	44.8	15.0	31.2	48.2	60.7	19.0	34.3	51.1	64.6

C_H' = Equivalent Hydrostatic Load; d/D = Ratio of Height of Water to Diameter; C_{HE} = Ratio of Net Dynamic Load to Equivalent Hydrostatic Load; Net Dynamic Water Load Divided by Weight of Water Displaced

FIG. 18.

KEUFFEL & ESSER CO. NEW YORK

D-05