

Propeller 23





MODEL OR TEST # PROPELLER DATA

PROPELLER # 23 *made in Spanish tank.*
(used in water tunnel)

	<u>FOR MODEL</u>			<u>FOR SHIP</u>	
DIAMETER (D)	6.229	IN.	.5191	FT.	(D')
PITCH (P)	6.742	IN.	.5618	FT.	(P')
HUB DIAMETER (D)		IN.		FT.	

CONSTANTS

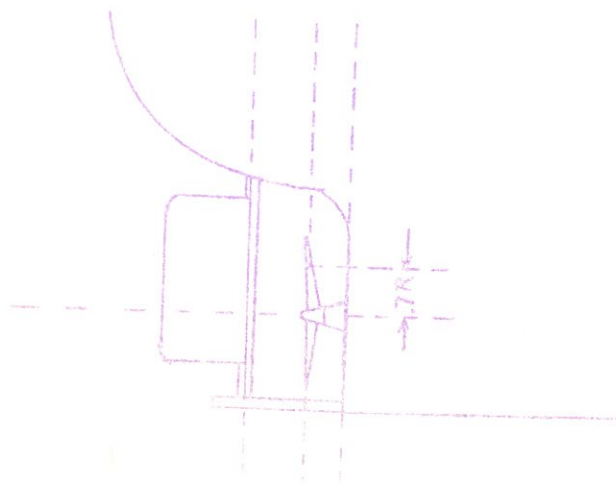
\sqrt{D} 1.926
 $\sqrt{D^4}$ 13.77
 $\sqrt{D^5}$ 26.53
 $\sqrt[5]{D^4}$
 AT 0°
 $\sqrt[5]{D^5}$
 AT 0°

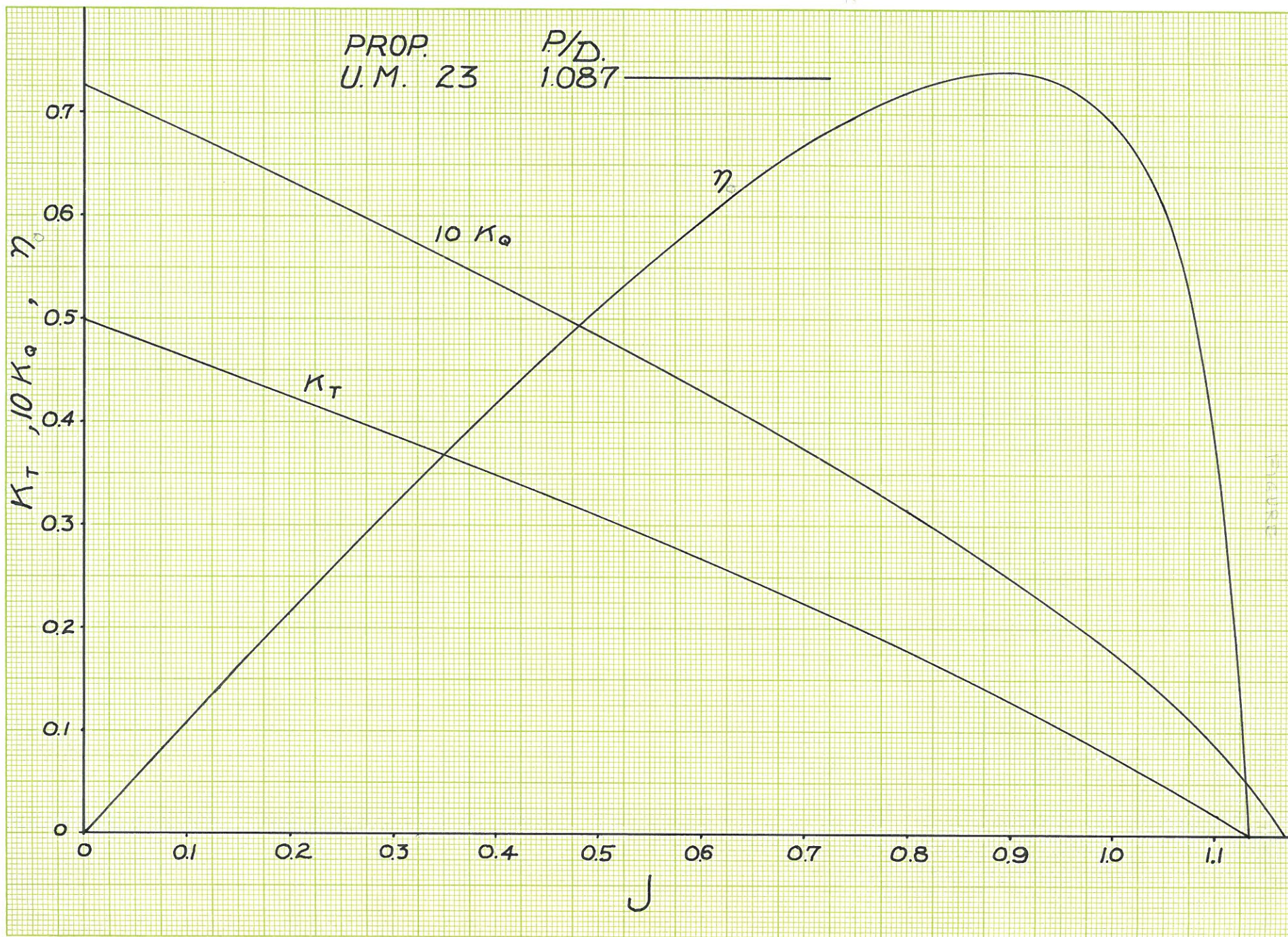
D/D

CHORD LENGTH
OF BLADE SECTION

CHARACTERISTICS

P'/D' 1.08
 MWR
 A_E/A_D .55
 BTF .045
 RAKE 6°
 # OF BLADES 4

CLEARANCES



PROPELLER DATA

PROPELLER No. 23
 $\lambda =$ _____

FOR MODELFOR SHIP

DIAMETER (d) 6.229 IN. 0.5191 FT. (D) _____ FT.

PITCH (p) 6.742 IN. 0.5618 FT. (P) _____ FT.

CONSTANTSCHARACTERISTICS

$\frac{1}{d}$ 1.926

P/d 1.0827

$\frac{1}{d^4}$ 13.77

MWR _____

E_A/D_A 0.55

$\frac{1}{d^5}$ 26.53

BTF 0.045

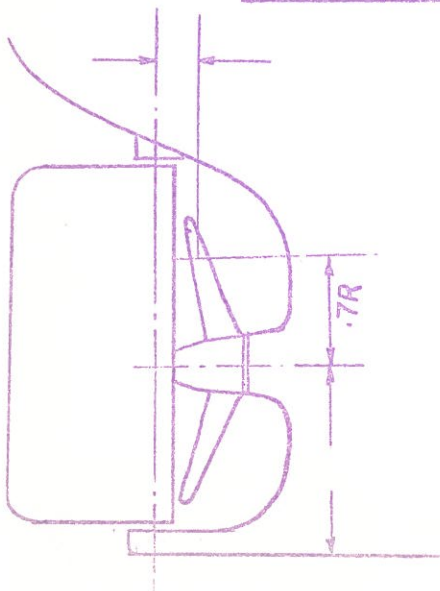
RAKE 6°

$\frac{1}{\rho_m d^4}$ 7.109
@ 66.5 °F

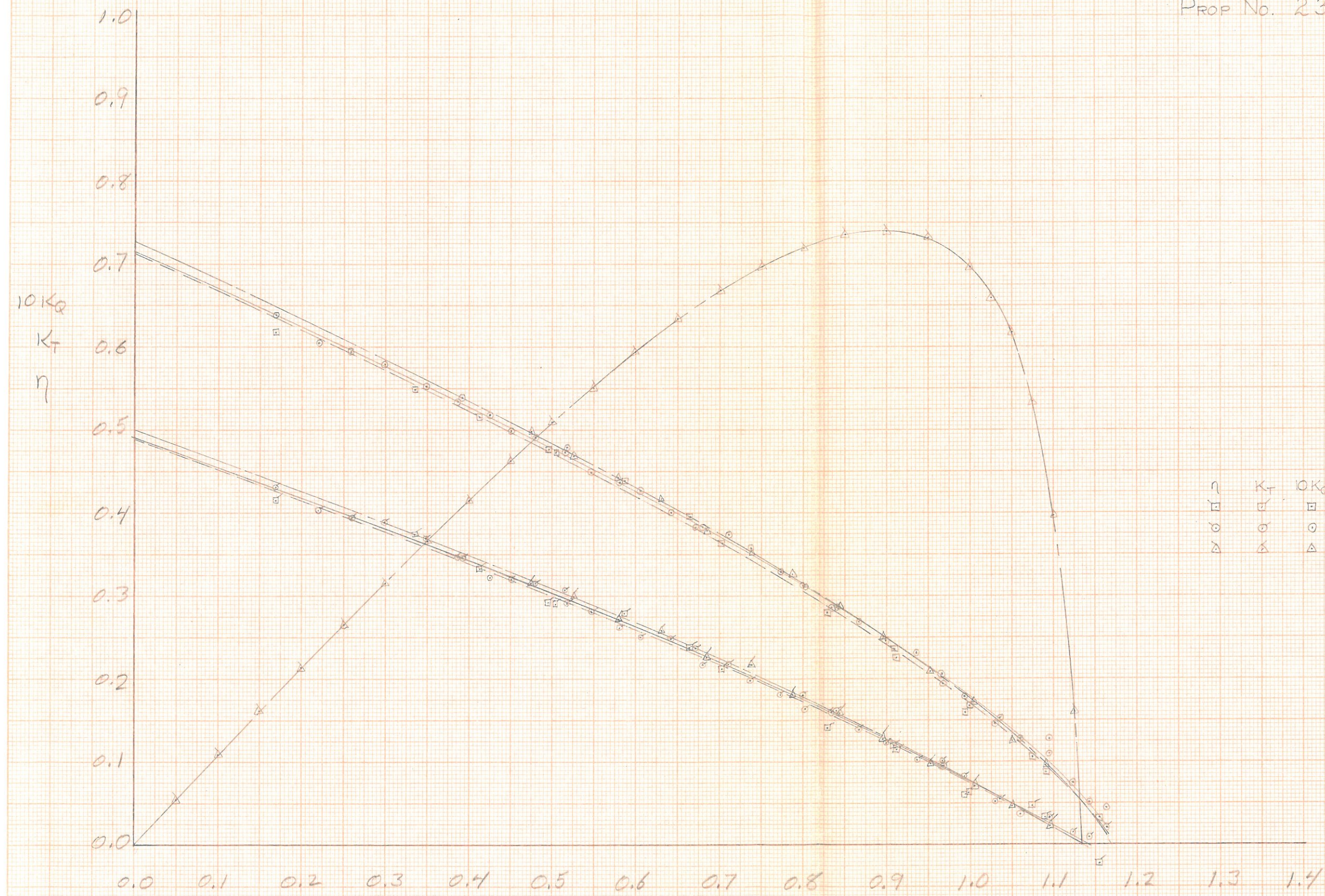
NO. OF BLADE 4

$\frac{1}{\rho_m d^5}$ 13.70
@ 66.5 °F

ρ_m @ 66.5 °F = 1.9370

CLEARANCE

PROP No. 23



η	K_T	$10KQ$	700	RPM	
\square	\circ	\triangle	900	"	
			1100	"	

$$J_A = \frac{v}{nd}$$