

N.P.G. Photo No. 28720 A

INSTRUCTIONS for use of N.P.G. Photo No. 28720 (opposite page):

A If powder index to be used is NOT listed in Column I:

- 1. Enter curves with present estimated bore enlargement and charge weight as marked on powder tank (interpolating if necessary) and obtain velocity loss.*

B If powder index to be used IS listed in Column I:

- 1. Add the charge correction given in Column II to the charge weight marked on powder tank and obtain corrected charge weight.*
- 2. Enter the curves with this corrected charge weight (interpolating if necessary) and present estimated bore enlargement and obtain velocity loss due to erosion.*
- 3. To this loss add the loss given in Column III to obtain velocity loss due to both erosion and charge weight as assembled.*

EXAMPLE:

Given Index SPDN 4103 (charge weight marked on tank 14.78 lbs) and Bore Enlargement 0".190.

- 1. Corrected charge weight is 14.78 + .15 = 14.93 lbs.*
- 2. Velocity loss due to erosion is 171 f/s.*
- 3. Total velocity loss is 171 + 21 = 192 f/s:*

I Powder Index	II Charge Correction	III Velocity Loss
0 to 4103		
4105 to 4120	0.15 lbs	+21 f/s
4122, 4123, 4331 4347, 4348		
5609 to 5616 5618	0	+6 f/s

*U.S. Naval Proving Ground
Dahlgren, Va.
December 1944*

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29 March 1945*

5-INCH 38-CALIBER GUN

OP 551 (2nd Rev.)

