Blog Entry © Friday, May 30, 2025, Ballistic Coefficient Exercises from Exterior ballistics, 1935 Written by Ernest Edward Herrmann, C/C++ Code by James Pate Williams, Jr., BA, BS, Master of Software Engineering, PhD Computer Science

Exercises 1 Page 41

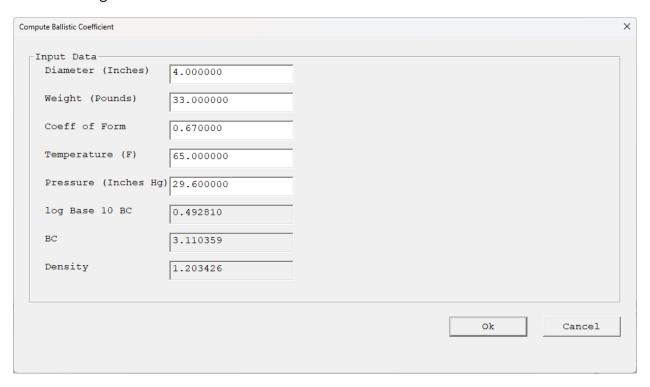
The textual hand computations are by Lieutenant Commander Ernest Edward Herrmann. Those calculations were made using logarithms and thus differ from my computer calculations. See the percentage differences at the end of the eight problems.

Problem 1 log 10 BC = 0.15710

Compute Ballistic Coefficient			X
Input Data			
Diameter (Inches)	3.000000		
Weight (Pounds)	13.000000		
Coeff of Form	1.00000		
Temperature (F)	61.000000		
Pressure (Inches Hg	29.800000		
log Base 10 BC	0.157563		
BC	1.437352		
Density	1.203426		
		Ok	Cancel

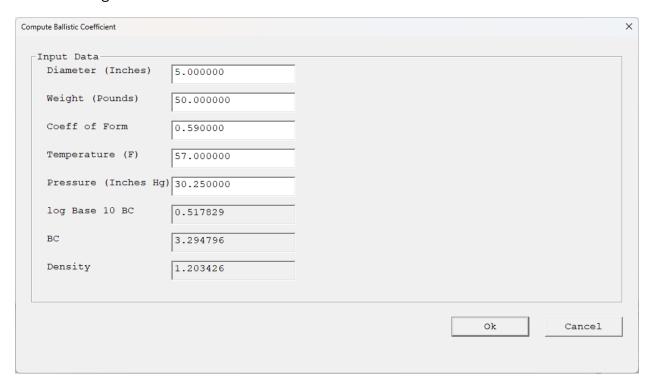
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Problem 2 log 10 BC = 0.49268



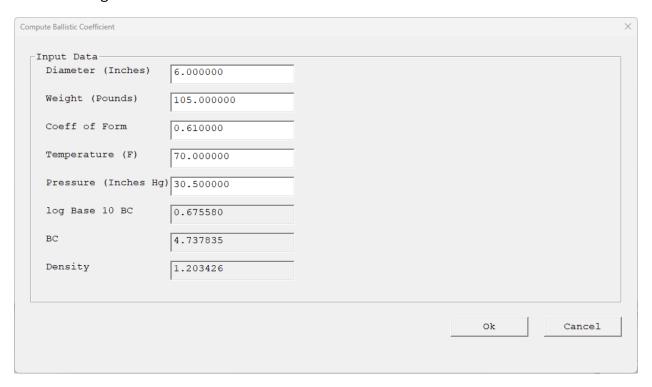
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Problem 3 log 10 BC = 0.51734



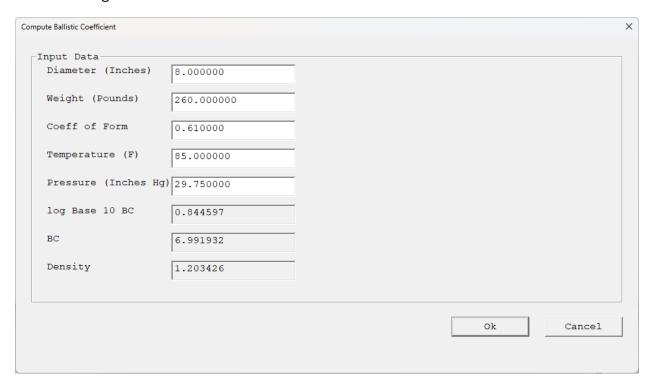
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Problem 4 log 10 BC = 0.67524



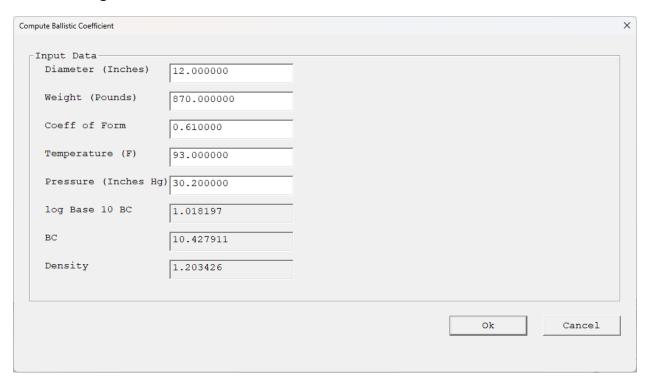
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Problem 5 log 10 BC = 0.84437



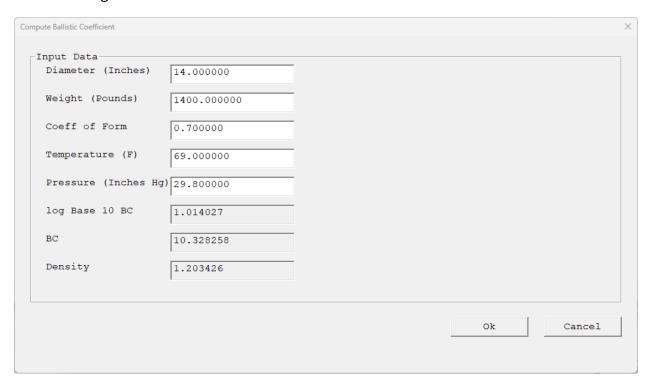
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Problem 6 log 10 BC = 1.01811



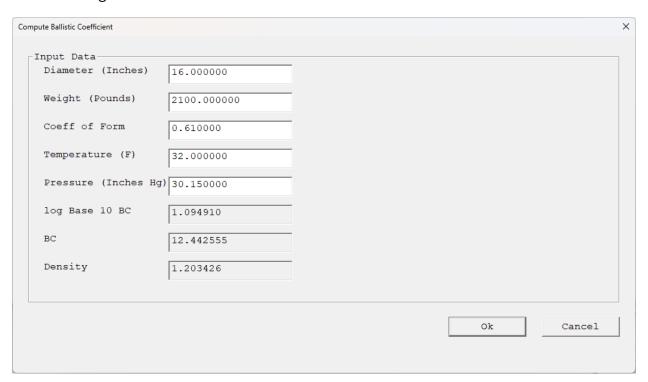
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Problem 7 log 10 BC = 1.01401



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Problem 8 log 10 BC 1.09482



Percentage Differences

Percentage Difference [1] = 0.294283%

Percentage Difference [2] = 0.026383%

Percentage Difference [3] = 0.094477%

Percentage Difference [4] = 0.050340%

Percentage Difference [5] = 0.026880%

Percentage Difference [6] = 0.008545%

Percentage Difference [7] = 0.001676%

Percentage Difference [8] = 0.008220%