

RN: _____

AB Kestrel Practical Exercise #1

1. Set up AB Kestrel as follows:

TGT

TR: 500 meters

DoF: 0 deg

Ideg: + 0 deg

WIND

WD: 12:00 clock

WS1: 0 mph

ENVIRO

Update: off

Lat: 0 deg

Temp: 59 deg F

SP: 29.92 inHg

RH: 50 %

SpnDft: No

GUN

MV: 2600 fps

DM: 175 SMK

BC: 1.000

BW: 175 gr

BD: 0.308 in

ZR: 100 m

BH: 2.50 in

ZH and ZO: 0.00 cm

RT: 1:11.00 in

Eunit and Wunit: mil

2. Go to **TGT** → **TR** → **ESTIMATE** and calculate the range in meters of an 18-inch target for the following mil measurements.

0.57 mil _____

0.65 mil _____

0.76 mil _____

1.52 mil _____

1.14 mil _____

0.91 mil _____

3. Go to **Range Card** → scroll third column to **Trce** and annotate the following trace values for the respected ranges.

300 meters _____

600 meters _____

800 meters _____

4. Go to **Ballistics** → and annotate the following.

RTrns _____ meters

RSubs _____ meters

5. Prior to mission, you want to figure out the elevation difference in mils from your cold bore MV from your average MV as inputted in question 1. Using the same conditions and target parameters as in question 1, your hold in mils for 500 meters is _____ mil. Now use a MV of 2546 fps for cold bore and with the same conditions and target parameters as in question 1. Your CB hold in mils for 500 meters is _____ mil.

6. What is the difference in mils between your average MV and your CB MV for 500 meters?
_____ mil

7. What is the difference in inches between your average MV and CB MV for 500 meters?
_____ inches

(RESET BACK TO 2600 fps AT THIS TIME)

8. You have established a firing point and have identified three TRP's within your sector. Using a 300 meter zero, what are your holds for the following ranges using the same conditions as question 1. (Set zero range to 300 m)

100 m _____ mil
200 m _____ mil
300 m _____ mil
400 m _____ mil
500 m _____ mil

TRP 1 @ 270 meters _____ mil
TRP 2 @ 186 meters _____ mil
TRP 3 @ 480 meters _____ mil

(RESET BACK TO 100 METER ZERO AT THIS TIME)

9. On infil, your suppressor's locking latch broke and now you must use it unsuppressed. During your zero confirmation prior to mission departure, you annotated that your M110 had a shift of .4 mils down at 100 meters when shooting unsuppressed. In **GUN**, what setting did you use to capture this shift? _____

What is your "suppressor off" shift equal to in cm? Include +/- in your answer. _____ cm

10. Go to **GUN** → **MV** → **Cal MV** → What is the recommended range to conduct a calibration of muzzle velocity? _____ meters

What three things must be confirmed prior to conducting a muzzle velocity calibration?

1. _____
2. _____
3. _____

SCORE: _____ / _____