DISCHARGE V 1.01

AN EXCEL MACRO TO CALCULATE STREAM DISCHARGE FROM CURRENT-METER
MEASUREMENTS USING THE 0.6D METHOD

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This macro has been protected in order to prevent inadvertent modification. The password is "Leopold".

TO ABORT PROGRAM AT ANY TIME SIMULTANEOUSLY DEPRESS THE COMMAND (CLOVERLEAF)AND PERIOD BUTTONS.

Unless otherwise indicated, clicking "CANCEL" in a dialog box will abort the program.

The program uses the following standard rating equations:

Pygmy:	$V = 0.028 + 0.977(R/T)$	English		
	$V = 0.0085 + 0.298(R/T)$	metric		
Price AA:		$V = 0.02 + 2.18(R/T)$	English	$R/T < 1.0$
	$V = 0.0061 + 0.6645(R/T)$	metric	$R/T < 1.0$	
	$V = 0.03 + 2.17(R/T)$	English	$R/T > 1.0$	
	$V = 0.0091 + 0.6614(R/T)$	metric	$R/T > 1.0$	

Rating equations are of the form: $V = a + b*(R/T)$. To use a different set of standard formulas, enter the metric and English 'a' values into macro cells B217 (pygmy), B208 (AA low range), and B212 (AA high
 range). Enter the associated 'b' values into cells B219 (pygmy), B210 (AA low), and B214 (AA high). Put AA changeover R/T value (value of R/T for switching from high to low range) in B191.

If you enter an individual rating (i.e., you don't want to use a standard rating) the program assumes you will enter the rating equation in whatever units you choose at the start.

Data required at each vertical are:

tape distance:	position on tape
D:	water depth
revs (R):	number of revolutions of meter in time interval T
time (T):	time interval in seconds over which revs were counted

Number of verticals, including LEW and REW, must be known

Enter data starting at LEW (left edge of water)

In "date of measurement", month should be abbreviated (e.g., Nov); entering a number will cause a "number is invalid" message.

To PRINT the results of an analysis, drag with the mouse to select the area of the worksheet to be printed. Choose 'Set Print Area' from the "Options" Menu. Now choose 'Page Setup' from the "File" menu and set margins, orientation of worksheet for printing, whether gridlines and column heads show, header, etc. Choose 'Print' from the "Edit" menu to print the document. Check the 'Preview' box in the Print dialog box to preview the document prior to printing.