

# Memo

Aero\_M\_PreSTo\_10-04-28.doc

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## Defined Names in Excel

PreSTo is a tool based on Excel. As it uses formulas in every cell calculation, there are two ways to write these formulas. The first one is to use the cell address. Example:

= G2 \* B3

This is the easiest way, but it is hard to understand the formula. The other way is to use defined names. Then we have for example:

= JET\_mPAX \* REQUIREMENT\_nPAX + REQUIREMENT\_mcargo

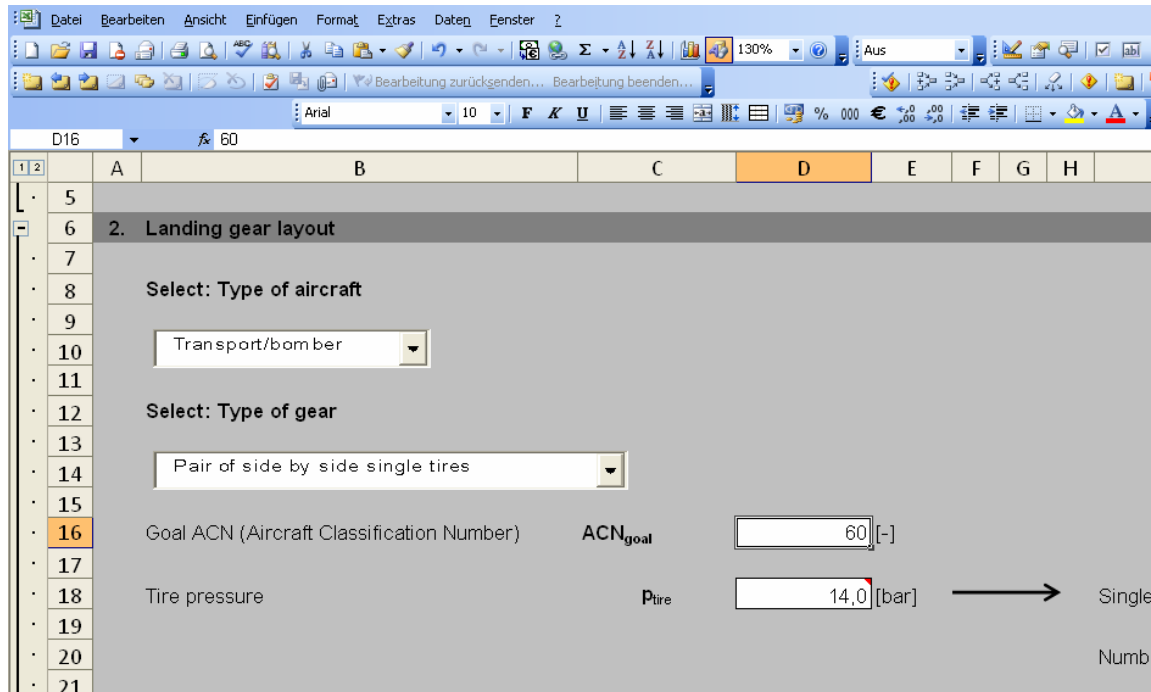
The formula is longer, but anyone can understand it.

In order to avoid conflicts with the names that we want to give them, the names should be given like this:

- |                                 |                                        |
|---------------------------------|----------------------------------------|
| ➤ Fuselage sheets               | : F_<variable name> E.g.: F_n_pax_FC   |
| ➤ Wing sheets                   | : W_<variable name> E.g.: W_cMAC       |
| ➤ High-lift sheets              | : HL_<variable name> E.g.: HL_cHL_TE_c |
| ➤ Tailplane sheets              | : TP_<variable name> E.g.: TP_SH       |
| ➤ Landing gear sheets           | : LG_<variable name>                   |
| ➤ Mass sheets                   | : M_<variable name>                    |
| ➤ Direct operating costs sheets | : DOC_<variable name>                  |

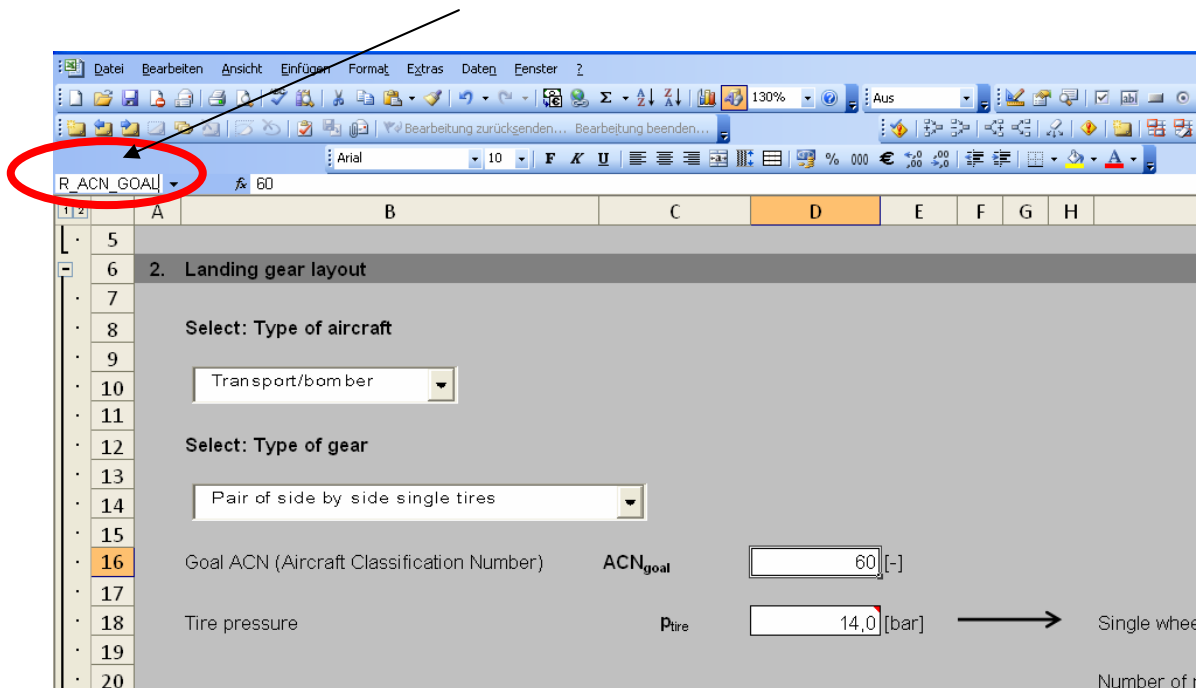
## How to Give a Name to a Cell

When you want to give a defined name to a cell, proceed like this: First select the cell you want to name. In this example, we want to name the cell D16 (Fig. 1).



**Figure 1** Select the cell

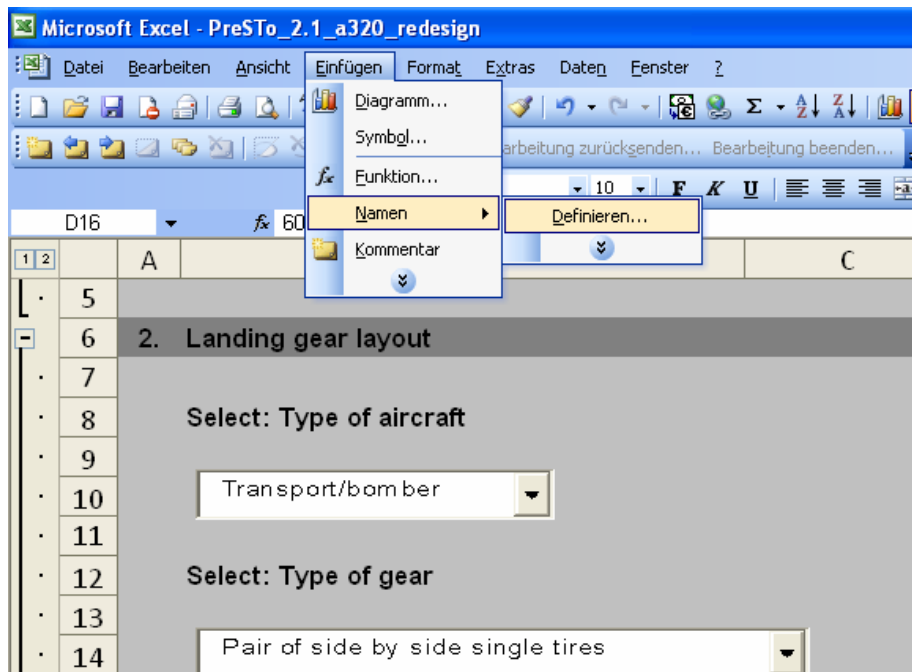
Then write the name in the top left “cell”, where the cell address was written (Fig. 2).



**Figure 2** Write the cell name

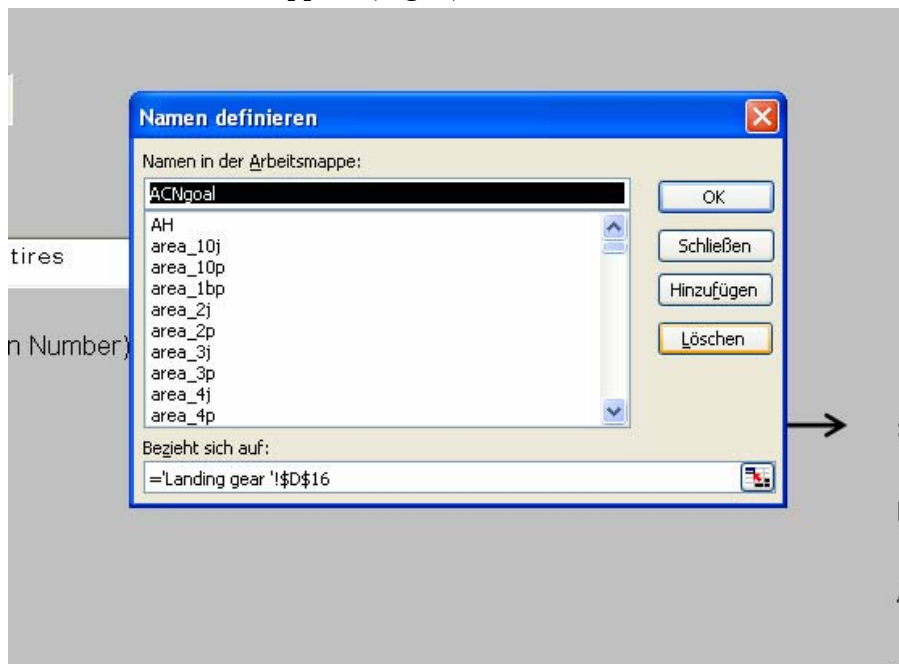
Hit “enter” key. The defined name is now given to this cell. Every time you will use this cell for a new formula, the name will appear instead of the address.

If you have no idea for the name you should give to a cell, you can try: Insert -> Names -> Define (Fig. 3).



**Figure 3** Go to “Define Name”

Then a window will appear (Fig. 4).



**Figure 4** The “Define Name” window

You just need to add the prefix related to your sheet, for example “F\_”, and then hit “Insert”, or “OK”.

## How to Update the Existing Formulas with a New Defined Name

Once you gave a defined name to a cell, you may have to update the existing formulas. It takes a lot of time to do it one by one. The best solution then is to do it like this (Fig. 5):

Insert => Names => Apply

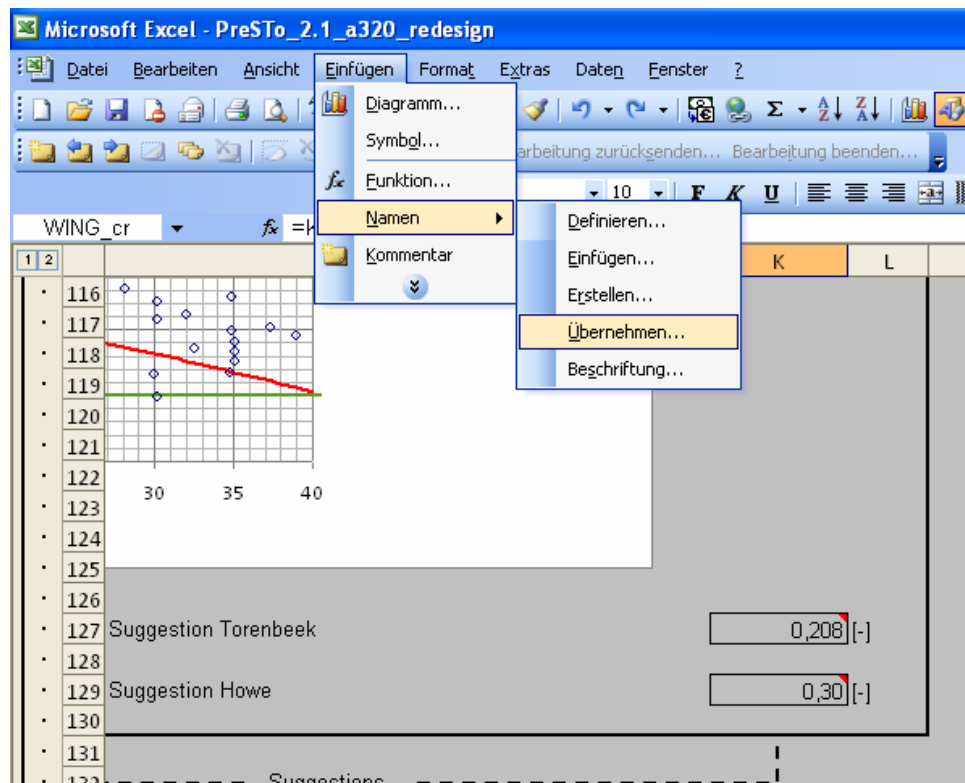


Figure 5 Go to “Apply names”

Select the names you want to update in the formulas, and hit “OK” (Fig. 6).

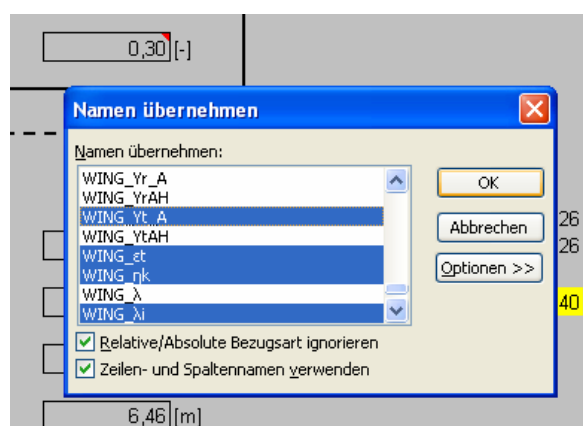


Figure 6 The “Apply names” window

The selected names will then be used in the existing formulas.

## References

PEAR 2010      PEARSON SOFTWARE CONSULTING, LLC: *Defined Names*, URL:  
<http://www.cpearson.com/EXCEL/DefinedNames.aspx> (28-4-2010)