Reports using MS Word

CHEN 1703

NOTE: Much of this may be out-dated in Office 2007. ICC still has Office 2003...
Equations

Insert → Object → Microsoft Equation

Close Equation Editor when you are done to insert the equation into MS Word.
Numbering Equations

http://support.microsoft.com/kb/212381/EN-US/

1. On a new line, insert a tab, then insert the equation, then insert another tab.
2. Choose Insert→Caption, and select “Equation” as the label type.
3. Click the “New Label” button and enter “)” and click “OK.”
4. Enter a “)” after the caption and push enter.
5. Select the entire line of text & choose Table→Convert→Convert Text to Table.
6. Choose 3 columns & click “OK.”
7. Choose Format→Borders and Shading and click the “none” box.
8. Right-click on the cell containing the formula and choose Cell Alignment→Align Center.
9. Right-click on the cell containing the label and choose Cell Alignment→Align Center Right.

NOTE: Modify step 6 (2 columns) and 8 (align left) if your equation should be aligned left.
Figures

Inserting a figure:
• If saved on disk: Insert → Picture → From File
• If copied onto the clipboard, simply paste it.

Creating a caption
• Select the figure, Insert → Caption
• Set label to “Figure”
• Type text for your caption in the text box & click “OK”

Formatting
• Right-click & choose “Format Picture”
• Size - allows you to change figure’s size
  → “Lock Aspect Ratio” - prevents you from distorting figure...
• Layout - changes how text wraps around figure.
  → Click “Advanced” & select “Top and Bottom” to have no text wrapping.

NOTE: MS Word doesn’t handle figures too well. Occasionally, captions can detach. Try not to drag figures around the document once you place them...
Cross-References

Insert → Cross Reference

Choose type of cross reference (figure, equation, table, etc.).

• Note that for equation references, you should select “(“ as the type of cross reference (see slide on numbering equations).

• Pay attention to the drop-down box entitled “Insert caption reference to:”
  ‣ On figures, only insert the label & number, e.g. “Figure 2”
  ‣ On equations (see slide on numbering equations), use “ Entire caption”

If references are “out of date” then select the whole document, right-click and choose “Update Field”
Citations / Bibliography

At the end of your document, start a new section entitled “References”

Begin a numbered list

Add each reference as a new item in the list

Refer to references using Insert→Cross Reference

• Note that inserting a reference in the beginning of the list can break the cross-referencing to the first item...

• Adding references in the middle or at the end works fine.

NOTE: As with equations, no elegant solution exists in Word 2003.
Alternatives...

LaTeX - a very powerful typesetting language.

- [http://www.latex-project.org/](http://www.latex-project.org/)
- VERY good at equations, placing figures, and doing cross-references.
- Used extensively in the math, science & engineering fields for technical reports & papers.
- Produces PDF documents
- Not GUI-based WYSIWYG.
- Available on all platforms (Windows, Mac, Linux, Unix).

Lyx - GUI front-end for LaTeX. Very good for “beginners” and experts alike.

- [www.lyx.org](http://www.lyx.org)
- Available for Windows, Mac, Unix, Linux.
In the figure, choose File→Export setup

- Edit fonts, background, etc., or choose a predefined export style.
- Click “Export” and choose the file name and type (eps, tiff, jpg, gif, etc).

Copy & Paste the figure into MS word, Powerpoint, etc.