

MISCELLANEOUS

DESKTOP PUBLISHING OF CAVING PUBLICATIONS.

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ABSTRACT.

Having recently prepared several extensive caving publications to the stage where they are ready for the printer or photo copier we thought that it could be useful to others to record our methods, computer equipment and software and some of the difficulties which have to be solved in the process.

As our publications were assembled on IBM computer desktop publishing equipment using text set by word processors some of our work may appear novel to people not yet computer literate.

INTRODUCTION

Personal computing covers many fields. It may include games, control of a business or company or just a way of keeping personal notes and records and for writing of letters.

One of the areas in which personal computers have made significant advances in the last two years, since the development of laser printers, is desktop publishing. These laser printers have a resolution of 300 dots per inch which, while far below the 2400 dots per inch resolution of most commercial printing equipment, is more than adequate for most publishing.

Using desk top publishing equipment an organisation can produce professional looking documents which have features that, surprisingly, would be very difficult for a commercial printer to achieve.

This volume of pre-prints for the conference has been produced using desk top publishing technology, giving, we feel, an acceptable standard of documentation at minimal expense. We have not by any means used all the capability of the equipment. Many of the capabilities were designed for advertising artwork layouts and are not entirely suitable for this style of publication.

Standardisation is all important. You will note that throughout this publication we have tried to use the same margins, type styles, paragraphs etc. Continual change of these tend to confuse the reader as too much time is spent in adjusting to differences.

PLANNING

"Though this be madness, yet there's method in 't"

William Shakespeare, Hamlet Act 2, Scene 2.

It is necessary to determine clearly what is required of the publication - in terms of content, format, time for printing, number of copies required, cost etc - at an early stage so that later decisions can be made correctly.

At this stage deadlines also need to be set for authors to produce their copy. Our experience in this area is that no one meets deadlines set and some are significantly worse than others. Leaders should look at their past record in this regard and perhaps set a better example for other members to follow in future.

EQUIPMENT AND SOFTWARE.

"For all a rhetorician's rules

Teach nothing but to name his tools"

Samuel Butler.

Text transfer - Text is usually prepared on the author's computer which is, in his eyes, the ultimate. This can provide some interesting problems as many computers are totally incompatible.

With IBM computers and the many IBM clones it is usually possible to transfer information on floppy disks. While there are several sizes of disks this presents no significant problem.

For transfer of disks from a number of other computers it is possible to use software such as Alien which allows for different methods of formatting of information recorded on the disks.

Experience with Apple computer disks shows that transfer is possible but only through a translation on Apple to provide a disk in ASCII format readable by IBM and its clones.

Wordstar 4000 word processing language was used as the standard for text preparation and for editing on an IBM clone computer (CCS). This was perhaps not the best choice as Wordstar 4000 justifies by adding spaces and does not have all the facilities of Microsoft Word which was used later in the process.

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Final preparation was carried out using two software packages, Aldus PageMaker, which is a desk-top publishing package, and Microsoft Excel, a state-of-the-art spreadsheet/database/graphics program. Excel was chosen because of its ability to manipulate fonts and page layouts.

Hardware used in the final printing was an IBM Personal System/2 Model 70, a desktop system which uses a high speed Intel 80386 processor and a 120 megabyte hard disk drive. This was coupled to a Hewlett-Packard LaserJet Series II with 1.5 megabytes of memory.

Additional equipment was Bitstream downloadable fonts, a Microsoft Mouse and a lot of coffee.

PREPARATION OF TEXT

*"Choice, word and measured phrase above the reach
Of ordinary men"*

William Wordsworth.

Text Entry - Text supplied by authors comes in a variety of forms most of which can be input to the computer from a disk either directly, translated by Alien (or equivalent) or on a computer of the same type to an ASCII file which is readable by most computers.

Some text of course comes as hard copy and has to be laboriously retyped into the computer. We are planning a special award to authors who prepare their paper on a word processor and then send only hard copy, making sure we are kept busy.

It is anticipated that in future use will be made of telephone linkup of computers and the text sent over the line, saving that week wait while the courier loses or misdirects already late text.

Some text was sent by facsimile from Hawaii - how much better if we could have got it by computer hook-up!

Editing - It is necessary to standardize text as far as possible to reduce the time involved in the layout process.

This involves setting all text to the same size, justifying of text to the standards used, setting headings in standard positions with consistency in size and style of type.

Position proposed for photographs and diagrams needs to be determined to locate these adjacent to the text where they are referred to and suitably flagged with spaces in the text so that they are readily seen when laying out.

Tabulations present special difficulties and should be flagged in the text and the table moved to the end of the text or preferably to a separate file. Tabulations should be tabbed, not set with the space bar.

Some computers justify text by inserting spaces in the line. When this text is transferred to the page layout computer the spaces cause irregularities in spacing which look untidy. To avoid this problem the text was run through a search a number of times and double spaces replaced by single spaces. This procedure totally fouls up spacing of any tables left in the text but they are readily re-tabbed.

To avoid long times in assembly, files should be short, an article or a chapter is usually suitable. However we did one publication with a file of over 100 pages of text which was slow to load and tended to slow down the whole operation. Tables would be better as separate files suitably named as relating to the main file, for example KARST for main file and KARST1 and KARST2 for tables 1 and 2.

Actual text of labels for tables, figures and diagrams should be placed in the text next to the flagging for these items.

Checking - All text then needs to be run through a dictionary check as we do not believe that any author of note ever does this sort of mechanical check and few can spell or type without errors. No author for this publication, other than those of this article, appeared to have done a dictionary proof check of the text supplied.

The text must be carefully read and re-read by several people looking for inconsistencies, wrong words, errors of grammar and other possible errors. The more correct the text can be made at this stage the easier is the layout job. And with all of this checking you can be sure that the printer's devil has been about and made a few mistakes for everyone to note.

ILLUSTRATIONS.

"Look here, upon this picture, and on this"

William Shakespeare, Hamlet Act3 Scene 4

Photographs can be either screened by the photographic process, or scanned and converted to an almost equivalent screening through a computer scanner. The photographs supplied for this publication were already screened with two exceptions which were scanned.

Diagrams supplied for this publication were in general well prepared, but some reduction was unfortunately economically necessary. The graph in Dunkerley's paper was prepared by computer and was supplied to us in finished format. The two graphs in Stone's paper were supplied as Lotus 1-2-3 "PIC" format files, which were then readily loaded direct into PageMaker. The emblem for the Chillagoe Caving Club Inc which appears in the preceding paper was drawn on the computer using a drafting program, MicroGrafx Designer.

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Most people are familiar with Letraset or equivalent methods of labelling on diagrams. It is necessary to allow for reduction in size and use large print on diagrams so that they remain readable.

Several diagrams proved to have borders not parallel and sides only "almost" at right angles..... these are better left to the computer to draw.

PAGE LAYOUTS

*"It is not the weight which counts ,
but how it is distributed"*

Article on fitness in the Australian Womens Weekly.

Page layouts were done with PageMaker software, the publication being laid out page by page in sections. Spaces were allowed for paste in of screened photographs and reduced copies of diagrams. As each page is laid up care is taken in appearance of layout, that paragraph breaks do not occur only part of a line from the end, and that references in the text are located where illustrations can be readily seen. Sometimes it is not possible to relate text and illustrations and some editing is done to show where the illustration is to be located.

Table of contents is prepared when all the content of the publication is laid out so that page numbering can be given.

Then title page, copyright and cover layouts are completed on PageMaker.

PageMaker has the ability to layout data files from scanning of photos so that photos can be put in the page layout rather than pasted in. Other illustrations can be drawn with computer software and can be similarly inserted in the page layout if desired.

CONCLUSIONS AND RECOMMENDATIONS

*"Of making many books there is no end; and much study
is a weariness of the flesh"*

Ecclesiastes xii. 12.

Desk top publishing appears to be most suitable for preparation of most caving publications at club or association level. Developments are occurring at an amazing rate and economical colour publication would appear to be a not too distant possibility.

Recommendations to Authors - The following recommendations are made for preparation of text for publishing by this method:-

(a) Do not fully justify your text. Leave it left justified only and tell the publisher how you want it justified.

(b) Tables and labels for illustrations should be on separate files.

(c) Where possible use the same computer software as the publisher for word processing.

(d) Always supply a hard copy of your text in case the publisher has any problems.

(e) Graphic images should be on separate files or as pen and ink or photographic copies, preferably at a size suitable for use.

(f) Footnotes are a problem as in PageMaker they will not appear at the same page position, so mark with an asterisk or similar. Provide the publisher with a list of footnotes referring to flagging symbols, with a request to show as footnotes and delete your flagging symbols.

(g) Use tabbing for layout tables as proportional fonts will not align unless tabbed. Not to do so makes your publisher less than friendly.

(h) For tables consider using a spreadsheet to create the file.

(i) If possible make yourself familiar with what software such as PageMaker will do as this can also lend new ideas to your future published work.

(j) Use your word processors dictionary, and then proof-read your final text.

(k) Make sure you provide all illustrations required.

(l) **Finally, get your article in by the requested deadline.**

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