

The newspaper Package

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Abstract

The `newspaper` package redefines the page style and `\maketitle` command to produce a typeset page similar to that of a newspaper. It also provides several commands that (when used with other packages) allow the ease of writing articles in a newspaper-style column format.

1 Introduction

In the early part of 2007, the lab where I was working sent me off to Washington to be a staffer at the House of Representatives. So the lab wouldn't forget about me – and also to keep up my \LaTeX skills – I decided to send back a newsletter once a month. To my great surprise, I couldn't find a suitable \LaTeX package for typesetting a newsletter. Therefore, I set about to write the package myself. The `newspaper` package is the result of this effort.

This package is a very simple package that redefines the page style and `\maketitle` command to produce a typeset page similar to that of a newspaper. It also provides several commands that (when used with other packages) allow the ease of writing articles in a newspaper-style column format. The result of the `\maketitle` command is shown in Figure 1. As you can see from the figure, the style is based on that of the *New York Times*. Commands for redefining the default values for Title, Date, and Slogan are described in the sections below.

2 Requirements

This system requires both $\text{\LaTeX} 2_{\epsilon}$ and the `yfonts` package developed by Walter Schmidt. The package itself is never actually loaded, but the `ygoth` font is called and used to typeset the heading. These are the only *required* packages. However, several additional packages (e.g. `multicols` by Frank Mittelbach and `picinpar` by Friedhelm Sowa) enhance the use of the `newspaper` package. Examples of these additional packages are discussed in Section 3.2.



Figure 1: Default heading acquired with the newspaper package.

3 User Interface

When loaded `newspaper` sets up a number of defaults (detailed later). These defaults can be modified by specific commands. Load the package in the usual way as

```
\usepackage{newspaper}
```

which immediately redefines the page style on the first page to resemble that of a newspaper, as shown in Figure 1. It also redefines the page style on all subsequent pages to provide the appropriate title, date, and page number.

There are three commands that must be set in the preamble of the document. That is, they must be defined before the `\begin{document}` command. These commands are:

```
\date{<date>}
\currentvolume{<real>}
\currentissue{<real>}
```

where `{<date>}` is the date (which could be `\today`), and `{<real>}` is any real number. The volume number is set in Roman numerals and the issue number is set in arabic numerals as shown on the left side of Figure 1.

3.1 Default Behaviour and Commands to Modify It

The default parameters of the `newspaper` package are shown in Table 1. Without actually specifying any changes, these settings will produce the output shown in Figure 1.

You'll notice there are two parameters that contain a similar setting: Paper Name and Header Name. This is necessary because the first page has a different heading page style than all subsequent pages. On this first page, the heading is that shown in Figure 1, in which the Paper Name is set with *gothic* font. In this font some letters appear different from modern type. Specifically the modern *s* is defined specifically by adding the colon. If that isn't done, the gothic *s* is used, which looks more like the modern *f* than the modern *s*.

All subsequent pages have a different heading that is comprised of the Header Name which is supposedly the same as the Paper Name but set in whatever font

is used for the main text. If we used just one parameter (say the Paper Name) we would run the risk of having colons appear after characters in the heading on subsequent pages.

Parameter	Default Value
Paper Name	Committee Times:
Header Name	Committee Times
Paper Location	Washington DC
Paper Slogan	“All the news...”
Paper Price	Zero Dollars

Table 1: Package Defaults

If you would like to customize the parameters, the appropriate commands are shown in Table 2. For example, to change the title of the paper simply add a line in the preamble that contains `\SetPaperName{My Title}`. Remember, to change the header name appropriately (in this case by adding `\SetHeaderName{My Title}`).

Parameter	Command to Change Parameter
Paper Name	<code>\SetPaperName{<i>text</i>}</code>
Header Name	<code>\SetHeaderName{<i>text</i>}</code>
Paper Location	<code>\SetPaperLocation{<i>text</i>}</code>
Paper Slogan	<code>\SetPaperSlogan{<i>text</i>}</code>
Paper Price	<code>\SetPaperPrice{<i>text</i>}</code>

Table 2: The necessary commands to affect package behaviour.

3.2 Additional Suggested Packages

The use of additional packages will greatly enhance the appearance of any “news-paper” style document. First and foremost, the `multicols` package by Frank Mittelbach is by the far the best means of producing columns of text. Unlike the `\twocoloum` command available to \LaTeX , the `multicols` package makes it possible to go between one column, two columns, and three columns of text on the *same* page.

Two other very useful packages are the `picinpar` package by Friedhelm Sowa and the `hyperref` package by Sebastian Rahtz. The `picinpar` package provides several useful commands for creating empty rectangular spaces within a block of text. This is especially useful for setting figures in columns of text – especially since the `multicols` package does not allow the use of floats inside columns.

The `hyperref` package is always a good idea when the final format is a PDF file. The package provides a wealth of commands that enable hyperlinks, and govern how the file is opened and displayed. For example, when I was sending

my newsletters back to the home office, I had a self-imposed maximum-length constraint of two pages. Keeping a newsletter short is one way to increase the number of people that will actually read it. Loading the `hyperref` package with the options

```
\usepackage[pdfpagemode={none},  
             pdfpagelayout={TwoColumnRight}]{hyperref}
```

ensured the resulting PDF file opened with bookmarks closed and in two-page display mode.

One other package I found very useful was the `Times` package. It's a small package, in fact the entire contents of the package is only three lines of code:

```
\renewcommand{\sfdefault}{phv}  
\renewcommand{\rmdefault}{ptm}  
\renewcommand{\ttdefault}{pcr}
```

The package changes \TeX 's default San Serif, Roman, and Type Writer fonts to Helvetica, Times-Roman, and Courier respectively.

As a general rule, Times-Roman (or Times New Roman as its variants are sometimes called) is a terrible font and should always be avoided. There is, however, one exception to the rule: when setting columns of text. The Times New Roman typeface was developed in 1931 for *The Times* of London. The letters are more narrow than other typefaces and the ascenders and descenders are smaller. This makes it ideal for newspapers, that always strive to squeeze more words onto a single page in order to reduce production costs. Its economic advantage has made it popular with book publishers in the United States.

The ability to squeeze more words onto a page is advantageous if you have a maximum length constraint of two pages, as I did for my newsletters. Even though the letters are narrow, reading short columns of text is easier on the eyes than moving your eyes back and forth across the length of an entire page. Such a font should never be used to set large pages of text because it will fatigue the eyes of the reader.

An example of using the `newspaper` package in combination with the packages mentioned above is shown in Figure 2.

"All the News I Feel
Like Printing."

Committee Times

Washington DC

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ZERO DOLLARS

Scientist Begins New Job At Congress

This February, Matthew Allen, a nuclear engineer by training and staff physicist at Sandia National Laboratories, arrived in Washington D.C. to begin a one year assignment as an ASME Congressional Fellow at the House of Representatives, Homeland Security (HS) Committee. The HS Committee is chaired by the Honorable Bennie Thompson, a democrat from Mississippi.¹ The Honorable Pete King, a Republican from New York, leads the minority staff.²



Chairman
B. Thompson
(D-MS)

Ranking Mem.
Pete King
(R-NY)

Dr. Allen will be one of 19 staffers on the minority side—the majority is allotted 38 staffers.

March has been a busy month for the HS Committee. They recently passed H.R. 844, the "Promoting Anti-terrorism Cooperation through Technology and Science (PACTS) Act," and H.R. 1401, the Rail Bill – a bill intended to improve the security of rail-based transportation.

Most recently the staff has been very busy drafting the language for the FY08 Department of Homeland Security Authorization Bill. The Authorization bill, which typically authorizes hundreds of billions of dollars for DHS, is passed every year by the House but rarely by the

Senate. If fact, in the last three and half years, Congress has not passed an Authorization Bill for DHS. Actual money flows to the Department from the Appropriations Committee. This does not deter the staff (on either side of the aisle) from spending long hours drafting, editing, debating, and re-drafting language for the base bill and amendments.

The HS Committee actually has six subcommittees. As the so-called "nuclear fellow" Dr. Allen will be working directly with the minority staff on the Subcommittee on Emerging Threats, Cybersecurity, and Science and Technology. The ETC Subcommittee (as it is affectionately known) is chaired by the Honorable James Langevin, a Democrat from Rhode Island. The ranking minority member is the Honorable Michael McCaul, Republican from Texas.



SubCom. Chair
James Langevin
(D-RI)

Ranking Mem.
Michael McCaul
(R-TX)

The ETC Subcommittee is the technical arm of the HS Committee and has jurisdiction over chemical, biological, radiological and nuclear threats; agroterrorism; cybersecurity; other emerging threats; the Domestic Nuclear Detection Office (DNDO); the Homeland Security Applied Research Programs Agency (HSARPA); and cross-cutting science and technology initiatives at the Department of Homeland Security.

ETC SUBCOMMITTEE HOLDS TWO HEARINGS WITH DNDO

In the month of March the ETC Subcommittee held two hearings directly related to the oversight of the Domestic Nuclear Detection Office, (DNDO). Mr. Vayl Oxford, Director of DNDO, was the primary witness in both hearings.



Vayl Oxford
Director DNDO

The first hearing (held on March 14) examined studies from the Government Accountability Office (GAO). The GAO issued a report highlighting concerns with the cost-benefit analysis DNDO conducted to justify the acquisition of next generation radiation portal monitors (RPMs). Chief among these concerns was the price DNDO listed for current generation RPMs and the price of next generation Advanced Spectroscopic Portals. The second hearing (held on March 21) focused on DNDO's radiation portal monitor deployment strategy.

DNDO's plan to go forward with the deployment of hundreds of new Advanced Spectroscopic Portals (ASPs) figured prominently at both hearings. The final (potentially \$1 Billion) contract for procurement of ASP systems has not been granted. Tests currently underway at the Nevada Test Site are meant to compare current technology with the new systems and demonstrate the capability of three commercial companies to meet the required goals of detection and identification of radioactive materials.

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Committee Times MARCH 22, 2007

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Life on the Hill The First Four Weeks

By MATTHEW ALLEN

The first four weeks have been a real learning experience. In the past month, I've had my first exposure to both hearings and markups.

A hearing is held to inform Members of Congress of anything within their committee's jurisdiction. Hearings are open to the public and serve as the main tool of oversight—typically involving testimony from federal agencies. They are also an enormous amount of work for Congressional committee staff. One of the first things required for a hearing is witnesses, typically picked by the majority staff with input from the minority. Once the witnesses and the date of the hearing are finalized, the staff researches the hearing topic and produces the hearing memo. My subcommittee staff director, Dr. Diane Berry, has a standing promise to buy lunch for anyone that can produce a hearing memo that's under five pages—I've never made it. To date my shortest is 10 pages, but I am improving—my last memo included no equations or extraneous math.

Background information must be extensively researched because the onus is on the staff to be prepared for any question that might arise during the hearing. It is also the role of the staff to provide questions to members for them to ask the witnesses. It's been a learning experience to observe that rigorously written hearing memos and questions the staff has spent large amounts of time drafting,

revising, and debating, are often gleefully ignored by the Members. At the end of every hearing, we submit *Questions For the Record*. These are questions Members ask the witnesses to look into and get back to the committee.

This month I also went through my first "markup." A markup is a public event where the majority and minority parties come together and debate and amend a bill—first at the subcommittee and then at the full committee level. The Rail Bill (actually begun last Congress) was marked up on March 8th at the full committee level. As part of the minority staff, we work on amendments to the bill introduced by the majority. Amendments are drafted at the committee level and then circulated to committee members. Each subcommittee drafts amendments in their jurisdiction, typically to be supported by their ranking subcommittee member. My subcommittee worked on four amendments, which were then supported by Mr. McCaul. All four amendments were passed unanimously, with bipartisan support.

After an amendment is passed at the markup, we must submit *report language* for the record. Report language (as I understand it) is essentially the meaning of a law or what the framers had in mind when the law was drafted. It is generally only seen by lawyers who refer back to the report language of this or that law during litigation.

In addition to preparing for hearings and markups, briefings are a daily occurrence. Briefings can be split into two large categories: solicited and unsolicited. Solicited briefings are generally held because the staff needs more infor-

mation to go forward with drafting laws or amendments. For example, Vayl Oxford, the director of DNDO, visits our staff more than once a month. I personally call his office at least twice a week. We are also briefed by other offices within DHS, such as John Vitko's office within the S&T directorate, or Matthew Clark's office in charge of Homeland Security Centers of Excellence.

And then there are the unsolicited briefings. These are given by companies, government agencies, or other institutions that want to share with the committee the great things they're doing for the nation. They tend to range from very interesting and informational, to entertaining but not so informational, to not interesting or informational and basically a total waste of time. In my first week our subcommittee was briefed by the director of the Naval Research Lab, the director of DNDO, the director of Los Alamos National Lab, and the Chem-Bio-Rad-Nuc Adviser to the Prime Minister of Australia. That was a fun week!

And then there are the others. There seems to be a plethora of companies and academic institutions that feel with proper funding they could develop a software package that can model terrorism, disaster mitigation, and solve all the interoperability problems between law enforcement, first responders, and intelligence agencies. Let me get my check-book.

Although the legislative process is very exciting and educational, I'm really looking forward to Congressional recess in April.

POINTS OF INTEREST

- My next report will discuss the various technology related issues the Lab should be aware of in the Rail Bill and the FY08 Authorization Bill.
- Looking ahead: There will be a hearing on April 18 for BioShield, and April 19 for Cyber-security. If you're in DC, it may be worth stopping by.



Figure 2: Demonstration of the default settings used in conjunction with the multicols and picinpar packages.

¹Majority Webpage
²Minority Webpage

3.3 Newspaper Macros

The package provides a few macros that help when writing articles in column format. As seen in Figure 2, I typically used a three column format, but these commands also work for any size column.

`\headline` The `\headline{<text>}` command is used to set the headline of the article. It's a good idea to use different style headlines for each article. This helps the reader distinguish between different topics. As you can see from Figure 2, I have used several different styles for the three articles I produced.

Using the above two commands the articles shown in Figure 2 would be set with the following commands:

```
\headline{\bf\sf\LARGE Scientist Begins New Job At Congress}  
<body of the article>  
\closearticle
```

```
\headline{\sc\Large ETC Subcommittee Holds Two Hearings with DND0}  
<body of the article>  
\closearticle
```

`\byline` When writing an editorial or if you just want to add a by-line, use the `\byline` command. This command works in almost the same way as `\headline`, but has an additional argument for the author credit. The author name is set in all uppercase letters after the word “By” directly under the article headline. The command is called by

```
\byline{<headline>}{<author>}
```

where `{<headline>}` is the title of the article and `{<author>}` is the name you would like to appear under that title.

If you want to add a subtitle before the The headline/byline combination as shown on the second page of Figure 2, you have to play with the spacing a little bit. The command used in the example is:

```
\byline{{\it\huge Life on the Hill}\}[10pt]  
{\Large The First Four Weeks}\}[10pt]}{Matthew Allen}
```

Someday I may go back and add a `\subtitle` command, but for now I just play with the spacing manually.

`\closearticle` The `\closearticle` command is used to show the end of an article. This command produces a small double-line rule the width of the column. It is useful when an article ends in the middle of column, before you declare the next headline. The `\closearticle` command does contain the parameter `\hsize`, which is the value of column width used by the `multicols` package. If you're not using the `multicols` package, this command could produce an error.

4 Implementation

Here we load the only *required* package.

```
1 %%%% Package Loading %%%%
2 \RequirePackage{yfonts} % used for the paper title font
3
```

Next we have the main body of the code, and begin by defining the font used for the Headline.

```
4
5 %% Define font for page title %%
6 \DeclareFontFamily{LYG}{bigygoth}{}
7 \DeclareFontShape{LYG}{bigygoth}{m}{n}{<->s*[2.5]ygoth}{}

```

Next we set up the page dimensions. We could have used the geometry package here, but I like to avoid loading packages when I can. The default values for the `article` class are shown to the right of the length commands.

```
8
9 %%%%%%%%%% Define Text Dimensions %%%%%%%%%%
10 \setlength\topmargin{-48pt} % article default = -58pt
11 \setlength\headheight{0pt} % article default = 12pt
12 \setlength\headsep{34pt} % article default = 25pt
13 \setlength\marginparwidth{-20pt} % article default = 121pt
14 \setlength\textwidth{7.0in} % article default = 418pt
15 \setlength\textheight{9.5in} % article default = 296pt
16 \setlength\oddsidemargin{-30pt}

```

`\currentvolume` Define the volume and issue number. These values must be entered manually.

```
\currentissue 17
18 %%%% counters for volume and number %%%%
19 \newcounter{volume}
20 \newcommand\currentvolume[1]{\setcounter{volume}{#1}}
21 \newcounter{issue}
22 \newcommand\currentissue[1]{\setcounter{issue}{#1}}

```

`\@papername` Set up the package defaults

```
\@headname 23
\@paperlocation 24 %%%% set internal variables %%%%
\@paperslogan 25 \def\@papername{Committee Times:}
\@paperprice 26 \def\@headname{Committee Times}
27 \def\@paperlocation{Washington DC}
28 \def\@paperslogan{'All the News I Feel Like Printing.}'
29 \def\@paperprice{Zero Dollars}

```

`\SetPaperName` Set up the commands to modify the behavior.

```
\SetHeaderName 30
\SetPaperLocation 31 \newcommand\SetPaperName[1]{%
\SetPaperSlogan 32 \def\@papername{#1}}
\SetPaperPrice 33 \newcommand\SetHeaderName[1]{%
```

```

34 \def\@headname{#1}}
35 \newcommand\SetPaperLocation[1]{%
36 \def\@paperlocation{#1}}
37 \newcommand\SetPaperSlogan[1]{%
38 \def\@paperslogan{#1}}
39 \newcommand\SetPaperPrice[1]{%
40 \def\@paperprice{#1}}

\maketitle Redefine the \maketitle command. This is only for the first page.
41
42 %%%%%%%%%% Redefine \maketitle %%%%%%%%%%
43 \renewcommand\maketitle{\thispagestyle{empty}}
44 \vspace*{-40pt}
45 \begin{center}
46 {\setlength\fbxsep{3mm}\raisebox{12pt}{\framebox[1.2\width]{\parbox[c]{1.15in}{\begin{center}\
47 {\textgoth{\huge\usefont{LYG}{bigyoth}{m}{n} \@papername}}\hfill%
48 \raisebox{12pt}{\textbf{\footnotesize \@paperlocation}}\}
49 \vspace*{0.1in}
50 \rule[0pt]{\textwidth}{0.5pt}}
51 {\small VOL.\MakeUppercase{\roman{volume}}\ldots No.\arabic{issue}} \hfill \MakeUppercase{\small
52 \rule[6pt]{\textwidth}{1.2pt}
53 \end{center}}
54 \pagestyle{plain}
55 }

At this point we redefine the page style for all subsequent pages.
56
57 %%%%%%%%%% redefine plain page style %%%%%%%%%%
58 \renewcommand\ps@plain{%
59 \renewcommand\@oddfont{} % empty recto footer
60 \let\@evenfont\@oddfont % empty verso footer
61 \renewcommand\@evenhead
62 {\parbox{\textwidth}{\vspace*{4pt}}
63 {\small VOL.\MakeUppercase{\roman{volume}}\ldots No.\arabic{issue}}\hfill\normalfont\textbf{\@
64 \rule{\textwidth}{0.5pt}
65 \vspace*{12pt}}}%
66 \let\@oddhead\@evenhead

\headline Define the \headline and the \byline commands. The \closearticle command
\byline is intended to be used at the conclusion of each article.
\closearticle
67
68 %%%%%%%%%% Headline (with byline) command %%%%%%%%%%
69 \newcommand\headline[1]{\begin{center} #1\ %
70 \rule[3pt]{0.4\hsize}{0.5pt}\ \end{center} \par}
71 \newcommand\byline[2]{\begin{center} #1 \ %
72 {\footnotesize\bf By \MakeUppercase{#2}} \ %
73 \rule[3pt]{0.4\hsize}{0.5pt}\ \end{center} \par}
74 \newcommand\closearticle{{\begin{center}\rule[6pt]{\hsize}{1pt}\vspace*{-16pt}
75 \rule{\hsize}{0.5pt}\end{center}}}}
76 %%%%%%%%%% End of Package %%%%%%%%%%

```