

The navydocs Package*

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Abstract

This article documents the L^AT_EX package for generating the title page and other leading pages as prescribed for Navy technical reports. For example, as part of a document delivered on a U.S. Government contract.

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1 Introduction

The `navydocs` package provides an easy means for creating title pages and the following supplementary material pages used in technical reports by United States Navy organizations. These pages are generated by specifying the page content via a set of commands and then calling a macro to create the page at its occurrence in the document. The package in its current form provides a title page and a technical components page as used by the Carderock Division at the Naval Surface Warfare Center (Carderock/NSWC). The macros provided within the package can be easily copied and modified to support formats used by other Navy organizations. The `navydocs` package is provided in the hope that it proves useful to other Navy organizations, with users contributing macros for their organizations. Please email to the author any new macros for title pages or supplementary material so they can be added to the `navydocs` package.

In the current version of the `navydocs` package, the macro `\NavyTitlePage` will produce a title page for a technical report released by Carderock/NSWC. The macro `\MakeCarderockDivPage` will create a Technical Components page that lists the major Carderock Division technical components of the organization along with the three types of reports issued by this division. This is typically inserted after the title page.

A sample of the Carderock/NSWC title and technical components pages is given in section 6 for one example of how to use the `navydocs` package.

2 The Individual Fields

There are 10 fields for producing the title pages. The following macros, each having a single argument, define the data to be included in each field. Usually only a few fields will apply to a given report. Table 1 notes which fields are required and which have default values. The best approach to insure that the form is properly filled-in is to preview the page and adjust any fields that appear to have a problem. Note that in many cases you can use “`\`” (newline) to spread the text over several lines.

Table 1: Field Attributes and Approximate Maximum Size.

Macro Name	Required	Default Value	Max Lines	Chars. ⁽³⁾ per Line
<code>\NavyDivision</code>	Yes	—	1	58
<code>\NavyDivisionLocation</code>	Yes	—	1	70
<code>\NavyReportNumber</code>	Yes	—	1	57
<code>\NavyReportDate</code>	—	(1)	1	12
<code>\NavyReportType</code>	Yes	—	2	75
<code>\NavyReportTitle</code>	Yes	—	3	45
<code>\NavyAuthor</code>	Yes	—	19	75
<code>\NavyDistributionStatement</code>	—	(2)	1	55
<code>\NavyMarginTitle</code>	—	—	2	85

Notes:

- (1) Defaults to the current date in “dd Month yyyy” format (*e.g.* 26 June 2016).
- (2) Defaults to “Approved for public release; distribution is unlimited” .
- (3) The number of characters is approximate and for the Computer Modern Roman font family only.

`\NavyDivision` **1. DIVISION**

The full specification of the Navy division producing the technical report as it should appear at the top of the title page, *e.g.* Carderock Division, Naval Surface Warfare Center. This field is required.

`\NavyDivisionLocation` **2. DIVISION LOCATION**

The city, state, and zip code of the Navy division producing the technical report as it should appear at the top of the title page, *e.g.* West Bethesda, Maryland 20817-5700. This field is required.

`\NavyReportNumber` **3. REPORT NUMBER**

Enter the unique alphanumeric report number(s) assigned by the Navy performing organization, *e.g.*

`\POReportNumber{CRDKNSWC/HD-1427-02; AFWL-TR-85-4017-Vol21-PT-2}`
→ BRL-1234; AFWL-TR-85-4017-Vol21-PT-2

`\NavyReportDate` **4. REPORT DATE**

Publication date , which is typically in the format of month and year, *e.g.* October 1996.

`\NavyReportType` **5. REPORT TYPE**

State the type of report as stipulated by the Navy organization. You can use “\” (newline) to specify the report type across multiple lines, such as

`\NavyReportType`{Hydromechanics Directorate
Research and Development Report }
This field is required.

`\NavyReportTitle` **6. REPORT TITLE**
The title for the report. This should be taken from the part of the report that provides the most meaningful and complete information. You can use “`\\`” (newline) to specify the report type across multiple lines, such as
`\NavyReportTitle`{Mathematical Model for MANSIM Version 2:
A Surface Ship Maneuvering, Stationkeeping,
and Seakeeping Simulator Computer Program }
On classified documents enter the title classification in parentheses. This field is required.

`\NavyAuthor` **7. AUTHOR(S)**
Enter name(s) of the person(s) responsible for writing the report, performing the research, or credited with the content of the report. You can use “`\\`” (newline) to specify the report type across multiple lines. If editor or compiler, this should follow the name(s).

`\NavyDistributionStatement` **8. DISTRIBUTION/AVAILABILITY STATEMENT**
Use agency-mandated availability statements to indicated the public availability or distribution limitations of the report. If additional limitations/restrictions or special markings are indicated follow agency authorization procedures, *e.g.* , RD/FRD, PROPIN, ITAR. This field is **not** required, but will default to the first of the following examples:

“Approved for public release; distribution is unlimited.”

“Distribution authorized to DoD only; (reason and date). Other requests shall be referred to (controlling DoD office).”

“Further dissemination only as directed by (controlling DoD office and date) or higher DoD authority.”

For DoD — See DoDD 5230.24, “Distribution Statements on Technical Documents.”

For DoE — See authorities.

For NASA — See Handbook NHB 2200.2.

For NTIS — Leave blank.

`\NavyMarginTitle` **9. MARGIN TITLE**
Title to appear in the left margin of the title page, oriented in a vertical position. The title is typically the same as that used with `\NavyReportTitle` but may differ because the title has to be shortened due to space limitations or line breaks. Hence a separate command is used to provide the title.

A margin title will only appear if this command is called with an argument. The title will appear in the margin according to the formatting commands provided

for the title, for example using a “\” (newline) to have the title split across more than one line or a `\hphantom` to control placement of text (cf. Section 6).

```
\NavyMarginTitle{Title for margin}
```

By default the margin title will be placed at the margin paragraph width and the bottom of the text height area. To allow user control over the exact placement of the margin title, the command accepts two optional arguments (`xmargin`, `ymargin`) that define the horizontal (`xmargin`) and vertical (`ymargin`) position of the bottom left placement.

```
\NavyMarginTitle[xmargin][ymargin]{Title for margin}
```

To provide guidance on suitable values for `[xmargin][ymargin]`, the default values are `[40][70]`, while the values used to place the margin title as it appears in Section 3 are `[140][95]`.

3 Title Page

The macro `\NavyTitlePage` will produce a title page for the Navy technical report on a separate page at the location where it appears. This will produce the title page as shown on the following page.

Report No. Report Title

Division, Center

City, State Zip Code

Report No. Month Year
Directorate
Research and Development Report

Report Title

by
Author



Approved for public release; distribution is unlimited.

4 Supplementary Material Page

Some Navy organizations require that additional pages follow the title page. For example, Carderock/NSWC requires that a Technical Components page follow the title page. The latter page can be produced by using the macro `\MakeCarderockDivPage` included with this L^AT_EX package. You can easily define a macro customized for other Navy organizations by copying and modifying this one.

`\MakeCarderockDivPage`

The macro `\MakeCarderockDivPage` makes use of one field that identifies the form at the bottom of the page, namely `\NavyFormID{FormID}` where FormID is the form identifier, e.g. “NDW-DTRC 5602/51 (Rev. 7-93)”. This field is required.

The `\MakeCarderockDivPage` command need simply be inserted into your L^AT_EX document after the `\MakeNavyCoverPage` command. This will result in the following page appearing in the document.

MAJOR CARDEROCK DIVISION TECHNICAL COMPONENTS

CODE	011	Director of Technology
	10	Machinery Systems/Programs and Logistics Directorate
	20	Ship Systems & Programs Directorate
	50	Hydromechanics Directorate
	60	Survivability, Structures and Materials Directorate
	70	Signatures Directorate
	80	Machinery Research & Development Directorate
	90	Machinery In-Service Engineering Directorate

CARDEROCK DIVISION, NSWC, ISSUES THREE TYPES OF REPORTS:

1. **CARDEROCKDIV reports, a formal series**, contain information of permanent technical value. They carry a consecutive numerical identification regardless of their classification or the originating directorate.
2. **Directorate reports, a semiformal series**, contain information of a preliminary, temporary, or proprietary nature or of limited interest or significance. They carry an alpha numeric identification issued by the originating directorate.
3. **Technical memoranda, an informal series**, contain technical documentation of limited use and interest. They are primarily working papers intended for internal use. They carry an identifying number which indicates their type and the numerical code of the originating directorate. Any distribution outside CARDEROCKDIV must be approved by the head of the originating directorate on a case-by-case basis.

5 Configuration

In order to make the use of the report documentation page as easy as possible, several aspects of the package are automated or can be easily configured.

5.1 Fonts

When the package is loaded it defines the fonts that are used by basing them on the font families `\sfdefault` for the field labels and `\rmdefault` for the text entries. By default, they will be based on the Computer Modern font family. If you are changing the base font families for your paper and you want the fonts used on the `navydocs` to change also, then you must change the font families before loading the `navydocs` package. See [1, pages 229,236] for more information about the default font families.

For any specific field, you can override the default font by declaring your preferred value along with your entry, *e.g.*

`\Title{\Huge A Huge Title}` → A Huge Title

6 An Example of Use with the `article` Class

This sample program demonstrates how the `navydocs` package may be used and integrated with an existing class. Here we redefine `\@makefile` so that we can create a titlepage and report documentation page that share a common set of fields, such as the report title, the performing organization title and address and the report abstract.

First we have to start the paper as an `article` with twosided pages and using the `navydocs` package.

```
1 \documentclass[twoside]{article}
2 \usepackage[margin=0.75in]{geometry} % set margins to 0.75 in
3 \usepackage{lipsum} % required to produce dummy text
4 \usepackage{navydocs}
```

Set some page specifications so the margin title will appear properly using the defaults. Otherwise we'll need to explicitly specify where the margin title is to be placed.

```
5
6 \setlength{\marginparwidth}{64pt}
7 \setlength{\parindent}{5ex}
8 \setlength{\paperwidth}{8.5in}
9 \setlength{\textwidth}{6.5in}
10 \setlength{\oddsidemargin}{0in}
11 \setlength{\evensidemargin}{0in}
```

Now we fill in the fields needed for the title page. For reference as a template, we have entered all of the `navydocs` block macros below.

```

12
13 \begin{document}
14
15 \NavyDivision{Navy Division, Navy Center}
16 \NavyDivisionLocation{City, State Zip-Code}
17 \NavyReportNumber{XXXXXXXX/XX-0123-45}
18 \NavyReportDate{Month Year}
19 \NavyReportType{Navy Directorate \\\
20                 Research and Development Report}
21 \NavyReportTitle{Mathematical Model Version 2:\\
22                 A Long Detailed Title \\\
23                 Spanning Multiple Lines (if desired)}
24 \NavyAuthor{Author Name}
25
26 % Note that we explicitly shifted the margin title horizontally for
27 % better visual effect because of the smaller default font used
28 % in the two-sided page option for article.
29 \NavyMarginTitle{
30   \NavyReportNumber{} Mathematical Model Version 2: \\\
31   \hphantom{\NavyReportNumber{}} A Long Detailed Title Spanning Multiple Lines (if desired)
32 }
33
34 \NavyFormID{NDW-DTRC 5602/51 (Rev. 7-93)}

    Finally we produce a very simple report that contains a title page and the
    technical components page as used by Carderock/NSWC. First we print the title
    page. Next the technical components page is written. Following these two pages,
    the table of contents is output, followed by the very short report.

35
36 \NavyTitlePage
37
38 \pagenumbering{roman}
39
40 \MakeCarderockDivPage
41
42 \tableofcontents
43 \cleardoublepage
44 \pagenumbering{arabic}
45 \setcounter{page}{1}
46
47 \section{Introduction}
48
49 \lipsum[1]
50
51 \section{Conclusion}
52
53 \lipsum[2]
54
55 \end{document}

```

7 The DOCSTRIP Modules

The following modules are used in the implementation to direct DOCSCRIPT in generating the external files:

driver	produces a documentation driver file.
package	produces the package navydocs.sty.
sample	produces a sample L ^A T _E X template and test file.

8 The code

8.1 Identification

```
56 \NeedsTeXFormat{LaTeX2e}
57 % Note that the YYYY/MM/DD format must be respected or an error will
58 % be generated.
59 \ProvidesPackage{navydocs}[2016/06/22 Navy Documents]
60 \typeout{Package: navydocs 2016/07/01 v1.1}
```

Define some commands for the abbreviation “*e.g.*” and to retrieve the current month as a name.

```
61 \providecommand{\eg}{\it e.g.\/\ }
62 \newcommand{\MONTH}{%
63   \ifcase\the\month
64   \or January% 1
65   \or February% 2
66   \or March% 3
67   \or April% 4
68   \or May% 5
69   \or June% 6
70   \or July% 7
71   \or August% 8
72   \or September% 9
73   \or October% 10
74   \or November% 11
75   \or December% 12
76   \fi}
```

8.2 Load the `eso-pic` Package

Check to see if the `eso-pic` package is present. If it is, then load the package so we can put vertical text in the left margin per Carderock/NSWC style requirement. If not, then generate a package error.

```
77 \IfFileExists{eso-pic.sty}{%
78   \usepackage{eso-pic, rotating}}
79 {\PackageError {navydocs}{The eso-pic package was not found.}
80  {Install the eso-pic package on your system.}}
```

8.3 Load the `mdframed` Package

Check to see if the `mdframed` package is present. If it is, then load the package so a vertical line can be drawn to indicate the left margin per Carderock/NSWC style requirement. If not, then generate a package error.

```
81 \IfFileExists{mdframed.sty}{%
82   \usepackage[
83     linewidth=4pt,
84     middlelinecolor= black,
85     middlelinewidth=0.4pt,
86     roundcorner=1pt,
87     topline = false,
88     rightline = false,
```

```

89 bottomline = false,
90 rightmargin=0pt,
91 skipabove=0pt,
92 skipbelow=0pt,
93 leftmargin=0cm,
94 innerleftmargin=1cm,
95 innerrightmargin=0pt,
96 innertopmargin=0pt,
97 innerbottommargin=0pt,
98 ]{mdframed}}
99 {\PackageError {mdframed}{The mdframed package was not found.}
100 {Install the mdframed package on your system.}}

```

8.4 Load the fancyhdr Package

Check to see if the fancyhdr package is present. If it is, then load the package to define a custom footer. If it is not present then report error and terminate. This package is needed to define a custom footer where the form identifier appears on the Technical Components page produced by \MakeCarderockDivPage.

```

101 \IfFileExists{fancyhdr.sty}{%
102 \usepackage{fancyhdr}}
103 {\PackageError {navydocs}{The fancyhdr package was not found.}
104 {Install the fancyhdr package on your system.}}

```

8.5 Load the relsize Package

Check to see if the relsize package is present. If it is, then load the package to allow the font in the margin title to be one size down from whatever is currently being used by default.

```

105 \IfFileExists{relsize.sty}{%
106 \usepackage{relsize}}
107 {\PackageError {navydocs}{The relsize package was not found.}
108 {Install the relsize package on your system.}}

```

8.6 Load the setspace Package

Check to see if the setspace package is present. If it is, then load the package to allow line spacing to be controlled in sections of the document such as those generated by \MakeCarderockDivPage.

```

109 \IfFileExists{setspace.sty}{%
110 \usepackage{setspace}}
111 {\PackageError {navydocs}{The setspace package was not found.}
112 {Install the setspace package on your system.}}

```

8.7 Load the xparse Package

Check to see if the xparse package is present. If it is, then load the package to allow a command to be defined with more than one option. This package is

used to define the `\NavyMarginTitle` command with two optional arguments for placement of the margin title.

```
113 \IfFileExists{xparse.sty}{%
114   \usepackage{xparse}}
115   {\PackageError {navydocs}{The xparse package was not found.}
116    {Install the xparse package on your system.}}
```

8.8 The User Interface

The following macros define the external and internal portions of the user interface. These macros are used to fill the various items on the title page. All the macros have the same pattern: a public version which sets the internal value, both based on the item name.

```

\NavyDivision
\navy@Division 117 \newcommand\NavyDivision[1]{\renewcommand\navy@Division{#1\hfill}}
118 \newcommand\navy@Division{\relax}

\NavyDivisionLocation
\navy@Location 119 \newcommand\NavyDivisionLocation[1]{\renewcommand\navy@Location{#1\hfill}}
120 \newcommand\navy@Location{\relax}
```

The `\NavyReportNumber` command is defined so the user can use it to both specify and retrieve the report number. Use of the command with an argument will specify the report number, while call it will return the currently save report number. The latter feature is useful when wishing to have the report number appear in the cover page such as the margin title as shown in the example given in Section 6 above.

```

\NavyReportNumber
\navy@ReportNumber 121 \newcommand\NavyReportNumber[1]{
122   \ifx&#1&%
123     % Empty argument so use existing report number
124     \navy@ReportNumber
125   \else
126     % Use argument for report number
127     \renewcommand\navy@ReportNumber{#1}
128   \fi
129 }
130 \newcommand\navy@ReportNumber{\relax}

\NavyReportDate
\navy@ReportDate 131 \newcommand\NavyReportDate[1]{\renewcommand\navy@ReportDate{#1\hfill}}
132 \newcommand\navy@ReportDate{\number\day~\MONTH~\number\year}

\NavyReportType
\navy@ReportType 133 \newcommand\NavyReportType[1]{\renewcommand\navy@ReportType{#1\hfill}}
134 \newcommand\navy@ReportType{\relax}
```

```

\NavyReportTitle
\navy@ReportTitle 135 \newcommand\NavyReportTitle[1]{\renewcommand\navy@ReportTitle{#1\hfill}}
136 \newcommand\navy@ReportTitle{\relax}

```

```

\NavyAuthor
\navy@Author 137 \newcommand\NavyAuthor[1]{\renewcommand\navy@Author{#1\hfill}}
138 \newcommand\navy@Author{\relax}

```

```

\NavyDistributionStatement
\navy@DistributionStatement 139 \newcommand\NavyDistributionStatement[1]
140 {\renewcommand\navy@DistributionStatement{#1\hfill}}
141 \newcommand\navy@DistributionStatement{
142 Approved for public release; distribution is unlimited.\hfill
143 }

```

The macro `\NavyMarginTitle` is defined so an optional title can appear in the left hand margin of the cover page, oriented in a vertical position. It accepts two optional arguments that define the bottom left placement of the margin title in order to allow the user control over its exact placement, if needed. This is achieved by defining two variables (`xmargin,ymargin`) that are used later in the `\AddToShipoutPicture` command. By default, the margin title will be placed at the margin paragraph width and the bottom of the text height area. Two helper functions are defined to properly account for the offset depending on whether the margin text occupies 1 or 2 lines.

`\countlines` The macro `\countlines` is a helper function that counts the number of lines in a text block so the offset for the margin title can be properly determined.

```

144 \newcommand\countlines[1]{
145   {\setbox0\vbox{\noindent{#1}\par
146    \count@z@
147    \loop
148    \unskip\unpenalty\unskip\unpenalty\unskip
149    \setbox0\lastbox
150    \ifvoid0
151     \xdef\numlines{\the\count@}
152    \else
153     \advance\count@\@ne
154    \repeat}}
155 }

```

`\countlines` The macro `\getmargintextheight` is a helper function that calculates the height of a line in a text block so the offset for the margin title can be properly calculated.

```

156 \newcommand\getmargintextheight[1]{
157   \newdimen\margintextheight
158   \setbox0=\vbox{#1}
159   \margintextheight=\ht0 \advance\margintextheight by \dp0
160   % count number of lines so height of each line can be found
161   \countlines{#1}
162   % now determine height of each line
163   \margintextheight=\the\dimexpr \margintextheight / \numlines
164 }

```

`\NavyMarginTitle` The `\NavyMarginTitle` command is now defined for two optional arguments using the `\DeclareDocumentCommand` from the `usepackage xparse`. No margin title will appear if `\NavyMarginTitle` is called with an empty argument. The `\marginoffset` command calculates the default offset for the margin title when it contains 2 lines in the text block.

```

165 \newif\ifmargin
166 \margintrue
167
168 \def\marginoffset{\the\dimexpr -\margintextheight*(\numlines - 1) +
169 \margintextheight*(\numlines - 1)/2}
170
171 \def\navy@xmargin{
172 \LenToUnit{\leftmargin - \oddsidemargin + \marginparwidth/2
173 + \marginoffset}}
174 \def\navy@ymargin{\LenToUnit{\paperheight - \textheight + \topmargin}}
175 \newcommand\xmargin{\navy@xmargin}
176 \newcommand\ymargin{\navy@ymargin}
177
178 \DeclareDocumentCommand{\NavyMarginTitle}
179 {
180 0{ \LenToUnit{\leftmargin - \oddsidemargin + \marginparwidth/2
181 + \marginoffset} }
182 0{ \LenToUnit{\paperheight - \textheight + \topmargin} } m }{
183 \renewcommand\xmargin{#1}
184 \renewcommand\ymargin{#2}
185 \ifx#3&%
186 % Empty argument so suppress margin title
187 \marginfalse
188 \else
189 % Use mandatory argument for margin title
190
191 % get height of each line for margin offset calculation
192 \getmargintextheight{#3}
193
194 \renewcommand\navy@MarginTitle{#3}
195 \fi
196 }
197 \newcommand\navy@MarginTitle{\relax}

```

`\NavyFormID` The macro `\NavyFormID{FormID}` is defined so a form identifier can be placed at the bottom of a page. It is currently used by the macro `\MakeCarderockDivPage` when producing the Technical Components page used by the Carderock Division/NSWC. An example FormID for the latter is “NDW-DTRC 5602/51 (Rev. 7-93)”. This macro can be used in new macros that are created for other Supplementary Material pages required by Navy organizations. It can also easily be copied and modified for a different `\fancypagestyle` as supported by the `fancyhdr` Package.

```

198 \newcommand\NavyFormID[1]{
199 \fancypagestyle{NavyFormIDStyle}
200 {\fancyhf{ }\renewcommand{\headrulewidth}{0pt}
201 \fancyfoot[L]{\scriptsize #1} }

```


8.9 Error checking and reporting

`\ifnavy@undef` This switch is used by the error reporting at the end of the document to generate
`\navy@undeftrue` a general message that there was an undefined required field.
`\navy@undeffalse` 202 `\newif\ifnavy@undef`
203 `\navy@undeffalse`

`\navy@undefined` The `\navy@undefined` macro is executed with the optional argument for each
required field and without the optional argument at the end of the document.

```
204 \newcommand{\navy@undefined}[1][\@empty]{%
205   \ifx \@empty#1\relax
206     \ifnavy@undef
207       \typeout{^^J%
208                 navydocs Warning: There are required fields that are
209                 undefined.%
210               ^^J}%
211     \fi
212   \else
213     \navy@undeftrue
214     \typeout{^^J%
215               navydocs Warning: \expandafter\string\csname #1
216               \endcsname\space is undefined.%
217             ^^J}%
218   \fi}
```

`\navy@checkfield` This macro does the actual checking for undefined required fields. Because of
the different sorts of field definitions that could be created, it was easier to just
fill a box with whatever the user defined and check to see if the box has a non-
zero width. You could defeat this if you really wanted to, but it should work for
reasonable field values.

```
219 \newcommand{\navy@checkfield}[1]{%
220   \setbox\@tempboxa\vbox{\csname navy@#1\endcsname}%
221   \ifdim \wd\@tempboxa =0pt
222     \navy@undefined[#1]
223   \fi}

224 \AtEndDocument{\navy@undefined}
```

8.10 Page layout

This is the part of the code that actually produces the title page and any supple-
mentary material pages. After the pages are produced, most of the macros are set
to `\relax` in order to recover as much pool space as possible.

8.10.1 Form setup and cleanup

`\NavyTitlePage` At the end of the `\titlepage` command, the `\thanks` macro is redefined to be
`\relax`. If we want to define the title once and also want to be able to have a
`\thanks` message associated with the title on the titlepage, and want to use that
same title text on the report documentation page, then we need to redefine the

`\thanks` macro to eat its argument. This is done by setting `\thanks` to `\@gobble` while printing the report title page.

```
225 \newcommand{\NavyTitlePage}{%
226   \global\let\thanks\@gobble
227   \MakeNavyTitlePage
228   \global\let\thanks\relax}
```

`\MakeNavyTitlePage` The `\MakeNavyTitlePage` command creates the Report Title Page using the information defined by the associated field macros. This should be used at the beginning of a deliverable report.

```
229 \newcommand\MakeNavyTitlePage{%
```

If the `twoside` option is specified in the `\documentclass`, then it is printed as a separate page with a blank back. This page is treated as page ‘*i*’ (if the `documentclass` `twoside` option is specified, then the back treated as page ‘*ii*’.

```
230   \newpage
231   \if@twoside\ifodd\c@page\else
232     \null
233     \thispagestyle{empty}%
234   \newpage
235   \fi\fi
```

Check for missing required fields. If the field value is missing, then print a warning. In the case of the number of pages, if the `totpages` package was loaded, then calculate the value, else if the total pages is not given, then give a warning.

```
236   \navy@checkfield{Division}
237   \navy@checkfield{Location}
238   \navy@checkfield{ReportNumber}
239   \navy@checkfield{ReportDate}
240   \navy@checkfield{ReportType}
241   \navy@checkfield{ReportTitle}
242   \navy@checkfield{Author}
243   \navy@checkfield{DistributionStatement}
```

Next define a picture that contains the report title oriented vertically to be put in the left margin of the title page. This is done to conform to Carderock/NSWC title page format requirements.

```
244 \ifmargin
245 \AddToShipoutPicture*{\put(\xmargin,\ymargin)
246   {\rotatebox{90}
247     {\scalebox{1}{\parbox[t]{\textwidth}
248       {\textbf{\small \navy@MarginTitle}}}
249   }}}
250 \fi
```

The set up is now done, so start the title page and use the `mdframed` environment to create a vertical rule along the left margin.

```
251 \begin{titlepage}
252
253 \noindent
254 \begin{minipage}[t]{\textwidth}
255 \begin{mdframed}
```

Next put the Navy division and location at the top of the page followed by a thick and then thin line that runs horizontally across the page.

```

256 \parbox[t][0.98\textheight][t]{\textwidth}{
257 \noindent\textbf{\large \navy@Division}
258 \vskip3mm
259 \noindent\textbf{\small \navy@Location}
260 \vskip3mm
261 \noindent\rule{\textwidth}{4pt} % thick line across page
262 \vskip-8pt
263 \noindent\rule{\textwidth}{2pt} % thinner line across page

```

Vertically skip 4 mm and state the report number, report date, and report type.

```

264 \vspace{4mm}\
265 \noindent
266 \navy@ReportNumber \ \navy@ReportDate \ \navy@ReportType \

```

Vertically skip 1.7 cm and insert the report title and author(s). Note that the blank lines are needed in order for the `\vspace` to work properly.

```

267 \vspace{1.7cm}\
268 {\Large \textbf{\navy@ReportTitle}
269 \vspace{1cm}\
270 \normalsize
271 \noindent
272 by \ \navy@Author
273 }\

```

Finish adding the content to the page by placing the Navy logo and the Distribution Statement at the bottom, closing off the page with a horizontal rule. Note that the Distribution Statement outlined by horizontal lines is produced within a *minipage* environment.

```

274 \vfill
275 \noindent
276 \includegraphics[width=21mm]{graphics/navy-logo-102.png}
277 \hspace{0.6in}
278 \begin{minipage}{0.75\textwidth}
279 \vspace{-0.8cm}
280 \hrule height 4pt
281 \vspace{4pt}
282 \noindent
283 \parbox[c]{\textwidth}{
284 \vspace{4pt}
285 \textbf{\small \navy@DistributionStatement}
286 \vspace{4pt}
287 }
288 \hrule height 4pt
289 \end{minipage}

```

Finish up the title page.

```

290 \end{mdframed}
291 \end{minipage}
292 \end{titlepage}

```

Finally, the last step is to set all of the now unused definitions to `\relax`, thereby freeing some space.

```

293 % \thispagestyle{empty}
294
295 \global\let\NavyDivision\relax
296 \global\let\navy@Division\relax
297 \global\let\Location\relax
298 \global\let\navy@Location\relax
299 \global\let\ReportNumber\relax
300 \global\let\navy@ReportNumber\relax
301 \global\let\NavyReportDate\relax
302 \global\let\navy@ReportDate\relax
303 \global\let\NavyReportType\relax
304 \global\let\navy@ReportType\relax
305 \global\let\ReportTitle\relax
306 \global\let\navy@ReportTitle\relax
307 \global\let\NavyAuthor\relax
308 \global\let\navy@Author\relax
309 \global\let\NavyRelease\relax
310 \global\let\navy@DistributionStatement\relax
311 \global\let\MarginTitle\relax
312 \global\let\navy@MarginTitle\relax
313
314 \global\let\MakeNavyCoverPage\relax} % end of \MakeNavyCoverPage

```

`\MakeCarderockDivPage` The `\MakeCarderockDivPage` command creates the Technical Components page for the Carderock Division/NSWC. The text for the page is explicitly included in this initial release of the package, rather than passed into the macro via a user interface, because it is not known at the time of writing what are the requirements of other Navy organizations. This is subject to change in future if there is a need and demand to do so.

The Technical Components page is produced using the fancy page style defined via the `\NavyFormID` described above so the document code appears in the footer.

```

315 \newcommand\MakeCarderockDivPage{%
316 \thispagestyle{NavyFormIDStyle} % insert document code in footer

```

Insert page title at the top in reverse image followed by the list of Navy codes residing at Carderock/NSWC.

```

317 \section*{ \sffamily\colorbox{black}{\bfseries\textcolor{white}
318 {\large MAJOR CARDEROCK DIVISION TECHNICAL COMPONENTS}} }
319 \vspace{8ex}
320
321 \doubleSPACE
322 \begin{tabular}{lrl}
323 CODE & 011 & Director of Technology \\
324 & 10 & Machinery Systems/Programs and Logistics Directorate \\
325 & 20 & Ship Systems & Programs Directorate \\
326 & 50 & Hydromechanics Directorate \\
327 & 60 & Survivability, Structures and Materials Directorate \\
328 & 70 & Signatures Directorate \\
329 & 80 & Machinery Research & Development Directorate

```

```

330 & 90 & Machinery In-Service Engineering Directorate
331 \end{tabular}
332 \spacespace

```

State types of reports produced by the division at the bottom of the page in a framed box.

```

333 \vfill % push minipage to bottom of page
334
335 \noindent
336 \fbox{\begin{minipage}{\textwidth}
337 \vspace{2ex}
338 \begin{center}
339 CARDEROCK DIVISION, NSW, ISSUES THREE TYPES OF REPORTS:
340 \end{center}
341
342 \parbox{0.97\textwidth}{
343 \begin{enumerate}
344 \item \textbf{CARDEROCKDIV reports, a formal series,} contain information
345 of permanent technical value. They carry a consecutive numerical
346 identification regardless of their classification or the originating
347 directorate.
348 \item \textbf{Directorate reports, a semiformal series,} contain
349 information of a preliminary, temporary, or proprietary nature or of
350 limited interest or significance. They carry an alpha numeric
351 identification issued by the originating directorate.
352 \item \textbf{Technical memoranda, an informal series,} contain
353 technical documentation of limited use and interest. They are primarily
354 working papers intended for internal use. They carry an identifying
355 number which indicates their type and the numerical code of the
356 originating directorate. Any distribution outside CARDEROCKDIV must be
357 approved by the head of the originating directorate on a case-by-case
358 basis.
359 \end{enumerate}
360 }
361 \vspace{1ex}
362
363 \end{minipage}}

```

Force new page and close the `\MakeCarderockDivPage` macro.

```

364 \newpage
365 \global\let\MakeCarderockDivPage\relax % end of \MakeCarderockDivPage

```

9 Acknowledgments

I would like to acknowledge Steven Douglas Cochran for authoring the `sf298` Package, which was used as a template for writing this `navydocs` Package.

References

- [1] Michel Goossens, Frank Mittelbach, and Alexander Samarin, *A Guide to L^AT_EX 2_ε*, 1993, 2nd edition (revised 1995).