

The leaflet document class

Jürgen Schlegelmilch

Hubert Gäßlein

Rolf Niepraschk

Walter Schmidt

2020/10/14

Contents

1	Usage	1
2	Implementation	1
2.1	Test whether the LaTeX format is new enough	1
2.2	Saving some internal macros.	1
2.3	Option processing	1
2.4	Changing the class properties	7
2.5	Changing the page dimensions	8
2.6	Additional user macros	9
2.7	Page construction and output	10
2.7.1	Intercepting the small pages	10
2.7.2	Reassembling the small pages	11

1 Usage

Process the file `leaflet-manual.tex` with \LaTeX to see details of usage and layout.

2 Implementation

```
1 (*class)
```

2.1 Test whether the LaTeX format is new enough

We use the 'shipout/before' hook.

```
2 \providecommand\IfFormatAtLeastTF{\@ifl@t@r\fmtversion}
3 \IfFormatAtLeastTF{2020/10/01}{-}{-}%
4 \ClassError{leaflet}{-}%
5 LaTeX version equal to or newer \MessageBreak
6 than '2020/10/01' is required%
7 }{-}%
8 Renew your TeX installation.%
9 }{-}%
10 }
```

2.2 Saving some internal macros. . .

```
11 \let\LL@begindvi\@begindvi
```

2.3 Option processing

```
12 \@ifundefined{iflandscape}{\newif\iflandscape}{-}%
13 \@ifundefined{iftumble}{\newif\iftumble}{-}%
14 \@ifundefined{iftwopart}{\newif\iftwopart}{-}%
15 \@ifundefined{iffoldcorr}{\newif\iffoldcorr}{-}%
16 \newlength\LL@tempdima
17 \newcommand\LL@debug@info[1]{-}%
```

```

18 \DeclareOption{dvips}{\PassOptionsToPackage{\CurrentOption}{graphics}}
19 \DeclareOption{pdftex}{\PassOptionsToPackage{\CurrentOption}{graphics}}
20 \DeclareOption{vtex}{\PassOptionsToPackage{\CurrentOption}{graphics}}
21 \DeclareOption{dvipdfm}{\PassOptionsToPackage{\CurrentOption}{graphics}}
22 \DeclareOption{twoside}{\OptionNotUsed}
23 \DeclareOption{twocolumn}{\OptionNotUsed}
24 \DeclareOption{landscape}{\landscapetrue}
25 \DeclareOption{portrait}{\landscapefalse}
26 \DeclareOption{debug}{\let\LL@debug@info\typeout}
27 \DeclareOption{twopart}{\twoparttrue}
28 \DeclareOption{notwopart}{\twopartfalse}
29 \DeclareOption{nospecialtricks}{%
30   \AtEndOfClass{%
31     \ifLL@combine
32       \let\immediate\@@@immediate\let\write\@@@write
33       \let\openout\@@@openout\let\closeout\@@@closeout
34       \let\special\@@@special\let\@@@exec\outs\relax
35     \fi}}

```

`\LL@setPaperSize` Some paper sizes are not supported by the article class. Hence this work-around. These page dimensions *must* be given in landscape orientation!

```

36 \newcommand*\LL@setPaperSize{}
37 \DeclareOption{a3paper}{\def\LL@setPaperSize{%
38   \paperwidth=420mm\paperheight=297mm\relax}}%
39 \ifdefinable\ifLL@combine{\newif\ifLL@combine}
40 \DeclareOption{combine}{\LL@combinetrue}
41 \DeclareOption{nocombine}{\LL@combinefalse}

```

`\LL@selectOutput`

```

42 \newcommand*\LL@selectOutput{}
43 \DeclareOption{frontside}{\def\LL@selectOutput#1#2{#1}}
44 \DeclareOption{backside}{\def\LL@selectOutput#1#2{#2}}
45 \DeclareOption{bothsides}{\def\LL@selectOutput#1#2{#1#2}}

46 \DeclareOption{tumble}{\tumbletrue}
47 \DeclareOption{notumble}{\tumblefalse}

```

`\LL@foldmark` Drawing code for the fold mark. (Will be called within a picture environment.)

```

48 \newcommand*\LL@foldmark{}
49 \DeclareOption{foldmark}{%
50   \def\LL@foldmark{%
51     \begin{group}
52       \linethickness{\foldmarkrule}%
53       \@tempdima=\dimexpr\paperheight-\LL@tmargin
54       \put(0,\@tempdima){%
55         \line(0,-1){\foldmarklength}}%
56     \end{group}%
57 }

58 \DeclareOption{nofoldmark}{\def\LL@foldmark{}}%

59 \DeclareOption{foldcorr}{\foldcorrtrue}
60 \DeclareOption{nofoldcorr}{\foldcorrfalse}

61 \newcommand*\LL@toomanypages[2]{}
62 \DeclareOption{draft}{\PassOptionsToClass{\CurrentOption}{article}%
63   \AtEndOfClass{%
64     \def\LL@toomanypages#1#2{%
65       \ClassWarningNoLine{leaflet}{#1.\MessageBreak#2}}%
66   }}%
67 }
68 \DeclareOption{final}{\PassOptionsToClass{\CurrentOption}{article}%
69   \AtEndOfClass{%
70     \ifLL@combine

```

```

71     \def\LL@toomanypages#1#2{%
72         \ClassError{leaflet}{#1}{#2.}}%
73     \else
74         \def\LL@toomanypages#1#2{%
75             \ClassWarningNoLine{leaflet}{#1.\MessageBreak#2}}%
76         \fi
77     }%
78 }
79 \DeclareOption*{\PassOptionsToClass{\CurrentOption}{article}}
80 \PassOptionsToClass{landscape,a4paper}{article}
81 \ExecuteOptions{tumble,foldmark,bothsides,combine,landscape,notwopart}
82 \ProcessOptions\relax
83 \ifLL@combine

```

\LL@rotate@I Rotates the output pages.

```

\LL@rotate@II 84 \newcommand*\LL@rotate@I{}\newcommand*\LL@rotate@II{}%
85 \iflandscape
86     \def\LL@rotate@I#1{#1}%
87     \iftumble
88         \def\LL@rotate@II#1{\rotatebox[origin=c]{180}{#1}}%
89     \else
90         \def\LL@rotate@II#1{#1}%
91     \fi
92 \else
93     \def\LL@rotate@I#1{\rotatebox[origin=c]{90}{#1}}%
94     \iftumble
95         \def\LL@rotate@II#1{\rotatebox[origin=c]{270}{#1}}%
96     \else
97         \def\LL@rotate@II#1{\rotatebox[origin=c]{90}{#1}}%
98     \fi
99 \fi

```

\immediate In the following we redefine the \TeX primitives \immediate, \write, \openout, and \closeout. All of them not “immediate” executed statements are added to the macro \@@@pending@outs (comma list). So especially the \write statements independent of \TeX ’s \shipout run at a convenient time. For $\text{\textit{V}\TeX}$ we must keep in mind that \immediate\special exist.

```

100 \def\@@@pending@outs{}\let\@@@immediate\immediate
101 \let\@@@write\write \let\@@@special\special
102 \let\@@@openout\openout \let\@@@closeout\closeout
103 \def\immediate{%
104     \let\write\immediate@write%
105     \let\openout\immediate@openout%
106     \let\closeout\immediate@closeout%
107     \let\special\immediate@special}%
108 \def\reset@immediate{%
109     \let\write\pending@write%
110     \let\openout\pending@openout%
111     \let\closeout\pending@closeout%
112     \let\special\@@@special}%
113 \long\def\pending@write#1#\{\pending@@write{#1}}
114 \def\immediate@write{%
115     \reset@immediate\@@@immediate\@@@write}%
116 \def\immediate@openout{%
117     \reset@immediate\@@@immediate\@@@openout}%
118 \def\immediate@closeout{%
119     \reset@immediate\@@@immediate\@@@closeout}%
120 \def\immediate@special{%
121     \reset@immediate\@@@immediate\@@@special}%
122 \let\write\pending@write
123 \let\openout\pending@openout
124 \let\closeout\pending@closeout

```

`\@dummy@whatsit` Makes our redefined primitives more like “whatsits” (???). ‘`\special{}`’ is also possible for pdfTeX but we get a lot of strange warnings (“Non-PDF special ignored!”) in this case.

```

125 \def\@dummy@whatsit{\special{}}
126 \begingroup\ifundefined{pdfoutput}%
127 {\endgroup}
128 {\endgroup}
129 \ifnum\pdfoutput>\z@\def\@dummy@whatsit{\pdfliteral{}}\fi

130 \begingroup\expandafter\expandafter\expandafter\endgroup
131 \expandafter\ifx\csname eTeXversion\endcsname\relax
132   %% Test is from Markus Kohm (d.c.t.t, 29 Jun 2004)
133   \ClassWarningNoLine{leaflet}{%
134     *****\MessageBreak
135     * It's very recommended to use eTeX \MessageBreak
136     * with this package! \MessageBreak
137     *****}%

```

`\pending@@write` Doesn't work correctly without any `\mark` or `\special` or `\pdfliteral` command inside.

```

138 \long\def\pending@@write#1#2{%
139   \@dummy@whatsit
140   \g@addto@macro\@@@pending@outs{\@@@immediate\@@@write\number#1{#2},}%

```

`\pending@openout`

```

141 \def\pending@openout#1 {%
142   \@dummy@whatsit
143   \g@addto@macro\@@@pending@outs{\@@@immediate\@@@openout\number#1,}%

```

`\pending@closeout`

```

144 \def\pending@closeout#1{%
145   \@dummy@whatsit
146   \g@addto@macro\@@@pending@outs{\@@@immediate\@@@closeout\number#1,}%

```

`\@@@exec@outs` Note to this implementation: The out commands and the page breaks are not allways in sync, which means possible wrong page references.

```

147 \newcommand*\@@@exec@outs{%
148   \@@@pending@outs\gdef\@@@pending@outs{%
149     \LL@debug@info{%
150       >>> execute the output commands of the current page <<<}}%
151 \else
152   \RequirePackage{etex}

```

Allocation of a new mark class.

```

153 \globmarks\@@@out@mark
154 \newcounter{@@total@outs}\setcounter{@@total@outs}{0}
155 \newcounter{@@last@exec}\setcounter{@@last@exec}{0}

```

`\pending@@write` Doesn't work correctly without any `\mark` or `\special` or `\pdfliteral` command inside.

```

156 \long\def\pending@@write#1#2{%
157   \global\advance\c@@@total@outs\@ne%
158   \marks\@@@out@mark{\the\c@@@total@outs}%
159   \g@addto@macro\@@@pending@outs{\@@@immediate\@@@write\number#1{#2},}%

```

`\pending@openout`

`\pending@@openout`

```

160 \def\pending@openout#1 {%
161 \global\advance\c@@@total@outs\@ne%
162 \marks\@@@out@mark{\the\c@@@total@outs}%
163 \g@addto@macro\@@@pending@outs{\@@@immediate\@@@openout\number#1,}%

```

`\pending@closeout`

```

164 \def\pending@closeout#1{%
165 \global\advance\c@@@total@outs\@ne%
166 \marks\@@@out@mark{\the\c@@@total@outs}%
167 \g@addto@macro\@@@pending@outs{\@@@immediate\@@@closeout\number#1,}%

```

`\@@@exec@outs` With the call of `\@@@exec@outs` we simulate \TeX 's execution of non-immediate output commands. The number of pending commands which can be executed must be decremented by `\value{@@total@outs}-\botmarks\@@@out@mark`. The remaining commands must still wait until the next output page is ready. It works only for output commands in the main text which moved to the next page but not for floating output commands.

```

168 \newcommand*\@@@exec@outs{%
169   \begingroup
      Pending io's = \@tempcntb = TOTAL-OUTS - LAST-EXEC
170   \@tempcntb\c@@@total@outs\advance\@tempcntb-\c@@@last@exec%
171   \edef\reserved@a{\botmarks\@@@out@mark}%
172   \ifx\reserved@a\@empty\@tempcnta\z@else\@tempcnta\reserved@a\fi%
173   \LL@debug@info{PENDING-OUTS:\the\@tempcntb\space\space
174                 TOTAL-OUTS:\the\c@@@total@outs\space\space
175                 LAST-EXEC:\the\c@@@last@exec\space\space
176                 TOPMARK:\topmarks\@@@out@mark\space\space
177                 FIRSTMARK:\firstmarks\@@@out@mark\space\space
178                 BOTMARK:\botmarks\@@@out@mark}%
      Last valid pending entry = \@tempcntb = PENDING-OUTS - TOTAL-OUTS + BOTMARK
      Number of invalid (moved) out's = \@tempcnta = TOTAL-OUTS - BOTMARK
179   \advance\@tempcnta-\c@@@total@outs \advance\@tempcntb\@tempcnta
180   \@tempcnta-\@tempcnta%
181   \ifnum\@tempcnta>\z@
182     \LL@debug@info{%
183       >>> resave \the\@tempcnta\space output command(s).
184       Too early to execute! <<<}%
185   \fi
186   \@tempcnta\z@ \def\reserved@b{}%
187   \set@display@protect
188   \@for\reserved@a :=\@@@pending@outs\do{%
189     \ifx\reserved@a\@empty\else
190       \ifnum\@tempcnta<\@tempcntb%
191         \reserved@a% execute output's related to the current page box.
192         \global\advance\c@@@last@exec\@ne
193         \LL@debug@info{>>> execute output command number
194                       \the\c@@@last@exec\space<<<}%
195       \else
      Other output's must be resaved and still pending.
196       \expandafter\g@addto@macro\expandafter\reserved@b\expandafter{%
197         \reserved@a,}%
198       \fi
199       \advance\@tempcnta\@ne%
200       \fi}%
201   \expandafter\@temptokena\expandafter{\reserved@b}%
202   \xdef\@@@pending@outs{\the\@temptokena}%
203 \endgroup}%
204 \fi% end of eTeX test.

```

`\protected@write` Because our redefined `\write` is expandable we must protect it inside of \LaTeX 's `\protected@write`.

```

205 \long\def\protected@write#1#2#3{%
206   \begingroup
207     \let\thepage\relax
208     #2%
209     \let\protect\@unexpandable@protect
210     \edef\reserved@a{\noexpand\write#1{#3}}%
211     \reserved@a%
212   \endgroup
213   \if@nobreak\ifvmode\nobreak\fi\fi}%

```

`\@begindvi` Delay `\@begindvi` to be executed until the real page output.

```

214 \let\@beginDvi\@empty
215 \fi% end of \ifLL@combine

```

\LL@toomanypages Now elsewhere ...

```

216 \LoadClass{article}
217 \RequirePackage{graphicx}

```

\LL@pagesize@specials Now the graphics driver is known. We will check the graphics driver and set special code for page dimensions and other.

```

218 \newcommand*\LL@pagesize@specials[2]{%
219 \ifundefined{Gin@driver}{}%
220 \ifx\Gin@driver\@empty\else%
221 \filename@parse{Gin@driver}\@tempswafalse%
222 \def\reserved@a{dvips}%
223 \ifx\filename@base\reserved@a\@tempwattrue\fi%
224 \def\reserved@a{dvi}%
225 \ifx\filename@base\reserved@a\@tempwattrue\fi%
226 \if@tempwa
227 \ClassInfo{leaflet}{Generating code for dvips}%
228 \def\LL@pagesize@specials#1#2{%
229 \@tempdima=#1\@tempdimb=#2 %
230 \AtBeginDvi{\special{papersize=\the\@tempdima,\the\@tempdimb}}}%
231 \fi
232 \def\reserved@a{pdfTeX}%
233 \ifx\filename@base\reserved@a
234 \ClassInfo{leaflet}{Generating code for pdfTeX}%
235 \def\LL@pagesize@specials#1#2{%
236 \@tempdima=#1\@tempdimb=#2 %
237 \pdfpagewidth\@tempdima\pdfpageheight\@tempdimb}%
238 \fi
239 \def\reserved@a{LaTeX}%
240 \ifx\filename@base\reserved@a
241 \ClassInfo{leaflet}{Generating code for LaTeX}%
242 \ifx\pdfpagewidth\undefined
243 \def\LL@pagesize@specials#1#2{%
244 \@tempdima=#1\@tempdimb=#2 %
245 \pagewidth\@tempdima\pageheight\@tempdimb}%
246 \else
247 \def\LL@pagesize@specials#1#2{%
248 \@tempdima=#1\@tempdimb=#2 %
249 \pdfpagewidth\@tempdima\pdfpageheight\@tempdimb}%
250 \fi
251 \fi
252 \def\reserved@a{XeTeX}%
253 \ifx\filename@base\reserved@a
254 \ClassInfo{leaflet}{Generating code for XeTeX}%
255 \def\LL@pagesize@specials#1#2{%
256 \@tempdima=#1\@tempdimb=#2%
257 \pdfpagewidth\@tempdima\pdfpageheight\@tempdimb}%
258 \fi
259 \def\reserved@a{VTeX}%
260 \ifx\filename@base\reserved@a
261 \ClassInfo{leaflet}{Generating code for VTeX}%
262 \def\LL@pagesize@specials#1#2{%
263 \@tempdima=#1\@tempdimb=#2%
264 \mediawidth\@tempdima\mediaheight\@tempdimb}%
265 \fi
266 \fi
267 }

```

\LL@CmdIgnored

```

268 \newcommand*\LL@CmdIgnored[1]{%

```

```

269 \ClassWarning{leaflet}{%
270   '\string#1' ignored}}

```

2.4 Changing the class properties

```

271 \setlength{\parskip}{1ex plus 2pt}
272 \@listi%
273 \setlength{\labelwidth}{\leftmargin}
274 \addtolength{\labelwidth}{-\labelsep}
275 \pagestyle{empty}
276 \headheight\z@
277 \headsep\z@
278 \footskip\z@
279 \marginparwidth\z@
280 \marginparsep\z@
281 \sloppy
282 \setcounter{secnumdepth}{0}
283 %\renewcommand{\marginpar}[2][]{\LL@CmdIgnored{\marginpar}}
284 \renewcommand{\twocolumn}[1][]{\LL@CmdIgnored{\twocolumn}}
285 \renewcommand{\onecolumn}{\LL@CmdIgnored{\onecolumn}}
286 \renewcommand{\topfraction}{0.7}
287 \renewcommand{\bottomfraction}{0.7}
288 \setlength{\textfloatsep}{10pt plus 4pt minus 3pt}
289 \setlength{\parindent}{\z@}
290 \setlength{\leftmargini}{1.5em}
291 \setlength{\leftmarginii}{1.5em}
292 \setlength{\leftmarginiii}{1.5em}
293 \setlength{\leftmarginiv}{1.5em}
294 \setlength{\leftmarginv}{1.5em}
295 \setlength{\leftmarginvi}{1.5em}
296 \setlength{\labelsep}{.5em}
297 \setlength{\labelwidth}{\leftmargini}
298 \addtolength{\labelwidth}{-\labelsep}

```

\noparskip

```

299 \def\noparskip{\par\vspace{-\parskip}}

```

Modification of list and section parameters for a more compact layout.

```

300 \let\old@small\small
301 \renewcommand{\small}{\old@small\let\@listi\@listI}
302 \let\old@footnotesize\footnotesize
303 \renewcommand{\footnotesize}{\old@footnotesize\let\@listi\@listI}

```

\sectfont User macro for changing the font of the typesetted parameter of the \?section commands.

```

304 \newcommand{\sectfont}{\bfseries}

305 \renewcommand{\section}{\@startsection{section}{1}{\z@}%
306   {-3.5ex \@plus -.75ex}%
307   {1ex} %\{1.5ex}%
308   {\normalfont\large\sectfont}}
309 \renewcommand{\subsection}{\@startsection{subsection}{2}{\z@}%
310   {-2.5ex plus -.5ex}%
311   {1\p@} %\{1ex}%
312   {\normalfont\normalsize\sectfont}}
313 \renewcommand{\subsubsection}{\@startsection{subsubsection}{3}{\z@}%
314   {-2.5ex plus -.5ex}%
315   {-1em}%
316   {\normalfont\normalsize\sectfont}}
317 \def\part{\LL@CmdIgnored{\part}\secdef\@part\@spart}
318 \def\@part[#1]#2{}
319 \def\@spart#1{}
320
321 \renewcommand*\descriptionlabel[1]{%
322   \hspace{\labelsep}\normalfont\descfont #1}

```

`\descfont` User macro for changing the font of the description label.

```

323 \newcommand*\descfont{\bfseries}

324 \iffalse
325 % Doesn't work!
326 \g@addto@macro\enumerate{\parsep2\p@\@plus2\p@\@minus\z@}
327 \g@addto@macro\itemize{\parsep2\p@\@plus2\p@\@minus\z@}
328 \g@addto@macro\description{\parsep2\p@\@plus2\p@\@minus\z@}
329 \else
330 \newcommand*\LL@listsetup{%
331 % \parsep.445ex\@plus.445ex\@minus.2225ex%
332 % \parsep.5ex\@plus.5ex\@minus.25ex%
333 \parsep1ex\@plus.5ex\@minus.25ex%
334 \LL@debug@info{***parsep=\the\parsep}%
335 % \itemsep.25\parsep
336 \itemsep\z@
337 \LL@debug@info{***itemsep=\the\itemsep}%
338 \topsep\z@
339 \LL@debug@info{***topsep=\the\topsep}%
340 % \partopsep\z@
341 \LL@debug@info{***partopsep=\the\partopsep}%
342 }
343 \def\enumerate{%
344 \ifnum \@enumdepth >\thr@@\@toodeep\else
345 \advance\@enumdepth\@ne
346 \edef\@enumctr{enum\romannumeral\the\@enumdepth}%
347 \expandafter
348 \list
349 \csname label\@enumctr\endcsname
350 {\usecounter\@enumctr
351 \def\makelabel##1{\hss\llap{##1}}%
352 %\def\makelabel##1{##1\hfill}%
353 %\def\makelabel##1{\hss##1}%
354 \LL@listsetup
355 }%
356 \fi}
357 \def\itemize{%
358 \ifnum \@itemdepth >\thr@@\@toodeep\else
359 \advance\@itemdepth\@ne
360 \edef\@itemitem{labelitem\romannumeral\the\@itemdepth}%
361 \expandafter
362 \list
363 \csname\@itemitem\endcsname
364 {%
365 \def\makelabel##1{\hss\llap{##1}}%
366 %\def\makelabel##1{##1\hfill}%
367 %\def\makelabel##1{\hss##1}%
368 \LL@listsetup
369 }%
370 \fi}
371 \renewenvironment{description}
372 {\list{\labelwidth\z@ \itemindent-\leftmargin
373 \let\makelabel\descriptionlabel
374 \LL@listsetup}}
375 {\endlist}
376 \fi

```

2.5 Changing the page dimensions

`\setmargins` User command to specify the margins. (o, u, l, r)

`\setmargins{<top>}{<bottom>}{<left>}{<right>}`

The new user interface! By default, the `leaflet` class does not use headings, footings and marginal notes. If the user desires, these can be restored by setting the respective lengths *before*

calling `\setmargins`. Setting the margins should *always* be done using `\setmargins`; if the user assigns to any of the length registers `\topmargin`, `\evensidemargin`, `\oddsidemargin` using `\setlength`, chaos will happen.

```

377 \newcommand*\setmargins[4]{%
temp. top!
378 \setlength\topmargin{#1}%
379 \edef\LL@tmargin{\the\topmargin}%
temp. bottom!
380 \setlength\evensidemargin{#2}%
381 \textheight=\dimexpr\paperheight
382 -\topmargin-\evensidemargin-\headheight-\headsep-\footskip
temp. left!
383 \setlength\oddsidemargin{#3}%
temp. right!
384 \setlength\evensidemargin{#4}%
385 \textwidth=\dimexpr\paperwidth
386 -\oddsidemargin-\evensidemargin-\marginparwidth-\marginparsep
real top!
387 \addtolength\topmargin{-1in}%
real left!
388 \addtolength\oddsidemargin{-1in}%
probably not necessary
389 \evensidemargin\oddsidemargin
390 }

```

The dimensions of a single small page.

```

391 \LL@setPaperSize
392 \paperwidth=0.333333334\paperwidth
393 \setmargins{11mm}{11mm}{8mm}{8mm}

```

2.6 Additional user macros

`\foldmarkrule` The dimension of the foldmark between page 2 and page 3.

`\foldmarklength` 394 `\newcommand*\foldmarkrule{0.4pt}`
395 `\newcommand*\foldmarklength{2mm}`

`\AddToBackground` Adds the given parameter #2 (some picture commands) to a macro which will be used inside a zero-dimensional picture environment located at the lower left corner of a page. Parameter #1 selects the page number. The star version adds the picture commands to the background of one of the combined large pages instead of one of the small pages.

`\AddToBackground*`

```

396 \newcommand\AddToBackground{%
397 \ifstar{\@tempwatrue\LL@AddToBackground}
398 {\@tempwafalse\LL@AddToBackground}}
399 \onlypreamble\AddToBackground
400 \newcommand\LL@AddToBackground[2]{%
401 \if@tempwa\def\@tempa{\LL@largePic}\else\def\@tempa{\LL@smallPic}\fi
402 \expandafter\providecommand\csname\@tempa\@Roman{#1}\endcsname{%
403 \expandafter\g@addto@macro\csname\@tempa\@Roman{#1}\endcsname{#2}}

```

`\CutLine` Adds a dotted line with two scissors on the left side of the page given as parameter #1. The starred version draws only the dotted line.

`\CutLine*`

`\Scissors` 404 `\newcommand*\CutLine{%`
405 `\ifstar{\@tempwatrue\LL@CutLine}{\@tempwafalse\LL@CutLine}}`
406 `\onlypreamble\CutLine`
407 `\newcommand*\LL@CutLine[1]{%`
408 `\ifLL@combine`
409 `\ifx\Scissors\@empty\@tempwatrue\fi`

```

410 \if@tempswa
411 \AddToBackground{#1}{%
412 \put(0,0){%
413 \rotatebox{90}{\makebox(\paperheight,0){%
414 \normalsize
415 \dotfill}}}}%
416 \else
417 \AddToBackground{#1}{%
418 \put(0,0){%
419 \rotatebox{90}{\makebox(\paperheight,0){%
420 \normalsize
421 \dotfill\Scissors\dotfill\dotfill\Scissors\dotfill}}}}%
422 \fi
423 \fi}
424 \IfFileExists{pifont.sty}
425 {\RequirePackage{pifont}%
426 \newcommand*\Scissors{\raisebox{-0.85ex}{\large\ding{34}}}%
427 {\newcommand*\Scissors{}}}

```

Adds the fold mark code between page 2 and page 3.

```

428 \AddToBackground{3}{\LL@foldmark}

```

2.7 Page construction and output

2.7.1 Intercepting the small pages

`\vb@xt@` Similar to `\hb@xt@` (should be part of the L^AT_EX kernel).

```

429 \providecommand*\vb@xt@{\vbox to}

```

We use our own page saving macro instead of real L^AT_EX output.

```

430 \AtBeginDocument{\AddToHook{shipout/before}{\LL@processPage}}

```

`LL@page` A counter for the small pages (absolute counting).

```

431 \newcounter{LL@page}\setcounter{LL@page}{1}
432 \newcommand\LL@tempa{}

```

`\LL@processPage` With “combine” option the six small pages will be saved in box registers (`\LL@boxI...` `\LL@boxVI`). The `\ShipoutBox` with the page content must be a bit moved to get a “normal-sized” box. In “nocombine” mode only put the background picture.

```

433 \newcommand*\LL@processPage{%
434 \ifLL@combine\DiscardShipoutBox\fi
435 \ifnum\c@LL@page<7\relax
436 \LL@tempdima=\paperwidth
437 \ifLL@combine
438 \iffoldcorr
439 \@tempswafalse
440 \ifnum\c@LL@page=4\relax
441 \@tempswatrue
442 \else
443 \ifnum\c@LL@page=5\relax
444 \@tempswatrue
445 \fi
446 \fi
447 \if@tempswa\LL@tempdima=0.9797979798\paperwidth
448 \else\LL@tempdima=1.0101010101\paperwidth \fi
449 \fi
450 \@@@exec@outs
451 \expandafter\newsavebox\csname LL@box\Roman{LL@page}\endcsname%
452 \setbox\ShipoutBox=\vbox{\vskip1in\unvbox\ShipoutBox}%
453 \setbox\ShipoutBox=\vbox{\moveright1in\box\ShipoutBox}%
454 \setbox\ShipoutBox=\hb@xt@\paperwidth{\box\ShipoutBox\hss}%
455 \iffoldcorr
456 \setbox\ShipoutBox=\hb@xt@\LL@tempdima{\hss\box\ShipoutBox\hss}\fi

```

Add a background picture to a single small page ('combine').

```

457 \setbox\ShipoutBox=\vb@xt@\paperheight{%
458 \vbox{%
459 \pictur@(0,0)(0,\paperheight)%
460 \begingroup
461 \set@typeset@protect
462 \paperwidth=\LL@tempdima
463 \@nameuse{LL@smallPic\Roman{LL@page}}%
464 \endgroup
465 \endpicture
466 }%
467 \nointerlineskip\box\ShipoutBox\vss
468 }%
469 \global\expandafter\setbox
470 \csname LL@box\Roman{LL@page}\endcsname=\box\ShipoutBox
471 \typeout{\@spaces[\the\c@LL@page] ==> [\Roman{LL@page}]}%
472 \else

```

Add a background picture to a single small page ('nocombine').

```

473 \setbox\ShipoutBox\vbox{%
474 \vbox{\@tempdima=1in\relax
475 \@tempdimb=\paperheight\advance\@tempdimb-\@tempdima
476 \pictur@(0,0)(\@tempdima,\@tempdimb)%
477 \begingroup
478 \set@typeset@protect
479 \@nameuse{LL@smallPic\Roman{LL@page}}%
480 \endgroup
481 \endpicture
482 }%
483 \nointerlineskip\box\ShipoutBox
484 }%
485 \fi
486 \fi
487 \ifnum\c@LL@page=7\relax

```

Make this an error or warning message, depending on class option. (--> warning in all cases?)

```

488 \begingroup
489 \set@typeset@protect
490 \LL@toomanypages{%
491 The text you supplied fills more than six pages\MessageBreak
492 and will therefore not fit onto a single flyer}{%
493 Try using smaller fonts or reducing vertical space}%
494 \endgroup
495 \fi
496 \stepcounter{LL@page}}

```

NOTE TO OURSELVES: All the following must be done if the document code is already processed.

`\LL@add@empty@pages` Generating missing small pages

```

497 \newcommand*\LL@add@empty@pages{%
498 \clearpage\pagestyle{empty}%
499 \loop\ifnum\c@LL@page<7\relax
500 \ClassInfo{leaflet}{Generating empty page \the\c@page}%
501 \null\newpage
502 \repeat
503 }

```

`\LL@shipout@combined@pages`

```

504 \newcommand*\LL@shipout@combined@pages{%

```

2.7.2 Reassembling the small pages

Suppresses all shipout hook's clients (removing other kinds of background pictures). Our page saving macro is still needed for the next step and must be set again.

```

505 \RemoveFromHook{shipout/foreground}[*]
506 \RemoveFromHook{shipout/background}[*]
507 \RemoveFromHook{shipout/firstpage}[*]
508 \RemoveFromHook{shipout/lastpage}[*]
509 \RemoveFromHook{shipout/before}[*]
510 \AddToHook{shipout/before}{\LL@processPage}

Create empty pages if necessary.
511 \LL@add@empty@pages

Here begins the real output. LaTeX's \shipout will no more suppressed. The begin dvi hook
is reactivated. Final removing content from the hook.
512 \RemoveFromHook{shipout/before}[*]
513 \let\@begindvi\LL@begindvi
514 \paperwidth=3\paperwidth
515 \iflandscape
516 \LL@pagesize@specials{\paperwidth}{\paperheight}%
517 \else
518 \LL@pagesize@specials{\paperheight}{\paperwidth}%
519 \fi

\LL@shipoutPage This is similar to LATEX's \outputpage, but without a group; \set@display@protect seems
to work as well.

\LL@preparePages Helper macros for page output: reassemble the small pages.
\LL@preparePage
520 \newcommand*\LL@shipoutPage[1]{%
521 % \set@display@protect
522 \let \protect \noexpand
523 \shipout\vb@xt@\paperheight{%
524 \set@typeset@protect
525 \vskip-1in%
526 \@begindvi\hb@xt@\paperwidth{\hskip-1in##1\hss}\vss}}%
527 \newcommand*\LL@preparePages[3]{%
528 \typeout{[ \@Roman{##1}\space \@Roman{##2}\space \@Roman{##3}] ==>}%

Add a background picture to a large page.
529 \pictur@(0,0)\@nameuse{\LL@largePic\Roman{page}}\endpicture%
530 \LL@preparePage{##1}\LL@preparePage{##2}\LL@preparePage{##3}}%
531 \newcommand*\LL@preparePage[1]{%
532 \expandafter\box\c@name \LL@box\@Roman{##1}\endcsname}%

Combine and output the frontside and the backside. The option two part arranges the pages
in a different than the “natural” order, to allow the typesetting of a 4 page leaflet and a
detachable 2 page form, for summaries, fill-in forms, applications, questionnaires, etc.
533 \LL@selectOutput
534 \iftwopart
535 {\setcounter{page}{1}%
536 \LL@shipoutPage{\LL@rotate@I{\LL@preparePages{6}{4}{1}}}%
537 {\setcounter{page}{2}%
538 \LL@shipoutPage{\LL@rotate@II{\LL@preparePages{2}{3}{5}}}%
539 \else
540 {\setcounter{page}{1}%
541 \LL@shipoutPage{\LL@rotate@I{\LL@preparePages{5}{6}{1}}}%
542 {\setcounter{page}{2}%
543 \LL@shipoutPage{\LL@rotate@II{\LL@preparePages{2}{3}{4}}}%
544 \fi
545 }%

546 \ifLL@combine
547 \AddToHook{enddocument/end}{\LL@shipout@combined@pages}
548 \else

Create empty pages if necessary and then call the normal LATEX end.
549 \LL@pagesize@specials{\paperwidth}{\paperheight}%

```

```

550 \AtEndDocument{%
551 \LL@add@empty@pages
552 }
553 \fi
554 \</class>

```

Done. Phew! (Did you hear that deep-drawn sigh?)

Change History

v0.8c		<code>\write</code> , <code>\openout</code> and <code>\closeout</code> . (RN) 1
General: Repacked as dtx file. (RN) 1		
v0.9d	v1.0pre2	General: eTeX support. (RN) 1
General: LPPL 1.3 (HjG) 1		
M-x delete-trailing-whitespace (HjG) . . 1	v1.0pre3	General: Options ‘landscape’ and ‘portait’. (RN) 1
More code documentation; some caveats. (HjG) 1		
v0.9e	v1.1a	<code>\LL@processPage</code> : Additions for new option ‘foldcorr’. (RN) 10
General: Add option ‘finish’. (RN/HjG) . . 1		General: New options ‘foldcorr/nofoldcorr’ suggested by Walter Schmidt. (RN) 2
v0.9f		Using <code>\dimexpr</code> instead of package ‘calc’. (RN) 6
General: Merge v0.9d and v0.9e (hastily). (HjG) 1		
v0.9g	v1.1b	<code>\LL@pagesize@specials</code> : Adding code for LuaTeX >0.85. Thanks to Knut Lickert for his bug report. (RN) 6
General: Rename option ‘finish’ to ‘combine’. (RN/HjG) 1		
v1.0	v2.0a	<code>\LL@processPage</code> : Temporarily do not call <code>\@@@exec@outs</code> . (RN) 10
General: CTAN release. (RN/HjG) 1		Using L ^A T _E X’s new ‘shipout/before’ hook. (RN) 10
v1.0a		General: The macro <code>\LenToUnit</code> is no longer required. (RN) 1
General: Option ‘debug’. (RN) 1	v2.0b	<code>\LL@processPage</code> : Renamed <code>\LL@savePage</code> to <code>\LL@processPage</code> . (RN) 10
v1.0b		<code>\LL@shipout@combined@pages</code> : Suppress other background images. (RN) 11
<code>\closeout</code> : <code>\special</code> must be processed similar to e.g. <code>\write</code> (V _T E _X). (RN) . . 3		General: Using hooks instead of redefinition of <code>\@@end</code> . (RN) 11
General: New option <code>nospecialtricks</code> for testing purposes. (RN) 1	v2.0c	<code>\@@@exec@outs</code> : Missing <code>\set@display@protect</code> (RN) 5
v1.0c		<code>\LL@processPage</code> : Activated <code>\@@@exec@outs</code> again. (RN) 10
<code>\LL@shipoutPage</code> : Fix <code>\protect-ion</code> problems. (RN/HjG) 12		
v1.0d		
<code>\LL@foldmark</code> : Invalid code for option “nofoldmark” changed. Thanks to Una Smith. (RN) 2		
General: Options ‘twopart/notwopart’ suggested by Luis Rivera. No more ‘final’ in <code>\ExecuteOptions</code> suggested by Axel Berger (RN) 1		
v1.0e		
<code>\LL@pagesize@specials</code> : Patch from Toby Thurston for XeLaTeX. (RN) . . . 6		
v1.0pre1		
General: Redefinition of <code>\immediate</code> ,		

Index

Numbers written in *italic* refer to the page where the corresponding entry is described; numbers underlined refer to the code line of the definition; numbers in roman refer to the code lines where the entry is used.

Symbols	<code>\@@@exec@outs</code> . . . . .	. . . . . 32, 100, 115,
<code>\@@@closeout</code> . . . . .	. . . . . 34, <u>147</u> , <u>168</u> , 450	117, 119, 121, 140,
. 33, 102, 119, 146, 167	<code>\@@@immediate</code>	143, 146, 159, 163, 167

<code>\@@@openout</code>	<code>\DiscardShipoutBox</code> 434	<code>\leftmarginii</code> 291
. 33, 102, 117, 143, 163	<code>\do</code> 188	<code>\leftmarginiii</code> 292
<code>\@@@out@mark</code> . . 153, 158,	<code>\dotfill</code> 415, 421	<code>\leftmarginiv</code> 293
162, 166, 171, 176–178		<code>\leftmarginv</code> 294
<code>\@@@pending@outs</code> . . 100,	E	<code>\leftmarginvi</code> 295
140, 143, 146, 148,	<code>\endlist</code> 375	<code>\line</code> 55
159, 163, 167, 188, 202	<code>\endpicture</code> . . . 465, 481, 529	<code>\linethickness</code> 52
<code>\@@@special</code> 34, 101, 112, 121	<code>\enumerate</code> 326, 343	<code>\list</code> 348, 362, 372
<code>\@@@write</code>	<code>\evensidemargin</code>	<code>\LL@add@empty@pages</code> . . .
. 32, 101, 115, 140, 159	380, 382, 384, 386, 389	. . . . . 497, 511, 551
<code>\@Roman</code> . . 402, 403, 528, 532	F	<code>\LL@AddToBackground</code> . . .
<code>\@begin@v</code> 11, 214, 513, 526	<code>\filename@base</code> 223,	. . . . . 397, 398, 400
<code>\@dummy@whatsit</code>	225, 233, 240, 253, 260	<code>\LL@begin@v</code> 11, 513
. . . . 125, 139, 142, 145	<code>\filename@parse</code> 221	<code>\LL@CmdIgnored</code>
<code>\@enumctr</code> 346, 349, 350	<code>\firstmarks</code> 177	. . . . 268, 283–285, 317
<code>\@enumdepth</code> 344–346	<code>\fmtversion</code> 2	<code>\LL@combinefalse</code> 41
<code>\@for</code> 188	<code>\foldcorrfalse</code> 60	<code>\LL@combinetrue</code> 40
<code>\@ifequal@sign</code> 160	<code>\foldcorrtrue</code> 59	<code>\LL@CutLine</code> 405, 407
<code>\@ifl@t@r</code> 2	<code>\foldmarklength</code> . . . 55, 394	<code>\LL@debug@info</code>
<code>\@itemdepth</code> 358–360	<code>\foldmarkrule</code> 52, 394	17, 26, 149, 173, 182,
<code>\@itemitem</code> 360, 363	<code>\footnotesize</code> 302, 303	193, 334, 337, 339, 341
<code>\@listI</code> 301, 303	<code>\footskip</code> 278, 382	<code>\LL@foldmark</code> 48, 428
<code>\@listi</code> 272, 301, 303		<code>\LL@listsetup</code>
<code>\@minus</code> . . . 326–328, 331–333	G	. . . . 330, 354, 368, 374
<code>\@onlypreamble</code> . . . 399, 406	<code>\Gin@driver</code> 220, 221	<code>\LL@page</code> 431
<code>\@part</code> 317, 318	<code>\globmarks</code> 153	<code>\LL@pagesize@specials</code> . .
<code>\@spart</code> 317, 319		. . . . 218, 516, 518, 549
<code>\@startsection</code> 305, 309, 313	H	<code>\LL@preparePage</code> 520
<code>\@tempa</code> 401–403	<code>\headheight</code> 276, 382	<code>\LL@preparePages</code>
<code>\@toodeep</code> 344, 358	<code>\headsep</code> 277, 382	520, 536, 538, 541, 543
<code>\@unexpandable@protect</code> 209	<code>\hskip</code> 526	<code>\LL@processPage</code> 430, 433, 510
	<code>\hss</code> 351, 353,	<code>\LL@rotate@I</code> . . . 84, 536, 541
A	365, 367, 454, 456, 526	<code>\LL@rotate@II</code> . . 84, 538, 543
<code>\AddToBackground</code>	I	<code>\LL@selectOutput</code> . . 42, 533
. . . . 396, 411, 417, 428	<code>\if@nobreak</code> 213	<code>\LL@setPaperSize</code> . . 36, 391
<code>\AddToBackground*</code> 396	<code>\iffalse</code> 324	<code>\LL@shipout@combined@pages</code>
<code>\AddToHook</code> . . . 430, 510, 547	<code>\iffoldcorr</code> 15, 438, 455	. . . . . 504, 547
<code>\AtBeginDvi</code> 230	<code>\IfFormatAtLeastTF</code> 2, 3	<code>\LL@shipoutPage</code>
<code>\AtEndOfClass</code> . . . 30, 63, 69	<code>\iflandscape</code> 12, 85, 515	520, 536, 538, 541, 543
B	<code>\ifLL@combine</code>	<code>\LL@tempa</code> 432
<code>\botmarks</code> 171, 178	. . . . 31, 39, 70, 83,	<code>\LL@tempdima</code> 16,
<code>\bottomfraction</code> 287	215, 408, 434, 437, 546	436, 447, 448, 456, 462
C	<code>\iftumble</code> 13, 87, 94	<code>\LL@tmargin</code> 53, 379
<code>\c@@@last@exec</code>	<code>\iftwopart</code> 14, 534	<code>\LL@toomanypages</code>
. . . . 170, 175, 192, 194	<code>\ifvmode</code> 213	61, 64, 71, 74, 216, 490
<code>\c@@@total@outs</code>	<code>\immediate</code> 32, 100	<code>\llap</code> 351, 365
. 157, 158, 161, 162,	<code>\immediate@closeout</code> 106, 118	<code>\long</code> 113, 138, 156, 205
165, 166, 170, 174, 179	<code>\immediate@openout</code> 105, 116	M
<code>\c@LL@page</code> 435,	<code>\immediate@special</code> 107, 120	<code>\makelabel</code>
440, 443, 471, 487, 499	<code>\immediate@write</code> . . 104, 114	. 351–353, 365–367, 373
<code>\c@page</code> 500	<code>\itemindent</code> 372	<code>\marginpar</code> 283
<code>\ClassWarning</code> 269	<code>\itemize</code> 327, 357	<code>\marginparsep</code> 280, 386
<code>\closeout</code> 33, 100	<code>\itemsep</code> 335–337	<code>\marginparwidth</code> . . . 279, 386
<code>\CutLine</code> 404		<code>\marks</code> 158, 162, 166
<code>\CutLine*</code> 404	L	<code>\mediaheight</code> 264
D	<code>\labelsep</code> 274, 296, 298, 322	<code>\mediawidth</code> 264
<code>\descfont</code> 322, 323	<code>\labelwidth</code>	<code>\moveright</code> 453
<code>\description</code> 328	273, 274, 297, 298, 372	N
<code>\descriptionlabel</code> 321, 373	<code>\landscapefalse</code> 25	<code>\newcounter</code> . . . 154, 155, 431
<code>\dimexpr</code> 53, 381, 385	<code>\landscapetrue</code> 24	<code>\newlength</code> 16
<code>\ding</code> 426	<code>\leftmargin</code> 273, 372	<code>\nobreak</code> 213
	<code>\leftmargini</code> 290, 297	<code>\nointerlineskip</code> . . 467, 483

<code>\noparskip</code>	299	<code>\pdfpagewidth</code>		<code>\ShipoutBox</code> 452–454, 456,	
<code>\null</code>	501		237, 242, 249, 257	457, 467, 470, 473, 483	
<code>\number</code>	140,	<code>\pending@@@openout</code>	<u>160</u>	<code>\sloppy</code>	281
143, 146, 159, 163, 167		<code>\pending@@openout</code>	<u>160</u>	<code>\special</code>	34,
		<code>\pending@@write</code> 113, <u>138</u> , <u>156</u>		101, 107, 112, 125, 230	
O		<code>\pending@closeout</code>		<code>\stepcounter</code>	496
<code>\oddsidemargin</code>			111, 124, <u>144</u> , <u>164</u>	<code>\subsubsection</code>	313
383, 386, 388, 389		<code>\pending@openout</code>			
<code>\old@footnotesize</code> 302, 303			110, 123, <u>141</u> , 160	T	
<code>\old@small</code>	300, 301	<code>\pending@write</code> 109, 113, 122		<code>\textfloatsep</code>	288
<code>\onecolumn</code>	285	<code>\pictur@</code>	459, 476, 529	<code>\textheight</code>	381
<code>\openout</code>	33, <u>100</u>	<code>\protected@write</code>	<u>205</u>	<code>\textwidth</code>	385
P				<code>\thepage</code>	207
<code>\pageheight</code>	245	R		<code>\topfraction</code>	286
<code>\pagestyle</code>	275, 498	<code>\raisebox</code>	426	<code>\topmargin</code> 378, 379, 382, 387	
<code>\pagewidth</code>	245	<code>\RemoveFromHook</code> 505–509, 512		<code>\topmarks</code>	176
<code>\paperheight</code> 38, 53, 381,		<code>\reserved@b</code> . . . 186, 196, 201		<code>\topsep</code>	338, 339
413, 419, 457, 459,		<code>\reset@immediate</code>		<code>\tumblefalse</code>	47
475, 516, 518, 523, 549		108, 115, 117, 119, 121		<code>\tumbletrue</code>	46
<code>\paperwidth</code>		<code>\rotatebox</code>		<code>\twocolumn</code>	284
38, 385, 392, 436,		88, 93, 95, 97, 413, 419		<code>\twopartfalse</code>	28
447, 448, 454, 462,				<code>\twoparttrue</code>	27
514, 516, 518, 526, 549		S		U	
<code>\part</code>	317	<code>\Scissors</code>	<u>404</u>	<code>\unvbox</code>	452
<code>\partopsep</code>	340, 341	<code>\secdef</code>	317		
<code>\PassOptionsToClass</code> . . .		<code>\sectfont</code> <u>304</u> , 308, 312, 316		V	
62, 68, 79, 80		<code>\set@display@protect</code> . .		<code>\vb@xt@</code>	<u>429</u> , 457, 523
<code>\PassOptionsToPackage</code> .		187, 521		<code>\vskip</code>	452, 525
18–21		<code>\set@typeset@protect</code> . .		<code>\vss</code>	467, 526
<code>\pdfliteral</code>	129	461, 478, 489, 524		W	
<code>\pdfoutput</code>	129	<code>\setmargins</code>	<u>377</u> , 393	<code>\write</code>	32, <u>100</u> , 210
<code>\pdfpageheight</code> 237, 249, 257		<code>\shipout</code>	523		