## $M_{\rm S}R_{\rm S}E$ – a short font report

(The telegraphic alphabet - by UDO HEYL, January  $1^{st}$ , 1998)

*Error Reports in case of UNCHANGED versions to* Udo Heyl, Stregdaer Allee 7, 99817 Eisenach, Federal Republic of Germany

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DANTE, Deutschsprachige Anwendervereinigung TeX e.V., Postfach 10 18 40, 69008 Heidelberg, Federal Republic of Germany, Email: dante@dante.de

## 1 What is $M_{\rm S}E$ ?

It is a LATEX2e - package for printing Morse code signs.

## 2 How to use the $M_{\rm S}E$ package?

First and foremost you've got to copy the following files

- MORSE10.MF, MORSE.DEF, MORSE.ALF and MORSE.NUM into your Metafontdirectory (\emtex\mfinput\morse)
- MORSE.STY into your Style-directory (\emtex\texinput\morse) and
- MORSE10.TFM into your Tfm-directory (\emtex\tfm\morse).

Note, however, that the paths may be different in your  $ET_EX2e$  implementation (EmT<sub>E</sub>X for MS-DOS, web2c for UNIX etc.).  $ET_EX2e$  is absolutely required, if you want to use  $M_{SE}^{R}$ , which doesn't run with the **ancient**  $ET_{E}X209$ .

The example shows you the usage of this font:

```
\documentclass[10pt]{article}
\usepackage{morse} %%% to include morse.sty
\begin{document} ...
%......
{\morse .....}
%......
\end{document}
```

Telegraphic code will appear now in the current size and won't change the current shape. Of course you can input {\Huge\morse MorseText } to manage greater Morse code signs. After the command \morse numbers, stops and letters (upper and lower case) are converted into Morse code, exceptions are given in Table 1.

Input	Output	Value	Input	Output	Value	Input	Output	Value
a	•	a	n	-•	n	3		3
\aAcute	••	á	0		0	4		4
\ae	•_•_	ã	\oe	·	ő	5	•••••	5
b		b	р	··	р	6		6
с	_·_·	с	q		q	7		7
d		d	r	·_·	r	8	"	8
∖ch		ch	s	•••	s	9	·	9
е	•	е	t	_	t	0		0
\eAcute	··_··	é	u	••_	u	;	_·_·_·	;
f	··_·	f	\ue	··	ű	,	•_•_•_	,
g	<b>·</b>	g	v		v	:	••••	:
h	••••	h	w	•	W	?	····	?
i	••	i	x		х	!		!
j	•	j	у	_•	у	∖dq		"
k	_•_	k	z	_ <b>_</b>	Z	∖sq	•	,
1	·_•·	1	1	·	1	1		/
m		m	2	··	2	•	•••••	

Table 1: The Alphabet of the Telegraphy

In the year 1832 the American painter and director of the Plastic Arts Academy SAMUEL MORSE had the idea to use electromagnetism in order to set up a telegraphic connection. After some different unsuccessful experiments he could propose a model of his "Recording electric telegraph" to the New York University in 1835. In Washington he took out a patent for his invention in 1837. At the same time CHARLES WHEATSTONE in England and KARL AUGUST STEINHEIL in Bavaria had made up telegraphs. The one by the last mentioned was the same on principle as MORSE's telegraph, but wasn't as useful in drawing longer lines because its fine and complex mechanism. That is why STEINHEIL himself recommended the installation of MORSE's telegraph, which was the better one in later experiments too because of its plainness and easy usage up to now. MORSE's system consists of an armature with a pin, which is attracted by a powerized electric magnet. The pin prints dots or dashes onto a passing tape of paper, in proportion as the power circuit is complete for shorter or longer periods. The foregoing alphabet is composed out of this dots and dashes. The character á is an innovation for the Hungarian language; ấ, ő and ű for the German vocabulary; and in Polish words the characters a, e and ó are described by ấ, é and ő.