Obyknovennaya Novaya
(Ordinary New Face) in METAFONT

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The Obyknovennaya Novaya (Ordinary New Face) typeface was widely used in the USSR for scientific and technical publications, as well as textbooks. My "Obyknovennaya Novaya" is a revival of that typeface, and though it is not the first one, I believe it is the most complete. The Obyknovennaya Novaya family currently includes regular, bold, italic, bold italic, slanted and small capitals shapes. Obyknovennaya Novaya is free software, available under the terms of the LPPL. The story of the METAFONT version of this font follows . . .

In the beginning of 2008 I was a student and needed to choose the theme for my qualifying work. My scientific supervisor was Vladimir Lidovski, and he advised to learn METAFONT and make the font Obyknovennaya Novaya in METAFONT, to expand the variety of available Cyrillic fonts in TeX. I began to read Donald Knuth's *The METAFONTbook* and make my first steps in drawing and font making. After approximately a month, I made the first letter — at that moment it was a big success to me. Over the next month I learned about main parameters, such as stems, curves, bars and others. The "army" of my letters was growing, and it inspired me to continue my work. By the time the number of letters reached 50, I had learned about some new typographic features.

I read Knuth's Volume E of *Computers & Typesetting*, which contains precise definitions of about 500 letters, numerals, and other symbols of the Computer Modern Typefaces, all described with META-FONT. I realized that my letters had different parameters, each letter was described in its own file, for example `LetterA.mf`, without any unification. So I decided to combine them by making one file for all letters of one size, and began a large amount of work to restructure my font.

By the end of May 2008 I had 66 Cyrillic letters (33 capitals and 33 small), 52 Latin letters, numerals and some punctuation marks, all in one shape (regular), at several point sizes: 7, 10, 12, 17 pt. I met with Alexander Shen, who supported me and observed new directions to improve my typeface. I successfully graduated from the university and then it was time to decide what to do next with my project. At that time the development of the Obyknovennaya Novaya typeface became supported by the TUG development fund, so I began the long journey of making a high-quality font.

There were big plans for the future to make italic, bold, bold italic and slanted shapes, work with rounding errors, kerning and others. In spite of my no longer officially being his student, Vladimir Lidovski continued testing my font, made suggestions and gave advice. It was partly this support that kept me from throwing everything down. During this time I also met Alexander Tarbeev, who gave me some valuable advice regarding the overall design and relationship between the different parameters of the typeface.

By the spring of 2011 I had made regular, bold, italic, bold italic, slanted and small capital shapes. Some work to optimize font rendering was done, and new kerning pairs had been added.

At that point, I stopped working with the font until 2014, and began to learn about other font formats, such as TrueType, OpenType and PostScript Type 1.

I read a lot about font smoothing and rendering on digital devices. Beat Stamm's site (`http://www.rastertragedy.com`) was especially useful for me; it gives a detailed description how fonts are rendered on the screen. I am trying to understand how to apply this method in Metafont, and hope to implement it in the future.

In general the work on this font has been a fruitful experience for me. It is my first contribution to CTAN and the LaTeX community. I hope the font will be useful and I am glad to be able to help people. I also hope that the publication of my font will provide more feedback and suggestions from experienced TeX users on how to improve it.

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Normal shape, (10pt): АБВГД...ЭЮЯ абвгд...ыьэюя 0123456789 ABCD...WXYZ abcd...wxyz ?@&*№

Bold shape, (10pt): **АБВГД...ЭЮЯ абвгд...ыьэюя 0123456789 ABCD...WXYZ abcd...wxyz ?@&*№**

Italic shape, (10pt): *АБВГД...ЭЮЯ абвгд...ыьэюя 0123456789 ABCD...WXYZ abcd...wxyz ?@&*№*

Bold italic, (10pt): ***АБВГД...ЭЮЯ абвгд...ыьэюя 123456789 ABCD...XYZ abcd...wxyz ?@&*№***

Slanted shape, (10pt): *АБВГД...ЭЮЯ абвгд...ыьэюя 0123456789 ABCD...WXYZ abcd...wxyz ?@&*№*

Small Capitals, (10pt): АБВГД...ЭЮЯ абвгд...ьэюя 0123456789 ABCD...WXYZ abcd...wxyz ?@&*№