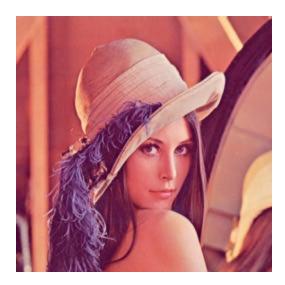


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# A Complete Story of Lena

#### Introduction

Engineers, researchers, and students who are familiar with image processing or compression has most likely used the picture of "Lena" or "Lena" in their experiments or project assignments, as the Lena picture is one of the most widely used standard test images. Today, the use of Lena image has been recognized as one of the most important events in the history of electronic imaging. However, very few people have seen the original picture and know the complete story of Lena. Here is the materials about Lena I have recently found on the Internet, which includes the recent picture of Lena in May 1997.



### Who is "Lenna" or "Lena"?

From the comp.compression FAQ, we can find that "Lenna" or "Lena" is a digitized Playboy centerfold, from November 1972. (Lena is the spelling in Playboy, Lena is the Swedish's pelling of her name.) Lena Soderberg (ne Sjooblom) was last reported living in her native Sweden, happily married with three kids and a job with the state liquor monopoly. In 1988, she was interviewed by some Swedish computer related publication, and she was pleasantly amused by what had happened to her picture. That was the first she knew of the use of that picture in the computer business.

## When and where the Lena picture creates?

In the Playboy and Wired News, we know that in the early Seventies Lena's Playboy centerfold was scanned in by an unknown researcher at the University of Southern California to use as a test image for digital image compression research. Since that time, images of the Playmate have been used as the industry standard for testing ways in which pictures can be manipulated and transmitted electronically. Over the past 25 years, no image has been more important in the history of imaging and electronic communications, and today the mysterious Lena is considered the First Lady of the Internet.

## Who create the "Lena" image?

I worked for 5 years ('78 - '83) at the Image Processing Institute as a system programmer in the Image Processing Lab (IPL) which distributed Lena and several other images (including the Mandril) which people often refer to as "The baboon image." The "unknown researcher" was Dr. William K. Pratt, now of Sun Microsystems, who was writing a book on image processing and he needed some standard images for it. For a long time the folded up centerfold that had been the basis for that image was in the file cabinet at the lab. I went back in 1997 to visit and the lab has undergone many changes and the original image files were nowhere to be found. The original distribution format was 1600BPI 9-track tape with each color plane stored separately.

-- Chuck McManis (USC Class of '83)

# Want to see the original Lena?

The standard digital Lena image is just a closeup of the original picture with her face and bare shoulder. Recently, Chuck Rosenberg obtained a copy of the original Playboy Magazine and put it on the Internet. Here's a glimpse:

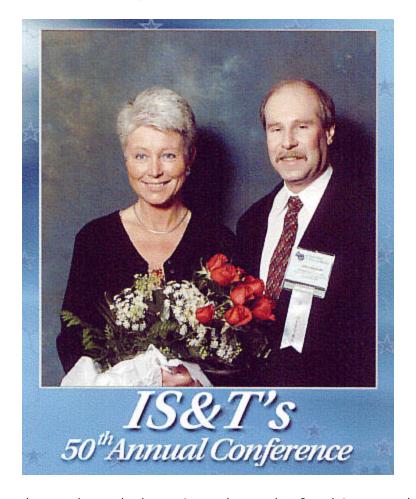


The full picture can be found in the Here. WARNING!!! this picture contains nudity...

Want to see the Lena in 1997?

No problem! Lena was invited to attend the 50th Anniversary IS&T conference in Boston on May 1997. With the assistance of Playboy, Jeff Seideman(the president of the Boston chapter of the IS&T) arranged Lena to appear at the IS&T Boston, as part of an overview of the history of digital imaging.

Here is a picture of Lena taken in May 1997 at the IS&T's conference:



At the conference, she was busy signing autographs, posing for pictures, and giving a presentation about herself. Lena commented to the Wired reporter: "They must be so tired of me ... looking at the same picture for all these years!"

Currently, Lena lives near Stockholm and works for a government agency supervising handicapped employees archiving data using, appropriately, computers and scanners.

## Where can I find the standard Lena picture?

The standard version of Lena is available on our sites.

#### original text from

- www.eso.org/~ndevilla/lena.html
- The Wired Magazine: www.wired.com

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