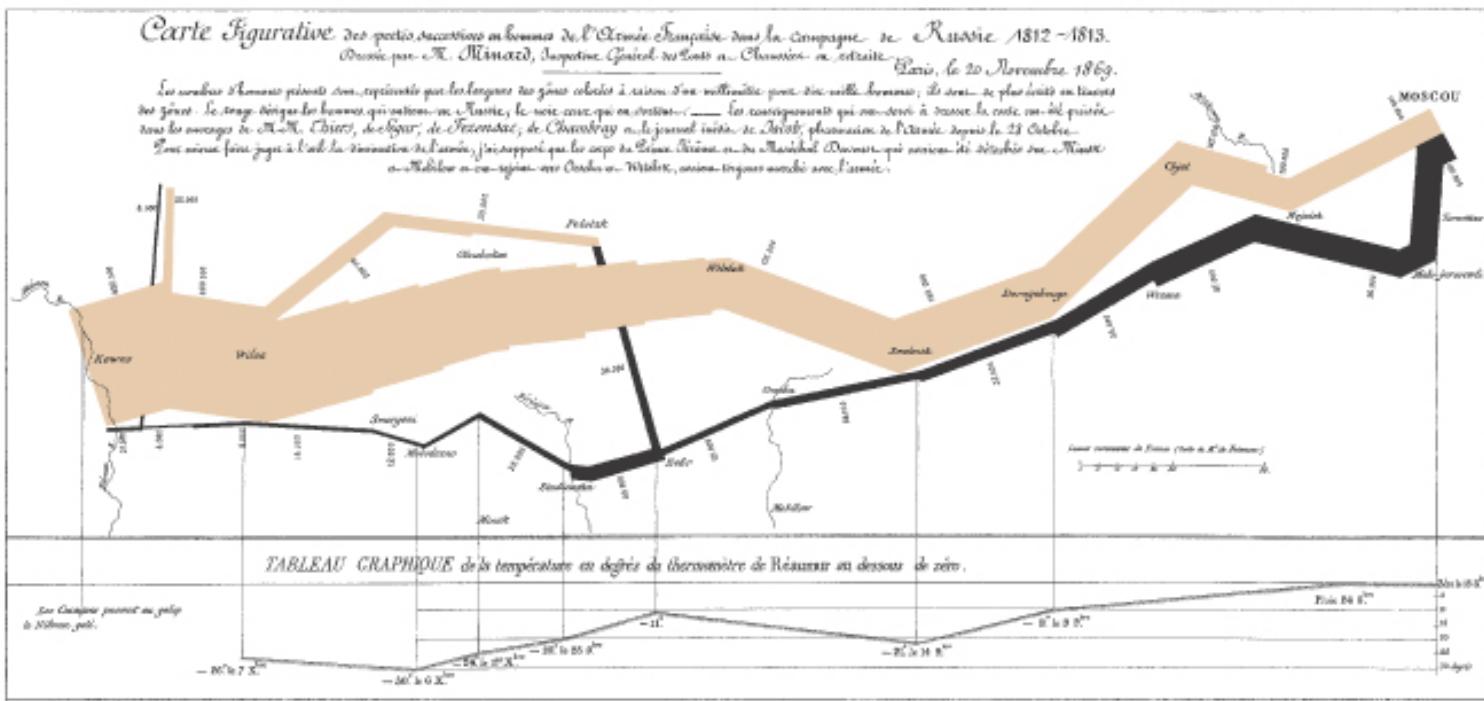


Posters

How to make them.
How to present them.





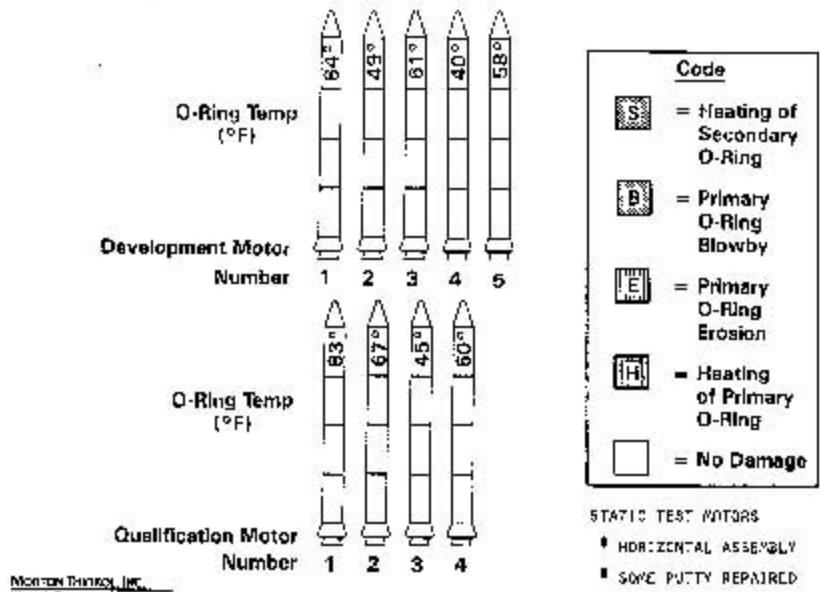
Napoleon's March to Moscow The War of 1812

Chapt. 3—Moral

This classic of Charles Joseph Minard (1795-1870), the French engineer, shows the terrible fate of Napoleon's army in Russia. Described by E. J. Marey as seeming to defy the pen of the historian by its brutal eloquence, this combination of data map and line-series, drawn in 1869, portrays the devastating losses incurred in Napoleon's Russian campaign of 1812. Beginning at the left on the Polish-Russian border near the Niemen River, the thick band shows the size of the army (120,000 men) as it entered Russia in June 1812. The width of the bands indicates the size of the army at each place on the map. In September, the army reached Moscow, which was by then sacked and deserted, with no one man. The route of Napoleon's retreat from Moscow is depicted by the darker, lower band, which is linked to a concentration

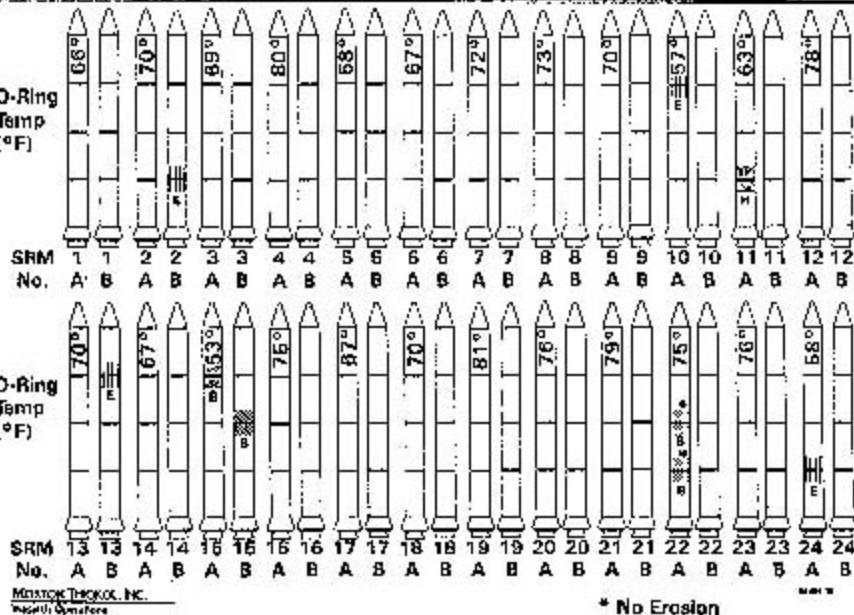
scale and dates at the bottom of the chart. It was a bitterly cold winter, and many froze on the march out of Russia. As the graphic shows, the crossing of the Berezina River was a disaster, and the army finally struggled back into Poland with only 10,000 men remaining. Also shown are the movements of auxiliary troops, as they sought to protect the rear and the flank of the advancing army. Miaroff's graphic tells a rich, coherent story with its mathematical data, far more enlightening than just a single number bunched along over time. Six variables are plotted: the size of the army, its location on a two-dimensional surface, direction of the army's movement, and concentrations on various dates during the retreat from Moscow. It may well be the best statistical graphic ever drawn.

History of O-Ring Damage in Field Joints

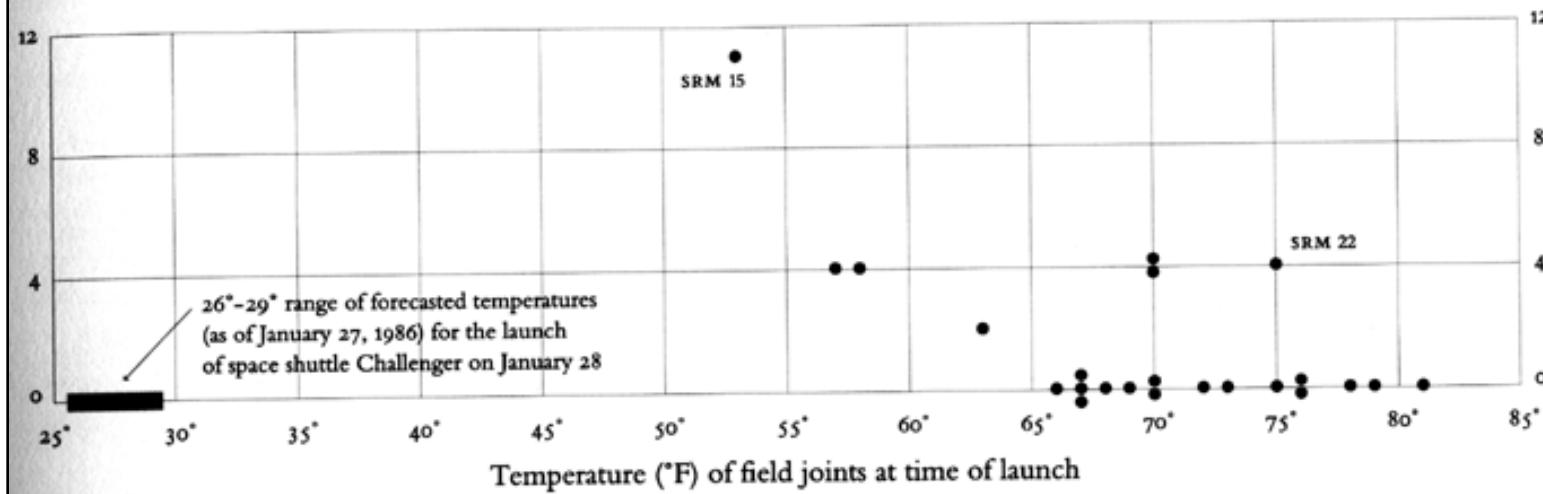


INFORMATION ON THIS PAGE WAS PREPARED TO SUPPORT AN ORAL DISCUSSION AND CANNOT BE CONSIDERED COMPLETE WITHOUT THE ORAL DISCUSSION.

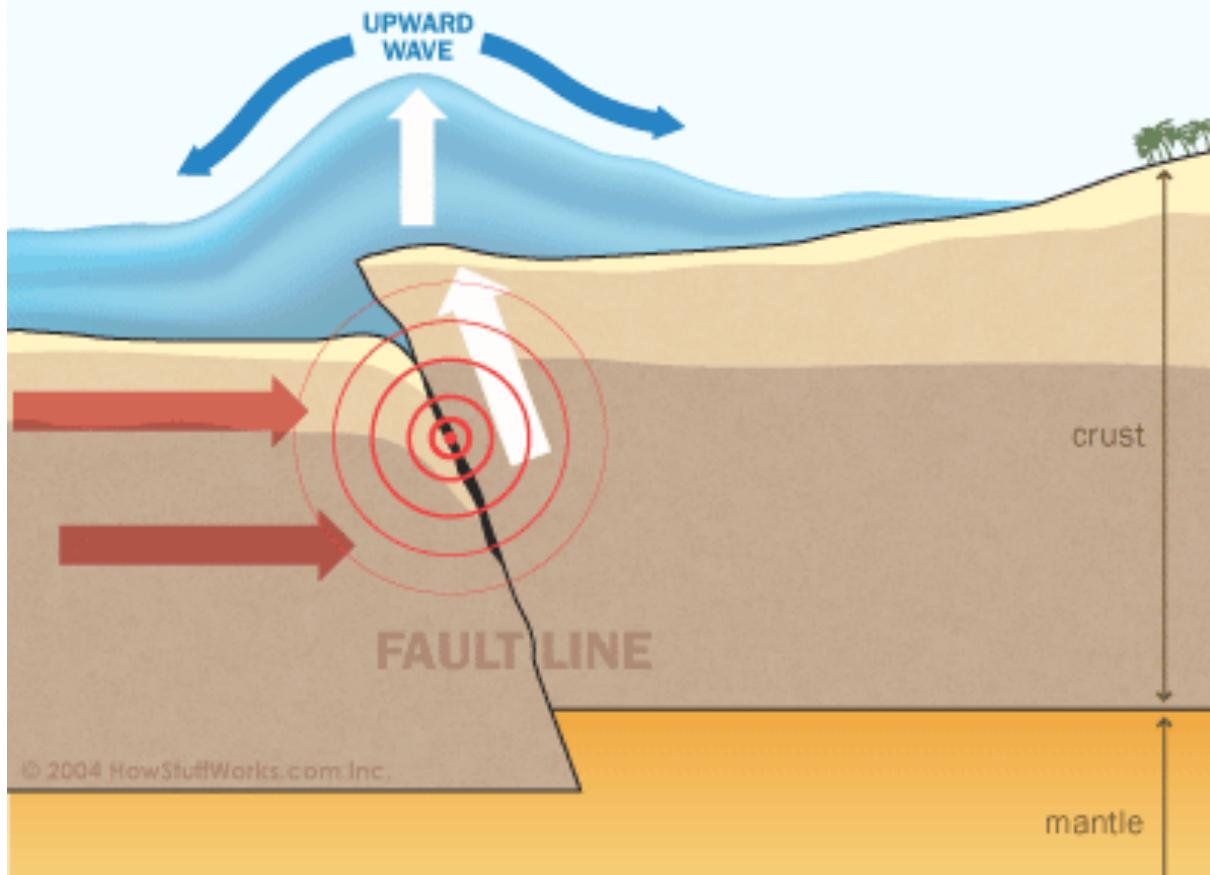
History of O-Ring Damage in Field Joints (Cont)



O-ring damage
index, each launch



How Tsunamis Work: Tsunamigenesis





To Present Data



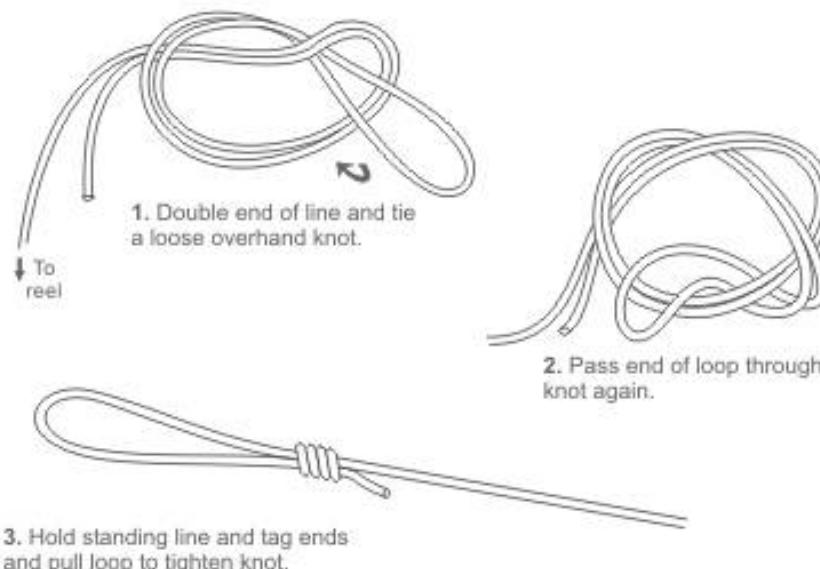
When Words are Inefficient: Surgeon's End Loop Knot - Text

1. Form a loop at the end of the line.
2. With the loop, tie an overhand knot.
3. Pass the loop through a second time.
4. Adjust the loop size.
5. Lubricate and pull the knot tight.
6. Trim the end.

When Words are Inefficient: Surgeon's End Loop Knot - Illustrated

SURGEON'S END LOOP

The Surgeon's End Loop forms a loop at the end of a line. This provides a means to quickly attach leaders and other tackle. This end loop is very easy to tie and very reliable. It is sometimes tied with three overhand knots .



The Problem With Big Blocks of Text

- Frequently, the readers of long blocks of text, rather than analyze the entire text box carefully, have a tendency to simply read the first little bit. Sometimes, this syndrome can be alleviated by turning longer blocks of text into shorter lists of individual points. Even simple things like white space between list items can help draw attention to each underlying idea.

The Advantage of Lists

- Often, viewers of long blocks of text just read the first bit.
- Putting the key points in a list can help.
- The empty spaces between the bullet points make the list look even simpler.

First questions to ask yourself:

- What's your content?
 - Create a topic statement – one sentence to describe your point.
- What are you trying to achieve?
- Who will be attending?

- Goal:
 - Attract visitors.
 - Use the poster as a visual aid to illustrate your points.
 - Use the poster to generate conversation between you and your visitors.

Props

- Does your subject matter allow for a practical demonstration?
 - Physical hardware – or a mockup/prototype
 - Your software on a laptop
 - Video of your project
- These are less portable, sometimes conflict with space restraints
 - Plan your presentation without the props

Planning your Poster

- **Make your poster *Readable*.**
 - Do the ideas flow from one item to the next?
 - Does the text have grammar/spelling problems?
 - Avoid:
 - Complex sentence structures.
 - Passive voice.
 - Unnecessary adjectives.
 - Long paragraphs.

- **Make your poster legible.**
 - Use larger fonts.
 - Major points should be readable from 6-10 feet away.
 - Even minor points should be obvious at a glance.

- **Make your poster organized.**

- Information should flow logically.
- Make the starting point clear.
- Make the visual path obvious.

- **Keep your message succinct.**
 - Keep your language short and to the point.
 - Use the space but don't cramp.
 - 20% text, 40% graphics, 40% white space.
 - Be concise and selective. Key points are important, not details.
 - Edit ruthlessly.

General Poster Design

- Keep it tasteful and professional.
- Use large pictures.
- Use eye catching titles.
- Use color wisely.
- Be consistent.

Graphics

- Should catch and hold audience attention.
- Should increase understanding of complex subjects.
- Should increase efficiency in sending a message.
- Things to ask:
 - Is it relevant or simply cute/faddish?
 - Does it add to verbal material? Is the redundancy useful?
 - Is it easy to understand?

Image Resolution

- Make sure your graphics will be clear when printed out.
 - When choosing images, consider:
 - The source of the image.
 - The purpose of the image.
 - The output of the printing/display device.
- Beware of Web Graphics
 - Graphics optimized for fast download often don't print well.

Starting your poster:

- Determine your main message.
- Lay out your elements crudely.
- Eliminate extraneous material.
- Consider looking online for templates.
 - <http://colinpurrington.com/tips/poster-design>

Presenting your poster

- Style, format, color, readability, attractiveness, and showmanship all count.
- Message should be clear: 3-5 minutes.
- You are on display with your poster.

Things to Do:

- Wear a name tag.
- Greet viewers and offer to answer questions.
- Stand to the side of your poster, give viewers space.
- Speak to the viewers, not the poster.
- Walk viewers through the figures.
- Leave a note if you must leave during your session.
- Thank viewers for visiting.

Recommended reading

Useful resources for poster design:

- <http://guides.library.cornell.edu/poster>
- <http://www.swarthmore.edu/NatSci/cpurrin1/posteradvice.htm>

Good examples of other scientific posters:

- <http://phdposters.com/gallery.php>
- <http://eposters.net>

How to Print it:

Poster Guidelines: <http://bels.soe.ucsc.edu/PosterGuidelines>

- Most critical: 48" x 36" dimensions, don't use a dark background
- Check out links to poster tutorials from [Swarthmore](#) and [Cornell](#).

Submit PowerPoint or PDF file to web form at:

<http://bels.soe.ucsc.edu/posters>

- Name your poster with last name, subject, and revision number if you've had this poster printed before. Example: Vitale-100TbNetworking-R3.ppt
- 5-day minimum lead-time for lowest-cost printing.
 - Kinkos can do a very quick turnaround for about \$25 (black and white only – color will cost \$\$\$)
 - Real Color – Westside Santa Cruz (403 Swift St.) is an inexpensive source of color poster printing.