



Preparing for Your Wiki Assignment

For your assignment, you'll be selecting a document and analyzing it.



Preparing for Your Wiki Assignment

You may never
have done a similar
assignment before.
A little worried?
Consider this story.

My parents warned me never to open the cellar door or I would see things I shouldn't see.





One day when my parents went out, I
did open the cellar door,

and I did see things I shouldn't see –
like grass, flowers, the sun!

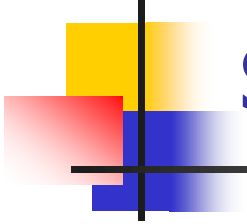




Let's go through that door
together.

Let's analyze the
following document
together.

A sample document and a sample analysis



MORTON THIOKOL, INC.

COMPANY PRIVATE

Wasatch Division

Interoffice Memo

31 July 1985
2870:FY86:073

TO: R. K. Lund
Vice President, Engineering

CC: B. C. Brinton, A. J. McDonald, L. H. Sayer, J. R. Kapp

FROM: R. M. Boisjoly
Applied Mechanics - Ext. 3525

SUBJECT: SRM O-Ring Erosion/Potential Failure Criticality

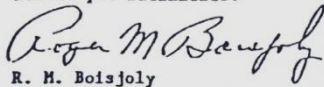
This letter is written to insure that management is fully aware of the seriousness of the current O-Ring erosion problem in the SRM joints from an engineering standpoint.

The mistakenly accepted position on the joint problem was to fly without fear of failure and to run a series of design evaluations which would ultimately lead to a solution or at least a significant reduction of the erosion problem. This position is now drastically changed as a result of the SRM 16A nozzle joint erosion which eroded a secondary O-Ring with the primary O-Ring never sealing.

If the same scenario should occur in a field joint (and it could), then it is a jump ball as to the success or failure of the joint because the secondary O-Ring cannot respond to the clevis opening rate and may not be capable of pressurization. The result would be a catastrophe of the highest order - loss of human life.

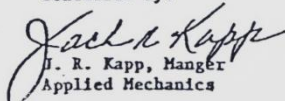
An unofficial team (a memo defining the team and its purpose was never published) with leader was formed on 19 July 1985 and was tasked with solving the problem for both the short and long term. This unofficial team is essentially nonexistent at this time. In my opinion, the team must be officially given the responsibility and the authority to execute the work that needs to be done on a non-interference basis (full time assignment until completed).

It is my honest and very real fear that if we do not take immediate action to dedicate a team to solve the problem with the field joint having the number one priority, then we stand in jeopardy of losing a flight along with all the launch pad facilities.



R. M. Boisjoly

Concurred by:


J. R. Kapp, Manager
Applied Mechanics

COMPANY PRIVATE

The document



Can you identify the features
of memo format?

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COMPANY PRIVATE

MORTON THIOKOL, INC

company name

Wasatch Division

Interoffice Memo

31 July 1985

date

2870:FY86:073

TO:

R. K. Lund

reader's name and job title

Vice President, Engineering

CC:

B. C. Brinton, A. J. McDonald,
L. H. Sayer, J. R. Kapp

CC, which stands for courtesy copy and identifies who will receive copies of the memo

FROM:

R. M. Boisjoly

writer's name and dept title

Applied Mechanics – Ext. 3525

SUBJECT:

SRM O-Ring Erosion / Potential Failure Criticality

A subject line that identifies the message topic



Can you identify the features of memo format?

- The company name
- The date
- The reader's name and job title
- The writer's name and job title or dept
- A subject line that identifies the message topic
- CC, which stands for courtesy copy and identifies who will receive copies of the memo



Does labeling a message private keep it private?

- The top and bottom of this message is labeled "PRIVATE."



Does labeling a message private keep it private?

- This memo in its entirety forms part of the public record of a U.S. presidential commission.



The first paragraph:

This letter is written to insure that management is fully aware of the seriousness of the current O-Ring erosion problem in the SRM joints from an engineering standpoint.



What is the purpose of the memo?

- What does the writer want the reader to do?



What is the purpose of the memo?

- What does the writer want the reader to do?

The writer wants the reader to know without a doubt that they have a serious engineering problem with the o-rings.



The second, supporting-detail paragraph:

The mistakenly accepted position on the joint problem was to fly without fear of failure and to run a series of design evaluations which would ultimately lead to a solution or at least a significant reduction of the erosion problem. This position is now drastically changed as a result of the SRM 16A nozzle joint erosion which eroded a secondary O-Ring with the primary O-Ring never sealing.



What connects Paragraphs 1 and 2?

- What words from Paragraph 1 are repeated in the first sentence of Paragraph 2?



What are the repeated words?

- This letter is written to insure that management is fully aware of the seriousness of the current O-Ring erosion problem in the SRM joints from an engineering standpoint.

- The mistakenly accepted position on the joint problem was to fly without fear of failure and to run a series of design evaluations which would ultimately lead to a solution or at least a significant reduction of the erosion problem. This position is now drastically changed as a result of the SRM 16A nozzle joint erosion which eroded a secondary O-Ring with the primary O-Ring never sealing.



What are the repeated words?

- This letter is written to insure that management is fully aware of the seriousness of the current O-Ring erosion problem in the SRM joints from an engineering standpoint.

- The mistakenly accepted position on the **joint problem** was to fly without fear of failure and to run a series of design evaluations which would ultimately lead to a solution or at least a significant reduction of the **erosion problem**. This position is now drastically changed as a result of the **SRM 16A nozzle joint erosion** which eroded a secondary **O-Ring** with the primary **O-Ring** never sealing.

What connects Paragraphs 1 and 2?



- What words from Paragraph 1 are repeated in the first sentence of Paragraph 2? –
 - “joint[s]”
 - “problem”
 - “erosion”
 - “O-Ring”
 - “SRM”



What connects Paragraphs 1 and 2?

- Workplace communication is about “news” – what’s the news here?



What's the news?

- The mistakenly accepted position on the joint problem was to fly without fear of failure and to run a series of design evaluations which would ultimately lead to a solution or at least a significant reduction of the erosion problem. This position is now drastically changed as a result of the SRM 16A nozzle joint erosion which eroded a secondary O-Ring with the primary O-Ring never sealing.



What's the news?

- Workplace communication is about “news” – what’s the news here? – **A secondary O-Ring has eroded, and the primary O-Ring never sealed.**



The third, supporting-detail paragraph:

If the same scenario should occur in a field joint (and it could), then it is a jump ball as to the success or failure of the joint because the secondary O-Ring cannot respond to the clevis opening rate and may not be capable of pressurization. The result would be a catastrophe of the highest order – loss of human life.



What is the purpose of the memo?

- What does the writer want the reader to do? This is the main idea.

The writer wants the reader to know without a doubt that they have a serious engineering problem with the o-rings.

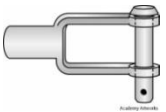


Notice how the third paragraph supports the main idea.

- What is the sports metaphor?
- What is a clevis? Will the reader know what a clevis is?
- How does this paragraph support the main idea?

Notice how the third paragraph supports the main idea.

- What is the sports metaphor? **Basketball – a jump ball**
- What is a clevis? Will the reader know what a clevis is? – **a U-shaped yoke at the end of a chain or rod between the ends of which a lever, hook, etc., can be pinned or bolted – also a channel as in a can of paint – klev'is – Yes, because the reader is in engineering.**
- How does this paragraph support the main idea? – **Nothing could be more serious than “loss of human life.”**





The fourth, supporting-detail paragraph:

An unofficial team (a memo defining the team and its purpose was never published) with leader was formed on 19 July 1985 and was tasked with solving the problem for both the short and long term. This unofficial team is essentially nonexistent at this time. In my opinion, the team must be officially given the responsibility and the authority to execute the work that needs to be done on a non-interference basis (full time assignment until completed).



What is the next step that this fourth paragraph suggest?

- What is the function of the first sentence in this paragraph?
- What is the function of the second sentence in this paragraph?
- What is the function of the third sentence in this paragraph?



What is the next step that this fourth paragraph suggest?

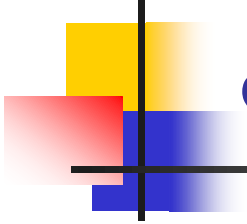
- What is the function of the first sentence in this paragraph? – to remind the reader that the basis for the next step, the “unofficial team” is already in place.
- What is the function of the second sentence in this paragraph? – to make the transition to the final sentence in the paragraph by stating that the team has not been doing its job and by implying that the team was somehow prevented from doing so.



What is the next step that this fourth paragraph suggest?

- What is the function of the third sentence in this paragraph? – to state the specific action that the writer wishes the reader to take. This action appears so late in the memo because the reader must first be persuaded that the situation is serious enough to warrant such action.

What is the hidden accusation?





What is the hidden accusation?

- The writer is implying that the team to solve the problem wasn't set up properly and may even have encountered interference that prevented it from doing its job.

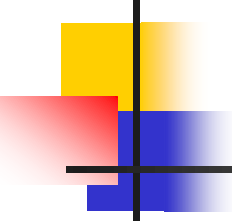


Why is the accusation hidden?



Why is the accusation hidden?

- Workplace messages rarely accuse anyone directly and openly.
- Why don't they? What do you think?



The closing, next-step paragraph:

It is my honest and very real fear that if we do not take immediate action to dedicate a team to solve the problem with the field joint having the number one priority, then we stand in jeopardy of losing a flight along with all the launch pad facilities.



The Signatures:

R. M. Boisjoly

Concurred by:

J. R. Kapp, Manager
Applied Mechanics

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COMPANY PRIVATE

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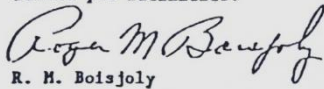
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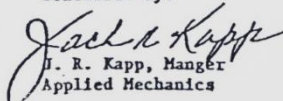
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J. R. Kapp, Manager
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COMPANY PRIVATE

Take a final
look at the
document.



Look at the document one last time, using your Table: Features of Workplace Writing, as a guide.

- What kind of document is it?
- How does it focus on the reader?
- What is the purpose, the main idea?
- Is the reasoning behind the points obvious?



Look at the document one last time, using your Table: Features of Workplace Writing, as a guide.

- What kind of document is it? – Interoffice memo
- How does it focus on the reader? – Supplies information for a specific reader and purpose, uses “we,” asks the reader to act, expects an answer
- What is the purpose, the main idea? – The writer wants the reader to know without a doubt that they have a serious engineering problem with the o-rings.
- Is the reasoning behind the points obvious? – Uses “if . . . then” pattern



Look at the document one last time, using your Table: Features of Workplace Writing, as a guide.

- Are the paragraphs short?
- Does it use titles and headings?
- Does it use point form and lists?
- Does it use a standard format?
- Does it use key words and phrases?



Look at the document one last time, using your Table: Features of Workplace Writing, as a guide.

- Are the paragraphs short? – average 5 lines
- Does it use titles and headings? – in memo format and subject line
- Does it use point form and lists? – uses embedded lists of two points
- Does it use a standard format? – interoffice memo
- Does it use key words and phrases? – repeats key words



Look at the document one last time, using your Table: Features of Workplace Writing, as a guide.

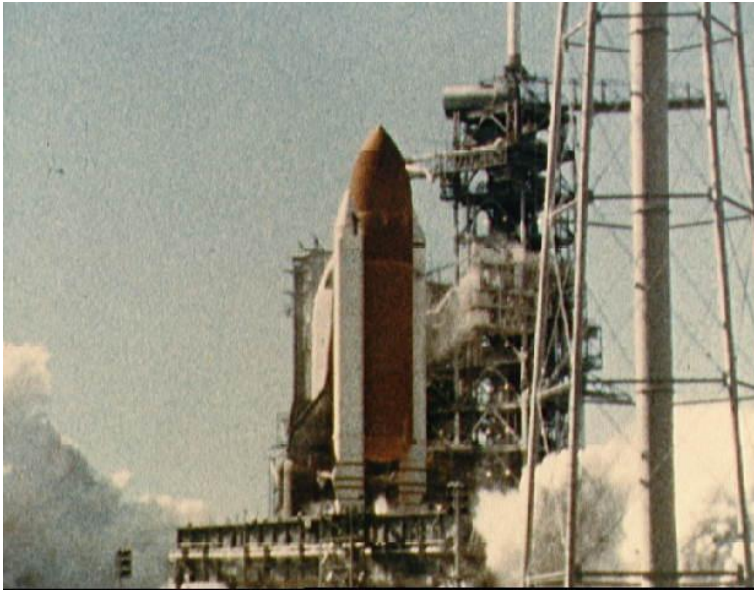
- Does it use underlining, capitalization, bold, colour, and graphics to highlight information?
- Does it use tables, graphs and other illustrations for at-a-glance understanding?



Look at the document one last time, using your Table: Features of Workplace Writing, as a guide.

- Does it use underlining, capitalization, bold, colour, and graphics to highlight information?
 - uses parenthesis to highlight information
- Does it use tables, graphs and other illustrations for at-a-glance understanding? – graphic on upper right of form identifies it as company correspondence

The Challenger exploded shortly after leaving the launch pad in January 1986.



Photos are taken from the Image library of the STS-51L Challenger mission at Johnson Space Center and can be accessed at <http://images.jsc.nasa.gov/search/search.cgi?selections=STS51L&browsepage=Go&query=STS51L&field=missionid&startat=0&maxresults=5>.

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http://history.nasa.gov/rogersrep/v1p249.htm

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Page Tools

Report of the PRESIDENTIAL COMMISSION on the Space Shuttle Challenger Accident

Thiokol letters and memoranda written after O-ring concern escalates

COMPANY PRIVATE

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Web Camera

The entire document is part of the record of the Report of the Presidential Commission on the Space Shuttle *Challenger* Accident (commonly called the Rogers Commission Report) and can be accessed at <http://history.nasa.gov/rogersrep/v1p249.htm>.



Workplace communication is serious business.

- While Boisjoly was not able to prevent the catastrophe, he felt that his memo proved he had done his best, a point he has repeated at several public speaking engagements.



Workplace communication is serious business.

- The O-rings have flown on every subsequent launch of the Shuttle.
- The disaster was caused by managers overriding the protests of engineers to launch in freezing conditions that were outside O-ring specifications.

(Pointed out by Michael Lennick in his March 19, 2011 letter to the editor of the *Globe & Mail*.)



Workplace communication is serious business.

- According to Boisjoly, the reader of the memo told him that as an engineer he agreed but that when he put on his manager's hat, he realized it would be bad for the program to postpone the launch.

Do you think readers are influenced by more than the words on the page?





But that was waaaay back in 1986 . . .

Here are a few quotations from more than 40 pages of memos written in **2003** from NASA (National Aeronautics and Space Administration) engineers warning about the effects of damage to the heat tiles on the NASA shuttle:



Memo Excerpts

- Trying a belly landing because heat-tile failures have damaged the landing gear is “almost certainly a LOCV [loss of the crew and vehicle] case.” – Engineer R. K. McCluney
- “Any more activity today on the tile damage or are people just relegated to crossing their fingers and hoping for the best?” – Engineer Robert Daugherty in an email to a colleague – Jan. 28, 2003, 12:39 pm email, http://www.nasa.gov/pdf/2207main_COL_email_030..., p. 15.



Memo received by the Pilot:

- “Experts have reviewed the high speed photography and there is no concern for RCC [reinforced carbon carbon] or tile damage.”

(Taken from “NASA staff raised fears of calamity” by Tu Thanh Ha in the *Globe & Mail*, Feb. 27, 2003; See also “Email told fatal shuttle it was safe,” Associated Press to the *Guardian*, July 1, 2003, at <http://www.guardian.co.uk/columbia/story/0,,988704,00.html>, accessed 9/13/2006)

The Columbia disintegrated shortly after reentering the Earth's atmosphere above Texas on February 1, 2003. All 7 astronauts were killed.





And in even more recent times:

- In a March 2009 email, VANOC (Vancouver Olympic Organizing Committee) chief John Furlong expressed concern that an athlete could get “badly injured or worse” on the Whistler sliding track.
- Almost a year later, 21-year-old Georgian luger Nodar Kumaritashvili was killed on the track during a training run for the 2010 Olympics.

(Taken from the *Globe & Mail*, Feb. 8, 2011)



You can read the full report.

- <http://www.pssg.gov.bc.ca/coroners/publications/docs/coroners-report-kumaritashvili-nodar.pdf>
- <http://datafind.gov.bc.ca/query.html?qp=&style=pssg&qt=coroners+report+Nodar+Kumaritashvili&Submit.x=39&Submit.y=4>