

UNIVERSITY OF NEW HAVEN
Tagliatela College of Engineering

September 10, 2013

TO: EAS & 107 Students

FROM: EAS& 1 07 Instructor

68 % - (Writing a Technical Memorandum - Form and Content

Why You Need to Write Memos

In late 2012 the college surveyed its alumni and employers of its graduates concerning the importance of technical communication skills in preparation for an engineering career. That survey revealed that over 97% of those responding believed that letters and memos were “Critically Important” (46.9%) or “Somewhat Important” (50.6%) technical communication products in engineering. The importance of memos is also reflected in the way TCoE faculty have coordinated

As the origins of the memo point out, the purpose of internal communication is efficiency, cooperation, and productivity in the organization. The memo format is intended to accomplish those purposes. The lean system of headings helps orient readers to the situation. The body of the memo is organized according to the management purpose it serves (italics added)

So beyond the conventional heading material such as you see at the top of this memo, the information that follows depends on the different purposes and situations that writers of the memo encounter. Driskill goes on to say that “Memos vary in tone, length, and style to reflect these differences.”

So one can say that the modern memo has two essential features:

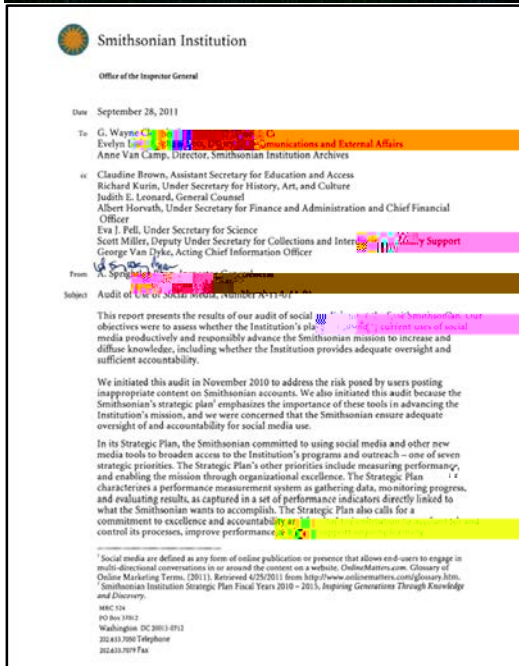
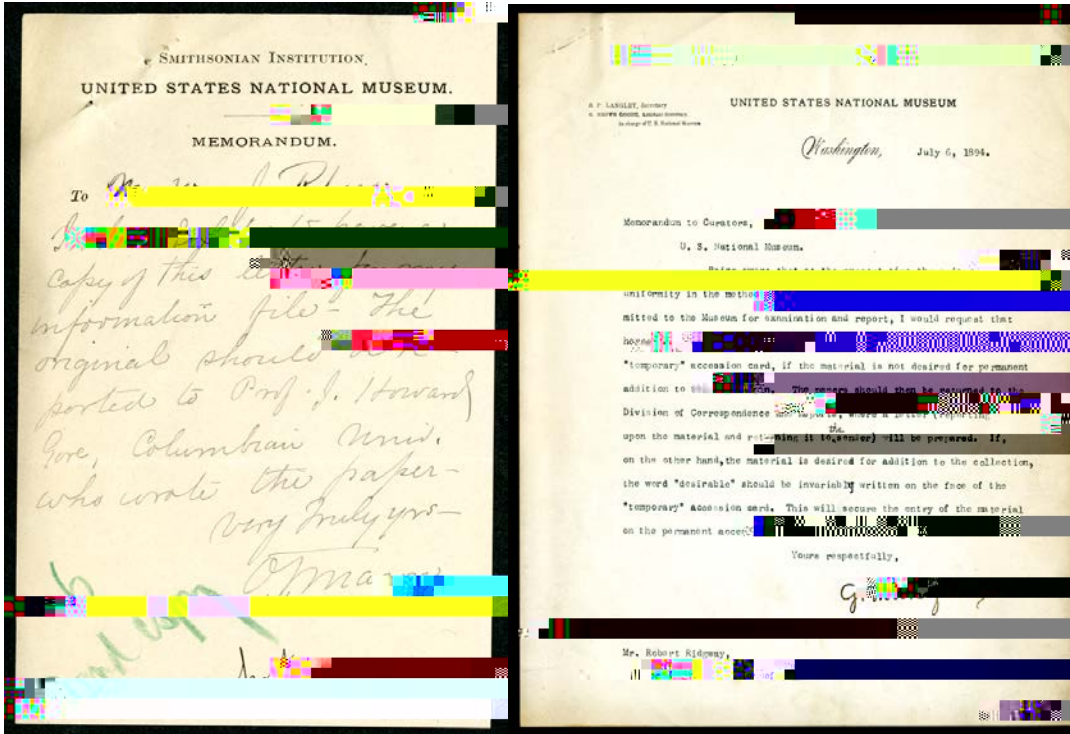
- x A conventional heading structure at the top that records basic information about the memo;
- x Content that reflects the arrangement of information, level of detail and the type of work to achieve the writer’s purpose.

The rest of this handout presents a brief history of the memo followed by two examples of the kind of memo you will need to write in your engineering courses.

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Memos: a Little History

The three slides below provide a capsule view of how the memo has changed over time.



Drawn from the archives of the Smithsonian Institution, this sequence

Figure 1. Three Examples Illustrating the Evolution of the Memo.

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The main point is to show how the memo evolved from a handwritten reminder (sort of a professional diary entry) to the common format and purpose that people recognize in 2013.

Two Annotated Examples of Brief Technical Memos

Attached you will see two examples of the type of brief technical memos required in EASC 1107. Please remember that the exact length and level of detail in your memos will depend upon the situation you are given in your assignment sheet. You will notice three overall trends:

- x Placing the most important information first in a direct style that does not waste words;
- x Choosing words with care so that the language precisely matches the data;
- x Providing data to support conclusions or recommendations, summarized in the text of the memo and detailed in an attachment.

Works Cited

1. L. Driskill, J. Ferril & M. Steffy. 1992. Business & Managerial Communication: New Perspectives. 257. Harcourt Brace Jovanovich. Orlando, FL.
2. Smithsonian Institution. 2011. The Evolution of the Memo. Washington, D.C. Retrieved from (<http://siarchives.si.edu/blog/evolutionmemo>) September 2, 2013.

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Table C6Eg

To: Laboratory Staff

9/4/2013

From: Mike Rufalo, Laboratory Manager

Subject : Homestead Industrial Project: Wood
Variability

Request for Information

Homestead Industrial, Inc. has asked us to verify the strength of weathered white pine boards previously used for siding on homes. They would like to reuse the material and are concerned about the strength.

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To: Mike Rufalo, Laboratory Manager
 From: Juliette Coblenz, Laboratory Technician
 Subject: Homestead Industrial Project Results of Test on Weathered White Pine Boards

Date: 9/14/2013

Notice that the very first sentence is a basic question and is clearly linked to the subject line and the heading; there is no beating ar

The Test Results You Requested

Our laboratory tests confirmed that sample of No. 2 white pine submitted by Homestead Industrial maintains a compressive strength far beyond the 675 psi specified by The National Design Specification (NDS) for Wood (1997). All 30 specimens were tested to failure and the results analyzed. The mean compressive strength of those 30 specimens tested was 4475.18 psi, a figure 563% greater than the listed NDS value. Assuming a normal distribution, the probability that the strength of a specimen will be larger than the published value is 99.28%. Below I have included the mean, minimum and maximum compressive strengths and the standard deviation and coefficient of variation of those strengths as well as the histogram you requested. Please contact me if you have any questions.

Table 1. Homestead Wood Products Test Values

Mean compressive strength	4475.18 psi
Minimum compressive strength	3000 psi
Maximum compressive strength	6000 psi
Mean compressive strength	4475.18 psi
Standard deviation	333 psi
Coefficient of variation	0.074

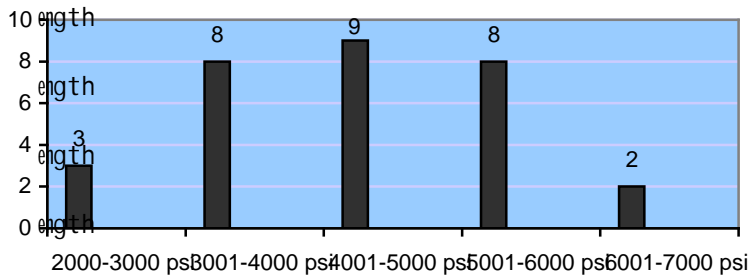


Figure 1. Distribution of Test Results: Homestead No. 2 White Pine--Compressive Strength of 30 Samples Tested to Failure.

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September 1, 2013

To: Laboratory Staff
From: Jim Corcoran
Subject: Hydrostatic Equations and new Wilson tank design



Sarah Chen is manager of Contracts & Specifications from at our Memphis Office. One of her clients, Wilson Hydraulic Systems, has received an RFP (request for proposal) for a new line of ultra-light tanks. These tanks will be used in an experiment that determines how high a jet of buoyant fluid will rise through a static fluid that is stratified (fluid density increases as depth). She knows we have run experiments to determine the forces and pressures acting on the walls an earlier line of smaller Wilson tanks, tanks using fresh water. She wants to know whether the equations we used in those experiments would also be appropriate in determining the forces and pressures acting on the walls of their new tanks.

These tanks are to be 5 ft (l) x 3 ft (w) x 5 ft (h). In this experiment the tank is filled with salt water. The water's specific gravity varies linearly over the depth from 1.025 at the bottom of the tank to 1.000 at the surface.

W gn

Using this company standard format, please draft a memo to V & K that addresses the following:

1. Would it be appropriate to use the eq2(c)-1atio6s wtrfromt apd

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