September 10, 2013

TO: EAS & 107 Sodents

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 assignments across the engineering programs. At this point seven different PITCH-designated was originally a reminder letter that people wrote to themselves. As Figure 1 demonstrates, it evolved to become primarily an internal communication for organizations. Technical communications scholar Linda Driskill (1902) Rice University summarized two important points about the modern memo.

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 purp it serve(stalics 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 athatsbeet 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.

9/6/2013

# Memos: a Little History

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

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Figure 1. Three Examples Illustrating the Evolution 6the Memo.

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 wiseetwo examples of the type of brief technical memos required in EASC 1107. Please remember that the exact lengthexael of detail in yournemos will depend upon the situation you are given in your ansignt sheet. You will notice those erall treds:

- 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

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

# UNIVERSITY OF NEW HAVEN Tabyle ClegoEleg

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.

To: Mike Rufalo, LaboratoryManager

Date: 9/14/2013

From: Juliette CoblenzLaboratory Technician Subject : Homestead Industrial ProjeResults of Test on Weathered White Pine Boards

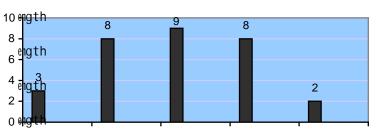
Notice that the very first sentence ar basic question and is clearly linked to the subject line and the heading; there is no beating ar

#### The Test Results You Requested

Our laboratory tests confirmed at 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 rength of those 30 specimens tested was 4475.18 psi, a figure 563% greater than the listed NDS value. Assuming a normal distribution, t probability that the strength of a specimen will be larger than the published value is 99.28%. Below I have included therean, minimum and maximum compressive ngths and the standard deviation and coefficient of variation of those trengths as well as the histogram you requested. Please contact me if you have yaquestions.

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2000-3000 psB001-4000 ps#001-5000 ps5001-6000 ps6001-7000 psi Figure 1. Distribution of Test Results: Homeste No. 2 White Pine--Compressive Strength of 3 iation Samples Tested to Failure.



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 depth). She knows we have run experiments to determine the forces and pressures acting on the walls an earlier line of smaller Wilsotanks, tanks using fresh water. She wants to know whether the equations we used in those periments would also be appropriate in determining the forces and pressures acting on the walls of their new tanks.

These tanks are to  $bett S(I) \times 3$  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 tank from 1.025 at the bottom of the tank to 1.000 at the surface.

# Mar in the second secon

Using this company standard format, plase draft a memto 0 V & K ItheQ that addresses following:

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

# **6 5**

В