TECHNICAL COMMUNICATIONS
HUMOR AND PHILOSOPHY

THE ASCE 2016 CROSS-USA LECTURE

Jean-Louis BRIAUD
Distinguished Professor
Texas A&M University
1. General rules
2. Emails
3. Letters
4. Geotechnical reports
5. Thesis and dissertations
6. Visual aids for reports
7. Phone calls
8. Meetings
9. Power point presentations
10. Interaction with the media
11. Ethical behavior
12. Your professional society
13. Rules for a successful career
TECHNICAL COMMUNICATIONS
HUMOR AND PHILOSOPHY

MEANS OF COMMUNICATION

MANEUVERING THROUGH A DISCUSSION

RANDOM THOUGHTS
COMMUNICATION IS ESSENTIAL TO YOUR HEALTH

(International Student, Widow)

Jean-Louis Briaud
MOST IMPORTANT CONCEPTS IN TECHNICAL COMMUNICATIONS ARE:

1. BE BRIEF
2. BE CLEAR
3. BE RIGHT TECHNICALLY
4. BE CORRECT FROM THE COMMUNICATION POINT OF VIEW
Communicating Risk

The graph illustrates the relationship between fatalities and dollars lost, categorized by annual probability of failure. Each point on the graph represents a different risk scenario, with lines indicating risk thresholds.

- **Dotted line**
  - Risk = 0.1 Fat/yr
  - Risk = 100000 $/yr

- **Dashed line**
  - Risk = 0.01 Fat/yr
  - Risk = 10000 $/yr

- **Solid line**
  - Risk = 0.001 Fat/yr
  - Risk = 1000 $/yr

Key risk categories include:
- Mine pit slopes
- Heart disease
- Car accident
- Foundation cancer
- Offshore structures
- Mobile drill rigs
- Bridge scour
- Dams
- Plane crash
- Hurricane protection system
MY FIRST COURSE IN TECHNICAL COMMUNICATIONS

(CANADA-1974 = DON’T SHY AWAY FROM CHALLENGING SITUATIONS)
USE PROPER MEANS OF COMMUNICATION

(EMAIL, PHONE CALL, VISIT, BODY LANGUAGE)
DARE TO SPEAK IN PUBLIC

(TOASTMASTER, ROTARY)
CONTROL QUALITY

(SPELLING, GRAMMAR, PRONUNCIATION OF NAMES)
BEWARE OF LOCAL CUSTOMS

(BEST SEAT IN KOREA)
KNOW YOUR RIGHTS

(COURAGE, DISCIPLINE, and WISDOM)
COMMUNICATE BETWEEN FIELDS OF ENGINEERING

(STRUCTURES, HYDRAULIC, WW BRIDGE)
NEW BRIDGE WITH STRATIGRAPHY

NOT TO SCALE

Depth (m)

V2  V1  M1  M2  M3  M4  M5  M6  M7  M8  M9  M10
BORE HOLE EROSION TEST

<table>
<thead>
<tr>
<th>WATER FLOW</th>
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<tbody>
<tr>
<td>DIAMETER, D</td>
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<tr>
<td>WATER FLOW VELOCITY, V</td>
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EROSION FUNCTION OF SOIL

BET at DEPTH Z

RATE OF INCREASE IN DIAMETER

CRITICAL VELOCITY

VELOCITY
SEEK COMMUNICATION TO SOLVE PROBLEMS

(PERSONAL DISCUSSIONS ARE BEST)
LISTEN, LISTEN, LISTEN

(20%, BANANAS, CAROL SHIELDS)
PUT YOURSELF IN THE OTHER PERSON SHOES, EMPATHIZE

(BEAR, PROFESSORS AND PRACTITIONERS, ANN LANDERS)
From Tucson, Ariz.: Engineers ARE different. My engineer husband (graduate of MIT) tells me when my skirt is 1/8 inch shorter in the back. If the tile floor in the bathroom looks uneven, he gets out the tape measure for “proof.” A crooked window shade must be adjusted at once. If, however, I am crawling around the house with a killer migraine, he doesn’t notice.

Carbondale, Ill.: You’re darned right engineers are different. I am still happily married to mine after 35 years. They tend to look before they leap and have stable marriages. By nature, they are problem solvers, sensitive and caring. The woman who wrote to complain ended up with the wrong man, not the wrong profession.

No City, Please: Thirty years ago, I married an engineer. Our marriage was an emotional wasteland. He would have been a better father if our children had been robots he could program. Engineers can figure out everything except how to be human and caring.

Indianapolis: My engineer husband doesn’t send me flowers. In fact, some days, we don’t even have a decent conversation, but I’ll take this nerdy-looking guy with his assortment of pens and eyeglass cases in his shirt pocket, his dull tie and wrinkled trousers, over all of the men I’ve ever known. He is loyal, decent, dependable and real. He’ll never cheat or lie to me. That’s worth a lot these days.

Jean-Louis BRIAUD
BE CLEAR AND BE BRIEF WITH YOUR MESSAGE

(SO WHAT, TOO COMPLICATED, KIDS, NORMANDY CLIFFS )
Pointe du Hoc and Cliff Erosion

World War II Invasion Site
June 6th, 1944

© Pascal Le Fichant - 2003
HEAVY BOMBARDEMENT OF POINTE DU HOC

25 APRIL 1944
13 MAY 1944
22 MAY 1944
4 JUNE 1944
5 JUNE 1944
6 JUNE 1944

http://b26marauder.com/322nd/b26inflight.html
CLIMBING THE CLIFFS AT LOCATIONS OF BOMB IMPACT

General Earl Rudder and 200 Rangers
POINTE DU HOC TODAY
Sketch cross section of the cliff and Observation Post

- Silty Clay
- Fractured Limestone
- Very Hard Sandstone
- Fractured Limestone and Sandstone
- Very Stiff Gray Marly Limestone

Estimated Section Profile in 1944
- High Tide plus Storm Wave
- High Tide
- Low Tide

Distance:
- 0 m
- 10 m
- 8 m
- 4 m
- 3 m
- 9 m
- 2006
- 22 m
- 6 m
- 7 m
Proposed remediation to reopen the Observation Post

Motion Sensors

Walkway and Rail

Capping Beam

Micropiles on perimeter of O.P.

Estimated Section Profile in 1944

High Tide plus Storm Wave

High Tide

Low Tide

Silty Clay

Fractured limestone

Very hard sandstone

Fractured limestone and sandstone

Very stiff gray marly limestone
THINK BEFORE YOU TALK, KEEP THE BIG PICTURE IN MIND

(ONE DAY MORATORIUM, MAKE SURE YOU LOSE!, MANAGER)
CONCENTRATE ON PROBLEM SOLVING NOT BLAME ASSIGNING, BE PROFESSIONAL

(ATTACK PROBLEMS, NOT PEOPLE)

Jean-Louis BRIAUD
KEEP A TRUMP CARD IN YOUR BACK POCKET

(HUNT LECTURE AND JANET)
TWO POSITIVE FOR EVERY NEGATIVE

(TENNIS COACHING)
TIMING IS IMPORTANT

(LETUCE, PEATNICK)
A LITTLE LUCK DOES NOT HURT

(WASHINGTON MONUMENT)
Washington Monument
SOME PHILOSOPHICAL SAYING
It’s nice to be important, but it’s more important to be nice.
Things should be made as simple as possible but not any simpler than that.
Imagination is more important than knowledge.
Don’t ever, ever, ever, ever quit.
Learn from the past but most importantly concentrate on the next point.
Good judgment comes from experience, but experience comes from bad judgment.
So learn from the bad judgment of others, you don’t have time to make all the mistakes yourself.
Do not be afraid to challenge even the most established concepts.
The harder you work, the luckier you get.
All the shots that you do not take, do not go in.
Behind every difficulty, there is an opportunity.
The race for quality has no finish line.
Nothing happens unless first a dream.
Save money while you are young.
Anger is one letter away from danger.
Some people may hate you but they only win if you hate them back.
The tongue weighs practically nothing, but so few can hold it.
You should do things as if everyone will know about it.
If someone betrays you once it’s their fault, if it happens twice it’s your fault.
Do not worry or stress, simply concentrate and prepare. Play your life one point at a time.
RULES FOR A SUCCESSFUL MARRIAGE

Jean-Louis BRIAUD
Rule 10. Life is not fair, get use to it. Refer to it when everything else fails.

Rule 9. If you wish to know what your spouse will be like in 25 years, study your parents in law.

Rule 8. Make sure you never win an argument.

Rule 7. Communication is the secret to solving relationship problems. Remember that in your marriage there are two truths: yours and your spouse’s. In fact in this world there are about 6 Billion different truths because no body thinks the same way, and yet everybody thinks that they are right. Remain calm in all situations. Getting mad may give you a few seconds of pleasure but several days of agony.

Rule 6. Work at reaching a balanced self-esteem and self-reliance. Remember at all times that your competition is about 3 Billion strong because there are 3 Billion other women and 3 Billion other men on this planet. That is mighty tough competition. I have talked to Janet about this; she assures me that mine is down to only about 100,000!!
Rule 5. Share your love and your talents with each other and with others around you. Remember that when you leave this world, the only part of you that does not die is what you have given to others.

Rule 4. Have faith in a higher order that we are so far from understanding completely. Faith is a beautiful thing that can bring tremendous peace and tremendous strength. It will always help you keep the big picture in mind.

Rule 3. Handle your marriage relationship like a common research project. Innovation is one of the keys to an exciting life. Human relationships are so complex that it will take you a life time before you get bored with this research project.

Rule 2. Be supportive of your spouse’s dream and contribute to its achievement as if it was your own.

Rule 1. I can assure you that I have not done too well in applying any of those rules. However, rule number 1 is the one that saved me. Rule no.1 for a successful marriage is to make sure that in the choice of your spouse, you get very very lucky; and if Janet were here I would add, and I have been.
RULES FOR A SUCCESSFUL CAREER

(WITH THE HELP OF CLYDE BAKER)
10. Relentless pursuit of excellence as a way of life
8. Work hard but balance your interests
7. Make lots of friends. Public relations
6. Look for solutions and not who is to blame.
5. Be firm in your decisions but fair and polite
4. Treat others as you wish to be treated
3. Communication is best way to solve problems.
2. Surround yourself with smart people
1. Go after your dreams with vision and perseverance
CARE ABOUT YOUR PROFESSIONAL SOCIETY

“ASKED NOT WHAT THE GI CAN DO FOR YOU, ASK WHAT YOU CAN DO FOR THE GI”
REMEMBER TO
KEEP ON SMILING NO MATTER WHAT
BECAUSE

HAPPINESS IS A CHOICE