Prepare Yourself: The Real World is Coming

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The Real World is Coming...

- Some general thoughts
  - It is everything people say it is
  - Fast-paced...extremely fast-paced
  - Writing well is more important than you think
The Educated Assumption

- Real-world problems are complex and ill-defined, multi-disciplined, and can have multiple solutions

- How do you fill in the blanks?
  - Engineering judgement
  - Experience

- Which solution is best?
Your Second Family

- Learn about your company
  - History
  - Values
  - Structure
    - People
  - Customers / Vendors
  - Cash flow
  - Resources
  - Trade secrets
Respect the Chain of Command

- Know your corporate structure
- Follow the ladder up
- Don’t leave someone out
- Who needs to be aware? Who doesn’t?
Be very wary of this
It’s easier to do than you think!

Poor planning on your part does not constitute an automatic emergency on my part
Ownership

- The success or failure of a project depends on you
- Learn about all parts of the project – become multi-disciplined
  - Arm-chair management won’t cut it
- Anticipate what is needed – be pro-active!
The Inquisitive Idiot

Think before you ask!
Do your research and provide your thoughts first
Tunnel Vision

- Don’t lose sight of the big picture
- View the picture from all angles
  - What you do could affect someone else’s job
The Enemy of Good...

- Perfection does not exist
- Learn to define and accept “acceptable”
The Paper-Trail

- Document, document, document!!
  - Company requirement
  - You will forget, papers don’t
  - CYA = Cover Your @$$
    - It’s not what you know, it’s what you can prove

- Organization is key
  - Organized mess doesn’t work anymore
I Can Write Good

Every year, we buy ten cases of paper at $35 each; and every year we sell them for about $1 million each. Writing well is very important to us.

- Bill Browning, President of Applied Mathematics, Inc.

I’m sorry I wrote you such a long letter. I did not have time to write you a short one.

- Blaise Pascal

- Everything must be well-written
  - Reports, papers, memos, emails, everything
- Choose your words carefully, there can only be one meaning
- Remember your audience
Stage-Fright

- Presentations are inevitable – be prepared!
- How do you prepare yourself?
- What makes a good presentation?
  - What makes a bad presentation?
I think we can all agree that this is an example of a bad presentation. There is so much text on this slide that it’s hard to make anything out. Plus, I’m reading this slide to you so 1) I’m not even facing you, and 2) don’t lie, you’re trying to read this while I’m reading it to you. So why am I even up here talking? You’re not listening to me and there’s no reason to listen to me because I’m not adding anything to this slide. I could just as easily have given you the slide to read yourself and you would have gotten the same amount of information from it.
Stage-Fright

- Presentations are inevitable – be prepared!
- How do you prepare yourself?
- What makes a good presentation?
  - What makes a bad presentation?
- Practice, practice, practice!
The Practical Engineer

The “pie-slice” approach

- Less is more
- What is negligible?
- Work smarter, not harder
  - Computer simulation vs. hand calculation
Random Thoughts

- You will make mistakes
- GIGO = Garbage In, Garbage Out
- Start saving your money now
- Leave work at work
In The End

The Real World is Coming...

Be confident, you are ready!