

CAREER PERSPECTIVES IN ENGINEERING

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Airborne Early Warning Systems

Northrop Grumman Integrated Systems

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CAREER PERSPECTIVES IN ENGINEERING

- **Vision and Leadership**
- **Risk and Reward**
- **Set the Bar High**
- **Play for the House**
- **Loyalty**
- **Work With and Select the Best**
- **Mentor: Be One Have Many**
- **Be a Change Agent**
- **To Thine Own Self Be True**
- **Be Careful**
- **Have Some Fun!**

Vision and Leadership

- **Vision Is the Commodity of Leadership**
- **Do Not Work for Individuals or Organizations That Do Not Have Vision!**
- **Clearly Articulated Vision and Goals**
- **Walk the Walk and Talk the Talk**
- **Make Sure the Vision and the Resulting Goals and Tactics Are Consistent With Your Beliefs and Acceptable Practices**
- **Leaders Are Followed Because of the Perceived Integrity of Their Intent**
- **Be a Student of Leadership**

**“Leadership is the art of
accomplishing
more than the science of
management
says is possible.”**

Risk and Reward

- **Take Risks (Calculated and Consciously)**
- **Seek Out Opportunities**
- **Do Things That Others Won't Dare to Do**
- **Sometimes Take on Things Just Because You Need the Experience**
- **Balance the Risks and Rewards**
- **Include Your Family in the Discussions**

Set the Bar High

- **Demand Excellence From Yourself, Your Leadership, Your Peers and Subordinates!**
- **Make Sure You Are Adding Value to Everything You Touch**
- **Encourage Intellectual Debate, Especially Among Those Who Do Not Agree With You**
- **Reach Beyond Your Grasp, Encourage Others to Do So**
- **Do Not Punish Yourself or Others for Occasionally Not Making the Goals**

On the Necessity of Understanding Our Customers' Vision "His Requirements and Desires" and Our Development Discipline

Lockheed, for example, doesn't make hamburgers or stereos or personal computers. But we are a customer business just the same.

There is only one path to success in any business and that is to know your customer, his requirements, and his unwritten desires.

To get your courage up, first think of the abuser's own personal interest in the matter: He needs the job. You need the performance.

■ Do you believe that an error-free product is possible?
It is possible only if we methodically get at the cause of a failure and permanently put it to bed.

■ Do you shoot for perfection the first time through?
Because we have "time" to redo a second time, we may be getting lax in doing it right the first time.

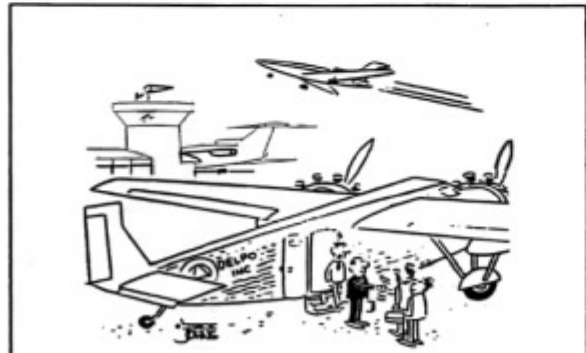
A word about sloppiness. Innovation is a messy process, full of intuitive groping, scribbles on the backs of envelopes, plans gone awry, and abandoned directions. It is a necessary untidiness and we would be foolish to suppress it.

But when inquiry leads to conviction, proposal to program, it is time for attention to detail to reassert itself, to clean up the mess. Don't send your clutter downstream into the process.

■ Do you know what your customer needs?
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My remarks are intended to generate self-examination. I challenge you to ask yourself, "Where does my company stand in the cycle? Is it headed for danger? Am I truly being a leader?"



"Gentlemen, this is an efficiency expert who claims our company is in need of modernization."

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Play for the House

- **“If You Take a Man’s Money, Then Ride for the Brand”**
- **Be a Change Agent**
- **Positively Influence the Organization**
- **Enlightened Self Interest Is Good, Self Serving, Self Aggrandizing Behavior Is Not**
- **Organizations Are Like Families, They Have a Rhythm, They Ebb and Flow. Strong Ones Overcome Adversity**
- **Think of Your Behavior and Actions in Terms of the Organization**

Loyalty

- **Loyalty Above All Else Except Honor !**
- **Loyalty Down As Well As up**
- **Be Careful With Misplaced Loyalty, There Is a Hierarchy of Obligations**

REMEMBER THIS . . .

IF YOU WORK FOR A MAN, in Heaven's name, work for him. If he pays you wages which supply you bread and butter, work for him; speak well of him; stand by him and stand by the institution he represents.

If put to a pinch, an ounce of loyalty is worth a pound of cleverness. If you must vilify, condemn and eternally disparage - - resign your position and when you are outside, damn to your heart's content.

But as long as you are part of the institution, do not condemn it.

If you do that, you are loosening the tendrils that are holding you to the institution, and at the first high wind that comes along, you will be uprooted and blown away, and probably will never understand the reason why.

Elbert Hubbard

Work with and Select the Best

- **Head towards the light!**
- **Seek out the best, learn from them, challenge them**
- **Do not let your insecurities limit your choices**
- **Surround yourself with the best, especially complimenting your weaknesses**
- **Do not be afraid of making mistakes or not looking all knowing**
- **The Best people make you and the organization better!**

LESSON 8

"Organization doesn't really accomplish anything. Plans don't accomplish anything, either. Theories of management don't much matter. Endeavors succeed or fail because of the people involved. Only by attracting the best people will you accomplish great deeds."

In a brain-based economy, your best assets are people. We've heard this expression so often that it's become trite. But how many leaders really "walk the talk" with this stuff? Too often, people are assumed to be empty chess pieces to be moved around by grand viziers, which may explain why so many top managers immerse their calendar time in deal making, restructuring and the latest management fad. How many immerse themselves in the goal of creating an environment where the best, the brightest, the most creative are attracted, retained and, most importantly, unleashed?

LESSON 13

"Powell's Rules for Picking People:"

Look for intelligence and judgment, and most critically, a capacity to anticipate, to see around corners. Also look for loyalty, integrity, a high energy drive, a balanced ego, and the drive to get things done.

How often do our recruitment and hiring processes tap into these attributes? More often than not, we ignore them in favor of length of resume, degrees and prior titles. A string of job descriptions a recruit held yesterday seem to be more important than who one is today, what they can contribute tomorrow, or how well their values mesh with those of the organization. You can train a bright, willing novice in the fundamentals of your business fairly readily, but it's a lot harder to train someone to have integrity, judgment, energy, balance, and the drive to get things done. Good leaders stack the deck in their favor right in the recruitment phase.

LESSON 4

**"Don't be afraid to challenge the pros,
even in their own backyard."**

Learn from the pros, observe them, seek them out as mentors and partners. But remember that even the pros may have leveled out in terms of their learning and skills. Sometimes even the pros can become complacent and lazy. Leadership does not emerge from blind obedience to anyone. Xerox's Barry Rand was right on target when he warned his people that if you have a yes-man working for you, one of you is redundant. Good leadership encourages everyone's evolution.

Mentor: Be One Have Many

- **Actively seek out Mentors**
- **Mentor others**
- **This is a strategic instrument, that is good for you and for the organization**
- **This takes a long view**
- **Requires an investment in time for it to be effective**
- **Requires integrity, honesty and vulnerability**

Be a Change Agent

- **You Can Sit and Complain or You Can Engage**
- **Be Recognized As Someone Who Identifies Problems, Formulates Solutions and Can Implement Corrective Actions**
- **Volunteer for Initiatives**
- **Participate in Tiger Teams, Discussion Groups or Virtual IPT's**
- **If You Think of Yourself As Part of an Organization Versus an Individual Your Sphere of Potential Influence Automatically Grows**

"Company Champions"

ARE YOU A LEADER?

by Larry Kitchen
Chairman of the Board
& Chief Executive Officer
Lockheed Corporation

Adapted from a talk
at Lockheed's Senior
Management Institute

(Quality Circle Digest,
April '86)

"You should spend your quality time with the true achievers in your organization, not those who just perform the procedure but those who improve the process. You should know who they are, support them, stroke them, and reward them because it is on the backs of these champions that this company moves forward."

I have been in business long enough to know that companies go through cycles.

Events and companies never sit still. A company may be enjoying prosperity and yet trouble may not be far away. As often as not it is trouble of the company's own making.

The ingredients leading to a down cycle manifest themselves in many ways. Taken all together they can spell disaster.

- The workforce is no longer lean and mean.
 - Costs get out of control.
 - Fire in the belly dies down.
 - The aggressive, fight-for-survival spirit goes away.
 - Complacency sets in.
 - Teamwork gets sloppy.
 - People become paranoid, protective, and internal squabbling begins.
 - Competitions are suddenly lost... competitions that should have been won.
 - As competitions are lost, pressure starts building up at the top to some scalps... investment plans for the future are scrapped... and management and the work force become gun-shy and overly cautious.
 - With these ingredients in place it is too late to rationally take corrective action before experiencing a significant impact on earnings and the balance sheet.
- Crisis management then becomes the order of the day.
- Discipline and teamwork are stressed, and the teams begin once again to work the details toward a mutual objective.
 - Risk-taking is encouraged.
 - Costs are controlled.
 - And through smart and aggressive hard work competitions are won.
 - But what a waste of resources during the down years.

It doesn't have to be this way. While I believe that businesses are subject to cycles, I believe that a company can conduct itself in a counter-cyclical fashion, fight the prevailing malaise wherever it rears up, and keep the work force lean and alert in the best of times.

It all comes down to leadership. I think a company has a right to demand it.

A top company spends generously to see to it that its managers have the best operating equipment for the job. But the finest and sharpest scalpel is nothing more than a sophisticated meat cleaver in the hands of a half-hearted surgeon.

While we are busy perfecting the machining processes and software techniques - the computer integrated factories and electronically-controlled machines - we have to make sure we are not putting this equipment into the hands of quacks.

These new machines can produce work of the most exquisite detail and beauty - but if a high tech machine is stamping out work that is flawed, the patient dies, and the only thing automated is the manufacture of wastepaper and scrap.

It is my job to cultivate and motivate leadership ability. A manager knows how to state the problem and the symptoms; the leaders that I am looking for can find the specific solutions to those problems, aiming past the symptoms to the causes.

"You should spend your quality time with the true achievers in your organization, not those who just perform the procedure but those who improve the process. You should know who they are, support them, stroke them, and reward them because it is on the backs of these champions that this company moves forward."

LESSON 6

"You don't know what you can get away with until you try."

You know the expression, "it's easier to get forgiveness than permission." Well, it's true. Good leaders don't wait for official blessing to try things out. They're prudent, not reckless. But they also realize a fact of life in most organizations: if you ask enough people for permission, you'll inevitably come up against someone who believes his job is to say "no." So the moral is, don't ask. Less effective middle managers endorsed the sentiment, "If I haven't explicitly been told 'yes,' I can't do it," whereas the good ones believed, "If I haven't explicitly been told 'no,' I can." There's a world of difference between these two points of view.

To Thine Own Self Be True

- **Your Integrity, Intellectual Capability and Credibility Are Yours. No One Can Take Them From You, You Can Only Give Them Away**
- **Do Not Be Someone You Are Not**
- **Do Not Do Things That Are Not Part of Your Belief System**
- **Sometimes You Just Have to Say No**

Be Careful!

- **Watch the Politics**
- **Never Delegate : Selecting the Team, Rewarding the Performers or Disciplining the Transgressors**
- **You Can Never Communicate Too Much**
- **Do Not Get Your Life Too Far Out of Balance**
- **Watch Your Ego**

LESSON 10

"Never let your ego get so close to your position that when your position goes, your ego goes with it."

Too often, change is stifled by people who cling to familiar turfs and job descriptions. One reason that even large organizations wither is that managers won't challenge old, comfortable ways of doing things. But real leaders understand that, nowadays, every one of our jobs is becoming obsolete. The proper response is to obsolete our activities before someone else does. Effective leaders create a climate where people's worth is determined by their willingness to learn new skills and grab new responsibilities, thus perpetually reinventing their jobs. The most important question in performance evaluation becomes not, "How well did you perform your job since the last time we met?" but, "How much did you change it?"

Have some Fun!

Love like you have never been hurt

Work like you don't need a job

And Dance like no one is watching

LESSON 17

"Have fun in your command. Don't always run at a breakneck pace. Take leave when you've earned it: Spend time with your families.

Corollary: surround yourself with people who take their work seriously, but not themselves, those who work hard and play hard."

Herb Kelleher of Southwest Air and Anita Roddick of The Body Shop would agree: seek people who have some balance in their lives, who are fun to hang out with, who like to laugh (at themselves, too) and who have some non-job priorities which they approach with the same passion that they do their work. Spare me the grim workaholic or the pompous pretentious "professional;" I'll help them find jobs with my competitor.

LESSON 12

"Perpetual optimism is a force multiplier."

The ripple effect of a leader's enthusiasm and optimism is awesome. So is the impact of cynicism and pessimism. Leaders who whine and blame engender those same behaviors among their colleagues. I am not talking about stoically accepting organizational stupidity and performance incompetence with a "what, me worry?" smile. I am talking about a gung-ho attitude that says "we can change things here, we can achieve awesome goals, we can be the best." Spare me the grim litany of the "realist," give me the unrealistic aspirations of the optimist any day.

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Questions?