

Paul Kaminski talking notes Feb 29, 2008 at Bolling AFB Officers' Club

Fifth Annual ICAF Honors Banquet  
In Honor of Dr Paul Kaminski

Thank you Gen Wilson. That wonderful introduction gives me credit for a number of accomplishments. But I have to confess publicly that I didn't accomplish any of them by myself. They were achieved by Partners - teams of people working together. These teams included people that I was privileged to work for, and many more wonderful people – many are here tonight – that I was so privileged to work with. Since you all shared in the work, I insist that you share in the honor tonight. (Sheehan in Tux)

One special partner that I would like to recognize tonight is my wife Julie. Julie has been my special partner for more than 40 years now. She has always been by my side, helping and supporting me during many challenges, in good times and in difficult times. Last year, I had the opportunity to help and support her for some months as she faced a major challenge. And we were blessed to come through this together as a team, with extraordinary support from so many of you who are here tonight. One special value of Julie as a partner is her candor. When asked what I should talk about, a typical response from Julie would be “don't try to be intellectual or witty – just be yourself.”

Well, you heard me mention 2 key words thus far - People and Partnerships.

The subject of my talk tonight is People and Partnerships – critical enablers to address National Challenges ahead. Let me begin with a little background.

Looking back on my 4 careers (It seems that I have trouble keeping a job), I have consistently found that making a real difference and having an impact requires the presence of 4 P's.

The first P stands for PEOPLE - our most important national asset.

Walt Disney said, “You can dream, create, design and build the most wonderful place in the world, but it requires people to make the dream a reality.”

To have an impact we need to attract our best and brightest people, empower them, challenge them, provide the best and latest tools, education, and training. We then need to challenge them, recognize and reward them when they progress, and provide opportunity for learning via correctable mistakes. We also need to remember when dealing with people that nobody cares how much you know - until they know how much you care.

- Need for talent in Gov't – need to rebuild our people base
  - Acquisition workforce gutted by congressional reductions in late 1990's
    - “Shoppers”
    - FY 96 15,000
    - FY 97 additional 15,000
    - FY98 25,000 reduction
  - National Defense Education Act of 1958
    - Titles II, III, IV, V
    - Loans – 600,000 students borrowed 59-64
    - Grants for labs, colleges in science, math, languages
      - \$267M 59-64
      - Enrollment in math, sciences up 50% in some states
    - Grad fellowships 5,500 59-64, expanded to 15,000
    - Need program similar to NDEA to address challenges ahead

The second P is for PARTNERSHIPS-working together with a common goal. We sometimes find it difficult in large, bureaucratic organizations to work with a common purpose. But the challenges I will describe in a few moments will not be successfully addressed without effective partnerships. We will need partnerships with our allies, partnerships among various government organizations, various industries, universities, and laboratories. But sometimes partnerships can be a struggle – especially with people like engineers. :

Two engineering students were walking across campus when one said, "Where did you get such a great bike?"

The second engineer replied, "Well, I was walking along yesterday minding my own business when a beautiful woman rode up on this bike. She threw the bike to the ground, took off all her clothes and said, "Take what you want."

The first engineer nodded approvingly, "Good choice; the clothes probably wouldn't have fit."

The third P is for PROCESSES-We need processes to provide guidance and direction, to help us measure how we are doing, and to provide a foundation of integrity – rules of the road. There has been lots of attention to process – probably too much on subjects like acquisition, so I won't discuss further tonight.

Fourth P is for PERSISTENCE-Calvin Coolidge said, "Nothing in the world can take the place of persistence. Persistence means completing the job, and I want to share a sports story about completing the job. In 1951, there was a pitcher named Warren Spahn. Some of us are old enough to remember Warren Spahn. He is the winningest left-handed pitcher in the history of baseball. He was pitching in 1951 one day for the then-Boston Braves against the then-New York Giants in the then-Polo Grounds. And the Giants sent up to the plate a rookie who was 0-for-13. It was clear the kid could never hit big-league pitching...it was a little kid named, Willie Mays. Spahn stood on the mound, sixty-feet six-inches from home plate, fired the ball and Mays crushed it. First hit, first home run! After the game the sports writers went up to Spahn in the clubhouse and said, "Spahnie, what happened?" Spahn said, "Gentlemen, for the first sixty feet that was a hell of a pitch!

Today I want to focus on the first 2 P's – People and Partnerships. I believe ICAF is about People and Partnerships. The mission of ICAF today is to prepare selected military officers and civilians for senior leadership positions by conducting postgraduate, executive-level courses of study and associated research dealing with the resource component of national power, with special emphasis on materiel acquisition and joint logistics, and their integration into national security strategy for peace and war. During my time at ICAF, I gained a valuable perspective about US industry through our industry studies, a perspective that helped me develop productive partnerships.

Tonight I would like to quickly highlight 3 challenges that we face as a nation, and I decided to focus on three that require a special combination of people and partnerships. Each challenge is long term. Each will have a significant impact on National Security in next decade. And each will require a foundation of talented people working together in partnership.

1. The first challenge is managing US energy dependency until such time as we can achieve energy independence.

- Energy – US Oil Dependency
  - CFR Report National Security Consequences of US Oil Dependency
    - John Deutch Jim Schlesinger Ind TF Report No. 58
    - “Lack of sustained attention to energy undercutting US FP & Nat Sec”
    - “For next few decades, challenge is to manage dependencies vs pursue chimera of independence”
    - Not feasible to eliminate dependence in next 20 years (now 60% imported, & growing)
      - Major dependence - transportation
        - uses 68% of US oil
        - 96% fueled by oil
  - Economic & political leverage
    - Significant changes in short term oil price with supply variations – 1% change in supply (.85 mm BPD) changes price 5-10% (\$4-\$8 PB)
    - \$25 PB increase in oil drops US GDP 1%
    - If your impressed with all my statistics, you should know that the average US golfer walks 900 miles per year. He also drinks about 22 gals of alcohol per year. That’s about 41 MPG – pretty impressive, isn’t it. But now back to energy dependency.
  - Competition for oil leading to political arrangements beyond commercial terms
    - Chinese oil investments in Africa include key infrastructure (telecom, airports, railroads)
    - China (and Western firms) taking positions in Saudi nat gas infrastructure.
    - Growing number of Chinese State-State arrangements.
  - Dependence on oil increasingly will put US in competition with populous developing countries such as China and India. At best challenging relations; at worst seriously straining relations
  - US must explicitly integrate energy issues into foreign & defense policy
    - Integrate DOE into NSC and Intel Councils
    - All planning studies at NSC, DOS, IC include energy considerations

- Important domestic policy initiatives needed (e.g., long term incentives to move toward independence) – I’ll skip tonight – speech in itself
- Reality – as more remote oil resources are tapped, world economy will become more dependent on elaborate & vulnerable infrastructures to bring oil to market.
  - Producing & consuming countries have common interest in reducing infrastructure vulnerability (natural or terrorist) - Partnerships
  - US must work with major suppliers (esp Saudis) to detect & deter attacks
  - Greater efforts needed to harden and “prepare the battlefield” Concern for threats such as mines)
    - Strategic choke points (e.g., Straits of Hormuz)
    - 2/ 2006 terrorists attempt to destroy Abqaiq proc facility 2/3 of Saudi
- US needs military posture to support rapid and sustained deployment to SWA
- US energy infrastructure must be made less vulnerable to disruption – natural as well as terrorist attacks (reminder from Katrina & Rita about unknowns in robustness)
- Summary of challenge
  - Situation will improve only when energy issues become integral part of US policy-making process
  - Need for integration of energy issues will make foreign and national security policy more complex
  - Need for special people skills – education+ domain experience
  - Need for long term partnerships – US Allies, DOD, DOE, State, Commerce, Industries (Defense, Transportation, Energy), Universities

## 2. Second challenge is providing for Cyber Security

- Growing dependence of US and key allies on internet for global business
- Aware of growing vulnerability for years – lots of talk, little action until very recently. It turns out that cyber security is one of many areas where after all is said and done, more is said than done.

- Major New Initiative – CyberInitiative – President just signed classified Exec Order with roughly \$10B of new funding
- Recognizes vulnerability of US military systems, networks (netcentric), navigation, comm. (More you know, the more you worry)
- Supporting infrastructure also vulnerable– e.g., Commercial IT, finance, commo, power grid.
- Public awareness increasing – reports of alleged Chinese break-ins (SecDef)
- US and allies now fundamentally dependent on internet. Getting off the net is not an option. Must secure the net.
- Fundamental issue in IO – Offense almost always beats defense
  - Offense attacks weakest point
  - Defense must defend all points
- Need for interaction between Offense and Defense to enhance defence - Partnerships
- But defence alone not sufficient
- Need for deterrence framework much like MAD & nuclear weapons
- For deterrence to work, must have attribution – know who did it. Difficult task, but perhaps possible with appropriate system engineering, architecture, and partnerships.
- Strong need for best and brightest, and need for partnerships – role for DOD, DHS, Intelligence Community, IT Industry, Universities, UARCS, and our allies. Focus on people and partnerships. Attracting and keeping our best and brightest will require:
  - Education
  - Training and environment to interact with leading colleagues
  - Best tools
  - Exercises and competitions
- We are in this for the long haul
- Expect continuing series of actions and reactions (just like EW)

### 3. Third Challenge – Developing and Deploying the Next Generation Air Transportation System (NextGen)

- Current US system is archaic, with inefficient and costly legacy systems

- System is capacity limited today, and unable to support growing demands
- One challenge is deployment – changing tire on car going 60 mph
- Won't describe the many enablers of NextGen, but will instead focus on one - Automatic Dependent Surveillance-Broadcast (**ADS-B**)
  - Replace current ground radars with different approach
  - Each A/C senses its position with enhanced GPS
  - Projects a tube describing where it is and where it will be
  - All “tubes” broadcast on network along with weather, terrain info
  - Permits direct routes, with algorithms to provide deconfliction much like VFR
- Challenges to develop and deploy supporting infrastructure
- Challenges of security – DOD, DHS may need to provide backup radars for skin track
- Implementation will require people with education, training and domain experience
- Partnerships again key – have formed JPDO to coordinate efforts of DOT, FAA, DOD, DHS, State, Commerce, etc

## Summary

- Each of these challenges is fundamental and long term
- Need to attract, train and equip people
- Need to create and incentivize partnerships
- Without the key people and partnerships we'll have lots of talk and little progress
- In WW II and aftermath we established programs and institutes to build foundation of people and partnerships (e.g., radiation labs in Cambridge Mass – Harvard & MIT) which served us well through the cold war. Need similar initiatives for the challenges ahead.
- Important role here for ICAF
- Also stress new type of partnerships enabled by web. Partnerships at lower levels – horizontal collaboration. Being very effectively exploited in private sector today. But challenging for large hierarchical organizations like DOD. I think we all have to learn more about this and gain some experience to more effectively exploit.

Now this has been a fairly heavy talk. I think you will remember the importance of people. As we break up, you'll have an opportunity to get to know the extraordinary people seated on your left and right.

To help you remember Partnerships, I'd like to send you away with a few light thoughts related to interesting names for some hypothetical partnerships that could be formed.

For example if

KNOTT'S BERRY FARM and THE NATIONAL ORGANIZATION FOR WOMEN combined , the partnership could be called  
( Knott Now)

Fed Ex and UPS (Fed Up)

GREY POUPON and DOCKERS PANTS  
(Poupon Pants)

On that note, I think it's time to close. Thank you all for your kind attention. It's been an honor and a pleasure to share this evening with you.