Rethinking National Security
in an Era of Declining Budgets Seminar Series

15 February 2012
Dr. Mark Lowenthal
Declining National Security Spending - Implications for Intelligence
Former Vice Chairman for Evaluation on the National intelligence Council
President of the Intelligence & Security Academy

Notes:
1. Below are informal notes taken by a JHU/APL staff member at the Seminar.

Introduction
Dr. Lowenthal began by acknowledging that the budget for the Intelligence Community (Intel) is going down and would continue to do so. However, he noted that at the time when the Defense budget is dropping the need for more intelligence is actually increasing.

- After 9/11 the budgets of both the Defense and Intelligence communities reached apogee
- Had to fall sometime especially since the Iraq war is over and Afghanistan is winding down
- Moving away from focus on counterterrorism, which will no longer dominate

Issues to be addressed
- The Intelligence budget and how to think about cutting it
- Intel workforce and education
- Data versus knowledge debate
- Innovation in Intel
- Standards for assessing intelligence

Intelligence and Budget Reductions
At its height the unclassified Intelligence budget was $81.1 billion, but is now trending down

- Difficult to figure out return on investment for Intel
  - Did Intel pay for 4 coups d'état, several UAVs, and an Estimate?
  - What if we want more Estimates and less UAVs?
  - Defense budget has it easier – Army can count brigades / Navy can count ships
- What did $81.1B buy?
  - Need to determine whether Intel was successful at stopping events
  - Hard to prove that Intel caused something not to happen – maybe it wasn’t going to happen anyway
  - Rather like insurance – can never tell if you have enough until disaster strikes

Defense budget is generally about 10 times the size of the Intel budget
- Not a rigid rule – just has happened that way
- Can’t just say that if the Defense budget goes down then the Intel budget must go down, too
  - Shouldn’t use United Way process – Defense usually says all should pay their fair share
Defense budget drop is already much more precipitous
Really need more intelligence when Defense capabilities are reduced – need more warning
DoD and Intel don’t need to be in lockstep
Military and Intel are now more deeply entwined
DoD needs to realize that it does not have a near peer threat – and they must live with it
No other country is going to fight the US in the arenas where the US clearly dominates
US weak point is with satellites – US could be blinded and deafened but then all would have trouble operating

DNI Clapper has noted that the US already knows how to do cuts the wrong way – did it in the 1990s
The across the board 10% cuts were bad for all
Some programs should actually go up as others are reduced
Must avoid salami cut methodology

Not a lot of efficiencies can be found when cutting Intel
Can’t tell analysts to think faster
Can’t tell one satellite to do the job of two – physics problem
In Intel it is more important to be effective
Not just an Intel community problem
US government doesn’t really produce anything but currency
Everything needs to be bought from civilian companies
Cutting the Defense budget also cuts into the industrial base – not just an issue of Congressional district pork decisions

Other Issues to Consider When Cutting the Budget
Personnel: 50% of all Intel analysts joined after 9/11
Work force is the least experienced since 1947 when Intel community first established
They may be good but they are not experienced

Intel Training: needs improvement
Now mostly parochial
Each has to learn to write like his or her agency
All need to learn how to be objective
Can’t be inculcated by peers who come in with the same set of views and attitudes
Intel community is not good at mentoring – uses merely a drive-by approach
Intel community is not as good at education and training as the military is
People who are being hired now tend to have some specific character features of their age
Good at collaboration – constantly communicating with each other
Don’t recognize that they are not all winners – not everyone deserves a trophy as they all received when playing ball as kids
Don’t write well because of texting – mostly Tonto speak: “Me here. Where u?”
Don’t know a lot about the world – even general cultural references
Most wouldn’t recognize something like a Dickens reference to Madame Defarge
This is the predominant cadre now in the community

Lessons Learned from 9/11
9/11 Commission report was overrated
Findings were not related to the recommendations
Said that Intel did not connect the dots – just didn’t connect the right ones
Said that Intel did not share properly so in Iraq everyone shared too much
Said that Intel did not use enough imagination so in Iraq they used too much imagination
• Said that Intel had not provided enough warning so in Iraq there was too much warning
• Bottomline: Intel analysts must not make mistakes

Lessons have become legends and drive the Intel community
• Info-sharing – is better than it was and it could be better
  o But we should declare victory and move on
  o Won’t ever be perfect
  o People now spend their whole day sharing and not analyzing or writing
  o Developed a temerity about doing analysis
• Knowledge versus data
  o Now talking about the big data – becoming obsessed with data
  o X-files TV Show thesis is wrong – the truth may not be out there
  o Policy makers don’t want data they want knowledge
    ▪ Need data to build insight which is what is really needed
  o Has been too much emphasis on dots
  o Try an Einstein-style thought experiment: Would it be better to have lots of data but not as many analysts or the other way around?
• Collaboration versus Innovation
  o Really interesting ideas come from individuals, not crowds
  o Don’t believe in the wisdom of the crowd developed from crowd-sourcing
  o Avoid “white swans blinking at the tipping point” – all the current buzz words that only make a good graphic
  o Need collaboration but also need time for individual thinking
  o Groups breed temerity – lowest common denominator
  o Bring a good idea to a group and it gets either stolen or tamped down

Assessing how well Intel is doing
• Can’t be just an assessment of being right or wrong
• If choosing how often you need to be right out a thousand, students will say 500
  o Just because it was in the middle
  o No real number out there
  o All depends on the question you are being asked
• Like in baseball – you have fielding and batting averages
  o A yearly fielding average has to be 980 or 990 to stay in the game
  o A yearly hitting average needs to be only about 260
  o In Intel sometimes you get asked fielding questions: Who is the vice deputy minister of defense in China?
    ▪ Should be able to get these right even if have to look it up quickly
  o An Intel batting question for would be: What will Kim Il Eun do next?
    ▪ These are the big questions
    ▪ Much less likely to be able to answer something like that all the time
• Fielding questions which are rather like connecting the dots should be easy but not Intel
• Intel more like finding patterns in mosaics using constantly shifting pieces of colored glass
  o Not even trying to make a picture
  o Must also expect 30% of the pieces to change every day
• Linearity – has come up as an issue especially in the last year
  o We all think linearly – each day follows the one before with small differences
  o Then get a situation like the Arab Spring that starts with a Tunisian vegetable seller
    ▪ Story is like a bad Tom Clancy novel (Popular Mechanics with dialogue)
• Senior policy makers were upset by lack of warning about the Arab Spring
  • Mubarak was upset, too, and he was closer
  o A non-linear prediction would be the collapse of China
    • “Short China and go long on India”
    • Prefer the China we have now – stable and conservative
    • What would happen in a world with an unstable China?
    • Don’t expect to see the Chinese fleet invade Taiwan or Hawaii
    • China much more likely to collapse
  o Tend not to think of concepts like the fall of China since it is non-linear and we don’t experience the world that way

Conclusions
Intel’s situation resembles the comment of the 19th century editor of Punch, the British humor magazine
• He was accosted on the street by a man who complained that Punch was not as good as it was in the past
• He replied that “It never was.”
• Intel: not as bad as it used to be and it never was – big changes in last 10 years but a difficult time
The Intel budget cut deliberations are really about capabilities
• Need to know what policy makers want from Intel
• Needs are not the same thing as wants
  o Where do you put Intel on the spectrum between needs and wants?
  o Where do you put specific Intel programs on that spectrum?

QUESTION & ANSWER SESSION

Batting Versus Fielding Questions
• Policy makers find it easier to ask batting rather than fielding questions
• Last 10 years of tactical warfare has put a premium on current intel
  o Has been driving out the capabilities for indications and warning (I&W)
  o Commanders ask: What is happening now?
  o Lost the research capabilities needed for I&W
• Sometimes the unknown unknowns are unknowable
  o Such a concept was unacceptable to policy maker SECDEF Rumsfeld
• Intel needs to guide policy makers to ask different questions
  o Difficult balancing act but need to be proactive

Political Successes and Intelligence Failures
• Intel fails sometimes because it is asked the wrong question
• Must recognize that surprise is inevitable
  o Arab Spring was not an intelligence failure
  o Intel had all the basic information about the situation
  o Intel had no way to know that a Tunisian vegetable seller would spark revolts
• By contrast, Pearl Harbor was strategic failure and 9/11 a tactical failure
• Intel must manage the expectations of newly arriving senior policy makers
  o Tell them about something they haven’t thought about, not what they didn’t kow
  o Building knowledge for them is important
  o Not all will be able to absorb what they are given
Strategic Thinking
Less strategic thinking has been going on in the last decade
- There are no big strategic questions like the threat from the Soviet Union now
- When Lowenthal was Vice Chairman of the National Intelligence Community (NIC) he could not find much market for strategic thought
  - Policy makers were generally too overwhelmed by their in-boxes – could only see their immediate problems
  - Could not think about water problems in 2020 – wouldn’t be around that long
  - Current intelligence will drive out strategic intelligence as it has for the last 10 years
  - NIC is supposed to be doing strategic thinking but it lacks personnel with the right capabilities

Critical Thinking
Critical thinking is the big new concept in intelligence education
- Very hard to teach it
- Some part of your mind has to disengage while you are thinking to observe your thinking
  - Involves being self-critical which people find hard to do and don’t want to do
  - A matter of thinking about thinking while thinking
  - Not sure that everyone can do it
- Need to think past data points
  - Younger generation cannot see beyond data packets – pre-wired to find data packets
  - Getting harder to teach analytic thinking
- Analytic tools may not be all that useful
- Must teach critical reading before can move on to critical thinking and writing
  - Critical reading can be taught using Shakespeare but that frightens many students
  - Must remind them that Shakespeare wrote for illiterate peasants
- People think and write better using a pen rather than a keyboard
  - Long-hand is dying out to the extent that some schools stopped teaching cursive
  - Typing may be faster but it is not as thoughtful
- Critical thinking may be the most difficult thing to teach

What to Tell Young Analysts
- Remember that the history of rock and roll did not start when you turned on the radio
- Need to know history such as references to Caesar crossing the Rubicon
- Must be able to have fun with and enjoy writing
- Must be able to tolerate a certain level of uncertainty
- Must be aware of context
  - Asked: Why did you use dated intel?
  - Answer: We didn’t know it was dated at the time.
  - Recognize that there is a river of intelligence always going by
  - Different situation than courtrooms where can’t take into account a defendant’s prior offenses in making judgments
- Must believe that intelligence is more fun than anything else the government will pay you to do

Looking Out 20 Years for Intel and National Security Issues
- Can see that the Air Force is in big trouble because of UAVs
  - Next big thing will be operating UAVs in hostile environments
  - Air-to-air combat by UAVs is coming
    - Will need a different skill set than current reconnaissance UAV operators
Big worry will be how to defend the US from UAVs – only 5 or 6 years away
- Really can’t look out more than about 3 years
  - 20 years out could even say things like France will become a monarchy again
  - A matter of fidelity versus distance
    - Looking out 3 years should have pretty good fidelity
    - Worry about what you do with data for 20 years out – might be able to just as a guideline
- Can say that UAVs will change warfare
- Cyber will also change warfare in a big way
  - Currently in the same situation that air warfare was in World War I
    - Aircraft and the possibility of air warfare had only existed for a few years
  - No doctrine on cyber warfare yet either
- Can assume the Army will have less heavy infantry and more light infantry
  - Warriors want changes to the rules of engagement – go where they need to go and then tell commanders they were in the area
  - Command and control will change when don’t wait commanders’ permission to operate

Secrecy
- Open-source intelligence has finally arrived as a major part of the Intel community’s work
  - In a reverse, about 80% of intelligence now from open sources where it used to be 20%
- Problem: no one owns open-source so it does not have the throw-weight (another cultural reference) of other types of intelligence
  - No dedicated “INT” for cyber – like MASINT or HUMINT
- There will always be some secrets
- Intel is in the secrecy business – not the mystery business
  - Somebody in the world knows the answer and Intel must find it
  - What is going on in Iran is a secret
  - What happened to Amelia Earhart is a mystery
- Wiki-leaks may have caused some doors to close – after the fact
  - Lots of stupid things happened in that case: Why as wrong guy given so much access? Why was all the info on that system?
- Will always need some secrecy – provide entre to policy makers
  - “We know a secret” attitude is the wrong way
  - “We know interesting stuff and it is meaningful to you” is the better way

Budget Cut Criteria
Lowenthal helped develop the process used in the National Intelligence Priorities Framework (NIPF)
- Priorities are worked out at the NSC / Cabinet level: What are their most urgent needs?
  - Identifies what support Intel needs to be provide
- Can’t just say that “We’ll make the cuts but we will give you the same fine level of service”
  - On the eve of the Iraq war, asked to identify how much intelligence support would be needed
  - Then figured out how much was left for all the other problems in the world
  - Frightening about all the things that would not be done
  - Can’t exactly go to the UN and ask the world to just stop doing things for 6 months
- Spent a lot of time explaining to the policy makers that Intel does not “cover the earth”
- When there is a crisis, Intel drops everything else and gets the job done
  - Policy makers then assume that Intel can “do it all”
- Must teach policy makers to be realistic and manage their expectations
Some countries can now do without US troops permanently stationed there
Example: Germany is now just a staging area for the MidEast
- Recent budget cuts of about 8% not all that bad but next cuts will really hurt
  - Then something will happen somewhere in the world
  - Can’t say: No, we have no time for your civil war now
- Can try to explain that there will only be a skeleton intelligence crew for some areas of the world
  - May ask analysts to spend 15% watching over a neglected area
- Involves doing triage – in some situations there will be no way to help so don’t spend time on it
  - It was a mistake not to let policy makers know that this was what Intel was doing
- Libya crisis was a good example of the problems Intel has been facing
  - Suddenly had to track where all the Surface-to-Air Missiles (SAMs) were
  - Used to have a good handle on that – forgot how to do it
  - Couldn’t just say: We don’t do that any more
  - Pushed some of the military action over to NATO countries
- Bottomline: must rebuild some intelligence capabilities – spend less time on counterterrorism
  - Counterterrorism issue has morphed – mostly in our favor
  - But something may go wrong again
  - In the meantime can’t maintain the same level of effort
- Parsing resources is like playing roulette – put most chips where you think there will be problems
  - Libya was interesting example – shows a loss of capability we once had
  - Efforts (chips) had all been moved over to counterterrorism
  - Now must start learning about Chinese carriers – not that they will know what to do with one should they acquire it
- NIPF does have problems that need to be fixed
  - Having reviews every 6 months would be better than the present 12-month reviews
  - It is understandable why they went to the 12-month cycle – no one likes doing them
  - Process involves getting the most senior people to identify their intelligence priorities
    - Was generally successful in doing so
  - Developers assumed it would go away with the new Administration
    - Against precedent, Obama Administration did not even change its name
    - It was kept on because it worked – politically agnostic
    - Had a limited set of goals
  - Policy makers did not want to spend time on it
    - Secretaries assume that their people will automatically know what they want
    - Secretaries assume that their needs are being covered
- Bottomline: Sometimes good enough is good enough especially since perfection costs too much

Cyber Warfare
No one knows what a cyber war would look like
- No concept for an air force or an air war before the Wright brothers flew in 1903
  - Developed quickly enough to have air warfare in World War I
  - Other wars early in the 20th century had some use of aircraft
  - Had no written air warfare doctrine until 1923 because needed to try things out first
- Technology must be allowed to proceed before you can get to policy development
- Cyber warfare at about the World War I level if compared to air warfare
- Know that cyber-attacks go on but not exactly sure all that is involved
- If order a cyber-attack is it: An intel covert action? Preparation of the battlefield? A sneak attack?
- Some interesting legal issues, too
- Intel will be involved and is happy to have an active role in the warfare
• Must start by agreeing that cyber is a domain – like air, sea, or land
• Everyone says that tornadoes sound like railroad trains, but what did they sound like in 1790 before trains came along?
• Bottomline: We don’t know what cyber warfare looks like
• Also don’t know what skill set will be needed
  o In WWI saw that pilots needed to be able to react faster than soldiers in trenches
  o Already seeing the need for a different set of skills for UAV pilots
• Must ask the right questions to develop a doctrine for using cyber
  o WWI first used the new tanks individually but they just became targets for the Germans
    ▪ Problem set changed when 30 or 40 were sent at the enemy at one time
• Many of the legal questions that need to be addressed have never come up in warfare before

**Intelligence Education**
The current state is depressing
• All done in stovepipes – CIA has their school, NSA has theirs, etc.
• But then the students are told to “think purple” – just not quite yet
• Different organizations don’t train to the same standards
• Training should start like freshman year in college – everyone must take the 101 courses
  o Would also have the opportunity to get to know people in the other organizations early on
  o Don’t want to wait until a crisis to find someone to talk in another organization
• Also need graduate schools – like war colleges to learn your profession at a higher academic level
• Intelligence training is somewhat anti-intellectual – odd for a basically intellectual profession
• Army does the best with its senior training school and promotion process
  o Can find the list of things an officer must do to move on to the next level
    ▪ Nothing like this for civilian analysts
  o Intel analysts are only required to write well and think interesting thoughts
  o Military does a better job in its professional education efforts
• National Intelligence University should be the leader in this effort
  o Need to develop a career progression and an educational progression
  o Would get better analysts than if depended on teaching courses in critical thinking
  o Avoid the Ben-Hur School – don’t chain the galley slave to their oars
    ▪ Let them learn other things even if they are in a specific job
    ▪ Having one type of duties doesn’t eliminate learning other totally different skills

**Best Questions Never Asked to the Analyst**
Really more like the best statements made without being asked
• In 1986 Lowenthal told his analysts how the Soviet Union would fall apart – Politburo takes a vote and decides it was over, all lead by the KGB and the military
  o Got most push back from the Soviet analysts: You don’t know the Soviet Union
  o Wrong! Analysts couldn’t step back to see what is happening
    ▪ Attitude of “I am a Soviet analyst so there must be a Soviet Union”
• In the transition between the Reagan and Bush Administrations in 1988: Lowenthal recommended not worrying about Japan
  o We already won that war and Japan is collapsing
  o At the time Japan was buying up US real estate, acclaimed as business geniuses, etc.
  o But Japan had reached the end of its consumerism while corruption in its financial and political worlds was rampant
• Lowenthal’s most recent non-linear concept: China will go under
  o Economic, demographic, and political indicators all show trouble ahead