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DEFENSE ACQUISITION PERFORMANCE ASSESSMENT PROJECT

- - -

PREPARATORY MEETING

- - -

Thursday , 6 October, 2005

8th Floor SCIF

1560 Wilson Boulevard

Rosslyn, Virginia

Certified Copy

1 P R O C E E D I N G S

2 MR. PATTERSON: The next time we move out of here
3 you'll start to see the issue papers, so that we'll have
4 something to chew on. We're going to start the issue papers on
5 Monday, probably sooner than that actually, but over the
6 weekend, and to start to put big thoughts in the issue papers.
7 I'm thinking topic sentences, that kind of thing, with some
8 notion about what sort of art work might go in there.

9 But I want you to have stuff to look at so that on
10 the 19th we start to really make headway through these topics.

11 Before the informal introductions around the table,
12 let me tell you a little bit about Dr. Tom Killion, who's going
13 to talk to us about the Army's science and technology efforts
14 within acquisition. He was designated the Deputy Assistant
15 Secretary for Research and Technology and basically in short the
16 chief scientist. We've talked a lot about the need for someone
17 who fulfills that position, so you're being here is timely and
18 is greatly appreciated.

19 Prior to becoming the chief scientist, he was the
20 Director for Technology in the Office of the Assistant Secretary
21 for the Army for Acquisition, Logistics, and Technology and the
22 Under Secretary for ASA and Research and Technology. In this
23 position, he was resolution for oversight and coordination for
24 many Army applied research programs.

25 So with that, it's just a short intro. Tom, I don't

1 want to take any more of your time. Thank you very much for
2 being here.

3 ARMY S&T BRIEFING - DR. TOM KILLION, ASA(ALT)

4 DR. KILLION: Thank you for inviting me. It's a
5 great opportunity.

6 (Slide.)

7 That's the formal bio. The informal bio is --

8 MR. PATTERSON: That's got your picture and
9 everything in here.

10 DR. KILLION: The informal bio is I've worked for
11 the Air Force for 10-1/2 years --

12 MR. PATTERSON: Good foundation.

13 DR. KILLION: -- and then the Navy coopted me and I
14 worked for Al Hutchins for two years in the joint project
15 office.

16 MR. PATTERSON: You've overcome that nicely.

17 MR. CAPPUCIO: You can't hold a job.

18 DR. KILLION: That's right. I just keep moving
19 around for some strange reason.

20 MR. PATTERSON: You have finally seen the light.

21 DR. KILLION: That's right. In the last three and a
22 half years I've had some number of jobs.

23 To be honest, I didn't know exactly what you
24 gentlemen and ladies would be interested in, so I tried to cover
25 as much as I could on what S&T is about in terms of contributing

1 to the ongoing support to the Army and the global war on terror
2 and really our major acquisition program for the future, the
3 Future Combat System, and talk a bit about the whole issue of
4 transition of technology out of the S&T base and the partners in
5 that process, the PPOs and PMs.

6 If I could get the next chart.

7 (Slide.)

8 I think a little humor always helps. This is good:

9

10 "Project postmortem will only be helpful if each of
11 you is honest."

12 "Your colossal ineptitude as a leader suppressed our
13 natural talents, leaving us listless and unfocused."

14 "And by honest, I mean blaming people who aren't
15 here."

16 We do plenty of that. That was in Dilbert.

17 MR. CAPPuccio: We just did that this morning.

18 MR. A'HEARN: That's why Dick and Frank were
19 responsible last time.

20 (Laughter.)

21 DR. KILLION: I thought we'd blame Ron this morning.

22 DR. ABBOTT: But he comes back.

23 DR. KILLION: I was very happy to see in looking at
24 the website, some of the documentation, that one of the topics
25 of discussion was the big "A", little "a" issue that my boss

1 talks about a lot, Mr. Bolton. I liken it to the old story
2 about the gentleman who comes out of the bar late at night and
3 is getting ready to go to his car, and he sees this person in
4 the street crawling around on their hands and knees.

5 He goes up to him and says: Are you okay?

6 He says: I'm just looking for my keys. He's
7 obviously kind of drunk.

8 He says: Well, I can help you find them; where did
9 you drop them?

10 He says: Well, I dropped them over there.

11 He says: Well then, why are you looking here under
12 the streetlight?

13 Because the light's better here.

14 In going, for example, to the DSB this summer in
15 their outbrief on acquisition is broken and so on, and they talk
16 about acquisition being broken, but then all the fixes seem to
17 be focused on fixing the little "a", fixing our process, as
18 opposed to looking at the whole domain of acquisition, the big
19 "A", looking from the whole requirements process, the resourcing
20 process, the acquisition process, the management of the
21 material, and everything else.

22 So I think of it in terms of the challenges we have
23 in the big "A", not just the little "a". So we can blame lots
24 of people and we get blamed plenty. S&T also takes some of the
25 blame, of course, and I'll talk about some good examples of that

1 along the way.

2 If I can get the next chart.

3 (Slide.)

4 This is how I talk about our S&T program. A few
5 years ago we really focused on this part of it, that is making
6 sure that we got to a future capability that was more mobile or
7 agile than the force that we have today. These are great
8 systems: the soldier, the M1 tank, our battle command
9 capability. They're unparalleled. They're also very large,
10 very heavy. We overburden the soldier with material and make it
11 tougher for them to operate. In fact, that loading affects them
12 not only physically but cognitively.

13 We need to move to a much lighter force that uses
14 knowledge to substitute for some of the heavy armor that we use
15 today in part and use different ways of going about ensuring
16 force survivability.

17 When General Shinseki first really laid down the
18 vision for Future Combat Systems, he basically gave us a pass
19 and said, don't worry about the current force; work on the
20 future force. When the new chief came in and realized we are at
21 war today, we are challenged in terms of resources and we need
22 to see what we can do to take that technology that is mature
23 enough and roll that back into the current force to enhance
24 current force capability.

25 So we're back to being balanced between how do we

1 enable that future force and how do we enhance the current
2 force. I sometimes get asked, what's the right balance between
3 those things? I say: BTHOM -- beats the heck out of me,
4 because I don't know what the right balance is. What we have to
5 do is see what technology is available and mature enough that we
6 can give it to the current force to enhance their capabilities.

7 Next chart.

8 (Slide.)

9 Of course, you're probably all familiar with S&T. I
10 really manage the 6.1, 6.2, and 6.3 investment portfolio for the
11 Army. It's only a small part of the overall acquisition domain,
12 to say the least. In '05, about \$1.78 billion, that's the
13 President's budget. We get some additional largesse from our
14 friends over on the Hill. We end up managing closer to \$3
15 billion in year of execution.

16 MR. KOZLOWSKI: Is that the total S&T slice or is it
17 just the Army?

18 DR. KILLION: That's the Army's piece. The total
19 S&T slice in the Department of Defense in a given year is on the
20 order of \$10 billion in the President's budget. The three
21 services have roughly equivalent amounts of S&T overall, in that
22 range at least. Air Force, Navy, Army are all about the same in
23 terms of S&T.

24 The challenge for the Army, the part that we've
25 always talked about, that becomes a double-edged sword, is that

1 when it comes to actual investment in acquisition SDD and
2 procurement, the Army is well behind the other two services. If
3 you look at the TOA for the three services, Army's about \$100
4 billion, both the Navy and Air Force are about \$125 billion.
5 That difference, at least with the Air Force, is almost totally
6 in the acquisition domain. In the Navy it's a split between
7 acquisition and other investments.

8 The challenge there, of course, is then there are
9 not as many systems in the pipeline that we can transition the
10 technology to. Some people say that argues that we should have
11 less S&T. I say it means we need to have more on the
12 acquisition end of the business. So that's part of the
13 challenge.

14 We invest about 15 percent of that in traditional
15 fundamental research, basic research, largely with universities,
16 some in-house. The balance between in-house and out of house is
17 about, now about 30 percent in-house and 70 percent out, through
18 a variety of mechanisms, and I'll talk about those later, a
19 couple of them later.

20 6.2 is about 35 percent and that's pretty much
21 evenly split between in-house research, applied research, and
22 funding to industry partners in many of those projects. Then in
23 6.3, which is about 45 percent at the moment -- and that's
24 largely because we've made major investments in recent years in
25 the demonstration to make sure of the technologies for FCS, so

1 this has grown in recent years more so than in the 6.2 domain --
2 that's about 80 to 85 percent executed externally, so with
3 industry partners.

4 The key there is what we're about is creating the
5 capability in the industrial base that then can come back to us
6 in acquisition programs. It isn't the traditional, we develop
7 and build it in-house and then try to figure out how to hand it
8 off to somebody, because, as you're probably well aware, that
9 doesn't work real well. There are some traditional areas where
10 we do the bulk of the heavy lifting in terms of the research,
11 like in traditional armor development, and then work closely
12 with the industrial partners to exploit that.

13 MR. PATTERSON: When you put a picture up you always
14 run the risk that you'll get a question you didn't anticipate.
15 Under advanced technology development, the UAV. How do you
16 reconcile or integrate what you do in advanced technology with
17 the myriad other systems up there all working on UAVs of that
18 size? And maybe that's a good thing. We've always taken a
19 shotgun kind of approach to that kind of stuff.

20 GENERAL KERN: That one was a DARPA project.

21 DR. KILLION: As a matter of fact, that one's a
22 co-investment with DARPA, a revolutionary rotary wing platform
23 that has unparalleled endurance at that altitude and higher
24 payload capacity because it uses a new approach to rotary
25 technology, control technology, so that traditional rotor craft

1 just wouldn't come close to it. You can get endurance here that
2 talks about 36 hours type of thing with the platform, which is
3 extremely unusual, at least for a rotary.

4 MR. PATTERSON: So you would say that the Navy signs
5 up the vehicle for this and the Air Force signs up to be in it,
6 and the actual development and application in terms of a product
7 will come out of the center of excellence out at Nellis?

8 MR. CAPPUCCIO: No, that's not what he said.

9 DR. KILLION: No, not in this particular case.

10 MR. CAPPUCCIO: The Army UAV program is a little bit
11 different, in the sense of -- it's called jointness.

12 DR. KILLION: And I'll be honest about this
13 particular platform, the A-160. Several years back, as part of
14 FCS we signed a major agreement with DARPA to explore a number
15 of technologies relevant to the Future Combat System. That
16 included a number of UAV platforms both at the very small end,
17 what's called the micro UAV -- it's not that micro; it's a
18 back-packable ducted fan system about 9 inches in diameter -- up
19 to what was considered a class 4-plus kind of bird, the A-160.
20 This was pushing the envelope and the state of the art at both
21 ends of the spectrum in terms of UAV capability to support the
22 myriad of needs that were defined for the FCS.

23 As the Army's UAV strategy has unfolded, it looks at
24 the MAV, the Micro Air Vehicle. FCS has signed up to say, if
25 we're successful with the ongoing demonstrations with that, that

1 will be the class 1 UAV that is bought for the FCS system.

2 Right now there's no home for the A-160.

3 MR. PATTERSON: I just use that as an example
4 because we run up against constantly this idea that we have,
5 probably three months ago it was 27 UAV programs. It's probably
6 31 now. They tend to be one a month, and there's no home for
7 them and maybe there's a need to be. I've come to think that
8 there doesn't need to be necessarily any more.

9 DR. KILLION: In the last year, to the dismay of
10 many, I participated in the cancellation of a major UAV program,
11 the UCAR, because there's no home for it. It was designed to be
12 a Comanche companion and the Comanche program went away.
13 Despite all the protestations from the aviation community, there
14 was no home for that program and there was no reason for the
15 Army and DARPA to spend half a billion dollars developing
16 something that was going nowhere.

17 MR. CAPPUCIO: The Army's UAV programs probably,
18 there may be a lot of little ones, but the Army UAV programs are
19 probably the best of the UAV programs. They've got a couple of
20 people. They've got AAI, they've got Shadow. They really are
21 focused. They get them out, they know what they want to do,
22 compared -- the Navy and the Air Force programs are consuming at
23 least, at least, maybe more than an order of magnitude of money
24 and fielding significantly less.

25 GENERAL KERN: The Army's done some really stupid

1 things, too, over the years.

2 DR. KILLION: Over the years we've done some amazing
3 things.

4 MR. CAPPuccio: But they fix stuff.

5 GENERAL KERN: In the last 10 years.

6 DR. BRANDT: Is there a mechanism by which each of
7 the services doesn't necessarily buy into the others' UAV
8 programs, for example -- it doesn't have to be UAVs; it could be
9 any -- but where at least you understand and know what is
10 happening with the others with technology transfer?

11 DR. KILLION: Yes. I'll talk a little bit about
12 that. It was kind of incidental. I could have brought lots
13 more on that. I sit on what's called the DSTAB, the Defense
14 Science and Technology Advisory Board, made up of the S&T
15 executives from each of the services, Director of DARPA,
16 Director of DTRA, and DDR&E.

17 MR. PATTERSON: Ben Reilly sits on that.

18 DR. KILLION: He sits in for the CTTGF.

19 That's a forum for overseeing the S&T programs.
20 Under the DSTAB is what was Project Reliance, and we still
21 sometimes refer to it as Project Reliance, but it's really the
22 defense S&T planning process that coordinates all the efforts
23 going on across the services in all the -- well, it's like
24 either 12 or 13 different technical domains. You've got
25 materials, sensors, electronics.

1 DR. BRANDT: What does "coordinate" mean?

2 DR. KILLION: They actually sit down together to
3 decide who's going to do which programs, and in some cases, for
4 example in rotor craft S&T, the Army has the lead and basically
5 the other services don't invest.

6 DR. BRANDT: So that is what coordinated the 27 or
7 31 UAV programs that Dave's always talking about?

8 DR. KILLION: The question is whether that group --

9 DR. BRANDT: That's what I'm trying for.

10 MR. CAPPuccio: They coordinate the technology that
11 is not duplicative or, where duplicative, there is a good reason
12 to be duplicative.

13 GENERAL KERN: I'm really biting my tongue on this
14 because I got in a shoot-out with one of our early speakers over
15 the UAV programs, Mr. Douglass. When he was the Assistant
16 Secretary of the Navy, if you remember -- maybe you don't -- in
17 the early 90s OSD said there would only be four UAVs, period,
18 and they killed all the other programs and they told the Army,
19 you could have one and would share it with the Marines.

20
21 So we worked for a couple years trying to figure out
22 how to do that, and the program office was down at NAVAIR, the
23 cruise missile office, unmanned aerial vehicle.

24 DR. KILLION: That's where I was. In fact, sir,
25 just to reemphasize your point, I became -- I was technology

1 team chief on the UAV joint project. I became the interim
2 program manager for what was then the Close-Range UAV program,
3 close-range UAVs. This was supposedly Army, Marines, and Navy.
4 Okay. What was a close-range UAV? When I finally sat down with
5 each of the users to discuss it, the Marines' close-range UAV
6 was a Pointer; take it out of a backpack and throw it in the
7 air. The Army's close-range UAV was go out to 50, 60
8 kilometers, basically the Shadow, and loiter for multiple hours
9 and provide support for battalion-scale operations. The Navy's
10 close-range UAV was fly off a ship, go out 200 kilometers,
11 loiter for three or four hours, and come back.

12 Those were all going to be one UAV. Well, first we
13 split off the Navy one and said, ain't no way that the Army and
14 Marines need what the Navy needs, and we tried to see if there
15 was a possibility of reconciling the Army and Marine Corps ones.

16 Eventually the Marine Corps went a different way.

17 The problem is what do people -- what is it that the
18 user really wants? You end up with a proliferation of systems.

19 GENERAL KERN: But part of it, to get back to the
20 S&T side, now that you've got shipboard, all the real
21 requirements start bubbling up and you find there's a whole
22 range of these things. They pull back out of the S&T whatever
23 you can get, how much you can transition quickly. It goes all
24 the way from Global Hawks down the handheld ones that are still
25 being used out there.

1 But we constrained ourselves at one point to four.

2 Now we've got 27, whatever you want to count.

3 DR. BRANDT: The wrong place of constraint is at the
4 wide end of the funnel.

5 DR. ABBOTT: Early in the 90s cost was the driver.

6 GENERAL KERN: The real issue shouldn't be UAVs.
7 The real issue should be how do you get the stuff out of S&T,
8 are you doing enough stuff, do you share all the information the
9 right way, is it going to generate the answers you're looking
10 for when you need them

11 DR. BRANDT: And that should be the wide end of the
12 tunnel, all those questions you ask, but in addition how do you
13 stop some of that wide end of the funnel.

14 GENERAL KERN: In 6.1 I don't think you want to.

15 DR. BRANDT: Not at 6.1.

16 MR. CAPPuccio: When you say there's 28, maybe there
17 would be 128. The question gets to be in acquisition, the
18 preacquisition strategy, how much commonality do you want in
19 economies of buy and scale? You can have 50 programs if all 50
20 had the same endgame sensor if that's what you want, or if they
21 all used the same ground stations with some level of
22 commonality.

23 GENERAL KERN: Or they could share information

24 MR. CAPPuccio: Or they shared information. It's
25 not -- I hate to say a plane's a bus because it's not that

1 simple. But the cheap end of the business, not cheap, which is
2 the 40 percent of the airframe, even less in some cases, that
3 you can tailor for every mission -- long-range, short-range.
4 But you don't have to have 7, 9, 20 sensors in the IR domain
5 looking and 20 different producers of IR. You might want to
6 have three producers of IR, all with reasonable volume to get
7 the cost down.

8 So the acquisition strategy is you're looking at the
9 wrong thing. It's not the number of programs; it's who is
10 mandating the certain key elements. Key elements could be the
11 engines, you're going to have three damn engines that you could
12 get away with. You could design an engine that's 50, 150 to
13 200. You can do that. That's where the economies of scale.
14 That's where the government is missing out because they're
15 reinventing sensor algorithms, target acquisition algorithms.
16 That's the issue.

17 DR. KILLION: I can't say that the whole process is
18 perfect in terms of tamping things out, but I can tell you I
19 often get the question: Gee, are we really leveraging what the
20 Navy is doing and DARPA is doing? The answer is yes. When we
21 go down to the worker level, the guys in the labs, they know
22 what each other is doing and who's doing what, why they're doing
23 it. They share the information. So they're aware of it.

24 At my level I don't get all the details on every
25 single project. So it's easy to say to me, well, the Navy is

1 doing this and you're doing that, why are they different? But
2 if I go ask the question, they can explain it.

3 MR. PATTERSON: I think too that one of the things
4 I'm always drawn back to is the fact that there's a reason. If
5 you wanted to point to a very fundamental reason why the United
6 States of America is the leader in new products and new
7 applications and new weapons systems, it's not because we have a
8 person who's in charge of a single technology. It's because we
9 are willing to invest and let everybody who thinks they can do
10 it give it a try.

11 DR. ABBOTT: I think what also happens is, with
12 Linda's funnel there's a market-clearing function that takes
13 place in our society, which takes all those and clears the
14 market. Now, I would suggest that the market-clearing function
15 in DOD might not be the best one because we salami-slice a lot
16 of stuff. But that function takes place because at some point
17 we're going to have to fund that, and when that happens things
18 start falling out on whether it's 20 of your systems or 6 of
19 them or something else. That market is a competitive market
20 between the services, with DARPA involved and others involved.

21 You ought not throw out the baby with the bath water
22 here.

23 GENERAL HAWLEY: It seems to me in this whole
24 conversation there's an underlying issue that we ought to talk
25 about. It's this theory that somehow the services can get

1 whatever they want as long as we paint it black, that they're
2 not different. There's a perception that the services ought to
3 buy the same thing, and every time we make the services do that
4 we produce an acquisition horror story, because there is a view
5 among political appointees who show up in the Pentagon that
6 somehow we all ought to fly the same airplane, we all ought to
7 fly the same UAV, we all ought to drive the same truck, and so
8 on and so forth.

9 So they mandate these common programs for uncommon
10 requirements. That's where we got to the four UAVs. They said,
11 well, all the services can use the same short-range, all the
12 services can use the same mid-range; there ought to be one long
13 one.

14 MR. CAPPuccio: Calvin Coolidge's revenge.

15 GENERAL HAWLEY: The fact is the services operate in
16 different environments, they have different missions, and
17 therefore they have different requirements. Therefore the S&T
18 job for the Army is to try to develop underlying technologies
19 that support Army requirements and, where appropriate, transfer
20 to the other services and so on for the other S&T programs.

21 Somehow, you can go back, the F-111.

22 MR. CAPPuccio: Take a look at J-UCAS.

23 GENERAL HAWLEY: J-UCAS is going that way. Joint
24 Strike Fighter is going that way. We try to impose commonality
25 in uncommon domains and environments and it doesn't work.

1 MR. CAPPuccio: Commonality at the higher level.

2 GENERAL HAWLEY: I believe that this began with the
3 Packard Commission, because the Packard Commission produced a
4 report that indicted the services' uniqueness. It said the
5 services were the problem, and we have built a culture in OSD
6 that reflects that view that the services are the problem.

7 MR. KOZLOWSKI: I think it goes back to McNamara's
8 tenure.

9 GENERAL HAWLEY: Well, it was reinforced by
10 McNamara.

11 The services are not the problem. The services are
12 in fact the institutions that look out for the warfighters, and
13 if we don't talk about that in our report I think we're failing
14 in our job.

15 MR. KOZLOWSKI: I agree with you 110 percent. It
16 bothered me for many, many years about the value and the cost of
17 prototyping, fly before buy, and what that means. It's sort of
18 borne out in this. Every time somebody tries to have technology
19 demonstrated, which we all advocate to reduce technology risk,
20 we say: You all bring your ideas, and then once something gets
21 built in whatever form, the temptation is it's got to go
22 operational and mass production.

23 That's not what the purpose of this advanced science
24 and technology funding is all about.

25 DR. KILLION: There is a certain element of it that

1 is and elements that are not.

2 GENERAL HAWLEY: So we've got to recognize the
3 paradox that we sort of feed with this monster. On the one
4 hand, we want the technology matured to some level of
5 maturation. On the other hand, we've got to avoid the pitfall
6 of everything has to have an operational home and the financial
7 trail that comes with it.

8 So the focus seems to be on what Frank was getting
9 to, that we need to find a way with the things that truly are
10 common to be common, without elevating it to the point that you
11 produce things that the service can't find a way to use them.

12 MR. PATTERSON: In our discussions we tend to be
13 very adult in taking into account all kinds of views. When we
14 go to implement things, we become extraordinarily polar and we
15 either go all the way to one side because we don't know how to
16 deal with the middle ground, and it becomes a real problem for
17 us.

18 MR. CAPPuccio: Part of it is domain knowledge.
19 Part of it is to believe you can be common. You can be common
20 at certain levels of the system, but you can't be common to the
21 most senior system levels where the warfighter has to do his
22 business. You just can't be common at that level up.

23 If the acquisition community would understand that
24 the top-level system is a small part of the costs associated
25 with acquisition, that the components are the costs, the seekers

1 are the costs, the subsystems are the cost, the radars are the
2 cost, if you can figure out what next level down, you can stay
3 common. You don't have to have a common cruise missile program
4 or a common JSF, where now we're finding out we have two sets of
5 RCS requirements and we may have wasted a billion and a half
6 dollars.

7 GENERAL KERN: There's another piece of it, I think.

8 If you look back at some of the examples, the 6.1. stuff, it
9 could go anywhere. So the atomic clock came out of an Army
10 research office and ends up in satellites 50 years later. Who's
11 going to figure that out, and why should we worry?

12 GENERAL HAWLEY: Who cares?

13 GENERAL KERN: Who cares. On the other end of it,
14 the A-160.

15 GENERAL HAWLEY: Well, if you want to develop a new
16 rotor technology, everybody who flies helicopters will benefit.

17 DR. KILLION: Actually, it was interesting, and now
18 we're doing concept definition for the joint heavy lift
19 capability, joint service --- honestly, it is joint service --
20 trying to look across the services. One of the candidates
21 that's in concept development, the guys who did the A-160,
22 bringing that same rotor technology to bear in the design of a
23 manned heavy lift system.

24 GENERAL HAWLEY: So it's not that that ATD needs to
25 find a home. It's that that ATD needs to produce a technology

1 which can eventually find a lot of homes.

2 DR. KILLION: Exactly.

3 DR. ABBOTT: The support of S&T is particularly
4 important in an era when the common belief is that somehow the
5 commercial sector will do this kind of work, and in fact they're
6 not. They have a very short-term horizon, we have a very
7 long-term horizon. They have a very generalized return on
8 investment horizon, we have a performance horizon. Totally
9 different sets of standards.

10 But the people who are making decisions and writing
11 articles on this are constantly talking about, oh well, just
12 take commercial applications and we'll be able to, and the
13 commercial guys are doing all this R and D work. The answer is
14 they're not.

15 MR. PATTERSON: The reality is that most of the
16 stuff goes the other way.

17 DR. ABBOTT: Yes, I know.

18 MR. PATTERSON: It takes us a long time to develop
19 something and suddenly it's sucked up in a heartbeat.

20 DR. ABBOTT: We all understand this, but if you go
21 over toward Jenkins Hill and get on top of the Hill, that's not
22 what they believe. So it bears saying from us.

23 DR. KILLION: We've all been through a lot of things
24 that don't work. There is one other good lesson that I always
25 remember from my days in the joint project office that's about a

1 service commitment and decision to go forward. It's the story
2 of the Pioneer versus the IEW UAV that the Army was trying to
3 build. The Army finally got smart and said, we'll just let
4 people come and bring a UAV and we'll do a test and do a flyoff
5 and proceed with one under contract.

6 The IEW guys brought their birds. One didn't fly,
7 the other flew and crashed. The Army cancelled the program.

8 The Navy decided to do Pioneer. They bought some
9 Pioneers, they put them out on a battleship. They crashed every
10 single one of them and came back and said: What a great
11 success; we're buying hundreds.

12 So you decide who was right.

13 GENERAL KERN: The other part of that, though, that
14 I'd like to just offer as a comment is the observation on the
15 S&T business. A lot of people would like to say you can
16 consolidate this stuff, too, and to me you want to throw as big
17 a net as you possibly can in the S&T business. The less
18 consolidation and the more distribution on it, the better off we
19 are as a nation.

20 We'll have duplication, hell, yes. But that's good.

21 That's competition.

22 MR. KOZLOWSKI: That's as fundamental as academic
23 freedom.

24 GENERAL KERN: But I tell you, there's a lot of
25 people who want to consolidate it.

1 GENERAL HAWLEY: S&T needs to support a long-term
2 vision, and the services have the vision that their S&T
3 organizations support. If you kluge them, there isn't any
4 vision and there's no way to focus the work.

5 DR. ABBOTT: They should be driven down by the
6 conflict in the central decision authority and the people who
7 are down in the field making these individual decisions on what
8 S&T to do and how to do it. The classic example is the
9 Sidewinder missile. You go back and think what happened to
10 Sidewinder and why it exists today. It was because the people
11 on the bottom said: Oh, I understand what you just told me,
12 boss, but we're not going to do that. And they went around the
13 system, violated a number of laws, by the way, in the process.
14 But when the Sidewinder was necessary it was ready to go.

15 MR. A'HEARN: That hasn't bothered the Navy.

16 DR. ABBOTT: No, it hasn't bothered the Navy for
17 years.

18 MR. PATTERSON: I think they go outside the 12-mile
19 limit.

20 DR. ABBOTT: The law doesn't apply once you're under
21 way.

22 DR. BRANDT: But in today's environment.

23 DR. KILLION: I'm going to rush through some of
24 these. One of the things that we've done even more recently
25 than when General Kern was there, over the last couple of years

1 -- I've redefined. We have what's called the science and
2 technology objective process. We have broken that out into what
3 we call Army technology objectives, research and development.

4 Just so we understand, there's a difference in the
5 nature of the work going on in those two aspects of the program.

6 The focus is what kind of metrics you can expect, the degree to
7 which this is defined by warfighter needs versus technology.

8 GENERAL KERN: Are you going to talk about the
9 ASPLIC and how the requirements are focused into it?

10 DR. KILLION: Sure. What a setup. Next chart.

11 (Slide.)

12 Part of it's this. Our response to Army needs, I'm
13 proud of it. This man's right. Who do I report to? The chief
14 of staff and the Secretary of the Army and that's who I'm
15 working for. Now, we're part of the joint force and I work for
16 the other services to the best of my ability, but I'm supposed
17 to deliver technology for the Army and so I respond to the Army
18 warfighter needs that come from a variety of levels, from the
19 top level, division of the Army, down to specific requirements,
20 for example, here in terms of the TRADOC publication that
21 delineates the requirements for Future Combat System.

22 Next chart.

23 (Slide.)

24 Capability gaps. Our friends in TRADOC have
25 actually culled through various requirements. The latest buzz

1 phrase is capability gaps. I say it heartily there because it
2 was future operational capabilities or future operating
3 capabilities before that, and now it's "capability gaps" and it
4 may be something else in the future. Right now the JCIDS
5 specific and capability gaps is the terms of the day.

6 DR. ABBOTT: Windows of vulnerability.

7 DR. KILLION: There you go.

8 But the key is helping us define what the needs are
9 for both today and tomorrow. That's what TRADOC tries to
10 provide in this process.

11 Next chart.

12 (Slide.)

13 We build our ATOs, currently about 200 of them. I'm
14 working to cut that down. I think that's too many. The
15 Secretary of the Army thinks it's too many. In a meeting a
16 couple weeks ago with Secretary Harvey and General Griffin, ATOs
17 came up and Dr. Harvey said: What's an ATO? I said: Well,
18 Army technology objective; there's about 200 of them.

19 He looked at me and he looked at Ken Griffin and he
20 said: You've got to be kidding; 200? So anyway, it's probably
21 going to be less than that in the future.

22 But the key is to actually have milestones, metrics,
23 and transition goals, sign-on, particularly in the 6.3, from the
24 PM or PEO who's going to receive the technology to say, if
25 you're successful with it I'm going to use it to the degree that

1 it's possible.

2 Now, there are still elements of the program where
3 I'm going to push the technology, because, as I think we're all
4 aware, there are many technologies that would never have come to
5 fruition in the Department if somebody had not pushed the
6 technology and said, this is a capability we ought to use, and
7 once it was demonstrated people started to think, yes, I could
8 do that to do X, Y, and Z.

9 I mean, how did the Army get rotor craft? It wasn't
10 because somebody wrote a requirement in advance to say, I want
11 rotor craft. It was because they developed the capability, they
12 demonstrated in Korea and Vietnam what could be done with it,
13 and they're in the fleet today.

14 MR. KOZLOWSKI: I don't mean to complicate your life
15 with your management, and I understand their desire at that
16 level to reduce the 200 or whatever to some more finite number.
17 However, if you're talking to the people down in the trenches
18 who are going to respond to these things, they need -- the more
19 specifics you can give them the better to trigger their creative
20 juices.

21 So maybe you bucket these things or somehow set
22 aside those top-level managers, but don't get away from
23 specificity. I used to live on these damn things.

24 DR. KILLION: I concur and we're working that issue
25 of exactly how, how we reorganize.

1 GENERAL KERN: Did you push Harvey on why 200 was
2 too many?

3 DR. KILLION: His experience in industry was, in
4 industry you never have -- the problem is we talk of them as the
5 S&T programs in the Army, because there's lots of things that
6 aren't ATOs too. But those are the top programs. How do you
7 have 200 top programs?

8 GENERAL KERN: Well, what industry deals with boots,
9 food, rotor craft?

10 DR. KILLION: Which is the reason why when he said
11 --

12 GENERAL KERN: Chemical suits.

13 DR. KILLION: Which is why he said, well, maybe 25
14 is a good number, and I say I think 100 is probably a reasonable
15 number, because I've got such a scope of technology to deal
16 with. We have two different types.

17 Next slide.

18 (Slide.)

19 We have a process that we use, that we provide
20 guidance early in the year, relatively early. It goes out to
21 the field. People then respond to that guidance by developing
22 proposed ATOs. Now, one of the keys here is these are funded
23 programs. They're not unfunded requirements. They are you have
24 money in your budget, in your PE in the future. This helps to
25 then define what you're going to do with that money to support

1 the needs of the Army.

2 MR. KOZLOWSKI: Is your process defined somewhere in
3 Army regs or whatever, or is this somewhat informal?

4 DR. KILLION: Is there is an Army reg on ATOs? It's
5 written down, but it's not a reg.

6 MR. KOZLOWSKI: Army writes everything down.

7 DR. KILLION: We have formalized documents on the
8 process. We have formalized documentation on the nature of the
9 charts, what font size you can use, whatever you'd like, sir.

10 MR. PATTERSON: I happen to know that this is
11 exactly true. A very good example: The other day I was invited
12 to go to the Army mess. I sat down, I said: I'd like two eggs
13 sunny side up. They informed me that, because of the
14 temperature that was required for the yoke of the egg, they
15 could not do sunny side up; would I go for over easy quickly? I
16 said okay. That's a true story. You've got to be joking.

17 DR. KILLION: The Army is very specific.

18 MR. PATTERSON: It's in the manual.

19 GENERAL KERN: They knew you came from the Air
20 Force, too.

21 MR. PATTERSON: They knew immediately because I
22 asked the question.

23 DR. KILLION: The key here is that in recent years
24 we have changed. We used to funnel all these back to what we
25 call our warfighter tech council, and 6.2 and 6.3 kind of got

1 dumped in together in a common review process. We have broken
2 those out with more of a tactical review on the 6.2 level,
3 heavily involving the tech directors and some TRADOC
4 participation, but much more so on the warfighter side in the
5 warfighter council.

6 They then make a recommendation on a slate of new
7 ATOs to the Army science and technology working group which I
8 chair, co-chair, with the FD from GA, Steve Speeds at the
9 moment. Then we take that new slate to the Army S&T advisory
10 group, which is of course a body co-chaired by Mr. Bolton and
11 the vice chief of staff.

12 So there's a very systematic process by which we vet
13 each year proposals for new technology objectives and get
14 approval for that new slate.

15 Next chart.

16 (Slide.)

17 These are the kind of people who sit on those
18 various bodies, at least at the ASTWG level and the advisory
19 group level. Then we have parallel processes at the Defense
20 level in terms of the DSTAG and the whole Defense technology
21 area plans that are now -- when George Singley went from being
22 the DAS R&T in the Army to DDRNE he dragged along the Army's
23 planning process. So that's when they came up with defense
24 technology objectives and this whole DTAP process that's now
25 been institutionalized.

1 Actually, they're kind of enthused about the idea of
2 trying to figure out how to damp down the number of things
3 they're dealing with because they have 400 DTAPs.

4 MR. KOZLOWSKI: If I were king I'd say why not a
5 thousand, but that's a different story. This is a loaded
6 question, so you don't have to even answer it. As you look at
7 this, is this process with all these people that are involved,
8 is it amenable to a great degree of simplification, or do you
9 think this is hell?

10 Now, I understand the need for everybody getting on
11 board to buy in and feel good and all that sort of thing. But
12 just to get those technology objectives defined, is this
13 required or is this too cumbersome?

14 DR. KILLION: I would tell you -- well, a couple of
15 answers to that. One is one thing I instituted in changing the
16 process that I think is good is the potential for paper-based
17 review rather than dragging people through endless briefings, to
18 bodies of people, the review and approve their objectives, is we
19 allowed for people now to -- these bodies to review stuff purely
20 paper-based in advance of any coordinating, to say, looks good,
21 this is one that makes it.

22 In fact, 30 percent of the new 6.2 ATO-Rs and about
23 20 percent of the new ATO-Ds were approved paper-based, never
24 had to be briefed to these bodies. As a result of that process,
25 instead of -- last year there were two two and a half day

1 sessions to review and approve the new slate. This year there
2 were two one and a half day sessions. Okay, that's a day of
3 each people, of many people's lives, that we gave back to them,
4 and I want to do more of that in the future.

5 I think it's healthy in that if you actually sit
6 through one of these WTCs you get a lot of useful perspectives
7 on how relevant and how -- what the technical quality is of
8 what's being proposed.

9 GENERAL KERN: I'd add, I think -- I think it's
10 different for each service. The Army tends to be the least
11 technical service and the people -- a lot of the people that are
12 listed there, if you didn't do this, would never hear it. But
13 they're the people that sit around the table and make budget
14 decisions and program decisions and so forth. They don't have a
15 mechanism that at least informs them of what the realm of the
16 possible is.

17 I've sat in on Air Force and Navy reviews, too, and
18 they do it differently, in the audience. I don't think we
19 should try to tailor one way. As you said, time changes, too.
20 When Shinseki was the chief, he dragged everybody in and we
21 listened to --

22 DR. KILLION: Four-star RMCs.

23 GENERAL KERN: -- the predecessor of Tom Killion for
24 days on end, and every single technology piece that was going
25 into the FCS program and the Objective Force program. And

1 people thought it was very painful, but up to that point we had
2 gone through three chiefs who had never heard the science and
3 technology. Feast or famine. So you went to that from you have
4 a vacuum. I heard some insane questions and some insane
5 comments made, too.

6 DR. KILLION: I think the policy, what's important
7 is part of it is reviewing at these very high levels what's
8 being proposed to be done with the investment we're making. The
9 investment's pretty precious, so it's useful to get that. Part
10 of it's an education process, where there are people in those
11 staffs to understand what S&T is and their commitment that they
12 support what's going on, so it's a little harder to take the
13 knife to it when it comes budget-cutting time because they're
14 on board too.

15 And yes, it's a painful process for some of the
16 people in the field. That part of it is the discipline.

17 MR. KOZLOWSKI: Well, one of the issues, it's just
18 fundamental to this whole damn system. What we've got is too
19 complex for the human beings to exist in. But what you just
20 said and what you just emphasized is, part of this is
21 determining what those technology objectives are, sort of a very
22 up-front requirements kind of process, as opposed to educating,
23 motivating, and getting the staff on board, a totally different
24 problem, and I agree with that part of it 110 percent.

25 I was just interested in how simplified can you get

1 to saying, what the hell does the Army want? And you've got a
2 lot more than that involved in this. We can move on.

3 GENERAL KERN: This process has changed three or
4 four times. It's been less inclusive and more inclusive at
5 varying times, but it's very much tailored to the times and the
6 audience.

7 DR. KILLION: It is imperfect, but it actually works
8 pretty well and we got a lot of buy-in from the user community.

9 GENERAL KERN: We are trying to simplify the
10 process, too.

11 DR. KILLION: Yes, and that's what I've done, a lot
12 of it. We're continuing to do that, because in the era of Lead
13 6 Sigma, with the workload, the overhead of doing this, we need
14 to simplify it, which we're doing.

15 MR. KOZLOWSKI: Sure.

16 DR. KILLION: Next chart.

17 (Slide.)

18 I'd show you fancy videos, but I think I've already
19 run out of time. The key here being a few years back when I
20 worked for Mike Andrews and was sitting in the office as the ARL
21 liaison I helped create a chart that showed cartoons of
22 technologies that could be useful for Future Combat System.
23 Today I can stand here and show you every one of those is a real
24 technology that's being demonstrated or been demonstrated at a
25 level of maturity that gives us confidence that it will work,

1 and there are some pretty impressive ones in there, things like
2 active protection, which there were many debates in the past as
3 to what we would do to achieve that.

4 I think we have made some impressive strides in the
5 technology. There's a lot of debate about how far I need to
6 take technology. In fact, I get into a debate constantly with
7 GAO because they say TRL-7 and I say TRL-6 because that's what
8 my DOD guy says, that TRL-6 is sufficient. My argument there is
9 in terms of going to 7, going to 7 is a lot about the swap,
10 size, weight, and power, and packaging. The problem with that,
11 of course, is for something like FCS they're still doing trades.

12 I don't know what the size, weight, and power requirements are
13 exactly, so I don't know what all the constraints are.

14 I do the best I can in terms of packaging, but
15 taking it the final step, they'd probably have to pay money to
16 take it another final step. So is that a useful investment for
17 me? And I don't have the money to take it that next step.

18 MR. CAPPuccio: What is the definition of 6 again?
19 Is it prototype, flying?

20 DR. KILLION: It's demonstration in an operational
21 development environment in an operationally relevant manner. 7
22 is more robust demonstrations and more packaged towards the
23 final end item that you would actually go with in the system.

24 MR. CAPPuccio: If you were making changes in the
25 acquisition process, do you think mandating that SDD programs

1 have to start at a technology 6 makes sense?

2 DR. KILLION: Mandating that they start?

3 MR. CAPPuccio: Yes, mandating, absolutely
4 mandating, you will not go forward.

5 DR. KILLION: Without a TOL-6?

6 MR. CAPPuccio: Without a TOL-6, without these.

7 GENERAL HAWLEY: On milestone B.

8 MR. CAPPuccio: On milestone B. Does that make it
9 technologically nonsense?

10 DR. KILLION: My experience in FCS says I would not
11 want to have that constraint, because many of the technologies
12 that we're dealing with were not TOL-6 when we made the
13 milestone B decision. But we had risk reduction plans and
14 technology plans and technology transition agreements between
15 the S&T community and the program manager as to how we would get
16 there during this phase of the program.

17 MR. CAPPuccio: Isn't there a mandate now, you
18 cannot enter SDD without technology 6?

19 DR. KILLION: It's not a mandate, but it's certainly
20 a guideline.

21 MR. KOZLOWSKI: It's sort of understood.

22 DR. KILLION: And there are good reasons for saying
23 you want to be there. You want to be there just as a general
24 rule just because of the amount of experience we have with
25 programs that started with technology that was too immature and

1 spent lots of money maturing the technology instead of actually
2 building it.

3 MR. CAPPuccio: But 6 is tough. Being in an
4 operational environment means you really have to know the
5 requirement is dead on, or at least stretch the truth about the
6 results that you've done in fitting technology to 6, and we're
7 putting our technologists in a position where they are
8 rationalizing why that technology is 6 for that application.

9 DR. KILLION: In fact I get to that point.

10 MR. CAPPuccio: And that's important.

11 GENERAL KERN: I think it depends what level you're
12 defining from. FCS is redesigning the Army, so if everything
13 had to be at the same point you'd be holding up an awful lot of
14 stuff.

15 DR. KILLION: For an very long time.

16 GENERAL KERN: With a huge overhead, for not much
17 gain.

18 MR. CAPPuccio: Well, that's why when people say
19 they're going to move forward in order to start a program at a
20 higher level, let's start it with a higher technology level.
21 But to do that, you have to up-front invest in technology three
22 to four years to get there. Nobody knows three to four years
23 and we're in a do-loop all the time. So we've got to be
24 careful.

25 MR. KOZLOWSKI: There are some Catch-22 loops in

1 this business that are very difficult to get around.

2 MR. PATTERSON: You don't even become a program
3 until milestone B. So what we've been talking about is putting
4 far more emphasis on milestone zero to A and A to B, in that
5 area, so where you do have this concept refinement, technology
6 development, it seems to me that, yes, you could be holding up a
7 bunch of stuff if everything has to be at level 6. But at the
8 same time, what we're finding is we have programs that are
9 zipping right along, only to find that they can't be fielded
10 because that one invention has never been quite gotten.

11 DR. KILLION: And that's what I was saying in terms
12 of the technology maturity.

13 GENERAL HAWLEY: The problem with mandates is it
14 takes the judgment out of the process, and you have to apply
15 judgment. There are probably some technologies that ought to be
16 a 6 or a 7 before you start because they're core to getting
17 anything fielded. There are other technologies which are
18 subsystem level stuff, that, hey, I can field the system without
19 this and when the maturity comes I can add that capability.

20 I sent you the paper on the F-15 program. The fact
21 is when the first F-15As showed up they had this big empty place
22 behind the pilot. It had been intended that that be filled with
23 electronics, which were going to be jammers and all kinds of
24 electronic countermeasures stuff. It wasn't mature. So we
25 said, fine, send it out there with a hole in it; we'll add that

1 stuff later, which we did. It wasn't critical to getting the
2 basic system out into the field.

3 See, mandating stuff has dangerous implications. It
4 creates behaviors. We've talked a lot about behaviors that are
5 unhealthy and dangerous.

6 MR. PATTERSON: But I think there is some value in
7 saying that, do not allow supporting technologies because
8 they're not mature to stop the program. Pull them out, put them
9 in an R and D line, and let the program go forward, just like
10 you did in the F-15. Otherwise you get an F-22.

11 MR. KOZLOWSKI: All very true. This has been going
12 on for as long as I've been around. We just call them in
13 different things. Just as he cited on the F-15, the back seat
14 was a hole for electronics. We make those decisions all the
15 time. If a program is direly needed and the services want it,
16 they ought to be allowed to take on risks, knowingly and with
17 the concurrence of the civilian authority. You launch.

18 For those who are risk averse, okay, you can wait
19 until every Goddamn horse gets ready before the race begins, and
20 that's kind of stupid. But we've been doing this very same
21 thing for many, many years.

22 GENERAL HAWLEY: I think this is what spiral
23 development is supposed to allow.

24 MR. KOZLOWSKI: In the 60s we called it mod money.
25 I used to exist on it.

1 MR. A'HEARN: Before we had spiral, we had
2 evolution, we had P3I. We're constantly rediscovering it.

3 MR. PATTERSON: We're saying the pendulum has swung
4 too far, to don't build the system until everything is accurate.

5
6 GENERAL HAWLEY: You read the GAO stuff, it would
7 drive you to that conclusion.

8 DR. KILLION: And that's why I have debates with
9 them regularly over why 7 versus 6, because they really want you
10 to take it much farther in S&T, farther than -- and I don't have
11 that kind of money. Second is again this issue of, I don't know
12 the final details of exactly what the requirement's going to be.

13

14 GENERAL HAWLEY: You've got to build a prototype to
15 get to 7.

16 MR. KOZLOWSKI: The last I heard, though, GAO is a
17 critic of the system. They're not necessarily resolution to run
18 the system. Let's forget them for a while.

19 MR. PATTERSON: I think too that the precision with
20 which everybody believes that you go from 6 to 7 is a gag.

21 DR. KILLION: Oh, please. I'll say something about
22 that later.

23 Next chart.

24 (Slide.)

25 I'll blow through these. The only reason for

1 putting this up is to say, if you're about acquisition obviously
2 you know that we're fielding stuff rapidly right now and a lot
3 of it's coming out of S&T. A lot of it's based upon that
4 (indicating). That's something we can't forget in this process.

5 We have scientists and engineers who understand the technology,
6 they understand the Army and they can figure out solutions. And
7 that's why we can get stuff to the field rapidly. Whether that
8 starts in the lab or in industry, I don't care.

9 GENERAL KERN: Are you going to talk about your work
10 force at all?

11 DR. ABBOTT: So the success is based on scientists
12 and engineers, who are a diminishing breed.

13 DR. KILLION: I was not, but I'd be happy to discuss
14 that.

15 MR. KOZLOWSKI: Are you losing in-house capability
16 beyond critical mass?

17 DR. KILLION: Actually, what's interesting is in
18 recent times we've actually refreshed the work force
19 significantly. I think as Paul can tell you, what's interesting
20 is we have a bimodal distribution. We have the period in time
21 in the 90s where there were no new hires and there's a hole in
22 the work force there. We've got the guys who have been in the
23 lab for many years and we've got the new guys who are in their
24 20s.

25 GENERAL HAWLEY: That demo has had a pretty positive

1 effect on our ability to get people.

2 DR. KILLION: There are a lot -- going out to the
3 labs now, I'm really encouraged to see a lot of younger
4 scientists and engineers.

5 Now, that is not to say that the U.S. does not have
6 a significant problem because, guess what, when I go to
7 someplace like MIT, to the Institute for Soldiering
8 Nanotechnology, which we sponsored and is doing great work for
9 the Army, we have one group doing really phenomenal work in
10 fiber that can serve as sensors or maybe as signature management
11 kind of capabilities is headed by an Israeli and two foreign
12 graduate students.

13 MR. PATTERSON: I wonder how critical that
14 technology may be for Israel. We may have a new criteria for
15 the smallest amount of time versus a nanosecond.

16 DR. KILLION: It really is amazing, the challenge we
17 have. I know Ron Sega before he moved over to the Air Force,
18 the story he always gave was last year going to Stanford to a
19 graduation ceremony for guys in software engineering. The top
20 three guys were from Iran and they were all going back.

21 So it's a challenging environment really, both in
22 terms of what kind of work we can sponsor and where and then how
23 we're going to get a work force that has the necessary
24 clearances to do our work.

25 MR. PATTERSON: And the top three were all paid for

1 by Iran?

2 DR. KILLION: Probably so.

3 Next chart.

4 (Slide.)

5 I'm guilty of trying to show that we are relevant,
6 and I think it's a good thing. You've got stuff out there to
7 the field very rapidly that is making a difference in the field.

8 Next chart.

9 (Slide.)

10 Force protection is a big area, obviously.

11 Next chart.

12 (Slide.)

13 Lethality.

14 Next chart.

15 (Slide.)

16 Can't forget training and logistics because it makes
17 a significant difference in theater.

18 Next chart.

19 (Slide.)

20 And medical support. Having gone up to Walter Reed
21 and talked to the guys up there and to the medical folks, it's
22 just amazing how we're helping people to survive who never would
23 have survived in the past and getting the care they need.

24 We still have challenges in terms of helping them
25 lifetime-wise in terms of what they can do, but it is amazing.

1 One of the people I met up at Walter Reed is a young woman, a
2 helicopter pilot from the National Guard who had lost both legs.

3 She was sitting there in a wheelchair in operational therapy
4 and I went up and introduced myself and said, I'm the chief
5 scientist. She said: Oh, good; I didn't know who to thank.

6 I'm going: You've got to be kidding me. You're
7 thanking me? She said: No, you don't understand. She said:
8 The technology that you guys gave me, body armor. She said: An
9 RPG came into the cockpit and blew up right in front of me. And
10 she said: The body armor protected my heart and lungs so that
11 I'm alive today because of that. The NONEX flight suit,
12 courtesy of the Air Force, protected me from burns. The only
13 burns she got were where the fragments actually penetrated the
14 flight suit.

15 She was particularly happy about the quality of the
16 technology in the helmet, both the visor to protect her eyesight
17 and her face and the hearing protection, which made her hearing
18 survive despite having a blast go off right in front of her.

19 So she was alive today because of the technology and
20 the training that she got to use it properly, as she says. But
21 it makes you feel like you need to go out and do more to figure
22 out how to provide even greater protection on these things. But
23 it is amazing what they can do.

24 Next chart.

25 (Slide.)

1 Quite a few of these are going through the rapid
2 equipping force. I'll play one video just for fun. Let's play
3 backstop. This is Q.

4 (Video.)

5 As Paul was saying, we do technology everywhere,
6 from guns and bullets to boots and clothing to food and
7 everything else. This is from the Corps of Engineers, providing
8 overhead protection against GRAM-type threats, where basically
9 this upper structure pre-detonates the inbound artillery and
10 then the lower level catches all the fragments, so that you
11 don't get anything coming down and penetrating the compartment
12 where the soldiers are. There's also side protection.

13 It's not new technology so much as how do you adapt
14 the technology you have and some of the materials. Now,
15 interestingly, when they first started out they thought, well,
16 we can use sort of a wire mesh for the pre-detonation. They
17 found out they couldn't because it wasn't positive enough that
18 it would set off the fuse. So they had to go to a solid
19 structure.

20 In any case, it does work. The REF is buying this
21 for a lot of the structures at various bases in Iraq.

22 Next chart.

23 (Slide.)

24 Katrina. We're obviously involved there.

25 Next chart.

1 (Slide.)

2 Both in terms of com support because of the
3 destruction of infrastructure down there, as well as things like
4 providing water support. The Army is in fact in the position of
5 being able to supply large numbers of people in areas where
6 there is not much access to clean water, and we do it.

7 Next chart.

8 (Slide.)

9 MRMC, new helicopter hoist. An air beam shelter
10 from our friends at Navy. They finally got a real use for that
11 air beam structure. They're using that for a repair facility
12 for Apaches and so on, a support facility. Then ERDEC, of
13 course; the Corps has a lot of people in theater.

14 Next chart.

15 (Slide.)

16 A couple of, okay, so a lot of stuff that's going
17 today, and for FCS that's primarily 6.2 and 6.3. What about the
18 basic research? ISN I mentioned earlier. This is a partnership
19 with MIT and with industry, a couple small partners, Dupont and
20 Raytheon, and others, really exploring how we take nanoscience
21 and nanotechnology and design the next generation of systems to
22 enhance our soldier survivability.

23 Next chart.

24 (Slide.)

25 GENERAL KERN: Can I tell them a quick little story?

1 This is a freaky thing. The guy who runs that center is a
2 professor at MIT, Ed Thomas. The first year he got it started,
3 he decided to have a design contest for all MIT students from
4 freshman to postdocs, and he put up MIT money as a prize. They
5 got about 50 projects that came out of it.

6 They asked the Army's Infantry Center, what are your
7 non-lethal problems that you want to solve, and that's what
8 generated the projects. It's in its third year right now. Last
9 year one of the prizes that came out, they said: Okay, we've
10 got a battery problem out in the field. Everybody comes back
11 from a mission, they throw all the batteries in a box and pick
12 fresh ones. Nobody has any idea whether they've got half-life
13 left in them or whether they've got nothing left in them.

14 So they asked the students to design something you
15 could wear on your waist and take all the batteries that are
16 thrown away and use them to recharge the rechargeable batteries.

17 They did, and as a company. That cost the Army nothing.

18 DR. KILLION: In fact, in the last year they
19 included the West Point Military Academy in the competition.

20 GENERAL KERN: They won that.

21 DR. KILLION: There was a student group from there
22 that won one of the prizes.

23 So really, leveraging bright ideas from young folks.

24 DR. ABBOTT: Experience and intelligence are not
25 necessarily connected.

1 GENERAL KERN: But it's the idea. This is an
2 investment in basic research, but the return on it is far more
3 than you got out of just the money that you put into the
4 research.

5 (Slide.)

6 DR. KILLION: The next chart is on the flexible
7 display center at Arizona State, where we're working with them
8 and with industry. I know one of the industrial partners is
9 Kodak, but there are others, looking at building displays in
10 flexible substrates that we can roll up or fold up or whatever
11 and put them in your pockets. It's probably something where the
12 commercial market will overtake us in a few years, but we really
13 have to get it kickstarted, like we've done in areas like night
14 vision, stuff like that. Once we create the capability,
15 somebody else will start buying it and we can take advantage of
16 the volume and cost advantages associated with it.

17 But to get it started, we're making the investment.

18 Next chart.

19 (Slide.)

20 So an S&T perspective. Now I got into the
21 transition, and I'm already out of time, so I'll go to where you
22 can ask questions.

23 I mentioned that in the beginning the limited
24 procurement funding is an issue for the Army in particular
25 because of the size of the RDA.

1 VOICE: Could you comment on the transition we did
2 from DARPA to FCS? Do you think that was good, bad?

3 DR. KILLION: There's good elements that are coming
4 out of it, like the MAV, where General Cartwright has committed
5 to, if the MAV is successful in its initial demonstrations, that
6 will be his platform for the class 1 UAV and he will take that.

7 It's a good partnership in terms of leveraging
8 bright ideas from DARPA. Unfortunately, it's unclear how many
9 of those technologies will actually have a home in the FCS
10 program at the far end, because in the beginning when we started
11 we were kind of covering the waterfront of technologies that
12 might be relevant and now we're coming down to specific designs
13 and specific requirements. So we're starting to filter out
14 which things are going to be used and which are not.

15 MR. CAPPuccio: You can expect about 25 percent of
16 DARPA's stuff, but that shouldn't stop anybody.

17 DR. KILLION: No.

18 GENERAL KERN: It's a transition issue really,
19 because we kind of looked at a 5-year plan.

20 MR. CAPPuccio: Transitioning out of DARPA is very,
21 very hard.

22 DR. KILLION: Well, in my experience I have positive
23 experiences with DARPA and not so positive experiences. My
24 argument about DARPA is that where DARPA is at its best is
25 creating new fundamental technologies in the private sector that

1 I can take advantage of. They helped build the graphics engine
2 that's in Silicon Graphics. That's an entire industry today.

3 MR. KOZLOWSKI: They started the Internet, too.

4 DR. KILLION: Yes, they started the Internet.

5 They've done many things that have contributed to where we are
6 today. They helped to create really the industry in uncooled IR
7 that the Army has taken great advantage of. We've worked with
8 them on the production capacity to do that.

9 So in those areas they've been great. There are
10 other examples, for example CPOF, Command Post of the Future. A
11 fabulous little soldier-machine interface, a commander's tool
12 for collaboration among staff and commanders. Basically, they
13 sold that to somebody in the field and said: This is great.
14 And I got told: You need to spend money to help go fix this in
15 theater, without any planning, without any coordination with the
16 PEO or anything else. It's just: We want this, so you need to
17 go do this and, oh, by the way, it's a nice design in terms of
18 the tool itself, but it didn't have any of the plugs to tie into
19 any of the existing information systems that we have. So we had
20 to go design those.

21 So yes, it's a great tool, but I had to do a lot of
22 sudden adjustments in budget to help make sure that that would
23 get transitioned effectively. But Pete Corelli, who
24 I went and saw at Fort Hood this summer, loved it. He thinks
25 it's a fabulous tool.

1 GENERAL KERN: It could be the right answer, because
2 the Army may never have done that.

3 DR. KILLION: Right. And getting forced to do it
4 was probably the right answer in this case. But the problem is,
5 without advance planning it's a bit of a disruption.

6 I was at a DSTAG meeting one morning and Application
7 Schaefer was talking about, you know, investment in disruptive
8 technologies, and I said: I know DARPA invests in disruptive
9 technologies because when they come up with a project and hand
10 it off to me it disrupts my budget.

11 DR. ABBOTT: It's always a disruptive technology.

12 GENERAL HAWLEY: Some would argue that's not your
13 job.

14 DR. KILLION: Understand, understand. But in some
15 cases I help to foster that transition by making sure that what
16 I'm building is relevant to a product.

17 GENERAL HAWLEY: To me that's the point for
18 transition. If you're doing relevant work, it'll transition.

19 DR. KILLION: Right, and that's the key. Part of it
20 is that, making sure that we have partnerships with the PMs so
21 that they agree with us as to what criteria to use.

22 GENERAL HAWLEY: Another part of this issue is we
23 don't know what transition is and we don't have any way to track
24 what transitions and what transitions in your business. Lots of
25 stuff that labs fund gets done in industry and it transitions

1 someplace, but we don't really have a mechanism for
2 understanding how much of it, where it transitions to, because
3 we don't get feedback.

4 DR. KILLION: There is certainly some of that.
5 Interestingly, back in the 60s there was a project called
6 Project Hindsight done by the DSB that looked at like 18 weapons
7 systems of the day. It went back to look at where did the
8 technology come from that went into these systems. It did a
9 really nice analysis. Actually, I have had a couple of guys
10 over at NDU doing my own Project Hindsight II, looking at a
11 couple of our weapons platforms of today to say: Okay, what
12 lessons can we learn from the technology that's gone into those?

13 MR. CAPPUCIO: The question is really budget.
14 Nobody owns a slug of money to transition a good idea into what
15 an operator really, really needs. There's no slug of money.

16 GENERAL HAWLEY: We've built such a risk-averse
17 system. You develop a cosmic technology, but if there isn't a
18 place, as you say, there isn't any program.

19 DR. KILLION: Yes, it doesn't go anywhere.

20 GENERAL HAWLEY: And if there is a program that's
21 fairly far along, nobody wants your technology because it's
22 going to disrupt the program and cost money and put schedule at
23 risk.

24 DR. KILLION: Well, there's also a point associated
25 with you saying somebody having a slug of money. Part of that

1 is essentially having a slush fund that allows you to redirect
2 in real time. And of course, who hates that? Our friends on
3 the Hill. They do not want to give you a pot of money that you
4 say, okay, in the year of execution you can decide what to do
5 with this. They want to know in advance, for good reasons, what
6 you're going to do with the money.

7 So it's hard to set aside that pot of money that
8 allows you the flexibility in execution.

9 GENERAL HAWLEY: I'm attracted to the notion that
10 it's not your job to transition.

11 MR. KOZLOWSKI: It really isn't. If you're putting
12 to the engineering community the state of the art, they'll go to
13 literature, they'll go to conferences, they'll go to the
14 telephone. They'll use anything they can to figure out who's
15 done what for whom and then make a judgment, can I do it the
16 next step or not.

17 GENERAL HAWLEY: Transition is just a metric and it
18 represents a lot of things. It's how relevant is the S&T that's
19 being developed. It's how many opportunities are there for new
20 systems that can absorb it. It can measure a lot of things.

21 DR. KILLION: You just previewed the rest of my
22 slides, because if we go to the next one --

23 (Slide.)

24 -- this is some examples from S&T program history.
25 Some are good examples, things that are in production today --

1 guided MLRS. This is an instrumented litter that the medics
2 have. PGMM, SDD, all those kinds of things.

3 But then there are some other news. EFOG-M, never
4 went anywhere. RPA was going to go into Comanche, but that was
5 terminated. The good news is elements of that are going to go
6 into FCS.

7 FSCS was a program that General Kern was quite
8 familiar with with the U.K. We terminated that, but we're going
9 to FCS and it will have many of those same technologies. So
10 again, the component technologies that went into the program may
11 well have a home even though that specific platform isn't what
12 transitioned.

13 Next chart.

14 (Slide.)

15 Shortstop, this was a Congressional-funded program.
16 They had the foresight to do this, where we build the system to
17 jam artillery fuses to predetonate before they reached the
18 ground. When the IED problem came along, smart guys up at
19 CERTEC said, hey, we can take this system and convert it to a
20 jammer against the control devices for IEDs, and that's what we
21 did. That was the start of the Warlock family of systems, which
22 includes other systems as well today and is in production.

23 MR. CAPPuccio: The ACA has been terminated?

24 DR. KILLION: The ACTD is terminated.

25 MR. CAPPuccio: But the MDA is continuing --

1 DR. KILLION: The MDA is continuing the technology
2 at the moment, although there is language in the SAC that says,
3 Army, you take the program. Honestly, I'm scared as hell about
4 that because I was putting in \$3 million and MDA was putting in
5 \$150 million. And if they say now, you Army take this, and we
6 don't get the money, I'm going to have a bit of a problem, to
7 say the least.

8 MR. CAPPUCIO: Technology is still an issue there?

9 DR. KILLION: When you kind of got around to
10 looking, the structure that you would have to have to operate at
11 those altitudes.

12 Next chart.

13 (Slide.)

14 Well, how do we get products to the warfighter
15 faster? Things like REF. But again, we have to understand the
16 limitations thereof. We don't produce a lot of the standard
17 documentation, we don't do the full scope of testing we would
18 normally do. We put this stuff in the hands of the soldiers and
19 try to make sure it's safe enough for them to use without
20 working out all the training and everything else that would
21 normally go along with these items.

22 But if it helps the fight, that's okay. But it's
23 not our traditional acquisition process. But we're also
24 fielding stuff through the PMs and PEOs that we're using the
25 same kind of process for right now.

1 GENERAL KERN: How do you think -- let's assume
2 we're out of Iraq some day, however long, and you're going to
3 take a look at all that stuff and say, okay, which do you keep
4 and which do we go into full production on. Is there a
5 mechanism for that?

6 DR. KILLION: There are mechanisms in terms of we're
7 trying to institutionalize the REF to a greater degree. I think
8 what's likely to happen is we have to sort out how we transition
9 from those sort of prototypes, because there are always a
10 limited number of them, into some program managed by APM. We're
11 going to probably go back to many of the criteria we'd associate
12 with the normal acquisition program.

13 MR. PATTERSON: I have a quick question,
14 particularly with regard to IED's. That is, you know, we've
15 seen a change in the bad guys in what they're doing. We then
16 attempt to adapt to that change. Do we have a group of really
17 smart people who play the Iraqis, to develop -- the Iraqis have
18 a seven-month cycle time in the way in which they build IEDs.
19 I'm not clear that we have that.

20 DR. KILLION: I can assure you we have guys working
21 that kind of problem. Now, whether it's a formal group that
22 does that? But we do have the guys who are looking at what are
23 the technology options that are coming out of Radio Shack that
24 these guys are going to be using next and how do we beat them.
25 Yes, we have people doing that.

1 MR. PATTERSON: I think that's a concern. It's not
2 particularly our concern, but institutionalizing that
3 capability.

4 DR. KILLION: That's where people like those young
5 kids that we brought on board become really important, because
6 they're the ones who are familiar with the technology and what
7 could be done with it.

8 GENERAL KERN: But there is -- we used to have a red
9 design group to try to replicate everything before -- we have
10 not done that with any degree of formality like we did then for
11 an insurgent-type, non-defined kind of threat. They're just
12 really out there looking at everything possible.

13 DR. KILLION: But I can tell you, people like Ben
14 Reilly are working hard to figure out how to set up that kind of
15 process.

16 MR. CAPPuccio: That's hard.

17 DR. KILLION: Next chart.

18 (Slide.)

19 Next.

20 (Slide.)

21 Okay, there's the guidance on what I do. Close
22 collaboration between us and everybody else is a good thing.

23 Next chart.

24 (Slide.)

25 How do I institutionalize that? This is one

1 mechanism that I would tell you is a good mechanism, that's in
2 the new 5000 series. I've exploited it with the FCS program. I
3 intend to use it more widely, technology transition agreements.
4 Why? Because it creates common expectations between the guys
5 doing the S&T and the guys on the PN side, so that everybody
6 knows what it is you're going to do, how much you're going to
7 spend, what you're going to deliver, and when, so that there
8 isn't this: but I thought you were going to give me X.
9 Everybody knows what you're going to deliver and when, and it's
10 important to get that down on table.

11 MR. KOZLOWSKI: So it's sort of a contract.

12 DR. KILLION: It is a contract between us and them.
13 And we have done this and we've delivered the lightweight cannon
14 one, actually we delivered on schedule, at a much lighter weight
15 than originally planned, and a smaller volume. So possible to
16 actually do things right sometimes. I won't say it's a perfect
17 mechanism, but it really helps to create common expectations.

18 Again, it helps also in terms of them fostering that
19 transition because, you're right, I'm not resolution for the
20 transition, the PMs are.

21 MR. PATTERSON: So actually it's been a good story
22 because it migrated to the other services, or it migrated to the
23 services, the other services.

24 DR. KILLION: I think we exploited it. We were an
25 early adopter and the other services have learned to use this

1 more. It's like TRAs. We were aggressive in using that
2 process.

3 MR. CAPPuccio: If the system really wanted to worry
4 about transition, what you need to do is take a look at other
5 parts of the S&T budgets. For instance, take a look at the -- I
6 knew this for the Air Force. Take a look at the travel the PIs
7 have. The travel is down to practically nothing more. How the
8 hell can you possibly transition anything either to industry or
9 to assist a service when the lab rats --

10 GENERAL HAWLEY: Or how do the lab rats know what's
11 going on?

12 MR. CAPPuccio: Or how does he know what's going on.
13 So if you take a look at S&T across all the services, they keep
14 cutting budget, they keep cutting budget. They don't want to
15 cut people, so they cut things.

16 GENERAL HAWLEY: One reason is the services have a
17 perception that these accounts aren't delivering useful things
18 to them and so they feel that this money is being spent at the
19 direction of OSD, not at their own volition.

20 One idea that we came up with when I looked at the
21 Air Force lab program was in every RFP to have a deliverable,
22 where did the technologies come from that you're going to put in
23 this program, so that the industry has to fess up that they got
24 it out of the lab.

25 MR. CAPPuccio: I'll tell you, one thing that we

1 looked at --

2 GENERAL HAWLEY: Just to address this perception
3 issue, somehow you've got to get the services to appreciate what
4 comes out of this program.

5 MR. CAPPUCCIO: Every program has a small business
6 set-aside. We had actually toyed with a proposal, a set-aside
7 for the predominant lab on that contract. Force the set-aside,
8 force giving money to the research. There are other ways in the
9 acquisition process to make them relevant to work on, but it has
10 to be thought out.

11 We've got businesses that don't know nothing and we
12 train them. We've got a lab group that can help, but we don't
13 have any set-aside that says you must go to them to run some
14 technical integrity reviews.

15 GENERAL HAWLEY: But actually, the Navy, I give
16 credit to them, has a program for their small businesses where
17 they're trying to do a better job of training them as to how to
18 transition and work with government more effectively.

19 MR. CAPPUCCIO: As part of the strategy, you set
20 aside a certain percentage of money.

21 MR. KOZLOWSKI: Forget set-aside. Why don't we just
22 force them to pay a royalty back to the originating labs?

23 MR. CAPPUCCIO: You must get them involved.

24 DR. KILLION: That would be good.

25 GENERAL HAWLEY: You're going to spend this money.

1 You've got the mandate you spend 3 percent, right? The trick is
2 to get the services to understand what comes out of the
3 pipeline. They don't see the product because the program
4 managers say: Oh, I contracted with Lockheed, Lockheed did
5 this.

6 DR. KILLION: Sometimes it's relatively invisible to
7 them that we actually did the work that created the capability.

8 GENERAL HAWLEY: Or funded the work.

9 GENERAL KERN: Part of it also ought to be the
10 people transition, I think, for some period of time: Hey,
11 that's the government guy I saw working down here last week; now
12 he's here working on the transition piece.

13 We can go back. We also have the momentum process
14 on moving things from the lab.

15 DR. KILLION: There are challenges there.

16 GENERAL KERN: What are the challenges?

17 DR. KILLION: Some are here. "Don't accept advanced
18 technology from lab." The PMs are not convinced the technology
19 is mature. Sometimes they don't want to trust that. They want
20 to mature it further, but they'd like us to do that, and they'd
21 like to have our money to do it sometimes.

22 There are too many integration unknowns. Now,
23 that's an issue that is one where, okay, I address technology
24 readiness, but I don't address the general level,
25 manufacturability, producibility, integratability, those kind of

1 issues. We do the best we can, but it isn't that that's a
2 four-part effort necessarily. Those are ones that -- Dennis
3 Schmidt at the acquisition conference recently was talking to
4 PMs and they resonated with those.

5 Now, there's the other side. Next chart.

6 (Slide.)

7 Which is the lab perspective of why PMs don't use
8 their technology: The PMs are too conservative. They'll just
9 use known technology rather than taking a chance on a good idea.
10 They want to control the technology development. Sometimes
11 what happens -- we've had this happen, as you probably are
12 aware, in multiple cases. A good example is what was low-cost
13 precision kill became APKWS, Advanced Precision Kill Weapon
14 System, demonstrated with contractor how well it worked with
15 precision guidance based on the Hydra 70 rocket, demonstrated
16 that the technology worked great. A fabulous technology. The
17 user really loves it because it's relatively low cost, a fairly
18 high precision capability.

19 When the PM got the program, they recompeted and
20 didn't get the same contractors. Guess what? We started from
21 scratch. In fact, we're about to restart the program.

22 MR. CAPPuccio: Let me guess. The contractor bid
23 lower because he didn't have any scar tissue.

24 GENERAL KERN: There you go.

25 MR. PATTERSON: And he had no past performance.

1 MR. CAPPuccio: No past performance.

2 GENERAL KERN: And he wanted to sell more rockets,
3 not fewer.

4 DR. KILLION: Actually, the funniest one was when I
5 was giving a brief and I talked about APKWS because APKWS is an
6 example of the technology program, and the user sitting at the
7 table is going: Is there any way you could make that an area
8 weapon instead of a precision? Sure, take the guidance off of
9 it. Why did I do all this work?

10 GENERAL KERN: In the mean time, we shoot a Hellfire
11 at a truck.

12 MR. KOZLOWSKI: There are interesting perspectives
13 on both sides as to how this works. Again, I think part of this
14 is coming to common expectations, what is it going to deliver
15 and when, what level of maturity, so everybody is agreed.
16 That's important. Having a good partnership with them, as
17 General Kern is suggesting, it's largely about people.

18 We often, the labs also provide engineering support
19 to the PM and PEO's office. My suspicion is some of those
20 people do migrate back and forth, not as much as they should.

21 GENERAL KERN: I think we need more of, and I think
22 that's something we ought to watch.

23 DR. KILLION: One of the things that I'm doing with
24 one of our major ATD's, the Future Force Warrior Program, is
25 instituting a process, it's been used in the past, but I think

1 we need to use it more in the future, where the leadership team
2 for that ATD is led by an S&T person, but the deputy is from the
3 PM shop. As we go into the demonstration phase of the program,
4 they switch roles, the PM in charge of the demonstration and the
5 S&T person is the deputy, so that the PM starts to take
6 ownership of the project.

7 DR. ABBOTT: But you've got to start it with the
8 program.

9 GENERAL KERN: At milestone A?

10 DR. KILLION: Yes, at milestone A. The problem in
11 that case is the transition path, because, guess what, there's
12 no money for this as a new program in the future at the moment.
13 But it's important to get the job done in terms of the
14 technology.

15 Next chart.

16 (Slide.)

17 GENERAL HAWLEY: We have significantly reduced
18 funding for technology for new programs. We've taken huge
19 reductions in funding demonstrations.

20 DR. KILLION: The Army's been pretty healthy on that
21 in recent times. But still, it's a matter of, what I get asked
22 every single year is, okay, you've got the 6.3 money doing this
23 demonstration; where's the transition? And in some cases I'm
24 pushing the technology. In other cases there is a transition
25 path, and the problem is you started this program X years ago,

1 you're coming to fruition now; in the interim some of those
2 programs have been terminated, some have been changed
3 significantly. Some, there's nothing out there any more. So it
4 changes your path significantly.

5 Here you go. We could put together some IPTs. We
6 could eliminate IPTs. Dennis thought that IPTs tended to eat,
7 ride, and watch, watch TV. He's not a fan of IPTs.

8 Next chart.

9 (Slide.)

10 And the solutions are right there. You guys are
11 going to come up with them. So implement them immediately.

12 Next chart.

13 (Slide.)

14 This is good in terms of, okay, these guys
15 (indicating) ought to hold their decisionmakers available about
16 why they didn't use a technology that is available. At the same
17 time, if you look at the next chart --

18 (Slide.)

19 -- me and the MACOMs should be asking this question
20 right here (indicating): What are we doing to make the
21 technology acceptable?

22 GENERAL KERN: What do you do, Tom, to make the PEOs
23 go visit the labs, other than the one that they may be directly
24 associated with?

25 DR. KILLION: Yes, the ones where they're part of

1 the LCOC at that particular site.

2 MR. KOZLOWSKI: You mean just to acquire a general
3 familiarity with what's going on?

4 GENERAL KERN: I mean, you go back to the last
5 chart. It said that the PEOs should hold PMs responsible for
6 using the work that comes out of them. How do they know?
7 Sitting in a meeting for an hour isn't an answer to, yes, I know
8 how that works.

9 MR. PATTERSON: The Joint Strike Fighter is at SVD,
10 milestone B, it's a program. What prompts anybody to go back to
11 a lab? You've got more work to do just to get the program going
12 as a program manager, and the things that you've got on your
13 plate, let alone.

14 GENERAL KERN: Well, if you have major hiccups then
15 you go back to the lab.

16 MR. PATTERSON: Yes. Well, that's priceless.

17 DR. KILLION: In fact, that was one of the major
18 findings of the original Hindsight report, was quite often the
19 work in research that was relevant was because guys got the
20 technology, they couldn't figure out some glitch that came up
21 when they tried to implement it, and they went back to the lab
22 to say, how does this work. And their lab would do the
23 necessary research to understand it.

24 GENERAL KERN: The other thing you haven't mentioned
25 at all either is the lab folks, when they're doing evaluations

1 of the proposals, provide us the objective, disinterested
2 evaluation, and that's one of the dangers if you start losing
3 those people who read the proposals. I don't know who will read
4 them.

5 DR. KILLION: That's why I need people who are
6 actually engaged in the technology.

7 MR. CAPPuccio: Well, one of the biggest OSD issues
8 -- it's not our issue, but a biggest OSD issue -- is how big
9 from an industry perspective -- from an industry perspective,
10 number one, governments are building labs with people that are
11 talented, which industry can't find and which industry would
12 like to steal. You've got a problem.

13 The second one you have a problem: Where should
14 technology be coming from? Should it be coming out of your
15 industry base or out of your military lab base? What's the
16 blend?

17 The third one is, the third one is, at the rate the
18 budget is shrinking, the only ones doing fundamental research
19 now are getting to be the Lockheeds and the Boeings and the
20 Raytheons. The subcontractors are barely surviving and they're
21 not inventing in this. The labs are not putting out a lot of
22 research contract money any more, which means a lot of the
23 suppliers are not visiting the labs any more.

24 So right now, if someone doesn't get in and look at
25 the right blend, we're spiraling into a problem where you're

1 going to have guys in the labs doing lab stuff, not getting
2 anywhere; industry doing industry stuff, not getting anywhere.
3 So it's not our problem, but eventually you need to come to
4 grips with it.

5 GENERAL KERN: What you just said, too, goes back to
6 the bimodal demographics you've got, at least in the Army labs,
7 and I think all the services are probably the same. You have a
8 need for people who are going to fill that work. What we
9 continually find is that it's more attractive for a young
10 scientist to come work in a government lab right out of school.
11 They get more responsibility and the pay is fairly comparable at
12 that point. But 5 years down the line, you take them because
13 they're mature and our pay isn't comparable.

14 With that bimodal distribution that we have, that's
15 really being a problem.

16 GENERAL HAWLEY: The demo has helped with that.
17 When I looked at the Air Force labs, it's been --

18 MR. KOZLOWSKI: That's where the action is; that's
19 where the people will go.

20 GENERAL HAWLEY: And a lot of people in this world
21 are not as motivated by the paycheck as in other areas.

22 DR. KILLION: That's the point I make about it. The
23 one advantage we have in the lab, like up at Aberdeen, is we let
24 guys make things go boom. We have a unique infrastructure
25 because they can do stuff that they would not be able to do

1 elsewhere.

2 MR. PATTERSON: With an emphasis on milestone A and
3 before and a program starting at milestone A, the caution is you
4 don't still focus the lab work and the technology development.
5 But many of the things that we're discussing here, because you
6 have an emphasis now on the pre-SDD, will start to shred out.

7 MR. KOZLOWSKI: You have a trend in all of this,
8 though, Frank, when you say it's not our problem. If industry
9 continues to shrink in terms of its investment and all these
10 other issues, one of the outcomes could be, and not too far down
11 the pike, the design teams, the R and D teams, all become
12 governmental, government controlled. They design it, industry
13 ends up building it to a print kind of mentality, and there is a
14 migration toward that, that if industry doesn't change their
15 path that's what we're going to end up with. The government
16 will suck this back in house, particularly if they're tending to
17 be more vital right now with the younger set. That's what could
18 be in store for us.

19 MR. CAPPuccio: We've gone back, even though our
20 IRADs aren't evaluated, we've got back to writing IRAD reports,
21 the IRAD books. We've gone back in certain technologies to
22 having IRAD days with our counterparts.

23 MR. KOZLOWSKI: Is your IRAD, though, increasing as
24 a percent of sales?

25 MR. CAPPuccio: Not as much as it should be.

1 I'm wondering whether or not the IRAD reviews that
2 we have at the labs, I'm wondering whether or not the government
3 should put that back on, because it forced people to talk, it
4 forced guys to share phone numbers.

5 GENERAL HAWLEY: That's one of the things that came
6 out of our lab study with the Air Force, that that ought to be
7 reinstated as a far more formal process.

8 MR. KOZLOWSKI: Just take the auditors out of it,
9 though.

10 MR. CAPPuccio: Just take the auditors out of it.

11 DR. KILLION: I remember going through those
12 reviews. It was an arcane process because of the payoffs that
13 were involved and everything else. They need some process for
14 doing it, and I can assure you there are lots of people on the
15 government side who are going: How do we know enough about
16 what's going on in the industry?

17 MR. PATTERSON: The problem is you don't have a
18 process review to say, wait a second, we've gotten off track
19 here, let's go back.

20 GENERAL HAWLEY: It works both ways. It's a two-way
21 thing. It helps industry. Those reviews help industry
22 understand how to focus their R and D and they help government
23 understand what's going on in industry.

24 DR. BRANDT: And they also articulated the
25 government's interest in the R and D in the industrial sector,

1 which we haven't articulated very well lately.

2 MR. CAPPuccio: Well, in some cases what we actually
3 do is, first of all we take the pain out of it, because it's a
4 meeting not for score. You're not getting a ranking that goes
5 into your overhead or your G and A. It's a meeting where guys
6 can exchange data.

7 The way we structured it is we actually asked the
8 government to rate us. I mean, how are we doing compared to our
9 competitors? Not give us a competitive rating; how are we
10 doing? Where should we be putting more money to be competitive?
11 Where do we have a lead?

12 What's good about that is I'll take it and say:
13 Look, if we're blues here and the government thinks we're yellow
14 here, let's modify next year's research budget. Let's try and
15 make that yellow green. And then when we review with the
16 government next year, if the blue turns into green we'll worry
17 about it. So the dialogues are very healthy, and since we went
18 away from scoring it's a lot friendlier meeting.

19 Why are you doing this? Some guys in the government
20 say: We're doing that; don't waste your time, Frank. Just
21 don't waste your damn time.

22 Out of this we may want to --

23 DR. KILLION: Next chart.

24 (Slide.)

25 I think we're on the last chart. There we go.

1 MR. CAPPUCCIO: We may want to do something about
2 that.

3 MR. PATTERSON: It's always good to raise the dock.

4 DR. KILLION: Dennis almost got me to bring you the
5 other thing that said: Don't jump on stuff because it sounds
6 innovative. Quite often, stuff that sounds innovative turns out
7 to be not particularly useful. That's another quote that's in
8 there.

9 MR. A'HEARN: May I ask you about funding? Overall,
10 Army S&T funding over time, what's the trend? Down, up, flat?

11 DR. KILLION: It has been up. Past 2000 it went up
12 significantly because of the investment for FCS. We're about to
13 go down because of PBD-753 substantially. We took a hit on the
14 POM last spring and we took another hit this summer in the
15 President's budget for '07.

16 MR. A'HEARN: Down substantially, as in 3 percent, 4
17 percent?

18 DR. KILLION: More like 8 percent.

19 MR. A'HEARN: Really?

20 DR. KILLION: The hit for PBD-753 is down by --

21 GENERAL KERN: Overall, it's down about 20 percent
22 from the peak.

23 DR. KILLION: When you include everything, it's down
24 somewhere between 12 and 15 percent from where it was at the
25 peak of our POM '04 numbers. We're down substantially. To be

1 honest, where we are is -- this will give you an idea. This is
2 6.1, 6.2, and 6.3 total.

3 MR. CAPPuccio: And 6.3.

4 DR. KILLION: To give you an idea, if you take out
5 some recently devolved programs from OSD, I'm back at zero
6 percent real growth from the President's budget in '00, which,
7 as you might suspect, wasn't exactly a transformation budget at
8 that time.

9 MR. KOZLOWSKI: Are these cuts, this reversal of
10 trend, true for all the services?

11 DR. KILLION: I think they're going that way if they
12 already haven't. The pressure to go that way is just too great.

13 MR. CAPPuccio: The only thing that keeps the S&T
14 budget stuff from going flat is the 6.1 stuff, trying to keep
15 6.1 stable. 6.2 -- when you get to 6.3, it gets tough.

16 GENERAL HAWLEY: They're holding at about 3 percent.
17 It's about 3 percent.

18 MR. CAPPuccio: And they're trying to hold it.

19 GENERAL HAWLEY: And they're trying to hold that.
20 But there's been a huge migration out of the service S&T budgets
21 and into DARPA.

22 DR. KILLION: Oh, yes.

23 GENERAL HAWLEY: So the services are down at 2, 2.1
24 percent probably, something like that.

25 MR. CAPPuccio: DARPA has, the last I looked, 70,

1 almost now 63 or 70 percent of the budget, of the research, what
2 you would call 6.1, 6.2-ish budget.

3 GENERAL HAWLEY: Well, DARPA's moving into 6.3.

4 MR. CAPPUCCIO: I've got the data at home. But the
5 bottom line is the money has been scooped up at OSD and put in
6 at DARPA.

7 GENERAL HAWLEY: This is all kind of that culture
8 kind of issue: the services have got it wrong, we know better,
9 and we're going to take it and put it into OSD organizations.

10 MR. PATTERSON: I have to, as much as it pains me,
11 you're right. But you know, I'll tell you that the culpability
12 of why that happened is because there's backing and there'll be
13 a question, there'll be a program, there'll be something, and
14 something that is expected to happen doesn't and they'll say,
15 what?

16 GENERAL HAWLEY: Because they separated
17 responsibility and accountability.

18 MR. PATTERSON: No, you're right, that's exactly
19 right. That's the reason.

20 Tom, thank you.

21 DR. KILLION: Thank you, and I'm sorry I carried you
22 over, or you carried me over, one of the two.

23 MR. PATTERSON: The only impact has been a
24 physiological impact, and the lines have now crossed.

25 GENERAL HAWLEY: It's time to address physiology.

1 MR. PATTERSON: It's time to address physiology more
2 than cognitive stuff, but it's kind of S&T.

3 DR. KILLION: There you go.

4 GENERAL KERN: You haven't really been to an Army
5 S&T review. Physiology is not accounted.

6 DR. KILLION: We don't allocate time for that.

7 MR. PATTERSON: I understand. But this has been
8 extremely valuable to us because you have raised the exact
9 issues that cause us to go and reflect on where we can do
10 substantial good here in the process, and we really appreciate
11 that.

12 MR. CAPPUCCIO: You need to add some of the points
13 that we've got if we go with the acquisition strategy on
14 milestone A to get some of the concerns. This business of the
15 government, GAO, forcing people, pushing people to say you're
16 not going to forward unless you're at a technology rating of 7
17 or 6 or 5 is the wrong answer.

18 MR. PATTERSON: That's the wrong answer.

19 MR. CAPPUCCIO: And you know it's getting support.

20 MR. PATTERSON: I know it's getting support. That
21 doesn't mean it's the right answer.

22 GENERAL HAWLEY: It has a predictable level, which
23 means it will corrupt the TR level definition and we'll call
24 things TRL-7 that aren't.

25 MR. PATTERSON: Let's reconvene at 11:00.

1 (Recess from 10:54 a.m. to 11:13 a.m.)

2 MR. PATTERSON: If you'll turn to tab 7 while we're
3 getting squared away here. This is on disk and we'll get it up
4 there on the screen, about the calendar that we have set out and
5 the road ahead. You should have just gotten a copy and it
6 should go in tab 7. We see the things that we have laid out for
7 us today and tomorrow. The 10th, Columbus Day, is a holiday,
8 but we'll try to get some work anyway the 11 through 12.

9 We'll call the senior review team, tell them about
10 what we plan, the dinner, between the 11th and 14th. We're
11 going to start to provide you with the issue papers, as I
12 mentioned, and we have to get information to Norm Augustine so
13 that -- he has agreed to not only come and talk to us on the
14 19th, but also to write the forward for this study.

15 MR. KOZLOWSKI: He agreed to that?

16 MR. PATTERSON: He did, yes.

17 MR. KOZLOWSKI: He volunteered? I don't know that
18 he agreed to it.

19 MR. PATTERSON: I don't know. I thought it was a
20 pretty good idea.

21 DR. ABBOTT: That's what you said.

22 GENERAL KERN: Do we get to read it before?

23 MR. PATTERSON: Oh, yes. I mean, if it sucks --

24 MR. CAPPUCCIO: With Norm, you don't change it.

25 MS. GIGLIO: I actually had him as a speaker and I

1 tried to get him to tweak. Never once.

2 GENERAL KERN: That was my last assignment with the
3 cadets I was teaching, was to write a 100-word book review of
4 the sequel to Norm Augustine's book.

5 MR. PATTERSON: So all of you who have his revised
6 and expanded version, which I think is the latest one, and you
7 want it signed, this will be an opportunity.

8 MR. KOZLOWSKI: I have some misgivings about using
9 him.

10 MR. PATTERSON: Oh, okay.

11 MR. KOZLOWSKI: I can't quantify it more than that.
12 It's just he's a voice from the past that has a message and an
13 image, a powerful individual within DOD and industry, highly
14 opinionated. Do you really want to put that up as the forward
15 to this report?

16 MR. PATTERSON: Well, I would --

17 GENERAL HAWLEY: A countervailing view is that we've
18 been described as a bunch of lightweights and maybe that would
19 --

20 MR. PATTERSON: Who said that?

21 GENERAL HAWLEY: -- offset the view that we're a
22 bunch of lightweights.

23 MR. PATTERSON: Who was that?

24 GENERAL HAWLEY: You haven't read that?

25 MS. GIGLIO: Wheeler from Defense News or from

1 LaRoche's Defense Information.

2 MR. PATTERSON: You mean the Kent Carroll crowd?

3 GENERAL HAWLEY: I just read it.

4 MR. PATTERSON: There are other ways of taking that.
5 That could be a compliment.

6 GENERAL HAWLEY: I don't know how much currency it
7 has. It made it into some newspaper.

8 MR. PATTERSON: None. It has none.

9 MS. GIGLIO: We've gotten good press.

10 MR. PATTERSON: Let's hear what he has to say. And
11 he did ask that we provide him some talking points. So that if
12 he puts his name to the bottom of what we say, I'm kind of
13 satisfied with that. But I take your concern.

14 GENERAL KERN: Does Gordon England know that he's
15 going to write it?

16 MR. KOZLOWSKI: I would certainly ask him.

17 MR. PATTERSON: I will. I'll ask him. I'll ask
18 him. We're going to be showing John Hamre and Gansler and all
19 these folks who have been part of the review team, so we are
20 reaching back into the past in other areas.

21 DR. ABBOTT: Is Hamre part of the review?

22 MR. PATTERSON: Yes.

23 GENERAL KERN: You know you don't have any of this
24 business in the reviews at all, somebody that's looking into the
25 future, Bill Gates. They're in defense, but they're not in

1 defense.

2 MR. PATTERSON: Like Megatrends?

3 GENERAL KERN: Some guy who's currently running a
4 big operation associated with defense, but not into it.

5 MR. CAPPuccio: Like Jack Welch, someone that says:
6 I don't have a stake in the game, I'm not part of the culture,
7 but I think what I read below makes a lot of sense; this is how
8 I run my business. If Jack Welch said that at the beginning of
9 the report, five sentences.

10 MR. PATTERSON: Take care of that, Eileen.

11 MS. GIGLIO: I will. I can do it.

12 (Laughter.)

13 MR. CAPPuccio: I do tend to agree that Augustine
14 brings a certain amount of baggage. He's well known, he's well
15 respected. But the question is, one could say is the report
16 that shallow that you have to bring in somebody outside to give
17 it some sort of credibility.

18 The question to me would be what's the question of
19 bringing a person of Norm's stature? It's an endorsement for
20 what? He hasn't been involved, so what was their motive? To
21 sell it?

22 DR. ABBOTT: He read our book and liked it, that's
23 essentially what we're talking about, and he wrote the forward,
24 or his little review is on the back of it.

25 MR. CAPPuccio: Then you sell it to him. You say:

1 Look, if you can't say, I read the book and I like it, you ain't
2 the forward. Can you say that? If he says it, then it's good.

3

4 DR. ABBOTT: If not, you don't get somebody to write
5 the forward who doesn't like the book. It makes no sense.

6 MR. PATTERSON: Sometimes I'm surprised by what gets
7 controversy.

8 MR. CAPPuccio: Well, it's not controversy.

9 DR. ABBOTT: The three of us come from the community
10 that for almost a generation tried to have the person we're
11 talking about do what we asked him to do.

12 MR. CAPPuccio: And he didn't do shit.

13 DR. ABBOTT: And he never did, he never did.

14 MR. A'HEARN: He had his intended message.

15 DR. ABBOTT: He had a message he wanted to send and
16 he was going to talk about that.

17 GENERAL HAWLEY: Why did you keep inviting him back?

18 DR. ABBOTT: Because he was the defense industrial
19 base.

20 DR. BRANDT: He had been coming for a long time when
21 I got there and he was the defense industrial base. But when he
22 stepped down, we actually shifted to Vance Kaufman, and I saw
23 him at a black tie affair. I was going through a receiving
24 line. It was a think for Kaminski. I shook his hand and I
25 said: I'm so glad you were with us for 22 years consecutively.

1 We've now switched to Vance Kaufman; you're off the hook.

2 He looked at me, he said: It's 23 years, you know.

3 And I said: Oh, okay.

4 Then he said to me: You know, if I come two more
5 years it will be 25 years. I said: Oh.

6 He said: It would be 25 years. I said: Does this
7 mean you want to continue coming? And he said: Well, it would
8 be 25 years.

9 DR. ABBOTT: Take the hint, doctor.

10 MR. CAPPUCCIO: I want to have a resume that says
11 "25 years."

12 MR. A'HEARN: I think you should probably invite him
13 back for two more.

14 DR. BRANDT: But in a different form. But again,
15 it's a true story.

16 DR. ABBOTT: We only have how many living honorary
17 professors in the school? There's only a few and he's one of
18 them.

19 DR. BRANDT: Actually, Jacques Gansler, Jacques
20 called me and said: You know, I've been coming for 27 years.

21 MR. CAPPUCCIO: You should have said: Okay, give
22 two to Augustine and we're even.

23 (Laughter.)

24 MR. PATTERSON: Let me tell you the rationale and it
25 has to do with any kind of a book or any kind of a report. That

1 is that you do like to have as many people that have credentials
2 to at least support your effort. We have used that as the
3 method by which we go about this in every other aspect. We have
4 people who have credentials in this world.

5 And arguably, Augustine, with "Augustine's Laws,"
6 that is an almost household word when you come to the subject,
7 would lend itself to what we're doing.

8 Why do we have Hamre? Because Hamre has talked
9 about the subject and up until now has had the quintessential
10 study on the street, incidentally without any counterpoint to
11 it. For him to come and be part of this actually lends
12 credibility to his objectivity for anything he might say, but
13 also says to the world that we have really looked hard at all of
14 the issues. And it seemed like a good opener to have the father
15 of acquisition, if not endorse, at least comment.

16 MR. KOZLOWSKI: He's not the father of acquisition
17 reform. I respect this guy tremendously and I know what you're
18 trying to do, but let's draw an analogy to publishing. Let's go
19 out and get five, six, or ten of these guys that have different
20 viewpoints, different stakes in this thing, and get them to
21 write comments on the jacket of the book, if you will, as
22 opposed to taking the position of being the kingpin up front
23 writing the forward.

24 It puts him in the position of being God and that's
25 where I have a problem.

1 MR. PATTERSON: I don't have an objection to having
2 more than one comment.

3 MR. KOZLOWSKI: But it's just a comment; it's not
4 the forward for the report.

5 MR. PATTERSON: Yes. I had a very short forward
6 that I wrote. I said fundamentally: We've done this a lot,
7 most every document has been critical, very few laudatory, but
8 no one said that we shouldn't provide the very best for the
9 warfighter. And I think that that -- but I have no objection to
10 having more than one comment.

11 MR. KOZLOWSKI: Just think about it. This kind of
12 body has the responsibility to be somewhat autonomous,
13 objective, disconnected, etcetera, etcetera. And you might be
14 jeopardizing yourself more than you are already. I understand
15 the political motivations 100, 1,000 percent. But there may be
16 some other way to achieve that.

17 You could go out and ask the Under Secretary and a
18 couple of the chiefs of staff to sort of sign up and say: Yes,
19 we have watched this system for the last 25 years; by God, this
20 is it. I just don't put that much value in it.

21 MR. PATTERSON: Lightweights? Lightweights?

22 GENERAL HAWLEY: I just read the papers.

23 MR. PATTERSON: Okay, we will look at that.

24 MS. GIGLIO: We will.

25 MR. PATTERSON: With caution.

1 17, the materials go to the senior review team along
2 with the invite to dinner when they come. We are offering
3 briefings, again always in terms of our process, where we are in
4 the process, not any of our conclusions, except that every now
5 and then you throw out something if it's kind of, what do you
6 think about this.

7 When we did that with capital accounts and milestone
8 budgeting, there was no pushback on either Senate or the House.
9 These are the authorizers, though, keep in mind. So keep in
10 mind.

11 Then on the 19th we have -- it says it's closed
12 because it's in executive session, and Augustine will chat off
13 the record to us, and start early. But when he speaks to the
14 panel, his formal presentation, that is on the record. I mean,
15 that is in the open session.

16 GENERAL HAWLEY: So at noon when it says "closed
17 session ends," it's really open session ends.

18 MR. PATTERSON: That's really open session ends.

19 And of course, the person who's going to get all of
20 these good people also did this.

21 GENERAL KERN: I may be missing a piece of the 19th
22 and a piece of the 20th. I believe I'm in Hawaii on the 20th.

23 MR. PATTERSON: You know about the time change.

24 MR. KOZLOWSKI: GAO firm, then, regarding Augustine?

25 MR. PATTERSON: Not firm. How firm is it?

1 MS. GIGLIO: They're checking his calendar. They
2 didn't say no, but they're checking his calendar. The idea is
3 we want an on-site person to talk to.

4 MR. KOZLOWSKI: Are you going to confront him with
5 this debacle?

6 MR. PATTERSON: I already did that. He said: You
7 know, I can see how somebody would have taken it that way.

8 DR. ABBOTT: You know, there's more than one way to
9 read this.

10 MS. GIGLIO: This way, he comes in our camp.

11 MR. PATTERSON: Yes. But at any rate, then on the
12 20th, Thursday, the senior review group. Then we'll have the
13 white paper review, dinner with that group, review group, at
14 1800 Tivoli that night. Whether or not we do a 21st is still --

15 MS. GIGLIO: Can we go back to the dinner and the
16 outbrief by the senior review group? It probably should be done
17 in-house here and then people go down to Tivoli, because the
18 chairman said yesterday he thought it would be good just to get
19 together with the senior review group, and we were thinking that
20 would be the backbrief from what they had done all day. I think
21 it would be better to do it here at 5:00 o'clock, like we did
22 with the intermediate group.

23 GENERAL KERN: I agree with you.

24 MS. GIGLIO: Then dinner, I thought it would be nice
25 to have somebody else from the outside to come in, if anybody

1 has any ideas. Gordon England and Krieg are out of town. So
2 we'll try Gordon again.

3 MR. PATTERSON: How about Mike Wynne?

4 MS. GIGLIO: That would be perfect.

5 MR. PATTERSON: I'll ask him.

6 GENERAL KERN: Are you suggesting we have somebody
7 in addition to speak at the review group?

8 MS. GIGLIO: No, just as a social.

9 MR. KOZLOWSKI: We're looking for somebody to act as
10 host, somebody from the government to be the host.

11 MS. GIGLIO: It would be nice to have somebody.

12 MR. PATTERSON: Fran Hardy I think would like to do
13 that.

14 MR. KOZLOWSKI: He's from West Point, you know.

15 MR. PATTERSON: Yes, I do.

16 MS. GIGLIO: I'm open for a suggestion. Just
17 socially, not to do a speech or anything.

18 MR. PATTERSON: Just to join us. Don Winter?

19 MS. GIGLIO: We could do that.

20 The service acquisition executives, the three of
21 them?

22 MR. PATTERSON: I don't think that --

23 MS. GIGLIO: All right. Anybody who has ideas, I
24 think it would be nice to have.

25 MR. PATTERSON: Okay. We can invite them, because

1 this is the last opportunity for them to join us, their last
2 shot at us.

3 MS. GIGLIO: Uh-oh.

4 MR. KOZLOWSKI: You're probably going to lose some
5 of them, I would suspect, just because it's after the final
6 de-brief. They won't be feeling a strong obligation to stick
7 around for dinner. Some people actually have lives.

8 MR. PATTERSON: I'll make a note.

9 Then there's process from that point on, of starting
10 to work on the guts of this report. As you can see there, there
11 are certain mechanical things in the report that need to be
12 achieved, and on the 31st of October we would expect to have
13 final graphics and an executive briefing and the draft stage,
14 and to have that complete.

15 Then we have the DAPA panel meeting, which is a
16 closed session, and we'll go through the review of the report
17 and briefing. It's after that review, which will be very
18 intense, that it'll go for printing, so that we all know that.

19 Then we currently have a TBD there for the
20 Congressional breakfast. We're going to have to be really very
21 confident that what we have in that briefing is what we expect
22 to provide publicly, because that Congressional breakfast will
23 be a good opportunity to get it on the stage.

24 MR. KOZLOWSKI: You're going to do that before you
25 formally outbrief Krieg?

1 MR. PATTERSON: No, we're going to provide that to
2 Ken and Gordon first. I'm not going to surprise them.

3 Then when it's provided to Krieg on the 11th,
4 that'll be the formal -- that will be provided formally to him.
5 Then on the 15th, that will be provided formally to the Deputy
6 Secretary. We've scheduled two hours on the Deputy Secretary's
7 calendar.

8 We are not briefing Congress. We are simply sending
9 the report to the chairmen of the committees, and I would
10 propose -- and I think that there is a focal point for FACA, but
11 my sense is that it should go to the big eight.

12 Press conference, and then Thanksgiving. I'm not so
13 sure about Thanksgiving, but definitely a press conference.
14 Those are just notional, if necessary. I think
15 that the deputy may very well want to do that. If he is -- and
16 he will be -- in agreement with the study, then he will
17 definitely want to do that, I think.

18 MS. GIGLIO: It's like perfect timing, just before
19 Thanksgiving.

20 MR. PATTERSON: Thanksgiving, it's what's known as
21 Friday at 4:30 after the first feed to New York. That's when we
22 always give the good news.

23 Then what we'll do at the end of November is to
24 transfer the FACA responsibility to basically a caretaker
25 status. There are some mechanical things that you need to kind

1 of understand, that is that there's a good chance that all of
2 the office space that we're in goes away, just because that
3 wedge is being renovated, and we promised that we'd be out of
4 there at the end of November.

5 Now, practically I'm not sure that that will happen
6 because they do have to get on the A-Ring and they have to get
7 through. So it may be that those offices just kind of hang
8 around. But we are going to be kind of from a facilities point
9 of view out of business.

10 I've got a hand over there.

11 MS. GIGLIO: Can we go back to the breakfast. When
12 I put this on the calendar -- and Alan and I have talked; we
13 wouldn't be showing our hand completely -- there was this whole
14 idea of dribbling some of the scope of what we had looked at in
15 an open session, and we're expecting to have something like, if
16 the members are in town, five or six members and about 100
17 staffers from all the committees.

18 MR. PATTERSON: My point would be I don't want to
19 dribble stuff that hasn't been dribbled to Ken Krieg and the
20 deputy.

21 MS. GIGLIO: Right, but it wouldn't be the findings
22 and the final.

23 MR. PATTERSON: No. Of course, you know that that's
24 --

25 MS. GIGLIO: The big idea, the big idea.

1 MR. PATTERSON: When they see the big idea, the
2 first thing they will raise their hand and say: Well, what
3 about the little idea? So you've got to be prepared.

4 The whole idea here, though, is that it continues
5 with this idea of openness and transparency. It's a
6 collaborative effort and we're not going to be able to do this
7 without you guys. That's why we brought you here and it's a
8 deal.

9 That's kind of how the calendar sorts out between
10 now and then.

11 Are you looking for a slow news day here?

12 DR. ABBOTT: Sir?

13 MR. PATTERSON: Are you looking for a slow news day?

14 DR. ABBOTT: No, I was saying, if we could be lucky
15 and there could be an airline crash the day that we release.

16 MR. PATTERSON: It's interesting you say that. They
17 asked if we'd do a quick editorial board and so I said, yes,
18 we'll do that, and Larry DeRita finds me in the hall and he
19 says: Excellent timing; now, if you can see the needle pop up
20 off of Harriet Miers for your editorial board, I'd be interested
21 in that. Thank you, Harriet.

22 I told him, I said: You don't understand; we are
23 experts in scheduling. We know these things.

24 GENERAL HAWLEY: Back to the 11th through 14th white
25 paper draft review and so on, the call from Maggie asking if we

1 could be here for that.

2 MR. PATTERSON: Yes.

3 GENERAL HAWLEY: Can we do some of that virtually?

4 MR. PATTERSON: You can.

5 GENERAL HAWLEY: Good.

6 MR. PATTERSON: Absolutely. What my plan, and
7 working with Al, will be is to provide you the time frame in
8 which we need them back, and I'm happy to do that. But please
9 know that we have a facility that's open to come in if you
10 choose to do that as well.

11 GENERAL HAWLEY: I'd spend a lot of time behind a
12 wheel when I can be doing it.

13 MR. PATTERSON: I'm with you, I understand. Okay.

14 All right, if we can go on to the next topic, which
15 is under tab 2. What I'd like to do now is to turn it over to
16 Al and have him take you through what we did last time as a way
17 of getting everyone up on the step, as well as to do the, this
18 is what I thought we said, please help me, is it what we really
19 said.

20 Okay, Al.

21 MR. HUTCHINS: To review, at our last session we
22 came up with what you see here in green as a construct for
23 organizing our work. It started out and captured the logic of
24 the whole assessment and the process. If you want to improve
25 them, you have got to fix the process. We spent some amount of

1 time understanding the sources of that instability and came up
2 with our framework for improvement. I'm going to walk through
3 this briefing material that we gave to Ken Krieg, for those of
4 you who weren't there, and we got a first cut.

5 Today we're going to start a number of activities.
6 We're going to review those solutions against slides we
7 extracted from subject matter expert briefings, take a look at
8 what we've extracted from previous acquisition studies, and try
9 and recapture some of the discussions we had at earlier panel
10 meetings to, if we need to, modify and work on that list with a
11 view towards trying to consolidate this top-level solution into
12 some five or six big things.

13 Now, in discussions with our chairman yesterday he
14 wasn't convinced that we were actually going to be able to get
15 this far in six or seven, in these two days of meetings. I'm
16 going to be delivering a draft report, however, by the 1st of
17 November. I need to get started on doing things. So any
18 progress we can make towards capturing top-level things we can
19 start writing white papers on would be a big help.

20 The anticipation is we're going to go through this
21 process again on the 19th and 20th for one last review to make
22 sure we've captured everything we want to capture. We will then
23 go into the end of the final process.

24 Okay, so can we bring up the review of the Ken Krieg
25 brief that we had.

1 (Slide.)

2 To have a committee or panel success, this is the
3 panel that put together the briefing and received some
4 consensus, actually, as I recall, it really does establish kind
5 of a good way forward. One thing to note is you'll be seeing as
6 you get various things in email, we're starting to date stamp
7 everything so that we'll be able to --

8 MR. PATTERSON: Absolute configuration control.

9 MR. HUTCHINS: We start with what the assignment
10 was. The Deputy Secretary told us to go out and do this. The
11 first thing we did was we came up with what's the problem.

12 Next slide.

13 (Slide.)

14 When this panel decided to consider this problem, it
15 took a decision to not just address the very straightforward
16 acquisition process of contracting, developing, producing, but
17 rather the larger process of exposition that takes into account
18 requirements and budgeting. This then is the logic that we
19 argue that the panel is taking in its deliberations.

20 The problem is loss of confidence. Confidence is
21 lost when you cannot predict the cost, the schedule, or the
22 performance of things that you're delivering out of this
23 "defense" writ large acquisition process. If you want to be
24 able to predict better to regain that confidence, you have to be
25 able to work on the process so that it is well integrated and

1 the process is stable.

2 We note that, although the nature of our business
3 leads us to complexity of technology and systems and that will
4 preclude perfect predictability, we still argue that better
5 results than we have seen before can be obtained.

6 Yes?

7 MR. KOZLOWSKI: Refresh my memory. How did we end
8 up with the focus on the term "prediction," "predictability,"
9 etcetera?

10 GENERAL HAWLEY: As one who wasn't here, it looks to
11 me like we are excessively focused on that aspect of the
12 problem.

13 MR. HUTCHINS: I'll walk through what we went
14 through at the last meeting again. Defense acquisition is a
15 process. Cost, schedule, performance are measures of the
16 process. You lose confidence in the process when you are no
17 longer able to accurately predict those measures. In other
18 words, the SAR report starts out: We think we're going to
19 deliver in this amount of time, it's going to cost this much,
20 it's going to have this much performance. People lose
21 confidence when repeatedly you can neither keep schedule or cost
22 or performance.

23 GENERAL HAWLEY: What that misses is the aspect of
24 the problem that causes a loss of confidence, in some people
25 don't think we buy the right things. In other words, we've had

1 the comment, if you buy the wrong things really fast and cheap,
2 I'm not very much in favor of that either.

3 We've got to lose that with this focus on just
4 predictability.

5 DR. ABBOTT: Unfortunately, the evidence we're
6 buying the wrong things -- if we are buying the wrong things,
7 we're still buying them over cost, out of schedule, and with
8 performance problems.

9 MR. HUTCHINS: And we had some significant
10 discussion at our last session that, while we hear a lot of
11 people saying we're buying the wrong things, there is very
12 little quantitative evidence that supports that.

13 GENERAL KERN: Well, can we say cannot agree on what
14 we're buying?

15 GENERAL HAWLEY: But there's still a perception. I
16 don't know whether Gordon England told it to us, but certainly
17 Krieg did, that there's a perception we're buying the wrong
18 things.

19 GENERAL KERN: England did, yes.

20 GENERAL HAWLEY: Yes.

21 DR. ABBOTT: England asked if we were buying the
22 right things. There is a difference.

23 GENERAL HAWLEY: We may conclude that there's very
24 little evidence to support that assumption, but I think it's
25 part of the problem.

1 GENERAL KERN: I think if we just said, though, that
2 confidence is lost when DOD cannot agree on what to buy and what
3 they will cost and when they will deliver.

4 MR. HUTCHINS: Certainly.

5 GENERAL KERN: Just add it.

6 GENERAL HAWLEY: The other thing that occurred to me
7 when I read this chart was the fourth bullet tries to capture a
8 lot, and I wonder if we haven't diluted a significant -- because
9 this gets into the why part. I mean, as we look at this it
10 seems to me we've got a system where good people in program
11 offices are trying to work with industry to produce something
12 for soldiers, sailors, airmen, and marines, and what they look
13 at external to the program office is this set of hurdles that we
14 have created for them, where they're constantly being tested.

15 Another way to put it is they're walking through
16 quicksand all the time because the system is designed not to
17 help them reach their objective, but to make it hard for them to
18 reach their objective. That's kind of my view of the current
19 system.

20 MR. KOZLOWSKI: It's designed to help prevent them
21 from making mistakes, as opposed to help them get their job
22 done.

23 GENERAL HAWLEY: And where we get to that is
24 divergent values among process participants. But we're trying
25 to capture a lot with that one little phrase of "divergent

1 values."

2 DR. ABBOTT: But there are subsequent charts that
3 speak to the divergent value question.

4 GENERAL HAWLEY: True.

5 DR. ABBOTT: This is just appended just simply to be
6 a logic trail, not to be an explanation of everybody's point of
7 view.

8 GENERAL HAWLEY: Again, as one who wasn't party to
9 the discussions, it looked like overemphasis on the
10 predictability issue, no discussion of buying the right or wrong
11 things, and then kind of masking a big part of a problem, which
12 is this very obstructionist process that we have to work
13 through.

14 MR. HUTCHINS: What changes would you like me to
15 make?

16 MR. PATTERSON: Put down "cannot agree," "when DOD
17 cannot agree."

18 DR. ABBOTT: We ultimately agree. We may not like
19 the agreement, but we ultimately agree what we're going to buy.
20 Decisions get made, you're going to buy this.

21 GENERAL HAWLEY: That's a big part of this hurdle
22 thing I'm talking about. There's a lot of people who
23 participate in the process are obstructionist because they don't
24 think we're buying the right thing, so they try to obstruct.

25 MR. PATTERSON: Let's back away from this just a

1 second. We're talking about the fundamental logic, writ very
2 large, that will encompass a lot of exactly what you say as we
3 go through this. The reason we use the word "predict" as
4 opposed to other kinds of words that we could have is that when
5 you lose confidence you expect one thing and get something else
6 and the word "predict" we thought grabbed that, that idea.

7 As we go through this, you will see that we have
8 fortified that notion with a follow-on logic train to support
9 it. So what I would say is, let's go through this and say,
10 okay, I get the gag, but let's go through it and then come back
11 and see if we haven't really done what we thought we did in your
12 mind.

13 GENERAL HAWLEY: Okay.

14 MR. PATTERSON: Okay.

15 MR. HUTCHINS: So I've added that we argue that
16 changes in the security environment, diverging values, and
17 process complexity have driven the three major elements of that
18 we saw before apart, and inserted a significant amount of
19 instability into the process.

20 DR. ABBOTT: Changes have driven.

21 MR. HUTCHINS: We'll get it. We then argue that
22 changes need to be made in each of the processes and in all of
23 the participating organizations, which we define as the work
24 force, oversight bodies, and industry, and Congress.

25 DR. ABBOTT: "Among process participants" after

1 "divergent values," to make it read just a little bit easier.

2 MR. HUTCHINS: Okay, help me out. Where am I?

3 GENERAL KERN: The fourth bullet.

4 GENERAL HAWLEY: Did you have a debate about whether
5 "values" is the right word or "objectives"?

6 GENERAL KERN: Yes, we did.

7 GENERAL HAWLEY: All right. I don't want to re-plow
8 all that ground.

9 DR. ABBOTT: This carpet is still stained.

10 MR. PATTERSON: Take out "among process
11 participants". That's it, delete. Okay.

12 MR. HUTCHINS: Then the final bullet was the concept
13 that, no matter how well this panel does or the effect of its
14 recommendations, even this panel's work won't be an end point.
15 It needs continuous improvement. It will need to be continually
16 revisited.

17 Given that, given that logic, the question then
18 arises, well, what are these sources of instability? What
19 causes this instability? And we came up with differences in the
20 theory and practice of big "A" Acquisition, changes in the
21 security environment, and the clash of values among process
22 participants.

23 GENERAL HAWLEY: Differences among? Can you help me
24 with that phrase? Differences in the theory and practice?

25 MR. HUTCHINS: Next slide, please.

1 (Slide.)

2 DR. ABBOTT: This is a summary of things to come.

3 GENERAL HAWLEY: Differences between the theory and
4 the actual practice. Okay, I got you.

5 MR. HUTCHINS: This is the theory (indicating). In
6 actuality, this (indicating) is what's happening, on the right
7 side of the slide.

8 MR. KOZLOWSKI: There's some point here where we've
9 got to introduce the leadership as the glue.

10 MR. HUTCHINS: Yes. And again, as we go through
11 this and we walk through the top level results from last time,
12 you're exactly correct. A first inspection of what we did the
13 last time indicates to me there are a lot of things this panel
14 has discussed which were not captured, so we need to capture
15 those.

16 GENERAL KERN: But is part of that that we want to
17 put leaders in this diagram?

18 MR. HUTCHINS: It's a good question. Historically
19 in terms of in the panel meetings, we had captured that by
20 arguing that that's where that lived (indicating). We may want
21 to do exactly that.

22 GENERAL KERN: Part of the way to do that is,
23 because we also argue that putting this and the Packard quote on
24 the same chart was overly busy, if we exploded the theory and
25 practice piece of it and just put the leaders in there.

1 MR. HUTCHINS: This whole quote right out of Packard
2 was placed here simply to emphasize that in theory and practice,
3 and we'll go into then and now, the fundamentals of successful
4 programs remain the same.

5 We can, if the panel likes, capture leadership as a
6 fundamental part of this construct.

7 GENERAL KERN: I think we should, just because of
8 the fact that we lost it.

9 MR. KOZLOWSKI: It's sort of sad that leadership is
10 the thing that makes that theory side work. Maybe you just take
11 that arrow in the middle and sort of shift it over there and
12 show it as a path, that leadership makes that happen.

13 MR. PATTERSON: I would say that what we're trying
14 to do is we have -- it's clearly diverging. If we said that
15 what we have to date is diverging and it's the leadership that
16 should drive it, so the arrow's driving these things back
17 together, and in fact we would submit that that is exactly
18 what's happening, and the purpose of this whole thing is that
19 leadership said, I'm not going to put up with this any more, I
20 need to have confidence in what's going on and I want this all
21 driven back.

22 MR. HUTCHINS: This chart I believe was a lift from
23 a Lockheed presentation, simply to reinforce that there is a lot
24 of process instability.

25 MR. PATTERSON: Complexity.

1 GENERAL HAWLEY: I wish we had ten-year programs.

2 MR. HUTCHINS: The second cause of instability is
3 fundamental changes in the security environment. We argue that
4 then historically pre-1985 there were things that helped
5 contribute to the process being somewhat less divergent than it
6 is now: monolithic threat, strategic focus, the real threat to
7 the country, physical destruction, a large competitive defense
8 industrial base, the focus on performance at any cost, a rigid
9 acquisition process that went along to implementing that, and
10 this acquisition process was born during the Cold War.

11 As we look at how things have changed until now,
12 lots of things have changed. We have changed the focus of the
13 understanding of the threat. The actual threat itself is more
14 economic than physical at this point. Instead of having a
15 large, diverse, competitive economic base, we have a much more
16 consolidated one, and we're now having to operate in the global
17 defense industry. Instead of performance at any cost, we're now
18 in a performance within cost environment.

19 But the interesting thing is, given all those
20 changes, we still have the same linear complex acquisition
21 process that was created to deal with this environment.
22 Interestingly enough, if you take a look at between Cold War
23 times and now, in all of the literature that goes along with
24 acquisition reform it is in the main focused on little "a" and
25 it's very apparent when you look at the mapping of the study

1 reports that they are in the main silent on the other
2 constituents of this whole integrated process.

3 GENERAL HAWLEY: Are we overstating this notion that
4 prior to or in the Cold War we bought performance at any cost?
5 Are we exaggerating that a bit?

6 DR. ABBOTT: At the strategic level that might be
7 more applicable than at the tactical level.

8 GENERAL HAWLEY: Even at the strategic level, it
9 seems to me that the way we did that is we said 10 percent of
10 DOD's budget is going to go to nuclear deterrence. So it had a
11 cost.

12 MR. A'HEARN: But people like Gansler in one of his
13 books wrote that during the Cold War performance was king over
14 cost and schedule, and that's probably a reasonable statement.

15 MR. KOZLOWSKI: That's true, but it's not the same
16 as at any cost.

17 GENERAL HAWLEY: At any cost.

18 DR. ABBOTT: We discussed that.

19 MR. KOZLOWSKI: We did. We talked about using the
20 terminology "performance-driven," a number of ways.

21 DR. ABBOTT: It was overstated and we agreed it was
22 overstated for making a point.

23 GENERAL KERN: You could say, if you wanted to tone
24 it down, you could say performance over cost, instead of
25 performance within cost.

1 GENERAL HAWLEY: You're going to take this to a lot
2 of people who were part of that whole process.

3 DR. ABBOTT: The thing that bothers me about that
4 chart, I would suggest it's true that the acquisition process as
5 implemented is rigid, but I would also suggest the acquisition
6 process as written is as flexible as hell if we choose to use
7 it, which we don't choose to use it that often.

8 Like many things in the law, we end up with
9 regulation that is a considerable constraint where the law in
10 fact gives us all sorts of room.

11 GENERAL HAWLEY: How do we justify or validate that
12 it was rigid during the Cold War, when we produced things like
13 the F-117 in a pretty flexible way, a lot of other weapons
14 systems got produced in a fairly flexible way? Can we back up
15 this idea that the Cold War was characterized by a rigid
16 acquisition process?

17 I might argue that in many cases it was far more
18 flexible than the one we have today.

19 GENERAL KERN: But the process, the real issue is
20 defined during the Cold War --

21 GENERAL HAWLEY: I'm keying off of Gary's point.
22 How do you apply the process?

23 DR. ABBOTT: Yes, how do you apply the process is
24 key. But if you read the regulations pre-1990, you discover
25 that a lot of it is, internal to the Department, is mandatory.

1 The change comes post-Cold War where things become a guidebook
2 as opposed to mandatory regulations.

3 Within both of those, the law requires you to be as
4 flexible as you chose to be -- you're willing to be, better than
5 chose to be -- willing to be.

6 MR. PATTERSON: It was not until Gansler in '99 and
7 2000 established 5002 as guidelines. Prior to that time, 5001
8 and 5002 were regulations.

9 DR. ABBOTT: Were standing instructions on how to do
10 the job.

11 MR. CAPPuccio: So could you change the word "rigid"
12 to "regulated"?

13 DR. ABBOTT: Yes.

14 MR. CAPPuccio: Regulated during the Cold War.

15 MR. PATTERSON: But it's not necessarily unregulated
16 today.

17 MR. CAPPuccio: Adherence versus guidelines.

18 MR. HUTCHINS: While you're discussing that --

19 MR. CAPPuccio: I think you can make the point more
20 simply. I think you can get rid of "rigid acquisition process"
21 and then have "acquisition process born in the Cold War," which
22 is essentially the same. We've got the same process. That's
23 the point. It's not whether one's more flexible. We
24 effectively have the same process.

25 Now, it happens to be linear, which is not likely to

1 change.

2 MR. HUTCHINS: I'm sorry, say again? How do you
3 want me to change this?

4 MR. CAPPuccio: Take out the word "rigid" in both
5 cases.

6 GENERAL HAWLEY: "Cold War acquisition process" on
7 both sides.

8 DR. ABBOTT: Someone will say, well, the guidelines
9 are guidelines.

10 MR. PATTERSON: Al, just take out the next to the
11 last line altogether, because you have it. You already have it
12 once.

13 DR. ABBOTT: I think that implies the same thing, a
14 more accurate picture.

15 MR. HUTCHINS: The next source of instability:
16 differing values. We took a look at three process components in
17 which we valued fundamentally different things, how much, and
18 when, the why and what essentially, the acquisition how, and we
19 looked at the three major participants: the work force, valuing
20 these items (indicating); the oversight community, these
21 (indicating); industry, these (indicating).

22 Notice that we picked up the leadership issue in the
23 context of where is the accountability in this picture. Given
24 that, then, what's the -- that's the statement of the problem.
25 What's the framework for solution?

1 Well, the framework is to create a structure and
2 process, tying back to the tasker from the deputy secretary,
3 with clear alignment of responsibility, accountability, and
4 authority, which if possible minimizes instability, when not
5 possible manages it, reduces process complexity, adds agility,
6 but still allows risky technology when it's needed.

7 So tying it all together in a logic diagram, you
8 regain confidence by improving DOD's ability to predict cost,
9 schedule, and performance.

10 MR. CAPPuccio: Is that going to regain confidence?

11 MR. PATTERSON: I would answer yes.

12 MR. CAPPuccio: Is it really just to predict the
13 cost?

14 MR. PATTERSON: Then you're back to --

15 MR. CAPPuccio: I don't care. I just want to make
16 sure everybody buys in. I just want to make sure everybody buys
17 in that if we really move towards early prediction of cost, high
18 confidence of schedule, and demonstrated performance, that
19 improves confidence. I just want to make sure I agree.

20 MR. A'HEARN: I guess another way to ask the
21 question, which I think you're correctly posing, is this says
22 the framework for improvement, on the very first line, the way
23 we're going to create the improvement is by a structure and a
24 process. I think what's not clear is the issue that several
25 people have raised: What about leadership and discipline?

1 Don't leadership and discipline also help improve things? Isn't
2 that what this is about?

3 MR. CAPPuccio: The chart before it says
4 accountability.

5 MR. PATTERSON: And it's in the top line. I think
6 I'm uncomfortable with the fact that we have dropped the word
7 "leadership" -- I think we did discuss this the last time --
8 with the intention of repopulating leadership where it would be
9 most effective.

10 MR. CAPPuccio: You could say by improving DOD's
11 leadership ability. You could just add the word "leadership
12 ability to predict," right, because that picks up accountability
13 and responsibility. But it's just not DOD like DOD is
14 something. I mean, DOD is nothing.

15 MR. PATTERSON: DOD does not do anything.

16 MR. CAPPuccio: It doesn't do anything. But there
17 are DOD -- by improving the DOD's leadership ability to predict.

18 MR. PATTERSON: That sounds right.

19 MR. CAPPuccio: I think if you put leadership, then
20 you say somebody's responsible for doing something. Right now
21 we talk about DOD like it's something, like a person that lets a
22 contract. There's some schmuck that lets the contract
23 someplace.

24 GENERAL HAWLEY: None of those five sub-bullets
25 capture what they're supposed to do, in my opinion. The five

1 sub-bullets, the way this reads, are products of this
2 acquisition structure and process, right?

3 MR. HUTCHINS: Descriptors, not products.

4 GENERAL HAWLEY: Descriptors.

5 MR. HUTCHINS: Create an acquisition structure and
6 process which. They're the products of that process.

7 GENERAL HAWLEY: So they're not outputs; they're
8 characteristics?

9 MR. HUTCHINS: Yes, they're descriptors of the
10 process: minimizes instability, manages it where you can.

11 MR. CAPPuccio: All verbs.

12 MR. HUTCHINS: Yes.

13 MR. CAPPuccio: They're all verbs.

14 GENERAL KERN: What we don't have in there is what
15 we added up in the front, though, about buying the right stuff.

16 MR. HUTCHINS: The top-level solutions are the right
17 products. If you create a process and structure which does
18 this, then the products it should produce are your top-level
19 solutions.

20 MR. PATTERSON: Just for a second I want to move
21 past the buying the right stuff. I'll tell you what my thought
22 on it was. If you have a program that's performing to a
23 requirement, can you possibly -- is it possible to still not be
24 buying the right stuff?

25 MR. CAPPuccio: Yes.

1 MR. PATTERSON: You've established a requirement.
2 You've established a requirement, you're performing to
3 requirement. Now what's wrong with that?

4 GENERAL KERN: It took you too long and the
5 requirement went away.

6 MR. PATTERSON: Ah, that's schedule. That's
7 different. That's not the wrong stuff.

8 GENERAL KERN: No, it's not schedule.

9 MR. PATTERSON: But it's not the wrong stuff,
10 though.

11 MR. HUTCHINS: You're changing the requirement.
12 You're driving it, and this thing manages instabilities and
13 accommodates it when you can. Sometimes you can't. Sometimes
14 the world changes.

15 MR. PATTERSON: But we talk about that.

16 MR. CAPPuccio: Is there a way in this deck of
17 charts to address buying the right stuff?

18 MR. HUTCHINS: Absolutely. You have to get through
19 the rest of the deck.

20 MR. CAPPuccio: Okay, but let's not use it.

21 GENERAL HAWLEY: The banner on this chart says our
22 whole framework is based upon better prediction.

23 MR. CAPPuccio: That's what I was having a problem
24 with before.

25 GENERAL HAWLEY: That's a part of it maybe, but it

1 ain't the whole thing.

2 MR. HUTCHINS: Tell me what you want changed?

3 GENERAL HAWLEY: Well, we're trying to get to that.

4 MR. CAPPuccio: Aren't you saying if you execute the
5 above, if your process achieves the seven points, you should
6 regain confidence in the acquisition process?

7 GENERAL KERN: Regain confidence, period.

8 MR. CAPPuccio: But if you really do this, if you
9 improve leadership, minimize this, the net result is --

10 MR. PATTERSON: Regains confidence.

11 MR. CAPPuccio: -- you should just regain comfort.

12 MR. PATTERSON: That's right, the goal is achieved.

13 MR. CAPPuccio: You could say the goal of regaining
14 confidence is achieved.

15 GENERAL KERN: Why not just leave it the way it
16 says, the goal is to regain confidence. It's a positive
17 statement, not the passive statement that you changed it to:
18 become a bureaucrat.

19 MR. CAPPuccio: Fine. I'm trainable. Some people
20 would argue that.

21 Is it the goal is to regain or regaining confidence
22 is achieved? What drives them to action? Pick it. I don't
23 care.

24 MR. PATTERSON: I would like to think that by doing
25 these things we will have achieved some positive end state, and

1 if our goal is to regain confidence then we ought to say that if
2 you do these things it's achieved.

3 MR. CAPPuccio: Achieves confidence or regains
4 confidence.

5 GENERAL HAWLEY: Could I back up to the five
6 sub-bullets? I know you guys spent a lot of time working on
7 this, but reduces process complexity, and it rounds into
8 complexity theory. But it's more than reducing complexity and
9 restoring unity of effort. Today we don't have unity of effort.
10 We've got this --

11 MR. PATTERSON: Isn't that the leadership bullet?

12 DR. ABBOTT: It's also the authority,
13 accountability, and responsibility bullet.

14 GENERAL HAWLEY: This bullet on allowing risky
15 technology?

16 MR. PATTERSON: What we thought was that we needed
17 to address the issue of we don't want to do all of these things
18 and drive an unreasonable fear of technology risk. We want to
19 say we can still do this and manage to allow some moderate to
20 high-risk technology.

21 GENERAL HAWLEY: Just the phrase bothers me. How
22 about something that says that manages risk, manages risk rather
23 than avoids risk?

24 MR. CAPPuccio: Allows management of risk.

25 GENERAL HAWLEY: Manages rather than avoids risk.

1 MR. CAPPuccio: You're answering an anticipated
2 question. That thing doesn't fit there. You're answering an
3 anticipated question. The anticipated question gets to be:
4 Well, how can you do this without making things riskier? Well,
5 the anticipated question, you can say, well, how can I improve?
6 Suppose someone says: What are you suggesting, I get rid of all
7 the leadership?

8 MR. KOZLOWSKI: The framework for that, though, was
9 different. It may look that way, but it was there to say that,
10 in all this world of complexity and instability and all that,
11 one of the driving factors is technological risk. You don't
12 want to walk away from that. You want to address it. So it
13 allows you to manage technical risk.

14 MR. CAPPuccio: So the phraseology is manages rather
15 than ignores risk. You're never going to ignore risk in our
16 business.

17 GENERAL KERN: What we're trying to say is we want
18 to allow them to take risks.

19 MR. CAPPuccio: That's not what Don said.

20 GENERAL KERN: That's what we were talking about.
21 We don't want to create a system where people are afraid to take
22 risks.

23 GENERAL HAWLEY: Which is part of our problem today.

24 DR. ABBOTT: If you took the first five bullets and
25 said, go implement them, one of the first things you'd do is get

1 rid of risk. Why would you embrace a risky process when you
2 want to do all those five things? The answer is, by the way, we
3 want to do these five things and still have the ability to
4 embrace risky situations.

5 GENERAL KERN: Which would differentiate you from
6 the commercial sector, who wants to minimize risk to make a
7 profit. Don't do something out there that ain't going to work,
8 that nobody will buy.

9 GENERAL HAWLEY: We want to manage technology risk
10 rather than avoid it.

11 DR. ABBOTT: We want to do the top five things above
12 and still be able to manage the risk.

13 MR. KOZLOWSKI: You make conscious decisions about
14 where you're going with technical risk, that's all. They have
15 to be up front. They have to be documented and have their part
16 of the milestone process.

17 MR. CAPPUCCIO: Manage rather than avoid risk,
18 that's exactly it, okay.

19 MR. PATTERSON: Okay.

20 MR. HUTCHINS: Given that, then we went through an
21 exercise where we looked at each of the processes one at a time,
22 and then on the next chart we'll go through each of the
23 constituents one at a time, and these are the top solutions that
24 were developed at the last meeting -- I'll walk around them
25 here -- in a later series of charts, because this gets awful

1 cluttered. I just made one chart for budget, one for
2 requirements, one for acquisition, and put bullets there, so
3 we'd have something to work with.

4 So for budget, the big idea, the top solution there
5 was a separate capital account with management reserve.

6 Requirements, in no particular order: time and
7 resource constrain operational testing; revisit KPPs. This one
8 was a concept of an annual jointly sponsored or conducted AT&L
9 and JROC experiment, but with the realism of an exercise, to
10 evaluate technology, innovative concepts, capabilities, validate
11 requirements, and technical maturity.

12 GENERAL HAWLEY: When I wrote it down I put a big
13 question mark on mine.

14 DR. ABBOTT: You had to be there.

15 GENERAL HAWLEY: I presume I had to be there, yes.

16 MR. HUTCHINS: Let me come back and discuss them.

17 GENERAL HAWLEY: All the service war games today
18 include an evaluation of potential future technology. I play in
19 a lot of them and, believe me, every one of them.

20 GENERAL KERN: This discussion is in the war games
21 they do, but not in exercises. It's to flesh out what's real
22 and what isn't.

23 DR. ABBOTT: It was also not focused totally on the
24 future, but rather on the present.

25 GENERAL HAWLEY: Service war games, you don't have

1 any more pure service war games. It was a tool. So how are you
2 going to do this? You're going to use actual prototypes in this
3 exercise?

4 GENERAL KERN: And bring them forward every year.

5 MR. CAPPuccio: There's not a buy-in on that
6 particular one.

7 GENERAL KERN: What I laid out is what we did to get
8 to our set of experiments that got rid of stuff that wasn't
9 going to work, that was real, not in the computer.

10 GENERAL HAWLEY: The services do that today, too.

11 GENERAL KERN: Not to the extent that they do it by
12 onesies and twosies.

13 MR. CAPPuccio: So what was your thinking here?
14 Your thinking was to somehow flesh out?

15 GENERAL KERN: Well, it gets back to how do you
16 match technologies and requirements in a very regular way so as
17 the environment changes you're testing against scenarios that
18 are current to today's world. You do it in a process that
19 doesn't give you false outlooks on what technologies can
20 actually produce, that gives you a measure of where that
21 technology really is. And yes, it's hard.

22 GENERAL HAWLEY: I think it also pulls you into a
23 very near-term focus, because the things that you're going to
24 bring are things that exist and that have matured to a point
25 where you can actually test them.

1 GENERAL KERN: The set of experiments that we laid
2 out is what we did starting 1994, which ended up in the Blue
3 Force Tracking System, which was fielded in this war on 2001.
4 But it took 7 years of, how do you make a mobile Internet, how
5 do you get the connectivity to those pieces, how do you get
6 through. And you would have never found out half the problems
7 we did unless it was not in the lab, not in a controlled
8 experiment, but in real world exercises.

9 I can give you dozens of examples of things that
10 fell out of that. That was the thought behind of how do you get
11 the requirements, the technologies, and the people to match the
12 environment and the world that we're going to live in. And yes,
13 it requires -- my point was it requires a planning cycle so that
14 you aren't jerking the people in the field around, which we tend
15 to do with a lot of our joint exercises that are not planned out
16 annually, or the technology guys show up at the last minute,
17 throw it at somebody and say: Look, here, go try it. And you
18 have to train people on how to use it, you haven't got the right
19 support for it.

20 So it is a big step, I agree.

21 MR. KOZLOWSKI: You would not have to have a working
22 prototype as we would normally think of it to get in on the
23 action on this exercise. You could simulate it by a number of
24 different techniques. You could bootstrap something together
25 just to simulate the function.

1 MR. CAPPuccio: "Experiment" should be in quotes.

2 MR. KOZLOWSKI: As far up front as you can get.

3 GENERAL HAWLEY: I think we do this. All the
4 services do this today. And why would you want AT&L and the
5 JROC to be the sponsors of this?

6 GENERAL KERN: That was the other piece of how do
7 you get the two communities together. It was in the Packard
8 Commission, but it's never happened. It's not part of the
9 requirement.

10 MR. PATTERSON: There is a criticism that has been
11 persistent and continuous, that is a number of really great
12 technologies have been sent to the field in Iraq and for reasons
13 of ability to train to use them, they use the very surface level
14 of the capability and the whole capability is not realized. A
15 lot of it has to do with sometimes it's too doggone hard to
16 figure it all out on the fly.

17 MR. HUTCHINS: Excuse me, if we can --

18 MR. PATTERSON: These kinds of things can be
19 surfaced.

20 MR. HUTCHINS: The pizza is going to come. I'd like
21 to get through the remainder of the key brief because we're
22 going to go back and look through these things and pick up on
23 these ideas. As I told you earlier, a lot of these things when
24 you start looking at them really need to be linked together with
25 a number of other ones before they make a lot of sense.

1 GENERAL KERN: An issue to think about is how do you
2 have a paper process for demonstrating JCIDS joint.

3 GENERAL HAWLEY: I think all the services are doing
4 these annual events where they try to get technologists to come
5 to the table with stuff and look at it. The Air Force does, I
6 know that. I think the Army does. I'm pretty sure the Navy
7 does.

8 MR. HUTCHINS: The next one, focus JCIDS on new
9 requirements rather than using it to reevaluate existing ones.
10 Time constrained; replace JCIDS, another thought.

11 The acquisition area, endorsed, but update full
12 implementation of the Packard Commission organizational
13 framework, which is part of the reason we did the verbatim
14 shredded map a little bit later.

15 Emphasize milestone A process.

16 (Slide.)

17 Then we took a look at the participating
18 organizations. The work force, to put something in place that
19 attended to the organization, training, development of the
20 acquisition work force. The idea was to reinstate a service
21 system command at the four-star level and the acquisition work
22 force was in the big "A" conceptualization.

23 Industry, industrial readiness assessment in
24 conjunction with developmental planning for future systems.
25 Again, a lot of these things we need to tie together with

1 multiple ideas. This links up with the capital funding to
2 really make that work.

3 MR. PATTERSON: And it also links up with RFP and
4 acquisition.

5 MR. HUTCHINS: Yes. We've got the big ideas coming
6 later.

7 MR. PATTERSON: I'm sorry.

8 MR. HUTCHINS: I'm trying to make the point, you
9 really have to start bending these a little differently before
10 the sum of several of them start making a lot of sense. For
11 example, here is one with industry which says assign long-range
12 development planning to this four-start thing we just talked
13 about over here (indicating).

14 GENERAL HAWLEY: What do we have in mind with that
15 four-star?

16 MR. HUTCHINS: This would be each of the services
17 would have Air Force systems --

18 GENERAL HAWLEY: Does this resurrect the old Systems
19 Command?

20 MR. HUTCHINS: And NAVMAT.

21 GENERAL KERN: Or do it like the Air Force and the
22 Army right now, not create a separate one. But the one that has
23 the biggest challenge right now is the Navy, that has three
24 separate commands.

25 MR. PATTERSON: In discussing this with Admiral

1 Mullens yesterday I said: And oh, by the way, one of the things
2 that we're considering is to resurrect the four-star billet and
3 the System Command. He said: Oh, that would get us right in
4 the middle of the requirements again and it would tend to bring
5 acquisition and requirements together. And oh, by the way, we
6 probably could manage the work force better with a four-star in
7 charge than a bunch of others. Good idea.

8 MR. KOZLOWSKI: That was one of the reasons for
9 doing this, was to give some topic for referral for the
10 acquisition requirements.

11 MR. PATTERSON: Well, I watched it and I thought it
12 was a mistake to get rid of Systems Command.

13 GENERAL HAWLEY: I agree, because if we're saying
14 what Paul says, it's not a new command, it's the current
15 alignment wherein the Air Force AFMC and in the Army AMC --

16 MR. PATTERSON: Well, when we get through this we
17 may want to discuss this. This is a real big idea.

18 GENERAL HAWLEY: A real big idea.

19 MR. PATTERSON: And how do you do it is going to be
20 very key.

21 MR. CAPPUCCIO: But this is an idea that's doable.
22 This is a doable idea.

23 MR. PATTERSON: Absolutely.

24 MR. KOZLOWSKI: The corollary that I want to mention
25 before I forget it, that came out of Krieg's discussion. I

1 posed the question, would he be interested in taking PAE under
2 his jurisdiction, at least part of it, and that got sort of a
3 mixed reaction. But he did say that he could see --

4 MR. CAPPuccio: It wasn't mixed. He said no.

5 DR. ABBOTT: Except that, if you do the following.

6 MR. KOZLOWSKI: But he also said as part of that, in
7 the second breath he said, he could see where you could get rid
8 of programs.

9 MR. CAPPuccio: The who?

10 MR. KOZLOWSKI: Programs. And I need to understand
11 what he meant by that.

12 GENERAL KERN: I'll tell you that the guy to bring
13 in right now is the Army programmer who is trying to eliminate
14 this organization.

15 MR. CAPPuccio: What programs are you talking about?

16 GENERAL KERN: The guys who are building the POMs.

17 MR. CAPPuccio: Oh, the POMs.

18 MR. PATTERSON: The program operational memorandum,
19 we just call it operational memorandum.

20 MR. HUTCHINS: In the oversight area, the very top
21 level is push ACAT levels down. for example, from the service
22 acquisition level. Change the oversight environment from
23 regulatory compliance to decision support, and there's a way to
24 mechanize this.

25 The third bullet there is the space way of doing

1 milestone reviews.

2 Now, in addition to these, which map regularly to
3 the three processes and three owners, there are --

4 (Slide.)

5 -- some kind of global big ones. This is, the top
6 one is clarify, clean out, realign the joint OSD and service
7 secretary staffs, make them rational. So I guess a better word
8 is "rationalize".

9 Connect the OSD and service S&T processes to product
10 development. You heard Tom Killion talking at length about
11 those sorts of issues this morning.

12 Put ATL somehow in the requirements process. Of
13 course, you can look at it the other way around, as somehow put
14 the requirements process in ATL. The idea of linking these two
15 things, which now seem to be diverse.

16 Increase the role of COCOMs in big "A" Acquisition;
17 categorize ACATs differently, some method of categorizing
18 programs other than just pure dollars that would require OSD
19 milestone review, as opposed to service secretary milestone
20 review and approval.

21 Acquisition strategies need to be improved is the
22 entire set of things that come under acquisition strategy, from
23 creating strategy and providing strategy guidance to programs
24 early.

25 GENERAL KERN: You've got to figure out a better way

1 of saying it. That's a motherhood and apple pie statement.

2 MR. HUTCHINS: Which one is?

3 GENERAL KERN: Acquisition strategies need to be
4 improved. You're implying 100 things you have in mind, but it
5 doesn't say anything specific.

6 MR. HUTCHINS: You're exactly correct. With these
7 top-level statements we had last time, there are a lot of them.

8 MR. KOZLOWSKI: They're all placeholders needing
9 improvement.

10 MR. HUTCHINS: Before we can write, we need to
11 develop all the detail.

12 GENERAL HAWLEY: I think your third bullet is much
13 too narrowly focused as well. I think it's much broader than
14 ATL being in the requirements process.

15 MR. HUTCHINS: Yes.

16 GENERAL HAWLEY: It's getting the technologists and
17 the program offices connected to the requirements process.

18 MR. HUTCHINS: Again, that's absolutely true. Let
19 me get to this last bullet because that ties in with another
20 bullet I need to make. The last one is flexible process for
21 maturing KPPs and their values. Now, you see that as a global
22 idea this is very simple. We've got KPPs here and we've got
23 KPPs over in requirements. We've noted that in a number of
24 cases all we have are a few words to capture top-level thoughts.

25

1 GENERAL HAWLEY: Have we got the nerve to just say
2 get rid of KPPs?

3 MR. CAPPUCCIO: Why did they come to be?

4 GENERAL KERN: Because we have too many
5 requirements. The way the KPP came to be is you had a list of
6 100 requirements and it's what are the ones that you're going to
7 kill the program on. That's the question.

8 GENERAL HAWLEY: We wanted a program killer in the
9 requirements list.

10 DR. ABBOTT: And gave the requirements people the
11 ability to hold the program to the five or six or something
12 items.

13 GENERAL HAWLEY: And the testing community, who
14 said, what do we test to.

15 MR. CAPPUCCIO: If you have to make compromises,
16 don't make them there. So there are positive aspects.

17 DR. ABBOTT: But the problem is they took on a life
18 of their own, to the extent that even when compromise within the
19 KPP is obvious it almost is impossible to execute.

20 GENERAL HAWLEY: I'd like to just say kill them
21 because I think they tend to try to remove judgment from the
22 process.

23 MR. PATTERSON: But there needs to be some sort of
24 criteria or condition that you run up against that if you can't
25 do it you will choose a different alternative, or that drives

1 you to a different alternative.

2 MR. CAPPUCCIO: What you're saying is you want a
3 definition that constitutes performance.

4 GENERAL KERN: Besides everything.

5 MR. CAPPUCCIO: Yes, besides everything.

6 GENERAL HAWLEY: The concept of KPP is if you can't
7 make this level of performance on this system attribute we don't
8 want the system.

9 DR. ABBOTT: That's essentially it.

10 GENERAL HAWLEY: That's essentially it. I argue
11 that you don't know that at the point that you're trying to
12 establish these KPPs.

13 MR. KOZLOWSKI: Well, that's essentially the issue.
14 Maybe you don't nail these down until you get past, what did we
15 say, CDR.

16 MR. PATTERSON: Yes.

17 MR. KOZLOWSKI: Which is quite late as compared to
18 where it is today.

19 GENERAL HAWLEY: It's an attempt to remove judgment
20 from the process.

21 MR. KOZLOWSKI: I agree with you, maybe we should
22 get rid of it. There is this threshold mentality that, hey, if
23 I can't reach this I've got to bail out of this program. But
24 they really were a substitute. People have taken them as sort
25 of a fixed price contract, you either do this or you're dead.

1 There has to be some room for negotiation, and that's how we got
2 into this from an acquisition standpoint.

3 The KPP community gets so intransigent that you'd
4 rather fight a multi-year battle.

5 GENERAL HAWLEY: We've got 10 or 15 year duration
6 programs. We established KPPs in about year two, and they
7 become inviolate. So three generations of leadership later is
8 supposed to be held to this set of judgments that were made 10,
9 12, 13 years previously. It doesn't make any sense.

10 DR. ABBOTT: But one of the drivers for the KPPs
11 besides what you've described is what they're supposed to be was
12 a contract between a requirer who was going to go away or change
13 and the acquisition community, the little "a".

14 GENERAL HAWLEY: And I would argue that the requirer
15 who set that KPP is in no better position to decide whether or
16 not that's valid.

17 DR. ABBOTT: Well, yes, but most of the programs
18 that we've reviewed have five to seven.

19 MR. PATTERSON: With the exception of some that have
20 14 to 19.

21 DR. ABBOTT: Well, that's understandable. If it's
22 going under water, I want lots of KPPs, okay. There ain't no
23 parachutes under the water if it don't work, no ejection seats,
24 guys.

25 GENERAL HAWLEY: Gerry, you have great sympathy with

1 the Navy. I understand that. But 17 is too many.

2 DR. ABBOTT: It's not too many. I want lots of
3 KPPs. But regardless, most of them were in the seven to eight
4 range.

5 MR. HUTCHINS: To bring everybody back to where we
6 are --

7 MR. PATTERSON: We need to move along.

8 MR. HUTCHINS: This is an impossible task for this
9 group.

10 This is where we are. We have made some
11 improvements as we have gone along, gone through what the first
12 cut solutions are. Now, the work is review these first cut
13 solutions and going through all these things here to aid
14 memories, to pick up the things which everybody has been
15 pointing out that we missed in the first pass through here.

16 What we need to try to do is to get this list of
17 first cut solutions updated, to add what's been missed, to
18 clarify the things that are a bit broad and vague right now.
19 What I'd really like to try and get done by the end of our
20 meeting is to start bending those into where they line up with
21 these top things.

22 So that's the work that's before us. Now I
23 understand, I think, that the IRT wants to talk to us.

24 MR. PATTERSON: Is the pizza here on schedule?

25 MR. HUTCHINS: I beg your pardon? I don't know if

1 the pizza's here, but the IRT says they're ready to brief out.

2 GENERAL HAWLEY: Can we take a five minute break?

3 MR. PATTERSON: Yes, we can. Yes, we can. Here's
4 something also to think about, that we are now at a point where
5 we're bumping up against concepts that do in fact by their very
6 nature if we modify them drive the system. You said you assumed
7 that we have a 13-year, only because historically you are right,
8 a 13-year program. What if you decided, I'm not going to do
9 that, I'm not having a 13-year program; I'm having a much less
10 in my time frame.

11 GENERAL HAWLEY: We've got five and six-year
12 programs, I don't like KPPs any better.

13 MR. PATTERSON: No, no. But you make a decision
14 whether or not your CDR comes sooner and you make a decision as
15 to whether or not that's actually the alternative that I want
16 or, not that I want, but that makes sense. Yes, I like that
17 idea.

18 MR. CAPPuccio: I don't mind an exit criterion on
19 the CDR that incentivizes them. It's having them so early in
20 the program you don't even know.

21 (Recess from 12:34 p.m. to 12:42 p.m.)

22

23

24

25

1 AFTERNOON SESSION

2 (12:42 p.m.)

3 MR. WAY: We all have meetings for later in the
4 afternoon.

5 MR. PATTERSON: We're going to listen fast if you
6 talk fast. But if we get done listening before you get done
7 talking, we're going to have pizza. Go for it.

8 IRT OUT BRIEF

9 MR. WAY: Good afternoon, everybody. We have a
10 quick report out. We spent the morning taking the two tasks
11 that you've given us from the last meeting. As you might
12 remember, the last time you were asking us to go back to pre-A
13 and A milestones. We'll try to be a little bit more definitive
14 as to what robust looks like, try to talk to intended and
15 unintended consequences as we begin to flesh out what this
16 process would look like in greater detail, and then finally how
17 would we help or what would the process look like if the deputy
18 secretary would be able to implement or monitor whatever we've
19 been working on. So that's been our focus for the morning.

20 I don't know if we have Peter Chou on the phone.

21 DR. CHOU: I'm on the line.

22 MR. WAY: Hello, Peter. Peter's here from Berlin.
23 He's been with us this morning on the phone. I don't know if
24 Tom Heinsheimer's also there.

25 MR. PATTERSON: Tom?

1 (No response.)

2 MR. WAY: Tom has been with us off and on through
3 the morning as well.

4 From that point, I'm going to turn it over to
5 Joanne, who will give you the macro overview of what the process
6 piece that we've been speaking to.

7 MS. SCHOONOVER: The process or the discussion that
8 we had this morning is what's outlined over here in the pink
9 writing. So first a summary of what we think the pre-milestone
10 A activity looks like, as well as another question we got into.
11 We got into the between milestone A and milestone B, because we
12 quickly realized, of course, that you can't just concentrate on
13 A without giving it the flow up to instituting a real program at
14 B.

15 We have a straw man idea of what does that robust
16 process look like, and that's some of the charts over on this
17 side, as well as discussed some of the unintended as well as the
18 intended consequences, we hope, of those activities. I'm really
19 counting on the rest of the team to kind of jump in here at
20 some point in time.

21 But basically, the rigor on the pre-milestone A
22 activity we think is driven by a couple of things, I'm going to
23 say two primary things right now. One is the money. Got to
24 have a way to fund some of that activity so that we can put --
25 so we have the resources with which to put rigor in that

1 process, to establish some sort of a group, to establish some
2 sort of a funding stream that's not going to get siphoned off
3 the way advanced studies tend to do when you come down to crunch
4 time at the end of putting the budget together in December, but
5 establish some sort of an entity -- this is the second one.

6 So you establish some sort of an entity separate
7 from any specific program office that would conduct this
8 pre-milestone A activity. The reason for that is if you put it
9 in a program office it comes out looking remarkably like the
10 next version of whatever that program office was established to
11 do. Or if you put it in a service, the answer comes out looking
12 remarkably like an airplane if it's in the Air Force, or a ship
13 if it's in the Navy.

14 So the idea is to take it out, make it as joint as
15 possible, and make it separate from a program, a specific
16 program, and make it -- and fund it, so that you can have in
17 there not only your requirements guys, but your budget guys.
18 This is critical so that you get some commitment to some sort of
19 a funding level to at least get it through the milestone B
20 decision point.

21 So you have in there some sort of a program
22 management, acquisition flavor guys, your requirements guys,
23 your budget guys. We recommend getting some representation from
24 the test community in there so that they understand what the
25 requirement analysis, what the capability that you're analyzing

1 here.

2 The idea here at the end of milestone A is to come
3 up with a proposed solution set, not a thing, not anything that
4 looks like a program yet, but just a proposed solution set. We
5 have this requirement, because they're going to deal with the
6 non-material solutions first, of course, as well as some
7 material solutions, "solutions" being plural.

8 So at the end of A, we still think it's important to
9 have some options. Then between A and B is when you start
10 looking at the technology risk and other things and start
11 refining what those risks are. At the end of A you come out
12 with a solution set. Between A and B you assess the risks, and
13 then at B you start your real program.

14 MS. DAVIS: Then the DEPSECDEF would actually
15 require his top people who are going to be involved in this
16 program, in other words his acquisition executive, his under
17 secretary for acquisition, his comptroller, requirements and
18 testing community, and even the PA&E, independent cost analysis
19 group, to sign up for this, for these people to get together, to
20 agree to a pre-program strategy and a program strategy, have a
21 meeting, sign on the bottom line, the dotted line, like it's a
22 contract, an internal contract, so that the next day they can't
23 walk away and do something else. They can't change their
24 requirement, they can't not fund it.

25 MR. CAPPuccio: Let me ask you a question. The

1 solution set may mean different things to your team. I'm just
2 hearing "solution set." Part of the attractiveness was not the
3 solution set, but how a solution -- you may put four people on
4 the contract who have solution differences. I thought one of
5 the things we were striving for was how do we not lose the
6 acquisition strategy associated with putting people on the
7 contract for the solution?

8 I'm not sure whether what I'm hearing you telling me
9 is you have a more sophisticated AOA.

10 MS. SCHOONOVER: Yes, that's part of it.

11 MR. CAPPuccio: If you've thought about a more
12 sophisticated AOA, that's one part of the equation. Where do we
13 pick up a more sophisticated acquisition strategy? Where do we
14 pick that up?

15 MS. CLIATT: You mean in concept development?

16 MR. CAPPuccio: Yes.

17 MS. CLIATT: We would consider that you have to have
18 an acquisition strategy as part of your milestone A.

19 MR. CAPPuccio: No, the question is where do you
20 pick up an acquisition strategy, so that when you go to
21 milestone B you don't get in trouble?

22 MR. DIAMOND: It's got to be established that
23 milestone A, the acquisition strategy has to be robustly defined
24 between A and B.

25 MR. CAPPuccio: I just want to make sure that we

1 don't lose -- one of the attractivenesses that you offered
2 before and what we're coming to in other parts of the committee
3 is we're searching for an acquisition strategy up front that
4 catches a lot of the problems we see downstream -- requirements
5 creep.

6 MR. DIAMOND: Risk reduction.

7 MR. CAPPuccio: Cost, the contractor is lying about
8 costs.

9 MR. DIAMOND: Exactly, exactly.

10 MR. CAPPuccio: When you talk about the proposed
11 solution set, the question then gets to be contractors at B can
12 still bid a 20-80 solution. We're trying to figure out how to
13 stop them from bidding 20-80. How do you stop them from bidding
14 20-80?

15 One way of stopping them says: I'm going to buy a
16 cup for 15 cents, and then the reason I pick Hawley's cup over
17 Frank's cup, very simple: He showed me; he built two cups. You
18 haven't built any, Frank. And by the way, the cup he has, when
19 I put my hand on it I don't burn it.

20 That's what we're trying to get to. I don't want to
21 lose the fact that we're not looking for a more sophisticated
22 analysis of alternatives.

23 MS. DAVIS: We had talked about having an
24 independent assessment team to advise the acquisition executive
25 on different alternative approaches and also to look at what the

1 program or project manager is coming in with and giving an
2 independent assessment of the risk. But one of the things we
3 had discussed in the approach -- and I actually like the idea of
4 saying to the contractors, we've got X amount of money --
5 they're going to find out anyway. We've got X amount of money.
6 We've got this mission requirement. What can you give me for
7 that amount of money?

8 But we don't want to lose the innovation. We don't
9 want to say, we've got this amount of money, we want one cup
10 that looks exactly like this. We don't want to stifle industry
11 innovation.

12 MR. CAPPUCCIO: No, I agree.

13 MS. SCHOONOVER: We didn't discuss specifically
14 contractor motivations. We discussed government processes.

15 MS. DAVIS: So we liked the idea of this independent
16 group taking a look at it, but we don't want to add -- one of
17 our fears was adding to the bureaucracy. In order to get more
18 rigor into milestone A, we thought, oh, let's not create another
19 bureaucratic mess.

20 Now, a lot of documents -- we reviewed the
21 regulations, some of them, and a lot of things are already
22 required, but the meeting is not always -- in fact, it hardly
23 ever happens at the OSD level. You hardly ever have a milestone
24 A decision meeting. So we wanted to keep that meeting. We want
25 to have the rigor because the parties, the stakeholders coming

1 in, actually sign an internal contract.

2 GENERAL HAWLEY: When does he sign this contract?
3 Is this an entry to B contract or entry to A?

4 MS. DAVIS: Entry to A.

5 GENERAL HAWLEY: So this happens pre-milestone A.

6 MS. DAVIS: Yes.

7 MS. SCHOONOVER: Or it's signed as a result of the
8 milestone A at that point.

9 MS. DAVIS: But then we would get rid of some of the
10 existing bureaucracy. Our vision is to get rid of the IPTs and
11 the OIPTs and all of those meetings that have just grown and
12 grown and grown, that used to be a kind of an oversight and
13 helping thing, but now have become directional and
14 consensus-based, so that the program manager in this day and age
15 has got so many reviews, so much documentation, and so many
16 different people telling him what to do from their own
17 perspective.

18 So that's what we wanted to get rid of.

19 MR. PATTERSON: I'm having trouble with, you talk
20 about what you propose and that you don't want to call it a
21 program, and yet all of your vocabulary that you use to describe
22 it is within a program construct. I don't have any problem with
23 the program construct. I don't have any problem at all with
24 saying at milestone A we have a program and this program has
25 these conditions that need to be dealt with over the next three

1 years.

2 MS. DAVIS: We discussed that. We talked about
3 calling it something else, a concept management.

4 MR. PATTERSON: Why? Why? Program is fine.

5 MS. DAVIS: Well, that's what we finally came around
6 to, just call it program.

7 MR. PATTERSON: The world is focused on "program."
8 If you want to make something real, you call it a program and
9 you fund it. That's what you do if you want to fund something.
10 So you lost me when you didn't want to call it a program.

11 MR. DIAMOND: Pre-milestone A, you've got the
12 requirements folks, the technical folks, the budget folks, and
13 some number of program folks that are putting together the
14 strategy that's going to occur at milestone A, between milestone
15 A and B.

16 MR. PATTERSON: Okay. We're with you there.

17 MR. DIAMOND: So that you have sufficient rigor in
18 that, the things you're doing, that acquisition strategy, that
19 gives you the confidence to go into B, to go ahead and carry
20 that out, and reduce the risk associated with the program and
21 the funding associated with that.

22 MR. CAPPUCIO: The problem I have is everybody has
23 the confidence to go into B, so everybody confidently goes into
24 B and they overrun it. What I'm trying to do is say I want
25 certainty, maybe not just confidence, but we want to go into B

1 with a set, with an acquisition process, or at least an
2 evaluation process, that says this is not about confidence, this
3 is about absolute certainty that the money that's there can give
4 me the product that I want.

5 Not that I'm overly optimistic about the money and
6 I'm praying that some contractor is not going to either
7 underestimate, overestimate. This is not about credibility or
8 confidence. I don't think -- we go into every one of our
9 programs with a high degree of confidence.

10 MR. DIAMOND: But we don't have the rigor in front
11 of the program to give us that confidence, though.

12 MR. CAPPuccio: Right.

13 MR. DIAMOND: That's what I'm saying.

14 MR. CAPPuccio: What do we have to come to? What do
15 we have to do?

16 MS. SCHOONOVER: One of the things -- and you want
17 to talk about this -- is replacing the IPT, the IPT structure,
18 with an independent assessment team.

19 MR. CAPPuccio: "IPT" is?

20 MS. SCHOONOVER: First of all, it's not permanent
21 staff.

22 Why don't you go ahead.

23 MS. CLIATT: Well, the idea is based on what the
24 space folks have done with NSS-301, where you have -- instead of
25 having to go through a consensus-building exercise with the OSD

1 staff to get to a milestone, instead of those people being door
2 trolls -- no, you can't go to a DAB because you haven't
3 satisfied me -- you have instead the program manager, whoever
4 requests a milestone review, and the MDA says: Okay, I'm going
5 to pick Mr. Patterson to be the IPA lead and he's going to put a
6 team together and he's going to assess the program's plan and
7 their state of affairs, and make a determination as to whether
8 they're ready to proceed to the next milestone and make
9 recommendations to the MDA.

10 MR. CAPPUCCIO: Who develops the criteria to drive
11 the program plan? I want to review quality in a plan. Who
12 drives what the plan absolutely has if it's successfully
13 executed, gives me the confidence?

14 MR. DIAMOND: The MDA's going to drive the plan, and
15 it's going to be put together by the program management team.

16 MR. CAPPUCCIO: That's the exam question, not review
17 somebody's plan. We're trying to make it so that the guy has no
18 wiggle room under the plan, other than for technical problems.

19 MR. DIAMOND: You really have to sufficiently
20 identify as best you can prior to milestone B the activities
21 that are going to reduce your risk going into development.
22 That's not been done in the past. You've got to sufficiently
23 establish and understand what the program is, have the budget to
24 execute in that -- well, following milestone A, prior to
25 milestone B, the activities that are going to give you that

1 confidence.

2 MR. PATTERSON: I'll tell you that one of the
3 things, something that's a little bit confusing -- everything
4 you've said we've talked about and we are in agreement in some
5 sequence. What I'm missing here is, first of all, I don't want
6 to talk about milestone A. I want to talk pre-milestone A.
7 What do you think about pre-milestone A? Tell me your
8 pre-milestone A world, and then we'll go to milestone A and the
9 conditions to make milestone A and go forward. Then we'll talk
10 about the area between milestone A and milestone B and how you
11 go to milestone B.

12 I realize it's our fault because we kind of gave you
13 a bunch of questions. But I'm going to be very serial here.
14 Pre-milestone A, tell us what you think.

15 MR. DIAMOND: Requirements and acquisition.

16 MS. SCHOONOVER: And budget.

17 MR. DIAMOND: And budget, all together in a singular
18 meeting.

19 MS. SCHOONOVER: And the joint guys. We want a
20 joint guy in there to look at joint opportunities.

21 MR. DIAMOND: Right.

22 MS. SCHOONOVER: And testing. And these guys come
23 together and leading up to milestone A they develop a concept
24 for a program, and they agree basically what it's going to be
25 about, what the activities between A and B are going to be, what

1 it's going to cost, and how will we test it, how will we measure
2 it.

3 They all agree what their own part of that piece of
4 the pie is and they agree to defend it.

5 MR. CHOU: And you do the trade analysis, the
6 fiscally informed trade analysis, in that pre-milestone A as
7 well.

8 MS. DAVIS: Right.

9 GENERAL KERN: Who's leading this? Who's the leader
10 of the pack?

11 MS. DAVIS: Well, we didn't discuss a lead at that
12 point, although we probably should. But at the milestone A
13 decision, a program manager is appointed to become the lead for
14 executing the --

15 GENERAL KERN: I thought that was pre-milestone A,
16 you described it.

17 MS. CLIATT: We talked about who it shouldn't be.

18 MS. SCHOONOVER: Yes. One of the suggestions -- we
19 didn't come to any kind of consensus conclusion on this, but one
20 of the concepts was to establish, once again to establish this
21 group, organization, outside a program office, without specific,
22 outside any program office so you don't end up with the same
23 thing, outside of the services, really put it in a joint type of
24 an environment.

25 One of the thoughts was to put a GO in charge so

1 that you don't have colonels who are trying to make GO competing
2 to sell their idea. Rather, you have someone in charge who's
3 going to take a more strategic look at these and whose goal is
4 to provide capability to the services as opposed to programs, to
5 keep the focus more on capability as opposed to specific
6 solutions.

7 MS. DAVIS: We didn't discuss where in the
8 organization that person would be located. That would be worth
9 some discussion. Is it going to be in the requirements group?
10 Is it going to be in the acquisition group, R and D? Where is
11 it going to be? We didn't get that far in our discussions. So
12 we throw that one over to you.

13 MR. HUTCHINS: What causes this process to start?
14 What causes these groups of people to come together?

15 MS. DAVIS: Well, again we didn't really discuss
16 that, but a lot of things. I think the technology development,
17 we did talk about the problem that we have transitioning
18 technologies, like on the ACTD program, the Advanced Concepts
19 Technology Demonstrator Programs. One of the nice things about
20 setting up a joint acquisition command is that would give the
21 perfect place for the transition of that technology to a command
22 that is then going to execute it and deliver something to the
23 warfighter. Right now we have a breakdown after we get some
24 technology and then try to get it into a service or into -- we
25 have COCOMs who want it, but we can't get a service to execute

1 it.

2 MR. CHOU: There'll be two components, right?
3 There'll be a technology push, in which case that could come out
4 of DBR and A or AP and L. But probably the bulk of it will come
5 as a requirements pull, whatever your requirements system is,
6 that once they get through the requirements generation process
7 that ends up saying that, we're not going to solve this problem
8 with doctrinal change, is that there is potentially a hardware
9 solution to this problem, that then triggers this pre-milestone
10 A process.

11 MR. PATTERSON: Would it be reasonable to say that
12 it doesn't matter where it comes from, where a need comes from,
13 but that the need must be presented with certain words, certain
14 vocabulary, that identifies it as a need, so that we don't care
15 where it comes from. It could come from a service AP and L, it
16 could come from the COCOMs. It doesn't matter. But that it
17 must have some sort of characteristic that allows it to get into
18 the process.

19 MR. CHOU: It should have enough, it should have
20 enough -- the calculuses ought to be in some way that they ought
21 to be robust enough for me to have all those plans that we
22 identified sitting on the table, beginning to flesh it out.

23 MR. PATTERSON: That's right. It has to have enough
24 granularity.

25 MR. CHOU: And not be a very skeletal and extremely

1 nebulous requirement, like some of the things that have been
2 coming out.

3 MR. PATTERSON: That's what I'm trying to get at.

4 MR. DIAMOND: Followed by an independent group who
5 will do the AOA.

6 MR. HUTCHINS: That's what I was really asking.

7 MS. SCHOONOVER: It has to have a separate source of
8 funding, don't forget. Don't miss the funding, because
9 otherwise the funding gets skimmed off. You can't have two
10 services sharing the funding because we've all seen those
11 TRADOCs go: He's not going to fund it, so I'm not going to fund
12 it. They have to have their own separate funding line to do
13 these things.

14 MR. HUTCHINS: That's what I was asking. As I
15 understand what you're saying -- and correct me if I'm wrong --
16 there is some organization, some entity, where all of those
17 thoughts will flow in and that organizational entity then can
18 put funding in that will cause the budget people, requirements
19 people, technology people to come together.

20 So call it milestone zero for want of a better word.
21 Who is, what is, where is that entity?

22 MR. DIAMOND: We described that as a joint
23 acquisition command within OSD.

24 MR. HUTCHINS: So your conceptualization of the
25 milestone B, what we've been talking about here, milestone B or

1 zero or whatever we want to call it, is to implement a joint
2 acquisition command, and they would then be responsible for all
3 program starts?

4 MS. SCHOONOVER: That's one option. That's one
5 option. We want to get it out of the program office, out of the
6 service, someplace else, whether you make it a command or
7 whatever.

8 MR. DIAMOND: That was the thought. That was the
9 thought, yes.

10 MS. SCHOONOVER: There are many ways to do that.

11 MS. DAVIS: And that is in the same train of thought
12 with when General Cartwright says who's in charge and when.
13 You've got this JROC process and you've got this NAV process,
14 and we don't think it makes sense any more to have all these
15 meetings. We think the people really need to come together --
16 well, okay, you might say there's representation of the Joint
17 Chiefs on the DAB and there's representation of the acquisition
18 people on the JROC, but still why are we doing this?

19 We really think it would be a better idea on each
20 milestone to have one meeting and have all the right people in
21 the room and have them all sign their internal contract, have
22 the budget people there, just have the one, do it one time.

23 MR. PATTERSON: I think we're with you. Joint
24 acquisition command. Everything kind of dumps into that. It
25 manages it through to when?

1 MS. DAVIS: It needs to report to DOD in some
2 fashion.

3 MR. DIAMOND: USD AT and L.

4 MS. SCHOONOVER: But wait a minute. I think we have
5 the question of how long. What we discussed was through
6 milestone B, and then at milestone B it goes to --

7 MR. CHOU: It would go to the services, and it could
8 go to another joint entity like NDA that's doing things.

9 MS. SCHOONOVER: Like the JSF. There are a number
10 of models out there. But this group takes it through milestone
11 B. Now, the danger there of course is that you set up a seam.
12 You've got to make sure that the funding is continuous from that
13 activity forward to whatever program execution organization you
14 set up.

15 MR. CHOU: Yes, but in theory you have all the
16 actors, all the budgetary actors, as part of that signatory
17 process, that they are to be involved, from that point anyway.

18 MR. PATTERSON: Actually, what you're describing is
19 ASF.

20 MR. DIAMOND: Yes, that's kind of the model.

21 MR. PATTERSON: You have DARPA that put together a
22 series of studies on lift, vertical lift and how that would
23 work. You also had JAST.

24 MS. SCHOONOVER: Real immediate, yes. But see, even
25 those assumed that it was going to be an aircraft. So the

1 pre-milestone A needs to --

2 MR. PATTERSON: Not make that assumption.

3 MS. SCHOONOVER: Right, not make that assumption,
4 really be dealing in the realm of capabilities, what are we
5 trying to do. We're not trying to deliver a 2,000 pound bomb on
6 this target. We're trying to take out that target.

7 MR. PATTERSON: Long-range strike.

8 MS. SCHOONOVER: Yes.

9 MR. HUTCHINS: In your conceptualization, for
10 clarity of my understanding, using JSF as a model, when would
11 the decision have been made that it was an airplane? Before
12 milestone A?

13 MS. SCHOONOVER: Prior to DARPA, prior to that DARPA
14 effort.

15 MR. HUTCHINS: No, I mean in your milestone A-B
16 construct.

17 MS. SCHOONOVER: Prior to A.

18 MR. HUTCHINS: Prior to A, thank you.

19 MR. CHOU: And that's what you get out of your A.

20 MS. SCHOONOVER: Well, that would be one of the
21 options that would come out of A. Like the long-range strike
22 fighter that we were talking about, one of the options that's
23 going to come out of A if we're doing this today is we're going
24 to do an aircraft. One of the options that's going to come out
25 is a hypersonic missile. One of the options that's going to

1 come out is something else.

2 MR. HUTCHINS: I'm confused again. Now I'm confused
3 again.

4 MS. DAVIS: I would say closer to B. We talked a
5 lot about the milestone A and a half. That is, we want to do
6 milestones, but because of the way that the milestones are
7 structured right now there's a lot that can happen between A and
8 B.

9 MR. HUTCHINS: That was exactly my point, is there
10 is an enormous amount of work to do from the point that it's an
11 airplane to getting the very high content I think we're all
12 looking for at milestone B.

13 MS. SCHOONOVER: Right.

14 MR. HUTCHINS: It's an enormous amount of work after
15 you've made the decision that it's an airplane, really trying
16 to, in your construct of zero, A, and B, wondering when that
17 decision is made.

18 MS. SCHOONOVER: One of the things where this is
19 working successfully now is the Missile Defense Agency, where
20 they have a family of things. They've defined the three: the
21 post-boost, the mid-course, and the terminal phase. They have a
22 number of programs that are being evaluated within each of
23 those. So that's another way to do it. That's why you don't
24 have to come out with one solution at the end of milestone A.
25 You can have a solution set that further gets developed and

1 defined and analyzed before you get to milestone B.

2 MR. KOZLOWSKI: That's true, but in some defense
3 industrial entities they treat each one of these individual
4 solutions as an pseudo-program.

5 MS. SCHOONOVER: Right. Of course they do. Of
6 course they do.

7 MR. DIAMOND: In my mind you can have two or three
8 solutions that you can take, too. But in my mind what we were
9 describing was a known solution at milestone A, so you can
10 vigorously lay out an acquisition strategy and when you get to
11 the B decision you've got the highest level of confidence.
12 That's my understanding.

13 MR. KOZLOWSKI: Where do you see the science and
14 technology, the early 6.1, 6.2 guys, interfacing in this thing?

15 MS. SCHOONOVER: The pre-A, of course.

16 MR. KOZLOWSKI: Very early?

17 MR. DIAMOND: I think in concept exploration, the
18 early concept in terms of looking at various solution sets.

19 MR. KOZLOWSKI: But they're not necessarily a
20 signatory to this milestone A.

21 MS. SCHOONOVER: No.

22 MR. DIAMOND: No. Independent.

23 MS. DAVIS: I think they could be, like in the
24 example of JSF, and maybe there are certain times when they
25 might be. But in general, no. It would depend.

1 MR. CHOU: You would have to tell me why not,
2 though. If you're asking for some sort of technical part of the
3 analysis with technical rigor and whether it is in the area of
4 the achievable, and aren't they the community that's going to
5 sort of tell you, hey, I'm the guy that, yes, we can deliver
6 that technology on time, it's there, it's within reach, it's
7 here on level blank. We're the community that's going to tell
8 you that.

9 MS. DAVIS: Well, technically they look at things 20
10 years out.

11 MS. SCHOONOVER: Well, but they also, they could be
12 part of that independent assessment team.

13 MR. PATTERSON: I think that their responsibility or
14 obligation may not need to be any more, have any more fidelity
15 than there is clearly a need to place greater emphasis in the
16 process on pre-milestone, milestone zero to milestone A, and the
17 deliberative process that takes place after milestone A in terms
18 of technology development and that the how's of this process are
19 open to a lot of different alternatives, but that what has
20 happened historically is that we have failed to put the emphasis
21 up front where it needs to be. Consequently, you get all manner
22 of confusion and discontinuity in requirements and how the
23 requirements have been satisfied with capability, and we fall
24 down to immediately go to the default position, which is, oh
25 well, that's an airplane or it's a ship.

1 Have I kind of captured that?

2 MS. SCHOONOVER: Right.

3 MR. DIAMOND: Right.

4 MS. DAVIS: And by the time the decisionmaker gets
5 involved it's usually milestone B and it's too late to make the
6 decision. The decision has been made.

7 MR. PATTERSON: Although you don't have a program.

8 MS. SCHOONOVER: It's too late to alter the outcome.

9 MR. KOZLOWSKI: But if you're smart you've got your
10 eye on some portion of the wedge.

11 MR. ETHERINGTON: Well, but the issue too is you
12 haven't made the tradeoffs yet in milestone A. You haven't done
13 all of that. So you really can't get everybody in the room and
14 say, okay, this is the program, right. And then you can't go to
15 Congress and say, look, we have an executable program, we've
16 determined this is the capability, this is the money including a
17 management reserve to deal with the risk issues we've
18 identified. Now, next year we're going to ask for this much.
19 The year after that we're going to ask for that much. We don't
20 have a mechanism to formalize this into some sort of a
21 aw, but we want you to keep your hands off of this. We want you
22 to let it go. As long as we are now deviating from what we've
23 presented to you, leave it alone, so that we have, at least for
24 this program, some degree of stability that allows us to manage
25 it and get control of all the things that everybody up here is

1 complaining about.

2 MR. PATTERSON: I think that that's where we are.

3 MR. KOZLOWSKI: This is fascinating. What I'm
4 hearing is we don't need, we don't really use milestone A at
5 all.

6 MS. SCHOONOVER: Right, right.

7 MR. PATTERSON: That's right.

8 MR. KOZLOWSKI: They just said, they just said that
9 you don't really make the fiscally constrained tradeoffs between
10 requirements and money until later on.

11 MR. DIAMOND: Right.

12 MR. KOZLOWSKI: I believe the documents say you're
13 supposed to have all that done by milestone A.

14 MS. SCHOONOVER: That was one of the things we keep
15 going back to. We'd pull up the 5000 one, we'd pull up the
16 stuff off the acquisition desk book, and it's all there, and
17 we'd say: Well, how come? So we kept coming back to, well,
18 what does put more rigor in the process mean, because the
19 process looks pretty darn fine.

20 MR. PATTERSON: Because there's no program.

21 MS. SCHOONOVER: Right, there's no program. There's
22 no entity that's graded on that alone.

23 MR. PATTERSON: I can't fund something that's not a
24 program. I can't talk about it, I can't advocate it.

25 MR. WAY: The discussion really started to turn when

1 we talked where the money was going to go, and it was the money
2 stream that drove the behavior that drove everybody away from A
3 because it really -- so then if you started to say if you wanted
4 to affect it then what would you do to affect the flow of the
5 money stream. That was -- and it's not up here, but some of
6 these things, you've got to be a little bit more open at A in
7 engaging the Congress, and we called the A to B frame a
8 commitment and the B and beyond was investment. The
9 psychological implications of that would drive a different
10 behavior.

11 Since we used the term "tainted money," but money
12 that came from a source that was already in existence, you were
13 driving behaviors that just, yes, you were encouraged to slide
14 past A and jump in in the midstream. So that really started to
15 change some of our discussion.

16 MS. SCHOONOVER: One of the specifics there that we
17 discussed was you probably want to have a relatively small set
18 of flexible PEs, and maybe those PEs are modeled after the FCBS
19 or maybe they're modeled after the road maps, but some sort of
20 set of PEs that are not associated with a specific program.
21 They're a set-aside to be doing this pre-milestone A activity
22 and can support several programs within that portfolio, within
23 that capability portfolio.

24 GENERAL KERN: Two questions on it. It sounds like
25 you don't want the services to play in this at all. Is that

1 right?

2 MS. DAVIS: No, we're going to have services playing
3 jointly.

4 MS. SCHOONOVER: We think they should be joint
5 entities, and there was some discussion about where do you
6 establish, say, an executive agent kind of thing. It's not
7 before milestone, we think not before milestone A.

8 MR. DIAMOND: I think you've got to have agreement,
9 both on the acquisition side and on the requirements side. So I
10 think you need to figure out a way to get that consensus built
11 in up front, so that there is an understanding, whatever happens
12 in the acquisition process, that the service and OSD are in
13 agreement both on the acquisition strategy that is being put
14 forth as well as on the requirements. I don't think you can
15 divorce those.

16 MS. DAVIS: If you have a program -- and we
17 mentioned getting the joint aspect into there, into this team,
18 but also if services, a service or services, are interested in
19 it, then they would be sitting at the table too, if they have an
20 interest in this program. And they may at some point drop out
21 because, no, they no longer have an interest, or they may want
22 to be the service lead on it, or it may be a joint lead. It may
23 go somewhere else. It depends on what happens after milestone
24 A.

25 MR. CHOU: If you want some intellectual competition

1 going on, it's exactly there. It's in that phase.

2 MS. DAVIS: Right.

3 MR. DIAMOND: To have this joint acquisition command
4 or group, whatever you want to call it, we thought provided you
5 the independence a little differently than you have today, where
6 the seed money and all the resources came out of existing
7 program offices and, as Joanne was talking about, having
8 separate PEs to identify, although we don't call it programs
9 today, this program that we're trying to satisfy this need with
10 is already identified earlier on, and you have this independent
11 group actually carrying out the functions of the acquisition
12 strategy.

13 GENERAL KERN: Can we do this on everything?

14 MR. DIAMOND: I'm sorry?

15 GENERAL KERN: Can we do this for everything?

16 MR. DIAMOND: No, you couldn't. You'd have to
17 really decide what the DOD's priorities are and what kind of
18 programs you'd apply this on.

19 MR. PATTERSON: What is the decision point?

20 MR. DIAMOND: You'd have to take a look at where the
21 Secretary of Defense was going with the QDR and what they are
22 putting on the street with the future requirement. So whatever
23 process that was to determine a DOD perspective on what the need
24 was.

25 MS. DAVIS: And there are other good programs out

1 there that we think should be left alone, like the ACD-JCD
2 process, the defense acquisition challenge program, small
3 business innovation research. All those programs, they're fine.
4 Keep those things going.

5 MR. PATTERSON: Because they're all in DDR and E
6 anyway. I'm just saying.

7 MR. DIAMOND: Well, but they're disjointed. DDR and
8 E and the services' science and engineering community are not in
9 sync as to what should be developed and brought along in terms
10 of technology.

11 MR. PATTERSON: Do you know any group of scientists
12 at all who are in sync?

13 MR. DIAMOND: Well, organizationally, if this was a
14 corporation we should be single-minded, or you would hope that
15 we were single-minded on the technology that was going to be
16 important to the warfighter.

17 DR. ABBOTT: The corporate guys are shaking their
18 heads no.

19 MR. CAPPUCIO: You've got the IRAD weenies that are
20 fooling around in never-never land.

21 MR. PATTERSON: I think your instincts are right. I
22 think that there is an institution against which you're butting
23 your heads. There is only one truly focused stationary concrete
24 institution. It's the services. Everybody else is sort of in
25 flux to one degree or another.

1 If you want something done and you're serious about
2 it, you'll give it to a service to hold them accountable.
3 That's why we have executive agents. On the other hand, there
4 are programs that -- MDA clearly jumped over all that stuff.
5 It's a national security issue, not an air or sea or land issue.
6 So we can separate that out.

7 But on the other hand, in those other cases that's
8 got to take some real work. It's not a trivial issue.

9 MR. DIAMOND: Remember, that's where your problems
10 come in because of the independence of the services and the
11 control of the budget. That's where your problems come in with
12 regard to --

13 GENERAL KERN: Are you saying the services are our
14 problem?

15 MR. PATTERSON: Where were you on this, Pierre? Did
16 you author the part about send everything back to the services?

17 MR. CHOU: No. Again, the decisions ought to be
18 done, joint execution ought to be done by the services, exactly
19 because, you know, Hamre's comment that he does truly believe
20 that the one focused institution in the DOD are the services.
21 So the two central concepts were that you jointly determine a
22 requirement and requirements are actually driven by the
23 customer, in that case being the COCOMs and the guys in the
24 field, doing your demand pull. Your technology push comes out
25 of a reinvigorated R and D. It's executed by the services, and

1 you try to get one single button inside the services that you
2 can hold them accountable so you can draw the seam inside the
3 big "A". That's the argument.

4 MR. DIAMOND: A good example of that would be the
5 airborne laser program. The Air Force utilized that as a cash
6 cow, kept kicking the can down the street. It was only when
7 missile defense took it on as a joint program, as a joint
8 requirement, that it got the funding that it needed to carry the
9 program forward.

10 MR. PATTERSON: I would argue that it became a
11 program. Before that it was interesting.

12 MR. CHOU: I think you avoid that problem by giving
13 some -- by granting the PEs a little bit of funding. Whatever
14 the enemy is up front in doing this pre-milestone kind of
15 activity, it gives life to ideas earlier on. It solves a little
16 bit of your valley of death problem that you've got with the S&T
17 community generating all this new stuff that doesn't end up
18 getting anywhere, as well as puts the rigor in there. So that
19 when, by the time you're getting down to your A and a half or B
20 we've quit the thinking and we've got some more commitment.

21 And the incentive for going through this -- there
22 ought to be incentives and penalties. Otherwise, this thing
23 will get gamed and cheated on, like everything else. One of the
24 incentives that I think Jon Etherington mentioned was that if
25 you're sticking to the path we'll leave you alone.

1 MR. PATTERSON: Okay.

2 MR. WAY: I know several people have got commitments
3 they wanted to get to.

4 MR. PATTERSON: I think this was very valuable,
5 because we needed to start to parse the words that each of us
6 were using so that we understood the common ground. I think
7 that you have done exactly what Ron has asked you. You have
8 described an environment where emphasis is placed on
9 pre-acquisition A and A to B. You gave us the thoughtful
10 conditions that bring you from one to the other and a solution
11 set that actually describes what you could do if you chose to,
12 and that's been very valuable and we really appreciate that.

13 Thank you very much.

14 (Applause, the IRT team departs, and recess from
15 1:25 p.m. to 1:44 p.m.)

16 HEINSHEIMER TELECON WITH PANEL

17 MR. PATTERSON: Tom, we have the chart. It's up on
18 the screen. What I propose in the way of an introduction is
19 that we have just had the IRT out-brief their deliberations.
20 How I would characterize this is a complement to the IRT that
21 drills down with more detail into the pre-milestone A
22 activities. Is that fair?

23 MR. HEINSHEIMER: Yes. I think we were not fixated
24 on whether it was pre-A or between A and B. I think that's
25 something that you need a little judgment about. But it was

1 certainly the idea that more system engineering had to be done
2 before big promises were made and big money was spent, and
3 that's probably some in pre-A and some between A and B.

4 MR. PATTERSON: Okay. So we're on slide 1, the
5 title slide, and you can take it.

6 (Slide.)

7 MR. HEINSHEIMER: Well, very good. It's myself, Tom
8 Heinsheimer, and Brian Arnold.

9 The next chart will show you, if you go to chart 2
10 --

11 (Slide.)

12 -- a little wordsmith review of where we ended up
13 with the IRT last time and what our basic premise was. The
14 premise of the thing was that the problems of most of these
15 programs do not occur at the time when all the symptoms occur,
16 when everybody's mad; they occur in the genesis of the program.
17 The problem is that right now the psychology of the genesis of
18 the program is essentially consensus-building, team-building,
19 everybody sort of getting on board, and that as a result the
20 program is usually oversubscribed with requirements and
21 undersupplied with schedule and cost.

22 What we recommend instead is some kind of a process,
23 which we call a collaborative system engineering process for
24 lack of a better term, that spends money, does a real formal
25 system engineering review of the trades of cost, schedule, and

1 mission, and shows people what the benefits and the regrets are
2 of moving from some kind of a sweet spot, that there's some kind
3 of a sweet spot of readiness, where you could have certain
4 missions but if you go beyond that you have a lot of trouble.

5 At the moment there is no formal mechanism that uses
6 established principles and spends money and really focuses on it
7 to show people where the best operating point is, that balance
8 point for a program. As a result, usually the requirements just
9 keep piling up, and by the time it gets to the implementing
10 entities you have something that's virtually impossible, but
11 nobody dares to say so.

12 If you could do, that's the first left-hand box
13 under program definition. The center would then say, instead of
14 putting out a very complicated RFP with all kind of criteria,
15 you would have as a result of the first box some kind of a
16 certified program with a sweet spot defined. People would bid
17 against that and you would choose the prime contractor most
18 likely to achieve it. It would be a risk-based approach rather
19 than liar's dice about cost or schedule or performance. You
20 would define up front the performance, cost, and schedule
21 criteria and then people would bid to it and you would give the
22 award to the contractor most likely to achieve it based on some
23 risk criteria.

24 Finally then, the program execution to try and solve
25 the problem that after the proposal you get a whole new team and

1 nobody ever goes back and looks at what was promised. The
2 program execution documentation defined in the first box on the
3 left would flow through the second and through the third and
4 would be the measure of effectiveness. So you'd have solid
5 milestones not more than a year apart to judge how things are
6 actually going, so the program doesn't get re-baselined the day
7 after the prime contractor wins.

8 So that was the principle of the thing.

9 MR. PATTERSON: I think that addresses a number of
10 issues that we've raised, particularly with regard to liar's
11 dice and re-baselining and reconstructing the program after the
12 contractor is signed.

13 MR. HEINSHEIMER: Well, I think this chart is sort
14 of the key to our whole story. The rest is sort of details, in
15 which you either kind of believe this or you don't. We can go
16 back to programs like SBIRS or FIA or whatever, where you were
17 in the suspension of belief situation. Everybody kind of played
18 the game and ended up going forward with something that, if you
19 really took them aside and said, can this happen, everybody
20 said, well, of course not. And we want to get out of that.

21 MR. PATTERSON: Okay.

22 (Slide.)

23 MR. HEINSHEIMER: Okay. So the next chart, chart 3,
24 says, well, of course as you know, the first two bullets, that
25 those are problems. The third bullet is, well, what do you do

1 about it. That is that there has to be -- and we don't have
2 here a detailed submission of what the administrative process
3 is, but we have sort of a concept.

4 We need some way to certify that the program is
5 actually executable, and the way to do that is to take some
6 money, and we offer one percent as an example, to actually run
7 through the kind of formal system engineering processes that a
8 lot of FCRCs and a lot of the government and the contractors
9 have, but apply too late, in order to trade cost, risk,
10 schedule, requirements, TRLs, what have you, and actually be
11 able to show decisionmakers: Here's the curve; if you add
12 another requirement, here's where you fall off the TRL curve.
13 If you add another requirement, here's what it's going to do to
14 cost, and get people to have a reasonable balance of these
15 things through a formal process, rather than through a delphi
16 process or through a consensus-building process, which is what
17 we do now.

18 So a lot of people will be equally disappointed
19 rather than delighted, but in the end you'll actually have
20 something.

21 The second sub-bullet is there be some kind of a
22 document that would be -- and we call it a PEC, which is kind of
23 a poor acronym, but we had a Program Executable Certification
24 Report, which came out with a worse acronym, so we dropped the
25 "R" -- at some time before milestone B.

1 The people who are the designers, the builders, and
2 the executers sign up for that and say, yes, we can actually
3 implement that program. So whereas now we don't have a
4 situation where the people who have to do it, SMC Aerospace in
5 the case of space, are certifying their program is executable
6 until essentially it's on contract and then it's too late.

7 Then the final sub-bullet is that the contractor
8 selection process is by compliance to the PEC, rather than by
9 saying, I can do it better, cheaper, faster. We just want you
10 to show that you can actually do this and show why your proposal
11 is lower risk, and that there are processes like the SMC
12 Aerospace system engineering process, which I think is a good
13 example but of course there are others, that if you apply to
14 this early enough you could end up finding the sweet spot,
15 getting everybody to agree to it, and then imposing it on the
16 acquisition and deployment of the program.

17 (Slide.)

18 The next chart, chart 4, is sort of another level of
19 detail of how you would actually do that. You'd have some kind
20 of a documentation process, going through some kind of a formal
21 review, that actually spends money and does work. It's not a
22 bunch of experts that come around and sort of say, oh, yes, we
23 can do that, but a real hard, slogging system engineering
24 process that creates this and then is vetted, as you see in the
25 lower bullets, through all of the people that are in the

1 process.

2 When they want to know, well, gee, why can't the
3 airplane fly a little faster or go a little higher, well, why
4 can't the spacecraft do this or that or the other thing, there
5 are some real curves that say, well, if you do that, then here
6 are the regrets and here are the problems and we think this is
7 the sweet spot where you want to run the program.

8 (Slide.)

9 The next chart shows the basic process, chart 5,
10 which I think we've all come to know and love, but worry about.
11 You see that at the milestone A and B, though a lot of work is
12 done, it tends to be done by experts in a kind of a stovepiped
13 way, that the requirements are vetted and then the cost is
14 independently done and so on, rather than having a real trade
15 space where people can argue back and forth on what is the right
16 set of requirements to have.

17 (Slide.)

18 So our next chart, chart 6, puts in that little box
19 called the PEC process, whatever that is, which is some
20 integrated, disciplined system engineering process that allows
21 the alternative concepts and the concept definition to be done
22 in a real no-kidding trades way, rather than in
23 consensus-building, so that there is real pushback against some
24 of the requirements.

25 What we're seeing now, the problem is that, because

1 these programs are so big, so complex, so costly, and joint,
2 that it is very difficult to push back against anybody's
3 requirement, because everybody says: Well, you want me on
4 board, you got to do such and such. So if you get people on
5 board there's an accretion and an accumulation and endless
6 increase in requirements, without somebody being able to say,
7 yes, but if you do that here are the bad things that are going
8 to happen.

9 Somebody has to be able to push back on that in
10 order to keep the requirements from exceeding what's possible.
11 So this process would be introduced in the A, B area, in the A,
12 B time zone, to make that happen.

13 (Slide.)

14 The next chart, chart 7, makes the point that one of
15 the problems we have now is that the people who have to
16 implement, that is the government and contractors, SMC
17 Aerospace, are not doing enough work in a noncompetitive
18 environment early enough for everybody to be satisfied that the
19 program can really happen. What typically happens is you have
20 some parallel studies, like TMOS and TSAT and SSTs and so on,
21 which does not encourage the definition of the program. It's a
22 jockeying for position, and most of the system engineering then
23 is not done in a noncompetitive environment.

24 (Slide.)

25 The next chart shows again another view of the

1 process, chart 8, where you see it's requirements-driven, but
2 that there is not a process of pushing back against the
3 requirements or against the internal constraints. So by the
4 time you see the contractor reduce risks, it is reducing the
5 risks against something which may in fact be unachievable or
6 cost much more and take much longer than was promised.

7 So chart 9 would overlay onto this process this
8 system engineering process in some kind of an entity, and we
9 haven't defined what that entity is, but who is it that has the
10 authority, the moral and technical authority and capability, to
11 do this in an objective way and be able to stand up and push
12 back against cost, schedule, and mission constraints imposed
13 from on high.

14 (Slide.)

15 The next chart is just an example of a system
16 engineering process used in SMC that could do this kind of
17 thing. We certainly don't want to go into the details of that,
18 but just to make the point that this is done routinely on
19 programs, but the problem is it is done so late that you don't
20 have enough flexibility to change the big things.

21 (Slide.)

22 The next chart is just an indication that a lot of
23 organizations have these at various levels, so all of the
24 capabilities to do that exist.

25 (Slide.)

1 The next two charts show again another way, the V
2 charts, in which these things are done, and you can see again
3 it's driven by requirements and validation of requirements and
4 CONOPS, which is a way of making sure that the various users
5 really want to do this. But as we see in jointness and
6 netcentric and interoperable programs, those requirements are
7 becoming so onerous that by the time you get into building it
8 you often, as in the case of space-based radar, you throw up
9 your hands.

10 So the next chart would again put into this process
11 some kind of trade, so that the requirements people and the cost
12 people and the schedule people could actually interrelate and
13 see how these things can be traded off against each other.

14 (Slide.)

15 The final chart is making the point that if we could
16 lock down the best balance of all of the parameters -- risk,
17 cost, schedule -- before we make too many promises, we would
18 then have the chance of disappointing people early rather than
19 late. And if you disappoint them early and get them on board,
20 give them half of what they want but you can actually produce
21 it, we may be better off.

22 Otherwise, we're trying to fix it once these
23 problems come along, as in the case of SBIRS or FIA, and it
24 isn't going to get us anywhere.

25 Some kind of a document where people sign off that,

1 yes, this is the real best balance point, have the bidders
2 bidding into that based on a risk criteria rather than cost, so
3 that cost -- bidding a low cost doesn't do you any good. You're
4 going to bid the cost line that's in the PEC, and you're going
5 to pick the contractor team most likely to perform, and by doing
6 that you put ownership and accountability in the program early,
7 before it's too late.

8 MR. ARNOLD: Let me jump in here, Tom. This is
9 Brian Arnold. Good to talk to you.

10 I think as I look back on this and my experiences as
11 a PEO for space for the last four years, the one thing that we
12 really lacked is the signing up of everybody, including the
13 contractor. Now, certainly we have a SAMP, Single Acquisition
14 Master Plan, but that's kind of -- that hasn't really taken on
15 the role of having everybody sign up to a commitment.

16 What this would do would be to maybe focus more on
17 risk and the ability of the contractor to actually execute on
18 the dollars that everybody signed up to. Certainly I think if
19 it was -- in most cases they are the complex types of programs
20 we deal with. We're talking about a cost-plus contract. But
21 what this would do, this would bring the users in early to agree
22 on a reasonable set of requirements, get through the proper
23 trades, and bounding the problem. They may be satisfied with
24 the 85 percent solution instead of always the 100 percent
25 solution.

1 Secondly, it brings in the contractor early during
2 the concept development as we actually derive the ICD and before
3 we go to the CDD, between KDP-A and B or milestone A and B for a
4 5001 program, where you get the total buyin and the contractor
5 actually cements into the reasonable cost here.

6 Then what it does on top of that, adds
7 accountability and a commitment on all parties -- the
8 developers, the Aerospace or MITRE Corporation or whoever is
9 adding the insight and oversight, the contractor and the users.

10 Then the other thing that this would do, it would
11 begin to balance out the top-down-driven programs, for example
12 space radar and others, and give them perhaps a better chance of
13 actually executing on what the estimate for the start.

14 Now, some of the questions this brings up: Will
15 this eliminate those innovative solutions from the smaller
16 companies, say for example a GDE, Spectrum Astro, bidding on a
17 GPS-3 satellite? What I think it would allow us to do is to
18 recognize those innovative solutions, but at the same time it
19 would force those innovative solutions to show us the risk path
20 to go from viewgraph to actually producing a product on the
21 dollars that they're estimating. So it would allow them, and if
22 you had to carry two vendors forward for a down-select later it
23 would at least establish some criteria that you would use for
24 that down-select.

25 Then finally, it would begin to simplify the RFP

1 process a bit by baselining the cost and the schedule and
2 everybody bidding to a risk, and that would be the sole basis of
3 the criteria for selection.

4 MR. PATTERSON: I think what you propose is I think
5 -- fits with what we've been talking about. You've added some
6 meat to the bones and given us some good input onto where to do
7 what we've been talking about.

8 I guess in yours it's after A, after milestone A,
9 but between A and B, this idea of coming to closure on what
10 actually is executable. You probably noted that that step is
11 missing in the way things are done now, put in those kinds of
12 terms. There were in times past, of course, organizations that
13 told you that, but they don't exist any more.

14 MR. HEINSHEIMER: I think one of the reasons they
15 don't exist is they were considered to be a negative element on
16 consensus-building, which is based on euphoria rather than
17 system engineering, and that was considered -- wet blankets like
18 that weren't considered constructive, let's get rid of them.

19 But the net result if we look back at how things
20 would have been had you done this, for instance, on SBIRS and
21 FIA, you could see that problems that resulted in those programs
22 imploding were because this wasn't done in the beginning and
23 everybody knew once the contracts were awarded, the day after
24 they were awarded, all these problems could have been predicted
25 and were predicted. It's just that nobody would dare to say so.

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MR. ARNOLD: I think the other thing this would do is, if you had the reasonable baseline and you were able to vet this all the way up through the OSD staff and in fact actually talk to the Congress before you would ever get started, everybody would understand the baseline of the requirements and the technical requirements and the costs. So then as you moved forward and you take your traditional cuts during the execution year, which is a nail in the heart for the program manager, everybody would understand here is the consequence of that cut and here's what that does to the adjusted baseline. So it would eliminate some of the finger-pointing that typically goes on when you do take those types of execution year cuts that are really, really traumatic to carrying on a normal program execution.

MR. PATTERSON: Okay, anyone else?

MR. KOZLOWSKI: I've got a simple question. Could you not incorporate a lot of these changes in an acquisition decision memorandum following milestone A? Could everybody sign up to this plan as you described it, albeit it's quite a different document?

MR. ARNOLD: You certainly could, and that's a very good point. It depends on when you bring in the contractor. I think if we brought in the contractor, as we said, some time between the concept definition approval process, KDPA as we call

1 it on the space side, that as you go through the concept
2 definition studies the contractor is there in part of that, and
3 that's inclusive in the ADM, then you could capture it certainly
4 in that document.

5 All we're doing is, we picked a word, PEC, Program
6 Execution Certification, but some kind of a process that ties in
7 all the parties, that ties them into accountability, and that
8 they have some sort of commitment that this is the program
9 they're going to step out and execute.

10 MR. HEINSHEIMER: We're really trying to change the
11 motivations of the people. As Brian says, if you bring
12 contractors in early in a competitive environment and a
13 proprietary environment, it's different than bringing them into
14 a situation where you're trying to have everybody argue for that
15 balance point and that they know that once that balance point is
16 achieved the competition, which will be in the future, is based
17 only on risk.

18 That's going to try to have the contractors move
19 everybody in the direction of a reasonable risk program, rather
20 than one in which they happen to have some kind of a technical
21 advantage.

22 GENERAL HAWLEY: It seems to me that what you've
23 proposed is -- this is Dick Hawley here -- is a structural
24 process for achieving a requirements definition.

25 MR. HEINSHEIMER: Yes.

1 GENERAL HAWLEY: So that we get everybody involved
2 in defining the requirement prior to signing anybody up. I was
3 trying to think how you would apply this against, say, an
4 aircraft program. I think you would do this before we would get
5 to, say, a prototype development effort. Let's say we use the
6 Joint Strike Fighter. You'd have applied this PEC process
7 before we down-selected to two guys to go build prototypes to
8 compete against each other, right?

9 MR. HEINSHEIMER: Right. That's exactly right.
10 That's probably a good example. Like on the F-35, you would be
11 doing it during your alternative concept study, and then as you
12 go towards that pre-acquisition, system definition, risk
13 reduction, you could actually continue to carry two vendors that
14 compete head to head. But by the time you get to your phase B
15 or what we call KDPB, everybody has deliberately signed up to
16 this, including users. So they may back off of some of those
17 extreme requirements that push you out of the envelope there as
18 far as what you think is a notional cost for the program.

19 GENERAL HAWLEY: I think you've provided a very
20 constructive input here, one of the best we have had.

21 MR. CAPPuccio: Let me give you -- Tom, it's Skip
22 Cappuccio. Let me talk about next generation long-range strike.
23 We've got at least three AOAs out. Each contractor is getting
24 I think \$10 million apiece, so we're spending \$30 million to
25 generate alternatives and requirements, without anybody talking

1 to each other.

2 They're all going to go in to the government and the
3 government's going to make hay out of them, as opposed -- and
4 that's going to take 18 months -- as opposed to taking 6 months
5 up front, establishing sets that should be studied, establishing
6 common requirements that should be studied. You may find out
7 you don't even need the AOA. You may be able to come up with
8 requirements that lead you in a direction that says, look, don't
9 waste your time with hypersonic this and subsonic that and this
10 missile that, and save yourself half that money, because all of
11 industry wants the program to go. So they're all going to put
12 the right talent on it.

13 But to exercise everybody and throw it into a hopper
14 and not knowing what's happening -- and that's what's going to
15 go on -- is a recipe for disaster because nobody in industry can
16 get together.

17 GENERAL HAWLEY: It feeds the conspiracy of hope.

18 MR. CAPPuccio: Well, it does.

19 MR. PATTERSON: Well, what happens is you will come
20 out with a solution that has the greatest advocacy.

21 MR. CAPPuccio: Well, if it's not your solution you
22 will work Congress and everybody else to show how the AOA is
23 invalid. If you get industry participation in it --

24 MR. PATTERSON: I think that's what I said.

25 GENERAL HAWLEY: Non-competitive.

1 MR. CAPPuccio: Non-competitive.

2 GENERAL HAWLEY: That's what I like about this, this
3 collaborative approach to refining the environment. We've all
4 talked about we need collaboration on the requirements
5 development process. This provides the structure to do that.

6 MR. PATTERSON: It does. It provides it at the
7 right time.

8 MR. CAPPuccio: At the right time.

9 MR. HEINSHEIMER: But you've got to take the fear
10 out of the process, because right now the government comes in
11 and says, I want an airplane that does this, that, and the other
12 thing. If I'm a contractor, I will say: Yes, sir, I can do
13 that.

14 GENERAL HAWLEY: I can do that.

15 MR. HEINSHEIMER: If there's a collaborative process
16 that says, can we get together and draw a very simple curve of
17 the TRL needed as a function of some mission parameters, speed
18 for instance, and everybody argues and in the end we have this
19 curve and you'll see where this curve breaks in the TRL going
20 down from 7 to 5 or to 2, and we'll make a decision, well, maybe
21 we ought to drive this thing, not by the speed of the aircraft,
22 but by the TRL level. And then we'll end up with a point, and
23 then we can do the same thing with other parameters and costs
24 and schedule and so on.

25 But at least there will be a logical process to go

1 to the requirements imposers and push back on the requirements
2 early enough to say, you know, if you really just set the point
3 here we would be much more likely to do this thing on cost and
4 on schedule. And there's no process right now where anybody
5 could do that without getting fired.

6 MR. PATTERSON: Also, one of the issues is, you're
7 proposing, what it does is it does not take a solution and say,
8 hey look, we can't get the 100 percent solution but we can get
9 the 80 percent solution, and that's good enough. It doesn't
10 actually say that. It says: What might have been the 80
11 percent solution in an otherwise perfect world is the 100
12 percent solution and it's achievable.

13 MR. HEINSHEIMER: That's exactly right. You know,
14 typically you get these dueling AOAs that we spend, as somebody
15 mentioned, \$30 million. They become a cottage industry out
16 there by themselves. What you could do is you could structure
17 the way you do your AOA, if in fact that's the tools, and they
18 seem to be pretty good tools, that you use for your balance
19 trades, but they would be administered by this group rather than
20 go off ad hoc and do their own individual AOAs and then come
21 back and report out. It would be a way to begin to get more
22 substance and direction to them.

23 MR. CAPPuccio: Hey, Tom. Let's take a hypothetical
24 situation.

25 MR. HEINSHEIMER: Yes.

1 MR. CAPPuccio: From a parametric standpoint, all of
2 us have about the same parametric tools to do carpet plots.
3 That's easy. So I think all of us will come up with standard
4 sensitivity curves on speed, propulsion, fuel consumption. I
5 think that's an easy one.

6 The question on my mind, Tom, is what happens in the
7 situation where you're in a meeting and let's suppose,
8 long-range strike, and let's suppose the issue gets to be an
9 alternative would be an aircraft or a missile. And let's
10 suppose you have a missile in the back shop with a very, very
11 low technology readiness, but a very high technology because
12 you've done something, but the contractor doesn't want to admit
13 it, but by the same token he's not going to stand still and let
14 the team eliminate that option.

15 How do you handle that? That's the only concern.
16 Now, the problem is --

17 GENERAL HAWLEY: How do you get the contractors to
18 show their cards during this process?

19 MR. CAPPuccio: How do you get them to show their
20 cards on the technology readiness?

21 GENERAL KERN: Because it doesn't fit in with what
22 you think the answer might be?

23 MR. CAPPuccio: Well, no. Well, if it doesn't fit
24 in in what you think the answer might be is one problem, and
25 that's probably the exception. But on the other hand, if on

1 some other areas where somebody might have a technology, maybe
2 you just compromise. It's where a decision on technology
3 readiness if wrong eliminates an option that might be viable.

4 MR. PATTERSON: But doesn't that come out when you
5 start to refine in the dialogue amongst the crowd, you start to
6 refine the requirement, and all of a sudden you start to see
7 that that airplane starts to look ugly and the missile starts to
8 look better.

9 MR. CAPPuccio: But suppose I have information that
10 tells you the missile looks very good, but I don't want to share
11 it with anybody.

12 MR. KOZLOWSKI: But that's your own damn fault. If
13 industry doesn't want to put their cards on the table in a
14 competitive environment, tough. That happens all the time.

15 MR. PATTERSON: That would be my point, too. I'd
16 say, what other customer do you have?

17 MR. HEINSHEIMER: Let me try to --

18 MR. CAPPuccio: Let me give you a scenario. I put
19 it on the table. I put it on the table and say, I can do this.
20 The other people who don't have the technology say: I don't
21 believe you.

22 GENERAL HAWLEY: You can't do it.

23 MR. CAPPuccio: You can't do it. I say: No, I can
24 do it and I'll contract for it. They say: You can't do it, not
25 because he -- he don't know it. There are nuances that have to

1 be worked out before we go forward. I don't want to kill this
2 idea because I think it's the right approach, but we need to
3 think out carefully when that question gets raised. You say:
4 Okay, this is an approach. When that happens, a different board
5 comes into being. People who know the work is being done out of
6 the classified community come into the team.

7 We need to think out questions like that.

8 GENERAL HAWLEY: It's a process of adjudication.

9 MR. CAPPuccio: Exactly. A process of adjudication
10 needs to be put into this thing.

11 MR. PATTERSON: Can you do that by simply having a
12 high-level competition for concept?

13 MR. HEINSHEIMER: But you can do that based on risk.

14

15 MR. CAPPuccio: Yes, you might be able to do that
16 based on risk.

17 MR. KOZLOWSKI: What Frank's pointing out is you
18 have to be able to convince the guy on the other side of the
19 table that you know what you're talking about, you've got some
20 experience base, you've got some data, you've got some proof
21 that you're at some level of TRL. MR.

22 HEINSHEIMER: Frank, let me try to answer your question, because
23 I think we do this all the time. But let's say take a simple
24 one that I want to have a curve that is put out by the system
25 engineering guys of aircraft speed versus TRL.

1 MR. CAPPUCCIO: Right.

2 MR. HEINSHEIMER: Okay, so we're going to have some
3 quasi-public -- and by public I don't mean newspaper, but public
4 meetings where all kind of people are going to come in and give
5 all kind of briefings. And then, as usual, different
6 contractors are going to request one on ones with the government
7 people, and they're going to say whatever it is they want to say
8 in a proprietary sense, but not in a competitive sense.

9 Then the government is going to say: Okay, great,
10 we've taken all that under consideration and we, this government
11 entity, are going to publish this curve which is our best
12 estimate of, from listening to everybody, of the aircraft speed
13 versus TRL. This is what really is out there. We won't give
14 away anybody's secrets, but there's the curve, and you can see
15 that when you get to this speed everything just sort of breaks.

16 MR. CAPPUCCIO: That'll work.

17 MR. HEINSHEIMER: Okay. So we do this all the time,
18 where we have public and then carve-out meetings. But the
19 government entity -- let's take Aerospace for the sake of
20 argument. Let's say Aerospace did this.

21 GENERAL KERN: I want you to try something after
22 this that's not Aerospace.

23 MR. HEINSHEIMER: I'm just talking about our
24 experience base.

25 GENERAL KERN: You're talking about tradeoffs and

1 speed and fuel and a platform. I'm looking at other platforms.

2 MR. PATTERSON: The next time you use an example,
3 let's talk about a gun.

4 GENERAL KERN: No, I want you to put 18 of them on a
5 C-130 and tell me how you're going to make the trades.

6 MR. CAPPuccio: Tom, what you're saying -- all
7 right. All I'm getting at is I think we've got to do something
8 different. I think you're on the right approach. When we
9 define the process, we need to put the adjudication method in
10 there so we don't draw the question and the dialogue, because
11 most of the people that we're going to brief are one question
12 deep. Answer that question and we get through.

13 MR. HEINSHEIMER: I think the main question now is
14 how come these programs are train wrecks? The answer is because
15 we don't have this process up front.

16 MR. CAPPuccio: I agree.

17 MR. HEINSHEIMER: And as a result we get into SIBRS
18 and FIA, which we know were train wrecks when we started. If we
19 had gone through this process --

20 GENERAL KERN: Why did we need the process to fix
21 that?

22 MR. CAPPuccio: Paul, the reason was, I'll be honest
23 with you, because him and I both worked a couple of the
24 programs, and when we -- in his case, when he was told, he was
25 told to leave the room, right? Remember that, Tom? They didn't

1 want to hear it.

2 MR. HEINSHEIMER: Yes.

3 GENERAL KERN: Do you need a process to fix that?

4 MR. CAPPuccio: I was summarily dismissed.

5 GENERAL HAWLEY: The thing was that when you did
6 things like set the requirements for SIBRS, it's a classic
7 conspiracy. They defined it exactly right. We're going to
8 start a program, we want supporters, so we invited everybody in
9 with their requirement. The requirements piled up and pretty
10 soon you've got this unexecutable dream.

11 GENERAL KERN: Someone should stand up and say: We
12 can't do this.

13 MR. HEINSHEIMER: And everybody, remember, if we can
14 speak out of school on SIBRS, everybody on both sides knew that
15 it couldn't be done. But the rule of the game was, let's go
16 along with the gag.

17 GENERAL HAWLEY: Let's get the program started.

18 MR. HEINSHEIMER: Let's get this thing on contract.
19 We'll sort it all out later and everything will be okay.

20 But once you've combined the requirements from DSB
21 and from the other programs, put it all into one thing, changed
22 all kind of stuff, you created something that couldn't be done
23 and where the problems on that program -- you haven't even seen
24 the worst of it yet. Wait until you see something going up
25 there and find out that the hardware and the software don't

1 mesh. There'll be another five years of grinding around, which
2 is what we learned on DSP.

3 MR. KOZLOWSKI: We've got a leadership and integrity
4 issue written into that one.

5 GENERAL KERN: This has nothing to do with any of
6 the process. It has to do with people.

7 MR. KOZLOWSKI: There's another dimension in this.

8 GENERAL HAWLEY: The process can help.

9 MR. KOZLOWSKI: There's another dimension in this
10 that I want to hear him talk about. That is, even though you
11 knew certain things going in, isn't there a case of contractors
12 just not performing, miserable performance?

13 MR. HEINSHEIMER: No, no, I think that's not -- you
14 will always get into situations where people goof, people do
15 badly. Of course that happens. But our responsibility as
16 people who put together the structure is to start out with a
17 program where everybody can look everybody else in the eye and
18 say: We can really do this.

19 In the case of SIBRS, it was perfectly well known
20 that you couldn't do it. And with FIA we can go through the
21 same story. Everybody knows that story. This was just not
22 something that was achievable. They knew when they issued the
23 award that it would cost at least three times more.

24 So the incentive of people to really achieve the
25 program when everybody knows that it couldn't be done vanishes.

1 Now, if you have a program that is really defined so that it can
2 be done and everybody agrees to it honestly, and then the
3 contractor screws up, that can happen. Of course that happens.
4 But it's just asking for disaster when you don't motivate the
5 contractor. When he knows he can't bring it in on time, on
6 schedule, and meet the requirements, why is he going to put the
7 best people on? Why are those people going to work day and
8 night in order to achieve something when they know it can't be
9 done?

10 MR. ARNOLD: Let me jump in here for a second. I
11 think that whoever brought up that last question, does the
12 contractor's misfortune during the production phase cause a
13 large consequence, the answer is absolutely yes. I agree with
14 what Tom said, the initiation of the program needs to be focused
15 on, but from my standpoint -- and I'm the SIBRS poster child,
16 let me tell you -- is the areas I saw the biggest problems with
17 were very, very poor testing, piece parts that slowed you down.
18 You can take any large program and start listing them: HVT
19 chips, phase 3 antennas, bromine issues, fasteners put in
20 backwards.

21 These are basic quality production work, and if you
22 go to any of the big guys you'll look at the money they're
23 spending on CMMI level 5, any of the process improvements,
24 Malcolm Baldrige, it doesn't equate to the parts issues we're
25 seeing right now on the floor that is basically bringing,

1 grinding every one of your major programs to a halt.

2 So it's sort of a two-pronged answer to that
3 question. I think Tom is absolutely right, we need to focus on
4 the initiation and be honest up front. But at the same time,
5 industry needs to pick up the ball and reduce the scrap, rework,
6 and quality problems they're having out there, particularly with
7 the sub-vendors.

8 MR. PATTERSON: Can we be off the record just a
9 second.

10 (Discussion off the record.)

11 MR. ARNOLD: The notion there would be as you dig
12 down into each of the primes you need to go down and do an
13 industrial base review of their qualified space or ground or air
14 vendors.

15 GENERAL KERN: Well, we wouldn't have gotten there,
16 is my point, that, as Tom said, the technology doesn't work.

17 MR. HEINSHEIMER: Well, but if you take the THAAD
18 program as an example, you recall that proposal went in in
19 something like 1989, and it was supposed to be operational in
20 1995. They ran a bunch of tests and they found out that there
21 were piece part problems and the parts took more volume than the
22 nosecone would provide and you couldn't stuff it all in, and so
23 there were all these kind of problems.

24 Having discovered all those problems, they very
25 quietly gave a sole source E and D contract to the contractor

1 that had all those problems, and the program went underground
2 for ten years, and may or may not ever emerge.

3 GENERAL KERN: Yes, after it worked. So I'm not
4 sure what you're trying to say.

5 MR. HEINSHEIMER: Well, again, this was in the
6 procurement process. The reward for failure was a
7 non-competitive --

8 GENERAL KERN: The program didn't go underground for
9 ten years. It worked after we fixed the quality problems.

10 MR. HEINSHEIMER: THAAD?

11 GENERAL KERN: Yes, THAAD.

12 MR. HEINSHEIMER: It hasn't worked yet.

13 GENERAL KERN: Bullshit.

14 MR. HEINSHEIMER: It never shot another missile.

15 GENERAL KERN: You're dreaming. What world are you
16 living in?

17 MR. HEINSHEIMER: There's EMD --

18 GENERAL KERN: It has knocked down plenty of
19 targets, so that's not the issue.

20 MR. HEINSHEIMER: The THAAD program EMD is about to
21 start shooting this year.

22 GENERAL KERN: I don't want to get into a program
23 issue. That's not the discussion. The point is how does the
24 PEC piece -- where do you find ground truth? Who is going to be
25 the people who make the technical assessments and say yes or no,

1 and how do you sort that out from the quality assessments when
2 they are things that you haven't done yet.

3 MR. HEINSHEIMER: Right, right. I think there this
4 process that we suggest would not have detected those quality
5 problems, but that really falls into the question that was asked
6 earlier, is, well, what happens if later on it turns out that it
7 doesn't work? But the concepts in the case of THAAD at that
8 time were vetted reasonably well. You had three contractors,
9 all of whom said you could do it. You picked one, which looked
10 pretty reasonable, and then it just turned out that there were
11 assembly and manufacturing problems later on.

12 What we're talking about here I don't think would
13 have identified, wouldn't have predicted that.

14 MR. ARNOLD: But I think in my experience where we
15 see the technology opportunities and the needs analysis support
16 kind of coming together at the concept definition approval
17 point, you begin to have models that actually do the dig-down,
18 the synthesis of the various levels of technology readiness.

19 The people we turn to on the space side are, of
20 course, Aerospace, and they are some of the best in the world.
21 MITRE does it for ESC and every one of the large Air Force
22 product centers has a person they turn to, an engineering corps
23 that they turn to, to distill the technology readiness levels
24 that bring ground truth to that.

25 But I do think in my view, I think you can find if

1 you do the right kinds of digs down to the vendor level before
2 you get started to see if those people are really qualified,
3 because one of the problems that I found is that the primes do
4 not -- they just go out on a whim and they'll pick a vendor,
5 maybe because it's the only vendor available, and they don't see
6 that the part is space-qualified in a lot of cases.

7 Field-programmable gauges is probably our best example.

8 MR. KOZLOWSKI: It brings up a point that I have
9 alluded to before. That is, you can have the world's most
10 perfect acquisition system, but if quality goes belly up -- and
11 it can come at a very low tier level or it can be at the prime
12 level, and sometimes it can even happen when the government
13 starts handling the hardware -- if you don't stay constantly
14 vigilant and increase our standards for quality throughout the
15 DOD system, you're going to get bit sooner or later big time,
16 whether it's losing a satellite, losing an airplane. You can
17 just go on and on and on and on.

18 Don't forget, what they're saying here is it may be
19 a very good idea, and I agree with the thing of bidding, taking
20 costs out of the bidding equation. But if you don't watch the
21 quality and if we don't, you're going to get bit big time.

22 GENERAL HAWLEY: Well, one fix doesn't get to solve
23 all our problems. But doing something like this will do a lot
24 to rationalize the requirements part of the problem.

25 MR. PATTERSON: That's exactly right. Asking the

1 question, is this executable --

2 GENERAL HAWLEY: Bad parts produced by a
3 subcontractor is a different issue, and maybe we can come up
4 with a fix for that. But we know that the requirements are a
5 big part of our problem area.

6 MR. HEINSHEIMER: There's a difference between parts
7 and acquisition. Go back to SIBRS for example. When the SIBRS
8 concept was originally developed, the whole idea was to take
9 what was then a heritage sensor and make modest improvements to
10 it and keep on going. That was something that was reasonably
11 well known. The parts were known, the subcontractor was known,
12 the vendor base. All of that was known and had a pretty good
13 pedigree.

14 As a result of the acquisition process, Hughes ended
15 up deciding they wanted to do something entirely different.
16 They created their own team, ended up losing to a contractor
17 that had to simply start from a clean sheet of paper with a
18 whole bunch of new parts that had no pedigree, and all of this
19 had to be built from scratch.

20 Well, maybe that was the right answer at the time,
21 but it certainly did result in a lot of painful discoveries as
22 that design, that sensor design, went from viewgraphs to
23 reality.

24 MR. ARNOLD: I think, just to add on, I think in the
25 space business what I've seen is that what we've overlaid in the

1 last four years as far as the risk reduction and the mission
2 assurance processes were able to catch the quality problems.
3 The problem is they arrive at various times, whether during
4 thermal vac or during integration and testing. But we do catch
5 them, and we base it on the TOSNI report that came out of
6 Aerospace about three years ago, that basically showed a large
7 number of the NRO platforms experiencing a failure of a
8 subsystem in the first 100 days on orbit, and it was caused by
9 poor system engineering at the part level and some quality
10 issues, is what's mentioned.

11 So we've gone back and we dig down. We catch those
12 now. We go through extra, it costs you extra money, but we
13 catch the problem before it goes on orbit.

14 But the problem is how do we qualify those
15 sub-vendors before they send that FPGA part or the HBC ship part
16 to all the vendors, I mean all the primes out there, and
17 everybody comes to a grinding halt. Crypto is another example.

18 MR. PATTERSON: Okay. Well, listen. Thank you very
19 much, Tom. You've been very helpful in this briefing and on the
20 mark.

21 MR. HEINSHEIMER: Dave, it's a pleasure, and if we
22 can do anything further let us know.

23 MR. PATTERSON: Thank you very much.

24 MR. HEINSHEIMER: Over and out.

25 MR. PATTERSON: Thank you.

1 GENERAL HAWLEY: I like the idea. I think it would
2 be helpful.

3 DR. BRANDT: The only problem is, I was about to ask
4 a question. We all understand the need to get programs started,
5 which leads to a conspiracy which either is or isn't an ethical
6 issue. We can talk about that.

7 GENERAL HAWLEY: It is.

8 DR. BRANDT: Does this substitute for -- when you
9 have an analysis problem, and I think it was Don who said last
10 time you can't substitute analysis for leadership, or we're
11 trying to substitute in many cases.

12 MR. KOZLOWSKI: An analyst can prove anything.

13 DR. BRANDT: Will this temper that conspiracy of
14 hope and mitigate the need to get the program started by
15 providing analyses that people will sign up for from every
16 community? Is that the mechanism?

17 GENERAL HAWLEY: It's collaboration. What it
18 provides is a formal structure to drive collaborative
19 development of requirements, which is the part I like.

20 MR. PATTERSON: And it gets the system engineers
21 into the process very early, so that you see the thread that
22 runs through the entire program.

23 GENERAL HAWLEY: I don't see that it's going to
24 solve the leadership problem, no. It's just a way, a structured
25 way to get a collaborative process to define requirements, so

1 that you don't get into the thing where we all too often are
2 today, where people without much knowledge of industrial
3 capabilities or technology kind of believe Powerpoint briefs
4 that come to them, write down a requirement, and then throw it
5 over to the acquisition community and say: Go build this.

6 MR. CAPPuccio: The only thing it will stop -- if
7 you go back and talk about the ethics issue and all that stuff.
8 One thing it will stop is, when you formalize the process of
9 coming up with the acquisition strategy, it would be very
10 difficult for a program manager or a conspiracy of program
11 managers, industry and government, to fundamentally hide a
12 report that says this is what it's going to take to do, this is
13 how we're going to do it. It will be very difficult in that
14 environment.

15 When you have poor leadership and no one is
16 providing oversight and in actuality when the direction coming
17 down -- off the record.

18 (Discussion off the record.)

19 MR. PATTERSON: Let's go back on the record. This
20 is good.

21 DR. ABBOTT: Before A, the size of the dogs playing
22 in the game are relatively small. As the progress goes on, the
23 size of the dogs gets much larger, and when they do you're
24 likely to get impacted.

25 GENERAL HAWLEY: But the size of the dogs will grow

1 because you're putting money on this.

2 DR. ABBOTT: Exactly, exactly.

3 GENERAL HAWLEY: And people begin to take an
4 interest because you're committing money to help you develop
5 your requirements. You're not just letting people come in
6 freebie to your office, give you a Powerpoint brief.

7 MR. PATTERSON: And the reason that this will work
8 is, remember that at this point this is where the majors and the
9 lieutenant colonel wannabees, this is where they're in, this is
10 where they're churning. And if this is all established at that
11 level, they're much less liable to go to their flag officer boss
12 and say: No kidding, boss, we can dematerialize here and
13 rematerialize over here; it's not a problem.

14 GENERAL HAWLEY: Well, it'll give the people --
15 it'll make the commitment a tool.

16 DR. ABBOTT: The Air Force actually had a program
17 like that. It was called disappearing budget.

18 MR. PATTERSON: No kidding, boss. We can do that.

19 GENERAL HAWLEY: Hey, you're picking on my poor lab
20 guys. They had a good idea. They studied quantum physics.

21 MR. PATTERSON: This across the board does tend to
22 create a mountain of truth that's pretty difficult to push aside
23 if you want to do something eccentric.

24 MR. CAPPuccio: The problem is, if you want to push
25 it aside you can, you can. If you want to push it aside, you

1 can, but you go brief everybody about the risks you're taking
2 and no one should be surprised.

3 DR. ABBOTT: If you go back to the great ideas we've
4 kicked around here, there's one thing that's clear and that is
5 earlier is better, but too much is happening early that's
6 unconstrained by anything. Earlier is better. The better you
7 do it up front, the better you're going to do it at the end.
8 We've been teaching that in the schoolhouse for years, but
9 that's the reality that we're facing.

10 MR. KOZLOWSKI: In spite of having all the system
11 engineering studies and all this kind of stuff up front -- and
12 maybe you just said this and I wasn't paying attention -- these
13 studies, they can still be tailored, constrained. They can be
14 filled with optimism just as much, and a lot of that will depend
15 on just what the state of the industry is.

16 DR. ABBOTT: The assumptions.

17 MR. KOZLOWSKI: All sorts of things.

18 GENERAL HAWLEY: I pose the question: Are we
19 approaching the point where in order to get a face-down of the
20 requirements guys who want everything and the fiscal guys and
21 others who want to put a constraint, are we looking at some sort
22 of an outside -- I hate to call it "review" -- a devil's
23 advocate group that literally comes down like a hammer?

24 I'm not sure the acquisition folks and the
25 requirements folks can meet at the pass and hammer this out.

1 Maybe they could and maybe it's worth a try. Who would it be
2 that would come in as an independent third party and say, be the
3 judge in a court, you've got a plaintiff and a defendant and
4 somebody's got to judge, okay, where's the 80 percent solution?

5 In other words, I have a fear that people,
6 bureaucracy in particular, with large numbers will find a way to
7 game anything you come up with, even bidding to the no-cost
8 proposal, taking cost out of the equation, which I fundamentally
9 am just tickled to death with that, except I'm still searching
10 for the, how can I beat the system if I were bidding.

11 MR. CAPPuccio: It's an interesting disease.

12 MR. KOZLOWSKI: But you're going to make the
13 proposal on the basis of risk, and that's the same discussion I
14 was having with somebody here a couple of weeks ago. Okay, how
15 can I game a risk story? You brought up the point of maybe
16 you've got a trick up your sleeve that nobody else has got, but
17 now you've got to convince the government that you've got it.
18 Okay, there's lots of ways to do that and they're now
19 susceptible to a Powerpoint presentation, a little
20 touchie-feelie hardware demonstration, which may be one of a
21 kind. It would be impressive as hell.

22 MR. CAPPuccio: You can game anything.

23 MR. KOZLOWSKI: That's exactly the point. Are we
24 approaching the point where we need to introduce some kind of
25 devil's advocate board, a murder board, if you want to call it

1 that?

2 GENERAL KERN: How do you do that? I guess you're
3 talking about technical risk, not cost risk. A lot of the
4 trades we make on this stuff are operational. I'll just go back
5 to the C-130 issue. The weight you put on the C-130 isn't the
6 fact that you can't build a vehicle that will fit on a C-130.
7 It's what you want to put in it and how much survivability you
8 want. Survivability has always been a function of how much
9 armor you put on it. Today it's not. We're looking at things
10 like they showed you, like active protection systems.

11 So those are the trades that you start looking at,
12 and the answer why the thing grew bigger than the C-130 had
13 nothing to do with any of that. It was the fact of how many
14 rounds did you want to put on it, how many kills that you could
15 stow, and that's an operational trait. It has nothing to do
16 with any of these other risks.

17 GENERAL HAWLEY: Well, doesn't that occur in this
18 process? Why doesn't that occur?

19 GENERAL KERN: It does. That's my point. Those
20 trades are being made.

21 MR. CAPPuccio: But I think Tom would say he comes
22 from a certain knowledge base, which is space basically.

23 GENERAL KERN: Right.

24 MR. CAPPuccio: All we're saying is whatever trades
25 are relevant for the acquisition in mind have got to be in

1 there, whatever requirements. More than just technology or
2 readiness, there are operational risks. There's landing gear
3 risks. There's a whole bunch of risks.

4 GENERAL HAWLEY: All he's trying to do is provide
5 capability, technical risk curves, where's the meat of the
6 curve.

7 GENERAL KERN: Right, I got that. I understand.

8 GENERAL HAWLEY: Or operational risks. And part of
9 that is the operational concept.

10 GENERAL KERN: The thing with space guys, they don't
11 have to maintain it. Once it's up there, it's up there.

12 GENERAL HAWLEY: You've got to adapt their system.
13 That's why I was trying to figure out how to put a prototype
14 effort in front of it.

15 MR. CAPPUCIO: The only question we've got to ask
16 -- we've got to answer, so we're going to get challenged on, if
17 I have a gimmick up my sleeve, we've got an answer for that.
18 The next question is, industry would come back, the industry
19 guys, and say: Wait a minute, you're kidding me. You guys, you
20 sleazy government guys, you're trying to sucker me into a fixed
21 price contract again.

22 So somehow we've got to figure out when we put the
23 dress on this thing how do we address the fact that, is it
24 really a fixed price contract? Because in this scenario it
25 doesn't have to be.

1 GENERAL HAWLEY: No, it's a cost plus. I'm going to
2 select you based on the lowest risk competitor.

3 MR. CAPPuccio: Exactly.

4 GENERAL KERN: How about this, Frank. We'll do it
5 on a fixed price a year at a time.

6 MR. CAPPuccio: We can do something. We just have
7 to say: No, the intention is you won't be evaluated on cost.

8 MR. PATTERSON: The intention is to drive the
9 competition to management and technical risk and how you manage
10 it, and take cost out of the equation, and who does it the best.

11 MR. CAPPuccio: Okay, but when someone bids in three
12 costs, are you not even accepting -- you may not accept the cost
13 bid.

14 MR. PATTERSON: No, just we know what the cost is,
15 so whatever you give us is fine, but we know what it is.

16 MR. KOZLOWSKI: But you're going to judge him on the
17 basis of --

18 MR. CAPPuccio: That's hard.

19 DR. ABBOTT: It's a WPA project for lawyers all you
20 guys are designing in here.

21 MR. CAPPuccio: It's hard.

22 MR. KOZLOWSKI: You mean I couldn't do a source
23 selection based on risk?

24 DR. ABBOTT: You can, but all you do is open
25 yourself up to how the parameters were set, how they were

1 judged. And if I'm the guy losing and I don't like the way you
2 set it up, we're going to find ourselves in court.

3 MR. CAPPuccio: You win me, you select me, right,
4 and then I'm sitting down and they say: Okay, Frank, you got
5 selected. Then after I get selected, you spring your costs.
6 Somebody springs the costs.

7 GENERAL HAWLEY: You knew the cost up front.

8 MR. CAPPuccio: Then it's a fixed price contract.

9 GENERAL HAWLEY: No, it isn't. I selected you
10 because I think you have the lowest risk.

11 MR. CAPPuccio: Of making that cost.

12 GENERAL HAWLEY: Of making the cost with the
13 performance.

14 MR. CAPPuccio: Okay, that's fine.

15 GENERAL HAWLEY: We can collaborate ahead of time
16 and agree that we thought we could deliver that widget for that
17 price.

18 GENERAL KERN: Cost plus for R and D?

19 GENERAL HAWLEY: No, no.

20 MR. KOZLOWSKI: Sometimes, but not very frequently.

21 GENERAL KERN: They take very measurable risks.
22 They don't go for the whole enchilada in one contract.

23 MR. KOZLOWSKI: We'll just have to make sure when we
24 put it in there we talk about how we're handling costs, because
25 in that scenario everybody's bidding to the same cost, to the

1 same sets of requirements.

2 GENERAL KERN: But the other thing you said which
3 bothers me when we keep playing with process, you said it and
4 you said it: No matter what process we put on a piece of paper,
5 you're going to figure out how to game it.

6 MR. CAPPuccio: That ain't all that bad.

7 GENERAL KERN: You want to win.

8 MR. CAPPuccio: That ain't all that bad, because
9 right now everybody's gaming it, even the U.S. government. If
10 you take out the fact that the initial starting cost is
11 reasonably good to begin with --

12 GENERAL KERN: But you're still going to keep gaming
13 it.

14 MR. CAPPuccio: Somebody will always game it.

15 GENERAL KERN: The issue is how do you reduce the
16 risk on it.

17 MR. CAPPuccio: Right. So you start with
18 requirements that you freeze. You start with a cost that you
19 believe is right.

20 DR. ABBOTT: Reasonable.

21 MR. CAPPuccio: Reasonable.

22 GENERAL HAWLEY: We're in the business here of
23 trying to get the perfect system. Can we get one that's better
24 than the one we got? I think this is better than the one we got
25 in terms of defining a set of realistic requirements. This is a

1 better process than the one we typically use today.

2 DR. ABBOTT: Well, part of it is when you go back to
3 your responses and accountability, it begins to assign these
4 things right up front in the beginning.

5 MR. PATTERSON: On this cost competition thing, the
6 Joint Strike Fighter is just the classic, absolutely. Everybody
7 sat around the table and the government said: Most probable
8 cost, 23.5. Boeing says: Oh, yeah, that's right, that figures,
9 exactly right. We agree. Lockheed says: Of course. Click,
10 click, click, check, check, check, 23.5, no problem, that's
11 exactly right.

12 Everybody agreed that was the most probable cost.

13 GENERAL HAWLEY: Yes, but we hadn't even matured the
14 requirement yet, so what were you costing?

15 MR. CAPPuccio: Parametrically speaking, that cost
16 --

17 GENERAL HAWLEY: We started that program with three
18 big sets of requirements, which were all very different. No
19 wonder you couldn't get a decent cost.

20 MR. CAPPuccio: No, no. Actually, Hal started that
21 contract with the requirements being banged together into a
22 camel.

23 GENERAL HAWLEY: That's another way of saying it.

24 MR. CAPPuccio: And when the camel left, you know
25 when that camel left all the bumps jumped off.

1 MR. PATTERSON: What is it now?

2 MR. CAPPuccio: We bid -- that's a problem where the
3 guy had the right idea, but the moment the services came in, and
4 in actuality we didn't waste two years, but in two years, two
5 and a half years that it took us to do the demo, or a year and a
6 half, requirements on the part of the Navy and the Marines did
7 indeed change the question of whether the program should be
8 joint. The Air Force requirements did indeed change as to
9 whether or not that vehicle should do it.

10 GENERAL HAWLEY: You see, I look at the Joint Strike
11 Fighter as a different problem. This was a case again where
12 civilian leadership thought they were smarter than the services
13 and forced them into a joint program that never should have been
14 joint in the first place.

15 MR. PATTERSON: I can't argue with you.

16 MR. CAPPuccio: You didn't agree with him, but you
17 just can't argue.

18 MR. PATTERSON: Everybody should have learned their
19 lesson from TFX.

20 GENERAL HAWLEY: The Air Force wanted a low-cost
21 complement to the F-22, the Navy wanted a first day of the war
22 penetrator, and the Marines wanted a close air support airplane.
23 How do you take those and smash them into one thing? Whacko.

24 DR. ABBOTT: The same way you put a 111 on a
25 carrier.

1 MR. KOZLOWSKI: You're on the record.

2 MR. CAPPuccio: It's okay.

3 MR. PATTERSON: I'll tell you what. I can't argue
4 with you. Once you make the decision, was this probably the
5 best way to execute the decision? Yes. It comes close.

6 GENERAL HAWLEY: We keep coming back, where are the
7 institutions, where is the competence in the Department,
8 enduring competence?

9 MR. PATTERSON: It's in the services.

10 GENERAL HAWLEY: But the whole system views the
11 services as the problem.

12 MR. PATTERSON: No.

13 MR. KOZLOWSKI: No.

14 GENERAL HAWLEY: No? What did our IRT team do for
15 us?

16 MR. KOZLOWSKI: I'll come back to that one.

17 MR. PATTERSON: We'll come back to that, because
18 they were not right on that.

19 Okay, we're on break.

20 (Recess from 2:51 p.m. to 3:06 p.m.)

21 MR. PATTERSON: One of the things that Ron wanted us
22 to do was to make sure that we went through and made sure that
23 we all understood how the Packard Commission recommendations
24 mapped to what we're doing, which essentially is building a
25 foundation of validity for moving forward.

1 Okay, over to you, Al, please.

2 MR. HUTCHINS: We were asked to get the actual text
3 from the Packard Commission recommendations and map the
4 recommendations to our construct here of processes and
5 organizations. What I have done here is, first these are
6 Packard recommendations that they booked as national security
7 strategy and budgeting. They mapped of course to our budget and
8 requirements processes, and this is in the Packard Commission
9 where they start with defense planning and walk it all the way
10 around to Congress.

11 Well, in the context of a top-level solution we came
12 up with last week, where we said we were going to endorse, but
13 perhaps update, the Packard recommendations, if there are any of
14 these that people see up here that have not been implemented we
15 should probably note them as we go through.

16 MR. PATTERSON: Have not been?

17 MR. HUTCHINS: Have not been or incompletely; we
18 should probably note those.

19 MR. PATTERSON: Congressional two-year budget was
20 not in there.

21 MR. HUTCHINS: Two-year budget. I know DOD now
22 prepares them, but whether Congress --

23 MR. PATTERSON: Yes, but both shoes were supposed to
24 drop. DOD was supposed to go to a two-year budgeting cycle,
25 which we did; and Congress was as well, so they'd be in sync,

1 but Congress didn't.

2 GENERAL KERN: I didn't realize that one also said
3 the President would give the Department a five-year budget.

4 MR. HUTCHINS: Yes.

5 GENERAL KERN: That's one I don't think we have
6 implemented.

7 MR. HUTCHINS: It is not clear to me, as I haven't
8 worked in this area, how much of these or to what degree all
9 these have been implemented.

10 GENERAL HAWLEY: I don't think those have been
11 implemented the way they're written.

12 MR. HUTCHINS: These are the exact words out of the
13 Packard Commission.

14 GENERAL HAWLEY: The chairman doesn't really provide
15 broad options from which.

16 MR. KOZLOWSKI: Basically, nothing from the NSC down
17 to DOD really happened.

18 MR. HUTCHINS: So we should note that, but hold that
19 in potential as something that may or may not want to be noted
20 by this panel.

21 MR. PATTERSON: In point of fact, you'll find it
22 when you get to BGN because they say the same thing. They go
23 back and repeat those same things; they ought to be done, but
24 they haven't been.

25 MR. HUTCHINS: Again, the reason I bring this up is

1 that we said here that this is what we're going to do: endorse
2 but update full implementation of Packard Commission.

3 MR. PATTERSON: For acquisition.

4 MR. HUTCHINS: Remember, we said for us acquisition
5 is this (indicating). So this includes all of this
6 (indicating).

7 GENERAL HAWLEY: Do we really want to fully
8 implement Packard?

9 GENERAL KERN: That's why we're looking at it.

10 DR. ABBOTT: I think what we want to do is establish
11 some level of legitimacy with Packard and then update the
12 Packard portions.

13 MR. CAPPUCIO: Update the Packard portion and put
14 it as a recommendation here?

15 DR. ABBOTT: Well, to the extent that we think that
16 those recommendations are valid, but should be modified and
17 still valid, that's what I would suggest.

18 MR. HUTCHINS: That's what I would suggest. If we
19 find something that's impacted, that has either, A, not been
20 implemented or not fully implemented or not implemented with the
21 intent, that we believe should be, that's what ought to be
22 noted.

23 MR. RIXSE: Or you could say, or implemented and
24 should be dis-implemented because it was done for the Cold War
25 environment. You've got a different environment.

1 MR. PATTERSON: The intent that the chairman would
2 prepare broad military options, that's actually picked up in the
3 national defense strategy, and there's another document that
4 comes out of the joint staff, that I can't think of the name of
5 it right this second.

6 GENERAL KERN: What is the military program that
7 they're referring to there? Is that a program as a piece of
8 hardware or is that a broad program?

9 MR. HUTCHINS: That's the broad "program." That's
10 the way Packard wrote this section.

11 GENERAL HAWLEY: Well, the way Packard wrote it,
12 according to that, the chairman and the director of the CIA
13 would put together a set of options, from which the President
14 would select a specific. In other words, he prepared two or
15 three or however many different ways to satisfy national
16 military security strategy. That's what I read.

17 MR. PATTERSON: Yes.

18 GENERAL HAWLEY: That's not how we do it.

19 MR. PATTERSON: There are some cases where they took
20 what the Packard Commission recommended and it was modified by
21 Goldwater-Nichols and did something that was more practical in
22 terms of how everybody worked.

23 GENERAL KERN: As we really drill into it then,
24 we're sort of saying that the Packard Commission's overall view
25 of acquisitions was right, but their implementation of the

1 strategic planning we don't really want to buy into right now.
2 That's not the way it's written up there, as opposed to the way
3 we're implementing it.

4 MR. PATTERSON: Isn't it simply outside of what we
5 want to do?

6 MR. RIXSE: This is a nuance. They weren't writing
7 in these recommendations to perfect acquisition. These are
8 recommendations that may have an application to, they have an
9 impact on acquisition, if they had been implemented.

10 GENERAL KERN: The last thing I'd like to do is see
11 the NSC and OMB tell us what programs to choose.

12 MR. RIXSE: What they were focusing on is having NSC
13 and OMB say what the strategy was and what the funding level was
14 and lock it in, and then let the chairman and the Department
15 within a fixed level of funding decide what the programs ought
16 to be.

17 MR. PATTERSON: In some respects, through OMB it
18 kind of works that way, because it's a dialogue going on with
19 OMB.

20 GENERAL HAWLEY: It's a constant negotiation.

21 MR. PATTERSON: But come November something when the
22 deputy and the comptroller walk over and talk with Josh, that's
23 locked in.

24 GENERAL HAWLEY: For one year. Packard was focused
25 on a blessed five-year period. We don't do it that way.

1 MR. PATTERSON: No, no, no, we don't. It's just one
2 year. But the dialogue --

3 MR. KOZLOWSKI: Do you not get any guidance from
4 them as to the out years?

5 MR. PATTERSON: Sometimes it's a surprise -- oh,
6 guidance about the out years? I'm sorry.

7 DR. ABBOTT: The guidance is: All problems will be
8 solved in the out years.

9 MR. PATTERSON: They really don't want to talk about
10 that because they're focused on the President's budget.

11 MR. KOZLOWSKI: But the budget submittal includes
12 FYDP projections in it.

13 GENERAL KERN: They can be backed out.

14 MR. KOZLOWSKI: The budget submittal that goes to
15 the Congress includes FYDP projections.

16 GENERAL KERN: We include the FYDP.

17 MR. PATTERSON: But when that program is argued, it
18 is argued based on the budget year.

19 MR. KOZLOWSKI: It's the budget year that counts.

20 MR. HUTCHINS: The answer is yes, the President's
21 budget actually just contains the two budget years, but the R
22 sheets and the P sheets actually have all the FYDP stuff in
23 them.

24 MR. KOZLOWSKI: I'm sorry, I couldn't hear you.

25 MR. HUTCHINS: The actual President's budget

1 document only has the budget years, but the R sheets and the P
2 sheets and the Congressional justification book that the
3 services send up have all the FYDP stuff in it.

4 DR. ABBOTT: Because they want to know: You sign me
5 up for ten bucks, but that doesn't cover the sign me up for a
6 thousand for the whole program.

7 MR. HUTCHINS: No, it does not.

8 GENERAL KERN: And that's the real issue that we get
9 into.

10 MR. HUTCHINS: Well, things really start getting
11 interesting when you really look at the Packard Commission words
12 talking about acquisition organization and procedures. It
13 starts off with, here is where the under secretary -- this was
14 called under secretary for acquisition in the report.

15 DR. BRANDT: And in the legislation.

16 MR. HUTCHINS: And there is what they had in mind
17 (indicating) for the ambit of the under secretary. It's policy,
18 performance of the system, and establishing a policy for
19 administrative oversight and auditing. No running programs.

20 It gets more interesting.

21 MR. KOZLOWSKI: Why do you say "no running
22 programs"? What do you think he meant by "supervising the
23 performance of the entire acquisition system"?

24 MR. HUTCHINS: System, not individual programs.

25 DR. ABBOTT: How is the system working.

1 MR. HUTCHINS: Now take a look here (indicating).

2 MR. KOZLOWSKI: You're getting into semantics, guys.
3 But go ahead.

4 MR. HUTCHINS: Oh, yes. It really becomes important
5 when you work around to here, okay, and it talks about a similar
6 position in each of the services, who would then have PEOs.
7 Each service would retain the flexibility to shorten this
8 reporting chain. It's quite clear. This is the exact language
9 in the Packard report of where the actual execution of programs
10 was supposed to reside.

11 DR. ABBOTT: Notice it didn't say lengthen or
12 change. The authority was to shorten.

13 GENERAL KERN: We actually did that for a while in
14 the early 90s, when people really shortened that up and gave
15 PEOs and SAEs much more authority to approve it right there
16 without going all the way through. But that's gone back up over
17 time.

18 MR. HUTCHINS: I found the collection of these words
19 interesting. Also here, the belief by Packard was by doing this
20 you would substantially reduce the number of acquisition
21 personnel. We've cut it in half since they wrote the report.

22 MR. RIXSE: To answer your comment, Don, ten years
23 later in the Hicks report you can see how they come back to
24 these points and say that one of the problems was that OSD got
25 into program execution too much. They didn't reference the

1 Packard Commission, but the comments were focused on, we
2 recommend that OSD stay where it's supposed to be, in the policy
3 and supervision, but get out of the program execution business.

4 So it looks like in the ten-year interval people
5 just sort of added on and got more and more involved, and Hicks
6 came along ten years later and said: You're too involved; you
7 ought to back off.

8 GENERAL KERN: What it also didn't say in here is
9 the role of the comptrollers holding back funds, PA&Es holding
10 programs hostage in the reviews, and all that. It didn't get
11 into that big side of it.

12 MR. KOZLOWSKI: Human beings gaming the system
13 again. PA&E is not really mentioned at all.

14 MR. HUTCHINS: Well, another point I'll make is
15 nowhere here and in any of all the stuff I have read has anybody
16 ever said that the SAE should not report to the service
17 secretary. It's nowhere written, nowhere.

18 GENERAL KERN: Now, somewhere in there I think they
19 said no more than three levels.

20 MR. HUTCHINS: That's reporting chain here. Program
21 managers report directly to PEOs. PEOs are responsible to
22 report to SAEs. Each service should retain the flexibility to
23 shorten this reporting. Those are the exact words.

24 Nowhere does it say that the acquisition business is
25 separated out from the service secretaries. I can find no

1 explicit direction to do that. You experts from DAU, am I
2 getting it wrong?

3 (No response.)

4 So I found this kind of interesting.

5 MR. A'HEARN: Say that again? You're not finding
6 what?

7 MR. HUTCHINS: I'm not finding anything in this
8 language that separates acquisition from the service
9 secretaries.

10 DR. ABBOTT: He's saying, Chip, that the SAE --
11 normally what you see when you see the SAE is there are two
12 lines. He's saying by Packard, Packard didn't say the SAE went
13 around the service secretary and only reported to the DAE. He
14 is, after all, an assistant secretary. If he is, he should
15 report to the service secretary.

16 MR. A'HEARN: And that may be again in there. But
17 trying to fill that gap is a statute that says the civilian
18 secretary of the service is empowered to organize, train and
19 equip. So he's got a hand in there somewhere.

20 MR. HUTCHINS: If there is such a thing that says
21 the SAE is responsible for organizing, training, and equipping.

22 MR. A'HEARN: No, no. The service secretary.

23 MR. HUTCHINS: The service secretary has got Title
24 10 authority to do that.

25 MR. A'HEARN: Right, that's the point.

1 MR. PATTERSON: Now, how did -- what violence did
2 Goldwater-Nichols do to this slide?

3 DR. ABBOTT: The PEOs report to the service
4 acquisition executives, who report to the DAE.

5 MR. PATTERSON: That's different.

6 MR. HUTCHINS: It could be different, except when
7 you start seeing this context about what they're supposed to be
8 reporting about. It is performance of the system and
9 administrative oversight.

10 MR. PATTERSON: But you know, it makes much better
11 sense for the acquisition to be pushed down to the service, the
12 service manage it within the PEO SAE service secretary. The
13 service secretary by law is held accountable to the Secretary of
14 Defense, and the USD AT&L can establish policy and report to the
15 Secretary of Defense as to how the policy is being executed.

16 MR. HUTCHINS: And worry about the consistency
17 across the system, for example, and worry about auditing of
18 defense contractors.

19 DR. ABBOTT: The thing I would have been amazed
20 about: Given Packard and where he came from, if Packard really
21 wanted to create an under secretary for acquisition, he would
22 have given him the money and empowered him. He's got no budget
23 authority.

24 MR. KOZLOWSKI: Yes.

25 DR. ABBOTT: And yet, the whole idea that you're

1 going to manage a process without having oversight of the money
2 certainly makes little sense in most management texts. And yet
3 Packard clearly stayed away from that because he wanted him in
4 the policy area, not in the day to day management of the process
5 of the individual programs. So there is a telling function
6 there.

7 GENERAL KERN: It is interesting, if you take that
8 one step further, though, Gerry, that the service secretary does
9 have a budget.

10 DR. ABBOTT: Yes.

11 GENERAL KERN: But you have to remember what they
12 were trying to go back and fix. At the time when this was
13 written, there was no under secretary, but there was a DDR and
14 E, and he was sort of the de facto acquisition chief and OSD
15 during that period. But he had no policy or capability to do
16 anything either across the Department or inside the services.

17 The services, including the Navy, all had a -- and
18 this is something we have to be careful about how we word -- a
19 systems command. They also had often -- not often. Within that
20 systems command, they created the program managers. The O-6's
21 and O-5's were buried under one, two stars at their local
22 headquarters, another four-star headquarters with three and four
23 stars, and then they went over to the Pentagon and had the same
24 thing on the service staffs. Then they went up to OSD and had
25 the same thing on their staffs.

1 So the program -- what they were trying to fix there
2 was this layering that required multiple staffings with very
3 little value added from a program office to a decisionmaker. So
4 you'd go through a continuous process.

5 GENERAL HAWLEY: I don't recall that kind of
6 layering in the Air Force.

7 GENERAL KERN: Very much true in the Army.

8 GENERAL HAWLEY: You had an RD.

9 GENERAL KERN: There was an RDA in the Army staff.
10 There was an RDA in the AMC staff.

11 GENERAL HAWLEY: The RD in the air staff had no
12 program execution responsibilities.

13 MR. KOZLOWSKI: But every time there was a hiccup
14 you had to go talk to him. I spent a lot of time in Slay's
15 chain of command just running through there, keeping him
16 abreast.

17 GENERAL HAWLEY: Oh, yes, because he took the heat.
18 He took the heat. His job was to cover the chief.

19 GENERAL KERN: That's what they were talking about
20 here, was to get out of these multiple layers and get it down to
21 a very streamlined, so essentially three: program manager, PEO,
22 and an acquisition executive.

23 GENERAL HAWLEY: Yes, but we took the RD staff and
24 put it into AQ.

25 GENERAL KERN: I'm not talking about the

1 implementation of it. I'm talking about what they were trying
2 to fix with this, because everybody implemented it a little bit
3 different.

4 MR. HUTCHINS: Work force, and I apologize. I
5 didn't completely split these two. There are two thoughts here.

6 Senior appointment system, they talked about a November 1985
7 National Academy of Public Administration report I couldn't
8 find. There was a recommendation on that.

9 The key point here is DOD must be able to attract,
10 retain, motivate well-qualified acquisition personnel.

11 This, the alternate personnel management system, was
12 the China Lake experiment at the time.

13 GENERAL HAWLEY: We did that, at least part of it.

14 MR. HUTCHINS: Federal regs should establish
15 business-related education and experience criteria for civilian
16 contracting personnel. I don't know if that's completely
17 implemented.

18 Federal law should permit expanded opportunities for
19 education and training of all civilian acquisition personnel.

20 (Slide.)

21 In terms of what we call requirements and
22 acquisition, they call acquisition, organization, procedure.
23 This was the start of COTS, which itself was a big push. The
24 joint resources management board, joint requirements management
25 board; they said it should be co-chaired by this under secretary

1 for acquisition and the vice chair of the joint chiefs.

2 MR. KOZLOWSKI: That's a big disconnect that was
3 never done.

4 DR. ABBOTT: That's the most glaring disconnect.

5 MR. A'HEARN: But on the upper left, the JRMB
6 providing early tradeoffs between cost and performance, I think
7 largely that didn't happen either.

8 MR. KOZLOWSKI: That did not.

9 MR. CAPPUCCIO: So this big Packard Commission
10 everybody hears about, not much was done.

11 MR. KOZLOWSKI: Hmm?

12 MR. CAPPUCCIO: I said, the big Packard Commission
13 everybody keeps on talking about, very little was done.

14 MR. RIXSE: Because basically they put in
15 Goldwater-Nichols instead of the Packard Commission.

16 MR. KOZLOWSKI: Well, wait a minute. The thing that
17 you're playing there is that they don't make the tradeoffs
18 between performance and cost.

19 MR. A'HEARN: At the requirements stage, yes,
20 correct. That's the predecessor of the JROC.

21 MR. KOZLOWSKI: There are some people who argue that
22 they do that, that they did it. Maybe it's cursory.

23 MR. A'HEARN: Limited.

24 MR. KOZLOWSKI: It doesn't matter. It's a level of
25 finality.

1 GENERAL KERN: JRMB is different than JROC.

2 MR. A'HEARN: Absolutely.

3 MR. HUTCHINS: I want to apologize in advance for
4 doing this to you, but, given the conversation in here about,
5 given the conversations about redoing milestone A, given the
6 conversations about reconnecting and integrating S&T, and given
7 the conversations that have been going on in here about that
8 field exercise experiment thing, I felt it important to capture
9 all these words. So I'll take a little time and read through
10 them, because it seemed that that set of words tied those three
11 thoughts together pretty well.

12 (Slide.)

13 More requirements and acquisition. Interestingly
14 enough, they are so -- insight to operational test and testing.
15 They believed it should start as early as development. That was
16 something we used to call early user evaluations and OTEs, and
17 we used to actually do them all the way from 6.2 all the way
18 through, instead of just having the big graduation exam at IOTE.

19

20 MR. KOZLOWSKI: If you did some of that OTE stuff
21 early, would it alleviate the concerns we have?

22 MR. HUTCHINS: No. There are still these problems
23 with the operational test community, have taken a life of its
24 own.

25 MR. KOZLOWSKI: Adding requirements outside the

1 formal structure, that's one issue. Suppose they stayed within
2 their boundaries for them. They also had a propensity to just
3 make life very, very complex and expensive, even though they
4 might just be testing you to the original requirement. But if
5 they were involved in a sense of collaboration and all these
6 other kinds of things, they were involved early.

7 Is there any useful benefit to recommending that
8 they be involved early?

9 MR. HUTCHINS: Yes, absolutely, absolutely.

10 GENERAL KERN: But the problem that I described
11 earlier is that we used to do a lot more of that, but the Army
12 took all of the soldiers out. They don't have any soldiers any
13 more, so there's nobody there to do that early testing.

14 MR. HUTCHINS: And that was a huge advantage because
15 operational testers are real fleet sailors, real soldiers, real
16 airmen. Get them in early to actually get their hands on,
17 that's a really good field interaction with your technologists
18 and system designers. It's a benefit if you do it right.

19 GENERAL KERN: And Dick, it's one of the reasons,
20 because we don't have -- at least from the Army's perspective,
21 doing these other kind of exercises combined with tests is a
22 better -- well, it's the only way to get your hands on people.
23 There are no other people to do it at this point.

24 MR. HUTCHINS: Other interesting Packard words.
25 This is where they talk about IOT&E: "The first units coming

1 off low rate production should be subjected to intensive
2 operational testing." But the interesting words is: "A system
3 should not enter high-rate production until the results are
4 evaluated."

5 It doesn't say anything in there about you have to
6 get a passing grade or something from op-eval or approval. It
7 just says those results have to be evaluated.

8 GENERAL HAWLEY: That's how we implement it, I
9 think.

10 MR. HUTCHINS: That's how we implement it. But of
11 course, that's what Congress keeps beating us about, the OT
12 guys, is: You've got to get a -- you have to be effective and
13 suitable before you can go into high rate production. Now
14 that's not correct. The results of the tests have to be
15 evaluated.

16 GENERAL HAWLEY: And we occasionally ignore the
17 results of the tests and press right on.

18 MR. KOZLOWSKI: That's right, that's right.

19 The critics who want to use it will use it as a
20 hammer and say: You didn't pass the test. Well, in fact you
21 didn't have to pass. You just had to make sure you took it into
22 consideration.

23 MR. HUTCHINS: I don't know if this has happened or
24 not. DAU people maybe can help me out. They suggest that all
25 federal statutes governing procurement should be integrated into

1 a single government-wide procurement statute.

2 DR. ABBOTT: Isn't that where 5001 came from, an
3 integrated FAR? Remember we used to have DETFARS and DACFARS,
4 DAFARS and DFARS? I don't know about that one.

5 DR. BRANDT: They're talking about the statutes.
6 The FAR stuff actually was implementation of a later 800
7 committee.

8 DR. ABBOTT: It cuts down on the number of pages,
9 etcetera, going from a shelf to a small shelf.

10 MR. HUTCHINS: This conversation I know is ongoing
11 every year. Packard suggested DARPA expand into prototyping,
12 particularly in joint programming.

13 GENERAL HAWLEY: Which they have.

14 MR. HUTCHINS: Packard said that DOD should consider
15 more commercial models for acquisition, things such as expanded
16 use of A-45 and a couple of other things.

17 MR. A'HEARN: They're also talking about competition
18 relying on inherent market forces, and the defense industrial
19 base looked very different in 1986 than it does now.

20 MR. HUTCHINS: Yes, there's a lot less of it, less
21 market forces.

22 MR. A'HEARN: Actually, we do a pretty good job
23 buying commercial products. It's developing and producing
24 weapons systems that there's no market. Packard believed that
25 there is one.

1 MR. HUTCHINS: Packard came out in support of
2 baselining. Baselining of a very slightly different sort we've
3 just been talking about with these things.

4 DR. BRANDT: Part of what one would have to think
5 about is, baselining was an attempt to put some structure and
6 accountability into the system. You could argue that it's not
7 necessarily had the effect that it should. This moves it back,
8 and it depends on what you expect this baseline to do vice the
9 other ones.

10 I'm not saying it's bad. I'm just saying we had one
11 attempt which didn't do this.

12 GENERAL HAWLEY: Packard's words focus on a firm
13 internal agreement, which is the part we don't really get today.

14 MR. A'HEARN: Sort of the PEC thing.

15 GENERAL HAWLEY: That sounds like the PEC thing,
16 whereas what we do today is very different.

17 MR. HUTCHINS: Interestingly enough, the report that
18 just came out of the U.K. that was the focus of so much of
19 Senator Clinton's remarks at the hearing, I would say the
20 majority of their comments focus on baselining, having gone
21 through that and looked at it and their recommendations.

22 GENERAL HAWLEY: Baselining in the sense of a firm
23 internal agreement?

24 MR. HUTCHINS: Yes, sir.

25 GENERAL HAWLEY: And program parameters?

1 MR. HUTCHINS: Yes, sir.

2 MR. RIXSE: And lock it down before they go forward.

3 MR. HUTCHINS: Of all the recommendations we looked
4 at, I would say over half of them talk about baselining.

5 MR. KOZLOWSKI: It's baselining with the mutual
6 agreement of the parties signing up.

7 MR. HUTCHINS: Yes, sir, exactly, almost to the
8 point of, as in the PEC --

9 DR. BRANDT: This baseline was implemented in such a
10 way that the program manager signed it and the PEO, if there was
11 one, signed up. The SAE signed up. But it didn't include the
12 requirements guys.

13 GENERAL HAWLEY: It's an acquisition baseline.

14 DR. BRANDT: And it didn't include the comptroller
15 guy. So when things went awry either with technology or with
16 the budget, the program manager was the one who was told, you
17 didn't stay to the baseline, and breaches were reported.

18 GENERAL HAWLEY: Because it was his baseline.

19 DR. BRANDT: That's right.

20 MR. KOZLOWSKI: It started out as an accounting
21 reference primarily to track the dollars.

22 DR. BRANDT: Well, also it was an accountability.

23 MR. A'HEARN: Does the baseline have performance
24 parameters in it, too?

25 MR. KOZLOWSKI: Yes, it does.

1 MR. HUTCHINS: Yes, KPPs. Again, acquisition
2 organization and procedures, it's talking about acquisition.
3 Two things came out of Packard. One was surge mobilization and
4 industrial policy and the other one, which I know because I was
5 there at the time was the hot topic, was proprietary rights,
6 data rights. I don't know the degree of progress that's been
7 made here. It's certainly better than it was. Again, the focus
8 on early on focusing on industrial policy is probably what you
9 do.

10 MR. KOZLOWSKI: I think the industry -- Frank, you
11 can answer this, but I don't think we've had any real arguments
12 about data rights. The issue in those days was the threat that
13 if the government contracted with you they owned your data and
14 they would take that data and then put it out on the street, and
15 you could get crucified.

16 It never happened. It was an unfounded fear. The
17 way I got around it with several programs was to say, okay, you
18 can have everything I've got, as long as you put it in escrow,
19 and as long as I'm performing you can't open that escrow box.
20 As soon as I go away, it's all yours and you can do with it
21 whatever you want. They therefore had long-term production
22 rights guaranteed in case we died or went away, but until that
23 time they couldn't just go out and use it on a merciless basis
24 to undercut us.

25 But it was an unfounded fear and I think people have

1 given up on this issue.

2 MR. RIXSE: The Packard Commission came out with
3 three different conditions of data rights and they gave you
4 three different conditions. If the government fully funds it,
5 pays for everything, then they own it. They break it down.
6 They have three different conditions and they said those are the
7 conditions which ought to apply for it.

8 MR. HUTCHINS: To this day, there are an awful lot
9 of small businesses that will not do business with the
10 government, a lot of them on that one issue, believe it or not.

11 MR. RIXSE: Yes, because the government claims the
12 ability to have sole rights to the data even if the government
13 doesn't pay 100 percent for it. That's the issue that I got.

14 MR. HUTCHINS: The government always claims march-in
15 rights, so a lot of small businesses won't go there.

16 DR. ABBOTT: It's a starting position.

17 MR. CAPPUCCIO: From an acquisition standpoint, it
18 does create problems, not with the big primes. They'll give it
19 up. But the subs -- and when your RFP says give up data rights,
20 you're forced to pulse the subs, which are 60 percent of the
21 program, and every one of them argues: Why am I giving this up?

22 I ain't got to give it up; you're going to give it to another
23 sub. And the question is --

24 MR. KOZLOWSKI: And it's their intellectual key.

25 MR. CAPPUCCIO: It's their intellectual key to

1 existence on the small ones. So from a standpoint it creates
2 tremendous havoc in the system when you buy it, and it's not a
3 real requirement. It's not real. Get it the hell out.

4 MR. HUTCHINS: I'll give you a personal small
5 business example. Every solicitation I answer to the
6 government, I have to declare every software tool I have ever
7 built to be my own intellectual property, or else it becomes the
8 right of the government by default. A lot of people walk away
9 from that.

10 MR. KOZLOWSKI: It's a pain in the ass, and the only
11 reason, only legitimate reason they've got to have it, is so
12 they can reproduce whatever you're building should you not be
13 able to deliver. So you give them the production rights in case
14 you die.

15 DR. ABBOTT: But before, this was '86. In '86 and
16 before, essentially the government wasn't buying data rights
17 down to level 3 where you could produce. They were buying
18 top-level data and they were marginally constrained by that.

19 GENERAL KERN: The Army was buying down to level 3.

20 DR. ABBOTT: In '84?

21 GENERAL KERN: Yes, because we wanted to re-procure
22 and back out.

23 MR. CAPPuccio: It's a nuisance, it's a nuisance.
24 Not for -- like I said, Lockheed rolls on it. Every now and
25 then we fight with DARPA just to have some fun with the

1 contractors. But the subcontractors take it seriously.

2 And I'll tell you the next group that takes it
3 seriously. You try to get some advance state of the art
4 commercial software test packages or emulation models or the
5 next generation network system or Ethernet, that kind.
6 Microsoft, those guys, you can't get them on your program
7 because of this. They say no way.

8 MR. KOZLOWSKI: That's why they don't play.

9 MR. CAPPUCCIO: That's why they don't play.

10 MR. KOZLOWSKI: They're making 25 percent margin on
11 their products. Why should they play?

12 MR. CAPPUCCIO: You spend endless, endless dollars
13 on the other parts of the acquisition process trying to comply
14 to a rule.

15 MR. HUTCHINS: The final piece of the puzzle, it
16 doesn't map to anything we really talked about, but Packard
17 wrote extensively on the organization of the joint staff.
18 Here's what Packard said about the organization of the joint
19 staff (indicating).

20 MR. A'HEARN: All implemented.

21 GENERAL KERN: That's been done, yes.

22 GENERAL HAWLEY: Except the vice chairman they
23 envision being a little different cat than he turned out to be.
24 He was viewed as being almost a grey beard. He was going to be
25 someone who was not in contention to be the chairman and would

1 provide this kind of sage counsel to the younger members of the
2 staff.

3 DR. ABBOTT: Prior to Goldwater-Nichols, essentially
4 the rotation of JCS when JCS was out of town, the President
5 rotated senior service members. The idea of the sixth guy was
6 he would be an old guy whose linear number would be lower than
7 the other four serving members and he by default would become
8 JCS when JCS was out of town and not near the President. But by
9 creation it was actually now making the vice the number two guy.
10 The JCS was never --

11 MR. HUTCHINS: In your binders, we didn't have time
12 to make these into viewgraphs, but we have done the same thing
13 with the recommendations and the thesis beyond
14 Goldwater-Nichols.

15 DR. BRANDT: Which tab?

16 MR. HUTCHINS: It's under tab 4.

17 GENERAL HAWLEY: Oh, yes, you sent us this by email.

18 MR. HUTCHINS: That's right. It came out of Hicks.
19 The GAO one is the March '05 that caused all the furor earlier
20 this year, and the U.K.-NATO is the one I just talked about, the
21 one that Senator Clinton called out.

22 Now, the way these are organized is these are
23 organized by the six areas we have there: budget, requirements,
24 acquisition, oversight, industry, work force. Then the big
25 idea, and I've color-banded the big idea across so you can see

1 where anything in any of these reports map to any of our big
2 ideas. When there's not a big idea next to it, that means there
3 are things there that don't map to any of our big ideas.

4 So you can work through those or look through those,
5 but kind of the short form for the results of that, once you've
6 gone through Goldwater-Nichols there isn't actually a lot new
7 out there, and actually after Packard there's not a heck of a
8 lot new in any of these other studies.

9 MR. CAPPUCCIO: Beyond Goldwater-Nichols is BGN-2?

10 MR. HUTCHINS: Yes.

11 MR. CAPPUCCIO: And that's the report that's coming
12 out?

13 MR. PATTERSON: That's the CSIS.

14 GENERAL KERN: Did you take a look, by chance,
15 looking at Goldwater-Nichols' implementation of Packard versus
16 just Packard?

17 MR. HUTCHINS: I have not looked at that.

18 GENERAL KERN: Most people just kind of assume if
19 they're not in the acquisition business that that maps.

20 DR. ABBOTT: There's a lot more in Goldwater-Nichols
21 that wasn't in Packard.

22 GENERAL HAWLEY: Was there a lot more in
23 Goldwater-Nichols with regard to acquisition that wasn't in
24 Packard?

25 DR. ABBOTT: Subsequently there was.

1 DR. BRANDT: Yes, later.

2 DR. ABBOTT: The Defense Acquisition Work Force
3 Improvement Act.

4 GENERAL HAWLEY: But that's separate from
5 Goldwater-Nichols.

6 DR. ABBOTT: No, it wasn't part of
7 Goldwater-Nichols, but it was essentially part of the same
8 continuum. It was the increased granularity when you get done
9 with it.

10 MR. A'HEARN: But a lot of requirements in
11 Goldwater-Nichols.

12 DR. ABBOTT: A lot of the requirements, and our
13 organization, joint promotion of officers.

14 GENERAL KERN: I don't want to put you through
15 another one of these, but it may be worthwhile because I think
16 most people who will interpret or read the report,
17 Goldwater-Nichols, better than they do back to Packard.

18 DR. ABBOTT: Goldwater-Nichols, for example, gave
19 the chairman the authority to produce his own budget and submit
20 it. It's never been used. It's there.

21 MR. HUTCHINS: We'll take that on for something to
22 do.

23 We kind of are at a juncture here where we could do
24 one of a couple of things. One, we could actually it down and
25 work through the spreadsheets if you're interested. The other

1 thing we have to do in terms of review is go through all of the
2 shredded out slides, the slides that we pulled to refresh
3 memories, and see if, given the list of top ideas that came up
4 last time, is there anything that's been missed, is there
5 anything we want to modify, or anything we want to change.

6 So what's the desire to do that?

7 MR. PATTERSON: Why don't we take a 15-minute break,
8 come back at 1600. I vote that we believe you that all of those
9 things mapped to what you said they do.

10 MR. HUTCHINS: Do you disagree with me, because the
11 other guy did all of the work?

12 MR. PATTERSON: And that we then go to the slides
13 that we culled out. That's at tab 10, and that we go through
14 those.

15 MR. HUTCHINS: Again, I remind everybody, the other
16 thing I've got going through all of this stuff is that this
17 panel is unprecedented in terms of the breadth of the look it is
18 taking. All the other panels seem to focus on, I call them,
19 hobby horses, kind of specific areas.

20 DR. BRANDT: But beyond Goldwater-Nichols 2 also?

21 MR. HUTCHINS: They get right down to the
22 recommendations.

23 MR. RIXSE: That's a mile wide and an inch deep.
24 This is a mile wide and a mile deep.

25 MR. KOZLOWSKI: I think I asked this the last time.

1 Where can we get a summary of the Goldwater-Nichols legislation?

2 I was going to look for that. I didn't do it.

3 GENERAL KERN: Are you asking for the legislation or
4 a summary?

5 MR. KOZLOWSKI: Well, a summary would do. I just
6 want to know what happened in Goldwater-Nichols so I can fit it
7 in the context of this.

8 MR. PATTERSON: We'll grab that real quick. We'll
9 get it.

10 MR. KOZLOWSKI: And if you can, the original
11 legislation will do.

12 MR. PATTERSON: The original legislation is hard to
13 read.

14 DR. ABBOTT: It's hard to read, but it's readable.
15 You don't read the whole paragraph. You just read the first
16 line.

17 MR. PATTERSON: Break.

18 (Recess from 3:46 p.m. to 4:04 p.m.)

19 MR. PATTERSON: Okay, let's re-engage.

20 MR. KOZLOWSKI: Before we jump into it, I want to
21 ask a couple simple questions. Who has the authority to approve
22 the requirements?

23 MR. A'HEARN: The JROC validates the requirements,
24 but I don't think they have the authority to approve them.

25 MR. KOZLOWSKI: The vice chief doesn't have to sign

1 them?

2 GENERAL HAWLEY: I suppose that varies by service,
3 but the service chief signs it.

4 MR. KOZLOWSKI: Does that seem to imply that the
5 services can set their own requirements?

6 GENERAL HAWLEY: That's where requirements start.

7 MR. KOZLOWSKI: I understand. I'm not questioning
8 it. I'm just trying to understand.

9 GENERAL HAWLEY: But we now, after the service chief
10 signs it, it has to go down to the JCIDS and get validated.

11 MR. KOZLOWSKI: How would you all define complexity
12 of the acquisition process? If somebody wanted to describe it
13 or define it or explain it, what is it that drives this term
14 "complexity"?

15 DR. ABBOTT: I would suggest the thing that drives
16 it, first of all the system is inherently simple in the sense of
17 it starts with the need or requirement and moves through the
18 process of approvals from explorations of concepts to prototypes
19 to approval to produce, and then you produce. It's a linear
20 system.

21 MR. KOZLOWSKI: With well-defined decision points,
22 okay.

23 DR. ABBOTT: Having said that, the complexity
24 becomes, you remember the chart we had that's around here that
25 looks like the back of a TV? I think that's even simple by

1 comparison. That level of complexity, plus the fact that there
2 is virtually -- I don't want to overstate it, but there's
3 thousands of people who aren't on that chart who get to play in
4 the process and bring their own pet rock into the process that
5 will affect the outcome.

6 MR. KOZLOWSKI: And usually governed by some
7 regulation someplace.

8 DR. ABBOTT: Usually allowed, usually allowed by
9 some regulation, and allowed by the general idea that by opening
10 the process up to, quote, "everyone with an interest," you will
11 get on board consensus and you will move forward, and with
12 consensus you usually get -- one of the obvious things is the
13 lowest common denominator, which is not necessarily the best
14 idea.

15 So the complexity, it gets exacerbated by the levels
16 of authority. Look at Packard. Packard says go from the
17 program manager to the PO to the SEA to the PA. That's four
18 levels. The reality is there's probably 400 levels when you add
19 in all the IPTs, all the service chiefs. The service chiefs
20 aren't out of the game. That colonel or that one-star is in
21 there talking. Information is being passed.

22 DR. BRANDT: Unless he's stupid.

23 DR. ABBOTT: Unless he's stupid, unless he has an
24 interest in killing himself.

25 All those functions are taking place.

1 MR. PATTERSON: Gerry, let me put just a little bit
2 different complexion on that, and I think you accurately, you
3 said it. That PEO is in there talking with that service chief,
4 but the problem is -- and Admiral Mullens made this point
5 yesterday. He said the reason that it works reasonably well
6 between myself and John Young is because we both understand that
7 we have to talk to one another.

8 My comment to him was: But do you feel like it's
9 institutionalized? He said: Oh, no. He said: My
10 predecessors, Vern Orr did, but everybody before him never
11 talked.

12 So the fact is that sometimes they do and it works
13 okay and the problems are worked out, but there's nothing to say
14 that they always will. What we're about is helping to create a
15 circumstance where it's not a matter of personality.

16 DR. ABBOTT: But the real question, what was the
17 level? How would you describe the complexity? The system is
18 inherently simple. The execution of the system is inherently
19 complex.

20 MR. RIXSE: Gerry, another point -- and this is
21 something that I deduce from going over the Hicks report. It
22 suggests that, well, they infer that the job descriptions of the
23 people who are assigned responsibility, the people in charge at
24 the top need to look carefully at it because people tend to
25 write their own job descriptions, and as you go down the tier

1 people add more and more things to give themselves more and more
2 power. If you look at what is in people's job descriptions, it
3 is greater complexity and oversight control.

4 MR. KOZLOWSKI: The reason I ask the question, if
5 England is asking us to simplify, what the hell can you do to
6 challenge that system to shake the cobwebs out of it?

7 GENERAL HAWLEY: Eliminate OIPT.

8 MR. KOZLOWSKI: It's a very big step.

9 DR. ABBOTT: It's a very big step.

10 GENERAL HAWLEY: Eliminate JCIDS.

11 MR. KOZLOWSKI: Yes, we can do that.

12 GENERAL HAWLEY: Just eliminate it, come up with a
13 better way to provide a joint input to the requirements process
14 that's simpler and doesn't have its own bureaucracy.

15 DR. ABBOTT: And is done within X number of days.

16 GENERAL HAWLEY: Yes.

17 MR. A'HEARN: The AT and L step. Yesterday
18 afternoon Linda and I had a general officer who's a PEO -- we
19 have non-attribution, so I don't want to identify this person
20 any more than that -- said a couple things to the students.
21 One, the AT and L staff has grown so large that it's out of
22 control. One of my programs, he said, one of my program
23 managers has a SAMP, Systems Acquisition Management Plan, that's
24 been in coordination two years and is not out yet. There's
25 something wrong there, there's something very wrong.

1 MR. KOZLOWSKI: Especially if there's only supposed
2 to be two or three layers of approval.

3 MR. A'HEARN: That's right.

4 DR. ABBOTT: You had your PEO for ships telling us
5 that the TE budget to do the testing for his program would be
6 the cost of one ship.

7 MR. HUTCHINS: Turning to tab 11 --

8 DR. ABBOTT: A good idea to test, right; terribly
9 complex if it's causing that.

10 MR. KOZLOWSKI: You're just telling me that the
11 system's a lot more complex than anything you could possibly map
12 out of official regulations, directives.

13 DR. BRANDT: That's right.

14 MR. KOZLOWSKI: So the disease of bureaucracy has to
15 be cured.

16 DR. ABBOTT: The only way to do it in Washington is
17 to cut the tree down and you start over.

18 MR. PATTERSON: Okay, Al, over to you.

19 (Slide.)

20 MR. HUTCHINS: Here's what we're doing now. These
21 are the slides that the panel has asked to be pulled from all
22 the subject matter expert briefings that we have received. The
23 process we'll go through is I'm going to put these slides up
24 here one at a time. What we need to do is as we look at these
25 slides determine if, is there something in here we want to add

1 as a top level solution. That's question number one.

2 Question number two, do any of these slides prompt
3 us to say, oh, and when we develop one of these top level
4 solutions here is there something more we need to add to one we
5 already have? I think that pretty well covers the universe.

6 This is starting. This is from the 15th of July.

7 MR. PATTERSON: We will cover the right-hand side
8 and it will be part of the words and the introduction that
9 distinguishes what we've done from what other folks have done,
10 and it will also appear again, probably some statement that says
11 something similar, in our explanation of the baseline document
12 search.

13 (Slide.)

14 MR. HUTCHINS: Here are a number of interesting
15 bullets under the heading of what we need to do better. Is
16 there anything here we need to add to our top solutions list or
17 map into one of our current top solutions?

18 MR. CAPPuccio: Robust industrial base, any of the
19 industrial base stuff.

20 MR. HUTCHINS: Does that mean we need to capture
21 some top level solutions on industrial base?

22 MR. CAPPuccio: No. I mean, it blares out, but I'm
23 not sure that the charter of this group is that industrial base
24 thing, because it itself can take a whole damn case study. You
25 may mention it.

1 MR. KOZLOWSKI: It's like the scientific
2 engineering. It's a problem we can identify. Certainly it's
3 part of the environment. But it's not up to us to solve it.

4 DR. ABBOTT: These are almost the sides.

5 MR. PATTERSON: I think it's not unreasonable for
6 the report to say that the panel recommends that the Department
7 of Defense take the initiative to look for solutions.

8 MR. CAPPuccio: For the industrial base, on this
9 whole issue of is large-scale integration and vertical
10 integration hurting or harming the product set that is being
11 delivered to the government.

12 MR. PATTERSON: And we're going to talk about, we're
13 going to talk about that when you talk about the first, second,
14 third tier suppliers and how you bring them into the system,
15 what's your strategy.

16 MR. HUTCHINS: At this point none of that is in the
17 top level. So if your point is those topics should be addressed
18 under the greater rubric of acquisition strategy, which is
19 already a top level solution, we can write that down and we will
20 make that happen. Or if your point is we should add a top level
21 solution that says we will address large-scale integration, we
22 can add it.

23 MR. CAPPuccio: I think you just push it aside as a
24 comment, topics worthy of further study.

25 MR. RIXSE: Al, another way of answering the

1 question. On your global big ideas, you do not have the word
2 "industry" on this.

3 MR. HUTCHINS: Nor do I have it anywhere.

4 MR. RIXSE: No, but in one of the six mapping areas
5 industry is there. Very few previous studies have explicitly
6 addressed industry. It's an opportunity for this panel if they
7 want to, if they think industry is important, to put it on
8 there. That's what you're asking. That's your question.

9 MR. HUTCHINS: Yes. I need an answer.

10 MR. PATTERSON: Only insofar as we have to address
11 the people that have talked to us about the first, second, third
12 tier supplier base.

13 GENERAL HAWLEY: What we said previously is that the
14 DOD should strengthen its industrial policy work. We've had
15 comments in here that said we don't do that very well.

16 MR. CAPPuccio: Not anywhere in the big ideas.

17 MR. RIXSE: Are you not saying, though, that some of
18 the actions you're taking are designed to control the industry
19 base, that it's important to be able to do that to effect a good
20 acquisition plan?

21 MR. CAPPuccio: That's a different topic.

22 GENERAL HAWLEY: Well, that may be true, but
23 explicitly we have said that we thought we needed a stronger
24 industrial policy function within OSD.

25 MR. HUTCHINS: That is not on our list.

1 GENERAL HAWLEY: Which we do not have on our list,
2 anyway.

3 MR. HUTCHINS: Do we want to have that on our list?

4 MR. PATTERSON: We put it up there in the beginning,
5 industrial policy. It took a decidedly ugly turn and we decided
6 that we did not want to address industrial policy.

7 MR. HUTCHINS: I've heard yes and I've heard no.
8 I'm sorry, I can't deal with that.

9 MR. CAPPuccio: Let me make a motion. I make the
10 motion, make a motion that all discussions on the robustness and
11 the consolidation and any consolidations associated with the
12 industrial base be identified as a subject worthy of future
13 deliberations on an appendix.

14 DR. ABBOTT: Is that the only one?

15 MR. CAPPuccio: Do I hear a second, and do we go
16 forward?

17 DR. ABBOTT: Second.

18 MR. HUTCHINS: Any discussion? We've got S&T
19 community and integration as a topic already.

20 DR. ABBOTT: You remember the discussions on the
21 second and third tier didn't cover much data.

22 MR. CAPPuccio: No.

23 DR. ABBOTT: A lot of observations and fears.

24 MR. CAPPuccio: Opinions.

25 DR. ABBOTT: And that has been going on for probably

1 46 years plus.

2 MR. HUTCHINS: Any other topics from this chart?

3 (No response.)

4 (Slide.)

5 MR. HUTCHINS: Anything here anybody wants to?

6 MR. KOZLOWSKI: Where were these charts taken from?

7 MR. CAPPUCCIO: These are from briefings. What do
8 you mean, when?

9 MR. KOZLOWSKI: Yes, which one.

10 MR. HUTCHINS: I can give you the dates of the
11 sessions, but I'd have to go back into the briefs.

12 MR. CAPPUCCIO: We did not talk anything about --
13 the other chart had it. We did not talk anything about system
14 of systems and network-centric capabilities, make the assumption
15 when you do the requirements. All that stuff should fall out in
16 that arena.

17 MR. HUTCHINS: Now, we do not have anything on our
18 top level solutions yet that talked about any of the discussions
19 we've had today, including that about requirements, force
20 requirements, architectures, interfaces, any of that discussion.
21 We do not have a top level solution that talks about any of
22 that.

23 MR. CAPPUCCIO: But I thought the stuff that Tom
24 presented this morning, the PEC stuff, was the solution.

25 GENERAL HAWLEY: I thought the PEC was the best I'd

1 heard.

2 MR. CAPPuccio: But is it on this?

3 GENERAL HAWLEY: It opens the requirements process.

4 MR. HUTCHINS: PEC would go to milestone A.

5 DR. BRANDT: We have JCIDS.

6 GENERAL HAWLEY: Get rid of JCIDS.

7 MR. HUTCHINS: We have that.

8 GENERAL HAWLEY: But isn't the pre-milestone,
9 milestone A, a lot about requirements?

10 MR. HUTCHINS: It should be, but nowhere have we
11 talked about things that have been discussed in terms of how you
12 conduct a campaign, how do you describe that in an architecture
13 with a set of interfaces. None of that discussion is captured
14 anywhere in our top level solutions.

15 MR. CAPPuccio: And I don't think this panel should
16 discuss the how-to. I think the panel should discuss the fact
17 that there's a discrepancy.

18 DR. BRANDT: We had discussions about requirements
19 as flexible or inflexible, as iterative, as connected to
20 acquisition. We've talked about all of this in JCIDS.

21 MR. HUTCHINS: We've talked about it, but in our top
22 level solutions all we have now --

23 MR. CAPPuccio: What you need to do is get the big
24 "A" sheet and put it on the board and remind people it ain't on
25 the big "A".

1 MR. HUTCHINS: We have at this point 18 top level
2 solutions, that's it.

3 MR. CAPPUCCIO: That's it.

4 MS. GIGLIO: Tomorrow you get the Air Force,
5 requirements briefing, whether that matters or not.

6 MR. KOZLOWSKI: Well, you've got two items. One,
7 you've already got the "get rid of JCIDS." We also talked about
8 moving the ATL piece further up front, which is germane to this.
9 And these things about establishing force structure and those
10 kinds of things, that's left to the professionals.

11 MR. PATTERSON: The networkcentric capability,
12 that's a requirement.

13 MR. CAPPUCCIO: Just another requirement, hit a
14 target.

15 MR. PATTERSON: And if you have a good system and
16 process for evaluating it, that'll be taken care of.

17 MR. CAPPUCCIO: And if there's a need.

18 MR. HUTCHINS: You can look under tab 3 and I've
19 mapped out on separate sheets all the current existing 18 or 19
20 top level solutions. That's all we have so far. So at this
21 point we've got --

22 MR. CAPPUCCIO: I'm not saying do it. I'm just
23 saying I don't want to add this -- it comes across on three
24 charts. We should make a conscientious decision that says this
25 is a requirement like any other requirement and it will be

1 handled in the PEC process.

2 MR. HUTCHINS: We already have this one beaten to
3 death everywhere.

4 MR. PATTERSON: You've actually included it in one
5 of your briefings.

6 MR. HUTCHINS: Yes, a top level briefing.

7 I guess the question on the table from this one
8 would be would there be thought to redoing any of this
9 structure.

10 MR. KOZLOWSKI: Isn't the 2R there referenced?

11 MR. PATTERSON: The 2R was actually a regulation.

12 MR. HUTCHINS: It used to be the 2M.

13 MR. PATTERSON: No. The 2R is the guidebook as a
14 regulation, and Secretary Wolfowitz disapproved it as a
15 regulation and it then became in total a guideline.

16 MR. HUTCHINS: That the auditors are now using to
17 say, why aren't you following this?

18 DR. ABBOTT: Why aren't you following your own
19 regulation, your own guidance, even though it's not mandatory.

20 MR. PATTERSON: Right.

21 MR. CAPPuccio: You have to justify existing staff,
22 staff have to justify existence.

23 DR. ABBOTT: You've got to find something wrong.

24 MR. HUTCHINS: This would be JCIDS.

25 (Slide.)

1 We already have a top level solution there.

2 (Slide.)

3 MR. CAPPuccio: We lost the behavioral part. But
4 the behavioral aspects may be under the leadership stuff.

5 MS. GIGLIO: Culture and behavior.

6 MR. CAPPuccio: Culture and behavior got lost. One
7 of the things, if you had a guy who's in a position who said
8 that's a leader and he turns and said, what do you want me to
9 do, I don't know what to do, it would be nice if there was a
10 series of behaviors you could turn to and say: Look, the first
11 thing as a leader you can do is stop this behavior. We lost
12 that.

13 GENERAL HAWLEY: Would that fit under the oversight?

14 MR. CAPPuccio: Yes, it might.

15 MR. KOZLOWSKI: I don't think it's under the
16 leadership. The leadership sets the tone for culture, for
17 behaviors, what your expectations are of the labor force in
18 general. Even if you're just laying down a vision, you expect
19 them to march to it. That's why I brought up this complexity
20 issue. The bureaucracy is so strong that it tends to dilute all
21 those individually driven -- here's one guy on top who's got to
22 drive thousands to ten thousand to a hundred thousand people.
23 If just half of them are trying to write extra things in their
24 job jar, how can you expect him to change it.

25 GENERAL HAWLEY: What I'm thinking is these are a

1 place to capture leadership issues: pushing ACAT levels down,
2 changing oversight from regulatory to decision support, using
3 small experienced review teams, assigning long-range development
4 responsibility for the system. It seems to me you can get at
5 leadership issues within those.

6 MR. CAPPuccio: So anything behaviorally will
7 capture in that leadership because you added the leadership
8 thing this morning.

9 MR. HUTCHINS: You recall the last step in the
10 process I would like to be able to get to in two days is to take
11 a look at all these top level solutions and say: Now, are some
12 of these related that we want to pull together, just like you're
13 talking about, under an overall heading called --

14 GENERAL HAWLEY: Behavioral issues, leadership,
15 whatever.

16 MR. KOZLOWSKI: Back up a minute, Al. The systems
17 thinking raised an issue. There's another big deficiency in the
18 system. When we talked about the lack of system engineering, is
19 there anything we want to say relative to that? Is there
20 anything, any action that should be taken? Or is that just it
21 happens and you've got to live with it?

22 MR. PATTERSON: I think it comes under the rubric of
23 work force and training and folded into the big idea of systems
24 command.

25 DR. ABBOTT: Okay.

1 MR. HUTCHINS: And a lot of discussion that system
2 engineering is needed most is places like the joint staff,
3 placing new requirements. If -- I think I heard this morning
4 that we're going to add to the top level ideas the PEC -- you're
5 going to have a pre-milestone A activity, you can't do it
6 without good system engineering at a top level. So we will
7 probably be able to capture it somewhere in that discussion.

8 MR. RIXSE: Good system engineering should be in the
9 end and the thing is the left-hand side of that end captures the
10 requirement part.

11 MR. HUTCHINS: That's the PEC.

12 MR. RIXSE: Which is the PEC part.

13 MR. HUTCHINS: We will be capturing this in writing,
14 I know, which is the progression of acquisition reform.

15 (Slide.)

16 GENERAL HAWLEY: It doesn't have anything to do with
17 this chart, but we have decided we aren't going to address the
18 programming process, the use of artificially low inflation
19 indices, the underprogramming of O and M accounts, which then
20 drives you to go raid acquisition accounts, all that kind of
21 stuff.

22 DR. BRANDT: The destabilization.

23 MR. PATTERSON: Isn't that under realistic costing?

24 GENERAL HAWLEY: No. Realistic costing focuses on
25 realistic costing of the acquisition programs.

1 DR. BRANDT: But should there not be some backup?
2 Maybe that would deflate the idea of capital. I also in
3 non-attribution was talking to a one-star PEO about this kind of
4 thing. They seconded what he said about getting anything
5 through OSD, but in addition the budget issue came up as huge in
6 terms of anything that they were doing in their program.

7 I think the capital account is intended to take care
8 of that. But should there not be some discussion of other kinds
9 of comptroller behaviors? I don't want to make this sound
10 pessimistic. In case the capital account isn't 100 percent
11 implemented or something, if we only provide that as a solution
12 are we not then leaving one chunk of that circle undone? I
13 don't know. That's a strategic -- that's a strategy issue.

14 GENERAL HAWLEY: Yes, I think if we propose a
15 capital account with a management reserve, which is the way we
16 described it here, without addressing the rest of the
17 programming problem, we have an unrealistic recommendation,
18 because you can't do the one unless you do something to fix the
19 rest of the problem that forces them to raid the capital account
20 to begin with. That's what I think.

21 MR. HUTCHINS: How would you phrase that? Realistic
22 programming?

23 GENERAL HAWLEY: At the highest level, realistic
24 programming across all accounts.

25 MR. HUTCHINS: Realistic programming across all

1 accounts needs to be added as a top level solution.

2 MR. KOZLOWSKI: One thing that Krieg said Friday,
3 well, in short he thinks in his tour of PA and E they have taken
4 care of the deficiency of the personnel account by properly
5 accounting for medical costs. I don't know if that's a fact,
6 but it sounded like he just did it in the last 6 months or so.

7 MR. PATTERSON: Yes, but that was an
8 oversimplification, and whether or not it'll prove through
9 remains to be seen.

10 MR. KOZLOWSKI: I understand that. But there are
11 moves being made to correct all of that, and it is a forecasting
12 problem or estimating problem across all the accounts. What you
13 want to avoid is using the procurement account as your balancer.

14
15 GENERAL HAWLEY: That's my point. I just don't
16 think -- it's not realistic to expect the capital account to
17 remain whole if you don't fix the rest of the problem, because
18 in the real world it's the only place you can go for money there
19 in the execution year or in the year prior to execution.

20 DR. ABBOTT: It's the largest amount of
21 discretionary funds.

22 GENERAL HAWLEY: It's the only discretionary money
23 you get.

24 DR. ABBOTT: It could be discretionary if you chose
25 to sit down, which you have done in the past.

1 GENERAL HAWLEY: In the real world it's not
2 discretionary, because if you're taking the O and M money you
3 destroy current readiness and nobody's going to take that risk.

4 GENERAL KERN: Well, not in the current environment.
5 10, maybe 20 years ago when we were in the middle of the Cold
6 War.

7 GENERAL HAWLEY: Then you could and we did.

8 MR. KOZLOWSKI: Well, fundamentally, somewhere in
9 the report we've got to talk about this problem. The principal
10 reason we're into this is the perennial perception that cost
11 overrun is rampant. Well, why? What are the causes? The
12 budgeting problem that you just described is part of it, and
13 it's got to be explained. What is that and what are we doing to
14 fix that? The criteria is the end solution, but you need the
15 lead end of that entire argument with the data to support it.

16 MR. CAPPUCCIO: So we're going to pick up, under
17 that we'll pick up a broader issue, that once you do the capital
18 you now have to go back and do realistic programming of all
19 accounts, so that when you fix the capital you're not deceiving
20 yourself as to the dollars, as to the value of that budget.

21 DR. ABBOTT: Actually, that process would help even
22 if you don't have a capital account.

23 MR. CAPPUCCIO: Linda's saying if they don't pick
24 one recommendation maybe they'll pick the other.

25 GENERAL HAWLEY: In fact, if you could realistically

1 program everything else and realistically cost program, you
2 wouldn't need a capital account.

3 DR. BRANDT: You wouldn't need a capital account
4 then, yes.

5 GENERAL HAWLEY: My point is, though, that if you
6 establish a capital account and don't fix the other, you're
7 fooling yourself because the capital account won't be honored.

8 GENERAL KERN: The other piece of it, a way to look
9 at it is that the capital account would not necessarily be the
10 entire procurement account. It's the priority piece of it that
11 the leadership agrees, that says this is firm, we're going to
12 make some decisions on that and we're going to stick with it
13 over a long period of time. And it still gives them the
14 discretion with the other piece which they have made some a
15 priori view that it's not as fixed.

16 MR. CAPPUCIO: Financing in big pots, big pots of
17 money.

18 GENERAL KERN: That's how the Army bought the rest
19 of the program 20 years ago.

20 (Slide.)

21 MR. HUTCHINS: Anything on this one?

22 GENERAL KERN: But we don't do it now.

23 GENERAL HAWLEY: Yes, I think we do.

24 DR. BRANDT: One other thing. Looking at the global
25 big ideas, and I'm not sure if it would be under work force or

1 under requirements or whatever, Ron went up and testified about
2 training for the big "A" acquisition work force, and I'm not
3 sure that's reflected at all. In other words, we're going to
4 provide some standard of training for requirements and
5 comptroller work force, whether that's realistic or not.

6 MR. HUTCHINS: That was captured under the
7 "establish a four-star that has the organize, train, and equip
8 responsibility."

9 DR. BRANDT: Okay.

10 MR. HUTCHINS: Anything else for this one?

11 MR. KOZLOWSKI: Where did that budgeting curve come
12 from? I'm sorry?

13 MR. PATTERSON: PA and E.

14 MR. CAPPUCCIO: The one we've been asking for, that
15 no one seems to be able to produce; is that the one you're
16 asking?

17 MR. KOZLOWSKI: I'm trying to figure out what it
18 says.

19 MR. A'HEARN: The PA and E thing is the POM process,
20 building from the POM to the President's budget, plotted against
21 calendar months.

22 GENERAL KERN: Where you start with 100 and you end
23 up with 10 from POM to budget.

24 MR. A'HEARN: But I've seen charts like that before.
25 It's plotted against the calendar. If it's January we must be

1 doing this. If it's March --

2 DR. ABBOTT: Actually, the way the budget chart is
3 put, it's three calendars running simultaneously, as opposed to
4 this final one.

5 MR. PATTERSON: This is a chart that's based on a
6 four-year QDR cycle.

7 (Slide.)

8 MR. HUTCHINS: Anything here?

9 GENERAL KERN: That's the way the CNA says we should
10 all be working.

11 (Slide.)

12 DR. ABBOTT: You can clearly see the line there
13 drawn up to the Secretary. He doesn't seem to have any
14 confusion.

15 DR. BRANDT: I don't think there is confusion about
16 that.

17 GENERAL KERN: It's a little bit of an integration
18 challenge.

19 DR. ABBOTT: And we all have more than one boss.

20 MR. KOZLOWSKI: It's interesting that he used the
21 same terminology that Packard used: acquisition policy,
22 procedure, and oversight.

23 GENERAL KERN: It's also interesting that it's not
24 broken out by NAVSEA, NAVAIR, and other.

25 DR. ABBOTT: You see where the program managers are

1 located.

2 MR. HUTCHINS: Those are the ACAT 3 and 4 program
3 managers. These are the ACAT 1 and 2's. The interesting thing
4 is -- that's not right. SYSCOMs work for the CNO. That's their
5 line.

6 MR. CAPPUCCIO: He is not right? That chart's not
7 right, really?

8 MR. HUTCHINS: Systems commanders work for the CNO.

9 DR. ABBOTT: Yes, but they also work for AS and O,
10 or AS and O, RD and A.

11 MR. HUTCHINS: The actual line though is --

12 DR. ABBOTT: There should be another line. There's
13 two lines, two reporting chains.

14 MR. HUTCHINS: Yes. Anyway --

15 DR. ABBOTT: Most flag officers at that level have
16 at least two fitness reports submitted on them.

17 GENERAL HAWLEY: I don't know, but I quit getting
18 fitness reports when I became a three-star.

19 DR. ABBOTT: Right, the same thing in the Army.

20 GENERAL HAWLEY: One of the nice things about
21 getting three stars is you quit getting fitness reports.

22 MR. HUTCHINS: You mean you have to start writing
23 your own?

24 DR. ABBOTT: Yes, but the trouble with being a
25 three-star is you actually believe what your fitness report

1 said.

2 GENERAL KERN: Two-stars.

3 DR. ABBOTT: Two-stars, that's right.

4 GENERAL KERN: You mean the last one you got:
5 Walked on water, didn't get his feet wet.

6 (Slide.)

7 DR. ABBOTT: I don't know why we kept this one.

8 MR. HUTCHINS: This was the early discussion about
9 JCIDS here, here, here, here, here, as opposed to different
10 management acquisition here, as opposed to budget here. That
11 needed to be clarified.

12 DR. ABBOTT: That's the purple portion or blue?
13 Being color-blind, I can't tell.

14 MR. HUTCHINS: Purple is where JCIDS.

15 MR. CAPPUCCHIO: The purple is so that JCIDS, if
16 unintentional, can enter the program in a whole bunch of
17 different ways and cause delays or opportunities for
18 requirements creep.

19 DR. ABBOTT: It's amazing, JCIDS thinks it plays a
20 big role in the disposal. Things must have changed dramatically
21 since I was in the business. I can't imagine the joint
22 community worrying about disposal, other than maybe they talk
23 about nuclear disposal of weapons.

24 MR. HUTCHINS: I think the point was that about this
25 time, towards the end of the life cycle of weapons, they're

1 starting again.

2 DR. ABBOTT: They're starting over again. Oh, I
3 see. This is the loop going back.

4 GENERAL HAWLEY: I don't think there's anything in
5 this chart.

6 MS. GIGLIO: This means to get rid of JCIDS?

7 MR. CAPPUCCIO: Well, we've no doubt we should get
8 rid of JCIDS.

9 MR. KOZLOWSKI: This was just so someone could steal
10 it and use it.

11 (Slide.)

12 MR. HUTCHINS: That's the end of that section. Let
13 me call up the next one.

14 (Slide.)

15 This is obviously the brief one we got from most
16 folks.

17 GENERAL KERN: There is sort of a contradiction
18 between that last chart and this one, like experience counts and
19 the next one says that the world is different.

20 MR. CAPPUCCIO: That there is none, he's saying.

21 MR. PATTERSON: Actually, this first bullet sort of
22 lays out some things that may be incorporated into our theory
23 versus practice.

24 MR. HUTCHINS: Some interesting stuff.

25 MR. CAPPUCCIO: The first part in the preamble is

1 the justification for the pick would say, look, given that there
2 are so few people to help coordinate, given that there are so
3 few starts, given that you produce low, doing something way up
4 front has a lot more value than you would have thought five
5 years ago.

6 So you could weave those things as forcing functions
7 of why more up-front stuff is better.

8 GENERAL HAWLEY: We don't have anything in our 18 on
9 what we buy, do we?

10 MR. CAPPUCIO: No.

11 GENERAL KERN: We did not address it.

12 MR. HUTCHINS: What would our top level solution to
13 what we buy be?

14 DR. ABBOTT: Part of the strategy requirements was
15 that exercise, for one of the functions to be able to tie
16 competitive strategy to requirements.

17 MR. HUTCHINS: So we need to add to our what to buy
18 list -- what to buy list -- top level solutions, that tying
19 strategy to requirements at the front end will allow us to be
20 more sure we're buying the right thing, and also the decision
21 made.

22 MR. HUTCHINS: I'm trying to recapture the thought
23 so we don't lose it.

24 GENERAL HAWLEY: What I think is that there's a
25 missing link in our strategy to task structure, which is a

1 long-term force structure vision for the Department.

2 MR. HUTCHINS: So to flip it around to a solution,
3 we need to?

4 GENERAL HAWLEY: Each of the services has a road map
5 by mission area or something like that. Where does that come
6 together for a mission area road map at the departmental level
7 so you can integrate all this and make sure that you're actually
8 buying the right stuff.

9 DR. ABBOTT: It traditionally has come together when
10 the concept was how many wars you're going to fight, big wars
11 and little wars you're going to fight, two, three, or four
12 battles.

13 GENERAL HAWLEY: Even that, when you say we're going
14 to do two nearly simultaneous, each of the services decides
15 they're going to fight their own war and generally they fight it
16 pretty much by themselves.

17 DR. ABBOTT: Right. They don't need each other.

18 GENERAL HAWLEY: The Navy's going to fight their
19 war, the Air Force is going to fight their war, the Army's going
20 to fight their war, the Marines are going to fight all the wars.

21 GENERAL KERN: Well, we decided we need everybody
22 because somebody's got to get us there.

23 GENERAL HAWLEY: You need a big transportation
24 command, yes, that's true.

25 But where is the integrating vision that says,

1 here's how we think we're going to fight?

2 MR. CAPPuccio: Well, shouldn't that come up in
3 pre-acquisition A? When someone defines the need, should that
4 need not stem from some overall doctrine?

5 MR. KOZLOWSKI: Some doctrine issues, some concept
6 of operations.

7 GENERAL HAWLEY: It's much bigger than
8 pre-acquisition, because pre-acquisition has to do with a
9 particular program. This is broad guidance.

10 MR. CAPPuccio: The way I'd read it in there is
11 wouldn't you say you would need that document to start it and
12 then use that to say, but it don't exist, so you've got to
13 create it?

14 GENERAL HAWLEY: Yes.

15 MR. HUTCHINS: What document do they need to create?

16 GENERAL KERN: How many systems have we built to
17 kill a tank?

18 GENERAL HAWLEY: Lots.

19 GENERAL KERN: Then ask yourself, how much
20 duplication do you really need?

21 MR. CAPPuccio: Different tanks.

22 GENERAL HAWLEY: How many? Well, there's merit in
23 being able to kill a tank several different ways.

24 GENERAL KERN: This gets back to the APKWS thing
25 that we talked about this morning, because the Army was killing

1 trucks with the same thing they use for killing tanks. There
2 are those people that say a small little hole with a pre-charge
3 killing everybody in the tank is a tank kill, but I can't prove
4 it. There are those requirements that say: No, you don't
5 understand; I want the turret five feet away and the thing blown
6 apart.

7 So there are -- and there are two technologies, at
8 least that I know of, or three actually, that kill tanks
9 depending upon the buyer feeling comfortable with whether you
10 really killed it. So I was only kidding, but there are two ways
11 of killing tanks.

12 It's the guy on the ground that's got to walk up to
13 it and knock on the door and say: Are you dead.

14 MR. CAPPuccio: The guy on the ground, we know what
15 he wants: all over the field.

16 MR. KOZLOWSKI: The bomb damage assessment is pretty
17 damned important.

18 MR. HUTCHINS: I'm still looking for a solution
19 statement.

20 GENERAL KERN: The answer is, to get to what Dick
21 was saying to Frank, was that it's not just the pre-acquisition
22 that's got to be right. It's a much bigger question.

23 MR. CAPPuccio: So what would you call the document?
24

25 GENERAL HAWLEY: It would be force structure

1 planning guidance.

2 MR. HUTCHINS: Force structure planning guidance
3 needs to be implemented.

4 MR. KOZLOWSKI: In a giant document.

5 GENERAL HAWLEY: The only thing I can think of that
6 we do close to it is in the munitions area, where we allocate.
7 When we planned against actual conflicts, we allocated targets
8 to the services and we said: Navy, you're going to do this much
9 of it, so you go buy stuff for 30 percent; Air Force, you're
10 going to do this much of it, you go buy 30 percent; Army, you're
11 going to kill this much, you go buy to kill 30 percent.

12 GENERAL KERN: Let me give you a sort of a thought
13 on it --

14 DR. ABBOTT: And the Marines don't have any.

15 GENERAL KERN: We did that for big stuff, but we
16 never had a way of adding it all up. So we created an ammo
17 readiness chart a couple years ago, something that didn't exist,
18 and that allocated not just Army-Navy targets, it allocated all
19 of our munitions against a platform, and then rated ourselves on
20 the readiness rate of the munition to kill the target and our
21 production capability, whether it was good, bad, or indifferent.

22 It was sort of an interesting chart. We probably
23 made it too complicated because it cross-referenced lots of
24 different information, but it essentially painted everything
25 very green and black. I'll never forget the first we ever

1 showed it to Schoomaker, because we had only been using it for
2 about a year, and small arms ammunition were black and we were
3 showing the unclassified thing, and he looked at me and he said:
4 Is that real data or is that just stuff the thank you made up?

5 I said: Well, we put all the classified stuff in.

6 I said: That's real data. How did you judge that it was black?

7 I said: We added up all the mission requirements, allocating
8 it to systems, and we had about two rounds for these last 500
9 people.

10 So we went through after that and did it for
11 everything, not just small arms, and really looking at what
12 requirements were against platforms, against missions. It was
13 very illustrative and it scared the hell out of you, frankly,
14 when you really looked at some of it, how close to the wire we
15 got.

16 But it was a way of evaluating tasks to missions
17 against a resource that we were buying, but we really didn't
18 have a metric to adequately deal with all of it.

19 GENERAL HAWLEY: Put in its most simple way, you'd
20 take Rumsfeld's words about LDHD and you'd turn it into guidance
21 that says: buy more of these things and less of these other
22 things that aren't LDHD. We lack that, and therefore --

23 MR. PATTERSON: Didn't that actually -- didn't that
24 used to be part of the JSCAP?

25 GENERAL HAWLEY: No.

1 GENERAL KERN: When we had a Soviet threat it was
2 easy to measure that stuff, like Dick described. But in the
3 world today it's much harder to measure because you're looking
4 at a very broad threat.

5 GENERAL HAWLEY: It certainly is a nontrivial
6 problem. But absent some kind of guidance, everybody's free to
7 figure out their own solution.

8 MR. PATTERSON: The LDHD did make a great briefing
9 to the SLC, though. So it's written down somewhere.

10 GENERAL KERN: But the bottom line out of all that
11 is we ought to put out some sort of a direction that says we've
12 got to find a way of evaluating what we're buying against what
13 we think we're going to do with the mission to task on a regular
14 basis, not every four or five years. And I don't know that we
15 could ever figure out from this thing how to do that precisely,
16 but we know that we'll be buying -- you've got to have some way
17 to judge what you're buying, whether it's enough of them

18 MR. KOZLOWSKI: It's sort of like Krieg's request to
19 give me one set of metrics I can use to judge all the programs.
20 It's almost an impossible task. However, you can use some
21 relatively simple yardsticks by which you can get some relative
22 answers. If you have to do it by a target ensemble or a
23 frequency of mission, whatever the hell, some rules.

24 But I'm puzzled why this kind of thing does not
25 exist across the entire DOD structure. What you're saying is to

1 me that we as a military complex don't really know how we're
2 going to fight the next war. Now, I don't take that beyond --

3 DR. ABBOTT: As a total complex, you don't know how
4 you're going to fight the next war.

5 GENERAL KERN: Because you don't know what the next
6 war is. We don't know what the next war is. But each service
7 conjures up with that war is.

8 MR. KOZLOWSKI: And I understand that.

9 DR. ABBOTT: And then tries it so that when they
10 have to come forward in the battle space they come forward with
11 the support they've already decided they should have. Whether
12 it matches the requirements of that war or not is purely --

13 MR. KOZLOWSKI: I get lost in this.

14 GENERAL KERN: The way we figured it out for years
15 was against the COCOM plans. We didn't make up plans, so we
16 took real mission requirements and devolved that from a mission
17 down to the task, down to requirements. So there is a tool out
18 there that we can do it with.

19 GENERAL HAWLEY: But the way you do programming in
20 the Department is you use scenarios. The scenarios don't look
21 anything like the plans.

22 MR. KOZLOWSKI: I understand that.

23 GENERAL HAWLEY: For example, one of the scenarios
24 is Korea, and we're going to send (NUMBER DELETED) soldiers to
25 Korea under the scenario. Not under the war plan, but under the

1 scenario we are.

2 MR. KOZLOWSKI: Well, it's a scenario, key to the
3 war plan or not, I really don't care. But if at this
4 tri-service level, the joint level, you could agree on a
5 scenario, a set of scenarios, or an arbitrary target list, you
6 can analytically come up with some relative merit.

7 (Discussion off the record.)

8 MR. PATTERSON: With regard to this, you recall this
9 is beyond Goldwater-Nichols, defense overview, and this is what
10 they proposed. Are there things in here that are worthy of
11 adopting, remembering? I think that in our S&T that we really
12 haven't talked about raising the prominence of the DR and E,
13 and is that a good idea, a bad idea, or what?

14 MR. HUTCHINS: We have not had discussion in this
15 group about what an appropriate OSD organization should look
16 like at all.

17 GENERAL KERN: At all.

18 MR. HUTCHINS: We talked about the need to do a
19 better job integrating S&T, but we haven't talked about the
20 implementing organization to do so.

21 GENERAL KERN: We haven't even looked at an OSD
22 organizational chart.

23 MR. HUTCHINS: We can fix that.

24 (Slide.)

25 MR. KOZLOWSKI: We handed out one in August.

1 GENERAL KERN: Well, yes, but that doesn't show how
2 the acquisition flows through.

3 MR. PATTERSON: What we have to do first, before we
4 go to that level -- and that would be when we look at the white
5 papers that speak to the subject of the organization -- is that
6 -- where is that bin? And it's going to be under the little
7 "acquisition."

8 MR. CAPPuccio: Let's go back. Let's take each
9 point because there's controversial stuff here. The first one
10 says, are we going to -- chiefs back. I believe we did not
11 touch this.

12 MR. HUTCHINS: In our last session we said we were
13 going to take a different position than beyond Goldwater-Nichols
14 on this.

15 GENERAL KERN: What we said is we're going to create
16 this four-star command that has personal responsibility, which
17 puts the chiefs back in the business of watching the people.

18 MR. CAPPuccio: And that was it, and that was going
19 back to the old AOC command.

20 GENERAL KERN: But that is not what that says.

21 MR. CAPPuccio: So the next one, the RDT and E.

22 MR. PATTERSON: Remember, just on this subject,
23 remember you told me to go and talk to the chiefs, and I gave
24 you a paper with a synopsis of two. I now have three and I'll
25 have four here shortly.

1 MR. KOZLOWSKI: And they pretty much, the ones you
2 cited at least, said no.

3 MS. GIGLIO: Yes, they need more involvement.

4 MR. PATTERSON: They need more involvement. But
5 what they're talking about is that they want to be involved in
6 the nexus of acquisition and requirements. So what they're
7 saying is something has to push them together so we can -- and
8 as divergent as they are, and I just give you requirements.
9 Admiral Mullens says: I have a requirement and I articulate it
10 and I'm never quite sure what happens to it. Then suddenly when
11 I hear that the program is over budget, oh, then I get back into
12 it again.

13 MR. KOZLOWSKI: He's never quite sure what happens
14 to it?

15 MR. PATTERSON: Isn't that what he said?

16 GENERAL HAWLEY: What's he talking about, the
17 transition of the requirement into a program spec?

18 MR. PATTERSON: That's right, into a program. And
19 he's not quite sure, and he said: I'm not saying I want to get
20 involved in all of that stuff, but there ought to be some point
21 where I'm at least given a hint, where it comes back: and so,
22 by the way, this is a \$2 billion overrun.

23 MR. KOZLOWSKI: By regs, is the program manager
24 required to keep that chain informed?

25 MR. PATTERSON: No.

1 MR. KOZLOWSKI: Why not?

2 MR. HUTCHINS: Well, because since about the early
3 90s that conversation has been actively discouraged, at least in
4 the Navy.

5 GENERAL KERN: All the services pretty much.

6 MR. KOZLOWSKI: Why?

7 GENERAL KERN: Because of the way people read the
8 implementation piece under Goldwater-Nichols. It's almost
9 separation of church and state, that kind of view of life.

10 GENERAL HAWLEY: So why don't we want to give the
11 service chiefs and the secretaries authority over PEOs and PMS?

12 GENERAL KERN: I think what they're referring to is
13 to put them back into the decision process, and what they're
14 saying is we don't have time.

15 DR. ABBOTT: We want to simplify.

16 GENERAL KERN: They want to make sure the
17 requirements are met, but not to get into the contract level
18 issues and what the PEOs do.

19 GENERAL HAWLEY: Not into the PEO levels, but they
20 are into the cost and schedule and performance tradeoffs
21 throughout the execution of the program. Don't we want them
22 there?

23 MR. KOZLOWSKI: I think you want them involved in
24 the process. I think you want both communities with the money
25 given to the guys involved continuously. The question is do you

1 ever want to transition the program authority, the execution of,
2 go out now and get something? Does that stay with the service
3 chiefs or does that move over to the AT and L folks?

4 MR. CAPPUCCIO: Who acquires? Who does the dirty
5 work of acquiring? That's the question. Who wants to be
6 responsible for watching how it gets acquired? Making sausage
7 is a bloody business; does the chief really want to do that, or
8 does he want to know somebody's doing it?

9 GENERAL KERN: They all do keep the service chiefs
10 informed to some level of comfort.

11 MR. RIXSE: Wasn't that your point, Al, in the
12 Packard recommendation? It says that the program manager goes
13 to the PEO, who goes to the service secretary, the SAE; the SAE,
14 who reports to the service secretary. It doesn't say he reports
15 to AT and L. AT and L has oversight, they have visibility into.

16 But the service secretary -- remember, the secretary and the
17 chiefs are different, but the chief works for the secretary too.

18 But the service secretary is the senior guy, the political
19 appointee.

20 MR. HUTCHINS: The big point that I was really
21 trying to make is nowhere in Packard did I find language that
22 suggested there should be this huge separation between the
23 requirements and acquisition community.

24 GENERAL KERN: Part of the problem, I'll tell you,
25 in the Army is the lawyers.

1 MR. KOZLOWSKI: Go ahead, explain.

2 GENERAL KERN: I've listened to -- I've had service
3 chiefs that will not even let a contractor in the door because
4 the lawyer says don't talk to him, we're in the middle of an
5 acquisition. The service chief has nothing to do with that
6 acquisition. Lockheed Martin could be involved in an
7 acquisition forever at one level or another. And I have
8 listened to them from the general counsels. The way we have set
9 it up, the procurement side has a general counsel that's in the
10 secretariat, but the dispute side is over in the JAG, over in
11 the service chief.

12 MR. KOZLOWSKI: With this huge umbrella.

13 GENERAL KERN: It doesn't make a lot of sense.

14 GENERAL HAWLEY: The way the system works today I
15 think is the only time the service chiefs get insight into the
16 status of a program is when it's broke.

17 GENERAL KERN: That's probably true.

18 GENERAL HAWLEY: And I don't think that's right.
19 I'm not comfortable if we're not going to recommend that the
20 service chiefs be involved.

21 GENERAL KERN: But I've sat in on the Air Force
22 reviews where the service chief and secretary sit down together
23 with all your MACOMs and go through program by program and they
24 are pretty good. They balance the S&T pieces against the
25 acquisition pieces against the readiness pieces, so they do it.

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And most of the time they spend talking about things that aren't working the way you would like. That's a time issue, I think, rather than a reporting issue of what could be done, because all the green ones just get ignored. Everybody looks at -- it's our nature to look at what's red or going that way.

8

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MR. CAPPUCCIO: So the question is, did we cover -- this is the CSIS report, right?

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GENERAL HAWLEY: Yes, that's right.

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MR. CAPPUCCIO: So of all the things that people will buck our report against, this will be one of them.

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GENERAL KERN: Let me tell you the problem --

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MR. CAPPUCCIO: Excuse me one second. You may want to have a comparison. You may want to anticipate the question. You may want to take their recommendations and our recommendations and say, we differ because, and beat people to the punch. You may have to put the comparisons on the chart and say they differ because.

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GENERAL HAWLEY: They differed because they were trying to integrate the requirements of budgeting and acquisition and this was their solution. Do we have a solution that helps to better integrate budgeting requirements and acquisition?

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GENERAL KERN: May I draw something on the chart?

1 MR. PATTERSON: Absolutely.

2 MR. HUTCHINS: Between milestone A and B, the guy in
3 charge of the program would be the requirements officer. The
4 deputy would be the program manager. Post-milestone B it flips
5 with the program manager is in charge, but his deputy is the RO
6 then, forcing the integration of the two. The requirements guy
7 still works for the requirements guys, the PM still works for
8 the PM, but the PM and the deputy, those roles reverse. You
9 heard Tom Killion talk about it today in terms of S&T flowing
10 back over where we have the S&T guy in charge way up front and
11 then it flipped over to the program guy when it went to the
12 field.

13 We had talked earlier about that sort of an
14 integrating concept short of saying, okay, service chiefs, you
15 now have to be the line authority over all this kind of stuff.
16 That's the one discussion that's going on here.

17 MR. RIXSE: Al, Packard would have said, under that
18 tick, it would have said SAE report to service secretary, not
19 USD AT and L.

20 MR. HUTCHINS: What Packard actually said was for
21 each of the services to establish a politically appointed person
22 with similar responsibility to the DAE. That's what it said.

23 MR. RIXSE: Right, that's what I'm saying. So in
24 other words, if you said a recommendation that the SAE reported
25 to the service secretary, the chief also reports to the service

1 secretary, they're all sitting there together.

2 MR. HUTCHINS: They already do that. Our argument I
3 think would be that an entire separation of requirements and
4 acquisitions was never the intent of Packard, and in fact a
5 closer integration is desirable.

6 MR. PATTERSON: So institutionally then, how do you
7 bring requirements and acquisition at a regular time, at a
8 regular frequency, to the table?

9 MR. HUTCHINS: Leadership again. Seriously. Before
10 Goldwater-Nichols, my requirements officer attended every single
11 one of my program reviews. I spent half of my time responding
12 to his flags, the other half responding to mine. And it was all
13 a leadership issue, because that's the way the CNO wanted to run
14 the Navy.

15 MR. PATTERSON: If you were to institutionalize
16 that, how would you do that?

17 GENERAL KERN: Can I just show you what used to be,
18 and let us not get ourselves back into the trap of trying to
19 recreate this, but you can read. Putting the service chiefs
20 back over them could happen. This is what happened. This is
21 what used to happen in the Army.

22 The program manager reported up through the head of
23 the contracting activity, which was one of our two-star
24 commands, TACOM for the tank and automotive, the aviation guys
25 at in St. Louis at that time. They reported up for major

1 decisions to the RDA guy, who was a three-star under the Army
2 Material Command.

3 So we're saying create a four-star commander over
4 here with this responsibility, and they went down through a loop
5 that went through another three-star up here on the Army staff,
6 who reported to the service chief. And by the way, notice I
7 didn't even put the assistant secretary in there because most of
8 the time he was ignored. It went to the under secretary and the
9 vice chief and the under secretary chaired the reviews.

10 It went up then to OSD DR and E, because there was
11 no AT and L. So that's the way the service chief and the Army
12 used to operate.

13 So this guy (indicating) had a hell of a route to
14 get through. There was very little value added with these two
15 stops because these guys had the budget up here. And by the
16 way, I can put in the rest of the staff up here, who also had a
17 function, the training and doctrine folks who had their pieces
18 of it that you had to get to. So we had a hellacious route for
19 a program manager to get to under the service chief.

20 These two guys in our case when the Army was
21 building up were really good and they drove the hell out of
22 everybody, and that's really all you ever need. And this guy
23 supported it. This guy is now the military deputy to the
24 assistant secretary. All of this stuff now goes to here. Most
25 of it, if it's not an ACAT-1, stops here, then it goes up there.

1 This is a PEO now, separate, reporting straight up
2 here to the SAE. So there was a whole lot of stuff there in the
3 service chiefs before. Now, I've got to tell you we don't have
4 as many general officers to even come close to doing that any
5 more, or people. But we ought not to make -- we ought to make
6 sure that, whatever we say, we don't recreate an old
7 bureaucracy.

8 It is better today from my viewpoint in terms of
9 streamlining. The part that's missing is how do you get this
10 guy to be involved in it in terms of he understands the
11 decisions that he's making for budgeting and the operational
12 requirements are in fact getting better. But don't recreate
13 that old system.

14 MR. PATTERSON: I mentioned this before and you've
15 just made a whole lot of my claim. But if you started to put
16 these acquisition decisions into the joint staff process, the
17 chief would be in it, the DEP-OPS-DEPS would be in it, and you
18 would have it adjudicated at least three times and then the
19 chief would deal with it in the tank and they couldn't say they
20 weren't involved, and you don't have a change of process. You
21 just have to say, why do you have a separate decisionmaking
22 process for buying stuff as opposed to should we increase end
23 strength, should we put an exercise in Guatemala?

24 I don't understand what qualitatively makes one
25 decision different than the other. You would solve a huge

1 problem, which is how do you get the chiefs involved in making
2 the decisions about requirements and budgetary things.

3 GENERAL KERN: There's a language barrier, to start
4 with.

5 GENERAL HAWLEY: Oh, number one, the joint staff
6 doesn't work for the service chiefs. They work for the
7 chairman.

8 MR. PATTERSON: Well, yes, okay.

9 GENERAL HAWLEY: So they may get to the tank and sit
10 in on the meeting.

11 MR. PATTERSON: But the chief sits there. The chief
12 works for the chairman.

13 GENERAL HAWLEY: No, the chief doesn't work for the
14 chairman.

15 GENERAL KERN: Yes, he does, when he's in the staff.

16

17 GENERAL HAWLEY: When he's in the staff.

18 GENERAL KERN: When he's acting in his role on the
19 joint staff.

20 MR. PATTERSON: The truth of the matter is that
21 nothing changes when they're inside that tank.

22 MR. CAPPUCCIO: It's the level of interest.

23 MR. PATTERSON: And they still work the same kinds
24 of stuff they did.

25 GENERAL HAWLEY: Well, the fact is today the service

1 chiefs have no staff who work these issues.

2 GENERAL KERN: That's right.

3 GENERAL HAWLEY: It doesn't do any good for the
4 service chiefs to go down to the tank and to sit in on some
5 meeting that talks about acquisition if he doesn't have a staff
6 to help him execute whatever his responsibilities may be in that
7 area.

8 GENERAL KERN: I'll give you a yes-but on that,
9 Dick. My job description, even though I didn't get a fitness
10 report on it, as the three-star military deputy to the assistant
11 secretary, said I was also the primary adviser to the chief of
12 staff, and I went to every service staff meeting.

13 GENERAL HAWLEY: So he had a staff of one.

14 GENERAL KERN: I had a lot of other people I could
15 call on. I could go to my entire acquisition staff.

16 MR. CAPPUCCIO: Did it help? Did it help? Did your
17 attendance make a difference?

18 GENERAL KERN: Yes.

19 MR. CAPPUCCIO: So then all service chiefs should
20 attend to try to make a difference.

21 GENERAL KERN: But at the same time, the service
22 chief was being counseled: Don't bring anybody directly in from
23 the acquisition side. So everything came back to me.

24 GENERAL HAWLEY: To me, these guys were trying to
25 solve the problem of creating the three functions, and we've

1 talked about that being a leadership issue. They were trying to
2 address the leadership issue by bringing the chief back in. How
3 do we propose -- if we don't agree with this, how do we propose
4 to remedy the problem, which we've identified as a leadership
5 issue also? In that sense we agree with them, but we don't
6 agree with their solution.

7 To me, that makes it incumbent upon us to offer an
8 alternative.

9 MR. PATTERSON: Okay, let me take your --

10 MR. CAPPuccio: Let's think about it. We're not
11 going to solve it tonight.

12 MR. PATTERSON: I'm still not convinced that where I
13 was going isn't right, because no matter how they deal with
14 these issues as a chief arguably taking your position -- they
15 may be right, but I would submit that if a question comes up
16 about an acquisition program that General Mosely will turn to
17 General Hoffman and say: Give me a paper on, and he will.

18 GENERAL HAWLEY: That's different than General
19 Mosely have responsibility to make sure that budget requirements
20 and acquisition are an integrated function.

21 GENERAL KERN: I think we have overinterpreted what
22 is in current law and intent by the policies. That's one of the
23 things we might say. I told you that Hudson rewrote the Army
24 directive that said that the chair of the Army systems review is
25 exclusively the assistant secretary, not co-chaired by the vice.

1 He took him out of it.

2 MR. PATTERSON: Maybe he was wrong.

3 GENERAL HAWLEY: What I'm looking for is a solution
4 where the chiefs feel responsible for the performance of the
5 acquisition system and I don't think they necessarily feel that
6 way today. I want them to do what they did on the F-15 program
7 that I sent the little thing around on and say: By God, it's
8 going to go on time and I'm willing to give up defensive
9 avionics and some other stuff in order to assure it gets
10 delivered on time. They don't feel that way today.

11 MR. CAPPuccio: Nor are they asked, nor are they
12 asked.

13 GENERAL HAWLEY: Nor are they asked.

14 MR. CAPPuccio: They're not asked to say, what would
15 you give up to keep the program.

16 GENERAL HAWLEY: To keep the program on track.

17 MR. CAPPuccio: They're not.

18 GENERAL HAWLEY: They're not asked that. I want
19 them to be challenged.

20 MR. CAPPuccio: They ask the program office.

21 MR. PATTERSON: You want them to fit into an
22 institutional framework that demands that kind of --

23 GENERAL HAWLEY: That's what I'm looking for. This
24 is a solution. CSIS has offered one approach. It's probably
25 not the best approach, but if we're going to say it's wrong I

1 just think it's incumbent upon this panel to come up with a
2 better idea.

3 MR. PATTERSON: So what you want fundamentally, it
4 has nothing to do really with who reports to who right here.
5 What it has to do with, does institutionally the chief sit in a
6 venue in which you have budgetary, acquisition, and requirements
7 being considered all at the same time?

8 GENERAL HAWLEY: Does he feel responsible.

9 MR. PATTERSON: And as a consequence, take that back
10 to the --

11 GENERAL HAWLEY: Institutionally responsible by
12 position to make sure that budget, requirements, and acquisition
13 are an integrated set of activities.

14 MR. HUTCHINS: Which means by corollary he has the
15 authority to impact all three, yes?

16 MR. KOZLOWSKI: The only way you can get the RAA
17 equation to close is somebody has got to have all three sooner
18 or later. That's a fundamental principle.

19 DR. BRANDT: And that's the articulation of why they
20 send that.

21 MR. PATTERSON: Today it's not the SECDEF.

22 GENERAL HAWLEY: It's a little lower. Gordon
23 England is where it all comes.

24 MR. PATTERSON: What you have now is you have the
25 chief who has some budgetary authority, has opportunity to

1 establish requirements, but doesn't have the connection to turn
2 requirements into something and spend the money for it and then
3 be accountable for it.

4 MR. CAPPuccio: And that's why they came with their
5 response.

6 GENERAL HAWLEY: CSIS came up and said, well, they
7 recognize this problem and so they proposed this.

8 MR. CAPPuccio: It's a simple answer. If the chiefs
9 hold to, if they know what they want, right, i.e., therefore
10 they know the performance, and they are generating requirements,
11 why not just let them have the money and just do the job?

12 MR. KOZLOWSKI: They do have the money.

13 MR. CAPPuccio: Well then, let them do the job.

14 GENERAL KERN: They just don't have the money to
15 make the decision.

16 MR. CAPPuccio: Well, the argument here was shut
17 down ATL. Well, not really, because then they went on to say --

18

19 DR. BRANDT: Or look for a function for ATL.

20 MR. CAPPuccio: Look for a function for ATL. They
21 then went on to say, let's find a function for ATL. Let's make
22 it palatable because we're not laying off everybody in ATL.

23 DR. BRANDT: And they truly thought there was no
24 technology champion any longer.

25 MR. CAPPuccio: Right. So now we need to say, let's

1 have ATL do something real, so now let ATL be part of this
2 cumbaya technical group.

3 MR. PATTERSON: What if the chief is responsible for
4 the requirements? He then is the advocate for the requirements
5 to the service secretary to whom the SAEs report. Then you have
6 a nexus of these functions all within the services.

7 GENERAL KERN: The other part that I said was, if
8 you go back to what we were talking about on milestone A you
9 could give them a much larger role. You could give them a real
10 role on milestone A before anything really gets started.

11 MR. KOZLOWSKI: Who?

12 GENERAL KERN: The service chiefs.

13 MR. CAPPuccio: The service chiefs. In other words,
14 it takes a long time to acquire. So keep him out of the daily
15 mud of acquiring.

16 GENERAL HAWLEY: I want him involved in cost,
17 performance, schedule, trades, all the way through the program.

18 MR. CAPPuccio: It's a difference, a difference of
19 opinion.

20 GENERAL HAWLEY: Yes, we have a significant
21 difference of opinion. I don't mind writing a minority report
22 here.

23 GENERAL KERN: They're also going to devolve it to
24 their vices in those cases.

25 MR. PATTERSON: I will also tell you that each of

1 the chiefs I talked to is not going to agree with that.

2 MS. GIGLIO: But Mullens was very concerned. He
3 indicated that he really had lost control of requirements.

4 MR. PATTERSON: Yes, he had lost control of
5 requirements, which he does have. He said that his requirements
6 were totally undisciplined.

7 GENERAL HAWLEY: Why are they undisciplined?
8 Because he doesn't pay the price. It's that SAE who pays the
9 price.

10 MR. PATTERSON: He says he's accountable.

11 MS. GIGLIO: He says it never comes until February
12 or March, when you go up to the Congress and Congress holds him
13 accountable, and that's not fair because the program manager and
14 all those folks in the chain continue to make decisions that
15 alter what the original requirements were and the money changes
16 so they can't afford it.

17 So he was very -- he didn't want more work, but he
18 had lost control of it.

19 DR. ABBOTT: He loses control of the requirements
20 because he also has three systems operating simultaneously,
21 generally independent of each other.

22 MR. HUTCHINS: But where you are is you've really
23 got two kind of fundamental choices, seriously. You can say one
24 of two things. Either the real issue is you have to bring the
25 budget, requirements, and acquisition together at a lower level

1 than the DEP-SEC-DEF. You only have two choices: give it to
2 the service chief, these guys' solution; or you can say the real
3 problem is they established the SAE at too low a level and it
4 really belongs in the pocket of the service secretary. Those
5 are really the two choices, or did I get it wrong?

6 GENERAL HAWLEY: There may be another solution.

7 GENERAL KERN: I think if you have a service
8 secretary with some experience, or the under secretary, wherever
9 we're going to do it, which we do a pretty reasonable job, not
10 perfect, with the SAEs today. The under secretary and the
11 service secretaries don't have any --

12 GENERAL HAWLEY: I think part of the problem is it's
13 been long enough since we did this separation that the current
14 service chiefs are very uncomfortable doing anything in the
15 acquisition world. For the past 20 years they've grown up in a
16 system where that's somebody else's business.

17 MR. PATTERSON: They're not part of that legacy.

18 GENERAL HAWLEY: What I'm arguing is that somehow we
19 need to change the culture so the service chiefs grow up
20 thinking that operators are part of acquisition and vice versa.

21 MR. PATTERSON: You know, Al, there was a time, the
22 day before Goldwater-Nichols, when the SAE was the service
23 secretary.

24 MR. HUTCHINS: Yes. But my point also is --

25 GENERAL KERN: There is guidance now that says that

1 the SAE cannot be the service secretary.

2 MR. HUTCHINS: Packard didn't say that they had to
3 be the assistant secretary, just that each service should
4 appoint.

5 MR. PATTERSON: If you do that, if you put it up to
6 the service secretary and have the chief hooked in, you've done
7 what you want to have done, because either one of them, whether
8 it's the military guy giving the military assessment of what
9 he's got, when he goes to the hearing he can speak to the same
10 thing, and when the service secretary goes to speak the chief
11 will be with him and he's going to speak to the political side
12 and to the suit side.

13 You're right, nobody ever said that the service
14 secretary shouldn't be the senior acquisition.

15 MR. HUTCHINS: One reason I said under secretary is
16 for the last bunch of years service secretaries have been
17 focused on different sorts of issues, but the under secretaries
18 have always been available to be kind of the full-time --

19 MR. RIXSE: Like the DEPSECDEF, because otherwise,
20 would you make the John Young the service secretary, because as
21 the service secretary you have to have the qualities of a John
22 Young. Maybe it's better as an under.

23 MR. HUTCHINS: My point is you only have two
24 choices. Either the service chief of --

25 MR. CAPPUCIO: But you'd have to tee up -- could we

1 get a different -- I mean, Al is swamped in general. Should we
2 have a different group that's vetting Al's stuff against what
3 CSIS is saying, recommendations to recommendations?

4 MR. PATTERSON: I think we've already done that.

5 MR. CAPPuccio: You've already done that?

6 MR. PATTERSON: Yes.

7 MR. CAPPuccio: What I'm worried, because that's
8 where this report's going to come apart. It's going to be
9 challenged by other reports that are going to say -- we've taken
10 a very broad perspective to it. They've taken a narrow
11 perspective of it. Part of the reason we've come to different
12 conclusions is they have a narrow perspective.

13 DR. BRANDT: I'm not sure they have a narrow
14 perspective.

15 MR. CAPPuccio: CSIS?

16 DR. BRANDT: Yes.

17 MR. RIXSE: They've actually taken a broader
18 perspective.

19 MR. CAPPuccio: So their solution set and our
20 solution -- but I mean, their solution set and our solution set,
21 other than difference of people, they should be on the whole, on
22 the aggregate, they should be about the same.

23 MR. RIXSE: Take a look at your tab 4, the BGN,
24 because what happens is BGN looked at Goldwater-Nichols and all
25 the things Goldwater-Nichols was talking about. You're looking

1 at the big "A" and so there's a lot of things that were in GN,
2 BGN-2 and 1, that are related to this. That's what's in your
3 tab 4. There's other stuff they talked about which was out of
4 the field altogether and there's no relationship to it at all.

5 MR. CAPPuccio: What do you want to do with the
6 second one? We've taken a lot of time on that one. The problem
7 is we want something that basically says the three have to come
8 together.

9 MR. HUTCHINS: The solution statement is that
10 requirements, budget, and acquisition have to be
11 organizationally integrated at a much lower level in the
12 DEPSECDEF. That's the solution.

13 MR. CAPPuccio: That's the solution.

14 MR. HUTCHINS: While I recognize that, I haven't
15 heard clarity here yet.

16 MR. CAPPuccio: Well, you said there's two ways of
17 doing it.

18 MR. HUTCHINS: It seems to me, unless someone comes
19 up and shows me.

20 MR. RIXSE: It seems to me the SAE should be the
21 service secretary of the Army, which would make a big thing of
22 bringing the service chiefs in.

23 MR. HUTCHINS: We're at one level, two logical
24 solutions. One is the service chiefs, the other is the under
25 secretary or the assistant secretary.

1 MR. RIXSE: Instead of assistant secretary, then?

2 MR. HUTCHINS: I beg your pardon?

3 MR. RIXSE: Instead of assistant secretary?

4 MR. HUTCHINS: Yes, because in my mind the CNO
5 doesn't work for the assistant secretary. The CNO sure does
6 work for the secretary. '

7 GENERAL KERN: It gets back to, part of this ought
8 to be to put the staff functions together, to get the people who
9 are going to be in the decision seats the right information.

10 MR. HUTCHINS: Absolutely.

11 MR. CAPPUCCIO: Would that streamline the system if
12 we did that?

13 MR. HUTCHINS: Absolutely, hugely.

14 MR. CAPPUCCIO: And would that get rid of a lot of
15 the bureaucracy in the ATL organization?

16 MR. HUTCHINS: Yes, most of ATL would go away.

17 DR. BRANDT: I think it would migrate over to the
18 joint combined.

19 MR. CAPPUCCIO: But you guys are most familiar with
20 those organizations. Is it efficiency or is it just another way
21 of skinning the cat?

22 DR. ABBOTT: I personally believe it's another way
23 of skinning the cat.

24 MR. PATTERSON: Let me offer you one other. I
25 couldn't explain why I had this four-star system command out

1 there when I had an ASD, an assistant secretary level, which was
2 lower than the four-star in the pecking order. But if I take
3 the SAE and make the under or the secretary, now I can have a
4 four-star system command out there and it all fits, because I've
5 got a chief, the systems command four-star can report to the
6 chief, the chief reports to the secretary, who is the SAE.

7 I couldn't do that before and now I have clear lines
8 of authority and accountability. The systems command person has
9 all the work force and is managing the day to day functioning of
10 programs.

11 MR. RIXSE: Would you streamline it, does the SAE
12 have to report to the DAE? If he doesn't, that eliminates a lot
13 of this stuff.

14 MR. PATTERSON: You see, I couldn't -- I knew a
15 systems command was the right answer. I just couldn't get it.

16 GENERAL KERN: Just don't go back and recreate that
17 (indicating).

18 MR. HUTCHINS: No. And again, Packard is quite
19 clear about the role for the defense acquisition executives and
20 for service acquisition executives and their context, policy,
21 and consistency of policy and approach across, among, however
22 you want to phrase it, services.

23 I would argue that in all the panel meetings we have
24 also discussed the need at that level, the defense level, to do
25 what I call portfolio management. Other people have other names

1 for it, which is looking across all the services and integrating
2 their science and technology and looking at transition, looking
3 across all the services, and making sure resources balance
4 across. In other words, we're not doing across two services two
5 of exactly the same thing. Those sorts of roles, which are not
6 line management of acquisition programs. It is literally the
7 top level portfolio management, policy administration of the
8 system.

9 I call it portfolio management and that's probably
10 my poor use of words.

11 MR. RIXSE: That was reaffirmed by Hicks also ten
12 years after that.

13 MR. HUTCHINS: Exactly.

14 MR. RIXSE: If you take out the words the SAE does
15 not report to the DAE, that they are the focal point, then ATL
16 has a supervisory thing, that's consistent with Packard and with
17 Hicks, neither of which were implemented.

18 MR. CAPPuccio: It would be nice to structure an
19 organizational concept where if you can make the four-star ASC
20 work and fit into. It's much harder to dismiss it when they go
21 to execute. You know what I'm saying? If it's hard to
22 implement because there isn't a good reporting chain, the first
23 reaction will be, well, it's too hard to do. If you give them
24 an organizational structure that logically flows, then they
25 won't kill the ASC then at the four-star level.

1 MR. PATTERSON: Let's figure out how to build more
2 four-stars.

3 MR. HUTCHINS: We only need one more.

4 MR. CAPPuccio: We're not going to solve that. We
5 should think about that. What about the second one, the
6 strategic direction, elevate the DDR and E function. Why do we
7 want to play in that?

8 GENERAL KERN: That one doesn't make any sense.

9 MR. CAPPuccio: That doesn't make any sense. But
10 Delaney has been pushing that. Yes, Delaney has been pushing
11 that real hard.

12 DR. BRANDT: They had originally wanted to elevate
13 the DDR and E function to AT. In other words, that's all they
14 wanted.

15 MR. KOZLOWSKI: It's a setup in my view, because if
16 you do the first bullet the only significance you've got left is
17 to call it DDRA.

18 DR. BRANDT: That's what they had wanted, and Don
19 put his finger on it. They wanted to move it to the services,
20 what's left, what needs to be done, technology; that should be
21 the role.

22 GENERAL KERN: But there ought to be something in
23 there that says there can never be more than two levels of
24 review before the decisionmaker. In other words ACAT-1 or
25 ACAT-100.

1 MR. HUTCHINS: Our top level result is exactly that.
2 They reaffirm the Packard recommendations with some
3 modifications of the streamlining. At our last meeting is where
4 we tried to capture exactly those sorts of thoughts. In the
5 report I think we want to be quite explicit about those sorts of
6 things.

7 MR. CAPPuccio: So if you go through the rest of
8 them, we all agree they should reduce the hell out of the ATL
9 system, but we have to have a robust requirements capability.
10 Only COCOMs have operational requirements?

11 MR. KOZLOWSKI: Eventually they want the COCOMs to
12 start directing the requirements process.

13 MR. CAPPuccio: And we said we don't want that
14 because that's too short-sighted.

15 MR. KOZLOWSKI: Not their responsibility to look
16 that far ahead.

17 MR. CAPPuccio: Or they're really saying --

18 MR. KOZLOWSKI: There was a time when the COCOMs
19 used to jump into the process and put their sanction on the
20 requirements process, so that you at least tapped that judgment,
21 and there also was a method to the madness -- Dick, you can cite
22 this better than I -- where the operational guys got cycled back
23 through TAC and other places. God, I learned a lot from Momar
24 when he was in Southeast Asia and I learned a lot more when he
25 was down at TAC.

1 So there was a way of keeping that accountability,
2 of operational flavoring in the assignment.

3 GENERAL HAWLEY: We've talked about changing the
4 planning system in DOD by basing it on the COCOM war plans, but
5 requiring the COCOMs to develop an extended planning annex for
6 each of their war plans. So they look at to 2020 or whatever,
7 forcing them to look at two things: one, how do I think my
8 threats are going to evolve; and two, how would I like to fight
9 those evolved threats, which would then be useful as guidance
10 back into the requirements process. That way, the COCOMs could
11 begin to drive requirements without having to develop a whole
12 requirements staff.

13 MR. KOZLOWSKI: Are they going to do that?

14 GENERAL HAWLEY: I don't know.

15 MR. KOZLOWSKI: That's just a thought.

16 GENERAL HAWLEY: That's just another input to the
17 QDR.

18 MR. HUTCHINS: We never did answer the question,
19 either this morning or at any other time, as to how this whole
20 thing starts. We talked about it, we talked about the PEC, we
21 talked about various ways of pulling things together. But
22 nobody ever answered the question of where does this whole thing
23 start, when does something become a requirement that would cause
24 this whole engine to start.

25 GENERAL KERN: And they didn't include the services.

1

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GENERAL HAWLEY: The JCIDS process is supposed to do that, the thing we're proposing be done away, because that's the gap analysis.

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MR. HUTCHINS: What do we propose takes its place then?

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GENERAL HAWLEY: I think we're going to have to come up with that. My approach would be to have an extended planning apparatus in place for all six COCOMs, which would provide a gap analysis, because then you can provide their view of how the threat is going to evolve in the theater and identify gaps.

14

15

MR. PATTERSON: Would each of the services provide the equivalent of an XOR?

16

17

MR. HUTCHINS: I'm sorry. Who's XOR? And you're right, the extended planning annex.

18

19

GENERAL HAWLEY: That would get rid of the scenarios that OSD does.

20

21

22

See, if you did it that way, the that COCOMs would do something they're interested in doing.

23

24

MR. PATTERSON: That's right.

GENERAL HAWLEY: So it fits with their mission, whereas --

25

MR. PATTERSON: And Herman would like it because he knows that they've got time to do it.

MR. CAPPUCIO: But if they did some forward

1 thinking on the gap analysis in their theater and then you
2 integrated the gap analysis across all warfighters --

3 GENERAL HAWLEY: Across the COCOMs.

4

5 MR. CAPPUCCIO: -- then you see where they overlap
6 and you say, okay, maybe I can acquire --

7 GENERAL HAWLEY: If I've got three of them that have
8 the same gap, that looks like something I've got to go work on.

9 GENERAL KERN: Now, is that a PA and E function?

10 MR. CAPPUCCIO: It's not done.

11 GENERAL HAWLEY: It would be integration. I would
12 view that as a joint staff function.

13 GENERAL KERN: I agree with that.

14 MR. PATTERSON: And you know what? They don't do
15 it. They don't do it.

16 MR. HUTCHINS: Then would the joint staff integrate
17 these and parse it out to the services, saying this is yours,
18 this is yours, this is yours?

19 MR. CAPPUCCIO: How do we do it after they come up
20 with the gap?

21 GENERAL HAWLEY: See, I think it could evolve into
22 this integrating force planning function if you did this,
23 because you'd have these extended planning annexes to the
24 current O plans, which are oriented against the most likely
25 threats. I think that's a good thing. Looking into the future,

1 you'd integrate them at the joint staff to produce an
2 overarching gap analysis and priority, because you can
3 prioritize them.

4 Then that would become guidance to the services for
5 their program.

6 MR. HUTCHINS: Could we call that the strategic
7 planning office?

8 GENERAL HAWLEY: Something like that.

9 MR. PATTERSON: Well, we have a distinction here.
10 Joint staff mostly figures that they're reconciling between
11 services. No, we don't want them to do that. We want them to
12 integrate across COCOMs. That's different, because at each of
13 the COCOMs we have XOR and 8JH. They're doing the hard work,
14 the hard lifting.

15 MR. CAPPUCIO: But you have to have -- you're going
16 to have to -- I know we said that this morning. You're going to
17 have to come up with some sort of strategic planning group.

18 MR. PATTERSON: But it also has to get the policy
19 inputs.

20 GENERAL HAWLEY: What you do is you take the
21 manpower that's currently committed to the JCIDS process, cut it
22 by 80 percent, and use the remaining 20 percent to do this
23 strategic.

24 DR. BRANDT: I thought there was a 20-80 split
25 between people who work for the government and contractors, so

1 there you have it. You've got it.

2 GENERAL HAWLEY: Use the 20 percent government to do
3 this integration.

4 MR. HUTCHINS: Help me walk through this heel and
5 toe one more time? COCOMs all now do an extended planning annex
6 to the war plan.

7 GENERAL HAWLEY: Yes.

8 MR. HUTCHINS: This product then -- do they do the
9 gap analysis within their region?

10 MR. CAPPUCCIO: Within their region.

11 GENERAL HAWLEY: Yes.

12 MR. HUTCHINS: They do a gap analysis on the
13 extended planning annex within their region.

14 MR. KOZLOWSKI: They do that by judgment.

15 MR. CAPPUCCIO: However they do it.

16 GENERAL HAWLEY: Good military judgment.

17 MR. HUTCHINS: So this product gets thrown up to
18 Washington, where it lands in the strategic planning office on
19 the joint staff, that integrates across the COCOMs.

20 GENERAL HAWLEY: Right.

21 MR. HUTCHINS: Having integrated across the COCOMs,
22 they then come up with an integrated and prioritized gap list,
23 which are then parsed and issued to the services, to the NHGH,
24 XOR.

25 GENERAL KERN: That would make an interesting tank

1 discussion for the chiefs.

2 MR. HUTCHINS: Did I capture it correctly?

3 GENERAL HAWLEY: Yes.

4 MS. GIGLIO: I get it.

5 MR. PATTERSON: I'm going to get those chiefs
6 working in the tank yet.

7 Do you remember all that? Did you get all that?

8 MR. HUTCHINS: Yes, I like it.

9 DR. BRANDT: Say it again.

10 MR. CAPPUCCIO: So all right. Therefore we have --

11 GENERAL HAWLEY: But I still want the chiefs feeling
12 responsible for the performance of the acquisition system.

13 GENERAL KERN: So I'm trying to think in my mind how
14 you do that.

15 MR. HUTCHINS: If the under secretaries become the
16 SAE, you have the service chiefs --

17 MR. CAPPUCCIO: Do it on the chalkboard.

18 MR. HUTCHINS: I think you've got a challenge,
19 because if the program reporting is report to the PEO how is
20 that going to work with the systems command?

21 GENERAL KERN: That's the issue with not having too
22 many levels.

23 GENERAL HAWLEY: Not having more than one other
24 level. You go PEO to who?

25 MR. HUTCHINS: To under secretary.

1 MR. CAPPuccio: To under secretary is what he's
2 saying.

3 GENERAL HAWLEY: What's systems command do?

4 MR. HUTCHINS: Systems command is the home room and
5 it organizes, trains, and equips the work force.

6 GENERAL KERN: Systems command provides the
7 integrating function across.

8 GENERAL HAWLEY: So what's different? Essentially
9 we're saying that what I think the Air Force and the Army are
10 doing today is what we're recommending, because that's basically
11 what they're doing.

12 GENERAL KERN: Yes.

13 GENERAL HAWLEY: They've got their PEOs dual-hatted
14 to the material commands and to the SAE, and to the SAE. So
15 we're essentially saying that's what we support.

16 MR. HUTCHINS: And the Navy and that system is --
17 the Navy has small program offices and the other services have
18 SPOs.

19 GENERAL KERN: We've got a split right now. One has
20 dual reporting and one is split. I think the Air Force has them
21 all working for --

22 (Simultaneous conversation.)

23 MR. PATTERSON: Okay, are we reasonably satisfied
24 we're through with this slide?

25 (Slide.)

1 MR. HUTCHINS: That was an easy one, right?

2 DR. BRANDT: We're not through with this.

3 MR. PATTERSON: No, no, we're not through with the
4 issue, because it's formulating as a big idea for doing away
5 with JCIDS and putting where you put the accountability for
6 acquisition writ large and how you establish it.

7 GENERAL HAWLEY: See, I think this extended planning
8 idea for the COCOMs would work with this.

9 MR. PATTERSON: I agree. I'll tell you, you see,
10 that's -- I went to all of those meetings back in the 80s and I
11 never -- why didn't we do away with all that stuff? It just
12 seemed so reasonable.

13 (Slide.)

14 MR. HUTCHINS: Anything here?

15 (Slide.)

16 MR. PATTERSON: You've got to watch out for that
17 banging on the civilians at OSD.

18 GENERAL KERN: But just think about how many general
19 officers we used to have in OSD.

20 MR. PATTERSON: Oh, absolutely. They were the
21 deputies in every position.

22 (Slide.)

23 MR. HUTCHINS: All this stuff seems to tie into do
24 we want to have requirements joint, dah dah dah dah dah dah
25 dah, that whole litany.

1 (Slide.)

2 MR. CAPPuccio: I think that's crazy, "requirements
3 born joint"?

4 GENERAL KERN: The way we just described it.

5 MR. HUTCHINS: It's a lot cleaner the way we just
6 described it.

7 MR. CAPPuccio: Yes, much better.

8 GENERAL KERN: We could have deputies. So who is
9 Abizaid's deputy who's going to come up here this week?

10 GENERAL HAWLEY: You could easily wind up with three
11 Air Force guys and an Army guy showing up here and doing this
12 and no Navy guy, depending on how you're manning the deputy
13 positions.

14 MR. PATTERSON: These are not good ideas.

15 MR. RIXSE: Some of those things, your suggestion of
16 a PEC-like thing would supplant some of that.

17 GENERAL HAWLEY: Yes.

18 MR. RIXSE: Because it would bring the civilian and
19 military together early on. It would be pre-planning A.

20 (Slide.)

21 MR. HUTCHINS: It looks like we've jumped into the
22 briefing now about how they're fixing space stuff.

23 DR. ABBOTT: That seemed like a good idea when we
24 picked this chart up, but I don't know what it has to offer.

25 GENERAL KERN: I see one good idea out of that.

1 (Slide.)

2 MR. HUTCHINS: We have already taken as a big idea
3 adopting the NRO-like milestone process.

4 MR. RIXSE: Yes, that's all picked up.

5 DR. ABBOTT: And independent costs.

6 MR. HUTCHINS: We have talked about, although I
7 haven't heard people say formally yes, we're going to do that,
8 in the context of taking cost off the table in major development
9 contracts, essentially driving to closure kind of in a PEC
10 environment we talked about today, on cost models, agreement
11 between industry and government, and establishing the cost
12 target of a contract at the CAIG estimate.

13 I don't know if everybody says yes, they want to do
14 that, or not.

15 MR. KOZLOWSKI: In the absence of anything better,
16 that's the best available information. There was a policy
17 several years ago where they were supposed to use this as a way
18 of doing business, and it sort of went up in the air.

19 MR. HUTCHINS: The policy was a little different.
20 The policy was the Department had the budget. What I just
21 walked through here is on Joint Strike Fighter, F-35, Air Force,
22 that was driving the program, did a superb job of closing
23 Boeing's, Lockheed's, and the government's model they used for
24 cost estimates. That's kind of point one, so everybody is
25 understanding how cost estimates are built.

1 The thing that hasn't been done yet is to take cost
2 off the table in these competitive big system development
3 contracts and say, okay, we've now hopefully decided it's 20
4 cents we're going to pay for a cup of coffee, set the target
5 cost on the contract at the CAIG.

6 MR. CAPPuccio: That's how you solve the problem.
7 That's how you solve the problem with costs, share the cost
8 models like we did on JSE, so when the CAIG number came out we
9 understood how they got it. It was up to General Howe to say
10 did he want to fund to it. Nobody could bitch.

11 MR. HUTCHINS: Then the thing to drive to the
12 taxpayers is, you put a very aggressive share line on the target
13 cost, which is the CAIG estimate, so everybody wins by coming in
14 under CAIG.

15 MR. CAPPuccio: Everybody wins by coming in under
16 CAIG.

17 MR. RIXSE: One thing, Al. You used the phrase
18 "budget to the CAIG estimate." I think if we go back to
19 something that you talked about earlier, having the CAIG
20 estimate is one thing for pricing, getting agreement on what the
21 price should be for the bidding. But the budgeting -- if you go
22 back to a point that Ron Sugar and others made, the budgeting
23 may need to take into account the capital account to provide
24 management reserve. So you don't necessarily want to budget to
25 CAIG estimate.

1 MR. HUTCHINS: No, I was just saying that that was
2 the policy.

3 (Slide.)

4 Anything here?

5 MR. CAPPUCCHIO: That's the one that says cut. I
6 think they said get rid of all these things.

7 MR. HUTCHINS: This we picked up.

8 (Slide.)

9 Kill that, do this.

10 GENERAL HAWLEY: And establish time lines for the
11 review.

12 MR. HUTCHINS: Yes.

13 (Slide.)

14 It's a very short time line. We captured all of
15 that. We liked this, and it was not just looking over the
16 shoulder checking. It was also an assist to the program
17 manager, so all the good things.

18 MR. PATTERSON: It helped to take away the set of
19 circumstances where you'd go to a DAB and you'd have three sets
20 of numbers: you'd have PA and E, OSD, and you'd have the
21 program manager, and you'd maybe have a fourth.

22 MR. HUTCHINS: Well, that was one of the hiccups I
23 had with this morning's discussion, where they proposed an
24 independent review team but it was supposed to be -- well,
25 you're program managers, we don't trust you. We're going to

1 come up with our own technology assessment.

2 Well, what's the decisionmaker going to do with
3 that? I've got one set over here and one set over here and now
4 how do I value them? It really needs to be collaborative.

5 MR. PATTERSON: A most recent DAB took the high
6 number, the low number, and drew a line in between with
7 absolutely no data at all and said, that's the one we'll do.

8 DR. ABBOTT: It's a biblical decisionmaking process.

9 MR. HUTCHINS: This is the chart that prompted the
10 discussion where we came down in terms of one of the big
11 solutions, that requirements people and budget people also need
12 training, may need experience, which tied in with the
13 acquisition work force incentivization discussion we had last
14 time.

15 But this is what was prompted by this chart.

16 MR. PATTERSON: Also, we've done a little bit of
17 noodling through the position descriptions offered up by
18 personnel as bits of data. So when anybody comes in and says,
19 oh well, we do that already, the position description for a
20 15-10 program manager says -- there's a little line in there
21 that says level 3 should be obtained within 18 months of taking
22 position. One of them is for a two-year temporary position.

23 GENERAL KERN: It's good for six months?

24 MR. PATTERSON: Well, no. You wait until the end.
25 It's a six-month course and you go to school.

1 But the point is that those kinds of things -- we
2 institutionalize exactly the wrong thing to achieve what you
3 want, because not everybody's in on the gag.

4 MR. KOZLOWSKI: Does it bother any of you guys to
5 see the space guys adapting the acquisition system to their own
6 lexicon?

7 MR. PATTERSON: Yes.

8 MR. KOZLOWSKI: Their own school. I think it would
9 be highly advantageous if the entire system used one system and
10 then you adapted it.

11 DR. ABBOTT: The same words.

12 GENERAL KERN: While we're at that, we ought to
13 throw in all of the software.

14 DR. ABBOTT: Or throw in all the services.

15 GENERAL KERN: They don't have a separate process
16 for that through the CII?

17 MR. CAPPUCCIO: CMMI.

18 DR. ABBOTT: You heard the one about how to secure a
19 building? The Marine Corps attacks it, kills everybody in
20 there. The Army surrounds it, gets everybody out, and sets up
21 guard posts. The Navy sends in a bunch of guys with swabs and
22 buckets and cleans it down. And the Air Force takes out a lease
23 to buy arrangement. That's how you secure a building. It
24 depends on your perspective. By the way, the Navy locks it
25 after they wash the decks. I forget to lock it.

1 MR. HUTCHINS: Given the discussion of the panel, I
2 believe we're going to write a section that talks about a bunch
3 of things about work force writ large, anywhere from K through
4 12 education to the science development technology work force,
5 to the lowered opportunity to have experience working on
6 programs.

7 But I haven't heard a big idea yet on something
8 substantive to do about it.

9 MR. KOZLOWSKI: There isn't much this panel can say
10 other than to properly maintain the training of the work force
11 at hand in the acquisition community.

12 MR. CAPPuccio: But you could tee it up like the
13 other one.

14 MR. KOZLOWSKI: You do point it out as a national
15 problem that will affect the way we do business in the future.

16 DR. ABBOTT: You could comment on there are other
17 places to gain experience in program development other than
18 inside DOD.

19 MR. HUTCHINS: We could certainly tee it up and
20 point to all the stuff that's been going on.

21 DR. ABBOTT: And I'm not talking about the Lockheed
22 Martin.

23 DR. BRANDT: That's already in the legislation.

24 (Slide.)

25 MR. CAPPuccio: That's a problem set.

1 MR. HUTCHINS: This is driving back to leadership.

2 MR. CAPPUCIO: This is the leadership.

3 GENERAL HAWLEY: Ethics.

4 MR. HUTCHINS: That's the leadership problem.

5 GENERAL HAWLEY: Leadership, conspiracy of hope.

6 (Slide.)

7 GENERAL KERN: The chairman of the who?

8 MR. HUTCHINS: The milestone decision authority.

9 GENERAL KERN: Not Kadish.

10 MR. HUTCHINS: On that particular, I think what I've
11 heard discussed here is that you don't want -- you really want
12 it integrated. You don't want it separated.

13 MR. PATTERSON: What happens is you have a center of
14 excellence and everything else goes away.

15 GENERAL KERN: You need to generate many ideas and
16 you're going to pick a few.

17 MR. CAPPUCIO: What do you want with the expert
18 program advisory teams? More staff?

19 DR. ABBOTT: Those are supposed to be grey beards
20 available to come in and assist the program.

21 MR. KOZLOWSKI: It's in direct analogy to the same
22 kind of teams they're using on the space side.

23 (Slide.)

24 MR. HUTCHINS: Anything here?

25 (No response.)

1 (Slide.)

2 GENERAL KERN: Is the tenure piece a real issue? I
3 don't think it is any more.

4 MR. CAPPuccio: No, I think he solved it. Most of
5 the services have been pretty good.

6 GENERAL KERN: Most people have been there three or
7 four years.

8 MR. CAPPuccio: Three or four years.

9 MR. PATTERSON: And if you have your systems
10 command, they manage it.

11 DR. BRANDT: Tenure may be a problem in
12 requirements. It's certainly a problem on the joint staff in
13 the JCIDS portion, 18 months and out, 22 months and out.

14 GENERAL HAWLEY: Do we want to chime in on this idea
15 of a joint C2 acquisition executive?

16 (No response.)

17 GENERAL HAWLEY: No? Okay.

18 DR. BRANDT: I don't know about the comptroller.

19 MR. PATTERSON: I tend to think that we ought to
20 make an observation, but I don't know why we have all of these
21 different systems for acquiring stuff. NII acquires stuff,
22 space acquires stuff. It's just stuff.

23 GENERAL HAWLEY: C2 is important stuff.

24 MR. PATTERSON: Oh, I agree.

25 GENERAL HAWLEY: When it comes to integrating

1 service capabilities, a lot of it has to do with C2.

2 MR. HUTCHINS: This is probably the place to have
3 that discussion about what does joint mean. Does joint mean
4 services come and the COCOM doesn't have to plug them in because
5 they're built that way, or does joint mean you do something like
6 this where somehow magically OSD now buys stuff that makes
7 everybody joint?

8 MR. PATTERSON: There's such a huge disconnect
9 between the services and NII and the joint world and STRATCOM,
10 it makes your head hurt, because there's nobody in charge.

11 GENERAL HAWLEY: Well, I concluded some years ago
12 that the only way you're going to fix C2 was to have a tyrant in
13 charge of it with all the money.

14 MR. PATTERSON: One.

15 GENERAL HAWLEY: One tyrant with all the money, with
16 the money.

17 MR. PATTERSON: That's right.

18 MR. CAPPUCCIO: STRATCOM don't have the money.

19 MR. PATTERSON: STRATCOM doesn't have the money.

20 GENERAL HAWLEY: Gerry's got this one right. It
21 ought to be like the Navy nuclear program. You put a tyrant in
22 charge, give him all the money, and leave him there for ten
23 years. You might fix it after a decade.

24 DR. ABBOTT: If you pick the right guy.

25 GENERAL HAWLEY: That's why I said might.

1 MR. CAPPuccio: It took four more to get him out.

2 DR. ABBOTT: He didn't work for the Navy. He worked
3 for Congress.

4 MR. HUTCHINS: Have we closed on that?

5 (No response.)

6 The fundamental issue of joint, one approach to
7 joint says establish the interfaces and the architectures so the
8 services come to play. There is another one we just heard that
9 says give all the money and all the power to a big gorilla who
10 will then establish it for the services. And what's the answer?

11 GENERAL KERN: Well, there is -- it goes back to how
12 you create that under secretary position. If we had the
13 standards and the discipline that you couldn't buy it unless it
14 was to that standard -- we've done that a little bit.

15 We had a huge problem with this with handheld radios
16 for the Army Special Ops guys right now. They wanted to buy
17 radios that didn't meet the requirements. They wouldn't let
18 them buy them, just would not let us buy them. We finally got
19 an exception to it, but it took a year plus.

20 The problem is the commercial world moves in this
21 area circles around us.

22 MR. KOZLOWSKI: You posed two questions. One, do we
23 set a bunch of standards and say, you all come and play them?
24 Who's going to set those standards? Don't you still need the
25 czar or somebody to set the standards?

1 MR. HUTCHINS: That's the corollary.

2 MR. KOZLOWSKI: Because the czar who goes out and
3 solves it later is going to set some standards and implement
4 them.

5 MR. HUTCHINS: So is the panel saying that we need
6 to establish an entity that does that?

7 MR. KOZLOWSKI: We need a central way to establish
8 standards. Whether we need a central way to buy it or not, I'm
9 not sure.

10 MR. CAPPUCCIO: Let's go back a second, go back to
11 the charter. We're doing stuff, gain credibility for the
12 leadership. Let's go back to the charter. The charter was part
13 of the problem set was regaining credibility. Would taking on
14 that help us get to that charter or is it a distraction? I
15 don't know. I'm just throwing it out.

16 MR. KOZLOWSKI: Ron will give you, since he had a
17 stint up at ESD, but that's such a fundamental issue to what we
18 buy. It's been lingering in the background in just about
19 everything I've ever worked on. If we could make some real
20 serious progress in setting an independent set of standards --
21 an ad hoc group; I don't care how you do it -- that would go a
22 long way to solving going problem.

23 But when you try to get people in the same room that
24 argue about who's going to control what --

25 MR. PATTERSON: But setting standards is different

1 than buying.

2 GENERAL HAWLEY: There's a weakness in the standard
3 setting approach, which by the way is the J6's job along with
4 J-FCOM in the joint world.

5 MR. PATTERSON: They have totally backed away.

6 GENERAL HAWLEY: They set them -- TechLink 16, they
7 set standards. The way the standards were implemented resulted
8 in incompatible systems. The Navy implementation is different
9 than the Air Force and so you put Air Force and Navy systems in
10 the same place and they don't work.

11 MR. CAPPUCIO: Then somebody didn't meet the
12 standard. It's a loose standard. It's a loose standard. You
13 have to have wire.

14 MR. KOZLOWSKI: What about --

15 GENERAL HAWLEY: I don't know the details exactly.
16 I think it had something to do with the message sets actually.
17 But in any event, I'm pretty sure they don't work together.

18 GENERAL KERN: Part of it goes back to what those
19 S&T guys do and how we really set standards in today's world.
20 But I think what we've found, and I think the Air Force found
21 the same thing, is they need a facility that says everything
22 that is going to communicate has to be certified by that
23 facility to meet those standards.

24 GENERAL HAWLEY: And that was the theory behind the
25 interoperability KPP that J-FCOM is supposed to sign off on.

1 GENERAL KERN: Right.

2 GENERAL HAWLEY: That didn't work, apparently, or
3 maybe it hasn't had enough time to work. I don't know.

4 MR. PATTERSON: Like I said, it's pretty confusing
5 to me.

6 GENERAL HAWLEY: I just know that if you're thinking
7 about joint -- and I think we have to think about joint because
8 I think it has a lot to do with our charter -- C2 is where it
9 all happens.

10 MR. PATTERSON: Could be, because this is really
11 hard. I mean, it's harder than everything else.

12 GENERAL KERN: I'm not sure I would buy that.

13 MR. PATTERSON: Could we stick this at the end of
14 our discussion to come back to?

15 GENERAL HAWLEY: Integrating joint forces is all
16 about C2.

17 MR. PATTERSON: I believe that if you could solve
18 it, if you had kind of a big idea that touched on it, you could
19 be a hero. But coming up with it, because I've watched all the
20 paperwork go back and forth and really smart people haven't come
21 --

22 MR. CAPPUCIO: No, but the problem you're going to
23 have is -- Hawley is right, this isn't hard. Conceptually it's
24 not hard. You've got to do it. This is just a real -- this is
25 a doing function. You say, here's the standard. No, you don't

1 understand. Here's the standard. You will not take exception
2 to the message traffic. That is the message traffic.

3 GENERAL HAWLEY: One thing you could do is you could
4 set up a C2 test range and every new fielded system that
5 communicates has to go through the C2 test range and pass.

6 MR. PATTERSON: And having an exercise once a year
7 might do that.

8 GENERAL HAWLEY: And an exercise once a year might
9 do that.

10 MR. CAPPuccio: But you know what happens? In order
11 to do the passing, you spend all the money building the stuff,
12 and the poor guy says: Yes, I failed, but I ain't got no money
13 to do new stuff. So you say, oh, you know --

14 MR. KOZLOWSKI: I don't know what you'd have to
15 build.

16 MR. PATTERSON: If you're going to do it, now is the
17 time to do it. New joint forces command, very strong STRATCOM.

18 MR. CAPPuccio: Now's the time.

19 MR. PATTERSON: Now's the time.

20 GENERAL HAWLEY: By the way, joint forces command is
21 in charge of something called the national training center,
22 which could fit in with this whole idea of an annual or
23 semi-annual or every third year exercise.

24 MR. HUTCHINS: So organizations to limit the J6, is
25 that what I heard?

1 MR. KOZLOWSKI: I don't think the interoperability
2 issue, from everything I've learned in my career, it is not an
3 engineering problem.

4 MR. CAPPuccio: No, it is not.

5 MR. KOZLOWSKI: It is a money and a political
6 problem.

7 MR. PATTERSON: It is almost theological. I'm
8 telling you.

9 GENERAL KERN: Okay, let's take C2. C2 between two
10 guys on the ground is a hell of a lot different than C2 with
11 some guy flying at mach 2 at 40,000 feet.

12 MR. CAPPuccio: Absolutely, absolutely.

13 MR. KOZLOWSKI: They're not easy communications
14 problems.

15 GENERAL KERN: They're not easy.

16 MR. CAPPuccio: They're not easy, but the fact is
17 there is no requirement that says when you are flying at mach 2
18 you have to put out a communication message to the guy on the
19 ground and his interface for receiving it is this speed, this
20 latency, this code, do it. Just go do it. Hey, that's hard.
21 Nobody's saying it's not hard.

22 But I'll tell you, in most cases -- JSF, it's going
23 to have an air-ground mode. What's the Army need air to ground?
24 Who's working it? There's no do-it. There's an IER, I think.
25 IER's?

1 MR. HUTCHINS: Information exchange requirement.

2 MR. CAPPuccio: There's an information exchange
3 requirement that you can drive a Mack truck through.

4 GENERAL KERN: That's right, and if you look at all
5 of our programs each one of them has its own C2 piece stuck in
6 it, and it's so far down the stream it's going to cost me a
7 billion dollars to fix it.

8 MR. CAPPuccio: But you can get a couple of good --
9 you can get a couple of good com guys from industry, from the
10 Army, ground guys, and they can say: Hey, this is the interface
11 that you need.

12 GENERAL KERN: The only one that fascinates me, and
13 I've never been able to figure out how they did it -- who did it
14 is the person who wrote the Mil Standard 1553 on database. That
15 was written in 1950.

16 MR. CAPPuccio: And it's still valid today.

17 GENERAL KERN: And it's still working today, and
18 everybody uses it.

19 MR. HUTCHINS: There was a big remake in '82 when
20 they went to a twisted pair on it instead of a single copper
21 wire.

22 GENERAL KERN: But the point of that is if we can
23 get the right standard, who cares what the piece of equipment
24 is, whether it's Motorola or Lockheed or General Dynamics or
25 whoever produces it, as long as they can communicate.

1 MR. HUTCHINS: But you've still got a fundamental
2 choice you've got to make. Choice number one: There is an
3 entity that designs, develops, builds the C2 stuff and issues
4 it, thereby assuring when people come to play they play
5 together.

6 GENERAL KERN: The problem is I don't think you can
7 do that.

8 MR. HUTCHINS: Why not?

9 GENERAL KERN: Because there's com stuff in every
10 platform.

11 MR. HUTCHINS: That's choice number one. Choice
12 number two is you define the architecture and the interfaces.
13 That's the engineering issue. It can be done. The leadership
14 part, making sure it happens? Well.

15 If you elect choice two and if this panel says joint
16 ought to be done, then I need to hear where organizationally
17 does that live, the organization that establishes the
18 architecture and the interfaces. And is that a legitimate ATL
19 function, is that a J6 function? Where does it live and how
20 does it happen? How does it now tie into this strategic
21 planning thing that we just talked about.

22 MR. KOZLOWSKI: In terms of specifying the standards
23 and the interoperability requirements, give it to the joint
24 staff, and the sooner they promulgate the better.

25 GENERAL KERN: But they could have a support

1 function, the technical side of it, on the OSD staff.

2 MR. KOZLOWSKI: And they do.

3 MR. HUTCHINS: I think I just heard a solution.

4 GENERAL KERN: But that's a support function to the
5 people who write the standard.

6 MR. PATTERSON: That's right, that's right.

7 GENERAL KERN: They're not an entity until itself.
8 J6 might have just a little trouble going out and working with
9 the industry, but NII doesn't. So there's a very valuable
10 support function that NII can provide.

11 MR. KOZLOWSKI: Give the ownership to the proper
12 people. It is a joint requirement.

13 MR. CAPPuccio: Who's doing JDRS? Who's generating
14 the architecture for JDRS?

15 GENERAL KERN: J6.

16 MR. CAPPuccio: It looks like we're going to have
17 three JDRS systems. It's nuts. The problem is the wave form is
18 not common right now.

19 GENERAL KERN: But the point that drove me nuts on
20 it is the way, you think you've been operating with a radio for
21 20 years, that you'd own the wave form.

22 MR. CAPPuccio: You would think.

23 GENERAL KERN: You don't.

24 MR. CAPPuccio: You don't. And the question is, do
25 wave forms have to be different for technical reasons, or do

1 wave forms have to be different because of who owns what data?

2 GENERAL KERN: The latter.

3 MR. CAPPuccio: The latter?

4 MR. PATTERSON: Yes. The guys from Rockwell-Collins
5 got caught in the latter, in the latter part.

6 MR. CAPPuccio: So the question gets to be when J8
7 does the job they have to generate the standard in a wave form
8 in which nobody owns it? J6.

9 GENERAL KERN: And when we go to broadband, then we
10 have a whole new ballgame.

11 MR. PATTERSON: But here's the deal. You've got to
12 really have, you've got to have somebody strong who says: You
13 know, we've got to get a J6 who knows how to do this stuff and
14 who won't walk away from it.

15 MR. HUTCHINS: If J6 could get some organization
16 with industry, perhaps they could deal with things like HDTV.

17 GENERAL HAWLEY: Strength in our world comes from
18 budget authority.

19 MR. PATTERSON: And just because -- just because you
20 have real strong COCOMs out there who have personalities that
21 gobble stuff up, J6 functionally, that's the guy.

22 GENERAL HAWLEY: We turn them over every 18 months,
23 2 years. This is not an 18 month, 2 year job.

24 MR. PATTERSON: No, it's not. And look, they're
25 three-star and they normally retire out of that job.

1 GENERAL HAWLEY: Normally.

2 MR. HUTCHINS: That means you want a J6 with a tech
3 director.

4 MR. PATTERSON: A tech director as the deputy.

5 GENERAL HAWLEY: That would give them a long-term
6 view.

7 MR. CAPPUCCIO: So you let the technical director be
8 responsible for taking -- if it takes five years, six years to
9 come up with a standard.

10 MR. HUTCHINS: Look how industry's come up with
11 standards for image generation, for 3D imagery, for HDTV. This
12 can be done. It's not an engineering problem.

13 MR. PATTERSON: So we've agreed that you set the
14 standards and everybody plays to the standard or you don't get
15 to play.

16 MR. HUTCHINS: J6 does that. Their technical arm is
17 the NII, which also solves your interoperability KPP because now
18 they can operate KPP as you go someplace and you test to that
19 interface.

20 GENERAL KERN: And a facility is established as part
21 of it?

22 MR. HUTCHINS: We can arrange a test facility
23 budget.

24 MR. CAPPUCCIO: Prototype stuff where you can
25 emulate stuff.

1 GENERAL HAWLEY: You could populate it with real
2 systems.

3 MR. CAPPUCCIO: Yes, you could do that. Or right
4 now, the way software is so good, you could populate it with the
5 architecture that you're going to use and proof validate the
6 architecture. You don't even have to do the hardware no more.

7 GENERAL KERN: Well, part of -- one of the things
8 we've found is if you're doing networks you've got to find a way
9 to load it.

10 (Slide.)

11 MR. CAPPUCCIO: This one here we missed altogether.
12 This one here was one, if I fail this criteria I kill a program,
13 and let me give you an example. The question gets to be do you
14 really think you should formalize a when to kill the program
15 review matrix or scoring card.

16 VOICES: No.

17 MR. KOZLOWSKI: No.

18 MR. CAPPUCCIO: I don't think so either.

19 MR. PATTERSON: But wait a minute. This is a great
20 chart for pre-acquisition strategy.

21 MR. CAPPUCCIO: Sure, you just flip it around.

22 DR. ABBOTT: It's an assessment chart.

23 MR. PATTERSON: Have I done all these things? Have
24 I plugged into all these squares?

25 MR. CAPPUCCIO: He was using it to kill. You could

1 use it to start.

2 MR. PATTERSON: I was standing here thinking: Gosh,
3 you've got everything.

4 MR. CAPPuccio: But there is an issue here. One of
5 the questions we haven't talked about is, if you're going to
6 throw all that PEC stuff in there do you want to take on the
7 issue that the system does not know how to kill a program, or do
8 you want to be silent on it?

9 GENERAL KERN: The system does know how to kill a
10 program. Everybody's saying that. The Army's killed almost 100
11 programs in the last five years.

12 MR. CAPPuccio: Well, the perception is that --

13 GENERAL KERN: But it did.

14 MR. CAPPuccio: I know. Congress would say that you
15 don't know how to stop it.

16 MR. KOZLOWSKI: One of the pieces of data that I
17 keep asking for, I want a list of all the programs that have
18 been cancelled in the last 20 years for whatever damn reason,
19 and we can put this monster to bed. We're not going to stop our
20 critics, but at least you can say the system already knows how
21 to kill programs.

22 MR. CAPPuccio: How to kill programs. And the ones
23 that get through are only maybe a fraction of a percent.

24 MR. HUTCHINS: I was just talking about the last
25 PBDs. The system really knows how to kill programs.

1 MR. PATTERSON: Yes, we can kill programs like
2 crazy. We get them shoved back at us by Congress.

3 GENERAL KERN: Hang on. Who is the only person in
4 the organization who can kill a program? Congress, and that's
5 no shit. That's the law. We cannot kill them. We can
6 recommend they be terminated, and that's the list you've got to
7 take over there and see which ones they really did. And there
8 are lots of them.

9 It's not that we don't know how to kill. We don't
10 have the authority to do it.

11 MR. HUTCHINS: I don't think you need Congressional
12 authority to terminate a program, but you need Congressional
13 acquiescence to stop the funding.

14 DR. ABBOTT: Well, first of all, you can kill the
15 contract. You can still have the funding, but you can kill the
16 contract.

17 MR. PATTERSON: Your point is, and we'll try to get
18 that data --

19 MR. CAPPUCCIO: But we're not going to go this way.

20 MS. GIGLIO: I have a request in to the
21 Congressional Budget Office for exactly that.

22 MR. PATTERSON: Next.

23 (Slide.)

24 MR. CAPPUCCIO: This I think we solved.

25 MR. PATTERSON: This I think we solved.

1 MR. HUTCHINS: That's the end of the second session
2 in July. We've got two more to do, which sounds like tomorrow.

3 MR. CAPPuccio: Can we start early tomorrow?

4 MR. PATTERSON: Do you want to start at 7:30?

5 MR. CAPPuccio: Is that okay? Can people start that
6 early?

7 MS. GIGLIO: We have to go to the Hill.

8 MR. PATTERSON: They can start at 7:30. They have
9 got good leadership here. Tomorrow we're going to go because
10 Congressman Everett asked for someone to come and talk to him
11 just about our process and how we're doing this, because we
12 talked to the staffers and the staffers went by and said, hey,
13 these guys, this panel, is really doing a good job.

14 MR. CAPPuccio: You mean the lightweights?

15 MR. PATTERSON: The lightweights.

16 MR. CAPPuccio: Okay, all right.

17 So what time are we going to convene?

18 MR. PATTERSON: 7:30.

19 MR. CAPPuccio: 7:30 breakfast or 7:30 meeting?

20 MR. PATTERSON: 7:30 breakfast, 8:00 o'clock
21 meeting.

22 (Whereupon, at 6:12 p.m., the meeting was recessed,
23 to reconvene on Friday, October 7, 2005.)

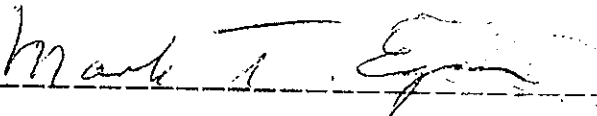
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CERTIFICATE OF REPORTER

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I, **MARK T. EGAN**, the officer before whom the foregoing deposition was taken, do hereby certify that the witness whose testimony appears in the foregoing deposition was duly sworn by me; that I am neither counsel for, related to, nor employed by any of the parties to the action in which this deposition was taken and further that I am not a relative or employee of any attorney or counsel employed by the parties thereto, nor financially or otherwise interested in the outcome of the action.



Notary Public in and for
the District of Columbia

My commission expires: 12/14/2005