

File 20100624.1416: Notes for today's WAR to Dr Martin:

weekly activity report 142 (loughry)

Weekly activity report no. 20100624.1416 (GMT-7) sequence no. 0142, week 8+1 TT

This has been an extremely busy week. I had a meeting with the programme manager for the Radiant Mercury CDS, Mr Olav Kjono, in Denver on Monday. He is based in San Diego, near the government sponsor (U.S. Navy SPAWARSYSCEN) but was in Colorado on a business trip. I went into the meeting with an agenda and a list of specific questions about RM's funding relationship through Lockheed Martin and the government sponsor, how the costs of CT&E time and effort are allocated, and the overall cost and budget of the programme. An impedance mismatch quickly became apparent in the specialised terminology of defence contracting with the government. I understand where the programme is in the systems engineering life-cycle, but not in the acquisition life-cycle. We found it impossible to communicate without a glossary; the language of acquisitions is so ideosyncratic (example: 'the wrong colour money') that I could not get my questions across. The reasons why the O&M sustainment phase is fee-for-service and not fully funded can only be explained in the context of the acquisition life cycle; specifically, where the RDT&E money that is used for beta testing comes from. Under the fee-for-service model, sites needing an RM system pay a combination cost of price + 'tax' for overhead in addition to a yearly support fee, in contrast to a fully funded programme such as an aircraft acquisition where the end-users receive aircraft but pay no amount monetarily. RM is not fully funded, even for the baseline.

The programme manager recommended that I study the acquisition life cycle training material at the Defence Acquisition University (dau.mil) in order to better understand the right questions to ask. I have requested access to the training and was also referred to some articles by an author in the Lockheed systems engineering organisation on the subject of 'affordability' (another overloaded term that has a specific, non-obvious meaning in the acquisition life cycle). Mr Kjono encouraged me to come back and talk to him again after I have learnt the language. [Editorial note: so this is what those people on the business side of the house do. From my experience, the engineers are largely unaware of it. They know vaguely that a specialised language exists but rarely hear it, as it is considered 'business ops'. Engineers are more aware of the Federal Acquisition Regulations (FAR) because of compliance training that engineers receive, but FAR is about controls, not acquisitions. What I discovered this week is that talking to the programme manager is impossible without the vocabulary.]

Going through the Basic training series, Fee-for-Service module, and O&M Support module at dau.mil is expected to take 56 hours. I have not begun it yet because I am working on the ACM workshop paper, due in a few days. On the subject of different accreditors measuring different levels of risk in a CDS, hence making different judgments about the risk mitigation measures that they will insist be put in place, the concept of 'moral hazard' keeps coming up. Everett U. Crosby wrote about risk assessment in the context of fire insurance and fire protection measures in factories in the late 19th and early 20th century, which led to the formation of agencies that were sponsored by insurance companies for the purpose of encouraging and requiring—later enforcing—risk mitigations that had been shown actuarially to reduce payout costs. In this analogy, accreditors are like the fire marshals, data owners are the insurance companies, and CDS installers are the factory owners. Some entities play more than one role, however, so I am still deciding whether this analogy holds water. Another related reference is Akerlof (1970), on the 'market for lemons'.

Looking for more history on the CT&E and ST&E of cross-domain systems in the intelligence community, I found a new book by Richard J. Aldrich about GCHQ. In this book and Bamford (2002), possibly Bamford (2008) I hope to find a reason for the oft-cited difference in risk tolerance positions between US and UK accreditors of cross-domain systems. I have heard the philosophical difference expressed on different occasions by evaluators on both sides of the ocean, so evidence suggests it is a real phenomenon. Other than by reading between the lines of their respective standards, if I can't find a primary source for the policy differences I may be reduced to quoting the opinions of practitioners in the area. Fortunately, I have at least two good sources of such opinions, opinionated individuals who are willing to give me their opinions on the record. Such are not as good as published sources in the literature for citation, but again I come up against the dearth of published sources (other than standards and policy documents) in the cross-domain accreditation field. To this end, I continue to angle for an invitation to attend the next meeting of the CDTAB in Washington, DC. The person I asked referred me to two other people and seems to be wanting to make it a combined delegation to the CDTAB (Cross Domain Technical Architecture Board), DSAWG (Defence Security Accreditation Working Group), and the Unified Cross Domain Management Office (UCDMO) conference at the beginning of August. The programme manager is trying to get the PMO to provide funding. I may have to pay my own way.

I talked with Mingqiu Song this week by email some more about security certification requirements by the US Department of Defence under DOD Instruction 8570.1, particularly the CISSP and what it covers. I offered to endorse her application if she wants to get the certification for the purpose of making security managers more likely to talk to her. We talked about what the examination covers, study guides, and changes that were introduced in the requirements around 2004 that made the certificate more difficult to obtain.

I spent some time this week reading articles in the Times Higher Education about PhD education, supervision, and time pressure imposed by the nominal three-year duration of a UK PhD as compared with nearer seven years elsewhere. I am thinking about it because of the need pretty soon to stop researching, drive a stake in the ground, and say ‘I will write a dissertation about x .’ All the stories about poor graduate students in those articles make me want to validate with Dr Martin that he thinks I am generally still on the right track and not doing too many of those behaviours that annoy supervisors and delay finishing. I requested a meeting when Dr Martin gets back.

References