Tactical Development â€“ 20 Years Later â€“ Part V

Description

Part IV

Sorry, I got distracted, but I continue on the journey. Just so you know, along the way between parts Iv and this one, I typed this up: Why We Shelved TASMs. That post details much of what the falout of the report we generated, but also some dealing I had years later, as a result of this exercise 20 years ago this past August.

We arrived back in Norfolk, and returned to our digs on the ground floor of Building â€œWhiskey-5â€• (â€œW5â€• as the sign on the building said). As usual, our plate was full and I looked at the Ops Boss and asked when we were going to get to work on the tactical analyis. He said he had the next operation to plan (he did) and went back to sorting through the large stack of daily messages. Being the Ops Boss, he owned the two operations types, OSCS(SW) Koch and RMCS(SW) Rumbaugh, and they were put to work. Oh, well, off to the small shared conference room I went, hauling box after box, after box of raido logs, DRT traces, radio-telephone (R/T) logs, weather reports, intel messages and much more. For quite some time, I would sit in there, with charts, dividers, logs and notepads, piecing together engagements from first detection to simulated impact.

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I managed to pull a total of 59 complete engagement sequences out of the piles of data. This data not only included the track of the intended virtual, constructive or cooperative target reckoned by the shooters and search aircraft, but the overlay of the actual tracks. While the times of position didnâ€™t always match, I plotted the ded-reckoned tracks to allow some degree of checking apples to apples. For the flight of the simulated TASMs, I plotted the ded-reckoned tracks, based on the engagement plans, printed for final approval by the CO before the simulated firings. During this, I read the tactical signal logs between the shooters and reviewed any other available data.

I donâ€™t recall how many total engagements were run. Some were disgarded for the fact that not all elements of the detection and tracking process were there. Some were not written down, some were not included in the records, most likely to not being packaged up properly. In any case, for 4 dedicated days, an average of almost 15 engagements a day wasnâ€™t too bad for extracting some meaningful info.

In order to manage the data, I hauled in my new toy, a Macintosh 512K, to the office, and ran Excel as my database manager. The data was all kept on 800K 3.5â€³ floppies, as internal hard drives werenâ€™t a common thing with home computers yet. I seem to recall the printed out data was a 8 page wide by 2 page high form, which I peeled apart (tractor feed paper in an ImageWriter][dot-matrix printer) and taped together to show the Commodore. Included in the spreadsheet (which wasnâ€™t even available for the IBM PC yet), was my first serious work in making calculations using spherical geometry. It took a bit of reading in Bowditch, then dusting off the college level trig, and spending quite a bit of time making sure the parenthesis were placed properly to do computations between two fixes. I also did a lot of testing of the formulas, just to make sure Iâ€™d get the right answers. This was done so for every fix of the target, I would compare the â€œmiss distanceâ€• between the apparent position

(from the shooterâ€™s track files) to â€œground truthâ€• (the targetâ€™s navigational files, which were assumed to be accurate in any case). The speadsheet would indicate the azimuth and distance of miss all along the sequence to engagement.

Iâ€™d spool it up, tape it together, and walk in to lay it out for Commodore Jordan to review. I took lots of notes as he talked. We did finally iron out all the assumptions used to figure we had the best picture of what happened and from there, I began typing the report. In a number of instances, the data wasnâ€™t what we wanted to hear, butâ€¦it was what it was. The spreadsheet was constructed to compute minimums, maximums, means and averages of just about any set of data points. I learned, during this work, how to build a spreadsheet that could be easily tweaked, without having to redo all the formulas, or the data. It was life saving experience, particularly as the Commodore liked to change the methodology (a lot).

During this time, I also got to know one of the Lockheed-Martin programmers quite well. wanting to be able to fine tune our observations, I called Tom and he provided me a wealth of data on the flight program algorithms. In addition to modeling the simulated engagements being done in Excel, I also used Excel to do some computations on what the detailed parametrics of the seeker would be. This did help fine tune the analysis. Tom had worked on the program from the inception of Tomahawk, so he was the prime reference.

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Following all the layout of the data, we settled into drawing some conclusions of tactical employment of the TASM. Some ideas, developed on the ramp up held true, and then there were some that did not. We had read the preliminary guidance (as discussed earlier), and thought we understood the systemâ€™s capabilites and limitations. When we re-read the documentation available, we saw they had also seen some of the same things we had noted, and until revisiting the pubs, wondered why no one had mentioned some of the issues we found. It turns out they had, and they were â€œburiedâ€• in the text. This became one of the big hurdles to getting the report done.

At this point, to make a long story short and to purposely keep some stuff generic, I handed in the report to the Commodore and he did some breifing of CCDG8, RADM Mike Boorda, and the message was: â€œThis is an important system. Keep the report positive.â€• For months, we struggled to, as we realized our predecessors had, say it but not say it when discussing some of the capabilities that werenâ€™t quite as advertized. Iâ€™m sure some of you fully comprehend what Iâ€™m saying here. I recall 35 re-writes. To me, re-writes were major do overs. The many small changes in between were far too many to count. Finally, the report headed up the chain of command at the end of Capt Jordanâ€™s tour.

We were a resdient expert pool for a while and invited to speak at a Second Fleet Over the Horizon Targeting (OTH-T) conference, which was held in the new Tactical Training Group, Atlantic (TACTRAGRULANT) building on the Dam Neck base. The new commodore, Capt Joe Lopez elected to let me be the speaker for our topic of Battle Ship Battle Group (BBBG) OTH-T tactics. I got up in front of a very large crowd, wearing my O-4 oak leaves and proceeded to tell our story of employment, how even a two bird SH-60B det could not maintain 24/7 coverage, how we parked the FFG about 100 miles ahead and the LAMPS another 100-150 ahead, sending the tactical picture back to us via high frequency (HF) Link 11 in order to be able to have a chance of employing TASM at close to max range. An A-6 LT, sitting in the front row rudely interupted me and demandeed to know whay we placed the FFG in harmâ€™s way and why we didnâ€™t send TACAIR out. Well, for one question to remain for

him to ask, he must have missed the part about the BBBG, but to the first half of his multipart question, I replied â€œThatâ€™s why they didnâ€™t make them as expensive as AEGIS Cruisers.â€• I figured that would help him comprehend the tactics employed, and gee, it sure got quiet in there for about 10 seconds. I think I made my point, as ugly as it sounded, but, true at the core. Just, not as we say, â€œdiplomatic.â€•

The presentation proceeded. The Commodore thought I did a fine job and we got calls for some time later on the subject.

So ends the tale of my experience with a major procurement program, personally developing tactics and working days like no where else. It was illuminating and served me well in later years, when I had SH-60 dets embarked, and we operated around the shooters.

Questions?

Category

1. History
2. Military
3. Navy
4. Technology

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