Transitions: Unmanned Aircraft?

Description

Lex is discussing an article by Ralph Peters regarding the old and new worlds.

One of Lex's commenters, John, says those who want to get involved should have "experience" in the real ejection seat, before being in charge of the UAVs:

> Insist that anyone above the video game player level for UAVs have recent seat time as an attack, FAC, ANGLICO to keep the focus and urgency on supporting the guys [and gals] in the mud.

Good comment, but the opportunities to have this sort of experience to execute oversite diminish quickly as the UAVs are brought online. In the beginning, there will be lots of "old hands" with the time in the saddle, given the current global unpleasantness, but once that settles down, they will work their way up the ranks, and have less time in the cockpit, and more holding a pen of pounding a keyboard.

It's the next big challenge.

I began to comment, but, suffering from a little bit of blogger's cramp, thought it might work over here, to get another post on the board.

Granted, my "stuff" was really low speed, high drag in comparison, yet, it's all about the mindset. Some of the transitions in how we, as the Surface Warfare community had to rethink the "world:"

Moving from "conventional CICs" to the NTDS world was another. The data link surely put more info in the hands of "higher," that had previously been the domain of the all knowing, on scene commander. I was around for that transition, to some degree, when the bulk of the destroyer fleet became so enabled with the introduction of the 963s. Blogged a few of the observations of the beginning and 5 years later conditions, too.

I was an "early adopter" of the over-the-horizon capability as a LTJG with the control of 8 RGM-84 HARPOONs, too. I went from that job, where it was all shiny and new, where we got litlle more instruction on how to point and shoot, to a training command where I saw some really innovative tools developed (the "Harpoon Interactive Tactical Simulator" (HITS)) that helped us wrap our brains around a moving search pattern, that couls also be static, even with the .85 mach "sensor platform" underway to the vicinity of the target. Years later, with improvements suggested to us (and paid for) by the Brits, the B models added to our ability to get 500 lb warheads on target. The came fancy tools like the AN/SWG-1A to interface with the seekers. Now we could engage with simultaneous precision, from one platform.

Not so fancy? Well, before that was 5?/38s and /54s at not much more than the horizon visual ranges. Now we were out in the 60+ mile realm and we needed off ship "eyeballs" to help out. A transition.

I was part of a staff sent to sea to figure out BBBG tactics with Tomahawk, when doing "OTH-T" with

mountains of national sensor data coming in via hard copy from Radio was the order of the day – oh, and the info was then plotted on paper charts. That had been good for the old gunnery days, but wholly unsatisfactory for the missile age. As a result, a magic computer came from behind the Green Door to help out: POST. Now we had to teach ourselves really technical stuff about emitters, so operators could set the right filters to locate and engage targets. A transition. Along the way, then LCDR Harry Harris, now of GTMO fame, made an interesting remark when I finished my briefing to ADM Jerimiah.

After the Gulf War, pilots had an entirely new appreciation for the TLAM variant of the Tomahawk cruise missile, the thing that, before that war, couldn't possibly do the job TACAIR was there for. A transisiton (and more pilots coming home).

Later, I was around when the CEC system, integrated into the NTDS networks, which was a (insert sailor adjective here) mess the first time they tried it. I was there. I had told them at the planning meeting there was going to be a problem and they needed to do some more analysis (i wasn't nay saying, just looking for success). They told me not to worry. In the test, they told the NTDS side to shut down. It'sa ll been worked out, but it took some rethinking when a really novel system entered the arena of tactical tools for a fast paced world. Before I had been at that level for the safety of CEC, one of my project manager worked it, and I saw some incredible briefs on the technology. We, back then in the early 90s, were putting a lot of stock into computing technology to help us down high speed, sea skimming threats. Has I been on the sea going side, I'm sure I would have had some qualms about trusting Eddie Electron so much. A transition.

In another job, I had to tell ship COs that the only way they were going to save their ship from Exocets was to put NSSMS into a full auto configuration. I had some COs tell me to stuff it. I held up the TACMEMO, paid for with a lot of taxpayers money, that proved it was the only hope. I suspect we use more auto features these days. A transisiton.

My interests in computer technology tends to heavily lean towards display technology, to include virtual environments. I have a bad habit of paying more for video and sound cards for my systems as most would plunk down for a whole computer system. I had my first hands on experience with a personal VR system in the 1993 time frame. Since then, not only has the display technology improved remarkably, but the rate of data transmission and bandwidth has increased. Those are things that will make the combat UAVs (CUAVs) a reality. Challenges to overcome as to the employment, the supporting data transmission paths, and the like? Oh, yes. Can they provide the same "quality of service" to that ground pounder with and enemy looking to grab him by the belt buckle? With time, I'm sure it will happen. Along the way, there will be barriers and hurdles to clear. Along the way, some really smart young people will show up and tell us how to use them in ways our old paradigms would never allow us to see. The convergence of so many new, light-weight capabilities and materials is incredible. That will all lend itself to this next leap forward.

I suspect the technology will allow a "driver" to be immersed to such a degree, he or she will get a startlingly accurate feel for the environment, and the soldier or Marine on the ground will be happy with the results.

For years, the military and the computer gaming market have been headed for the same end game. Along the way, they have joined forces, and it was over a decade ago that that happened. Net result? Look at some of the UAV hand controllers….

The first challenge: Think how to employ this technology, not why we shouldn't….and let our junior

speak their minds, too.

Category

1. Supporting the Troops

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