IDEAS & ISSUES (FUTURE CONFLICT)

Ambrosia

Chapter 2

by Maj Victor M. Ruble

he four speedboats were racing across the waters of the Gulf so fast that Lt Rosado was having a hard time trying to keep them on his tablet's screen. Pulling hard on the "Little Bird's" control stick, the images on the screen raced by as Aidan attempted to keep up with the rapidly approaching watercraft.

Wow. These things are fast. Aidan thought to himself as he struggled to keep the speeding gunboats in view. I don't remember anyone mentioning anything about this kind of tech in the brief.

"So what's the deal, Hollywood?" Capt Prophet's voice boomed through Aidan's comm helmet. "It's hard to make an assessment when I can't see the thing I'm supposed to be assessing."

"Working on it, sir," Aidan responded. He wanted to add, *Like you could do any better*, but his focus on maintaining visual of the rapidly approaching craft—and his professional sensibilities—kept him from pulling the trigger on the that one.

"Thought so!" he said out loud to himself as the camera view locked in on the first of the four boats. Obviously, the speed of these boats was something that Lt Rosado was not prepared to deal with, but there was more than just their ability to seemingly glide over the choppy waters that cued Aidan to the fact that not only were these boats unknown to most people, they weren't crewed by any either. "Freaking autonomous!"

"Apache 6, this is Hollywood."
"Send it."

"Are you tracking on this?" referring to the images being relayed from the Little Bird.

"Yeah. Am I seeing what I think I'm seeing?"

"A-firm," Aidan responds, using the officially unofficial comm vernacular for affirmative. With a few presses of

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High Speed Boat concept art. (Google Images, turkishnavy.net.)

the touch screen inside of his troop commander's station, the images of the formation of unidentified speeding watercraft expanded as the ÛAV's camera zoomed in on the vessels. Long, lean, and sexy, the ships had a similar silhouette to that of a cigarette boat, but with raised canopies surrounded with dark tinted windows where the captain's station would normally be and with a longer stern than that of the racing variety. What cued Aidan to the fact that these were unmanned was not only had he not seen even the tiniest peek of a human or shadow of a human on the boat-which wasn't a dead giveaway in and of itself, being that the windows of the "cockpit" were super dark—but there was also no doorway or access hatch into it. From what he could tell looking these things over was, if a pilot or crew were to embark, they would have to do it from underneath, as there was no topside access.

"Unmanned attack boats," Aidan continued. "That explains why these things are moving the way they are. They're lighter 'cause they don't have to account for a crew, crew spaces, and the metal is probably much, much lighter since they don't have to worry about force protection or human factors. It's basically just a boat shaped robot on the water."

"Roger, but you said 'attack' boats. I'm not seeing that there's any indication that these things aren't just some racing team from the Emirates pushing the boundaries of international waters."

Aidan scanned the live feed and had to agree with his CO on this one. His gut was screaming to him that these things were bad news, but looking at the long, slender hull, he couldn't see anything that even loosely resembled an offensive capability. From the looks of it, these were ships build specifically for speed.

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So when the laser designator warning alarm turned Hollywood's ACV very "Hollywood," Aidan was surprised as anyone.

"All Blue vics, this is Blue 3-1. Shuffle, Shuffle, Shuffle, We're getting lazed." SSgt Washington shouted over ACV Platoon Tac 1. "Shuffle" was the brevity code the ACV platoon used to quickly signify that they had made contact with an unidentified enemy. Normally, this code was only used on land to signal a land based ambush, as no one had ever tried to oppose an amphibious landing with watercraft of their own, but clearly they were dealing with an adversary who by its very nature was unorthodox.

As the brevity code went out over the net, the ACV section began to execute its immediate actions in a fashion that epitomized the months of training and unit cohesion that can only be achieved through a rigorous pre-deployment training regimen. The driver of Lt Rosado's "track" began to furiously press the display screen on his driver's display screen located above his steering column in front of him, prompting a joystick rack to extend from underneath the driver's station. As the young lance corporal grabbed hold of the water sled steering mechanism, Aidan felt the entire ACV/water sled lurch as control of the high-speed sled was transferred from autonomous, GPS satellite guidance over to the driver for manual operation.

"Hold on to your butts," LCpl Cooper announced over the intercom.

And with that, the young ACV driver pulled hard on the joystick, pitching the ACV and its sled hard left in unison with the other three ACVs of the third squad. Aidan's stomach felt like it dropped into his boots as the vehicle made its flanking movement, and within an instant, Lt Rosado and his platoon, embarked on the four ACVs of third squad, began quickly closing the distance between the infantry company and its aggressors.

"Pak-man, this is Blue 3-1."

"Send it."

"My laser designator warning alarm just went bananas. We are en route to intercept."

"Roger. Mine as well, but we're still out of range. Main formation is going to maintain course to center beach. Screen our flank, and if those things don't disengage ... smoke 'em."

"GTG sir," SSgt Washington replied and then switched her radio frequency back to the section's net.

"All vics, lock your guns on that signal, and if they do anything that is even remotely hostile, you're cleared hot to fire."

All of the vehicle commanders responded that they understood. The "slew-to-cue" capability of the ACV 3 allowed the gunner or vehicle commander to immediately traverse the weapons station onto its target based on either pre-programmed coordinates, visual identification via the optics suite, or in this case, to orient on the source of the laser designator by following the path of the laser to its host—the target. With a simple push of a button, SSgt Washington fixed her weapons station in place, and within an instant, all four ACV 30mm cannons swung around and were locked on the incoming boats.

"Corporal Ski, you got 'em?" SSgt Washington asked her gunner, ensuring that the slew-to-cue process went smoothly.

"Got 'em, SSgt." He replied over the intercom, "but these things are moving pretty fast. They'll be in range ... like now-ish. But not sure how long we've got until we're in theirs though. Or how long we've been there, already."

Aidan remained focused on the video imagery of the oncoming bogeys, still uncertain as to what weaponry these boats may be armed with that they have laser designator capability at such a long range. He didn't have to wonder for very long. Subdued hatches began to slide open on the bow and stern of the boats, revealing what looked to be a 14.5 cannon in the front and a rocket pod on the back.

"Holy ...!" SSgt Washington yells. She wasn't on intercom, and she didn't need to be. Everyone in her track heard her loud and clear. "Contact! Evasive maneuvers! Phantom! Phantom! Phantom!"

"Phantom" was another brevity code used by the ACV platoon that was nor-

mally used in land based situations. But regardless of the rapid technological advancements being made and proliferated in this modern, chaotic world, improvisation was still a staple of the Marine Corps. With the "Phantom" call, the four ACV formation spread out from each other, increasing the intervals between the vehicles and gaining more dispersion. The front two vehicles increased their speed, while the two on the flanks dropped back, so that the online formation now looked more like a crescent, or a "C." Once the required dispersion was achieved, the middle vics began zig zagging across the front of the formation, spewing a thick, white smoke from their smoke generation systems. Within seconds, the entire frontage of the ACV section was completely obscured by smoke. The gunners of the ACV were able to maintain visual contact of the enemy craft via the weapon stations organic FLIR (forward looking infrared) system, but visually, they were as blind as the enemy. Aidan was able to keep "eyes on" via the Little Bird and as he steered the small UAV closer to incoming speedboats, he saw a barrage of rockets being launched from the front boat's rear missile rack.

"Incoming!" he shouted into his comm helmer's microphone.

"Got it," SSgt Washington replied. With this, the two ACVs deploying the smoke obscuration began launching chaff from the grenade pods attached to the sides of the RWS (remote weapons system). In moments, the smoke filled sky was littered with tin foil confetti. It was a formidable blanket, and one that the unknown enemy's projectiles could not overcome. Impacting randomly in the air or splashing into the waters of the Gulf, none made it close to their intended target.

"Ok, light em up!" SSgt Washington ordered, and with that, the two ACVs positioned on the flanks of the formation shot through the massive cloud of smoke and metal fragments. Emerging from the obscuring fog, the ACV 30mm chain guns erupted in a fury of precision and destruction. Many in the defense acquisition community questioned the high cost of such a weapons system on a platform whose primary mission was

infantry support, not peer-threat engagement. But today, the 30mm RWS earned every penny. In a single volley, two of the four enemy gunboats erupted in flames as the HEDP, or high-explosive dual purpose, munitions ripped the thin-skinned watercraft to shreds. Each ACV fired additional bursts into the smoldering hulls to ensure destruction, leaving only the skeletons of these highly advanced vessels to coast across the waters of the Gulf under their own momentum. Autonomous or not, the intelligence network "piloting" the remaining two craft seemed to understand full well that it was tactically and technically outmatched. Performing a maneuver that would take a seasoned coxswain years to achieve and a lifetime to master, the two speedboats spun aft in a complete 180-degree redirect at full speed and raced back from which they

"Save your ammo. They're bugging out," SSgt Washington commanded over the net.

"Hey SSgt. Good job," Lt Rosado chimed in over the intercom. "Ler's pull up next to one of those hulls. I want to get a better look at who or what those things are."

"Roger sir. Let me radio back to Pakman and give him the SITREP."

Aidan thought about just flying the Little Bird closer to one of the destroyed boat hulks but decided he wanted to see it with his own eyes. Plus, he was looking forward to popping his hatch and getting some fresh air. Aidan stood up on his seat as the ACV pulled alongside the still smoking hull of the attack craft, so that his entire torso was sticking out of the troop commander station.

"Careful, sir," SSgt Washington warned. "That things still on fire, and last thing we need is for whatever ammo's left in that thing to cook off and gives you a face shot."

"So I take it we're not going to get any closer?"

"Negative, sir."

The ACV was about 200m away, which was still way too close for SSgt Washington's comfort, but still way too far for Aidan to really get a good look at it with the naked eye, considering all of the smoke and debris in the

air. He pulled his XM8 carbine from the rifle lock located inside the vehicle and sighted in on the destroyed vessel. Scrolling though the various digital magnifications of his rifle's optics suite, he was able to get a good view of the craft. After scanning the boats hull for what seemed like minutes, the ACV's commander finally broke the silence.

"What do you see, sir? Did we get 'em?" she asked impatiently, clearly ready to get on the move and link back up with the platoon.

"I want to get a better look at who or what those things are."

"Oh yeah. You knocked the stink off of these things." Aidan could sense her impatience, but he really needed to get more intel than, these things are really fast. He couldn't just stamp that these were autonomous attack craft based solely on the fact that they were sleek, and the cabin had tinted windows. As he scanned for anything that would confirm his suspicions, the amount of battle damage that these things suffered was so catastrophic that Aidan was just about to concede his quest, but as he lowered his weapon, he saw it.

"AST" in a subdued stencil across

It is the custom, especially in this region, that countries-even failing ones-tended to plaster their flags and insignias across all of their combat equipment. The presence of a mega corporation operating in the area of operations explained why these attack craft were initially unidentifiable. Add in that AST was on the forefront of autonomous weapons tech, and the lack of human carnage evident in the wreckage of the boat, Aidan could reasonably ascertain that these were indeed, "robot attack boats." But the fact that a nongovernmental entity, especially a megacorporation such as Applied Science Technologies—who's bread and butter was military arms and weapons research and development-would be willing to not only operate independently in this area but would be willing to stamp their gear with the company logo, even if subdued, was disconcerting to say the least. Add in the fact that the Marines' primary mission was to facilitate the delivery of a service—namely free potable water via a transportable, energy efficient desalinization station—that would be in direct conflict with AST's bottom line meant that AST was probably more than willing to escalate things well beyond the harassment Aidan and his platoon just experienced.

Aidan would have loved to have had more time to do some SSE (sensitive sight exploitation) and get this stuff back to the "egg heads" at DARPA (Defense Advanced Research Projects Agency), but they needed to link back up with the rest of the company, and SSgt Washington's warning was germane. Aidan saw the explosion before he heard it as the shockwave slammed him back down into the troop commander's station. What little was left of the boat splintered into a cloud of fire as the remainder of the boat's ammunition cooked off.

Having had his fair share of concussions throughout his amateur athletic career, he was pretty sure he could add another to the list. Before he could "shake off the cobwebs," LCpl Cooper had their ACV at full throttle racing away from the downed enemy craft. Aidan, understanding the urgency of his discovery, regained his bearings and furiously tried to raise Captain Prophet on comm. He needed to keep the rest of his company from starting their landing. Hopefully, they hadn't reached their boat lane yet. If AST was truly making a push to have a seat at the Iranian buffet table, Aidan needed to get this information back to Apache 6 as soon as possible before he and his Marines, expecting an unopposed landing on Qeshm Island, suddenly found themselves in a meat grinder.

