

# SILENT RUIN

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**ARMY CYBER**  
**INSTITUTE**  
AT WEST POINT

# BUILDING A BETTER, STRONGER AND MORE SECURE FUTURE FOR OUR ARMED FORCES

**Science Fiction Prototypes** are science fiction stories based on future trends, technologies, economics, and cultural change. The story you are about to read is based on threatcasting research from the Army Cyber Institute at West Point and Arizona State University's Threatcasting Lab. Our story does not shy away from a dystopian vision of tomorrow. Exploring these dark regions inspires us to build a better, stronger, and more secure future for our Armed Forces.

Technology is evolving faster and faster ... but our military doctrine, organization, training, leadership, personnel, and education models are struggling to keep the same pace. Therefore, how do we inspire military innovation? Even in the 1920s and 1930s, the U.S. military was able to successfully innovate with low military budgets and limited support, which ultimately created huge impacts in World War II.

What if our adversaries have learned the lessons on military innovation over the last century and applied them to the future battlefield? What if they are embracing cyber and electronic warfare in their main order of battle? What if they are willing to incorporate change into their organizations? How might we fare against them on a future battlefield? How are you helping or hindering military innovation?

Lt. Col. Natalie Vanatta  
Academy Professor  
U.S. Army Cyber Institute

# SILENT RUIN

Our science fiction prototype begins in the year 2027. Yugaria and Novistrana have united, crossing a red line for Razkavia. Tensions are high as both NATO and Razkavia conduct training missions on each side of the border. When both group's front-line autonomous forces deviate from their submitted plans . . . the robots engage . . . triggering a full conflict.

The fight is fast. With superior electronic warfare capabilities, the Razkavians launch a cyber attack that jumps the autonomous forces and targets the manned tanks.

Razkavian tanks roll into the city and converge on the U.S. Embassy . . .





YUGARIA

NOVISTRANA

RAZKAVIA

AFTER YEARS OF NEGOTIATIONS,  
YUGARIA AND NOVISTRANA  
UNITE... CROSSING A RED LINE  
FOR RAZKAVIA.

ENHANCED  
FORWARD  
PRESENCE  
STANDS AT  
THE READY...



RAZKAVIA MASSES PEACEKEEPING  
FORCES FOR A SNAP EXERCISE...



THE FIRST ATTACK: RAZKZVIAN FRONT  
LINE AUTONOMOUS DRONES LAUNCH AN  
ELECTRONIC WARFARE ATTACK...



LOSING SIGHT OF THE FRONT  
LINE... TANKS ARE CALLED IN  
TO INVESTIGATE...



AMERICAN OBSERVATION  
DRONES GO DOWN... THEIR  
CONTROLLERS LOSE  
SIGNAL...







JUST  
FOURTEEN MORE  
HOURS 'TIL THAT  
WEEKEND PASS...  
NOT THAT I'M  
COUNTING...


THIS LOCK  
DOWN HAS BEEN  
NUTS... IT'S LIKE WE  
CAN'T EVEN FART  
WITHOUT A DIRECT  
ORDER...



**BLUE 2 THIS  
IS BLUE 1--JUST GOT  
A CALL FROM BLACK 6  
THEY'VE LOST CONTACT  
WITH OP 1... I NEED YOU  
TO MOVE FORWARD TO  
OP1'S LOCATION AND  
CHECK ON SENTRY  
GOLD 2.**


**BLUE 1...  
ARE YOU KIDDING  
ME? THIS AGAIN...  
WE WERE JUST  
UP THERE...**

**BLUE 2  
ROGER...NEED  
YOU TO GO  
CHECK IT OUT  
AGAIN...**




WITH THE OBSERVATION DRONES  
BLINDED, MORE RAZKAVIAN TANKS  
ARRIVE, GREATLY OUT MATCHING THE  
NATO FORCES, BUT THE RAZKAVIAN  
PLAN FOCUSED ON A DIFFERENT  
ATTACK\*...

\*A FAULTY PATCH TO THE NATO BLUE FORCE TRACKING  
SYSTEM BROUGHT IN A VULNERABILITY...THE TANKS  
THAT DIDN'T GET THE MAINTENANCE BEFORE THE  
DEPLOYMENT WERE AFFECTED...



RAZKAVIAN CYBER COMMAND  
LAUNCHES A SECOND WAVE  
TO DISABLE THE NATO  
TANKS...

LAUNCH IT  
NOW!



THE NATO FORCES SIT UNAWARE  
THAT THEY WERE BEING  
ATTACKED AND DISABLED.

I CAN'T  
SEE ANYTHING...  
MY THERMAL  
IMAGING IS  
DOWN!



THE FIRST SHOT IS FIRED: A RAZKAVIAN AUTONOMOUS VEHICLE SLIPS PAST THE SENTRY GUNS WITH AN ANTI-TANK GUIDED MISSILE AND ATTACKS BLUE 2.



WE'VE BEEN HIT! WHAT THE HELL?

SGT, COUNTER MEASURE JUST WENT OFF AT THREE O'CLOCK.

I CAN'T SEE ANYTHING. IT'S ALL WASHED OUT!

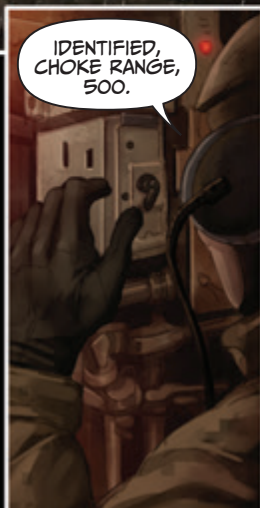
RAZKAVIA'S AUTONOMOUS TANKS SLAM INTO NATO FORCES, CATCHING THEM UNPREPARED...



GUIDONS, BLACK 6: WEAPONS FREE, ENGAGE ALL TARGETS, OUT.



GUNNER, SABOT, TANK, CHOKE.

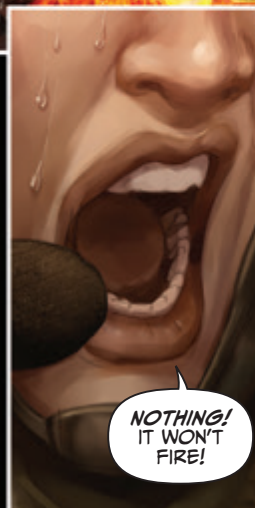


IDENTIFIED, CHOKE RANGE, 500.



UP!

FIRE AND ADJUST.



NOTHING! IT WON'T FIRE!



GO TO MASTER BLASTER. WOODY, GET US THE HELL OUT OF HERE.





BLACK 6,  
RED 1--THEY'RE  
THROUGH MY BRAVO  
SECTION.

LET'S GO,  
WOODY!

IT'S NOT  
RESPONDING...  
I CAN'T CONTROL  
IT!



BLACK 6,  
WHITE 4, MY 1  
VICTOR IS NOT  
RESPONDING... IT IS  
ONLY GOING IN  
CIRCLES...



BLUE 2 THIS IS  
BLACK 6...WHAT'S  
WRONG?

CONTROLS NOT  
RESPONDING...

WE'RE  
FLIPPING!



OH  
MY GOD...  
CAN'T GET  
OUT!





RAZKAVIAN FORCES  
CONVERGE ON THE  
U.S. CONSULATE.



**THE END**



“While we may be reluctant to implement autonomous capabilities, there is no doubt our adversaries will take every opportunity to outpace us. If we fail to harden our own systems while they develop innovative means to counter the proliferation of advanced autonomous systems, this threatens to render the world's most technologically advanced force its most vulnerable.”

Lt. Col. J. Lane  
U.S. Army



# AFTERWORD

Tanks flip, sights fail, tubes jam, and steering breaks today on M1A1s. What if tomorrow it is not just environmental and maintenance factors you need to worry about ... but also a potential digital adversary affecting your weapons platform?

In the future, cyber and electronic warfare operations and capabilities can share our view of reality. How will we protect our forces and maintain ground truth?

In a world of inter-connected devices and systems, a vulnerability in one can lead to devastating consequences in another. Are you doing your part to protect your digital systems? Are you really aware of your actions and their potential consequences?

Are we innovating now to be prepared to meet the adversary of the future? Are these adversaries investing in new systems today so that we will be outmatched tomorrow?

How do we need to evolve as an organization to ensure that the final graphic panel in this story never becomes true? Multi-domain battle is a step in the correct direction. It will help us drive change and design a future force that can fight and win in contested domains.



