

# 11.25.2027

Written by Brian David Johnson • Creative Direction: Sandy Winkelman

Illustration: Riccardo Burchielli with D. Hudson & M. Haley • Brought to you by the Army Cyber Institute at West Point



**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. 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.

Once a year, Americans sit down to a Thanksgiving meal that unites us in gratitude for our safety and security. As many follow the celebration with a football game or an after-dinner nap, our defense automated supply chain never sleeps.

Our economy is becoming more and more automated. Between global supply chains and high frequency trading, our national and economic security is increasingly dependent on automation and AI. But what safeguards monitor the machines that we depend upon? On Thanksgiving Day 2027, robots and algorithms will hyper-efficiently run our supply chains, but are these systems themselves secure?

Lt. Col. Glenn Robertson  
U.S. Army, Signal

The views in this graphic novel are those of the author and do not reflect the official policy or position of the Department of the Army, DOD, or the U.S. Government.

© 2018 Department of the Army

# 11-25-2027

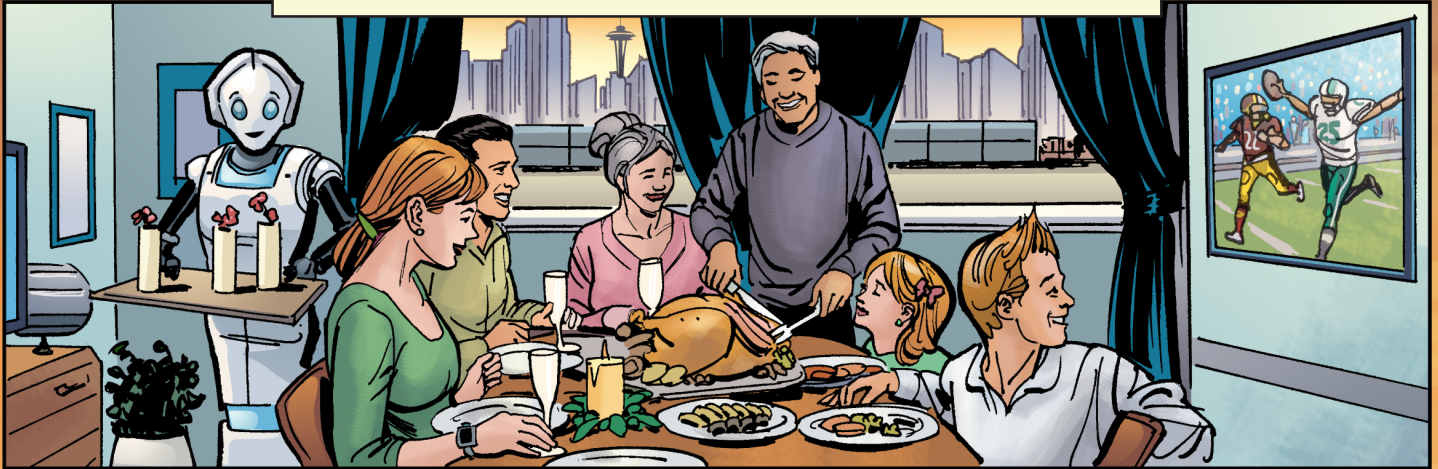
The shipments from Ft. Lewis were delayed two days, sticking Lt. Jenkins and her skeleton crew to supervise the load at the docks on Thanksgiving day. Without a second thought one of them tweets "Finally...looks like I will get some turkey! #hatemylife" ...and the attack begins.

Months before the Army's highly automated supply chain and the deployment planning system had been breached, turning them into a weapon for a local terror cell. Little errors and minimal oversight have sent a deadly payload to the docks of Seattle WA.

A pair of autonomous drones fly on a collision course with a specially loaded railcar... millions will die. No one will ever forget 11/25/27.



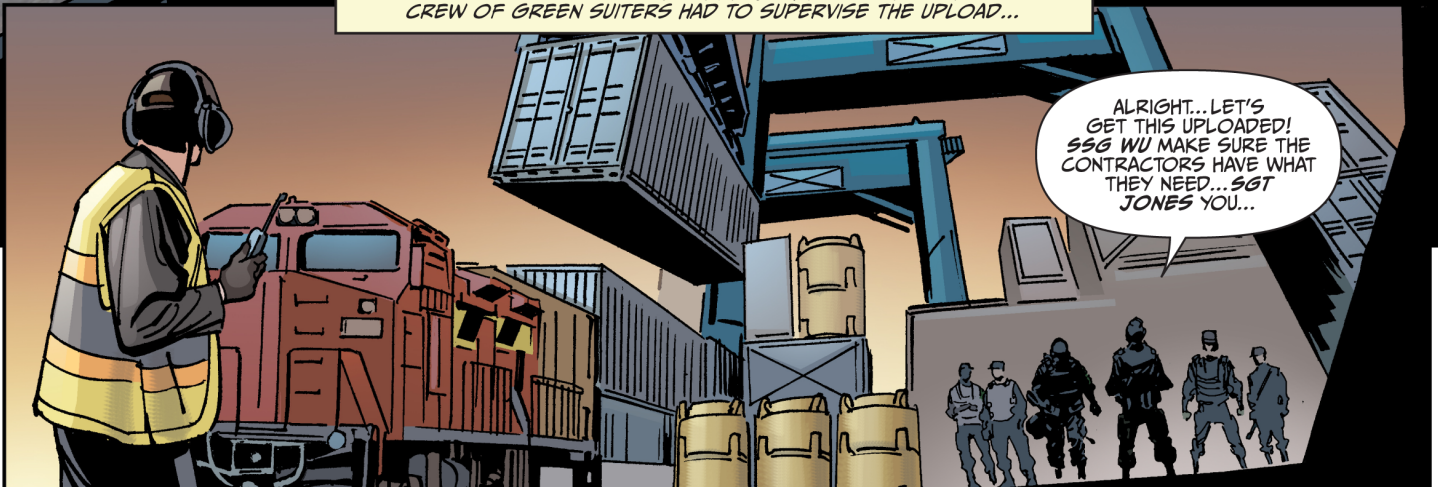
THURSDAY, NOVEMBER 25, 2027. IT WAS AN UNSEASONABLE COLD THANKSGIVING...  
ACROSS AMERICA...TURKEYS WERE CARVED...FOOTBALL WAS WATCHED...AND  
PEOPLE TOOK A BREAK TO BE THANKFUL FOR WHAT THEY HAVE.



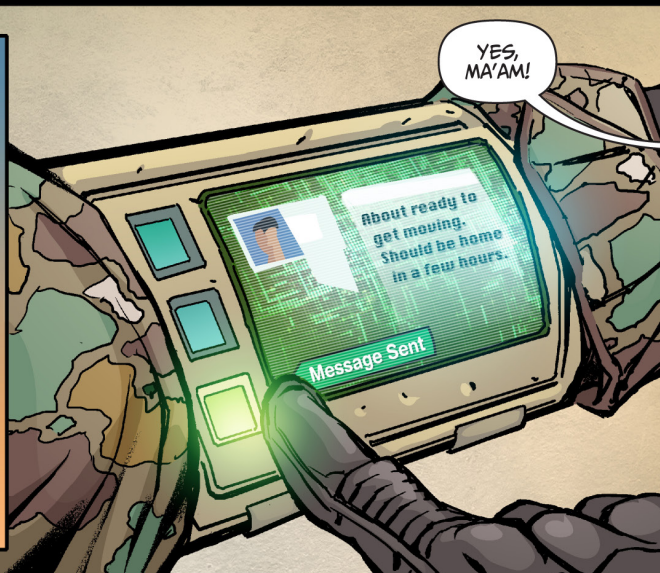
SEATTLE, WA. PORT  
OF SEATTLE. BUT NOT  
EVERYONE GOT THE  
HOLIDAY OFF...



THE SHIPMENTS FROM FT. LEWIS HAD BEEN DELAYED BY RAILROAD AND  
CONTRACTOR TIE-UPS...SO LT SARA JENKINS AND HER SKELETON  
CREW OF GREEN SUITERS HAD TO SUPERVISE THE UPLOAD...







AND NOW THEY KNEW THAT THEIR MONTHS OF WORK HAD PAID OFF... TWO DRONES WERE LAUNCHED... AN EXPLOSIVE TRIGGER AND DEADLY SYNTHETIC BIOLOGICAL AGENT...





MONTHS BEFORE THE  
ARMY'S SUPPLY CHAIN HAD  
BEEN BREACHED...

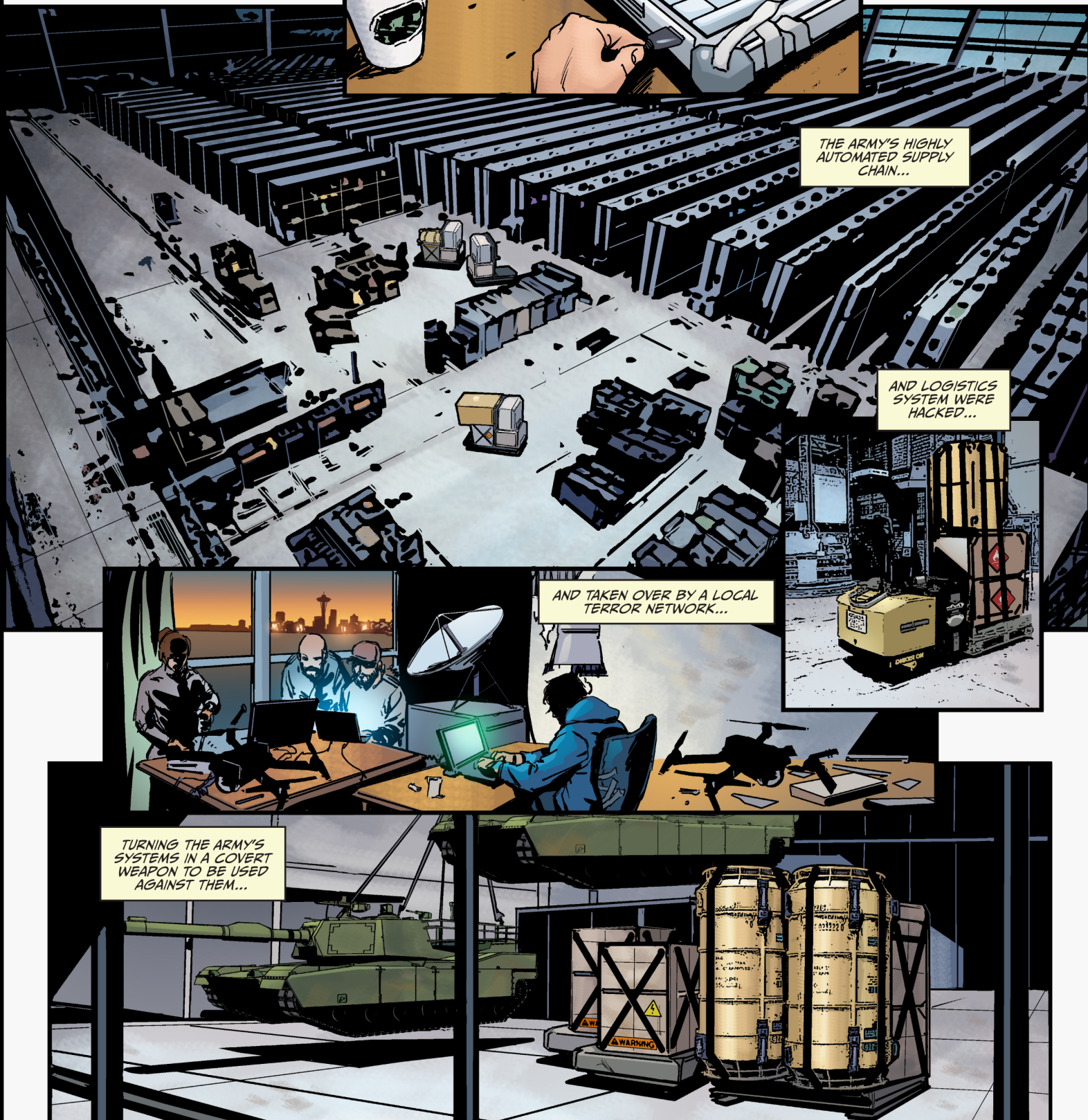
A SEEMINGLY HARMLESS ACT  
OF CARELESSNESS OPENED  
UP A VULNERABILITY...

THE ARMY'S HIGHLY  
AUTOMATED SUPPLY  
CHAIN...

AND LOGISTICS  
SYSTEM WERE  
HACKED...

AND TAKEN OVER BY A LOCAL  
TERROR NETWORK...

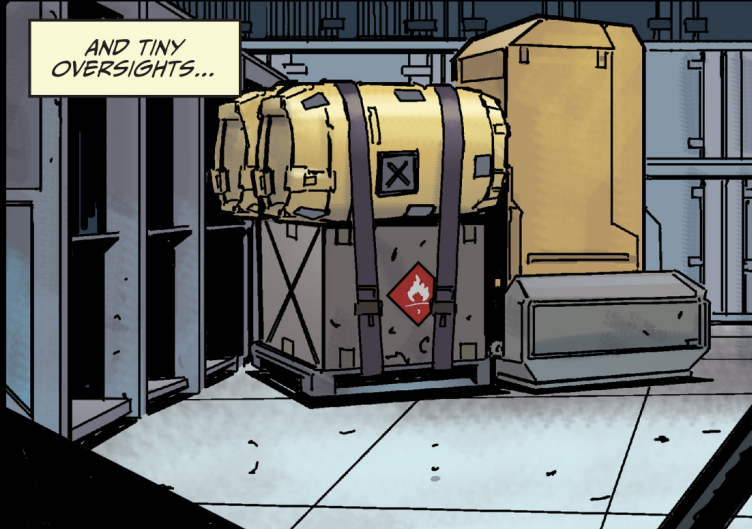
TURNING THE ARMY'S  
SYSTEMS IN A COVERT  
WEAPON TO BE USED  
AGAINST THEM...







OVER THE NEXT MONTH...LITTLE NUDGES...



AND TINY OVERSIGHTS...

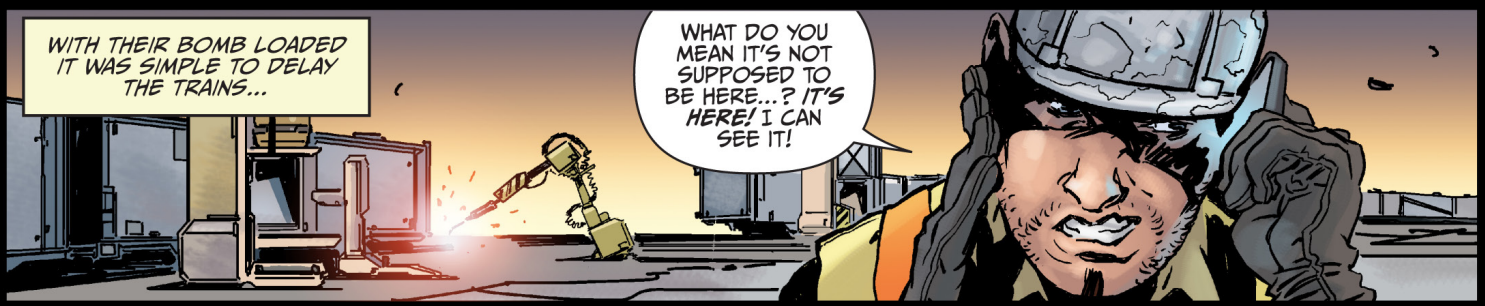


ALLOWED THE TERRORISTS TO SUBVERT SAFEGUARDS...



AND ASSEMBLE A DEADLY WEAPON WITH NO ONE NOTICING...

REWARDING EFFICIENCY AND COST CUTTING MEANT THAT CONTRACTORS REMOVED AS MANY HUMANS AS POSSIBLE FROM THE WORKFLOW...PROVIDING LITTLE TO NO HUMAN OVER-SIGHT...



WITH THEIR BOMB LOADED IT WAS SIMPLE TO DELAY THE TRAINS...

WHAT DO YOU MEAN IT'S NOT SUPPOSED TO BE HERE...? IT'S HERE! I CAN SEE IT!



SO THAT THEIR BOMB WOULD ARRIVE  
ON A DAY WITH THE MAXIMUM NUMBER  
OF CASUALTIES...



ALRIGHT...LET'S GET THIS  
UPLOADED! SSG WU MAKE  
SURE THE CONTRACTORS  
HAVE WHAT THEY NEED...  
SGT JONES YOU...

YES,  
MA'AM!

FINALLY...  
LOOKS LIKE  
I WILL GET  
SOME TURKEY!  
#HATEMYLIFE



THE FIRST AUTONOMOUS DRONE CRASHED...  
IGNITING SHIPMENTS THAT SHOULD HAVE NEVER BEEN  
TOGETHER...SETTING OFF A CHAIN REACTION...

CAUSING THE SECOND DRONE  
TO BLOW...DISPERSING THE  
SYNTHETIC BIOLOGICAL AGENT  
INTO THE AIR AND WATER...

THE CASUALTIES WERE  
UNIMAGINABLE BUT THE  
REAL HORROR WAS  
THE RECOVERY...

NO ONE WOULD  
EVER FORGET  
11/25/27...



**THE END**

# AFTERWARD

“I don’t need my own robot army as long as I can commandeer yours.”

Colonel Greg Conti  
U.S. Army Retired

---

In the port of Seattle, an Army of robots conducts their repetitive task of off-loading delicate cargo from trains. We’re all thankful for robots that don’t need a day off for Thanksgiving. But who’s watching the robots to see what ingredients were mixed together?

In the future, machines will increasingly automate menial and complex tasks. How do we ensure the effectiveness of safety-related functions? Have we taken into account not just the chance of random failures, but also acts of an adversary seeking to subvert these systems?

Whereas developing high-performing human operators and safety personnel once took decades of training and experience, it can now be imparted to machines in seconds. However, does this knowledge contain everything a machine needs to know “in case of emergency?”

In a world where safety is not the only threat, how do we understand the danger of cyber threats combined with the physical world? As cyber-physical systems and interactions become more complex, how do we visualize the threat adequately and defend ourselves accordingly?

By lowering the cost of doing business, we make our systems more competitive in the global economy. As our systems become more “efficient” how do we evaluate the risk of trading off efficiency for security?

