

ARMY CYBER INSTITUTE AT WEST POINT PRESENTS:

HERO

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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. 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 at a fast pace - the miniaturization of processing power combined with advancements in algorithms and sensor technology could radically change what our future looks like. It will be an era of accelerated human progress.

Therefore, we must have agile, adaptive organizations that continually encourage innovation while weighing the risk versus reward. We must embrace change in our thinking and actions in order to remain successful. This science fiction prototype is meant to spark these conversations.

Lt. Col. Natalie Vanatta
U.S. Army, Cyber

HERO

The year is 2028. Amid chemical attacks and global conflict, a rumored summit is about to convene in a secret location. Tensions are high. Rumors are rampant. A terror cell has infiltrated the summit and an attack is imminent.

Who can gather the crucial information needed and disarm the threat?
It's time for an unlikely hero.

MISSION: ZXJ-012566//

INFORMATION-DATA 02

LONGITUDE POSITION
25.4920'61

LATITUDE POSITION
-36.6824'92

SUSPICIOUS GATHERING
MISSION - 2654

CRIMINAL LOCATION
MISSION - 2654
LOCATION 990 049

POLICE IN AREA
MISSION - 2654

LOCATION 990 049
SEARCHING

MAP COORDINATION
SEARCHING

SUMMIT LOCATION
SINCE 2020

LOCATION 990 049
SEARCHING

PERCENTAGE BAR 23%

MAPLOCATE

ACQUIRING LOCATION..

ENTRY IDENTIFIED

CLEARING SECURITY..

[SECURITY LEVEL E3-524

E3

INDIVIDUAL-UNIDENTIFIED
SYSTEM CHECKING/EXC

SEARCHING FOR SUSPECTS...

WHEN I WAS LEAVING THE OFFICE I HEARD THE NEWS...

OK...GET READY FOR THIS...

IT LOOKS LIKE THE SUMMIT IS GOING TO HAPPEN...

THAT WOULD BE HUGE IF IT HAPPENS...DID THEY DISCLOSE THE LOCATION?

IF THEY DON'T DISCLOSE THE LOCATION I DON'T THINK IT'S REALLY GOING TO HAPPEN...THE LOGISTICS ARE TOO COMPLICATED...

[SECURITY LEVEL E4-671

E4

INDIVIDUAL-UNIDENTIFIED
SYSTEM CHECKING/EXC

MONITORING...

I DON'T EVEN KNOW WHY WE ARE STILL TALKING ABOUT THIS...

THIS IS RIDICULOUS...THEY KNOW IT'S A CHEMICAL ATTACK...IT HAS TO BE A CHEMICAL ATTACK...

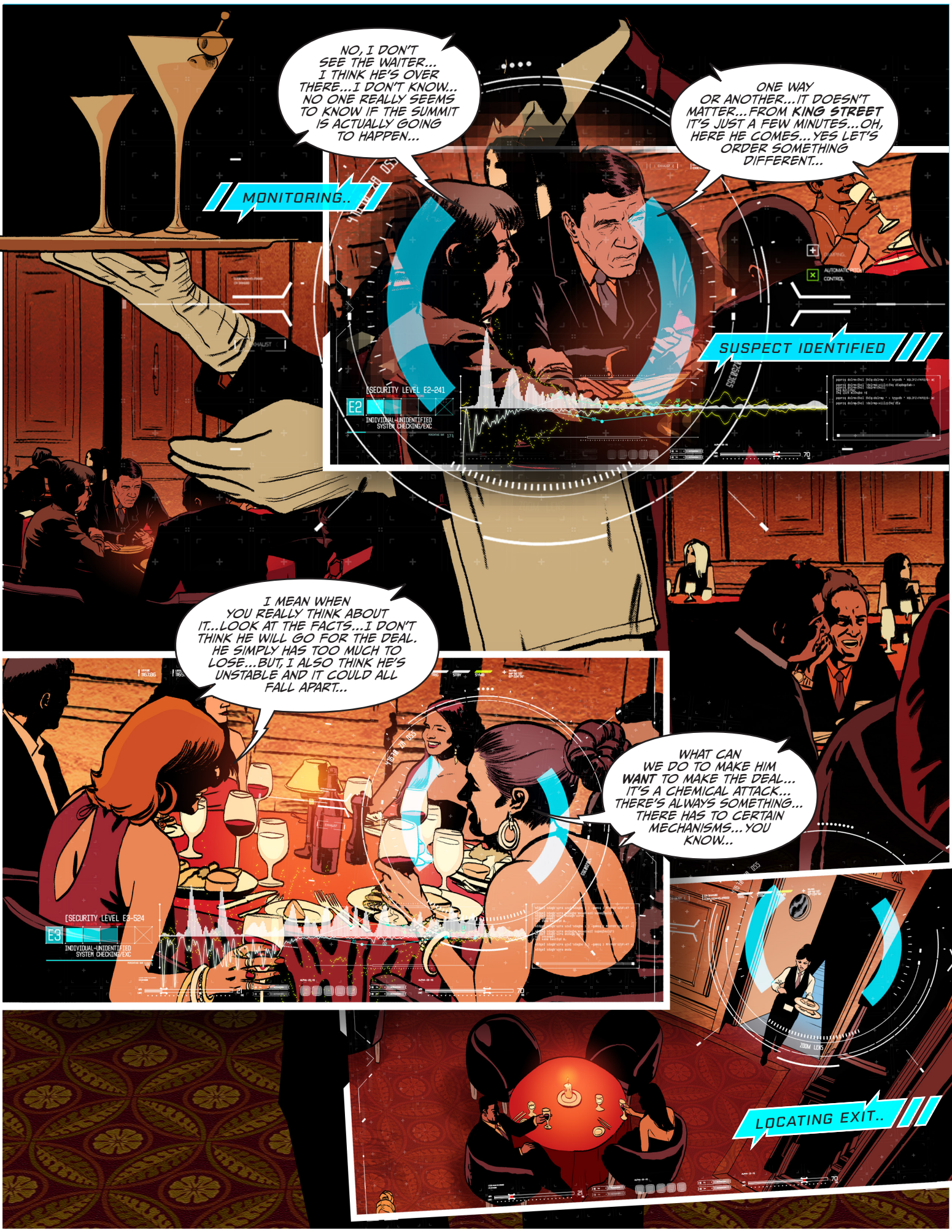
YES...BUT THAT DOESN'T AFFECT THIS ABSURD SUMMIT...IF ALL OF THE PLAYERS ARE THERE THE EFFECT WOULD BE THE SAME...NOW I THINK THERE'S A CHANCE, IF YOU REALLY THINK ABOUT IT...

[SECURITY LEVEL E3-524

E3

INDIVIDUAL-UNIDENTIFIED
SYSTEM CHECKING/EXC

SEARCHING FOR SUSPECTS...



NO, I DON'T
SEE THE WAITER...
I THINK HE'S OVER
THERE...I DON'T KNOW...
NO ONE REALLY SEEMS
TO KNOW IF THE SUMMIT
IS ACTUALLY GOING
TO HAPPEN...

MONITORING..

ONE WAY
OR ANOTHER...IT DOESN'T
MATTER...FROM KING STREET
IT'S JUST A FEW MINUTES...OH,
HERE HE COMES...YES LET'S
ORDER SOMETHING
DIFFERENT...

SUSPECT IDENTIFIED

I MEAN WHEN
YOU REALLY THINK ABOUT
IT...LOOK AT THE FACTS...I DON'T
THINK HE WILL GO FOR THE DEAL.
HE SIMPLY HAS TOO MUCH TO
LOSE...BUT, I ALSO THINK HE'S
UNSTABLE AND IT COULD ALL
FALL APART...

WHAT CAN
WE DO TO MAKE HIM
WANT TO MAKE THE DEAL...
IT'S A CHEMICAL ATTACK...
THERE'S ALWAYS SOMETHING...
THERE HAS TO CERTAIN
MECHANISMS...YOU
KNOW...

LOCATING EXIT..



EXITING...

BEGINNING TRANSMISSION...



TRANSMISSION COMPLETE.

THE MUCH RUMORED
SUMMIT BETWEEN THE
INTERNATIONAL COALITION AND
OPPOSITION FORCES, KICKED
OFF TODAY, AT A NEW
UNDISCLOSED AND SECURE
LOCATION.

AN ANONYMOUS TIP
LAST NIGHT TO INTERPOL,
LED TO THE ARRESTS OF A
TERRORIST FACTION THAT WAS
FOUND TO HAVE TIES TO THE
ORIGINAL SUMMIT VENUE,
HERE ON KING STREET.

BREAKING:

Interpol announced that King Street is on lockdown as chemical terror plot is thwarted a day before attack...

AFTERWARD

“A.I. [artificial intelligence] is today what aviation was 100 years ago. Like that other disruptive technology, we cannot ignore how A.I. will change our world.”

Max Brooks
Best-selling author

In this story, our miniature hero was a vital member of the team - an autonomous robot searching for covert clues to prevent an attack.

What if in the future your teammates might not all be human? What if you worked beside a mechanical device, connected to a robust sensor network, that can process and analyze terabytes of data at machine speed real-time to develop an understanding of the environment that would take humans months or years?

While this might enable our victory, how do we also protect ourselves when our adversaries use it against us to exploit the initiative to create positions of relative advantage?

How does this scenario reshape your concerns about privacy? Should the definition of privacy evolve to accommodate the technology, or should we force technology to work within our current definition?

What might happen if our algorithms evolve past using statistical correlation to make decisions to being able to execute causational thinking? Then might we trust them to make decisions for humans without humans in the loop? Specifically from a law enforcement or judicial perspective, how would we integrate this technology into our legal system? Would a prosecutor be able to call Hero to the stand to cross-examine how they collected the evidence? Would the larger AI system that Hero feed its data into be able to articulate to the court how the investigation evolved over time and stayed within the scope of legal allowances?

While this graphic novel highlights both positive and adverse possibilities of future technology, our future does not have to be dismal. If we start thinking now, we can better prepare ourselves, our communities, and our organizations how can you help? Your ideas could be the solution!

For more information or to share your ideas of how we need to adapt for the future, please contact us (threatcasting@usma.edu)



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