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IN THE NEWS

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## World News

O nce again we see others taking a cautious approach to Artificial Intelligence in warfare. Case in point, the European Parliament passed a resolution to ban the development and use of autonomous weapon systems [1]. Since such a ban does not apply to say China or Russia, the likely means European forces will someday be slaughtered in combat. Of course following any battlefield defeat, the focus will shift to deploying similar weapons. A different approach is to make the robotic systems ethical [2]. If we ignore history and the determination of our adversaries; the rush to deploy such weapons will be without the benefit of long design and analysis. Consider the case of nuclear weapons. Much work was done to prevent their accidental use. What would have happened had we not invested heavily in safeguards?

Consider, it has been seventy-three years after the first use a nuclear weapons and the threat continues. For instance, one piece suggests Pakistan could soon become the world's fifth largest nuclear weapons state [3]. Concurrently, our advisories are planning to deploy hypersonic weapons that can deliver nuclear weapons [4]. To counter the evolving hypersonic nuclear threat; the Pentagon is considering deploying space based missiles and sensors [5].

Finally, we must consider active military conflict in places such as Syria continues. For instance, Israeli jets overflew Lebanon to strike targets in Syria [6]. One piece suggests that since 2017, Israel launched up to 200 aerial attacks in Syria [7]. Additionally, Russian planes bombed targets in Idib, Syria [8]. Finally, a Russian plane was shot down by Syrian air defenses, killing 15 people aboard the aircraft [9].

- 1. BBC News, MEPs vote to ban 'killer robots' on battlefield, September 12, 2018.
- Ackerman, Evan, IEEE Spectrum, We Should Not Ban 'Killer Robots,' and Here's Why, July 29, 2015.
- 3. Business Today, Pakistan could emerge as world's 5th largest nuclear weap-

acksover pressurized gas line [4].rgetedWe since learned that fol-thlowing the accidents, thedgas company was visitingDA)every gas household to shute areoff gas meters and conductrat-inspections [5]. Then re-l.ports suggested nothing was

suspicious [6]. The critical infrastructure is not the only vulnerable target. In past newsletters, we have shown that many financial transactions rely on Artificial Intelligence (AI) programs called Algos, to conduct business without human intervention. One of the risks is that news can affect how the program operates. To this end, the Security and Exchange Commission (SEC) is exploring tools to monitor social media, searching for information that could

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markets [7]. 1. O'Donnell, Lindsey, Threat Post, Insecure

have an effect on financial

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#### Special points of interest:

- First time unemployment claims lowest since December 1969
- Dow record high
- S&P 500 record high
- Massachusetts gas explosions and fires

# Security

I n the past, cyberattacks have successfully targeted pipelines operating with supervisory control and data acquisition (SCADA) [1]. Additionally, there are many oil and gas cyberattacks go undetected [2]. Plus, there are many warnings that the energy grids are vulnerable [3]. With this background we look at domestic accidents. For example, in Massachusetts, up to 80 fires and 3 explosions were blamed on an

#### (Continued from page 1)

SCADA Systems Blamed in Rash of Pipeline Data Network Attacks, April 4, 2018.

- Pipeline & Gas Journal, Volume 243, Number 2, Top 10 Cybersecurity Vulnerabilities for Oil and Gas, February 2016.
- Stilgherrian, ZDNet, Poor cybersecurity could destabilise increasingly complex

## Security

energy grids, July 26, 2018.

- Donato, Christopher, and Biswas, Joyeeta, ABC News, Gas explosions: Governor declares state of emergency, police avert 'catastrophic event', September 14, 2018.
- Martinez, Gina, and Reilly, Katie, Time, 1 Dead, 25 Injured in Massachusetts Gas Explosions. Here's What to Know, September 14, 2018.
- 6. Callery, Time, WMUR, Mass. gas explosions not considered suspicious, September 15, 2018.
- Boyd, Aaron, Next Gov, SEC Wants to Keep Tabs on Social Media Posts That Could Move Markets, August 31, 2018.

The great liability of the engineer compared to men of other professions is that his works are out in the open where all can see them. His acts, step by step, are in hard substance. He cannot bury his mistakes in the grave like the doctors. He cannot argue them into thin air or blame the judge like the lawyers.—Herbert Hoover

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ons state: Report, September 6, 2018.

- Macias, Amanda, CNBC, Russian submarine fleet capable of launching missiles armed with hypersonics and nukes will be ready for war by 2024. September 21, 2018.
- Gertz, Bill, Washington Free Beacon, Pentagon Plans to Deploy Space-Based Missiles, September 5, 2018.

## World News

- Aji, Albert, and Issa, Philip, ABC News/AP, Israeli jets fly over Lebanon in rare daytime raid on Syria, September 4, 2018.
- O'Connor, Tom, Newsweek, Israel Reveals Size of its War Against Iran in Syria and Says it May Soon Get Bigger, September 5, 2018.
- BBC News, Syria war: 'Russian' planes bomb targets in Idlib province, September 4, 2018.
- 9. Tarnopolsky, Noga, and

Bulos, Nabih, Los Angeles Times, *Russia blames Israel after its jet is downed off Syria*, September 18, 2018. O nce again, terrorism strikes within Europe. Case in point, in Paris, an attacker injured 7 people in a knife attack [1].

In Afghanistan, a suicide bomber killed at least 68 people gathered for a protest [2]. In Somalia, a suicide bomber killed at least 6 people [3]. In Kabul, Afghanistan, a double suicide bombing attack at a sports club left at least 20 people dead [4].

On the positive side; one report indicates the number of deaths associated with terrorism fell 27% last year [5]. However, the FBI Director warned the threat from terrorism is everywhere [6].

1. Perper, Rosie, Business

## Terrorism

Insider, Seven people have been injured in a knife attack in Paris, September 10, 2018.

- Popalzai, Ehsan, CNN, Afghan suicide bombing kills 68 in deadly month for attacks, September 12, 2018.
- NY Times/AP, Suicide Bombing Kills at Least 6 in Somalia, September 10, 2018.
- BBC News, Afghanistan conflict: Bombers kill 20 at Kabul sports club, September 5, 2018.
- Browne, Ryan, and Hansler, Jennifer, CNN, US says worldwide terrorism deaths decreased 27% last

year, September 19, 2018.

6. CBS News, FBI Director Christopher Wray: "Today's terrorism threat is everywhere, coast to coast", September 10, 2018.

Anyone who comes into your office with an idea, and it may be the silliest idea in the world, listen to them and never ridicule them.—Thomas P. O'Neill

### Economy

I n a clear sign the economy continues improving, the number of job openings for July rose to a record 6.94 million [1]. Additionally, on September 4, shares of Amazon rose briefly, pushing the market cap (company value) above the \$1 trillion threshold [2]. On September 20, the Dow Jones Industrial Average and the Standard & Poor's 500 both closed at record highs [3]. Then on September 21, the Dow and S&P 500 again set a new record high [4]. News on the unemployment

News on the unemployment front also looks good. Case in point, for the week ending September 1, the number of first time unemployment claims fell to 203,000; the lowest since December, 1969 [5]. For the week ending September 8, the number of first time unemployment claims was 204,000 [6]. Finally, for the week ending September 15, the number of claims were 201,000; a number not seen since November 12, 1969 [7]. On the negative side, the US trade deficit for July rose to \$50.1 billion [8]. Of this, the Chinese trade deficit rose to \$31.05 billion for August [9].

- Bartash, Jeffry, Market Watch, U.S. job openings climb to record 6.9 million, September 11, 2018.
- Bloomberg/Fortune, Amazon Joins Apple in the \$1 Trillion Club, September 4, 2018.
- Shell, Adam, USA Today, Dow, S&P 500 close at record highs as bull shrugs off trade worries, September 20, 2018.
- Decambre, Mark, Market Watch, Dow marks 2nd alltime high in a row but tech stocks weigh on broader market, September 21, 2018.
- Mutikani, Lucia, Reuter, U.S. weekly jobless claims drop to near 49-year low,

September 6, 2018.

- Nasdaq, U.S. Weekly Jobless Claims Unexpectedly Edge Slightly Lower, September 13, 2018.
- Bartash, Jeffry, Market Watch, Hurricane Florence pushes jobless claims down to new 49-year low, September 20, 2018.
- CNBC/Reuters, US trade deficit jumps by the most in 3 years, September 5, 2018.
- CNBC/Reuters, China's trade surplus with US grows to new record in August, adding fuel to trade war fire, September 8, 2018

Paperwork will ruin any military force.–Chesty Puller