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IN THE NEWS

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Security

B ack in 1984, Ken Thompson demonstrated the ease in injecting a back door during software development [1]. With that as a backdrop, a first thought on 9/11 was how did terrorists take over the flight computer on the first airplane? As it turned out, this was not the 9/11 root cause. Nevertheless, we explore accidents potentially vulnerable to cyber-attacks or electronic warfare (EW) exploits. These include software controlled systems; especially since many of our critical electronics and computers, are made in China. Consider, on October 29, a Boeing 737-800 jet operated by Lion Air crashed shortly after take-off due to faulty sensor data and the interactions with the Maneuvering Characteristics Augmentation System (MCAS) [2]. Then on February 23, a Boeing 767-300 cargo plane operated for Amazon, crashed in a nose dive in Texas [3]. Once again, a crash occurred in Ethiopia shortly after takeoff on March 10 during clear visibility [4]. The crash was described later described as a nosedive [5]. This comes as Boeing plans a software update in April to further improve safety [6]. Perhaps the best inside explanation is that planes are now too complicated for pilots to fly [7]. In summary, there is nothing at this time to suggest a cyber-attack or EW exploit; only that three jets crashed with nose dive characteristics; software is integral to airplane operation; and airplane complexity is a factor.

One of the biggest security threat agents in the world remains China. The news broke that China was adding malicious chips to motherboards was a wake-up call for electronics [8]. Now there are concerns that lite-on power cords made in China may be used to spy on US companies [9].

In past newsletters, we have discussed the security vulnerabilities associated with the SCADA protocol used to control critical infrastructure resources. Now we are seeing the effects of a black out in Venezuela and that country's President, Nicolas Madurois, is blaming cyber-attacks [10]. One piece suggests a cyberattacks could affect the blackout as claimed [11]. While we don't know the cause of the blackout, full power is not likely to be restored for some time [12]. What the

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World News

In the past (1947, 1965, 1971, and 1999) India and Pakistan have fought each other. The potential for a regional war to include the use of nuclear weapons is a real concern. By one estimate, Pakistan has between 140 and 150 nuclear weapons [1]. The estimate for Indian nuclear weapons is between 130 and 140 [2]. Reports indicate that in response to the terrorist attack in Kashmir, India launched an airstrike on a target on Pakistan

territory [3]. Following the attack, Pakistan promised there would be a response [4]. Later, Pakistan claimed it shot down two Indian warplanes [5]. India acknowledged the loss of a MIG-21 fighter and demanded Pakistan return the captured pilot [6]. However, after the pilot was returned, border shelling in the Kashmir between Pakistan and India left at least 4 dead [7]. The main military focus for the US continues to be the large state actors. Case in

point, in a shift away from the war on terrorism; Special Forces will concentrate on China and Russia instead [8]. In particular, the new Defense budget focuses on the threat from China [9]. Meanwhile, in response to the growing military threat from China; Taiwan made a US request to purchase modern fighters [10]. One report indicates the sale to Taiwan of up to 66 F -16V jet fighters was approved by President Trump

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Special points of interest:

- India and Pakistan fighting escalates
- Venezuela Power Outage
- Anti-Muslim Terrorism in New Zealand

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The use of the atomic bomb, with its indiscriminate killing of women and children, revolts my soul.—Herbert Hoover

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blackout shows is how chaos takes hold and the physical damage done. For instance, one piece suggests at least 17 deaths were due to the power outage [13].

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Without resolving

Kashmir dispute, lasting

peace cannot be

maintained in the region.—

Shehbaz Sharif

Terrorism

From the World News section of this newsletter, we can see the potential cost of terrorism in the India/Pakistan dispute. A single act of terrorism resulted in conflict between the two countries. As long as Pakistan remains lax on combatting terrorists, the risk of war will remain elevated [1].

If we do not learn from history, we are doomed to repeat it. Consider, following the 9/11 terrorist attack, over two dozen members of the bin Laden family were allowed to leave the US without a police style investigation [2]. Now the new leader of the al-Qaeda terrorist group is Hamza bin Laden (he is also married the daughter of a 9/11 terrorist) [3]. So it comes as no surprise, the State Department is offering \$1 million for information leading to the arrest of Osama bin Laden's son (Hamza bin

Laden) [4]. In retrospect, given the family ties to terrorism, was it wise for President Bush (43) to allow bin Laden family members to leave the US without a complete police investigation?

In New Zealand, attacks on Muslim worshipers at two mosques left at least 40 people dead [5]. The gunman live streamed 17-minutes of the attack [6]. The main terrorist is believed to be Brenton Harrison Tarrant, a 28-year-old Australian national [7].

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Economy

The robust economy has not helped a number of large brick and mortar stores. For instance, the Gap, JCPenney, Victoria's Secret and Foot Locker announced store closings numbering 465 stores [1]. Overall, the economic news is mixed. During February, only 20,000 new jobs were added but the unemployment rate fell to 3.8% [2]. For the week ending February 23, the number of first time unemployment claims was 225,000 [3]. For the week ending March 2, the number of claims was 223,000 [4]. Finally, for the week ending March 9, the number of claims was 229,000

[5].

On the trade deficit side, the imbalance with China started moving closer to equality. For February, the trade deficit with China was \$14.72 billion, down from \$27.3 billion in January [6].

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The greatest problem all around the world today, whether in America, Japan, China Russia, India or anywhere else in the world, is that people are not in peace. People want peace.—Prem Rawat

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