#### Title:

Future Shock: Voice Recognition Identification Technology

Word Count:

1466

#### Summary:

VRIT, or Voice Recognition Identification Technology will soon become a pervasive part of our society. Are you ready for it? Please read a ficticious account how VRIT can be applied to work in the aviation industry.

### Keywords:

voice recognition, audio technology, computer technology, computers and technology, voice graphics

### Article Body:

<b>Dateline:</b> Tuesday, July 13, 2010

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<b>Location:</b> Teterboro, New Jersey

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Schedule:</b> N714JA, a Gulfstream V in Jet Aviation's Private Fleet, is scheduled to take off at 0830 for LAX. Crew of three with fourteen pax.

<b>Backgrounder:</b> Kay Hughes, flight attendant for today's non-stop coastto-coast flight is busy checking her catering order and prepping the cabin. Bob
Harmon is the captain and Jeff Mortowski is his first officer. Both are situated
in the cockpit going over the pre-flight checklist. The pax are from various
companies in the New York area or individuals on personal business who have
bought seats on his flight.

<b>The Story:</b> Kay woke up with a start as the alarm on her clock radio blared. Reaching across her pillow, she noticed the time, 5:15, and hammered the snooze button in the hopes of grabbing another five minutes of sleep. Tired as she was, her mind began to race as she considered the day ahead. In less than four hours she would be enroute to L.A. with an aircraft full of passengers. Slowly the thought of additional sleep became less important as she considered all that she had to do before leaving Teterboro. Quietly she slipped on her robe and slippers, poured herself a cup of coffee, and slinked into the shower.

As Kay walked across the tarmac, she saw the fuel truck pulling up to her aircraft and the caterer at the gate waiting for a security clearance. It was

6:48 and already she could feel the heat lifting off of the pavement. Another scorcher she thought; at least L.A. will be cooler.

Kay greeted Jeff who was busy overseeing the fuel delivery; she then climbed onboard the G-V and gave a similar greeting to Bob who was occupied with updating paperwork. Bob finished what he was doing and briefed Kay with the day's schedule. Minutes later Kay turned to assist the approaching caterer with the day's order. Within the hour, the first of the passengers began to arrive. Each sat in the lobby of the FBO waiting to be boarded. At precisely 8:00 a.m., Kay left the aircraft and walked down the ramp to the FBO. She whispered to the waiting security agent who signaled to the FBO customer service representative to make the boarding announcement. "Ladies and Gentlemen, Jet Aviation Flight #001 departing TEB for LAX is now boarding. Please present your identification card and boarding pass to the security agent. Once you are cleared, you will be boarded. Thank you for flying Jet Aviation and enjoy your flight."

Kay turned and left the FBO and walked back to the aircraft. Both pilots were onboard completing their preflight preparations. Kay stood at the bottom of the steps leading up to the aircraft waiting for the security agent to bring the passengers to the plane. She knew that with fourteen passengers the security clearance would take a bit longer than normal.

Kay considered waiting inside the cabin to keep cool, but knew that it was important that she greet the passengers at the base of the steps in case one of them needed assistance climbing up." It must already be 85 degrees out here," she thought as she watched the heat vapors rise off the pavement.

After what seemed like an inordinate delay — Kay's hair was slowly losing style in the heat — Bob poked his head out of the cockpit and said, "Sorry for the delay, but we caught another one." Startled, Kay stammered, "You mean one of the passengers failed security clearance?" Bob replied, "Not only that but he is on the FBI's wanted list of suspected terrorists. The remaining passengers checked out okay, but we'll be delayed until the agents finish interviewing them to see if they knew the guy." Despite the heat, Kay shivered as she thought of the potential chain of events a terrorist onboard the aircraft might unleash.

Her fears gradually subsided when Jeff reminded her that the VOICE RECOGNITION IDENTIFICATION TECHNOLOGY (VRIT) unit in the FBO was flawless in the nearly six months of use. Over that time, twenty-six people with a criminal element were pulled, most of whom had been charged previously with petty crimes [such as tax evasion] and were either on the run or would be in violation of their parole restrictions had they left the state. Today marked the first time that a suspected terrorist was caught and as the squad car sirens wailed, Kay knew that

this day would be anything but normal.

<b>The above account is fiction</b>, but it pre-supposes a couple of things that could occur in the intervening years that would bring about similar results, i.e., additional and more widespread terrorist attacks being a primary consideration. In addition, a change in the way we do business, i.e., selling seats to individuals instead of selling the entire flight to a company or an individual would have to occur — no longer would you have a lead passenger who could identify all of the other passengers. VRIT is now within reach and will, more than likely, become the norm of the day. Essentially, it works this way: a person speaks into a device that immediately matches the voice pattern with one in the database. The database identifies the person and when a match is made, the person is cleared [unless the database turns up a warrant for their arrest].

Naturally, in order to get onboard a flight we would require passengers to be part of that database. This could occur if VRIT becomes as mandatory as holding a social security number or a driver's license. Foreign nationals would have to be keyed into the same system to make it work, so the potential for a worldwide Orwellian-type system would be great.

Recently, I had the opportunity to meet with Russ Cooper, a managing partner with COMPUTEK, a Wall Street company that has developed the latest generation of VRIT. He shared with me that both the FBI and CIA use an older generation of VRIT and his company is marketing the current one. Their customer base potential is impressive: government agencies, security firms, airports, airliners, automobile manufacturers, you name it. Wherever a positive i.d. on a person is needed, their technology might be utilized.

According to Russ, the technology is fail-safe. When I mentioned that a voice impersonator like a Richard Little type could sneak by, he claimed that VRIT would still know who he was even with the "Richard Nixon" voice. Apparently, voice patterns are distinguishable even when disguised.

We did not discuss "price" as he was not marketing his product directly to me. I can only imagine that the costs involved would be significant, but then I began to think that they could possibly be offset by lower insurance premiums if insurance companies see the benefit of "guaranteeing" passenger security.

So what role could the flight attendant play in utilizing VRIT? Perhaps in lieu of a security agent [especially in out of the way places like Bozeman, Montana], a VRIT unit would be assigned to your aircraft — much like a cardiac defibrillator monitor — and you would greet each passenger as they boarded the aircraft. Before the aircraft could be cleared for takeoff, the passengers would

speak into the handheld VRIT and be given a security clearance on the spot.

<b>Let's return to our story and amend it with the security check being placed directly in the flight attendant's hands:</b>

Kay walked down the G-V's steps carrying her mobile VRIT device and waited as the passengers exited the FBO and made their way to the aircraft. She announced, "Welcome onboard Jet Aviation flight #001 bound for Los Angeles. Please speak your name into the VRIT unit. Once you have been cleared, you may proceed up the steps. The first officer will take your boarding pass and you may be seated. If you need additional assistance, the captain will be glad to help you."

One by one the passengers filed by, stating their name and waiting for the green clearance light to flash. As they spoke, a signal was transferred to an orbiting satellite and then beamed to VRIT headquarters in Washington, DC. As the last of the passengers approached, Kay continued to greet each one and wait for clearance. Finally, when all passengers were cleared, she climbed the steps and had both pilots speak into the VRIT unit. At last, Kay placed the unit in the First Officer's hands in order to have him run clearance on her. Kay cleared her throat, spoke her name, but after an extended pause, the VRIT beeped loudly and signaled red. The color in Kay's face drained away and she turned to flee. Within moments several arms reached forward to apprehend her as sirens wailed in the background.

All she could think about was running away...

Startled, Kay awoke from her dream as the snooze alarm blared away.