

Special Report: Monitoring On The Edge Of A Nuclear Confrontation

Editor's Note: In this issue of "Utility Communications Digest," Steve Douglass breaks with tradition to cover a single topic. While "only" a single topic, it is a very complex one, and one that certainly deserves our attention here in Pop'Comm.

Please bear with me this month as I depart a bit from antenna topics and the technical aspects of utility monitoring to focus on what I feel is the guts of why we monitor: to be at the forefront of the events that shape the human world. Whether we're monitoring the communications surrounding a natural disaster like Katrina or listening to human beings engaged in war, utility monitors are usually ahead of the curve in knowing the real stories behind the headlines.

It is the aim of this special report to place utility monitors directly inside the halls of power at a time of great crisis. Imagine what it would be like to be a fly on the wall inside a government situation room, intelligence gathering agency, strategic planning committee meeting or government think-tank, all concerned with a too real crisis, one that could very easily push the world to the brink of a limited nuclear war.

The Clock Is Ticking

HF and MILCOM monitors should start now searching the bands and collecting frequency and station information concerning a looming crisis in the Middle East—one that could make the war in Iraq look trivial by comparison. I am *not* being an alarmist or exaggerating when I state that it is very possible that a nuclear crisis, with worldwide ramifications much like the Cuban missile crisis of the 1960s, could grip this globe very soon. Although largely under-reported by the media, sources inside the Washington beltway say the administration is quietly preparing for the worst-case scenario: a limited nuclear war in the Middle East.

Let me outline the possible makings of this coming crisis.

As of this writing, Israel's Prime Minister, Ariel Sharon, is clinging to life after a massive stroke. Even if he survives, his days as the reigning leader of Israel are over.

Taking advantage of the political confusion in Israel, Iran's president, Mahmoud Ahmadinejad, has put the region on edge by publicly declaring that he is planning for the day when the world is "Zionist Free" and making alarming statements about wiping Israel off the face of the Earth.

This may seem like just another case of cliché Iranian saber-rattling, but deep inside the halls of power the threats aren't being taken lightly, especially in light of the fact that Iran is proceeding with its uranium enrichment-program, which could yield enough fissionable material to build a nuclear bomb within 90 days.

If that isn't enough to lose sleep over, to counter the growing threat, the United States just sold Israel several hundred bunker-busting warheads that could be used in an Osirak-type



(Photo courtesy Department Of Defense archives)

preemptive strike on Iran's nuclear facilities. Some of you may recall that in 1981 Israeli fighter bombers destroyed the Osirak nuclear facility near Baghdad when it looked like Saddam Hussein was planning to produce weapons grade material for building a nuclear bomb. (You can read more about the Osirak attack at http://news.bbc.co.uk/onthisday/hi/dates/stories/june/7/newsid_3014000/3014623.stm.)

The key targets for such an attack on Iran would most likely be the nuclear facility at Bushehr (built with massive aid from Russia), the nuclear enrichment facilities in Natanz, and other nuclear facilities located throughout Iran.

Knowing full well that Israel has no qualms about bombing Iranian nuclear sites, Iran has made it known for the record that it would indeed strike back. To quote the deputy chief of the Iranian Revolutionary Guards, Brig. Gen. Mohammad Baqer

Zolqadr, "If Israel fires a missile into the Brushehr nuclear power plant, it has to say goodbye forever to its Dimona nuclear facility, where it produces and stockpiles nuclear weapons."

Although Israel has never confirmed nor denied that it has a nuclear arsenal, according to a report issued by the Federation of American Scientists (www.fas.org/nuke/guide/israel/nuke/) it is possible that Israel is sitting on a stockpile of at least 150, and quite possibly as many as 200, nuclear bombs, most probably stored in a vast underground complex under or near the Dimona nuclear facility.

Brain Trust

In an attempt to understand how an Israeli/Iranian war might come to pass, I have interviewed at length some knowledgeable sources, including analysts working for government-funded think tanks and military-beat journalists at major publications. These people are close to the problem and (under the condition that I do not reveal their identities) have outlined the events that could lead to war.

In many midnight phone conversations and Internet chat sessions, my sources have put their heads together to produce for this column a detailed timeline of events as they see them possibly unfolding in the Middle East.

The Trigger

The nuclear clock began ticking when Iran announced it was proceeding with its uranium enrichment program. Nuclear scientists predict that given the state of Iran's nuclear technology (aided by Russian experts) it is possible that Iran could produce enough fissionable material to build a small nuclear bomb as early as the end of March.

That doesn't necessarily mean that Iran will have the wherewithal to build a working nuclear device, but most likely, Israel would feel the need to strike Iranian nuclear facilities long before that occurs.

Since Israel is a nation surrounded by enemies and in a constant state of war, it will not risk destruction by waiting for United Nations sanctions or international pressure (in the form of formal protests, economic boycotts, or trade blockades) to convince the Iranians that attacking Israel is not in their best interests.

When Israeli intelligence operatives confirm that the Iranians are close to man-

ufacturing enough weapons-grade nuclear material to build a bomb, Israel *will* strike.

Scenarios

The following are educated guesses made by strategic thinkers on how an Israeli pre-emptive strike on Iran—and the consequences—may very well play out.

Using special Mossad agents inside Iraq, known as the "Metsada," or possibly even a special covert action unit known as "Egoz," Israel would first positively ascertain which facilities to attack. From there, Israeli military planners would have to decide on how measured their attack should be. Should it be an all out war aimed at toppling the current Iranian government, or consist of surgical strikes aimed only at the nuclear facilities involved with producing radioactive material and nuclear bomb components? Once the Israeli government decides on its course of action, the tactical planning will begin.

Aircraft And Munitions

Although Iran fears a missile attack on its nuclear facilities, the aforementioned delivery to Israel of several hundred bunker-buster bombs (quite possibly GLU-109s) made expressly for the purpose of cracking hardened concrete bunkers and structures like nuclear containment facilities means it is more likely the attack will come in the form of an airborne strike led by Israeli F-15 Eagles tasked with destroying the nuclear sites. Although Israeli F-16s can carry the GLU-109s, laden down with bombs the smaller single-engine aircraft is sluggish (meaning more vulnerable and less accurate), has less range, (even with additional fuel packs attached), and would be better suited to protecting the F-15s from interception by enemy fighters.

Complicating any attack is the fact that the GBU-109 is a dumb bomb and not very accurate. It isn't laser guided and relies on a pilot's skill in dropping unguided bombs on a target quite possibly while under heavy fire. Although the United States has in its inventory more precise laser-guided bunker busters (known as JDAMs for Joint Direct Attack Munitions), it is not known if any have been transferred to Israel.

There is another, *very frightening* option, one that ensures an underground target is totally destroyed, but also one that some military technologists predict

will cause the release of massive amounts of radiation. This controversial approach is to use small earth-penetrating tactical nuclear warheads capable of utterly destroying hardened underground facilities and at the same time limiting collateral damage.

However some nuclear scientists say that containing the radiation is not at all possible and trying to destroy a target in this way would only result in an agonizing death for anyone (including civilians) caught down wind and make the area uninhabitable for decades, if not centuries.

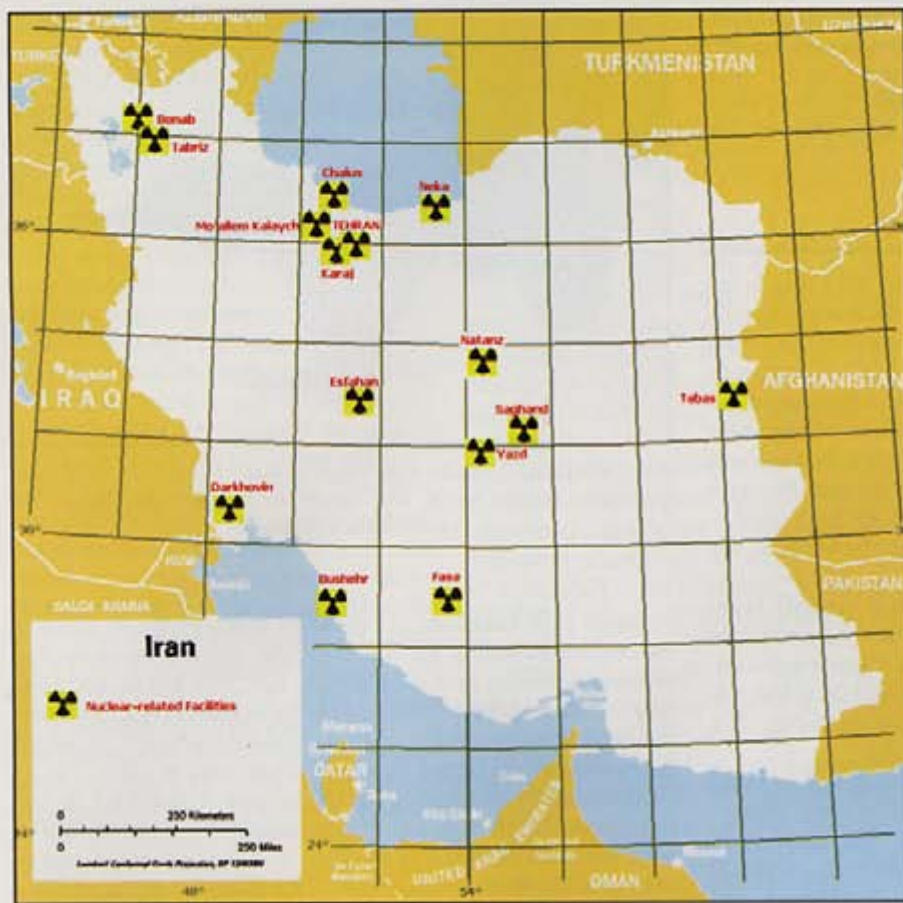
(You can read more about nuclear-tipped bunker busters and the controversy surrounding them at www.globalsecurity.org/wmd/systems/rnep.htm.) Military theorists agree that a nuclear tipped earth-penetrating warhead would be a weapon of last resort.

Attack Tactics

The dangers involved in such a mission are many. Just getting to the target is problematical at best. It is possible to fly directly to Iran from Israel; the distance is not that great. But to get there as the crow flies Israeli bombers and fighters would have to violate the airspace of countries hostile to Israel. They could fly around these countries to avoid the political and military repercussions, but that would require considerable mid-air refueling support. Even then, the attackers would have to fly through Iranian air space avoiding Iranian radar networks, interceptor aircraft, surface-to-air missile batteries, and even fire from ground-based anti-aircraft artillery. Since Israel does not have any stealth aircraft, avoiding detection by enemy radar is also a problem. There are two tried and true methods to avoid discovery.

The first is to fly at low altitude under the radar, using hills and canyons to mask your strike team from probing radar beams. Israeli pilots are masters at this, training here in the U.S. right along side Americans in exercises such as Red Flag. The twisting, turning canyons and desert mountains in the Nellis ranges are much like the terrain in the Middle East and provide very intense and realistic practice almost as dangerous as the real thing.

Another way to avoid detection is to use subterfuge. This takes intensive pre-planning and exact timing. It also takes an intimate knowledge of international civil and military air traffic in the area. It might be possible to fool air traffic controllers and military controllers into



Iranian nuclear sites. (Courtesy globalsecurity.org)

thinking an Israeli strike package is just another of the many commercial flights in the region. The trick is to get close enough to a commercial aircraft so the radar signatures merge into one—difficult at best without the commercial pilot or other aircraft observing them. This would only work for a strike package made up of a small number of aircraft. Nighttime would be the best time to attempt this; however the risks at night are greater for mid-air collisions, possibly endangering innocent air-travelers.

One method (without putting civilians in danger) is for the Israeli attack package to use a faked civil aircraft transponder code of a regularly scheduled civilian flight. In this way the attack aircraft (again, if it was a small force tightly bunched) might not raise much suspicion on an air traffic controller's scope.

Consider this: Israel also has its own national airline, El Al, which could assist in covering such a strike package. El Al services many eastern countries that take their air carriers south of Iranian airspace. However, since El Al flight routes take a very long haul (going around Saudi

Arabia, Yemen, Oman, and north into the Indian Ocean) it would take considerable aerial refueling tanker support to keep the fighter/bomber aircraft in the air.

Another idea could be to disguise tankers as El AL flights with the attack force following very close behind. The force could also take advantage of spotty radar air traffic control coverage over the open oceans. For that reason, it might be wise for utility monitors to keep a close ear to the ICAO (International Civil Aviation Organization) HF Enroute Network frequencies in the region. (You can find current frequency lists on the Internet by doing a search or by directing your web browser to www.seanaustralia.bigpond-hosting.com/planes/icoa.html.)

Another way, which has much less subtlety but much more chance at succeeding, is to just go all out. Send in so many aircraft on the mission that it overwhelms Iran's air defense systems. Even though the odds are great that many aircraft would be shot down, chances are at least some aircraft would make it to the target.

Currently Israel has several hundred military aircraft in its inventory, made up

of a mixture of American and European types. Chief attack aircraft are the F-15A/B (33 available), F-15C/D (17), F-15I (25), F-16A/Bs (94), F-16C/Ds (75), and over a hundred F-16Is. (To view a list of the current Israeli Air Force inventory, direct your Internet browser to www.aeroflight.co.uk/waf/israel/iaf_current_inventory.htm.) Israel also has numerous ground-attack and support aircraft, such as refueling tankers and transports aircraft, helicopters, and recon drones.

Joint Stealth Mission?

Another almost sure-fire tactic would be to use stealth attack aircraft armed with precision laser- or GPS-guided bombs. A stealth attack aircraft, such as an F-22 or F-117, could easily slip through Iran's radar defenses and surgically take out any hardened or buried nuclear target with a few well-placed JDAMs, which can be launched from approximately 15 miles from the target with each warhead independently targeted to a different site. But, as I stated earlier, as far as anyone in the Pentagon knows (or is acknowledging) Israel does not currently have in its inventory any stealth aircraft like the F-117 or F-22.

But the United States Air Force does. Since it would also be in U.S. interests to remove any chance that the current extremist regime in Iran might acquire atomic bombs (which would totally upset the power balance of power in the Persian Gulf and be detrimental to the stability in the region) there is a possibility that the two countries would consider teaming up for a covert joint mission to ensure Iran's nuclear capabilities are destroyed. Quite possibly (in some Pentagon planning office or in a government funded think-tank) a mission is being planned, one that would be composed of a large Israeli strike force with a few embedded American stealth fighters tagging along and quite invisible. It would be the job of the Israeli force to attack soft targets in Iran and the task of the stealth fighters to take out the most important and hardened targets that have to be destroyed.

Before this joint American/Israeli attack force would leave the ground, however, there would have to be an agreement that America's part in the raid would remain unacknowledged. Even though it might become very obvious that U.S. forces must have helped the Israelis, it would have to be agreed that it never officially happened. In this way the United

States could avoid the inevitable political fallout that a joint attack on Iran would produce. The United States is working very hard to convince the Arab world that there is no huge American/Zionist conspiracy to rid the world of Islam, and a joint U.S./Israeli attack on Iran would not make this mission any easier.

The Iranian Air Force

Although military analysts say the Iranian Air Force is not even close to being on a par with the Israelis, their aircraft could still prove a threat, not to mention that there are other air forces in the region that would be more than happy to join Iran in its dream of ridding the world of Israel. The bulk of the Iranian Air Force is also made of some American aircraft, including some aging F-14As bought from the United States when the Shah was in power in the late 1970s. However it is thought that they have been barely kept in service by cannibalizing parts from other F-14s or patched together with jury-rigged parts from MiGs and other Russian aircraft types.

According to globalsecurity.org, "Other aircraft types include Russian and Chinese built MiGs which were acquired at the onset of Desert Storm, when more than 350 advanced aircraft were bought by Iran or made operational including Russian MiG-27s, -29s, -31s, TU-22M3 Backfires, Russian Su24s, -25s, -27s, IL-76 transports, and French Mirage F-1s."

Iran acquired even more military aircraft when fleeing Iraqi pilots (thinking they would find safe haven in Iran) flew to Tehran. They acquired 115 combat aircraft, among them 24 Mirage F1s, four Su-20 Fitters, 40 Su-22 Fitters, 24 Su-24 Fencers, seven Su-25 Frogfoots, nine MiG-23 Floggers, and four MiG-29 Fulcrums. The pilots were returned to Iraq, but Iran kept the aircraft. It is not known how many of the seized aircraft are operational.

The Iraqi Su-25s, MiG-23s, and Mirage F1s are thought by some not pose a threat due to age, low capability (MiG-23s) or too few numbers (Su-25s). Other reports suggest that Iran had overhauled Iraq's fleet of 24 Mirage F-1B fighters and placed them into service.

As for radar systems, Iran imported surveillance radars from the China National Electronics Import-Export Corporation. The radar can detect targets up to 300 km away and is now part of Iran's air defense system. But even with China's help, Iran's air defenses remain porous, perhaps on a par with Iraqi capabilities, as demonstrated in the 1991 Gulf war.

Iran also lacks low-altitude radar coverage, overlapping radar network, command and control integration, sensors, and resistance to jamming and electronic countermeasures needed for an effective air defense net. Russia and Iran enjoy a close military sales relationship, and Iran has taken steps with Russian help to modernize its air defense systems, but these systems are not thought to be operational yet.

Attack Timeline

Most likely an attack on Iran would take place at night, possibly on a weekend or holiday to reduce the chances that civilians would be injured. It is very likely that just prior to any attack, Israel would notify the United States government for several reasons, chief among them being to advise U.S. forces in the area (especially in the Persian Gulf) that the aircraft they are seeing on their scopes are not a hostile force bent on attacking American Navy ships.



The F-16I looks radically different from other F-16s, with conformal fuel tanks, dorsal spine, and numerous fairings and bulges for undisclosed equipment.

Since U.S. forces are in control of much of the air space in the region, including the whole of Iraq, there is no doubt that airborne systems, such as AWACS, E2C Hawkeyes, and Joint Stars (including orbiting satellite systems) would be quite aware that something was amiss in Iran. Without a doubt, U.S. forces in the area would be put on a heightened state of alert.

By carefully monitoring the HF military frequencies, in particular the HF-GCS (Global Communications System) worldwide network, it might be possible to detect when this notching-up of the alert status occurs. Monitors should listen for a dramatic increase in coded radio traffic in the affected region and a change in EAM (Emergency Action Message) length and repetition. If you don't have a current list of HF-GCS frequencies, do a Google search or subscribe to one of the e-mail list-serve discussion groups, such as MILCOM or WUN (World Utility News) on the Internet. Key frequencies to monitor at all times should be the primary (USB mode) HF frequencies of 4.724 MHz, 6.712 MHz, 6.739 MHz, 8.992 MHz, 11.175 MHz, 13.200 MHz, and 15.016 MHz.

In the weeks and days before an attack, Israeli fighters and bombers would launch from their bases on many faux sorties, not only for training purposes, but also to confuse any Iranian spies watching the bases who would give Iranian forces a heads up that an attack is on the way. Like the legend of the little boy who cried wolf, too many false alarms will have the Iranian intelligence agency losing confidence in their own agents. Once over Iran with the attack underway, if the Israelis have successfully avoided detection, they'll drop their bombs on sites almost simultaneously.

It's thought that a ring of surface-to-air missile and anti-aircraft guns protects the Bushehr nuclear power plant. Again, according to globalsecurity.org:

There is no definitive source of information on Iranian air defense deployment. Key SAM-defended areas include Tehran and centers involved in nuclear, chemical, and biological weapons programs. Iran appears to have deployed the SA-5 batteries to defend Tehran, major ports, and oil facilities, providing long-range medium-to-high altitude coverage of vital coastal installations. The I-Hawk and SA-2 batteries are reportedly located around Tehran, Isfahan, Shiraz, Bandar Abbas, Kharg Island, Bushehr, Bandar Khomeini, Ahwaz, Dezful, Kermanshah, Hamadan, and Tabriz, providing point defense for key bases and facilities. Some of these sites lack sufficient missile launchers to be fully effective.

Up to this point, the strike package will have been operating radio and electronically silent. To foil the Iranian SAMs and radars, the attacking aircraft will have to go electronically active. Once SAMs have acquired them, active electronic jamming will take place, announcing to all that an attack is underway. The electronic noise generated by the attacking force would show up on any nearby radar as a blanket of interference that the attacking aircraft could hide in, but also making it hard to distinguish friend from foe.

Close in, SAMs might be able to get a good enough radar signature on some of the attacking aircraft to lock on and could actually get a firing solution. However, when a SAM turns on its radar it becomes fair game to any aircraft holding an anti-radiation missile, which can ride down the radar beam to destroy the radar emitter. It's most likely that some of the attack force will be specially tasked to take out the SAMs.

The actual bombing itself might be a two-fold procedure with the first wave of bombs dropped to crack the hardened structures and the second wave dropped in any holes created by the first wave to penetrate structures and explode within. Hopefully the structure containing any nuclear material will cave in on itself, helping to contain any release of radiation, but chances are good that any explosion could throw pulverized radioactive material into the air. How far this highly toxic material drifts depends on how much radiation is released, the height of the debris cloud, and the strength of the prevailing winds.

Only after the Israeli attack force has cleared Iranian air space will radio contact with home base occur, and most likely that will be on HF. The communication will be on a predetermined frequency, will be brief, and consist of just one or two code words to let their commander's know if the strike was successful.

The Aftermath: Damage Assessment

Shortly after the attack, American U-2s might be launched to fly nuclear sampling (SAMP) missions in the area to determine the level of radiation leakage. In a best-case scenario, the radiation spread by the attack would be minimal, with levels only high around the immediate site of the attack. MILCOM monitors should keep an ear out for ASPEN and SAMP call signs.

Air Force communications code words signifying nuclear incidents are:

BENT SPEAR—Incidents involving nuclear weapons that are of significant interest but are not categorized as PINNACLE NUCFLASH OR PINNACLE BROKEN ARROW.

PINNACLE-BROKEN ARROW—An accidental event involving nuclear weapons or nuclear components but does not create the risk of nuclear war.

PINNACLE-NUCFLASH—The actual or possible detonation of a nuclear weapon which risks the outbreak of nuclear war.

PINNACLE-EMERGENCY DISABLEMENT—Operations involving the command disablement or nonviolent disablement of a nuclear weapon.

PINNACLE-EMERGENCY EVACUATION—Reports the evacuation of nuclear weapons.

PINNACLE-EMPTY QUIVER—The seizure, theft, or loss of a nuclear weapon or nuclear component.

FADED GIANT—A "nuclear reactor and/or radiological accident and incident" which does not involve nuclear weapons.

DULL SWORD—Reports of minor incidents involving nuclear weapons, components or systems, or which could impair the deployment of same.

Photoreconnaissance aircraft and spy satellites will be positioned over the attack area for damage assessment. From the extent of the damage or radiological threat to civilian populations, the need for humanitarian aid will be ascertained.

Political Fallout

Arab nations will be quick to condemn Israel for the attack, although some leaders of Arab countries will secretly be glad that Israel removed the nuclear power stick from Iran's hands. Many European countries will also protest long and loudly, even though they, too, may be secretly relieved. Even the United States might publicly condemn the attack, although covertly it may have helped the Israelis achieve military success. Outrage by the rest of the world will be wholly dependent on the range and scope of the nuclear fallout, if there is any.

The United Nations will send into Iran special teams to make damage assessments. If civilian populations are in danger or are dead and dying, humanitarian aid will be flown into the affected areas as soon as it is feasible.

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Arab nations will call for Israel's national head on a platter.

Iran's Military Response

Iran would most likely launch an attack on the nuclear sites in Israel and, in particular, the Dimona nuclear facilities. Because Israeli air defenses are some of the tightest in the world, an air strike would probably be ruled out. The Iranian weapon of choice will most likely be the Shahab-5/Kosar missile armed with a large conventional warhead.

However it could be that during the preemptive strike by Israel the Shahab-5/Kosar missile launch sites were destroyed or damaged, making the majority of the sites unusable. The range of Shahab-5/Kosar missile is 3,500 to 3,750 or 4,000 to 4,300 kilometers dependent on the warhead size, which would most likely be a conventional 1,000-750 kilogram high explosive warhead.

There is a slight possibility that military and intelligence analysts have underestimated how far along Iran's nuclear weapons program is and Iran could possibly retaliate by lobbing a nuclear warhead-tipped Shahab-5/Kosar missile (with an explosive power in the 1 to 10 kiloton range) into Israel. Depending on the Iranian mind-set at the time, targets could range from military to nuclear facilities and even population centers such as Tel Aviv.

Key strategic sites in Israel are protected by the advanced Arrow 2 theatre ballistic missile defense system developed by the MLM Division of Israel Aircraft Industries in cooperation with the United States and Boeing. The system, carrying the codename Homa or Fence, is deployed in batteries, including one battery near Tel Aviv and one near the Dimona nuclear facilities.

Each Arrow 2 battery typically is equipped with four or eight launch trailers, each with six launch tubes and ready-to-fire missiles, a truck-mounted Hazelnut Tree Launch control center, a truck-mounted communications center, a trailer-mounted Citron Tree fire control center, and the units of a mobile Green Pine radar system. Although never used in actual combat, tests of the Arrow system have been very successful. The Arrow 2, with a launch weight of 1,300 kg, was first tested in 1995. Arrow 2 has successfully acquired, tracked, and destroyed TM-91 Arrow missile targets from ranges of 60 km and 100 km.

If the system works as designed, Iran would have a very hard time penetrating this missile defense. Even if it did get lucky and managed to get a missile past the Arrow 2 missile defense system, the missile would also have to deal with the second layer of the missile defense system, a close-range Patriot PAC 3 antimissile battery. Israel currently uses upgraded PAC 3 as part of a two-tier anti-ballistic missile defense system, with Arrow 2 in the role of high-altitude interceptor and the Patriot PAC 3 for point defense. Patriot PAC 3 is also known to be deployed around Israel's nuclear reactor and nuclear weapons assembly facility at Dimona.

The Patriot PAC 3 is no longer the much-maligned system that was rushed into service during the first Gulf War. The PAC 3 missile is smaller than the early Patriot rounds that came before it, and is more accurate due to its high maneuverability and use of terminal active radar homing. This means that the missile contains fully functional radar, which can detect the target at short ranges (during the terminal phase of flight) and make corrections to the missile immediately before it hits the target. Because of the reduced size, a launcher trailer can carry 16 PAC 3 missiles (four canisters with four missiles per canister) rather than the four missiles carried by the PAC 1 or PAC 2 trailers (four canisters with one missile per canister).

If it does turn into a shooting war and missiles begin to fly between Iran and Israel, utility monitors listening to the ICAO HF Enroute Network, Major World Air Route Area (MWARA), frequencies in the region would be some of the first to know. During the first Gulf War, when Saddam launched Scud missiles into Saudi Arabia, special NOTAMS (Notices to Airmen) could be heard on HF frequencies (even here in the United States) advising whenever a Scud was fired.

The Best And The Worst

If indeed Israel launches an attack on Iran to take out its nuclear weapons manufacturing capabilities, the best we could hope for is that the facilities are destroyed without radiation leakage and major loss of life. In response Iran would retaliate by launching missiles into Israel. Most likely these missiles would be intercepted by Israel's missile defense system and would fall harmlessly into the desert.

If some Iranian missiles should get past the missile defense systems and hit

Dimona, it is possible that the Israeli government had the time and forethought to remove all nuclear weapons and radioactive materials from the site so the damage would be limited to the buildings.

But, on the other hand, it is possible that massive amounts of radiation could be released into the atmosphere from a meltdown of the nuclear reactor at Brushehr or at the Israeli reactors at Dimona. This radiation could kill thousands, maybe even hundreds of thousands, of people in the region. Eventually a cloud of nuclear contaminants could encircle the Earth causing cancer rates to skyrocket worldwide.

In a worst case scenario, Iran could retaliate with a nuclear tipped missile that intelligence analysts didn't know they had, perhaps one Iran itself had developed or one it had obtained on the black market from Russia or North Korea. A direct nuke strike on Tel Aviv could kill millions and trigger a full-on nuclear war in the Middle East. Millions could die, hundreds of millions could be radiated, and the world would suffer holocaust of unimaginable scale.

In Closing

It is imperative that rogue extremist-terrorist states like Iran do not acquire nuclear weapons. It is also imperative that Iran consider the consequences that using such a weapon against an enemy would bring about. Not only would it invite the total destruction of Iran and its people, it would also mean the deaths of millions of others, including Arabs, Palestinians, Christians, Buddhists, Hindus, and Muslims. The effects of nuclear weapons are not just contained to the radius of their explosive power. Since these warring countries are located in close proximity to each other, what affects one affects the other.

To quote the late President John Kennedy, "Our most basic common link is that we all inhabit this planet. We all breathe the same air. We all cherish our children's future. And we are all mortal."

I hope you found this special report intriguing, somewhat disturbing, and a rare peek into what military and political analysts do every day: try to ascertain the coming threats and figure out what needs to be done to stave off disaster. If by some chance you think this report was in any way revealing tactical secrets, think again. When and if there is a real attack, most likely what we

described here has already been considered and probably dismissed.

However, you can bet if there is the possibility that war, a terrorist act, or desperate political action is brewing in one of the world's hot spots, somewhere behind closed doors there are people tasked with researching and writing scenarios much like this one, wondering things like, "what would it take, how many ships, and how many men would we need to save lives, stop wars, protect a region or preserve a nation?"

In closing I want to thank all the experts that contributed to this report. Remember, this report is speculative. It's quite possible that every scenario listed could be totally wrong.

In the coming months, let's hope and pray that smarter and cooler heads will prevail and, if something has to happen concerning Iran's nuclear threat, that only the best-case scenarios listed here will come to pass. If the region does become embroiled in a Cuban missile-type crisis, utility monitors will undoubtedly be at their stations, twiddling the dials and scanning the bands in search of the real story behind the headlines.

Readers Logs

Due to the length of this month's special report, the reader's logs are a bit truncated. Fear not, we will be back to our usual format next month. In the meantime, don't forget to send those logs in!

0000 (Frequency MHz): STATION, Anytown, USA, summary of traffic heard in MODE at 0000 Z. (monitor/ sometimes location)

2252.0: 6HB USN vessel making callouts at 0100. (MC)

3349.0: NNN0BNJ opening USN/USMC MARS 4G1B SC Traffic Net at 0102. (MC)

3349.0: NNN0SDL taking check-ins to 4D2B Georgia Area Traffic Net at 0232. (MC)

4724.0: Andrews HF-GCS clg OMNI 02 at 1652. (MC)

5320.0: CAMSLANT clg USCGC PATOKA (WLR 75408) at 2119. (MC)

5696.0: P9A wkg CAMSLANT to report a Go-fast with white hull and black top at 1454. (MC)

5696.0: KILLER 29 wkg RING LEADER for alternate frequency at 1621. (MC)

5708.0: REACH 505 (C-5A) ALE initiated call to TACC at 0140. (MC)

5732.0: Parkhill encryption followed

by RAZORBACK wkg OMAHA 470 at 0159. (MC)

6715.0: HALIFAX MILITARY radio check with TRENTON MILITARY followed by RTTY transmission monitored at 0142. (MC)

6761.0: INDY 85 (KC-135R, 74 ARS/434 ARW) radio check with TAZZ 84 (KC-135R, 145 ARS/121 ARW) at 0015. (MC)

8971.0: BAT 22 wkg BLUESTAR (TSC Comalapa) to report ops normal. Mention of a TOI at 2240. (MC)

8983.0: CAMSLANT informs CG 2141 (HU-25) that CGAS Cape Cod reports they are entering a live fire zone in W-102 at 1822. (MC)

8992.0: RFR 7496 p/p via Andrews HF-GCS to Lajes Meteo for WX at Lajes and Santa Maria at 1351. (MC)

9025.0: CG 1503 ALE initiated call to District 1 Command Center regarding tasking at 1754. (MC)

11175.0: JSTARS 33 (E-8 JSTARS) (also uses STARGATE) p/p via McClellan

HF-GCS to Radar Maintenance heard at 1730. (MC)

11220.0: Andrews HF-GCS and ANDREWS 01 troubleshooting data comms with TAPESTRY at 2256. (MC)

11232.0: BANDSAW LIMA (E-3 AWACS) p/p via TRENTON MILITARY to OAKIE SAM at 1739. (MC)

11271.0: DRAGNET VICTOR (E-3 AWACS) (also uses SENTRY 61) p/p via TRENTON MILITARY to Radar Maintenance for troubleshooting heard at 1427. (MC)

11494.0: OMAHA 57B with ops normal & position report to HAMMER at 2325. (MC)

13907.0: OMAHA 54X wkg HAMMER to report they are over 25 foot TOI at 2137. (MC)

13200.0: Z8L p/p via Puerto Rico HF-GCS to STATION 1 with Exercise Highly Esteem Alpha traffic at 1421. (MC)

All logs contributed by Mark Cleary, Charleston, SC. ■

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