

**Representatives of all the military services got together at Maxwell AFB for a new type of war game.**

# Strategic Force

**By Suzann Chapman, Associate Editor**

**T**HE Air Force last November launched a unique war game, one that was, for the first time, both global in scale and “joint” in execution. This week-long effort, held at Maxwell AFB, Ala., brought together senior Air Force, Army, Navy, and Marine officers from the staffs of every theater commander in chief. Their goal: to explore promising employment concepts for future weapons in a computer-assisted war of the future.

Strategic Force '96, the first of what is expected to be an annual war game, was set in 2010. It pitted three Blue teams—each consisting of the US and coalition partners—against three Red teams—each representing Iran. The Blue teams had a mix of theater CINC staff warfighters and planners. Maj. Gen. Thomas R. Case, USAF's director of Modeling, Simulation, and Analysis, said each was led by a retired four-star officer “with good warfighting credentials.”

According to the director of the game, USAF Col. Parks Schaefer, “The war game proved the efficacy of an air campaign, executed at its fullest, as a means to bring an enemy to an attrition level that rendered him ineffective.” The game, based on current and projected weapons and heavily reliant on a high-intensity air campaign, “demonstrated that we could bring the enemy to the table.”

General Case emphasized the signifi-

cance of USAF's use of a joint-force concept for the game in order to test its warfighting assumptions. The game examined not only the role of air- and spacepower but also the contribution each could make, as emphasized in “Joint Vision 2010,” written by the Chairman of the Joint Chiefs of Staff, Gen. John M. Shalikashvili. Joint Vision 2010 is a “conceptual template,” concentrating on expectations about warfare of the future.

## **Full Leverage**

General Case explained, “The objective is to fight a war of the future. You create a Red force adversary that acts as an adversary might, then present the warfighters with a challenging situation. Then the exercise becomes one of innovative thinking about how . . . you best extract the full leverage of the value of the forces you will have in this 2010 time frame.”

All three “Blue CINCs” endorsed the selection of players and the emphasis on integrating service capabilities.

Gen. John A. Shaud, USAF (Ret.), Executive Director of the Air Force Association, said the theater CINCs “sent us the right people” for the game. “You don't need to do Persian Gulf 101 with these people, and it's for that reason alone that we are able to march to 2010 quickly,” General Shaud said. He added that the CINCs' assignment of good people was an “obvious en-

dorsement of the Air Force that the CINCs felt this joint war game would be something of value—it is the most sincere way of saying that I respect what you're doing.”

Another team leader, retired Army Gen. John W. Foss, said the game did not “give you the traditional way that each service would like to spend its forces.” There were no big air-to-air battles, no big land battles or big naval battles taking place, he noted. “Everybody's got a problem, and they have to use their resources and try to resolve the problem the way it exists, not the way they'd like it to be.” Retired Navy Adm. William N. Small echoed that sentiment, stating, “It was certainly not an Air Force-driven war game. It's one in which everybody gets an equal say.”

The game planners pitted the Blue teams against capable adversaries, led by Graham Fuller, longtime RAND Corp. analyst and author of numerous books about Iran and Islamic fundamentalism. Although Mr. Fuller admitted he had never played a war game before, he maintained that he is “a true Red-team type, in the sense that I have spent my whole life living in the Middle East, learning foreign cultures, languages—thinking about how these countries operate.”

With his three Red teams, each of which contained service personnel as well as intelligence analysts, Mr.

Fuller crafted a set of “rational and coherent political goals” that seemed realistically attainable and made sense for “Iranian” national interests. He said he then let his military commanders implement the agenda. “For a game that is by definition artifice, it is pretty realistic,” he added. “I think we are working with real problems, real states, real peoples, real passions, real psychological mindsets.”

### Political Dimension

The reality of the game also extended to “a formally constituted Green cell that acted as the coalition partners,” stated Colonel Schaefer. He said that, although the game assumed US control of coalition forces, the Green cell, led by two former ambassadors with considerable political experience, kept the military players conscious of the political dimension.

For instance, he said that coalition forces, which even in 2010 might still be using older-generation aircraft, had to be given a viable role to maintain political unity.

The game also featured on-site access to logistics expertise, which Admiral Small said was a great improvement over other games he had played. Essentially, the logistics cell, which had experts from DoD, ran requests for transportation of weapon systems, munitions, and support equipment through a “logistics ‘doability’ filter so that we really account for the logistics factor,” said General Case. The logistics cell also forecasted what the 2010 weapon systems might need for logistics support.

Lt. Col. Steven L. “Fuzz” Fuzzell, the Air Force’s logistics cell leader, said that, if his team did not have the data to answer a request, it would call on the system experts with the Army, Navy, or Air Force to develop a realistic response.

The game design included three assessment teams that used a suite of analytical computer models to evaluate moves by both the Blue and Red teams. The assessment team then returned an “adjudicated” move to the teams, essentially providing outcomes that the assessors believed would have been generated by each move.

A central contention for several years for the Air Force has been that the Joint Staff has relied on a computer model, “Tacwar,” that does not accurately

represent the contributions of airpower. [*See “The Rediscovery of Strategic Airpower,” November 1996, p. 26.*] While Strategic Force ’96 employed a different model, “TAC Thunder,” to represent air and space forces as well as ground forces, General Case emphasized the war game was “not an exercise in dueling models.” He said that each model has its strengths and weaknesses.

Colonel Schaefer said that Tacwar is a force-on-force model and answers very well the questions it was designed to answer. “However, we are no longer asking that aggregated [force-on-force] type of question.” The questions have gotten much more complex and detailed. While Thunder more accurately represents air and space contributions, he stressed that the Air Force is still exploring these issues, and “we know that Thunder is not the ultimate model. . . . There is no ultimate model. If you ask better questions, you need better tools.”

In general, the same initial Red action occurred across all three teams. The scenario was based on a coordinated incursion of Kuwait by Iranian ground forces crossing Iraq, coupled with a simultaneous theater ballistic missile and cruise missile launch at Bahrain and the ports and the oil fields across the Persian Gulf. It also included an attempt to close the Strait of Hormuz, using mines and missile- and ground-force deployments.

“The initial [Red] move was essentially a coordinated three-pronged attack over, around, and through the Gulf,” said Colonel Schaefer.

Each Blue team could call immediately on a number of forces within the theater: two land-combat brigades, an aircraft carrier battle group, a Marine Expeditionary Force, and a bit more than five USAF tactical fighter squadron equivalents. However, Colonel Schaefer stated that by the time “Iran” had actually established a hostile intent, the Blue teams had already begun to bring in additional forces from outside the theater.

The initial Blue response included the activation of defenses against ballistic and cruise missile attack, posturing of ground forces to counter the Red ground-force incursion, and the marshaling of warships to proceed to the Strait of Hormuz.

### The Air Campaign

Each Blue team immediately employed an intensive aerial campaign—a central focus of the 1996 game. “For this year’s game, we wanted to look at the impact of a high-intensity air campaign early in the beginning of a conflict,” stated Colonel Schaefer. He said that he specifically created a scenario within which the enemy was not facing an equivalent ground force or a superior naval force in immediate contact, ensuring a “high-intensity air campaign was a necessary choice.”

“So we played with a much more realistic expectation of [immediate] force availability,” he added.

For purposes of the 2010 “war,” each Blue team had a wide assortment of tactical fighters—Air Force F-22s, F-15Es, F-16s, and A-10s, along with Navy F/A-18E/Fs and F-14s. Additionally, each Blue team employed B-2, B-1B, and B-52 bombers, some of which were deployed to the theater for continuous operations and some of which were employed from outside the theater. One team also brought in AH-64D Longbow Apache helicopters from Europe, which was “an offensive weapon of significant contribution for the air and space campaign,” noted Colonel Schaefer.

He added that the play realistically included all of the available “multi-generational platforms.”

In 2010, he said, the US still will have B-52s capable of conventional weapons delivery, and there will still be C-130s and A-10s in the inventory, as well as older Army and Navy systems. “So everybody will be dealing with sort of a multigenerational problem,” said Colonel Schaefer, “and one of the things that we needed to be very careful about was not creating an environment that postulated [that] some one system would be the silver bullet.”

Some ground forces were involved for each Blue team, but there was no need for a decisive land campaign, since the air campaign reduced the fighting strength of the enemy to the point where Iranian forces could no longer advance, and thus were no longer a threat, he added. However, Colonel Schaefer emphasized that because the game did not include an examination of an end state, the Air Force did not know the ultimate requirement for ground forces.

He further explained that the Blue teams played at the strategic rather than the tactical level. They did not assign specific weapon systems to specific targets but instead plotted strategy and developed operational priorities. Then, a group of computer modelers handled the tactical moves, making weapon selections and assigning the targets to each weapon system.

The CINCs developed the overall strategy. The component commanders developed the operational priorities to best pursue the strategy. The modelers executed the tactical strategy at the operational level. However, the games were different at the operational level since each Blue team and the modelers had to respond to a different Red team. After the first move, the games were no longer identical.

### **Big Blast**

For instance, the Colonel noted, one of the Red teams managed to close the Gulf for a long time by expending half of its missile inventory in the opening salvo. The corresponding Blue team found itself engaged in a longer air campaign—running about 96 hours behind the other two. The Colonel stated that, despite the divergence in time, each Blue team's air campaign "clearly showed that the halting phase was accomplished by joint combined air forces."

The game also demonstrated a credible Theater Missile Defense (TMD). "The major insight that came from all three games is the efficacy of the layered, integrated theater missile defense," stressed Colonel Schaefer. Each team employed Patriot missiles, Theater High-Altitude Area Defense (THAAD), and the Attack Laser aircraft. The Patriot served as the initial layer, a point defense weapon. THAAD provided the next layer of upper-tier coverage. The Attack Laser was used for area coverage to knock out ballistic missiles in their boost phase. They also used the AEGIS cruiser and the arsenal ship, the Navy's 2010 cruise missile platform.

"You've got an area weapon to cover you in the early stage, then an upper-tier weapon that will take care of the leakers through that area layer, then a point-defense weapon to take care of the few remaining leakers," explained Colonel Schaefer. "So what you're

doing is not saturating at any given time any level of defense and you're placing the theater ballistic missile defenses into the arena where they do the most good."

He said that working TMD as a multiservice problem provided the most effective defense. However, although there were no gaps in coverage, he said that different deployment decisions were made by Blue commanders based on their perception of their Red adversary. He called it a "risk management problem."

Each team had only a limited number of assets and a set of potential targets that had to be defended, and the teams slightly varied the deployment of their TMD forces. "This allows us to look at the span of approaches that might be real and the span of responses or initiatives against those defensive approaches and how those things work against each other," stated Colonel Schaefer.

"If you only have one airfield to defend, you can do a very good job with a point-defense weapon and an area weapon, but if you have a whole city, five airfields, and two ports and you still have only one point-defense system, where do you put it, how do you deal with that, what kinds of risks are you willing to take, what kinds of questions do you have to ask to work that out? Those are the questions that commanders will have to face."

### **Concentrating the Mind**

Blue commanders had to constantly rethink options in light of the fact that "Red" had a full complement of nuclear, biological, and chemical weapons. Theoretically, in fact, the Red teams could have launched a nuclear weapon into central Europe.

Red team leader Mr. Fuller said that the "nuclear option" depended not on game constraints but rather on an assessment of "real-world implications" for the one using such weapons. He explained, "After all, we know that there is going to be an end to the war. We may not succeed in winning, . . . so we have to live with the consequences of these actions in the real world."

As it turns out, the only weapons of mass destruction actually used by the Red teams were chemical weapons. One Blue player in response to the chemical

weapons was to use a "reverse CNN effect," stated Colonel Schaefer. General Shaud said that his team widely publicized the results of the attack to gain worldwide support. He added, however, that "to have a robust TMD really made a difference."

Colonel Schaefer pointed out that the game had very aggressive, highly capable Red teams, and part of their job was "to make sure that it didn't become some sort of ludicrous military scenario where some crazed general caps off a nuke to solve his problems."

Adding to the realism across the board were the space elements. According to Colonel Schaefer, US Space Command was one of the top supporting commands in the entire game. They not only supplied enough personnel for two players on each Blue team but also had space experts for the Red teams and assessment teams.

"If we had only one player on each Blue team, none in the assessment cells, and none in the Red cells, we would have been able to claim that we 'played' space, but we wouldn't have been able to claim that we learned anything," he added. He also stressed that the space players came from each service, making the war game "top-notch."

However, one drawback noted by General Shaud in the information warfare element was that it was still classified to such an extent that it was difficult to play. He said that it was vital to play IW openly as part of the normal thought process.

The Air Force has already started work on its next Strategic Force war game. The Army and Navy are also working on creating or revising their war games to focus on joint operations in a future scenario. "There have been other war games out in the future," said General Foss, "but this is one that has laid a challenge in that you don't have symmetrical approaches—that is, land-on-land, air-on-air, sea-on-sea—but use a joint force of varying capabilities to try to solve the problem."

General Case emphasized that as each service works to "figure how best to contribute to the Joint Vision 2010 construct for future warfare, it will take a significant amount of war-gaming and other types of concept-developing activities over time to refine that vision." ■