

OPPOSITION FORCE SENIOR MENTOR'S  
OBSERVATIONS OF  
MILLENNIUM CHALLENGE 2002  
(12 August 2002)

Part 1

Limits to Red "Free Play" During Millennium Challenge 2002  
That Could Influence Evaluation of the Concepts

NOTE 1: As the opposition force (OpFor) senior mentor I reviewed key MC-02 documents to gain an understanding of the purposes of the exercise and, more importantly, the method and metrics by which events were to be judged. These key documents contain a variety of terms (see exerts below) identifying the criteria to be used to ascertain the viability of the concepts. In the report that follows, my subjective evaluations are contained in the remarks in [bold] at the end of each paragraph. I selected a criterion of *assess* since it appears in three of the six documents and because the JFCOM Experiment Analysis Plan created an "assessment team" to gather data. Personnel representing the OpFor were able to observe the *manifestations* of Blue JTF's efforts to implement the JFCOM operational concepts—rapid decisive operations, effects based operations, and operational net assessment. They were not, however, able to observe the influences of any of the services, technical, or procedural initiatives. (All *italics* in the exerts below are added.)

- The Millennium Challenge (MC 02) Exercise Directive states that "the purpose of the MC 02 events is to *demonstrate* and *assess* the rapid decisive operations concept.
- The MC 02 Control Plan notes in paragraph A. 2. of the Introduction that the framework and structure provide an approach that frees "the experiment to focus on critical events required to *assess* the concept."
- Appendix A, "Experiment Description, to MC 02 Control Plan" states in its first paragraph that, "The primary concepts that will be *explored* during the experiment are . . . ."
- Appendix C, "Experimental Objectives, to MC 02 Control Plan" uses words such as *develop*, *demonstrate*, *provide*, *support*, etc. that reflect an orientation on the conduct of the exercise and experiment, not desired outcomes related to appraising the concepts.
- The JFCOM Experiment Analysis Plan (JEAP) in paragraph 1. a. Purpose says it "documents the plan for *assessing* the Joint Field Experiment on Rapid Decisive Operations (RDO) in 2007, Millennium Challenge 2002 (MC02)." Paragraph 2. a. (2) states that, "MC02 Experiment success is defined by: *validation*, *refinement*, *modification*, and/or *revision* of the RDO concept."
- A transcript of General W.F. Kernan's (commander U.S. Joint Forces Command) news briefing of Millennium Challenge 2002 held on 18 July 2002

contains the following quote: "MC '02 is the key to military transformation. *By testing* concepts to allow military commanders to make better decisions and leveraging our information superiority, MC '02 helps support the DOD's key transformation goals . . . ."

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NOTE 2: In the role of Major General [REDACTED] commander Red JTF-South, I kept many details of my intentions and plans hidden from Ambassador [REDACTED] who was playing the role of the Government of Red's Supreme Leader. My suspicion that Ambassador [REDACTED] was not revealing his real intentions to me was confirmed at the conclusion of the exercise when I had the opportunity to read his *aide memoire* in which he revealed his objectives. I had no access to Blue JTF information during the course of the exercise. All connections to JECG or Blue data sources were removed from my computer. Those modeling and simulation work stations that I used to follow the movement and status of my units had filters to strip off Blue "ground truth." Finally, I did not monitor any closed circuit television broadcasts that concerned JECG or Blue matters. I developed my "world view" by listening to World News Network (WNN), reading transcripts of broadcasts, and from discussions with Ambassador [REDACTED]. I maintained situational awareness of operational matters through staff briefings that included captured screen shots from the Red JTF-South air, naval, and ground workstations and by "visits" to my air, land, and sea commanders in their respective test bay cells.

#### Before start of exercise

##### *Exercise design*

1. During the development of MC 02 OpFor personnel were required to provide detailed supporting information for all desired Red capabilities—the standard for acceptance appeared high. Thus, Red JTF-South had available only those technical capabilities that could reasonably be expected to be available in [REDACTED]. Moreover, some of these capabilities, such as a laser guided off-set system [REDACTED] were not properly modeled, therefore, the assets that they were to protect, for example, SA-20s, were more vulnerable to attacks by precision guided munitions (PGMs). Conversely, Blue had available systems, including two DD-21 land attack destroyers, two SSGNs [REDACTED] six high-speed vessels, an Advanced Deployable System (ADS) theater-deliverable acoustic surveillance system, Standard Missile-3 Block 1B (SM-3 Blk 1B), Theater High Altitude Area Defense (THAAD) missiles, and an airborne laser (ABL) [REDACTED].

Although a number of experiments have been conducted with HSVs, [REDACTED]. The ADS is reportedly a Naval Warfare Development Command concept with no approved mission needs statement or operational requirement document. [REDACTED] SM-3 Block 1B missiles

are expected to be available on [REDACTED]

[REDACTED] In short, Blue employed some forces equipped with [REDACTED] capabilities against Red JTF-South forces equipped with [REDACTED] capabilities. The rationale provided by the JECG for allowing these disparities was that "they supported service equities" and "enabled select systems to be examined in what some believe will be the last major Joint exercise for some time."

[The fidelity of the exercise was too low to determine the impact such disparities might have had on the ability to assess the concepts with two exceptions, both involving theater ballistic missile defense (TBMD).

The first exception concerns the destruction of 12 Red JTF-South theater ballistic missiles between 1101Z and 1114Z on 27 July 2002. The modeling and simulation showed that Blue shot down all 12 TBMs, four of them by THAAD (see attachment 1). [REDACTED]

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The second exception concerns the use of Blue TBMD-capable standard missiles (SM). The SM-2 is not capable of engaging TBMs. A cancelled program—the SM-2 Block 4A—would have been capable of engaging TBMs. The SM-3 Block 1B will be capable of engaging TBMs, however, as noted above it will not be until 2008 that the first 50 missiles will be available. Nonetheless, the Blue JTF fired 68 [REDACTED] and 49 [REDACTED] during the course of the exercise, 67 more than available even if the [REDACTED] is on hand a year earlier than planned. (See attachment 3.)

*Absolutely no conclusions should be drawn from the "success" of Blue theater ballistic missile defense in MC-02.*

**In a higher resolution exercise all of the disparities noted above would have a significant effect on an assessment of the concepts.]**

2. At the start of MC 02 the night shift was declared to be "non-experimental." Non-experimental was defined as, "Red Forces will not initiate any significant offensive actions except in response to Blue actions" at night (2100-0900 local). The rules for conducting operations during this period were revised twice early in the exercise (see paragraph 5 below under "After start of exercise, exercise play.") The reported rationale from the JECG was that there were insufficient Blue service response cell personnel and "pucksters" to support 24-hour operations. [The inability to conduct a realistic level of operations around the clock constrained the ability of Red JTF-South to stress the concepts in order

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to fully assess them. This limitation will have a significant impact on the assessment of the concepts.]

2. General simulation models were tied to actual real-world systems which hindered the ability of Red JTF-South to employ its capabilities in a realistic manner. As an example, [REDACTED] thus, Red theater ballistic missiles could only be fired during two 2-hour launch windows (1100-1300 and 1900-2100 EDT) because [REDACTED] had to be notified in advance so [REDACTED]. After the exercise began a similar situation was discovered to exist with the time phased force deployment (TPFD) system—see paragraph 1 below under *exercise play*. [These restrictions substantially constrained the ability of Red JTF-South to plan and operate as an “adaptive thinking” enemy in order to present Blue with situations that would allow assessment of the concepts. This constraint will have a significant impact on the assessment of the concepts.]
4. Much of Red JTF-South’s infrastructure was modeled, however, Blue and neutral infrastructures were not. As a consequence, evaluation of Red JTF-South actions against these infrastructures had to be done manually with lower resolution. [This deficiency had a nominal impact on Red JTF-South’s efforts to stress the concepts and will have only a minor influence on the assessment.]
5. World media play was not structured to allow for representation of truly independent reporters, thus Blue government policies and Blue military plans and actions were not openly questioned or challenged. Consequently, Blue role-players were not forced to consider the impact their actions might have had with the American or world public. WNN was not representative of a World-wide view. It was heavily biased towards Blue reporting. There was little reporting of Red other than “unconfirmed sources”. Little if any news came from other regional or international sources. [This deficiency had only a minor impact on Red JTF-South’s efforts to stress the concepts and will have only a minor influence on the assessment of the concepts.]
6. Blue issued a demarche (dated 20 July 2007) to the Government of Red on the afternoon of 23 July prior to commencement of the exercise and arrival of its Supreme Leader (role-played by Ambassador [REDACTED]). A copy was provided to commander JTF-South who responded on 24 July. It was not clear why this one Blue diplomatic action occurred outside of the exercise window. [The contents of this document caused Red JTF-South to immediately focus on a military threat and away from Blue efforts in the diplomatic, informational, and economic arenas. This early event will influence the assessment of the concepts only if Blue intended at this point in the exercise to use other elements of national power against Red JTF-South. See paragraph 1 of Part 2 of this report for additional clarifying details. However, if Blue’s plan was to use other elements of national power the influence will be significant.]

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1. The Blue TPDF forces were allowed to flow unimpeded, that is, no Red JTF-South actions could be implemented that would hinder or slow deployment between Spiral 3 and the start of MC-02. The JECG's rationale was that the effects tasking order (ETO) would not be able to be adjusted by the Blue JTF during the interval; therefore, the desire of the JECG was to commence the exercise with the ETO unchanged. As a result the Blue CVBG, ARG, MCM TF, and advance elements of Blue army and air force units were in the Gulf at the start of MC-02. During this same period several Red JTF-South supported terrorists actions were to be carried out as part of the Red JTF-South anti-access strategy (mines in the [REDACTED] and the firing of missiles at US ships from unidentified merchant ships at the southern exit of the [REDACTED]). These actions were not permitted by the JECG. [This "time jump" prevented Red JTF-south from implementing its full range of strategic anti-access capabilities—capabilities that would have challenged the concepts and aided in their assessment. The impact on assessment of the concepts will be moderate.]
2. On the first and second day of the exercise the Government of Red and the Red JTF-South political leadership were restrained from aggressively pursuing an ambiguity strategy (designed to make unclear the relationship between the Supreme Leader and commander Red JTF-South). JECG's rationale was that Blue interagency resources were not robust enough to handle the problem and the primary interagency personnel on the distributed net had other "real world" responsibilities that precluded their working this issue full-time. [The restriction on Red JTF-South's ability to exercise one of its three strategic approaches—*ambiguity*, the others being anti-access, and asymmetry—at the start of the exercise lessened the coherence of the overall strategy. More importantly, this constraint will prevent a comprehensive assessment of the diplomatic elements of the concepts. The effect on the assessment will be significant.]
3. WNN reports were not updated between Spiral 3 and start of MC-02 making it difficult for the Government of Red and Red JTF-South role-players to gain situational awareness of the international situation and public diplomacy. [This deficiency prejudiced the first several days of the exercise since role-players were unable to place their political and military decisions into a larger context, thereby negating a comprehensive assessment of concepts during this period. The impact on and assessment will be moderate.]

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After start of exercise

*Exercise design*

1. The initial MC-02 brief stated that Blue would not be part of a coalition. Soon after the start of the exercise Blue was depicted as a member of a Gulf Partnership

Policy Council. JECG's explanation was that a "partnership" is not a coalition. From Red JTF-South's perspective the effect, however, was the same. Red JTF-South intelligence identified British, Australian and Canadian warships with the ~~navai~~ naval task force which gave further evidence of a Blue led coalition. [This variation from the expected scenario served as a distracter to Red JTF-South, but will have only a minor impact on the overall assessment of the concepts.]

- During the exercise the interaction of models, especially those involving the Joint Semi-Automated Forces (JSAF) system, did not appear to function at the level expected. Somewhat surprisingly, the problems, whether stemming from architectural anomalies or inadequately trained operators, were not identified during Spiral 3. As a consequence, adjudications were often resolved with the comment from JECG representatives, "that wouldn't have happened," referencing the outcomes of the models. An example of the order of magnitude of the difference between model results and JECG adjudications is shown in Table 1 for Red JTF-South's combined attack conducted on 27 July 2007.

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(the models captured the total number of air-launched missiles, but not sea and ground launched missiles), the modeling and simulation showed [redacted] The Digital Collection, Analysis, and Review System (DCARS) calculated [redacted]

A subject matter expert (SME) judged 17 Blue ships were destroyed, of which 5 were major combatants and 4 were amphibious ships. JECG adjudication determined only 4 Blue ships were destroyed, *none of which were major combatants or amphibious ships.* [redacted]

However, a subsequent examination of the systems revealed that because of previously unrecognized modeling and simulation federation limitations, Blue's [redacted] missiles were not able to shoot down air-launched enemy missiles. With this information the SME re-evaluated the results removing all air launched missile hits and determined one less ship would have been lost, the cruiser Antietam.

SHIP NAME	SHIP CLASS	TYPE MISSILE	MODEL & SME RESOLUTION WITH FINAL ADJUDICATION		
			DCARS	SME	ADJUDICATION
JCATS 4945	Amphib				
Arctic (ARC)	AOE		DEST	OOA	FULLY OPERATIONAL
Baugh	AOE		DEST		DESTROYED
Bridge (BRG)	AOE			OOA	DESTROYED
Camden (CAM)	AOE		DEST	OOA	DAMAGE 25%
Antietam (ANT)	CG		DEST	OOA	DESTROYED P 15 KTS AAW ASUW
Lake Erie (LKE)	CG				FULLY OPERATIONAL
San Jacinto (SJC)	CG		DEST		FULLY OPERATIONAL
Lincoln (ABE)	CVN		DEST	OOA	DAMAGED P 20 KTS 15 AVC W-CAT
Arleigh Burke (ARB)	DDG				FULLY OPERATIONAL

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Bentley (BEM)	DDG		DEST	OOA	FULLY OPERATIONAL
Langren (LAN)	DDG		DEST	OOA	FULLY OPERATIONAL
Fitzgerald (FTZ)	DDG			OOA	FULLY OPERATIONAL
					FULLY OPERATIONAL
Preble (PRE)	DDG		DEST		FULLY OPERATIONAL
HMS Argyle (AYR)	FFG				FULLY OPERATIONAL
Tarawa (TAR)	LHA		DEST	OOA	DAMAGE P 0 KTS WD FO
Boxer (BOX)	LHD		DEST	OOA	FULLY OPERATIONAL
Cleveland (CLE)	LPD		DEST	OOA	DAMAGE P 15 KTS
Comstock (COM)	LSD		DEST		FULLY OPERATIONAL
Fort McHenry (FMH)	LSD		DEST	OOA	FULLY OPERATIONAL
AGG Sea King	MCM		DEST	OOA	FULLY OPERATIONAL
AGL Sea King	MCM		DEST	OOA	NOT MENTIONED
Devastator (DEV)	MCM1		DEST	OOA	NOT MENTIONED
Cardinal (MHC-51 (CAR))	MHC		DEST	OOA	DESTROYED
ABL-T-AGOS 20	TAGOS		DEST	OOA	DESTROYED
NUMBER OF ROUNDS BY TYPE					
TOTAL NUMBER OF HITS					

TABLE I

- o DEST = Destroyed OOA = Out of Action
- o Missile warhead weights
  - Surface-to-surface
    - [REDACTED]
    - [REDACTED]
    - [REDACTED]
    - [REDACTED]
  - Air-to-surface
    - [REDACTED]
    - [REDACTED]
    - [REDACTED]
- o The Digital Collection, Analysis, and Review System (DCARS) collects, fuses, and delivers data from simulations, C4I systems, and live systems. Its purpose is to provide near real-time availability of data from target systems and analysis tools to compare and/or analyze them.
- o Results shown under the "SME" column above were determined by a retired Navy officer with 30 years surface warfare experience including command of the Afloat Training Group, Pacific where sailors are taught damage control and fire fighting.

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[The number of ships the JECG adjudicated destroyed or damaged was a "re-engineered" product, that is, the numbers were based on the "minimal ships needed to enable Blue JTF to continue the exercise." This sizeable imbalance between the results of the modeling and simulations and the JECG adjudication continued

throughout the exercise and included air and land forces as well. There will be very significant differences between an assessment of the concepts using the modeling and simulations results and an assessment using those of the JECG.]

*Exercise play*

1. Nearly all regional states were depicted on day two of the exercise as politically supporting Blue military actions, manifestations being the signatures of leaders from six regional states on the Gulf Partnership Policy Council Declaration to Red JTF-South and the granting of over-flight, and air and sea basing rights to Blue forces. Visible diplomatic actions by Blue did not seem to support this almost overnight "flip" in orientation by states throughout region. [This early "set" of political relationships negated the possibility of any Red-Blue diplomatic interaction at a critical time in the exercise. The impact on the assessment of concepts is judged to be moderate.]
2. The master scenario events list (MSEL) contained an event (#12468) depicting the shooting down of one Blue CRAF aircraft by terrorists. This event was requested by OpFor for 27 July, but was not approved by the JECG. The reason provided was that the Blue JTF TPDF was being processed on a [REDACTED] computer that had limited memory available due to real world operations, therefore, the TPDF run could not be stopped or changed. A similar MSEL event (#15161) depicted the shooting down of one Blue KC-10. This event was requested by OpFor for 28 July, but was not approved by the JECG. [REDACTED]

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[REDACTED] On 1 August OpFor requested that another similar event take place in country Brown. This request was also denied. The event was later permitted to be inserted by the JECG, but was modified so that it was a "bird strike" that destroyed a plane. [REDACTED]

[REDACTED] and, therefore, could concentrate its attention on other planning issues. This situation will have a moderate to significant influence on the ability to fully assess the concepts.]

3. No Blue information operations (IO), as examples, psychological operations or public diplomacy, were apparent to Red JTF-South during the course of the exercise, except on 1 August. The messages on that date, however, were not very sophisticated or likely to persuade an enemy. The first message (PO #001) below was for a radio broadcast. The second message (PO #003) below was for a leaflet drop and radio broadcast.



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PO # 001 "US has no territorial ambitions in the region; US military is acting in response to potential actions by hostile force against territorial sovereignty of Green and interference w/freedom of navigation."

PO # 003 "Violence against US will be met with overwhelming force; US forces will take all necessary actions to protect all GCC and US interests; encourage desertions."

On 5 August radios were dropped to Red JTF-South forces, on the islands, but no IO message was provided to give a sense of actions or behaviors Blue desired.

**[The almost complete lack of Blue information operations, as observed from the Government of Red and Red JTF-South perspectives, will significantly reduce the ability to assess the concepts.]**

4. Blue did not appear to be cognizant of Red diplomatic and information activities prior to hostilities. As an example, no acknowledgement of Red JTF-South's responses to the Blue *demarche* and Gulf Partnership *declaration*, responses that contained offers "to find a regional solution to the problems that require" sea mines. [See paragraph 1 of Part 2 of this report for additional clarifying details. The almost complete lack of Blue diplomatic actions, as observed from the JTF-South perspective, *unless Blue conducted no such actions*, will significantly reduce the ability to assess the concepts.]
5. On 28 July rules for the "non-experimental shift (2100-0900)" were changed to the following:

(JECGOPFORSCNTRL msg. 28 July 02 5:17 PM)

- a. Land: Can and will reposition. All forces will accept combat. Will not initiate major combat.
- b. Sea: No red movement. Any red reposition movement will be at risk. No sub attacks at night. If detect blue movement, may engage (not supposed to happen since BLUE is not going to move).
- c. Air: May reposition in country. May conduct night CAPs...no offensive operations. Flights out over BLUE will be at risk (they must assume is offensive action) NOTE: Wonder what will happen with a WHITE airliner at night???

ALL TIMES: Allowed to engage UAVs and aircraft over territory. May have too many exceptions for ONE UAV per day-- prior coordination.

Right of self defense is not abrogated.

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These rules were changed yet again on 29 July as follows:

(JECGOPFORSCNTRL 29 July 02 3:40 AM)

- a. Land: Both Red and Blue can reposition. *Red forces will not initiate combat but Blue may.* Red will defend itself if attacked.
- b. Sea: Both Red and Blue can reposition. Any Red or Blue repositioning will be at risk. Red will not initiate attacks unless Blue ships repositioning come in range. Red will not "stalk" Blue Ships or reposition so that Blue Ships at rest come in range. Red will defend itself if attacked.
- c. Air: Red Air can reposition in country. *Red may conduct night DCA but not OCA.* Flights out over BLUE will be at risk. Red ADA will fire at Blue aircraft that come in range.

Three changes of rules in as many days confused some participants and gave an advantage to Blue in certain circumstances, for example, "red forces will not initiate combat but blue may." [Results of Blue-Red JTF-South interactions during the "non-experimental shift" are unclear and should not be used to evaluate the concepts. These several changes of rules diverted Red JTF-South staff's attention from exercise play on 28 and 29 July to some degree. This diversion will have only a minimal impact on the ability to assess the concepts.]

6. On 29 July the Exercise Director began providing Red JTF-South "commander's guidance" on operational matters directly to the Forces and Simulation Branch Chief (role playing the OpFor chief of staff) supplanting that of the designated OpFor commander (senior mentor playing commander Red JTF-South). The rationale offered was that Blue had "not set conditions for conducting forcible entry operations," therefore, disposition of Red JTF-South forces in the models had to be adjusted to allow for the exercise to continue and to match up with live events. As a result, from this date forward in the exercise the Blue force was no longer facing a "thinking and adaptive enemy" commander in the person of the senior mentor. For the remainder of the exercise high-level battlefield conditions in the models and simulations were set by guidance from the Exercise Director and the Blue senior mentor, not by the operational or tactical decisions of the OpFor senior mentor or results obtained from the modeling outcomes of Blue and Red JTF-South actions. Examples of the type of instructions that were given subsequently in order to "drive" the exercise are shown below:

(JECGOPFORSCNTRL msg. 29 July 02 4:10 PM)

Following guidance has been provided to OPFOR Sim units by OPFOR Senior Control:

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1. SA5 already dead
2. SA6 3 remaining launchers are illuminating at this time
3. SA1 [sic] 2 of 3 remaining TELARs are illuminating
4. SA20 6 TEL unit at Newport Beach is non-illuminating....does have an acq radar (contrary to previous) 5 TEL unit at Ajo is illuminating
5. Hawks all dead
6. CDCMs CSSC-3 (8) and C802 (16) illuminating THIS MAY BE OVERKILL...NEED CORRIDOR SO THAT WE CAN REFINE
7. Grd forces In def psns, practicing c-attack plans, have not been attrited....
8. Mines They're out there!!!!.....

Phase 1 of this process is to illuminate and absorb expected BLUE strikes to set conditions (from 1400Z-0300Z)

Phase 2 of this process is to "turn 'em off" if Phase 1 does not work....this surgical process begins at 0300Z and ends by 0500Z)

And:

(JECGOPFORSRCNTL msg. 29 July 02 8:32 PM)

As you know have been working most of the day to 'set conditions" so that JTF can proceed...since they are up against a real world event which drives the sims.

We are aligning numbers on the objectives...in order to set force ratios (for NTC) and for the STOM objective, no change in troop disposition.

TASKS ahead:

1. Deconflict the abn flight route with sim IADS that are still active. Looks like we will have to turn off AJO....other ADS were hit this date....but Ajo remains active and appears to be close to the route.
2. Determine the STOM route(s).....and determine threat to them especially from CDCM. We will be prepared to provide a corridor...but probably no change to any ground troops dispositions.
3. Intent is to provide ROE for the night's fight....which should be normal combat ROE with some exceptions by system.

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Still waiting on all pieces...this decision not vested in COLs/Contractors....will confirm with BG Smith....and will get word to you as soon as possible.

As the exercise progressed the interactions, including outcomes, between Red JTF-South forces and the Blue JTF were increasingly scripted. Most of these interactions were built backward from some JECG desired conclusion. Attachment 4 provides examples of both detailed and outline scripting. [The results of Red-Blue interactions post-29 July need to be considered in light of the fact that the Blue JTF commander did not operate against a "thinking and adaptive" enemy who "could win." Not having a "thinking and adaptive" enemy operating against the Blue JTF will have a very significant impact on the assessment of the concepts.]

7. On 29 July the OpFor commander (senior mentor role-playing commander Red JTF-South) indicated his intention to employ chemical weapons (sarin nerve agent) the next day if Blue JTF forces invaded the mainland of southern Red. He was precluded from doing so by the Exercise Director with the explanation that this action did not match the "persona" or "mind set" created for MG [REDACTED]. The persona the OpFor senior mentor employed was that developed by the J-9 World Class Adversary which clearly included a mind set to use chemical weapons if Blue attacked JTF-South's mainland with ground forces. [REDACTED]

[REDACTED]

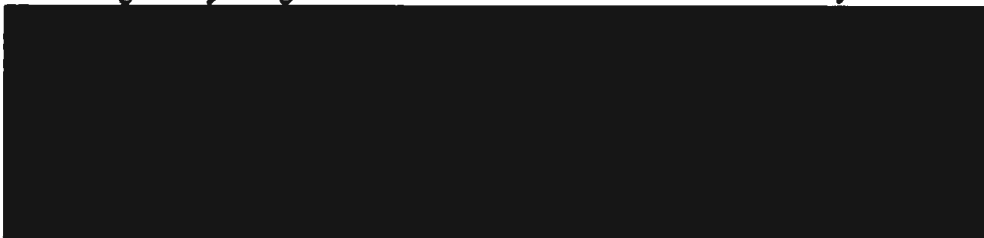
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[REDACTED]

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On 1 August another request to use chemical weapons was made by the Forces and Simulation Branch Chief (acting as OpFor commander—see paragraph 6 above), but the request was denied with the explanation that this was a secret exercise and Blue would have to use a “code word-level response” which couldn’t be done. On 3 August OpFor was informed that control of the location of Red JTF-South chemical weapons was being assumed by the Blue senior mentor. [The inability of the Red JTF-South commander to employ chemical weapons greatly restricted his ability to asymmetrically confront the Blue forces. As noted above, *asymmetry* was one the three basic approaches of Red JTF-South’s strategic plan. This limitation will significantly hamper the ability to assess the concepts against an enemy employing asymmetries.]

8. A Blue Joint Special Operations Task Force (JSOTF) operation against the Black Star terrorist organization and the Gulf Fishing Company was planned and briefed early in the exercise. It was discussed at length by the Blue JTF commander during the after action review (AAR) on 1 August and touted as an indication of the viability of operational net assessment (ONA) in planning for a *coup d’main* without large forces. Unfortunately, this proposed operation was not based on information contained in the ONA data base, but on information provided directly to the Blue JTF staff by the SOF cell in the JECG. After further coordination with the OpFor, this operation was later “reversed-engineered” to tie it to the ONA data base. A second raid was likewise constructed to enable culmination of the scenario by attacking the enemy commander and the chief of the Black Star terrorist organization. Scripting was used to further develop the intelligence for the needed parties to assemble at one location where Blue could attack them. [If either of these operations is considered in the assessment of the concepts without recognition of the imposed artificialities it will have a significant impact and reflect negatively on the credibility of the results.]
9. On 5 August as the Blue JTF was attempting to destroy individual WME (chemical) warhead cache sites, the JTF Commander decided to attack the one remaining site by using aerial bombs in order to avoid further friendly casualties.



Therefore the JECG adjudicated there were no casualties and that the weapons had 100% effect on the target. [The scenario before adjudication indicates a failure to do proper effects-to-task analysis, as well as abiding by the ROE. Though this event will have minimal ability on assessing the concepts, it does reflect a weakness in the utility or application of the ONA.]

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10. On 5 August the JECG advised OpFor that during planning for the assault on the four disputed islands in the SOH the Blue JTF determined it would be unable to generate favorable force ratios against the remaining Red forces defending the islands. In order to focus planning for the Blue JTF the JECG directed the OpFor to script a surrender of forces on two of the islands so that the Blue JTF would only have to plan and execute an attack against the remaining two. [This JECG action and other similar scripting indicate one of three possibilities. One, from the outset the design of the exercise was flawed in that Red JTF-South forces were too large or too capable in comparison to those of JTF Blue. Two, that the ONA was unable to provide the information needed for the Blue JTF to focus its combat power in a manner that would have overcome Red JTF-South forces earlier in the exercise. Three, that the modeling and simulation system was not able to properly adjudicate Red JTF-South-Blue JTF interactions leaving Red with more forces at this point in the exercise than would have actually been available. This one action will have moderate impact on assessing the concepts. However, the cumulative effects of the JECG's scripting will have a very significant impact on the assessment.]
11. When it became apparent mid-way through the exercise that the Blue JTF was directly targeting Major General [REDACTED] the OpFor placed his location in the modeling and simulations commencing on 1 August. Blue JTF was unable to locate [REDACTED] in the models with its intelligence, surveillance and reconnaissance capabilities, thus his location was scripted daily from 5 August until his pre-planned demise on 9 August as a result of a Blue joint special operations. [As noted in paragraph 10 above, relying on scripted events to assess the concepts, including this one, will have a very significant impact. In fact, it is difficult to see how any scripted event could be used to assess the concepts.]

JS 1.4(a)(g)

## Part 2

### **Red JTF-South's Perceptions of Blue Actions**

1. Several Blue actions, as observed by Red JTF-South, were inexplicable in that they seemed to separate Blue diplomatic, informational, and military efforts, counter to the coherent application of the elements of national power supposedly inherent in *effects based operations*.
  - a. Diplomatic. Throughout the exercise all diplomatic overtures and cease-fire proposals offered by the commander JTF-South or his intermediary [REDACTED] were rebuffed. Offers by the Government of Red to broker the removal of Red JTF-South forces from the disputed islands were also refused. Discussions between Blue and Red JTF-South [REDACTED] of any of these proposals may have obviated the need for hostilities that ensued. (For exercise purposes negotiations could not have

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been allowed to succeed, however, not allowing discussions to even commence made it clear that this was to be a pure military exercise. What remains unclear is why Blue made no attempt to negotiate with Red JTF-South (if for no other reason than to cloak its real intentions.) Moreover, hostilities brought about the widespread destruction of infrastructure in southern Red which would have severely hampered earthquake recovery efforts bringing condemnation from governments around the world. This devastation would have also adversely impacted on any discussions between Blue and the Government of Red.

- b. Informational. From Red JTF-South's position there were virtually no Blue or Blue JTF informational activities that had any impact. (JECG personnel indicated after the conclusion of exercise play that there were numerous Blue information operations, but for some reason the products were never transmitted to OpFor.) Several examples of deficiencies in Blue's use (or JECG's handling) of information operations are noted below:

- The Blue JTF seemed unable to create a viable Red-focused psychological or media/public affairs campaign. The very few psychological leaflet drops and Commando Solo radio broadcasts "seen" or "heard" by OpFor players contained material with a simple and unsophisticated story line: the Red JTF-South's leadership is illegitimate; all Red JTF-South forces should surrender or die. Given the improved economy in the south brought on by MG [REDACTED] policies, it is doubtful these psychological messages would have done much to undermine his popularity.
- The daily Blue press briefings served merely as a vehicle to put forth the Blue JTF's perception of the war. Tough questions from the most adversarial international press role-players were met with vague answers or answers that were clearly of a "party line" variety and often factually inaccurate. This treatment of the media culminated with the two international press member role-players (who were openly sympathetic to Red JTF-South) being excluded from future press conferences. The idea of a Blue public affairs officer banning a legitimate Voice of the Gulf reporter because she was a 'thorn in his side' and barring the entry of another is unsupportable. If this were a real-world situation the international media and the entire Arab world would have reacted negatively towards Blue's actions. The Blue JTF commander would have been accused of throwing out a "guest." In the Arab view the press representative should have been treated the same as a protected guest in a Bedouin tent. The Bedouin would defend the guest with all the power at his disposal. This is the yardstick that this incident would be judged against. This incident might have stalled talks with the Government of Red.

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- Also affecting the information operations aspect of the exercise were Blue's kinetic attacks on all media nodes in the southern region. Blue JTF's concern that commercial radio and television stations were carrying coded military messages caused Blue to physically destroy all three stations. This would have unquestionably produced a negative impact on the Blue JTF's feedback and on the transition efforts following military operations.

c. Military. Since Major General [REDACTED] commander Red JTF-South *saw nothing except a desire on the part of Blue to go to war and:*

- understanding that the United States had publicly and repeatedly announced since as far back as June 2002 that it would employ a military policy of preemption;
- recognizing the inherent dangers in Blue's concept of "rapid decisive operations" to any nation that allows Blue to initiate military operations;
- having observed Blue position major forces inside the Gulf during late June and early July 2007;
- having read a demarche dated 20 July 2007 to the Government of Red stating that, "United States Military forces will use all necessary means available to conduct operations in the absence of armed conflict in the land territory, territorial waters and airspace of the disputed islands and the JTF-S AOR to prevent or stop JTF-S from:" with a list of specific actions;
- being the recipient of a "Declaration of the Gulf Partnership" dated 25 July 2007 that mandated JTF-South comply with eight specific provisions by 1000 EDT 27 July 2007 (from his perspective this appeared to be Blue JTF's H-hour and D-day);
- having tried unsuccessfully on two occasions to open discussions with Blue representatives;
- having noted no Blue reaction to an air rehearsal on 26 July where approximately two-thirds the number of aircraft as planned for his preemptive combined arms attacks flew (staying over land); and
- monitoring the movement of a second Blue amphibious ready group (ARG) through the straits early on the morning of 27 July

*saw no option except to strike Blue first!*

These observations raise the following questions:

- If Blue intended to attack Red JTF-South regardless of any diplomatic gambits made by MG [REDACTED] why did it issue such provocative documents as the demarche and declaration which "telegraphed" the time Blue military actions might begin?

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- If Blue was employing all the elements of national power, why did it not open any channels for dialogue with MG [REDACTED]?
- Why did Blue lead with military actions rather than information operations that might have helped set favorable operational and tactical conditions?
- Why did Blue's operational net assessment not recognize that Red JTF-South had been developing the ability to launch a coordinated air, sea, and missile strike? (Note the following extract from PMESII Military Special Assessment 11 June – 23 July Summary dated 15 July 2002: "Indications of multi-airplane over-water operations continue, but at a slower rate with fewer aircraft. It is assessed that these indications are consistent with the maritime training oriented towards achieving a near simultaneous time-on-top for surface-to-surface and air-to-surface weapons on an U.S. high value unit." Italics added.)

[From the commander Red JTF-South's viewpoint there was little evidence of the employment of effects-based operations during the exercise. Only the application of military power was apparent.]

1. From a Red JTF-South standpoint many Blue actions gave the impression that they were not the result of an *operational net assessment* because of the undesirable second and third order effects that resulted. Examples are described below:

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- a. The Blue JTF needed to fly military transport aircraft along a route that passed over [REDACTED] on the night of 30 July, but was concerned about Red JTF-South's surface-to-air missiles, especially its SA-20s.

[REDACTED]

- [REDACTED]

Most significantly, the Blue battle damage assessment apparently had not determined that *all of the SA-20s had been destroyed in attacks conducted prior to 30 July*, meaning that the effects desired had already been achieved!

- [REDACTED]

[REDACTED]

- [REDACTED] caused a release of a dangerous chemical from an aluminum plant resulting in the deaths of thousands could not be immediately refuted by the Blue JTF staff. Owing to the plausibility of the claim, which was actually deliberate disinformation, the Blue JTF was forced to task ISR assets to confirm or deny the story, an unintended *third-order effect*.

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- In summary, [REDACTED] innocent civilians died when a second-order effect denied them medical care, and a plausible Red information operation created conditions for an unintended third-order effect when Blue redirected ISR systems at a critical period in combat operations.

- b. Red JTF-South employed a command and control methodology specifically designed to thwart Blue JTF technological advantages that had been made evident from 1990 to 2007. Blue's ability to intercept electronic communications by a variety of means, including satellites, was well known. Red leadership realized that [REDACTED]

[REDACTED] were easily compromised.

[REDACTED] thus, were used only for tactical messages that were time sensitive or for administrative traffic. Use of cell phones and satellite communications was discouraged for all except the most routine traffic and even that was encoded. Emphasis was placed on mission-type orders and long-time personal associations that allowed for an implicit understanding between key personnel. Couriers were relied upon for the most sensitive messages.

[REDACTED] Military aircraft and ships practiced operating regularly under emission control. Activities that would be expected to produce radio traffic such as aircraft taxiing for takeoff used substitute means, for example, flashing lights from the towers. Major General [REDACTED] often said that he wanted to be "in command" of his forces, but he also wanted them to operate "out of any direct control." "*In command and out of control*" was his philosophy. Information on this unique Red JTF-South approach to countering known Blue advantages in the area of command and control countermeasures was contained in the ONA data base and was highlighted in scripted material developed during the course of the exercise. However, throughout the exercise the Blue JTF appeared to

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rely on its well recognized technical countermeasures. As an example, personnel from the JECG intelligence scripting cell used the Distributed IW Constructive Environment (DICE) model to determine the effects of Blue JTF attacks on Red JTF-South's communications systems. There was an ingrained belief that when certain nodes of that system were destroyed Red JTF-South would automatically resort to other communications means—cell phones and satellite communications—that were subject to interception. Only after detailed briefings on Major General [REDACTED] approach to command and control did the JECG fall off the Blue "mirror imaging" of Red JTF-South's capabilities. [REDACTED]

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**[The Blue JTF attack on Red JTF-South was wide spread and destructive—airfields, seaports, transportation systems, communications, troop units, etc. It did not appear to be an attack against key links and nodes.]**

2. From Red JTF-South's position Blue JTF's attack was not rapid, nor was it decisive. After the introduction of flexible deterrent option (FDO) forces Blue required another 23 days (12 July-3 August) to move sufficient forces into theater and to commence offensive actions. At the end of hostilities Red JTF-South still retained its control of the southern Red mainland.
3. Terrorist groups were used by OpFor in a number of ways to challenge the concepts. First, the groups had objectives and goals which, though generally similar, were also in many ways different from those of the commander Red JTF-South and from each other. This was meant to cause Blue to see the adversary as non-cohesive, that is, the destruction of the war-making capacity of Red JTF-South would not have a direct influence on the groups. Second, the terrorists provided an asymmetric means to attack Blue's access into the region without providing a direct excuse to attack Red JTF-South forces. The terrorists were to be a rear area threat that Blue had to consider while attempting at the same time to militarily subdue the primary actor, commander Red JTF-South. Third, the terrorist groups afforded a plausible means to attack Blue's deployment system even in the Blue homeland. The terror cells employed three main methods to accomplish these objectives. Political terror, such as kidnapping or assassinating key leaders, against the regional governments that had sanctioned Blue presence through approval of basing and over flight rights. This was seen as a way to punish these regimes for complicity and to coerce them into not cooperating with Blue further. Direct action against Blue's logistic centers in the region was meant to draw off

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combat units for security and to impact Blue's ability to operate unfettered in its rear area. Direct attacks against Blue's deployment system by shooting down military transport aircraft and interdiction of the sea transportation links [REDACTED] was designed to slow and disrupt the flow and thus throw JTF-Blue off its operational deployment timelines.

[Most of the terrorist actions had no measurable effect on JTF-Blue due to a lack of adjudication by the JECG. The actions to interdict strategic deployment were delayed by the JECG until the effect on Blue forces levels and sustainment were manageable. None of the outcomes of the direct attacks in theater were faithfully modeled, so JTF-Blue operational tempo was not impaired]

### Part 3

#### Assessment of Red JTF-South's Three-Element Strategy

1. Ambiguity. There were many facets to the Red JTF South's approach to making the political and military situations ambiguous in the eyes of Blue. Primary among these was to cloud the true relationship between the Red Supreme Leader and the commander Red JTF-South. At the outset of MC-02 the JECG ordained that the relationship between the two leaders be made unambiguous and that the Red JTF-South clearly be seen as a rogue. This direction was reversed two days later by the Exercise Director. It was not evident that the Blue JTF ever recognized the ambiguity of the association and the effect it would have on his military operations. The second element of ambiguity was the non-cohesiveness of the adversary. Beyond Red and Red JTF-South there were the terrorists, the pirates and the Gulf Fishing Company, all with their own objectives. The relationships between these various entities were made as opaque and confusing as possible. The situation Blue JTF faced in this scenario seemed to stress the concepts.
2. Anti-Access. Red JTF-South's anti-access approach consisted of terrorists and conventional attacks on deploying Blue assets in the seventeen day window between Spiral 3 and the start of the exercise; terrorists attacks on key leaders throughout the region to dissuade support of Blue; attacks on Blue aircraft and ships in the TPDF flow; a combined arms surface, air, and missile attack on Blue forces in the Gulf; air defenses against the airborne drop and the air-landed Stryker Brigade; and use of chemical weapons if Blue JTF forces invaded the mainland. This element of the three-part strategy appeared to work very well even though many of Red JTF-South's anti-access capabilities were not allowed to be played by the JECG.
3. Asymmetry. OpFor had a number of asymmetric capabilities. The most significant was Red JTF-South's chemical weapons. When the Exercise Director prohibited their use it eased considerably the Blue JTF's operational

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and tactical problems, though it was not clear from an OpFor viewpoint whether or not the Blue JTF commander knew this. These weapons did, however, provide Red JTF-South valuable "bait" which was used repeatedly to draw Blue JTF forces into unfavorable fights with well positioned Red JTF South forces. The terrorists were another asymmetric capability, however, they were only allowed to play against countries in the region outside the Blue JTF joint operations area (JOA). OpFor saw no indications in the Blue media, MSEL events or in deliberate Blue planning that the 13 successful and 4 unsuccessful terrorist attacks in the region were recognized or had any significant impact. Of the 9 successful terrorist attacks carried out against targets in the Blue JTF JOA, OpFor saw no Blue response except a special operations attack against one individual. (See attachment 5 for details.) Other asymmetric assets used by the OpFor were small boats, the fishing fleet, pirates, mini-submarines, and captured freighters. These had minimal effects.

**Conclusions.** From my observations the MC-02 scenario was "scripted" to a Blue JTF *rapid* and *decisive* conclusion. The Blue JTF did not arrive at that end-state by engaging a "thinking and adaptive" enemy. The exercise was not allowed to "play out" through properly modeled and adjudicated interactions. The result was preordained from at least 31 July (see various e-mails at attachment 6). The supposed benefits of effects-based operations and operational net assessment were not made evident during the course of the exercise. MC-02 can only be presented as a training exercise that perhaps aided in the further development of some of the procedures and techniques that support these concepts. In my judgment, any suggestion otherwise is not credible. As noted at the outset of this report, the OpFor was not able to observe the influences of service, technical, or procedural initiatives employed in MC-02.

Paul K. Van Riper  
Senior Mentor  
Opposition Force  
Millennium Challenge 2002

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