



First-Ever Military Wargame at the 79th MORS Symposium

Michael W. Garrambone, InfoSciTex Corporation, michael.garrambone.ctr@wpafb.af.mil

For the past 15 months, a training cadre has been taste-testing local pizzas, but more importantly has been building expertise in planning, redesigning, structuring, experimenting, and analyzing “the performance” of military wargames. While this sounds like a lot to do, the overall objective was to come to the 79th MORS Symposium in June prepared to teach, orchestrate, and run the first-ever MORS’s Symposium wargame with various experienced and new players in the adversarial setting of one versus one and two versus two games. Because this was a new event for MORS, nearly every aspect of gaming had to be examined, designed, constructed, and “play-tested” in order to establish the requirements, game materials, and game execution processes. The early thinking required four committees: a Planning Group, the Synthesis Team, the Senior Technical Advisors, and the Senior Wargame Advisors. The Planning Group and the Synthesis Team were composed of basically the same members, who switched hats from research and thinking to designing and building. (Table 1 lists the members of each committee.) The Senior Technical Advisors

Table 1. MORSS Military Wargaming committees

Planning Group	Synthesis Team
Mr. Mike Garrambone	Mr. Mike Garrambone
Mr. Bret Givens	Mr. Bret Givens
Mr. Tom Hughes	Mr. Tom Hughes
Dr. Steve Riese	Dr. Steve Riese
Mr. Scott Simpkins	Mr. Mike Ottenberg
	Mr. Kyle Kliever
	Mr. Scott Simpkins
	Mr. Mike Newkirk
Senior Tech Advisors	Senior Wargame Advisors
Ms. Trena C. Lilly	Mr. James F. Dunnigan
Dr. Robert S. Sheldon	Dr. Peter P. Perla
Mr. Dave Reynolds	Mr. Ted Smyth
Mr. E. B. Vandiver	

were MORSians who were knowledgeable on all matters of executing major events within MORS’s Symposia, and the Senior Wargame Advisors were wargaming experts with years of experience in designing and executing games.

It is interesting to note that these people were all long-term volunteers and that the germ for the idea of building a MORS wargame originated at the U.S. Coast Guard Academy Symposium several years earlier. Thus, the time had come.

Table 2. Categories of objectives

Event Objectives
1. Design and play a first MORS Symposium wargame.
2. Experiment and develop the structure, organization, and processes to execute these type events at MORSS.
3. Demonstrate wargaming as an Operations Research tool and show the technique and its ability to conduct analysis on decision making.
4. Provide MORS attendees a wargaming experience and learning environment.
Wargame Team Objectives
1. Plan, train, and field a knowledgeable game execution team with on-the-job training.
2. Learn and experiment with organizational and structural designs.
3. Solicit and train various level (novice and seasoned) player volunteers.
4. Execute multilevel and multiplayer wargames.
5. Capture military planning and the execution of various courses of action. Capture all cognitive aspects of opposing commander decision making.
6. Record, analyze, and publish the results of the entire process.

It was clear from the onset that “doing” a first wargame would require defining “everything,” identifying all the requirements as early as possible, and coordinating these with the many other events at the 79th Symposium. The objectives would first have to be written and then the various levels of planning and requirements would have to be addressed. Two categories of objectives immediately came to mind: the event objectives and the wargaming team’s objectives (see Table 2).

These objectives gave rise to the aspects of building and running this stimulating wargame at four levels and parsing various activities and requirements of game preparation.

To flesh out how all these activities and requirements would take place required identifying some special support teams. These teams were the Event Support, the Site Facilitator, the MORS staff, and the Dayton Super Team. The Event Support Team consisted of the senior 79th MORS personnel who provided coverage and guidance for the execution of the entire event. Everyone from the MORS President to the Symposium Tutorial Chair provided





Table 3. Activities and requirements involved in building and running the wargames at different levels.

Level	Principal Activities and Requirements
Event	Symposium execution requirements and coordination of required planning
Organizational	Building a game structure, team, operations, support, and media planning
Operational	Objectives, game performance, assessment, data capture, execution, training, "Do part"
Game Mechanics	Mechanism for creating, teaching players, executing, and playing the game

Table 4. Special support teams.

Event Support
President, Mr. Terry McKearney
President Elect. Ms. Trena C. Lilly
79th MORSS Chair, Dr. John Hummel
Special Sessions Chair, Mr. Don Timian
Tutorial Chair, Ms. Lisa Kaiser
Site Facilitators
Dr. Donna Blake
Mr. Eric Hamp
Dr. Steven Pilnick
Ms. Cindy L. Grier
CDR Harrison Schramm
MORS Staff
Ms. Krista Paternostro
Ms. Jill Clark
Mr. Eric Hamp
Mr. Paul LaPorte
Ms. Jenna Rowland

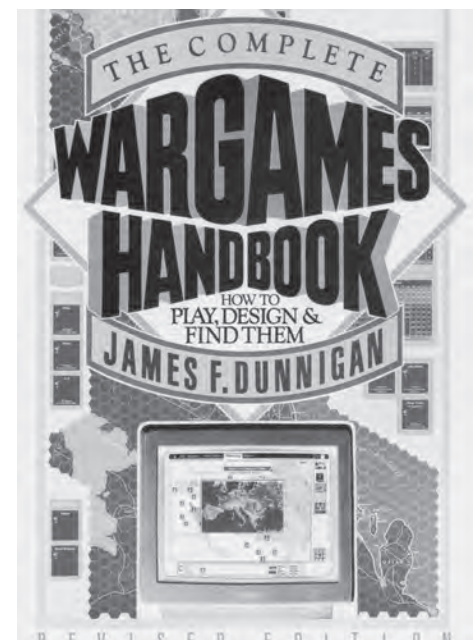
ideas, time, local support, tutorial space, and encouragement for the event. The Site Facilitators provided knowledge about the environment and requirements to conduct games at the unclassified level across several days, employing various set-aside wargame playing and tutorial rooms. The MORS staff covered nearly every aspect of the wargames from advertising to awards.

The organizational, operational, and game mechanics levels required deep arcane research, some tough decision making, eclectic OR information seeking, and wildly lucky but soundly judicious personnel selection.

For a first-ever event, the important question that everyone asked was, "What game?" This was usually followed by, "How about my game?" The trick was making this game selection based on the following criteria:

- It already existed as a successful commercial seller.
- It was a rule-based board game, with rules out in the open.
- It offered the right level of difficulty and was no offensive to anyone or nation.
- The game-length time was appropriate (seven turns, 1 to 2 hours).
- It accounted for simple logistics.
- It allowed corps-level play (18 units).
- There were one or two players per side and the objectives were clear (for both sides).
- It allowed ample decision making (movement, combat) but required no extensive doctrinal knowledge.
- Outcomes were stochastic.
- It was historically based and the events represented were researchable.
- It offered game turn examples.
- It was a complete system.
- It offered clear courses of action.
- It was highly teachable (less than 2 hours) but sufficiently complex.
- It was highly enjoyable.
- It was sufficiently play-tested and also easy to improve (size, handouts).
- The game author was accessible and amendable.
- It was a James F. Dunnigan product.

Mr. James F. Dunnigan, who has supported many a gamer (groggnard) since his early college days, provided MORS with his famous teaching wargame from *The Complete Wargames Handbook* and graciously and gratuitously gave his permission to make whatever adjustments needed to "make it happen" at the 79th MORSS. The "Drive on Metz" wargame selected from this book is derived from the events of the Lorraine Campaign executed by LTG George S. Patton's Third U.S. Army in his pursuit across France to the "West Wall" and beyond. The game was perfect for a first-ever adventure, but as with all models of combat, there were some items (for example, weather, decrements, personnel, and terrain elevation) that were only explicitly accounted for but certainly did not detract from the exciting play. Readers are invited to follow the actual campaign in books such as John Nelson Rickard's *Patton at Bay: The Lorraine Campaign, 1944* (Potomac Books, 2004), Hugn M. Cox's *The Lorraine Campaign* (U.S. Government Printing Office, 1950), and Steven J. Zaloga's *Lorraine 1944: Patton vs Manteuffel* (Osprey Publishing, 2000).



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To learn as much as possible, a Dayton Wargaming Team was established, which turned out to be a critical element in the MORS wargame developmental process. It was because of this team's dedication to creating and playing the game that they were able to shake out the requirements and the methodology for orchestrating game play—not to mention demonstrating their capacity for eating and judging pizza. It was during the early game playing that the personnel requirements for the various wargamer-analysts, game facilitators, game players, game directors, adjudicators, intelligence agents, observer-recorders, and technical advisors were determined. In a period of ten gaming sessions over several months, the team learned how to prepare, field, execute, and derive meaningful analytical information from military wargaming as a unique analytical tool. This was also the time when training, courseware, and tutorials were developed and tested by the eclectic professional staff of mathematicians, statisticians, operations research analysts, human factors engineers, physicists, computer scientists, and program managers. This team addressed many of the operational concerns, such as communicating moves across team rooms, maintaining perfect battlefield information, playing multiple games simultaneously, and resolving unique combat situations. At the game-mechanics level, they worked everything from player training, game turns timing, rule revisions, handouts, magnetic map boards, battery

power, and data recording. The Dayton Team consisted of the following personnel:

- LTC Darryl Ahner
- James Boyer
- Kristi Brendlinger
- Frank Campanile
- Dr. James Chrissis
- Scott Cone
- Lee Curto
- Jeff Dubois
- Don Emerson
- John Flach
- Dr. John Flach
- Derek Garrambone
- Scot Garrambone
- Tara Garrambone
- Sarah Gilkey
- Bret Givens
- Tom Hughes
- Randy Levine
- Chris Linhardt
- Tim Menke
- Dean Neitman
- David Panson
- Mike Petkosek
- Beth Rogers
- Evan Rolek
- Lee Ann Rutledge
- John "Sleet" Sletten
- Matthew Smitley
- Rob Subr
- Matt Squire
- Lori Walton
- Jimmy Whalen
- Jill Whealon
- Pete Venero
- Janet Williamson
- Todd Van Woerkom

Two factors rounded out these early discussions. The first was the requirement to highlight the analytical interests of the game play, and the second involves the joining together of three MORS Communities of Practice (CoP) in following players' decision making. The wargame centered on a learning experience of creating and running the wargame as an event, and also teaching MORSians about military history and demonstrating the merits of using wargames

as an analytical tool. A major objective during the game was capturing the military planning and execution of various Courses of Action (COA). A second objective had a human factors and social science bent and was to capture all cognitive aspects of opposing commanders in their decision making. The first objective is common to school-trained military minds, but the second objective needed quite a bit of professional help. The help was forthcoming from the members of the MORS Wargaming CoP (Richard Phares), the MORS Irregular Warfare CoP (Renee Carlucci and Laura Guay) and most certainly from the MOR Social Sciences CoP (Drs. Yuna Wong and Margaret McCown, Tim Wilkie, and Karen Grattan). It was through these communities that we derived what to look for in behaviors, body language, player statements, and decision-making criteria of the commanders. It was the social scientists who reasoned that we needed to have co-commanders to have them audibly flush out their thoughts and be attentive to their comments about intelligence preparation of the battlefield, perceptions of determining likely courses of action on the part of opponents, and how soon they anticipated probable success or gain the time and space knowledge to know they already "bought the farm." Aligned with each of these CoPs are MORS Working Groups who also contributed to the process and brought their members to the 79th MORSS.

With great assistance from the MORS leaders, several wargame activities were planned for this symposium. In addition to several early morning breakfasts, these were the planned events:

- Monday morning, Wargame Tutorial
- Monday morning, MORS Execution Team Training
- Monday afternoon, Fundamentals of Wargaming & Drive on Metz Tutorial
- Monday afternoon, MORS Execution Team Rehearsal (ROC) Drill
- Tuesday noontime, Wargame Day 1 (Black Belt I and White Belt) games (Tutorial)
- Wednesday noontime, Wargame Day 2 (Black Belt II and White Belt) games (Tutorial)
- Wednesday afternoon, Meeting of the MORS Wargaming CoP in Working Group 30
- Thursday afternoon, MORS Special Session Meeting: DoM Wargame Outbriefing



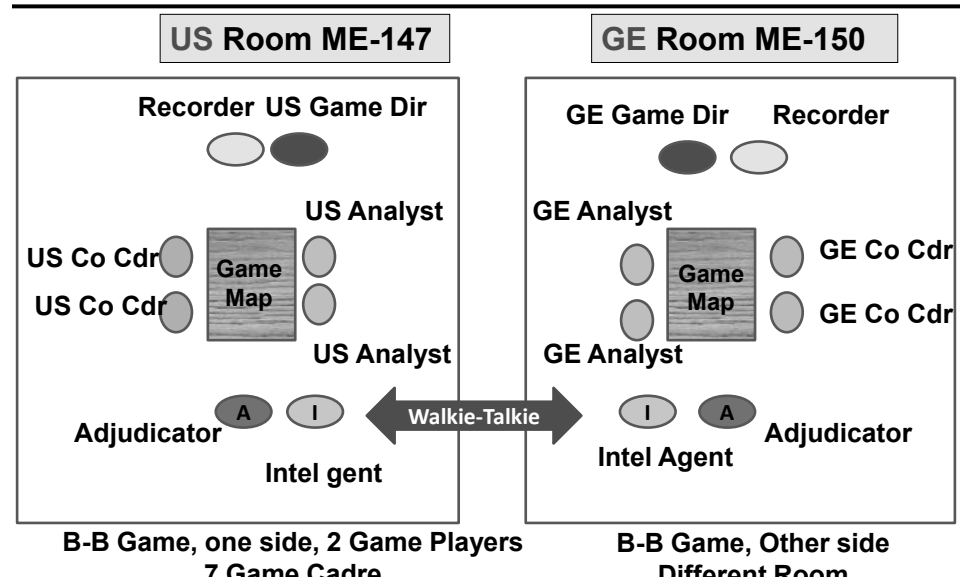


By the time Monday morning got started, three major things of interest occurred. The MORS Wargaming Team had filtered in and their onsite presence was getting into gear. The primary long-term leader for the event was quickly absconded and everything immediately got better. New leadership clearly emerged and onsite training and rehearsals began. In addition, both experienced (Black Belt) and novice (White Belt) players showed up ready for combat. Not enough good things can be said about the Symposium Wargaming Team, which ran the entire event, but by listing their names one can see how all the great things happened:

- LTC Darryl Ahner
- Col John Andrew
- Ellie Bartell
- Dr. Ted Bennett
- Dr. Donna Blake
- Kristi Brendlinger
- Julian Carlucci
- Nick Carlucci
- Renee Carlucci
- Dr James Chrissis
- Jeff Dubois
- Dr. Brian Efirm
- Bret Givens
- Derek Garrambone
- Dr. Niki Goeger
- COL Simon Goeger
- Cindy L. Grier
- Tom Hughes
- Greg Keethler
- Kyle Kliewer
- Jane Krolewski
- Dave Lee
- Dr. Lee Lehmkuhl
- Chris Linhardt
- Greg Melcher
- Mike Newkirk
- Mike Ottenberg
- David Panson
- Lupita Perez
- Dr. Steve Riese
- Scott Simpkins
- Tim Wilkie
- Todd Van Woerkom
- Paul Works
- Dr. Bill Young

As always, with attrition and the joining of new members, the MORS Wargaming Team reorganized both game directors and other team members and also adjusted the event to accommodate the many players who joined the Black Belt and White Belt games. It is interesting to note that the players have a very different mindset from the game's author and game organizers. It is also interesting that the more experienced

Figure 1. Game room composition.



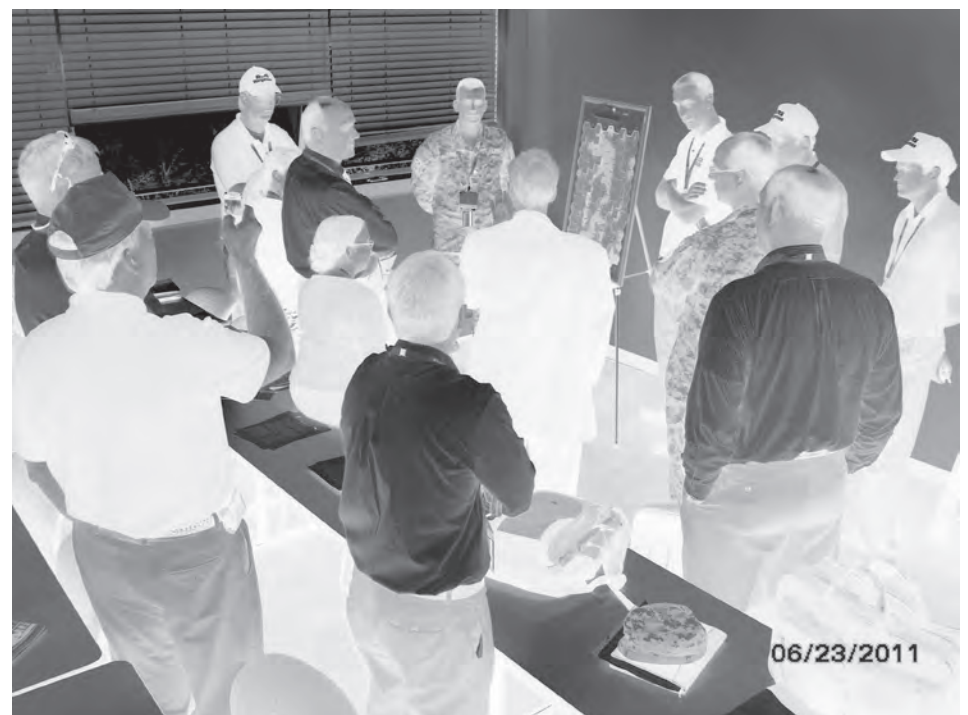
players are attuned to rule sets, probabilities, terrain, and what their opponents may be up to, which became a favorite topic among co-commanders.

A listing of the players and their manner of success is not provided here and it was not an objective of the event to indicate “who won.” On the other hand, the most prevalent comment from the players was Terminator-like, that is, “I’ll be back.” As can be seen in the accompanying photos, people readily followed the training, were allowed to have a good time, and enjoyed their participation in the wargame. Very important to the event was the information fed back to the team and most important was the information garnered from the

wargamer-analysts. For each side (U.S. or German loyalty), there were two analysts. They represented the school-trained OR analyst paired with a Social Sciences analyst. Much like the early days of OR, it is this varied team composition that gives strength to analytical effort. A complete arrangement of the game room composition appears in Figure 1.

Over the two gaming-day periods, both the wargame teams and the players became more comfortable with the game's environment and execution. There was less to set up and more time to concentrate on the individual duties briefed on the first day.

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There was not much time for daily hot washes (end of day discussions) because the rooms had to be vacated for the follow-on working groups and the cadre had to re-engage with their own MORS activities. It was during the games that courses of action were quickly reviewed and, after a time, more sequential planning was discussed. The one versus one games only took an hour, but little conferring takes place and mostly consists of the game director discussing/teaching the game and the abilities of the various U.S. and German units to move and engage in combat. These were designed to be novice games and there were quite a few players at the tables. Comments about the composition of the game rooms came up frequently because it appeared to some that there were more than enough “operating” the game than needed. This appeared to be true, but in a gaming room with guest arrivals, directors are handling the visiting audience and dual-hatted adjudicators and observers could be overwhelmed depending on the pace of the game. Because there is always more to analyze than time to do it, the process continues; therefore, I include only the most interesting comments from the wargamer-analysts (see Table 5). So what does one learn from this experience? It appears the answer depends on the participant (see Table 6). For Symposium planners, we now know that MORS can put on a complete wargame from soup to nuts. For those who never participated in a wargaming, we have shown what it looks like and the advantages and disadvantages of simulations of this variety.

As an organization, MORS has grown into an event that can provide yet another analytical tool for experienced and new analysts. We have again found our roots in using eclectic teams of different disciplines in accomplishing missions. While analyzing the results of the “Drive on Metz,” we are sure to relive the experience of putting on a wargame. It is clear from the number and caliber of the many volunteers who gave the direct use of their time and effort that the Society continues to grow strong from the talents of its members, who deserve every degree of credit for taking on and accomplishing this mission—Patton would have been proud of all of you.

Table 5. Comments from the wargames.

Not Necessarily Journal Material	Dynamics in Decision Making
“Uh oh, the Germans actually went north”	Negotiation and consensus
“We are just attacking here for giggles”	Emergent leader
Looks like “game points” vs. “ego points”	Voting (of three co-commanders)
Much blaming of “the dice roll”	Time constraints (7 minutes per turn)
They just can’t retreat off the board, right?	Decisions are based on getting points
What were those victory points?	Decisions are based on denying points
How can we lose that many times in a row?	Decisions are based on rules and the Combat Results Table
They were lucky time ran out	Risk seeking vs. risk adverse
What will they say in the AA Review?	Decisions are based on previous history



Table 6. Lessons learned.

MORS Execution Team Learning	Player Learning
We now know how to do this event	Effects of battlefield entities and loyalties
We realize the logistical requirements	Understanding performance parameters
We know how much intellectual capital is needed	Understanding aspects of combat scenarios
Lots goes into material preparation	Combat decision-making under pressure
Wargames require extensive lead time	Employing battlefield position and movement
Wargames are highly training-intensive events	Using intelligence and surveillance
It is important to build a cadre of wargamers	Deriving combat data requirements
Hardest is to make wargamer-analysts	Living with stochastic combat results
You need to pick the right size game	It is easy to get tricked on the battlefield
Multiple team rehearsals are important	It looked like a simple game for a while
Something will go wrong, but it can be fixed	Making after-action reviews