# Symphony or Jazz Mission-Planning Timelines

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ate in the day on 5 April 2003, Col. David Perkins received the order from the 3rd Infantry Division commanding general: his 2nd Brigade Combat Team (BCT) would conduct a limited objective attack into the center of Baghdad in two days.¹ Less than twenty hours later, Perkins briefed his battalion commanders and published an order consisting of four sparse pages.² About thirty hours after receiving the order, 2nd BCT began movement toward the center of Baghdad in one of the last large-scale offensive operations against an enemy conventional force that any U.S. brigade has conducted.³ On 10 April, the Ba'athist regime and its military collapsed.⁴ Many years later, Perkins equated the deliberate, detailed orders briefed at career courses to practicing

scales on an instrument, while the smooth synergy 2nd BCT displayed over those days in April 2003 was the military equivalent of playing jazz.<sup>5</sup>

The newly published Field Manual 3-0, *Operations*, refocuses the U.S. Army on large-scale combat operations and claims those operations will be "much more demanding in terms of operational tempo" when compared to the Army's experiences in Iraq and Afghanistan.<sup>6</sup> However, doctrine does not provide any concrete references on how much operational tempo will change. This research is intended to fill that gap and provide the Army a quantifiable reference point to assess tempo. Specifically, this article attempts to answer this question: Historically, how much time do



brigade or equivalent staffs have to plan ground offensives in large-scale combat operations? To do this, the author examined the time between a division order and brigade departure in sixty-seven cases from World War II, the Korean War, and the 2003 invasion of Iraq.

Based on the limited data available to this author, the multiple days allowed for offensive planning at the National Training Center (NTC) dwarfs the historical average of fifteen hours. To continue the metaphor, the tempo of historical combat operations demands a unit that can play jazz, but our training centers allow brigades the time to compose a symphony of precise synchronization. This article proceeds in three parts: an extended methodology, a descriptive discussion of the results, and a conclusion with recommendations for training modifications and for future study.

## Methodology

This section discusses the screening criteria used to select comparable historical cases, the method by which each case was processed to limit error, and the sources of error and uncertainty that inevitably persist in the results.

Case screening. Military operations are necessarily diverse, which inhibits comparison among them. The screening criteria used here limit the data set to operations that are reasonably similar to one another to maximize the predictive value of analyzing them as a group. The conflicts chosen were limited to U.S. large-scale combat operations where the predominant form of transportation was motorized and mechanized vehicles. This research only used U.S. operations to minimize the impact of culture and divergent operational thought on the data. Arguably, the U.S. Army in World War II had a very different culture than the U.S. Army today, but that distinction remains smaller than the difference between the United States and Germany or Israel, for example. Removing foreign

**Previous page:** U.S. Army Materiel Command band members (*from left*) Spc. Andrew Webb, Sgt. Clint Brandeu, Sgt. Paul Scherer, and Spc. Michael McGinn perform at Redstone Arsenal's 75th Anniversary and Armed Forces Celebration Week 28 June 2016 with a multimedia performance at Huntsville High School, Huntsville, Alabama. (Photo by Sgt. Eben Boothby, U.S. Army)

case studies presented the simplest option for limiting the influence of cultural factors.

Within U.S. conflicts, this research selected only large-scale combat operations with a conventional threat that occurred after motorized and mechanized vehicles replaced the horse as the primary means of ground transportation. Crisis responses and limited contingency operations (e.g., the 1983 invasion of Grenada) are influenced by a plethora of nonmilitary factors that make a comparison to large-scale combat operations unreasonable. Although arguably large scale, this research also eschews counterinsurgency operations as they do not reflect the exigencies a conventional military adversary poses. Finally, the advent of motorized and mechanized vehicles as the dominant mechanism for ground movement and maneuver represented a revolutionary change in the operational tempo possible. Although technology has continued to improve, this article assumes that the tempo possible in World War II somewhat resembles the tempo possible today, while all prior conflicts are rejected as too dissimilar.8

Thus screened by conflict, the cases are further restricted to orders within a campaign, not orders beginning a campaign. Initial orders, or orders bringing a unit into theater, do not have a discernible starting point; planning may have begun months or years prior to the operation. While planning prior to start of operations may support subsequent orders, this research limited cases to operations where the mission was not known prior to entering the theater, so the military decision-making process (MDMP) or its historical equivalent had to be conducted where contact with the enemy was possible if not continuous.

Finally, the operations used were only ground offensives. Clearly, administrative and movement orders that do not anticipate contact with the enemy do not demand a similar level of planning. By definition, the enemy (the attacking force) has the initiative during defensive operations, and planning only

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truly ceases for the defenders when the enemy makes contact.<sup>9</sup> Stability operations, even in the rear area of a conventional conflict, do not provide comparable data since planning is essentially continuous and because maneuver occurs almost exclusively below the brigade level. Finally, offensive operations involving air assault, airborne, or landing operations require specialized

planning and thus are not comparable to operations that are more mundane.

After winnowing all of the possible data, this research covers World War II, the Korean War, and the 2003 invasion of Iraq. Almost all of the World War II data is from the European theater, since research for this study only yielded one usable data point from Northern Africa. The invasion of Iraq referenced here only extends through 10 April 2003, after which Saddam Hussein's regime collapsed and no conventional threat remained. The Pacific theater of World War II and the Vietnam War include comparatively few cases that fit the above constraints, thus research effort was concentrated elsewhere. Finally, ground

offensive operations in Operation Desert Storm did not substantially extend beyond the initial order and thus did not provide any usable cases for this research.<sup>10</sup>

Data processing. Within the operations selected, this research examined instances of mission planning to determine their length. The division order begins mission planning, and the departure of the first main body element marks the end of planning time available. When both verbal and written orders were given, the earliest time was used to reflect the earliest time the staff could have begun planning. Doctrinally, reconnaissance forces depart prior to planning completion, so their movement did not impact departure times in this research. Sources often left the line of departure unclear, and sometimes movement occurred to another assembly area or attack position prior to actually

Table 1. Standard
Times for Common
Descriptions

Before morning	0300			
Early	0600			
Morning	0800			
Afternoon	1500			
Late afternoon	1600			
Late evening	1800			
Night	2400/0000			

(Table by author)

launching the offensive. In almost all cases, the start of movement was considered departure. Departure was only determined to be after an initial movement when the source clearly indicated that planning or orders publication occurred at a subsequent assembly area. Since divisions command multiple brigade-size elements, a single division order usually covered multiple

units. Each brigade-size element represented a separate data point, even when the division dictated a synchronized attack, so multiple brigades had the same order and departure times.

Historical evolution of naming conventions and extensive task organization changes in World War II and the Korean War muddle recognition of brigade-size elements. 12 For this research, a brigade is defined as a command incorporating two or more maneuver battalions. That definition applied to elements titled brigade, regiment, task force, or combat command. Accordingly, the "division order" may not come directly from a division headquarters but rather may filter through a regiment or other intermediate headquarters. The order time used here is always the time the unit received the order if different from the time the division issued it.

### Uncertainty and error.

Documentation of military conflict necessarily includes some uncertainty. Data points were only included if the source text referenced the time, not just the date, either explicitly or by relation to other events. An order date without an associated time was only accepted when the total period (order to departure) exceeded twenty-four hours. Considering that orders in these cases were most likely published during the day (between 0600 and 1800 hrs.), estimating the order time as 1200 restricted the possible error to six hours. In this way, all data points had a possible estimation error of 25 percent or less of their duration.

Just over half of the data points used had some uncertainty associated with the order time, and a quarter had uncertain departure times. Commonly, the uncertainty stemmed from a descriptive reference to

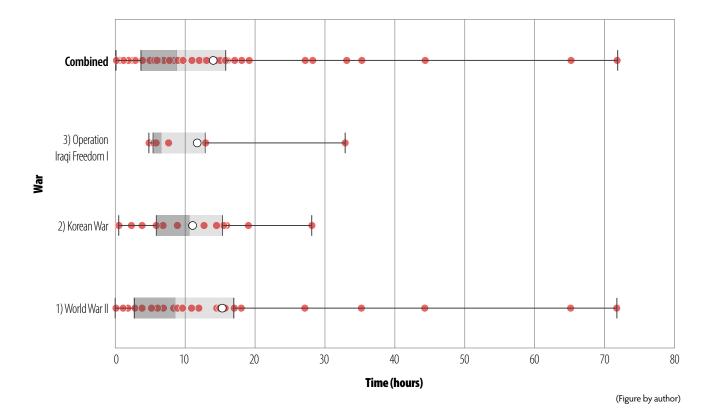


Figure. Box-and-Whisker Chart of Planning by Conflict

time rather than listing the hour (e.g., "morning," "late afternoon," "night," etc.). To mitigate this, the author established a standard for common descriptions (see table 1, on page 50). When the description referenced light data (e.g., "at sunset"), the author used historical light data to approximate the hour.

The data available that met selection standards and the methods used to approximate uncertain times resulted in a level of random error. This research differs from similar efforts primarily because it uses a large sample size to mitigate the influences of random error. However, it is not an exhaustive examination of the historical record.<sup>13</sup> These data, therefore, may have a selection bias, but the direction and magnitude of that bias is currently unknown.

In addition to the random error, the complexities of human interactions insert systematic error. The research methods used here assume no parallel planning occurred, but in reality, commanders often communicate informally about the next operation enabling staffs to begin mission analysis prior to the order. Furthermore, initial planning and preparation

before arriving in theater or during periods of reconsolidation often support planning for later operations. None of this time is accounted for in the data presented. However, BCTs in a combat training center (CTC) rotation have similar opportunities for preparation and parallel planning that are not incorporated in that measured timeline either. This error can be assumed to be approximately equal between training and historical cases. Thus, the relative results remain valid.

### Results

The figure displays the historical results as a boxand-whisker chart by war. The top line shows the combination of all the data points. The shaded box on each data line demarcates the second and third quartiles with the line between the two levels of shading marking the median. The colored dots annotate all of the data points while the big white dot represents the mean. In total, sixty-seven data points are represented with six from Operation Iraqi Freedom (OIF) I, thirteen from the Korean War, and forty-eight from World War II (see table 2 for summarized figures and table 3, pages 54–57, for complete data).

World War II engendered the greatest quantity of available data and displayed the greatest variation. However, the means of all three conflicts are remarkably similar (12.71, 12.22, and 16.19 respectively). As they occurred only five years apart, the technological similarity between World War II and the Korean War corroborates that their tempo should also be similar. Yet Korea

body departure. Applying the "one-third–two-thirds rule" that a brigade staff should not use more than one-third of the time available for its own planning, brigades should be completing MDMP in five hours. <sup>14</sup> Following the same logic, battalions should be completing MDMP in approximately three hours and twenty minutes. The reader should also note the handful of data points wherein the brigade had to depart in under two hours, leaving only minutes to plan.

**Table 2. Summarized Results** 

	Quantity data points	Mean	Median	Minimum	Maximum
World War II	48	16.19	9.75	1.33	72.00
Korean War	13	12.22	12.00	1.75	29.00
Operation Iraqi Freedom	6	12.71	7.88	6.75	33.77
Combined	67	15.10	10.00	1.33	72.00

(Table by author)

and western Europe represent dramatically different terrain, so this data indicates that terrain may not substantially influence operational tempo. Furthermore, the consistency reinforces the idea that past experience may correlate to future experience.

The data set from the 2003 invasion of Iraq (OIF) is simply too small to draw many conclusions, but it remains significant, as OIF was the first and only large-scale combat operation to employ digital battle command systems (e.g., Blue Force Tracking systems). While enormous technological changes have occurred since the Korean War, digital battle command systems represent the greatest paradigm shift in mission planning. The data from Iraq strongly support the conclusion that these systems do not make mission planning longer on average, but it remains unclear whether battle command systems actually increase operational tempo.

All of the data studied here averages to 15.1 hours between division order and brigade main

This research did not analyze when brigades actually produced orders, and thus the author will refrain from making any conclusions on the topic. However, the author generally observed that shorter timelines led to less relative brigade planning. For instance, an after action report from the 36th Armored Regiment in World War II reads, "22 December 1944. At 0445 hrs, CO, Combat Command 'R', returned from Div and issued orders for an attack at 0900 this date." Given only 4.25 hours, the commander issued his orders without taking any additional time to plan, whereas then Col. Perkins in the introductory anecdote used approximately nineteen of his thirty-four hours (55 percent of the available time) for brigade planning. 16 These examples are not given to judge the commanders involved or show a change in planning over time, but rather they simply reinforce that the "one-third-two-thirds rule" is only a rule of thumb that may not be evenly applicable to very short or quite long time scales. Similarly, the



author could not conclusively assess the quality or level of detail available in the division orders. Some appear to have been merely a meeting between division and brigade commanders, either by radio or in person.

The NTC provided the author only one example from a training rotation that showed the BCT in question had eighty-seven hours between division order and main body departure and used fifty-eight of those hours for brigade planning. <sup>17</sup> One data point certainly cannot confirm a trend, yet the mere fact that a presumably typical planning timeline exceeded the longest historical example and was almost six times the historical average indicates that training scenarios do not adequately reflect the time constraints of combat.

### **Conclusion and Recommendations**

ADRP 5-0, *The Operations Process*, acknowledges "taking more time to plan often results in greater synchronization" just before pointing out that taking too much time may yield the initiative. Army doctrine demands units seize, retain, and exploit the initiative, so yielding that initiative in exchange for greater synchronization must be an unacceptable tradeoff. The

Members of the Tennessee Army National Guard's 1st Squadron, 278th Armored Cavalry Regiment, out of Knoxville, Tennessee, formulate a plan of action to move forward toward opposing forces 12 May 2018 during a predeployment exercise at the National Training Center, Fort Irwin, California. (Photo by Sgt. Sarah Kirby, U.S. Army)

results show that our most sophisticated training scenarios provide unrealistically long planning timelines. Presumably, the increased time does lead to greater synchronization. Therefore, in execution, all elements in the brigade benefit from that synchronization.

In essence, our brigades train as if they are symphony orchestras with each instrument following their own sheet of music telling them when and how to come in and when to fade into the background. In combat, those symphony orchestras have to become jazz bands that can harmonize in the middle of the music. Perhaps in the initial stages of home-station training, highly synchronized plans are necessary to establish a level of competence while limiting risk. However, at a brigade's last performance before combat, they should be playing jazz not orchestrating a symphony.

**Table 3. Complete Data** 

Conflict	Division	Brigade	Order (date/time)	Departure (date/time)	Order unclear	Departure unclear	Time available	Citation
1) WWII	9th Infantry	47th Infantry	3/27/43 16:00	3/28/43 5:00	N	Y	13.0	Headquarters 9th Infantry Division, "Report on Operation Conducted by 9th Infantry Division, United States Army, Southern Tunisia," 26 March – 8 April 1943, 33 and 14.
1) WWII	9th Infantry	47th Infantry	4/20/43 12:00	4/23/43 5:30	Υ	N	65.5	lbid., 86 and 64.
1) WWII	9th Infantry	39th Infantry	4/20/43 12:00	4/23/43 5:30	Υ	N	65.5	lbid.
1) WWII	9th Infantry	60th Infantry	4/20/43 12:00	4/23/43 5:30	Y	N	65.5	lbid.
1) WWII	9th Infantry	47th Infantry	5/5/43 20:00	5/6/43 6:00	N	Y	10.0	lbid., 97 and 71.
1) WWII	2nd Armored	CCA	7/21/43 18:00	7/22/43 6:00	Y	N	12.0	Headquarters 2nd Armored Division, "Historical Record - Operations of U.S. Second Armored Division (Kool Force)," 22 April - 25 July 1943, 8–9.
1) WWII	5th Armored	CCA	8/2/44 11:00	8/2/44 16:00	N	Y	5.0	Vic Hillery and Emerson Hurley, Paths of Armor: The Fifth Armored Division in World War II, (Battery Press, 1986), 46—47.
1) WWII	5th Armored	ССВ	8/2/44 11:00	8/2/44 16:00	N	Y	5.0	lbid.
1) WWII	5th Armored	CCA	8/6/44 14:30	8/7/44 0:00	N	Υ	9.5	lbid., 50.
1) WWII	5th Armored	ССВ	8/6/44 14:30	8/7/44 0:00	N	Υ	9.5	lbid.
1) WWII	28th Infantry	Task Force A	8/9/44 17:00	8/10/44 3:00	N	N	10.0	Headquarters 66th Armored Regiment, AAR #586U, "After Action Report 66th Armd Regiment 2nd Armored Division," August 1944 – May 1945, 9.
1) WWII	5th Armored	CCA	8/9/44 17:40	8/9/44 20:00	N	N	2.3	Hillery and Hurley, <i>Paths of Armor</i> , 57–58.
1) WWII	5th Armored	ССВ	8/9/44 17:40	8/10/44 0:00	N	N	6.3	lbid.
1) WWII	5th Armored	CCA	8/11/44 19:45	8/12/44 6:30	N	Υ	10.8	lbid.
1) WWII	5th Armored	CCR	8/11/44 19:45	8/12/44 6:30	N	Υ	10.8	lbid.
1) WWII	5th Armored	CCA	8/14/44 22:00	8/15/44 16:00	N	N	18.0	lbid., 66–68.
1) WWII	5th Armored	ССВ	8/14/44 22:00	8/15/44 16:00	N	N	18.0	lbid.
1) WWII	5th Armored	CCR	8/14/44 22:00	8/15/44 16:00	N	N	18.0	lbid.
1) WWII	5th Armored	CCA	8/18/44 8:00	8/18/44 12:00	Υ	N	4.0	lbid., 72.
1) WWII	5th Armored	ССВ	8/18/44 8:00	8/18/44 12:00	Υ	N	4.0	lbid.

(Table by author)

# **Table 3. Complete Data (continued)**

Conflict	Division	Brigade	Order	Departure	Order	Departure	Time	Citation
			(date/time)	(date/time)	unclear	unclear	available	
1) WWII	5th Armored	CCA	8/20/44 0:00	8/20/44 9:30	Y	N	9.5	lbid., 75.
1) WWII	5th Armored	ССВ	8/20/44 0:00	8/20/44 9:30	Y	N	9.5	lbid.
1) WWII	5th Armored	CCA	9/13/44 12:00	9/13/44 15:00	Y	N	3.0	lbid., 117.
1) WWII	5th Armored	CCB	9/13/44 12:00	9/13/44 15:00	Υ	N	3.0	lbid.
1) WWII	5th Armored	CCR	9/13/44 12:00	9/13/44 15:00	Υ	N	3.0	lbid.
1) WWII	5th Armored	CCR	9/13/44 19:25	9/14/44 11:00	Υ	N	15.6	lbid., 117–8.
1) WWII	5th Armored	ССВ	9/16/44 8:00	9/16/44 16:00	Υ	Υ	8.0	lbid., 121.
1) WWII	3rd Armored	36th Infantry	12/7/447:30	12/10/447:30	Y	N	72.0	Headquarters 36th Armored Regiment, AAR# 379-U, "After Action Report 36th Armored Inf. Regt. 3rd Armored Division", November 1944 - April 1945, 21—22.
1) WWII	3rd Armored	CCR	12/22/44 4:45	12/22/44 9:00	N	N	4.2	lbid., 26.
1) WWII	5th Armored	CCA	1/28/45 12:00	1/30/45 0:00	Υ	Υ	36.0	Hillery and Hurley, <i>Paths of Armor</i> , 219.
1) WWII	5th Armored	CCB	2/25/45 8:00	2/26/45 12:00	Υ	N	28.0	Ibid., 224.
1) WWII	3rd Armored	CCR	2/25/45 9:35	2/27/45 6:30	N	Y	44.9	"After Action Report 36th Armored Inf. Regt.," 68–70.
1) WWII	3rd Armored	CCB	2/25/45 9:35	2/27/45 6:30	N	Υ	44.9	lbid.
1) WWII	5th Armored	CCA	2/28/45 12:00	3/1/45 7:10	Υ	N	19.2	Hillery and Hurley, <i>Paths of Armor</i> , 234.
1) WWII	3rd Armored	Task Force Richardson	3/20/45 13:00	3/21/45 6:00	Υ	N	17.0	"After Action Report 36th Armored Inf. Regt.," 83–84.
1) WWII	3rd Armored	CCB	4/5/45 8:15	4/5/45 12:00	N	N	3.8	lbid., 98–99.
1) WWII	3rd Armored	CCA	4/5/45 8:15	4/5/45 12:20	N	N	4.1	lbid.
1) WWII	3rd Armored	CCR	4/7/45 16:00	4/8/45 11:00	N	N	19.0	lbid., 100.
1) WWII	3rd Armored	CCR	4/8/45 22:00	4/9/45 0:00	N	N	2.0	lbid., 100–1.
1) WWII	3rd Armored	Task Force Hogan	4/9/45 14:40	4/9/45 16:00	N	N	1.3	lbid., 102.
1) WWII	3rd Armored	Task Force Hogan	4/10/45 22:50	4/11/45 6:00	N	N	7.2	lbid., 103–4.
1) WWII	3rd Armored	Task Force Richardson	4/10/45 22:50	4/11/45 6:00	N	N	7.2	lbid.
1) WWII	3rd Armored	Task Force Hogan	4/11/45 15:00	4/12/45 7:44	Υ	N	16.7	lbid., 105.

(Table by author)

**Table 3. Complete Data (continued)** 

Conflict	Division	Brigade	Order (date/time)	Departure (date/time)	Order unclear	Departure unclear	Time available	Citation
1) WWII	3rd Armored	Task Force Richardson	4/11/45 15:00	4/12/45 7:00	Y	N	16.0	lbid.
1) WWII	3rd Armored	Task Force Richardson	4/12/45 18:00	4/13/45 4:00	Y	N	10.0	lbid., 106.
1) WWII	3rd Armored	Task Force Richardson	4/15/45 13:00	4/15/45 16:15	N	N	3.2	lbid., 105.
1) WWII	3rd Armored	Task Force Richardson	4/17/45 10:00	4/17/45 14:00	N	N	4.0	lbid., 112.
1) WWII	3rd Armored	Task Force Hogan	4/19/45 11:00	4/19/45 13:15	N	N	2.3	lbid., 115
2) Korean War	8th Army	27th Infantry Regiment	8/18/50 8:00	8/18/50 13:00	Y	N	5.0	Roy E. Appleman, <i>South to the Naktong, North to the Yalu</i> (Washington, DC: U.S. Government Printing Office, 1961), 354–55.
2) Korean War	1st Cavalry	23rd Infantry Regiment	8/23/50 0:00	8/23/50 6:00	Y	Y	6.0	lbid., 361–62.
2) Korean War	25th Division	24th Infantry	9/2/50 14:45	9/2/50 16:30	N	N	1.8	lbid., 480.
2) Korean War	2nd Division	5th Marines	9/2/50 16:00	9/3/50 8:55	Y	N	16.9	lbid., 462–64.
2) Korean War	1st Cavalry	7th Cavalry	9/21/50 0:00	9/21/50 8:00	N	Y	8.0	lbid., 566.
2) Korean War	1st Cavalry	Task Force 777	9/21/50 3:00	9/22/50 8:00	Y	N	29.0	lbid., 589–91.
2) Korean War	25th Division	27th Infantry Regiment	9/23/50 12:00	9/24/50 8:00	Y	Y	20.0	lbid., 574.
2) Korean War	1st Marine Division	5th Marines	9/23/50 22:00	9/24/50 8:00	N	Y	10.0	lbid., 526.
2) Korean War	7th Division	32nd Infantry	9/24/50 14:00	9/25/50 6:30	N	N	16.5	lbid., 528–30.
2) Korean War	1st Cavalry	Task Force 777	9/26/50 8:00	9/26/50 11:30	Y	N	3.5	lbid., 593.
2) Korean War	1st Cavalry	7th Cavalry	10/17/50 17:00	10/18/50 6:45	Y	N	13.8	lbid., 647.
2) Korean War	1st Cavalry	5th Cavalry	10/18/50 17:00	10/19/50 5:00	Y	N	12.0	lbid., 648.
2) Korean War	24th Division	21st Infantry	11/4/50 16:30	11/5/50 8:00	N	Υ	15.5	lbid., 711–12.

(Table by author)

**Table 3. Complete Data (continued)** 

Conflict	Division	Brigade	Order (date/time)	Departure (date/time)	Order unclear	Departure unclear	Time available	Citation
3) OIF I	3rd Infantry	1 BCT	3/24/03 18:00	3/25/03 0:00	Y	N	6.0	Gregory Fontenot, E. J. Degen, and David Tohn, <i>On Point: United States Army in</i> <i>Operation Iraqi Freedom</i> (Fort Leaven- worth, KS: Combat Studies Institute Press, 2004), 196—98.
3) OIF I	3rd Infantry	3 BCT	3/31/03 17:15	4/1/03 0:00	Υ	N	6.8	lbid., 282–86.
3) OIF I	3rd Infantry	1 BCT	3/31/03 17:15	4/1/03 2:00	Υ	N	8.8	lbid.
3) OIF I	3rd Infantry	1 BCT	4/3/03 8:00	4/3/03 15:00	Υ	N	7.0	lbid., 300-2.
3) OIF I	3rd Infantry	2 BCT	4/4/03 16:00	4/5/03 6:00	N	N	14.0	Anthony Carlson, "Thunder Run in Baghdad, 2003," in <i>Mission Command in</i> the 21st Century: Empowering to Win in a Complex World, ed. Nathan K. Finney and Jonathan P. Klug, (Fort Leavenworth, KS: The Army Press, 2016), 95—96.
3) OIF I	3rd Infantry	2 BCT	4/5/03 18:00	4/7/03 3:46	Y	N	33.8	Carlson, "Thunder Run in Baghdad, 2003," 97; Jim Lacey, <i>Takedown: The 3rd Infantry Division's Twenty-One Day Assault on Baghdad</i> (Annapolis, MD: Naval Institute Press, 2007), 238.

(Table by author)

Late in 2002, the 3rd Infantry Division deployed to Kuwait where they conducted months of intense maneuver and live-fire training in preparation for the impending invasion. Perkins later reflected that mission command "requires a lot of training" and "a lot of dialogue between commanders" to gain "common visualizations," and the time his brigade spent in Kuwait proved invaluable if not necessary for the tempo of combat they experienced while invading Iraq.20 Common visualizations allow a commander to give minimal guidance yet share an understanding with his or her subordinates of how that mission will be executed. Since many BCTs can only train as a brigade at a CTC, that time may not be sufficient to develop the common visualizations needed for "jazz." NTC claims in its mission to prepare units for combat, yet this research undermines the conclusion that a CTC rotation is sufficient to prepare a brigade for the tempo of large-scale offensive operations. So how much more time would a BCT need to be truly ready for an impending conflict?

More training would streamline a given staff or unit but cannot be considered a panacea. Aside from the impracticalities of brigades spending more time at CTCs in peacetime or having the opportunity to train specifically for an expected conflict, turnover and battlefield attrition inevitably disrupt the most efficient teams. As discussed above, rapid planning is not merely the same steps done faster but should be considered qualitatively different. Current doctrine is agnostic towards time, allowing planning processes to adjust the level of detail to the time available. Simply requiring training exercises with less time available (e.g., departure on a movement to contact required within ten hours of the division order) would catalyze adaptations to streamline MDMP and build confidence when facing the ambiguity associated with rapid planning.

The skills and events associated with developing highly detailed plans and preparations—the "symphonies"—cannot be abandoned. Indeed, they should retain a prominent place in the American way of war. Operations



like Desert Storm and Overlord relied upon such careful orchestration, as do many specialized operations such as those associated with airborne and air assault missions that this research did not study. Rather, staffs at all echelons should recognize that future operations are likely to require rapid planning—"jazz"—more often than detailed planning and should train accordingly.

Shrinking time available for planning applies not only to CTCs but also to Army centers of excellence. Applying time restrictions to culminating exercises that are reasonably rigorous compared to the historical time available would encourage officers not only to complete products but also to apply sound judgment in prioritizing those products and in assuming risk when time constrained. And perhaps more significant, basing time standards off the data presented here or off other, similar historical precedents would normalize perceptions of time among centers of excellence.

While more than sufficient to identify a discrepancy between training and historical timelines, this data could be substantially improved by including more conflicts and data points in each conflict. In particular, primary source documents for World War II and the Korean

A Georgia National Guard soldier from the 48th Infantry Brigade Combat Team prepares a sand table in a field environment 12 May 2018 during Joint Readiness Training Center (JRTC) rotation 18-07 in Fort Polk, Louisiana. (Photo by JRTC Operations Group Public Affairs)

War (e.g., after action reports, operations reports, etc.) exist but are difficult to access. Future research could use these to increase the fidelity of data from those conflicts. Studying foreign conflicts since 1950, including the Arab-Israeli conflicts, may give further insight into how improving technology has influenced operational tempo. Foreign cases may reveal whether other militaries tend to conduct operations faster than the United States does. Finally, examining a larger data set on mission planning from our CTCs would provide better context for this research and may provide insights into how brigade planning changes with shorter or longer times available. All of this research would refine the training recommendations presented here and, thereby, could make our training more realistic and our brigades better prepared for large-scale conflict.

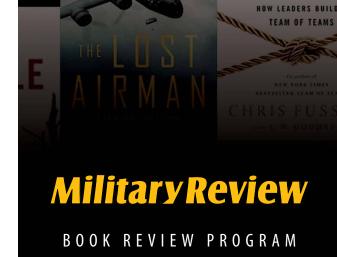
### **Notes**

1. Anthony Carlson, "Thunder Run in Baghdad, 2003," in *Mission Command in the 21st Century: Empowering to Win in a Complex World*, ed. Nathan K. Finney and Jonathan P. Klug (Fort Leavenworth, KS: The Army Press, 2016), 97.

2. 2nd BCT, 3ID, FRAGO 20 to OPORD 03-09 A, 6 April 2003. A FRAGO, or fragmentary order, is an abridged version of an OPORD, or operation order, used to relay changes to an original OPORD or when required for expediency. In FRAGO 20, five paragraphs of the order are contained within the first two pages. A third page is used for an execution matrix, and a target list occupied the fourth. Operations graphics also accompanied the order.

3. Jim Lacey, *Takedown: The 3rd Infantry Division's Twenty-One Day Assault on Baghdad* (Annapolis, MD: Naval Institute Press, 2007), 238. The last offensive occurred on 10 April when 3rd BCT attacked against weak resistance from north of Baghdad to link up with 2nd BCT downtown; Gregory Fontenot, E. J. Degen, and David Tohn, *On Point: United States Army in Operation Iraqi Freedom* (Fort Leavenworth, KS: Combat Studies Institute Press, 2004), 377. Although other large-scale offensives occurred throughout Operations Iraqi Freedom, Enduring Freedom, and New Dawn, their enemy remained entirely irregular in nature. 10 April 2003 remains the last time the U.S. Army fought in combat against a nation-state actor with a regular military force.

- 4. Fontenot, Degen, and Tohn, On Point, 378.
- 5. David Perkins, "April 7th Thunder Run," (video teleconference with 5th Squadron, 7th Cavalry Regiment leaders, Fort Stewart, GA, May 2017).
- 6. Field Manual (FM) 3-0, Operations (Washington, DC: U.S. Government Publishing Office [GPO], October 2017), 1-3.
- 7. National Training Center (NTC) Operations Group Plans Team 2, email message to author,  $14 \, \text{February} \, 2018$ .
- 8. Aviation and other technologies that have proven to be force multipliers for ground forces are not used as screening criteria because they only indirectly influence the possible operational tempo. In contrast, the transition from the horse to motorized and mechanized vehicles changed the tempo physically possible for a ground force. Although this point is certainly arguable, it is beyond the scope of this article.
- 9.  $\bar{F}M$  3-90-1, Offense and Defense Volume 1 (Washington, DC: U.S. Government Printing Office, March 2013), 6-1.
- 10. 24th Mechanized Infantry Division Combat Team Historical Reference Book (Fort Stewart, GA: Headquarters of the 24th Infantry Division, 1992), 67 and 69. The 24th Infantry Division is assumed to be representative of all ground divisions in Operation Desert Storm. The final order prior to the invasion was given on 23 February 1991 and was followed only by an order on 6 March for reconnaissance of egress routes from Iraq. This shows that no offensives were planned after the invasion began.
- 11. FM 3-98, Reconnaissance and Security Operations (Washington, DC: U.S. GPO, July 2015), 4-15; see also Army Techniques Publication 3-20.96, Cavalry Squadron (Washington, DC: U.S. GPO, May 2016), 2-5-2-6.
- 12. Units during these wars were not organically combined arms. Task organization usually resulted in a combined arms formation with varying combinations of infantry and armor forces.
- 13. Many primary sources for World War II and the Korean War are not digitized. This author did not have the resources available to access these documents physically.
- 14. Army Doctrine Reference Publication (ADRP) 5-0, *The Operations Process* (Washington, DC: U.S. Government Printing Office, May 2012), 2-23.
- 15. Headquarters 36th Armored Regiment, AAR# 379-U, "After Action Report 36th Armored Inf. Regt. 3rd Armored Division", November 1944–April 1945, 26. The order in this case was likely delayed to avoid extraneous events during the night, and the staff also likely published a warning order to mitigate the impacts of a later order. The official accounts currently available cannot confirm or deny any of this. However, these speculations only reinforce that longer timelines provide commanders more opportunity to manipulate planning timelines beyond one third of the time available.
  - 16. Carlson, "Thunder Run," 97; Lacey, Takedown, 238.
  - 17. NTC Operations Group Plans Team 2, email message to author, 14 February 2018.
  - 18. ADRP 5-0, The Operations Process, 2-23.
  - 19. FM 3-0, Operations, 1-16.
- 20. Lt. Gen. David Perkins, interview by Tony Carlson and Kelvin Crow, "Operational Leadership Experiences in the Global War on Terrorism," Combat Studies Institute, 6 May 2013.



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