DOMINATING DUFFER'S DOMAIN

Lessons for the U.S. Marine Corps Information Operations Practitioner

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Preface

This report is written in the style and tradition of an important military teaching text: *The Defence of Duffer's Drift*.[1] Written by Major General Sir Ernest Swinton in 1904 based on his experience as a field-grade officer during the Boer War, *Duffer's Drift* became a military classic over the course of the following century because it so effectively taught principles of tactical defense. In Swinton's text, the fictional narrator, Lieutenant Backsight Foresight, experiences a series of six dreams; in each, he is charged with the same mission (the defense of Duffer's Drift), and in each (save the last) he fails spectacularly, though in new and different ways, having learned from each of the previous failures until he is finally, before awakening, successful.

The Marine Corps Combat Development Command (MCDDC) republished *The Defense of Duffer's Drift* in 1989, framing the work as a still relevant classic because of four features: (1) its "simplistic style"; (2) its "satirical nature," which provides "a humorous look at how not to employ one's troops"; (3) how it shows the "tactical principles in every operation"; and (4) how it "illustrates the tragic results of ignoring such principles."[2]

We agree with MCDDC's assessment and add that using narrative to show what not to do, followed by a demonstration of the correct application of principles, is a particularly compelling and sound teaching method. Thus, for important rhetorical and pedagogical reasons, this document is different from most RAND publications. It follows narrative conventions and uses the vernacular language of its primary audience in the U.S. Marine Corps. We hope this *Duffer's Drift*–inspired text does for information operations (IO) what the original did for defensive tactics: effectively communicate timeless principles while also persuading readers of "the tragic results of ignoring such principles."[3]

The target audience for this piece of instructional fiction are Marines with current or future IO responsibilities and at least some understanding of Marine Expeditionary Unit (MEU) staffing processes: captains (O-3) or above, chief warrant officers (CWO-3 to CWO-5), or master sergeants or master gunnery sergeants. Secondary audiences include even more senior personnel with other staff roles (up to and including commanders) who may ben-

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[1] Originally published by Ernest Dunlop Swinton, *The Defence of Duffer's Drift*, London: W. Clowes and Sons, 1904, but republished in many forms since.

[2] U.S. Marine Corps, *The Defense of Duffer's Drift*, Quantico, Va., Fleet Marine Force Reference Publication 12-33, April 13, 1989, Foreword.

[3] In addition to the long legacy of the original (still used in military education and training today), numerous *Duffer's Drift*–inspired texts have emerged and have proven useful training aides in a number of military specialties, including tactical counterinsurgency, tactical urban operations, and logistics. See for example, Russell W. Glenn, *An Attack on Duffer's Downtown*, Santa Monica, Calif.: RAND Corporation, P-8058-1, 2001; Reginald Scott, *The Defense of Duffer's Drift Brigade Support Area*, Washington, D.C.: U.S. Army, Institute of Land Warfare, 2001; and Center for Army Lessons Learned, *Nightmare on Wazir Street*, Newsletter 08-39, June 2008.

efit from a better understanding of how IO should work and what it should contribute to planning and operations, as well as IO personnel from other services and from the militaries of partner countries.

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Executive Summary

This is the account of fictitious narrator Captain I. N. Hindsight as he dreams of planning and integrating information operations (IO) in support of a mission in the notional country of Centralia. It intentionally mirrors the narrative style of the classic *The Defence of Duffer's Drift* and documents Captain Hindsight's efforts, and the things that go wrong, over the iterative course of six dreams. Hindsight offers the lessons he learns from these failures and shows how he incorporates the lessons from each consecutive dream before failing again. By the end of the sixth dream, Hindsight succeeds because he has learned 26 hard-won lessons that readers may find useful for the future conduct and planning of IO.

The principles espoused here were derived from nearly a decade of research on IO by the lead author. These principles were selected from a longer list of candidate lessons in consultation with several IO professionals. We have chosen not to provide source citations for each lesson both to adhere to the stylistic conventions of *Duffer's Drift* and to allow readers to make up their own minds about the utility of the lessons. Ultimately, instructional fiction in this style is successful when the elements of the vignettes ring true to the reader as things that could happen and when the lessons offered are credible as effective solutions not only to the challenges faced by the fictional narrator but also to that class of problem, should something similar ever beset the reader. The elements of the instructional vignettes themselves are drawn from events that have occurred during actual historical operations, could have occurred in those operations, or were identified through wargaming, contingency planning, or (yes) hindsight.

Captain Hindsight's 26 lessons are as follows:

1. Effective information operations cannot be an afterthought. If IO is part of planning, it is more likely to be part of the plan.
2. If effects in and through the information environment are important to the commander, they should feature prominently in commander's intent.
3. Maneuver and fires generate effects in the information environment, too.
4. Plan for friendly-force mistakes and adversary propaganda.
5. All communications are potentially global. What you do and say here can have effects elsewhere, and vice versa.
6. IO is like fire-support coordination; it is an integrating function, not itself an information-producing/affecting capability.
7. One information-related capability by itself produces minimal effects and risks being overwhelmed by others or other lines of operation.
8. Information-related capabilities that are not part of the IO concept of support may still be active; ensure that all information-related capability operators are aware of IO plans and that all plans are deconflicted, at a minimum.

9. Information-related capabilities can have lengthy timelines, for both execution and results.
10. Events do not always unfold according to plan, so prepare IO branches and sequels.
11. Warfare—including information warfare—involves trade-offs.
12. The efforts planned and coordinated by IO need to be monitored and assessed; otherwise, you're shooting in the dark.
13. IO is not well understood in the force.
14. Success in IO requires prioritizing intelligence support for IO.
15. IO objectives must be clear and precise.
16. Good deeds do not speak for themselves.
17. Do not assume that changing attitudes will change behaviors.
18. Consider the information environment from the population's perspective.
19. Things do not always happen for the reasons you think; causation can be complicated when behaviors, perceptions, cognition, and culture are involved.
20. Fail fast. Quickly try, quickly monitor results, and quickly adjust assumptions and efforts accordingly.
21. Every operation is an information operation.
22. IO can deliver effects on enemy forces and commanders, as well as on civilian populations.
23. Adversaries can do things that you cannot. Be prepared for them.
24. Information-related capabilities that are not well integrated with operations are vulnerable to being overwhelmed.
25. It can take years to build credibility but only minutes to tear it down.
26. Sometimes, the most important cognitive, informational, mental, or moral effect is the one you avoid.

Abbreviations

CA	civil affairs
COA	course of action
D-day	the unnamed day on which a particular operation commences or is to commence
EMSO	electromagnetic spectrum operations
H-hour	the specific hour on D-day at which a particular operation commences
IO	information operations
MAGTF	Marine Air Ground Task Force
MCDDC	Marine Corps Combat Development Command
MCDP	Marine Corps Doctrinal Publication
MCIOC	Marine Corps Information Operations Center
MEU	Marine Expeditionary Unit
MISO	military information support operations
NCO	noncommissioned officer
OPSEC	operations security
POTUS	President of the United States of America
S-2	intelligence staff officer, staff section
USMC	U.S. Marine Corps

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Foreword

I stumbled back to our berthing to watch a movie after a heavy meal in the wardroom. Leaden from good Navy chow, I instead almost immediately passed out in my rack and proceeded to have a curious sequence of six dreams. In each, I was the MEU's information operations officer at the beginning of an operation. The locale and operation were the same in each dream, but I had no recollection of previous dreams other than specific lessons learned from my errors in judgment. In each subsequent dream I thus fared slightly better, until I was eventually able to succeed in carrying out my role in support of the mission.

The location of the dreams was unrecognizable to me and was both perfectly realistic and wholly unlike anywhere I have ever been. I will therefore refer to our area of operations as "Centralia" and its aggressive neighbor as "Montanya," drawing from the names of the host nation and the opposing force used in instructional exercises at The Basic School and so familiar to many of my fellow Marines.

I was able to recall the entire sequence when I woke from the final dream, remembering not just the valuable lessons but also the experiences that had led me to learn them. I have faithfully recorded these dreams here in the hope that others might benefit from them. I have gone back through these accounts and expanded most of the many acronyms that I used so that a reader with a different background than my own might more easily follow my account.

Capt. I. N. Hindsight, USMC

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THE FIRST DREAM

A Failure to Plan Information Operations

I was a little sad, watching the rest of the MEU staff, many of them my peers and friends from the battalion, scurrying about in such an active frenzy. The MEU was preparing to conduct an amphibious landing on the coast of Centralia, and the planning process was in high gear. We were to conduct a humanitarian mission in response to massive flooding across the coastal areas of the country. But we were also to partner with local forces to deter aggression from their neighbors in the country of Montanya. The humanitarian crisis in Centralia was just the sort of excuse the Montanyans had been looking for, and they were threatening to use the pretext of "defending" ethnic Montanyans from imagined persecution by Centralians as justification for a land grab.

Things were pretty hectic throughout the staff right then—feverish planning and little sleep as the scheme of maneuver, intelligence preparation of the battlefield, coordination of fires, and such were hammered out. I, on the other hand, felt somewhat guilty. IO (information operations) weren't exactly the commander's priority—in fact, writing up Appendix 3 to Annex C of the plan was something I did entirely on my own—and I think the operational planning team lead was sort of surprised that I did it. And, to be frank, it wasn't that hard. I had done the ten-day Intermediate MAGTF (Marine Air Ground Task Force) Information Operations Practitioner Course, and if anyone was prepared to write that appendix, I was. It wasn't the most substantial document in the world. I pretty much copied and pasted the Annex B Intelligence section on the enemy situation, the friendly situation was somewhat notional, and the IO concept of support was only a paragraph, with no phases. It was, however, beautifully formatted, and the task listing had everything: military deception, electronic warfare, OPSEC (operations security), MISO (military information support operations), and so on. It looked very professional.

So I had plenty of time to get ready for the real show. No doubt once we were ashore I would be very busy coordinating and liaising and whatnot, so I took time now to eat good chow, work out, catch up on rack time—to get myself ready. But H-hour on D-day finally came, and I along with everyone else eagerly awaited the news as MEU forces took the beach and moved inland.

Local tides dictated an evening landing. There was quite a sense of excitement when we first received word that the landing was opposed. Reconnaissance on the beach two nights before showed that there was an unoccupied complex of buildings on the dunes, but during the landing, small arms and rocket fire was reported from these buildings. Intelligence had indicated that there was the possibility of local extremists friendly to the Montanyan cause, and the Marine response to them was swift. Direct-fire crew-served weapons, combined with mortar fire, put those hostiles on the old "horns of a dilemma" and silenced them almost instantly. Grins were fierce outside the combat operations center.

The grins disappeared with further reports. My heart sank after the Marines surged into the complex to find that they had just obliterated a wedding—the gunfire and "rockets" were celebratory, not hostile. More SITREPs (situation reports) came in—two dead; no, three dead. Finally, confirmation of five local civilians dead, three of them children from the same mortar round. At least 19 civilians wounded, with some having fled the site. As I thought about how we—how I—had failed to think through coordination with local government, how the focus of planning had been the scheme of the maneuver and force protection, with no thought to the possible effects in and through the information environment, I grew sick to my stomach. It was my job to think about how information affects the moral and mental and not just the physical,[1] how it could support or undermine our operations and to insist that others on the staff give this due consideration. I had completely failed.

That was a long, awful night, and the next day was worse. BBC and other news outlets were broadcasting a constant stream of increasingly horrible outcomes. The District Administrator released a statement condemning "the violent attack on the peace-loving people" of his district, characterizing it as an attack from the ethnically Centralian capital. Mobile phone footage emerged of "the Wedding Massacre," as it became known, with one central image dominating: a shrieking, sobbing mother on her knees, clutching the shattered body of her child while she rocked back and forth, blood staining her robe and streaking her hands.

That was always the thing I came back to—that woman holding her child's body and the raw agony of her wails. There were other outcomes of course, worse and worse in terms of the mission. A small regional extremist group, *The Truth*, was immediately able to launch a highly effective propaganda campaign, using the Wedding Massacre as proof of the central government's ill will toward ethnic Montanyans and an American role in support of genocide. As international condemnation rolled in, we were forced to pull out just as the insurgency picked up steam and Montanyan forces massed at the border. Not four hours after we embarked, a Montanyan mechanized battalion crossed into Centralia to establish an "ethnic justice and protection zone" in the district. Given the low international (and domestic) opinion of the United States and the U.S. Marine Corps, this was widely seen as a justified act.

But as bad as all that was—and I was now painfully aware of the strategic consequences of our, of *my*, failure—I still kept coming back to the woman on her knees, with her child's blood all over her. I would be trying to sleep, to eat, and there she was again, sobbing and rocking. Those were some of the worst weeks of my life, and perhaps no moment more excruciating than waiting outside the Old Man's hatch, while the operations officer was dressed down, reamed out, and relieved. I couldn't hear the exact words, but the cadence through the thin bulkhead was unmistakable, and then it was my turn. I don't remember all that the commander had to say. I was locked up at the position of attention so long I started to lose my balance—the deck felt pitched over at 45 degrees while I stood there staring straight ahead. I do remember him telling me that he was at fault too, that he was likely to be relieved, "but you know what, son? I wouldn't trust you to hand out basketballs at Camp Lejeune, and you'll be lucky if you're even tapped to do that, if I have anything to say about it."

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[1] MCDP-1, *Warfighting*, counsels us that "war is characterized by the interaction of physical, moral, and mental forces."

Lessons from the First Dream

As I faded from dreaming back toward sleeping, I reflected on this terrible experience, gathering the following observations and lessons:

1. **Effective information operations cannot be an afterthought. If IO is part of planning, it is more likely to be part of the plan.**

My IO plan had been insubstantial and not an important part of the operation's plan. No one on the staff, including myself, had given serious consideration to cognitive, informational, moral, or mental issues. I should have been more thoughtful about possible effects in and through the information environment, and I should have been more assertive about this relationship when communicating with the rest of the staff.

2. **If effects in and through the information environment are important to the commander, they should feature prominently in commander's intent.**

The MEU staff and the commander were focused on the scheme of fire and maneuver for the landing and not much else. I should have found a way to force cognitive and information considerations into the planning process. If commander's intent had included anything about the information environment or the moral or mental aspects of the operation, more of the staff would have been more inclined to orient to IO issues. I should have pushed the operational planning team lead for a clear statement of the cognitive aspects of the desired end state and offered a list of possibilities for consideration.

3. **Maneuver and fires generate effects in the information environment, too.**

I failed to arrange for any messaging or broadcasts to accompany or precede our landing, and our actions ended up speaking for themselves. In fact, those actions ended up having a much greater impact on the information environment than any traditional information-related capability (like electronic warfare or MISO) was likely to have had. Not only is every Marine a rifleman and every Marine a sensor, but every Marine is a potential source of influence (positive or negative). I should have arranged to support the landing with efforts to reduce the civilian presence, and I should have found some way to prepare our Marines to balance the need for force protection with the need to maintain goodwill.

4. **Plan for friendly-force mistakes and adversary propaganda.**

Some mistakes can be avoided, but some are unavoidable. The MEU made a grievous mistake in firing on the wedding, but we were also unprepared for the reverberations in propaganda and the news media. I should have made sure that there were response and mitigation plans to cover a range of possible crises, accidents, and mistakes. These plans should have included timelines, designated spokespersons, and preapproved messages, at the least.

5. All communications are potentially global. What you do and say here can have effects elsewhere, and vice versa.

Our mistake on the beach quickly resounded throughout Centralia and around the world. The effects of that local tragedy brought us local, national, and international condemnation and ended our mission in failure practically before it had begun. I need to remember that the stakes are high in IO and that communication technology knows no boundaries. General Krulak's "strategic corporal" is alive and well.

THE SECOND DREAM

This IO Stuff Is Harder Than It Looks

The details of the first dream faded from memory, leaving only the five lessons I had intuited behind. I tossed in my sleep and slipped into a second, similar dream. Again I dreamed of the humanitarian crisis in Centralia, the threat of invasion from Montanya, and the MEU called in to provide both humanitarian and security cooperation support. While the exact same operational details all seemed new and fresh to me, the difference was that I had retained the lessons of the previous dream—most powerfully, the need to integrate IO with broader planning.

Thoroughly convinced of the importance of the information environment to the mission, I set to the task of inserting myself, and IO, into the planning process with the intention of it receiving the same level of consideration as fires and maneuver. This was no easy task, though. I was not an expected regular at operational planning team meetings, and as a newcomer and a relatively junior captain it was not easy for me to bang the table. The planning lead showed little patience with me, suggesting that I convene my IO working group somewhere else and limit my input to a few summary slides. I agreed that I would do so but respectfully and forcefully requested continued regular participation in the operational planning team because IO planning—or failing to plan—could be just as consequential for this mission as maneuver and force protection. To my pleasant surprise the staff intelligence officer, the S-2, spoke up on my behalf. While the planning lead gave me a look that let me know I needed to be careful about overstepping my bounds, we agreed on the need to integrate IO into the overall planning process, and not just as a parallel effort to provide input to proposed courses of action. Ultimately, some of the information environment–related language I suggested ended up making it into the MEU concept of operations and the revised statement of commander's intent.

I was frantically busy from there like the rest of the MEU staff. I gathered reps from the various information-related capabilities to be part of my working group so I could tell them what I needed from each of them. Working with the intelligence staff, we were able to set up a red cell with some of our more creative NCOs to wargame possible contingencies during the landing and follow-on operations. I tasked the public affairs officer with working on response plans and sharing some of the contingencies we'd red-teamed. He agreed (somewhat stiffly, I thought) and said he'd done that sort of thing before. He said he would put together a package. It would include a response plan and message templates, which would lay out a phased timeline for gathering and releasing information during and after the landing. In support of that effort, I pushed for combat camera elements to be attached to the landing, not only to document events but also to give public affairs the imagery and evidence they might need for possible responses. I instructed MISO to arrange for a forward presence to broadcast and inform the local population. I didn't want the arrival of Marines to be too much of a surprise to the locals, so I instructed MISO to prepare pre-landing broadcasts informing residents of both our arrival and our good intentions, encouraging support for our efforts. It was a humanitarian mission,

after all, and while OPSEC remained an important consideration, it obviously needed to take a backseat to establishing good relations.

Perhaps most importantly, I made a point of going to the skipper of the company landing team and meeting with him and his platoon commanders. We spent a fair amount of time talking through the IO concept of support for the operation, the importance of local and international perceptions to our mission, what came out of the red cell wargaming, and possible contingencies. By this point I was pretty tired, but the interest of the landing team commander and his lieutenants showed, and their sharp questions really braced me up.

Because of that meeting I identified one more thing I could do—a masterstroke, I thought. We were going to take the initiative in the information environment and help shape the narrative. I sat down with a foreign area officer fluent in the local language, and we ginned up short, one-page handbills that the Marines could hand out to the locals if need be, explaining our purpose as legitimate defenders of the country, sanctioned and invited by the government, prepared to defend the freedom and rights of the people, and just generally be the good guys. I found a printer that wasn't too busy, printed off a few hundred, and delivered them to forward elements myself.

I was exhausted by this point, and we weren't even at the beach yet. But at the same time I was very satisfied. I'd made sure that IO had been a consideration during planning, that we were ready with an information response should there be an accident or surprise, and that information-related capabilities were on board and would execute. I'd even rolled up my sleeves and engaged directly with the landing team, involving them in the IO concept of support and supporting them with a handbill. I was up for two days straight at the end, but it was worth it to have Marines ready to hit the beach.

That being said, the pucker factor got pretty high early in the operation when word came in that there was small-arms and rocket fire coming from a (previously) empty complex of buildings on the dunes. At this point, the refined vision in commander's intent started to pay off. Understanding the importance of relationships with Centralia's local population, the landing element held back on responding with fires, and soon it became apparent that the weapons and "rocket fire" were actually celebratory rifles and fireworks at a wedding. I got more than one nod from other staff members at that moment. The wedding party panicked at the sight of armed Marines and fled, but we had just avoided a potential disaster of epic proportions. My pleasure was tempered by a sobering "what if," though—I couldn't help but think about how awful that could have turned out if we hadn't taken a comprehensive view of desired outcomes in planning. I was also a little irked. Why was the local wedding party panicking at our presence? Hadn't they received the message that we were coming and that we were the good guys?

Things on the beach had gone well so far. We had landed without any serious incidents. But I was concerned about the MISO effort. I had been quite proud of myself for insisting on MISO efforts both prior to and concurrent with the landing. I knew that my handbills alone wouldn't be enough, so I had asked for the full panoply of broadcasts, both loudspeakers and radio, to help communicate our intentions to the locals and get a head start on positive perceptions. But when I checked in with the MISO team, things weren't going so well. To start with, some of the ideas I'd pushed on them were outside their package of existing, preapproved series and products; they had been working hard on their process, but the landing was under way and they still didn't have approval. They had prepared some broadcasts for transmission prior to the landing to inform the local population of our arrival and intention, but those transmissions had been delayed until H-hour due to OPSEC concerns. Obviously, you can't both keep

landing details undisclosed and tell locals when, where, and why the force will land. They said they'd tried to notify me about the problem (and well they should, since both OPSEC and MISO are traditional elements of IO, so their deconfliction should have been my responsibility), but they couldn't find me. Therefore, "no advance notice to locals" won out as the default setting. Apparently, that had come up when I was in the bowels of the ship printing my handbills. With the broadcast delayed until H-hour and no approvals for specific new series or products, MISO was using what was preapproved during landing operations, but even that wasn't going too well; it appeared that their radio broadcasts were being intermittently jammed. How was that even possible, given potential enemy capabilities?

Of course it was not the enemy. Or, rather, we had met the enemy, and he was us. It had not occurred to me to deconflict with electronic warfare, and as part of force protection for the landing, they were successfully jamming the frequencies we were using for our MISO radio broadcasts. Thankfully, MISO also had loudspeakers they could set up, and word came back to us that while the Marines on the beach couldn't speak to the curious locals who eventually came to the dunes, they handed out all the handbills. My guilt over failing to coordinate approval and deconfliction for MISO was somewhat ameliorated. So, while things had not been perfect, on the balance, it had gone well.

Or not. The next day, the MEU intelligence officer stormed in to see me, furious about the lack of coordination for MISO efforts. Had I thought about deconflicting MISO and electronic warfare, so that their broadcasts weren't blocked? No sir. Had it occurred to me to talk to MISO before going John Wayne and producing my own unauthorized MISO products in the form of handbills? No sir. Did I realize that maybe it would be a good idea to make sure that anything handed out in writing matched what was being broadcast over loudspeakers? Yes sir. Did I really think it was a good idea to send the populace mixed messages? No sir. Did it maybe make sense for the commander to have some say in how we shaped the information environment and that maybe public affairs, MISO, and IO planning ought to be coordinated? Yes sir.

I felt utterly the fool for my failure in this, but at the same time, the S-2's white-faced fury seemed a little over the top. That was until I found out just how wrong my "masterstroke" had gone. The foreign area officer I had worked with didn't tell me that the local language

was diglossic: The formal written and local spoken versions were so different as to be almost separate languages. The vast majority of locals couldn't read the formal written language and couldn't read the handbills. The educated few could read them, though, which presented a further problem. What was written on the handbills didn't match the MISO and public affairs messages: I had stressed our legitimacy acting on behalf of the central government and our role in protecting freedom and liberty. It turns out that neither Montanyans nor Centralians were particularly keen on American-style freedoms and liberty. Further, since the local ethnic Montanyans mistrusted the central government, I had portrayed us as essentially hired mercenary bad guys to that segment of the population. Still worse, it turns out that the foreign area officer I tapped had done a master's thesis on the holy text of the region and was heavily influenced by the style and imagery of that text. The local literate population interpreted the handbills as mocking or aping their holy text—a mark of disrespect.

Of course, the BBC, Al Jazeera, CNN, etc., were all soon running with headlines of the "U.S. Marines Insult Local Faithful" sort soon enough. On the one hand, public affairs responded quickly and adroitly, and the combat camera footage of Marines on the beach clearly showing caution and concern with avoiding civilian injury was persuasive. Persuasive, that is, to the Western world—locally, not so much. The regional extremist group *The Truth* made hay with the handbill, and soon local protest activity was rising. And because I had put MISO and public affairs so far behind the power curve, they were in damage control/reaction mode for weeks, effectively hamstringing the MEU's ability to promptly carry out its humanitarian mission.

I never got to see that, of course. On D+6 I was officially relieved of my duties and off the ship, headed back to Lejeune by D+12. That was about as bad a day as I can remember, waiting for what felt an eternity (and what felt like the strangest sense of déjà vu) outside the Old Man's office, to then be summarily chewed out for what subjectively felt like an hour. The cherry on top of all this was that I would have my attorney appointed for me only when I got back to the regiment. My handbills, being neither an approved MISO product nor part of command information, may also have been illegal and might require prosecution.

Lessons from the Second Dream

Before the dream faded, I had the opportunity to reflect back on my painful experience. I found the following lessons:

6. IO is like fire-support coordination; it is an integrating function, not itself an information-producing/affecting capability.

I realized that much of my hard work had been misdirected. While my efforts ensuring the integration of information environment–related concerns in overall planning was time well spent, I had no business making handbills, and I had no business trying to tell MISO *their* business. I also had no business tasking public affairs. IO doesn't own any of the information-related capabilities; I could *ask* public affairs but not *task* public affairs. I think that's why the public affairs officer was so short with me. I should have spent more time coordinating, integrating, deconflicting, and enabling the information-related capabilities and less time trying to do it all myself.

7. One information-related capability by itself produces minimal effects and risks being overwhelmed by others or other lines of operation.

I had focused really heavily on MISO, and that was a good emphasis, but I also should have worked to coordinate with the other information-related capabilities to make sure they were reinforcing and supporting the MISO messages instead of undermining them.

8. Information-related capabilities that are not part of the IO concept of support may still be active; ensure that all information-related capability operators are aware of IO plans and that all plans are deconflicted, at a minimum.

I had mistakenly thought that electronic warfare wouldn't be doing anything, since, I, the IO officer, hadn't asked them to do anything. That was a bad assumption. Similarly, I had decided to give MISO priority over OPSEC for the landing, but I hadn't taken the necessary steps to get that decision confirmed and built into the plan. Also, I wasn't around to champion my position when the OPSEC issue was raised because I was off freelancing MISO.

9. Information-related capabilities can have lengthy timelines, for both execution and results.

MISO was still waiting for approval of new products and series when we hit the beach. MISO and other information-related capabilities are relatively quick when working within preapproved parameters, but timelines can extend when going outside the bounds of what is preapproved. Similarly, the effects from most information-related capabilities are not instantaneous; perceptions and behaviors do not immediately change upon receipt of a message. This seems obvious enough, but it can be less accepted among military operators when effects from maneuver and fires *are* instantaneous.

10. Events do not always unfold according to plan, so prepare IO branches and sequels.

The delays in MISO approvals and the accidental electronic warfare jamming of MISO made me think. Like all planned efforts, IO may not unfold exactly as intended. Even relatively simple deconfliction can be complicated if not scripted or prepared in advance. IO planners can't anticipate everything, but it is a good idea to have a few contingency plans and some alternative means of achieving the same effects.

11. Warfare—including information warfare—involves trade-offs.

I anticipated that we would sacrifice OPSEC for gains in goodwill with the local population. In fact, we ended up trading goodwill with the local population and local government for OPSEC and surprise. Sometimes you trade OPSEC for warning and instructing locals; sometimes you trade short-term security for long-term consequences; sometimes you trade effective fires against an important target for further alienating the local population; sometimes you trade an intel source for acting based on intel that you could have gained only from that source. Sometimes, you trade in the other direction. In the future I will try to make those trade-offs consciously and in alignment with commander's intent.

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THE THIRD DREAM

How Do We Know Whether We're Doing It Right?

As the details of the second dream slipped away from me, I was left only with the 11 lessons of the previous dreams. A new dream began, unfamiliar to me, but with all the same details now familiar to you: the MEU tasked with a humanitarian assistance and security cooperation mission in Centralia.

As the MEU prepared to land and conduct the mission, I threw myself into my work. My focus was now on ensuring that IO and the cognitive, informational, moral, and mental aspects of the mission received due attention in planning by working through and with the operational planning team and by engaging all the information-related capabilities through the IO working group to make sure they had the support and guidance they needed and were aware of broader plans and deconflicted.

While I received some pushback from the planning lead, I was firm in my conviction of the importance of the information environment to this mission, and the importance of including IO considerations throughout the planning process, not just as a late addition or bolt-on to the fires process. With respect and confidence, I carried the day.

Public affairs produced contingency response and mitigation plans for a number of possible mishaps or adverse actions, which I made sure the other elements were aware of. I worked with MISO to identify opportunities to leverage their capabilities in support of the landing. I made suggestions, but some of those turned out to be poor ideas because of time constraints, with processes unlikely to be completed and approvals unlikely to come in time for the landing. After listening to MISO's understanding of the process and timeline, I withdrew my suggestions and we considered alternatives. We discussed and arranged for combat camera and MISO presence with the landing. MISO had a robust collection of preapproved series and products that were a sufficient fit for some of the things we wanted to accomplish in terms of notifying the locals of our arrival and intentions. During an IO working group session, the public affairs officer pointed out that we had more latitude for broadcasts that were not MISO influence products but just "command information"—straightforward facts from the commander suitable for any audience (U.S. domestic, press, or any foreign audience). The public affairs officer agreed to secure needed command approvals and to work with MISO to use their broadcast equipment. I suggested that we might be able to use shipboard broadcast equipment owned by our Navy hosts, too, and arranged to coordinate that and also to check with higher command to make sure our themes and messages corresponded with what the Embassy was saying and what had been coming out of the regional combatant command. We worked with electronic warfare and Navy EMSO (electromagnetic spectrum operations) to make sure that planned broadcast frequencies were free and would remain so. When I checked in with the combatant command IO group about MISO, I also checked that our IO plans nested well with their steady-state efforts and any ongoing efforts in support of the Centralian crisis. I also made sure that there weren't other possible players I needed to coordinate with (such as the regional

special operations command or a joint task force layer). The IO group at the combatant command was really helpful and gave me several folks to check in with periodically and keep on my cc line.

We also realized that it would be important to coordinate MISO with operations and the scheme of maneuver, both to allow MISO to physically deliver their message and operate and to make sure maneuver and messaging were mutually reinforcing and contributing not just to the physical but also to the moral and mental aspects of commander's intent. Before we hit the beach, I knew we had multiple information-related capabilities ready to deploy and the requisite staff visibility on how those efforts could be mutually supporting. I had an interesting thought along those lines: What if I got with a foreign area officer and cooked up some sort of flyers to hand out to the local populace? But of course I dismissed that immediately—my job was to integrate information-related capabilities, not be one myself. I suggested handbills to MISO, and they indicated they already had a preapproved product ready to go. We reviewed it to make sure it fit well with the other messages we were pushing out.

As we drew closer to D-day, both public affairs and MISO came to me with an issue that had come up: They were getting pushback on local broadcasts prior to landing due to OPSEC concerns. This was a valid concern; there was risk of action by local extremists, and that risk increased if they had advance warning of our likely landing sites and times. We discussed options in the IO working group, and then I elevated it to the operational planning team. In both conversations, I highlighted real risks on both sides: There was a potential cost for letting potential adversarial groups know too much about our plans, but there was also a cost for failing to inform and prepare local citizens and local government representatives for our arrival. We worked out a number of possible COAs (courses of action). Our recommended COA balanced OPSEC and local warning, with an embargo on information release until 48 hours before the landing and restrictions on information specific to sites and times until H-hour. The operational planning team lead carried our recommended COA to the operations officer and the commander, and it was accepted with only minor modification. Locals (and potential adversaries) would know we were coming and why we were coming beginning two days before the landing, but they wouldn't know exactly where and when we were coming. After wargaming the plan, we decided to add tactical deception to make it harder for nefarious actors to correctly determine where we would land: Prior to the landing, we had Marines from Reconnaissance Platoon survey beaches we weren't landing on, combined with a helicopter-borne demonstration to those beaches during the landing.

The landing was smooth, and when things weren't smooth, contingency planning and coordination meant we could adjust on the fly to achieve commander's intent and minimize the impact of mishaps. We were soon off the ship and on the forward operating base, and we started to identify potential food and relief distribution sites. Simultaneously, we moved forward with plans to engage the Centralian forces in training exercises. That presented something of a challenge—central government forces weren't popular with the locals. Aware of this, public affairs and MISO were aggressive, countering everything the regional extremists put out, even when their statements had nothing to do with the Marine presence or our operations. I wondered if that might be somewhat counterproductive—like we were giving the extremists free airtime.

But overall things were going well, so I was unprepared when the executive officer asked me somewhat offhandedly, "So, are we really winning hearts and minds?" I started to list all the ways we had been active, particularly how active CA (civil affairs) had been. The executive

officer was surprised by that—was CA even an information-related capability? As we talked through the kind of intimate daily contact with locals CA had and how their efforts impacted local perceptions and sentiment, he agreed that CA constituted an information-related capability but still pushed: Is it working? I guess given how well things had gone, I had assumed we were being effective in pushing toward our cognitive, informational, moral, and mental objectives. But as we talked, it became clear that while we had a good handle on *performance* and nothing had gone obviously awry, I couldn't point with confidence to our *effectiveness*.

I realized we needed data to measure our effectiveness and started with the S-2. I was able to get a good picture of the enemy—Montanya's order of battle, the regional and local extremist group's leadership, capabilities, and likely COAs. We also talked about the Centralian forces' capacity and equipment, but none of that really got to our progress in the humanitarian mission, or how much our partners were absorbing, and whether that was deterring the Montanyans. I needed more assessment data, but I cringed when I thought of what I'd heard about assessment teams whistling in from a higher headquarters and making pronouncements without ever really understanding the subordinate area of operations. I knew I needed something, but I knew I didn't need *that*.

I caught up with the exhausted CA guys to talk about the relief effort. Again, it was an interesting conversation, and I got a lot of numbers (relief supplies delivered, distribution centers set up, outreach and quantity of meetings with the local District Administrator's office) and a clear sense of what we were doing. But I had no sense of how effective we were. It was similar when I went to Bravo Company and asked about their partnering efforts. The skipper could tell me about the exercises they were running but could not really articulate any formal metrics for impact. He did offer his impressions, which I found somewhat worrisome: that they weren't getting the kind of engagement they hoped from partner forces, and enthusiasm was lacking. That prompted me to think about a comment from the CA officer to the effect that there wasn't as much usage at the relief distribution centers as he expected, given how bad the flooding had been.

That was concerning. I realized that I needed to articulate my information needs to give meaningful information requirements to the S-2. I made more rounds—back to the planning staff, to the CA guys, to MISO—and it became clear we couldn't explicitly tie our activities and immediate objectives to higher's. The CA lead made a good point: "You can't measure how well you're doing if you're not clear about what you're trying to do."

As the MEU continued to work hard, I struggled to put my finger on what specific cognitive, informational, moral, and mental effects we were trying to achieve in terms of the local population and what we really needed to accomplish to deter the Montanyans. And so I watched somewhat helplessly as things slowly, and somewhat mysteriously, deteriorated. Security cooperation exercises continued but with little observable impact on the readiness or posture of Centralian forces in the district. More and more disaster refugees poured into our area of operations, but at the same time there was no corresponding increase in activity at the disaster relief distribution sites: The misery index was going up. We also had cause to regret engaging the propaganda of *The Truth* so aggressively. We had in a way helped validate them as opponents, and as discontent increased among the local population, the extremists turned their focus from the central government to us. They got some traction, particularly after an incredibly unfortunate incident at an aid distribution site. A riot at a refugee camp, most likely orchestrated by extremists or maybe even Montanyan provocateurs, resulted in an attack on relief workers and the Marine detachment there.

As international criticism and media scrutiny of the mission increased, and more and more vocal concerns from Centralian outlets emerged, the Montanyans massed a significant armored force on the border, putting POTUS in a bind. We had failed at the deterrence portion of our mission. Because Centralian forces did not appear ready to repel an invasion on their own, the United States could either commit significant additional combat forces capable of repelling an armored assault or effectively turn tail and run. To the everlasting shame of every member of the MEU, POTUS made the latter decision. In particular, a European political cartoonist from Germany crafted a lasting, bitter image: a parody of the Marine Memorial, with Marines fleeing from a mouse, the flag flopping to the ground.

The mission was a failure, and it was a total humiliation for our battalion, our regiment, and the Corps.

Lessons from the Third Dream

This painful dream faded, leaving me with a sense of unease and these lessons:

12. The efforts planned and coordinated by IO need to be monitored and assessed; otherwise, you're shooting in the dark.

We failed in the mission because even though we were active in and through the information environment, we were also ineffective. Absent useful feedback to gauge effectiveness and make course corrections, by the time it became clear that we weren't having much effect, it was too late, and I wasn't even sure why. Usable assessment data could have come from intelligence, observation, and other data collection specific to our various tactical efforts, but the data needed to come from somewhere.

13. IO is not well understood in the force.

I was taken aback that the MEU executive officer didn't think that CA was an information-related capability. On reflection, many of my interactions with other Marines demonstrated a lack of understanding of IO. It isn't enough just to do IO. Sometimes you also need to take the time to explain IO and related capabilities, as well as their limitations and timelines.

14. Success in IO requires prioritizing intelligence support for IO.

When I came looking for intelligence support with the operation in full swing, the information the MEU had been collecting was of little use for information-related capability assessment or for IO more generally. While traditional intelligence collection focuses on enemy groups and their actions, I'm sure that intel could have done more for me had I asked for it sooner, and if I had been able to convince the commander that the cognitive, informational, moral, and mental things I wanted to know needed to be priorities.

15. IO objectives must be clear and precise.

As my fellow Marine pointed out, "You can't measure how well you're doing if you're not clear about what you're trying to do." Overall operational objectives were vague, so it was easy for

me to support them with good sounding but slightly ambiguous IO objectives. The easy road was the wrong road. These underspecified IO objectives made it hard for us to assess against them. Imprecise objectives probably also made it hard to connect objectives together, to ensure the coordinated pursuit of those objectives (because everyone was probably interpreting them a little differently), and this may have even undermined execution. I should have articulated clear and precise candidate IO objectives, made sure that the final IO concept of support had clear and precise objectives, and made sure that the information-related capabilities had clear and precise objectives that connected to the overall IO objectives, which, in turn, supported commander's intent.

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THE FOURTH DREAM

Populations Aren't Terrain to Be Navigated

I tossed and turned in my sleep as yet another dream began, with all except my 15 lessons appearing as if wholly new to me. Our MEU was tasked with providing humanitarian assistance to flood-ravaged Centralia and supporting the Centralian armed forces to deter neighboring Montanya.

My efforts in anticipation of the landing and the elements of that landing proceeded much as they had in the third dream; I will not bore you with repetition. I did try to make more of a contribution to the planning for the later phases of the operation, pushing for more clarity and specificity on the cognitive, informational, moral, and mental effects we would seek in and through the information environment. The commander's intent and concept of operations that initially emerged from the operational planning team made clear the importance of both the physical and the informational in achieving the commander's end state. However, while it was sufficient to avoid dire mistakes during landing and get us oriented in the right direction, it lacked important specifics.

I knew that it was important to have information-related capability objectives that nest clearly with IO objectives and IO objectives that, in turn, nest clearly with broader operational objectives. Unfortunately, the broader operational objectives hadn't been stated clearly enough to imply sufficiently clear IO objectives. I thought about asking for further clarification, but I found it hard to articulate the questions I wanted to ask, and I suspected that the planning lead or the operations officer would be frustrated by these hard-to-ask, hard-to-answer questions. Instead of looking for a top-down solution to my problem, I decided to try to solve the problem from the bottom up. Working with the IO working group, we started asking ourselves about potential IO objectives. For example, beyond the basic humanitarian concern with helping refugees, what effects were our relief efforts supposed to have? How exactly was our security cooperation effort with Centralian forces going to deter Montanya? What, if anything, did we want the broader international community to think or do based on our efforts here? We tried to be as clear as possible about how we thought our planned operations were going to contribute to mission objectives and how IO could help ensure that our actions would lead to those results.

Now we could work out implied intermediate objectives and I could go to the operational planning team with more than a blank look on my face. As I suspected, it was much more productive to ask, in effect, "Is this what you want to have happen?" and have my best-guess reinterpretation already spelled out, than it would have been to just ask, "So, what do you really want?" We'd hit the intent of the commander pretty well. My presentation was well received; we tweaked it a little in the planning team meeting and then the commander approved it with minor adjustments.

With specific IO objectives in place (and clear connections to the overall concept of operations for the phase), it was easy to develop nested information-related capability objectives in the IO working group, which, in turn, would let us think through assessments. With clear IO

and information-related capability goals, we talked through how progress toward those goals could be observed or monitored. These clearly broke into two types: those that could be monitored easily alongside our activities and those that required other kinds of data collection. We arranged for the executing capabilities to monitor and report on the things that they could observe and requested support from the ground combat element in monitoring the things they could observe. I took the rest of the list to the S-2 shop to see what we could do. I went over the list with an intel analyst I knew. I had kind of an "Aha!" moment with her as she walked me through their intel prep of the battlefield brief.

I realized that the S-2 shop was entirely focused on the enemy and physical effects. It was the same stuff I'd seen since The Basic School: enemy organization, capabilities, likely COAs, priorities in intel requirements, etc. There was no attention to the information environment, to the cognitive, the moral, or the mental, and—even worse—no attention to partners and the local populace. In no way was intel support integrated into IO efforts. As I talked her through my concerns in the physical/informational/cognitive dimensions of the information environment, I got buy-in, and she agreed to push for two additional priority intelligence requirements: one focused on key community leaders and the other on enemy efforts to influence the views, feelings, and behaviors of the populace. She also agreed to add informational lines of communication to that requirement. It was a good example of why I couldn't assume IO is understood throughout the force.

I then talked to the public affairs officer and worked toward refining branches and sequels for contingency mitigation in all phases of the operation. We refined counter-propaganda plans to incorporate additional nuance. I think most importantly, we built a flow chart with embedded criteria to help us make decisions about whether certain instances of propaganda needed to be countered at all, and we added detail to the plans to make sure that our counter-propaganda matched the scale and scope of the original propaganda: We didn't want to inadvertently give *The Truth* free advertising.

I also really got into it with the CA lead. There were lots of things they were planning to do that were good for the people of Centralia, but I kept pushing him to show me how his planned activities supported our clarified IO objectives and the overall operational objectives. I mean, everyone understands that helping displaced refugees was a good thing. But beyond that, can you articulate how a given civil-military operation effort contributes to the commander's end state? Your proposed aid distribution stations: What are the intended effects and how will you measure effectiveness? And the metric better not be "aid packages handed out," because I'm pretty sure the intended effect isn't to give people goods for transport and resale, or—heck—redistribution to insurgents. To the degree he could show me how civil-military ops directly contributed to the end state, I could go to bat to argue for the intermediate objectives connecting CA action to the mission. That was the bottom line.

The upshot was that, as a staff, we had integrated IO into the planning from the start and thought through both the activity and support to achieve IO effects. We also considered how we would measure the effectiveness of those efforts.

The landing proceeded smoothly, and we began to both render humanitarian aid and conduct security cooperation exercises with Centralian forces. Evaluation and monitoring efforts were in place so we'd be able to assess the progress of our efforts, and hopefully fix any that were deficient.

However, three weeks into the operation, new assessment data revealed mixed results from both the humanitarian assistance and security cooperation efforts. On the aid side, food

distribution sites were functioning, but turnout was much lower than expected, given the conditions. Construction efforts in disaster areas were effective at containing the flooding, but evacuations continued and refugee flows swelled. Local attitudes toward Marines and desired end states were positive, but desired behaviors, including the use of aid sites and returning to cleared former flooding areas, lagged. On the security cooperation side, our Centralian partners weren't really blowing us away, and there was a lot of frustration on our end. Their attitude toward us was positive—they seemed to like us. But motivation and competence didn't seem to be rubbing off on them. The crux of the matter was that they still didn't provide much in the way of a deterrent value against Montanya.

This was important feedback on our effectiveness, but man I wished we'd had this sooner so we could have made an early course correction. I had to report up the chain that effectiveness was lagging, but I also provided corrective COAs. We worked to make adjustments. I requested additional public affairs and MISO support to encourage use of the distribution sites and push information out more broadly: site locations, directions to get there, hours of operation, etc. I also suggested that CA expand their service hours at the sites and that they relocate some of the aid distribution sites to areas cleared of hazards to encourage residents to return. I felt confident about these changes. I wanted to make similar changes in support of the security cooperation effort, but I didn't know where to start. Assessment had revealed that there was a problem, but I wasn't altogether sure what the problem was. I suspected that it had something to do with morale, so I figured that more team building and socializing with Marines couldn't hurt; I requested delivery of a bunch of recreation equipment to the local Centralian forces' base, hoping that morale and cooperation might improve if the two nations' forces played volleyball or soccer together.

The operation continued, and we continued to monitor assessment data as they came in, watching for an uptick. I know changing attitudes and behaviors can take time, so I wasn't too worried. An initial uptick in one of my key metrics proved to be noise in the data; the trend lines remained flat—and inadequate. After another three weeks, I began to fear that the problems I had "fixed" with my course corrections were not really the problems that needed to be fixed. In desperation, I collected ideas and impressions from other staff elements and ground combat element units. Based on informal feedback gained from key leader engagement and the impressions of the troops who were conducting the security cooperation exercises, I started to get a better picture.

Aid distribution sites were plagued by several problems. First, local extremists had started rumors that the food being handed out was tainted. Their propaganda claimed that the products were not prepared in accordance with local religious dictates and might even be poisoned. The fact that the food was processed, heavy in preservatives, and not typical of the local diet enhanced their claims. Second, many local tribal leaders felt excluded from the aid distribution process and thus believed that it undermined their authority. Even though their people needed the support, it was obvious they would rather have the effort fail than see their own status diminished. And, of course, one of the tribal leaders happened to control the scarce local buses and had been rerouting them away from the aid distribution sites, making it hard for people to get to and from the sites.

I now understood the more local difficulties and continued to ask around about other efforts. It turned out that continued self-evacuations from flood-prone areas that we had made safe was just a matter of ignorance. Local residents didn't believe it was possible to build effective levees so quickly—they knew from generations of experience how long flooding lasted.

So they dismissed as implausible our broadcasts claiming to have made their home areas safe again. On the partnering side, after getting feedback from the commander's engagements with key officers in the Centralian forces, I started to understand what might be at issue there, too. The Centralian military didn't want to seem ungrateful or give offense, but it appeared that the security cooperation efforts were not well matched to the Centralians' needs. The training being offered and the exercises conducted were too basic. Centralian arms proficiency and tactical ability were more than adequate. What the Centralian forces really needed were better radios, better logistics support, and staff exercises to help them better integrate intel and ops and decrease their planning-to-execution timeline.

So, really, it was less about our partners not being engaged and more about us misunderstanding what they needed. If we'd leveraged our direct relationship connections sooner we'd have figured that out much quicker. It occurred to me that maybe I should have planned for engagement with key leaders as a data collection task. Anyway, now that we knew what went wrong, I could work across the staff to help coordinate better informational support.

Once we adjusted based on what was really going on, things turned around, and formal metrics begin to show an uptick. But it was also now two months into the operation, and with a terrible feeling of helplessness, I came to realize that it was too little, too late. The humanitarian crisis we had been sent to address was only marginally better—much of our effort failed to produce desired effects because we didn't really understand our audience.

We lost on two fronts. In our immediate area of operations, we had opened the door to an effective insurgency. We had alienated important tribal leaders, and while we struggled to repair those relationships, anger and mistrust toward U.S. forces gave extremists the operating space they needed. We were forced to transition to security operations when we should have been focusing on relief and partnering. Sniper and improvised explosive device attacks became part of the operational picture, and soon international media began reporting *not* on U.S. humanitarian aid but on "the U.S. Marine-led counterinsurgency in Centralia."

All of this came to a head after an unfortunate incident at a refugee camp close to the Montanya border. There was a huge riot at the camp, most likely orchestrated by insurgents. They attacked both the international relief workers and the Marine detachment, and the result was incredibly ugly. On the one hand, the squad leader—a young sergeant I knew from my old battalion—performed magnificently. He understood that a bunch of dead refugees was not what anyone wanted and would have been a disaster for the mission. He and his squad deftly used minimal and nonlethal force to disengage from the attackers and managed to rescue three aid workers. But on the other hand, the rioters still had three Iberian hostages. When they executed one of them, the Centralian Quick Reaction Force (which we had trained) rolled in and killed eight refugees, all of them ethnic Montanyans. In this context of criticism and unpopularity, it was all that Montanya needed to act. Within eight hours, Montanyan armored forces crossed the border into Centralia.

The valiant but doomed Centralian defense was the bitterest pill we had to swallow. We had been wrong about them—the Centralians were not the goofs we had thought they were. They put up a good fight, at least at the tactical level. They understood the old hunter/killer team concept for anti-armor, and they employed it perfectly in at least two locations, successfully engaging and destroying enemy tanks. But in the operational sense, their inability to gather, process, and communicate intel, and their real lack of staff capacity above the company level, meant they couldn't fight as a force. Montanyan armored forces were generally able to bypass and cut off the Centralians, and at that point they fell apart. If we had better understood their needs, we could have done so much more. We failed them.

Worse, the Montanyans captured two adviser teams from Bravo Company that were colocated with host-nation forces. The Montanyans were pretty smart—they didn't visibly mistreat the Marines but still used them as effective propaganda. The Marines were paraded in front of the media and forced to wear local garb with their heads shaved. The Montanyans managed to get non-U.S. media outlets like Al Jazeera and BBC to use the term "detainees," so instead of holding Marine prisoners of war, the Montanyans hoped to "quickly negotiate the return of American detainees" as part of creating an "ethnic justice and protection zone" in the district.

They had POTUS over a barrel. We negotiated our embarkation and swift departure, along with the return of the captured Marines. It was particularly galling to have Krasnovian forces invited in by the Montanyans to act as neutral observers and "guarantee U.S. conduct," acting as go-betweens. Somehow, after all our good initial work, we still wound up completely failing to accomplish the mission.

Lessons from the Fourth Dream

As the dream began to fade, I had a sour taste in my mouth from a promising start that had deteriorated so badly. I was left contemplating five new lessons, which I added to my collection:

16. Good deeds do not speak for themselves.

Although I recognized that CA was an information-related capability that could generate effects through the information environment to support the mission, I failed to arrange synergy and support from other information-related capabilities to echo the message of those deeds. I should not have assumed that simply restoring flooded areas would be good enough. I should also have planned to advertise that achievement and to actively encourage the refugees from cleared areas to return to their homes. My plans should have included better efforts to advertise relief distribution sites.

17. Do not assume that changing attitudes will change behaviors.

Both the local population and the Centralian forces with whom we were engaged had very positive attitudes toward us, but they weren't doing what we wanted. We focus on the cognitive, the informational, the moral, and the mental because we want people to act in a certain way, to *do* certain things. We wanted displaced persons to collect needed humanitarian aid and return to their homes when they could. We wanted Centralian soldiers to exercise with us to demonstrate and improve their capabilities. We wanted Montanyan forces to stay on their own side of the border. Positive attitudes might have helped with that, but we needed to be more explicit about desired behaviors. I should have made sure that both the IO objectives and the end-point assessment criteria were stated in behavioral—not attitudinal—terms.

18. Consider the information environment from the population's perspective.

On the subject of relief distribution sites, my failure to understand the local perspective kept our IO support from being effective at all. I just assumed that everyone would think that our provision of relief supplies would be a good thing, and I didn't think about other points of view. I should have considered the perspectives of local authorities or power brokers, or those of local extremists. If we had those perspectives in mind, we might have better coordinated

with local authorities and earned their support rather than their resistance, and we might have been better prepared to address extremist disinformation about our relief efforts. If I had better understood local perspectives, we could have avoided making implausible-seeming claims about flood control (using more visual imagery, promulgating demonstrations and explanations from engineers, tours of control areas for local leaders), and we could have prevented extremists from making plausible claims about improper or tainted relief supplies.

In this operation, we could and should have better understood the local population in support of relief efforts. In other operations, local perspectives (and behaviors) may be even more important. Local populations can impact operations over the long term (voting behavior, support for a peace accord settlement, according legitimacy), but also in the short term (joining protests or mobs, supporting adversaries with resources and intelligence, joining irregular forces, interfering with operations). So, consider issues and actions from the perspective of the domestic population and understand how easily use of force, even when justified, can undermine popular support.

19. Things do not always happen for the reasons you think; causation can be complicated when behaviors, perceptions, cognition, and culture are involved.

We had metrics in place and were able to see that both our security cooperation and humanitarian efforts were struggling, but we didn't know why. I made some (reasonable, I thought) assumptions about why we were failing, but I was wrong. I misdiagnosed the reasons we weren't hitting targets in both disaster relief and security cooperation, made the wrong course corrections, and kept us on a path toward failure for too long. I should have considered a wider range of possibilities and tried to gather more information.

I think this is a fairly common problem in IO. While we all share a reasonable understanding of how things work in the physical world, the way things work in the cognitive realm, or when culture is involved, is less well understood and thus vulnerable to mistaken assumptions. So, be explicit about your assumptions, especially the underlying logic of any effort (the ways the capabilities employed are supposed to produce the desired ends). If something unexpected occurs, consider (and try to test) a range of possible explanations.

20. Fail fast. Quickly try, quickly monitor results, and quickly adjust assumptions and efforts accordingly.

Although I ultimately figured out what was plaguing our various efforts, it was too little, too late. To reach the right conclusion in time, I should have turned things over more quickly. There was nothing wrong with me having some initial ideas about what was wrong with our struggling humanitarian and security cooperation efforts, but I should have treated those ideas as just one set of possible reasons. Without any way to know which of a number of competing explanations was actually correct, I should have chosen the one I thought most likely and pressed ahead with it while monitoring the situation and looking for other explanations. If I had been able to discard my mistaken assumptions more quickly and get to some of the real reasons for failure sooner, we might have been able to salvage the operation. Because of the complexity of cognitive processes and the cultural terrain, there is often considerable uncertainty about how different audiences will respond to different stimuli. When faced with such a situation, "fail fast."

THE FIFTH DREAM

The Enemy Has a Say in This, Too

I dreamed again, retaining only the lessons from the previous dreams. As before, I worked hard to make sure that aspects of the operation that relied on effects in or through the information environment received due consideration in planning for all phases—that the efforts of the information-related capabilities were integrated and supported, that IO and capability objectives nested with broader mission objectives, and that assessment plans were in place. However, this time our assessment efforts ended up being more robust. Not only did we identify ways to monitor the results of our efforts, but we also sought to collect information on things that might go wrong with our efforts to help us understand why we struggled in any given effort. This included planning for data collection from key leaders and from the informal observations and atmospherics data provided by maneuver elements engaging with partners and local citizens.

Our preparations paid off, and the landing and beginning of our humanitarian and security cooperation missions went smoothly. Although the rollout was smooth, early indicators suggested that both the aid effort and our partnering with Centralian forces were off. I think because we had been keyed up to be attentive to the local population and our partners—we understood that they weren't passive objects in this—we got a fairly quick read on what was happening. We were in the staff meeting, and I listened as we went around the horn. The S-2 reported, among other things, that there had been a sudden change in the local bus patterns. The operations officer also noted that while the training teams we had sent out were enthusiastically received, two different Centralian staff officers had asked about when the "real training" would start—which was a (confusing) red flag. CA shared that food distribution was way lower than it should have been, given the size of the displaced population, and also noted that while the engineers had worked marvels in the flood area, literally none of the displaced population had moved back.

As a staff, though, we were ready for that kind of mixed bag. We had built it into our planning process that we had to expect some failures in our assumptions, that we would have to be agile in picking up and dropping different perspectives, and that we would need to cast a wide net to synthesize different data sources. Most of all, we were ready to respond on the fly: As the Old Man always told us, "Flexible is too stiff. You gotta be fluid."

We quickly realized that while we had effectively engaged the Centralian government, we had overlooked local tribal leaders. The commander apologized personally to several key leaders for failing to recognize the importance of their positions and, after deconflicting with the district and central governments, arranged to involve these authorities in the aid distribution process. We had to be careful to make sure aid was fairly distributed, but everyone seemed to be happy with credit for relief going to a combination of the U.S. government, a concerned host-nation government, and local leaders. These contacts also helped us realize that locals didn't believe we could have built levees so quickly and effectively. To reassure the displaced

that they could return home safely, public affairs distributed combat camera footage of Seabees building levees to local news networks. Coupled with announcements of which areas had been flood-proofed, that reversed the flow of refugees. Inviting local media (and local leaders) to a presentation on the food aid being provided helped diminish the effectiveness of extremists' efforts to paint it as unhealthy or inappropriate.

We also made changes on the partnering side. An informal needs assessment conducted jointly with the command staff of district Centralian forces allowed us to refocus our security cooperation efforts. It turned out that the Centralians were reasonably competent at the tactical level—what they needed was help in command and control, and staff coordination. That was why they seemed so unmotivated. We'd made some incorrect assumptions and hadn't really been listening when they'd tried to tell us otherwise. We revised our entire advise/assist plan to focus on improving communication and logistics capacity, as well as staff planning/coordination. The best thing we did was develop a series of progressively more complex exercises for their staff. It was a challenge in terms of operational tempo, but the dividends were quick and unambiguous.

Effective security cooperation was the foundation for several of our IO lines of effort. Now, we were able to showcase confident Centralian forces exercising alongside Marines, conducting more complex exercises than they ever had before. Both public affairs and MISO integrated related themes and images into their efforts (with help from me, to make sure they didn't end up contradicting each other or messages from higher). This contributed to IO objectives supporting Centralian force confidence, the confidence of Centralian citizens in their military, and, most importantly, one of our primary mission (and IO) objectives: the deterrence of Montanya.

Sensing their opportunities disappearing, provocateurs from Montanya encouraged *The Truth* to launch a string of terrorist attacks, citing the need to repel the foreign occupiers and convince the population that they should reject the government, which had invited us into Centralia. This caused the MEU to adapt. Fortunately, our commander had directed that we include such contingencies in the unit's branch plans. In response to more than a dozen terrorist attacks in the district, the government of Centralia formally requested U.S. help with its internal security challenge, conducting operations alongside Centralian forces. While we waited for the Ambassador to consult with Washington and reach a decision, the staff went full bore on rapid-response planning, as we did not have detailed plans for this unexpected turn of events.

During this time-pressured planning process, the operational planning team lead pushed me toward efforts to minimize the impact of combined operations on the views of the local populace so that we wouldn't lose the goodwill we had gained. I ended up being pushed out from the core work on the scheme of fires and maneuver and excluded from the heavy additional staff work required to coordinate and interoperate with the Centralian forces. The idea was that while the planning team focused on operations against the enemy, I would be kept in the loop to keep IO on the same page. I wasn't sure about that decision—I kind of felt like we were putting a bulkhead up between information operations and enemy-focused ("real") operations. But I had to admit that maintaining the goodwill of the local population during these more kinetic operations was important, and the IO concept of support we had developed in the IO working group covered down on that.

The Ambassador notified the Old Man that we were responding favorably to the government of Centralia's request and listed the constraints and a new set of objectives, all of

which aligned pretty well with what the operational planning team had expected. Combined multinational counterterrorism operations with the Centralian forces began soon after. Our collaboration with the Centralians seemed to go well at first, built on the foundation of trust and mutual respect we'd developed during our early security cooperation. But that early success faded fast. *The Truth* always seemed to be one step ahead of us. They had much better intelligence than they had any right to have; we began to suspect that Centralian forces had been compromised or that Centralian OPSEC was just really poor. By contrast, *The Truth*'s OPSEC was pretty good: They had a cell structure that protected their organization, and they had not been penetrated by government intelligence assets. Our technical intelligence capabilities were able to get some good take, but there were concerns about sharing intel with the Centralians. When our intel folks found ways to eventually sanitize and share, a combination of the age of the information and the apparent compromise of the Centralian forces hamstrung efforts to exploit it.

The Truth could launch unexpected attacks, but when a combined force would move on a suspected terrorist hideout, we never took them by surprise. Targeted locations were inevitably abandoned (often just before the operation), booby-trapped, used to ambush friendly forces, or not terrorist hideouts at all but, rather, some innocent venue. The terrorists clearly understood that we were collecting intelligence on them, and they were engaging in deceptions that sometimes succeeded in misleading the Centralians. They also demonstrated some rudimentary jamming capability when they ambushed the combined force, effectively cutting off Centralian radio comms once an ambush had begun. Marine gear was immune to their efforts, so we were never directly affected, but the constant surprises unleashed by *The Truth* kept the Centralians back on their heels.

Extremist propaganda was even more effective, because the group had advantages that weren't available to us. They could cycle much faster than we could. We needed time to coordinate and deconflict our messaging, as well as seek approvals for new products, while they seemed to be able to simply decide and act. And more importantly, they could lie. In their single most effective operation, they took a tactical victory on our part and proceeded to beat us about the head and neck with it. Insurgents had ambushed a Centralian patrol outside a marketplace—pretty good tactical planning on their part, basically a large L-shaped ambush down the main street leading in and out of the marketplace. But the patrol consisted of guys we had worked with pretty extensively, and they came through like champs. Despite initially taking casualties, they followed their procedures perfectly and pushed through the kill zone to take the fight to the enemy. It turned out that although one Centralian was killed and three were injured, their extremely accurate direct and grenade fire killed five insurgents. Then there was the bad part: The patrol did not recover the bodies of the dead insurgents, which *The Truth* proceeded to arrange the next day as if they had been at morning prayer, gunned down by Centralians in cold blood. And they also got cell footage of the ambush. We weren't sure whether they filmed it or got it from a sympathetic bystander, but they put that video online after the images of the bodies, creating the impression that Centralians had committed an atrocity and the insurgents had bravely fought back against "the invader puppets and dogs."

That sort of thing happened more than once. MISO and public affairs worked hard to counter this propaganda and also tried to spin less successful operations to look better in an effort to keep up morale and support for Centralian forces. This backfired, too. To our dismay, it turned out that there had actually been violations of the law of armed conflict by Centralian forces in some of their own operations. When the truth of two documented Centralian

atrocities emerged and was confirmed by credible media, news outlets continued to dig and exposed those "spin" attempts. MEU credibility was shattered. The U.S. Department of State responded by working with the combatant command to change the collaboration rules with the Centralians to distance the United States from complicity in the atrocities. It was too little, too late: International indignation rose, and the Montanyans used that outrage as cover to cross the border to protect their co-ethnics from further atrocities. Under the circumstances, the MEU couldn't directly confront the Montanyan attack, and the Centralians were left to defend their border on their own.

The security cooperation portion of our mission was suspended, leaving the Centralians without our help. They put up a pretty stiff fight at the border, and the improvements in their staffing and planning processes really paid dividends. But without us to help push them over the top, the conflict progressed into an ugly stalemate. Insurgents and Montanyan forces engaged in atrocities against local noncombatants, and accusations of continued Centralian atrocities against locals of Montanyan ethnicity continued (whether accurate or manufactured, we couldn't tell). Although the threat from flooding had receded, a new humanitarian crisis emerged as the same refugees previously hit by the flooding now fled again due to the fighting. We were instructed to establish safe havens for as many of the refugees as possible, which we ably did. Sidelined, we watched in frustration as the bloody conflict wore on, deepening the humanitarian crisis. We were embarrassed by the atrocities (real or imagined) of our former partners, but we were more embarrassed to be standing by within arm's reach as they continued to fight the Montanyans' incursion. We were finally relieved by UN forces who would continue to oversee the refugee camps. Despite our good intentions, hard work, and promising initial progress, we had actually made things worse, contributing to conflict and suffering rather than alleviating them.

Lessons from the Fifth Dream

As the stinging shame of this dream of failure faded from my mind, I reflected on the five new lessons I had learned:

21. Every operation is an information operation.

The way in which combined operations with the Centralians ended up souring the information environment clearly demonstrated to me that every patrol, every battle, every raid is a chance to persuade the population to support the government (or some desired end state). As part of that, every action and utterance sends a message, whether intended or not. There are no purely kinetic or enemy-focused operations. To imagine that there are is to prepare to win every battle but lose the war.

22. IO can deliver effects on enemy forces and commanders, as well as on civilian populations.

Integrated information-related capabilities are applicable across the full spectrum of military operations, not just shaping or irregular warfare. Depending on the mission and context, IO can deliver effects on civilian populations and on enemy forces and commanders. When opera-

tions are focused primarily on the adversary, IO has a lot to offer in terms of effects on enemy cognition, decisionmaking processes, and systems. We talk about the cognitive, the informational, the moral, and the mental; these things apply to the enemy, too!

It was a mistake to allow myself (and IO) to be marginalized once the operation became kinetic. I should have remained in the thick of things and offered IO support both to undermine insurgent command and control and to help minimize the possible negative effects of operations by considering those operations themselves partially as information-related capabilities (not just trying to minimize the impact of ill-conceived actions with public affairs and MISO). Our warfighting philosophy holds that war is a conflict of opposing wills, and IO has numerous tools that can contribute to imposing our will on an enemy.

23. Adversaries can do things that you cannot. Be prepared for them.

I should not have been surprised by the insurgents' high-quality OPSEC, their use of jamming, or their effective intelligence penetration of Centralian forces. After all, we do those things too. I should have expected the enemy to use information-related capabilities beyond just propaganda. If I had been doing my job, efforts to degrade enemy decisionmaking—coupled with helping our Centralian partners increase their OPSEC (both IO functions)—might have diminished the value of adversary intelligence. I also should not have been surprised when the insurgents manufactured a false atrocity. The bad guys do not labor under the same legal and ethical constraints that we do, and their disinformation and skullduggery know no bounds. Though I find it repugnant, there is no point in wasting time complaining about it. In the future, I will be ready for it.

24. Information-related capabilities that are not well integrated with operations are vulnerable to being overwhelmed.

Public affairs and MISO efforts got crushed by the reality of operations. We got caught saying one thing and doing another. I need to remember that some of the things that aren't traditionally considered information-related capabilities (like maneuver, force protection, and fires) can have the biggest cognitive, informational, moral, and mental effects. These capabilities are "loud" in the information environment and can unintentionally trump other efforts—for example, fires destroying information-related targets, or maneuver or force protection contradicting or invalidating messaging efforts. IO must be integrated with operations. This isn't just to the benefit of IO. Blending information and physical combat power makes both forms of power more effective.

25. It can take years to build credibility but only minutes to tear it down.

I saw MISO and, to some extent, even public affairs trying to keep a positive spin on less-than-successful Centralian and combined operations. I should have raised that as an issue and kept it from happening. While it was well intentioned, it seriously and permanently undermined our credibility. Heck, in the modern communication environment, the truth is always going to come out eventually, so we really need to avoid lies and spin. It occurs to me that communication backed by kinetic action can create credibility; yet another reason to keep IO fully integrated with operations—so you can keep your threats and promises.

26. Sometimes, the most important cognitive, informational, mental, or moral effect is the one you avoid.

The conditions we set in the information environment did nothing to prevent Centralian forces from committing atrocities or to prevent insurgents from magnifying those atrocities with their propaganda. Nor did any of our IO efforts reduce the consequences of that propaganda or prevent the Montanyans from finding an excuse to invade. If I had better anticipated this sequence of events, I might have been able to plan something to prevent or derail it. While I'd spent a lot of time thinking about what we wanted to happen, I hadn't spent enough time thinking about what we *didn't* want to happen. I should have worked backward in planning, not only from the physical, moral, and mental aspects of the commander's desired end state but from our adversaries' as well.

THE SIXTH DREAM

Well-Integrated Capabilities Have Significant Effects In and Through the Information Environment

I once again found myself facing a fresh mission for the MEU. Though new to me in the dream, events unfolded following a pattern made familiar in this account. As previously, I worked hard to make sure that

- aspects of the mission that relied on effects in or through the information environment received due consideration in planning for all phases
- the efforts of information-related capabilities were integrated and supported
- IO and information-related capability objectives nested with broader mission objectives
- assessment efforts were in place.

Although initial humanitarian aid and security cooperation efforts struggled, rapid assessment feedback from a range of sources and an expectation to adapt allowed us to get things on the right track, with the humanitarian crisis significantly diminished and substantial improvements to the staff and logistics capabilities of Centralian forces in the district.

Sensing their opportunities disappearing, provocateurs from Montanya encouraged *The Truth* to launch a string of terrorist attacks, citing in their propaganda the need to repel the foreign occupiers and reject the government that had invited them. In response to these attacks, the government of Centralia formally requested U.S. help with internal security, conducting operations alongside Centralian forces. While waiting for formal approval of the request and permission to operate by, with, and through the Centralian forces, we planned for this new turn in the operation.

When the operation turned kinetic, the operational planning team lead tried to marginalize my participation in planning and steer IO efforts toward a concept of support focused on maintaining the goodwill of the local populace. I reminded him that IO had its roots in command-and-control warfare and that adversary will was surely a center of gravity. While we could and would certainly continue to inform and influence the locals in support of evolving mission objectives, we could also help degrade, disrupt, corrupt, or usurp adversary decisionmaking while helping to protect our own (right out of the joint definition of IO).[1] Maybe we could even help protect our partner forces' decisionmaking. He agreed to let me plan, at least, and eventually bought into the IO concept of support we developed. "You can do all this?" he demanded to know. I assured him that I'd spoken to all the information-related capability leads and that we could. I pointed out that some of it was contingent on what intel could pro-

[1] As a refresher for anyone needing it, Joint Publication 3-13 defines IO as "the integrated employment, during military operations, of information-related capabilities in concert with other lines of operation to influence, disrupt, corrupt, or usurp the decision making of adversaries and potential adversaries while protecting our own."

vide us as a place to start and some of it was contingent on the receipt of certain authorities, but all of that was clearly stated in the details of our concept of support.

We helped our partner forces with OPSEC, sharing basic principles, helping them execute the OPSEC methodology, and decreasing the number of unintended indicators they were generating. Counterintelligence/human intelligence Marines began to work with Centralian intelligence, and we requested additional support from the Embassy. We discussed OPSEC concerns with local Centralian commanders, and they shared our concerns; with their cooperation and under the guise of rapid-response drills, we were able to minimize the lead time the Centralians needed to execute operations against the terrorists while also minimizing the opportunity for the terrorists to plan based on any leaks.

As part of our red-teaming, we identified human-rights violations by Centralians as something that could undermine our collective efforts. We modified a MISO series used previously with a different partner nation to emphasize the importance of professionalism and the responsibility of a nations' military to protect all its citizens. I made sure that the Marines that were working with Centralian forces—either for training or as part of the combined force—were aware of and supported these efforts. In engagements with Centralian troops, we emphasized all aspects of professionalism in keeping with the MISO themes. In engagements with Centralian senior leaders and staffs, our officers focused on the danger of provoking the Montanyans through repressive tactics or disproportionate force. By sharing our real concerns with the leaders of our partners, we hoped to encourage them to emphasize the importance of discipline in this area to their own troops. In this case moral considerations were paramount in maintaining their legitimacy and ours.

Concurrent with these efforts to better protect friendly decisionmaking and reduce the prospects for human rights–related provocations, we really went after the adversary. Working closely with intel, we identified how the insurgents were communicating with each other. We then used electronic warfare and other technical capabilities to selectively shut down channels available to them, herding them toward comms that could be compromised by available intel means. Once we were inside their comms, we were able to unleash havoc on them. We had to be careful and not tip them off that their comms were compromised—we didn't want them to go silent or swap modes.

In a carefully choreographed sequence, we coordinated numerous capabilities in quick succession. We delivered messages to specific insurgents who were identified by intel as vulnerable to MISO or military deception—threatening them, trying to bribe them, urging their defection, or making them suspicious of their own colleagues. High-value targets we couldn't influence were targeted for capture or strike based on the information gleaned from enemy comms. We were so far inside their loop that we could counter their attacks and conduct our own successful ambush patrols. Careful timing made them think they had been infiltrated or that one or more of the high-value targets we'd captured was talking. Counter-propaganda became easier, too. Knowing the extremists' operational and propaganda intentions made it possible to inoculate the information environment against their lies and to make sure combat camera assets were in the right place to document their (now often failing) operations for use in our own (and Centralian) press releases. By carefully integrating physical operations and the information-related capabilities, we were highly effective against the terrorists while protecting and continuing to exploit our advantage. This blending of physical and information combat power really allowed us to impose our will on the enemy and get them dancing to the beat of our drum, rather than the other way around.

Our efforts to degrade adversary command and control also helped with our efforts to maintain popular goodwill toward the MEU and the government and forces of Centralia. The level of hurt we put on the insurgents kept them in total disarray; they had no successes to publicize, and no comfortable time to plan and generate their propaganda. I guess this was one of those times where the best defense really was a good offense. Conversely, we had numerous successes of our own to advertise to increase support for our collective end states: tactical successes, captured terrorists, defections, and captured documents showing the Montanyan role in encouraging and provoking these attacks. Of course, our continued humanitarian efforts helped, too. We genuinely helped people in need, and that earned goodwill from the populace. That goodwill paid off tangibly when we transitioned to MISO efforts to encourage specific supportive behaviors, like reporting suspicious activity to a tips line. Our IO efforts against the terrorists and to gain support from the local population were mutually reinforcing.

With the insurgents' networks shattered and discredited, with the more robust capabilities of the Centralian forces on clear display, and with international indignation against the Montanyans running high, the security situation quickly stabilized. After a few months, the MEU was able to withdraw, leaving behind a more capable partner, an improved security situation, a resolved humanitarian crisis, and a Centralia grateful from top to bottom. I watched the shore of Centralia retreat toward the horizon as I and others waited on the flight deck for the awards ceremony. I was to receive the Meritorious Service Medal. I formed at the rear of the formation with the others, and at the command "PERSONNEL TO RECEIVE AWARDS, CENTER . . . MARCH!" we stepped off sharply, heel edges hitting the deck with increasingly loud thuds, until . . . I was rudely awakened from my dream by the throbbing buzz of my alarm.

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Epilogue

Awaking aboard ship, I found myself somewhat disoriented. The MEU did not have a new mission . . . yet. Although I had never undertaken the responsibilities of an IO officer here in the waking world, I now felt more confident and prudently cautious about my ability to do so. I knew that there would be challenges and difficulties but that I would fare reasonably well if I remembered my training and the 26 lessons I had learned in the dreamland of Centralia rather than the real-world school of hard knocks:

1. Effective information operations cannot be an afterthought. If IO is part of planning, it is more likely to be part of the plan.
2. If effects in and through the information environment are important to the commander, they should feature prominently in commander's intent.
3. Maneuver and fires generate effects in the information environment, too.
4. Plan for friendly-force mistakes and adversary propaganda.
5. All communications are potentially global. What you do and say here can have effects elsewhere, and vice versa.
6. IO is like fire-support coordination; it is an integrating function, not itself an information-producing/affecting capability.
7. One information-related capability by itself produces minimal effects and risks being overwhelmed by others or other lines of operation.
8. Information-related capabilities that are not part of the IO concept of support may still be active; ensure that all information-related capability operators are aware of IO plans and that all plans are deconflicted, at a minimum.
9. Information-related capabilities can have lengthy timelines, for both execution and results.
10. Events do not always unfold according to plan, so prepare IO branches and sequels.
11. Warfare—including information warfare—involves trade-offs.
12. The efforts planned and coordinated by IO need to be monitored and assessed; otherwise, you're shooting in the dark.
13. IO is not well understood in the force.
14. Success in IO requires prioritizing intelligence support for IO.
15. IO objectives must be clear and precise.
16. Good deeds do not speak for themselves.
17. Do not assume that changing attitudes will change behaviors.
18. Consider the information environment from the population's perspective.
19. Things do not always happen for the reasons you think; causation can be complicated when behaviors, perceptions, cognition, and culture are involved.

20. Fail fast. Quickly try, quickly monitor results, and quickly adjust assumptions and efforts accordingly.
21. Every operation is an information operation.
22. IO can deliver effects on enemy forces and commanders, as well as on civilian populations.
23. Adversaries can do things that you cannot. Be prepared for them.
24. Information-related capabilities that are not well integrated with operations are vulnerable to being overwhelmed.
25. It can take years to build credibility but only minutes to tear it down.
26. Sometimes, the most important cognitive, informational, mental, or moral effect is the one you avoid.

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More than a century after its release, *The Defence of Duffer's Drift* by Major General Sir Ernest Swinton has become an enduring military classic. This piece of instructional fiction, in which the narrator learns from his operational mistakes over a series of dreams, has earned a place in military classrooms and has inspired military leaders, analysts, and historians. Indeed, the narrative form can be a powerful teaching and learning tool. To support the U.S. Marine Corps and its curriculum for information operations personnel, RAND has adapted the premise of General Swinton's work for a modern-day audience and a different problem set. The fictitious narrator, Captain I. N. Hindsight, takes readers repeatedly through the same mission over the course of six dreams in which he makes shortsighted decisions, critical miscalculations, and smaller mistakes that contribute to spectacular failures until his accumulated lessons ultimately allow him and the command he supports to succeed. The fabricated instructional scenario draws on actual historical operations, alternative directions that these operations could have taken, and realistic challenges that a Marine Corps information operations planner might face. The 26 concise lessons in this volume offer insight that, ideally, the practitioner will not need to acquire through hindsight.

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