

Organizing for Mission Command

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What's old is new again.

Confronted with numerical inferiority, a contested electromagnetic spectrum, and the lack of safe havens, the USAF is returning to an old concept: mission command.¹ This philosophy envisions small units, operating under commander's intent, that can maneuver and fight more rapidly than the enemy's targeting cycle. But is the Air Force capable of implementing the doctrine it is writing?

It is not. The USAF's organizational structure is incompatible with mission command philosophy. It does not have to be this way. Organizational structure can be changed.

This essay proceeds in four parts. First, this essay defines mission command. Second, this essay argues that USAF organizational structure inhibits execution of mission command. Third, this essay proposes an alternative organizational structure: the functionally-integrated squadron. Lastly, this essay explores the challenges of organizational change and advocates for why change is worth undertaking anyways.

What is Mission Command?

Mission command is a notoriously difficult concept to define.² Doctrine is the starting point of the conversation, not the end. At its core, mission command seeks to address a dilemma on the delegation of authority and commander's intent. Simply stated, the dilemma is:

The more a commander delegates authority, the more responsive an organization is to its environment. However, the more the commander delegates, the less likely that the organization's response will match the commander's intent.

¹ References to 'mission command' were popularized within the US armed forces following WWII and draw their heritage to the German concepts of auftragstaktik and weisungen. However, the concepts of 'mission command' have predated auftragstaktik in both US and foreign militaries. Despite the waxing and waning of the specific term, the concepts are quite old. For further discussion, see Maj Andrew Kiser, "Mission Command: The Historical Roots of Mission Command in the US Army," School of Advanced Military Studies, January 2015, <https://apps.dtic.mil/sti/pdfs/AD1001514.pdf>

² It is difficult to define mission command because in common parlance the term is used to discuss multiple, related concepts. It is frequently referred to as both a framework of executing orders and as a philosophy of leadership. This confuses the issue and hinders academic debate on the concept. This article uses the term 'mission command' to refer to the leadership philosophy. This article uses the term 'distributed control' to refer to the framework of executing orders. See "Air Force Doctrine Publication 1-1, Mission Command," USAF Lemay Center, August 2023, https://www.doctrine.af.mil/Portals/61/documents/AFDP_1-1/AFDP%201-1%20Mission%20Command.pdf, 1 and 4.

Mission command seeks to reconcile that paradox. AFDP 1-1 defines mission command as a philosophy of leadership.³ Subordinates understand commander's intent. Commanders trust subordinates. Everyone shares awareness.⁴ With this philosophy, the commander can delegate authority to subordinates without inheriting the typical downsides of delegation. An organization can be both responsive and true to commander's intent.⁵

Alas, when it comes to putting philosophy into practice...paradoxes of command are not so easily reconciled.⁶ Commander's intent does not necessarily equate to commander's perspective. Trust does not necessarily equal resources allotted. Awareness is situational. A philosophy of mission command is only as good as the framework of execution.

Mission Command and USAF Organizational Structure

A subordinate commander empowered with initiative - understanding commander's intent and possessing suitable resources - can react to a rapidly changing environment faster than their counterpart.⁷ Unfortunately, without an organizational structure that promotes these qualities, the subordinate commander lacks the tools and authority to exercise disciplined initiative, even when they see the opportunity. Does the USAF organizational structure promote these qualities?

Historically, the USAF was the most centrally controlled of the armed services. From their humble beginnings in WWI and maturing in WWII, airpower advocates consistently championed centralized control as a means of preventing airpower's dilution via subservience to the tactical objectives of army commanders.⁸ For a masterclass in centralized control, look no further than the Air Tasking Order (ATO). It is hard to imagine the Combined Forces Land Component Commander (CFLCC) issuing route instructions to individual vehicles, but in the Combined Air Operations Center (CAOC) it was commonplace during Desert Storm.⁹ Advances in communications over the last 30 years exacerbated this tendency by making possible a degree of centralization that was previously impossible.¹⁰

³ "Air Force Doctrine Publication 1-1, Mission Command," USAF Lemay Center, August 2023, https://www.doctrine.af.mil/Portals/61/documents/AFDP_1-1/AFDP%201-1%20Mission%20Command.pdf, 1.

⁴ *Ibid.*, 8-9.

⁵ *Ibid.*, 6.

⁶ Nor does a paradox have to be resolved. A paradox of command is frequently a tension between two valid principles. In this case the tension between organizational agility and unity of effort. Situationally-informed balance, not necessarily resolution, is an alternative framework. See David Zelaya, "The Paradox of Control," *Small Wars Journal*, October 2017, <https://smallwarsjournal.com/jrnl/art/paradox-control>.

⁷ "Insights and Best Practices Focus Paper: Mission Command," Joint Staff J7, January 2020, https://www.jcs.mil/Portals/36/Documents/Doctrine/fp/missioncommand_fp_2nd_ed.pdf?ver=2020-01-13-083451-207, 5.

⁸ Michael Kometer, "The strategy of control: Centralized vs decentralized control of us airpower," *Defence Studies*, October 2007, <https://doi.org/10.1080/14702430308>, 39.

⁹ Michael Fischer, "Mission-Type Orders in Joint Air Operations," School of Advanced Airpower Studies, May 1995, https://media.defense.gov/2017/Dec/29/2001861969/-1/-1/0/T_FISCHER_MISSION-TYPE_ORDERS.PDF.

¹⁰ Specifically, the increase in the reliability of over-the-horizon communications and communications bandwidth permits the centralized control the ability to issue orders and receive information from tactical elements. See Clint Hinote, "Centralized Control and Decentralized Execution," Air Force Research Institute, March 2009, <https://apps.dtic.mil/sti/pdfs/ADA550460.pdf>, 69.

AFDP 1-1 seeks to reverse this trend. Centralized control is out; distributed control is in.¹¹ AFDP 1-1 generally recognizes that the transition to mission command requires cultural change but underestimates the challenge.¹² Radical changes to service culture outside of the crucible of war are rare. When service culture has changed in peacetime, it has almost always been accompanied by large-scale organizational change.¹³

The USAF is predominantly a functionally organized service.¹⁴ Sub-groupings of Airmen are arranged according to their specialties. This contrasts with a divisional organizational structure, where sub-groupings are arranged by geographic region or by mission. Like all organizational structures, a functional structure has a mix of pros and cons. Immediately relevant to the discussion here, one of those cons is a decreased ability to delegate authority and distribute control.¹⁵

Significant challenges exist to executing mission command in a functionally divided organization. To understand these challenges, first consider the organization of a 'standard' Air Force operational wing, depicted in Figure 1 below.

¹¹ Compare the language in AFDP 1-1 with "JP 3-30 Joint Air Operations," Joint Chiefs of Staff, September 2021, https://www.jcs.mil/Portals/36/Documents/Doctrine/pubs/jp3_30.pdf, I-2.

¹² AFDP 1-1 cherry picks history to support the narrative that USAF command policies have been continually evolving towards mission command. While Gen Kenney in the Pacific Southwest during WWII is a good example of distributed operations, plenty of other operations were highly centralized. Operation Pointblank is an excellent example of how the highly centralized use of airpower was critical to Allied victory. It would be more accurate to say that while the Air Force has executed decentralized control to great effect, it has predominantly organized around centralized control. See Phillips O'Brien, *How the War Was Won: Air-Sea Power and Allied Victory in World War II* (Cambridge: Cambridge University Press, 2015).

¹³ An example of a peacetime cultural change due to organizational change is the Goldwater-Nichols act. See George Greanias, "Goldwater Ripples: How Defense Reform Made the Fighting Force More Diplomatic," *War on the Rocks*, September 2023, <https://warontherocks.com/2023/09/goldwater-ripples-how-defense-reform-made-the-fighting-force-more-diplomatic/>.

¹⁴ "Organization of the U.S. Air Force," US Air Force, Accessed December 2023, <https://www.af.mil/About-Us/Fact-Sheets/Display/Article/104613/the-us-air-force/#:~:text=Major%20commands%20are%20organized%20on,the%20accomplishment%20of%20assigned%20missions.>

¹⁵ Diego Stea, Kirsten Foss, and Nicolai Foss, "A Neglected Role for Organizational Design: Supporting the Credibility of Delegation in Organizations," *Journal of Organizational Design*, https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3420945.

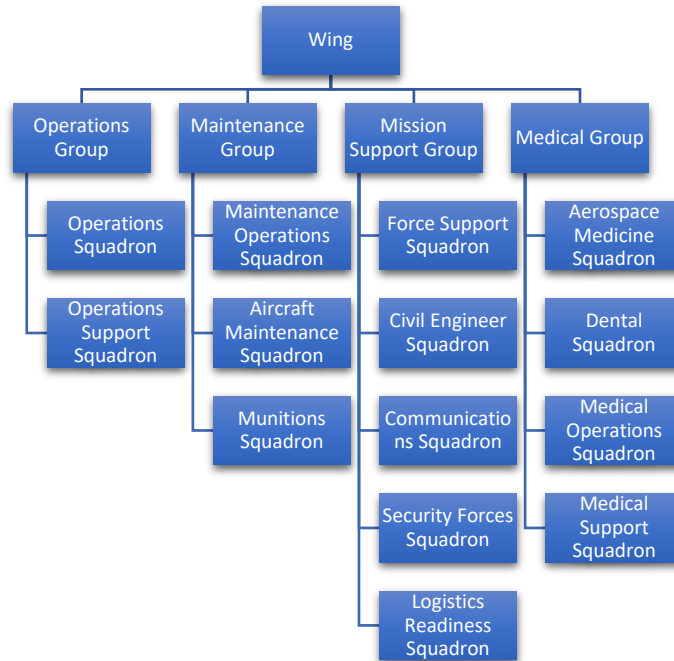


Figure 1. Air Force Wing Organizational Structure Example

The above structure has no independent combat generating formations below the wing level.¹⁶ To generate combat air power, support relationships exist between the operational squadrons and support squadrons. When a conflict between the functions arises that cannot be resolved through the supporting-to-supported command relationship, the wing commander is able to direct guidance. This works well under normal circumstances. But once the wing commander attempts to delegate authority or distribute control, things get complicated.¹⁷

Consider the following vignette, War in the South Pacific. A fighter wing deploys to the theater. In accordance with Agile Combat Employment (ACE), the headquarters element remains at the hub while individual units distribute amongst spoke locations. One spoke holds a fighter squadron from the operations group and a maintenance squadron from the maintenance group. The wing commander knows that communication between the hub and spoke could be limited. So, the wing commander passes intent to each commander, establishes the maintenance squadron as in direct support to the fighter squadron, and delegates to the fighter squadron commander the authority to modify the ATO-dictated sortie rate as the situation dictates. The fight progresses. Due to enemy losses, the commander of the fighter squadron sees an opportunity to inflict great attritional damage upon the enemy (the commander's intent) if the unit can surge its sortie generation rate for a short duration of time. He asks the maintenance commander to increase the number of sorties. Conversely, the commander of the

¹⁶ There are some notable exceptions; consider the relationship of a Special Operations Wing with its subordinate Special Tactics Squadrons (STS). An STS is an independent combat generating formation. But this structure is generally not applied to operational squadrons with a flying mission.

¹⁷ A direct support order clarifies the relationship between the squadron commanders and the wing commander, but it does not remove all ambiguity. Even with a direct support order, it is the supporting commander that decides whether the requested support falls within the chain of command's intent. See Justin Redfern and Aaron Cornett, "The challenging world of command and support relationships," U.S. Army, April 2018, https://www.army.mil/article/203331/the_challenging_world_of_command_and_support_relationships.

maintenance squadron sees a different opportunity. Due to enemy losses, he advocates for a decrease in the sortie generation rate for a short duration of time to complete badly needed maintenance for long-term fleet health (also the commander's intent). He recommends against the fighter squadron commander's request. Lacking a common understanding of the operational picture, the two commanders are slow to agree on an action. The window of opportunity passes.

Analysis of this simplistic vignette reveals two contributing factors to the wing commander's inability to execute distributed control. First, there exists a mismatch between authorities and resources. The fighter squadron commander had the authority to surge sortie rate but relies on the maintenance squadron commander to resource that surge. Per a direct-support relationship, the maintenance commander is obligated to meet the increased request, unless that level of support surpasses the intent of the maintenance squadron's chain of command. Arguably, it does. It is irrelevant which of the two commanders is 'right.' What matters is that despite the organization following the principle of mission command, neither commander has the combination of resources and authority to affect a rapid decision. Trust has been delegated, resources have not.

Second, there exists a communication barrier. The fighter squadron commander views the operational picture in terms of force ratios. The maintenance commander views the operational picture in terms of aircraft availability. Once again, who is 'right' is irrelevant. What matters is that the commanders' abilities to communicate their perspectives are inhibited due to their counterparts' unfamiliarity with the subject matter. Operational commanders often have minimal experience leading Airmen outside of their functional specialty below the wing level. It is even more rare for support commanders to have experience leading operational Airmen. In some services, this lack of shared expertise could be overcome by habitual relationships between the supported and the supporting force. The Air Force's reliance on Unit Type Code (UTC) size offerings sourced from disparate locations all but eliminates the possibility of effective habitual relationships across functional divides. Commander's intent can be shared, but not commander's perspective.

Admittedly, the vignette above is clunky and artificial. Air Force leaders have a proven track record of overcoming structural barriers to command through perseverance, tenacity, and by forming personal relationships not captured by organizational charts. At the same time, it is undeniable that organizational structure at the squadron level is a hinderance to the principles espoused in the mission command philosophy. Is there a different way?

The Functionally-Integrated Squadron

I propose an alternative: the "functionally-integrated squadron." A functionally-integrated squadron consolidates the functions required for the employment of a weapons system under a single squadron commander. Its lines of demarcation are mission based, not functional based. As such, a functionally-integrated squadron combines elements of the supporting functions into the operational squadron. Support squadrons would disaggregate and incorporate into operational squadrons. Some support squadrons (like aerospace medicine) would be fully incorporated and completely cease to exist. Others (like a maintenance squadron) would retain some personnel and capability (like backshop maintenance) while pushing the rest to the operations squadrons (like flightline maintenance). The personnel and capability retained in the operational support squadrons would then also integrate across functional support lines. To make such a move relatively manpower and aircraft neutral, where there was a single operations squadron before, there would now be multiple functionally integrated squadrons with similar numbers of personnel but fewer numbers of aircraft. See Figures 3, 4, and 5 below.

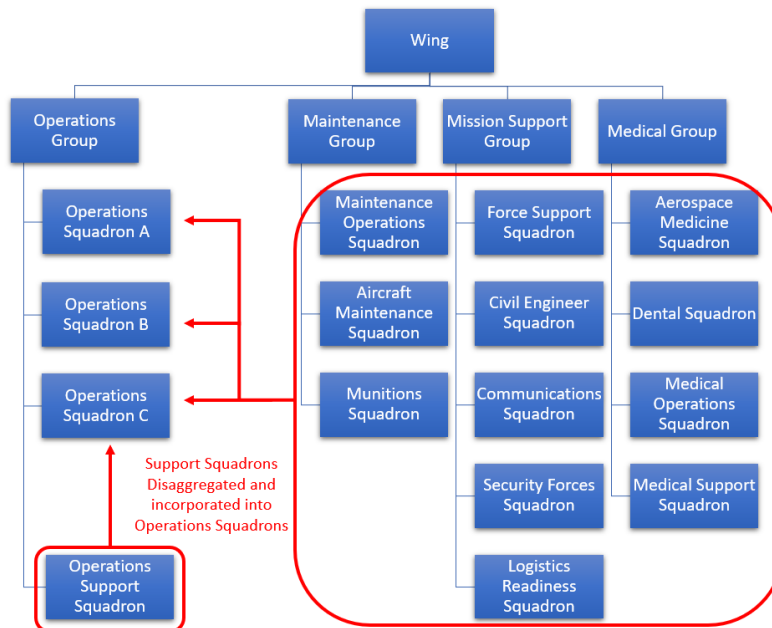


Figure 2. Reorganizing from a Traditional Wing to a Wing with Functionally-Integrated Squadrons

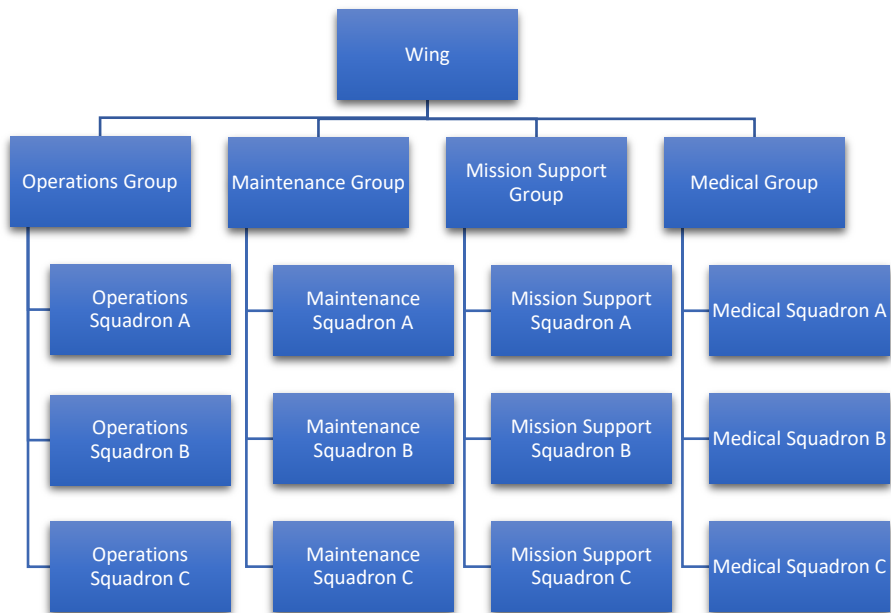


Figure 3. Structure of Wing with Functionally-Integrated Squadrons

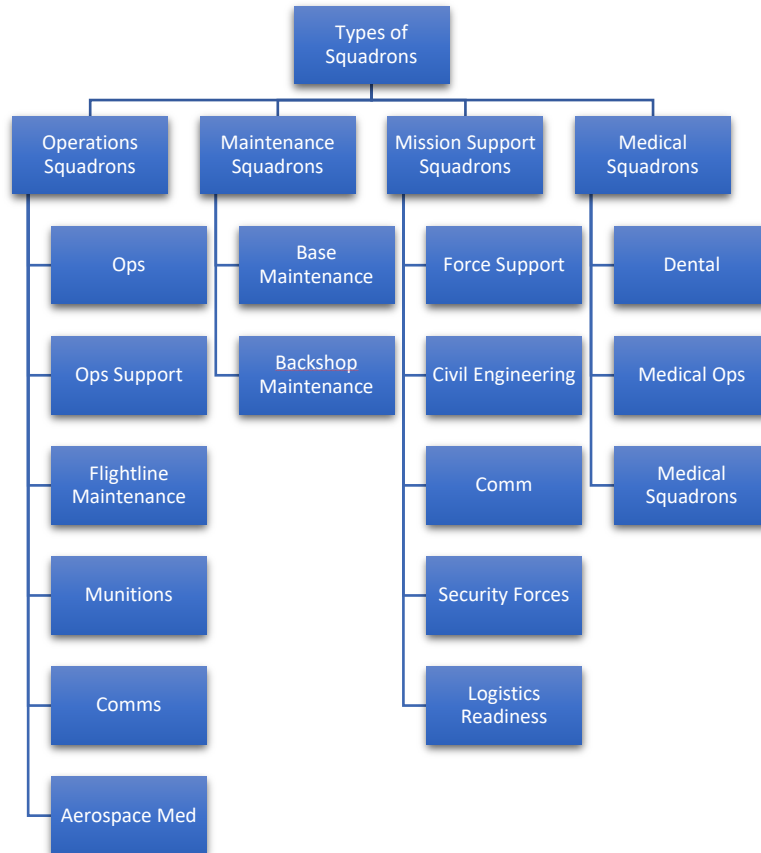


Figure 4. Composition of Functionally-Integrated Squadrons

What functions go into the operations squadrons and what functions remain separate? Any determination should be specific to the squadron's mission, but two rules of thumb may be helpful. First, those functions that scale based on the pace of operations should generally be integrated, while those functions that scale based on the location of operations should generally remain separate. To use the example from our vignette, a squadron needs more maintainers when the sortie rate of the unit increases. So, maintenance is a prime candidate for inclusion in the functionally-integrated squadron. Conversely, a squadron does not necessarily need more air traffic controllers when the sortie rate increases, but it absolutely needs more controllers if the squadron is to operate in two locations simultaneously. Therefore, air traffic control is not a good candidate for inclusion. Second, functions should only be integrated if their expected utilization meets or exceeds their minimum viable size. For example, expeditionary communications teams typically require a minimum of 2-3 members. There are enough communications requirements in a fighter squadron to ensure the entire minimum team size is utilized. So, expeditionary communications are a prime candidate for inclusion. Conversely, even though the minimum size of a chaplain team is only 1, it is unlikely that a chaplain would be fully utilized by a single squadron. Therefore, chaplains are not a good candidate for inclusion. Generally, the application of these rules of thumb indicate that operational support, maintenance, munitions, aerospace medicine, and communications should be members of the functionally-integrated squadron.

What is a mission-based line of demarcation? Once again, the answer is specific to the weapons system, but rules of thumb can be applied. First, a weapons system can act as a stand-alone squadron if it exists longitudinally throughout its mission's cycle. For example, consider the mission of dynamic targeting.

This mission can be subdivided longitudinally into find, fix, track, target, engage, and assess. A fighter like the F-15E has a role in each of those sub-process steps, even if it is not an equal role. So, a F-15E weapons system is a good candidate for being a stand-alone squadron. By contrast, a processing, exploitation, and dissemination (PED) cell does not have a role in the target and engage steps. So, a PED weapons system is not a good candidate for being a stand-alone squadron and is a better candidate for inclusion into other squadrons. Second, size matters. A single squadron that combines AWACS, Raptors, and CCAs is theoretically an excellent air superiority mission-based demarcation. However, once these platforms were combined with their supporting functions, the resulting squadron size would be too massive.

Functionally-integrated squadrons can significantly reduce the two organizational barriers to mission command discussed previously. Consider the first barrier: the mismatch of authority and resources. In a traditional wing structure, a functional disagreement between the supporting and supported commanders could not be remedied below the wing commander. In a functionally-integrated squadron, the operational commander and the maintenance commander are one in the same. When a wing commander delegates authorities to a functionally-integrated squadron, he or she is simultaneously resourcing it. There is no magic organization that can consolidate all the resources a weapons system needs in a single squadron. Just as a brigade is still dependent on resources held at the divisional level, so too will a squadron always be dependent on resources held at the wing level. But, a functionally-integrated squadron has organic access to vastly more resources than its traditional counterpart.

Consider the second barrier: the lack of communication tools to achieve a shared operational picture. The shift to a functionally-integrated squadron does not solve this barrier overnight; the commander of the squadron still has the same experience limitations as before. However, a functionally-integrated squadron addresses this concern in the long-term. The composition of a functionally-integrated squadron forces the different functions into proximity. As a result of this proximity, future squadron commanders will have a wider breadth of functional experience at an earlier point in their career. That experience directly translates to the communication tools needed to achieve a 'wing-commander-like' perspective on the interaction between operational and supporting forces.

Why?

You should be skeptical. The changes described above have considerable disadvantages. First, closing a divide within an organization inevitably creates a new divide. The standardization of tactics, techniques, and procedures within functional communities becomes substantially more difficult in an organization comprised of functionally-integrated squadrons. Second, divisional structures like functionally-integrated squadrons use resources less efficiently than their counterparts. The distribution of labor and materiel amongst multiple squadrons amplifies wastage and discourages sharing amongst the squadrons. Third, functionally-integrated squadrons are more prone to talent mismanagement than their counterparts. In a functionally-integrated squadron, members of one functional category will be rated on by members of a different functional category. This decreases the value of technical competence and increases the likelihood of perceptions of functional favoritism. When Airmen feel as if their skills are not valued and that their advancement is limited, they vote with their feet. In addition to the specific disadvantages to functionally-integrated squadrons, organizational change itself is costly. Even successful transformations expend precious funds, test the patience of outside stakeholders, generate temporary confusion, and risk alienating Airmen. Functionally-aligned squadrons face significant disadvantages, unclear costs, and significant risk; why do it?

Because, as the saying goes, “the enemy gets a vote.” The most dangerous of our potential enemies, China, is willing and capable of imposing an environment of distributed control on air forces, regardless of our command-and-control posture. While war has an inconvenient track record of defying our best-laid predictions, it is safe to make three assumptions about a war with China in the South Pacific. First, the USAF will be outnumbered.¹⁸ On top of the advantage of fighting a home game, China’s robust industrial base and large population enables them to field forces on scales not seen in combat since WWII. An attempt to centralize control against a mass of this magnitude will strain the human brain’s capacity for detailed decision making.¹⁹ Second, the electromagnetic spectrum will be contested.²⁰ China possesses a large and modern electronic warfare force, capable of disruption and denial across the electromagnetic spectrum. It is entirely plausible that squadrons and wings will experience moments of time where no communication is possible. Third, headquarters that do not move will be targeted.²¹ China boasts the largest ground-based missile force in the world.²² These weapons range well beyond the second island chain and exceed the stockpile of interceptors to oppose them. PLARF doctrine classifies command and control centers as a top priority target. If it is static it can be found. If it can be found it can be hit. To survive, headquarters will have to be mobile. That mobility will strain both the headquarters’ planning capacity and its ability to communicate that planning to subordinate units.

On top of these enemy-imposed conditions, the geography of the South Pacific simultaneously imposes and favors distributed control. The miles of ocean between spoke locations strains the ability of the higher headquarters to allocate resources or capabilities that are retained at the headquarters level. The same distance provides easily-defined boundaries between subordinate units. Such boundaries reduce the risk that two subordinate commanders acting with initiative will contradict each other’s operations.

Large forces, unreliable communications, mobile headquarters, and expansive oceans combine to form an environment in which centralized control is not just inefficient, it is ineffective. The choice between centralized and distributed control is a false one; distributed control is a characteristic of the wartime operating environment. Functionally-integrated squadrons will thrive in this environment. Functionally-divided squadrons will not.

Turning Aspiration into Reality.

¹⁸ Gen Charles Brown, “Keynote Address,” filmed September 2020 at AFA’s Air, Space, and Cyber 2020 Conference, <https://www.airandspaceforces.com/afas-vasc-2020-gen-charles-q-brown-jr-chief-of-staff-of-the-air-force/>.

¹⁹ The air war in Iraq and Afghanistan exposed that the CAOC’s ability to collect information far exceeds its ability to process information, a phenomenon that would be exponentially greater against a peer enemy. Despite the ability to communicate with a large number of forces, the ability to control them at speed and with detail is limited. See Nicholas Blanchette, *Air Power in the Age of Primacy*, Cambridge University Press, December 2021, <https://www.cambridge.org/core/books/abs/air-power-in-the-age-of-primacy/operation-enduring-freedom/3D1FFD423BA7E1581E1C193AF51D405B>.

²⁰ J. Michael Dahm, “Electronic Warfare and Signals Intelligence,” Johns Hopkins Applied Physics Laboratory, August 2020, <https://www.jhuapl.edu/sites/default/files/2022-12/EWandSIGINT.pdf>

²¹ Zachary Moer, Christopher Chini, Peter Feng, and Steven Schuldt, “Contested Agile Combat Employment,” *Air & Space Operations Review*, September 2022, <https://safe.menlosecurity.com/doc/docview/viewer/docNA3ACFE29572Ab41b7b587ee712e36fe560a95f4ce5dda930949cab0e539e94a61bcac9f9637b>.

²² Christopher Mihal, *Understanding the People’s Liberation Army Rocket Force*, Army University Press, July 2021, <https://www.armyupress.army.mil/Journals/Military-Review/English-Edition-Archives/July-August-2021/Mihal-PLA-Rocket-Force/#:~:text=Meanwhile%2C%20the%20conventional%20arm%20of,firepower%20to%20overcome%20each%20ship%27s>.

In summary, mission command is a philosophy of leadership. Putting that philosophy into practice requires distributed control, which the Air Force has moved away from over the last 30 years. Any return to distributed control must first overcome significant organizational barriers. These barriers include an organizational structure that does not match authority with resources and an organizational structure that does not promote cross-functional communication. Functionally-integrated squadrons diminish these barriers by consolidating parallel chains of command and by forcing the functional communities into closer proximity. The drawbacks of functionally-integrated squadrons, though serious, pale in comparison to the challenges of trying to implement centralized control against a war with China in the South Pacific.

Doctrine is supposed to codify best practices for replication across the force.²³ AFDP 1-1, Mission Command, is aspirational doctrine. It describes the philosophy of leadership we wish we had, not the practice of leadership we have. If the USAF wants to turn AFDP 1-1 into something more than aspiration, functionally integrated squadrons are a good place to start.

²³ "Doctrine Primer," USAF Lemay Center, October 2020, https://www.doctrine.af.mil/Portals/61/documents/Doctrine_Primer/A%20Primer%20on%20Doctrine%208%20Oct%2020%20v2.pdf