

(Department of Defense photo by U.S. Air Force Tech. Sgt. Michael R. Holzworth)

Maj. Gen. Roger F. Mathews, deputy commanding general, U.S. Army Pacific, and Australian Defense Force Maj. Gen. Richard M. Burr, Headquarters, U.S. Army Pacific, deputy commanding general of operations, salute as the U.S. and Australian national anthems are played during a 17 January 2013 ceremony on Fort Shafter, Honolulu, Hawaii.

Networking and Generalship Across the Anglo-Pacific

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his article reports the findings from a March 2013 social network analysis among senior military officers across the principal Anglosphere nations of the Asia-Pacific region. We chose this area for its increasing importance to the United States, particularly in light of President Barack Obama's remarks in a 2011 speech to Parliament in Canberra, Australia, that "as a Pacific nation, the United States will play a larger and long-term role in shaping this region and its future."

In this research, we found persuasive evidence supporting the hypothesis that U.S. military leaders occupied a central position among senior military officers in the Asia-Pacific, and that these officers' personal networks were primarily experience-based (i.e., that they had resulted from extensive personal contacts made during attendance at military schools and during service at multinational headquarters such as those in Iraq and Afghanistan). Among general and flag officers, if a picture is worth a thousand words, a handshake is worth a thousand e-mails. The policy implication is that if the United States values its position in the Asia-Pacific, it should support continued investment in these experience-based networks.

Quantitative Research

Harvard University Professor Joseph Nye writes that in the future, "much of the work of global governance will rely on formal and informal networks." Nye also finds that, due to the United States' strength in this respect, "predictions of an Asian century remain premature; the United States will remain more central in a dense global web of governance than other countries." Former Princeton University Professor Anne-Marie Slaughter agrees. She argues that in contrast to a hierarchical conception of power, the new "measure of power is connectedness," and "the state with the most connections will be the central player." Instead of "king of the hill," one should think "center of the circle," and "here the United States has a clear and sustainable edge."

Following these assertions about the U.S. role in the Pacific, we wanted to answer two questions using social network analysis: First, quantitatively, among general and flag officers, what could we say about the United States' position in relationships with Australian and New Zealand senior military leaders? Second, qualitatively, how were these officers' social networks constructed?

For the purposes of this article, social network analysis is "concerned with understanding the linkages among social entities and the implications of these linkages." Methodologically, social network analysis does not fit easily into one domain, making it "inherently an interdisciplinary endeavor." The first thing one finds in social network analysis is that networks are always changing—individuals leave assignments, and people fall out of contact or gain new contacts—thus, research always yields a snapshot in time. This modest drawback, however, is mitigated by the fact that a momentary social network analysis is better than no study at all. Moreover, there is a clear benefit to studying the nature of allied relationships for a U.S. military that consistently fights war as part of a multinational team.

Method of Sample Selection

We structured the study to narrowly gauge external perceptions of the United States among discrete groups of senior officers in the Australian and New Zealand militaries. Owing to the difficulty of obtaining a random sample of the target network, we relied on talking to those who could make themselves available for a short interview. The lack of a random sample means that our network may show some bias toward more sociable general officers. If this is the case, it is also important to note that we were able to obtain a significantly larger sample of the Asia-Pacific Anglosphere network than is usual for social research; studies often include well below 1 percent of a social network. Our study netted 27 interviews of Australians and New Zealanders. Twenty-one were general officers while six were civilian academics who networked with military officers.9 For a sense of relative sample size, there are approximately 74 general officers in the Australian army and 20 general officers in the New Zealand army. 10 Thus, our sample size for this study was more than 20 percent of the total number of general officers in the Australian and New Zealand armies, which is more than sufficient to draw valid and reliable conclusions.

The relatively small size of the Australian and New Zealand militaries provided the ability to obtain a meaningful sample size. In light of the difficulty of obtaining a random sample, this was another reason these nations were selected for study.

It is important to note that this study focused on networked connections as perceived by Australian and

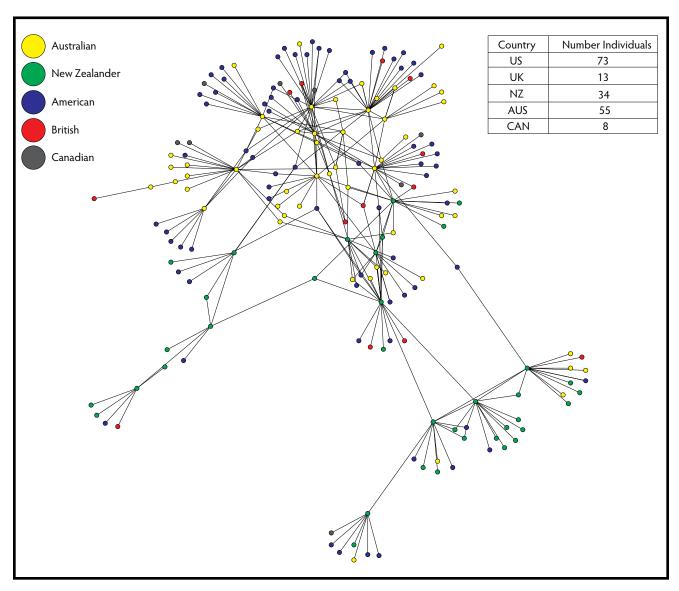


Figure. Network Derived From Interviews Asking Australian and New Zealand Senior Military Officers Whom They Contact for Advice

New Zealand general officers, so U.S., Canadian, and British senior military officers were not interviewed. Therefore, indications of networked connections to the latter groups only appear if specifically noted by the Australian and New Zealand general officers interviewed.

Methodology

Personal interviews were conducted to develop a high-quality data set. The majority of the interviews were accomplished face-to-face. Each participant received the same scripted prompt, which concluded with the guidance to provide "the social connections that are useful to you in a work or professional sense—who might you

reach out to for advice when you have a particularly tough issue?" This prompt's objective was to show to whom general and flag officers talked on important matters and from what country within the Anglosphere those individuals came.

Quantitative Findings

Using the interview data, we built a social network model of general officers and policy makers. Each node represented a person, and nodes were deemed connected if either person named the other in an interview. In this way, we formed a model of 191 people with 256 connections, as depicted in the figure above.

Analysis of the network yielded several interesting observations. First, the model showed that the Australians were more central than U.S. officers within the network, and analysis of centrality measures (not shown here) suggested that in this network, Australians held the most "important" social position. This was expected due to sampling bias. The interviews were conducted with 14 Australians and 13 New Zealanders. Intuitively, one would expect them to have closer relationships among themselves and talk with people in their countries' defense institutions more than with people from other countries. However, it was surprising that despite the sampling bias toward Australians and New Zealanders, many Americans were in the network. Although no Americans were interviewed, more were included in the network than any other nationality.

We also found that the Australians and New Zealanders in the network were more connected to Americans than to any other foreigners, as shown in table 1. This observation was somewhat surprising also, especially in the case of the New Zealanders due to the dissolution of the New Zealand-United States leg of the Australia-New Zealand-United States (ANZUS) Treaty in the mid-1980s, which ostensibly lessened ties between the militaries of the United States and New Zealand.

Even with a small sample of interviews, the strong bias among Australian and New Zealand officers toward U.S. officers provided persuasive evidence for the hypothesis that the United States was in the "middle." This meant that when Australian or New Zealand general officers encountered thorny issues and reached beyond their domestic borders for advice from similarly ranked peers, they were more likely to call on an American than an officer of any other nationality within the Anglosphere. This finding was consistent with Nye and Slaughter's overall conjecture—at the senior military officer level, the United

States holds a central position among these key allies and partners in the Asia-Pacific.

We also hypothesized that the higher the rank held, the more connections an officer would have. Thus, high-ranking officers were expected to be more central in the network model. However, our data on this point yielded no correlation. This likely was a function of sampling bias as many of the individuals interviewed were brigadier generals and major generals. In a social network model, people who are interviewed will be connected to everyone they name, which increases their centrality in the network model. Those who are not interviewed will appear in the model only if someone else names them and so will be less likely to be mentioned several times and have several connections.

In summary, the network data in this study were biased toward brigadier generals and major generals from Australia and New Zealand, which limited the analysis and conclusions we could draw. Despite this heavy bias, the study provided persuasive evidence that New Zealand and Australian military officers were more socially connected to U.S. officers than to those of any other country in the Anglosphere nations of the Asia-Pacific region. This was particularly surprising among the New Zealanders since one would expect them to name more Australian than U.S. officers due to their geographic proximity and Commonwealth relationship—but the data indicated otherwise.

Qualitative Research

Qualitatively, our study aimed to determine the nature of these social networks. Stanley McChrystal once famously observed that in Iraq and Afghanistan, "the [enemy's] network is *self-forming*." This assertion begs a question addressed in our research: how do general officers acquire their networks? Are they experience-based, as a result of military educational

Country	Australia	United States	Britain	Canada	New Zealand
Australians	2.22	1.11	0.18	0.13	0.53
New Zealanders	0.78	0.86	0.22	0.03	2.38

Table 1. Average Number of Connections for New Zealanders and Australians

or international staff time, or, alternately, are they self-forming in this age of technological connectedness?

We performed a thorough review of the responses and subjectively determined whether an individual could be said to have an experience-based or self-formed network. For example, if participants said all their contacts resulted from military schools and international headquarters (e.g., Iraq or Afghanistan), their networks were categorized as experience-based. When individuals described their sole approach to networking as taking the initiative to reach out to others with whom they had shared no prior experiences, their networks were listed as self-forming. A third category was for those who reported using both methods.

Qualitative Findings

Our analysis yielded the categorization of the 27 individuals' networks, depicted in table 2. We found the self-forming category almost entirely composed of academics or recently retired officers, with one actively serving officer as an outlier. As academics who study defense and security subjects tend to find their employment dependent upon relationships with active duty military officers, it is reasonable to explain that people in this category have greater incentives to seek their own social contacts. Also, retired general and flag officers have more time to devote to social relationships than while in active service, particularly for self-directed networking.

Nearly all the actively serving general and flag officers' connections fell in the experience-based category. This is valuable information because it suggests that active duty officers do not delibertely set out

to acquire their networks—rather, their networks develop as a natural result of work experiences. While this conclusion is significant, it must be noted that the sample size limits the ability to draw specific claims based solely on this data. There is room for conducting further studies, which might include interviewing American, British, and Canadian officers to elicit data showing a different perspective.

Implications

Based on this study, we assert that U.S. military senior leaders have a larger influence on Australian and New Zealand general officers than they have on each other. In addition, the data suggest that U.S. military leaders have more influence than British military leaders, a conclusion that was not obvious prior to data collection and analysis (i.e., one would expect military leaders from Commonwealth countries such as Britain, Canada, New Zealand, and Australia to have stronger ties with each other than with leaders from the United States).

Anecdotal evidence supports the validity of this study's findings. For example, the appointment of Australian Maj. Gen. Richard M. Burr to deputy commanding general for operations at U.S. Army Pacific, early in 2013, suggests that ties between Australian and U.S. military leaders are strong. Moreover, the commander of U.S. Army Pacific, Lt. Gen. Francis J. Wiercinski, expresses his commitment to international coalition defense networks: "In this business ... relationship building is building trust, and that's the part I want to make sure we hold onto." 14

Although social networks seem to provide significant benefits, budget clouds cast a shadow over the U.S. Army's ability to develop and sustain them. U.S. Army

Network Type (Category Total)	Current Generals and Flag Officers	Recently Retired Generals and Flag Officers	Civilian Academics		
Experience-based (16)	10	6	0		
Self-forming (7)	1	1	5		
Experience-based and Self- forming (4)	1	2	1		
*Academics in the network served in military schools and worked almost excusively with military officers.					

Table 2. Categorization of Interview Participants' Networks



(Photo by Sgt. Warren Wright, 5th Mobile Public Affairs Detachment)

A New Zealand army soldier provides cordon security for his unit as the 1st and 2nd Battalions of the Royal New Zealand Infantry Regiment participate during Cooperative Spirit 2008 at the Joint Multi-National Readiness Center near Hohenfels, Germany, September 2008. Cooperative Spirit is a multinational combat training center rotation intended to test interoperability among the American, British, Canadian, Australian, and New Zealand armies.

Chief of Staff Gen. Raymond T. Odierno acknowledges that the Army "will have to adjust to ... declining budgets, due to the country's worsened fiscal situation." In this context, it seems the force may migrate from traditional face-to-face defense diplomacy to online platforms to develop military networks because online networking is inexpensive. One such private effort is Rally Point, an online site that appears to replicate LinkedIn for a military audience. This sort of cost-saving measure could appeal to many, especially as the millennial generation (sometimes referred to as "digital natives") is comfortable with online communication. As a result, could the end of experience-based military social networks be on the horizon?

This techno-optimistic idea is not supported by our research effort. Our study found noteworthy evidence supporting the conjecture that American military officers occupy a central position among senior military officers from Anglosphere nations of the Asia-Pacific because the personal networks among them are heavily

experience-based. The resulting policy implication is to support continued investment in promoting these experience-based networks. Among this population, frequent flier miles and name badges still matter more than video teleconferences and character-limited messaging.

Finally, how do these findings provide value to the U.S. taxpayer? This question matters as it focuses on the effectiveness of the U.S. military's approaches to conducting defense diplomacy. In turn, more effective alliance and partner activities enhance U.S. capabilities, so these activities can become a cost-effective way to achieve national objectives. For the Army, networks among allied military leaders support the chief of staff's regionally aligned forces initiative. Moreover, continued development of these networks should ease the inevitable difficulty of working in alliances and coalitions. Therefore, social network analysis relative to identifying and explaining network development and functioning contributes tangible benefits.

Disclaimer: This essay is an unofficial expression of opinion; the views are those of the author and not necessarily those of the U.S. Military

Academy, Department of the Army, Department of Defense, or any agency of the United States Government.

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Notes

- 1. For the purposes of this essay, "Anglosphere" refers to the five countries with shared linguistic and cultural backgrounds and a history of military cooperation: Australia, Canada, New Zealand, the United Kingdom, and the United States. Though some might object to this as an exclusively racial construct, one glimpse at the modern multi-ethnic composition of these societies provides sufficient evidence to the contrary.
- 2. Barack Obama, "Remarks by President Obama to the Australian Parliament," 17 November 2011, The White House website, http://www.whitehouse.gov/the-press-office/2011/11/17/remarks-president-obama-australian-parliament (accessed 30 October 2014).
- 3. Joseph Nye, *The Future of Power* (New York: Public Affairs, 2011), 217.
 - 4. Ibid.
- 5. Anne-Marie Slaughter, "America's Edge: Power in the Networked Century," Foreign Affairs, 88 (1) (January-February 2009).
 - 6. Ibid.
- 7. Stanley Wasserman and Katherine Faust, Social Network Analysis: Methods and Applications (New York: Cambridge University Press, 1994), 17.
 - 8. Ibid, 10.
- 9. Academics, in this context, refers to individuals with sustained career focus and employment in the security or military fields, typically at an educational, research, or policy institution.
- 10. These figures are considered approximate because they do change on occasion as international and deployment assignments can curtail or extend opportunities for senior military figures. New Zealand figure obtained from Lt. Col. Stephen Kearney, Defence Personnel Executive-New Zealand Defence Force, 30 September 2014, e-mail to author. By rank, the New Zealand Army has 15 brigadier generals, four major generals, and one lieutenant general. Australian figure: Ian McPhedran, "Too Many Troops in Army Mess" *The Daily Telegraph–Sydney* (16 August

- 2010), http://www.dailytelegraph.com.au/too-many-troops-in-army-mess/story-e6freuy9-1225905574295?nk=cd6f64b22dc-80702b50a97f905865c77 (accessed 30 October 2014). By rank, the Australian Army has 49 brigadier generals, 22 major generals, and three lieutenant generals.
- 11. Joseph Galaskiewicz et al., "The Influence of Corporate Power, Social Status, and Market Position on Corporate Interlocks in a Regional Network," *Social Forces*, 64 (1985): 403-431. Note: To maintain future study potential, all participants were offered anonymity.
- 12. Stanley McChrystal, "It Takes a Network," Foreign Policy (March-April 2011), http://www.foreignpolicy.com/article/2011/02/22/it_takes_a_network (accessed 30 October 2014).
- 13. Amber Robinson, "USARPAC [U.S. Army Pacific] Honors Deputy Commanding General for Operations," U.S. Army Homepage (17 January 2013), http://www.army.mil/article/94570/ (accessed 30 October 2014).
- 14. Lt. Gen. Francis J. Wiercinski, quoted in Kevin Baron, "U.S. Army 'Fences Off' Military Diplomacy from Sequester," Foreign Policy.com (14 May 2013), http://e-ring.foreignpolicy.com/posts/2013/05/14/us_army_fences_off_military_diplomacy_from_sequester (accessed 30 October 2014).
- 15. Gen. Raymond T. Odierno, "The U.S. Army in a Time of Transition: Building a Flexible Force," *Foreign Affairs* (May-June 2012): 11.
- 16. Daphne Koller, "Digital Natives: A Defense of the Internet Community," *The New York Times*, 9 September 2013.
- 17. Kimberly Field, James Learmont, and Jason Charland, "Regionally Aligned Forces: Business *Not* As Usual," *Parameters* (Autumn 2013), 55.

Acknowledgement: The authors wish to express thanks and gratitude to Col. John Graham and the West Point Network Science Center for their generous funding and support for this study.