STAFF SYSTEMS AND THE CANADIAN AIR FORCE:

Part 1
History of the Western Staff System

Ellington at Waterloo by Robert Alexander Hillingford.

By **Major Paul Johnston,** Canadian Forces Aerospace Warfare Centre

Pity the poor staff officers; like Rodney Dangerfield, they just don't get any respect. Furthermore, air forces have always been more fascinated by the daring-do of flying operations than the mundane details of command and staff work on the ground.[1] Nevertheless, one of air power's signal characteristics has always been the critical importance of command and control, in particular that it be centralized. These two facts lead to an irony.

On the one hand, the traditional Air Force devotion to flexibility and aversion to formalized doctrine has tended to undermine standardization of command and staff arrangements. On the other hand, centralized control (albeit with decentralized execution) requires highly developed command and control organizations that should favour a standardization of command and staff arrangements in air forces.

Whatever the merits of such standardization, currently the Air Force is not standardized. No two wings seem to be organized the same way. The Air Division Headquarters and Air Staff in Ottawa are not organized the same way, and keep reorganizing. Recently, it has become a principle that emphasis should be placed on moving from a "staff centric" culture to a "command centric" one.[2] In a similar vein, it was a motivating concern behind the recent Canadian Forces transformation that command, or at least command-like responsibilities, were being exercised by staff officers.[3] Apparently there are problems with the way headquarters have tended to work in the Canadian Forces.

Often times, these sorts of complaints have tended to focus on either the bloated size or the bureaucracy of our headquarters[4]. What this paper will argue is that while those issues are certainly often symptoms of our problems, there are deeper issues. This paper will argue that, ironically, the Canadian Forces in general, and the Air Force in particular, have chronic problems with over-bureaucratic "staff centric" headquarters in part because we have not paid enough attention to staff work as a form of the military art. Rather, a propensity to "muddle through" staff work has been a characteristic of the Canadian military for most of our history. Staff work, or perhaps more specifically a *system* for operational staff work, is an important, indeed central aspect of military professionalism. Paradoxically, as we shall see, the lack of emphasis on a staff system in this sense that has led to "staff centric" headquarters because, without a deeper grounding in the fundamentals of staff systems, staffs have tended to react reflexively to each new pressure of the day, leading to the uncontrolled growth of bureaucracy. Furthermore, the more muddled the staff work becomes, the harder it is to deal with, necessitating even more staff. This can all too easily become a vicious circle.

This is a series of two articles. The first examines the history of command and staff systems generally. With that as background the second will trace the evolution of command and control organization and staff systems in the Canadian Air environment specifically, and then consider the subject and draw some conclusions.

Staff Systems' History

In the history of military staff systems, two broad approaches to the matter are discernable: the Prusso-British approach which divides staffing responsibilities into two or three simple parts and gives primacy to operational considerations, and the French-American "bureau" approach, in which the staff is sub-divided into many functional directorates. The origins of the operational primacy approach are complex, but it was pioneered by the Prussians, adopted by the British, and also picked up by the Russians. The history of the bureau approach is clearer – it was begun by those consummate bureaucrats the French and then developed further by the engineering and process minded Americans. Such is the influence nowadays of the US, however, that their "continental staff system" has almost completely displaced all other approaches to the matter amongst Western militaries. The Canadian Forces, for instance, has now adopted it almost across the board. What is interesting, however, is that the older British philosophy – which is "bred in our bones" – tends to show through in our actual practice.

The Traditional British System: A Diarchy

The British staff system and principles represented a somewhat idiosyncratic but quite highly articulated approach to the matter. Going back to the days of the New Model Army under Cromwell, the British Army based its staff organization upon a division into three parts: a generalist staff to handle operational issues, an "adjutant's" staff to handle personnel and related administrative issues, and a "quarter-master's" staff to handle what today we would call logistics.[5] This three fold division was sometimes succinctly summarized as "mission, men, material."

In practice however, in almost all cases below that of the highest command level, the adjutant and quarter-master's staffs were combined under one officer, which meant that commanders had two principal staff officers working for them – one to oversee all operational issues and one to oversee all support issues.[6] This is the "staff diarchy" referred to above – a philosophy that within their headquarters staffs, commanders would have two principal staff officers as their immediate subordinates: one dedicated to

operational issues concerning the prosecution of the mission, and one dedicated to ensuring adequate support in all its forms. Furthermore, this relationship between the commander and his two principal staff officers was direct; traditionally there were no deputy commanders or chiefs of staff in British practice to mediate between commanders and their staffs.[7] This staff diarchy as an organizing principle for military staffs was already discernible in Wellington's headquarters, which is shown in Figure 1, during the peninsular wars.[8]

Staff systems in Britain remained not much changed up to the late nineteenth century, when the successes of the Prusso-German system in Bismarck's wars seemed so impressive, especially compared to the British performance in the Crimea. Various reforms in Britain were initiated. Indeed the Army staff college at Camberley dates from this era, but it was not really until the further shock of the Boer war that the British finally got serious, and in imitation of the Germans formed a general staff and regularized their staff procedure. In 1912 a *Staff Manual* was published, laying out the basics of British Army staff doctrine, which remained unchanged in its essentials right up to the 1980s.

By the time of the Great War, the British had evolved a staff system that combined some features of the Prusso-German system with their own traditional approaches. In fact, the two were a good fit, as both adhered to the "staff diarchy" philosophy. The 1912 *Staff Manual* defined three staff branches which were signified by letter code:[10]
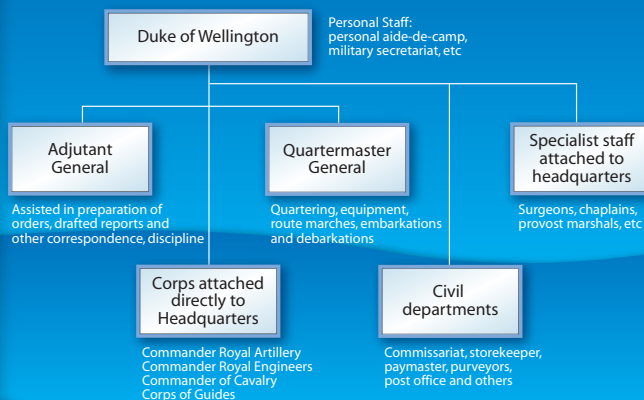
> **G** – for the General staff who handled operational issues, and were in principle at least meant to be staff college graduates;
> **A** – for the Adjutant General Branch, which handled personnel issues; and
> **Q** – for the Quartermaster General Branch, which dealt with what we would now call logistics.

This reflects the three-fold division into "mission, men, material" but in practice the A and Q staffs were combined into a single "AQ" Branch. As mentioned, another feature that distinguished British staff practice was the lack of either a chiefs of staff or deputy commanders, neither of which appear in the 1912 *Staff Manual* or, any actual headquarters organizations until the Second World War.[11]

The use of a chief of staff in British Commonwealth practice was introduced by Field Marshal Montgomery, who was convinced of its value, and when he took over the command of Eighth Army in North Africa he announced:
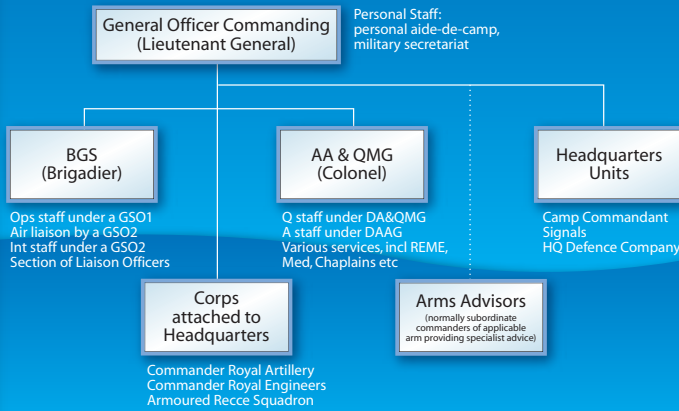
> I want to tell you that I always work on the Chief-of-Staff system. I have nominated Brigadier de Guigand as Chief-of-Staff Eighth Army. I will issue orders through him. Whatever he says will be taken as coming from me and will be acted on at once.[12]

Figure 1: General Structure of Wellington's Headquarters[9]

Duke of Wellington

Personal Staff: personal aide-de-camp, military secretariat, etc

Adjutant General — Assisted in preparation of orders, drafted reports and other correspondence, discipline

Quartermaster General — Quartering, equipment, route marches, embarkations and debarkations

Specialist staff attached to headquarters — Surgeons, chaplains, provost marshals, etc

Corps attached directly to Headquarters — Commander Royal Artillery, Commander Royal Engineers, Commander of Cavalry, Corps of Guides

Civil departments — Commissariat, storekeeper, paymaster, purveyors, post office and others

MONTGOMERY

Figure 2: British Corps Headquarters, late WWII[15]

General Officer Commanding (Lieutenant General)

Personal Staff: personal aide-de-camp, military secretariat

BGS (Brigadier)
- Ops staff under a GSO1
- Air liaison by a GSO2
- Int staff under a GSO2
- Section of Liaison Officers

AA & QMG (Colonel)
- Q staff under DA&QMG
- A staff under DAAG
- Various services, incl REME, Med, Chaplains etc

Headquarters Units
- Camp Commandant
- Signals
- HQ Defence Company

Corps attached to Headquarters
- Commander Royal Artillery
- Commander Royal Engineers
- Armoured Recce Squadron

Arms Advisors
(normally subordinate commanders of applicable arm providing specialist advice)

Figure 3: British Divisional Headquarters, late WWII[16]

General Officer Commanding (Major General)

Personal Staff: personal aide-de-camp

GSO1

Ops	Int	Ln
GSO2	GSO3	GSO3
2 x GSO3	IO	3 x LOs

AA & QMG

Staff	Services	
DAAG	Med	CRASC
DA&QMG	Ord	CREME
SC	Chaplains	Postal
	Provost	

Headquarters Units
- Camp Commandant
- Signals
- HQ Defence Platoon

Arms Advisors
(normally subordinate commanders of applicable arm providing specialist advice)

Figure 4: British Brigade Headquarters, late WWII[17]

Commander (Brigadier)

Brigade Major (BM) (Major)
- Ops staff under a GSO3
- Int staff under a captain
- Sect of Liaison Oficers

Staff Captain (SC) (Captain)
- AQ staff SC
- Transport Officer
- Various services, incl REME, Med, Chaplains etc

Headquarters Units
- Signals Troop
- Local Defence Platoon

Arms Advisors
(normally subordinate commanders of applicable arm providing specialist advice)

Technically, De Guigand was the "Brigadier, General Staff" or "BGS", i.e. the head of the G branch of the headquarters.[13] Although the practice of utilizing a chief of staff spread, British doctrine maintained, until the 1980s, that chiefs of staff were only provided for headquarters at corps level or higher.[14]

As shown in Figures 2, 3 and 4, this diarchic staff system can be seen in the organization of British and Commonwealth, which followed British staff tables, headquarters organizations during World War II.

The Royal Navy

Traditionally, in the Royal Navy (RN) admirals went to sea on a flag ship; thus, given the limited space available on board ship staffs were, of necessity, small. Above the level of admirals at sea, there was simply the Admiralty in London. In such circumstances, until the very end of the nineteenth century, naval staffs were small, and systemization of Royal Navy staffs came even later than in the British Army.[18] As late as 1911, the Sea Lords (i.e. the naval officers appointed to the Admiralty) were actively opposing the creation of a naval war staff. That year a young Winston S. Churchill was appointed First Lord of the Admiralty with a specific mandate from the Prime Minister to force such an innovation through. The Sea Lords, viewing such a thing as the inappropriate imposition of an Army institution upon the Royal Navy, continued to resist and it was only after asking for and receiving the resignations of the entire Board that Churchill got his plan through.[19]
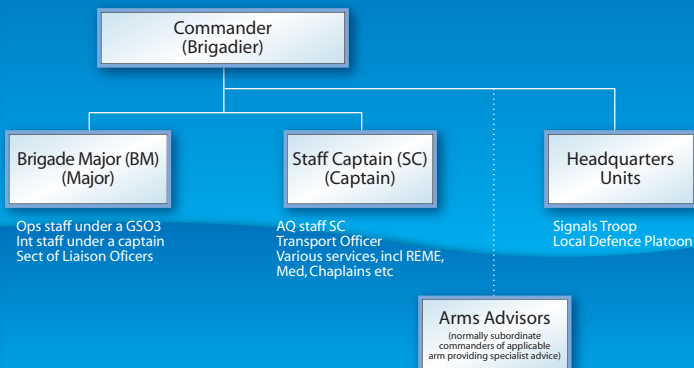
List of Abbreviations for figures 2, 3, and 4

AA & QMG	Assistant Adjutant and Quarter Master General	Int	Intelligence
BGS	Brigadier General Staff	IO	Intelligence Officer
CRASC	Commander, Royal Army Service Corps	Ln	Liaison
CREME	Commander, Royal Electrical Mechanical Engineers	LO	Liaison Officer
DA & QMG	Deputy Adjutant & Quarter Master General	Med	Medical
DAAG	Deputy Assistant Adjutant General	Ops	Operations
GSO 1	General Staff Officer 1st Grade	Ord	Ordnance
GSO 2	General Staff Officer 2nd Grade	REME	Royal Electrical Mechanical Engineers
GSO 3	General Staff Officer 3rd Grade	SC	Staff Captain
HQ	headquarters		

It was not until almost the end of the First World War that further progress was made. During that conflict, RN headquarters of various sorts had inevitably grown, but this growth had been rather ad hoc as the RN still lacked a staff doctrine comparable to that enunciated by the Army in the 1912 *Staff Manual*. By 1918 it was felt necessary to bring some order to things, and on 11 September 1918 an order was released stating that distinction was to be made "between officers appointed to the staff for operations and those attached to the staff for technical and administrative duties."[20] Thus, the diarchic staff principle was brought into Royal Naval use. In 1924 the system was further elaborated in the *King's Regulations and Admiralty Instructions* and in 1938 when the *Naval War Manual* and the *Naval Staff Handbook* were released the RN's staff system was more-or-less in its final traditional form.[21]

This form established that higher naval staffs would have a primary staff officer for operations, usually titled the "chief of staff (operations)" and a primary staff officer for support, usually titled the "chief staff officer." A unique naval innovation was a third group known as the "secretariat" which provided administrative staff support to both the operational and support staff arms, and served as a clearing house for all correspondence in and out of the headquarters.[22]

However, the RN's approach was far less systematized than the army's. They did not follow a standard approach at all levels. Essentially, staffs were simply the admiral and whatever "staff officers" he chose to appoint. Generally, staff titles consisted of the word "Staff" (at squadron level), "Fleet" (at fleet level), or "Command" (at higher level), followed by a word or phrase to denote that officer's specific duties.[23] Thus for example, there were no standardized positions in a fleet headquarters such as the 1912 *Staff Manual* would specify for an army brigade, but there

Figure 5: A Typical Staff at Squadron Level[26]

Admiral

Secretary or "Flag Lieutenant" Lt(N)

Staff Officer Operations CDR or LCdr "first among equals"

Staff Gunnery Officer Lt(N)

Staff Navigation Officer Lt(N)

Staff Engineering Officer LCdr or Lt(N)

Staff Supply Officer LCdr or Lt(N)
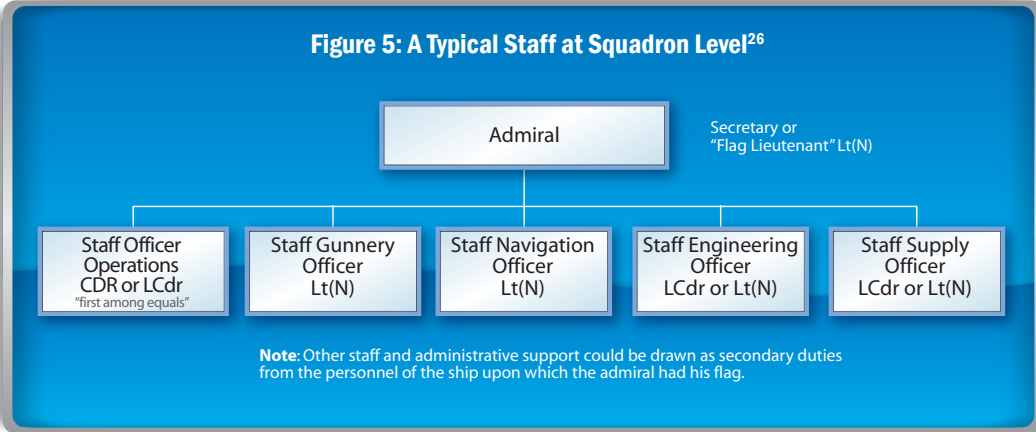
Note: Other staff and administrative support could be drawn as secondary duties from the personnel of the ship upon which the admiral had his flag.

would be positions such as "Fleet Gunnery Officer," as the admiral saw fit.[24] Another significant factor at lower level headquarters which went to sea, was that the size of staffs at this level was sharply circumscribed by the availability of bunk-space on board ship.[25]
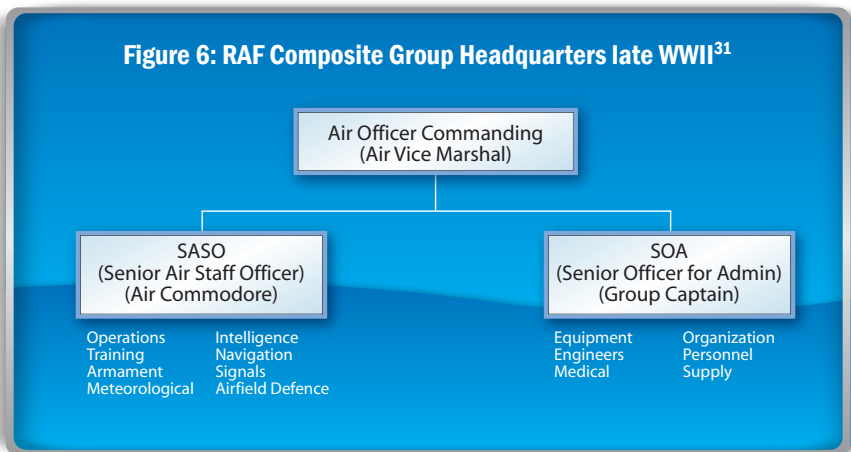
The RAF Follows the Army

Unsurprisingly, the 1912 British Army staff system formed the RAF's starting point towards command and staff issues. Most of the RAF's founding officers were drawn from the Army, not least the first Chief of the Air Staff, Sir Hugh Trenchard. Furthermore, as we have just seen, at the time of the RAF's founding at the end of the First World War, the RN's staff system was still somewhat nascent. In consequence, the primary influence upon the development of staffs in the RAF was the British Army system of 1912. Indeed, that the RAF's staff system was closely modeled on the Army's was expressly noted in official publications of the inter-war years.[27]

As in the British Army, at higher levels the RAF divided staffs into three branches, which in RAF practice were termed: air, administration and technical.[28] These were essentially analogous to the British Army's G, A and Q branches respectively. And just as the British Army tended to combine the A and Q branches under one officer to create in practice a diarchic staff system, so did the RAF at formation level tend to combine the administrative and technical functions under one officer who dealt with "administration" in the broadest sense of that word, i.e. all services and support.[29] The primary air staff officer was known as the Senior Air Staff Officer or "SASO," a position roughly analogous to the senior G staff officer in an army headquarters.[30]

The primary administrative officer was known as the Senior Officer for Administration or "SOA" (or Air Officer for Administration, "AOA," if the incumbent was of Air, i.e. general officer rank), which roughly corresponded to the senior "AQ" officer in an army hadquarters.

At the tactical levels, traditional RAF/RCAF practice was somewhat different. Wings and stations were treated as a single entity with a full three-pronged split rather than a diarchy, the three prongs being air operations, administration and technical.[32] This reflected the traditional British categories of "mission, men, material."

Figure 6: RAF Composite Group Headquarters late WWII[31]

Air Officer Commanding (Air Vice Marshal)

SASO (Senior Air Staff Officer) (Air Commodore)

Operations
Training
Armament
Meteorological

Intelligence
Navigation
Signals
Airfield Defence

SOA (Senior Officer for Admin) (Group Captain)

Equipment
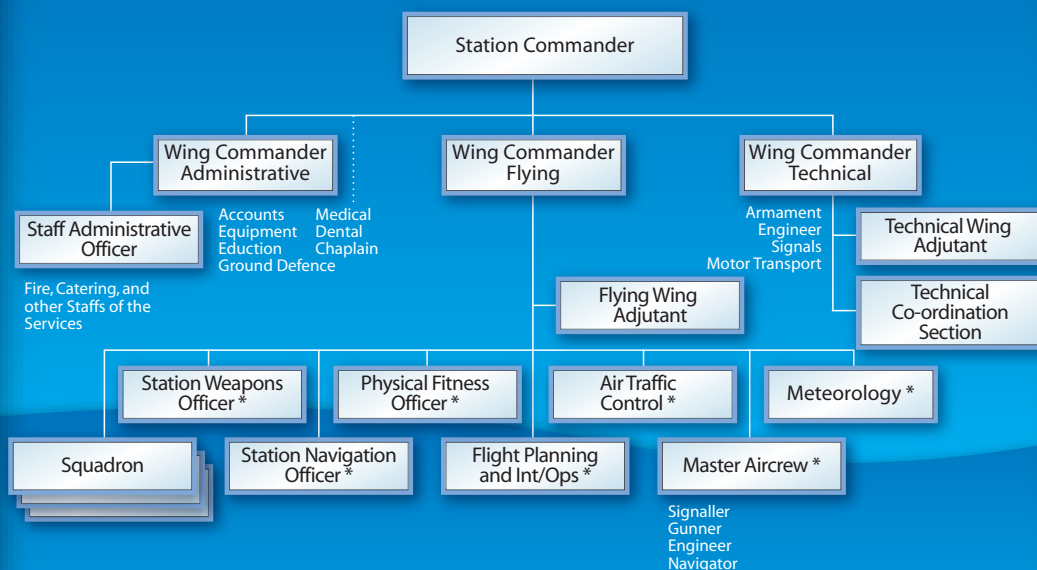Engineers
Medical

Organization
Personnel
Supply

Air force commanders at the tactical level thus had three principal immediate subordinates in their staffs, rather than two. Interestingly, the line units of the station or wing (including the flying squadrons themselves) all reported to the commander through one of those three positions. Those positions thus combined both line and staff responsibilities and the wing or station was something of an indivisible whole. Another point to note is that unlike practice in the Army and at higher formation level in the RAF/RCAF where the operational staff officer out-ranked the support staff officer(s), in this wing organization all three staff principals were the same rank.

The Germans: *im Generalstab*

Much has been written about the famous (or infamous) German Greater General Staff

Figure 7: Traditional RAF Station or Wing level Organization[33]

Station Commander

- Wing Commander Administrative
- Wing Commander Flying
- Wing Commander Technical

Staff Administrative Officer

Fire, Catering, and other Staffs of the Services

Accounts | Medical
Equipment | Dental
Eduction | Chaplain
Ground Defence

Armament
Engineer
Signals
Motor Transport

Technical Wing Adjutant

Technical Co-ordination Section

Flying Wing Adjutant

- Station Weapons Officer *
- Physical Fitness Officer *
- Air Traffic Control *
- Meteorology *
- Squadron
- Station Navigation Officer *
- Flight Planning and Int/Ops *
- Master Aircrew *

Signaller
Gunner
Engineer
Navigator

Note:
1. The wing commander administrative is responsible for the discipline and administration of the station as a whole.
2. The signals officer is responsible to the wing commander technical for the technical aspect of signals, but must work closely with the wing commander flying on operational signals matters, and with the wing commander administrative on administrative signals matters.
3. In Fighter Command the duties of technical wing adjutant and officer i/c technical co-ordination section are combined.
4. Sections marked * may be combined into one flying support squadron.

(*Grosser Generalstab*), in particular its possibly pernicious political effects in the fostering of militarism and thence two world wars.[34] What concerns us here are not those wider political effects, but rather the application of the German staff system at the purely military level, and its strong influence upon the British staff system.[35]

One of the Germans' most unique and remarked upon staffing characteristics was their formation of a specific corps of general staff officers. In most militaries, staff positions are filled by postings from the general pool of qualified officers, although often there is a prerequisite for a staff course of some sort.[36] The Germans, on the other hand, selected their brightest young officers in competitive examinations from the rank of captain, and sent them to the *Kriegsakademie* (war college). Thereafter, their careers proceeded in a special stream, filling general staff billets in formation headquarters or with the main body of the general staff at the high command in Berlin. They were also regularly given command

appointments, and promoted faster than regular officers; they constituted a specifically appointed elite within the German Army, and to signify this they wore "wine-red" stripes down the sides of their uniform pants and the letters "i.G." (*im Generalstab*, i.e. "in the general staff") after their rank.[37] There was some debate in Britain in the early 1900s regarding the advisability of adopting a similar system, but in the end it was decided not to, although those who were staff qualified (i.e. had passed the staff college course at Camberley) and were serving in a staff billet at a headquarters, were designated by wearing a red band on their forage cap and scarlet gorgets on their uniform.[38]

German staffs were formally divided into five sections as shown below, but for work they were arranged into three "groups": the operations group, the adjutant's group and the supply group.[39] This grouping thus reflected the full three categories of "mission, men, material" recognized in British practice. Unlike the British, however, the Germans preserved three

prongs right down to their lowest formation levels—they did not combine the adjutant and supply groups under a single officer as the British did.[40]

Formal German Staff "Sections" consisted of:[41]

I: **General Staff** – all members of this section were general staff corps officers. They were lettered as follows:
   Ia – senior operations officer
   Ib – senior supply and administrative officer
   Ic – intelligence officer
   Id – training officer

II: **Adjutant** – the officers of this section handled the administrative affairs of the headquarters and personnel issues.

III: **Legal** – legal

IV: **Intendant** – the officers of this section constituted the specialists responsible for services such as medical, supply, and veterinary.

V: **Transport** – the officers of this section constituted the specialists responsible for all transport and equipment

of the features of the Napoleonic era was the development of a standardized staff system at not just the high command, but for all French field headquarters. This grew in large part from the work of Pierre Alexandre Berthier, who was Napoleon's chief of staff from his days with the Army of Italy. In 1796 Berthier published his *Document sur le Service de L'État–Major General a l'Armée des Alpes*, in which he outlined the organization and principles under which the staff there would work.[43] This proved to be an influential document, especially since Berthier subsequently became chief of staff at Napoleon's Imperial Headquarters.

Berthier divided the staff into four sections. The first handled a miscellany of details, including records, inspections, troop movements, courts martial and prisoners of war. The second handled technical issues such as armaments, engineers, and hospitals. The third dealt largely with operational issues such as reconnaissance and operational plans, and also the lines of communication. The fourth section handled the headquarters itself, including its local security. Each of these sections was under an "adjutant general," and the whole was coordinated for the commander by a chief of staff. Whilst the precise distribution of duties between the various staff branches was different from that of later staff systems (and to modern eyes appears somewhat idiosyncratic), this system already reflected the philosophy of the modern "continental staff system," in that it represented a staff divided into a multitude

Figure 8: German Corps Headquarters, World War II, Reflecting the organization of the staff into three groups.[42]
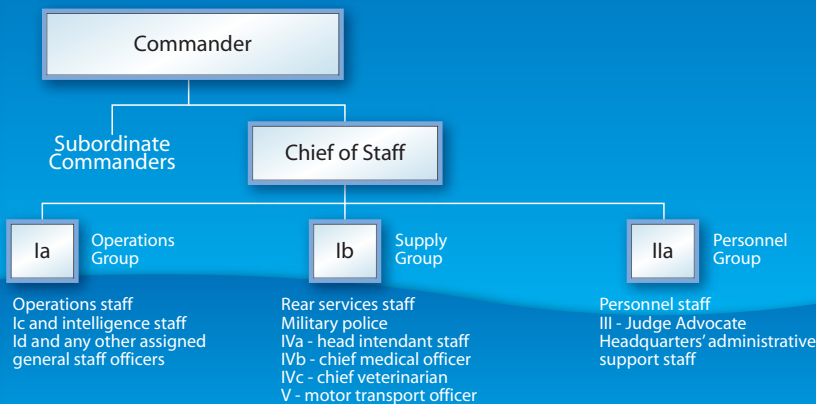
NB: the chief of staff and positions numbered with a roman numeral "I" are filled by general staff branch officers, the others by specialists appointed as appropriate.

The French "Bureaux" Approach

The French, in contrast to the Prusso-British di-or-triarchical approach, followed a rather different philosophy. Napoleon himself had a quite large and complex headquarters, but one

of separate branches, all of which were coordinated for the commander by a chief of staff.

By the time of the First World War, the French system had evolved to one in which staffs

were divided into three "bureaux," as they were called. The first dealt with all administrative issues, including both personnel and supply. The second handled intelligence, and the third dealt with operations and plans. (Note that this represented a different three categorization than the traditional British "mission, men, material." The French divided the "mission" part between operations and intelligence and combined the "men and material" into a single category.) Under the stress of the First World War, with its heavy material demands, it was decided to split the administrative responsibilities. Personnel issues were retained in the first bureau, and all logistic responsibilities were moved to a new, fourth bureau. As before, all remained under a chief of staff who coordinated the whole staff on behalf of the commander. The French system developed during the First World War is the essence of the modern form of the continental staff system.[44]
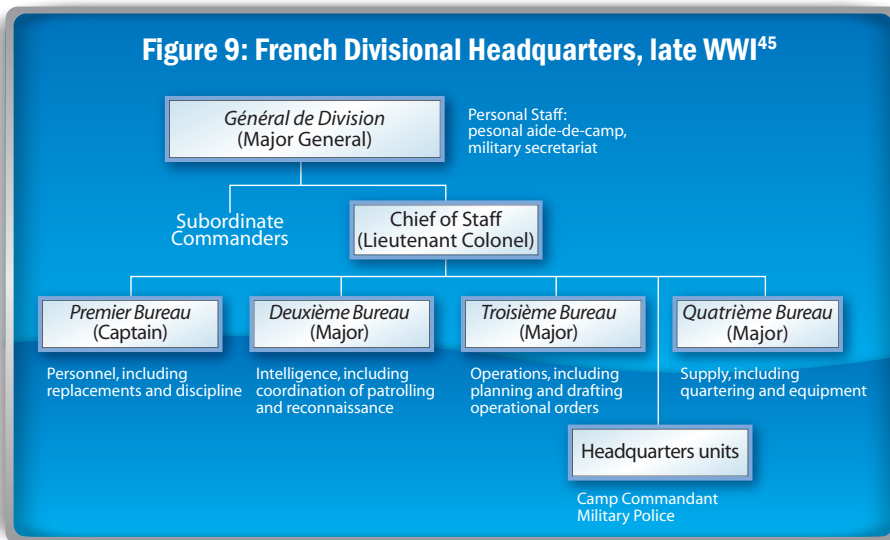
decided to model their staff system primarily on the French, and since this system was intended for their operations on the continent of Europe, it became known as the "continental staff system."[46] In 1921 the Harbord Board, convened by U.S. Army Chief of Staff General Pershing under Major General James Harbord, formalized this wartime practice as the official staff system for the entire US Army, and by the Second World War it had already evolved into more-or-less its modern form.[47] The Americans in World War II even employed the practice of varying the first letter of the staff designator to differentiate ground from air staffs – "G" for land force headquarters and "A" for air force headquarters.

Conclusion: Two Philosophies of Staff System

There have thus been two broad philosophies of staff system in Western military practice – the Prusso-British operational supremacy approach and the Franco-American continental system. The difference between these two is more than just a question of the way their organizational charts are drawn – there is a real difference in philosophy between them. Reduced to its fundamentals, the essence of the traditional British system is that all staff issues will be fit within one of only two fundamental realms: either the operations or the support arena, and that the entire staff will be expected to work together amongst themselves, with coordination achieved not by a chief of staff but by the principle of the primacy of operations. On the other hand, the fundamental philosophy behind the continental system is that staff issues will be subdivided into a larger number of specialties, each of which is meant to be at least nominally co-equal, and that coordination between those many sub-areas will be achieved

Figure 9: French Divisional Headquarters, late WWI[45]

The US Model Themselves on the French

The Americans developed their staff system from the French. In 1917, when the US entered the Great War and decided to raise a mass army and send it to France, they had no recent experience with warfare on such a scale. Quite prudently the decision was therefore made to send a team of officers to France to examine the staff systems employed by the Allies, and make recommendations as to how the American Expeditionary Force should organize itself for the war into which they were getting themselves. After some consideration, the Americans

not by the principal of operations primacy, but by a bureaucratic machinery overseen by a chief of staff.

In the continental system, the question of what functions, exactly, are awarded branch status thus becomes significant. Originally, there were only the classic four: personnel, intelligence, operations and logistics. Of particular note, the intelligence function was given its own standing, whereas in the British (and German and Russian) system intelligence was subsumed within operations. J.D. Hittle, the author of the classic study of staff systems,[48] considered this sub-dividing of functions a positive virtue—he argued that it constituted a system of checks and balances that would allow each branch to evaluate its area of expertise independently and prepare its advice objectively, without undue distorting influence, in particular in the form of the operational directorate's views crowding out intelligence and logistic concerns.[49]

An additional point is that the traditional British system placed the commander far more at the centre of the process—the British system (as originally developed) did not provide either deputy commanders or chiefs of staff. In army higher headquarters (before Montgomery's introduction of the chief of staff concept) the commander himself was the only point at which the "G" and "AQ" staffs came together, and likewise in RAF headquarters the commander was the only point at which the SASO and SOA came together. At wing or station level, there was a three-fold split between mission, men and material that only came together in the person of the commander himself. The continental system, on the other hand, was a more complexly articulated organization with its own chief of staff, and thus more prone to run as an autonomous bureaucracy. Inherently, any system that is subdivided into many parts will be more bureaucratic. A military that professes to be trying to move from a "staff centric" to a "command centric" philosophy might want to consider that carefully. ∎

Notes

1. See for instance Carl Builder, *The Icarus Syndrome* (New Brunswick, NJ: Transaction Publishers, 1994) and James Mowbray, "Air Force Doctrine Problems: 1926-Present" *Airpower Journal* (Winter, 1995) or, from closer to home, Colonel P.J. Taggart "A Working Paper on Proposals for the Development and Dissemination of Air Force Doctrine" *Air Doctrine Symposium, Summary Proceedings* (Canadian Forces College, 1994).

2. See Canadian Forces Transformation Website on the DWAN at *http://cds.mil.ca/cft-tfc/pubs/documents_e.asp* (accessed 15 Jan 08), and more specifically the report "CDS Action Team 1 Report," 2005. Available on DWAN at *http://cds.mil.ca/cft-tfc/pubs/cat_e.asp* (accessed 15 Jan 08), in particular paragraph 18 "Separation of Line and Staff" page 7 and paragraph 3 of annex A "Separation of Staff and Command Functions" page A-1/5.

3. Ibid.

4. See for instance Douglas Bland's *Chiefs Of Defence: Government And The Unified Command Of The Canadian Armed Forces* (Toronto: Canadian Institute of Strategic Studies, 1995); *Institutionalizing Ambiguity: The Management Review Group and the Reshaping of the Defence Policy Process in Canada* (Kingston: Centre for International Relations, Queen's University, 1986); and *National Defence Headquarters: Centre for Decision* (Ottawa: Dept. of Public Works and Government Services, 1997).

5. The history of staff organization related here is drawn largely from virtually the only published source on the subject: J.D. Hittle, *The Military Staff: Its History and Development* (Harrisburg, PA: The Stackpole Company, 3rd Edition, 1961), 157-158. Hittle was a retired USMC colonel who had served as an instructor at the Marines wartime staff college. He recounts in his foreword how he was astounded to discover, upon his arrival at the staff college, that there was no good history of staff systems to draw upon for instructional purposes. He created one, and in his retirement published it as a book.

6. Hittle, 147 and 158.

7. Ibid., 147. See also, for example, Figures 1-4 in this paper.

8. See Hittle, 142-144.

9. Ibid., 142.

10. British War Office, *Staff Manual* (London: Harrison & Sons, 1912) copy in the RMC library; John R. Grodzinski, *Operational Handbook for the First Canadian Army: Formation Organization, Staff Technique and Administration* (Published by the Regimental Historian, Revised edition 1998) (hereafter cited as "*1 Cdn Army Hbk*"), 16; also Hittle, 159-160.

11. Speaking here of operational field headquarters (army group and below).

12. Nigel Hamilton, *Monty – The Making of a General 1887 – 1942*, (London), 622-625. DeGuingand remained with Montgomery in the role of chief of staff when the latter assumed command of 21st Army Group.

13. It should be noted that as a young brigadier he was quite junior to the corps commanders immediately subordinate to Eighth Army headquarters.

List of Abbreviations

RCAF	Royal Canadian Air Force	RN	Royal Navy
RMC	Royal Military College of Canada	RAF	Royal Air Force
DMAS	Directorate of Management Advisory Services	USMC	United States Marine Corps
ISAF	International Security Assistance Force		

14. Directorate of Management Advisory Services (DMAS), "Canadian Forces Staff System" (DMAS Study No. 1951-100-70/4, October 1971, copy on file in the RMC Library, hereafter cited as: DMAS "Canadian Forces Staff System), Vol. 4, 17.

15. *1 Cdn Army Hbk*, 34-35.

16. Ibid., 26-27.

17. Ibid., 21-23.

18. For a description of the evolution of the Admiralty and the origins of RN staffs, see Leslie Gardiner, *The British Admiralty* (London: Blackwood, 1968).

19. Commander Maria Higgins, "Winston S. Churchill's Legacy to the Royal Navy, 1911-1915" *Naval War College Review*, XXVII (November-December 1974), 69-70.

20. Quoted in A.R.W. "Staff Training and the Royal Navy: World War I and the Aftermath: Part 1" *The Naval Review* (January 1976, pp 9-17), 12.

21. United Kingdom, Admiralty, BR 31/1938. For a more complete summary of British naval staff development, see M.V. Bezeau, "The Role and Organization of Canadian Military Staffs 1904-1945" unpublished M.A. thesis (Kingston: Royal Military College, 1978) 92.

22. Bezeau, 92-93. See also DMAS "Canadian Forces Staff System" Vol 4, 18-21.

23. DMAS "Canadian Forces Staff System," Vol 4, 21.

24. Ibid., 20-21.

25. Ibid., 20.

26. DMAS "Canadian Forces Staff System," Vol 4, 20.

27. See for instance, United Kingdom, War Office, *Field Service Pocket Book, 1932* (London: 1932), 56.

28. DMAS "Canadian Forces Staff System," Vol 4, 21-22.

29. Charles Carrington, *Soldier at Bomber Command* (London: Leo Cooper, 1987), 14.

30. Such as, for example, the BGS in a corps headquarters (see Figure 2 above).

31. *1 Cdn Army Hbk*, 115.

32. Wings and stations were generally commanded by group captains (i.e. colonels), who had three wing commanders (i.e. lieutenant colonels) as immediate subordinates: a "Wing Commander Flying" who handled all operations, a "Wing Commander Administrative" who handled all personnel and misc administration, and a "Wing Commander Technical" who handled all technical issues, including both air maintenance and technical ground based service support such as motor vehicles.

33. DMAS, "Canadian Forces Staff System," Vol 4, 51.

34. See for instance, John Wheeler-Bennett, *The Nemesis of Power: The German Army in Politics, 1918-1945* (New York: St Martins Press, 1954); Gordon A. Craig, *The Politics of the Prussian Army, 1640-1945* (Oxford: Clarendon, 1955); and Walter Goerlitz, *History of the German General Staff, 1657-1945* (New York: Praeger, 1959).

35. One of the first means by which this influence spread was Spenser Wilkinson's The Brain of an Army…

36. This remains the current Canadian Forces approach. In traditional British practice, completion of the Army staff course at Camberley entitled one to include the letters "p.s.c." for "passed staff college" after one's name, or "p.s.a." for "passed air staff college" in the RAF. Reflecting RN hostility towards a formalized staff system, there was no naval equivalent.

37. Hittle, 76-78; and DMAS "Canadian Forces Staff System," Vol. 4, 8-11. The modern German military retain this system today; see for instance Christian Millotat, *Understanding the Prussian-German General Staff System* (Carlisle Barracks, PA: US Army War College, 1992). The author served at ISAF headquarters with a German major from their general staff corps.

38. These scarlet gorgets were the infamous "bloody red tabs" of the Great War. See John Gooch "The Creation of the British General Staff, 1904-1914" *Royal United Services Institute Journal*, CXVI (June 1971, 50-53). Note that the letters "p.s.c." or "p.s.a." described in note 36 above were awarded as post-nominals (like an academic degree), but did not constitute part of their owner's rank as the letters "i.G." did in German practice.

39. Hittle, 77; and DMAS "Canadian Forces Staff System," Vol. 4, 10. Towards the very end of the Second World War a sixth section was added—"party"—which constituted a sort of Nazi party political commissar, but this was scarcely an inherent feature of the classic German staff system.

40. The lowest command level in the Wehrmacht with a fully articulated staff was the divisional headquarters. DMAS "Canadian Forces Staff System," Vol 4, 10, which provides full organizational charts for army to divisional level Second World War German staffs, based upon a study of the German system conducted by the US, British and Canadian Armies immediately after the war and published in April 1946. On the other hand, since only two of the three groups were headed by general staff officers (the operations and supply groups), so those two groups attained a greater significance within the German staff system, thus creating something of a diarchic system in practice.

41. DMAS "Canadian Forces Staff System," Vol. 4, 10.

42. Ibid., Figure 15, 50

43. Hittle, 95.

44. Ibid., 126.

45. Ibid., 124.

46. Ibid., 210-213.

47. Hittle, 215; and DMAS "Canadian Forces Staff System," Vol 4, 2.

48. See note 5 above.

49. Hittle, 78 and 299-300. Hittle believed that the Germans, with their operations dominated system, had been particularly prone to this sin.

Major Paul Johnston is employed on the doctrine staff of the Canadian Forces Aerospace Warfare Centre (CFAWC). He graduated with an Honors BA in Military and Strategic Studies from Royal Roads Military College, earned an MA in War Studies from the Royal Military College, and is currently a PhD candidate at Queens University. He has served at the tactical, operational and strategic levels, in Europe, the Middle East and Afghanistan, working with both NATO and NORAD, spending more time in headquarters staffs than he cares to admit. His writings have been published in a wide variety of journals including Parameters and the RAF Air Power Review. For his sins, his current duties are in the C4ISR section at CFAWC, where his major project over the past year has been command and control doctrine.