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EXERCISE/EXERCICE NEW HORIZON

TIME FOR THE CREATION OF A CANADIAN SPECIAL OPERATIONS CC130 HERCULES FLIGHT

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ABSTRACT

The requirement for specialised Air Mobility support is nothing new. From the humanitarian airlift in and out of Sarajevo to the support of UN Peacekeepers and evacuation of non-combatants in Rwanda, the CF has relied heavily on a small core of CC130 Advanced Tactical Air Transport (ATAT) crews to deliver this kind of specialised air mobility capability in high-risk environments. Unfortunately, these crews have historically been trained and grouped in an ad-hoc fashion. Over the last decade, the never-ending pressures of our fiscal realities, combined with the competing use of our CC130s for strategic airlift have greatly reduced our ability to train for 'Special Missions' and integrate with our Special Forces. Even when those rare opportunities occurred, our ad-hoc crewing assignments and 're-crewing' practices ensured that our already much reduced capabilities for Special Missions in high-risk environments stayed at a low level.

This essay will therefore explore the premise that it is high time to stop the ad-hoc training and grouping of our small core of CC130 ATAT crews and permanently create a Canadian Special Operations CC130 Hercules flight in order to ensure appropriate capabilities in Special Forces support and other high-risk Air Mobility operations.

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... a rapidly changing world deals ruthlessly with organizations that do not change.

General Peter J. Schoomaker, CINC SOCOM 1997 – 2000

When SOF [Special Operations Forces] capabilities are integrated appropriately with those of conventional units, the result is a capability not otherwise achievable.

General Carl W. Stiner, CINC SOCOM 1990 - 1993

During the course of the last decade, the potential for small-scale regional conflicts and instabilities throughout the world has not only been very high but has also continually increased. Indeed, since the end of the cold war and the collapse of the Warsaw pact, the need for world-wide security has grown rather than receded. Despite this fact, the CF has continually downsized its force from one that stood at 80,000 personnel a short time ago to one of barely of 60,000. But in 1993, Canada saw one exception to this generalized military downsizing in the creation of a military counter-terrorism and hostage rescue unit: the Joint Task Force Two (JTF 2).

The events of September 11th not only forced the U.S. to expand its role in counter-terrorism worldwide but also demonstrated the increasing role of Special Forces (SF) in overseas operations. It also obliged other nations like Canada to rethink their role in combating this ever-increasing threat to democracy. In that regard, Canada not only committed a portion of its small unit of SF in Afghanistan, but also decided to double the unit's size in order ensure an appropriate overseas capability. But to ensure its global reach, an increased size JTF 2 will undoubtedly require specialized Air Mobility support, for without it, it will be unable to fulfil its growing overseas mission.

A requirement for specialized Air Mobility support is nothing new. From the humanitarian airlift in and out of Sarajevo to the support of UN Peacekeepers and evacuation of non-combatants in Rwanda, the CF has relied heavily on a small core of CC130 Advanced Tactical Air Transport (ATAT) crews to deliver this kind of specialised air mobility capability in high-risk environments. Unfortunately, these crews have historically been trained and grouped in an ad-hoc fashion. Over the last decade, the never-ending pressures of our fiscal realities, combined with the competing use of our CC130s for strategic airlift have greatly reduced our ability to train for 'Special Missions' and integrate with our SF. Even when those rare opportunities occurred, our ad-hoc crewing assignments and 're-crewing' practices ensured that our already much reduced capabilities for Special Missions in high-risk environments stayed at a low level.

This essay will therefore explore the premise that it is high time to stop the ad-hoc training and grouping of our small core of CC130 ATAT crews and permanently create a Canadian Special Operations CC130 Hercules flight in order to ensure appropriate capabilities in Special Forces support and other high-risk Air Mobility operations.

In order to ascertain this premise, this essay will first review the different types of SF missions, establishing their enhanced importance and the increased political willingness to commit SF to crises. It will then quickly explore generic SF overseas mobility support requirements in order to ensure that our CC130s will indeed be the mobility support platform of choice for long-range overseas missions. It will thereafter delve into Air Mobility doctrine so as to ascertain the fulfilment of those support requirements. It will finally explain how these specialized capabilities are now delivered, in order to determine if the formation of a CC130 Special Operations Flight will indeed ensure appropriate capabilities in Special Forces support and other high-risk Air Mobility operations.

U.S. *Doctrine for Joint Special Operations* defines Special Operations (SO) as "operations conducted by specially organized, trained, and equipped military and paramilitary forces to achieve military, political, economic, or informational objectives by unconventional military means in hostile, denied, or politically sensitive areas".[1] U.S. SOF are organized, trained and equipped to accomplish the following nine principal missions: Direct Action, Special Reconnaissance, Foreign Internal Defence, Unconventional Warfare, Combating Terrorism, Psychological Operations, Civil Affairs, Counterproliferation of Weapons of Mass Destruction and Information Operations.[2] Their description can be found at Annex A. Although it can be argued that some of these missions, like Psychological Operations, Civil Affairs and Information Operations do not necessarily rest within the realm of SF, it is clear that Direct Action, Special Reconnaissance, Unconventional Warfare and Combating Terrorism definitely do.

It is also worth noting that larger scale Direct Action missions, like airfield seizures performed by U.S. Rangers, are not necessarily treated as SO in countries outside of the U.S. In some of these nations, these missions are accomplished by 'airborne' forces or light infantry forces which are not designated as SF. A case in point is Canada's three Light Infantry Battalions (LIBs) and their organic Parachute Companies (one in each), which could be tasked with the seizure and/or the securing of an airfield during a Non-combatant Evacuation Operation (NEO). Therefore, to alleviate confusion between Canadian and U.S. doctrine, this paper will adopt the U.S. approach and label these larger forces (i.e. LIBs) as SF, although they are not designated as SF in Canada.

As stated in U.S. *Doctrine for Joint Special Operations*: "SOF's principle missions are enduring and will change infrequently; however, SOF's collateral activities will shift more readily because of the changing international environment. SOF are not manned, trained, and

equipped for collateral activities. SOF conduct collateral activities using the inherent capabilities resident in the primary missions."[3] SOF frequently conduct the following seven collateral activities: Coalition Support, Combat Search and Rescue, Counterdrug Activities, Countermine Activities, Foreign Humanitarian Assistance, Security Assistance and Special Activities.[4] Their description can also be found at Annex A.

One cannot deny that the U.S. has much greater power and influence than Canada and that it therefore requires such overwhelming SF capabilities.[5] One can nevertheless acknowledge that even smaller SF capabilities, such as Canada's JTF 2, must be able to at least accomplish counter-terrorism, direct action and special reconnaissance missions. At present, the nature of responsibilities given to JTF 2 is to "provide a force capable of rendering armed assistance in the resolution of an issue that is, or has the potential of, affecting the national interest. The primary focus is counter-terrorism; however, the unit can expect to be employed on other high value tasks."[6] These 'other high value tasks' could vary from direct action, special reconnaissance and counter-terrorism; missions which are most probably all being accomplished by JTF 2 in Afghanistan.

Although the overt commitment of SOF to Afghanistan has enlightened the Canadian public as to the important role such forces can play, it has also forced the Canadian government to recognise their increased importance and renewed the political willingness to commit them to crises. As stated in 1995 by the then U.S. Assistant Secretary of Defence for Special Operations and Low-Intensity Conflict, Mr Allen H Holmes: "It will not surprise anyone if I begin by saying this is indeed a time of great uncertainty. Nor, I suspect, would many disagree that the pace of change is such that no one can reliably predict the exact shape of our future security environment. Despite the uncertainties, however, it is abundantly clear that DoD's special operations

will have increasingly important roles in the future."[7] Just as these uncertainties prompted most countries to expand the capabilities of their SOF[8], Canada too decided to double the size of JTF 2 after the September 11th events and ensuing uncertainties. This renewed interest, exemplified by the deployment of JTF 2 in Afghanistan, not only pointed out that JTF 2 is becoming an increasingly significant capability which Canada could contribute to a coalition, but also pointed out an increased political willingness to commit them to international crises. Having explored the different types of SF missions, established their increased importance and the increased political willingness to commit them to crises, let us now quickly look at the generic SF overseas mobility support requirements.

Generally speaking, SO are conducted at great distances from operational bases and require sophisticated means of insertion, support, and extraction to penetrate and return from hostile, denied, or politically sensitive areas.[9] Air methods of insertion, re-supply and extraction vary from simply landing fixed-wing transport or rotary-wing aircrafts onto a Landing Zone (LZ) at or near the objective area, to parachuting at low or high altitudes. Although other methods such as those using submarines and small boats exist and could realistically be used in the Canadian context, the preponderance of 'land-locked' areas of operations suggests that Air Mobility will play a key role in the insertion, re-supply and extraction of SF. Given this fact, the essay will hence concentrate on long-range fixed-wing assets.

The logic behind this focus is based on the fact that although JTF 2 is supported by a dedicated flight of short-range Griffon Helicopters (mainly for their counter-terrorism role in Canada), those could not be used in long-range operations without a very close-by staging base (assuming that enough time and strategic lift would exist to deploy them overseas). This also holds true for the employment of our LIBs in a NEO scenario, as such a large force could also

not be flown in from long distances using the Griffon. It is therefore clear that, given the air platforms currently available in the CF, the CC130 Hercules would be the platform of choice for long-range overseas SO support.[10] Having established the generic types of missions Canada's SF could be required to accomplish, and having deducted that our fleet of CC130s would be the platform of choice to support them in long range overseas missions, let us now turn to Air Mobility doctrine in order to explore how these support requirements could be fulfilled.

By and large, the role of Tactical Air Transport (TAT) forces, like those operating our CC130 Hercules, can be illustrated in the following five generic tasks: deployment, redeployment, aeromedical evacuation, air logistics support of combat forces and units between and within theatres of operations, and evacuation of Canadian nationals from foreign countries during times of tension or emergency.[11]

In order to achieve these five broad tasks, doctrine divides TAT operations into four categories. The first, Tactical Combat Assault Operations (also referred to as Airborne Operations), is based on the combat deployment of forces and equipment onto an objective area for immediate action, either by parachute (Parachute Assault) or by landing the aircraft onto the objective (Tactical Air Landed Operations [TALO]). The second category, Tactical Combat Support Operations, is based on the combat deployment or redeployment of forces and equipment into a secured and/or already seized objective in order to either establish a force for subsequent action, sustain a force after a successful assault, or for withdrawal and redeployment of a force. The basic essence of the first two categories of TAT operations rests in the combat role of TAT assets and their ability to enable the seizure of an objective or quickly deploy, sustain and redeploy forces either by parachute (airdrop) or by landing the aircraft (airland).[12]

The third category, Tactical Air Logistic Support Operations, is based on the tactical or administrative movement of personnel and equipment within an area of operations and represents the bulk of TAT operations. The fourth category, Special Missions, includes such operations as the insertion, re-supply or recovery of pathfinders, long-range reconnaissance patrols or Special Forces and psychological operations. Finally the fifth category, Tactical Aeromedical Evacuations, is the movement of patients / casualties to or between treatment facilities. This type of operation can be seen as a subset of Tactical Combat Support Operations when it is performed in a combat environment or as a subset of Tactical Air Logistic Support Operations when it is not.[13]

As the above Air Mobility doctrine suggests, SO support is categorized under 'Special Missions' and only generically describes SO support tasks as insertion, re-supply or recovery of SOF without referring to any other details as to the specific techniques required. One could deduce though that if Air Mobility forces are able to perform such TAT operations as Tactical Combat Assault Operations, both Parachute Assault and TALO, they can then also support the insertion, re-supply and extraction requirements stemming from SF. Although this assumption is somewhat true (in terms of basic crew skills), it must be appreciated that SF units such as JTF 2 would certainly not be contemplating larger types of operations such as those performed by larger 'airborne' units and thus require other, more covert, insertion methods. One such method is found in the realm of High Altitude Parachuting (HAP). Such a method is much more suited to covert insertions and re-supply of small teams of SFs as the aircraft stays at much higher altitudes (20,000 to 35,000 feet). This permits stand off airdrops (several km away from the target) of not only personnel equipped with oxygen, navigation equipment and 'steerable' chutes but also cargo with precision guided computerized parachute steering mechanism.[14] The execution of such Special Missions requires a higher level of crew skills and experience, and a thorough

integration between the user force and the crew; both of which are not generally required by the other four categories of TAT operations (with perhaps the exception of a TALO assault).[15]

An Air Mobility task that is worth noting for its possible involvement with SF is the evacuation of Canadian nationals from foreign countries during times of tension or emergency, also known as NEO.[16] Of particular interest is the possible involvement of JTF 2 and/or the LIBs when this type of operation is performed in environments where the local government is unable to ensure the security of the evacuation force and would perhaps require 'securing' an airfield.

This particular type of NEO could first require the insertion of a long range reconnaissance patrol and, once the necessary information was gained, a night Tactical Combat Assault Operation, either by parachute or by TALO, could be initiated. Once the airfield would be secured by the assault elements, the remainder of the security force could be flown in to maintain the perimeter and provide security of the convoys of evacuees coming to the airfield. A Rapid Tactical Combat Support Operation (also referred to as Rapid Airland in U.S. circles) could then evacuate the non-combatants, followed by the evacuation force itself. As this scenario points out, a certain amount of specialized and more importantly well honed skills (especially for the night formation TALO assault) would be required by TAT crews in order to ensure success. It is therefore timely to explore how the Air Mobility community now prepares for the delivery of such specialised SF support and other high-risk Air Mobility operations.

In order to deliver a TAT capability to Canada, the air force is mandated to have three designated TAT Squadrons of CC130 Hercules.[17] Of these Squadrons, only two (429 and 436 (T) Sqn in Trenton) are trained and experienced in accomplishing TAT tasks into or near a threat

environment. The third squadron (435 (T) Sqn in Winnipeg) is not trained in the specialized techniques of TAT and therefore could not operate into or near a threat environment. It could thus only provide limited TAT capabilities as it would be restricted to performing Tactical Air Logistics Support Operations in a theatre or part of a theatre where no threat to airlift is present.

Although the two Trenton Squadrons attempt to regularly train for the TAT role, the presently limited resources can only provide for a total of about twelve to sixteen operationally qualified TAT crews. These crews are all qualified in the basics of TAT during the Basic TAT course (BTAT), and are able to operate in a low threat environment where no radar based air defence or fighter threat exists. They are able to perform both airland and airdrop missions including 'limited' HAP (at a maximum of 10,000 feet, directly over the target i.e. no stand-off drops). These crews used to also train for formation flying, but due to a prevailingly risk-averse Air Mobility leadership, combined with limited resources and a lack of recognition of the requirement for this capability, formation-flying training was stopped in 2001.[18] This capability not only provided users the necessary concentration of force at the objective during Tactical Combat Assault Operations but also enhanced TAT forces survivability by providing mutual threat lookout support.

Although this basic training provides for a good basis to operate into or near a limited threat environment, advanced training must be received in order to operate into or near a threat environment where a radar based air defence or a fighter threat exists. This qualification training, accomplished on the Advanced TAT (ATAT) course, not only trains crews to operate in high-risk TAT operations, but also trains Aircraft Commanders and Tactical Navigators for the role of TAT mission commander where the coordination of multiple CC130s and other support assets like fighter escort, SEAD aircraft and AWACS is essential. Although this training pro-

vides for a good capability in high-risk Air Mobility operations, it is only given to a limited number of crews.[19] Also, as qualification training only provides the basic skills required for an appropriate operational capability, only continuation training exercises and close interaction and integration with the user force provides the true depth of experience required for a rapidly employable operational capability.

As it stands today, the only 'viable' solution to providing crews for high-risk missions is to send the few ATAT crews now in place. As these crews never train as a 'formed' crew during the few ATAT training opportunities available, and are always somewhat randomly 'put together', their overall crew or 'team' capabilities are even further reduced. Therefore, depth of experience, proficiency, crewing, and user force integration is at the heart of the issue for the provision of appropriate capabilities in Air Mobility support to SF and other high-risk Air Mobility operations such as NEO. This is where our presently trained and organized TAT force fails to meet the requirement.

Since the demise of the Canadian Airborne Regiment (CAR), the integration and interaction between our TAT forces and a user force has been almost inexistent. This is due in large part to a lack of 'hard' land force requirement for TAT, which was present during the CAR days. Because of that, and the realities of today's limited resources, peacetime CC130 airlift resources have been committed almost exclusively to 'strategic airlift'. As only a limited amount of crews and CC130s are available, the two TAT Squadrons have been busy delivering a strategic airlift capability, thus limiting the amount of TAT continuation training necessary to provide the required depth of experience in special missions. On average, as many as half of these TAT crews have been unable to maintain the minimum currency standards of about four training missions

every four months.[20] This is certainly not the proficiency level required to provide for the demanding requirements of special missions.

History has shown that similar gaps in user integration and depth of experience can result in catastrophic failures when attempting high-risk SO. The attempted Iranian hostage rescue operation (also known as the Desert One debacle), where a Marine helicopter collided with an Air Force C130 at the Iranian desert forward staging area, is but one example where the lack of Air Mobility (fixed-wing and rotary-wing) integration with SF, and the limited depth of experience in special missions proved to be the weak link in the successful accomplishment of the mission.[21] The U.S. latter recognized this weakness and corrected it with the creation of Special Operations Command in 1990; an organization that has completely integrated their required Air Mobility support forces with the SF users and does nothing but train for and deliver those Special Mission capabilities.[22] As stated by General Carl Stiner, CINC SOCOM 1990 – 1993: "We must focus our training on joint requirements, and we must train as we expect to fight. We will fight jointly in the future."[23]

The most pressing demand for an appropriate capability in Air Mobility special missions rests in the nationally mandated requirement of protection and evacuation of Canadians overseas: the NEO mission. As previously described, this mission could require both an HAP stand-off insertion and a Tactical Combat Assault Operation, both of which require a high level of experience, proficiency and integration with the user. As it stands, TAT forces are presently not training for these, as the air force will not commit any resources to such high risk missions until "valid user requirements are established".[24]

A rapid recognition and communication of these requirements must be done at once, as failure to do so will mean that Canada will not possess the capability to extract its citizen from a hostile environment and will need to once again count on its allies to do the job. As pointed out in the conclusion of LCdr Richard Jean's paper *A Commitment to Canadians Abroad: A NEO Capability for the Canadian Forces*: "Never should we have to rely on a third party to execute the functions of defending the state. As it stands today however, the ability to exercise such principle is compromised by our inability to come to the rescue of our citizens held against their will in a country where law and order has collapsed. At present, we must count on our allies to do the job. For Canada, the ability to conduct NEO on her own in a hostile environment is not only desirable; it is essential if we want to continue operating as a sovereign power."[25] Undoubtedly, even if those requirements where to be recognized, our present ad-hoc training and crewing practices will not ensure that the required depth of experience, proficiency and user force integration necessary for an appropriate operational capability in special missions exists.

Other nations, like the U.K., have recognized the need to integrate and constantly prepare Air Mobility forces for special missions. The U.K. long ago created a specialized CC130 flight for SF support. This flight regularly trains with the SAS and other users to provide not only the specialized capabilities required to execute a NEO in a hostile environment but also to provide for a proficient and integrated SOF insertion, re-supply and extraction capability.[26] As the CF is mandated to have both ground and air forces ready to execute a NEO mission within 72 hours of being notified,[27] one can wonder if it is realistic to expect that such a short reaction time would create the necessary 'well integrated and practiced' extraction force required for a NEO in a non-permissive environment.

Just as it is undoubtedly important to have a dedicated Special Operation Flight of Griffon helicopters and crews to support the counter-terrorism capability within Canada, the need to dedicate CC130 crews solely to the support of overseas SF missions and other high-risk Air Mobility missions is paramount. The requirement to form them as dedicated and permanent crews or 'teams' and group them together in one flight must be recognized, as a failure to do so denies the ability to safely accomplish the mission and could unfortunately lead to another 'Desert One' debacle.

As we have seen, the different types of U.S. SOF missions also apply well to smaller SOF capabilities like Canada's JTF 2, as direct action, special reconnaissance and counter-terrorism missions are most probably in the midst of being accomplished by our SF in Afghanistan. Indeed, the important roles that SF can play in an ever increasingly uncertain security environment have not only pointed out that JTF 2 is becoming an even more significant capability which Canada could contribute to a coalition, but also renewed an increased political willingness to commit them to crises. The importance of Air Mobility support to the overseas commitment of our SF has undeniably pointed out that our fleet of CC130s would be the platform of choice to support them in long-range overseas missions.

Although Air Mobility doctrine indicated that the SOF Air Mobility requirements could be doctrinally supported by our generic TAT forces, special mission requirements like NEO and the insertion, re-supply and extraction of SF pointed out that a certain amount of specialized and more importantly well honed skills would be required by our TAT crews in order to ensure success. It therefore became clear that depth of experience, proficiency, crewing, and user force integration was at the heart of the issue for the provision of appropriate capabilities in Air Mobil-

ity support to SF and other high-risk Air Mobility operations, and that this is where our presently trained and organized TAT force fails to meet the requirement.

Clearly, it is high time to stop the ad-hoc training and grouping of these specialized CC130 crews and permanently create a Canadian Special Operations CC130 Hercules flight in order to ensure appropriate capabilities in Special Forces support and other high-risk Air Mobility operations, as failure to do so denies the ability to safely accomplish the mission.

ANNEX A: U.S. SOF PRINCIPAL MISSIONS AND COLLATERAL ACTIVITIES

The nine principal missions of SOF described in U.S. doctrine are:

- Direct Action (DA): short-duration strikes and other small-scale offensive actions to seize, destroy, capture, recover, or inflict damage on designated personnel or materiel;
- Special Reconnaissance (SR): reconnaissance and surveillance actions conducted to obtain or verify information concerning the capabilities, intentions, and activities of an actual or potential enemy, or to secure data concerning the meteorological, hydrographic, or geographic characteristics of a particular area;
- Foreign Internal Defence (FID): participation in any of the action programs taken by another government to free and protect its society from subversion, lawlessness, and insurgency;
- Unconventional Warfare (UW): organizing, training, equipping, supporting, and directing of indigenous or surrogate forces;
- Combating Terrorism (CBT): actions, including antiterrorism (defensive measures taken to reduce vulnerability to terrorist acts) and counter-terrorism (offensive measures taken to prevent, deter, and respond to terrorism) taken to oppose terrorism throughout the entire threat spectrum;
- Psychological Operations (PSYOP): operations to convey selected information and indicators to foreign audiences in order to influence their emotions, motives, objective reasoning, and ultimately the behavior of foreign governments, organizations, groups, and individuals;
- Civil Affairs (CA): activities that establish, maintain, influence or exploit relations between military forces and civil authorities, both governmental and non-governmental, and the civilian population in an area of operations to facilitate military operations and consolidate operational objectives;
- Counterproliferation (CP) of Weapons of Mass Destruction (WMD): actions to seize, destroy, render safe, capture, or recover WMD; and
- Information Operations (IO): actions taken to affect adversary information and information systems while defending one's own.

U.S. SOF also conduct the following seven collateral activities:

- Coalition Support: improve the interaction of coalition partners and U.S. military forces;
- Combat Search and Rescue (CSAR): recovery of distressed personnel during war or operations other than war;
- Counterdrug (CD) Activities: detect, monitor, and counter the production, trafficking, and use of illegal drugs;
- Countermine (CM) Activities: reduce or eliminate the threat to noncombatants and friendly military forces posed by mines, boobytraps, and other explosive devices;

- Foreign Humanitarian Assistance (FHA): relieve or reduce the results of natural or manmade disasters or other endemic conditions that might present a serious threat to life or that can result in great damage to or loss of property;
- Security Assistance (SA): provision of defence articles, military training, and other defence-related services by grant, loan, credit, or cash sales; and
- Special Activities: actions conducted abroad in support of national foreign policy objective that are planned and executed so the role of the U.S. government is not apparent or acknowledged publicly.

END NOTES

[1] Department of Defence, Joint Pub 3-05 *Doctrine for Joint Special Operations* (Washington: Government Publishing Office, 1998) [3] I-1.
[2] As described in: DoD, *Doctrine for Joint Special Operations* [3] II-2 to II-11.
[3] DoD, *Doctrine for Joint Special Operations* [3] II-11.
[4] As described in: DoD, *Doctrine for Joint Special Operations* [3] II-11 to II-13.
[5] Air Force Special Operations Command (AFSOC) alone boasts close to 13,000 personnel on its records, something that Canada can never aspire to attain. Figures found in: Steven Watkins, *The Rise of Special Operations*, as found in Air Force Times (29 Apr 1996, Vol. 56 Issue 39) [21] 12 –15.
[6] Department of National Defence, 1901-3048(DGFD) *Canadian Forces Organization Order 1.1.3* (Ottawa: DND Canada, 15 November 1993) [6] 2/4.
[7] Allen H. Holmes, *America's Approach to Special Operations*, as found in Defense (1995, Issue 1) [12] 30.
[8] As described in: Scott R. Gourley, *Equipping Special Operations Forces* (Jane's International Defense Review, Quarterly Report Number 4, 1996) [10] 3.
[9] As described in: DoD, *Doctrine for Joint Special Operations* [3] I-4.
[10] As also suggested in: David Pugliese, *Canada's Secret Commandos, The Unauthorized Story of Joint Task Force Two* (Ottawa: Esprit de Corps Books, 2002) [18] 40.
[11] As described in: Department of National Defence, B-GA-450-000/FP-000 *Air Transport Operational Doctrine* (Winnipeg: CFTMPC, 1995) [7] 3-2.
[12] This represents a synthesis of our joint/combined and multi-level doctrine as described in:
NATO, Military Agency for Standardization (MAS), AJP-3.3 (ATP-33C) *Joint Air & Space Operations Doctrine* (Brussels: NATO HQ MAS, 2000) [17] 4-19 to 4-21;
Department of National Defence, *Out of the Sun, Aerospace Doctrine for the Canadian Forces* (Winnipeg: Craig Kelman & Associates, 1997) [9] 101 – 103;
DND, *Air Transport Operational Doctrine* [7] 3-6 to 3-7; and
Department of National Defence, 1st Canadian Air Division, 3037-7 (A3 Tpt Coord) *Concept of Operations, CC-130 Tactical Air Transport (TAT)* (Winnipeg, 5 Jan 1999) [4] 3 – 4.
[13] This represents a synthesis of our joint/combined and multi-level doctrine as described in:
NATO, *Joint Air & Space Operations Doctrine* [17] 4-19 to 4-21;
DND, *Out of the Sun, Aerospace Doctrine for the Canadian Force* [9] 101 – 103;
DND, *Air Transport Operational Doctrine* [7] 3-6 to 3-7; and
DND, *Concept of Operations, CC-130 Tactical Air Transport (TAT)* [4] 3 – 4.
[14] As described in: Ken Connor, *Ghost Force, The Secret History of the SAS* (London: Orion Publishing Group, 1998) [2] 320.
[15] As experienced by the author, CC130 TAT and AAR Standards and Evaluation Pilot for 1 CAD's Transport and Rescue Standards and Evaluation Team, 1998 – 2001 and ATAT/Special Operations qualified CC130 Aircraft Commander from 1992 – 2001.
[16] This task is a national mandate described in: DND, *Air Transport Operational Doctrine* [7] 3-2; and
Department of National Defence, *Defence Plan 2001* (Hwww.vcds.dnd.ca/dgsp/dplan/intro_e.aspH, retrieved on 1 Apr 02) [8] 3-11.
[17] As described in: DND, *Defence Plan 2001* [8] 3A-5.

[18] As stated in: Department of National Defence, *1 CAD Planning Guidance 2002 Rev A* (Winnipeg, 13 Feb 2002) [5] 119/354.
[19] 1 CAD Planning Guidance directs that 8 Wing Trenton plan for a maximum of four ATAT-trained crews (exclusive of the two ATAT instructor crews). As described in: DND, *1 CAD Planning Guidance 2002 Rev A* [5] 120/354.
[20] As recalled by the author, CC130 TAT and AAR Standards and Evaluation Pilot for 1 CAD's Transport and Rescue Standards and Evaluation Team, 1998 – 2001.
[21] As described in: Jim Greeley, *Desert One, A Mission of Hope Turned Tragic. A Case of What Could've Been*, as found in Airman Magazine (Vol. 45 Issue 4, Apr 2001) [11] 1 – 8.
[22] As described in: Watkins, *The Rise of Special Operations* [21] 12 – 15.
[23] Tom Clancy and General Carl Stiner, *Shadow Warriors* (New York: Putnam, 2002) [1] 519.
[24] DND, *Concept of Operations, CC-130 Tactical Air Transport (TAT)* [4] 1.
[25] LCdr Richard H. Jean, *A Commitment to Canadians Abroad: A NEO Capability for the Canadian Forces* (Ex New Horizon, May 98) [13] 6/9.
[26] As witnessed by the author during visits / training / operations with the RAF's C130 SF flight.
[27] As described in: DND, *Defence Plan 2001* [8] 3-11.

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[4] Department of National Defence, 1st Canadian Air Division. 3037-7 (A3 Tpt Coord) *Concept of Operations, CC-130 Tactical Air Transport (TAT)*. Winnipeg, 5 Jan 1999.

[5] Department of National Defence, *1 CAD Planning Guidance 2002 Rev A*. Winnipeg, 13 Feb 2002.

[6] Department of National Defence. 1901-3048(DGFD) *Canadian Forces Organization Order 1.1.3*. Ottawa: DND Canada, 15 November 1993.

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